

VERSICO ROOFING SYSTEMS



**VERSICO**  
ROOFING SYSTEMS

EPDM FIELD GUIDE



# EPDM FIELD GUIDE

## FIELD GUIDE PURPOSE

This manual has been developed to serve as a reference guide during the roof installation for Versico's approved contractors, quality assurance personnel, or anyone involved during the rooftop installation activities. Anyone using the reference guide shall already be familiar with our roofing systems and responsible for actual roof installation.

The following pages include system descriptions, product information, installation procedures, and quality control information to complete a successful EPDM single-ply roof system installation.

### Specifications



### Details



## DISCLAIMER

This manual is offered as a supplement, not a substitute to the Specification Manual, Safety Data Sheets, or Technical Data Bulletins.

Please visit Versico's website for all the latest product information and installation details.

When installing a Versico warranted system, refer to your roof drawing for your project's exact requirements. Should you have questions regarding the roof system, contact information is available in the back of this guide.

# TABLE OF CONTENTS

<b>Description of Systems</b> .....	1
<b>Products &amp; Accessories</b>	
Insulation .....	3
Fasteners & Plates .....	9
Adhesives, Primers, & Sealants .....	13
EPDM Accessories .....	21
<b>Tools &amp; Equipment</b> .....	23
<b>Common Installation Issues</b> .....	24
<b>Staging &amp; Storage Best Practices</b> .....	25
<b>Execution / Installation Procedures</b>	
Part I – General .....	27
Part II – Products .....	41
Part III – Execution.....	56
<b>Daily Procedures</b> .....	85
<b>Insulation Details</b> .....	<b>90</b>
A-27.1 Insulation / Cover Board Attachment .....	90
A-27.2 2" Thick VersiCore / Securshield Polyisocyanurate Insulation .....	91
A-27.3 Minimum 1-1/2" Thick VersiCore / Securshield Polyisocyanurate Insulation .....	92
A-27.4 1/4" Or 1/2" Thick Securock Or DensDeck/DensDeck Prime .....	93
A-27.5 5/8" Thick Securock Or DensDeck/DensDeck Prime/DensDeck StormX Prime .....	94
A-27.6 Versico DuraFacer (OSB/Polyisocyanurate Composite) or HP-NB Attachment .....	95
A-27.7 Insulation / Cover Board Attachment Using Bead Adhesive .....	96
MA-27.1 Insulation / Cover Board Attachment Up to 15-Year Warranties .....	97
MA-27.2 Insulation / Cover Board Attachment for Projects Exceeding 15-Year or Greater .....	98
MA-27.3 R-Tech Fanfold Roof Underlayment .....	99
MA-27.4 R-Tech Fanfold Roof Underlayment For FM Assemblies .....	100
MA-27.5 Insulation/Cover Board Attachment when Using SecurShield Family Products For All Warranties Lengths .....	101
<b>Main Details</b> .....	<b>102</b>
<b>Ballasted Details</b>	
VGB-1.1 VersiTrim 200 .....	102
VGB-3.0 Deck Expansion Joint .....	103
<b>Mechanically Attached Details</b>	
VGMA-1.1 VersiTrim 200 .....	104
VGMA-2.0A Mechanically Attached EPDM Securement – Option 1 .....	105
VGMA-2.0B Mechanically Attached EPDM Securement – Option 2 (RTS) .....	106
VGMA-2.0C Mechanically Attached EPDM Securement – Option 3 (RTS) .....	107
VGMA-2.1 Mechanically Attached EPDM Membrane Splice .....	108
VGMA-2.1A Mechanically Attached EPDM Membrane Splice <b>(25/30 Year Warranties)</b> .....	109
VGMA-2.2 Mechanically Attached EPDM Membrane Splice Intersection .....	110
VGMA-2.2A Mechanically Attached EPDM Membrane Splice Intersection <b>(25/30 Year Warranties or 90-mil Membrane)</b> .....	111
VGMA-2.3 End Lap Splice.....	112
VGMA-6.0 Roof Drain with Sump.....	113
VGMA-8.1 Quick-Applied Pipe Seal .....	114
VGMA-8.1A Quick-Applied Pipe Seal with 20" Quick-Applied Cured Flashing .....	115
VGMA-8.2 Field Fabricated Pipe Wrap.....	116
VGMA-8.2A Field Fabricated Pipe Wrap <b>(25/30 Year Warranties)</b> .....	117
VGMA-22 Ridge Membrane Attachment .....	118
<b>Common Details</b>	
VGC-1.1 VersiTrim 200 .....	119
VGC-1.1A VersiTrim 200 <b>(25/30 Year Warranties)</b> .....	120

VGC-1.2 VersiTrim 300 .....	121
VGC-1.2A VersiTrim 300 <b>(25/30 Year Warranties)</b> .....	122
VGC-1.3 VersiTrim 2000 & 3000 .....	123
VGC-1.4 VersiTrim Drip Edge Fascia .....	124
VGC-1.4A VersiTrim Drip Edge Fascia <b>(25/30 Year Warranties)</b> .....	125
VGC-1.5 VersiTrim One-Piece Gravel Stop .....	126
VGC-1.6 Metal Bar Edge Termination .....	127
VGC-2.1 EPDM Membrane Splice .....	128
VGC-2.1A EPDM Membrane Splice <b>(25/30 Year Warranties)</b> .....	129
VGC-2.2 EPDM Membrane Splice Intersection .....	130
VGC-2.2A EPDM Membrane Splice Intersection <b>(25/30 Year Warranties or 90-mil Membrane)</b> .....	131
VGC-2.3 EPDM Membrane Splices at Angle Change .....	132
VGC-3.1 Deck-to-Deck Expansion Joint .....	133
VGC-3.2 Deck-to-Wall Expansion Joint .....	134
VGC-3.3 Shear/Expansion Joint .....	135
VGC-5.1 Curb Flashing – EPDM Membrane .....	136
VGC-5.2 Curb Flashing – Quick-Applied Curb Wrap with 6" Tape .....	137
VGC-5.3 Curb Flashing – with 20" Quick-Applied Cured Flashing .....	138
VGC-5.4 Self-Flashing Curb .....	139
VGC-5.5 New Self-Flashing Metal Curb .....	140
VGC-6.1 Roof Drain .....	141
VGC-6.2 Roof Drain – Reinforced Field Sheet with Sump Exceeding 3" Per Foot .....	142
VGC-6.3 VersiGard Insert Drain .....	143
VGC-6.4 Insert Drain Through Deck .....	144
VGC-6.5 VersiGard Add-On Drain .....	145
VGC-8.1 Quick-Applied Pipe Seal .....	146
VGC-8.1A Quick-Applied Pipe Seal with 90-mil Membrane or 25/30 Year Warranties .....	147
VGC-8.2 Field Fabricated Pipe Wrap .....	148
VGC-8.2A Field Fabricated Pipe Wrap <b>(25/30 Year Warranties)</b> .....	149
VGC-8.3 Flexible Penetration .....	150
VGC-8.3A Flexible Penetration <b>(25/30 Year Warranties)</b> .....	151
VGC-8.4 Field Fabricated Hot Stack .....	152
VGC-8.4A Field Fabricated Hot Stack <b>(25/30 Year Warranties)</b> .....	153
VGC-9.0A Membrane Terminations, Page 1 of 2 .....	154
VGC-9.0B Membrane Terminations, Page 2 of 2 .....	155
VGC-12.1 Parapet / Curb with Continuous Membrane .....	156
VGC-12.2 Parapet / Curb with Separate Membrane Flashing .....	157
VGC-13.1 Built-Up Roofing Tie-In over Steel Roof Deck .....	158
VGC-13.2 Built-Up Roofing Tie-In over Concrete Roof Deck .....	159
VGC-13.3 Tie-In to Existing EPDM Membrane .....	160
VGC-13.4 EPDM Tie-In over Concrete Deck .....	161
VGC-13.5 Tie-In Shingled or Metal Panel Roof .....	162
VGC-13.6 Tie-In Between New Versico Adhered & Ballasted Roof .....	163
VGC-13.7 Tie-In Between New Versico Mechanically Attached & Ballasted Roof .....	164
VGC-15.1 Inside Corner Wall Flashing With RTS (Option 1) .....	165
VGC-15.2 Inside Corner Wall Flashing With RTS (Option 2) .....	166
VGC-15.3 Inside Corner With Continuous EPDM Wall Flashing .....	167
VGC-15.4 Inside Corner with Separate EPDM Wall Flashing .....	168
VGC-15.4A Inside Corner Flashing for Projects with <b>90-mil Membrane or 25/30 Year Warranties</b> .....	169
VGC-15.5 Outside Corner with Pre-Cut Quick-Applied Corner .....	170
VGC-15.6 Outside Corner with Quick-Applied Uncured EPDM Flashing (2 Piece) .....	171
VGC-15.7 Outside Corner with Quick-Applied Uncured EPDM Flashing (1 Piece) .....	172
VGC-15.7A Outside Corner Flashing for Projects with <b>90-mil Membrane or 25/30 Year Warranties</b> .....	173
VGC-16.1 Quick-Applied Pourable Sealer Pocket .....	174
VGC-16.1A Quick-Applied Pourable Sealer Pocket <b>(25/30 Year Warranties)</b> .....	175

VGC-16.2 Field Fabricated Pourable Sealer Pocket .....	176
VGC-16.2A Field Fabricated Pourable Sealer Pocket (25/30 Year Warranties) .....	177
VGC-16.3 Extended Pourable Sealer Pocket .....	178
VGC-16.3A Extended Pourable Sealer Pocket (25/30 Year Warranties) .....	179
VGC-18.1 Metal Scupper At Deck .....	180
VGC-20.1 Lightning Rod at Parapet (Vertical Attachment) .....	181
VGC-20.2 Lightning Rod at Deck Level .....	182
VGC-22.0 Valley .....	183
VGC-24.0 Sleeper .....	184
VGC-30.0 I-Beam Penetration .....	185

#### QA Details

QA-2 QA EPDM Membrane Splices .....	186
QA-12.1 Parapet/Curb with Continuous Membrane RTS .....	187
QA-12.2 Parapet/Curb with Separate Regular EPDM Flashing .....	188
QA-12.3 Parapet/Curb with Separate QA Membrane .....	189
QA-12.4 Parapet/Curb with Continuous Membrane – Cover Strip .....	190

#### Liquid Flashing Details .....

Attachment 1 Inspection, Cleaning & Substrate Preparation (Page 1 of 2) .....	194
Attachment 1 Inspection, Cleaning & Substrate Preparation (Page 2 of 2) .....	195
Attachment 2 Application of LiquiSeal Primer & Resin .....	196
LF-1.1 Sheet Metal Drip Edge or Gravel Stop Flashing .....	197
LF-8.1A Single and Multiple Pipe Penetrations (Page 1 of 2) .....	198
LF-8.1B Single and Multiple Pipe Penetrations (page 2 of 2) .....	199
LF-13.1 EPDM Membrane Tie-in with Existing Roof over Steel Deck .....	200
LF-13.2A TPO or PVC Membrane Tie-in with Existing Roof over Steel Deck (Page 1 of 2) .....	201
LF-13.2B TPO or PVC Membrane Tie-in with Existing Roof over Steel Deck (Page 2 of 2) .....	202
LF-13.3 Membrane Tie-in with Existing Roof over Concrete Deck .....	203
LF-18.1 Through-Wall Scupper .....	204
LF-30.1A Steel I-Beam Flashing (Page 1 of 2) .....	205
LF-30.1B Steel I-Beam Flashing (Page 2 of 2) .....	206

#### VacuSeal Details .....

V-0.1 Roof Assembly Over Existing Single-Ply Roof .....	207
V-0.2 Roof Assembly Over Existing Asphaltic Roof .....	208
V-0.3 Roof Assembly Over Steel Deck .....	209
V-0.4 Roof Assembly Over Poured-In-Place Concrete Deck .....	210
V-0.5 Roof Assembly Over Concrete Plank .....	211
V-0.6 Roof Assembly Over Lightweight Concrete Deck .....	212
V-0.7 Roof Assembly Wood Deck .....	213
V-1.1 Roof Edge: Roof Recover .....	214
V-1.2 Roof Edge: Tear-Off & Re-Roofing .....	215
V-5.1 Curb Base Flashing – New Construction and Re-Roof (Recover) .....	216
V-6.1 Roof Drain: Re-Roof (Recover) .....	217
V-6.2 Roof Drain: New Construction .....	218
V-8.0 V2T Vent with Pre-Applied Skirt Flashing .....	219
V-8.1 Pipe/Structural Steel Tube Through Metal Deck .....	220
V-8.2 Multiple Penetrations Through Steel Deck – New Construction .....	221
V-8.3 Single Penetration Through Existing Roof Assembly .....	222
V-8.4 Cluster of Penetrations Through Existing Roof Assembly .....	223
V-8.5A Hot Stack Air Flashing – Option A .....	224
V-8.5B Hot Stack Air Flashing – Option B .....	225
V-12.1 Parapet With Membrane Air Barrier .....	226
V-12.2 Parapet/Curb: Concrete/Lightweight Concrete Used as an Air Barrier .....	227
V-12.3 Parapet or Wall: New Construction and Re-Roof (Recover) .....	228

#### Contact Information .....

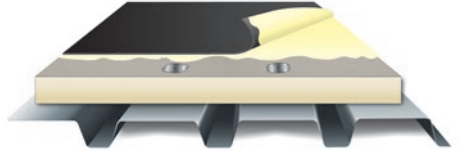
**229**

## SECTION 1: DESCRIPTION OF SYSTEMS

### VERSIGARD® / VERSIGARD WHITE / VERSIGARD REINFORCED

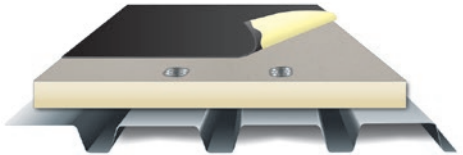
#### VersiGard, VersiGard White, and VersiGard Reinforced EPDM Adhered Roofing System

- Black and White Membrane Colors Available
- Standard Widths:  
VersiGard Black/White – 10', 16.5', and 20'  
VersiGard Black Reinforced – 6.5', 8', and 10'  
VersiGard White Reinforced: 10'
- Standard Lengths: 50' and 100'
- Pre-Cleaned and Dusted Membrane Available
- 3" or 6" Quick-Applied Tape (QAT)



#### VersiGard QA Black, VersiGard QA White, and VersiGard QA Reinforced EPDM Roofing System

- Black and White Membrane Colors Available
- Standard Width: 10'
- Standard Lengths: 50' and 100'
- Standard Thickness: 60-mil
- 3" Quick-Applied Tape (QAT)



#### VersiGard Reinforced EPDM Mechanically Fastened Roofing System

- Black and White Membrane Colors Available
- Standard Widths (Black): 6.5', 8', and 10'
- Standard Widths (White): 10'
- Standard Lengths (Black): 50' and 100'
- Standard Lengths (White): 100'
- Pre-Cleaned Membrane Only
- 6" Quick-Applied Tape (QAT)



## **VersiGard, VersiGard White, and VersiGard Reinforced EPDM VacuSeal™ Roofing System**

- Black and White Membrane Colors Available
- Standard Widths:  
VersiGard Black/White – 10', 16.5', and 20'  
VersiGard Reinforced – 6.5', 8', and 10'
- Standard Lengths: 50' and 100'
- Pre-Cleaned and Dusted Membrane Available
- 3" or 6" Quick-Applied Tape (QAT)



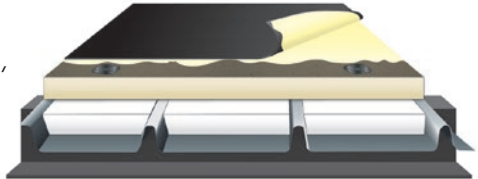
## **VersiGard EPDM Ballasted Roofing System**

- Black Color Only
- Standard Widths: 30', 40', and 50'
- Standard Lengths: 50' and 100'



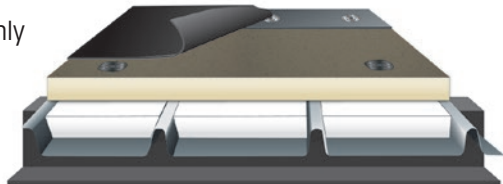
## **VersiGard, VersiGard White, and VersiGard Reinforced EPDM Metal Retrofit Fully Adhered Roofing System**

- Black and White Membrane Colors Available
- Standard Widths:  
VersiGard Black/White – 10', 16.5', and 20'  
VersiGard Reinforced – 6.5', 8', and 10'
- Standard Lengths: 50' and 100'
- Pre-Cleaned and Dusted Membrane Available
- 3" or 6" Quick-Applied Tape (QAT)



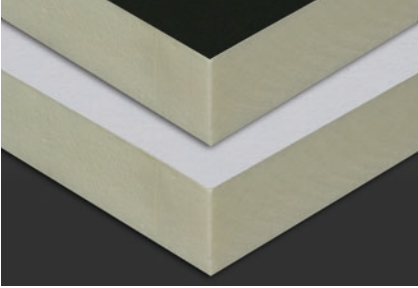
## **VersiGard Reinforced EPDM Metal Retrofit Mechanically Fastened Roofing System**

- Black Reinforced Membrane Only
- Standard Widths: 6.5', 8', and 10'
- Standard Lengths: 50' and 100'
- Pre-Cleaned Membrane Only
- 6" Quick-Applied Tape (QAT)



## SECTION 2: PRODUCTS & ACCESSORIES

### INSULATION



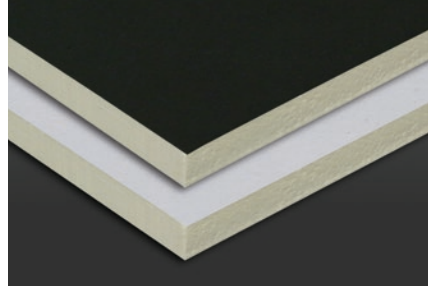
#### **SecurShield® with ReadyFlash Technology**

A rigid roof insulation panel composed of a closed-cell polyisocyanurate foam core bonded to high performance **coated glass facers (CGF)**. ReadyFlash features a dark CGF to accelerate adhesive flash-off on one side of the insulation board and a light CGF to slow down adhesive flash-off on the other. Ideal for use in adhered membrane systems. Provides a direct to combustible deck UL Class A fire rating at 1" thickness.

**Sizes:** 4' x 4' and 4' x 8'

**Thicknesses:** ½" to 4 ½"

**Compressive Strengths:** 20 and 25 psi



#### **SecurShield HD with ReadyFlash Technology**

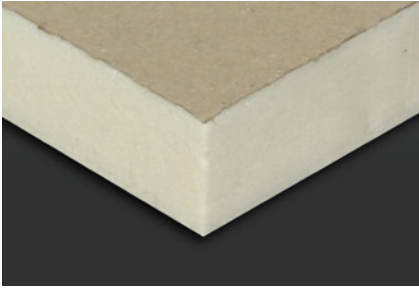
A rigid roof insulation panel composed of ½" high-density, closed-cell polyisocyanurate foam core bonded to a premium performance coated glass facer (CGF) specifically designed for use as a cover board. ReadyFlash features a dark CGF to accelerate adhesive flash-off on one side of the insulation board and a light CGF to slow down adhesive flash-off on the other. Provides 5 times the R-value at one-fifth the weight of traditional gypsum cover boards. Achieves a UL Class A fire rating direct to combustible deck.

**Sizes:** 4' x 4' and 4' x 8'

**Thickness:** ½"

**Compressive Strength:** 109 psi max





### VersiCore®

A rigid roof insulation panel composed of a closed-cell polyisocyanurate foam core bonded to **glass-reinforced felt (GRF) facers**. UL and FM approved for direct application over steel decks, polyiso provides the highest R-value per inch of any commercially available insulation product.

**Sizes:** 4' x 4' and 4' x 8'

**Thicknesses:** 1/2" to 4 1/2"

**Compressive Strengths:** 20 and 25 psi



### DuraFaceR®

A rigid roof insulation composite panel composed of a closed-cell polyisocyanurate foam core bonded to a glass-reinforced felt (GRF) facer on one side and 3/16" **oriented strand board (OSB)** on the other.

**Sizes:** 4' x 4' (routed 3 sides) and 4' x 8' (routed 4 sides)

**Thicknesses:** 1 1/2" to 4 1/2"

**Standard Thickness:** 1 1/2", 2", 2 1/2", 3", and 4"



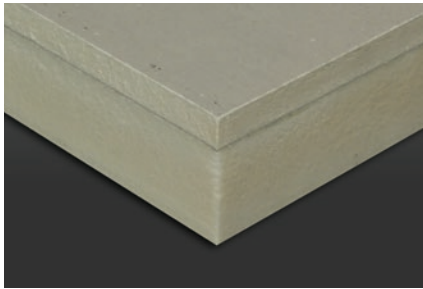
### SecurShield HD Plus

A rigid roof insulation panel composed of a 1/2" high-density, closed-cell polyisocyanurate foam core bonded to a premium performance coated glass facer (CGF) specifically designed for use as a cover board. Enhanced performance of the HD Plus product provides a **FM 1-90 wind uplift rating with only 8 fasteners**.

**Sizes:** 4' x 4' and 4' x 8'

**Thickness:** 1/2"

**Compressive Strength:** 109 psi max



### SecurShield HD Composite

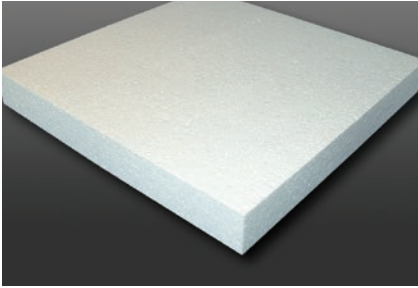
A unique composite insulation panel comprised of 1/2" high-density polyiso cover board bonded during the manufacturing process to SecurShield rigid polyiso roofing insulation. Eliminates the need for a separate cover board, reduces inter-ply adhesives and saves labor on the roof.

**A single product solution.**

**Sizes:** 4' x 4' and 4' x 8'

**Thicknesses:** 1 1/2" to 4 1/2"

**Compressive Strengths:** 20 psi (SecurShield) and 109 psi max (SecurShield HD)



## EPS

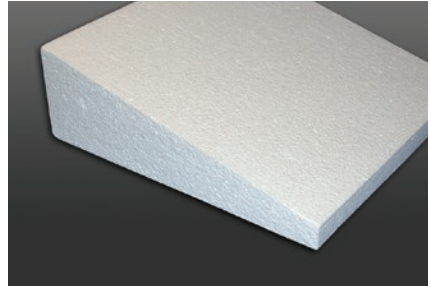
Engineered rigid insulation made of high-performance, water-resistant expanded polystyrene (EPS). Meets ASTM C578 requirements, includes extensive UL and FM ratings, and can be applied direct to metal decks. Warranted long-term R-value of up to 4.76/inch @ 40°F.

**Sizes:** 4' x 4' or 4' x 8'; custom sizes and tapered panels available

**Thicknesses:** ¼" to 40" per panel

**Densities:** 1 to 3 lb/ft<sup>3</sup>

**Compressive Strength:** 10 to 60 lb/ft<sup>3</sup>



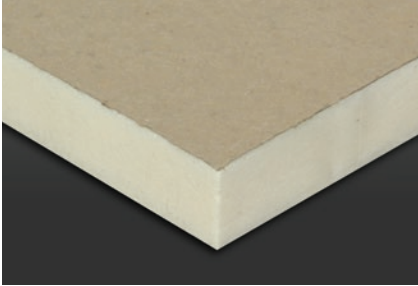
## Tapered EPS

Tapered engineered EPS insulation available in virtually any slope. Can be combined with Versico polyiso for tapered hybrid roof systems. Design assistance is available from Versico's Tapered Design Team. Custom saddles and crickets also available.

**Slope:** Virtually any slope

**Thickness:** ½" to 40"

**Densities:** 1 to 3 lb/ft<sup>3</sup>



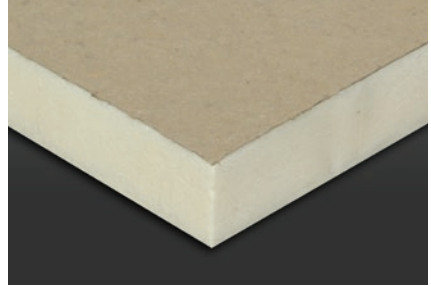
## VersiCore NH

VersiCore NH Polyiso is an LBC "Red List Free" rigid roof insulation panel composed of a closed-cell polyisocyanurate foam core bonded on each side to fiber-reinforced paper facers. VersiCore NH contains **zero halogenated flame retardants**.

**Sizes:** 4' x 4' and 4' x 8'

**Thickness:** ½" to 4 ½"

**Slope:** 20 and 25 psi



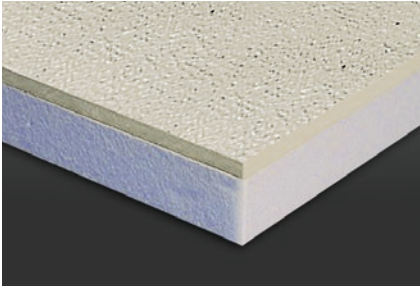
## SecurShield NH

SecurShield NH Polyiso is an LBC "Red List Free" rigid roof insulation panel composed of a closed cell polyisocyanurate foam core bonded during the manufacturing process to premium performance coated glass facers (CGF). SecurShield NH contains **zero halogenated flame retardants**.

**Sizes:** 4' x 4' and 4' x 8'

**Thickness:** ½" to 4 ½"

**Slope:** 20 and 25 psi



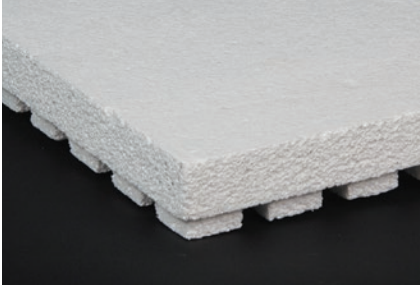
## HD EPS Composite

High-density polyiso cover board (1/2") laminated to Versico's engineered EPS. Five times lighter than traditional cover boards. Approved for both adhered and mechanically attached systems. Provides enhanced protection against severe weather and hail and meets Title 24 requirements for continuous insulation on combustible decks.

**Sizes:** 4' x 4' or 4' x 8'; custom sizes and tapered panels available

**Thickness:** 1 1/2" to 7" (including 1/2" HD polyiso cover board)

**Densities:** 1 to 3 lb/ft<sup>3</sup>



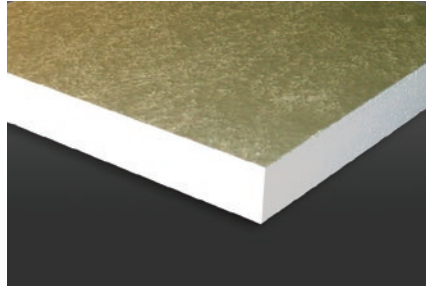
## DeckVent EPS

Versico's high-performance DeckVent EPS insulation is composed of lightweight, closed-cell expanded polystyrene meeting the requirements of ASTM C578 Type IX. DeckVent EPS has excellent dimensional stability, compressive strength, and water-resistant properties. DeckVent EPS is designed to be mechanically fastened directly to concrete decks. The use of DeckVent EPS in conjunction with one-way and two-way relief vents allows the installation of the roof system to begin upon structural cure of concrete.

**Sizes:** 4' x 4'

**Thickness:** 2"

**Compression Strength:** 25 psi



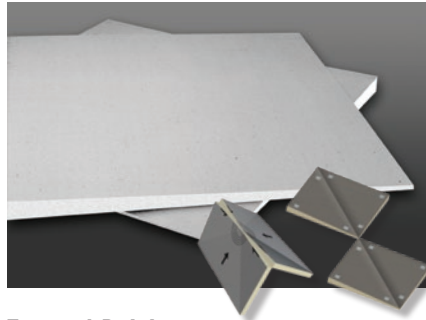
## SP EPS

Premium coated-glass-faced insulation approved for mechanically attached or self-adhering systems without a slip sheet. Warranted long-term R-value provides up to R-30 in a single layer.

**Sizes:** 4' x 4' or 4' x 8'; custom sizes and tapered panels available

**Thicknesses:** 1/4" to 6"

**Densities:** 1.25 to 3 lb/ft<sup>3</sup>



## Tapered Polyiso

A sloped, rigid roof insulation panel composed of a closed-cell polyisocyanurate foam core bonded to a coated glass or fiber-reinforced facer. Designed to promote **positive drainage** and **prevent ponding water**.

Hinged Target Sumps and Pre-Cut Hips and Valleys ship ready to install, **require no field cuts and save valuable time on the roof**. Multiple thicknesses and slopes available to accommodate specific job conditions with no waste, thus reducing disposal fees.

**Sizes:** 4' x 4' and 4' x 8'

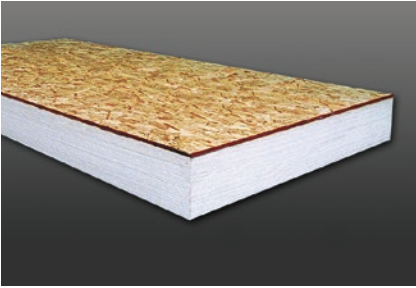
4' x 4' (Sump)

4' x 4' (Hip/Valley)

8' x 8' (Sump)

**Thicknesses:** 1/2" to 4 1/2" (multiple layers utilized for increased thicknesses)

**Compressive Strengths:** 20 and 25 psi



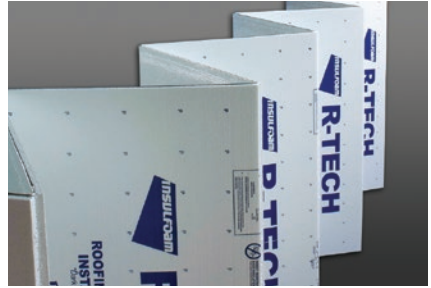
### Insullam™

OSB, plywood, or gypsum board laminated to Versico's engineered EPS. Approved for both adhered and mechanically attached systems. Provides enhanced protection against severe weather and hail. Can be utilized as a nail base, is available vented and with a wide assortment of cover boards.

**Sizes:** 4' x 4' or 4' x 8'

**Thickness:** 1 1/2" to 7"

**Laminate:** OSB 7/16" and 5/8"; plywood 5/8"; gyp. thickness varies

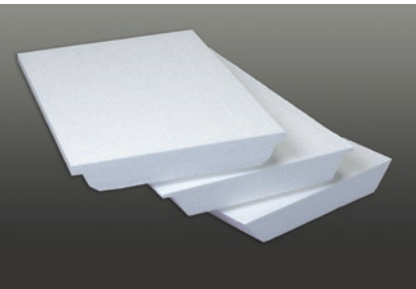


### R-Tech® Fanfold Recover Board

High-performance water-resistant facers laminated to Versico engineered EPS. Code-approved for recover applications and compatible with both light- and dark-colored single-ply membranes. Five times lighter than traditional cover boards with a coverage rate of 200 sq. ft. Saves time and labor on the roof.

**Sizes:** 2' x 4' (folded), 4' x 50' (unfolded)

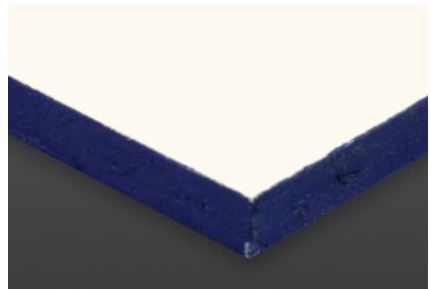
**Thicknesses:** 1/4", 3/8", 1/2", 3/4"



### EPS Flute-fill

Custom-cut, engineered EPS flute-fill insulation manufactured for virtually any standing seam profile. Meets ASTM C578 requirements and includes extensive UL and FM ratings, including direct to metal deck installations.

**Thickness, Shape and Size:** Custom manufactured to fit any roof profile



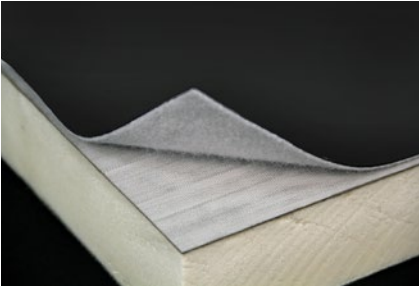
### DuraStorm VSH™

Engineered composite building material made from a proprietary blend of plastic and cellulose fiber sourced from post-industrial and post-consumer waste streams.

**Sizes:** 4' x 4' and 4' x 8'

**Thickness:** 1/2"

**Compressive Strength:** 3990 psi



### VersiCore RL

VersiCore RL is a standard density polyisocyanurate roof boards specially designed to act as the hook in the RapidLock (hook and loop) system. VersiCore RL utilizes a GRF facer.

**Size:** 4' x 8'

**Thickness:** 2.0" and 2.6"

**Compressive Strengths:** 20 psi



### SecurShield HD RL

SecurShield HD RL is a high-density rigid roof polyisocyanurate board bonded to coated-glass (CGF) facers specially designed to act as the hook in the RapidLock (hook and loop) system.

**Sizes:** 4' x 8'

**Thickness:** 1/2"

**Compressive Strength:** 109 psi max



### SecurShield HD Composite RL

SecurShield HD Composite RL is a rigid roof insulation panel composed of a top layer of high-density, closed-cell foam, and a bottom layer of 20 psi closed-cell foam, specifically designed to act as the hook in the RapidLock system. This creates a single-component solution that eliminates the need for a coverboard.

**Sizes:** 4' x 8' and 4' x 4'

**Thickness:** 2.0" to 4.0"

**Compressive Strengths:** 20 psi (SecurShield) and 109 psi max (SecurShield HD)

## FASTENERS & PLATES

### Insultite Fastener



Can be used to secure insulation. Compatible with wood (minimum 1<sup>5</sup>/<sub>32</sub>" [12mm] CDX plywood) and steel decks (22-gauge [0.76 mm] or heavier).

**Sizes Available:**

1 5/8", 2", 2 1/4", 3"-8"  
(1" increments)

**Size & Quantity Per Box:**

1 5/8", 2 1/4", 2"-8": 1,000

### Insultite ASAP Fastener & Plate



A pre-assembled Insultite fastener and plastic or metal insulation plate is acceptable for insulation attachment in both mechanically attached and fully adhered applications. Can be used to secure insulation. Compatible with wood (minimum 1<sup>5</sup>/<sub>32</sub>" [12mm] CDX plywood) and steel decks (22-gauge [0.76 mm] or heavier). Longer fastener sizes available through special order.

**Sizes Available:**

2 1/4", 3" - 8" (1" Increments)

**Size & Quantity Per Box:**

2 1/4" - 8": 250; 10" - 12": 200

Applications requiring a fastener larger than 8" should use MP 14-10 fasteners.

### HPVX Fastener & HPV-XL Fastener



Can be used to secure membranes, RTS, and insulation. Compatible with wood (minimum 1<sup>5</sup>/<sub>32</sub>" [12mm] CDX plywood) and steel decks (22-gauge [0.76 mm] or heavier).

**Sizes Available:**

2" - 8" (1" Increments)  
10" - 16" (2" Increments)

**Size & Quantity Per Box:**

2" - 4": 1,000; 5" - 12": 500;  
14" - 16": 250

### HPV-XL Fastener

Also available (not shown)

A #21 diameter fastener compatible with wood (minimum 1<sup>5</sup>/<sub>32</sub>" [12mm] CDX plywood) and steel decks (22-gauge [0.76 mm] or heavier).

**Sizes Available:**

2" - 8" (1" increments)

**Size & Quantity Per Box:**

500 (2" - 6"), 250 (7" - 8")

### MP 14-10 Fastener



Can be used to secure membranes, RTS, and insulation. Compatible with wood (minimum 1<sup>5</sup>/<sub>32</sub>" [12mm] CDX plywood) and structural concrete (minimum 2,500 psi).

**Sizes Available:**

2" - 12" (1" Increments)  
14" - 24" (2" Increments)

**Size & Quantity Per Box:**

2" - 4": 1,000; 5" - 11": 500;  
12" - 24": 250

## GypTec Fastener & Plate



Can be used to secure membranes, RTS, and insulation. Applicable to cementitious wood fiber, lightweight concrete, and gypsum decks.

**Sizes Available:**  
2 ½"- 10" (½" Increments)

**Size & Quantity Per Box:**  
2 ½"- 7": 500; 7 ½"- 10": 250

### GypTec Plate

**Sizes Available:**  
2" Metal membrane plate  
3" Metal insulation plate

**Quantity Per Box:** 1,000

## HPVX ASAP



A pre-assembled HPVX fastener and HPVX Plate. Can be used to secure membranes, RTS, and insulation. Compatible with wood (minimum 1½/32" [12mm] CDX plywood) and steel decks (22-gauge [0.76 mm] or heavier).

**Sizes Available:**  
2"-10" (1" Increments)  
12"-16" (2" Increments)

**Size & Quantity Per Box:**  
2"- 9": 250; 10"- 12": 200;  
14"- 16": 150

## HPV ASAP



A pre-assembled HPV Fastener and Polymer Seam Plate applicable for wood (minimum 1½/32" [12mm] CDX plywood) and steel decks (22-gauge [0.76 mm] or heavier).

**Sizes Available:**  
2"- 12" (1" Increments)

**Size & Quantity Per Box:**  
2": 500; 3": 450; 4"and 5":  
400; 6": 350;  
7" and 8": 300; 9": 250;  
10"- 12": 200

## CD-10 Fastener



Can be used to secure membranes, RTS, and insulation. Compatible with structural concrete decks (minimum 2,500 psi).

**Sizes Available:**  
2"- 6" (½" Increments)  
7"- 12" (1" Increments)

**Size & Quantity Per Box:**  
2"- 8": 500; 9"- 12": 250

## HP Lite-Deck Fastener



Used in conjunction with a specially designed 3" Lite-Deck Metal Plate for Insulation attachment to gypsum and cementitious wood fiber (Tectum). Features an oversize diameter (0.312" shank) and a deep, coarse thread designed for high pullout resistance.

**Sizes Available:**  
25/8", 3"- 10", 12"  
(1" Increments)

**Size & Quantity Per Box:**  
2 5/8"- 4": 500; 5"- 8": 250;  
9", 10", 12": 125

## HPV Fasteners



Can be used with various Versico fastening plates to secure membrane, insulation, and Reinforced Termination Strip (RTS) strips to a variety of substrates. Specially designed for securement of membrane on Versico's VersiGard Reinforced mechanically fastened systems, Versico's HPV Fasteners are compatible with 22-gauge and heavier steel, CDX plywood, and wood plank deck types.

**Sizes Available:**  
1 ¼", 2" - 15" (1" increments)

**Size & Quantity Per Box:**  
1 ¼", 2" - 6": 1,000  
7" - 12": 500  
13" - 15": 250

## Purlin Fastener



Used with Versico's Metal Retrofit Roofing System to secure membrane and RTS to structural steel purlins. Provides superior back-out resistance in standard 16-gauge Purlins.

**Sizes Available:**  
3 3/4", 4 3/4", 5 3/4", 7", 8"

**Quantity Per Box:** 1,000

## RetroDriller Fastener



A specially designed fastener with a 1/2" drill point used for attaching single-ply membranes to structural steel purlins (up to 3/16") in standing seam metal roof retrofit applications.

**Sizes Available:**  
4", 5", 6", 8" & 10"

**Size & Quantity Per Box:** 500

## Lite-Deck Metal Plate



Used in conjunction with HPV Lite-Deck Fasteners for insulation attachment to gypsum and cementitious wood fiber (Tectum).

**Sizes Available:**  
3" diameter

**Quantity Per Box:** 500

## SecurFast™ Insulation Fastening Plate



Designed for SECUROCK® securement under single-ply membranes. Plates are stamped from Galvalume-coated steel for long-term protection against corrosion.

**Sizes Available:** 2 7/8"

**Quantity Per Box:** 1,000

## AccuTrac Plate (Insulation)



AccuTrac Plates are 3" square flat- or recessed-bottom plates made of Galvalume-coated steel. Used to fasten insulation with the AccuTrac Tool.

**Sizes Available:** 3"

**Quantity Per Box:** 1,000

## Term Bar Nail-In



Used with Versico's Termination Bar or Seam Fastening Plates to secure membrane to concrete block, brick, or structural concrete walls. A zinc-plated steel pin provides excellent corrosion resistance while the zinc alloy body provides excellent holding power.

**Sizes Available:** 1 1/4"

**Quantity Per Box:** 1,000

## Insulation Fastening Plate



Used for insulation securement over wood (minimum 1 5/8" [12mm] CDX plywood), steel (22-gauge [0.76 mm] or heavier), and concrete decks. Available in steel and plastic versions.

**Sizes Available:** 3" diameter

**Quantity Per Box:** 1,000

## Seam Fastening Plate



Can be used with HPV, HD 14-10, and CD-10 Fasteners to mechanically attach all VersiGard EPDM membranes and RTS (excluding steel decks).

**Sizes Available:** 2"

**Quantity Per Box:** 1,000



## HPV Polymer Seam Plate



Used in conjunction with HPV Fasteners to mechanically fasten VersiGard Reinforced membrane and RTS over steel decks (22-gauge [0.76mm] or heavier).

**Sizes Available:** 2"

**Quantity Per Box:** 1,000

**Also Available (Not Shown):**

## HPV-XTRA Polymer Seam Plate

Used in conjunction with HPV Fasteners to mechanically fasten VersiGard Reinforced membrane and RTS over steel decks (22-gauge [0.76mm] or heavier).

**Sizes Available:** 2 3/8"

**Quantity Per Box:** 1,000

## Termination Bar (Aluminum)



Extruded aluminum bar that is designed for securing and sealing compression type flashing terminations. The bar features a top edge for ease of applying Versico's Lap Sealant. The bar can be easily cut to any desired length.

**Sizes Available:**  
1" wide x 10' long

**Quantity Per Box:**  
50 pcs; 500 Linear Feet

## Metal Fastening Bar



Galvalume™-coated metal bar used to mechanically fasten EPDM membranes. The bar can be easily cut to desired length. Installed using HPVX Fasteners.

**Sizes Available:**  
1" wide x 10' long

**Quantity Per Box:** 50 pcs;  
500 Linear Feet

## Dual Prong Fasteners



Designed to secure base sheets over gypsum, fibrous cement, and lightweight concrete decks. Consists of a galvanized (G-90) tube, a 2.7"-diameter GALVALUME plate and a locking staple formed from high-tensile coated

steel wire. Dual Prong Fasteners are installed using Versico's stand-up Dual Prong Applicator, which holds and drives the tube into the deck and sets the wires.

**Sizes Available:** 1.8" (45.17 mm)

**Quantity Per Box:** 500

## ADHESIVES, PRIMERS, & SEALANTS

### G200SA Yellow Substrate Adhesive



A high-strength, solvent-based contact adhesive that allows quick bonding of cured EPDM membranes to various substrates. Designed for bonding VersiGard, VersiGard White, VersiGard Reinforced,

and Epichlorohydrin membranes to approved substrates.

**Coverage Rate:** 60 sq. ft. per gallon of finished surface.

**Packaging:** 5-gallon pail

**Product Number:** 302141

**Shelf Life:** 12 months

### Low-VOC Bonding Adhesive\*



A high-strength, solvent-based contact adhesive that allows bonding of all EPDM membranes to various porous and non-porous substrates. This product meets the <250 gpl VOC content

requirements of the OTC Model Rule for Single-Ply Roofing Adhesives.

**Coverage Rate:** 60 sq. ft. per gallon of finished surface.

**Packaging:** 5-gallon pail

**Product Number:** 303090

**Shelf Life:** 12 months

### Aqua Base 120 Bonding Adhesive



Aqua Base 120 is a unique, semi-pressure-sensitive, water-based bonding adhesive for EPDM membranes with low-VOC's and no strong odors.

**Coverage Rate:** 120 sq. ft. per gallon of finished surface. (May vary due to conditions such as insulation type or wall construction.)

**Packaging:** 5-gallon pail

**Product Number:** 307431

**Shelf Life:** 12 months

### Weathered Membrane Cleaner



Used to clean both new and in-service VersiGard, VersiGard White, VersiGard Reinforced, EPDM membranes prior to seaming or

application of Quick-Applied (QA) products. Helps to loosen and remove dirt and other contaminants from the surface of the membranes and leaves a suitable surface for application of adhesive or primer. Please refer to the Technical Data Bulletins for specific instructions for EPDM applications.

**Coverage Rate:** 400 sq. ft. (one surface) per gallon.

**Packaging:**

(2) 1-gallon closed-top cans

5-gallon closed-top pail

**Product Number:** 304066 1-gallon pail

**Product Number:** 302074 5-gallon pail

\* Not compliant in all CA counties

## Low-VOC Bonding Adhesive 1168\*



A high-strength, solvent-based contact adhesive that allows bonding of all VersiGard, VersiGard White, and VersiGard Reinforced EPDM membranes to various porous and non-porous substrates. This product meets the requirements for SCAQMD regulations.

**Coverage Rate:** 60 sq. ft. per gallon of finished surface.

**Packaging:** 5-gallon pail

**Product Number:** 318847

**Shelf Life:** 12 months

## X-23 EPDM Bonding Adhesive



A high-strength, solvent-based contact adhesive that bonds EPDM membranes to various porous and non-porous substrates. This product meets the <250 g/L VOC content requirements of the OTC Model Rule for Single-Ply Roofing Adhesives.

**Coverage Rate:** 60 sq. ft. per gallon of finished surface.

**Packaging:** 5-gallon pail

**Product Number:** 324002

**Shelf Life:** 12 months

## Flexible DASH Adhesive



A low-rise, two-component, VOC-free, energy-absorbing, impact-resistant adhesive used to adhere VersiFleece membranes and insulation boards to various substrates for a non-penetrating system application. Flexible DASH adhesive provides a wider window of temperature workability (25°F - 120°F).

**Coverage Rate:** See Technical Data Bulletin

### Packaging:

50-gallon Drums – Part A –

Product Number: 310472

50-gallon Drums – Part B –

Product Number: 310473

15-gallon Drums – Part A –

Product Number: 317329

15-gallon Drums – Part B –

Product Number: 317331

5-Gallon Jug – Part A – Product Number: 329526

5-Gallon Jug – Part B – Product Number: 329527

Dual Tank – Part A – Product Number: 336340

Dual Tank – Part B – Product Number: 336342

Dual Cartridge – Product Number: 326735

**Shelf Life:** 12 months (Part A and Part B)

### Flexible DASH Accessories:

5-Gallon Jug – Static Mixing Tip (Patriot Jr., HULK, PaceCart): 331294

Dual Tank 25' Hose with Gun: 341411

Dual Tank Color-Changing Nozzle Tips (10/pack): 341412

Dual Tank 14" Extension Nozzle Tubs (10/pack): 330881

\* Not compliant in all CA counties

## Low-VOC UN-TACK™ Adhesive Remover and Cleaner



Used to clean spray guns and hoses applied by CAV-GRIP 3V Low-VOC Adhesive/Primer. Removes adhesives and primers from a variety of surfaces including single-ply membranes, accessories, metal, plastic, rubber, and glass. Low-VOC UN-TACK is VOC compliant in all 50 states.

**Coverage Rate:** 250 – 300 sq. ft. per cylinder

**Packaging:** #8 Aerosol Cylinder

**Product Number:** 330793

## Splice Cement



Designed for splicing cured-to-cured EPDM membranes and non-QA flashings. This high strength, solvent-based contact cement allows quick bonding of flashing, sheeting, and cured rubber seams. Formulated for application with a 1/2" medium nap roller and/or a 1/2"-thick paint brush, the versatile tack time allows large areas to be coated and adhered at one time.

**Coverage Rate:** 100 sq. ft. per gallon. This product is for use on non-warranted projects only.

**Packaging:** (6) 1-gallon cans – Black and White

**Product Number:**

309550 – Black

302147 – White

**Shelf Life:**

12 months – Black

9 months – White

## CAV-GRIP™ 3V Low-VOC Adhesive/Primer



Versico's CAV-GRIP 3V Low-VOC Adhesive/Primer can be used for a variety of applications: adhering VersiWeld TPO and VersiGard EPDM in the field of the roof and vertical walls, and adhering VersiFleece® to vertical walls. It can also be used as a primer for VapAir Seal 725TR and priming unexposed asphalt prior to applying Flexible DASH Adhesive for insulation attachment.

**Coverage Rate:** See Technical Data Bulletin

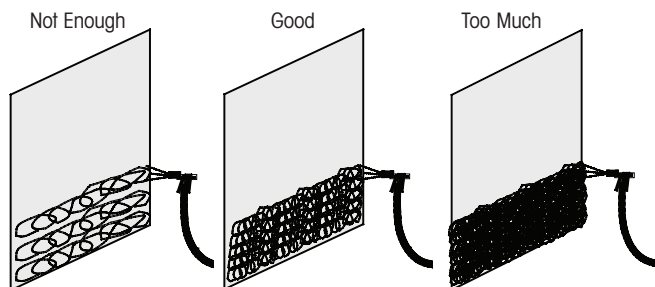
**Packaging:**

# 40 aerosol cylinder – Product Number: 330420

# 85 aerosol cylinder – Product Number: 332800

**Shelf Life:** 12 months unopened container

**Spray Patterns:**



## CAV-GRIP 3V Accessories



### Spray Gun

Versico's CAV-GRIP Spray Gun is a reusable spray gun for use with CAV-GRIP 3V Low-VOC Adhesive/Primer. The ergonomic handle makes it easy to apply bonding adhesive to vertical surfaces.

#### Installation

1. Use the adjustment wheel to close the valve until ready to use
2. Ensure all fittings are tight and leak free
3. Position the gun tip 12" to 14" from the surface. This allows for maximum pattern width.
4. Hold gun at a 90 degree angle to the surface by locking your wrist. Try not to move your wrist as that will cause an irregular spray pattern.
5. When you are done spraying, turn the adjustment wheel to the closed position. This will lock the gun.
6. When you want to resume spraying, turn the adjustment wheel to the open position. No cleaning should be needed if the hose and gun remain pressurized.
7. To clean the CAV-GRIP spray gun, turn the cylinder off at the valve. Ensure there is no adhesive left in the hose and gun. Hook the hose up to a cylinder of Low-VOC UN-TACK to clean the system. Turn cylinder off and drain Low-VOC UN-TACK from the hose.
8. Use an adjustable wrench to remove and replace spray tips as necessary.

#### Packaging:

Adjustable Spray Gun – Product Number: 307490  
Spray Gun with Extension –  
Product Number: 330912  
Replacement Tips – Product Number: 332774



### Hose & Splitter

The CAV-GRIP Hose should be used in conjunction with CAV-GRIP 3V Low-VOC Adhesive/Primer and a CAV-GRIP Spray Gun. The CAV-GRIP Hose is available in 6', 12' and 18' lengths.

#### Installation

1. Ensure all fittings are tight and leak free
2. No cleaning should be needed if the hose and gun remain pressurized.
3. To clean the CAV-GRIP spray gun, turn the cylinder off at the valve. Ensure there is no adhesive left in the hose and gun. Hook the hose up to a cylinder of Low-VOC UN-TACK to clean the system. Turn cylinder off and drain Low-VOC UN-TACK from the hose.
4. Use an adjustable wrench to attach the splitter to the CAV-GRIP 3V cylinder.
5. Attach hoses to both ends of the splitter using an adjustable wrench.

#### Packaging:

6' Hose – Product Number: 304302  
12' Hose – Product Number: 304303  
18' Hose – Product Number: 304304  
Hose Splitter – Product Number: 332680

### Dual-Tip Spray Applicator

Versico's Dual-Tip Spray Applicator, specially designed for use with CAV-GRIP 3V, reduces application time by spraying two streams adhesive with a single CAV-GRIP Spray Gun and Hose.

Product Number: 348903



## CAV-PRIME Canisters



### CAV-PRIME EPDM V-150 Primer

CAV-PRIME V-150 Primer is Versico's V-150 Primer packaged in a pressurized cylinder for spray application. V-150 Primer is a solvent-based product designed for one-step cleaning and priming of EPDM surfaces prior to the application of QA Seam Tape, factory-applied QA tape (QAT), and all other quick-applied (QA) products. CAV-PRIME primers are applied using a self-contained spray system coupled with a spray gun with extension wand and applicator attachment kit. CAV-PRIME spray guns, hoses, and applicator attachment kits are sold separately.

**Coverage Rate:** Approximately 1,320 ft<sup>2</sup>/cylinder (402 m<sup>2</sup>) can be expected when used with Pre-Kleened membrane or in seam areas that have been cleaned prior to application. Do not use with standard (dusted) membrane without cleaning.

**Packaging:** # 20 small cylinder – Product # 341466



### CAV-PRIME Low-VOC EPDM and TPO Primer

CAV-PRIME Low-VOC EPDM & TPO Primer is Versico's Low-VOC membrane primer packaged in a pressurized cylinder for spray application. Low-VOC Primer is a solvent-based product designed for one-step priming of EPDM or TPO surfaces prior to the application of Versico's QAT, Coverstrip, QA Seam Tape and all other quick-applied (QA) products. This product is designed to comply with VOC regulations. CAV-PRIME is applied via a self-contained spray system coupled with a spray gun with extension wand and applicator attachment kit. CAV-PRIME spray guns, hoses, and applicator attachment kits are each sold separately.

**Coverage Rate:** Approximately 1,760 ft<sup>2</sup>/cylinder (163.5 m<sup>2</sup>) can be expected on pre-cleaned EPDM and TPO membrane. Do not use with standard (dusted) EPDM membrane without cleaning.

**Packaging:** # 20 small cylinder – Product # 341449



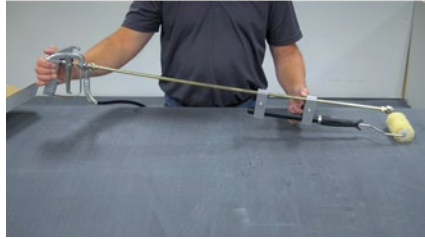
### CAV-PRIME Low-VOC Hose & Gun Cleaner

Versico's CAV-PRIME Low-VOC Hose & Gun Cleaner is designed to clean the spray guns and hoses used to apply CAV-PRIME primers. It can also be used to remove primer from various surfaces including single-ply membranes, accessories, and metal. CAV-PRIME Low-VOC Hose & Gun Cleaner is VOC compliant in all 50 states.

**Coverage Rate:** 250 – 300 ft<sup>2</sup> per cylinder

**Packaging:** # 16 mini cylinder – Product # 341407

## CAV-PRIME Accessories



### CAV-PRIME Applicator Attachment

#### Overview

Versico's CAV-PRIME Applicator Attachment consists of specially designed clamps and baton which allow a roller to be attached to a 2' or 3' spray gun extension so primer can be sprayed and rolled in one step. The clamps are made from durable but light milled aluminum and feature thumb screws for easy adjustment. The baton features male threads at one end and fits most commonly available threaded roller handles

#### Installation

1. Separate the two aluminum clamps by removing the thumb screws and lay the clamp halves that contain the internal threads flat, with the cradles facing up.
2. Place the 10" threaded baton onto the larger cradles milled into the clamp halves and the 2'- or 3'-long extension gun into the small cradles of the clamp halves.
3. Place the other half of the aluminum clamps over the pole and gun extension, lining up the screw holes. Thread the thumb screws into the clamps, tightening them just enough so final adjustments can still be made.
4. Thread a 4"-wide roller handle onto the baton and adjust the baton/roller so that the spray tip is just above the roller and the roller can comfortably be pushed using the handle of the gun. Fully tighten the thumb screws to prevent the baton/roller from spinning/sliding during application.

### CAV-PRIME Spray Gun

#### Overview

Versico's CAV-PRIME Spray Gun is an industrial grade spray gun with a 3' extension nozzle for use with CAV-PRIME primers. The ergonomic handle makes it easy to spray and roll primer when used in conjunction with the CAV-PRIME Applicator Attachment Kit. The CAV-PRIME Spray Gun's 3' extension is made from durable and rigid stainless steel for less flex when rolling primer.

**Note:** Avoid cross contamination of CAV-PRIME and CAV-GRIP 3V/CAV-GRIP PVC Adhesive in spray gun/equipment. NEVER USE LOW-VOC UN-TACK to clean CAV-PRIME Spray Guns or tips as it will cause primer to gel inside the hose/gun.

#### Installation

1. Use the trigger adjustment wheel to lock the trigger closed until ready to use.
2. Ensure all fittings are tight and leak free.
3. Install the CAV-PRIME Applicator Attachment and roller.
4. Use the adjustment wheel to adjust trigger depth and spray velocity. Apply and roll primer per Versico specifications and details.
5. When you are done spraying, turn the adjustment wheel to the closed position. This will lock the gun.
6. When you want to resume spraying, turn the adjustment wheel to the open position. No cleaning should be needed if the hose and gun remain pressurized.
7. To clean the CAV-PRIME gun, hose, or tip, turn the cylinder off at the valve. Ensure there is no adhesive left in the hose and gun\*. Hook the hose up to a cylinder of CAV-PRIME Low-VOC Hose & Gun Cleaner to clean the system. Turn cylinder off and drain Hose & Gun Cleaner from the hose.
8. Use an adjustable wrench to remove and replace spray tips as necessary.

\* CAV-PRIME guns and hoses can be utilized multiple times if maintained properly

## Low-VOC Primer



Designed for one-step cleaning and priming of EPDM surfaces prior to the application of quick-applied products. It is a Low-VOC product that is ideal for use where environmental issues are a concern.

**Coverage Rate:** As high as 600 sq. ft. per gallon with Kleen EPDM membrane. Approx. 250 square feet per gallon with dusted EPDM membrane.

**Packaging:**

1-gallon pail – Product Number: 329161

**Shelf Life:** 12 months

## V-150 EPDM Primer



A solvent-based product designed for cleaning and priming EPDM membranes prior to the application of quick-applied products.

**Coverage Rate:** As high as 450 square feet per gallon with Kleen

EPDM membrane. Approx. 250 square feet per gallon with dusted EPDM membrane

**Packaging:**

(6) 1-gallon cans – Product Number: 302081

**Shelf Life:** 12 months

## G300 Black & White Lap Sealants



Gun-consistency material used to seal the exposed cut edge of EPDM membranes and the edges of flashing.

**Coverage Rate:** 22' per tube using a 5/16" bead

**Packaging:** 25 Tubes/carton

**Product Number:**

302189 – Black

309819 – White

**Shelf Life:** 12 months

## G400 Two-Part Pourable Sealer



A two-component, solvent-free, polyurethane-based product compatible with VersiGard and VersiGard White membranes.

Designed to provide a flexible, durable and long-lasting seal around hard-

to-flash penetrations. Can also be used to provide a permanent tie-in between EPDM membranes and a built-up roof surface, and for attaching lightning rod bases and ground cable clips to the membrane surface.

**Coverage Rate:** 231 cubic inches of volume per properly mixed gallon.

**Packaging:**

Part A – (2) 1-gallon pails/ctn.

Part B – (2) 1-pint cans/ctn.

**Product Number:** 302084

**Shelf Life:** 12 months unopened container

## One-Part Pourable Sealer



A single-component, moisture-curing, elastomeric polyether sealant that is compatible with Versico's EPDM membranes.

Designed to provide a flexible, durable and long-lasting seal

around hard-to-flash penetrations. The sealant's consistency allows for quick pocket filling without mixing. Unused sealant is usable for up to 30 days if pouch is resealed with original cap.

**Coverage Rate:** 122 cubic inches of volume per 1/2-gallon pouch.

**Packaging:** (4) 1/2-gallon pouches per bucket

**Product Number:**

307647 – Black

307603 – White

**Shelf Life:** 12 months unopened container



## Universal Single-Ply Sealant



A 100%-solids, solvent-free, one-part, polyether sealant that provides a weathertight seal to a variety of building substrates.

**Coverage Rate:** 25' per tube or 600' per carton using a ¼" bead.

### Packaging:

24 Tubes/carton – White  
12 Tubes/carton – Gray

### Product Number:

310131 – White  
349227 – Gray

**Shelf Life:** 12 months unopened container  
(@ <90°F)

## G-500 CM Water Cut-Off Mastic



A one-component, low-viscosity, self-wetting, butyl-blend mastic used in conjunction with roofing and waterproofing systems. It is used as a sealing agent between various membranes and substrates for compression-type terminations.

**Coverage Rate:** 10' per tube, using a 7/16" bead.

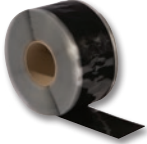
**Packaging:** 25 Tubes/carton

**Product Number:** 302202

**Shelf Life:** 12 months unopened container

## EPDM ACCESSORIES

### Quick-Applied Seam Tape



Fully cured synthetic rubber product used for splicing cured EPDM membrane in ballasted, adhered, and mechanically attached roofing systems.

#### Sizes Available:

3" x 100' – Product Number: 301939 – Black

3" x 100' – Product Number: 309817 – White

6" x 100' – Product Number: 302953 – Black

6" x 100' – Product Number: 317501 – White

**Quantity Per Box:** 2 rolls (6"), 1 roll (9" and 12")

### 20" Quick-Applied Cured Flashing



20" Quick-Applied (QA) Cured Flashing is pre-cut with Quick-Applied Seam Tape and is the most efficient, labor-saving way to flash a curb. Production time on projects with numerous curbs or wall flashings can be reduced with this labor saving accessory.

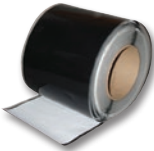
#### Sizes Available:

20" x 50' – Product Number: 326491 – Black

20" x 50' – Product Number: 330913 – White

**Quantity Per Box:** 1 roll

### Quick-Applied Uncured EPDM Flashing



Uncured EPDM laminated to synthetic rubber adhesive. QA Flashing can be used to flash corners, pipes and other penetrations.

#### Sizes Available:

6" x 100' – Product Number: 302682 – Black

6" x 100' – Product Number: 310434 – White

9" x 50' – Product Number: 303484 – Black

9" x 50' – Product Number: 309950 – White

12" x 50' – Product Number: 309773 – Black

12" x 50' – Product Number: 309951 – White

12" x 50' – Product Number: 348768 – Gray

**Quantity Per Box:** 2 rolls (6"), 1 roll (9" and 12")

### Quick-Applied Cured Coverstrip



Cured EPDM membrane laminated to a synthetic rubber adhesive makes this product the optimal solution to overlay seam fastening plates, strip in seams, and metal edgings, or make roof repairs.

#### Sizes Available:

6" x 100' – Product Number: 309774 – Black

6" x 100' – Product Number: 309813 – White

9" x 100' – Product Number: 309776 – Black

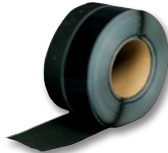
9" x 100' – Product Number: 309814 – White

12" x 50' – Product Number: 317601 – Black

12" x 50' – Product Number: 317599 – White

**Quantity Per Box:** 2 rolls (6"), 1 roll (9" and 12")

### Quick-Applied RTS



Reinforced Termination Strip (RTS) combines reinforced EPDM with 3"-wide Quick-Applied tape for additional membrane securement. A 9" version with 3"-wide Quick-Applied tape on

both sides permits securement of perimeter sheeting on mechanically attached systems.

#### Sizes Available:

6" x 100' RTS – Product Number: 301944 – Black

6" x 100' RTS – Product Number: 309818 – White

#### Use with all EPDM Systems

9" x 100' RTS – Product Number: 301945

Use with Mechanically Attached EPDM Systems

**Quantity Per Box:** 2 rolls (6"), 1 roll (9")

### Quick-Applied Curb Flashing



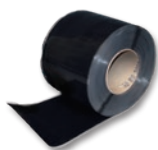
Cured EPDM membrane cut to 20" wide width with 6" QA tape already applied. This product provides an efficient way to flash curbs and short walls.

#### Sizes Available:

20" x 50' – Product Number: 309775 – Black

**Quantity Per Box:** 1 roll

## Quick-Applied Overlayment Strip



Semi-cured EPDM laminated to a synthetic rubber adhesive. It is designed for stripping in drip edges, all types of metal edging and all fastening plates.

### Sizes Available:

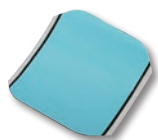
6" x 100' – Product Number: 332656 – Black

9" x 100' – Product Number: 332657 – Black

12" x 50' – Product Number: 305722 – Black

**Quantity Per Box:** 2 rolls (6"), 1 roll (9"),  
1 roll (12")

## Quick-Applied Inside/Outside Corners



Uncured EPDM laminated to a synthetic rubber adhesive. The pre-cut corners greatly reduce installation time and can be used for inside and outside corner installations.

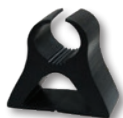
### Sizes Available:

7" x 9" – Product Number: 303325 – Black

7" x 9" – Product Number: 310310 – White

**Quantity Per Box:** 20

## Pipe Supports



An extruded EPDM product used to support steel pipe, electrical conduit, PVC pipe, and copper tubing on Versico's EPDM, TPO, and PVC roofing systems.

### Sizes Available:

Mini: ½" – 1 ½" – Product Number: 309403

Small: ¾" – 2" – Product Number: 309402

Large: 2 ½" – 5" – Product Number: 309404

**Quantity Per Box:** 20 (Mini and Small),  
10 (Large)

## Quick-Applied Walkway Pad



Cured EPDM with a synthetic rubber adhesive. Quick-Applied Walkway Pads are designed to protect the Versico EPDM membrane in areas exposed to repetitive foot traffic.

### Sizes Available:

30" x 30" – Product Number: 300829 – Black

30" x 30" – Product Number: 309589 – White

**Quantity Per Box:** 50

## Quick-Applied T-Joint Covers



Uncured EPDM laminated to a synthetic rubber adhesive. Used to seal field splice intersections and horizontal-to-vertical transitions of field splices. 12" x 12" T-Joint Covers are available for 30-Year Warranty Systems.

### Sizes Available:

6" x 6" – Product Number: 304029 – Black

6" x 6" – Product Number: 332871 – White

12" x 12" – Product Number: 305089 – Black

**Quantity Per Box:** 20

## Quick-Applied Pipe Seals



Cured EPDM with a synthetic rubber adhesive. QA Pipe Seals increase the speed and ease of installation.

### Sizes Available:

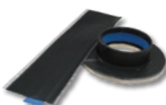
½" – 3" – Product Number: 302684 – Black

1" – 6" – Product Number: 309812 – Black

1" – 6" – Product Number: 317066 – White

**Quantity Per Box:** 10

## Quick-Applied Pourable Sealer Pockets



Uncured EPDM Flashing with a synthetic rubber adhesive and a 2" support strip pre-applied to the flashing. Sizes can be combined to form larger pockets when required.

### Sizes Available:

4" dia. – Product Number: 303322 – Black

6" dia. – Product Number: 303323 – Black

6" dia. – Product Number: 316243 – White

8" dia. – Product Number: 303324 – Black

8" dia. – Product Number: 332890 – White

**Quantity Per Box:** 12

## SECTION 3: TOOLS & EQUIPMENT

1. **Roof Cleaning Equipment**
  - a. Utilize a broom or a leaf blower to clean dust and debris from substrate prior to installation of adhesives and membranes.
2. **Caulk Gun**
  - a. Required for proper application of Lap Sealant and other miscellaneous sealants.
3. **Lap Sealant Tool**
  - a. Included with VersiGard G300 Black and White Lap Sealant cartons. Required for feathering sealant after application with caulk gun.
4. **Nap Roller**
  - a. 4" and 9"-wide medium ( $\frac{3}{8}$ ") nap roller and roller cage
  - b. For installing roller applied adhesives and splice primers
5. **HP Splice Wipes**
  - a. Use in conjunction with Splice Cleaners or Primer to clean and prime membrane prior to installing lap splices and quick-applied accessories.
6. **Shop Broom**
  - a. Required when installing all adhered roof systems ensuring adequate adhesion between membrane and substrate.
7. **150 lb. Segmented Roller**
  - a. Required after brooming membrane on adhered systems utilizing self-adhered sheets, CAV-GRIP 3V Adhesive/Primer, Flexible DASH, QA EPDM membrane, or RapidLock EPDM membrane.
8. **2" Seam Roller**
  - a. Required when installing seams and all quick-applied peel & stick flashing products.
9. **Temperature Gun and Heated Blankets**
  - a. For warming adhesives to the proper temperature prior to application
10. **Other Useful Tools and Accessories**
  - a. Commercial grade generators and OSHA compliant power cords
  - b. OSHA compliant fall guards such as perimeter railing systems and harnesses
  - c. Scissors for cutting membrane and various quick-applied flashings
  - d. Heat gun for warming quick-applied accessories during cold weather flashing installations
  - e. Adjustable wrench for replacing the brass tips on CAV-GRIP 3V spray guns
  - f. Tape measure
  - g. Chalk line
  - h. Utility knife

## SECTION 4: COMMON INSTALLATION ISSUES

### Splice Problems and Splice Repairs

#### A. Cautions

1. Due to solvent flash-off, condensation may form on freshly applied primer when the ambient temperature is near the dew point. If condensation develops, the application of primer and Quick-Applied Seam Tape must be discontinued since proper adhesion will not be achieved. Allow the primer surface to dry and apply a thin freshener coat of primer to the previously coated surface and apply Quick-Applied Seam Tape when conditions allow. Do not stir Low-VOC Primer.

#### B. Splice Repairs

##### 1. General

- a. Prior to initiating repairs, the membrane must be cleaned to remove field dirt and other contaminants. Using a scrub brush, scrub the splice areas with warm water and a low-sudsing soap (Spic and Span, Tide, Lestoil). Rinse with clean water and allow to dry prior to applying Weathered Membrane Cleaner or Versico EPDM Primer as required.
- b. Weathered Membrane Cleaner can be used to prepare membrane exposed to the weather prior to applying Versico EPDM Primer. Saturate a clean HP Splice Wipe or natural fiber rag (cotton) with Weathered Membrane Cleaner and scrub the area in a circular motion. Continue cleaning until the surface is a consistent matte black color without streaking.

##### 2. Repairs of Cuts and Tears (Surface Splice)

Repairs to cuts and tears in the membrane must be accomplished by splicing a membrane section over the affected area.

- a. Select a repair membrane, which is the same material as that to be repaired.
- b. Extend the repair membrane section at least 3" in every direction from the cut or tear. Round the corners of the repair membrane prior to splicing. Clean the membrane to remove field dirt and other contaminants as outlined above.
- c. Apply Versico EPDM Primer to the splice areas. Install Quick-Applied/Peel & Stick Cured Cover Strip or Cured Membrane and Quick-Applied/Peel & Stick Seam Tape and then hand roll the splice areas. Apply T-Joint Covers at splice intersections. Lap Sealant is applied at flashing and tape overlaps in accordance with standard procedures.

##### 3. Repair of Improperly Installed Tape Splices

- a. Improperly installed tape splices include, but are not limited to, fishmouths at field splices, lack of or improper use of Primer, condensation formation on Primer or incorrect tape placement, etc.
- b. If fishmouths are present in the field splice, the fishmouth must be cut by removing the top layer of membrane prior to overlaying the splice. The flashing overlay must be supported by the bottom layer of cured membrane.
- c. Clean the splice area with Weathered Membrane Cleaner. Apply EPDM Primer on both sides extending past the width of the new flashing overlay to be installed.
- d. Overlay the defective splice area with a minimum 6" wide Quick-Applied/Peel & Stick Uncured Flashing, Cover Strip, or Overlayment Strip centered over the edge of the splice. If using Quick-Applied EPDM Uncured Flashing, apply Lap Sealant around the outer edge and feather accordingly.

## SECTION 5: STAGING & STORAGE BEST PRACTICES

### General

- Perimeter warning lines and safety equipment must be in place per OSHA requirements prior to beginning any of the following roof activity.
- Before staging material, an assessment of the roof should be conducted to determine work flow, staging areas, weak spots, structural layout and placement of rolls and insulation.

### Insulation

- Insulation and underlayment must be stored so it is kept dry and protected from the elements. Store bundles flat and upright with the bottom of the bundles elevated (2" or more) above a finished surface.
- Slit the insulation bundle packaging vertically down the center of the two short sides to prevent moisture accumulation within the package. Completely cover the bundle with a waterproof tarp and secure to prevent wind damage and/or displacement.

### Adhesives/Primers

- Keep these products between 60°F – 80°F (15°C – 26°C) for best results and ease of application.
- Jobsite storage more than 90°F (32°C) may affect product shelf life. Prolonged exposure to below-freezing temperatures will cause the adhesive to thicken and eventually solidify in the can. Should the Low-VOC Bonding Adhesive be stored below freezing, restore to room temperature for a minimum of 24 hours prior to use; the adhesive will perform as intended once it is returned to a liquid state. When temperatures are expected to be consistently below 40°F (4°C), a heated enclosure or hot box is recommended for jobsite storage. Keep the adhesive between 60°F – 80°F (15°C – 26°C) for ease of application.
- Products are EXTREMELY FLAMMABLE. It contains solvents that are dangerous fire and explosion hazards when exposed to heat, flame or sparks. Do not smoke while applying. Do not use in a confined or unventilated area. Vapors are heavier than air and may travel along ground or may be moved by ventilation and ignited by pilot lights, other flames, sparks, heaters, smoking, electrical motors, static discharge, or other ignition sources at locations distant from material handling point and flashback. Use only non-sparking tools. All containers should be grounded when material is transferred from one container to another. A red caution label is required when shipping. A fire extinguisher should be available. In case of fire, use water spray, foam, dry chemical or carbon dioxide. Do not use a solid stream of water, because it can scatter and spread the fire.
- These materials are sensitive to atmospheric moisture; heat will accelerate the effect of moisture. Opened containers of bonding adhesive should be used within 48 hours. Adhesive will begin to thicken after this point, making it difficult, and eventually impossible, to control adhesive thickness.

### CAV-GRIP 3V Low-VOC Adhesive/Primer

- Store cylinders in protected, conditioned space with temperature maintained above 70°F (21°C). Do not store cylinders in areas where temperatures reach 110°F (43°C) or higher. Contents are flammable. Store in accordance with local, state, and federal regulations.

### Application Tips – Field Membrane:

- Allow EPDM membranes to relax for 30 minutes prior to applying adhesive.
- Achieve the proper coverage rate of 1,000 square feet per 40# cylinder using the extension wand with an approximate 1-2" (2.5-5cm) overlap of adhesive at each pass.
- Feather the spray gun at the end of each pass to avoid heavy areas which can cause blisters due to trapped solvents. Holding the gun too close to the surface can result in heavy application. Break the skin with a roller in heavy spots allowing solvents below the skin to flash-off.

- Allow adhesive in overlaps or heavy areas to flash-off until it does not transfer to your finger when touched or pushed. Use the “tack and push test” to ensure solvents have flashed-off and adhesive is tacky prior to installing the membrane. CAV-GRIP 3V has a generous open time.
- Flash off takes longer in cooler, cold or cloudy conditions, in shaded areas, and in areas with heavy adhesive coverage.
- Rapid solvent flash-off can lower the surface temperature below the dew point causing moisture to form on the adhesive. Slide your hand across the flashed-off adhesive on the insulation or cover board to ensure moisture has evaporated and the adhesive surface is dry and tacky prior to installing the membrane.
- Broom and roll the membrane with a segmented weighted roller. Pressure is required for a proper bond. Segmented 150-pound rollers are available through Rooftop Equipment at 800-222-6454.

#### **Application Tips - Wall Flashings**

- Same as note above except for a 50% overlap is required at each pass and the extension wand is not recommended for adhesive application on walls.
- Broom walls and roll with a silicone hand roller. Wider extendable Floor Rollers are available at most home improvement stores.

#### **Membrane and Flashing**

- Store EPDM membrane in the original undisturbed plastic wrap and cover with light colored, breathable tarpaulins. EPDM flashing should also be stored in the original packaging in the same manner.

##### **VersiGard QA EPDM**

- 40°F (4°C) ambient and 50°F (10°C) sheet temperature after relaxation for all approved substrates and fastening methods.
- 32°F (0°C) ambient and 40°F (4°C) sheet temperature after relaxation for DensDeck Prime and Securock fastened with urethane adhesive.

##### **VersiGard QA Reinforced EPDM**

- 40° F (4°C) ambient and 50° F (10°C) sheet temperature after relaxation for all approved substrates and fastening methods.
- 32°F (0°C) ambient and 40°F (4°C) sheet temperature after relaxation for Insulbase, DensDeck Prime and Securock fastened with urethane adhesive.

##### **VersiGard QA White EPDM**

- May be installed when the ambient temperature is 32°F (0°C) and is approved for application to DensDeck Prime, SECUROCK, SecurShield HD, SecurShield HD Plus, and clean concrete.
- When positioning the rolls on the roof pay attention to the “unroll” labels found on each individual roll to reduce the need for repositioning.

#### **Quick-Applied Products**

- All quick-applied EPDM accessories must not be exposed to prolonged jobsite storage temperatures more than 90°F (32°C). In warm, sunny weather, keep all quick-applied EPDM accessory rolls in their box or in a shaded area until ready to use. Storage and use at temperatures below 40°F (4°C) will result in a loss of adhesive tack, and in extreme cases will result in an inadequate bond to the substrate.

#### **EPDM Accessories**

- EPDM accessories such as molded and prefabricated products should be stored in a cool, shaded area and cover with light colored, breathable, waterproof tarp.
- Liqueal Liquid Flashing products are to be stored in a cool, dry location between 35°F – 80°F (1°C – 26°C). Do not store in direct sunlight. Approximate shelf life is 12 months with proper storage. Best practice is to store material at 65°F – 70°F (18°C – 21°C) for 24 hours before use. Do not install if ambient temperature is below 40°F (4°C) or above 90°F (32°C).

# SECTION 6: EXECUTION/INSTALLATION PROCEDURES

## VersiGard EPDM Roofing Systems

### Fully Adhered, Ballasted and Mechanically Attached

July 2023

The information contained in this generic specification represents a part of Versico's requirements for obtaining a roofing systems warranty. Construction materials and practices, building siting and operations, climatic conditions, and other site-specific factors will have an impact on the performance of the roofing system. Versico recommends that the building owner retain a design professional to determine appropriate design measures to be taken in order to address these factors.

This section is to serve as criteria for Specifiers and Authorized Contractors regarding the design and installation of Versico's Design "A" Fully Adhered, Design "B" Ballasted and Mechanically Attached EPDM Membrane Roofing Systems. Additional information essential for the design and installation of the roof system mentioned herein are also included in the Design Reference Section and also listed in the form of a Specification Supplement at the end of the Technical Manual. Specifiers and Authorized Contractors are advised to reference all applicable sections.

Various Warranty Tables have been included in Paragraph 1.05 citing various requirements by which specific warranty coverage can be obtained. Appropriate Warranty Table should be referenced to ensure proper warranty coverage.

### PART I – GENERAL

#### 1.01 Description

- A. **The Design "A" Fully Adhered Roofing System incorporates VersiGard (black or white) 60- or 90-mil thick non-reinforced EPDM VersiGard White (white-on-black) 60-mil thick reinforced EPDM, or VersiGard Black 45-, 60- or 75-mil Reinforced EPDM membrane.** An acceptable insulation is mechanically attached to the roof deck or Fully Adhered with Versico supplied urethane-based insulation adhesive or hot asphalt and the EPDM membrane is Fully Adhered to the insulation with Versico's EPDM Bonding Adhesive (Versico's G200SA Substrate Adhesive, CAV-GRIP 3V Low-VOC Adhesive/Primer, Low-VOC Bonding Adhesive, or Versico Water Based Adhesive). Adjoining sheets of EPDM membrane are spliced together using 3" or 6" wide QA Seam Tape and Primer or factory-applied QA Seam Tape (VersiGard QAT) and Primer. There are no maximum slope restrictions for the application of this roofing system.

**NOTE:** When non-reinforced EPDM membrane is used, Versico recommends a minimum of 60-mil thick material. VersiGard 45-mil non-reinforced EPDM may be utilized when specified or required by the owner or owner's representative.

Water based adhesive may be used for projects with 20-year maximum warranty and wind speed coverage up to 72 mph.

- B. **The Design "B" Loose Laid Ballasted Roofing System incorporates minimum 45-mil thick VersiGard Black nonreinforced or minimum 60-mil reinforced EPDM membrane.** Both the EPDM membrane and an acceptable membrane underlayment or insulation are loose laid over the substrate and held in place with a minimum of 10 pounds of ballast per square foot depending upon wind load requirements. Adjoining sheets of EPDM membrane are spliced together using 3" or 6" wide QA Seam Tape and Primer or factory-applied QA Seam Tape (VersiGard QAT) and Primer. The maximum roof slope for this roofing system is 2" to one horizontal foot.



- C. **The Mechanically Attached Roofing System incorporates 45-, 60- or 75-mil VersiGard Black reinforced EPDM membrane or VersiGard White (white-on-black) 60-mil thick reinforced EPDM membrane..** An acceptable insulation is Mechanically Attached to the roof deck and, depending on project criteria; the reinforced membrane is Mechanically Attached with the appropriate Versico Fastener and 2" or 2 3/8" diameter Fastening Plates (Polymer Seam Plates required over steel deck) or Fastening Bars at 6" minimum to 12" maximum along the center of the membrane splice.

Adjoining sheets of EPDM membrane are spliced together using 6" Factory-Applied QA Seam Tape (VersiGard QAT) and Primer or QA Seam Tape and Primer. Field membrane sheets are either 5', 6.5', 8', or 10' wide depending upon wind load requirements, building height and type of roof deck. At the roof perimeter, a heavier fastening density is required utilizing 5' or 6.5' wide sheets or 9" wide Quick-Applied RTS (Reinforced Termination Strip). The maximum roof slope for this roofing system is 18' in one horizontal foot.

The roofing system can also be specified over an existing standing seam, flat seam or corrugated metal roof with the membrane secured to the structural purlins. Refer to the Metal Retrofit System Specifications and Details.

**NOTE: The selection of various components (i.e. insulation, underlayment, membrane thickness, etc.) may vary depending on desired warranty coverage. Refer to appropriate Warranty Tables listed in Paragraph 1.05.**

**Assemblies with membrane fasteners 12" or longer must be submitted for Versico's review to ensure adequate securement due to the possibility of increased dynamic fastener movement. Such assemblies when accepted may require the use of additional insulation fasteners and the use of 1/2" SecurShield HD Recover Board.**

## 1.02 General Design Considerations

- A. Projects where wind speed coverage greater than 55 mph is specified or those with a 20-year or longer Total System Warranty will require additional enhancements beyond those outlined in this section. Prior to installation, refer to Warranty Tables in Paragraph 1.05.
- B. Petroleum based products; certain chemicals and waste products (i.e., grease, oil, animal fats, etc.) are not compatible with these roofing systems. Versico should be contacted for verification or compatibility and recommendations concerning an acceptable roofing assembly.
- C. It is the responsibility of the Specifier to review local, state and regional codes to determine their impact on the specified Versico Roofing System.
- D. It is the responsibility of the building owner or his/her designated representative to verify structural load limitation. In addition, a core cut may be taken to verify weight of existing components when the roofing system is to be specified on an existing facility.
- E. Coordination between various trades is essential to avoid unnecessary rooftop traffic over completed sections of the roof and to prevent subsequent damage to the membrane roofing system.
- F. Concentrated loads from rooftop equipment may cause deformation of insulation/underlayment and possible damage to the membrane if proper protection is not provided. A protection course or sleepers must be specified.
- G. Drainage
  - 1. Drainage must be evaluated by the Specifier in accordance with all applicable codes. Slope may be provided by tapering the structure or through the use of tapered insulation; a sufficient number of roof drains should also be specified and properly located to allow for positive drainage. Significant ponding that could remain after 48 hours should be eliminated with the addition of auxiliary drains in low areas where ponding is anticipated.

**Versico specifically disclaims responsibility for the design and selection of an adequate drainage system and drain accessories. Selection must be made by the building owner or the owner's design professional.**

2. Small incidental areas of ponded water will not impact the performance of this roofing system; however in accordance with industry standards, the roofing assembly should be designed to prevent ponding of water on the roof for prolonged periods (longer than 48 hours). Good roofing practice dictates proper drainage to prevent possible excessive live loads and, in the event of a roof leak, to minimize potential interior damage to the roofing assembly and to the interior of the building.
  3. **Tapered edge strips, crickets, or saddles** are recommended where periodic ponding of water may occur. When the slope of the taper exceeds 2" to one horizontal foot additional membrane securement at the base of the tapered edge strip, cricket, or saddle will be required.
  4. On **VersiGard White EPDM Fully Adhered Roofing Systems**, a slope greater than 1/8" per horizontal foot is recommended to serve the long-term aesthetics.
- H. On new construction projects, especially in cold climate regions, moisture generated due to the construction process could adversely impact various components within the roofing assembly if not addressed. Refer to Design Reference DR-01-21 "Construction Generated Moisture" included in the Versico Technical Manual.
- I. On structural concrete decks, when a vapor retarder is not used, gaps in the deck along the perimeter and around penetrations must be sealed along with vertical joints between fill-up panels, if present, to prevent infiltration of hot humid air and possible moisture contamination resulting from condensation. This is specifically important when adhesive is used to attach the roof insulation.
- NOTE:** If left unaddressed, collected moisture could weaken insulation boards and facers resulting in a blow-off or increase the probability of mold growth.
- J. Retrofit- Recover Projects (when the existing roofing material is left in place)
1. The removal of existing wet insulation and membrane must be specified. The Specifier shall select an appropriate and compatible material as filler for voids created by removal of old insulation or membrane.
  2. A core cut should be taken to verify weight of existing components when the roofing system is to be specified over an existing roofing assembly.
  3. Entrapment of water between the old and new membrane can damage and deteriorate new insulation/underlayment between the two membranes. If a vapor retarder or air barrier is not specified, Versico recommends the existing membrane be perforated to avoid potential moisture accumulation and to allow the detection of moisture to enable the building owner to take corrective action. This can be accomplished by drilling approximately." diameter holes every 100 sq. ft. in the existing built-up roof or single-ply membrane (excluding PVC membrane).
  4. Existing PVC membrane must be totally removed or the existing membrane must be cut into maximum 10' by 10' sections. All PVC flashings at the perimeter, roof drains, and roof penetrations must be removed.

## K. Optional Color Coating

1. Versico X-Tenda Coat is recommended for color coating the EPDM membrane and flashing when required by the Specifier. Available in white or gray. X-Tenda Coat can also be specified as a "Restoration System" when applied to an existing Versico EPDM membrane system that may qualify for a 5- or 10-year Coating System Warranty. Refer to Versico's published X-Tenda Coat Specification for specific requirements.

**NOTE:** Versico may be contacted for other optional color coatings.

### 1.03 Quality Assurance

Building codes are above and beyond the intended purpose of this specification. The building owner, owner's representative or Specifier should verify local codes for applicable requirements and limitations. It is the responsibility of the specifier to review local, state, and regional codes to determine their impact on the specified Versico roofing system..

**NOTE: For code approvals** achieved with the Versico EPDM Roofing Systems, refer to the Versico EPDM Code Approval Guide, Factory Mutual (FM) Approval Guide, or Underwriters Laboratories (UL) Fire Resistance or Roofing, System Directories, and DORA (Directory of Roof Assemblies)

- A. When recovering or retrofitting an existing roof system, the addition of new insulation (type and thickness) may alter the fire performance characteristics of the assembly. Building owners or their designated representatives shall consult the local code enforcement agency to avoid potential code violation.
- B. Versico recommends the use of Versico supplied products for use with these Versico Roofing Systems. The performance or integrity of products by others, when selected by the specifier and accepted as compatible by Versico, is not the responsibility of Versico and is disclaimed by the Versico Warranty.
- C. The specified roofing system must be installed by a Versico Authorized Roofing Contractor in compliance with drawings and specifications as approved by Versico.
- D. Provide polyisocyanurate insulation that meets PIMA Quality Mark Certified LTTR value through third party verification meeting ASTM C 1289, Type II, Class 1, Grade 2.
- E. There must be no deviations made from Versico's specification or Versico's approved shop drawings without the **PRIOR WRITTEN APPROVAL** of Versico.
- F. After completion of the installation, upon request, an inspection shall be conducted by a Field Service Rep (FSR) of Versico to ascertain that the membrane roofing system has been installed according to Versico's published specifications and details applicable at the time of bid. This inspection is to determine whether a warranty shall be issued. It is not intended as a final inspection for the benefit of the owner.

### 1.04 Submittals

- A. To ensure compliance with Versico's minimum warrant requirements, the following projects should be forwarded to Versico for review prior to installation, preferably prior to bid.
  1. Air pressurized buildings, canopies, and buildings with large openings where the total wall openings exceed 10% of the total wall area on which the openings are located (such as airport hangars, warehouses, and large maintenance facilities). Refer to Attachment IV at the end of this section for perimeter considerations, when a Mechanically Attached System is specified.
  2. Cold storage buildings are freezer facilities.
  3. Design "A" Fully Adhered Roofing System projects over 250' in height with warranties up to 15 years.
  4. Design "A" Fully Adhered Roofing Systems over 100' in height for projects with warranties greater than 15 years.

5. Design "B" Ballasted Roofing System projects over 75' in height.
  6. Mechanically Attached Roofing System projects over 100' in height.
  7. Projects where the EPDM is expected to come in direct contact with petroleum-based products, waste products (i.e., grease, oil, animal fats, etc.) and other chemicals.
  8. Projects where hot asphalt is specified for insulation attachment.
  9. Mechanically Attached projects specified with a fastener length exceeding 12".
- B. Shop drawings must be submitted to Versico by the Versico Authorized Roofing Contractor along with a completely executed Copy-A Job Approval Request for approval. Approved shop drawings are required for inspection of the roof and on projects where on-site technical assistance is requested.

Shop drawings must include:

1. Outline of roof and size
  2. Deck type (for multiple deck types)
  3. Location and type of **all** penetrations
  4. Perimeter and penetration details
  5. Key plan (on multiple roof areas) with roof heights indicated
  6. Sheet width and number of perimeter sheets for Reinforced Mechanically Attached Systems
  7. Versico Fastener type, length, and maximum spacing (for membrane securement) for Reinforced Mechanically Attached systems.
- C. **Along with the project submittals** (shop drawings and Request for Warranty), the roofing contractor must include **pullout test** results when the results are below the requirements identified in the Table included in Design Reference DR-06-19 "Withdrawal Resistance Criteria".
- D. Ballasted projects incorporating a lightweight insulating concrete substrate, a **certification letter** is **required** from the lightweight insulation concrete manufacturer for the following conditions:
1. The membrane is specified directly over **vermiculite** or **cellular** lightweight insulation concrete with a maximum compressive strength of 140 psi.
  2. The membrane is specified with Versico's Protective Mat as the membrane underlayment over **vermiculite** or **cellular** lightweight insulation concrete with a compressive strength between 140-175 psi.
- The certification letter must reference the project name and location, accompany the project submittals (shop drawing and Request for Warranty) and contain the following information pertaining to the lightweight insulation concrete mix design:
1. Manufacturer's brand name
  2. Maximum compressive strength
  3. Average wet density
  4. Average air dry density
- E. When field conditions necessitate modifications to the originally approved shop drawings, a copy of the shop drawings outlining all modifications must be submitted to Versico for revision and approval prior to inspection and warranty issuance.
- F. **As-Built Projects** (roofing systems installed prior to project approval by Versico)  
The Versico Authorized Contractor may supply Versico with an As-Built drawing for a project completed prior to Versico's approval. The As-Built drawings:

1. Must conform to Versico’s most current published specifications and details applicable at the time of bid.
2. Must be submitted along with a completely executed Job Completion form.
3. Must include the items identified in Paragraphs B, C and D above.

**NOTE:** As-Built projects are not recommended for those projects referenced in Paragraph A in order to ensure Versico warranty requirements have been met.

**G. Job Completion Form**

After project completion, a Job Completion date must be submitted to Versico to schedule the necessary inspection and acceptance of the project prior to issuance of the Versico warranty.

**1.05 Warranty**

A. A Total System Warranty is available for roofing systems on commercial buildings within the United States and applies only to **products manufactured or marketed by Versico**. The total system is defined as membrane, flashings, adhesives, sealants, and other Versico brand products utilized in the installation. For a complete description of these products, refer to the Part 2 “Products” Section included in this Specification and Spec Supplement “Related Products” P-01-20.

**B. See Tables Below for information regarding Warranted Systems and Design Criteria:**

1. **TABLE I – Non-Reinforced EPDM Membrane Thickness for Various Warranty Options**  
Identifies minimum membrane thickness for non-reinforced membranes used in Fully Adhered or Ballasted roofing systems.
2. **TABLE II – Reinforced EPDM Membrane Thickness for Various Warranty Options**  
Identifies minimum membrane thickness required for Fully Adhered and Mechanically Attached assemblies using reinforced membrane.
3. **TABLE III – Mechanically Fastened Roofing Systems - Membrane Fastening Criteria – Up to 20 YR Warranty - Steel/Concrete Decks** Identifies fastening density, field membrane width and number perimeter sheets required for the various wind zones. The assemblies are categorized based on various building height and specific wind speed warranty coverage.
4. **TABLE IV – Mechanically Fastened Roofing Systems - Membrane Fastening Criteria – Up to 20 YR Warranty - Wood (Plywood & OSB) Deck** Identifies fastening density, field membrane width and number perimeter sheets required for the various wind zones. The assemblies are categorized based on various building height and specific wind speed warranty coverage.
5. **TABLE V – Re-roofing Substrate Criteria - Up to 20 YR Warranty** Identifies required substrates for re-roofing applications for Fully Adhered, Mechanically Attached, and Ballasted roofing systems.
6. **TABLE VI – Adhered Roofing Systems - Underlayment Fastening Criteria - Up to 20 YR Warranty** Identifies required underlayment for Fully Adhered roofing systems with warranties up to 20 years based on the various wind speed coverage available. The Table also identifies fastening density of adhesive bead spacing and required edge terminations.
7. **TABLE VII – Underlayment/Insulation & Required Attachment Assemblies - Up to 20 YR Warranty** for QA EPDM Adhered Roofing Systems Identifies required underlayment for QA EPDM Fully Adhered roofing systems with warranties up to 20 years based on the various wind speed coverage available. The Table also identifies fastening density of adhesive bead spacing and required edge terminations.

8. **TABLE VIII – Adhered Roofing Systems – Underlayment Fastening Criteria - 25 to 30 YR Warranty** Identifies required underlayment for Fully Adhered roofing systems with warranties from 25 to 30 years based on the various wind speed coverage available. The Table also identifies fastening density or adhesive bead spacing and required edge terminations.

**Table I Non-Reinforced EPDM Membrane Thickness for Various Warranty Options**

Warranty Duration	VersiGard Black or VersiGard White Non-Reinforced Membranes					
	Warranty Wind Speed Coverage				Minimum Membrane Thickness	Hail Coverage
	55, 72 or 80 mph		90 to 100 mph	110 to 120 mph		*(Cover Board set in Adhesive)
	Fully Adhered	Ballasted	Fully Adhered	Fully Adhered		
5, 10,15 or 20 year		√(2)			VersiGard 45-mil	1" for Ballasted
5, 10, or 15 year	√	√(2)	√	√	60-mil VersiGard OR VersiGard White	1" for Adhered*
						2" for Ballasted
20 year	√	√(2)	√	√	60-mil VersiGard OR VersiGard White	1" for Adhered*
						2" for Ballasted
25 year (3)	√(1)	√	√(1)	N/A	60-mil VersiGard OR VersiGard White	1" for Adhered*
						2" for Ballasted
30 year (3)	√(1)	√	√(1)	N/A	90-mil VersiGard OR VersiGard White	2" for Adhered*
						3" for Ballasted

Notes: N/A = Not Acceptable √= Acceptable

- (1) G200-SA Yellow Substrate Adhesive or EPDM x-23 Low-VOC or CAV-GRIP 3V Bonding Adhesive must be utilized.
- (2) When VersiGard Reinforced membrane is specified, 60-mil membrane minimum is required for warranties for up to 15 years. Projects with 20 year warranty must incorporate 75-mil membrane.
- (3) See Attachment II '25/30 Year Warranty Design Enhancements' for enhanced design requirements.

**Table II Reinforced EPDM Membrane Thickness for Various Warranty Options**

Warranty Duration	VersiGard Black or VersiGard WHITE Reinforced Membranes								
	Warranty Wind Speed Coverage						Minimum Membrane Thickness	Hail Coverage	Puncture Coverage
	55, 72 or 80 mph		90 mph		100 to 120 mph			*(Cover Board set in Adhesive)	
	Fully Adhered	Mech. Attached	Fully Adhered	Mech. Attached	Fully Adhered	Mech. Attached			
5, 10, or 15 year	√	√	√	√	√	N/A	45-mil VersiGard	N/A	8 man hours
20 year	√	√	√	√	√	N/A	60-mil VersiGard or VersiGard WHITE	1" for Adhered*	16 man hours
25 year (2)	√(1)	√	√(1)	√	√(1)	N/A	75-mil VersiGard	2" for Adhered*	32 man hours
30 year (2)	√(1)	√	√(1)	√	√(1)	N/A	75-mil VersiGard	2" for Adhered*	32 man hours

Notes: N/A = Not Acceptable √= Acceptable

- (1) G200-SA Yellow Substrate Adhesive or EPDM x-23 Low-VOC or CAV-GRIP 3V Bonding Adhesive must be utilized.
- (2) See Attachment II '25/30 Year Warranty Design Enhancements' for enhanced design requirements.

**Mechanically Fastened Membrane Fastening Criteria**

**Table III**

**Up to 20 YR Warranty (1)**

**22 GA. Steel and Structural Concrete Decks**

Peak Gust Wind Speed Warranty	Max. Building Height	Min. Number of Perimeter Sheets			Field Membrane Width	Perimeter Sheet Width***	Fastening Density* (Field & Perimeter Sheets)
		Building Distance from Coastline					
		Greater than 7 miles	3 to 7 miles	Less than 3 miles			
55 MPH	Up to 60'	1	2	3	10'	6.5'	12" O.C.
					8'	6.5'	12" O.C.
	61' to 100'	2	2	3	10'	6.5'	6" O.C.**
					8'	6.5'	12" O.C.
72 MPH	Up to 60'	2	2	3	10'	6.5'	12" O.C.
					8'	6.5'	12" O.C.
	61' to 100'	3	4	4	10'	6.5'	6" O.C.**
					8'	6.5'	12" O.C.
80 MPH	Up to 60'	3	3	4	10'	5****	12" O.C.
					8'	5****	12" O.C.
	61' to 100'	3	4	4	10'	5****	6" O.C.**
					8'	5****	12" O.C.
90 MPH	Up to 60'	3	4	4	10'	5****	6" O.C.**
					8'	5****	12" O.C.
	61' to 100'	4	5	5	10'	5****	6" O.C. **
					8'	5****	12" O.C.

\* Using HPV Fasteners On Steel Deck with Polymer Seam Plates

\*\*12" o.c. Spacing can be utilized by using HPV-XL Fasteners and 2-3/8" Polymer Seam Plates.

\*\*\*As an option, 9" wide EPDM Quick-Applied RTS can be used beneath the field sheets for perimeter securement.

- (1) 20 year is the maximum warranty available with peak gust wind speed of 90 MPH. Projects with greater wind speed coverage **MUST** be submitted to Versico for review and possible considerations.

**Mechanically Fastened Roofing Systems Fastening Criteria**

**Table IV**

**Up to 20 YR Warranty**

**Wood (Plywood or OSB) Decks**

Peak Gust Wind Speed Warranty	Deck Type	Projected Pull-Out Values	Min. Number of Perimeter Sheets			Field Membrane Width	Perimeter Sheet Width	Fastening Density (Field & Perimeter Sheets)
			Building Distance from Coastline					
			Greater than 7 miles	3 to 7 miles	Less than 3 miles			
55 MPH	7/16" OSB	210 lbs	2	3	3	10'	5"	9" O.C.
			2	3	3	8'	5"	12" O.C.
	15/32" 3-Ply Plywood	240 lbs	2	2	3	8'	5"	12" O.C.
			1	1	1	10'	6.5'	12" O.C.
	15/32" 5-Ply Plywood	530 lbs	2	3	3	10'	5"	12" O.C.
			2	3	3	8'	5"	12" O.C.
72 MPH	15/32" 3-Ply Plywood	240 lbs	2	2	3	8'	5"	12" O.C.
			1	1	1	10'	6.5'	12" O.C.
	15/32" 5-Ply Plywood	530 lbs	2	3	3	10'	5"	12" O.C.
			2	3	3	8'	5"	12" O.C.
	5/8" OSB	310 lbs	2	3	3	10'	5"	12" O.C.
			2	3	3	8'	5"	12" O.C.
80 MPH	<i>Contact Versico for Approval and Evaluation</i>							

\*Maximum duration for OSB shall not exceed 20 Years.

**Re-roofing Substrate Criteria (Up to 20 YR Warranty)**

**Table V**

Acceptable Roof Deck/Substrate	EPDM Membrane (See Table I and II for minimum membrane thickness)		
RETROFIT / NO TEAR-OFF	Fully Adhered - Design "A"	Ballasted - Design "B"	Mechanically Attached
Existing Smooth Surface BUR or Mineral Surface Cap Sheet	Direct Application (1)	Insulation	Direct Application (1)
Gravel Surfaced BUR	Insulation	Insulation	Insulation
Coal Tar Pitch	Insulation	Insulation	Insulation
Modified Bitumen	Direct Application (1)	Insulation	Direct Application (1)
Existing Single-Ply	Insulation	Insulation	Direct Application (1)(2)
Sprayed-in-place Urethane	Complete Tear-off Required	Insulation	Complete Tear-off Required

(1) Direct application permitted for projects with warranties up to 15 YR unless specifically approved by Versico. For acceptable insulations, when 20 YR warranty is required refer to Table VI paragraph 1.05.

(2) Direct application over existing PVC is not permitted regardless of warranty duration. Versico may be contacted for specific substrate requirement.

NOTE: Projects with Warranties greater than 20 YR require total removal of existing materials. Refer to Table VI and VII for further material requirements.

NOTE: Refer to Roof Deck and Substrate Criteria Table in Part III for additional installation requirements.



## Fully Adhered Roofing Systems Underlayment Fastening Criteria Up to 20 YR Warranty

**Table VI**

Other Requirements are Listed in Additional Design Considerations following this Table  
All Versico Products listed for higher wind speed coverage can also be used for Warranties for lower speed coverage.  
(i.e. 72 MPH underlayment may be used for 55 MPH underlayment)

Maximum Peak Gust Wind Speed Warranty	Minimum Membrane Underlayment	Insulation/Underlayment Attachment		Metal Edging	
		# of Fasteners per 4' x 8' board size (1)	Adhesive Ribbon Spacing for 4' x 4' size board		
			Field		Perimeter
55 or 72 MPH	1" (20 psi) Polyisocyanurate	16	12" (5)(6)	6" (5)	Versico Drip Edge or VersiTrim 200
	1-1/2" (20 psi) Polyisocyanurate	10			
	2"(20 psi) Polyisocyanurate	8			
	1/2" SecurShield HD	12			
80 MPH	1/4" DensDeck Prime or 1/4" Securock	12	12" (5)(6)(7)	6" (5)(7)	Versico Drip Edge or VersiTrim 200 (11)
	1/2" SecurShield HD Plus	8			
	1/2" Versico Recovery Board (2)	16			
	2" SecurShield HD Composite	6			
	1/2" DensDeck Prime or 1/2" Securock (2)	8			
	1-1/2" Polyisocyanurate(25 psi)	10			
90 MPH	2" (25 -psi) Polyisocyanurate	8	6" (9)	6" (7)(8)	Versico Drip Edge (3), VersiTrim 200 (3)(4) or VersiTrim 2000 or 3000.
	1/2" DensDeck Prime or 1/2" Securock (2)	12			
	1/2" SecurShield HD or 1-1/2" (20-psi) SecurShield Polyiso	16			
	1/2" SecurShield HD Plus or 1/2" DuraStorm VSH (2)	12			
	2" (20-psi) SecurShield or 2" SecurShield HD Polyiso Composite	8			
	1-1/2" DuraFaceR (OSB/Polyiso Composite) or 1/2" DuraStorm VSH(2)	8			
100 MPH	1-1/2" Insulfoam HD Composite	16	FS	FS	Versico Drip Edge (3), VersiTrim 200 (3)(4) or VersiTrim 2000 or 3000.
	2" (25-psi) SecurShield Polyiso (1)	16			
110 MPH	1-1/2" DuraFaceR (OSB/Polyiso Composite) or 1/2" DuraStorm VSH (2)	16	FS	FS	VersiTrim 2000 or 3000
	1/2" SecurShield HD Plus				
120 MPH	5/8" DensDeck Prime or 5/8" DensDeck StormX Prime or 5/8" Securock (2)	16	FS	FS	VersiTrim 2000 or 3000
	1-1/2" DuraFaceR (OSB/Polyiso Composite) (1) or DuraStorm VSH (2)	17			
	1/2" SecurShield HD Plus	24			
	2" SecurShield HD Composite	16			

FS = Full Spray or Ribbons @ 4" O.C.

- (1) For Building heights between 51-100', enhance 12'-wide perimeter with 50% more fasteners and plates.
- (2) For Steel Decks, Cover boards must be installed over a min. 1" thick approved Versico Insulation.
- (3) Versico HPV or HPVX Fasteners must be used to secure Versico Drip Edge or VersiTrim 200 Metal Fascia to perimeter wood nailers.
- (4) Membrane securement is required at the base of the VersiTrim 200 waterdam.
- (5) Gravel Surface BUR - Field @ 6" O.C. / Perimeter @ 4" O.C.
- (6) Steel Decks - Field & Perimeter @ 6" O.C.
- (7) Cementitious Wood Fiber - Field @ 6" O.C. / Perimeter @ 4" O.C.
- (8) Smooth BUR - Field @ 6" O.C. / Perimeter @ 4" O.C.
- (9) Gravel Surface BUR – FS
- (10) Reduced fastening (11 fasteners per 4x 8 board) is acceptable on Reroof/No Tear off projects with a maximum roof height of 40'.
- (11) May be fastened with ring shank nails staggered 4" on center. Versico HPV or HPVX Fasteners may also be used fastened 12" on center.

### Additional Adhered Design Considerations - Up to 20 YR Warranty

- 1 - Building height shall not exceed 100'
- 2 - Local Wind Zone per ASCE 7 shall not exceed 130 mph\*
- 3 - Acceptable decking: 22-gauge or heavier steel, structural concrete, 1-1/2" wood plank, or 15/32" plywood.

\* For projects where building height exceeds 100', please submit to Versico for review.

## Underlayment/Insulation & Required Attachment Assemblies Up to 20 YR Warranty for QA EPDM Adhered Roofing Systems

**Table VII**

Other Requirements are Listed in Additional Design Considerations following this Table

All Versico Products listed for higher wind speed coverage can also be used for Warranties for a lower speed coverage. (i.e. 72 MPH underlayment may be used for 55 MPH underlayment)

Peak Gust Wind Speed Warranty	Minimum Membrane Underlayment	Insulation Attachment			Metal Edging
		# of Fasteners per 4' x 8' board size (1)	Adhesive Ribbon Spacing for 4' x 4' size board		
			Field	Perimeter	
55 or 72 MPH	1" (20 psi) Polyisocyanurate	16 (9)	12" (4)(5)	6" (4)	Versico Drip Edge or VersiTrim 200
	1-1/2" (20 psi) Polyisocyanurate	10			
	2" (20 psi) Polyisocyanurate	8			
	1/2" SecurShield HD	12			
	1/4" DensDeck Prime or 1/4" Securock				
2" (1.25 lb/density) Insulfoam SP*					
80 MPH	1/2" DensDeck Prime or 1/2" Securock (2)	8	12" (4)(5)(6)	6" (4)(6)	Versico Drip Edge or VersiTrim 200 (11)
	1/2" SecurShield HD	16			
	1/2" SecurShield HD Plus	8			
	2" SecurShield HD Composite	6			
	1-1/2" (25-psi) Polyisocyanurate	10			
	2" (25 -psi) Polyisocyanurate	8			
	2" (1.25 lb/density) Insulfoam SP**	16	6" (4)(5)(6)	6" (4)(6)	
1-1/2" Insulfoam HD Composite*	12	12"(8)	6"(6)(7)		
90 MPH	1/2" DensDeck Prime or 1/2" Securock (2)	12	6" (8)	6" (6)(7)	Versico Drip Edge (3), VersiTrim 200 (3)(4) or VersiTrim 2000 or 3000.
	1/2" SecurShield HD or 1-1/2" (20-psi) SecurShield Polyiso	16			
	1/2" SecurShield HD Plus or 1/2" DuraStorm VSH	12			
	1-1/2" DuraFaceR (OSB/Polyiso Composite)	8			
	2" (20-psi) SecurShield Polyiso or 2" SecurShield HD Composite	8			
	1-1/2" Insulfoam HD Composite	16			
100 MPH	5/8" DensDeck Prime or 5/8" DensDeck StormX Prime or 5/8" Securock (2)	16	FS	FS	Versico Drip Edge (3), VersiTrim 200 (3)(4) or VersiTrim 2000 or 3000.
	1/2" SecurShield HD Plus				
	1-1/2" DuraFaceR (OSB/Polyiso Composite) or 1/2" DuraStorm VSH				
	2" (25-psi) SecurShield Polyiso (1)				
	2" SecurShield HD Composite				

**FS = Full Spray or Ribbons @ 4" O.C.**

(1) For Building heights between 51'-100', enhance 12"-wide perimeter with 50% more fasteners and plates.

(2) Cover boards must be installed over a min. 1" thick approved Versico Insulation.

(3) Not Used.

(4) Gravel Surface BUR - Field @ 6" O.C. / Perimeter @ 4" O.C.

(5) Steel Decks - Field & Perimeter @ 6" O.C.

(6) Cementitious Wood Fiber - Field @ 6" O.C. / Perimeter @ 4" O.C.

(7) Smooth BUR - Field @ 6" O.C. / Perimeter @ 4" O.C.

(8) Gravel Surface BUR – FS

(9) Reduced fastening (11 fasteners per 4 x 8 board) is acceptable on Reroof/No Tear off projects with a maximum roof height of 40'.

(10) Versico HPV or HPVX Fasteners must be used to secure Versico Drip Edge or VersiTrim 200 Metal Fascia to perimeter wood nailers.

(11) Membrane securement is required at the base of the VersiTrim 200 waterdam.

(12) May be fastened with ring shank nails staggered 4" on center. Versico HPV or HPVX Fasteners may also be used fastened 12" on center.

\*Maximum warranty available 20 year.

\*\* Maximum warranty available 15 year.

### Additional Design Considerations (Up to 20 YR Warranty)

1 - Minimum membrane thickness 60-mil QA EPDM

2 - Building height shall not exceed 100'

3 - Local Wind Zone per ASCE 7 shall not exceed 130 mph\*

4- Acceptable decking: 22-gauge or heavier steel, structural concrete, 1-1/2" wood plank, or 15/32" plywood.

5- All "T-joints" must be overlaid with appropriate flashing material or Versico "T-Joint" Covers.

\* Projects where building height exceeds 100' or warranty wind speed exceeds 100 mph, shall be submitted to Versico for review.

**Adhered Roofing Systems Underlayment fastening Criteria  
25 YR or 30 YR Warranty**

**Table VIII**

Other Requirements are Listed in Additional Design Considerations following this Table

All Versico Products listed for higher wind speed coverage can also be used for Warranties for lower speed coverage.  
(i.e. 72 MPH underlayment may be used for 55 MPH underlayment)

Maximum Peak Gust Wind Speed Warranty	Minimum Membrane Underlayment	Underlayment Attachment			Metal Edging
		# of Fasteners per 4' x 8' board size (1)	Adhesive Ribbon Spacing for 4' x 4' size board		
			Field	Perimeter	
55 or 72 MPH	1" to 2" (25 psi) Polyisocyanurate	16	6" (3)(5)	6" (5)	Versico Drip Edge or VersiTrim 200
	1/2" Versico Recovery Board (1)(10)				
	1/4" DensDeck Prime or 1/4" Securock				
	1/2" SecurShield HD (2)				
80 MPH	1-1/2" to 2" (25-psi) SecurShield Polyisocyanurate	20	6" (4)(5)(6)	6" (5)(6)	Versico Drip Edge (7), VersiTrim 200 (7)(8) or VersiTrim 2000 or 3000.
	1/2" DensDeck Prime or 1/2" Securock (2)	16			
	1/2" SecurShield HD Plus (2)	20			
	1/2" SecurShield HD (2)	20			
90 MPH	1/2" SecurShield HD (2)	24	FS	FS	VersiTrim 2000 or 3000
	1/2" SecurShield HD Plus (2)	20			
	1/2" DensDeck Prime or 1/2" Securock (2)				
100 MPH	5/8" DensDeck Prime or 5/8" DensDeck StormX Prime or 5/8" Securock (2)	16	FS	FS	VersiTrim 2000 or 3000
	1-1/2" DuraFaceR (OSB/Polyiso Composite) or 1/2" DuraStorm VSH (2)				
	2" SecurShield HD Composite (2)				
	1/2" SecurShield HD Plus (2)	24			

FS = Full Spray or Ribbons @ 4" O.C.

- (1) For Building heights between 51'-100', enhance 12"-wide perimeter with 50% more fasteners and plates.
- (2) Hail coverage offered with substrate.
- (3) Structural Concrete - Field @ 12" O.C. / Perimeter @ 6" O.C.
- (4) 80-mph over structural concrete - Field & Perimeter @ 6" O.C.
- (5) Cementitious Wood Fiber & Wood – FS
- (6) 80-mph over Gypsum Decks – FS
- (7) Versico HPV or HPVX Fasteners must be used to secure Versico Drip Edge or VersiTrim 200 Metal Fascia to perimeter wood nailers.
- (8) Membrane securement is required at the base of the VersiTrim 200 waterdam.
- (9) May be fastened with ring shank nails staggered 4" on center. Versico HPV or HPVX Fasteners may also be used fastened 12" on center.
- (10) 1/2" Recovery Board limited to 55 mph.

**Additional Design Considerations - 25 YR to 30 YR Warranty**

- 1 - Building height shall not exceed 100'
  - 2 - Local Wind Zone per ASCE 7 shall not exceed 130 mph\*
  - 3 - Acceptable decking: 22-gauge or heavier steel, structural concrete, 1-1/2" wood plank, or 15/32" plywood.
  - 4 - 1/4" per horizontal foot slope is preferred; however 1/8" slope with sufficient number of drains and crickets / saddles may be accepted.
  - 5 - Two layers of insulation with staggered joints, bottom layer must be a minimum 1-1/2" (20-psi) Polyisocyanurate.
  - 6 - New construction or complete tear-off of existing roofing material.
  - 7 - Refer to Spec Supplement E-02-20 "EPDM Membrane Splicing and Splice Repairs" and appropriate Versico Details for additional design enhancements.
- \* For projects where building height exceeds 100' or warranty wind speed exceeds 100 mph, please submit to Versico for review.

C. Access for warranty service

It shall be the owner's responsibility to expose the membrane in the event warrant service is required when access is impaired. Such impairment includes, but is not limited to:

1. Design features, such as window washer systems, which require the installation of traffic surface units in excess of 80 pounds per unit.
2. Any equipment, ornamentation, building service units and other top surfacing materials, which are not defined as part of this specification.
3. Photovoltaic and mounting systems or other rooftop equipment which does not provide Versico with reasonable access to the membrane system for purposes of warranty investigation and related repairs.
4. Severely ponded conditions.
5. **CAUTION:** Applications such as walking decks, terraces, patios or areas subjected to conditions not typically found on roofing systems will not be eligible for a membrane system warranty. Versico may be contacted for other available options.

D. The formation or presence of mold or fungi in a building is dependent upon a broad range of factors including, but not limited to, the presence of spores and nutrient sources, moisture, temperatures, climatic conditions, relative humidity, and heating/ventilating systems and their maintenance and operating capabilities. These factors are beyond the control of Versico and Versico shall not be responsible for any claims, repairs, restoration or damages relating to the presence of any irritants, contaminants, vapors, fumes, molds, fungi, bacteria, spores, mycotoxins, or the like in any building or in the air, land, or water serving the building.

### 1.06 Job Conditions

- A. On phased roofing, temporary closures should be provided to prevent moisture infiltration. When a temporary roof is specified, Versico 725TR in conjunction with CCW 702, CCW-702 LV, or CAV-GRIP 3V Low-VOC Adhesive/Primer may be used. Refer to Product Section Part II for additional product information and Spec Supplement G-07-20 "Application Procedures for 725TR Air and Vapor Barrier".
- B. When possible on multiple level roofs, begin the installation on the highest level to avoid or minimize construction traffic on completed roof sections.
- C. On projects at high altitudes (6,000' and above) rapid flash off (drying) of substrate adhesive and primers will occur due to low atmospheric pressure.
- D. Vapor Retarders
  1. Versico does not require a vapor retarder for the protection of the membrane; however, it should be considered by the specifier for the protection of the roofing assembly (i.e. primarily insulation, underlayment and adhesives). The following criteria should be considered by the specifier:
    - a. Use of a vapor retarder to protect insulation and reduce moisture accumulation within an insulated roofing assembly, should be investigated by the specifier. Consult latest publications by ASHRAE (American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc.) and NRCA (National Roofing Contractors Association) for specific information.
    - b. In the generally temperate climate of the United States, during the winter months, water vapor flows upward from a heated, more humid interior toward a colder, drier exterior. Vapor retarders are more commonly required in northern climates than in southern regions, where downward vapor pressure may be expected and the roofing membrane itself becomes the vapor retarder.

- c. On cold storage/freezer facilities, the perimeter and penetration details must be selected to provide an air seal and prevent outside air from infiltrating and condensing within the roofing assembly.
2. When a vapor retarder is specified, VapAir Seal 725TR or VapAir Seal MD Air and Vapor Barrier may be used. Refer to Part II "Products" for necessary information and Spec Supplement G-07-20 "Application Procedures for 725TR Air and Vapor Barrier" for product installation.
    - E. Wood nailers are required for the securement of metal edgings, scuppers, and insulated pipes. Treated or nontreated wood nailers may be specified and shall be secured per specifier recommendation or in accordance with Factory Mutual's Property Loss Prevention Data Sheet 1-49. Refer to Design Reference DR-08-11 "Wood Nailers and Securement Criteria" in Versico Technical Manual shall be reference.
    - F. For fully adhered or mechanically attached systems specified over existing standing seam, flat seam or corrugated metal roofs, refer to the Versico's Metal Retrofit Roofing System Specifications.
    - G. When any of the EPDM Roofing Systems are specified on a portion of a roof, tie-ins to existing roofing membranes will be required. Depending on the type of the existing roofing system, the tie-in method will vary. Total isolation between two roofing systems or weep holes may be required to address moisture migration from one roofing system to the other. Prior to the selection of any tie-in detail, ensure the selected detail will not restrict drainage.

### **1.07 Product Delivery, Storage and Handling**

- A. Deliver materials to the job site in original, unopened containers.
- B. When loading materials onto the roof, the Versico Authorized Roofing Contractor must comply with the requirements of the specifier/owner to prevent overloading and possible disturbance to the building structure.
- C. Job site storage temperatures in excess of 90° F (32° C) may affect shelf life of curable materials (i.e., uncured flashing, adhesives, sealants, primers, QA Seam Tape and Quick-Applied Flashing/Accessories).
- D. When the temperature is expected to fall below 40°F (5°C), outside storage boxes should be provided on the roof for temporary storage of liquid adhesives, sealants, primers, QA Seam Tape and Quick-Applied Flashing/accessories. Containers must be rotated to maintain their temperature above 40° F (5°C).

**NOTE:** Prolonged exposure of quick-applied flashing and QA Seam Tape to temperatures below 40°F (5°C) will cause the pre-applied adhesive tape to lose tack and in extreme cases, not bond to the substrate. Refer to Spec Supplement E-02-18 "EPDM Membrane Splicing and Slice Repairs" in Versico's Technical Manual for application procedures in colder temperatures.

- E. Do not store adhesive containers with opened lids due to the loss of solvent, which will occur from flash off.
- F. Insulation/underlayment must be stored so it is kept dry and is protected from the elements. Store insulation on a skid and completely cover with a breathable material such as a tarp or canvas. If the insulation is lightweight, it should be weighted to prevent possible wind damage.

## Part II- Products

### 2.01 General

The components of this roofing system are to be products of Versico or accepted by Versico as compatible. The installation, performance or integrity of products by others, when selected by the specifier and accepted by Versico, is not the responsibility of Versico and is expressly disclaimed by the Versico warranty.

### 2.02 Membrane

A. VersiGard (Black and White) Non-Reinforced EPDM Membranes

1. Cured non-reinforced EPDM (Ethylene, Propylene, Diene Terpolymer) compounded elastomer.

**VersiGard 45- (Black Membrane Only), 60-, or 90-mil thick Non-Reinforced EPDM membrane** is available in Black or White. VersiGard White membranes are installed with the white surface facing up. VersiGard membrane with thickness up to 60-mil can be available in widths up to 50' and lengths up to 150' (200' for 45- mil membrane only). VersiGard White membrane with thickness of 60-mil is available up to 20' widths and lengths up to 150' long. VersiGard Black/VersiGard White 90-mil membranes are available in widths up to 10' and lengths up to 100'. Membrane conforms to ASTM D4637, Type I (non-reinforced).

2. **VersiGard Clean (black) EPDM Membrane** (mica dust has been removed during manufacturing) is available for sheets maximum 10' wide.
3. Refer to the physical properties listed on the following pages

B. VersiGard Reinforced EPDM Membranes

1. Cured reinforced EPDM (Ethylene, Propylene, Diene Terpolymer) compounded elastomer. **VersiGard Reinforced EPDM Membrane** is only available in black.

**45-, 60- or 75-mil thick VersiGard Reinforced EPDM Membrane** is available in sizes referenced in Table below. Reinforced membrane with polyester fabric conforms to ASTM D4637, Type II (reinforced).

VersiGard Reinforced Membrane Size Availability*			
Membrane Thickness	Sheet Sizes		
45-mil	5' or 6.5' X 100'	-	10' x 50' or 100'
60-mil	5' or 6.5' X 100' 5' x 200'	8' x 100'	10' x 50' or 100'
75-mil	-	-	10' x 50' or 100'

\*Contact Versico for other custom sizes available.

2. 60-mil thick VersiGard White Reinforced EPDM membrane is available in a 10' x 100' sheet size.
3. Refer to the physical properties listed on the following pages.

**45-, 60-, AND 90-MIL THICK NON-REINFORCED EPDM MEMBRANE**

**45-mil thick VersiGard (standard) non-reinforced EPDM membrane** is used only for VersiGard Design "B" Loose Laid Ballasted Roofing Systems.

**60- or 90-mil thick VersiGard (black and white) non-reinforced EPDM membrane** is used primarily for fully adhered roofing systems. Either membrane can also be used for ballasted and protected membrane assemblies.

**NOTE:** Although 60-mil Non-Reinforced EPDM is recommended for Adhered Roofing Systems, 45-mil thick FR Non-Reinforced EPDM may be utilized, if specified.

<b>VERSIGARD BLACK/VERSIGARD WHITE NON-REINFORCED MEMBRANES</b>						
Physical Property	Test Method	ASTM SPEC. (Pass)	Typical			
			45-mil	60-mil	60-mil	90-mil
			FR	FR	VersiGard White	VersiGard Black FR/ VersiGard White
Tolerance on Nominal Thickness, %	ASTM D 412	±10	±10	±10	±10	±10
Weight, lb./ft <sup>2</sup> (kg/m <sup>2</sup> )			0.26 (1.3)	0.35 (1.7)	0.39 (1.9)	0.59 (2.9)**
Tensile Strength, min, psi (MPa)	ASTM D 412	1305 (9)	1600 (11)	1600 (11)	1600 (11)	1600 (11)
Elongation, Ultimate, min, %	ASTM D 412	300	480	465	540	540
Tear Resistance, min, lbf/in (kN/m)	ASTM D 624 (Die C)	150 (26.3)	200 (35.0)	200 (35.0)	200 (35.0)	200 (35.0)
Factory Seam Strength, min.	Modified ASTM D 816	Membrane Rupture	Membrane Rupture	Membrane Rupture	Membrane Rupture	Membrane Rupture
Resistance to Heat Aging* Properties after 4 weeks @ 240°F (116°C)	ASTM D 573					
Tensile Strength, min, psi (MPa)	ASTM D 412	1205 (8.3)	1500 (10.3)	1450 (10)	1345 (9.3)	1450 (10)
Elongation, Ultimate, min, %	ASTM D 412	200	225	280	280	280
Tear Resistance, min, lbf/in (kN/m)	ASTM D 624	125 (21.9)	215 (37.6)	215 (37.6)	185 (32.4)	215 (37.6)
Linear Dimensional Change, max, %	ASTM D 1204	±1.0	-0.4	-0.5	-0.2	-0.5
Ozone Resistance* Condition after exposure to 100 pphm Ozone in air for 168 hours @ 104°F (40°C) Specimen is at 50% strain	ASTM D 1149	No Cracks	No Cracks	No Cracks	No Cracks	No Cracks
Brittleness Temp., max, deg. F (deg. C)*	ASTM D 746	-49 (-45)	-49 (-45)	-49 (-45)	-67 (-55)	-49 (-45)
Resistance to Water Absorption* After 7 days immersion @ 158°F (70°C) Change in mass, max, %	ASTM D 471	+8.0, -2.0	[+2]	[+2]	[+3.3]	[+2.0]
Water Vapor Permeance* max, perm	ASTM E 96 (Proc. B or BW)	0.1	0.05	0.03	0.02	0.03
Resistance to Outdoor (Ultraviolet) Weathering* Xenon-Arc, total radiant exposure at .70 W/m <sup>2</sup> irradiance, 176°F (80°C) black panel temp.	ASTM D 4637 Conditions	No Cracks No Cracking @7560 kJ/m <sup>2</sup>	No Cracks No Cracking @41580 kJ/m <sup>2</sup>	No Cracks No Cracking @41580 kJ/m <sup>2</sup>	No Cracks No Cracking @25200 kJ/m <sup>2</sup>	No Cracks No Cracking @41580 kJ/m <sup>2</sup> (black) @25200 kJ/m <sup>2</sup> (white)

\* Not a Quality Control Test due to the time required for the test or the complexity of the test. However, all tests are run on a statistical basis to ensure overall long-term performance of the sheeting.

\*\* VersiGard White 90-mil Membrane Weight in lb/ft<sup>2</sup>(kg/m<sup>2</sup>) is equal to 0.60 (2.9)

### 60-MIL THICK REINFORCED EPDM MEMBRANE

The membrane is used for Mechanically Fastened Roofing Systems.

VersiGard membranes are formulated with fire retardants to inhibit spread of flame and meets or exceeds UL Class A requirements for slopes up to 3°, depending on the assembly.

<b>VERSIGARD WHITE REINFORCED MEMBRANE</b>			
Physical Property	Test Method	ASTM SPEC. (Pass)	Typical 60-mil
Tolerance on Nominal Thickness, %	ASTM D 751	±10	±10
Weight, lb/ft <sup>2</sup> (kg/m <sup>2</sup> )			0.40 (2.0)
Thickness Over Scrim, min. in.(mm)	ASTM D 4637 Annex	0.015 (.381)	0.020 (.508)
Breaking Strength, min, lbf (N)	ASTM D 751 Grab Method (1)	90 (400)	225(996)
Elongation, Ultimate, min, %	ASTM D 751 Grab Method	250 **	480**
Tear Strength, min, lbf (N)	ASTM D 751 B Tongue Tear	10 (45)	70 (311)
Brittleness Temp., max. deg. F (deg. C)*	ASTM D 2137	[-49] (-45)	[-49] (-45)
Resistance to Heat Aging* Properties after 4 weeks @ 240°F	ASTM D 573		
Breaking Strength, min, lbf (N)	ASTM D 751	80 (355)	250 (1,110)
Elongation, Ultimate, min, %	ASTM D 412	200**	250**
Linear Dimensional Change, max, %	ASTM D 1204	±1.0	-1.0
Ozone Resistance* Condition after exposure to 100 ppm Ozone in air for 168 hours @ 104°F (40°C) * Specimen wrapped around 3" mandrel	ASTM D 1149	No Cracks	No Cracks
Resistance to Water Absorption* After 7 days immersion @ 158°F (70°C) Change in mass, max, %	ASTM D 471	+8.0, -2.0	[5.2**]
Water Vapor Permeance* Max. perms	ASTM E 96 (Proc. B or BW)	0.10	0.02
Fungi Resistance	ASTM G 21	N/A	0 (No Growth)
Resistance to Outdoor (Ultraviolet) Weathering* Xenon-Arc, total radiant exposure at .70 W/m <sup>2</sup> irradiance, 176°F (80°C) black panel temp.	ASTM G 155	No Cracks No Cracking @ 2,520 kJ/m <sup>2</sup> 1,000 hrs.	No Cracks No Cracking @ 25,200 kJ/m <sup>2</sup> 10,000 hrs.
At 0.35 W/m <sup>2</sup> irradiance, 80°C black panel temperature		2,000 hrs.	20,000 hrs.
* Not a Quality Control Test due to the time required for the test or the complexity of the test. However, all tests are run on a statistical basis to ensure overall long-term performance of the sheeting.			
** Specimens to be prepared from coating rubber compound, vulcanized in a similar method to the reinforced product.			



**45-, 60- OR 75-MIL THICK REINFORCED EPDM MEMBRANE  
STANDARD AND FIRE RETARDANT (FR)**

The membrane is used for Fully Adhered or Mechanically Attached Roofing Systems

The standard VersiGard reinforced membranes are formulated with fire retardants to inhibit spread of flame and meets or exceeds UL Class A requirements for slopes up to 3°, depending on the assembly. A 10' X 100' VersiGard reinforced FR Membrane is available in 60-mil when higher slope UL Class A ratings are needed.

VERSIGARD REINFORCED MEMBRANES						
Physical Property	Test Method	ASTM SPEC. (Pass)	Typical			
			45-mil	60-mil	75-mil	
			Standard	Standard and FR	Standard	
Tolerance on Nominal Thickness, %	ASTM D 751	±10	±10	±10	±10	
Weight, lb/ft <sup>2</sup> (kg/m <sup>2</sup> )			0.27 (1.3)	0.39 (1.9)	0.48 (2.3)	
Thickness Over Scrim, min. in.(mm)	ASTM D 4637 Annex	0.015 (.381)	0.016 (.406)	0.020 (.508)	0.032 (0.81)	
Breaking Strength, min. lbf (N)	ASTM D 751 Grab Method	90 (400)	140 (623)	140 (623)	177 (787)	
Elongation, Ultimate, min, %	ASTM D 751 Grab Method	250 **	480**	480**	500**	
Tear Strength, min. lbf (N)	ASTM D 751 B Tongue Tear	10 (45)	70 (311)	70 (311)	70 (311)	
Brittleness Temp., max. deg. F (deg. C)*	ASTM D 2137	[-49] (-45)	[-49] (-45)	[-49] (-45)	[-49] (-45)	
Resistance to Heat Aging* Properties after 4 weeks @ 240°F	ASTM D 573					
Breaking Strength, min. lbf (N)	ASTM D 751	80 (355)	182 (823)	182 (823)	182 (823)	
Elongation, Ultimate, min, %	ASTM D 751	200**	250**	250**	250**	
Linear Dimensional Change, max. %	ASTM D 1204	±1.0	-1.0	-1.0	-1.0	
Ozone Resistance* Condition after exposure to 100 ppm Ozone in air for 168 hours @ 104°F (40°C) Specimen wrapped around 3" mandrel	ASTM D 1149	No Cracks	No Cracks	No Cracks	No Cracks	
Resistance to Water Absorption* After 7 days immersion @ 158°F (70°C) Change in mass, max. %	ASTM D 471	+8.0, -2.0	[+5.5**]	[+5.5**]	[+5.5**]	
Factory Seam Strength, min.	Modified ASTM D 816	Membrane Rupture	Membrane Rupture	Membrane Rupture	Membrane Rupture	
Resistance to Outdoor (Ultraviolet) Weathering* Xenon-Arc, total radiant exposure at 70 W/m <sup>2</sup> irradiance, 176°F (80°C) black panel temp.	ASTM D 4637 Conditions	No Cracks No Cracking @7560 kJ/m <sup>2</sup>	No Cracks No Cracking @35320 kJ/m <sup>2</sup>	No Cracks No Cracking @35320 kJ/m <sup>2</sup>	No Cracks No Cracking @35320 kJ/m <sup>2</sup>	

\* Not a Quality Control Test due to the time required for the test or the complexity of the test. However, all tests are run on a statistical basis to ensure overall long-term performance of the sheeting.

\*\* Specimens to be prepared from coating rubber compound, vulcanized in a similar method to the reinforced product.

## 2.03 Insulations/Underlayments

### A. General

1. Roof insulation thickness must be determined by the thermal value required for each project and may be subject to code approval limitations. On projects where a vapor retarder is used, the specifier must calculate insulation thickness to ensure the temperature at the vapor retarder will not fall below the calculated dew point.
2. Multiple layers of insulation are recommended with all joints staggered between layers.
3. For minimum recommended R-Values, previously published by American Society of Heating and Air-Conditioning Engineers (ASHRAE), consult local building code official for applicable requirements.
4. For insulation fastening pattern and densities refer to Versico Applicable Details and Design Reference DR-05-21 "Insulation Fastening Patterns".
5. Versico insulation/underlayment must be specified for all Total System Warranty projects. Any of the Versico insulation/underlayment may be specified subject to design restrictions included with each table

### B. Versico Polyisocyanurate

Table B1 Polyisocyanurate (See below for product descriptions)					
Insulations / Underlayment	Minimum Thickness	ASTM	Roofing System Acceptability		
			Adhered	Mechanically Attached	Ballasted
Versico VersiCore Polyiso	*1.5"	C1289, Type II, Class 1, Grade 2 or 3	√	√	√
Versico VersiCore NH Polyiso	*1.5"	C1289, Type II, Class 1, Grade 2 or 3	√	√	√
Versico VersiCore HD	0.5"	C1289, Type II, Class 1, Grade 3	N/A	√	N/A
SecurShield Polyisocyanurate	*1.5"	C1289, Type II Class 2, Grade 2 or 3	√	√	√
SecurShield NH Polyisocyanurate	*1.5"	C1289, Type II Class 2, Grade 2 or 3	√	√	√
SecurShield HD Polyiso Composite (SS HD)	2"	C1289, Type IV, Grade 2 or 3	√	√	√
DuraFaceR Polyiso Composite (OSB)	1.5"	C1289, Type V, Grade 2 or 3	√	√	N/A
<b>Design Restrictions</b>					
- Extended Warranty, those with longer duration, higher wind speed, or puncture coverage, may require the use of a cover board over Polyiso Insulation, refer to Warranty Tables in Paragraph 1.04 for applicable requirements. - Maximum Flute Spanability shall be limited to 2-5/8" when 1" Minimum Polyiso Insulation is to be used. - Minimum thickness of insulation board may be restricted by wind speed coverage and warranty duration, refer to Tables V and VI in Paragraph 1.05. - The use of HD Polyiso Composite roof insulation is not recommended for Ballasted Applications. *1.5" minimum for adhered systems. 1" minimum for mechanically fastened systems or as a base layer for adhered.					
Notes: N/A = Not Acceptable √ = Acceptable					

1. **Versico VersiCore Polyiso** – A foam core insulation board covered on both sides with a medium weight fiber-reinforced felt facer meeting, ASTM C 1289-06, Type II, Class 1, Grade 2 (20 psi) or Grade 3 (25 psi). The product is available in 4' x 8' standard size with a thickness from 1 to 4 inches. 4' x 4' tapered panels are also available.
2. **Versico VersiCore NH Polyiso** – A foam core insulation board covered on both sides with a glass-reinforced felt meeting ASTM C 1289, Type II, Class 1, Grade 2 (20 psi) or Grade 3 (25 psi). The product is available in 4' x 4' and 4' x 8' standard size with a thickness from 1/2" to 4 inches. VersiCore NH Polyiso contains zero halogenated flame retardants.
3. **Versico VersiCore HD** – A high-density, foam core insulation board covered on both sides with a glass-reinforced felt meeting ASTM C 1289, Type II, Class 1, Grade 3 (25 psi). The product is available on 4' x 4' and 8' x 8' standard size with a thickness of one-half inch.
4. **SecurShield Polyisocyanurate** – A foam core insulation board covered on both sides with a coated glass fiber mat facer meeting ASTM C 1289-06, Type II, Class 2 (20 psi) or Grade 3 (25 psi). The product is available in 4' x 8' standard size with a thickness from 1 to 4

inches. 4' x 4' tapered panels are also available. These flat board products feature a dark-colored coated-glass facer (CGF) on one side of the insulation board and a light-colored CGF on the other, labeled ReadyFlash. ReadyFlash Technology allows applicators to manage adhesive flash-off times by choosing between two different-colored facers on every board.

5. **SecurShield NH Polyisocyanurate** – A foam core insulation board covered on both sides with a coated glass fiber mat facer meeting ASTM C 1289, Type II, Class 2, Grade 2 (20 psi) or Grade 3 (25 psi). The product is available in 4' x 4' and 4' x 8' standard size with a thickness from ½ inch to 4 inches. SecurShield NH contains zero halogenated flame retardants.
6. **SecurShield HD Composite** – Composite insulation panel comprised of ½ inch high-density (109 psi max) Polyiso cover board laminated during the manufacturing process to SecurShield rigid Polyiso roof insulation meeting ASTM C1289 Type IV, Grade 2 (20 psi) or Grade 3 (25 psi). Available in 4' x 8' boards with a thickness from 2" to 4.5". 4' x 4' panels are also available.
7. **DuraFaceR Polyiso Composite (OSB)** – Polyiso insulation bonded on the bottom side with a medium weight fiber reinforced felt facer and laminated with a top surface of 7/16" or 5/8" thick Oriented Strand Board (OSB) meeting ASTM C 1289-06, Type V, Grade 2 (20 psi) or Grade 3 (25 psi). Available in 4' x 8' boards with a thickness from 1-½" to 4".

C. EPS : Expanded Polystyrene

Table C1 EPS: Expanded Polystyrene (See below for product descriptions)					
Insulations / Underlayment	Minimum Thickness	ASTM	Roofing System Acceptability		
			Adhered	Mechanically Fastened	Ballasted
InsulFoam I	1"	C578 Type I	N/A	N/A	√
InsulFoam VIII	.75"	C578 Type VIII	N/A	N/A	√
InsulFoam II	.75"	C578 Type II	N/A	N/A	√
InsulFoam IX	.75"	C578 Type IX	N/A	N/A	√
InsulFoam HD Composite (SecurShield HD)	1.5"	C578 Type (I, VIII, II, or IX)	√	√	N/A
InsulLam (Various Cover Boards)	1.5"	C578 Type (I, VIII, II, or IX)	√	N/A	N/A
InsulFoam SP	1"	C578 Type VIII	N/A	√	√
<b>Design Restrictions</b>					
- Local Codes must be consulted regarding the acceptance of expanded insulation directly over steel decks. When specified, minimum thickness shall be designated by the manufacturer. - Expanded polystyrene roof insulations cannot be installed directly over coal-tar pitch roof surfaces or existing PVC membranes. A separation layer of minimum 1/2" SecurShield HD, Versico Recovery Board or Polyiso Insulation shall be used. - The use of InsulFoam HD Composite roof insulation is not recommended for Ballasted Applications.					
Notes: N/A = Not Acceptable √ = Acceptable					

1. **InsulFoam I** – A closed-cell lightweight expanded polystyrene (EPS) that meets ASTM C578, Type I. Nominal density of 1.0 lbs/cubic ft. (pcf) available in 4' x 4' or 4' x 8' sizes with thickness from ¼" to 40". Custom lengths, widths and tapered boards are available. May be specified beneath Versico HP Recovery Board, Dens-Deck Prime, DensDeck StormX Prime or Securock.
2. **InsulFoam VIII** – A closed-cell lightweight expanded polystyrene (EPS) that meets ASTM C578, Type VIII. Nominal density of 1.25 lbs/cubic ft. (pcf) available in 4' x 4' or 4' x 8' sizes with thickness from ¼" to 40". Custom lengths, widths and tapered boards are available. May be specified beneath Versico Recovery Board, Dens-Deck Prime, DensDeck StormX Prime or Securock.
3. **InsulFoam II** – A closed-cell lightweight expanded polystyrene (EPS) that meets ASTM C578, Type II. Nominal density of 1.5 lbs/cubic ft. (pcf) available. May be specified beneath Recovery Board, Dens-Deck Prime, DensDeck StormX Prime or Securock.

4. **InsulFoam IX** – A closed-cell lightweight expanded polystyrene (EPS) that meets ASTM C578, Type IX, Nominal density of 2.0 lbs/cubic ft. (pcf) available in 4' x 4' or 4' x 8' sizes with thickness from ¼" to 40". Custom lengths, widths and tapered boards are available. May be specified beneath Recovery Board, Dens-Deck Prime, DensDeck StormX Prime or Securock.
5. **InsulFoam HD Composite** – InsulFoam expanded polystyrene (EPS) insulation laminated with a top surface of ½" thick SecurShield HD. Available in 4' x 8' boards with thickness from 1-½" to 7".
6. **InsulLam** – InsulFoam expanded polystyrene (EPS) insulation laminated with a top surface of 7/16" or 5/8" thick Oriented Strand Board (OSB), ½" Securock, or ½" Versico Recovery Board. Available in 4' x 8' boards with thickness from 1-½" to 7".
7. **InsulFoam SP** – A closed-cell lightweight expanded polystyrene (EPS) with a factory-laminated fiber glass facer. Nominal density of 1.25 lbs/cubic ft. (pcf), and meets ASTM C578, Type VIII. Designed for low-sloped roof applications that employ mechanically attached or ballasted membranes.

D. **XPS: Extruded Polystyrene** – Available through Versico is dimensionally stable with high thermal and low water absorption performance capability. XPS is available in varying compressive strengths thicknesses and sizes. Refer to specific Technical Data Bulletins for physical properties and additional technical information.

1. **Thermapink 18 or 25 Extruded Polystyrene**
2. **Foamular 400 Extruded Polystyrene**
3. **Dow Styrofoam Deckmate Plus Extruded Polystyrene**

Table D1 XPS: Extruded Polystyrene (See below for product descriptions)					
Insulations / Underlayment	Minimum Thickness	ASTM	Roofing System Acceptability		
			Fully Adhered	Mechanically Attached	Ballasted
Thermapink 18	.75"	Refer to Technical Data Bulletin	N/A	N/A	√
Thermapink 25	1"	Refer to Technical Data Bulletin	N/A	N/A	√
Foamular 400	1"	Refer to Technical Data Bulletin	N/A	N/A	√
Dow Styrofoam Deckmate Plus	1"	Refer to Technical Data Bulletin	N/A	N/A	√
Design Restrictions					
<ul style="list-style-type: none"> <li>- Local Codes must be consulted regarding the acceptance of expanded insulation directly over steel decks. When specified, minimum thickness shall be designated by the manufacturer.</li> <li>- Expanded polystyrene roof insulations cannot be installed directly over coal-tar pitch roof surfaces or existing PVC membranes. A separation layer of minimum 1/2" SecurShield HD, Versico Recovery Board or Polyiso Insulation shall be used.</li> <li>- Refer to related products listed in Spec Supplement P-01-20 "Related Products" for other products which may be suitable for use. Versico must be contacted for specific requirements.</li> </ul>					
Notes: N/A = Not Acceptable √ = Acceptable					

E. **Versico Vacuum Insulated Panel (VIP)**

1. **Optim-R Vacuum Insulated Panel (VIP)** – a high R-Value vacuum insulated panel (VIP) used to provide a low-profile solution when height restrictions exist, such as windows, doors, equipment curbs, etc. Provides an R-38 insulating value in a 2.6" system thickness with up to 35% infill (non-VIP material). Available in 23.6" x 23.6" and 23.6" x 47.2" board sizes.

Table E1 Vacuum Insulated Panel (VIP) (See below for product descriptions)				
Insulations / Underlayment	Minimum Thickness	ASTM	Roofing System Acceptability	
			Adhered	Mechanically Attached
Versico Optim-R VIP	*1.6"	C1484	√	N/A
Design Restrictions				
*2.6" minimum for total installed system including an additional 2 layers of 1/2" SecurShield HD panels; 1 layer on top and 1 layer on bottom of Optim-R. For adhered systems only. Note: Optim-R VIP cannot be cut or punctured.				
Notes: N/A = Not Acceptable √ = Acceptable				

F. Cover Boards/Slip Sheets

Table F1 Cover Boards (See below for product descriptions)					
Insulations / Underlayment	Minimum Thickness	ASTM	Roofing System Acceptability		
			Adhered	Mechanically Attached	Ballasted
SecurShield HD	.5"	C1289, Type II, Class 4 (109 psi max)	√	√	N/A(2)
SecurShield HD Plus	.5"	C1289, Type II, Class 4 (109 psi max)	√	√	N/A(2)
VersiCore HD	.5"	C1289, Type II, Class 1, Grade 3	N/A	√	N/A
DuraStorm VSH	.5"	Refer to Technical Data Bulletin	√	√	N/A
Securock Cover Board	.25"	Refer to Technical Data Bulletin	√	√	N/A
Recovery Board	.5"	C208 Grade 2	√	√	√
DensDeck StormX Prime	.625"	C1177	√	√ (1)	N/A
DensDeck Prime	.25"	C1177	√	√ (1)	N/A
DensDeck	.25"	C1177	N/A	√ (1)	N/A
R-Tech Fanfold Recovery Board	.5"	C578 Type (I, VIII, II, or IX)	N/A	√	√
Protection Mat	6 oz	Refer to Technical Data Bulletins	N/A	√	√
Design Restrictions					
- Recovery Board and R-Tech Fanfold not recommended for direct use over Type B and F steel decks. - Securock Cover Board, Recovery Board, DensDeck Prime, DensDeck StormX Prime or DensDeck may not be used directly over New or Existing Lightweight Insulating Concrete Decks existing or Structural Concrete. - Due to some warranty restrictions, DensDeck, DensDeck Prime and DensDeck StormX Prime not recommended for use directly over existing roofing membrane without prior written approval from Versico. Contact Versico for specific requirements. - R-Tech Fanfold primarily for use in existing roof re-covers applications or directly over structural or lightweight insulating concrete. - Protection Mat may be used for Ballasted systems over Lightweight Insulating Concrete with a Maximum Warranty duration of up to 15 years. To be used for Mechanically Attached on new construction projects with Lightweight Insulating Concrete, Fiber Cement or Gypsum Deck a Maximum Warranty duration of up to 15 years. (1) Permitted with roofs with slopes greater than 2" per foot for compliance with external fire codes, refer to UL listings or contact Versico. (2) Acceptable for some roof system designs. Contact Versico for Recommendations					
Notes: N/A = Not Acceptable √ = Acceptable					

- SecurShield HD** – A rigid insulation panel composed of a high-density (109 psi max), closed-cell polyisocyanurate foam core laminated to coated-glass fiber-mat facer for use as a cover board or recover board. Available ½" thick 4' x 8' panel weight 11 lbs with an R-value of 2.5. These flat board products feature a dark-colored coated-glass facer (CGF) on one side of the insulation board and a lightcolored CGF on the other, labeled ReadyFlash. ReadyFlash Technology allows applicators to manage adhesive flash-off times by choosing between two different-colored facers on every board.
- SecurShield HD Plus** – A rigid insulation panel composed of a high-density (109 psi max), closed-cell polyisocyanurate foam core laminated to premium-performance coated-glass fiber-mat facer for use as a cover board or recover board. Available ½" thick 4' x 8' panel weight 11 lbs with an R-value of 2.5. Meets an FM 1-90 using only 8 fasteners per 4' x 8' board.
- VersiCore HD** – a closed-cell polyisocyanurate foam core insulation board covered on both sides with glass-reinforced felt (GRF) facer meeting ASTM C 1289, Type II, Class 1, Grade 3. The product is available in 4' x 4' and 4'x 8' standard sizes with a thickness of one half inch.
- Securock Cover Board** – A uniform composition of fiber-reinforced gypsum, without a facer, for use as a cover board or a thermal barrier. Available in ¼" to ⅝" thick and 4' x 4' or 4' x 8' size boards. Long uninterrupted runs (>200') may require slight gapping due to thermal expansion.
- DuraStorm VSH Cover Board** – an engineered composite building material made from a proprietary blend of plastic and cellulose fiber sourced from post-industrial and post-consumer waste streams. DuraStorm VSH is a durable, extremely moisture and mold resistant building material with a core that does not disintegrate or delaminate in the presence of water. Available in ½" thick and 4' x 8' size board.

6. **Versico Recovery Board** – A ½" or 1" thick high-density wood fiberboard with an asphalt coated facer for use as a cover board or recover board. Available ½" or 1" thick and 4' x 4' or 4' x 8' size boards.
7. **DensDeck StormX Prime** – a reinforced gypsum cover board with an enhanced, moisture-resistant core and coated glass mat facers on the top and bottom side. The top surface is pre-primed and provides excellent bond strength for adhered membrane for use as a cover board. DensDeck StormX Prime is extremely durable and is approved for use in assemblies meeting FM's Very Severe Hail (VSH) Classification. Available in ⅝" thickness and 4' x 4' or 4' x 8' size boards.
8. **DensDeck Prime** – Gypsum core that incorporates glass-mat facings on the top and bottom side. The top surface is pre-primed and provides excellent bond strength for fully adhered membrane for use as a cover board. Available in ¼" to ⅝" and 4' x 4' or 4' x 8' size boards.
9. **DensDeck Cover Board** – Gypsum core that incorporates glass-mat facings on the top and bottom side for use as a cover board. Available in ¼" to ⅝" and 4' x 4' or 4' x 8' size boards.
10. **R-Tech FanFold Recover Board** – Closed-cell lightweight expanded polystyrene (EPS) with polymeric laminated faces which meets ASTM C578 for use as a recover board. Polymeric facer compatible with PVC membrane, while metallic side used with EPDM. Available in thicknesses of ⅜" to ¾" with coverage 4' x 50' (2 squared). 4' x 8' units are also available.
11. **HP Protective Mat** – A nominal 6-oz per square yard UV resistant polypropylene needle punched fabric used either above the membrane as a slip-sheet for ballast or an underlayment to the membrane. Available 15' x 300' roll (4500 square foot) weighing 0.06 lbs per square foot. When used in reroof/no tear-off projects, warranty is limited to 15-year projects.

## 2.04 Related Materials

### A. Flashing

1. **VersiGard Black Quick-Applied/VersiGard White Peel & Stick Cured Cover Strip:** A 6" and 9" widths and 100' long and 12" wide by 50' long VersiGard Black or VersiGard White 60-mil cured EPDM membrane laminated to a nominal 30-mil cured Quick-Applied Tape. The Cured Cover Strip is ideal for flashing gravel stops, metal edging and Versico Seam Fastening Plates.
2. **VersiGard Quick-Applied Overlayment Strip:** A nominal 40-mil black, semi-cured EPDM membrane laminated to a nominal 30-mil cured, Quick-Applied/Peel & Stick Tape. Available in 6" and 9" widths and 100' long and 12" width with 50' long rolls used to overlay seams, flash gravel stops, metal edgings and Seam Fastening Plates used for additional membrane securement.
3. **VersiGard Black and Gray Quick-Applied/VersiGard White Peel & Stick Uncured EPDM Flashing:** A 6" x 100' and 9" or 12" wide by 50' long, 60-mil thick VersiGard Black or VersiGard White uncured EPDM Flashing laminated to a 30-mil Quick-Applied/Peel & Stick Tape used in conjunction with EPDM Primer. VersiGard Uncured Quick-Applied/Peel & Stick Flashing is used to flash inside and outside corners, pipes, scuppers and field fabricated pourable sealer pockets when the use of Versico pre-fabricated flashing accessories is not feasible.
4. **VersiGard Black Quick-Applied/VersiGard White Peel & Stick Curb Flashing** – A 20" wide by 50' long VersiGard Black or VersiGard White cured 60-mil thick EPDM membrane with 6" wide Quick-Applied/Peel & Stick Tape along one edge to be used to flash curbs/skylights, etc.

5. **VersiGard Black Quick-Applied//VersiGard White 20" Peel & Stick EPDM Cured Flashing** – A 20" wide by 50' long VersiGard Black or VersiGard White cured 60-mil thick EPDM membrane with Quick-Applied/Peel & Stick tape the full width already applied, used to flash curbs/skylights, etc.
  6. **VersiGard Black Quick-Applied/VersiGard White Peel & Stick "T" Joint Covers** – A factory cut 6" x 6" or 12" x 12" uncured 60- mil thick EPDM flashing laminated to a nominal 30-mil Quick-Applied/Peel & Stick Tape, used to overlay field splice intersections and to cover field splices at angle changes. Available in 6" x 6" and 12" x 12" sizes for VersiGard Black and 6" x 6" sizes for VersiGard White.
  7. **VersiGard Black Quick-Applied/VersiGard White Peel & Stick Inside/Outside Corner** – A 7" x 9" precut 60-mil thick (black or white) Uncured Flashing with a 30-mil Quick-Applied/Peel & Stick Tape; used for inside and outside corners, to overlay field splice intersections, and to cover field splices at angle changes.
  8. **VersiGard Black Quick Applied/VersiGard White Peel & Stick Pipe Seals** with Quick-Applied/Peel & Stick Tape on the deck flange are available for use with VersiGard (Black and White) Roofing Systems:
    - a. VersiGard Black Quick-Applied Pipe Seals are available in sizes: ½" to 3" and 1" to 6".
    - b. VersiGard White Peel & Stick Pipe Seals are available in one size: 1" to 6"
  9. **VersiGard Black Quick-Applied/VersiGard White Peel & Stick Pourable Sealer Pocket** – A pre-fabricated Pourable Sealer Pocket which consists of a 2" wide plastic support strip with Quick-Applied/Peel & Stick, adhesive backed uncured Flashing; black available in 4", 6" and 8" diameters for VersiGard Black EPDM and 6" and 8" diameter for VersiGard White EPDM.
- B. SEAM TAPES, PRIMERS, ADHESIVES AND SEALANTS/CLEANERS

Refer to Technical Data Bulletins for material coverage rates and proper usage. Prior to the use of any of the products listed below, consult the Material Safety Data Sheets for applicable cautions and warnings.

1. **VersiGard Black Quick-Applied/VersiGard White Peel & Stick Seam Tape** – A 3" or 6" wide by 100' long Splice Tape used for splicing adjoining sections of EPDM membrane. 6" wide splice tape is used for Mechanically Attached Roofing Systems and 20-year Warranty Systems. Complies with the South Coast Air Quality Management District Rule 1168.
2. **Versico V-150 Primer** – A solvent-based primer used to prepare the surface of EPDM membrane for application of Seam Tape or quick-applied/peel & stick products. Available in 1 gallon pails and in pressurized cylinders.
3. **CAV-PRIME V-150 Primer** - Versico's V-150 Primer packaged in a pressurized cylinder for spray application. V-150 Primer is a solvent-based product designed for one-step cleaning and priming of EPDM surfaces prior to the application of Quick-Applied Tape (QAT) and all other quick-applied/peel & stick products.
4. **Low-VOC EPDM and TPO Primer** – A Low-VOC (volatile organic compound) primer (less than 250 grams/liter) for priming EPDM or TPO surfaces prior to application of QA Seam Tape or Quick-applied products. Available in 1 gallon pails and in pressurized cylinders.
5. **CAV-Prime Low-VOC EPDM and TPO Primer** - Versico's Low-VOC membrane primer packaged in a pressurized cylinder for spray application. Low-VOC Primer is a solvent-based product designed for one-step priming of EPDM or TPO surfaces prior to the application of Quick-Applied Tape (QAT), Coverstrip, and all other quick-applied/peel & stick products.
6. **Versico's Lap Sealant** – A heavy-bodied material used at splice intersections beneath "T"-joint covers, at cut edges of reinforced EPDM membrane and around uncured Quick-applied accessories.

7. **Versico Weathered Membrane Cleaner** – A clear, solvent-based cleaner used to loosen and remove dirt and other contaminants from the surface of exposed EPDM membrane prior to applying Versico EPDM Primer. Available in 1 and 5-gallon pails.
8. **Low-VOC Membrane Cleaner** – A Low-VOC (volatile organic compound) cleaner (100% EPA-exempted solvents) used to loosen and remove dirt and other contaminants from the surface of exposed EPDM membrane prior to applying Versico EPDM Primer. Available in 1 and 5-gallon pails.
9. **G200-SA Yellow Substrate Adhesive** – A high-strength, yellow colored, synthetic rubber adhesive used for bonding VersiGard EPDM membranes to various surfaces.
10. **EPDM x-23 Low-VOC Bonding Adhesive** – A Low-VOC (volatile organic compound) bonding adhesive (less than 250 grams/liter) used for binding VersiGard/VersiGard White EPDM membranes to various surfaces. Adhesive is available in 5 gallon pails.
11. **Aqua Base 120 Bonding Adhesive** – A semi-pressure-sensitive water based adhesive; used as a 2-sided contact adhesive for bonding VersiGard EPDM membrane to various surfaces. Complies with the South Coast Air Quality Management District Rule 1168.
12. **CAV-GRIP 3V Adhesive/Primer** – Versico’s CAV-GRIP 3V is a low-VOC (<250 g/L), California-compliant, spray applied aerosol contact adhesive and primer used for a variety of applications: adhering standard TPO and EPDM membranes to horizontal and vertical surfaces, adhering VersiFleece membranes to vertical surfaces, as a primer for VapAir Seal 725TR, and as an unexposed asphalt primer for Flexible DASH. CAV-GRIP 3V is available in disposable/recyclable #40 size cylinders and in returnable/refillable #85 size cylinders.
13. **G500 CM Water Cut-Off Mastic** – A one-component, low viscosity, self-wetting, butyl blend mastic used as a sealing agent between the EPDM membrane and applicable substrates.
14. **G-400 Pourable Sealer** – A black, two-component, solvent-free, polyurethane based product used for tie-ins and as a sealant around hard-to-flash membrane penetrating objects such as clusters of pipes and for daily seal when the completion of flashings and terminations cannot be completed by the end of each work day.
15. **One-Part Pourable Sealer** – A black, one-component, moisture curing, elastomeric polyether sealant used for attaching lightning rod bases and ground cable clips to the membrane surface and as a sealant around hard-to-flash penetrations such as clusters of pipes.
16. **Universal Single-Ply Sealant** – A one-part polyether, non-sagging sealant designed for sealing expansion joints, control joints and counter flashings. Available in white and gray.

## 2.05 Fastening Components

### A. Termination Strip (RTS)

1. **VersiGard Quick-Applied RTS (Reinforced Termination Strip)** – A 6" or 9" wide, nominal 45-mil thick clean, cured reinforced EPDM black membrane with 3" wide Quick-Applied Tape laminated along one edge for the 6" wide RTS and along both edges for the 9" wide RTS.
  - a. **6" wide Quick-Applied RTS** is used horizontally or vertically at the base of walls, curbs, etc., in conjunction with Fastening Plates or Bars below the EPDM deck membrane for additional membrane securement.



- b. **9" wide Quick-Applied RTS** is utilized for perimeter membrane securement on VersiGard mechanically attached roofing systems and primary securement on Metal Retrofit Roofing Systems.

2. **VersiGard White Peel & Stick RTS (Reinforced Termination Strip)** – A 6" wide, nominal 45-mil thick clean, cured, reinforced EPDM membrane with 3" wide Peel & Stick Tape laminated along one edge. Used on VersiGard white fully adhered roofing systems.

B. Fasteners

The following Table illustrates criteria for fastening of Versico Insulation with the referenced roof deck and include minimum penetration requirements and pilot hole criteria.

Deck Type	Versico Fasteners (1)	Min. Penetration	Pilot Hole Depth	Pilot Hole Diameter
Steel or Lightweight Insulating Concrete over Steel	ASAP or InsulTite™	3/4"	N/A	N/A
Structural Concrete, rated 3,000 psi or greater	CD-10	1"	Note (2)	7/32"
	MP 14-10	1"	Note (2)	3/16"
Wood Plank, min. 15/32" thick Plywood or min. 7/16" OSB	HPV, ASAP or InsulTite	Min. 1" (3)	N/A	N/A
Cementitious Wood Fiber	Polymer Gyptec	1-1/2"	Note (4)	N/A
Cementitious Wood Fiber	Lite-Deck Fastener	2"	Note (4)	N/A
Gypsum	Polymer Gyptec	1-1/2"	Note (2)	7/16", 1/2" or 9/16" (5)
Gypsum	Lite-Deck Fastener	2"	Note (5)	Note (6)

Notes: N/A = Not Applicable

(1) Only 3" diameter insulation fastening plates can be used for insulation attachment.

(2) The pilot hole must be predrilled to a sufficient depth to prevent contact between the fastener point and any accumulated dust in the predrilled hole. This will help prevent bottoming out of the fastener during installation.

(3) For wood planks only, fastener penetration shall not exceed 1-1/2".

(4) Most cementitious wood fiber decks do not require pre-drilling; however, Versico should be contacted prior to installation for verification of specific types that may require a pilot hole to be predrilled.

(5) Pilot hole size may be varied to maximize pullout resistance.

(6) Gypsum hardness varies, and the desired pullout may determine pilot hole size. This could range from 1/4" to 5/16".

All Versico Fasteners listed below can be used with VersiGard (black and white) Roofing Systems. Refer to the applicable specification for specific requirements.

- HPV Fastener** – A threaded E-coat square head fastener for insulation and reinforced membrane attachment (mechanically attached systems) in conjunction with 2" diameter Polymer Seam Plates. Used into steel, wood plank, minimum 15/32" thick plywood or minimum 7/16" thick oriented strand board (OSB).
- HPV-XL Fastener** – An oversized diameter (.315") steel, threaded fastener used in conjunction with HPV-XL Polymer Seam Plates for membrane securement into minimum 22 gauge steel or wood decks on mechanically attached roofing systems.
- Insultite ASAP** – Versico's Insultite Fastener pre-assembled with a 3" diameter plate used for insulation attachment only on fully adhered and mechanically attached roofing systems.
- Insultite Fasteners** – A threaded Philips drive fastener used with Versico Insulation Plates for insulation attachment to steel or wood decks.
- MP 14-10 Concrete Fastener** – A #14 threaded fastener with a #3 Philips driver used for minimum 3,000 psi concrete decks.
- CD-10 Nail-In Fastener** – A hammer-driven, non-threaded E-Coat Fastener for use with structural concrete decks rated 3,000 psi or greater.
- Polymer Gyptec Fastener** – A non-penetrating, plastic fastener and corresponding plate used with lightweight deck substrates such as fibrous cement and gypsum.
- Term Bar Nail-In** – A 1-1/4" long expansion anchor with threaded drive pin used for fastening VersiGard Termination Bar or Seam Fastening Plates to concrete, brick or block walls. The fastener is set by hammering the drive pin into place.
- Lite-Deck Fastener** – A deep, coarse threaded fastener used to secure insulation to gypsum and cementitious wood fiber decks in conjunction with Lite-Deck Plates.

### C. Fastening Plates And Bars

1. **Polymer Seam Plate** – A 2" diameter plastic barbed fastening plate used with Versico HPV Fasteners for membrane and Quick-Applied Peel & Stick RTS securement for mechanically attached roofing systems over steel roof decks.
2. **HPV-XL Plate** – A 2- $\frac{3}{8}$ " diameter plastic barbed fastening plate used with HPV-XL Fasteners for membrane and Quick -Applied RTS securement for mechanically attached roofing systems over steel roof decks.
3. **Seam Fastening Plates** – A 2" diameter metal plate used for insulation attachment on mechanically attached roofing systems or membrane securement on fully adhered roofing systems in conjunction with the appropriate Versico Fastener.
4. **Insulation Fastening Plates** – A nominal 3" diameter metal plate used for insulation attachment in conjunction with the appropriate Versico Fastener.
5. **SecurFast Insulation Fastening Plates** – A nominal 2- $\frac{7}{8}$ " hexagon metal plate used for insulation attachment in conjunction with the appropriate Versico Fastener.
6. **Accutrac Insulation Plates** – A nominal 3" square, recessed or flat bottomed, metal plate used for insulation attachment in conjunction with the appropriate Versico Fastener. Flat bottom plate is used with manufactured Philips Head fasteners only.
7. **Gyptec Plates** – A 3" (26-gauge) steel plate for insulation and a 2" (22 gauge) steel plate for membrane attachment. The plates are stamped Galvalume-coated steel.
8. **Polymer Batten Strip** – A 1" wide by  $\frac{1}{20}$ " thick polymer bar which is pre-punched 6" o.c. packaged in 250' long coils used for membrane securement on mechanically attached roofing system in conjunction with HPV or HPVX Fasteners. Refer to applicable Technical Data Bulletin.
9. **Metal Fastening Bar** – A 1" wide metal bar which is pre-punched 6" o.c. and packaged in 10' long strips to be used for membrane securement on mechanically attached roofing systems.

### 2.06 Insulation Securement Adhesive

1. **Flexible DASH Adhesive** – A spray (full coverage) or bead-applied, two-component polyurethane, construction grade, low-rise expanding foam adhesive used for attaching approved insulations to compatible roof decks or existing smooth or gravel surfaced BUR, modified bitumen or cap sheets. Available in 50 gallon and 15 gallon drums.
2. **Flexible DASH Dual Tank** – A two component (Part A and B), extrusion applied, low rise adhesive for bonding insulation to various surfaces. Flexible DASH Dual Tanks utilize an HFO blowing agent. HFO (hydrofluoroolefin) blowing agents are widely recognized as the next-generation environmentally friendly blowing agent, replacing their HFC (hydrofluorocarbon) predecessor. When extruded at 12" on center the coverage rate is 3,500 to 3,700 sq.ft. per set of Dual Tanks.
3. **Flexible DASH Dual Cartridge and 5-gallon Jug Adhesive** – A two component (Part A and B), extrusion applied, low rise adhesive for bonding insulation to various surfaces. When extruded at 12" on center the coverage rate is 400-600 sq.ft. per carton of Dual Cartridges or 2,000-2,500 sq.ft. per set of 5-gallon Jug Adhesive.
4. **OlyBond 500 Bag in a Box** – A two-component, polyurethane, low-rise expanding adhesive used to bond insulation to various substrates. Packaged in 5-gallon boxes of Part A and Part B formulations that are applied using a mechanical dispense system. Applied in  $\frac{1}{2}$ " to  $\frac{3}{4}$ " beads or ribbons at the rate of 1 gallon per 150-250 square feet for 12" o.c. bead spacing. Perimeter bead spacing patterns and acceptable insulation and deck types are listed in the applicable Technical Data Bulletin.

5. OlyBond 500 BA Spot Shot – A two-component, polyurethane construction grade, low-rising expanding adhesive designed for bonding insulation to various substrates. Applied in ½" to ¾" beads or ribbons using a portable 1:1 applicator (oversized, dual-cartridge caulking gun). Refer to the Technical Data Bulletin for bead spacing with reference to building height.

## 2.07 Vapor/Air Barrier

### A. General

The use of a vapor retarder to protect insulation and reduce moisture accumulation within an insulated roofing assembly should be investigated by the specifier, especially on projects with high interior humidity, such as, swimming pools, breweries, pulp mills, etc.

If insulation is to be fully adhered to the vapor retarder with Flexible DASH Adhesive, the vapor retarder must be compatible and shall be fully adhered to the substrate. Available products include Versico's VapAir Seal 725TR Air and Vapor Barrier, VapAir Seal MD Air and vapor Barrier and spray or roller applied Butyl coatings. Installation requirements for Versico's VapAir Seal 725TR Air and Vapor Barrier are identified in Spec Supplement G-07-20 "Application Procedures for 725TR Air and Vapor Barrier" and Versico's VapAir Seal MD Air and Vapor Barrier are identified in Spec Supplement G-12-19 "Application Procedures for Versico's VapAir Seal MD Air and Barrier" in the Versico Technical Manual.

1. **Versico 725TR Temporary Roof Air and Vapor Barrier** – A 40-mil thick composite consisting of 35-mil selfadhering rubberized asphalt membrane laminated to a 5-mil UV resistant poly film with an anti-skid surface which is fully compatible with Flexible DASH Adhesive. 725TR can also function as a temporary roof for up to 120 days. Available in rolls 39" wide by 100' long (325 square feet).
2. **Versico VapAir Seal MD Air and Vapor Barrier** – A reinforced composite aluminum foil with self-adhesive SBS backing and removable poly release film. Used for direct application over metal decks. Available in rolls 42.5" wide by 131.23" long (460 square feet).
3. **CAV-GRIP 3V Low-VOC Adhesive/Primer** – A low-VOC, methylene chloride-free adhesive that can be used for a variety of applications including: bonding VersiGard EPDM and VersiWeld TPO membranes to various surfaces, enhancing the bond between Versico's VapAir Seal 725TR and various substrates, priming unexposed asphalt prior to applying Flexible DASH Adhesive and for adhering VersiGard EPDM membrane to vertical walls. Coverage rate is approximately 2,000-2,500 sq. ft. per 40 lb cylinder and 4,000-5,000 sq. ft. per 85 lb cylinder as a primer, in a single-sided application.
4. **CCW-702 Primer and 702LV Primer (Low-VOC)** – A single component, solvent based, high-tack primer used to provide maximum adhesion between Versico 725TR Air and Vapor Barrier and an approved substrate. Applied by spray or long nap roller with a coverage rating ranging from approximately 300 to 350 square feet per gallon on smooth finishes (i.e., concrete) to 75 square feet per gallon on porous surfaces (i.e., Dens-Deck Prime gypsum board). Available in 5-gallon containers. CCW-702LV Primer contains less than 250g/L VOCs and meets South Coast Air Quality Management District (SCAQMD) and Leadership in Energy and Environmental Design (LEED) Requirements for Volatile Organic Compounds.
5. **CCW-702 WB** – A high-tack, water-based contact adhesive for promoting adhesion of Versico air/vapor barrier membranes and an approved substrate (i.e., concrete, Dens-Deck Prime and Securock). Applied by roller, brush or spray with an application rate of approximately 200 sq. ft. per gallon. Available in 5-gallon containers. CCW-702 WB Primer contains 57g/L VOCs and meets South Coast Air Quality Management District (SCAQMD) and Leadership in Energy and Environmental Design (LEED) Requirements for Volatile Organic Compounds.

## 2.08 Edges And Terminations

### A. General

Products listed below can be used with any of the available Versico Roofing Systems. Refer to the applicable Versico details and installation instruction manuals for specific installation criteria.

### B. Products

1. **VersiTrim 200** – A snap-on edge system consisting of a 24 gauge galvanized metal dam and 40, 50 or 63-mil thick aluminum Kynar® 500, clear and colored anodized finish or 22 or 24 gauge steel, Kynar 500 finish. The fascia is available in a variety of colors and heights varying from 5" to 12-½". Custom fascia and colors are available upon request. ANSI/SPRI ES-1 certified.
2. **VersiTrim 300 Fascia** – A two-part assembly that includes a continuous 24-gauge, galvanized steel spring clip and a decorative snap-on cover, available in .063" (1.60 mm) or .050" (1.25 mm) aluminum and 24-gauge Kynar 500 coated galvanized steel. Custom fascias and colors are available upon request. ANSI/SPRI ES-1 certified.
3. **VersiTrim 400 Fascia** – A two-part assembly that includes a continuous 22-gauge continuous cleat and a decorative snap-on cover, available in pre-painted Kynar 500-coated .040" formed aluminum and 24-gauge Galvalume steel. Additional gauges are available upon request. ANSI/SPRI ES-1 certified.
4. **VersiTrim 2000** – An anchor bar roof edge fascia system consisting of heavy .100" thick extruded aluminum bar, corrosion resistant stainless steel fasteners and snap-on fascia cover used with fully adhered, mechanically attached and ballasted assemblies. Refer to installation instructions for various sizes, colors and accessories ANSI/SPRI ES-1 certified.
5. **VersiTrim 3000** – A metal anchor bar fascia system consisting of a 20 gauge steel retainer bar, corrosion resistant fasteners and an aluminum or 24 gauge steel snap-on fascia cover. It is for use in fully adhered and mechanically attached roofing systems, ANSI/SPRI ES-1 certified.
6. **SecurEdge 4000** – A two-piece assembly that includes a continuous cleat and a decorative fascia cover. Available in pre-painted Kynar 500-coated 0.40" formed aluminum and 24-gauge Galvalume steel, this product features 22-gauge pre-punched cleats with fasteners spaced at 12" on center. ANSI/SPRI ES-1 certified.
7. **Versico Drip Edge** – Designed for use on Fully Adhered and Mechanically Attached Roofing Systems. Includes a 22 gauge continuous 12' pre-punched 90-degree angle cleat and 12' long fascia sections. Incorporates concealed joint covers and strong 1-¼" ring shank nails to provide long-term holding power. A selection of colors in 24 gauge steel, Kynar 500 and 32-mil aluminum finish or Kynar 500 is available.
8. **Versico Ballast Retaining Bar** – A ballast retaining perimeter securement system comprised of a slotted (4" on center) extruded mil aluminum retention bar with an integrated compression fastening strip. 1-½" stainless steel fasteners with Neoprene washers are provided for stable securement.
9. **Termination Bar** – A 1" wide and 98-mil thick extruded aluminum bar pre-punched 6" on center which incorporates a sealant ledge to support Lap Sealant and provide increased stability for membrane terminations.
10. **VersiTrim Term Bar Fascia** – A 1.75" wide formed aluminum termination bar with pre-slotted fastening holes for ease of locating and installing. The decorative cover is available in 0.040" aluminum or 24-gauge galvanized steel. VersiTrim Term Bar Fascia is manufactured in 12' lengths for fewer joints/seams, fewer sections to handle and faster installation.
11. Other Versico Metal Edging/Copings suitable for use with roofing system included in the section can be found in the Specification Supplement G-10-18 Metal Edging.

## 2.09 Roof Walkways

Walkways are to be specified at all traffic concentration points (i.e., roof hatches, access doors, rooftop ladders, etc.), and if regular maintenance, once a month or more, is necessary to service rooftop equipment.

1. Walkway Types:
  - a. **Versico (White or Black) Pressure-Sensitive Molded Walkway Pads** – Versico molded walkway pads with factory applied Quick-Applied Tape are used to provide protection for areas of EPDM membrane that are exposed to regular rooftop maintenance.
  - b. **Versico Interlocking Rubber Pavers** – 24" x 24" x 2" thick rubber paver weighing approximately 24 pounds per unit, 6 pounds per square foot manufactured from recycled rubber, which provides a resilient, shock absorbing, weather resistant surface. Designed primarily for use as a walkway or on terrace areas offering a unique, environmentally sound advantage over concrete pavers. Features include freeze/thaw stability, bi-directional drainage and no breakage concerns. Available in black and terra cotta.
  - c. **Hanover Ballast and Lightweight Ballast Pavers** – The standard, 24" x 24" x 1-<sup>13</sup>/<sub>16</sub>" thick, Ballast Paver comes in a natural color and a non-slip Diamond finish and weighs 22 lbs/sq. ft. The Lightweight, 23-<sup>1</sup>/<sub>2</sub>" x 23-<sup>1</sup>/<sub>2</sub>" x 1-<sup>1</sup>/<sub>4</sub>" thick, Ballast Paver comes in a natural color and a non-slip diamond finish and weighs 15 lbs/sq. ft. Both pavers can be used as ballast or walkways.

## 2.10 Other Versico Accessories

Refer to Spec Supplement P-01-21 "Related Products" for additional accessories.

## PART III – EXECUTION

Prior to commencing with the installation of any of the EPDM Membrane Systems refer to Paragraph 1.05 "Warranty Tables" for applicable components and proper securement method suitable for the appropriate warranty coverage.

Requirements listed in this specification are considered minimum and are intended for the sole purpose of obtaining a Versico Warranty. Additional requirements dictated by Regulatory Agencies, Building Insurance, or Specifiers must be complied with and are considered to be beyond the scope of this specification.

### 3.01 General

- A. Safety Data Sheets (SDS) must be on location at all times during transportation, storage, and application of materials. The contractor shall follow all safety regulations as recommended by OSHA and other agencies having jurisdiction.
- B. Subject to project conditions, it is recommended to begin the application of this roofing system at the highest point of the project area and work to the lowest point to prevent water infiltration. This will include completion of all flashings, terminations, and daily seals.
- C. A proper substrate shall be provided by the building owner. This structure shall be sufficient to withstand normal construction loads and live loads.

### 3.02 Roof Deck/Substrate Criteria

- A. Proper decking shall be provided by the building owner. The building owner or their designated representative must ensure that the building structure is investigated by a registered engineer to assure its ability to withstand the total weight of the specified roofing system, as well as construction loads and live loads, in accordance with all applicable codes. The specifier must also designate the maximum allowable weight and location for material loading and storage on the roof.

- B. When insulation is mechanically fastened to the roof deck, withdrawal resistance tests are strongly suggested to determine the suitability of the roof deck. Refer to Design Reference DR-06-11 "Withdrawal Resistance Criteria" in the Versico Technical Manual proper procedures for conducting pullout tests.
- C. Defects in the substrate surface must be reported and documented to the specifier, general contractor and building owner for assessment. The Versico Authorized Roofing Contractor shall not proceed with installation unless defects are corrected.
- D. On structural concrete decks, when a vapor retarder is not used, gaps in the deck along the perimeter and around penetrations must be sealed along with vertical joints between fill-up panels, if present, to prevent infiltration of hot humid air and possible moisture contamination resulting from condensation. This is specifically important when adhesive is used to attach the roof insulation.
- E. **For all projects** (new or retrofit), the substrate must be relatively even without noticeable high spots or depressions. Accumulated water, ice, or snow must be removed to prevent the absorption of moisture in the new roofing components and roofing system.
- F. Prior to the placement of membrane underlayment, clear the substrate of debris and foreign material that may be harmful to the roofing system. Gaps greater than ¼" must be filled with an appropriate material.
- G. For direct application over an acceptable roof deck/substrate or when Protective Mat is specified and approved by Versico as the membrane underlayment in accordance with the Roof Deck and Substrate Criteria Table, the substrate must be smooth, steel trowel finished (structural concrete), free of debris, protrusions, sharp edges, and loose and foreign material. Cracks or voids in the substrate, greater than ¼", must be filled with an appropriate material.
- H. **On retrofit - recover projects**, cut and remove wet insulation, as identified by the specifier, and fill all voids with new insulation of type specified so it is relatively flush (+/- ¼") with the existing surface.
  - 1. Entrapment of water between the old and new membrane can damage and deteriorate new insulation/underlayment between the two membranes. **If a vapor retarder or air barrier is not specified**, Versico recommends the existing membrane be perforated to avoid potential moisture accumulation and to allow the detection of moisture to enable the building owner to take corrective action. This can be accomplished by drilling approximately ¾" diameter holes every 100 sq. ft. in the existing built-up roof or single-ply membrane (excluding PVC membrane).
  - 2. **For existing PVC membranes**, if the membrane is not removed, it must be cut into maximum 10' by 10' sections. All PVC flashings at the perimeter, roof drains, and roof penetrations must be removed.
  - 3. When installing this roofing system over an existing **gravel surfaced built-up roof, loose gravel must be removed**. Power brooming is recommended by Versico to remove the loose gravel, which may trap moisture. Any uneven areas of the substrate must be leveled to prevent insulation from bridging.
  - 4. On retrofit projects, all existing phenolic insulation must be removed.
  - 5. Refer to table below for other Recover/Retro-fit considerations
- I. The following table identifies the **acceptable roof decks/substrates** and the **minimum underlayment requirements** for Versico's EPDM Roofing Systems.

**NOTE:** Refer to the Warranty Tables, Paragraph 1.05, of this specification, for the minimum underlayment requirements for a specific Warranty Coverage.

## Roof Deck & Substrate Criteria

Certain warranty restrictions apply for projects with warranties greater than 15 YR. Refer to Table V 'Re-roofing Substrate Criteria' for warranty limitations in paragraph 1.05.

Acceptable Roof Deck/Substrate	EPDM Membrane		
	Fully Adhered - Design "A"	Ballasted - Design "B"	Mechanically Attached
<b>NEW CONSTRUCTION</b>	Insulation	Insulation	Insulation
Steel (min. 22 gauge)(1)(2)	Direct Application (11)	Insulation	HP Protective Mat (10)
Structural Concrete (min. 3000 psi ) or Gypsum	Direct Application (11)	Insulation	Direct Application (11)
Plywood (min. 15/32" thick) or Oriented Strand Board (min. 7/16" thick)	Direct Application	Insulation	Direct Application (11)
Wood Planks (minimum 3/4" thick)	Insulation	Insulation	HP Protective Mat
Fibrous Cement	<b>Note 3 (10)</b>	Protective Mat (10)	Direct Application (10)
Lightweight Insulating Concrete	Fully Adhered - Design "A"	Ballasted - Design "B"	Mechanically Attached
<b>RETROFIT / NO TEAR-OFF</b>	Direct Application (4)(11)	Insulation	Direct Application (4)(11)
Existing Smooth Surface BUR or Mineral Surface Cap Sheet	Insulation	Insulation	Insulation
Gravel Surfaced BUR (5)	Insulation (9)	Insulation	Insulation
Coal Tar Pitch (5)(6)	Direct Application (8)(11)	Insulation	Direct Application (8)(11)
Modified Bitumen	Insulation	Insulation (7)	Direct Application (7)(11)
Existing Single-Ply	Complete Tear-off Required	Insulation	Complete Tear-off Required
Sprayed-in-place Urethane	Fully Adhered - Design "A"	Ballasted - Design "B"	Mechanically Attached
<b>RETROFIT / TEAR-OFF</b>	Insulation	Insulation	Insulation
Existing roof material removed (regardless of deck type)			

**Notes:**

- (1) Local codes must be consulted regarding thermal barrier requirements.
- (2) Mechanically Attached Systems cannot be specified on steel decks less than 22 gauge or for corrugated steel decks, regardless of gauge.
- (3) The Design "A" Fully Adhered Roofing System may be specified directly over a new approved cellular or perlite lightweight insulating concrete substrate with a minimum compressive strength of 225 psi. Except when the lightweight insulating concrete is poured over slotted steel decks, pressure relief vents must be specified at a minimum rate of 1 every 2000 square feet. Direct Application is not permitted where the lightweight concrete is poured over an existing roofing material. Refer to **Spec Supplement G-03-20 "Fully Adhered Application Over Lightweight Insulating Concrete"**.
- (4) VersiGard Black Fully Adhered and Mechanically Attached Systems may be applied directly to the substrate provided asphalt on existing smooth surfaced built-up roof has a softening point above 185°F (85°C). VersiGard White Roofing Systems are not recommended for direct application to the substrate due to possible staining of the membrane surface. For direct application over smooth BUR or granule surface BUR or in conjunction with HP Mat make sure substrate is clean and free of roofing cement and fresh asphalt to avoid sheet contamination and staining of white color membrane.
- (5) Loose gravel must be removed to avoid entrapment moisture.
- (6) Existing coal tar could drip back into the building, especially when new insulation does not provide sufficient thermal value to prevent the surface of the coal tar from softening.
- (7) An approved Insulation/underlayment is required over existing ballasted single-ply systems and PVC roofing systems of any type.
- (8) Direct application permitted over smooth surfaced modified bitumen. Membrane shall be positioned with length of sheets parallel to modified bitumen field seams. At end laps or other locations where EPDM splices intersect modified bitumen field seams, 6" wide Uncured or Quick- Applied Flashing must be applied over intersections.
- (9) If insulation is specified to be secured to an existing coal tar pitch roof with Versico Flexible DASH Adhesive or hot asphalt, minimum 1.5" thick Polyisocyanurate insulation is the required minimum thickness when VersiGard Black EPDM is specified. Minimum 1" thick Polyisocyanurate is the required minimum thickness when VersiGard White EPDM is specified.
- (10) For direct application. Membrane system warranties are limited to 15 YR unless specifically approved by Versico.
- (11) Maximum warranty available is 20 YR with 55 MPH peak gust wind speed coverage (72 MPH peak gust wind speed coverage over structural concrete, wood planks or plywood) peak gust wind speed coverage. Versico may be contacted for other options.

#### J. Vapor Retarder Installation

For Versico's Vapor Retarder refer to Spec Supplement G-07-20 "Application Procedures for 725 TR Air and Vapor Barrier". Follow the respective vapor retarder manufacturer's recommended installation procedures and the specifier's instructions for the installation of the product specified. When insulation is to be set in adhesive, verify compatibility with Versico when Vapor Retarder by others is specified.

#### K. Wood Nailers

1. Install wood nailers in locations that have been designated by the specifier and as approved by Versico. Refer to Design Reference DR-08-11 "Wood Nailers and Securement Criteria" for Wood Nailer Criteria.
2. Wood nailers are not covered by the Versico Warranty.

### 3.03 Insulation/Underlayment

#### A. General

1. Roof insulation thickness must be determined by the thermal value required for each project and may be subject to code approval limitations. On projects where a vapor retarder is used, the specifier must calculate insulation thickness to ensure the temperature at the vapor retarder will not fall below the dew point.
2. For new construction projects in cold climate regions, the use of vapor retarders or air barriers is strongly recommended to protect insulation from moisture generated during construction.
3. Multiple layers of insulation are recommended with all joints staggered between layers.
4. Do not install more insulation/underlayment than can be covered by membrane in the same day.
5. All insulation boards must be butted together with no gaps greater than 1/4". Gaps greater than 1/4" are not acceptable.
6. Restrictions:
  - a. Versico Roofing Systems cannot be specified in conjunction with Phenolic Insulation.
  - b. Fiberglass insulation cannot be specified with Versico's Design "A" Fully Adhered and Mechanically Attached Roofing Systems, even if overlaid with additional insulation or membrane underlayment.
  - c. Do not specify perlite boards directly under the EPDM membrane on Design "A" Fully Adhered or Mechanically Attached Roofing Systems.
  - d. Wood fiberboard manufactured by others is not an acceptable underlayment for use with Design "A" Fully Adhered Roofing Systems unless approved in writing by Versico prior to installation.
  - e. For all EPDM Roofing Assemblies, the use of insulation by others is not acceptable when a Versico Membrane System Warranty is specified. Versico insulation must be used.

### 3.04 Insulation Attachment

#### A. General

1. Prior to proceeding with insulation securement refer to Warranty Tables, Paragraph 1.05, for attachment method and appropriate fastening density required for the specific Versico Warranty.



## B. Fully Adhered Roofing Systems

1. **Mechanical Attachment**, insulation fastening density will vary based on insulation type, thickness, and required warranty. Warranty Tables in Paragraph 1.05 should be referenced for fastening density and the appropriate Versico detail may be consulted to identify acceptable fastening pattern.
  - a. For code compliance, increased fastening density may be required depending upon project wind speed and wind uplift requirement. Refer to Design Reference DR-05-21 "Insulation Fastening Patterns" for fastening pattern reference.
  - b. When insulation securement is to comply with Factory Mutual (FM) approvals, follow the requirements of the specifier concerning additional securement at the roof perimeter and corners. Also refer to Design Reference DR-05-21 "Insulation Fastening Patterns" for various fastening patterns.
  - c. *On Reroof/No Tear off projects with a maximum roof height of 40', any Versico Insulation (i.e., 1/2" SecurShield HD, Recovery Board, Polyisocyanurate less than 1 1/2" thick) may be secured at the minimum rate of 11 Fasteners per 4' x 8' board (5 Fasteners per 4' x 4' board).*
  - d. When Oriented strand board (OSB) is specified for membrane underlayment, utilize DuraFaceR OSB/Polyiso Composite, mechanically fastened to the deck at the rate 17 fasteners for 4 x 8 board in accordance with Versico Details. When positioning OSB, butt edges and stagger joints of adjacent panels.
2. **Adhesive attachment**, Versico Urethane Adhesive Full Spray (Flexible DASH) or Bead (Flexible DASH or Olybond) may be used. When bead adhesive is specified bead spacing will vary based on Warranty coverage, refer to Warranty Tables, Paragraph 1.05 and appropriate Versico Details.

**CAUTION:** Apply adhesive bead so that the distance from the edge of the board does not exceed half the bead spacing (i.e. within 6" of bead spacing of 12" O.C.).

**CAUTION:** Do not apply urethane adhesives directly to un-weathered asphalt, (new or residual)

**CAUTION: Especially in cold regions on tear-off projects or new construction gaps between horizontal and vertical surfaces of the roof area as well as gaps around penetrations must be sealed to prevent interior warm air from infiltrating and condensing within the roofing assembly. Condensing moisture could weaken bottom insulation facer and eventually result in dislodgement or loose boards when adhesive is used.**

- a. On FM Global insured projects, consult FM Global's local representative concerning the use of adhesive to attach insulation to steel decks.
- b. Check to ensure the substrate is dry. Adhesive cannot be applied to a wet or damp surface.
- c. Apply Adhesive over the dry substrate area at the coverage rates indicated in Spec Supplement G-02-22 "Insulation Attachment with Flexible DASH Adhesive".
- d. Allow the adhesive to rise up approximately 1/8" and develop strings prior to setting insulation boards into adhesive.

**NOTE:** String-time is measured by touching the adhesive with a splice wipe and looking for development of "strings" of adhesive as you pull the splice wipe out of the adhesive. With Flexible DASH Adhesive, string time is generally around 1 1/2 – 2 minutes after application at room temperature.

- e. **Walk the boards into the adhesive and roll using the 30" wide, 150 pound segmented steel roller** to ensure full embedment. Optimal set up time should be approximately 5 to 7 minutes.

**CAUTION:** Walking on the boards immediately after placement in adhesive can cause slippage/movement until the adhesive has started to set up. On roofs with a slope greater than 1/2" in 12", begin adhering insulation at the low point and work upward to avoid slippage. **A person should be designated to walk/roll in all boards and trim/slit or apply weight as needed to ensure adequate securement.**

- f. Refer to Spec Supplement G-02-22 "Insulation Attachment with Flexible DASH Adhesive" for coverage rates.
3. **Alternate attachment method**, the specifier may select an alternate insulation attachment that incorporates a solid mopping of the insulation with hot asphalt (ASTM D312, Type III or IV). If the attachment method is to be covered by the Versico Warranty, Versico must be contacted for specific requirements. Upon review and acceptance by Versico, the maximum warranty coverage available is limited to 20 Year with maximum Peak Gust Wind Speed Coverage of 72 mph.
- a. Extruded or Expanded Polystyrene insulation are not acceptable when this alternate attachment method is specified.
  - b. The existing gravel surfaced built-up roof must be scraped to remove all loose gravel. Large blisters that may prevent continuous embedment of insulation must be repaired. The surface of the substrate must also be dry and clear of foreign material.
  - c. On coal tar pitch, when deemed compatible by the specifier, minimum 1.5" Polyisocyanurate is the required membrane underlayment when using VersiGard Black membrane. If VersiGard White membrane is used, minimum 1" thick Polyisocyanurate is required.
  - d. For successful attachment, proper asphalt temperatures must be maintained and the specifier's requirements concerning the installation of a base sheet (where required) and quantity of hot asphalt must be followed.
  - e. The maximum insulation board size shall not exceed 4' X 4'. Trim insulation boards around crickets and saddles to ensure continuous embedment.
  - f. Care must be exercised to prevent contamination of the top surface of the insulation. Asphalt oozing through insulation joints must be wiped from the surface. Contact with fresh asphalt can result in discoloration of the VersiGard White membrane.
  - g. Use of a grid nailer, subdividing the roof in individual sections of 2400 sq. ft. is not required for, but its use is strongly recommended.
  - h. The wood nailers are installed relatively flush with the insulation surface and the membrane is to be fastened with seam fastening plates and Versico HPV fasteners on 12" o.c. For wood nailer installation, refer to Design Reference DR-08-11 "Wood Nailers and Securement Criteria".
- C. Ballasted Roofing Systems
1. Insulation boards shall be loose laid over the substrate.  
**NOTE:** If insulation securement is specified, only Versico approved insulation adhesive may be used. Mechanical securement of roof insulation is not permitted due to increased probability of membrane puncture during ballast installation or periodic rooftop maintenance.
  2. Refer to Roof Deck/Substrate Criteria in Paragraph 3.02 for further information.  
**NOTE:** The use of cover boards, such as SecurShield HD, SecurShield HD Plus, DensDeck, DensDeck Prime, or Securock, is not permitted in conjunction with Ballasted Assemblies to reduce possible membrane punctures. Hard cover boards do not provide sufficient cushioning beneath the membrane and therefore when the assembly is subjected to traffic, the membrane is subjected to higher point loading resulting in puncture.

D. Mechanically Attached Roofing System

1. **Versico Fasteners and Fastening Plates** are required for insulation securement. Refer to Insulation Fastening Criteria Table in Paragraph 2.05, for appropriate fastener and deck penetration. The fastener can be used either 2" diameter VersiGard Seam Fastening Plates or 3" diameter VersiGard Insulation Fastening plate.
2. **Any Versico approved insulation or cover board** shall be Mechanically Attached to the roof deck at the minimum rate of **1 fastener and plate per every 8 sq. ft.** (4 fasteners in a 4 x 8 board) for warranties up to 15 years. Projects with up to 20 year or greater warranties (with standard wind speed coverage) require the use of 6 fasteners and plates in a 4' x 8' board (1 per 5.333 sq. ft.).

**CAUTION: Versico Polyisocyanurate Insulation with a thickness less than 1.5" installed over an existing roofing membrane without a tear-off** must be Mechanically Attached to the roof deck with a minimum of **1 fastener and plate for every 4 sq. ft.** or less of insulation.

3. Use of DensDeck and DensDeck Prime should be limited to assemblies with slopes greater than 2" per foot to ensure compliance with external fire codes, care shall be exercised to ensure Polymer Seam Plates are fully seated.

### 3.05 Membrane Placement And Securement

A. General

1. **Ensure** that water does not flow beneath any completed sections of the membrane system by completing all flashings, terminations, and daily seals by the end of each workday.
2. **Sweep** all loose debris from the substrate.
3. If aesthetics are of concern when VersiGard White EPDM is to be used, protection should be specified to avoid discoloration of the white membrane surface resulting from adhesive residue.
4. Adjoining sheets of EPDM membrane are spliced together using QA/P&S Seam Tape and Primer.
5. In addition to the primary membrane securement (Bonding for Fully Adhered, Ballasting for Ballasted Systems and Fastening for Mechanically Attached Assemblies), Additional membrane securement is required at the perimeter of each roof level, roof section, curb, skylight, interior wall, penthouse, etc., at any inside angle change where slope or combined slopes exceed 2" in one horizontal foot, and at other penetrations in accordance with the applicable Versico details. Refer to Paragraph G for additional membrane securement.

B. Membrane Placement

EPDM membrane with factory-applied tape is available in various widths. Prior to unrolling sheets ensure the tape side is properly located so that seams are properly shingled down slope. (Pre-applied QA Seam Tape should always be facing downwards once the sheet is unrolled).

1. **Position** EPDM membrane over the acceptable substrate without stretching. For Mechanically Attached assemblies, ensure the proper number of perimeter sheets are properly positioned along the perimeter of the roof. And field sheets are positioned perpendicular to the steel deck flutes.
2. **Allow** the membrane to relax approximately ½ hour prior to splicing (Ballasted systems), bonding (Fully Adhered Systems), or fastening (Mechanically Attached systems).
3. **Place** adjoining membrane sheets in the same manner, overlapping edges appropriately to provide for the minimum splice width (2 ½" or 5 ½" depending on warranty duration). It is recommended all splices be shingled to avoid bucking of water.

C. Membrane Securement/Bonding – Fully Adhered Roofing System (G200SA, x-23 LVOC, Low-VOC Bonding Adhesive or Aqua Base 120)

1. Adhere EPDM membrane to an acceptable substrate with Versico EPDM bonding adhesive. Comply with Labels, Safety Data Sheet (SDS) and Technical Data Bulletins for installation procedures and use. A contact type adhesive must be applied to both the membrane and the surface to which it is being bonded.
2. On projects at high altitudes (6,000' and above), rapid flash-off (drying) of EPDM Adhesive and Primers will occur due to low atmospheric pressure.
3. Fold membrane sheet back so half of the underside of the sheet is exposed. Sheet fold should be smooth without wrinkles or buckles.
4. Stir EPDM Adhesive thoroughly scraping the sides and the bottom of the can (minimum 5 minutes stirring is recommended). Bonding surfaces must be dry and clean.

CAUTION: If aesthetics are of concern when VersiGard White EPDM membrane is used, protect the white surface next to the edges of the folded membrane sheet so Adhesive will not discolor the white surface. Do not place Adhesive containers or their lids directly on the white surface of the VersiGard White EPDM membrane.

5. Apply Bonding Adhesive evenly, without globs or puddles, with a plastic core medium nap paint roller. A 9" roller will easily fit into the 5-gallon containers.

Apply contact type bonding adhesive to both the membrane sheet and the substrate to achieve continuous coating of both surfaces at a coverage rate of approximately 120 square feet per gallon per one surface (membrane or substrate) or approximately 60 square feet per gallon per finished surface (includes coverage on both membrane and substrate). Depending on adhesive used and the substrate type adhesive coverage rate will vary. Refer to Technical Data Bulletin for the appropriate adhesive for the proper coverage rate.

A mechanical roller dispenser or a mechanical sprayer can be used to apply Bonding Adhesive when the continuous coating and coverage rate noted above are maintained. When used, the adhesive must be rolled after applying with a plastic core medium nap paint roller to provide continuous coverage.

CAUTION: Due to solvent flash-off, condensation may form on freshly applied Bonding Adhesive when the ambient temperature is near the dew point. If condensation develops, possible surface contamination may occur and the application of Adhesive must be discontinued. Allow the surface to dry and apply a thin freshener coat at the coverage rate, which is approximately half of the coverage rate stated above to the previously coated surface when conditions allow for continuing.

6. Allow adhesive to flash-off until it is tacky but will not string or transfer to a dry finger touch.
7. Roll the coated membrane into the coated substrate while avoiding wrinkles.
8. Brush down the bonded half of the membrane sheet, immediately after rolling the membrane sheet into the adhesive, with a soft bristle push broom to achieve maximum contact.
9. Fold back the unbonded half of the membrane sheet and repeat the bonding procedure.

D. Membrane Securement / Bonding - Adhered Roofing Systems (CAV-GRIP 3V)

1. Adhere EPDM membrane to an acceptable substrate with CAV-GRIP 3V Bonding Adhesive. Comply with Labels, Safety Data Sheet (SDS) and Product Data Sheets for installation procedures and use. Contact type bonding adhesive must be applied to both the membrane and the surface to which it is being bonded.

2. On projects at high altitudes (6,000' and above), rapid flash-off (drying) of Bonding Adhesive and Primers will occur due to low atmospheric pressure.
3. Fold membrane sheet back so approximately half of the underside of the sheet is exposed. Sheet fold should be smooth without wrinkles or buckles.
4. Connect CAV-GRIP 3V Cylinder with hose and spray gun. Bonding surfaces must be dry and clean.

CAUTION: If aesthetics are of concern when VersiGard White EPDM membrane is used, protect the white surface next to the edges of the folded membrane sheet so Bonding Adhesive will not discolor the white surface. Do not place CAV-GRIP 3V Cylinders directly on the white surface of the VersiGard White EPDM membrane.

5. Spray apply CAV-GRIP 3V Bonding Adhesive evenly to both the membrane and substrate with a minimum 2" overlap to ensure 100% coverage. Avoid heavy areas or puddles that can skin over, trap solvent and create a blister. Refer to Product Data Sheets for the appropriate adhesive for the proper coverage rate.

CAUTION: Solvent flash-off can lower surface temperature below the dew point causing moisture to form on the adhesive. Slide your hand across the flashed-off adhesive on the insulation or cover board to ensure moisture has evaporated and the adhesive surface is dry and tacky prior to installing the membrane.

6. Allow adhesive to flash-off until it is tacky but will not string or transfer to a dry finger touch.
7. Roll the coated membrane into the coated

#### E. Membrane Securement/Ballasting- Ballasted Roofing Systems

##### 1. Ballasting- General

- a. Use of temporary ballast to prevent wind uplift is the responsibility of the Versico Authorized Roofing Contractor. For immediate protection against wind uplift, Versico requires ballast to be installed as each section of the installation is completed.
- b. When using polystyrene insulation directly beneath the membrane, ballast must be applied immediately after membrane installation to prevent potential damage to polystyrene insulation products from excessive heat.
- c. Care must be exercised during application of gravel or pavers. Heavily traveled areas during ballast installation must be protected by placing temporary protection courses to prevent possible damage to the EPDM deck membrane and insulation.

##### 2. Ballast Types/Coverage Rates

- a. The coverage rates listed in this section are considered minimum and are required by Versico for issuance of the standard Versico warranty. Depending on specific project conditions (building height, parapet height, and project location), additional ballast may be necessary to provide wind uplift protection. Refer to "Attachment I" at the end of this section for suitable ballast types and coverage rates. **Comply with the specifier's requirements when an additional ballast coverage rate is specified.**
- b. **Rounded Water-Worn Gravel** must be applied over the EPDM membrane at the minimum rate of **1,000 pounds per square foot** and must be evenly distributed to maintain an average of 10 pounds per square foot.

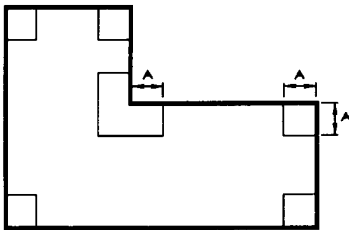
ASTM D 7765 SIZE NUMBER	MINIMUM COVERAGE RATE (pounds per square)	AVERAGE COVERAGE RATE (lbs./sq. ft. continuously distributed)
4 (1-1/2" nominal diameter)	1000	10
3 (2" nominal diameter)	1000	10
2 (2-1/2" nominal diameter)	1300	13
1 (3-1/2" nominal diameter)	1300	13

**NOTE:** In the field of the roof, some bare spots resulting from installation are permitted; however, they must not exceed 64 square inches and must be limited to no more than 2 per square (100 sq. ft.). No bare spots are permitted in the perimeter area of the roof that is 10' wide.

- c. **Crushed Stone** must be applied in conjunction with Versico Protective Mat placed over the EPDM membrane. The crushed stone must be applied at the minimum rate of 1,000 pounds per square and must be evenly distributed to maintain an average of 10 pounds per square foot.
- d. Smooth Surfaced Individual Concrete Pavers or Lightweight Interlocking Concrete Pavers
  - 01. Lightweight interlocking pavers and individual concrete pavers with a surface other than steel troweled finish must be installed over Versico Protective Mat. Contact Versico for verification of acceptable pavers.
  - 02. **Individual Concrete Pavers**, when specified, must be installed loose laid and butted with no gaps greater than 1/2".
 

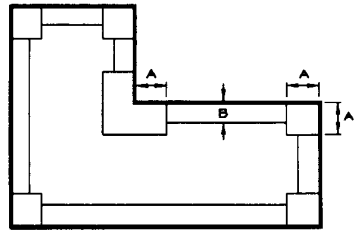
**NOTE:** Do not install pavers heavier than 80 pounds per unit unless approved in writing by Versico.
  - 03. **Lightweight Interlocking Concrete Pavers**, when specified, must be installed in accordance with the respective manufacturer's specification and as approved by Versico prior to installation.
- 4. Ballast Criteria for up to 20 Year Extended Warranty
  - a. Refer to installations below for calculating corner/perimeter areas for the noted warranty wind speeds available.
  - b. At corner and/or perimeter areas, ballast shall be 2 1/2" nominal rounded water worn gravel conforming to gradation #1 or #2 in accordance with ASTM D7765 method of sizing. Coverage rate shall be a minimum of 13 pounds per square foot.

**Ballast Requirements for 72 mph Warranty**



A (Corners) = .4 Times the Building Height  
(10' minimum)

**Ballast Requirements for 80 mph Warranty**



A (Corners) = .4 Times the Building Height  
(10' minimum)  
B (Perimeters) = 10'

- c. In field areas, ballast shall be 1 ½" nominal rounded water worn gravel conforming to gradation #4 in accordance with ASTM D7765 method of sizing. Coverage rate shall be a minimum of 10 pounds per square foot.

4. Placement of Versico Protective Mat

- a. When specified or required by Versico, position Versico Protective Mat loosely over the membrane with all edges overlapped a minimum of 6".
- b. Extend the mat a minimum of 2" above the anticipated ballast level at the perimeter and around penetrations except for roof drains and scuppers.
- c. The mat must extend to drain bases, scupper openings, and the base of Dutch gutters but **must not restrict drainage.**
- d. Additional matting must be installed around penetrations to prevent direct contact between crushed stone or pavers and flashing.

**NOTE:** Following the placement of the HP Protective Mat, it is necessary to install the ballast or temporary ballast to prevent the movement or displacement of unballasted fabric.

F. Membrane Securement/Mechanically Attached Roofing System (Fastening)

- 1. EPDM membrane shall be mechanically attached to the structural deck with specified Versico Fasteners and designated Plates or Bars, for fastening densities and numbers of perimeter sheets refer to Warranty Tables, Paragraph 1.05.
- 2. Membrane Fastening Selection Table

**Membrane Fastener Selection**

Deck Type	Versico Fasteners*	Versico Plate
Steel or Lightweight Insulating Concrete over Steel	HPV	HPV Polymer or Seam Fastening Plates
	HPV-XL	HPV-XL Polymer
Structural Concrete, rated 3,000 psi or greater	CD-10	HPV Polymer or Seam Fastening Plates
	MP 14-10	HPV Polymer or Seam Fastening Plates
Wood Plank, min. 15/32" thick Plywood or min. 7/16" OSB	HPV	HPV Polymer or Seam Fastening Plates
Cementitious Wood Fiber	Polymer Gyptec	Gyptec Plates – 2" Dia.
Gypsum	Polymer Gyptec	Gyptec Plates – 2" Dia.

Refer to Warranty Tables in Paragraph 1.05 for fastening densities and number of perimeter sheets.

\*Determine proper fastener length for deck penetration, refer to Table 2.05B.

- 3. On steel decks, membrane shall be positioned with seams perpendicular to the steel deck flutes. This allows the external forces on the roof assembly to be distributed between multiple steel deck panels. Refer to Design Reference DR-06-19 "Withdrawal Resistance Criteria" in the Versico Technical Manual.
- 4. When mechanical securement is not provided in some of the Versico Universal Details (i.e., pipes and pourable sealer pockets), additional Seam Fastening Plates must be used for membrane securement. The plates must be positioned a maximum of 12" away from the penetration, spaced a maximum of 12" on center and flashed in accordance with the applicable Versico Detail.
- 5. Perimeter Sheets

The number of perimeter sheets and fastener spacing is dependent on the building height, wind zone location, and warranty duration as outlined in Warranty Tables in Paragraph 1.05.

The roof perimeter is defined as all edges of each roof section (i.e., parapets, building expansion joints at adjoining walls, penthouse walls, etc.). When multi-level roofs meet at a common wall, the adjacent edge of the upper roof is treated as a roof perimeter if the difference in height is greater than 3'. Perimeter sheets are not required at the base of the wall at the lower level.

**NOTE:** Expansion joints, control joints, and fire walls in the field of the roof or roof ridges with slopes less than 3" to the horizontal foot are not considered as part of the roof perimeter.

Perimeter sheets can be formed by using individual 5' or 6.5' wide sheets or by sub-dividing 8' or 10' wide field sheet using 9" Quick-Applied RTS strip or row of seam fastening plates as described below.

a. Individual Perimeter Sheets (5', 6.5')

Position membrane along the perimeter of the roof over the acceptable insulation/ underlayment. The perimeter membrane width from line of securement to line of securement should be approximately 4.5' – 6.0' wide depending on perimeter sheet size.

b. RTS (Reinforced Termination Strip) Method

01. **When field sheets are positioned parallel to a roof perimeter, 9" wide**

**Quick-Applied RTS** shall be placed approximately down the center of the 8' or 10' wide field membrane sheets. When a RTS divides a field sheet in half, two perimeter sheets are created.

02. When a 8' or 10' wide reinforced EPDM membrane sheet extends perpendicular to the edge of the roof, install 9" wide Quick-Applied RTS beneath the EPDM membrane sheet approximately of 3'-6" for the 8' field sheet to approximately of 4' -0" for the 10' field sheet from the edge of the roof. When multiple perimeter sheets are required, additional RTS may be positioned approximately 3'-6" to 4'-0" from the previous RTS to create additional perimeter sheets.

**CAUTION:** 6" wide Quick-Applied RTS is only available with 3" wide QA Seam Tape on one side and therefore cannot be used to form perimeter sheets.

03. Refer to Applicable Versico Details for installation

c. Fastening Plates Method (When Option a and b are not feasible)

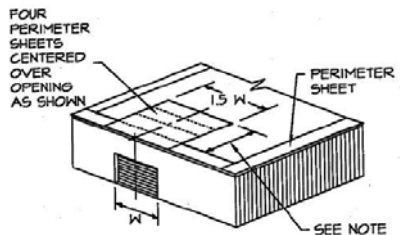
When field sheets extend to the edge of the roof, approved fastening plates can be installed through the reinforced membrane 3' – 6" to 4' – 6" from the roof edge which will be flashed with 6" wide Quick-Applied Cured Cover Strip. When field sheets are positioned parallel to the roof edge, fastening through the membrane along the centerline creates two perimeter sheets. When multiple perimeter sheets are required, additional fastening plates shall be positioned 3' – 6" to 4' – 6" from the previously installed fastening plates. Refer to applicable Versico Details for installation.

d. Building with Special Conditions:

Air pressurized buildings, canopies, and buildings with large openings where the total wall openings exceed 10% of the total wall area on which the openings are located (such as airport hangers, warehouses and large maintenance facilities) will typically require additional perimeter membrane securement, an increased fastening density or other enhancement.

e. Building with large openings

When any wall contains major openings with a combined area which exceeds 10% of the total wall area on which the openings are located, either four 5' or 6.5' wide to two 10' wide reinforced EPDM membrane sheets (centered over the opening) must be specified as shown.



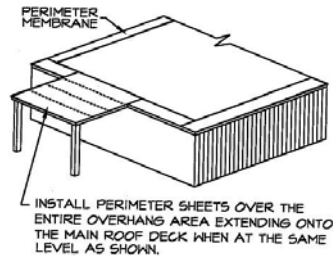


01. 9" wide Quick-Applied/Peel & Stick RTS (Reinforced Termination Strip) shall be specified in conjunction with the 10' wide membrane sheets.
02. The 9" wide Quick-Applied/Peel & Stick RTS is to be positioned beneath the 8' or 10' wide membrane sheet along the centerline and shall be secured with Polymer Seam Plates (required for steel decks) or Seam Fastening Plates. All fasteners and plates shall be spaced at the rate required at the roof perimeter as shown on the membrane securement charts on the previous pages.
03. As an option to the above perimeter securement, a fully adhered membrane section may be used in lieu of the mechanically attached membrane at large openings in accordance with the Versico Specification for the VersiGard (black and white) Fully Adhered Roofing System.

**NOTE:** Depth of perimeter area, noted above, shall not be less than 2.5 times the width of the opening.

f. Buildings with overhangs

The membrane must be specified with securement 3 ½' to 4 ½' over the entire overhang area extending onto the main roof deck a minimum of 3' when at the same level.



01. This can be achieved utilizing 8' or 10' wide membrane sheets in conjunction with 9" wide Quick-Applied RTS as described above.
02. As an option, a fully adhered membrane section may be used in lieu of the mechanically attached membrane at building overhangs in accordance with the Versico Specification for the VersiGard (black and white) Fully Adhered Roofing System.

7. Field Membranes

- a. **Position** field membrane sheets adjacent to perimeter membrane to allow a minimum 6" overlap, 3" from the center of the plate or bar in front and back.

**NOTE:** For 20-year warranty projects with a roof slope less than ¼" in 12" (minimum ⅛" slope required) or when splices buck water, strip in seams with a 6" Quick-Applied Overlay or Cured Cover Strip.

- b. **Secure the field and perimeter membrane sheets** along the pre-printed blue line approximately 3" from the edge of the membrane sheet at the approved fastening density with the required Versico Fastener and Versico Seam Plates or Bars. Refer to "Membrane Fastener Selection" Table in Paragraph 3.05 for further information.

Correct fastener placement must conform to the following:

01. The **minimum** distance between the bottom membrane edge and the nearest edge of the fastening plate or bar must be **2"**.
02. The **minimum** distance between the overlapping membrane edge and the nearest edge of the fastening plate or bar must be **2"**.
- c. On new construction projects, where direct application of the membrane is specified over Protection Mat over lightweight insulating concrete, standard 2" diameter Seam Fastening Plates must be used since the Polymer Seam Plates will not properly seat.

- d. **Position** adjoining membrane sheets to allow a minimum overlap of 6" where Fastening Plates are located (along length of the membrane); at the same time overlap end roll sections (width of the membrane) a minimum of 3" for Projects with a maximum 15 Year Warranty. For 20 Year Warranties, end roll sections should be overlapped 6" with 6" QA/P&S Seam Tape.
  - e. Work shall progress across the roof with a minimum 6" overlap provided at the previously secured sheet edge. The opposite length of the sheet must be secured with approved Fastening Plates or bars and overlapped accordingly.
- F. Membrane Splicing

1. General

- a. VersiGard/VersiGard White – Fully Adhered or Ballasted Roofing Systems

01. Projects with warranties up to 15 years – Detail VGC-2.1A

**Side Laps / End Laps:** Tape splices must be a minimum of 2 ½" wide using **3" wide field-applied QA/P&S Seam Tape OR 3" Factory-Applied Quick-Applied Tape (QAT).**

**Splice Intersections:** 'T'-Joints are to be flashed with a bead of lap sealant and 6"x6" minimum (black) or 7" x 9" (white) Peel & Stick 'T'-Joint Cover, (for membranes of maximum thickness of 75 mil). (Detail VGC-2.1A).

**NOTE:** In lieu of the 7"x9" White EPDM Pressure-Sensitive 'T'-Joint cover, a 6"x6" section of VersiGard White Peel & Stick Uncured EPDM Flashing may be used. VersiGard White Peel & Stick Uncured EPDM Flashing is available in rolls of 6", 9" and 12".

02. Projects with 20 year warranties – Detail VGC-2.1A and VGC-2.1B

**Side Laps / End Laps:** Tape splices must be a minimum of 2 ½" wide using 3" Factory-Applied Quick- Applied Tape (QAT) OR a minimum of 5 ½" wide using 6" Field-Applied QA/P&S Seam Tape. (Detail VGC-2.1A or VGC-2.1B).

**Splice Intersections:** 'T'-Joints are to be flashed with a bead of lap sealant and 6" x 6" minimum (black) or 7" x 9" (white) Peel & Stick 'T'-Joint Cover, (for membranes of thickness of 75 mil). (Detail VGC-2.1A). For membranes of thickness of 90 mil, Apply a second layer of 12" x 12" QA 'T'-Joint Cover centered over 6" x 6" QA/P&S 'T'-Joint Cover. (Detail VGC-2.1B– Option 2).

**NOTE:** In lieu of the 7" x 9" White EPDM Peel & Stick 'T'-Joint cover, a 6" x 6" section of white Peel and Stick Uncured EPDM Flashing may be used. White Peel and Stick Uncured EPDM Flashing is available in rolls of 6", 9" and 12".

03. Projects with 25 and 30 year warranties – Details A-2 or B-2 or U-2A.1

**OPTION 1:**

**Side Laps / End Laps:** Tape splices may be a minimum 3" wide Factory-Applied QA Seam Tape (VersiGard QAT) OR 3" wide QA Seam Tape. In addition the entire field splice must be overlaid with a continuous 6" wide Quick Applied Overlayment Strip. (See Detail VGA-2-Option 1 or VGC-2.1A -Option 1).

**Splice Intersections:** Overlay the entire field splice with a continuous 6" wide Quick-Applied Overlayment Strip. Apply Lap Sealant at all Intersections between Quick-Applied Overlayment Strip. (See Detail VGA-2- Option 1 or VGC-2.1A -Option 1).

## OPTION 2:

**Side Laps / End Laps:** Tape splices may be a minimum of 5 ½" wide using 6" wide Factory-Applied QA Seam Tape (VersiGard QAT) OR 6" wide QA Seam Tape (Detail VGA-2-Option 1 or VGB-2.1 or VGC-2.1A – Option 2).

**Splice Intersections:** 'T'-Joints are to be flashed with a bead of lap sealant and 6"x6" minimum (black) or 7" x 9" White Peel and Stick 'T'-Joint Cover. Apply a second layer of 12" x 12" QA 'T'-Joint Cover centered over 6" x 6" QA 'T'-Joint Cover. (Detail VGA-2-Option 1 or VGB-2.1 or VGC-2.1A – Option 2).

**NOTE:** White Peel and Stick Uncured EPDM Flashing is available only in rolls of 6", 9" or 12" rolls. Material used for Overlayment shall be cut from the appropriate roll.

### b. VersiGard Reinforced Mechanically Attached Roofing System

#### 01. Projects with 10, 15 and 20 year Warranties – Detail VGMA-2.1 and VGMA-2.2

**Side Laps:** Regardless of Warranty duration, where fastening plates are placed, shall be spliced using **6" wide Factory-Applied QA Seam Tape (VersiGard QAT) or 6" wide QA/P&S Seam Tape**. The splice tape shall be centered over the plates to extend approximately 2" on each side. QA Seam Tape must extend approximately 1/8" beyond the edge of the overlapping membrane. (Detail VGMA-2.1).

**End Laps:** Shall be spliced using either 3" wide QA/P&S Seam Tape resulting in a minimum splice of 2 ½" wide for a maximum of 15 year warranties and 6" wide QA Seam Tape resulting in a minimum splice of 5-½" wide for a maximum of 20 year warranties. (Detail VGMA-2.2).

**Splice Intersections:** 'T'-Joints are to be flashed with a bead of lap sealant and 6"x6" QA 'T'-Joint Cover, (for membranes of maximum thickness of 75 mil). (Detail VGMA-2.1).

#### 02. Projects with 25 and 30 year Warranties – Detail VGMA-2.4 and VGMA-2.2

**Side Laps:** Where fastening plates are placed, shall be spliced using 6" wide Factory-Applied QA Seam Tape (QAT) OR 6" wide Field-Applied QA Seam Tape. The splice tape shall be centered over the plates to extend approximately 2" on each side. QA Seam Tape must extend approximately 1/8" beyond the edge of the overlapping membrane. (Detail VGMA-2.4).

**End Laps:** Shall be spliced using **6" wide Factory-Applied QA Seam Tape (QAT) OR 6" wide Field-Applied QA/P&S Seam Tape** resulting in a minimum splice of 5-½" wide for a maximum of 30 year warranties. (Detail VGMA-2.2).

**Splice Intersections:** 'T'-Joints are to be flashed with a bead of lap sealant and 6"x6" QA 'T'-Joint Cover. Apply a second layer of 12"x12" QA/P&S 'T'-Joint Cover centered over 6" x 6" QA/P&S 'T'-Joint Cover. (Detail VGMA-2.4).

### c. For splicing procedures, cautions and warnings refer to **Spec Supplement E-02-19 "Membrane Splicing and Splice Repairs"** for information.

## G. Additional Membrane Securement

Securement must be provided at the perimeter of each roof level, roof section, expansion joint, curb flashing, skylight, interior wall, penthouse, etc., at any inside angle change where slope exceeds 2" in one horizontal foot, and at other penetrations in accordance with Versico's details and securement options as listed below.

Securement may be achieved as follows:

1. Quick-Applied/Peel & Stick RTS (Reinforced Termination Strip)

**Quick-Applied/Peel & Stick RTS** is a 6" wide strip of reinforced EPDM membrane with factory-applied 3" wide QAP&S Seam Tape and is installed in conjunction with Versico EPDM Fasteners and 2" diameter Seam Fastening Plates spaced a maximum of 12" on center below the EPDM deck membrane (Polymer Seam Plates or Polymer Batten Strips are required for Mechanically Attached Roofing Systems over steel decks). The securement strip can be fastened horizontally to the structural deck or vertically at walls and curbs.

- a. Loose lay the 6" wide Quick-Applied RTS along parapet walls and fasten with Seam Fastening Plates and the appropriate Versico fastener to the roof deck or into the parapet wall. Spacing of the Seam Fastening Plates shall be a maximum of 12" on center for up to 20 year warranties (less than 90 mph warranty wind speed) and a maximum of 6" on center for 25 and 30 year warranties.
  01. For horizontal attachment, the reinforced strip must be positioned a minimum of 1/8" to a maximum of 6" away from the angle change with pressure sensitive side facing away from the parapet and towards the roof plane.
  02. For vertical attachment, the reinforced strip must be attached to the vertical wall with pressure sensitive side extending onto the roof surface.

**CAUTION:** Horizontal RTS attachment is required when insulation is attached with adhesives to a vapor barrier or an existing asphalt based roof. For various options, Refer to Spec Supplement G-12-19 "Application Procedures for Versico's VapAir Seal 725TR Air and Vapor Barrier".

- b. Adjoining sections of the reinforced strip need not be overlapped; however, gaps between adjoining sections must not exceed 1".

**CAUTION:** When RTS is used for membrane securement along metal edgings, refer to the appropriate detail for applicable installation criteria. For some metal edge details, adjoining sections of the reinforced strip must be overlapped and spliced.

- c. **When using Quick-Applied/Peel & Stick RTS, clean the underside of the membrane with Versico Primer** and allow proper flash-off prior to removing the release film from the RTS.

**CAUTION:** On fully adhered systems discontinue bonding adhesive application on the underside of the membrane in area of the sheet where contact with the Quick -Applied RTS is to occur. Contact between Quick-Applied RTS and membrane coated with bonding adhesive can result in poor peel and shear values.

4. Seam Fastening Plates

When the use of Quick-Applied RTS is not feasible (at smaller curbs or skylights), 2" diameter Seam Fastening Plates may be used.

- a. Seam Fastening Plates may be installed horizontally into the structural deck or into walls or curbs.
- b. Securement of the EPDM membrane with the approved Versico Fasteners and Seam Fastening Plates must be a maximum of 12" on center starting 6" minimum to 9" maximum from inside and outside corners.
- c. If horizontal wood nailers are provided, secure the Seam Fastening Plates to the wood nailer with Versico HPV Fasteners. Nails (i.e. ringshank, roofing, etc.) are not acceptable for securement.
- d. After securing the Seam Fastening Plates, flash in accordance with the appropriate Versico Detail.

### 3.06 Flashings

For other requirements which must be complied with in order for Versico warranty to be issued, refer to Spec Supplement G-04-20 "Flashing Considerations / Metal Work".

#### A. General Considerations

1. All vertical field splices at the base of a wall or curb must be overlaid with Quick-Applied/Peel & Stick "T" Joint Covers, a 6" x 6" section (with rounded corners) of VersiGard (black and white) Quick-Applied/Peel & Stick Uncured EPDM Flashing centered over the field splice.
2. **Quick-Applied/Peel & Stick Uncured EPDM Flashing** must be limited to the overlayment of vertical seams (as required at angle changes), or to flash inside/outside corners, vent pipes, scuppers and other unusually shaped penetrations where the use of Pre-molded Pipe Seals, cured EPDM membrane or Quick-Applied/Peel & Stick Cured Cover Strip or Overlayment Strip is not practical.

**NOTE:** When using Quick-Applied/Peel & Stick products in colder temperatures, use a heat gun to warm the product. Apply heat to the EPDM flashing side of the product. Do not apply heat directly to the pre-applied adhesive. The Quick-Applied/Peel & Stick Flashing must be applied immediately after primer flashes off. Refer to "Membrane Splicing with QA/P&S Seam Tape" for application procedures in colder temperatures.

3. When using **Quick-Applied/Peel & Stick Cured Cover Strip or Overlayment Strip** to overlay Seam Fastening Plates or metal edging, etc., V-150 Primer or LOW VOC Primer must be used to clean the membrane and metal flanges.
4. Special requirements may apply for certain flashing details for projects with extended warranty durations. Refer to Versico published details for applicable requirements when warranty coverage exceeds beyond 20 years.

#### B. Walls, Parapets, Curbs, Skylights, etc.

1. Use continuous deck membrane with Quick-Applied/Peel & Stick RTS or Seam Fastening Plates along the angle change.
  - a. When using Quick-Applied/Peel & Stick RTS, refer to Paragraph 3.05 G, Additional Membrane Securement, for attachment criteria.
  - b. When Seam Fastening Plates are used to secure continuous deck membrane, use minimum 6" wide Quick-Applied/Peel & Stick Cured Cover Strip or Overlayment Strip to overlay fasteners and plates.
2. When the use of continuous deck membrane for wall flashing is not feasible, a separate piece of cured EPDM membrane may be used.

**NOTE:** 60-mil cured non reinforced membrane may be used as a separate wall flashing with projects of warranty 20 years or greater. The flashing may also incorporate membrane equal of thickness to that of the EPDM membrane at the deck level

3. Adhere flashing to the wall and terminate in accordance with the applicable Versico Detail.
4. Use a "T" Joint Cover or 6" x 6" Quick-Applied/Peel & Stick Uncured Flashing with rounded corners to overlay vertical splices as shown on the applicable Versico Detail.
5. Refer to applicable Versico Details for various corner flashing options.

#### C. **Flashing of other Penetrations**, refer to Spec Supplement G-04-22 for Flashing Considerations and the applicable Versico detail for specific requirements.

#### D. **Flashing of Difficult Penetrations**, refer to Spec Supplement G-11-20 for "LIQUISEAL Liquid Flashing" for additional information and specific requirements.

### 3.07 Roof Walkways

Walkways are to be specified at all traffic concentration points (i.e., roof hatches, access doors, rooftop ladders, etc.), and if regular maintenance (once a month or more) is necessary to service rooftop equipment. Refer to Spec Supplement G- 05-18 "Roof Walkway Installations."

### 3.08 Daily Seal

On phased roofing, when the completion of flashings and terminations is not possible by the end of each workday, provisions must be taken to temporarily close the membrane to prevent water infiltration. Refer to Spec Supplement G-06-20 "Daily Seal & Clean Up".

### 3.09 Optional Color Coating

- A. **If optional color coating is specified, Versico's final inspection for warranty must be conducted prior to the coating application.** This will permit the completion of any "Repair for Warranty" items without consideration for the removal and reapplication of the coating. The owner will then verify that the coating was applied after receiving the warranty.
- B. If **X-Tenda Coat** is specified to color the membrane surface, refer to the Versico X-Tenda Coat Specification for installation requirements.

### 3.10 Clean Up

For daily tie-off or cleaning procedures refer to Spec Supplement, G-06-20 "Daily Seal / Clean Up" in the Versico Technical Manual.

- A. General
  - 1. Termination bars and surface mounted reglets must be specified to be installed directly to the wall surface.
  - 2. Versico recommends VersiTrim™ Metal Edging/Coping, Termination Bar or Drip Edge for membrane termination.  
**NOTE:** Refer to Warranty Tables in Section 1.05 for specific metal edge requirements for projects with Total System Warranties or those with extended peak gust wind speed coverage greater than 80 miles per hour.
  - 3. Metal work by others, when specified, must be fastened to prevent the metal from pulling free or buckling and sealed to prevent moisture from entering the roofing system or building. **Unless supplied by Versico, metal work securement is not included in this specification and is excluded from the Versico warranty.**
  - 4. On retrofit projects, existing counter flashing, edging, expansion joint covers, copings, etc., shall not be reused unless investigated by the specifier to determine its compliance to Versico's current details.

# VersiGard Design "B" Loose-Laid Ballasted Roofing Systems

## "Attachment I"

### Ballast Criteria

July 2023

#### A. General

The specifier must evaluate the various conditions by which the ballast requirements are dictated. Building height, parapet height and project wind zone are major factors when specifying a minimum ballast requirement. The guidelines for ballast requirements which have been published by the following organizations should be referenced:

1. American National Standards Institute, ANSI/SPRI RP-4 (current edition) Wind Design Guide for Ballasted Single-Ply Roofing Systems. This standard is referenced in the current edition of the International Building Code (IBC).
2. Factory Mutual (FM) Research Corporation Loss Prevention Data Sheets 1-28 and 1-29.

#### B. Ballast Types/Coverage Rates

The coverage rates listed below are considered minimum and are required by Versico for the issuance of the Versico warranty. Additional ballast coverage rates may be specified to provide additional wind uplift resistance.

1. **Rounded Water-Worn Gravel** may be placed directly on the EPDM membrane without additional membrane protection.
  - a. Minimum acceptable gradation:
    01. Nominal 1 ½" rounded water worn gravel which conforms to the following gradation: 50% retained by a ¾" screen, 95% retained by a ½" screen and 98% retained by a ¼" screen. Use ASTM C136 method for sizing gravel.
    02. Alternately, #4, #3 and #24 stone (sized in accordance with ASTM D7765 method of sizing) may be used in lieu of the stone listed above.
    03. Coverage rate shall be no less than 1,000 pounds per 100 sq. ft. and ballast must be evenly distributed to maintain an average of 10 pounds per square foot.
  - b. Nominal 2 ½" rounded water worn gravel which conforms to gradation #1 or #2 when sized in accordance with ASTM D7765 method of sizing. Coverage rate shall be no less than 1300 pounds per 100 sq. ft. and gravel must be evenly distributed to maintain an average of 13 pounds per square foot.
2. Standard sizes of coarse aggregate - Based on ASTM D7765

Size Number	1	2	3	4
Nominal Size Square Openings	3-1/2" to 1-1/2"	2-1/2" to 1-1/2"	2" to 1"	1-1/2" to 3/4"
<b>Amounts Passing Each Lab Sieve (Square Opening), Percent (%)</b>				
4"	100			
3-1/2"	90 to 100			
3"		100		
2-1/2"	25 to 60	90 to 100	100	
2"		35 to 70	90 to 100	100
1-1/2"	0 to 15	0 to 15	0 to 15	90 to 100
1"				20 to 55
3/4"	0 to 5	0 to 5		0 to 15
1/2"			0 to 5	
3/8"				0 to 5

3. **Crushed Stone**, when specified, shall conform to the gradations approved for rounded water-worn gravel and must be installed in conjunction with Versico Protective Mat.
  - a. Protective Mat must extend a minimum of 2" above the crushed stone at the perimeter and penetrations, but must be discontinued at scuppers, Dutch gutters and at drain bases.
  - b. A minimum 6" overlap between adjacent sheets of HP Protective Mat must be specified.
4. Individual Concrete Pavers
  - a. Individual pavers with a minimum weight of 18 pounds per square foot may be substituted for nominal 1 ½" stone. Individual pavers with a minimum weight of 22 pounds per square foot may be substituted for nominal 2 ½" stone.
  - b. Individual pavers must be a maximum of two feet square. Unless otherwise required by Versico, pavers must weigh no more than 80 pounds per unit to allow for easy removal and replacement.
  - c. Individual pavers with a surface other than a steel troweled finish as approved by Versico must be installed over Protective Mat and must be accepted by Versico prior to installation. Elevating pavers should increase life expectancy, reduce freeze/thaw effects and promote more positive drainage. Acceptable pedestals can be specified under corners of pavers to elevate paver.
  - d. Individual concrete pavers shall be loose laid and butted together with no gaps greater than ½".
5. Lightweight Interlocking Concrete Pavers
  - a. Depending on the type of lightweight interlocking system, Versico Protective Mat or manufacturer's recommended matting may be required by Versico as a protection layer for the membrane. **Versico must be consulted prior to installation concerning protective matting requirements.**
  - b. Lightweight interlocking pavers (minimum 10 pounds per square foot) may be substituted for nominal 1 ½" stone or nominal 2 ½" stone.
  - c. When lightweight interlocking pavers are specified, the respective paver manufacturer must be consulted concerning installation criteria.
 

**CAUTION:** The securement method suggested by the respective interlocking paver manufacturer must be reviewed by Versico to determine membrane accessibility. If access to the membrane system is impaired by the paver interlocking mechanism (mechanical clips, strapping, adhesive, etc.), the building owner must assume the responsibility of providing access to the membrane for the purpose of investigation and warranty related repairs.
  - d. Lightweight Ballast Paver – 2' x 2' x 1.25" weighing 15 lbs/sq. ft.
6. Walkways
 

**CAUTION:** Walkways weighing less than 10 lbs per square foot can not be installed within 10 foot of the perimeter of the building for any building greater regardless of building height.

  - a. **VersiGard (Black or White) Pressure-Sensitive Walkway Pads** – VersiGard (black or white) molded walkway pads with Pressure Sensitive tape used to provide protection for areas of EPDM membrane that are exposed to regular rooftop maintenance.



- b. **Versico Interlocking Rubber Pavers** – A 2' x 2' x 2" thick rubber paver weighing approximately 24 pounds per unit, 6 pounds per square foot manufactured from recycled rubber, which provides a resilient, shock absorbing, weather resistant surface. Interlocking Rubber Pavers are designed primarily for use as a walkway or on terrace areas offering an environmentally sound design. Paver features bi-directional drainage and freeze/thaw stability. The Versico Interlocking Rubber Paver can be installed directly over the EPDM membrane without a separation layer.
- c. **Hanover Pedestal Paver** – Used for light traffic areas associated with rooftop or garden roof applications. 2' x 2' x 2.25" thick precast concrete pavers weighing 22 psf with an elevated clearance of ½" from incorporated footing. The pedestal paver can either be installed in conjunction with a separation layer of HP Protective Mat or using Pedestal and shims.

**NOTE:** EPDM Pedestal and Leveling Shims – A ¾" fixed height EPDM rubber pedestal incorporating ¼" spacer tabs. The pedestal allows pavers to follow the contour of the roof and may be combined with ⅛" or 1/16" leveling shims to prevent paver movement and provide a more stable feel. Both Hanover Pavers and leveling shims are available from Versico. (Refer to product section Spec Supplement P-01-20 "Related Products".)

- d. **Hanover Ballast and Lightweight Ballast Paver** – The standard, 24" x 24" x 1 13/16" thick, Ballast Paver comes in a natural color and a non-slip Diamond finish and weighs 22 lbs/sq. ft. The Lightweight, 23 ½" x 23 ½" x 1 ¼" thick, Ballast Paver comes in a natural color and a non-slip diamond finish and weighs 15 lbs/sq. ft. Both pavers can be used as ballast or walkways.
- e. **Other Walkway Considerations:**

Smooth concrete pavers when specified in conjunction with insulation that is Mechanically Attached, must be loose laid over a slip sheet of membrane or 2 layers of Versico Protective Mat. When insulation is attached with Flexible DASH, concrete pavers may be placed over one layer of Protective Mat. Pavers cannot weigh more than 80 pounds per paper for ease of removal

- 01. Walkways are considered a maintenance item and are excluded from the Versico warranty.
- 02. Window washing equipment will require special maintenance. Runways or window washing tracks must be utilized to prevent damage to membrane or insulation. Such details must be reviewed by Versico to determine reasonable access to the membrane and associated insulation/underlayment components.

**VersiGard Design EPDM Roofing Systems**  
**Adhered, Ballasted and Mechanically Fastened**  
**25/30 Year Warranty Design Enhancements**  
**July 2023**

Information contained in this Attachment outlines necessary enhancements required for projects where a 25 or 30-year Warranty is specified. At the contractor's or specifier's discretion, projects may be forwarded to Versico for warranty review prior to installation or bid.

A. General

1. All products specified for these roofing assemblies must be products manufactured or marketed by Versico.
2. On retrofit projects, all existing roofing material shall be totally removed.
3. All projects, a final shop drawing shall be approved by Versico prior to installation. Shop drawings must include all pertaining details. As-Built projects are not recommended.
4. The roof assembly will vary based on warranty wind speed and hail coverage. As identified in Warranty Tables, included in this attachment.
5. An air/vapor barrier shall be used when required and must be sealed around perimeter and roof penetrations. When not specified, the roof membrane shall be adhered over perimeter wood nailer along edges to prevent air infiltration along edging, regardless of assembly type (Ballasted, Adhered and Mechanically Fastened).
6. Due to warranty length, covered in this attachment, special consideration should be given to the total R-Value of the roof assembly. Utilizing the International Energy Conservation Code (IECC) to determine the minimum level of insulation for the building project's location is recommended.
7. To optimize energy efficiency, insulation shall be installed in multiple layers with joints staggered.
8. For limitations and specific types of insulation/underlayments refer to "Section E Insulation/Underlayments"
9. ¼" per horizontal foot slope is preferred; however 1/8" slope with sufficient number of drains and crickets / saddles may be accepted. Assemblies described in this attachment are governed by the maximum slope limit described in the current Versico publication.
10. Refer to Specification Supplement E-02-20 "EPDM Membrane Splicing and Splice Repairs" and applicable Versico Details for additional design enhancements.

B. Membrane Criteria

1. **Adhered Roofing Systems**, the roofing membrane shall be a minimum of **60-mil thick VersiGard (black or white) Non-Reinforced EPDM Membrane** utilizing enhanced details for **25 Year Warranty Duration**.

**OR**

**90-mil VersiGard Non-Reinforced Membrane OR 75-mil thick VersiGard Reinforced Membrane** utilizing enhanced details for **30 Year Warranty Duration**.

2. **Ballasted Roofing Systems**, the roofing membrane shall be a minimum of **60-mil thick VersiGard Non-Reinforced Membrane** utilizing enhanced details for **25 Year Warranty Duration**.

**OR**

**90-mil thick VersiGard Non-Reinforced Membrane** utilizing enhanced details for **30 Year Warranty Duration**. Maximum membrane width, not to exceed 10' wide.

3. **Mechanically Fastened Roofing Systems**, the roofing membrane shall be a minimum of **75-mil thick VersiGard Reinforced Membrane** utilizing enhanced details for **25 or 30 Year Warranty** Duration.
4. Non-Reinforced Membrane Criteria and Hail Coverage

VersiGard (Black or White) Non-Reinforced Membranes						
Years	Warranty Wind Speed Coverage				Minimum Membrane Thickness	Hail Coverage
	55, 72 or 80 mph		90 to 100 mph	110 to 120 mph		
	Adhered (2)	Ballasted (1)	Adhered (2)	Adhered (2)		
25 year	√	√	√	N/A	VersiGard (Black or White) 60-mil	<b>Adhered Systems (VersiGard – Black or White)</b> 1" Dia. Hail Coverage requires a min. 60-mil Adhered to Cover Board. 2" Dia. Hail Coverage requires a min. 90-mil Adhered to Cover Board.  <b>Additional Design Requirement</b> Cover Board set in Flexible DASH Adhesive (SecurShield HD, SecurShield HD Plus, DensDeck Prime, DensDeck StormX Prime or Securock - Adhered Only).
30 year	√	√	√	N/A	VersiGard (Black or White) 90-mil	<b>Ballasted Systems (VersiGard)</b> 1" or 2" Dia. Hail Coverage requires a min. 60-mil.  3" Dia. Hail Coverage requires a min. 90-mil.

Notes: N/A = Not Acceptable √= Acceptable

- (1) VersiGard (White) membrane is not recommended for ballasted systems.
- (2) Standard G200-SA or EPDM x-23 Low-VOC Bonding Adhesive must be utilized.

5. Reinforced Membrane Criteria and Hail Coverage

VersiGard Reinforced Membranes								
Years	Warranty Wind Speed Coverage						Minimum Membrane Thickness	Hail Coverage (Adhered Systems Only)
	55, 72 or 80 mph		90 mph		100 to 120 mph			
	Adhered (1)	Mech. Fastened	Adhered (1)	Mech. Fastened	Adhered (1)	Mech. Fastened		
25 year	√	√	√	√	√	N/A	VersiGard 75-mil	1" Dia. Hail Coverage requires a Min. 60-mil Adhered to Cover Board. 2" Dia. Hail Coverage requires a Min. 75-mil Adhered to Cover Board.
30 year	√	√	√	√	√	N/A	VersiGard 75-mil	<b>Additional Design Requirement:</b> Cover Board set in Flexible DASH Adhesive (SecurShield HD, SecurShield HD Plus, DensDeck Prime, DensDeck StormX Prime or Securock - Adhered Only).

Notes: N/A = Not Acceptable √= Acceptable

- (1) Standard G200-SA or EPDM x-23 Low-VOC Bonding Adhesive must be utilized.

C. Adhered System Design Criteria (25 YR to 30 YR Warranty)

1. Building height shall not exceed 100'. For projects where building height exceeds 100' or warranty wind speed exceeds 100 mph, please submit to Versico for review.
2. Local Wind Zone per ASCE 7-2010 (Category II Map) shall not exceed 120 mph.
3. All Field Splice "T-Joints" must be overlaid as described in Detail VGA-2.1.
4. The criteria is for compliance with Versico's requirements for warranty, when FM Compliance is required for a specific project refer to FM Documentation and Versico Code Listings.
5. 6" on center fastening required for Quick-Applied/Peel & Stick RTS.
6. Table below outlines insulation/underlayment requirements and application attachment methods:

Maximum Peak Gust Wind Speed Warranty	Minimum Membrane Underlayment		Insulation/Underlayment Attachment			Metal Edging
			# of Fasteners per 4' x 8' board size	Adhesive Ribbon Spacing for 4' x 4' size board		
				Field	Perimeter	
55 or 72 MPH	Cover Board over Insulation	1-1/2" to 2" (25 psi) Polyisocyanurate (1)	16	6" (4)	6"	Versico Drip Edge or VersiTrim 200, 300, or 400 may be fastened with ring shank nails staggered 4" on center. Versico HPV or HPVX Fasteners may also be used fastened 12" on center.
		1/2" Versico Recovery Board (2)(6)				
		1/2" SecurShield HD (3)				
		1/2" SecurShield HD Plus (3)				
		1/4" Dens-Deck Prime (3)				
		1/4" Securock (3)				
80 MPH	Cover Board over Insulation	1-1/2" to 2" (25-psi) SecurShield Polyiso	20	6"	6"	Versico Drip Edge (5), VersiTrim 2000, 3000 or 4000.
		1/2" SecurShield HD (3)	16			
		1/2" SecurShield HD Plus (3)				
		1/2" Dens-Deck Prime (3)				
		1/2" Securock (3)	20			
90 MPH	Cover Board over Insulation	1/2" SecurShield HD (3)	24	FS	FS	VersiTrim 2000 or 3000
		1/2" SecurShield HD Plus (3)	20			
		1/2" Dens-Deck Prime (3)				
		1/2" Securock (3)				
100 MPH	Cover Board over Insulation	5/8" Dens-Deck Prime or 5/8" DensDeck StormX Prime (3)	16	FS	FS	VersiTrim 2000 or 3000
		5/8" Securock (3)				
		1-1/2" DuraFaceR (OSB/Polyiso Composite) (3)				
		1/2" DuraStorm VSH (3)				
		2" SecurShield HD Composite (3)				
		1/2" SecurShield HD Plus (3)	24			

Notes:

FS = Full Spray or Ribbons @ 4" O.C.

All Versico Products listed for higher wind speed coverage can also be used for Warranties for lower speed coverage. (i.e. 72 MPH underlayment may be used for 55 MPH underlayment)

- (1) Not for use directly on concrete decks when adhesion is specified to the structural deck.
- (2) For Building heights between 51'-100', enhance 12'-wide perimeter with 50% more fasteners and plates.
- (3) Nail coverage offered with substrate when Flexible DASH Adhesive is used for cover board attachment.
- (4) Structural Concrete - Field @ 12" O.C. / Perimeter @ 6" O.C.
- (5) Versico HPV or HPVX Fasteners must be used to secure Versico Drip Edge to perimeter wood nailers.
- (6) 1/2" Recovery Board limited to 55 mph.

D. Mechanically Fastened System Design Criteria (25 YR to 30 YR Warranty)

1. Building height limitation depends on structural deck type. Projects with structural concrete or steel decks are limited to 100' in height. Projects with plywood decks (¾" min.) are limited to a maximum height of 30'. Projects with Wood plank (1" min.) are limited to a maximum height of 60'. For projects where building height exceeds 100' or warranty wind speed exceeds 100 mph, please submit to Versico for review.
2. Local Wind Zone per ASCE 7-2010 (Category II Map) shall not exceed 120 mph.
3. All Field Splice "T-Joints" must be overlaid as described in Detail VGMA-2.1A.
4. This criteria is for compliance with Versico's requirements for extended warranties, when FM Compliance is required for a specific project refer to FM Documentation and Versico Code Listings.
5. Fasteners covered in this attachment are limited to a length not to exceed 12". Assemblies with Tapered Insulation, requiring longer fasteners than 12", shall be reviewed by Versico.
6. 6" on center fastening required for Quick-Applied RTS.
7. Table below outlines insulation/underlayment requirements and application attachment methods:

Maximum Peak Gust Wind Speed Warranty	Deck Type	Insulation Thickness	Minimum Membrane Underlayment	Insulation Underlayment Attachment	Metal Edging
				# of Fasteners per 4' x 8' board size	
Up to 72 MPH	Steel, Concrete or Wood Deck	< 5"	1-1/2" to 2-1/2" (25 psi) VersiCore or SecurShield Polyisocyanurate	8	Versico Drip Edge, VersiTrim 200, 300, or 400 may be fastened with ring shank nails staggered 4" on center. Versico HPV or HPVX Fasteners may also be used fastened 12" on center.
		> 5"	Overlay 1/2" SecurShield HD Cover Board over VersiCore or SecurShield Polyisocyanurate		
80 MPH	Steel or Concrete Deck	Any Thickness	Overlay 1/2" SecurShield HD Cover Board over VersiCore or SecurShield Polyisocyanurate	8	Versico Drip Edge (1) or VersiTrim 2000, 3000 or 4000.
90 MPH	Steel or Concrete Deck	Any Thickness	Overlay 1/2" SecurShield HD Cover Board over VersiCore or SecurShield Polyisocyanurate	8	VersiTrim 2000 or 3000

Notes:

- (1) Versico HPV or HPVX Fasteners must be used to secure Versico Drip Edge to perimeter wood nailers.
- (2) An air/vapor barrier shall be used when required and must be sealed around perimeter and roof penetrations. When not specified, the roof membrane shall be adhered over perimeter wood nailer along edges to prevent air infiltration along edging, regardless of assembly type.

**(VersiGard Reinforced Membrane Only)  
22 GA. Steel Deck or Structural Concrete**

Peak Gust Wind Speed Warranty	Max. Building Height	Min. Number of Perimeter Sheets			Field Membrane Width	Perimeter Sheet Width	Fastening Density (Field Sheets)	Fastening Density (Perimeter Sheets)
		Building Distance to Coastline						
		Greater than 7 miles	3 to 7 miles	Less than 3 miles				
55 MPH	Up to 60'	2	2	3	10'	Note 3	12" O.C.(1)	12" O.C.(1)
	61' to 100'	2	3	4	10'	Note 3	12" O.C.(1)	12" O.C.(1)
72 MPH	Up to 60'	2	2	3	10'	Note 3	6" O.C.(1)	6" O.C.(1)
	61' to 100'	2	3	4	10'	Note 3	6" O.C.(1)	6" O.C.(1)
80 MPH	Up to 60'	3	3	3	10'	Note 3	12" O.C.(2)	12" O.C.(2)
	61' to 100'	3	4	4	10'	Note 3	12" O.C.(2)	12" O.C.(2)
90 MPH	Up to 60'	4	4	4	10'	Note 3	12" O.C.(2)	12" O.C.(2)
	61' to 100'	4	4	4	10'	Note 3	12" O.C.(2)	6" O.C.(2)

- (1) Using HPV Fasteners On Steel Deck with 2" Polymer Seam Plates  
(2) Using HPV-XL Fasteners and 2-3/8" Polymer (HPV-XL) Plates  
(3) Split Field sheet using a 9" Quick-Applied RTS along the center of the sheet.

**(VersiGard Reinforced Membrane Only)  
Wood Decks**

Peak Gust Wind Speed Warranty	Deck Type	Projected Pull-Out Values	Min. Number of Perimeter Sheets		Field Membrane Width	Perimeter Sheet Width	Fastening Density (Field & Perimeter Sheets)
			Building Distance from Coastline				
			Greater than 7 miles	Less than or equal to 7 miles			
55 MPH	3/4" Plywood (2)	450 lbs	2	2	10'	Note 1	12" O.C.
72 MPH	Wood Plank (3)	540 lbs	2	2	10'	Note 1	12" O.C.
	3/4" Plywood (3)	450 lbs	2	4	10'	Note 1	9" O.C.
80 MPH	Wood Plank (3)	540 lbs	2	4	10'	Note 1	9" O.C.

- (1) Split Field sheet using a 9" Quick-Applied RTS along the center of the sheet.  
(2) Maximum Building Height Up to 30'  
(3) Maximum Building Height Up to 60'

E. Ballasted Design Criteria (25 YR to 30 YR Warranty)

1. Building height shall not exceed 60'. For projects where building height exceeds 60' or warranty wind speed exceeds 100 mph, please submit to Versico for review.
2. Local Wind Zone per ASCE 7-2010 (Category II Map) shall not exceed 115 mph. Projects in greater wind zones may be submitted for review by Versico.
3. All Field Splice "T-Joints" must be overlaid as described in Detail VGB-2.1.
4. For applicable membrane thickness, refer to Tables in Section B4.
5. 6" on center fastening required for Quick-Applied/Peel & Stick RTS.

General

1. Versico Polyisocyanurate or Insulfoam EPS Insulation shall be applied in multiple layers with joints staggered between layers, following current energy codes. The layer directly under the membrane shall be 1 1/2" thick insulation and shall be loose-laid or, if specified, may be secured with bead adhesive (12" O.C. bead spacing is acceptable).

**CAUTION:** The use of Mechanically Fasteners is not permitted for insulation securement.

Polyisocyanurate Insulation

1. When Polyisocyanurate insulation is specified, VersiCore or SecurShield (20 or 25 psi) shall be utilized and is recommended. On structural and lightweight structural concrete, to safeguard against residual moisture, the use of SecurShield Polyisocyanurate is required.

Expanded Polystyrene (EPS) Insulation

1. When EPS (Expanded Polystyrene) insulation is to be utilized, only Insulfoam EPS may be used as follows:
  - a. Insulfoam I (1.0 pcf density) EPS.
  - b. Insulfoam VIII (1.25 pcf density) EPS.
2. On steel decks, install EPS insulation in conjunction with thermal barrier, if required for code compliance.
3. When directly installed on steel deck, total thickness of insulation must be adequate to span deck flutes.

Ballast Types/Coverage Rates

1. The coverage rates listed in this attachment are considered minimum and are required by Versico for issuance of the standard Versico warranty. Depending on specific project conditions (building height, parapet height and project location), additional ballast may be necessary to provide wind uplift protection. Refer to "Attachment I" in this Specification for suitable ballast types and coverage rates. **Comply with the specifier's requirements when an additional ballast coverage rate is specified.**
2. **Rounded Water-Worn Gravel** must be applied over the EPDM membrane at the minimum rate of **1000 pounds per square** and must be evenly distributed to maintain an average of 10 pounds per square foot.

ASTM D 7765 SIZE NUMBER	MINIMUM COVERAGE RATE (pounds per square)	AVERAGE COVERAGE RATE (lbs./sq. ft. continuously distributed)
4 (1-1/2" nominal diameter)	1000	10
3 (2" nominal diameter)	1000	10
2 (2-1/2" nominal diameter)	1300	13
1 (3-1/2" nominal diameter)	1300	13

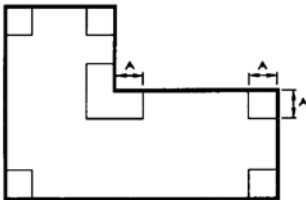
**Notes:** In the field of the roof, some bare spots resulting from installation are permitted; however, they must not exceed 64 square inches and must be limited to no more than 2 per square (100 square feet). No bare spots are permitted in the perimeter area of the roof that is 10' wide.

3. Smooth Surfaced Individual Concrete Pavers
  - a. When the use of concrete paver is specified, Versico supplied Hanover Pedestal Paver is recommended and can be covered by the Versico Warranty. A pedestal system is recommended, due to increased life expectancy, however, field fabricated, cut sections (8" x 8") of VersiGard Black Quick-Applied / VersiGard White Peel & Stick Molded Walkway Pads, beneath pavers, at corners of pavers.
  - b. Individual pavers must be a maximum of two feet square. Unless otherwise required by Versico, pavers must weigh no more than 80 pounds per unit to allow for easy removal and replacement.
  - c. Individual pavers with a surface other than a steel troweled finish as approved by Versico, must be installed over Versico HP Protective Mat and must be accepted by Versico prior to installation.
  - d. Elevating pavers should increase life expectancy, reduce freeze/thaw effects and promote more positive drainage. Acceptable pedestals can be specified under corners of pavers to elevate paver.
  - e. Individual concrete pavers shall be loose laid and butted together with no gaps greater than 1/2".

**Ballast Criteria for Up to 30 Year Extended Warranty**

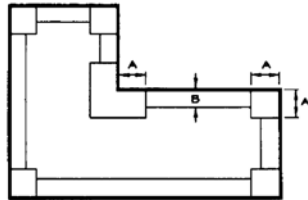
1. Refer to installations below for calculating corner/perimeter areas for the noted warranty wind speeds available.

**Ballast Requirements for 72 mph Warranty**



A (Corners) = 4 Times the Building Height  
(10' minimum)

**Ballast Requirements for 80 mph Warranty**



A (Corners) = 4 Times the Building Height  
(10' minimum)  
B (Perimeters) = 10'

2. At corner and/or perimeter areas, ballast shall be 2 1/2" nominal rounded water worn gravel conforming to gradation #1 or #2 in accordance with ASTM D7765 method of sizing. Coverage rate shall be a minimum of 15 pounds per square foot.
3. In field areas, ballast shall be 1 1/2" nominal rounded water worn gravel conforming to gradation #4 in accordance with ASTM D7765 method of sizing. Coverage rate shall be a minimum of 12 pounds per square foot.



4. Other ballasting configurations may be authorized by Versico, upon review and approval, prior to construction.

F. Roof Deck Criteria

1. Steel (22 gauge or heavier) – **HPV, HPV-XL or Insultite Fasteners are required, with a minimum pullout of not less than 450 pounds per fastener.**  
**NOTE:** Versico Insultite fasteners may be used with adhered systems only if the minimum pullout requirement is met.
2. Structural Concrete (minimum 3,000 psi) – **MP 14-10 (threaded) Fasteners are required with a minimum pullout of 800 pounds per fastener.** CD-10 (hammer-driven) is also applicable for adhered membrane assemblies. **In lieu of fastening, Flexible DASH Adhesive is an acceptable alternative for insulation attachment for adhered assembly when used in conjunction with coated glass faced insulation and full spray.**  
**NOTE:** The use of standard (paper) faced Polyisocyanurate is not acceptable. Due to possible presence of residual moisture in concrete slabs.
3. Wood Plank (minimum 1" thick) or minimum ¾" thick Plywood – **HPV or Insultite Fasteners are required with a minimum pullout of 450 pounds for plywood and 540 pounds for wood planks.**  
**NOTE:** Versico Insultite fasteners may be used with adhered systems only if the minimum pullout requirement is met.
4. For **Ballasted Assemblies**, the structural deck must be able to sustain the weight of a ballasted assembly (12-15 lbs of ballast, as well as other components, i.e. membrane, insulation and vapor barriers, if applicable). The structural deck must be sufficient to support concentrated construction traffic and point loading.

G. Flashing, Terminations and Other Considerations (All Assemblies)

1. All existing flashing must be removed prior to the application of new membrane. New membrane flashing must not conceal weep holes or cover existing through wall counterflashing.
2. Wall flashings shall extend a minimum of 8", or above the anticipated slush line, prior to written approval from Versico is required for lower heights of flashing.
3. Pre-fabricated accessories must be utilized, where applicable.
4. Project details must be reviewed by Versico, preferably prior to bid, and a written approval must be obtained. As a warranty prerequisite, the approval shall be included as part of the project submittals along with the Request for Warranty form that is required for project approval.
5. The use of the **VersiGard (Black or White) Quick-Applied/Peel & Stick (Cured) Cover Strip is not permitted** to flash metal flanges of edge metal fascia systems. Refer to Details for further information.
6. Only Versico supplied Sheet Metal and Edging is to be used on all projects, unless prior authorization from Versico has been obtained.
7. Versico Termination Bar is required in locations where a compression bar termination has been specified. The Termination Bar must be used in conjunction with new or existing counterflashing.
8. Where new or existing counterflashing is used, Versico's Termination Bar must be used as the primary termination.
9. Certain metal accessories by others may be permitted upon Versico acceptance for wind speed coverage less than 72 mph.

## SECTION 7: DAILY PROCEDURES

### Daily Seal

1. On phased roofing, when the completion of flashings and terminations is not possible by the end of each workday, provisions must be taken to temporarily close the membrane to prevent water infiltration.
2. Temporarily seal any loose membrane edge down slope using Flexible DASH Adhesive, hot asphalt, or a similar product so that the membrane edge will not buck water. Caution must be exercised to ensure positive draining during installation, temporary seal locations should be designated so that drainage is not restricted during construction by partially installed roof sections.
  - a. When applying Flexible DASH Adhesive or other sprayed urethane foam, prime the surface of the membrane with Versico Primer to ensure proper adhesion
3. When tie-in to existing built-up roofs, remove the gravel. The surface must be clean and dry.
4. After embedding membrane in daily seal material, CHECK FOR CONTINUOUS CONTACT. Provide continuous pressure over the length of the temporary seal. Provide weight evenly distributed along the length of the daily seal to reduce the wind effect on the continuous temporary seal.

**NOTE:** The use of rigid wood nailers is not recommended due to warping. Constant compression cannot be achieved on an uneven substrate.
5. When work is resumed, pull the imbedded membrane free; trim and remove daily seal material from membrane before continuing installation of adjoining sections.

### Clean Up

1. If required by the specifier to ensure the aesthetics of the surface of the membrane, hand prints, footprints, general traffic grime, industrial pollutants and environmental dirt may be cleaned from the surface of the membrane by scrubbing with soapy (non-abrasive soap) water and rinsing the area completely with clean water.
  - a. For EPDM membranes, Weathered Membrane Cleaner can be used to clean the surface of the membrane.
2. Bonding Adhesive and Flexible DASH Adhesive residue may be cleaned by using the following procedures:
  - a. Saturate a clean HP Splice Wipe with Weathered Membrane Cleaner.
  - b. Scrub exposed adhesive with the saturated HP Splice Wipe until all residue is removed from the membrane. For easier removal, it may be necessary to change Splice Wipes frequently.

### Inspection Process

1. Before roofing begins, an accurate design of the roof should be submitted into Versico's Project Review team to be reviewed. Once approved by Versico, the Copy-A (Job Approval Request) will be given in return with a 7-digit job number. Roofing should then begin as scheduled.

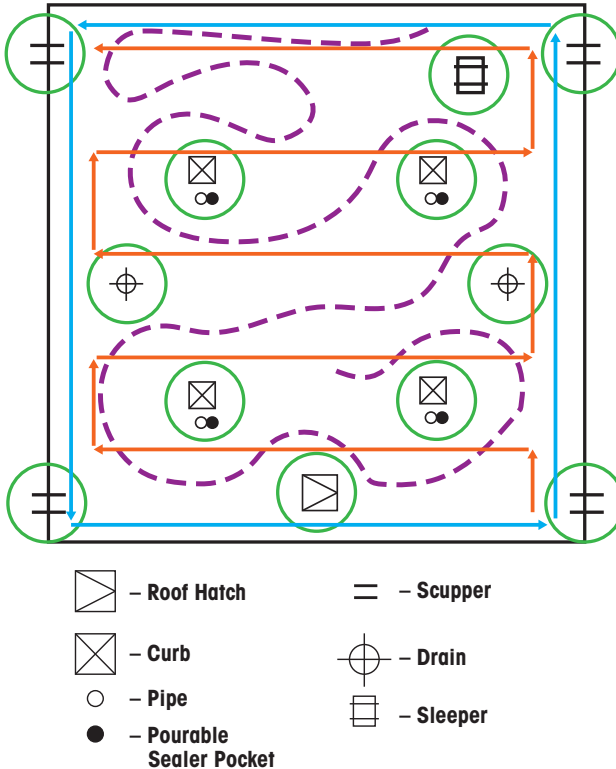
**NOTE:** Please be aware of any special design specifications noted on Job Approval Request.
2. Once the roof is 100% completed per Versico Specifications, the Copy-B (Job Completion) is submitted into Versico, informing us the job is complete. Once this is submitted, within 24 hours, the job will be assigned to the appropriate Versico Field Service Representative (FSR) for that area.

**NOTE:** Please provide an accurate drawing and accurate address of the job.

3. The assigned Versico FSR will give roofer a 48-hour notice on when he/she would be able to conduct a final inspection.
4. The day of the final inspection, Versico would prefer the roofer to be present and roof access be provided.

**NOTE:** Having a crew present during the inspection helps with the inspection process by repairing any issues during the inspection.

5. The inspection process begins as followed:



**Step 1: Inspect the perimeter.**

Update the roof plan to show the location of all curbs, penetrations, drains, etc. Focus on securement and termination. Mark deficiencies on the roof plan as they are found.

**Step 2: Inspect all seams on the roof level.**

Focus on plate placement and proper seaming.

**Step 3: Inspect all curbs, penetrations, drains, etc.**

Focus on one detail at a time, confirming proper securement, termination, and flashing minimums.

**Step 4: Finally, walk across the roof, update areas in need of repair, and perform a general check of the system.**

# TABLE OF CONTENTS

<b>Insulation Details.....</b>	<b>90</b>
A-27.1 Insulation / Cover Board Attachment .....	90
A-27.2 2" Thick VersiCore / Securshield Polyisocyanurate Insulation .....	91
A-27.3 Minimum 1-½" Thick VersiCore / Securshield Polyisocyanurate Insulation .....	92
A-27.4 ¼" Or ½" Thick Securock Or DensDeck/DensDeck Prime .....	93
A-27.5 ¾" Thick Securock Or DensDeck/DensDeck Prime/DensDeck StormX Prime .....	94
A-27.6 Versico DuraFacer (OSB/Polyisocyanurate Composite) or HP-NB Attachment .....	95
A-27.7 Insulation / Cover Board Attachment Using Bead Adhesive .....	96
MA-27.1 Insulation / Cover Board Attachment Up to 15-Year Warranties .....	97
MA-27.2 Insulation / Cover Board Attachment for Projects Exceeding 15-Year or Greater .....	98
MA-27.3 R-Tech Fanfold Roof Underlayment .....	99
MA-27.4 R-Tech Fanfold Roof Underlayment For FM Assemblies .....	100
MA-27.5 Insulation/Cover Board Attachment when Using SecurShield Family Products For All Warranties Lengths .....	101
<b>Main Details.....</b>	<b>102</b>
<b>Ballasted Details</b>	
VGB-1.1 VersiTrim 200 .....	102
VGB-3.0 Deck Expansion Joint .....	103
<b>Mechanically Attached Details</b>	
VGMA-1.1 VersiTrim 200 .....	104
VGMA-2.0A Mechanically Attached EPDM Securement – Option 1 .....	105
VGMA-2.0B Mechanically Attached EPDM Securement – Option 2 (RTS) .....	106
VGMA-2.0C Mechanically Attached EPDM Securement – Option 3 (RTS) .....	107
VGMA-2.1 Mechanically Attached EPDM Membrane Splice .....	108
VGMA-2.1A Mechanically Attached EPDM Membrane Splice <b>(25/30 Year Warranties)</b> .....	109
VGMA-2.2 Mechanically Attached EPDM Membrane Splice Intersection .....	110
VGMA-2.2A Mechanically Attached EPDM Membrane Splice Intersection <b>(25/30 Year Warranties or 90-mil Membrane)</b> .....	111
VGMA-2.3 End Lap Splice .....	112
VGMA-6.0 Roof Drain with Sump .....	113
VGMA-8.1 Quick-Applied Pipe Seal .....	114
VGMA-8.1A Quick-Applied Pipe Seal with 20" Quick-Applied Cured Flashing .....	115
VGMA-8.2 Field Fabricated Pipe Wrap .....	116
VGMA-8.2A Field Fabricated Pipe Wrap <b>(25/30 Year Warranties)</b> .....	117
VGMA-22 Ridge Membrane Attachment .....	118
<b>Common Details</b>	
VGC-1.1 VersiTrim 200 .....	119
VGC-1.1A VersiTrim 200 <b>(25/30 Year Warranties)</b> .....	120
VGC-1.2 VersiTrim 300 .....	121
VGC-1.2A VersiTrim 300 <b>(25/30 Year Warranties)</b> .....	122
VGC-1.3 VersiTrim 2000 & 3000 .....	123
VGC-1.4 VersiTrim Drip Edge Fascia .....	124
VGC-1.4A VersiTrim Drip Edge Fascia <b>(25/30 Year Warranties)</b> .....	125
VGC-1.5 VersiTrim One-Piece Gravel Stop .....	126
VGC-1.6 Metal Bar Edge Termination .....	127
VGC-2.1 EPDM Membrane Splice .....	128
VGC-2.1A EPDM Membrane Splice <b>(25/30 Year Warranties)</b> .....	129
VGC-2.2 EPDM Membrane Splice Intersection .....	130
VGC-2.2A EPDM Membrane Splice Intersection <b>(25/30 Year Warranties or 90-mil Membrane)</b> .....	131
VGC-2.3 EPDM Membrane Splices at Angle Change .....	132
VGC-3.1 Deck-to-Deck Expansion Joint .....	133

VGC-3.2 Deck-to-Wall Expansion Joint .....	134
VGC-3.3 Shear/Expansion Joint .....	135
VGC-5.1 Curb Flashing – EPDM Membrane.....	136
VGC-5.2 Curb Flashing – Quick-Applied Curb Wrap with 6" Tape .....	137
VGC-5.3 Curb Flashing – with 20" Quick-Applied Cured Flashing .....	138
VGC-5.4 Self-Flashing Curb .....	139
VGC-5.5 New Self-Flashing Metal Curb .....	140
VGC-6.1 Roof Drain.....	141
VGC-6.2 Roof Drain – Reinforced Field Sheet with Sump Exceeding 3" Per Foot .....	142
VGC-6.3 VersiGard Insert Drain .....	143
VGC-6.4 Insert Drain Through Deck .....	144
VGC-6.5 VersiGard Add-On Drain .....	145
VGC-8.1 Quick-Applied Pipe Seal .....	146
VGC-8.1A Quick-Applied Pipe Seal with 90-mil Membrane or 25/30 Year Warranties .....	147
VGC-8.2 Field Fabricated Pipe Wrap .....	148
VGC-8.2A Field Fabricated Pipe Wrap <b>(25/30 Year Warranties)</b> .....	149
VGC-8.3 Flexible Penetration .....	150
VGC-8.3A Flexible Penetration <b>(25/30 Year Warranties)</b> .....	151
VGC-8.4 Field Fabricated Hot Stack .....	152
VGC-8.4A Field Fabricated Hot Stack <b>(25/30 Year Warranties)</b> .....	153
VGC-9.0A Membrane Terminations, Page 1 of 2.....	154
VGC-9.0B Membrane Terminations, Page 2 of 2 .....	155
VGC-12.1 Parapet / Curb with Continuous Membrane.....	156
VGC-12.2 Parapet / Curb with Separate Membrane Flashing.....	157
VGC-13.1 Built-Up Roofing Tie-In over Steel Roof Deck .....	158
VGC-13.2 Built-Up Roofing Tie-In over Concrete Roof Deck.....	159
VGC-13.3 Tie-In to Existing EPDM Membrane .....	160
VGC-13.4 EPDM Tie-In over Concrete Deck.....	161
VGC-13.5 Tie-In Shingled or Metal Panel Roof .....	162
VGC-13.6 Tie-In Between New Versico Adhered & Ballasted Roof .....	163
VGC-13.7 Tie-In Between New Versico Mechanically Attached & Ballasted Roof .....	164
VGC-15.1 Inside Corner Wall Flashing With RTS (Option 1) .....	165
VGC-15.2 Inside Corner Wall Flashing With RTS (Option 2) .....	166
VGC-15.3 Inside Corner With Continuous EPDM Wall Flashing .....	167
VGC-15.4 Inside Corner with Separate EPDM Wall Flashing .....	168
VGC-15.4A Inside Corner Flashing for Projects with <b>90-mil Membrane or 25/30 Year Warranties</b> .....	169
VGC-15.5 Outside Corner with Pre-Cut Quick-Applied Corner .....	170
VGC-15.6 Outside Corner with Quick-Applied Uncured EPDM Flashing (2 Piece) .....	171
VGC-15.7 Outside Corner with Quick-Applied Uncured EPDM Flashing (1 Piece) .....	172
VGC-15.7A Outside Corner Flashing for Projects with <b>90-mil Membrane or 25/30 Year Warranties</b> .....	173
VGC-16.1 Quick-Applied Pourable Sealer Pocket.....	174
VGC-16.1A Quick-Applied Pourable Sealer Pocket <b>(25/30 Year Warranties)</b> .....	175
VGC-16.2 Field Fabricated Pourable Sealer Pocket .....	176
VGC-16.2A Field Fabricated Pourable Sealer Pocket <b>(25/30 Year Warranties)</b> .....	177
VGC-16.3 Extended Pourable Sealer Pocket.....	178
VGC-16.3A Extended Pourable Sealer Pocket <b>(25/30 Year Warranties)</b> .....	179
VGC-18.1 Metal Scupper At Deck .....	180
VGC-20.1 Lightning Rod at Parapet (Vertical Attachment).....	181
VGC-20.2 Lightning Rod at Deck Level.....	182
VGC-22.0 Valley .....	183
VGC-24.0 Sleeper.....	184
VGC-30.0 I-Beam Penetration.....	185

**QA Details**

QA-2 QA EPDM Membrane Splices .....	186
QA-12.1 Parapet/Curb with Continuous Membrane RTS.....	187

QA-12.2 Parapet/Curb with Separate Regular EPDM Flashing .....	188
QA-12.3 Parapet/Curb with Separate QA Membrane.....	189
QA-12.4 Parapet/Curb with Continuous Membrane – Cover Strip.....	190

**Liquid Flashing Details..... 191**

Attachment 1 Inspection, Cleaning & Substrate Preparation (Page 1 of 2).....	194
Attachment 1 Inspection, Cleaning & Substrate Preparation (Page 2 of 2).....	195
Attachment 2 Application of LiquiSeal Primer & Resin.....	196
LF-1.1 Sheet Metal Drip Edge or Gravel Stop Flashing.....	197
LF-8.1A Single and Multiple Pipe Penetrations (Page 1 of 2).....	198
LF-8.1B Single and Multiple Pipe Penetrations (page 2 of 2).....	199
LF-13.1 EPDM Membrane Tie-in with Existing Roof over Steel Deck.....	200
LF-13.2A TPO or PVC Membrane Tie-in with Existing Roof over Steel Deck (Page 1 of 2).....	201
LF-13.2B TPO or PVC Membrane Tie-in with Existing Roof over Steel Deck (Page 2 of 2).....	202
LF-13.3 Membrane Tie-in with Existing Roof over Concrete Deck.....	203
LF-18.1 Through-Wall Scupper.....	204
LF-30.1A Steel I-Beam Flashing (Page 1 of 2).....	205
LF-30.1B Steel I-Beam Flashing (Page 2 of 2).....	206

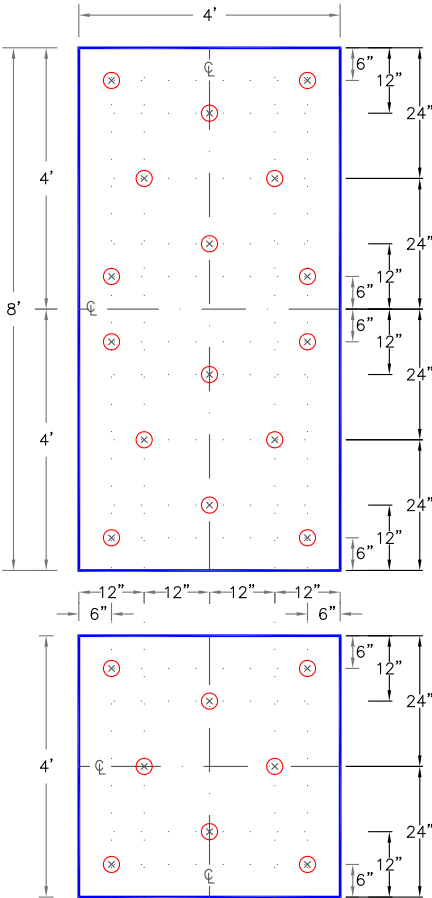
**VacuSeal Details..... 207**

V-0.1 Roof Assembly Over Existing Single-Ply Roof.....	207
V-0.2 Roof Assembly Over Existing Asphaltic Roof.....	208
V-0.3 Roof Assembly Over Steel Deck.....	209
V-0.4 Roof Assembly Over Poured-In-Place Concrete Deck.....	210
V-0.5 Roof Assembly Over Concrete Plank.....	211
V-0.6 Roof Assembly Over Lightweight Concrete Deck.....	212
V-0.7 Roof Assembly Wood Deck.....	213
V-1.1 Roof Edge: Roof Recover.....	214
V-1.2 Roof Edge: Tear-Off & Re-Roofing.....	215
V-5.1 Curb Base Flashing – New Construction and Re-Roof (Recover).....	216
V-6.1 Roof Drain: Re-Roof (Recover).....	217
V-6.2 Roof Drain: New Construction.....	218
V-8.0 V2T Vent with Pre-Applied Skirt Flashing.....	219
V-8.1 Pipe/Structural Steel Tube Through Metal Deck.....	220
V-8.2 Multiple Penetrations Through Steel Deck – New Construction.....	221
V-8.3 Single Penetration Through Existing Roof Assembly.....	222
V-8.4 Cluster of Penetrations Through Existing Roof Assembly.....	223
V-8.5A Hot Stack Air Flashing – Option A.....	224
V-8.5B Hot Stack Air Flashing – Option B.....	225
V-12.1 Parapet With Membrane Air Barrier.....	226
V-12.2 Parapet/Curb: Concrete/Lightweight Concrete Used as an Air Barrier.....	227
V-12.3 Parapet or Wall: New Construction and Re-Roof (Recover).....	228

**Contact Information..... 229**

# SECTION 8: DETAILS

## ATTACHMENT DETAILS / INSULATION / COVER BOARD



NOTES:

1. WHEN ENHANCED INSULATION FASTENING IS REQUIRED AS PRESCRIBED IN FACTORY MUTUAL LOSS PREVENTION DATA SHEET 1-29, ANSI/SPRI WD-1, OR MIAMI-DADE COUNTY, REFER TO [VERSICO'S DESIGN REFERENCE DR-05-18.](#)
2. FOR CRITERIA ON INSULATION FASTENERS AND PLATES, REFER TO VERSICO SPECIFICATIONS.
3. IF A WIND SPEED WARRANTY GREATER THAN 55 MPH (25 METERS PER SECOND) OR A WARRANTY TERM GREATER THAN 20-YEARS IS SPECIFIED, ADDITIONAL FASTENING MAY BE REQUIRED, REFER TO VERSICO SPECIFICATIONS.

FEET TO CENTIMETERS

4'	8'
122	244

INCHES TO CENTIMETERS

inch	1/4"	1/2"	3/4"	1"	1.5"	2"	2.5"	3"	4"	5"	6"	7"	8"	9"	10"	11"	12"
cm	1	1.5	2	2.5	4	5	6.5	7.5	10	13	15	18	20	23	25	28	30



VERSICO INSULATION / COVERBOARD ATTACHMENT

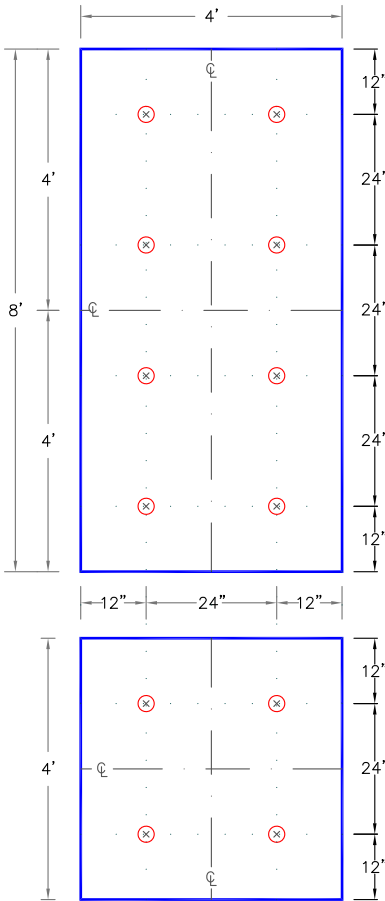
— FASTENER & PLATE  
 — CENTER LINE  
 — GUIDE LINE

ADHERED SYSTEM

A-27.1

ATTACHMENT DETAILS

INSULATION BOARD



NOTES:

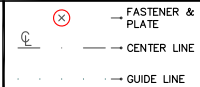
1. THIS DETAIL APPLIES TO MIN. 2" (51mm) THICK (SINGLE OR TOP LAYER) VERSICO POLYISOCYANURATE INSULATION WHEN FASTENED INTO 22-GAUGE STEEL, STRUCTURAL CONCRETE, MINIMUM 15/32" (12mm) PLYWOOD OR 1-1/2" (38mm) THICK WOOD PLANK ROOF DECKS.
2. WHEN ENHANCED INSULATION FASTENING IS REQUIRED AS PRESCRIBED IN FACTORY MUTUAL LOSS PREVENTION DATA SHEET 1-29, ANSI/SPRI WD-1 OR MIAMI-DADE COUNTY, REFER TO [VERSICO'S DESIGN REFERENCE DR-05-18](#).
3. FOR CRITERIA ON INSULATION FASTENERS AND PLATES, REFER TO VERSICO SPECIFICATIONS.
4. IF A WIND SPEED WARRANTY GREATER THAN 55 MILES PER HOUR (25 METERS PER SECOND) OR A WARRANTY TERM GREATER THAN 20-YEARS IS SPECIFIED OR FOR SYSTEMS OVER 50'(15METERS), ADDITIONAL FASTENING MAY BE REQUIRED, REFER TO VERSICO SPECIFICATIONS.
5. DETAIL NOT FOR USE OVER ORIENTED STRAND BOARD, GYPSUM, FIBROUS CEMENT (TECTUM), LIGHTWEIGHT INSULATING CONCRETE OR STEEL ROOF DECK THINNER THAN 22-GAUGE (0.8mm). [REFER TO DETAIL A-27.1](#) FOR ACCEPTABLE FASTENING.

FEET TO CENTIMETERS	
4'	8'
122	244

INCHES TO CENTIMETERS																	
inch	1/4"	1/2"	3/4"	1"	1.5"	2"	2.5"	3"	4"	5"	6"	7"	8"	9"	10"	11"	12"
cm	1	1.5	2	2.5	4	5	6.5	7.5	10	13	15	18	20	23	25	28	30



MINIMUM 2" THICK VERSICO  
MP-H/VERSICORE/  
SECURSHIELD  
POLYISOCYANURATE  
INSULATION

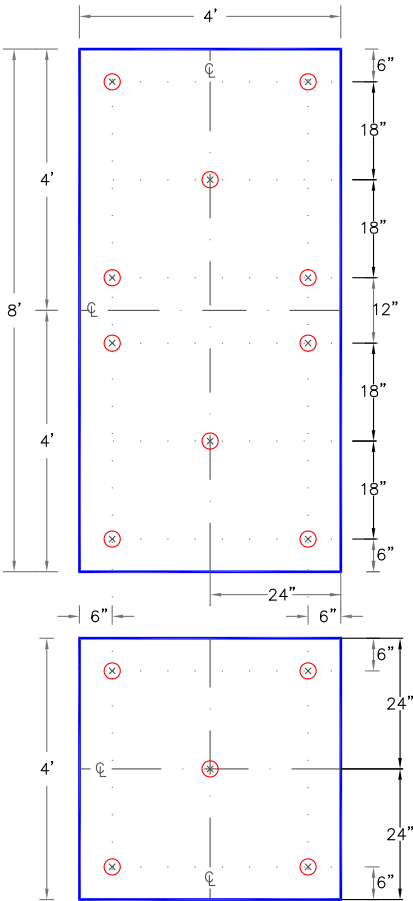


ADHERED SYSTEM  
A-27.2



ATTACHMENT DETAILS

INSULATION BOARD



NOTES:

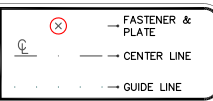
1. THIS DETAIL APPLIES TO MIN. 1-1/2" (38mm) THICK (SINGLE OR TOP LAYER) VERSICO POLYISOCYANURATE INSULATION WHEN FASTENED INTO 22-GAUGE STEEL, STRUCTURAL CONCRETE, MINIMUM 15/32" (12mm) PLYWOOD OR 1-1/2" (38mm) THICK WOOD PLANK ROOF DECKS.
2. WHEN ENHANCED INSULATION FASTENING IS REQUIRED AS PRESCRIBED IN FACTORY MUTUAL LOSS PREVENTION DATA SHEET 1-29, ANSI/SPRI WD-1 OR MIAMI-DADE COUNTY, REFER TO [VERSICO'S DESIGN REFERENCE DR-05-18.](#)
3. FOR CRITERIA ON INSULATION FASTENERS AND PLATES, REFER TO VERSICO SPECIFICATIONS.
4. IF A WIND SPEED WARRANTY GREATER THAN 55 MILES PER HOUR (25 METERS PER SECOND) OR A WARRANTY TERM GREATER THAN 20-YEARS IS SPECIFIED OR FOR SYSTEMS OVER 50'(15METERS), ADDITIONAL FASTENING MAY BE REQUIRED, REFER TO VERSICO SPECIFICATIONS.
5. THIS DETAIL NOT FOR USE OVER ORIENTED STRAND BOARD, GYPSUM, FIBROUS CEMENT (TECTUM), LIGHTWEIGHT INSULATING CONCRETE OR STEEL ROOF DECK THINNER THAN 22-GAUGE (0.8mm). [REFER TO DETAIL A-27.1](#) FOR ACCEPTABLE FASTENING.

FEET TO CENTIMETERS	
4'	8'
122	244

INCHES TO CENTIMETERS																	
inch	1/4"	1/2"	3/4"	1"	1.5"	2"	2.5"	3"	4"	5"	6"	7"	8"	9"	10"	11"	12"
cm	1	1.5	2	2.5	4	5	6.5	7.5	10	13	15	18	20	23	25	28	30



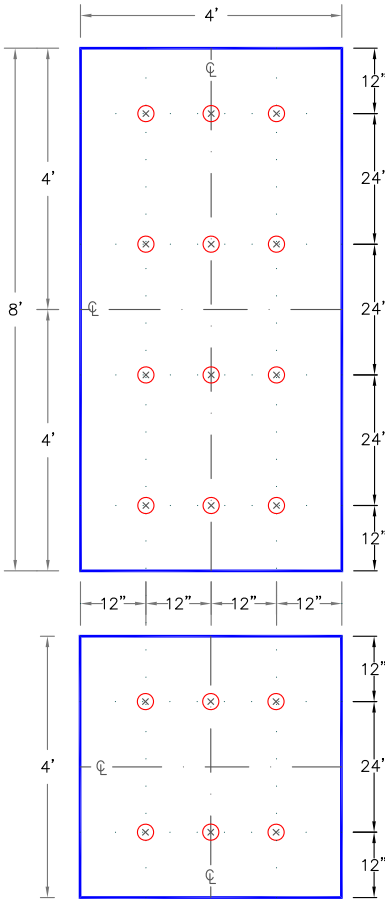
MINIMUM 1-1/2" THICK  
 VERSICO  
 MP-H/VERSICORE/SECURSHIELD  
 POLYISOCYANURATE  
 INSULATION



ADHERED SYSTEM  
 A-27.3

ATTACHMENT DETAILS

COVER BOARD



NOTES:

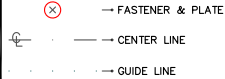
1. THIS DETAIL APPLIES TO 1/4" (6.4mm) AND 1/2" (13mm) THICK SECUROCK OR DENS DECK PRIME (OVER AN APPROVED INSULATION) WHEN FASTENED INTO 22-GAUGE (0.8mm) STEEL, STRUCTURAL CONCRETE, MINIMUM 15/32" (12mm) PLYWOOD OR 1-1/2" THICK WOOD PLANK ROOF DECKS.
2. WHEN ENHANCED FASTENING IS REQUIRED AS PRESCRIBED IN FACTORY MUTUAL LOSS PREVENTION DATA SHEET 1-29, ANSI/SPRI WD-1 OR MIAMI-DADE COUNTY, REFER TO [VERSICO'S DESIGN REFERENCE DR-05-18](#).
3. FOR CRITERIA ON INSULATION FASTENERS AND PLATES, REFER TO VERSICO SPECIFICATIONS.
4. IF A WIND SPEED WARRANTY GREATER THAN 55 MILES PER HOUR (25 METERS PER SECOND) OR A WARRANTY TERM GREATER THAN 20-YEARS IS SPECIFIED OR FOR SYSTEMS OVER 50'(15METERS), ADDITIONAL FASTENING MAY BE REQUIRED, REFER TO VERSICO SPECIFICATIONS.
5. DETAIL NOT FOR USE OVER ORIENTED STRAND BOARD, GYPSUM, FIBROUS CEMENT (TECTUM), LIGHTWEIGHT INSULATING CONCRETE OR STEEL ROOF DECK LESS THAN 22-GAUGE (0.8mm). [REFER TO DETAIL A-27.1](#) FOR ACCEPTABLE FASTENING.
6. WHEN INSTALLED OVER COMBUSTIBLE WOOD DECKS OR INSULATIONS, ALL JOINTS SHALL BE STAGGERED.
7. LONG UNINTERRUPTED RUNS >200' (>61M) OF SECUROCK MAY REQUIRE SLIGHT GAPPING DUE TO THERMAL EXPANSION.

FEET TO CENTIMETERS	
4'	8'
122	244

INCHES TO CENTIMETERS																	
inch	1/4"	1/2"	3/4"	1"	1.5"	2"	2.5"	3"	4"	5"	6"	7"	8"	9"	10"	11"	12"
cm	1	1.5	2	2.5	4	5	6.5	7.5	10	13	15	18	20	23	25	28	30



1/4" OR 1/2" THICK SECUROCK OR DENS DECK/DENS DECK PRIME

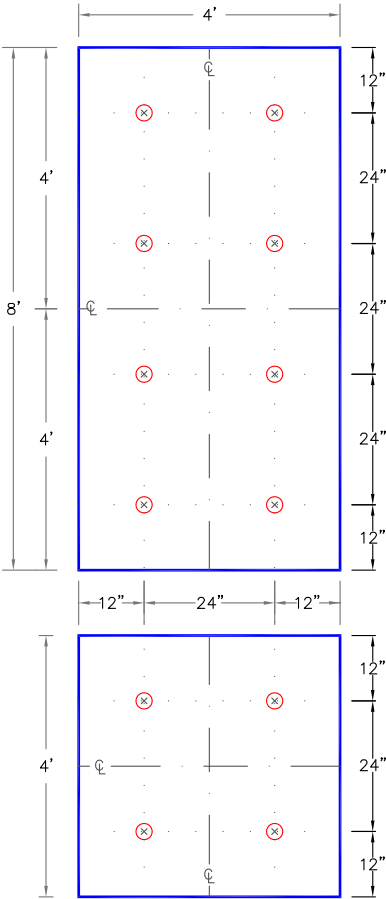


ADHERED SYSTEM

A - 27.4

ATTACHMENT DETAILS

COVER BOARD



NOTES:

1. THIS DETAIL APPLIES TO 5/8" (16mm) THICK SECUROCK OR DENS DECK PRIME (OVER AN APPROVED INSULATION) WHEN FASTENED INTO 22-GAUGE STEEL, STRUCTURAL CONCRETE, MINIMUM 15/32" (12mm) PLYWOOD OR 1-1/2" (38mm) THICK WOOD PLANK ROOF DECKS.
2. WHEN ENHANCED FASTENING IS REQUIRED AS PRESCRIBED IN FACTORY MUTUAL LOSS PREVENTION DATA SHEET 1-29, ANSI/SPRI WD-1 OR MIAMI-DADE COUNTY, REFER TO [VERSICO'S DESIGN REFERENCE DR-05-18.](#)
3. FOR CRITERIA ON INSULATION FASTENERS AND PLATES, REFER TO VERSICO SPECIFICATIONS.
4. IF A WIND SPEED WARRANTY GREATER THAN 55 MILES PER HOUR (25 METERS PER SECOND) OR A WARRANTY TERM GREATER THAN 20-YEARS IS SPECIFIED OR FOR SYSTEMS OVER 50'(15METERS), ADDITIONAL FASTENING MAY BE REQUIRED, REFER TO VERSICO SPECIFICATIONS.
5. DETAIL NOT FOR USE OVER ORIENTED STRAND BOARD, GYPSUM, FIBROUS CEMENT (TECTUM), LIGHTWEIGHT INSULATING CONCRETE OR STEEL ROOF DECK LESS THAN 22-GAUGE (0.8mm), [REFER TO DETAIL A-27.1](#) FOR ACCEPTABLE FASTENING.
6. WHEN INSTALLED OVER COMBUSTIBLE WOOD DECKS OR INSULATIONS, ALL JOINTS SHALL BE STAGGERED.
7. LONG UNINTERRUPTED RUNS >200' (>61M) OF SECUROCK MAY REQUIRE SLIGHT GAPPING DUE TO THERMAL EXPANSION.

FEET TO CENTIMETERS

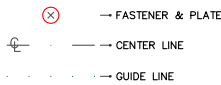
4'	8'
122	244

INCHES TO CENTIMETERS

inch	1/4"	1/2"	3/4"	1"	1.5"	2"	2.5"	3"	4"	5"	6"	7"	8"	9"	10"	11"	12"
cm	1	1.5	2	2.5	4	5	6.5	7.5	10	13	15	18	20	23	25	28	30



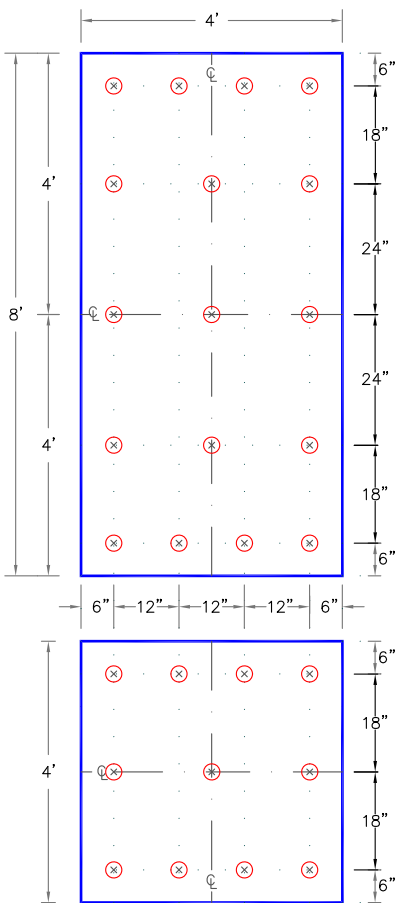
5/8" THICK SECUROCK OR DENS DECK/DENS DECK PRIME/DENS DECK STORMX PRIME



ADHERED SYSTEM  
A - 27.5

ATTACHMENT DETAILS

COVER BOARD



NOTES:

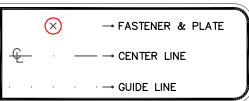
1. WHEN ENHANCED FASTENING IS REQUIRED AS PRESCRIBED IN FACTORY MUTUAL LOSS PREVENTION DATA SHEET 1-29, ANSI/SPRI WD-1 OR MIAMI-DADE COUNTY, REFER TO [VERSICO'S DESIGN REFERENCE DR-05-18.](#)
2. FOR CRITERIA ON INSULATION FASTENERS AND PLATES, REFER TO VERSICO SPECIFICATIONS.
3. IF A WIND SPEED WARRANTY GREATER THAN 55 MILES PER HOUR (25 METERS PER SECOND) OR A WARRANTY TERM GREATER THAN 20-YEARS IS SPECIFIED OR FOR SYSTEMS OVER 50'(15METERS), ADDITIONAL FASTENING MAY BE REQUIRED, REFER TO VERSICO SPECIFICATIONS.
4. OSB MUST BE POSITIONED WITH AN 1/8" (0.5cm) GAP BETWEEN BOARDS.
5. WHEN SPECIFIED, JOINTS IN OSB MUST BE STAGGERED WITH JOINTS IN INSULATION BELOW.

FEET TO CENTIMETERS	
4'	8'
122	244

INCHES TO CENTIMETERS																	
inch	1/4"	1/2"	3/4"	1"	1.5"	2"	2.5"	3"	4"	5"	6"	7"	8"	9"	10"	11"	12"
cm	1	1.5	2	2.5	4	5	6.5	7.5	10	13	15	18	20	23	25	28	30



OSB ATTACHMENT

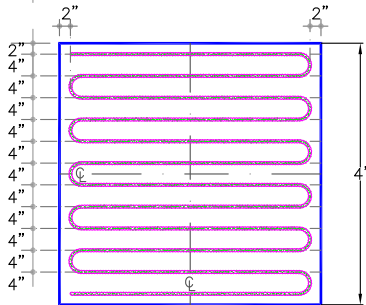
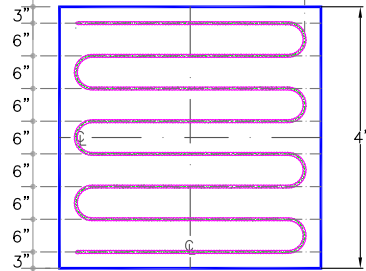
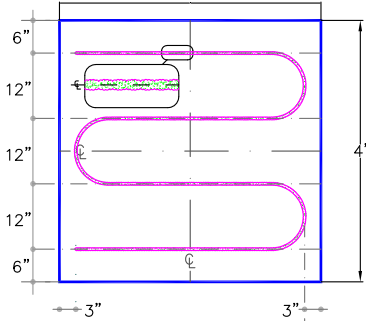


ADHERED SYSTEM  
A - 27.6

## ATTACHMENT DETAILS INSULATION / COVER BOARD

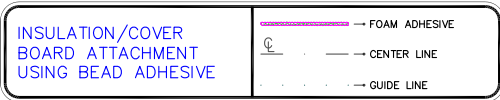
**NOTES:**

- REFER TO VERSICO SPECIFICATIONS FOR PRODUCT DATA SHEETS FOR APPROPRIATE BEAD SPACING BASED UPON THE BUILDING HEIGHT, WARRANTY TERM AND ACCEPTABLE SUBSTRATE.
- THE SURFACE TO WHICH ADHESIVE IS TO BE APPLIED SHALL BE DRY, FREE OF FINIS, PROTRUSIONS, SHARP EDGES, LOOSE AND FOREIGN MATERIALS, OIL AND GREASE. AREA SHOULD BE CLEANED WITH AN AIR BLOWER.
- PREVIOUSLY UNEXPOSED ASPHALT OR RESIDUE MUST BE PRIMED WITH VERSICO CAVGRIP, 702 OR 702LV PRIMER.
- SEAL ALL GAPS IN THE CONCRETE DECK WITH VERSICO 725TR OR OTHER SUITABLE MATERIAL TO AVOID CONDENSATION ISSUES OR FILL WITH VERSICO INSULATION ADHESIVE.
- AT THE BEGINNING OF THE INSULATION ATTACHMENT PROCESS AND PERIODICALLY THROUGHOUT THE DAY, CHECK THE ADHESION OF BOARDS TO ENSURE A TIGHT JOINT IS CREATED AND MAXIMUM CONTACT IS ACHIEVED.
- WALK THE BOARDS INTO THE ADHESIVE AND ROLL USING A 30" WIDE, 150 POUND SEGMENTED STEEL ROLLER TO ENSURE FULL EMBEDMENT.
- ONE PERSON SHOULD BE DESIGNATED TO WALK AND ROLL IN ALL BOARDS. RELIEF CUT MAY BE NECESSARY TO ALLOW LIFTED BOARD TO LAY FLAT, OR CONSTANT WEIGHT (10LBS MINIMUM FOR 5-15 MINUTES PER LIFTED AREA) MAY BE NECESSARY TO ACHIEVE ADEQUATE ADHESION



FEET TO CENTIMETERS	
4'	8'
122	244

INCHES TO CENTIMETERS																	
inch	1/4"	1/2"	3/4"	1"	1.5"	2"	2.5"	3"	4"	5"	6"	7"	8"	9"	10"	11"	12"
cm	1	1.5	2	2.5	4	5	6.5	7.5	10	13	15	18	20	23	25	28	30



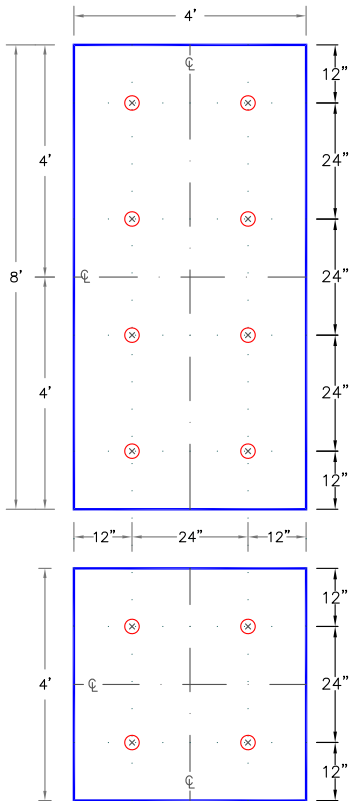
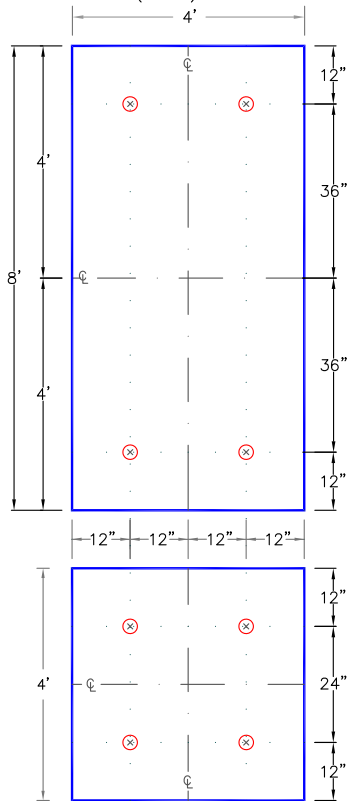
**ADHERED SYSTEM**  
A - 27.7

ATTACHMENT DETAILS

INSULATION / COVER BOARD

NEW CONSTRUCTION OR RE-ROOF/TEAR OFF PROJECTS WITH SECUROCK, DENS-DECK, RECOVERY BOARD OR ANY VERSICO APPROVED INSULATION MIN 1-1/2" (38mm) THICK

RE-ROOF/NO TEAR OFF PROJECTS WITH POLYISOCYANURATE LESS THAN 1-1/2" (38mm) THICK



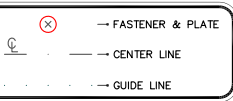
NOTE:

FOR CRITERIA ON INSULATION FASTENERS AND PLATES, REFER TO VERSICO SPECIFICATIONS.

FEET TO CENTIMETERS		INCHES TO CENTIMETERS																	
4'	8'	inch	1/4"	1/2"	3/4"	1"	1.5"	2"	2.5"	3"	4"	5"	6"	7"	8"	9"	10"	11"	12"
122	244	cm	1	1.5	2	2.5	4	5	6.5	7.5	10	13	15	18	20	23	25	28	30



INSULATION/COVER BOARD ATTACHMENT UP TO 15-YEAR WARRANTIES



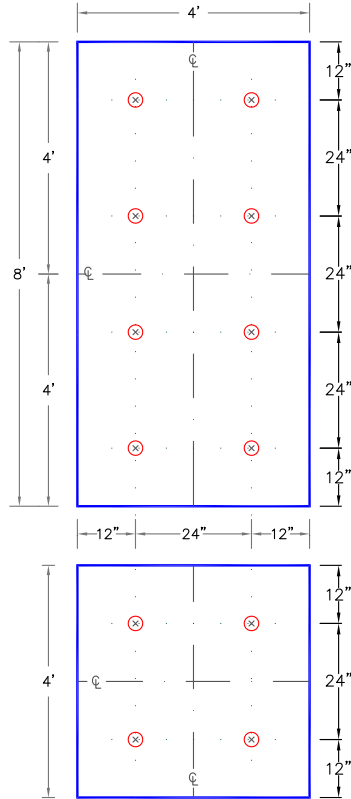
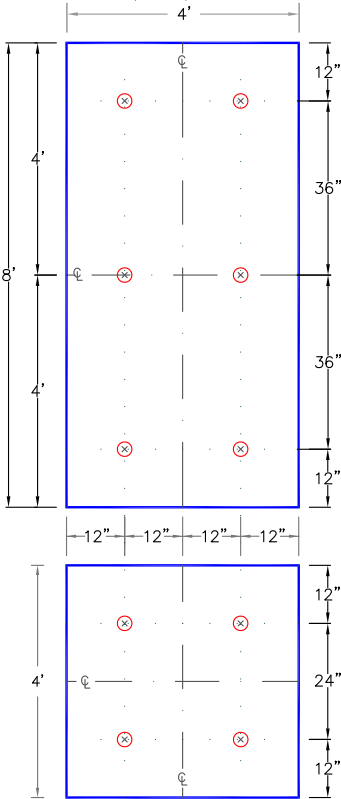
MECHANICALLY ATTACHED SYSTEM  
MA-27.1

ATTACHMENT DETAILS

INSULATION / COVER BOARD

NEW CONSTRUCTION OR RE-ROOF/TEAR OFF PROJECTS WITH SECUROCK, DENS-DECK, RECOVERY BOARD OR ANY VERSICO APPROVED INSULATION MIN 1-1/2" (38mm) THICK

RE-ROOF/NO TEAR OFF PROJECTS WITH POLYISOCYANURATE LESS THAN 1-1/2" (38mm) THICK



NOTES:

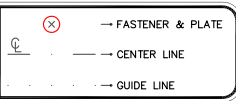
- FOR CRITERIA ON INSULATION FASTENERS AND PLATES, REFER TO VERSICO SPECIFICATIONS.
- 25 AND 30-YEAR WARRANTY PROJECTS REQUIRE COMPLETE TEAR OFF.

FEET TO CENTIMETERS	
4'	8'
122	244

INCHES TO CENTIMETERS																	
inch	1/4"	1/2"	3/4"	1"	1.5"	2"	2.5"	3"	4"	5"	6"	7"	8"	9"	10"	11"	12"
cm	1	1.5	2	2.5	4	5	6.5	7.5	10	13	15	18	20	23	25	28	30



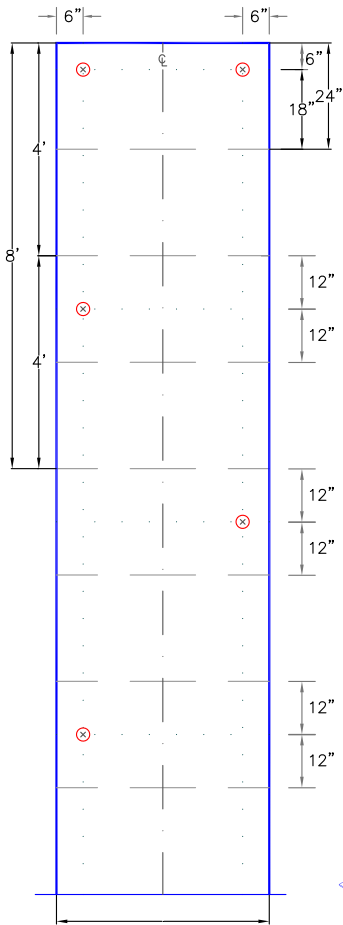
INSULATION/COVER BOARD ATTACHMENT FOR PROJECTS EXCEEDING 15-YEAR WARRANTIES



MECHANICALLY ATTACHED SYSTEM  
MA-27.2

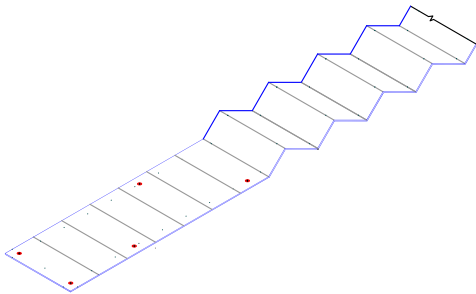
ATTACHMENT DETAILS

COVER BOARD



NOTES:

1. INSTALL R-TECH RECOVER BOARD WITH CONTINUOUS SIDE JOINTS AND END JOINTS STAGGERED SO THEY ARE OFFSET BY A MINIMUM OF 12" (30cm) FROM THE END JOINTS IN ADJACENT ROWS.
2. INSULATION SHOULD ABUT TIGHTLY AGAINST ADJACENT BOARDS.
3. IF R-TECH FANFOLD RECOVER BOARD IS BEING INSTALLED OVER AN EXISTING LAYER OF INSULATION, ALL JOINTS MUST BE OFFSET A MINIMUM OF 6" (15cm) BETWEEN LAYERS.
4. FASTENERS SHOULD NEVER BE CLOSER THAN 6" (15cm) FROM THE EDGES OF THE BOARD.
5. CARE MUST BE TAKEN TO AVOID OVERDRIVING OR UNDER-DRIVING THE FASTENER AND PLATE ASSEMBLY.
6. METALLIC FACER PERMITS THE USE OF R-TECH RECOVER BOARD UNDER EPDM MECHANICALLY ATTACHED ASSEMBLIES IN NORTHERN CLIMATES (CONTACT VERSICO FOR ACCEPTANCE).

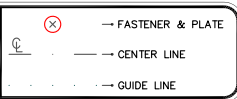


FEET TO CENTIMETERS	
4'	8'
122	244

INCHES TO CENTIMETERS																	
inch	1/4"	1/2"	3/4"	1"	1.5"	2"	2.5"	3"	4"	5"	6"	7"	8"	9"	10"	11"	12"
cm	1	1.5	2	2.5	4	5	6.5	7.5	10	13	15	18	20	23	25	28	30



R-TECH FANFOLD ROOF UNDERLAYMENT

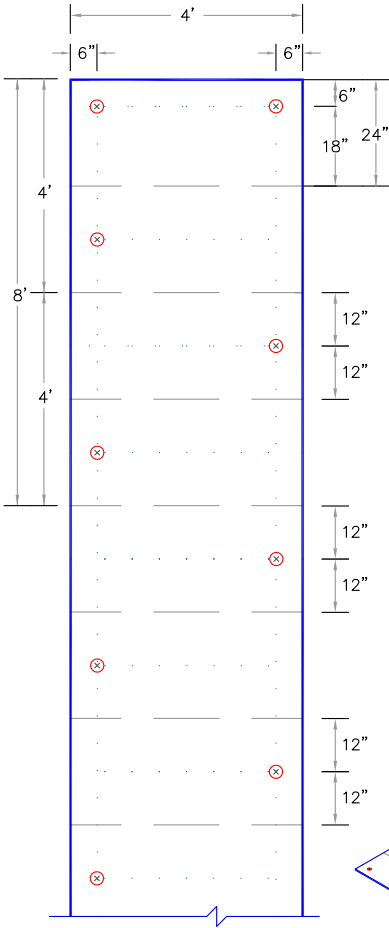


MECHANICALLY ATTACHED SYSTEM  
MA-27.3



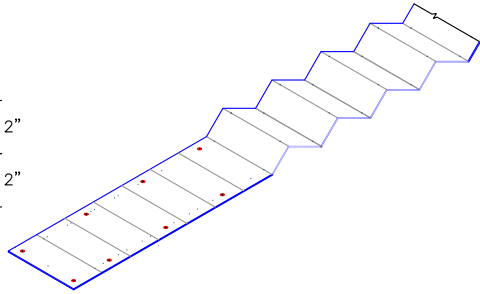
ATTACHMENT DETAILS

COVER BOARD



NOTES:

1. INSTALL R-TECH RECOVER BOARD WITH CONTINUOUS SIDE JOINTS AND END JOINTS STAGGERED SO THEY ARE OFFSET BY A MINIMUM OF 12" (30cm) FROM THE END JOINTS IN ADJACENT ROWS.
2. INSULATION SHOULD ABUT TIGHTLY AGAINST ADJACENT BOARDS.
3. IF R-TECH FANFOLD RECOVER BOARD IS BEING INSTALLED OVER AN EXISTING LAYER OF INSULATION, ALL JOINTS MUST BE OFFSET A MINIMUM OF 6" (15cm) BETWEEN LAYERS.
4. FASTENERS SHOULD NEVER BE CLOSER THAN 6" (15cm) FROM THE EDGES OF THE BOARD.
5. CARE MUST BE TAKEN TO AVOID OVERDRIVING OR UNDER-DRIVING THE FASTENER AND PLATE ASSEMBLY.
6. METALLIC FACER PERMITS THE USE OF R-TECH RECOVER BOARD UNDER EPDM MECHANICALLY FASTENED ASSEMBLIES IN NORTHERN CLIMATES (CONTACT VERSICO FOR ACCEPTANCE).
7. FOR NON-FM ASSEMBLY REFER TO DETAIL MF-27.3



FEET TO CENTIMETERS	
4'	8'
122	244

INCHES TO CENTIMETERS																	
inch	1/4"	1/2"	3/4"	1"	1.5"	2"	2.5"	3"	4"	5"	6"	7"	8"	9"	10"	11"	12"
cm	1	1.5	2	2.5	4	5	6.5	7.5	10	13	15	18	20	23	25	28	30



R-Tech FANFOLD ROOF UNDERLAYMENT FOR FM ASSEMBLIES

- ⊗ → FASTENER & PLATE
- ⊙ → CENTER LINE
- ⋯ → GUIDE LINE

MECHANICALLY ATTACHED SYSTEM

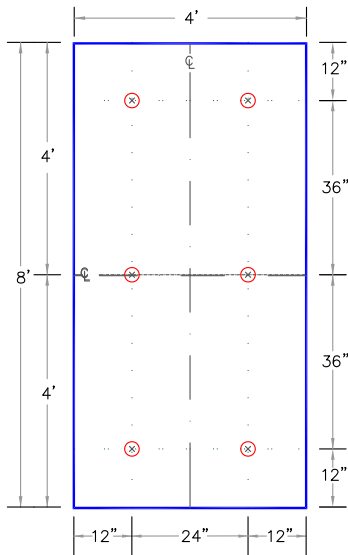
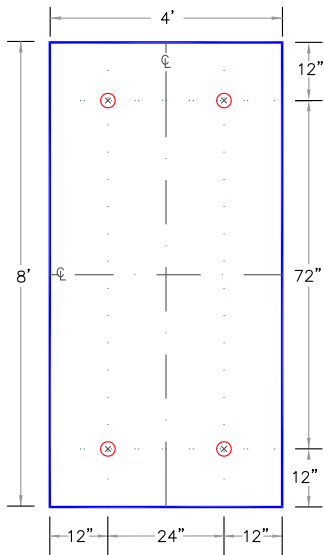
MA-27.4

ATTACHMENT DETAILS

COVER BOARD

NEW CONSTRUCTION OR RE-ROOF/TEAR OFF PROJECTS WITH 1/2" SecurShield HD COATED GLASS FACER

NEW CONSTRUCTION OR RE-ROOF/TEAR OFF PROJECTS WITH 20 OR 25 PSI SecurShield ANY THICKNESS

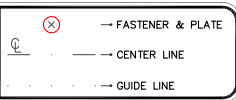


FEET TO CENTIMETERS	
4'	8'
122	244

INCHES TO CENTIMETERS																	
inch	1/4"	1/2"	3/4"	1"	1.5"	2"	2.5"	3"	4"	5"	6"	7"	8"	9"	10"	11"	12"
cm	1	1.5	2	2.5	4	5	6.5	7.5	10	13	15	18	20	23	25	28	30

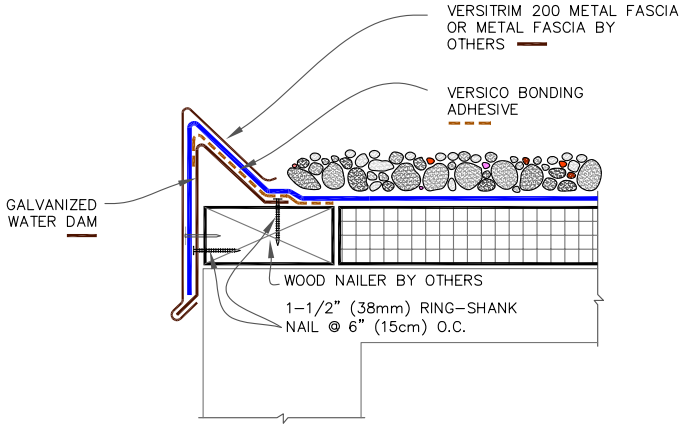


INSULATION/COVERBOARD ATTACHMENT WHEN USING SecurShield FAMILY PRODUCTS FOR ALL WARRANTIES LENGTHS



MECHANICALLY ATTACHED SYSTEM  
MA-27.5

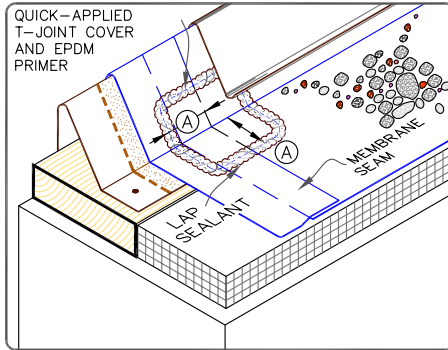
THERMOSET MEMBRANE EPDM



NOTE:

1. MAXIMUM MEMBRANE THICKNESS GOING OVER THE WATER DAM IS 60-MIL. FOR THICKER MEMBRANES, RUN FIELD SHEET UNDER THE WATER DAM AND STRIP-IN WITH MAXIMUM 60-MIL MEMBRANE.

DIMENSION	cm	
(A)	3"	7.5 MIN.



MAXIMUM WARRANTY: 20 YEARS



VERSITRIM 200

— EPDM MEMBRANE

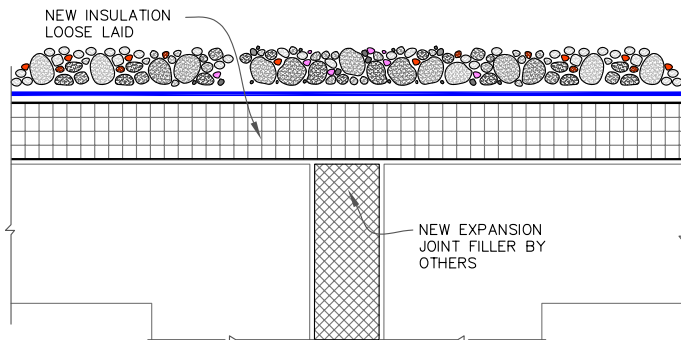
— APPROVED SUBSTRATE

0 — SEE NOTE(S)

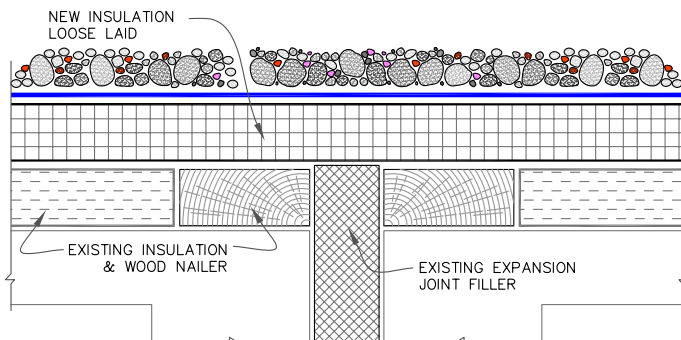
THERMOSET ROOFING SYSTEM

VGB-1.1

■■■■ THERMOSET MEMBRANE ■■■■ EPDM ■■■■



(A) NEW CONSTRUCTION OR TEAROFF



(B) DECK LEVEL/REROOFING

NOTE:

ANY **VGC-3 EXPANSION JOINT** DETAIL CAN BE USED WITH THE "B" SYSTEM (BALLASTED STONE ASSEMBLY)  
 MAXIMUM WARRANTY: 30 YEARS



DECK-TO-DECK  
EXPANSION JOINT

— REINFORCED EPDM—  
UNLESS NOTED OTHERWISE

— APPROVED SUBSTRATE

0 — SEE NOTE(S)

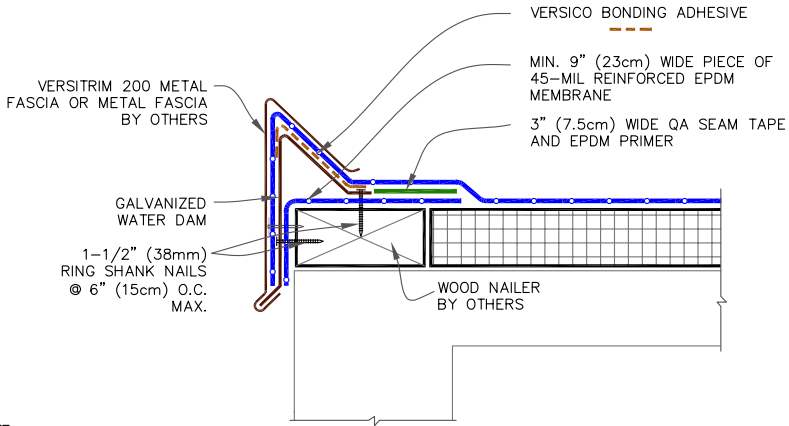
MECHANICALLY  
ATTACHED EPDM

VGB-3.0

# Main Details: VersiGard Mechanically Attached Details

THERMOSET MEMBRANE

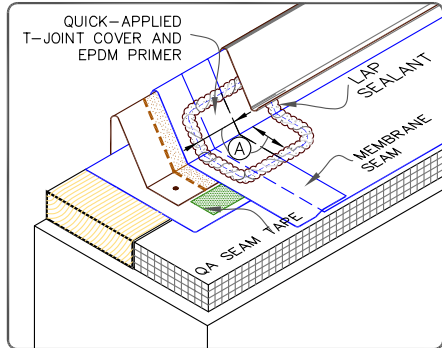
EPDM



NOTE:

1. MAXIMUM MEMBRANE THICKNESS GOING OVER THE WATER DAM IS 60-MIL. FOR THICKER MEMBRANES, RUN FIELD SHEET UNDER THE WATER DAM AND STRIP-IN WITH MAXIMUM 60-MIL MEMBRANE.

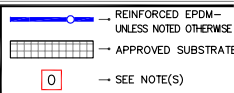
DIMENSION	cm	
(A)	3"	7.5 MIN.



MAXIMUM WARRANTY: 30 YEARS



VERSITRIM 200



MECHANICALLY ATTACHED EPDM  
VGMA-1.1

THERMOSET MEMBRANE

EPDM

**GUIDELINES FOR ROOF PERIMETER ZONES FOR MECHANICALLY ATTACHED ROOF SYSTEM**

**PERIMETER ZONES**

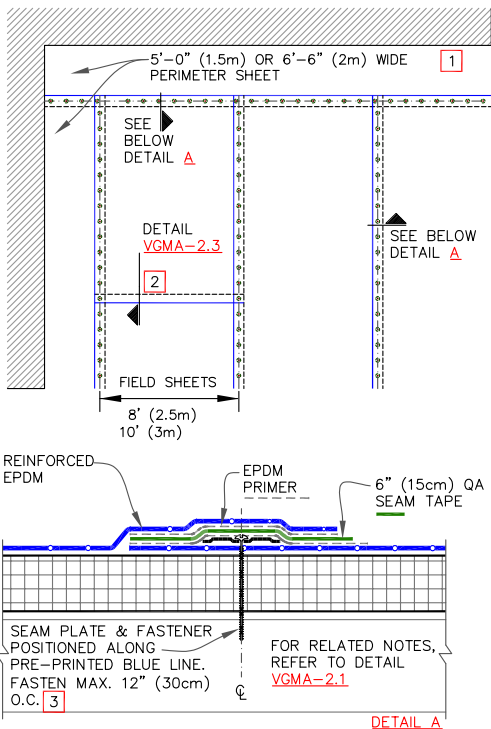
**SPLIT LEVEL ROOFS**  
 GREATER THAN 10 FEET (3m)

**SPLIT LEVEL ROOFS**  
 LESS THAN 10 FEET (3m)

**CANOPY ROOF**  
 INSTALL PERIMETER SHEETS OVER THE ENTIRE OVERHANG (PROJECTION ROOF) AREA, EXTENDING ONTO THE MAIN ROOF DECK WHEN AT THE SAME LEVEL AS SHOWN.

**LARGE OPENINGS OR LOADING DOCKS**

4 PERIMETER SHEETS CENTERED OVER LARGE OPENINGS



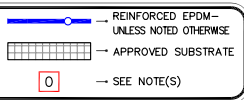
**NOTES:**

1. REFER TO VERSICO SPECIFICATIONS FOR REQUIRED NUMBER OF PERIMETER SHEETS, SHEET WIDTH AND MEMBRANE FASTENING DENSITY.
2. END LAPS DO NOT REQUIRE MECHANICAL FASTENING AND SHALL BE SPLICED USING EITHER 3" (7.5cm) OR 6" (15cm) WIDE QA SEAM TAPE. PER DETAIL [VGMA-2.3](#).
3. HPX FASTENERS AND POLYMER SEAM PLATES ARE REQUIRED OVER STEEL DECKS.

MAXIMUM WARRANTY: 30 YEARS



MECHANICALLY ATTACHED EPDM SECUREMENT - OPTION 1



MECHANICALLY ATTACHED EPDM  
**VGMA-2.0A**

THERMOSET MEMBRANE

EPDM

**GUIDELINES FOR ROOF PERIMETER ZONES FOR MECHANICALLY ATTACHED ROOF SYSTEM**

**PERIMETER ZONES**

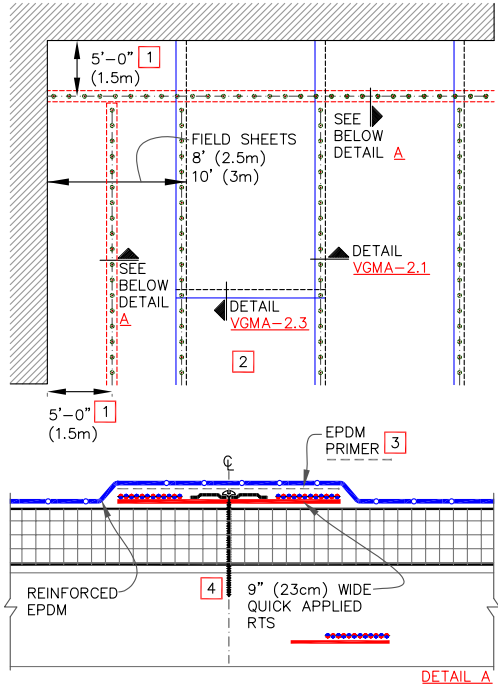
**SPLIT LEVEL ROOFS**  
 GREATER THAN 10 FEET (3m)

**SPLIT LEVEL ROOFS**  
 LESS THAN 10 FEET (3m)

**CANOPY ROOF**  
 INSTALL PERIMETER SHEETS OVER THE ENTIRE OVERHANG (PROJECTION ROOF) AREA, EXTENDING ONTO THE MAIN ROOF DECK WHEN AT THE SAME LEVEL AS SHOWN.

**LARGE OPENINGS OR LOADING DOCKS**

4 PERIMETER SHEETS CENTERED OVER LARGE OPENINGS



**NOTES:**

1. REFER TO VERSICO SPECIFICATIONS FOR REQUIRED NUMBER OF PERIMETER SHEETS, SHEET WIDTH AND MEMBRANE FASTENING DENSITY.
2. END LAPS DO NOT REQUIRE MECHANICAL FASTENING AND SHALL BE SPLICED USING EITHER 3" (7.5cm) OR 6" (15cm) WIDE QA SEAM TAPE. PER DETAIL VGMA-2.3.
3. EPDM PRIMER MUST BE APPLIED TO THE BACK SIDE OF MEMBRANE SURFACE PRIOR TO ADHERING MEMBRANE TO QUICK APPLIED RTS.
4. HPX FASTENERS AND POLYMER SEAM PLATES ARE REQUIRED OVER STEEL DECKS.

MAXIMUM WARRANTY: 30 YEARS



**MECHANICALLY ATTACHED EPDM SECUREMENT - OPTION 2 (RTS)**

— REINFORCED EPDM— UNLESS NOTED OTHERWISE

— APPROVED SUBSTRATE

0 — SEE NOTE(S)

**MECHANICALLY ATTACHED EPDM**

**VGMA-2.0B**

THERMOSET MEMBRANE

EPDM

**GUIDELINES FOR ROOF PERIMETER ZONES FOR MECHANICALLY ATTACHED ROOF SYSTEM**

**PERIMETER ZONES**

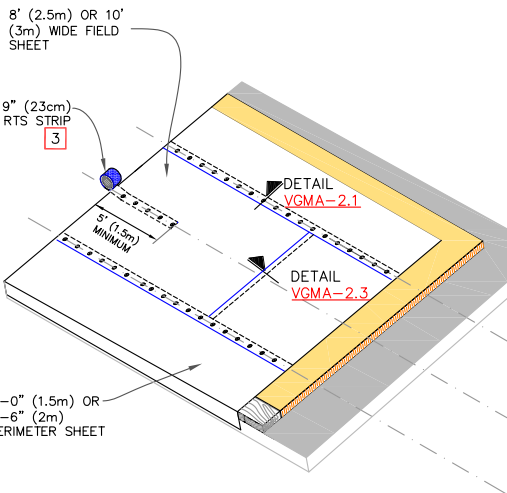
**SPLIT LEVEL ROOFS**  
 GREATER THAN 10 FEET (3m)

**SPLIT LEVEL ROOFS**  
 LESS THAN 10 FEET (3m)

**CANOPY ROOF**  
 INSTALL PERIMETER SHEETS OVER THE ENTIRE OVERHANG (PROJECTION ROOF) AREA, EXTENDING ONTO THE MAIN ROOF DECK WHEN AT THE SAME LEVEL AS SHOWN.

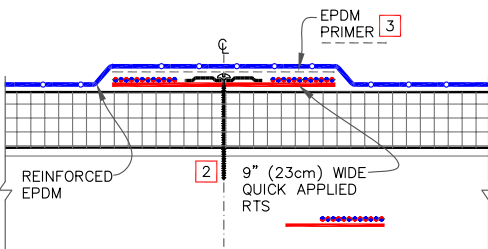
**LARGE OPENINGS OR LOADING DOCKS**

4 PERIMETER SHEETS CENTERED OVER LARGE OPENINGS



**NOTES:**

1. REFER TO VERSICO SPECIFICATIONS FOR REQUIRED NUMBER OF PERIMETER SHEETS, SHEET WIDTH AND MEMBRANE FASTENING DENSITY.
2. HPX FASTENERS AND POLYMER SEAM PLATES ARE REQUIRED OVER STEEL DECKS.
3. RTS "FINGER" MUST EXTEND THE WIDTH OF THE REQUIRED PERIMETER.



MAXIMUM WARRANTY: 30 YEARS



MECHANICALLY ATTACHED EPDM SECUREMENT - OPTION 3 (RTS)

- REINFORCED EPDM - UNLESS NOTED OTHERWISE
- APPROVED SUBSTRATE
- SEE NOTE(S)

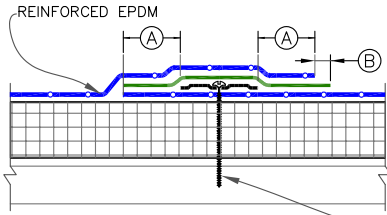
MECHANICALLY ATTACHED EPDM  
 VGMA-2.0C



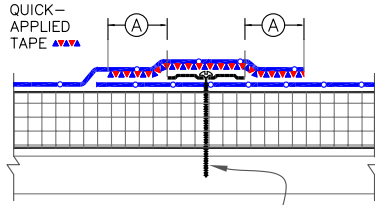
## THERMOSET MEMBRANE

## EPDM

6" (15cm) WIDE QA SEAM TAPE SPLICE

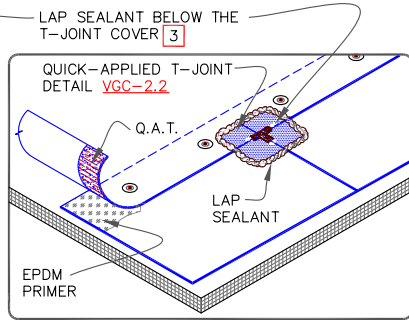
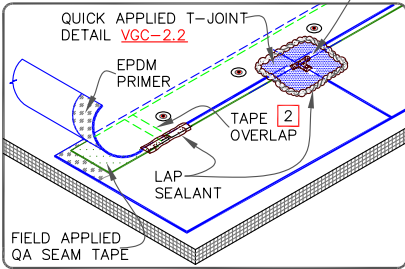


6" (15cm) WIDE FACTORY APPLIED TAPE



SEAM PLATE & FASTENER POSITIONED OVER PRE-PRINTED BLUE MARKS. FASTEN MAX. 12" (30cm) O.C. **1**

DIMENSIONS	cm
(A)	2" 5
(B)	1/8" 0.5 TO
	1/2" 1.5



NOTES:

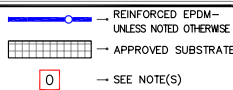
Q.A.T. (QA SEAM TAPE)

- HPX FASTENERS AND POLYMER SEAM PLATES ARE REQUIRED OVER STEEL DECKS.
- OVERLAP THE ENDS OF FIELD APPLIED QA SEAM TAPE A MINIMUM OF 1" (2.5cm). APPLY LAP SEALANT AT TAPE OVERLAPS 2" (5cm) IN EACH DIRECTION AS SHOWN.
- APPLY LAP SEALANT ALONG THE LEADING EDGE OF THE MEMBRANE SPLICE UNDER THE 6" (15cm) T-JOINT COVER, COVERING THE EXPOSED SPLICE TAPE 1/2" (1.5cm) IN ALL DIRECTIONS FROM THE SPLICE INTERSECTION.
- END LAPS SHALL BE SPICED USING 3" (7.5cm) WIDE QA SEAM TAPE. REFER TO DETAIL [VGMA-2.2](#).
- LAP SEALANT IS REQUIRED ON CUT EDGES OF REINFORCED EPDM MEMBRANE.

MAXIMUM WARRANTY: 20 YEARS

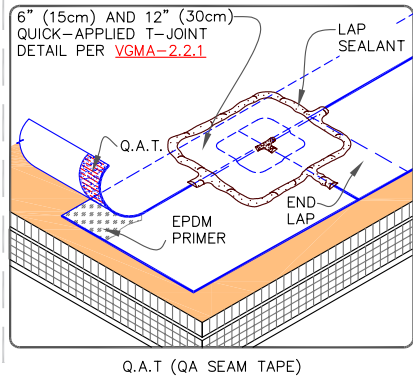
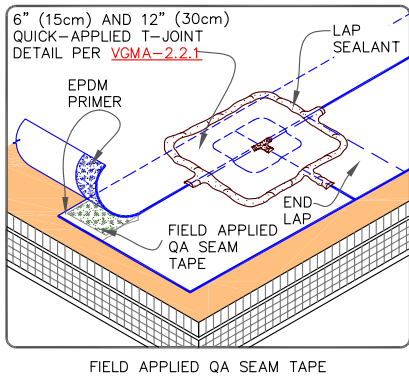
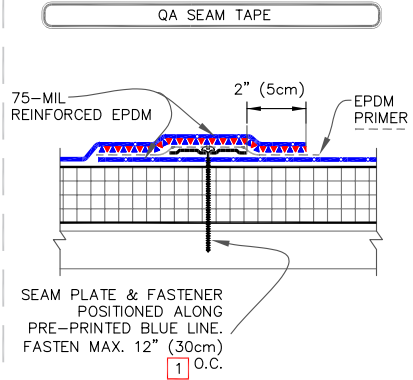
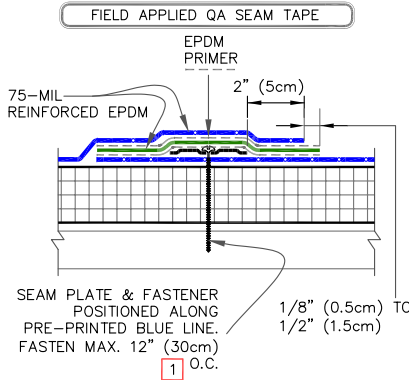


MECHANICALLY ATTACHED EPDM MEMBRANE SPLICE



MECHANICALLY ATTACHED EPDM  
**VGMA-2.1**

## THERMOSET MEMBRANE EPDM



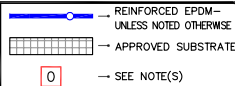
**NOTES:**

1. HPX FASTENERS AND POLYMER SEAM PLATES ARE REQUIRED OVER STEEL DECKS.
2. END LAPS SHALL BE SPLICED USING 6" (15cm) WIDE QA SEAM TAPE. REFER TO DETAIL [VGC-2.1A](#).
3. OVERLAP THE ENDS OF FIELD APPLIED QA SEAM TAPE A MINIMUM OF 1" (2.5cm). APPLY LAP SEALANT AT TAPE OVERLAPS 2" (5cm) IN ALL DIRECTIONS.
4. LAP SEALANT IS REQUIRED ON CUT EDGES OF REINFORCED EPDM MEMBRANE.

MAXIMUM WARRANTY: 30 YEARS



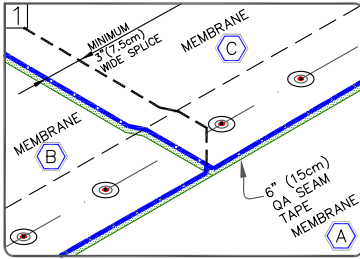
MECHANICALLY ATTACHED EPDM MEMBRANE SPLICE (25 / 30 YEAR WARRANTIES)



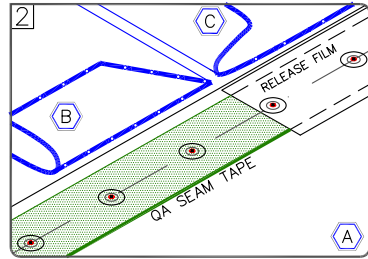
MECHANICALLY ATTACHED EPDM  
**VGMA-2.1A**

## THERMOSET MEMBRANE

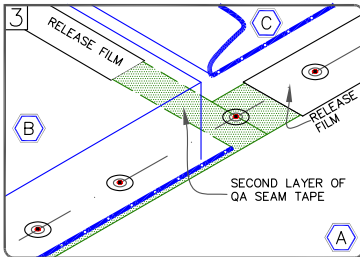
## EPDM



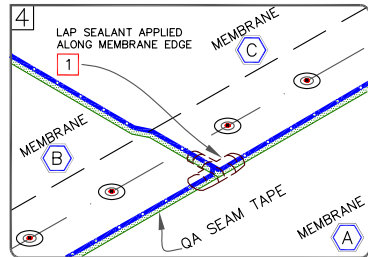
POSITION MEMBRANE TO ALLOW AN APPROXIMATE 7" (17.5cm) OVERLAP ALONG THE LENGTH OF THE MEMBRANE & 4" (10cm) AT END LAPS. THE PRE-MARKED LINE ON THE MEMBRANE EDGE CAN BE USED AS A GUIDE FOR TAPE PLACEMENT.



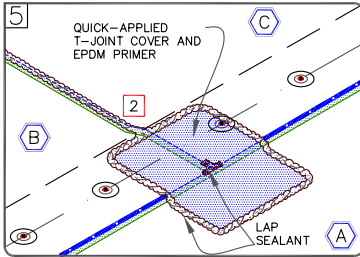
FOLD SHEETS BACK AS SHOWN. APPLY EPDM PRIMER TO THE SPLICE AREA ON BOTH SURFACES AND ALLOW TO FLASH-OFF. APPLY QA SEAM TAPE WITH RELEASE FILM ALIGNED WITH PRE-MARKED LINE.



SPLICE SHEET B TO SHEET A AND APPLY SECOND PIECE OF QA SEAM TAPE BETWEEN SHEET B AND C. TRIM RELEASE FILM AS SHOWN.



SPLICE SHEET C TO SHEET A AND B, PRESS TOP SHEET ONTO BOTTOM SHEET USING HAND PRESSURE TOWARDS THE OUTER EDGE OF THE SPLICE AND ROLL THE SPLICE AREA WITH A 2" (5cm) WIDE STEEL ROLLER.



APPLY QUICK-APPLIED T-JOINT COVER OR 6" (15cm) WIDE SECTION OF QUICK-APPLIED UNCURED EPDM FLASHING CENTERED OVER THE INTERSECTING POINT OF THE LEADING EDGES OF THE FIELD SPLICE INTERSECTION AS SHOWN.

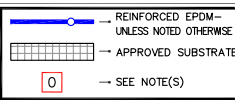
### NOTES:

1. APPLY LAP SEALANT ALONG THE EDGE OF THE MEMBRANE SPLICE (BELOW THE 6" (15cm) T-JOINT COVER) COVERING THE EXPOSED SPLICE TAPE 1/2" (1.5cm) IN EACH DIRECTION FROM THE SPLICE INTERSECTION.
2. APPLY LAP SEALANT AT CUT EDGES OF REINFORCED MEMBRANE AND TAPE OVERLAPS. REFER TO [DETAIL VGMA-2.1](#).

MAXIMUM WARRANTY: 20 YEARS

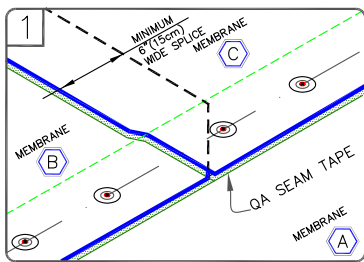


MECHANICALLY ATTACHED EPDM MEMBRANE SPLICE INTERSECTION

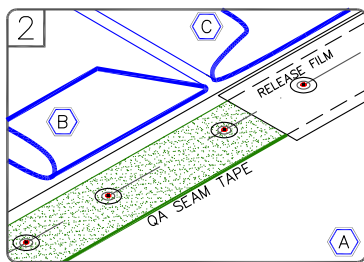


MECHANICALLY ATTACHED EPDM  
VGMA-2.2

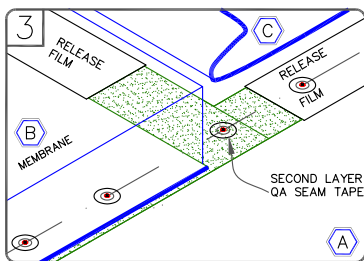
## THERMOSET MEMBRANE EPDM



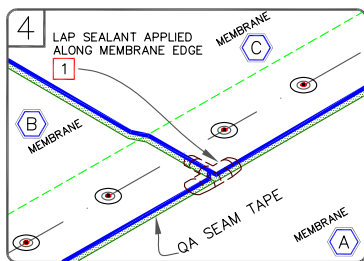
POSITION MEMBRANE TO ALLOW AN APPROXIMATE 7" (17.5cm) OVERLAP. THE PRE-MARKED LINE ON THE MEMBRANE EDGE CAN BE USED AS A GUIDE FOR TAPE PLACEMENT.



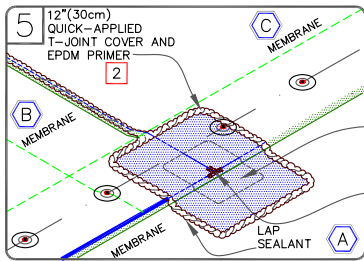
FOLD SHEETS BACK AS SHOWN. APPLY EPDM PRIMER TO THE SPLICE AREA ON BOTH SURFACES AND ALLOW TO FLASH-OFF. APPLY QA SEAM TAPE WITH RELEASE FILM ALIGNED WITH PRE-MARKED LINE.



SPLICE SHEET B TO SHEET A AND APPLY SECOND PIECE OF QA SEAM TAPE BETWEEN SHEET B AND C. TRIM RELEASE FILM AS SHOWN.



SPLICE SHEET C TO SHEET A AND B, PRESS TOP SHEET ONTO BOTTOM SHEET USING HAND PRESSURE TOWARDS THE OUTER EDGE OF THE SPLICE AND ROLL THE SPLICE AREA WITH A 2" (5cm) WIDE STEEL ROLLER.



APPLY 6" (15cm) QUICK-APPLIED T-JOINT COVER AND 12" (30cm) QUICK-APPLIED T-JOINT COVER OR QUICK-APPLIED UNCURD EPDM CENTERED OVER THE INTERSECTING POINT OF THE LEADING EDGES OF THE FIELD SPLICE INTERSECTION AS SHOWN.

6" (15cm) QUICK-APPLIED T-JOINT COVER AND EPDM PRIMER

LAP SEALANT BELOW THE 6" (15cm) T-JOINT COVER

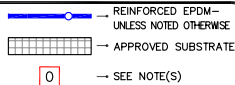
### NOTES:

1. APPLY LAP SEALANT ALONG THE EDGES OF THE MEMBRANE SPLICE COVERING THE EXPOSED SPLICE TAPE 1/2" (1.5cm) IN EACH DIRECTION FROM THE SPLICE INTERSECTION.
2. APPLY LAP SEALANT AT CUT EDGES OF REINFORCED MEMBRANE AND TAPE OVER LAPS.

MAXIMUM WARRANTY: 30 YEARS



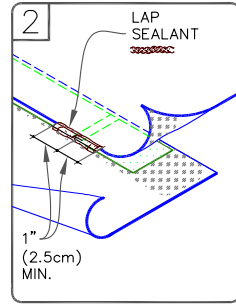
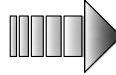
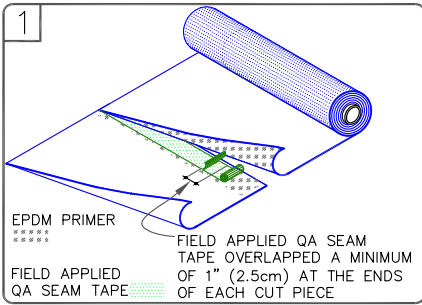
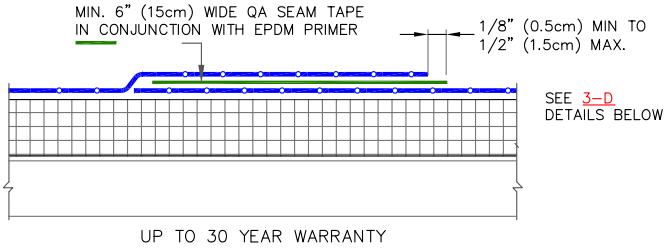
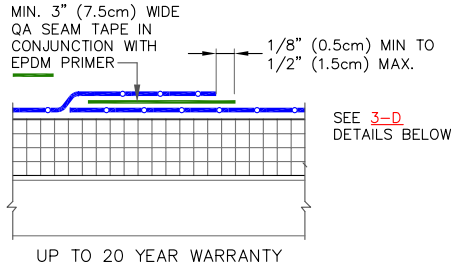
MECHANICALLY ATTACHED EPDM MEMBRANE SPLICE INTERSECTION (25 / 30 YEAR WARRANTIES)



MECHANICALLY ATTACHED EPDM  
VGMA-2.2A

THERMOSET MEMBRANE

EPDM



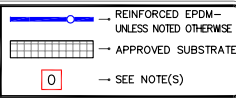
NOTES:

1. APPLY EPDM PRIMER TO THE MEMBRANE SURFACES PRIOR TO INSTALLING QUICK-APPLIED FLASHING.
2. LAP SEALANT IS REQUIRED ON CUT EDGES OF REINFORCED EPDM MEMBRANE.

MAXIMUM WARRANTY: 30 YEARS



END LAP SPlice

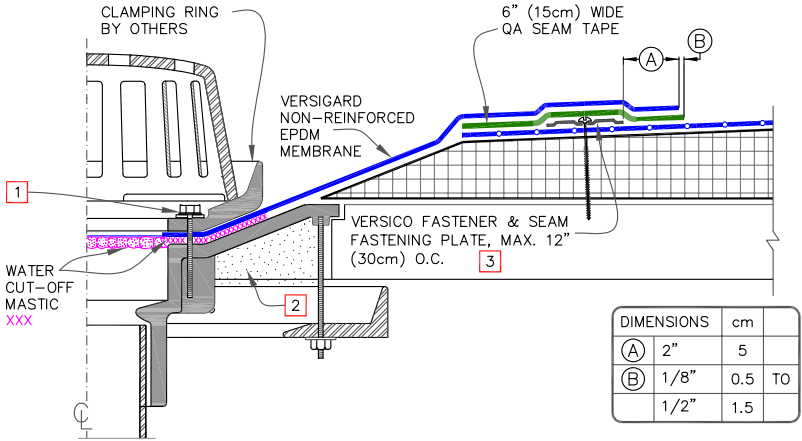


MECHANICALLY ATTACHED EPDM

VGMA-2.3

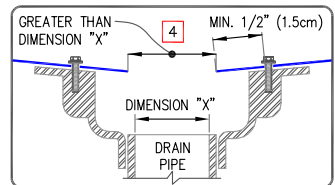
THERMOSET MEMBRANE

EPDM



NOTES:

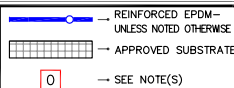
1. ALL BOLTS OR CLAMPS MUST BE IN PLACE TO PROVIDE CONSTANT COMPRESSION ON WATER CUT-OFF MASTIC.
2. REMOVE EXISTING LEAD, FLASHING MATERIAL & ENSURE THE DRAIN RING IS COMPLETELY CLEAN DOWN TO BARE METAL.
3. HPX FASTENERS AND POLYMER SEAM PLATES ARE REQUIRED OVER STEEL DECKS.
4. THE HOLE IN THE MEMBRANE SHALL EXCEED THE DIAMETER OF THE DRAIN PIPE, BUT SHALL BE NO LESS THAN 1/2" (1.5cm) FROM THE ATTACHMENT POINTS OF THE DRAIN CLAMPING RING.
5. ROOF DRAIN SIZE AND NUMBER OF DRAINS SHALL BE IN ACCORDANCE WITH THE LOCAL CODES.



MAXIMUM WARRANTY: 30 YEARS

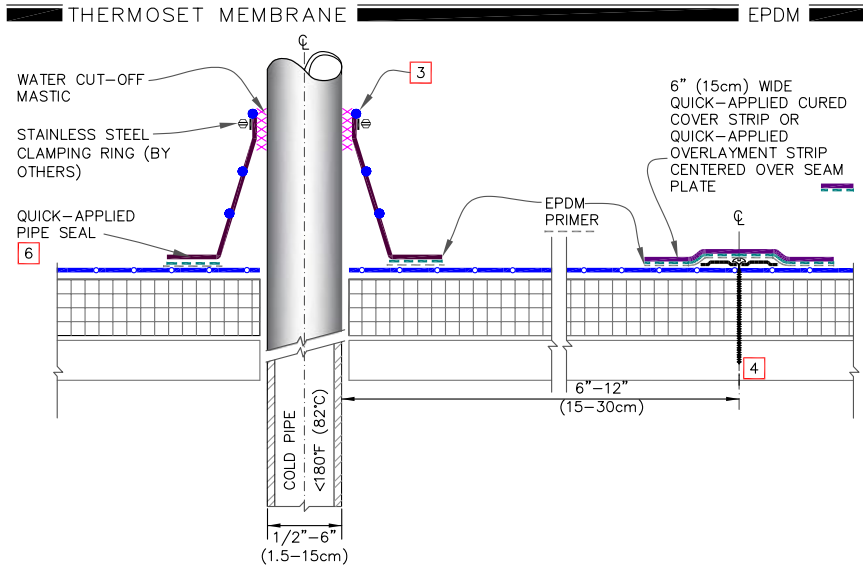


ROOF DRAIN WITH SUMP



MECHANICALLY ATTACHED EPDM

VGMA-6.0



**NOTES:**

1. REMOVE ALL LEAD AND OTHER FLASHING BEFORE INSTALLING PIPE SEAL.
2. TEMPERATURE OF PIPE MUST NOT EXCEED 180°F (82°C).
3. PRE-MOLDED PIPE SEAL MUST HAVE RIB INTACT AT THE TOP EDGE REGARDLESS OF PIPE DIAMETER.
4. INSTALL A MINIMUM OF 4 SEAM PLATES FOR PIPES WITH A DIAMETER UP TO 6" (15cm). ADDITIONAL SEAM PLATES WILL BE REQUIRED FOR PIPES GREATER THAN 6" (15cm) IN DIAMETER AND SHALL BE SPACED 12" (30cm) ON CENTER MAXIMUM.
5. HPX FASTENERS AND POLYMER SEAM PLATES ARE REQUIRED OVER STEEL DECKS.
6. DECK FLANGES OF THE QUICK-APPLIED PIPE SEAL SHALL NOT BE OVERLAPPED, CUT OR APPLIED OVER ANY ANGLE CHANGE.

MAXIMUM WARRANTY: 20 YEARS

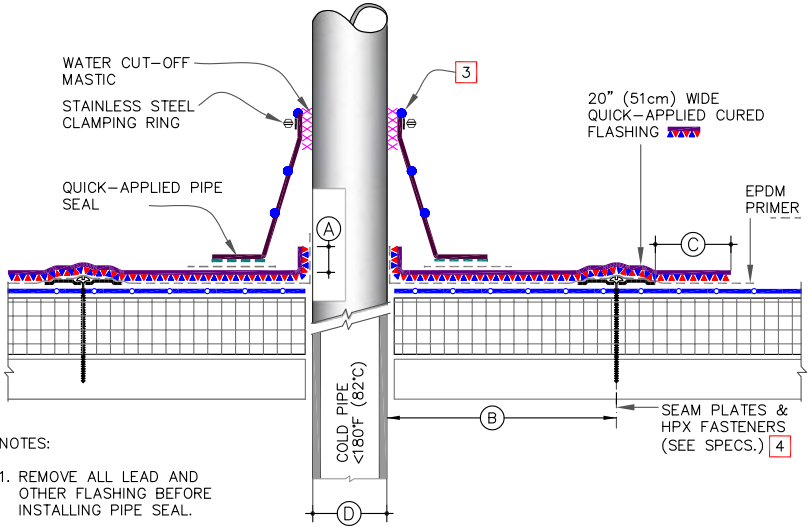


QUICK-APPLIED PIPE SEAL	REINFORCED EPDM— UNLESS NOTED OTHERWISE
	APPROVED SUBSTRATE
	SEE NOTE(S)

MECHANICALLY ATTACHED EPDM <b>VGMA-8.1</b>
---

THERMOSET MEMBRANE

EPDM

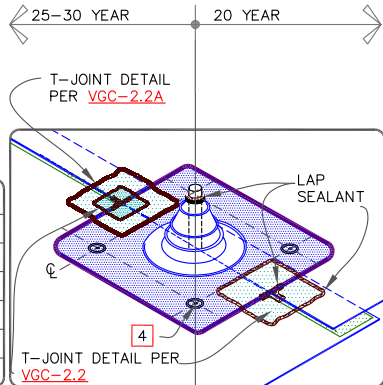


NOTES:

1. REMOVE ALL LEAD AND OTHER FLASHING BEFORE INSTALLING PIPE SEAL.
2. TEMPERATURE OF PIPE MUST NOT EXCEED 180°F (82°C).
3. PRE-MOLDED PIPE SEAL MUST HAVE RIB INTACT AT THE TOP EDGE REGARDLESS OF PIPE DIAMETER.
4. INSTALL A MIN. OF 4 FASTENERS FOR PIPES WITH OUTSIDE DIAMETER <6" (15cm). SEE DETAIL [VGMA-8.2](#) OR [VGMA-8.2.1](#) FOR WIDER PIPES.
5. DECK FLANGES OF THE QUICK-APPLIED PIPE SEAL SHALL NOT BE OVERLAPPED, CUT OR APPLIED OVER ANY ANGLE CHANGE.

MAXIMUM WARRANTY: 30 YEARS

DIMENSIONS	cm	
(A)	1/2"	1.5
(B)	6"	15 TO 30
(C)	2"	5
(D)	1/2"	1.5 TO 6"



QUICK-APPLIED PIPE SEAL WITH 20" QUICK-APPLIED CURED FLASHING

- REINFORCED EPDM- UNLESS NOTED OTHERWISE
- APPROVED SUBSTRATE
- SEE NOTE(S)

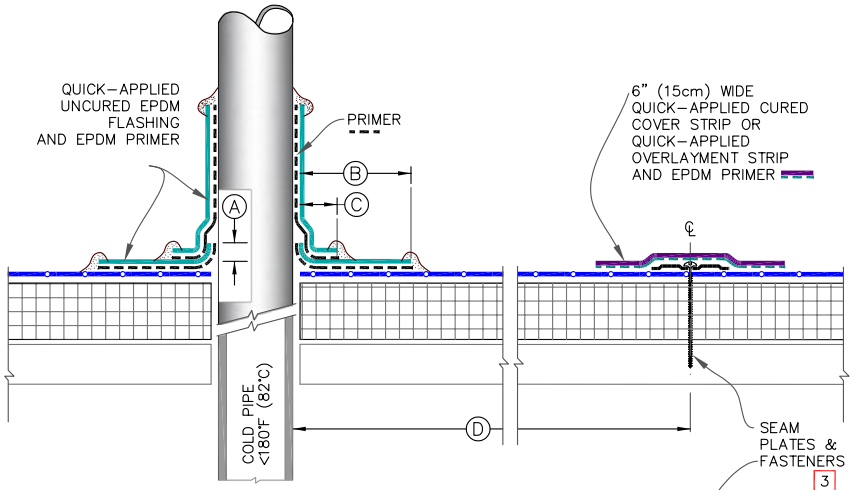
MECHANICALLY ATTACHED EPDM  
VGMA-8.1A



# Main Details: VersiGard Mechanically Attached Details

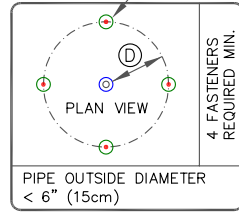
THERMOSET MEMBRANE

EPDM

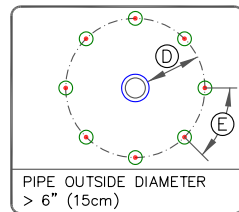


**NOTES:**

1. REMOVE ALL LEAD AND OTHER FLASHING BEFORE INSTALLING QUICK-APPLIED UNCURED EPDM FLASHING.
2. TEMPERATURE OF PIPE MUST NOT EXCEED 180°F (82°C).
3. HPX FASTENERS AND POLYMER SEAM PLATES ARE REQUIRED OVER STEEL DECK.
4. FOR STRUCTURAL STEEL TUBING GREATER THAN 12" ACROSS USE [VGC-5](#) DETAILS.



DIMENSIONS		cm	
(A)	1/2"	1.5	
(B)	3"	7.5	
(C)	1"	2.5	
(D)	6"	15	TO
	12"	30	
(E)	12"	30	MAX.



MAXIMUM WARRANTY: 20 YEARS



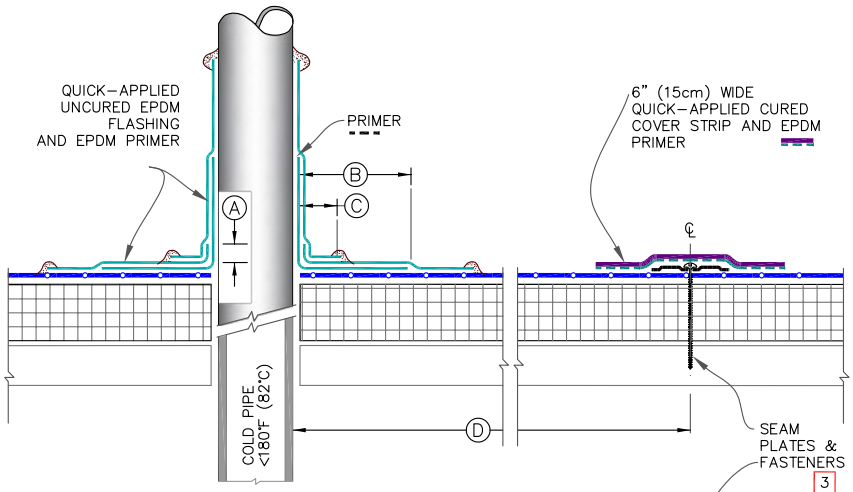
FIELD FABRICATED PIPE WRAP

REINFORCED EPDM—UNLESS NOTED OTHERWISE  
 APPROVED SUBSTRATE  
 — SEE NOTE(S)

MECHANICALLY ATTACHED EPDM  
**VGMA-8.2**

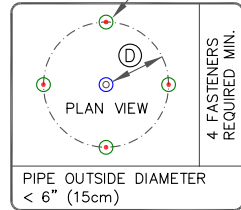
THERMOSET MEMBRANE

EPDM

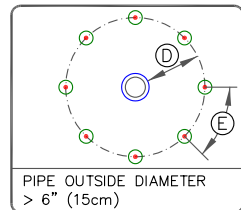


NOTES:

1. REMOVE ALL LEAD AND OTHER FLASHING BEFORE INSTALLING QUICK-APPLIED UNCURED EPDM FLASHING.
2. TEMPERATURE OF PIPE MUST NOT EXCEED 180°F (82°C).
3. HPX FASTENERS AND POLYMER SEAM PLATES ARE REQUIRED OVER STEEL DECKS.
4. FOR STRUCTURAL STEEL TUBING GREATER THAN 12" ACROSS USE [VGC-5](#) DETAILS.



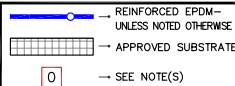
DIMENSIONS	cm	
(A)	1/2"	1.5
(B)	3"	7.5
(C)	1"	2.5
(D)	6"	15 TO
	12"	30
(E)	12"	30 MAX.



MAXIMUM WARRANTY: 30 YEARS



FIELD FABRICATED PIPE WRAP (25/30 YEAR WARRANTIES)

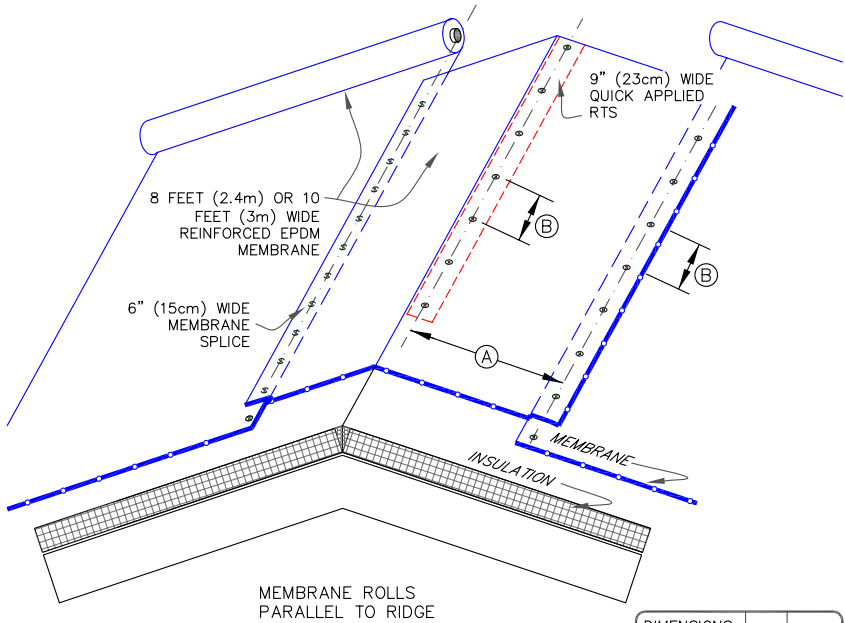


MECHANICALLY ATTACHED EPDM

VGMA-8.2A

THERMOSET MEMBRANE

EPDM



DIMENSIONS	cm	
A	3'-6"	110 MIN.
	4'-6"	140 MAX.
B	12" O.C.	30 MAX.

NOTES:

1. RIDGE MEMBRANE ATTACHMENT IS ONLY REQUIRED WHEN ROOF SLOPE EXCEEDS 3" TO THE HORIZONTAL FOOT (7.5cm/30cm).
2. REINFORCED EPDM MEMBRANE SHALL BE INSTALLED PARALLEL WITH RIDGE LINE (WITH MEMBRANE CENTERED OVER THE RIDGE LINE) AS SHOWN.
3. FOR PROPER MEMBRANE ATTACHMENT AND SPLICING, [REFER TO APPLICABLE VGMA-2 DETAIL.](#)
4. REFER TO VERSICO SPECIFICATIONS FOR REQUIRED NUMBER OF PERIMETER SHEETS, SHEET WIDTH AND MEMBRANE FASTENING DENSITY.
5. HPX FASTENERS AND POLYMER SEAM PLATES ARE REQUIRED OVER STEEL DECKS.
6. AS AN OPTION, 9" (23cm) WIDE QUICK APPLIED RTS MAY BE USED BENEATH EPDM FIELD SHEETS FOR PERIMETER SECUREMENT.

MAXIMUM WARRANTY: 30 YEARS

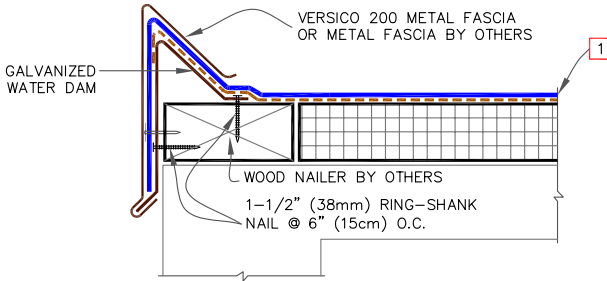


RIDGE MEMBRANE ATTACHMENT

MECHANICALLY ATTACHED EPDM

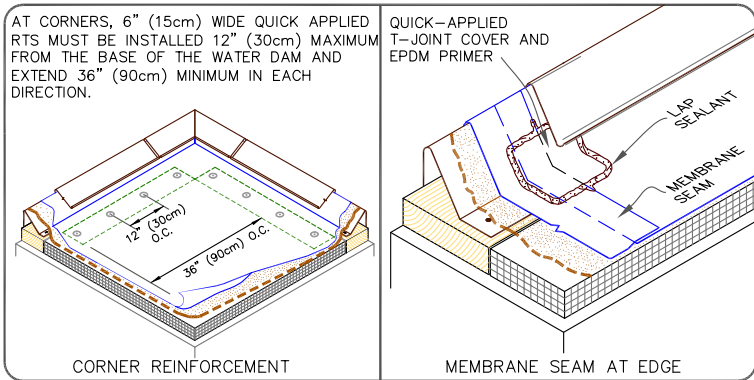
VGMA-22

THERMOSET MEMBRANE EPDM



NOTE:

1. MAXIMUM MEMBRANE THICKNESS GOING OVER THE WATER DAM IS 60-MIL. FOR THICKER MEMBRANES, RUN FIELD SHEET UNDER THE WATER DAM AND STRIP-IN WITH MAXIMUM 60-MIL MEMBRANE.
2. USE VGMA-1A FOR MECHANICALLY FASTENED SYSTEMS AND VGB-1.1 FOR BALLASTED SYSTEMS.



MAXIMUM WARRANTY: 20 YEARS



VERSITRIM 200

— EPDM MEMBRANE

— APPROVED SUBSTRATE

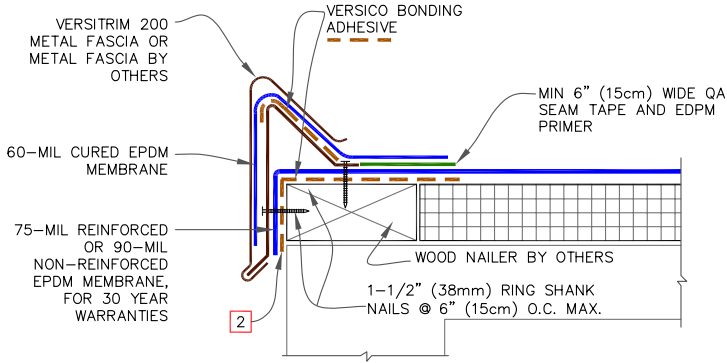
0 — SEE NOTE(S)

THERMOSET ROOFING SYSTEM

VGC-1.1

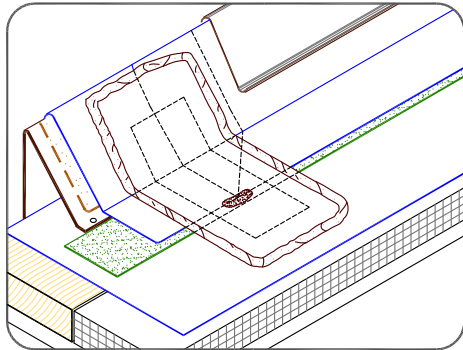
THERMOSET MEMBRANE

EPDM



NOTES:

1. FIELD SPLICES AT THE ANGLE CHANGE SHALL BE OVERLAID WITH EPDM PRIMER AND TWO LAYERS OF QUICK-APPLIED UNCURED EPDM FLASHING. PER DETAIL [VGC-2.3](#).
2. WHEN AN AIR/VAPOR BARRIER IS NOT SPECIFIED, THE ROOF MEMBRANE SHALL BE ADHERED OVER PERIMETER WOOD NAILER ALONG EDGES TO PREVENT AIR INFILTRATION ALONG EDGING, REGARDLESS OF ASSEMBLY TYPE (BALLASTED, ADHERED AND MECHANICALLY FASTENED).



MAXIMUM WARRANTY: 30 YEARS

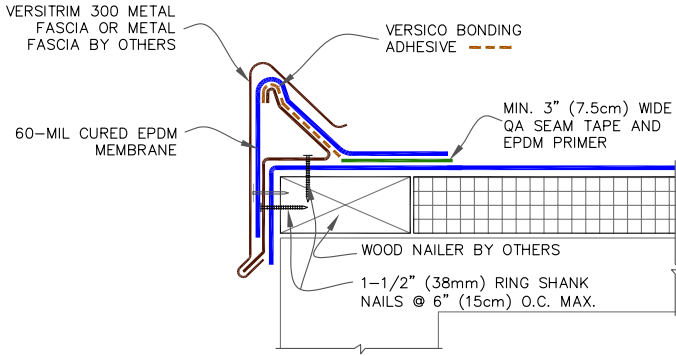


VERSITRIM 200  
(25/30 YEAR  
WARRANTIES)



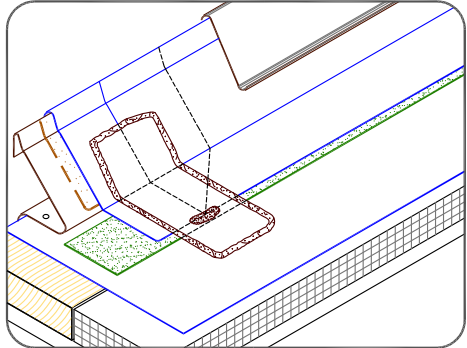
THERMOSET  
ROOFING SYSTEM  
VGC-1.1A

THERMOSET MEMBRANE EPDM



NOTE:

1. 6" (15cm) WIDE QUICK-APPLIED UNCURED EPDM FLASHING, IN CONJUNCTION WITH EPDM PRIMER, MUST BE CENTERED OVER FIELD SPLICES AT THE ANGLE CHANGE.



MAXIMUM WARRANTY: 20 YEARS



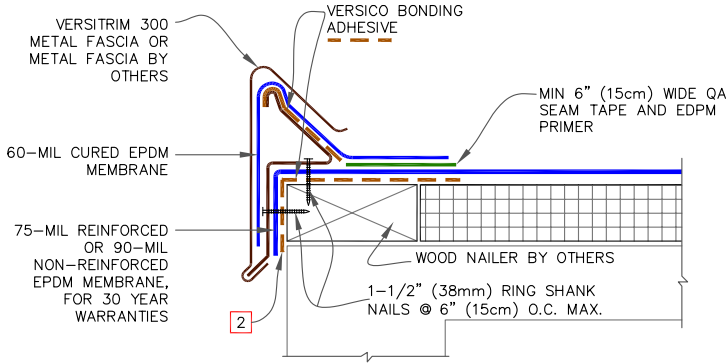
VERSITRIM 300

— EPDM MEMBRANE  
 APPROVED SUBSTRATE  
0 → SEE NOTE(S)

THERMOSET ROOFING SYSTEM  
**VGC-1.2**

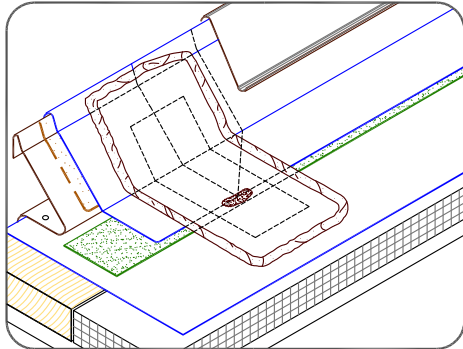
THERMOSET MEMBRANE

EPDM



NOTES:

1. FIELD SPLICES AT THE ANGLE CHANGE SHALL BE OVERLAID WITH EPDM PRIMER AND 2 LAYERS OF QUICK-APPLIED UNCURED EPDM FLASHING PER DETAIL [VGC-2.3](#).
2. WHEN AIR/VAPOR BARRIER IS NOT SPECIFIED, THE ROOF MEMBRANE SHALL BE ADHERED OVER PERIMETER WOOD NAILER ALONG EDGES TO PREVENT AIR INFILTRATION ALONG EDGING, REGARDLESS OF ASSEMBLY TYPE (BALLASTED, ADHERED AND MECHANICALLY FASTENED).



MAXIMUM WARRANTY: 30 YEARS

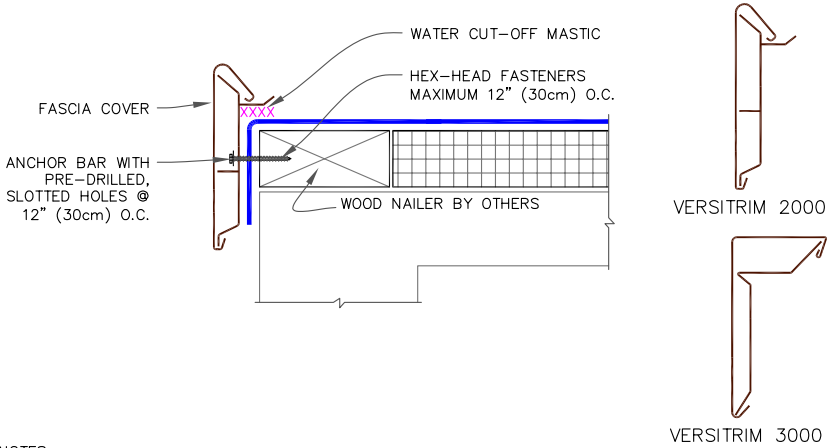


VERSITRIM 300  
(25/30 YEAR  
WARRANTIES)

- EPDM MEMBRANE
- APPROVED SUBSTRATE
- 0 -- SEE NOTE(S)

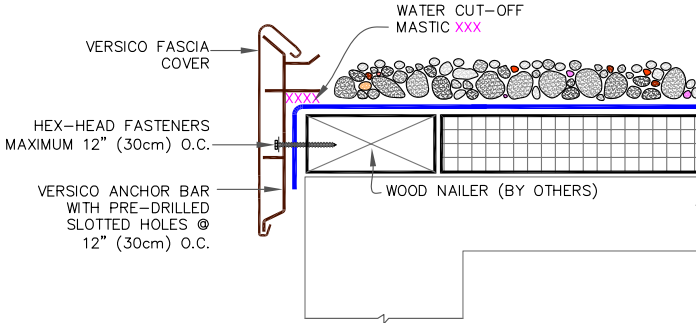
THERMOSET  
ROOFING SYSTEM  
VGC-1.2A

■■■■ THERMOSET MEMBRANE ■■■■ EPDM ■■■■






NOTES:

1. IF INCIDENTAL/TEMPORARY PONDED WATER IS EXPECTED, THE VERSITRIM MUST BE ELEVATED AND SCUPPERS PROVIDED FOR DRAINAGE.
2. ENSURE ROOF SLOPES AWAY FROM VERSITRIM.



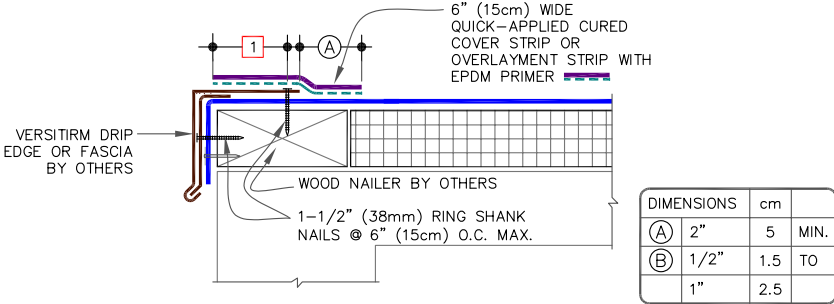
MAXIMUM WARRANTY: 30 YEARS

 <p>VERSICO ROOFING SYSTEMS © 2023 VERSICO</p>	<p>VERSITRIM 2000 &amp; 3000</p>	<p>— EPDM MEMBRANE</p> 	<p>THERMOSET ROOFING SYSTEM</p> <p>VGC-1.3</p>
		<p>— APPROVED SUBSTRATE</p> 	



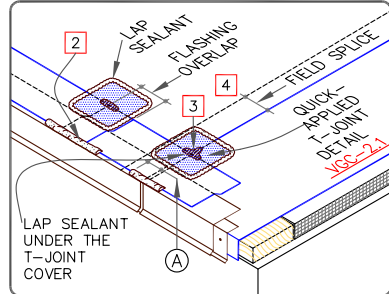
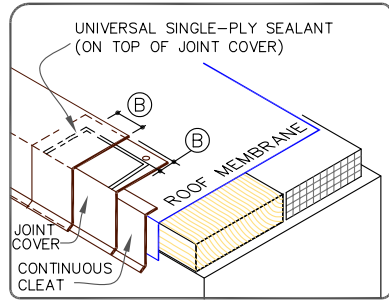
THERMOSET MEMBRANE

EPDM



NOTES:

1. DECK FLANGE MUST BE TOTALLY COVERED WITH MINIMUM 2" (5cm) COVERAGE PAST NAIL HEADS. TO REMOVE FINISHING OILS, SCRUB METAL FLANGE WITH WEATHERED MEMBRANE CLEANER; ALLOW TO DRY PRIOR TO APPLYING PRIMER.
2. LAP SEALANT MUST BE APPLIED AT FLASHING OVERLAPS AND INTERSECTIONS WITH JOINTS IN METAL EDGING.
3. T-JOINT COVER NOT NEEDED WHEN USING QA OVERLAYMENT STRIP ON MEMBRANE LESS THAN 90-MIL.
4. WHEN USING 90-MIL MEMBRANE INSTALL A 12" (30cm) T-JOINT COVER OVER THE 6" (15cm) T-JOINT COVER PER [VGC-2.2A](#)
5. DETAIL NOT FOR USE WITH DESIGN "B" (BALLASTED STONE ASSEMBLY).



MAXIMUM WARRANTY: 20 YEARS

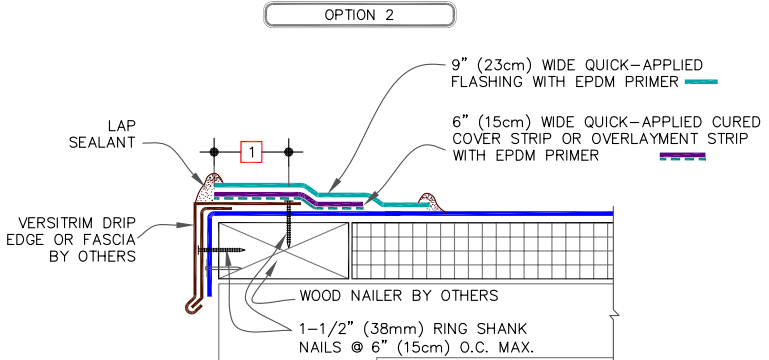
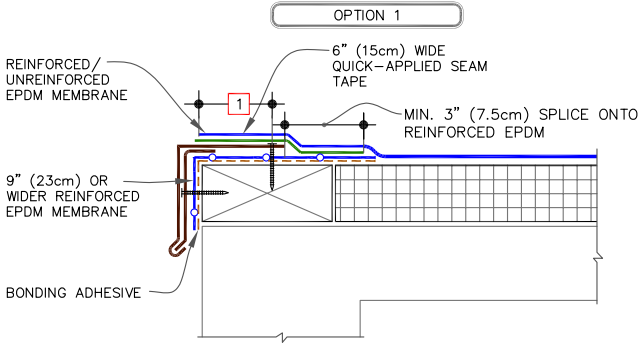


VERSITIRM DRIP EDGE FASCIA

- EPDM MEMBRANE
- APPROVED SUBSTRATE
- SEE NOTE(S)

THERMOSET ROOFING SYSTEM  
**VGC-1.4**

THERMOSET MEMBRANE EPDM



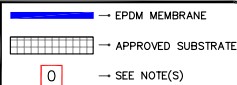
NOTES:

1. DECK FLANGE MUST BE TOTALLY COVERED WITH MINIMUM 2" (5cm) COVERAGE PAST NAIL HEADS. TO REMOVE FINISHING OILS, SCRUB METAL FLANGE WITH WEATHERED MEMBRANE CLEANER; ALLOW TO DRY PRIOR TO APPLYING PRIMER.
2. LAP SEALANT MUST BE APPLIED AT FLASHING OVERLAPS AND INTERSECTIONS WITH JOINTS IN METAL EDGING.
3. ALL SPLICE INTERSECTIONS MUST BE OVERLAID WITH QUICK-APPLIED T-JOINT COVERS AND SEALED WITH CONTINUOUS LAP SEALANT. PRIOR TO DOING SO, APPLY LAP SEALANT ALONG THE LEADING EDGE OF THE MEMBRANE SPLICES (UNDER THE 6" X 6" (15cm X 15cm) T-JOINT COVER) COVERING THE EXPOSED SPLICE TAPE 1/2" (1.5cm) IN ALL DIRECTIONS FROM THE SPLICE INTERSECTION.
4. DETAIL NOT FOR USE WITH DESIGN "B" (BALLASTED STONE ASSEMBLY).

MAXIMUM WARRANTY: 30 YEARS



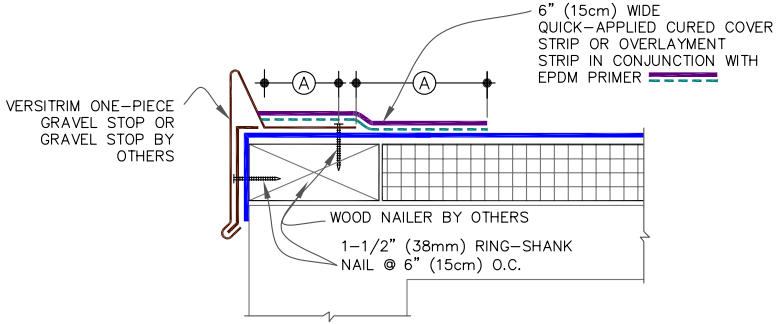
VERSITRIM DRIP EDGE  
FASCIA  
(25/30 YEAR  
WARRANTIES)



THERMOSET  
ROOFING SYSTEM  
VGC-1.4A

THERMOSET MEMBRANE

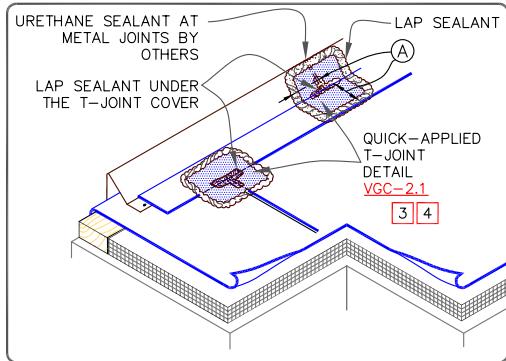
EPDM



NOTES:

1. TO REMOVE FINISHING OILS, SCRUB METAL FLANGE WITH WEATHERED MEMBRANE CLEANER; ALLOW TO DRY PRIOR TO APPLYING PRIMER.
2. LAP SEALANT MUST BE APPLIED AT FLASHING OVERLAPS AND INTERSECTIONS WITH JOINTS IN METAL EDGING.
3. T-JOINT COVER AT SPLICE INTERSECTION NOT NEEDED WHEN USING PS OVERLAYMENT STRIP ON MEMBRANE LESS THAN 90-MIL.
4. WHEN USING 90-MIL MEMBRANE INSTALL A 12" (30cm) T-JOINT COVER OVER THE 6" (15cm) T-JOINT COVER PER [VGC-2.2A](#)

DIMENSION	cm	
(A)	2"	5 MIN.



MAXIMUM WARRANTY: 20 YEARS



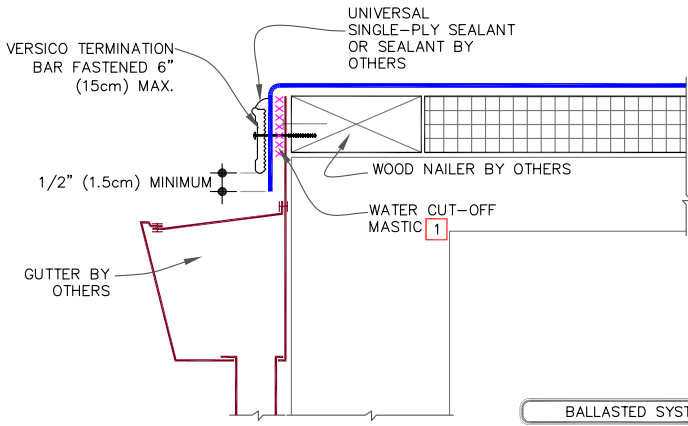
VERSITRIM ONE-PIECE GRAVEL STOP



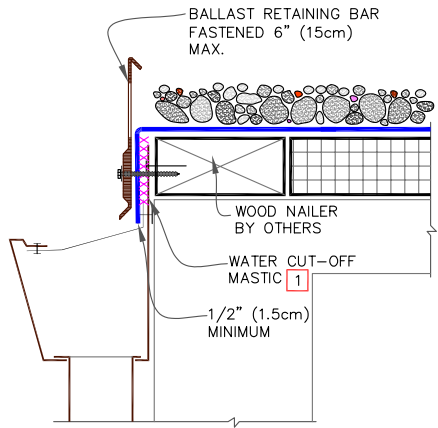
THERMOSET ROOFING SYSTEM  
VGC-1.5

THERMOSET MEMBRANE EPDM

NON-BALLASTED SYSTEMS



BALLASTED SYSTEMS



NOTES:

1. FASTENING OF METAL TERMINATION OR BALLAST RETAINING BAR MUST PROVIDE CONSTANT COMPRESSION ON WATER CUT-OFF MASTIC.
2. BALLAST RETAINING BAR MUST EXTEND ABOVE GRAVEL SURFACE SUFFICIENTLY TO RETAIN GRAVEL AND PREVENT GRAVEL MIGRATION.
3. SLOTS IN BALLAST RETAINING BAR MUST BE FLUSH OR SLIGHTLY BELOW MEMBRANE LEVEL.

MAXIMUM WARRANTY: 30 YEARS



METAL BAR EDGE TERMINATION

--- EPDM MEMBRANE

--- APPROVED SUBSTRATE

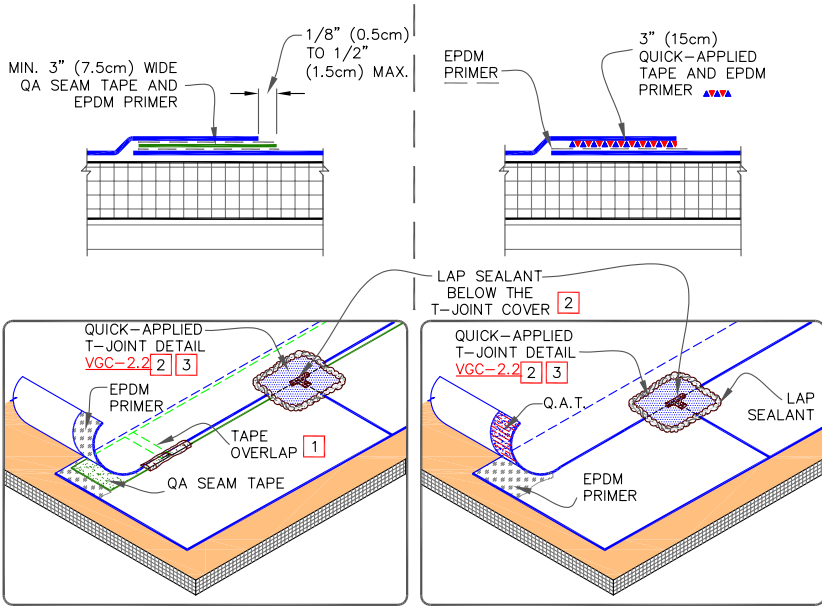
0 --- SEE NOTE(S)

THERMOSET ROOFING SYSTEM

VGC-1.6

THERMOSET MEMBRANE

EPDM



**NOTES:**

1. OVERLAP THE ENDS OF THE FIELD APPLIED QA SEAM TAPE A MINIMUM OF 1" (2.5cm). APPLY LAP SEALANT AT TAPE OVERLAPS 2" (5cm) IN EACH DIRECTION AS SHOWN.
2. APPLY LAP SEALANT ALONG THE EXPOSED EDGE OF THE MEMBRANE SPLICE COVERING THE EXPOSED SPLICE TAPE 1/2" (1.5cm) IN EACH DIRECTION FROM THE SPLICE INTERSECTION AND OVERLAY WITH A 6" (15cm) T-JOINT COVER.
3. WHEN USING 90-MIL MEMBRANE, INSTALL A 12" (30cm) T-JOINT COVER CENTERED OVER THE FIRST T-JOINT COVER PER DETAIL [VGC-2.2A](#).
4. LAP SEALANT IS REQUIRED ON CUT EDGES OF REINFORCED EPDM MEMBRANE.
5. REFER TO DETAIL [VGM-A-2.1](#) FOR MECHANICALLY FASTENED SPLICES.

MAXIMUM WARRANTY: 20 YEARS



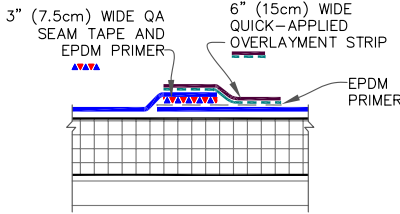
EPDM MEMBRANE SPLICE	<p>--- EPDM MEMBRANE</p> <p>--- APPROVED SUBSTRATE</p> <p>0 --- SEE NOTE(S)</p>
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THERMOSET ROOFING SYSTEM
VGC-2.1

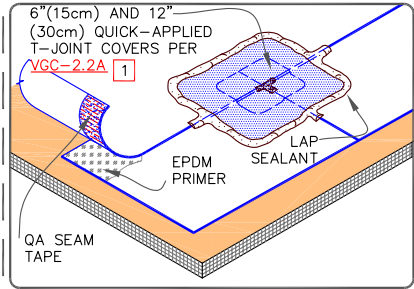
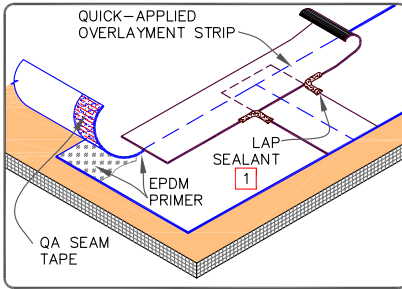
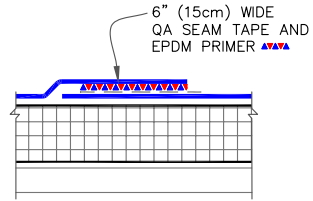
THERMOSET MEMBRANE

EPDM

OPTION 1



OPTION 2



NOTES:

1. APPLY LAP SEALANT AT ALL INTERSECTIONS BETWEEN QUICK-APPLIED OVERLAYMENT STRIP.
2. REFER TO DETAIL [VGMA-2.1A](#) FOR MECHANICALLY-FASTENED SPLICES.

NOTE:

1. APPLY LAP SEALANT ALONG THE EXPOSED EDGE OF THE MEMBRANE SPLICE COVERING THE EXPOSED SPLICE TAPE 1/2" (1.5cm) IN EACH DIRECTION FROM THE SPLICE INTERSECTION AND OVERLAY WITH A 6" (15cm) T-JOINT COVER. INSTALL A 12" (30cm) T-JOINT COVER CENTERED OVER THE FIRST T-JOINT COVER PER DETAIL [VGC-2.2A](#).

MAXIMUM WARRANTY: 30 YEARS



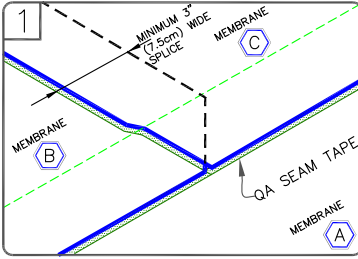
EPDM MEMBRANE SPLICE  
(25/30 YEAR WARRANTIES)



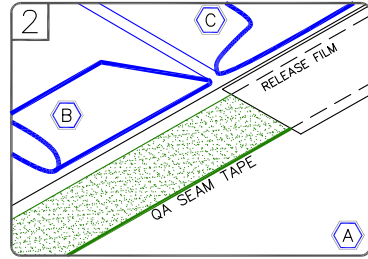
THERMOSET ROOFING SYSTEM  
VGC-2.1A

## THERMOSET MEMBRANE

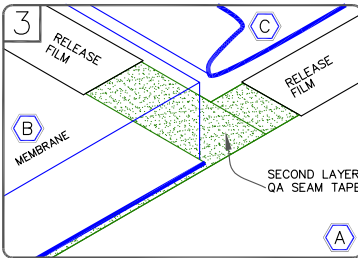
## EPDM



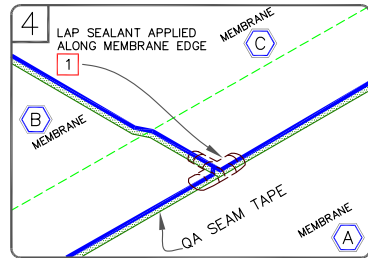
POSITION MEMBRANE TO ALLOW AN APPROXIMATE 4" (10cm) OVERLAP. MARK THE BOTTOM SHEET WITH AN INDELIBLE MARKER 1/2" (1.5cm) FROM THE EDGE OF THE TOP SHEET AS SHOWN. THE PRE-MARKED LINE ON THE MEMBRANE EDGE CAN ALSO BE USED AS A GUIDE.



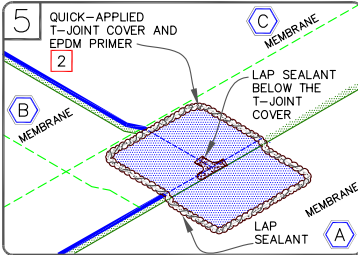
FOLD SHEETS BACK AS SHOWN. APPLY EPDM PRIMER TO THE SPLICE AREA ON BOTH SURFACES AND ALLOW TO FLASH-OFF. APPLY QA SEAM TAPE WITH RELEASE FILM ALIGNED WITH MARKED LINE.



SPLICE SHEET B TO SHEET A AND APPLY SECOND PIECE OF QA SEAM TAPE BETWEEN SHEET B AND C. TRIM RELEASE FILM AS SHOWN.



SPLICE SHEET C TO SHEET A AND B, PRESS TOP SHEET ONTO BOTTOM SHEET USING HAND PRESSURE TOWARDS THE OUTER EDGE OF THE SPLICE AND ROLL THE SPLICE AREA WITH A 2" (5cm) WIDE STEEL ROLLER.



APPLY QUICK-APPLIED T-JOINT COVER OR 6" (15cm) WIDE SECTION OF QUICK-APPLIED UNCURED EPDM FLASHING CENTERED OVER THE INTERSECTING POINT OF THE LEADING EDGES OF THE FIELD SPLICE INTERSECTION AS SHOWN.

### NOTES:

1. APPLY LAP SEALANT ALONG THE EDGE OF THE MEMBRANE SPLICE BELOW THE 6" (15cm) T-JOINT COVER, COVERING THE EXPOSED SPLICE TAPE 1/2" (1.5cm) IN EACH DIRECTION FROM THE SPLICE INTERSECTION.
2. APPLY LAP SEALANT AT CUT EDGES OF REINFORCED MEMBRANE AND TAPE OVERLAPS. REFER TO [DETAIL VGC-2.1](#).
3. REFER TO [DETAIL VGC-2.2A](#) WHEN USING 90-MIL MEMBRANE.

MAXIMUM WARRANTY: 20 YEARS



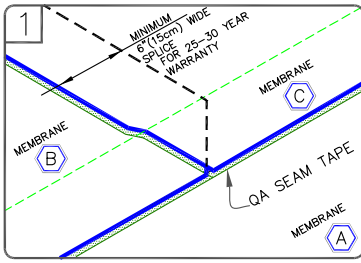
EPDM MEMBRANE SPLICE INTERSECTION



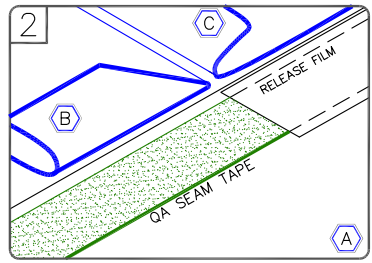
THERMOSET ROOFING SYSTEM  
**VGC-2.2**

THERMOSET MEMBRANE

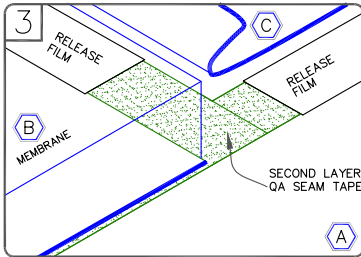
EPDM



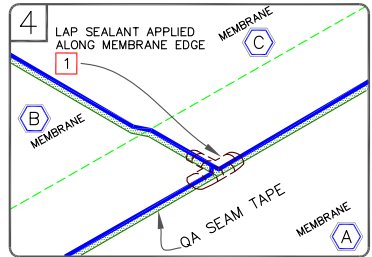
POSITION MEMBRANE TO ALLOW AN APPROXIMATE 7" (17.5cm) OVERLAP. MARK THE BOTTOM SHEET WITH AN INDELEBIL MARKER 1/2" (1.27cm) FROM THE EDGE OF THE TOP SHEET AS SHOWN. THE PRE-MARKED LINE ON THE MEMBRANE EDGE CAN ALSO BE USED AS A GUIDE.



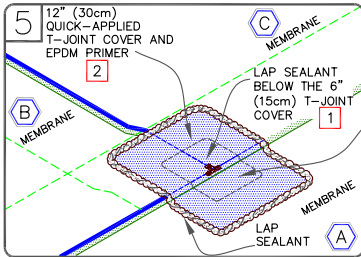
FOLD SHEETS BACK AS SHOWN. APPLY EPDM PRIMER TO THE SPLICE AREA ON BOTH SURFACES AND ALLOW TO FLASH-OFF. APPLY QA SEAM TAPE WITH RELEASE FILM ALIGNED WITH MARKED LINE.



SPLICE SHEET B TO SHEET A AND APPLY SECOND PIECE OF QA SEAM TAPE BETWEEN SHEET B AND C. TRIM RELEASE FILM AS SHOWN.



SPLICE SHEET C TO SHEET A AND B, PRESS TOP SHEET ONTO BOTTOM SHEET USING HAND PRESSURE TOWARDS THE OUTER EDGE OF THE SPLICE AND ROLL THE SPLICE AREA WITH A 2" (5cm) WIDE STEEL ROLLER.



APPLY 6" (15cm) QUICK-APPLIED T-JOINT COVER AND 12" (30cm) QUICK-APPLIED T-JOINT COVER OR QUICK-APPLIED UNCURED EPDM CENTERED OVER THE INTERSECTING POINT OF THE LEADING EDGES OF THE FIELD SPLICE INTERSECTION AS SHOWN.

6" (15cm) QUICK-APPLIED T-JOINT COVER AND EPDM PRIMER

NOTES:

1. APPLY LAP SEALANT ALONG THE EDGES OF THE MEMBRANE SPLICE COVERING THE EXPOSED SPLICE TAPE 1/2" (1.27cm) IN EACH DIRECTION FROM THE SPLICE INTERSECTION.
2. APPLY LAP SEALANT AT CUT EDGES OF REINFORCED MEMBRANE AND TAPE OVER LAPS.

MAXIMUM WARRANTY: 30 YEARS



EPDM MEMBRANE SPLICE INTERSECTION  
(25 / 30 YEAR WARRANTIES OR 90mil MEMBRANE)



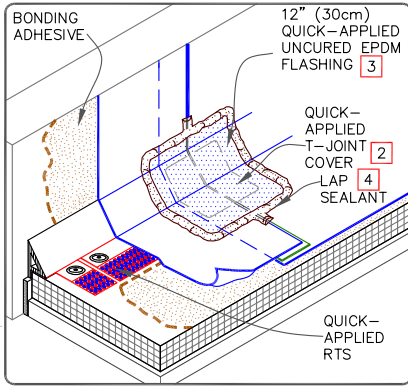
THERMOSET ROOFING SYSTEM  
VGC-2.2A



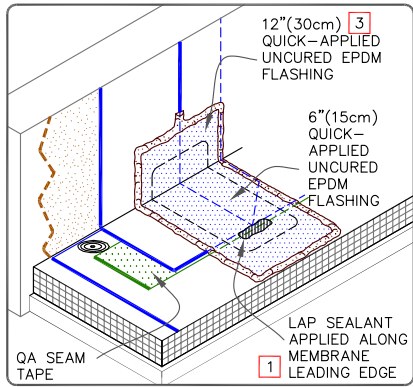
THERMOSET MEMBRANE

EPDM

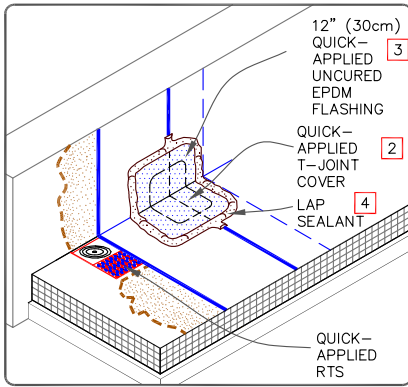
CONTINUOUS WALL FLASHING



SEPARATE WALL FLASHING



CONTINUOUS WALL FLASHING



NOTES:

1. APPLY LAP SEALANT ALONG THE LEADING EDGE OF THE MEMBRANE SPLICE (UNDER THE QUICK-APPLIED UNCURED EPDM FLASHING) COVERING THE EXPOSED SPLICE TAPE APPROXIMATELY 1/2" (1.5cm) BEYOND THE SPLICE EDGE.
2. QUICK-APPLIED T-JOINT COVER OR 6" (15cm) WIDE QUICK-APPLIED FLASHING, IN CONJUNCTION WITH EPDM PRIMER, MUST BE CENTERED OVER FIELD SPLICES AT THE ANGLE CHANGE.
3. PROJECTS WITH 25 AND 30-YEAR WARRANTIES OR WHEN USING 90-MIL MEMBRANE REQUIRE FIELD SPLICES TO BE OVERLAID WITH TWO LAYERS OF QUICK-APPLIED UNCURED EPDM FLASHING. THE BOTTOM LAYER SHALL BE 6" (15cm) WIDE COVERED WITH A 12" (30cm) WIDE TOP LAYER. BOTH LAYERS SHALL BE CENTERED.
4. SEAL EXPOSED LAYER WITH LAP SEALANT.

MAXIMUM WARRANTY: 30 YEARS

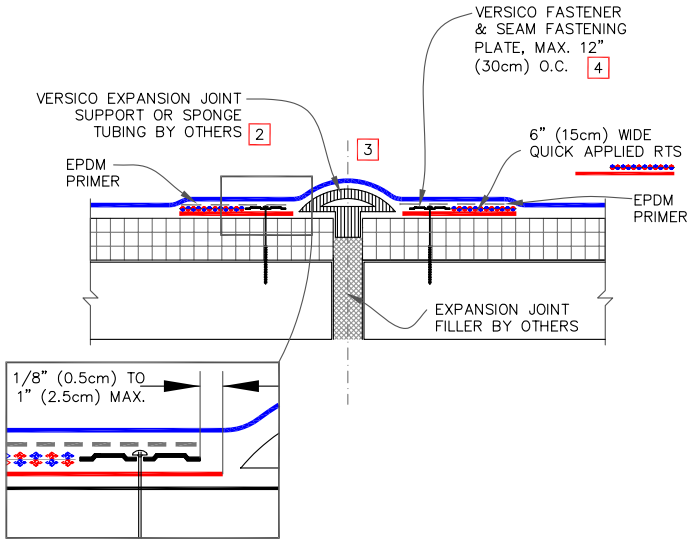


EPDM MEMBRANE SPLICES AT ANGLE CHANGE



THERMOSET ROOFING SYSTEM  
VGC-2.3


THERMOSET MEMBRANE EPDM



NOTES:

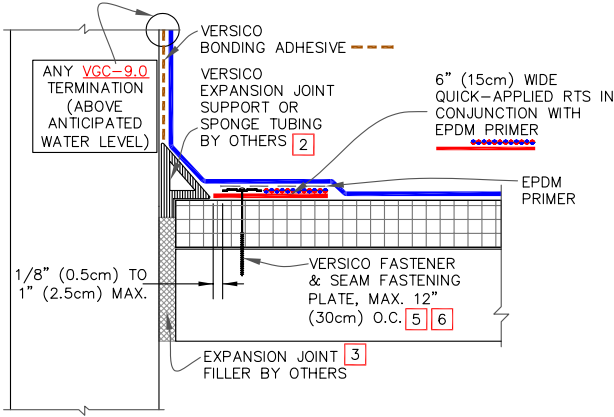
1. FOR EXPANSION JOINT INTERSECTIONS AND INTERSECTIONS BETWEEN EXPANSION JOINTS TO WALL OR EDGING, USE TWO LAYERS OF QUICK-APPLIED UNCURED EPDM FLASHING WITH SECOND LAYER 3" (7.5cm) LARGER THAN PREVIOUS LAYER IN ALL DIRECTIONS.
2. ROOF MEMBRANE SHALL BE LOOSE-LAID OVER THE EXPANSION JOINT SUPPORT OR SPONGE TUBING.
3. WIDTH OF JOINT SHALL BE A MINIMUM OF 3/4" (2cm) AND MAXIMUM 3" (7.5cm) WHEN USING VERSICO EXPANSION JOINTS.
4. HPX FASTENERS AND POLYMER SEAM PLATES ARE REQUIRED ON MECHANICALLY FASTENED SYSTEMS OVER STEEL DECKS.

MAXIMUM WARRANTY: 30 YEARS

 <p>VERSICO ROOFING SYSTEMS © 2023 VERSICO</p>	<p>DECK-TO-DECK EXPANSION JOINT</p>	 -- EPDM MEMBRANE	<p>THERMOSET ROOFING SYSTEM</p> <p>VGC-3.1</p>
		 -- APPROVED SUBSTRATE	
		 -- SEE NOTE(S)	

THERMOSET MEMBRANE

EPDM



NOTES:

1. ALL OUTSIDE AND INSIDE CORNERS REQUIRE TWO COMPLETE CORNER APPLICATIONS OF QUICK-APPLIED UNCURED EPDM FLASHING AS PER [DETAILS VGC-15.4A OR VGC-15.7A](#).
2. ROOF MEMBRANE SHALL BE LOOSE-LAID OVER THE EXPANSION JOINT SUPPORT OR SPONGE TUBING.
3. WIDTH OF JOINT SHALL BE A MINIMUM OF 3/4" (2cm) AND MAXIMUM 2" (5cm) WHEN VERSICO EXPANSION JOINT SUPPORT IS USED.
4. USE [DETAIL VGC-2.3](#) FOR EPDM MEMBRANE SPLICES AT ANGLE CHANGES.
5. HPX FASTENERS AND POLYMER SEAM PLATES ARE REQUIRED ON MECHANICALLY FASTENED SYSTEMS OVER STEEL DECKS.
6. MAXIMUM 6" (15cm) FASTENER SPACING FOR WARRANTY WIND SPEEDS GREATER THAN 90 MPH OR WARRANTIES EXCEEDING 20 YEARS.

MAXIMUM WARRANTY: 30 YEARS

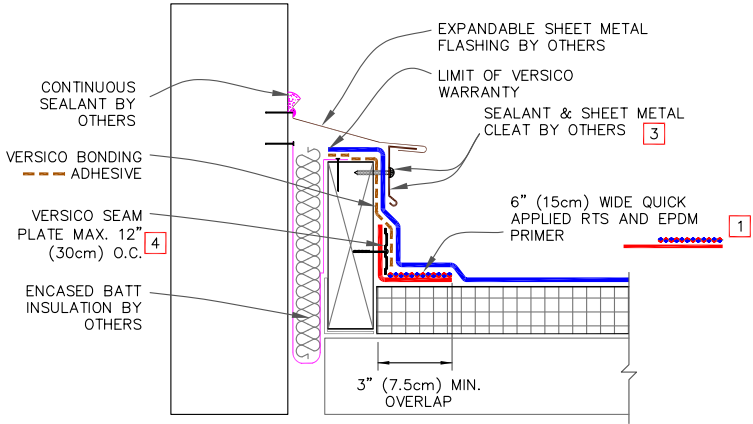


DECK-TO-WALL  
EXPANSION JOINT



THERMOSET  
ROOFING SYSTEM  
**VGC-3.2**


THERMOSET MEMBRANE EPDM



NOTES:

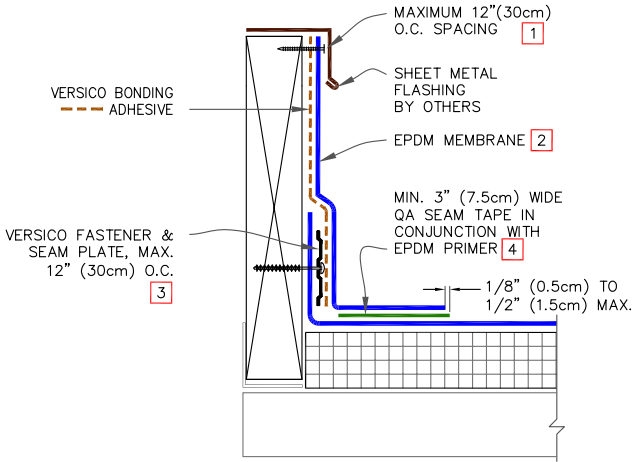
1. QUICK APPLIED RTS MAY BE INSTALLED INTO THE STRUCTURAL DECK. HPX FASTENERS AND POLYMER SEAM PLATES ARE REQUIRED ON MECHANICALLY-FASTENED ROOFING SYSTEMS OVER STEEL DECKS.
2. USE [DETAIL VGC-2.3](#) FOR EPDM MEMBRANE SPLICES AT ANGLE CHANGES.
3. SEAL FASTENERS BY APPLYING WATER CUT-OFF MASTIC UNDER THE COUNTER-FLASHING, OR USING EPDM WASHERS, OR CAULKING THE FASTENERS HEAD.
4. ALL OUTSIDE AND INSIDE CORNERS REQUIRE TWO COMPLETE CORNER APPLICATIONS OF QUICK-APPLIED UNCURED EPDM FLASHING AS PER [DETAILS VGC-15.4A OR VGC-15.7A](#).
5. MAXIMUM 6" (15cm) FASTENER SPACING FOR WARRANTY WIND SPEEDS GREATER THAN 90 MPH OR WARRANTIES EXCEEDING 20 YEARS.

MAXIMUM WARRANTY: 30 YEARS

 <p>VERSICO ROOFING SYSTEMS © 2023 VERSICO</p>	<p>SHEAR/EXPANSION JOINT</p>	<p>→ EPDM MEMBRANE</p>	<p>THERMOSET ROOFING SYSTEM</p> <p>VGC-3.3</p>
		<p>→ APPROVED SUBSTRATE</p>	
		<p>0 → SEE NOTE(S)</p>	

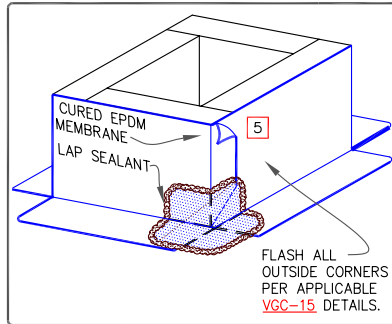
THERMOSET MEMBRANE

EPDM



NOTES:

1. WHEN MECHANICAL FASTENERS ARE USED TO PENETRATE THE METAL COUNTER-FLASHING, USE EPDM WASHERS, APPLY WATER CUT-OFF MASTIC UNDER THE COUNTER-FLASHING OR CAULK THE FASTENER HEADS.
2. LAP SEALANT IS REQUIRED ON CUT-EDGES OF REINFORCED MEMBRANE.
3. SEAM PLATES AND FASTENERS MAY BE INSTALLED INTO THE STRUCTURAL DECK AND THEN HPX FASTENERS AND POLYMER SEAM PLATES ARE REQUIRED FOR MECHANICALLY-FASTENED ROOFING SYSTEMS OVER STEEL DECKS.
4. MEMBRANE SPLICES SHALL INCORPORATE 6" (15cm) WIDE QA SEAM TAPE FOR PROJECTS WITH 25 AND 30-YEAR WARRANTIES.
5. IF THE VERTICAL SPLICE ON THE CURB FLASHING IS NOT LOCATED AT THE CORNER, USE DETAIL [VGC-2.3](#) FOR EPDM MEMBRANE SPLICES AT ANGLE CHANGES.



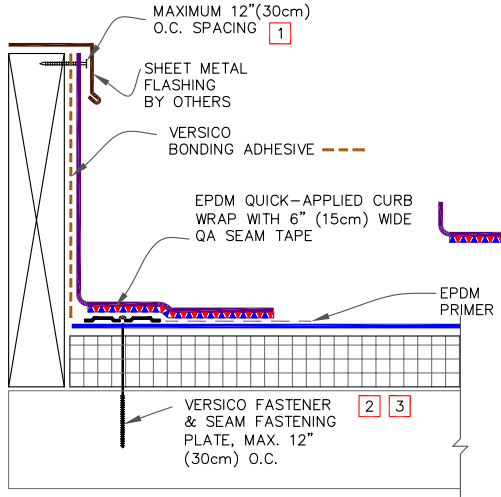
MAXIMUM WARRANTY: 30 YEARS



CURB FLASHING – EPDM MEMBRANE	— EPDM MEMBRANE 
	— APPROVED SUBSTRATE 
	0 — SEE NOTE(S)

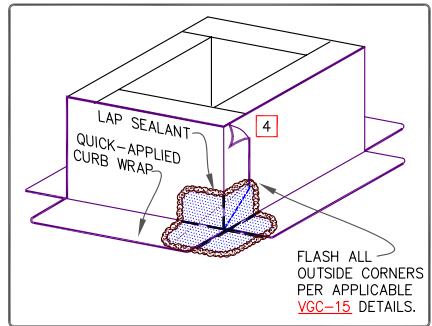
THERMOSET ROOFING SYSTEM  VGC-5.1
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THERMOSET MEMBRANE EPDM



NOTES:

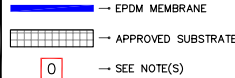
1. WHEN MECHANICAL FASTENERS ARE USED TO PENETRATE THE METAL COUNTER-FLASHING, USE EPDM WASHERS, APPLY WATER CUT-OFF MASTIC UNDER THE COUNTER-FLASHING OR CAULK THE FASTENER HEADS.
2. SEAM PLATES AND FASTENERS MAY BE INSTALLED INTO THE VERTICAL SUBSTRATE.
3. HPX FASTENERS AND POLYMER SEAM PLATES ARE REQUIRED FOR MECHANICALLY FASTENED SYSTEMS OVER STEEL DECKS.
4. IF THE VERTICAL SPLICE ON THE CURB FLASHING IS NOT LOCATED ON THE CORNER, USE DETAIL [VGC-2.3](#) FOR EPDM MEMBRANE SPLICES AT ANGLE CHANGES.



MAXIMUM WARRANTY: 30 YEARS



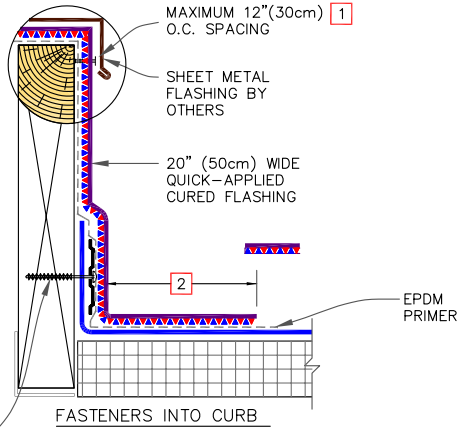
CURB FLASHING –  
QUICK-APPLIED CURB  
WRAP WITH 6" TAPE



THERMOSET  
ROOFING SYSTEM  
**VGC-5.2**

THERMOSET MEMBRANE

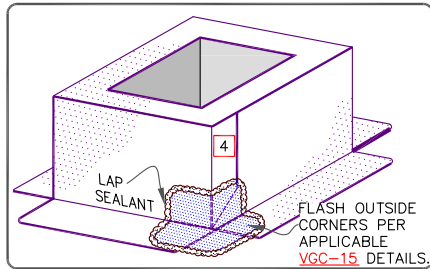
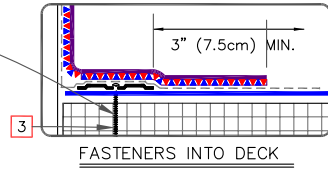
EPDM



VERSICO FASTENER & SEAM PLATES, MAX. 12" (30cm) O.C.

NOTES:

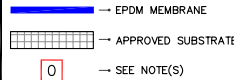
1. WHEN MECHANICAL FASTENERS ARE USED TO PENETRATE THE METAL COUNTER-FLASHING, USE EPDM WASHERS, APPLY WATER CUT-OFF MASTIC UNDER THE COUNTER-FLASHING OR CAULK THE FASTENER HEADS.
2. 3" (7.5cm) FOR UP TO 20 YEARS AND 6" (15cm) FOR 25/30 YEARS.
3. HPX FASTENERS AND POLYMER SEAM PLATES ARE REQUIRED FOR MECHANICALLY-FASTENED ROOFING SYSTEMS OVER STEEL DECKS.
4. IF THE VERTICAL SPLICE ON THE CURB FLASHING IS NOT LOCATED AT THE CORNER, USE DETAIL VGC-2.3 FOR EPDM MEMBRANE SPLICES AT ANGLE CHANGES.



MAXIMUM WARRANTY: 30 YEARS



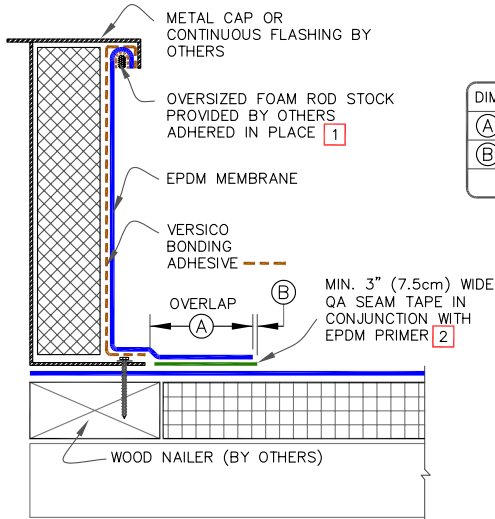
CURB FLASHING - WITH 20" QUICK-APPLIED CURED FLASHING



THERMOSET ROOFING SYSTEM

VGC-5.3

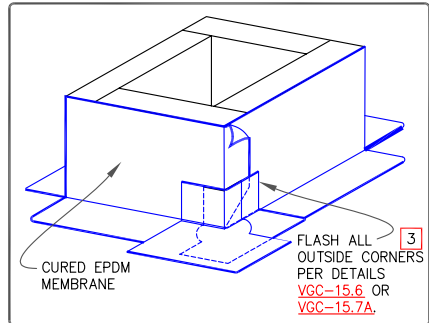
THERMOSET MEMBRANE EPDM



DIMENSIONS		cm	
(A)	3"	7.5	APPROX.
(B)	1/8"	0.5	MIN.
	1/2"	1.5	MAX.

NOTES:

1. LENGTH OF ROD STOCK IS LIMITED TO 4' (1.2m). USE INDIVIDUAL SECTIONS OF ROD STOCK FOR LONGER DIMENSIONS.
2. MEMBRANE SPLICES SHALL INCORPORATE 6" (15cm) WIDE QA SEAM TAPE FOR PROJECTS WITH 25 and 30-YEAR WARRANTIES.
3. WHEN METAL FLANGE IS ON TOP OF MEMBRANE USE DETAIL [VGC-15.6](#) (20 YEAR) OR [VGC-15.7A](#) (25/30 YEAR) TO ACHIEVE SUFFICIENT COVERAGE AT THE CORNERS.
4. DETAIL IS NOT ACCEPTABLE FOR VIBRATING ROOF TOP UNITS.



MAXIMUM WARRANTY: 30 YEARS



SELF-FLASHING CURB

 -- EPDM MEMBRANE  
 -- APPROVED SUBSTRATE  
 -- SEE NOTE(S)

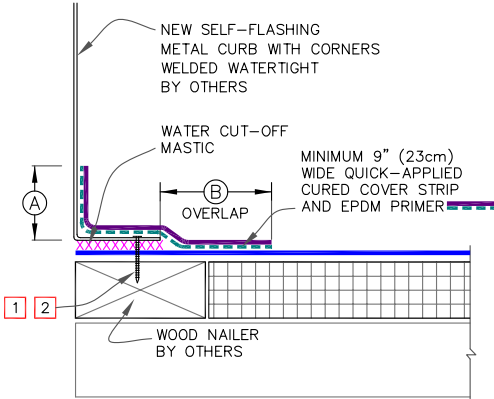
THERMOSET ROOFING SYSTEM

**VGC-5.4**



THERMOSET MEMBRANE

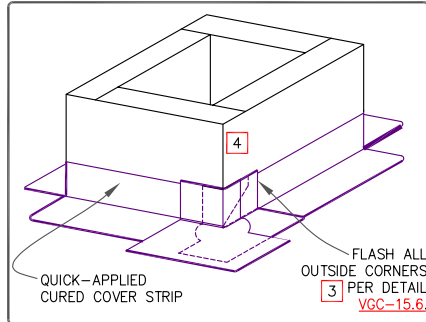
EPDM



DIMENSIONS		cm	
(A)	2"	5	MIN.
(B)	3"	7.5	APPROX.

NOTES:

1. CONSULT THE RESPECTIVE MANUFACTURER OF THE SELF-FLASHING METAL CURB FOR PROPER SECUREMENT.
2. WATER CUT-OFF MASTIC MUST BE HELD UNDER CONSTANT COMPRESSION.
3. USE [DETAIL VGC-15.6](#) TO ACHIEVE SUFFICIENT COVERAGE OF METAL FLANGE AT CORNERS.
4. IF THE VERTICAL SPLICE ON THE CURB FLASHING IS NOT LOCATED AT THE CORNER, USE [DETAIL VGC-2.3](#) FOR EPDM MEMBRANE SPLICES AT ANGLE CHANGES.



MAXIMUM WARRANTY: 20 YEARS

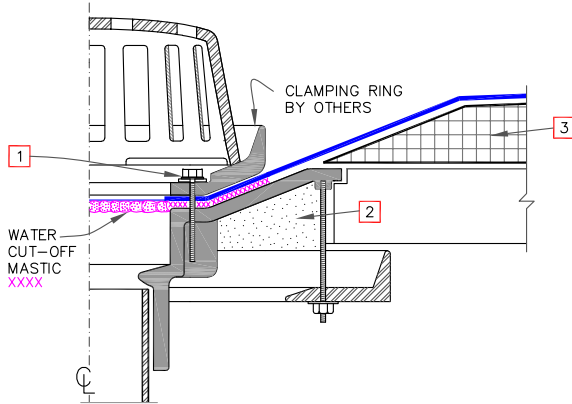


NEW SELF-FLASHING METAL CURB



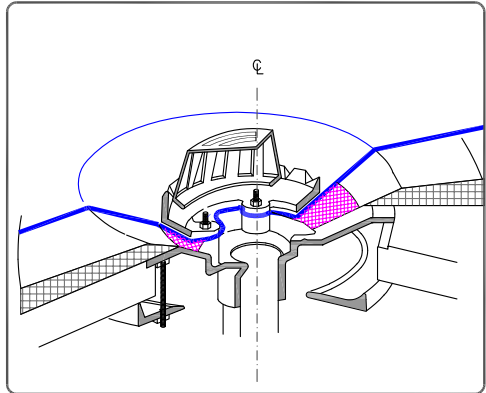
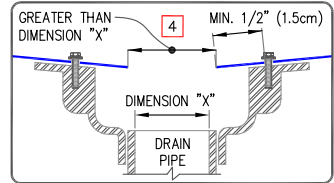
THERMOSET ROOFING SYSTEM  
**VGC-5.5**

THERMOSET MEMBRANE EPDM



NOTES:

1. ALL BOLTS OR CLAMPS MUST BE IN PLACE TO PROVIDE CONSTANT COMPRESSION ON WATER CUT-OFF MASTIC.
2. REMOVE EXISTING LEAD, FLASHING MATERIAL & ENSURE THE DRAIN RING IS COMPLETELY CLEAN DOWN TO BARE METAL.
3. INSULATION TAPER SHALL NOT BE GREATER THAN 6" (15cm) IN 12" (30cm) HORIZONTAL. REINFORCED EPDM IS LIMITED TO A TAPER LESS THAN 3" (7.5CM) PER FOOT. IF GREATER USE DETAIL [VGC-6.2](#).
4. THE HOLE IN THE MEMBRANE SHALL EXCEED THE DIAMETER OF THE DRAIN PIPE, BUT SHALL BE NO LESS THAN 1/2" (1.5cm) FROM THE ATTACHMENT POINTS OF THE DRAIN CLAMPING RING.
5. FIELD SPLICES MUST BE LOCATED AT LEAST 6" (15cm) OUTSIDE THE DRAIN SUMP.
6. ROOF DRAIN SIZE AND NUMBER OF DRAINS SHALL BE IN ACCORDANCE WITH THE LOCAL CODES.



MAXIMUM WARRANTY: 30 YEARS



ROOF DRAIN

— EPDM MEMBRANE

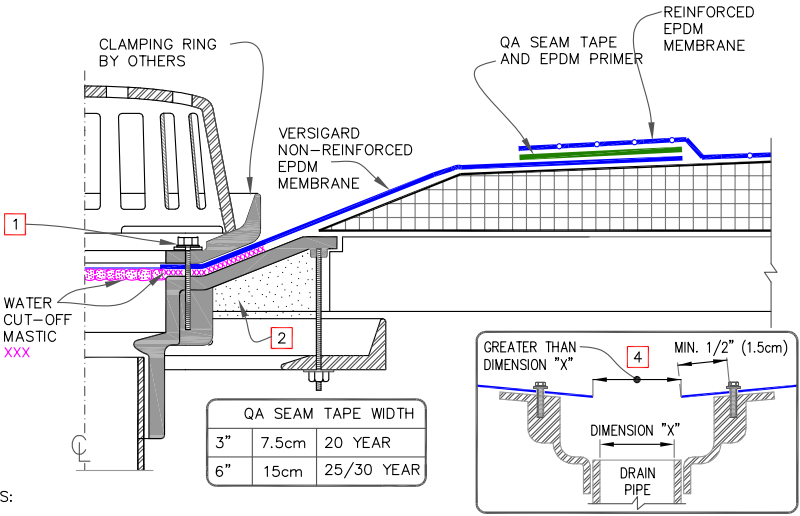
— APPROVED SUBSTRATE

0 — SEE NOTE(S)

THERMOSET ROOFING SYSTEM

VGC-6.1


## THERMOSET MEMBRANE EPDM



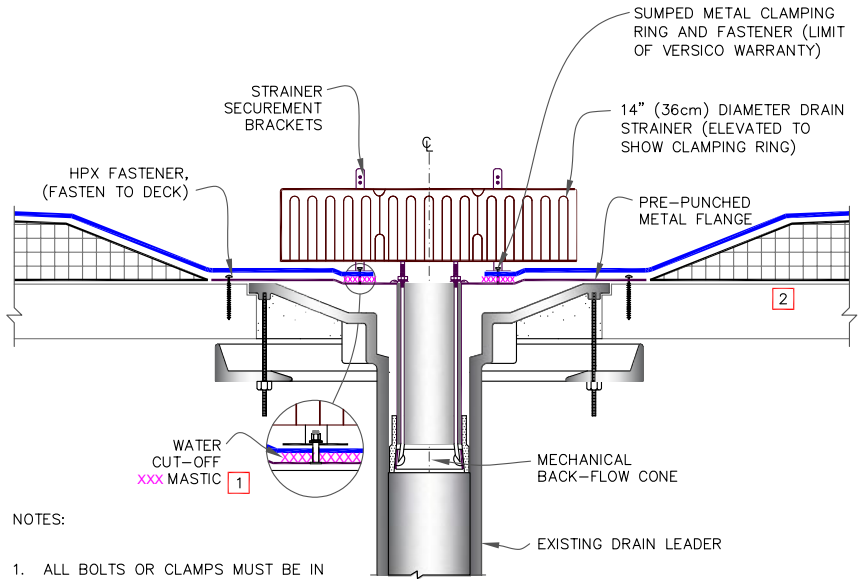
**NOTES:**

1. ALL BOLTS OR CLAMPS MUST BE IN PLACE TO PROVIDE CONSTANT COMPRESSION ON WATER CUT-OFF MASTIC.
2. REMOVE EXISTING LEAD, FLASHING MATERIAL & ENSURE THE DRAIN RING IS COMPLETELY CLEAN DOWN TO BARE METAL.
3. USE DETAIL **VGMA-6.0** FOR MECHANICALLY-FASTENED SYSTEMS.
4. THE HOLE IN THE MEMBRANE SHALL EXCEED THE DIAMETER OF THE DRAIN PIPE, BUT SHALL BE NO LESS THAN 1/2" (1.5cm) FROM THE ATTACHMENT POINTS OF THE DRAIN CLAMPING RING.
5. ROOF DRAIN SIZE AND NUMBER OF DRAINS SHALL BE IN ACCORDANCE WITH THE LOCAL CODES.
6. FIELD SPLICES MUST BE LOCATED AT LEAST 6" (15cm) OUTSIDE THE DRAIN SUMP.
7. VERSICO RECOMMENDS THE DRAIN TARGET SPLICE BE SHINGLED
  - 7.1. CUT A SQUARE HOLE IN THE FIELD SHEET TO BE AT LEAST 6" (15cm) OUTSIDE THE DRAIN SUMP
  - 7.2. APPLY PRIMER AND QA SEAM TAPE TO THE BOTTOM OF THE FIELD SHEET
  - 7.3. PRIME THE TARGET PIECE OF NR EPDM
  - 7.4. MATE THE TARGET TO THE TAPE
  - 7.5. APPLY BONDING ADHESIVE TO ADHERE FIELD AND TARGET MEMBRANE TO THE SUBSTRATE

MAXIMUM WARRANTY: 30 YEARS

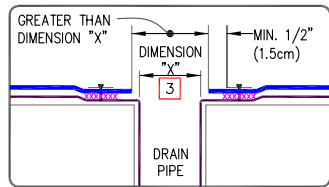
 <p><b>VERSICO</b> ROOFING SYSTEMS © 2023 VERSICO</p>	ROOF DRAIN – REINFORCED FIELD SHEET WITH SUMP EXCEEDING 3" PER FOOT	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="border-bottom: 1px solid black; width: 50px;"></td> <td style="font-size: 8px;">-- EPDM MEMBRANE</td> </tr> <tr> <td style="border-bottom: 1px solid black; width: 50px;"></td> <td style="font-size: 8px;">-- APPROVED SUBSTRATE</td> </tr> <tr> <td style="border: 1px solid black; width: 20px; text-align: center; margin: 5px auto;">0</td> <td style="font-size: 8px;">-- SEE NOTE(S)</td> </tr> </table>		-- EPDM MEMBRANE		-- APPROVED SUBSTRATE	0	-- SEE NOTE(S)	THERMOSET ROOFING SYSTEM <b>VGC-6.2</b>
	-- EPDM MEMBRANE								
	-- APPROVED SUBSTRATE								
0	-- SEE NOTE(S)								

THERMOSET MEMBRANE EPDM



NOTES:

1. ALL BOLTS OR CLAMPS MUST BE IN PLACE TO PROVIDE CONSTANT COMPRESSION ON WATER CUT-OFF MASTIC.
2. INSULATION TAPER SHALL NOT BE GREATER THAN 6" (15cm) IN 12" (30cm) HORIZONTAL.
3. THE HOLE IN THE MEMBRANE SHALL EXCEED THE DIAMETER OF THE DRAIN PIPE, BUT SHALL BE NO LESS THAN 1/2" (1.5cm) FROM THE ATTACHMENT POINTS OF THE DRAIN CLAMPING RING.
4. FIELD SPLICES MUST BE LOCATED AT LEAST 6" (15cm) OUTSIDE THE DRAIN SUMP.
5. ROOF DRAIN SIZE AND NUMBER OF DRAINS SHALL BE IN ACCORDANCE WITH THE LOCAL CODES.



MAXIMUM WARRANTY: 30 YEARS



VERSIGARD INSERT DRAIN

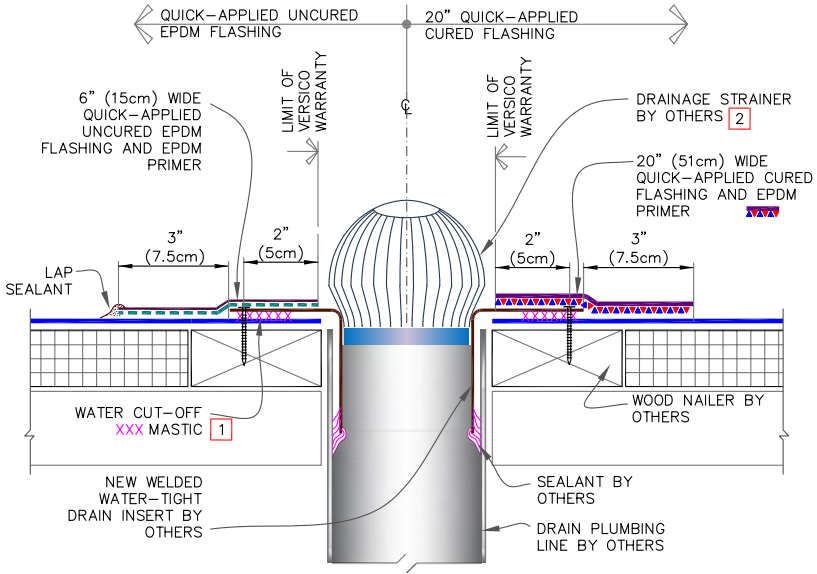
-- EPDM MEMBRANE  
 -- APPROVED SUBSTRATE  
0 -- SEE NOTE(S)

THERMOSET ROOFING SYSTEM

VGC-6.3

THERMOSET MEMBRANE

EPDM



NOTES:

1. WATER CUT-OFF MASTIC MUST BE UNDER CONSTANT COMPRESSION.
2. CONSULT SPECIFIER OR APPLICABLE CODES FOR ADEQUATE DRAINAGE STRAINER TO AVOID PONDING WATER. DO NOT RESTRICT WATER FLOW.
3. FOR PROJECTS WITH 25 AND 30-YEAR WARRANTIES, THE DRAIN INSERT FLANGE MUST BE OVERLAID WITH TWO LAYERS OF QUICK-APPLIED FLASHING. THE BOTTOM LAYER SHALL BE 6" (15cm) WIDE QUICK-APPLIED UNCURED EPDM FLASHING OR QUICK-APPLIED CURED COVER STRIP COVERED WITH A 9" (23cm) WIDE TOP LAYER OF QUICK-APPLIED UNCURED EPDM FLASHING. SEAL TOP LAYER WITH CONTINUOUS LAP SEALANT.

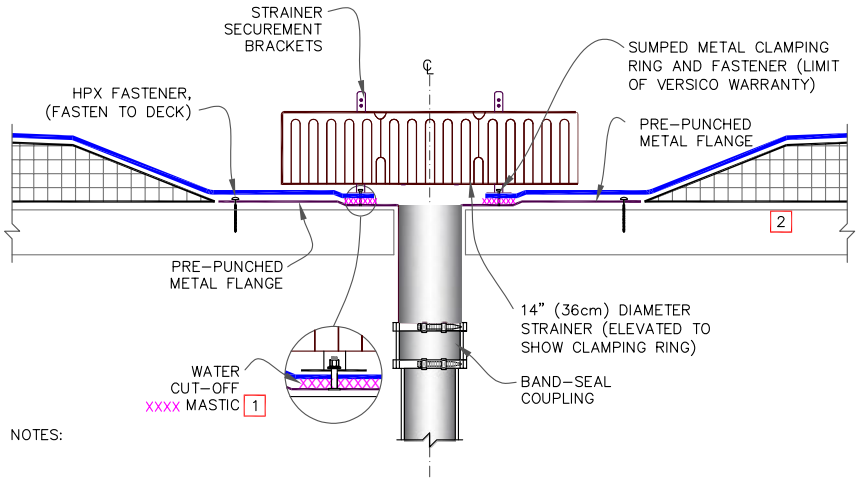
MAXIMUM WARRANTY: 30 YEARS



INSERT DRAIN THROUGH DECK	<p>— EPDM MEMBRANE</p> <p>— APPROVED SUBSTRATE</p> <p>0 — SEE NOTE(S)</p>
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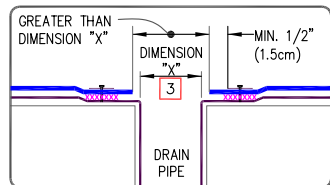
<p>THERMOSET ROOFING SYSTEM</p> <p>VGC-6.4</p>
--

THERMOSET MEMBRANE EPDM



NOTES:

1. ALL BOLTS OR CLAMPS MUST BE IN PLACE TO PROVIDE CONSTANT COMPRESSION ON WATER CUT-OFF MASTIC.
2. INSULATION TAPER SHALL NOT BE GREATER THAN 6" (15cm) IN 12" (30cm) HORIZONTAL.
3. THE HOLE IN THE MEMBRANE SHALL EXCEED THE DIAMETER OF THE DRAIN PIPE, BUT SHALL BE NO LESS THAN 1/2" (1.5cm) FROM THE ATTACHMENT POINTS OF THE DRAIN CLAMPING RING.
4. FIELD SPLICES MUST BE LOCATED AT LEAST 6" (15cm) OUTSIDE THE DRAIN SUMP.
5. ROOF DRAIN SIZE AND NUMBER OF DRAINS SHALL BE IN ACCORDANCE WITH THE LOCAL CODES.



MAXIMUM WARRANTY: 30 YEARS



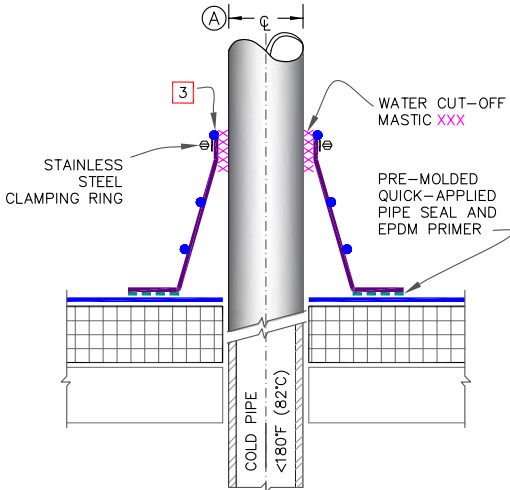
VERSIGARD ADD-ON DRAIN

- EPDM MEMBRANE
- APPROVED SUBSTRATE
- 0 — SEE NOTE(S)

THERMOSET ROOFING SYSTEM

VGC-6.5

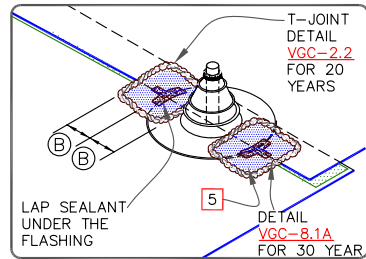
— THERMOSET MEMBRANE — EPDM —



**NOTES:**

1. REMOVE ALL LEAD AND OTHER FLASHING BEFORE INSTALLING QUICK-APPLIED PIPE SEAL.
2. TEMPERATURE OF PIPE PENETRATION MUST NOT EXCEED 180°F (82°C).
3. PRE-MOLDED PIPE FLASHING MUST HAVE RIB INTACT AT THE TOP EDGE REGARDLESS OF PIPE DIAMETER.
4. DECK FLANGES OF THE QUICK-APPLIED PIPE SEAL SHALL NOT BE OVERLAPPED, CUT OR APPLIED OVER ANY ANGLE CHANGE.
5. USE DETAIL [VGC-8.1A](#) WHEN PIPE BOOT INTERSECTS A SPLICE ON 25/30 YEAR WARRANTIES.
6. ON MECHANICALLY-FASTENED ROOFING SYSTEMS, REFER TO [DETAIL VGMA-8.1](#).

DIMENSIONS		cm	
(A)	1/2"	1.5	TO
	6"	15	
(B)	3"	7.5	



MAXIMUM WARRANTY: 30 YEARS



QUICK-APPLIED PIPE SEAL

— EPDM MEMBRANE

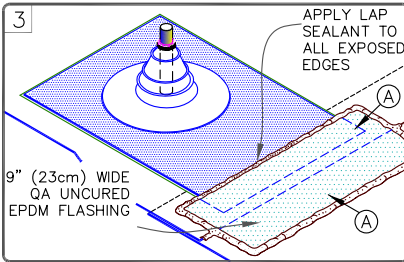
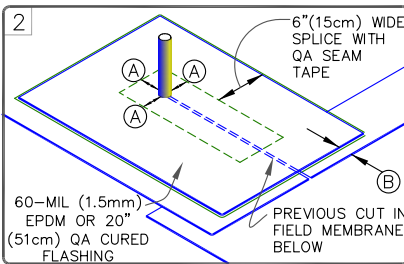
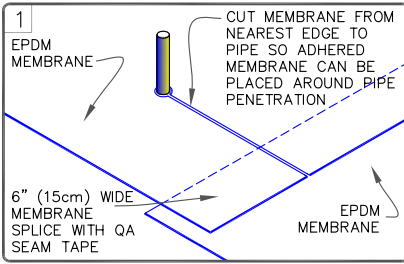
— APPROVED SUBSTRATE

0 — SEE NOTE(S)

THERMOSET ROOFING SYSTEM

VGC-8.1

THERMOSET MEMBRANE EPDM



NOTES:


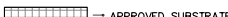

1. THIS DETAIL FOR USE WHEN A RELIEF CUT OR MEMBRANE SPLICE IS PRESENT AT THE PIPE SEAL. USE DETAIL [VGC-8.1](#) WHEN NO CUT OR SPLICE IS PRESENT.
2. REMOVE ALL LEAD AND OTHER FLASHING BEFORE INSTALLING QUICK-APPLIED PIPE SEAL.
3. PIPE SEAL MUST HAVE INTACT RIB AT TOP EDGE, REGARDLESS OF PIPE DIAMETER.
4. DECK FLANGES OF THE MOLDED PIPE SEAL SHALL NOT BE OVERLAPPED, CUT OR APPLIED OVER ANY ANGLE CHANGE.
5. ON MECHANICALLY FASTENED ROOFING SYSTEMS REFER TO DETAIL [VGMA-8.3](#).

DIMENSIONS	cm	
(A)	3"	7.5 MIN.
(B)	1"	2.5 MIN.

MAXIMUM WARRANTY: 30 YEARS



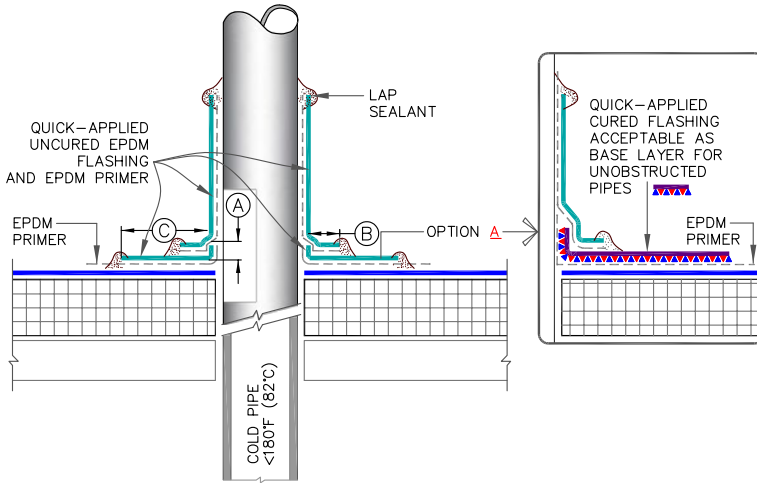
QUICK-APPLIED PIPE SEAL WITH 90-MIL MEMBRANE OR 25 / 30 YEAR WARRANTIES

 -- EPDM MEMBRANE  
 -- APPROVED SUBSTRATE  
 -- SEE NOTE(S)

THERMOSET ROOFING SYSTEM

**VGC-8.1A**





**NOTES:**

1. REMOVE ALL LEAD AND OTHER FLASHING BEFORE INSTALLING FIELD-FABRICATED FLASHING.
2. TEMPERATURE OF PIPE PENETRATION MUST NOT EXCEED 180°F (82°C).
3. ACCEPTABLE WITH SQUARE OR RECTANGULAR STRUCTURAL TUBING WITH ROUNDED CORNERS UP TO 12"(30cm). USE [DETAIL VGC-5](#) IF GREATER THAN 12" (30cm).
4. IN COLDER TEMPERATURES, A HEAT GUN MUST BE USED WHEN FORMING QUICK-APPLIED UNCURED EPDM OR CURED FLASHING.
5. ON MECHANICALLY FASTENED ROOFING SYSTEMS. REFER TO [DETAIL VGMA-8.2](#).
6. MEMBRANE SECUREMENT IS REQUIRED AROUND ALL ROUND PIPE PENETRATIONS GREATER THAN 18" (46cm) IN DIAMETER.

DIMENSIONS		cm	
(A)	1/2"	1.5	MIN.
(B)	1"	2.5	MIN.
(C)	3"	7.5	MIN.

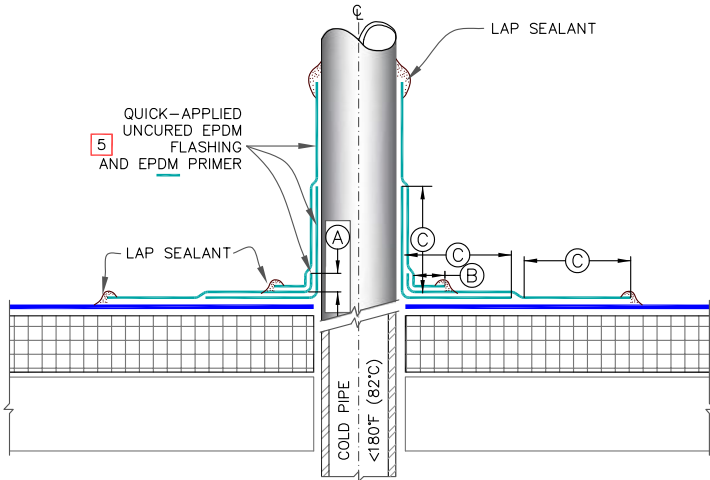
MAXIMUM WARRANTY: 20 YEARS



FIELD FABRICATED  
PIPE WRAP



THERMOSET MEMBRANE EPDM



NOTES:

1. REMOVE ALL LEAD AND OTHER FLASHING BEFORE INSTALLING FIELD-FABRICATED FLASHING.
2. TEMPERATURE OF PIPE PENETRATION MUST NOT EXCEED 180°F (82°C).
3. PIPE FLASHING MAY BE USED WITH SQUARE OR RECTANGULAR STRUCTURAL TUBING WITH ROUNDED CORNERS.
4. FOR STRUCTURAL STEEL TUBING GREATER THAN 12" (30cm) ACROSS, USE [DETAIL\(S\) VGC-5](#).
5. IN COLDER TEMPERATURES, A HEAT GUN MUST BE USED WHEN FORMING QUICK-APPLIED UNCURED EPDM FLASHING.
6. ON MECHANICALLY FASTENED ROOFING SYSTEMS, REFER TO [DETAIL VGMA-8.2.1](#).
7. MEMBRANE SECUREMENT IS REQUIRED AROUND ALL ROUND PIPE PENETRATIONS GREATER THAN 18" (46cm) IN DIAMETER.

DIMENSIONS	cm	
(A)	1/2"	1.5 MIN.
(B)	1"	2.5 MIN.
(C)	3"	7.5 MIN.

MAXIMUM WARRANTY: 30 YEARS



FIELD FABRICATED PIPE WRAP (25/30 YEAR WARRANTIES)

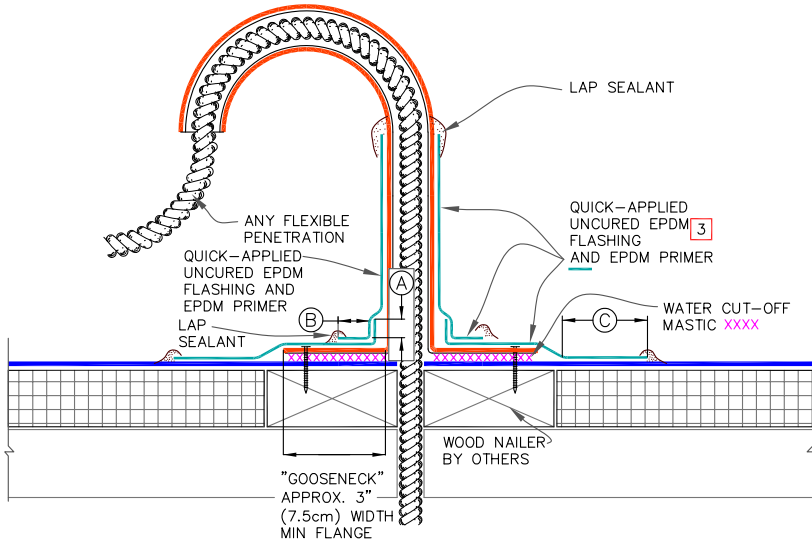
- EPDM MEMBRANE
- APPROVED SUBSTRATE
- SEE NOTE(S)

THERMOSET ROOFING SYSTEM

VGC-8.2A

THERMOSET MEMBRANE

EPDM



**NOTES:**

1. REMOVE ALL LEAD AND OTHER FLASHING BEFORE INSTALLING FIELD-FABRICATED PIPE SEAL.
2. TEMPERATURE OF PENETRATION MUST NOT EXCEED 180°F (82°C).
3. IN COLDER TEMPERATURES, A HEAT GUN MUST BE USED WHEN FORMING QUICK-APPLIED UNCURED EPDM FLASHING.

DIMENSIONS	cm	
(A)	1/2"	1.5 MIN.
(B)	1"	2.5 MIN.
(C)	3"	7.5 MIN.

MAXIMUM WARRANTY: 20 YEARS



FLEXIBLE PENETRATION

→ EPDM MEMBRANE

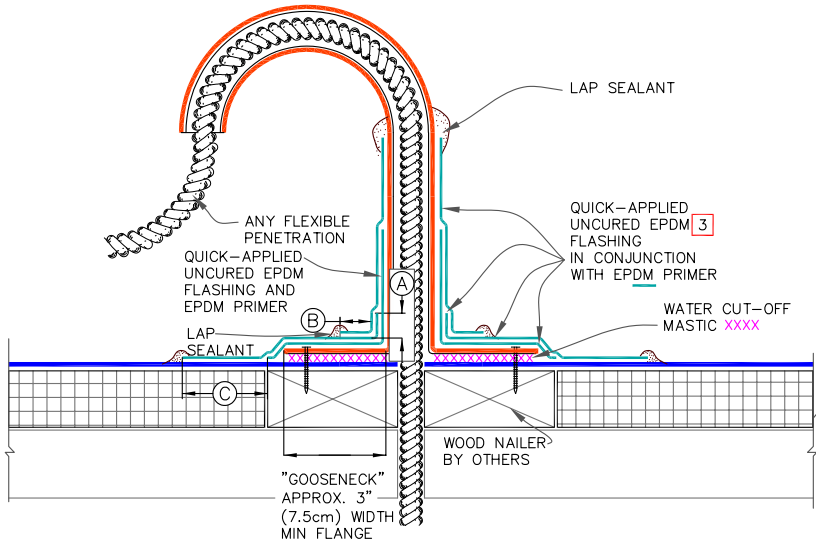
→ APPROVED SUBSTRATE

0 → SEE NOTE(S)

THERMOSET ROOFING SYSTEM

VGC-8.3

THERMOSET MEMBRANE EPDM



NOTES:

1. REMOVE ALL LEAD AND OTHER FLASHING BEFORE INSTALLING FIELD-FABRICATED PIPE SEAL.
2. TEMPERATURE OF PENETRATION MUST NOT EXCEED 180°F (82°C).
3. IN COLDER TEMPERATURES, A HEAT GUN MUST BE USED WHEN FORMING QUICK-APPLIED UNCURED EPDM FLASHING.

DIMENSIONS	cm	
(A)	1/2"	1.5 MIN.
(B)	1"	2.5 MIN.
(C)	3"	7.5 MIN.

MAXIMUM WARRANTY: 30 YEARS



FLEXIBLE PENETRATION (25/30 YEAR WARRANTIES)

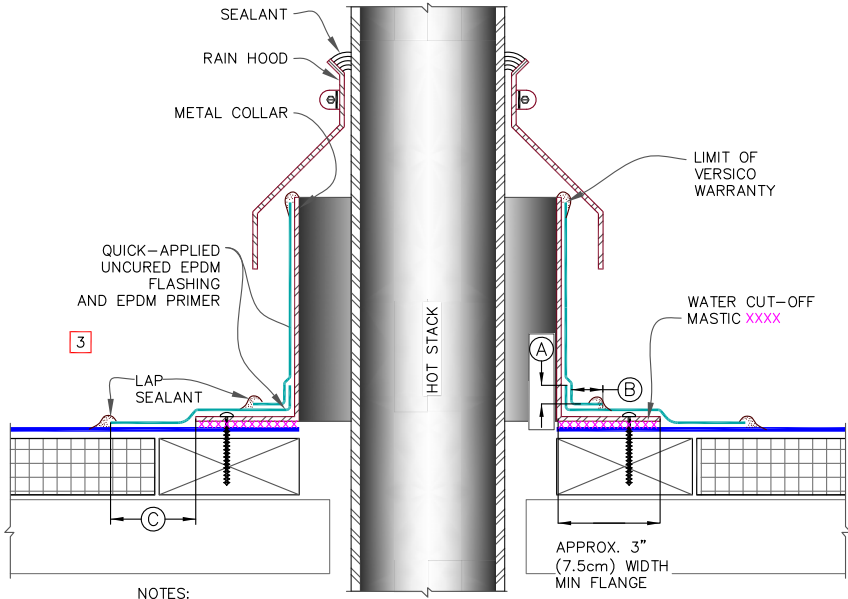
— EPDM MEMBRANE  
 APPROVED SUBSTRATE  
0 → SEE NOTE(S)

THERMOSET ROOFING SYSTEM

VGC-8.3A

THERMOSET MEMBRANE

EPDM



NOTES:

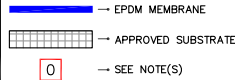
1. REMOVE ALL LEAD AND OTHER FLASHING BEFORE INSTALLING FIELD FABRICATED PIPE SEAL.
2. TEMPERATURE OF METAL COLLAR MUST NOT EXCEED 180°F (82°C).
3. IN COLDER TEMPERATURES, A HEAT GUN MUST BE USED WHEN FORMING QUICK-APPLIED UNCURED EPDM FLASHING.

DIMENSIONS	cm	
(A)	1/2"	1.5 MIN.
(B)	1"	2.5 MIN.
(C)	3"	7.5 MIN.

MAXIMUM WARRANTY: 20 YEARS

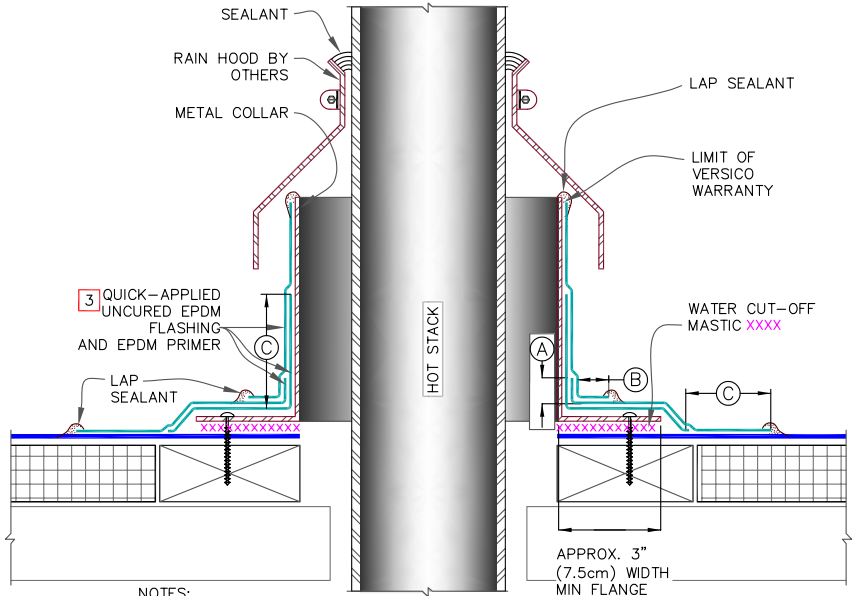


FIELD FABRICATED HOT STACK



THERMOSET ROOFING SYSTEM  
VGC-8.4

THERMOSET MEMBRANE EPDM



NOTES:

1. REMOVE ALL LEAD AND OTHER FLASHING BEFORE INSTALLING FIELD FABRICATED PIPE SEAL.
2. TEMPERATURE OF METAL COLLAR MUST NOT EXCEED 180°F (82°C).
3. IN COLDER TEMPERATURES, A HEAT GUN MUST BE USED WHEN FORMING QUICK-APPLIED UNCURED EPDM FLASHING.

DIMENSIONS		cm	
(A)	1/2"	1.5	MIN.
(B)	1"	2.5	MIN.
(C)	3"	7.5	MIN.

MAXIMUM WARRANTY: 30 YEARS



FIELD FABRICATED HOT STACK  
(25/30 YEAR WARRANTIES)

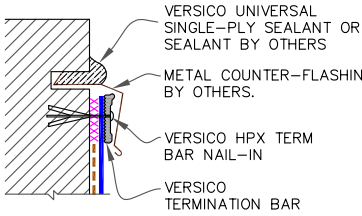
--- EPDM MEMBRANE  
 -- APPROVED SUBSTRATE  
0 -- SEE NOTE(S)

THERMOSET ROOFING SYSTEM  
**VGC-8.4A**

THERMOSET MEMBRANE

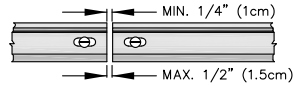
EPDM

9.1 MECHANICAL TERMINATION WITH COUNTER FLASHING



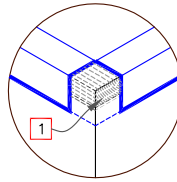
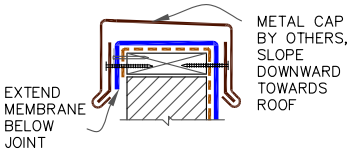
NOTES:

1. APPLY ON HARD SMOOTH SURFACE ONLY; NOT FOR USE ON EXPOSED WOOD.
2. DO NOT WRAP TERMINATION BAR AROUND CORNERS.
3. DETAIL 9.5 MUST BE USED AT VERTICAL JOINTS IN PANEL WALLS.



MAXIMUM WARRANTY: 30 YEARS

9.2 SHEET METAL COPING BY OTHERS

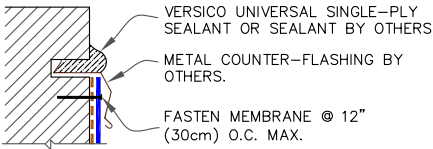


NOTE:

1. MEMBRANE MUST BE EXTENDED TO CORNERS TO PROVIDE COMPLETE COVERAGE OF THE TOP WALL SURFACE.

MAXIMUM WARRANTY: 30 YEARS

9.3 COUNTER FLASHING TERMINATION

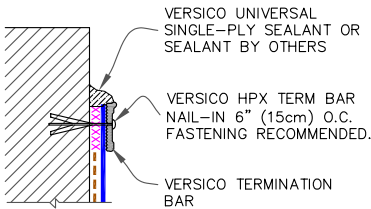


NOTE:

1. WHEN MECHANICAL FASTENERS ARE USED TO PENETRATE THE METAL COUNTER-FLASHING, USE EPDM WASHERS, APPLY WATER CUT-OFF MASTIC UNDER THE COUNTER-FLASHING OR CAULK THE FASTENER HEADS.

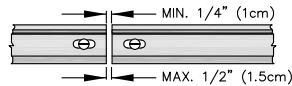
MAXIMUM WARRANTY: 10 YEARS

9.4 MECHANICAL TERMINATION



NOTES:

1. APPLY ON HARD SMOOTH SURFACE ONLY; NOT FOR USE ON EXPOSED WOOD.
2. DO NOT WRAP TERMINATION BAR AROUND CORNERS.
3. DETAIL 9.5 MUST BE USED AT VERTICAL JOINTS IN PANEL WALLS.



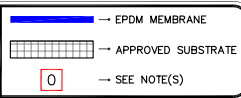
MAXIMUM WARRANTY: 20 YEARS

--- APPLICABLE BONDING ADHESIVE  
MAXIMUM WARRANTY: 10-30 YEARS

xxx WATER CUT-OFF MASTIC- MUST BE HELD UNDER CONSTANT COMPRESSION.



MEMBRANE TERMINATIONS  
PAGE 1 OF 2

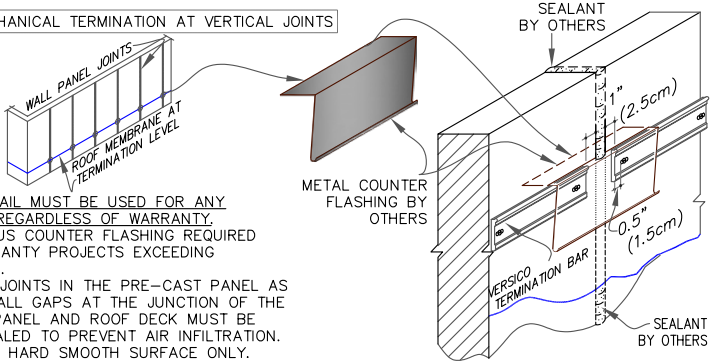


THERMOSET ROOFING SYSTEM  
VGC-9.0A

THERMOSET MEMBRANE

EPDM

9.5 MECHANICAL TERMINATION AT VERTICAL JOINTS



NOTES:

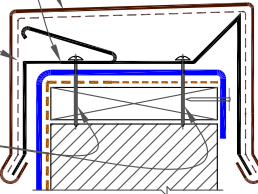
1. THIS DETAIL MUST BE USED FOR ANY PROJECT REGARDLESS OF WARRANTY.
2. CONTINUOUS COUNTER FLASHING REQUIRED FOR WARRANTY PROJECTS EXCEEDING 20-YEARS.
3. VERTICAL JOINTS IN THE PRE-CAST PANEL AS WELL AS ALL GAPS AT THE JUNCTION OF THE TILT-UP PANEL AND ROOF DECK MUST BE FULLY SEALED TO PREVENT AIR INFILTRATION.
4. APPLY ON HARD SMOOTH SURFACE ONLY.

MAXIMUM WARRANTY: 30 YEARS

9.6 VERSITRIM COPING

VERSITRIM 200 & 300

- COPING
- 20 GA. GALVANIZED ANCHOR CLIPS @ 6 FEET (183cm) O.C.
- CONCEALED SPLICE PLATE AT EACH JOINT OF COPING
- HEX-HEAD FASTENERS

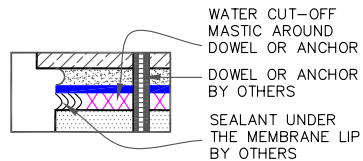
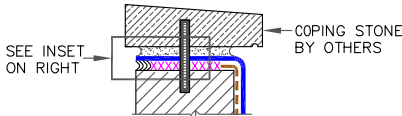


NOTE:

1. MEMBRANE MUST BE EXTENDED AT CORNERS TO PROVIDE COMPLETE COVERAGE OF THE TOP WALL SURFACE. REFER TO [DETAIL VGC-9.0B](#).

MAXIMUM WARRANTY: 30 YEARS

9.7 COPING STONE TERMINATION



MAXIMUM WARRANTY: 30 YEARS

--- APPLICABLE BONDING ADHESIVE  
MAXIMUM WARRANTY: 30 YEARS

xxx WATER CUT-OFF MASTIC- MUST BE HELD UNDER CONSTANT COMPRESSION.



MEMBRANE TERMINATIONS  
PAGE 2 OF 2

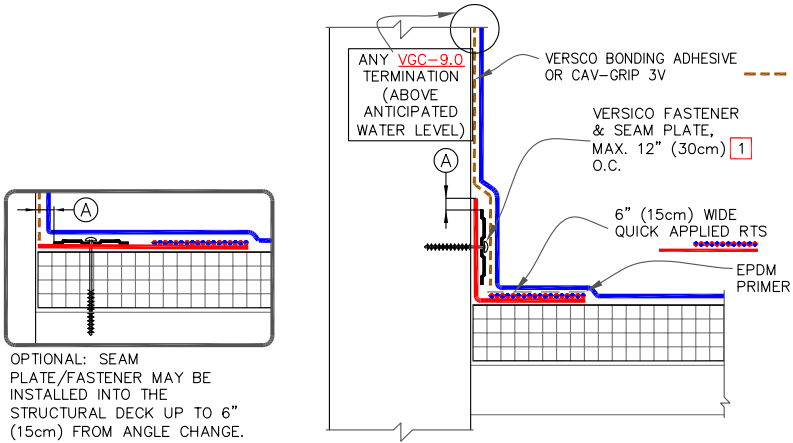
- EPDM MEMBRANE
- APPROVED SUBSTRATE
- 0 --- SEE NOTE(S)

THERMOSET ROOFING SYSTEM  
VGC-9.0B



THERMOSET MEMBRANE

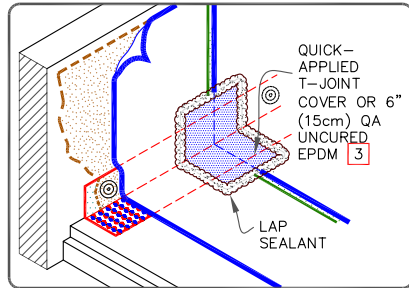
EPDM



DIMENSION	cm
<b>A</b> 1/8"-1"	0.5-2.5

NOTES:

1. FASTENERS AND PLATES ARE REQUIRED AT 6" (15cm) O.C. FOR ADHERED SYSTEMS WITH WARRANTY WIND SPEED COVERAGE GREATER THAN 90 MPH AND FOR ALL PROJECTS WITH WARRANTIES GREATER THAN 20 YEARS. HPX FASTENERS AND POLYMER SEAM PLATES ARE REQUIRED OVER STEEL DECKS ON MECHANICALLY FASTENED SYSTEMS.
2. PROJECTS WITH 25 AND 30-YEAR WARRANTIES OR WHEN USING 90-MIL MEMBRANE, REFER TO DETAIL **VGC-2.3**.
3. FOR CORNERS AND RUSS APPLICATION REFER TO **DETAILS VGC-15.1 OR VGC-15.2**.



MAXIMUM WARRANTY: 30 YEARS

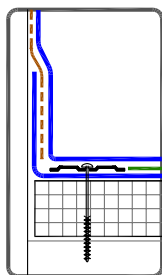


PARAPET / CURB WITH CONTINUOUS MEMBRANE

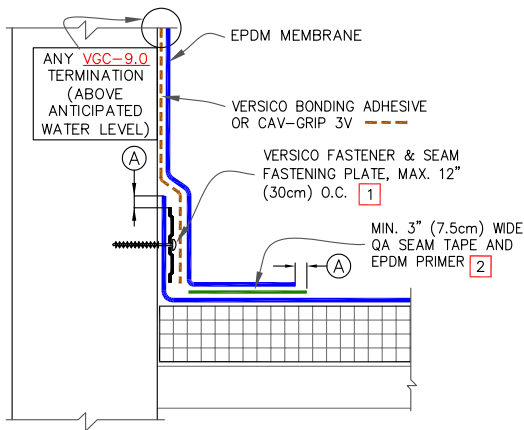


THERMOSET ROOFING SYSTEM  
**VGC-12.1**

THERMOSET MEMBRANE EPDM



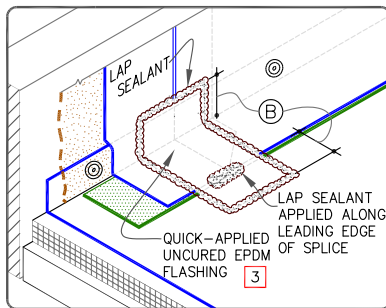
OPTIONAL: SEAM PLATE/FASTENER MAY BE INSTALLED INTO THE STRUCTURAL DECK UP TO 6" (15cm) FROM ANGLE CHANGE.



DIMENSIONS		cm	
(A)	1/8"	0.5	TO
	1/2"	1.5	MAX.
(B)	3"	7.5	

NOTES:

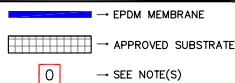
1. FASTENERS AND PLATES ARE REQUIRED AT 6" (15cm) O.C. FOR ADHERED SYSTEMS WITH WARRANTY WIND SPEED COVERAGE GREATER THAN 90 MPH AND FOR ALL PROJECTS WITH WARRANTIES GREATER THAN 20 YEARS. HPX FASTENERS AND POLYMER SEAM PLATES ARE REQUIRED OVER STEEL DECKS ON MECHANICALLY FASTENED SYSTEMS.
2. USE 6" (15cm) WIDE QA SEAM TAPE FOR 25/30 YEAR WARRANTIES. LAP SEALANT IS REQUIRED ON CUT EDGES OF REINFORCED MEMBRANE.
3. PROJECTS WITH 25 AND 30-YEAR WARRANTIES OR WHEN USING 90-MIL MEMBRANE, REFER TO **DETAIL VGC-2.3**.



MAXIMUM WARRANTY: 30 YEARS

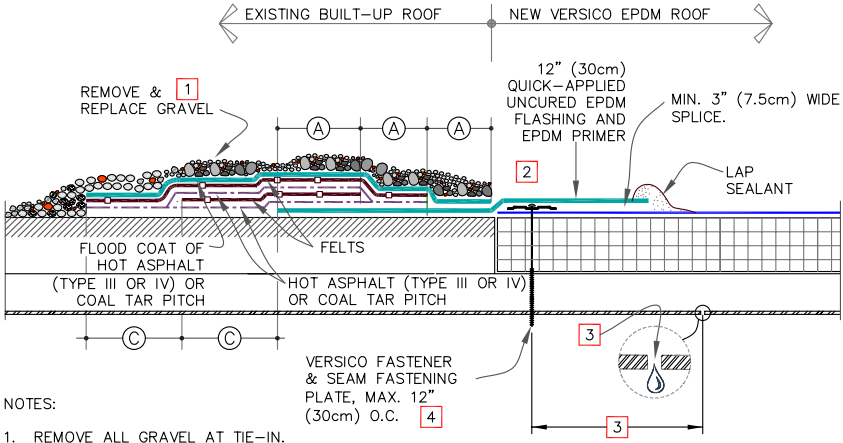


PARAPET / CURB WITH SEPARATE MEMBRANE FLASHING



THERMOSET ROOFING SYSTEM  
**VGC-12.2**

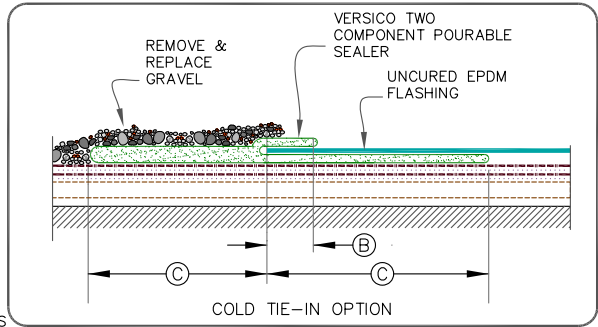
## THERMOSET MEMBRANE EPDM



**NOTES:**

1. REMOVE ALL GRAVEL AT TIE-IN.
2. SPLICE TWO PIECES OF UNCURED EPDM OR QUICK-APPLIED UNCURED EPDM TOGETHER TO ACHIEVE DESIRED WIDTH.
3. IF FLUTES ARE PERPENDICULAR TO THE TIE-IN DRILL A 3/8" (1cm) DIAMETER WEEP HOLE ON THE BOTTOM FLUTES OF THE STEEL DECK ALONG THE PERIMETER TO THE TIE-IN 6" (15cm) FROM THE SEAM FASTENING PLATE.
4. ON MECHANICALLY FASTENED SYSTEMS, HPVX FASTENERS AND POLYMER SEAM PLATES ARE REQUIRED OVER STEEL DECKS.
5. IF WATER PONDS OR FLOWS OVER TIE-IN FROM BUR SURFACE, USE [DETAIL VGC-13.2](#).
6. ON BALLASTED SYSTEMS, USE CONCRETE PAVERS TO PREVENT BALLAST MIGRATION.

DIMENSIONS	cm	
(A)	5"	13 MIN.
(B)	2"	5 ± 1/2" (1.5cm)
(C)	6"	15



MAXIMUM WARRANTY: 30 YEARS

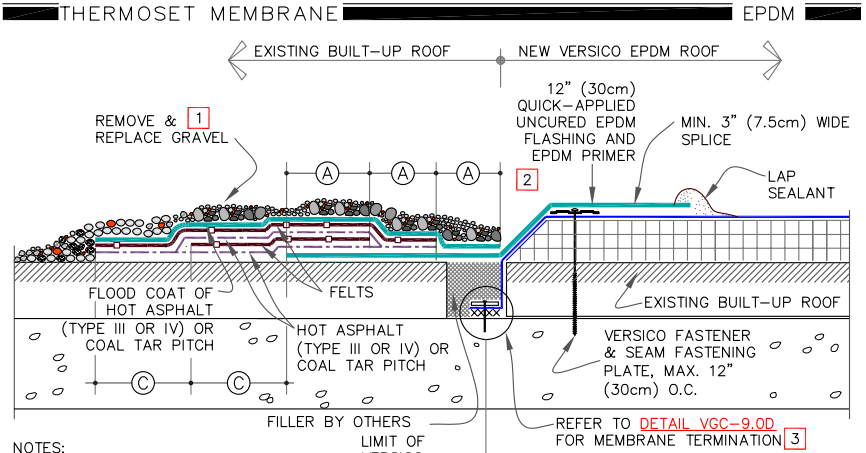


BUILT-UP ROOFING TIE-IN OVER STEEL ROOF DECK

-- EPDM MEMBRANE  
 -- APPROVED SUBSTRATE  
0 -- SEE NOTE(S)

THERMOSET ROOFING SYSTEM

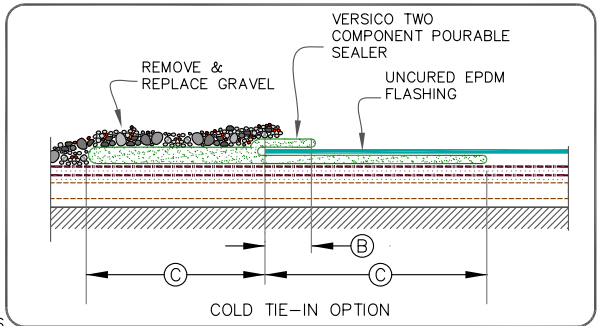
VGC-13.1



NOTES:

1. REMOVE ALL GRAVEL AT TIE-IN.
2. SPLICE TWO PIECES OF UNCURED EPDM OR QUICK-APPLIED UNCURED EPDM TOGETHER TO ACHIEVE DESIRED WIDTH.
3. WATER CUT-OFF MUST BE UNDER CONSTANT COMPRESSION.
4. VERSICO IS NOT RESPONSIBLE FOR DAMAGE TO THE BUILT-UP ROOF OR STRUCTURAL DECK RESULTING FROM PONDED WATER; THIS DETAIL APPLIES TO RE-ROOFING WHEN A TEAR-OFF IS NOT SPECIFIED AND WAS DESIGNED TO PREVENT MIGRATION OF WATER INTO THE NEW ROOFING SYSTEM.
5. ON BALLASTED SYSTEMS, USE CONCRETE PAVERS TO PREVENT BALLAST MIGRATION.

DIMENSIONS	cm	
(A)	5"	13 MIN.
(B)	2"	5 ± 1/2" (1.5cm)
(C)	6"	15



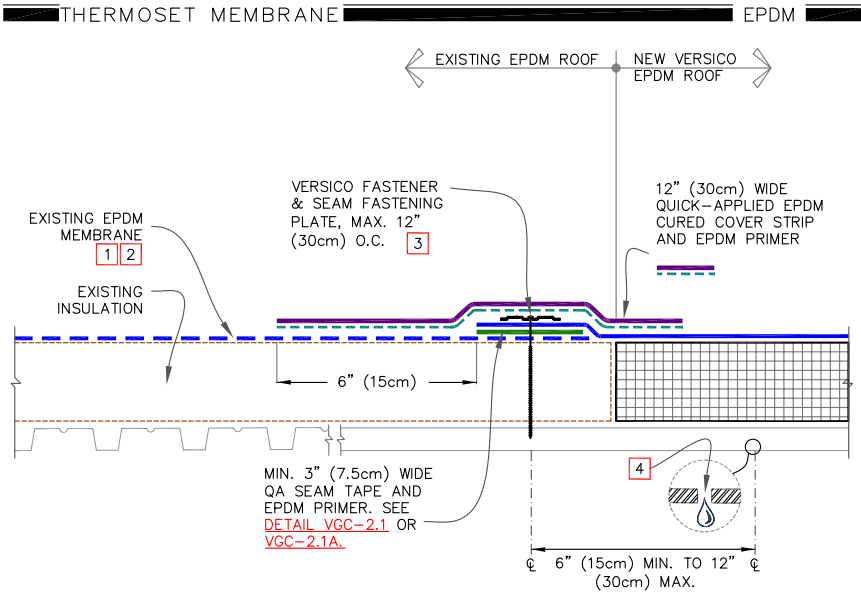
MAXIMUM WARRANTY: 30 YEARS



BUILT-UP ROOFING TIE-IN OVER CONCRETE ROOF DECK

— EPDM MEMBRANE  
 APPROVED SUBSTRATE  
0 → SEE NOTE(S)

THERMOSET ROOFING SYSTEM  
**VGC-13.2**



**NOTES:**

- CONTACT MANUFACTURER OF EXISTING EPDM MEMBRANE ROOFING SYSTEM TO VERIFY ACCEPTANCE OF TIE-IN AND TO NOT VOID EXISTING WARRANTY.
- PRIOR TO SPlicing, CLEAN EXISTING EPDM MEMBRANE BY SCRUBBING THE SPLICE AREA WITH WEATHERED MEMBRANE CLEANER AND ALLOW TO DRY.
- ON MECHANICALLY FASTENED SYSTEMS, HPX FASTENERS AND POLYMER SEAM PLATES ARE REQUIRED OVER STEEL DECKS.
- IF FLUTES ARE PERPENDICULAR TO THE TIE-IN DRILL A 3/8" (1cm) DIAMETER WEEP HOLE INTO THE BOTTOM FLUTES OF THE STEEL DECK ALONG THE PERIMETER OF THE TIE-IN 6" (15cm) MINIMUM TO 12" (30cm) MAXIMUM FROM THE SEAM FASTENING PLATE.

MAXIMUM WARRANTY: 30 YEARS



TIE-IN TO EXISTING EPDM MEMBRANE

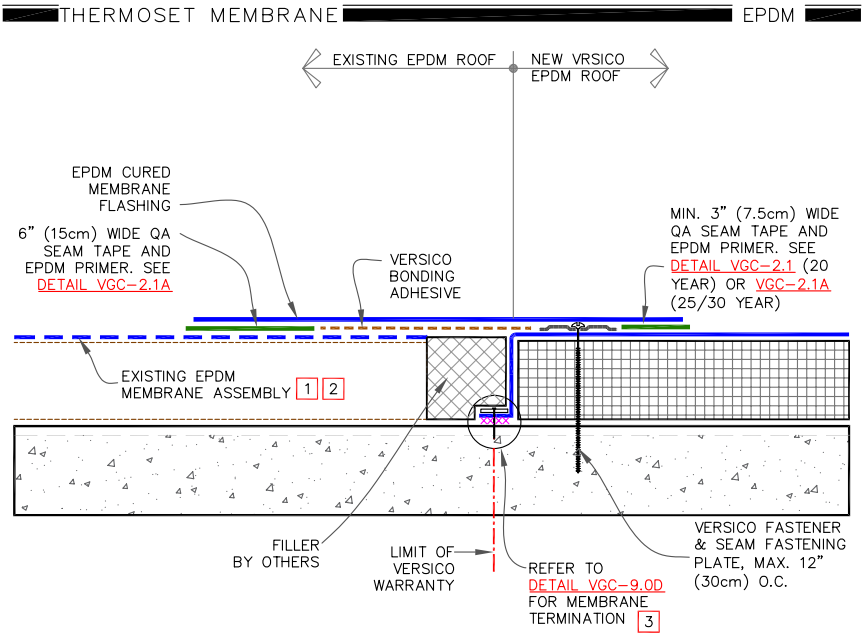
— EPDM MEMBRANE

— APPROVED SUBSTRATE

0 — SEE NOTE(S)

THERMOSET ROOFING SYSTEM

VGC-13.3



NOTES:

1. CONTACT MANUFACTURER OF EXISTING EPDM MEMBRANE ROOFING SYSTEM TO VERIFY ACCEPTANCE OF TIE-IN AND TO NOT VOID EXISTING WARRANTY.
2. PRIOR TO SPLICING, CLEAN EXISTING EPDM MEMBRANE BY SCRUBBING THE SPLICE AREA WITH WEATHERED MEMBRANE CLEANER; ALLOW TO DRY.
3. WATER CUT-OFF MASTIC MUST BE HELD UNDER CONSTANT COMPRESSION. WHEN RE-ROOFING OVER PRE-CAST CONCRETE, APPLY LIBERAL BEAD OF WATER CUT-OFF MASTIC IN THE JOINTS TO PREVENT MOISTURE MIGRATION.

MAXIMUM WARRANTY: 30 YEARS



EPDM TIE-IN OVER CONCRETE DECK

--- EPDM MEMBRANE

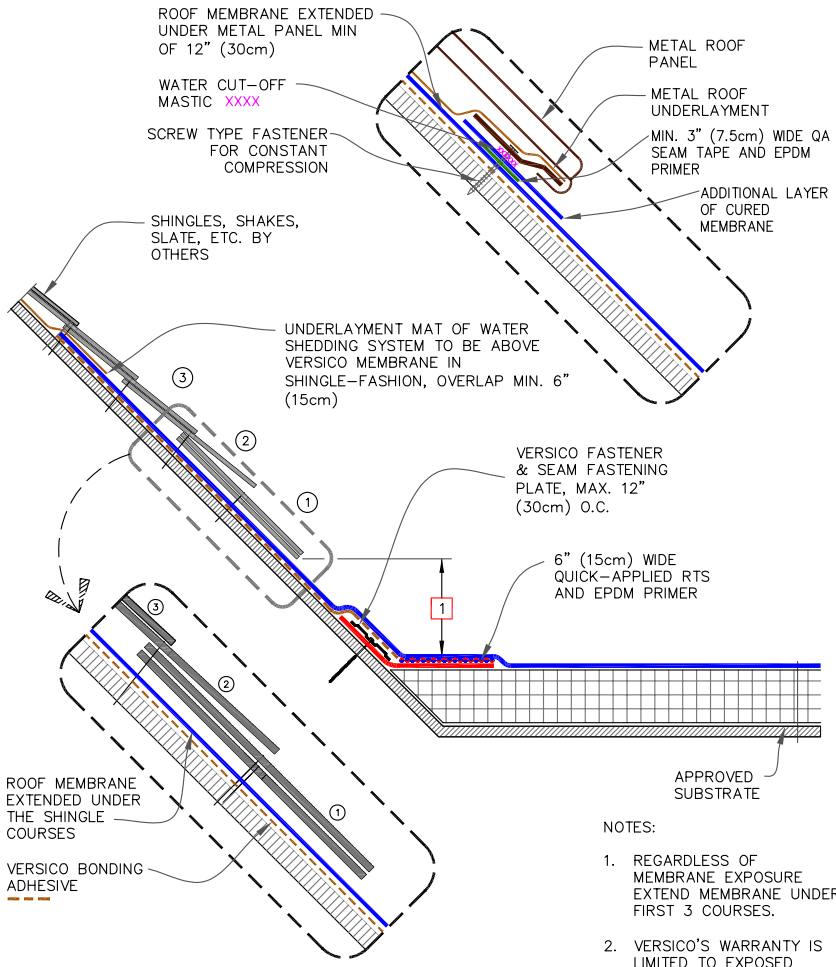
--- APPROVED SUBSTRATE

0 --- SEE NOTE(S)

THERMOSET ROOFING SYSTEM

VGC-13.4

THERMOSET MEMBRANE EPDM



- NOTES:
- REGARDLESS OF MEMBRANE EXPOSURE EXTEND MEMBRANE UNDER FIRST 3 COURSES.
  - VERSICO'S WARRANTY IS LIMITED TO EXPOSED PORTION OF ROOF MEMBRANE.

MAXIMUM WARRANTY: 30 YEARS

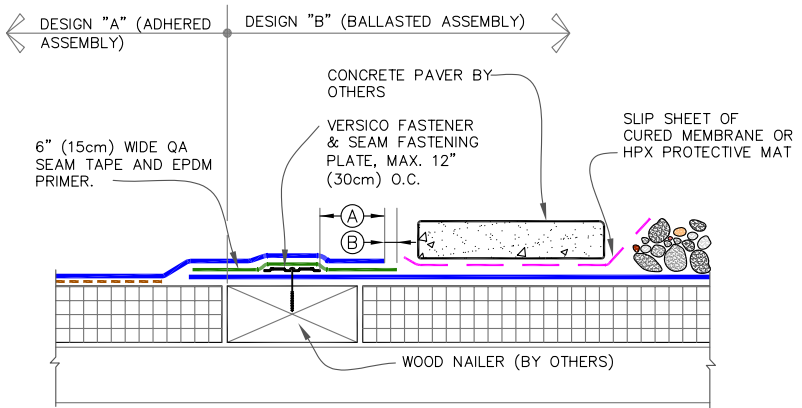


TIE-IN SHINGLED OR METAL PANEL ROOF

	EPDM MEMBRANE
	APPROVED SUBSTRATE
	SEE NOTE(S)

THERMOSET ROOFING SYSTEM  
**VGC-13.5**

THERMOSET MEMBRANE EPDM



DIMENSIONS		cm	
(A)	2"	5	MIN.
(B)	1/8"	0.5	MIN.
	1/2"	1.5	MAX.

MAXIMUM WARRANTY: 30 YEARS



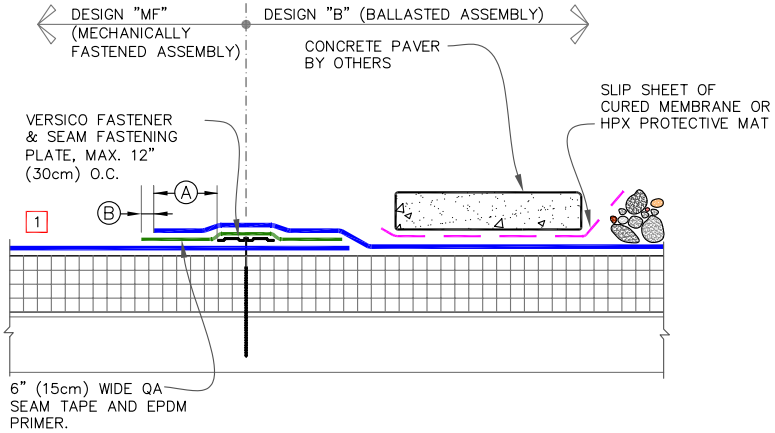
TIE-IN BETWEEN NEW VERSICO ADHERED & BALLASTED ROOF



THERMOSET ROOFING SYSTEM  
VGC-13.6



THERMOSET MEMBRANE EPDM



**NOTE:**

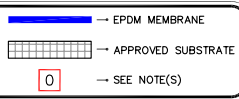
- ON MECHANICALLY ATTACHED SYSTEMS, HPX FASTENERS AND POLYMER SEAM PLATES ARE REQUIRED OVER STEEL DECKS.

DIMENSIONS	cm	
(A)	2"	5 MIN.
(B)	1/8"	0.5 MIN.
	1/2"	15 MAX.

MAXIMUM WARRANTY: 30 YEARS

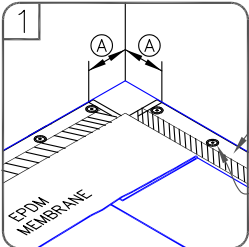


TIE-IN BETWEEN NEW VERSICO MECHANICALLY ATTACHED & BALLASTED ROOF



THERMOSET ROOFING SYSTEM  
VGC-13.7

THERMOSET MEMBRANE EPDM

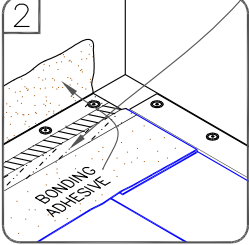
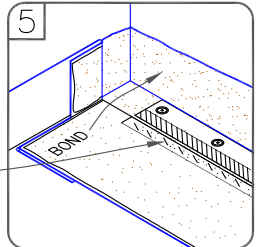


6" (15cm) WIDE QUICK-APPLIED RTs (MAY BE FASTENED INTO VERTICAL SUBSTRATE)

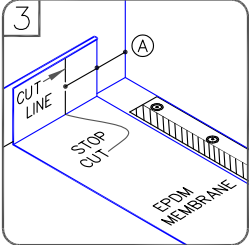
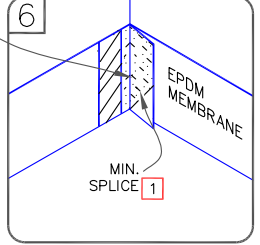
VERSICO SEAM PLATE & FASTENER.

EPDM PRIMER

CUT 45° AND APPLY EPDM PRIMER/QA SEAM TAPE

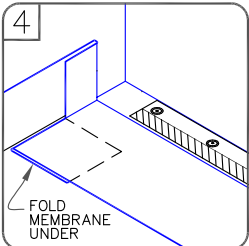
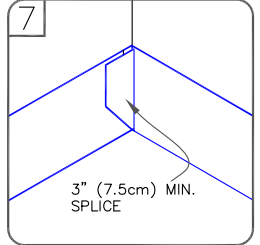


DIMENSIONS	cm	
(A) 6"	15	TO
9"	23	

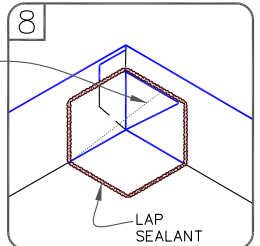


NOTE:

- MINIMUM SPLICE WIDTH:
  - 3" (7.5cm) UP TO 20 YEAR WARRANTIES
  - 6" (15cm) FOR 25/30 YEAR WARRANTIES
- REFER TO DETAIL [VGC-15.3](#) (20 YEAR) OR [VGC-15.4A](#) (25/30 YEAR) FOR INSIDE CORNER INSTALLATION REQUIREMENTS.



PIG EAR ON OPPOSITE WALL



MAXIMUM WARRANTY: 30 YEARS



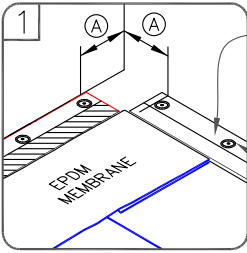
INSIDE CORNER WALL FLASHING WITH RTs (OPTION 1)

-- EPDM MEMBRANE  
 -- APPROVED SUBSTRATE  
 -- SEE NOTE(S)

THERMOSET ROOFING SYSTEM  
**VGC-15.1**

## THERMOSET MEMBRANE

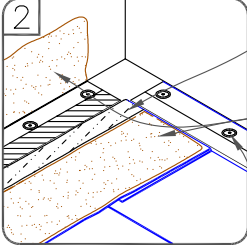
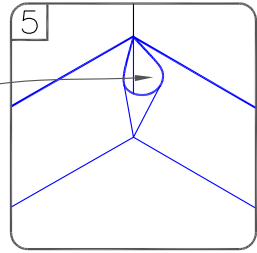
## EPDM



6" (15cm) WIDE QUICK-APPLIED RTS (MAY BE FASTENED INTO VERTICAL SUBSTRATE)

FORM PIG EAR WITH CONTINUOUS MEMBRANE AT CORNER AS SHOWN

VERSICO SEAM PLATE & FASTENER.

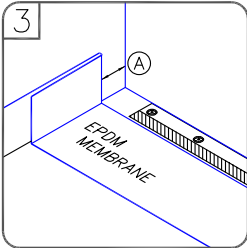
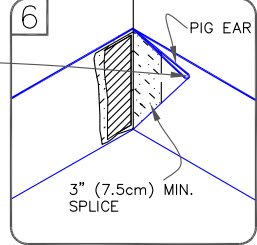


EPDM PRIMER

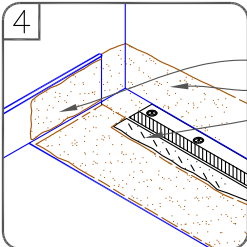
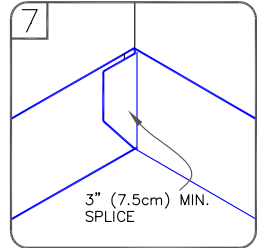
CUT & REMOVE EXCESSIVE MEMBRANE

VERSICO BONDING ADHESIVE

VERSICO SEAM FASTENING PLATE & FASTENER.



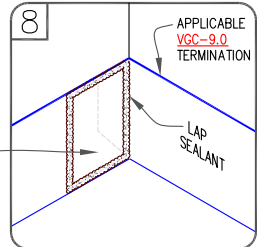
DIMENSIONS		cm	
(A)	6"	15	TO
	9"	23	



VERSICO BONDING ADHESIVE

EPDM PRIMER

6" (15cm) WIDE QUICK-APPLIED UNCURED EPDM FLASHING AND EPDM PRIMER



MAXIMUM WARRANTY: 30 YEARS



INSIDE CORNER WALL FLASHING WITH RTS (OPTION 2)

-- EPDM MEMBRANE

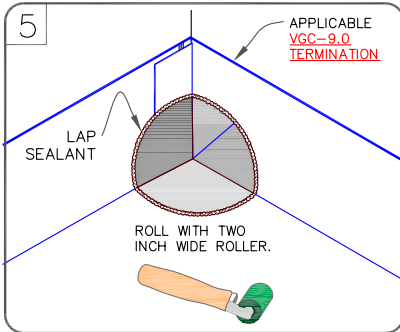
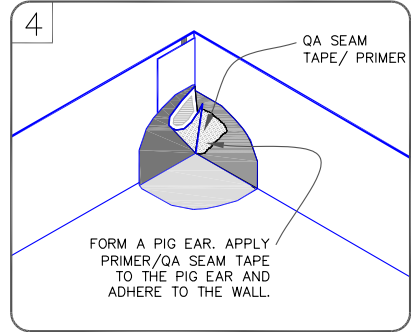
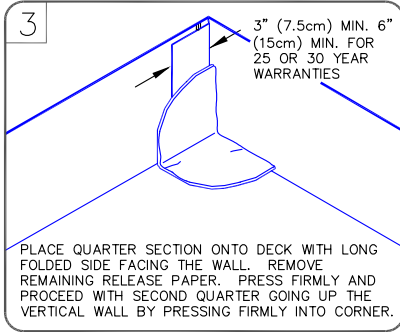
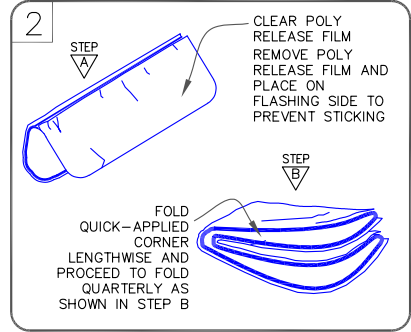
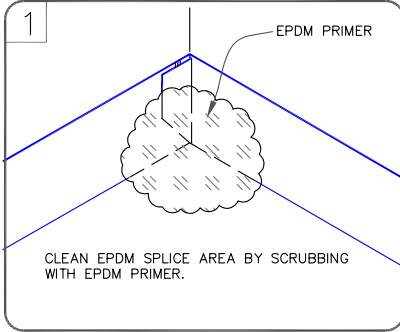
-- APPROVED SUBSTRATE

0 -- SEE NOTE(S)

THERMOSET ROOFING SYSTEM

VGC-15.2

THERMOSET MEMBRANE EPDM



NOTES:

1. PRE-CUT 7" X 9" CORNER OR 9" X 9" QUICK-APPLIED UNCURED EPDM.
2. FOR PROJECTS WITH 25 AND 30-YEAR WARRANTIES OR WHEN USING 90-MIL MEMBRANE, INSTALL A 6" T-JOINT COVER PRIOR TO INSTALLING A 12" T-JOINT COVER. SEAL TOP LAYER WITH CONTINUOUS LAP SEALANT. PER DETAIL [VGC-15.4A](#)
3. A HEAT GUN MUST BE USED WHEN FORMING QUICK-APPLIED UNCURED EPDM FLASHING IN COLDER TEMPERATURES.

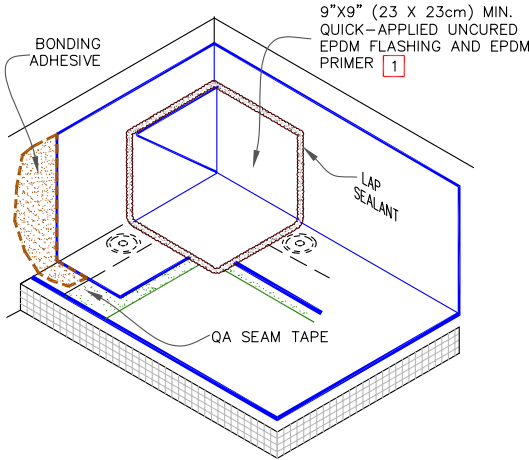
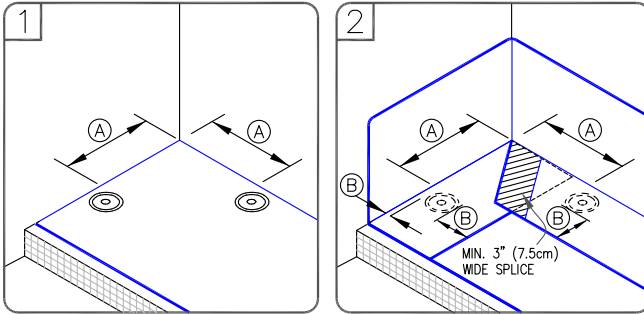
MAXIMUM WARRANTY: 30 YEARS



INSIDE CORNER WITH CONTINUOUS EPDM WALL FLASHING



THERMOSET ROOFING SYSTEM  
VGC-15.3



DIMENSIONS	cm	
(A)	6"	15 TO
	9"	23
(B)	3"	7.5

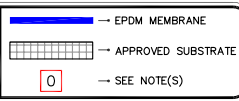
NOTES:

1. A HEAT GUN MUST BE USED WHEN FORMING QUICK-APPLIED UNCURED EPDM FLASHING IN COLDER TEMPERATURES.
2. FOR PROJECTS WITH 25 & 30-YEAR WARRANTIES OR WHEN USING 90-MIL MEMBRANE, REFER TO [DETAIL VGC-15.4A](#) FOR REQUIRED FLASHING ENHANCEMENTS.

MAXIMUM WARRANTY: 20 YEARS

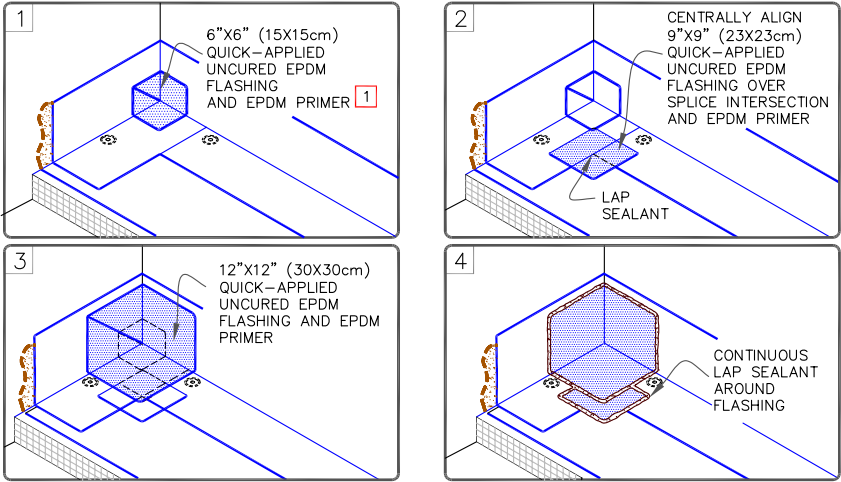


INSIDE CORNER WITH SEPARATE EPDM WALL FLASHING



THERMOSET ROOFING SYSTEM  
VGC-15.4

THERMOSET MEMBRANE EPDM



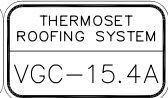
NOTES:

1. A 7"x9" (17.5cm X 23cm) QUICK-APPLIED PRE-CUT INSIDE/OUTSIDE CORNER MAY BE CUT DOWN TO 6" X 6" (7.5cm X 7.5cm).
2. A HEAT GUN MUST BE USED WHEN FORMING QUICK-APPLIED UNCURED EPDM FLASHING IN COLDER TEMPERATURES.
3. APPLY PRIMER AND QA SEAM TAPE TO ADHERE PIG EAR TO THE WALL.

MAXIMUM WARRANTY: 30 YEARS

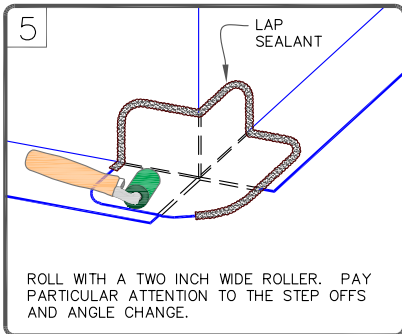
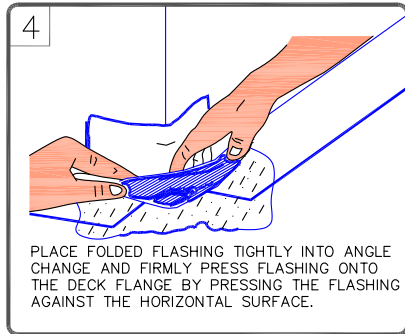
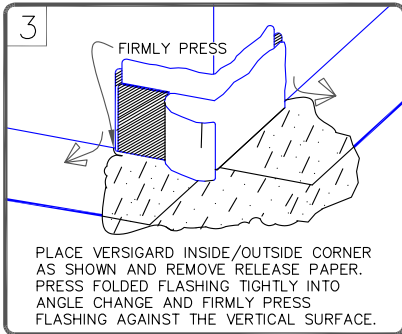
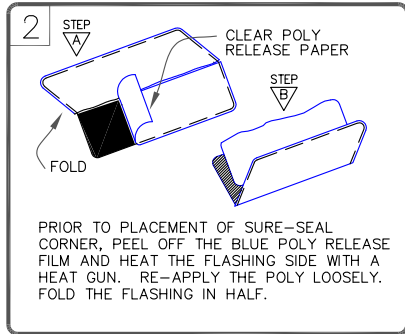
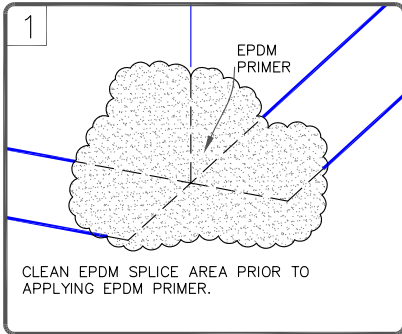


INSIDE CORNER FLASHING FOR PROJECTS WITH 90-MIL MEMBRANE OR 25 / 30 YEAR WARRANTIES



THERMOSET MEMBRANE

EPDM



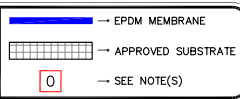
NOTE:

FOR PROJECTS WITH 25 & 30-YEAR WARRANTIES OR WHEN USING 90-MIL MEMBRANE, REFER TO [DETAIL VGC-15.7A](#) FOR REQUIRED FLASHING ENHANCEMENTS.

MAXIMUM WARRANTY: 20 YEARS

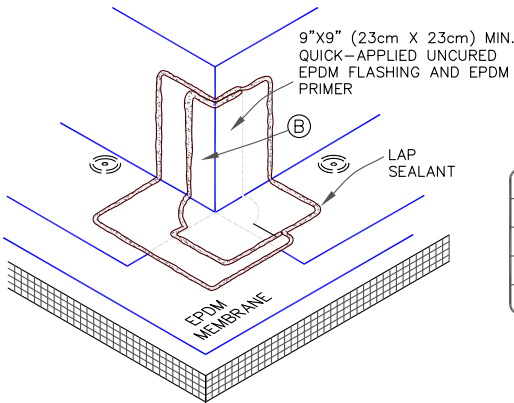
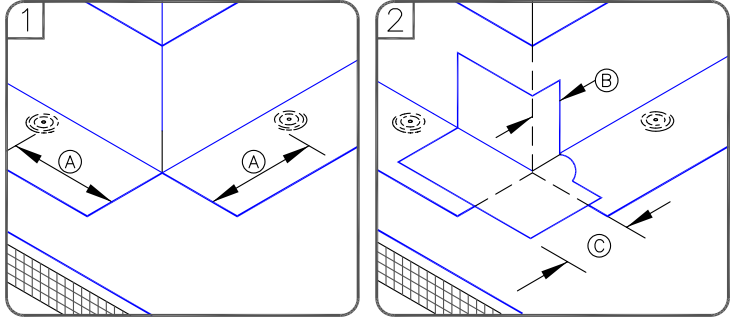


OUTSIDE CORNER WITH  
PRE-CUT QUICK-APPLIED  
CORNER



THERMOSET  
ROOFING SYSTEM  
VGC-15.5

— THERMOSET MEMBRANE — EPDM —



DIMENSIONS	cm	
(A)	6"	15 TO
	9"	23
(B)	2"	5 MIN.
(C)	3"	7.5 MAX.

NOTES:

1. A HEAT GUN MUST BE USED WHEN FORMING QUICK-APPLIED UNCURED EPDM FLASHING IN COLDER TEMPERATURES.
2. FOR PROJECTS WITH 25 & 30-YEAR WARRANTIES OR WHEN USING 90-MIL MEMBRANE, REFER TO [DETAIL VGC-15.7A](#) FOR REQUIRED FLASHING ENHANCEMENTS.

MAXIMUM WARRANTY: 20 YEARS



OUTSIDE CORNER WITH  
QUICK-APPLIED UNCURED  
EPDM FLASHING (2 PIECE)

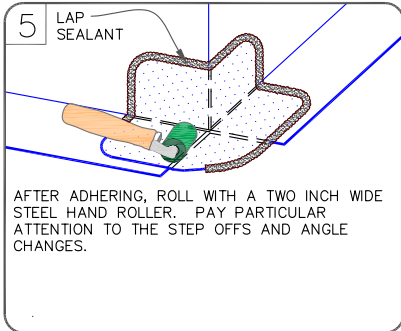
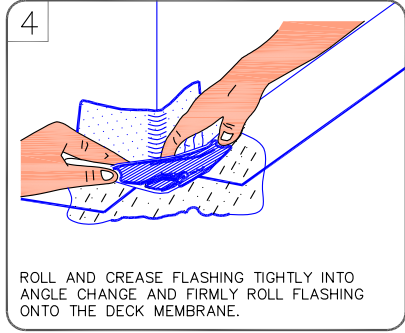
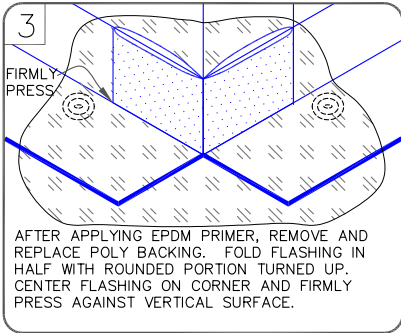
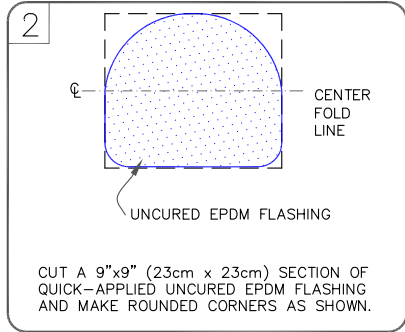
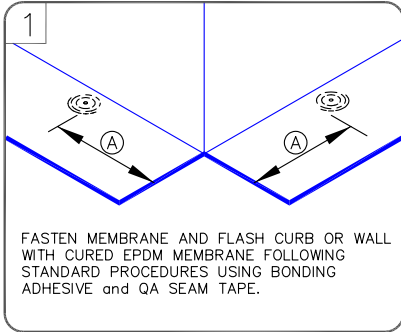


THERMOSET  
ROOFING SYSTEM  
VGC-15.6



## THERMOSET MEMBRANE

## EPDM



DIMENSIONS		cm	
Ⓐ	6"	15	TO
	9"	23	

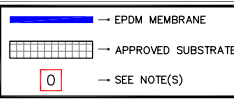
### NOTES:

- FOR PROJECTS WITH 25 & 30-YEAR WARRANTIES OR WHEN USING 90-MIL MEMBRANE, REFER TO [DETAIL\\_VGC-15.7A](#) FOR REQUIRED FLASHING ENHANCEMENTS.
- A HEAT GUN MUST BE USED WHEN FORMING QUICK-APPLIED UNCURED EPDM FLASHING IN COLDER TEMPERATURES.

MAXIMUM WARRANTY: 20 YEARS



OUTSIDE CORNER WITH QUICK-APPLIED UNCURED EPDM FLASHING (1 PIECE)



THERMOSET MEMBRANE EPDM

1

6" (15cm)

FASTEN MEMBRANE AND FLASH CURB OR WALL WITH CURED EPDM MEMBRANE FOLLOWING STANDARD PROCEDURES.

2

CENTER FOLD LINE

USE PRE-CUT T-JOINT COVERS OR CUT A 6"x6" (15X15cm) & 12"x12" (30X30cm) SECTION OF QUICK-APPLIED UNCURED EPDM FLASHING AND ROUND CORNERS

3

EPDM PRIMER

CLEAN EPDM SPLICE AREA WITH WEATHERED MEMBRANE CLEANER PRIOR TO APPLYING EPDM PRIMER

4

POLY FILM

REMOVE & REPLACE POLY BACKING ON FLASHING. FOLD FLASHING IN HALF WITH ROUNDED PORTION TURNED UP. CENTER ON CORNER & FIRMLY PRESS AGAINST VERTICAL SURFACE

5

ROLL & CREASE FLASHING TIGHTLY INTO ANGLE CHANGE & FIRMLY ROLL FLASHING ONTO THE DECK MEMBRANE

USE HEAT GUN TO WARM THE FLASHING IN COLD WEATHER

6

ROLL WITH A TWO INCH WIDE STEEL HAND ROLLER. PAY PARTICULAR ATTENTION TO THE STEP OFFS AND ANGLE CHANGES

7

ROLL STEP OFFS AND ANGLE CHANGES

8

APPLY EPDM PRIMER TO SPLICE AREA. INSTALL THE 12"x12" (30cmX30cm) SECTION OF QUICK-APPLIED UNCURED EPDM FLASHING CENTERED OVER PREVIOUSLY APPLIED FLASHING.

9

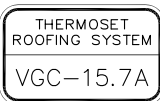
SEAL ALL EDGES WITH LAP SEALANT AS SHOWN

MAXIMUM WARRANTY: 30 YEARS

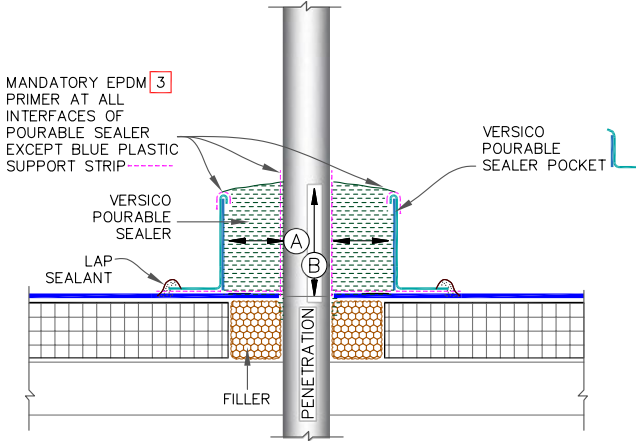


OUTSIDE CORNER FLASHING FOR PROJECTS WITH 90-MIL MEMBRANE OR 25 / 30 YEAR WARRANTIES

- EPDM MEMBRANE
- APPROVED SUBSTRATE
- SEE NOTE(S)



THERMOSET MEMBRANE EPDM



NOTES:

1. THE MAXIMUM ALLOWABLE SURFACE TEMPERATURE OF THE PENETRATION SHALL NOT EXCEED 180° F (82° C).
2. ALL DEBRIS (PAINT, RUST, LEAD, OTHER FLASHINGS, ETC.) MUST BE REMOVED FROM THE PENETRATION.
3. ALL SURFACES MUST BE PRIMED WITH EPDM PRIMER PRIOR TO APPLYING POURABLE SEALER. DO NOT PRIME THE BLUE PLASTIC SUPPORT STRIP.
4. POURABLE SEALER MUST COMPLETELY FILL POURABLE SEALER POCKET TO PREVENT PONDING OF WATER.
5. POURABLE SEALER MUST CONTACT PRIMED QUICK-APPLIED UNCURED EPDM FLASHING AND DECK MEMBRANE.
6. SECUREMENT IS REQUIRED FOR POURABLE SEALER POCKETS WHICH ARE GREATER THAN 18" (46cm) IN DIAMETER. REFER TO SPECIFICATIONS.
7. ON MECHANICALLY-FASTENED ROOFING SYSTEMS, ADDITIONAL MEMBRANE SECUREMENT IS REQUIRED (SIMILAR TO [DETAIL VGMA-8.1](#)) REGARDLESS OF SIZE OR DIAMETER.
8. MINIMUM 1" (2.5cm) CLEARANCE REQUIRED BETWEEN PENETRATIONS.

DIMENSIONS		cm	
(A)	1"	2.5	MIN.
(B)	2"	5	MIN.

MAXIMUM WARRANTY: 20 YEARS



QUICK-APPLIED  
POURABLE SEALER  
POCKET

— EPDM MEMBRANE

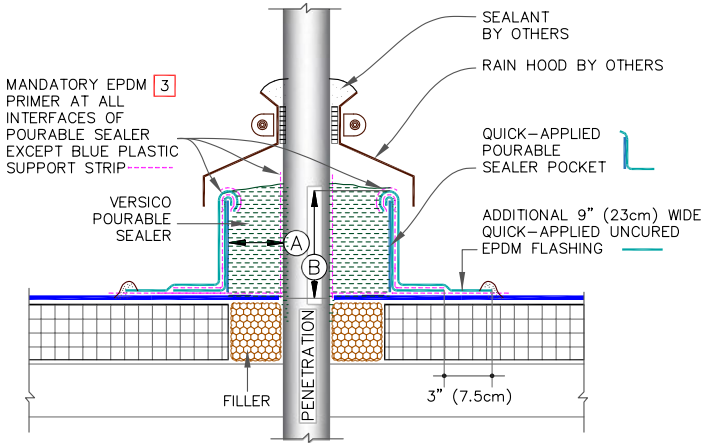
— APPROVED SUBSTRATE

0 — SEE NOTE(S)

THERMOSET  
ROOFING SYSTEM

VGC-16.1

THERMOSET MEMBRANE EPDM



NOTES:

1. THE MAXIMUM ALLOWABLE SURFACE TEMPERATURE OF THE PENETRATION SHALL NOT EXCEED 180° F (82° C).
2. ALL DEBRIS (PAINT, RUST, LEAD, OTHER FLASHINGS, ETC.) MUST BE REMOVED FROM THE PENETRATION.
3. ALL SURFACES MUST BE PRIMED WITH EPDM PRIMER PRIOR TO APPLYING POURABLE SEALER. DO NOT PRIME THE BLUE PLASTIC SUPPORT STRIP.
4. POURABLE SEALER MUST COMPLETELY FILL POURABLE SEALER POCKET TO PREVENT PONDING OF WATER.
5. POURABLE SEALER MUST CONTACT PRIMED QUICK-APPLIED UNCURED EPDM FLASHING AND DECK MEMBRANE.
6. SECUREMENT IS REQUIRED FOR POURABLE SEALER POCKETS WHICH ARE GREATER THAN 18" (46cm) IN DIAMETER. REFER TO SPECIFICATIONS.
7. ON MECHANICALLY-FASTENED ROOFING SYSTEMS, ADDITIONAL MEMBRANE SECUREMENT IS REQUIRED (SIMILAR TO [DETAIL VGMA-8.1](#)) REGARDLESS OF SIZE OR DIAMETER.
8. MINIMUM 1" (2.5cm) CLEARANCE REQUIRED BETWEEN PENETRATIONS.

MAXIMUM WARRANTY: 30 YEARS

DIMENSIONS	cm	
(A)	1"	2.5 MIN.
(B)	2"	5 MIN.



QUICK-APPLIED POURABLE SEALER POCKET (25/30 YEAR WARRANTIES)

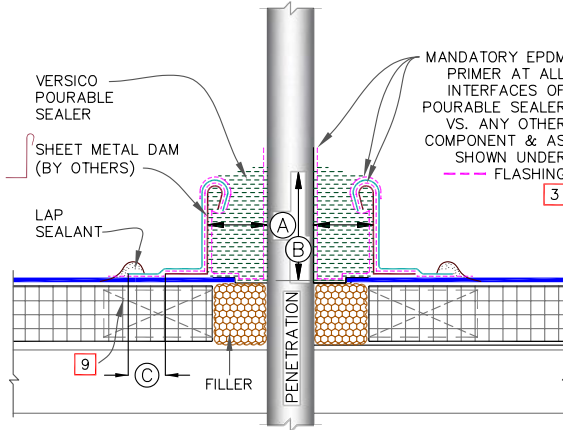
— EPDM MEMBRANE  
 APPROVED SUBSTRATE  
0 → SEE NOTE(S)

THERMOSET ROOFING SYSTEM

VGC-16.1A

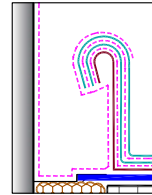
THERMOSET MEMBRANE

EPDM



NOTES:

1. THE MAXIMUM ALLOWABLE SURFACE TEMPERATURE OF THE PENETRATION SHALL NOT EXCEED 180° F (82° C).
2. ALL DEBRIS (PAINT, RUST, LEAD, OTHER FLASHINGS, ETC.) MUST BE REMOVED FROM THE PENETRATION.
3. ALL SURFACES MUST BE PRIMED WITH EPDM PRIMER PRIOR TO APPLYING POURABLE SEALER.
4. POURABLE SEALER MUST COMPLETELY FILL POURABLE SEALER POCKET TO PREVENT PONDING OF WATER.
5. POURABLE SEALER MUST CONTACT PRIMED QUICK-APPLIED UNCURED EPDM FLASHING AND DECK MEMBRANE.
6. SECUREMENT IS REQUIRED FOR POURABLE SEALER POCKETS WHICH ARE GREATER THAN 18" (46cm) IN DIAMETER. REFER TO SPECIFICATIONS.
7. ON MECHANICALLY-FASTENED ROOFING SYSTEMS, ADDITIONAL MEMBRANE SECUREMENT IS REQUIRED (SIMILAR TO [DETAIL\\_VGMA-8.1](#)) REGARDLESS OF SIZE AND DIAMETER, UNLESS WOOD NAILERS ARE PRESENT.
8. DECK FLANGE MUST BE CONTINUOUS WITH ROUNDED CORNERS.
9. WHEN ANY ONE SIDE OF THE FIELD FABRICATED POURABLE SEALER POCKET EXCEEDS 12" (30cm), USE WOOD BLOCKING TO ANCHOR SHEET METAL.
10. MINIMUM 1" (2.5cm) CLEARANCE REQUIRED BETWEEN PENETRATIONS.



MANDATORY EPDM PRIMER AT ALL INTERFACES OF POURABLE SEALER VS. ANY OTHER COMPONENT & AS SHOWN UNDER

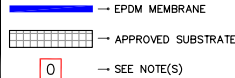
--- FLASHING

DIMENSIONS		cm	
(A)	1"	2.5	MIN.
(B)	2"	5	MIN.
(C)	3"	7.5	

MAXIMUM WARRANTY: 20 YEARS



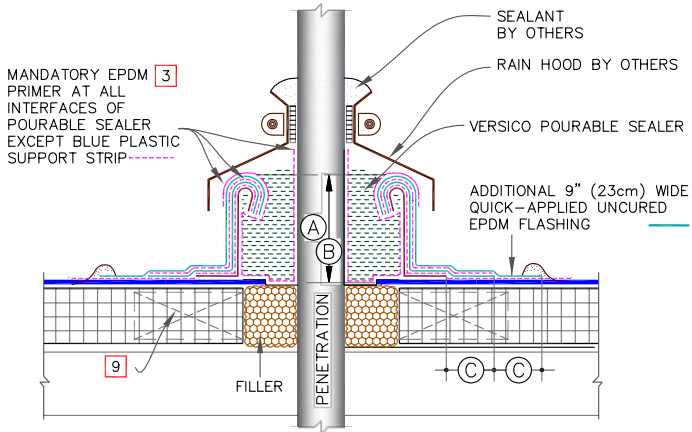
FIELD FABRICATED  
POURABLE SEALER  
POCKET



THERMOSET  
ROOFING SYSTEM

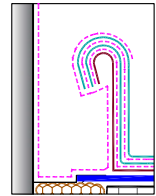
VGC-16.2

THERMOSET MEMBRANE EPDM



NOTES:

1. THE MAXIMUM ALLOWABLE SURFACE TEMPERATURE OF THE PENETRATION SHALL NOT EXCEED 180° F (82° C).
2. ALL DEBRIS (PAINT, RUST, LEAD, OTHER FLASHINGS, ETC.) MUST BE REMOVED FROM THE PENETRATION.
3. ALL SURFACES MUST BE PRIMED WITH EPDM PRIMER PRIOR TO APPLYING POURABLE SEALER.
4. POURABLE SEALER MUST COMPLETELY FILL POURABLE SEALER POCKET TO PREVENT PONDING OF WATER.
5. POURABLE SEALER MUST CONTACT PRIMED QUICK-APPLIED UNCURED EPDM FLASHING AND DECK MEMBRANE.
6. SECUREMENT IS REQUIRED FOR POURABLE SEALER POCKETS WHICH ARE GREATER THAN 18" (46cm) IN DIAMETER. REFER TO SPECIFICATIONS.
7. ON MECHANICALLY-FASTENED ROOFING SYSTEMS, ADDITIONAL MEMBRANE SECUREMENT IS REQUIRED (SIMILAR TO [DETAIL VGMA-8.1](#)) REGARDLESS OF SIZE AND DIAMETER, UNLESS WOOD NAILERS ARE PRESENT.
8. DECK FLANGE MUST BE CONTINUOUS WITH ROUNDED CORNERS.
9. WHEN ANY ONE SIDE OF THE FIELD FABRICATED POURABLE SEALER POCKET EXCEEDS 12" (30cm), USE WOOD BLOCKING TO ANCHOR SHEET METAL.
10. MINIMUM 1" (2.5cm) CLEARANCE REQUIRED BETWEEN PENETRATIONS.



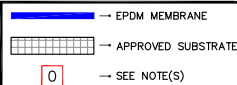
MANDATORY EPDM PRIMER AT ALL INTERFACES OF POURABLE SEALER VS. ANY OTHER COMPONENT & AS SHOWN UNDER --- FLASHING

DIMENSIONS	cm	
(A)	1"	2.5 MIN.
(B)	2"	5 MIN.
(C)	3"	7.5

MAXIMUM WARRANTY: 30 YEARS



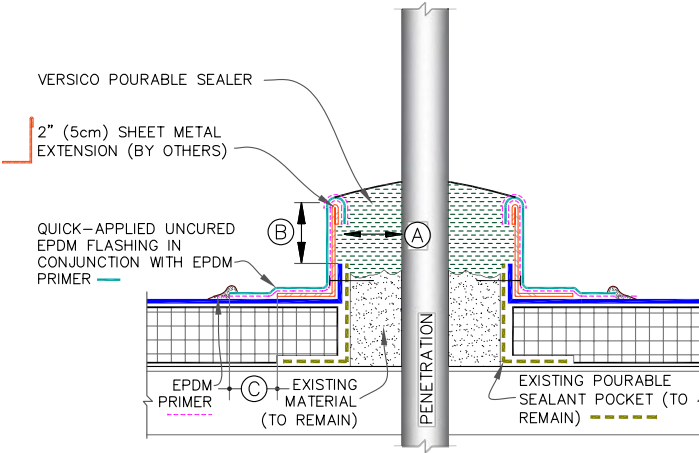
FIELD FABRICATED POURABLE SEALER POCKET (25/30 YEAR WARRANTIES)



THERMOSET ROOFING SYSTEM  
VGC-16.2A

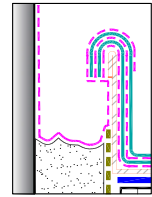
THERMOSET MEMBRANE

EPDM



NOTES:

1. THE MAXIMUM ALLOWABLE SURFACE TEMPERATURE OF THE PENETRATION SHALL NOT EXCEED 180° F (82° C).
2. ALL DEBRIS (PAINT, RUST, LEAD, OTHER FLASHINGS, ETC.) MUST BE REMOVED FROM THE PENETRATION.
3. ALL SURFACES MUST BE PRIMED WITH EPDM PRIMER PRIOR TO APPLYING POURABLE SEALER.
4. POURABLE SEALER MUST COMPLETELY FILL POURABLE SEALER POCKET TO PREVENT PONDING OF WATER.
5. POURABLE SEALER MUST CONTACT PRIMED QUICK-APPLIED UNCURED EPDM FLASHING.
6. SHAPE METAL DAM TO FIT EXISTING PITCH POCKET.
7. SECUREMENT IS REQUIRED FOR POURABLE SEALER POCKETS WHICH ARE GREATER THAN 18" (46cm) IN DIAMETER. REFER TO SPECIFICATIONS.
8. ON MECHANICALLY-FASTENED ROOFING SYSTEMS, ADDITIONAL MEMBRANE SECUREMENT IS REQUIRED (SIMILAR TO **DETAIL VGMA-8.1**) REGARDLESS OF SIZE OR DIAMETER.
9. MINIMUM 1" (2.5cm) CLEARANCE REQUIRED BETWEEN PENETRATIONS.



MANDATORY EPDM PRIMER AT ALL INTERFACES OF POURABLE SEALER

DIMENSIONS		cm	
(A)	1"	2.5	MIN.
(B)	2"	5	MIN.
(C)	3"	7.5	

MAXIMUM WARRANTY: 20 YEARS

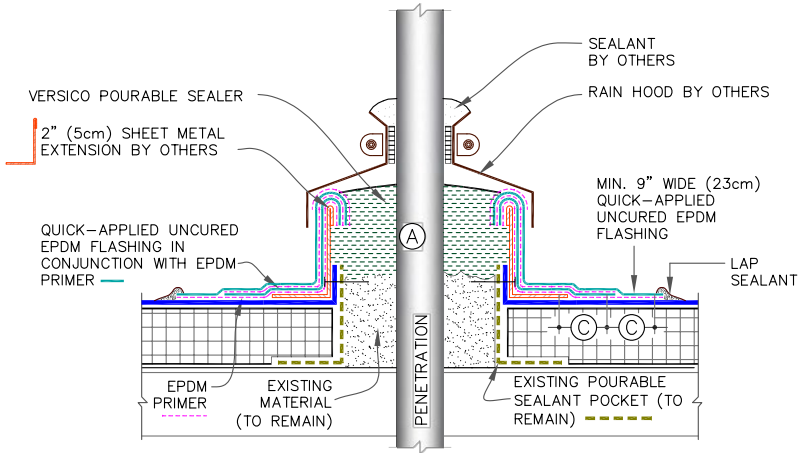


EXTENDED POURABLE SEALER POCKET



THERMOSET ROOFING SYSTEM  
VGC-16.3

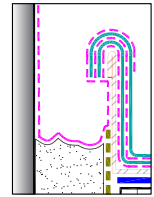
THERMOSET MEMBRANE EPDM



NOTES:

1. THE MAXIMUM ALLOWABLE SURFACE TEMPERATURE OF THE PENETRATION SHALL NOT EXCEED 180° F (82° C).
2. ALL DEBRIS (PAINT, RUST, LEAD, OTHER FLASHINGS, ETC.) MUST BE REMOVED FROM THE PENETRATION.
3. ALL SURFACES MUST BE PRIMED WITH EPDM PRIMER PRIOR TO APPLYING POURABLE SEALER.
4. POURABLE SEALER MUST COMPLETELY FILL POURABLE SEALER POCKET TO PREVENT PONDING OF WATER.
5. POURABLE SEALER MUST CONTACT PRIMED QUICK-APPLIED UNCURED EPDM FLASHING.
6. SHAPE METAL DAM TO FIT EXISTING PITCH POCKET.
7. SECUREMENT IS REQUIRED FOR POURABLE SEALER POCKETS WHICH ARE GREATER THAN 18" (46cm) IN DIAMETER. REFER TO SPECIFICATIONS.
8. ON MECHANICALLY-FASTENED ROOFING SYSTEMS, ADDITIONAL MEMBRANE SECUREMENT IS REQUIRED (SIMILAR TO [DETAIL VGMA-8.1](#)) REGARDLESS OF SIZE OR DIAMETER.
9. MINIMUM 1" (2.5cm) CLEARANCE REQUIRED BETWEEN PENETRATIONS.

MAXIMUM WARRANTY: 30 YEARS



MANDATORY EPDM PRIMER AT ALL INTERFACES OF POURABLE SEALER

DIMENSIONS	cm	
(A)	1"	2.5 MIN.
(B)	2"	5 MIN.
(C)	3"	7.5

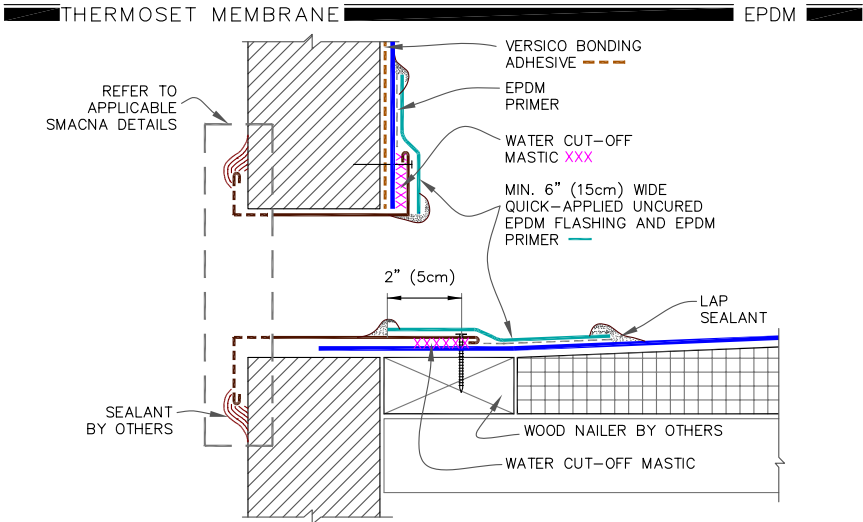


EXTENDED POURABLE SEALER POCKET (25/30 YEAR WARRANTIES)



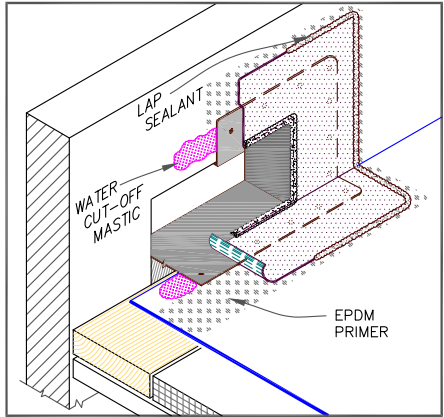
THERMOSET ROOFING SYSTEM  
VGC-16.3A





NOTES:

1. METAL SCUPPER BOX MUST HAVE CONTINUOUS FLANGES WITH ROUNDED CORNERS. SOLDER ALL SCUPPER SEAMS WATER-TIGHT.
2. WATER CUT-OFF MASTIC UNDER SCUPPER FLANGE MUST BE UNDER CONSTANT COMPRESSION.
3. CLEAN METAL FLANGE WITH WEATHERED MEMBRANE CLEANER; AND ALLOW TO DRY.



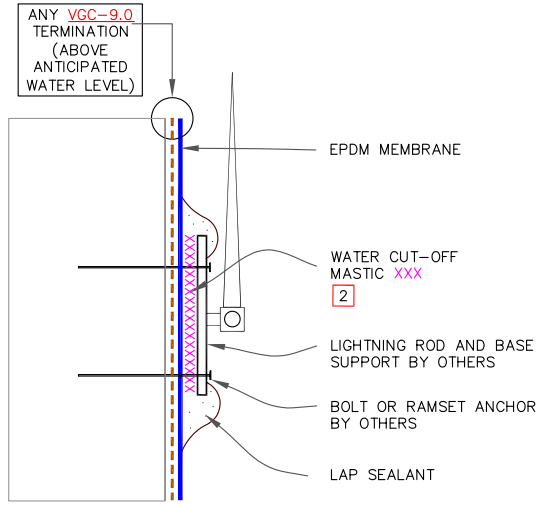
MAXIMUM WARRANTY: 30 YEARS



METAL SCUPPER AT DECK	-- EPDM MEMBRANE
	-- APPROVED SUBSTRATE
	-- SEE NOTE(S)

THERMOSET ROOFING SYSTEM
VGC-18.1

THERMOSET MEMBRANE EPDM



NOTES:

1. DETAIL MAY BE USED FOR ANY FASTENER PENETRATION (E.G., ACCESS LADDER, ANCHOR SUPPORT TO PARAPET).
2. WATER CUT-OFF MASTIC MUST BE UNDER CONSTANT COMPRESSION.
3. COMPLY WITH ZONING ORDINANCE AND LOCAL CODES FOR MOUNTING A LIGHTNING SYSTEM.
4. DETAIL UNACCEPTABLE FOR HORIZONTAL APPLICATIONS ON ROOF DECK.

MAXIMUM WARRANTY: 30 YEARS



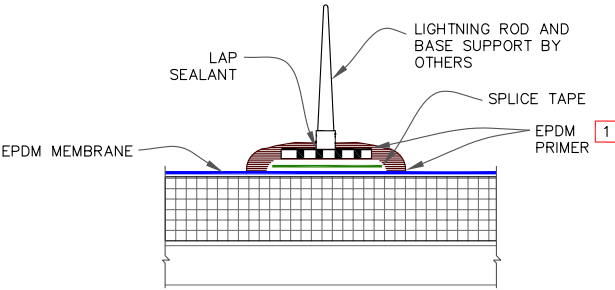
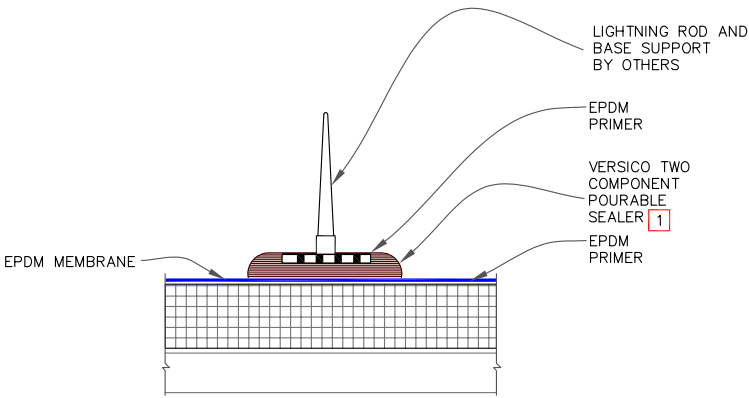
LIGHTNING ROD AT PARAPET (VERTICAL ATTACHMENT)

— EPDM MEMBRANE  
 APPROVED SUBSTRATE  
0 → SEE NOTE(S)

THERMOSET ROOFING SYSTEM

VGC-20.1

THERMOSET MEMBRANE EPDM



NOTES:

1. VERSICO TWO COMPONENT POURABLE SEALER IN CONJUNCTION WITH EPDM PRIMER, OR UNIVERSAL SINGLE-PLY SEALANT.
2. CLEAN EXPOSED MEMBRANE WITH WEATHERED MEMBRANE CLEANER AND ALLOW TO DRY.
3. PRIOR TO THE APPLICATION OF POURABLE SEALER, APPLY EPDM PRIMER TO THE MEMBRANE AND LIGHTNING ROD BASE ACHIEVING A VERY THIN EVEN COAT ON BOTH SURFACES. ALLOW PRIMER TO DRY UNTIL IT IS TACK FREE.
4. COMPLY WITH ZONING ORDNANCE AND LOCAL CODES FOR MOUNTING A LIGHTNING SYSTEM.

MAXIMUM WARRANTY: 30 YEARS

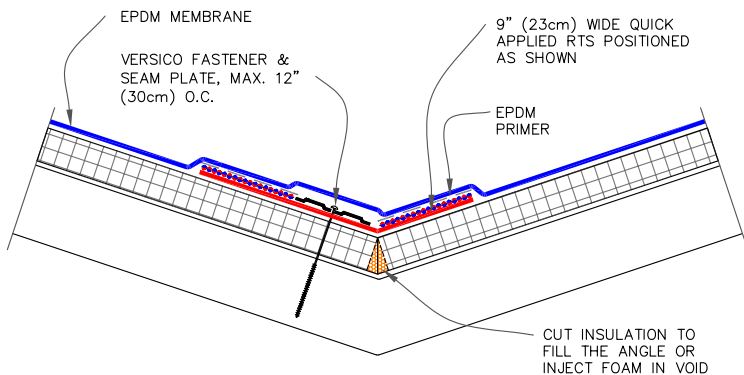


LIGHTNING ROD AT DECK LEVEL



THERMOSET ROOFING SYSTEM  
VGC-20.2

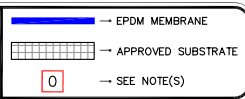
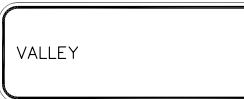
THERMOSET MEMBRANE EPDM



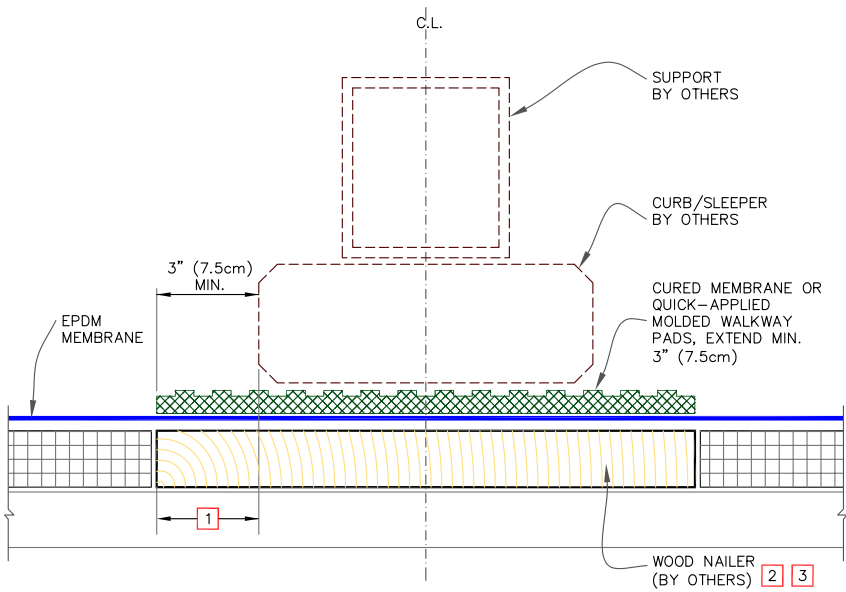
NOTES:

1. DETAIL FOR VERSIGARD/VERSIGARD-WHITE ADHERED AND VERSIGARD MECHANICALLY-FASTENED ROOFING SYSTEMS WHEN SLOPE AT VALLEY EXCEEDS 2" (5cm) IN ONE HORIZONTAL FOOT.
2. ON MECHANICALLY-FASTENED ROOFING SYSTEMS, HPX FASTENERS AND POLYMER SEAMS ARE REQUIRED OVER STEEL DECKS.
3. EPDM PRIMER MUST BE APPLIED TO BACK SIDE OF DECK MEMBRANE PRIOR TO COMPLETING SPLICE TO QUICK APPLIED RTS.

MAXIMUM WARRANTY: 30 YEARS



THERMOSET MEMBRANE      EPDM






NOTES:

1. SLEEPER MUST BE LARGE ENOUGH TO SUPPORT WEIGHT OF EQUIPMENT WITHOUT INDENTING INSULATION. EXTEND WOOD NAILER OUT AS REQUIRED BY STRUCTURAL ENGINEER TO DISTRIBUTE SUBJECT LOAD OR AT LEAST EXTEND OUT MIN. 3" (7.5cm).
2. ENSURE SCREW/ANCHOR HEADS IN TOP SURFACE OF WOOD BLOCKING ARE RECESSED TO PROTECT MEMBRANE.
3. WOOD NAILERS REQUIRED IF WEIGHT OF SLEEPER MAY INDENT OR DAMAGE INSULATION.
4. CONSULT STRUCTURAL ENGINEER AND/OR SPECIFIER TO AVOID WATER PONDING DUE TO DECK DEFLECTION.

MAXIMUM WARRANTY: 30 YEARS

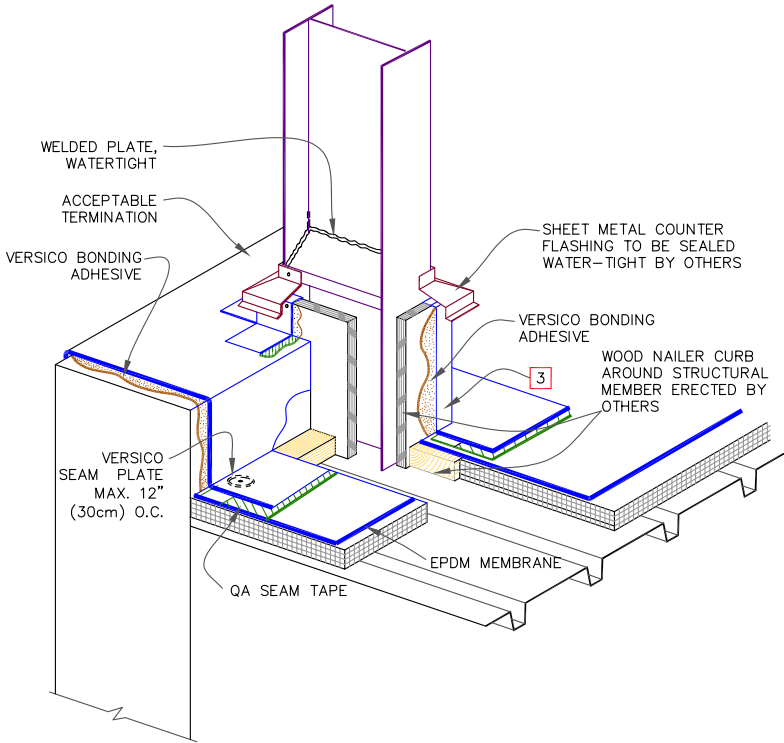


SLEEPER

	→ EPDM MEMBRANE
	→ APPROVED SUBSTRATE
	→ SEE NOTE(S)

THERMOSET ROOFING SYSTEM
VGC-24

THERMOSET MEMBRANE EPDM



NOTES:

1. FOR PARAPET FLASHING, REFER TO DETAIL(S) [VGC-12.](#)
2. FOR CURB FLASHING, REFER TO DETAIL(S) [VGC-5.](#)
3. FOR CORNER APPLICATION, REFER TO DETAIL(S) [VGC-15.](#)

MAXIMUM WARRANTY: 30 YEARS



I-BEAM PENETRATION

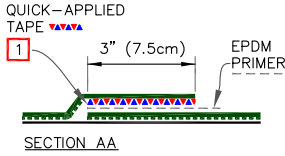
	→ EPDM MEMBRANE
	→ APPROVED SUBSTRATE
	→ SEE NOTE(S)

THERMOSET ROOFING SYSTEM  
VGC-30

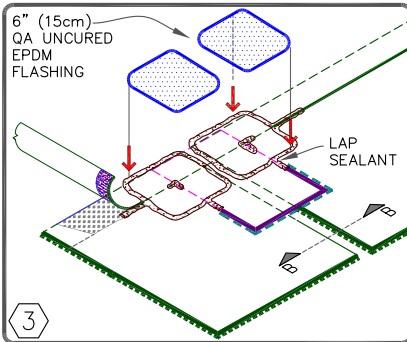
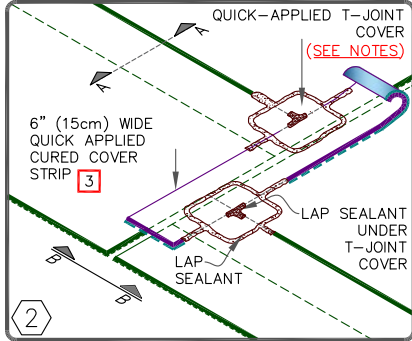
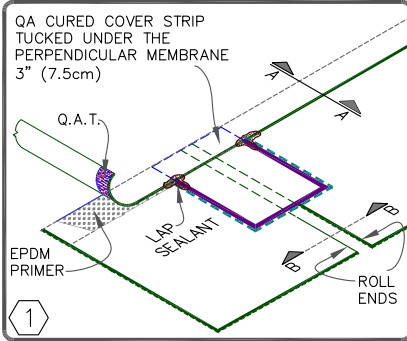
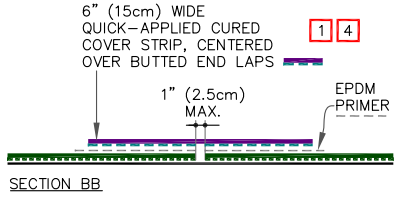
THERMOSET MEMBRANE

QA EPDM

SIDE LAP SPLICE



END LAP SPLICE



NOTES:

1. APPLY LAP SEALANT ALONG THE EDGE OF THE MEMBRANE SPLICE (UNDER THE 6"x6" T-JOINT COVER) COVERING THE EXPOSED SPLICE TAPE 1/2" (1.5cm) IN EACH DIRECTION FROM THE SPLICE INTERSECTION.
2. APPLY A 6" (15cm) T-JOINT COVER OR QUICK-APPLIED UNCURED EPDM FLASHING AND LAP SEAL THE EDGES.
3. QUICK-APPLIED OVERLAYMENT STRIP CAN BE USED WHEN QA IS OVERLAPPED A MINIMUM 1" (2.5cm) AND ELIMINATES THE NEED FOR T-JOINT COVERS.



QA EPDM MEMBRANE SPLICES - PROJECTS WITH 10, 15 AND 20 YEAR WARRANTIES

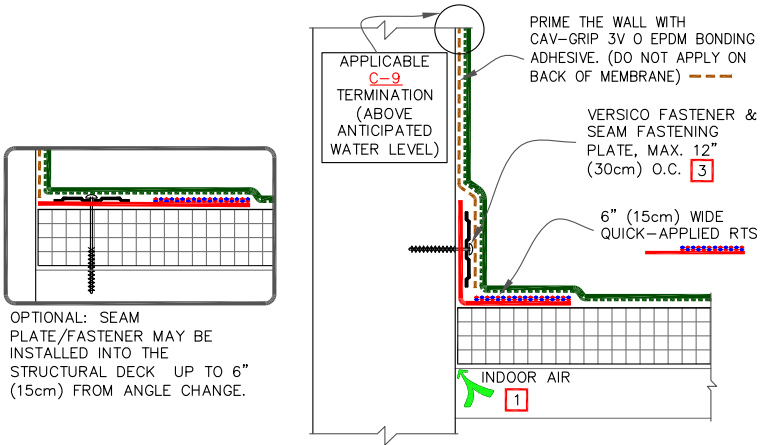


QUICK APPLIED TECHNOLOGY

QA-2

THERMOSET MEMBRANE

QA EPDM

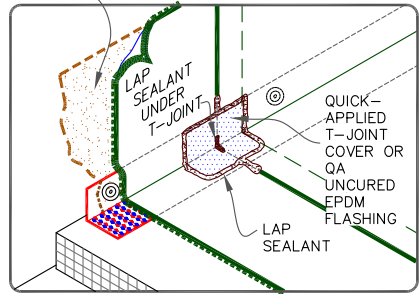


OPTIONAL: SEAM PLATE/FASTENER MAY BE INSTALLED INTO THE STRUCTURAL DECK UP TO 6" (15cm) FROM ANGLE CHANGE.

NOTES:

1. REFER TO SPEC. SUPPLEMENT SECTIONS:
  - 1.1. G-01-11: TO BLOCK INDOOR AIR INFILTRATION AND HUMIDITY AT THE JUNCTION.
  - 1.2. G-08-11: WHERE ROOF SYSTEM IS DESIGNED WITH A VAPOR RETARDER.
2. FOR CORNERS AND RTS APPLICATION, REFER TO DETAILS VGC-15.1 OR VGC-15.2.
3. FASTENERS AND PLATES REQUIRED AT 6" (7.5cm) O.C. FOR WARRANTY WIND SPEEDS EXCEEDING 90 MPH.

CAV-GRIP 3V OR EPDM BONDING ADHESIVE



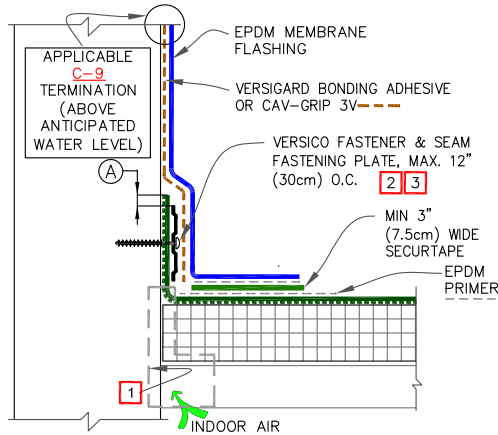
PARAPET / CURB WITH QUICK-APPLIED RTS (VERTICAL)

	EPDM MEMBRANE
	APPROVED SUBSTRATE
	SEE NOTE(S)

QUICK APPLIED TECHNOLOGY

QA-12.1



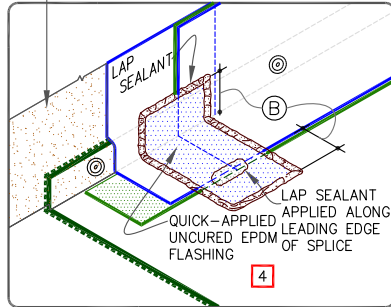


DIMENSION	cm	
(A)	1/8"–1"	0.5–2.5
(B)	3"	7.5

NOTES:

1. REFER TO SPEC. SUPPLEMENT SECTIONS:
  - 1.1. **G-01-18:** TO BLOCK INDOOR AIR INFILTRATION AND HUMIDITY AT THE JUNCTION.
  - 1.2. **G-08-18:** WHERE ROOF SYSTEM IS DESIGNED WITH A VAPOR RETARDER.
2. SEAM FASTENING PLATE/FASTENER MAY BE INSTALLED INTO THE STRUCTURAL DECK ALSO.
3. FASTENERS AND PLATES REQUIRED AT 6" (7.5cm) O.C. FOR WARRANTY WIND SPEEDS EXCEEDING 90 MPH.
4. APPLY QUICK-APPLIED UNCURED EPDM FLASHING COVERING VERTICAL SPLICE INTERSECTIONS.

VERSICARD BONDING ADHESIVE OR CAV-GRIP 3V

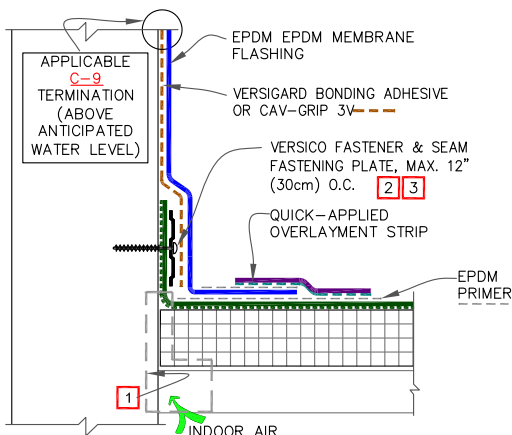


PARAPET/CURB FLASHING WITH SEPARATE REGULAR EPDM FLASHING

— EPDM MEMBRANE  
 APPROVED SUBSTRATE  
0 — SEE NOTE(S)

QUICK APPLIED TECHNOLOGY

QA-12.2

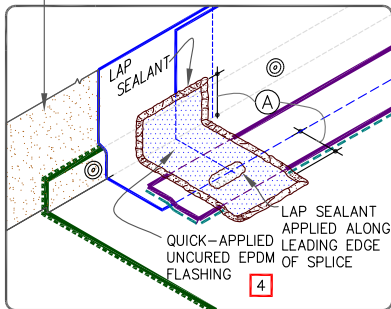


NOTES:

1. REFER TO [SPEC. SUPPLEMENT SECTIONS:](#)
  - 1.1. [G-01-18](#): TO BLOCK INDOOR AIR INFILTRATION AND HUMIDITY AT THE JUNCTION.
  - 1.2. [G-08-18](#): WHERE ROOF SYSTEM IS DESIGNED WITH A VAPOR RETARDER.
2. SEAM FASTENING PLATE/FASTENER MAY BE INSTALLED INTO THE STRUCTURAL DECK ALSO.
3. FASTENERS AND PLATES REQUIRED AT 6" (7.5cm) O.C. FOR WARRANTY WIND SPEEDS EXCEEDING 90 MPH.
4. APPLY QUICK-APPLIED UNCURED EPDM FLASHING COVERING VERTICAL SPLICE INTERSECTIONS.

VERSIGARD BONDING ADHESIVE OR CAV-GRIP 3V

DIMENSIONS		cm
(A)	3"	7.5

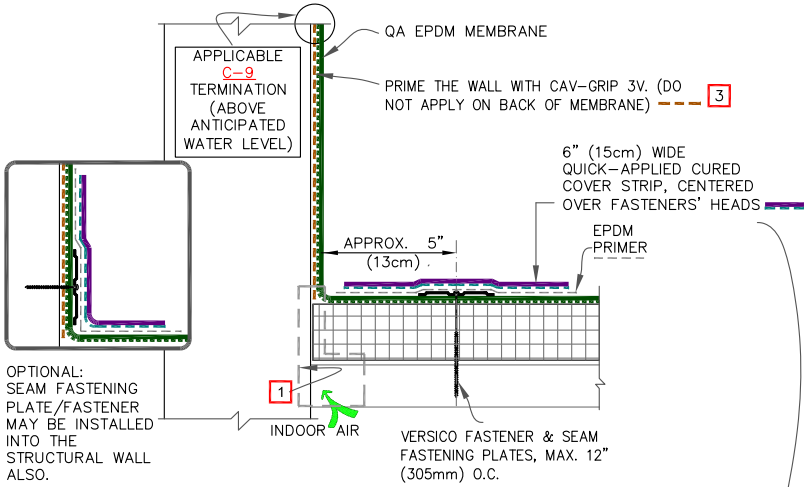


PARAPET/CURB WITH SEPARATE QA EPDM

- EPDM MEMBRANE
- APPROVED SUBSTRATE
- SEE NOTE(S)

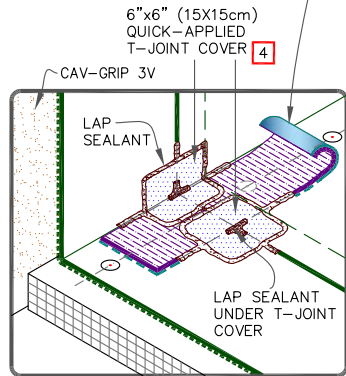
QUICK APPLIED TECHNOLOGY

QA-12.3

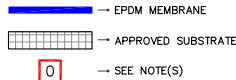


NOTES:

1. REFER TO [SPEC. SUPPLEMENT SECTIONS](#)
  - 1.1. [G-01-18](#): TO BLOCK INDOOR AIR INFILTRATION AND HUMIDITY AT THE JUNCTION.
  - 1.2. [G-08-18](#): WHERE ROOF SYSTEM IS DESIGNED WITH A VAPOR RETARDER.
2. T-JOINTS CAN BE ELIMINATED WHEN QUICK-APPLIED OVERLAYMENT STRIP IS USED.
3. FASTENERS AND PLATES REQUIRED AT 6" (7.52cm) O.C. FOR WARRANTY WIND SPEEDS EXCEEDING 90 MPH.



PARAPET/CURB FLASHING



QUICK APPLIED TECHNOLOGY

QA-12.4

## LIQUISEAL® Liquid Flashing

The information contained in this supplement serves as a criteria for Specifiers and Authorized Contractors regarding the design and installation of Versico Roofing Systems and use of liquid flashing to complete tie-in details and flash unusual and round penetrations. In addition to the information contained herein, attachment details 1 through 3 are included to provide the Specifiers and Authorized Contractors with quick access to specific information. Specifiers and Authorized Contractors are advised to reference all applicable details included with this spec supplement.

### A. General

LIQUISEAL Liquid Flashing is a two-component, polyurethane-based system which creates a reinforced, cold-applied liquid flashing that is compatible with all Versico EPDM membranes. LIQUISEAL Liquid Flashing is designed for use with oddly shaped penetrations and tying together dissimilar roofing systems without building an isolation curb or impeding drainage. LIQUISEAL Liquid Flashing is UV- and color-stable, solvent-free, low-VOC, and virtually odorless.

LIQUISEAL Liquid Flashing consists of the following products:

1. LIQUISEAL Resin – Two-component polyurethane-based resin, when mixed will be white or gray in color. Available in 0.56 gallon (2.1 l) sachets and 1.03 gallon (3.9 l) pails. Coverage rate of 13.6 sq. ft. (1.26 meters square) per gallon (3.8 l). Resin is also available in gray.
2. LIQUISEAL Fleece – 50-mil thick, white, Non-woven, needle-punched polyester fabric reinforcement. Available in rolls of 13.8" (350 mm) and 27" (685 mm) widths by 164'-0" (50 m) length.
3. LIQUISEAL Metal Primer – A solvent-free, high solids, two-part, cold-applied polyurethane resin. Used to prime metal, and other non-porous surfaces. Available in 0.25 gallon (0.9 l) sachets. Coverage rate of 25 sq. ft. (2.3 square meters) per 0.25 gallon (0.9 l) sachet.
4. LIQUISEAL Concrete & Masonry Primer – A solvent-free, two-part, cold-applied liquid epoxy resin. Used with Surfacing Sand to prime concrete, masonry, and other porous surfaces. Available in 0.25 gallon (0.9 l) sachets and 1.1 gallon (4.2 l) pails. Coverage rate of 19 sq. ft. (1.76 square meters) per 0.25 gallon (0.9 l) sachet.
5. LIQUISEAL Spiral Mixing Agitator – A 3" (7.62 cm) long steel spiral agitator with a ½" (1.27 cm) hex drive for use with handheld drills and mixers. Used to properly mix resin.
6. LIQUISEAL Surfacing Sand – Kiln-dried #00 - #35 graded sand suitable for broadcasting into LIQUISEAL Liquid Flashing Concrete & Masonry Primers for use in substrate preparation. Used with Concrete & Masonry Primer to promote proper adhesion and mechanical bond. Packaged in 50lb (22.6 kg) bags.

### B. Warranty

Projects meeting the conditions below can be eligible for a maximum 20 year System Warranty with wind speed coverage up to 90 mph peak gusts. Projects requiring extended wind speed coverage warranty must be submitted to Versico for review prior to installation.

### C. Precautions

1. Always store in a cool, dry location between 35°F – 80°F (1.7°C – 27°C). Do not store in direct sunlight. Approximate shelf life is 12 months with proper storage. Best practice is to store material at 65°F – 70°F (18°C – 21°C) for 24 hours before use.
2. Do not install if ambient temperature is below 40°F (4°C) or above 90°F (32°C).
3. Do not break down work packs into smaller quantities; mix the entire work pack.

4. Prepare surfaces and pre-cut all fleece before mixing resin. Pot life will be shorter as ambient temperature rises.
5. Use appropriate safety glasses and protect hands and wrists by wearing gloves.

### D. Installation

1. Surface Preparation: Prepare all substrates by removing any irregularities and any loose or foreign material such as dirt, water, grease, oil, lacquers, or release agents. Prepare membrane by sanding with 60-grit sandpaper.
2. Metal Primer Application:
  - a. All metal surfaces must be prepared using a grinder. Do not use a wire brush. Ensure that all metal surfaces are ground down to expose bare metal.
  - b. Remove bag from the aluminum packaging. Knead cream-colored resin (Component A) thoroughly until a uniform color is achieved.
  - c. Pull away the rubber cord separating the two components so that Components A and B can be mixed together. Knead the bag quickly and thoroughly for approximately 1 minute so that a homogenous primer is formed. The primer should be a uniform color, with no light or dark streaks present.
  - d. After the primer is mixed, cut off one corner of the bag and pour all primer into a clean, new mixing pail. Working quickly, apply approximately 25 sq. ft. (2.3 square meters) per 0.25 gallon (0.9 l) sachet. The primer should be rolled or brushed evenly onto the surface in a cross-directional method to fully cover the substrate in one application. Allow to set for approximately 3 hours or until fully cured prior to application of the LIQUISEAL Liquid Flashing Resin.

Note: LIQUISEAL Liquid Flashing Resin must be applied when the primer is completely dry and without tack. Do not apply LIQUISEAL Liquid Flashing Resin to tacky or wet primer.

3. Concrete & Masonry Primer Application:
  - a. Prepare all substrates by removing any irregularities and any loose or foreign materials such as dirt, water, grease, oil, lacquers, or release agents using a grinder. All concrete substrates should be dry and fully cured.
  - b. Remove bag from the aluminum packaging. Knead translucent yellow resin (Component A) thoroughly until a uniform color is achieved.
  - c. Pull away the rubber cord separating the two components so that Components A and B can be mixed together. Knead the bag quickly and thoroughly for approximately 1 minute so that a homogenous primer is formed. The primer should be a uniform color, with no light or dark streaks present.
  - d. After the primer is mixed, cut off one corner of the bag and pour all primer into a clean, new mixing pail. Working quickly, apply at a rate of approximately 19 sq. ft. (1.76 square meters) per 0.25 gallon (0.9 l) sachet. The primer should be rolled or brushed evenly onto the surface in a cross directional method to fully cover the substrate in one application.
  - e. After applying the primer, immediately broadcast LIQUISEAL Liquid Flashing Concrete & Masonry Preparation Sand into the uncured primer at the approximate rate of 50 lbs (22.6 kg) per 100 sq. ft. (9.29 square meters). Allow to set for approximately 4 hours or until fully cured prior to application of the LIQUISEAL Liquid Flashing Resin.

- f. In warm climates, higher contents of moisture or vapor within a concrete substrate may cause pin-holing of the primer due to vapor drive. Applying primer later in the day when temperatures are lower can improve this condition.

**NOTE:** LIQUISEAL Liquid Flashing Resin must be applied when the primer is completely dry and without tack. Do not apply LIQUISEAL Liquid Flashing Resin to tacky or wet primer.

4. LIQUISEAL Liquid Flashing Application:
  - a. Apply the appropriate primer to membrane and allow to flash off. Apply appropriate primer to all other surfaces to which flashing will be applied.
  - b. Cut and prepare all reinforcing fleece before mixing resin.
    01. For LIQUISEAL Resin in 1.03 gallon (3.9 l) Pail Packaging
      - i. Mix resin (Component A) with a clean spiral agitator until the liquid is a uniform white color.
      - ii. Add hardener (Component B) to Component A and mix with a spiral agitator for 2 minutes or until both liquids are thoroughly blended.
    02. For LIQUISEAL in 0.25 gallon (0.9 l) Sachet Packaging
      - i. Remove bag from the aluminum packaging.
      - ii. Knead white resin (Component A) thoroughly until a uniform color is achieved.
      - iii. Pull away the rubber cord separating the two components so that Components A and B can be mixed together. Knead the bag quickly and thoroughly for approximately 1 minute so that a homogenous resin is formed. The resin should be a uniform color, with no light or dark streaks present.
      - iv. After the resin is mixed, cut off one corner of the bag and pour entire sachet of resin into a clean, new mixing pail. Working quickly, apply at a rate of approximately 13.6 sq. ft. (1.3 square meter) per gallon (3.8 l).
  - c. Using a nap roller or brush, apply two-thirds of the resin evenly onto the substrate using even strokes.
  - d. Roll the LIQUISEAL Liquid Flashing Fleece directly into the LIQUISEAL Liquid Flashing Resin, ensuring that the SMOOTH SIDE IS FACING UP (natural unrolling procedure) and avoiding folds, wrinkles, and air pockets.
  - e. Apply the remaining one-third of the resin and use the roller or brush to work the resin into the fleece, saturating from the bottom up. All areas of the fleece should be completely saturated with resin.
  - f. Repeat steps 'b through e' again for subsequent layers of resin and flashing as needed for detailing.



Scan here to view Liquid Flashing Installation Videos.

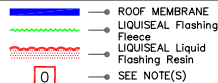
**Notes:**

- The following tables provide recommendations for preparation and priming of substrates and should be used as a guideline for proper adhesion & performance.
- The primer application rate will vary and should be adjusted depending on the substrate. See Product Data Sheets, SDS, Guide Specifications and Details for complete information regarding the suitability, application and handling of products.

INSPECTION		EPDM	TPO	PVC / KEE / HP	METAL SURFACES	MASONRY
A.1	Inspect insulation for wet conditions underneath the roof membrane. Remove & replace wet materials underneath to match in kind.	Y	Y	Y		
A.2	Ensure, membrane or roof assembly is properly secured.	Y	Y	Y		
A.3	Provide additional securement at the base of penetrations, tie-ins or angle changes per details.	Y	Y	Y		
A.4	Ensure, there is no standing water. Remove and dry the work area. Remove dust, debris and wipe the work surfaces clean. Masonry must be completely dry and sound.	Y	Y	Y	Y	Y
A.5	Verify structural integrity of metal objects. Check for broken welds or loose bolts. Verify the thickness of exposed metal after removal of finishes or rust for strength.				Y	
A.6	Ensure, there is no moisture present in the substrate.	Y	Y	Y	Y	Y
A.7	Within the work area, inspect the seams of existing membrane for proper seal.	Y	Y	Y		
A.8	Do not damage structural members, welds or remove any nuts/bolts unless approved by designer.				Y	
CLEANING & SUBSTRATE PREPARATION		EPDM	TPO	PVC / KEE / HP	METAL SURFACES	MASONRY
B.1	Use 60 grit sandpaper to rough up the top surface of the membrane.	Y	Y	Y		
B.2	Use abrasive grinding wheel (a diamond cup wheel is suggested) to expose the bare metal (do not use wire brush). Expose metal around nuts & tighten as needed. Wipe the membrane cleaner.				Y	Y
B.3	Remove dust, clean the surfaces with broom & power blower.	Y	Y	Y	Y	Y
B.4	Wipe the surfaces with <b>VERSICO Membrane Cleaner</b> , (Standard or Low VOC)	Y	Y	Y	Y	
B.5	Use painter's tape to contain flashing resin. Tape shall be set 1/4" to 1/2" (1-1.5cm) beyond the fleece edges.	Y	Y	Y	Y	Y
EXISTING BITUMINOUS ROOFING SUBSTRATES					CONCRETE & MASONRY PRIMER	
C.1	Modified Bitumen Smooth APP Surfaced.	Power wash to remove contaminants.			Y	
C.2	Modified Bitumen Smooth SBS Surfaced.	Power wash to remove contaminants & loose granules				
C.3	Bituminous Roofing – Granular Surfaced.					
C.4	Following bituminous substrates are not acceptable: Aluminum coating, flood coat & aggregate, coal tar pitch roofing – flood coat & aggregate, hot-melt bituminous waterproofing & ethylene-faced bituminous (bituthane) roofing.					



INSPECTION CLEANING & SUBSTRATE PREPARATION (PAGE 1 OF 2)



LIQUID FLASHING

ATTACHMENT 1

METAL SUBSTRATES			METAL PRIMER
D.1	Bare aluminum, lead, copper & zinc.	Grind to remove corrosion, then use membrane cleaner to wipe and clean.	⓪
D.2	Bare steel, galvanized steel.		
D.3	Black pipe, cast iron.	Grind to remove corrosion and coating. Then use membrane cleaner to wipe and clean.	⓪
D.4	Stainless steel.	Grind to achieve rough surface. Then use membrane cleaner to wipe and clean.	⓪
D.5	Kynar finish, ceramic coated, and painted metal.	Grind to remove coating. Then use membrane cleaner to wipe and clean.	⓪
CEMENTITIOUS AND MASONRY SUBSTRATES			MASONRY PRIMER
E.1	Structural & or lightweight structural concrete.	Scarify, shot blast or grind to remove laitance and open up pores	⓪
E.2	Granite, Marble.	Scarify, shot blast, grind to remove polished surface and open up pores	⓪
E.3	Clay brick, terra cotta, tile.	Scarify, shot blast, grind to remove glazed surface and open up pores.	⓪
E.4	Sandstone, limestone, synthetic stone.	Scarify, shot blast, grind to open up pores	⓪
E.5	Porous/air-entrained concrete, concrete masonry block.		
E.6	Repair & leveling mortars.		
GLASS & PLASTIC SUBSTRATES			METAL PRIMER
F.1	Glass.	Sand to abrade surface. Then use membrane cleaner to wipe and clean.	⓪
F.2	Acrylic.		
F.3	Fiberglass.		
F.4	ABS, PVC – Rigid.		

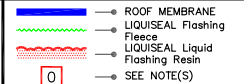
Note: Contact VERSICO for substrate not listed in these tables.

**CAUTION:**

All substrates must be prepared as necessary prior to the application of primers. Surfaces must be free from irregularities, loose, unsound or foreign materials such as rust, dirt, ice, snow, water, grease, oil, release agents, paint, lacquers, coatings, or any other conditions that would be detrimental to adhesion of the primer and resin.



INSPECTION CLEANING & SUBSTRATE PREPARATION (PAGE 2 OF 2)



LIQUID FLASHING

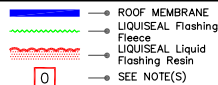
ATTACHMENT 1



LIQUISEAL PRIMER & RESIN APPLICATION		EPDM	TPO	PVC / KEE / HP	METAL SURFACES	MASONRY
G.1	Ensure all surfaces are ready for application of primer prior to mixing, due to limited pot life.	Y	Y		Y	Y
G.2	Mix primer thoroughly, per specifications.	Y	Y		Y	Y
G.3	Apply <a href="#">LIQUISEAL Metal Primer</a> per specifications.	Y			Y	
G.4	Masonry: Apply <a href="#">LIQUISEAL Concrete &amp; Masonry Primer</a> and surfacing sand per specifications.					Y
G.5	Wait for primer to cure per written instructions.	Y			Y	Y
G.6	Apply <a href="#">Low VOC Primer</a> and allow to flash off completely.		Y			
G.7	Cut & dry-fit all fleece prior to mixing resin. Ensure, the fleece is set back from painter's tape, per <a href="#">B.5</a> .	Y	Y	Y	Y	Y
G.8	Mix <a href="#">LIQUISEAL Flashing Resin</a> thoroughly (with spiral agitator if in pail).	Y	Y	Y	Y	Y
G.9	Apply a base layer of <a href="#">LIQUISEAL Flashing Resin</a> ensuring generous coverage of entire substrate.	Y	Y	Y	Y	Y
G.10	Immediately press <a href="#">LIQUISEAL Flashing Fleece</a> into the applied <a href="#">LIQUISEAL Flashing Resin</a> , taking care at corners and crevices.	Y	Y	Y	Y	Y
G.11	Apply a 2nd (top coat) of <a href="#">LIQUISEAL Flashing Resin</a> ensuring the fleece is completely saturated per published coverage rate.	Y	Y	Y	Y	Y

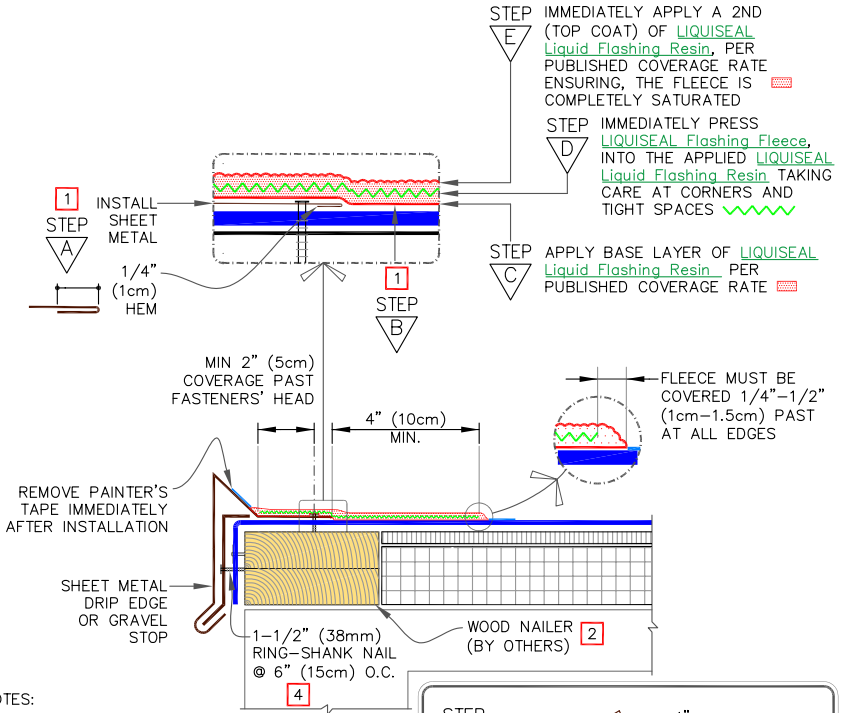


APPLICATION OF  
LIQUISEAL PRIMER &  
RESIN



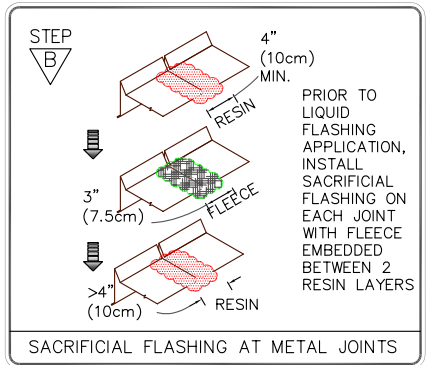
LIQUID FLASHING

ATTACHMENT 2

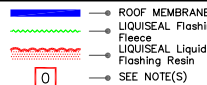


NOTES:

1. REFER TO TABLES ON SHEETS ATTACHMENT 1-2 FOR DETAILED INSPECTION, CLEANING AND PRIMING FOR DIFFERENT MATERIALS WITHIN THE FLASHING AREAS.
2. WOOD NAILER MUST EXTEND PAST TOTAL WIDTH OF SHEET METAL FLANGE.
3. SAME DETAIL APPLIES AT THE TOP OF PARAPET WALL, WHERE FULL COPING IS NOT USED.
4. FASTENERS MUST BE SECURED INTO STRUCTURAL MEMBERS, E.G., CONCRETE, SOLID MASONRY OR WOOD BLOCKING.
5. DETAIL NOT FOR USE ON WARRANTY PROJECTS EXCEEDING 20-YEARS, UNLESS OTHERWISE SPECIFIED.



SHEET METAL DRIP EDGE OR GRAVEL STOP FLASHING

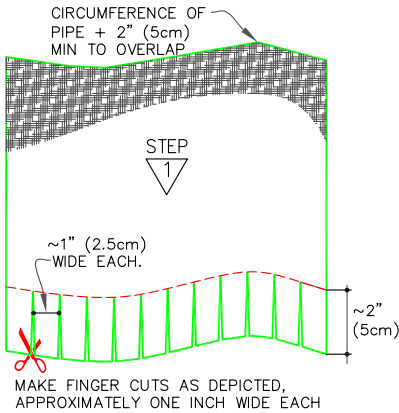


LIQUID FLASHING

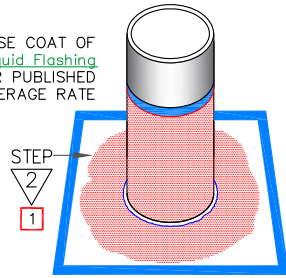
LF-1.1

## LIQUID FLASHING

## EPDM/TPO/PVC

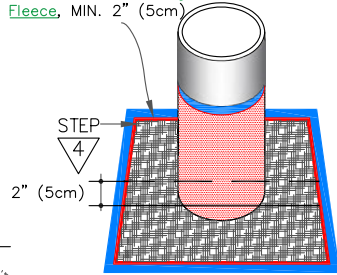
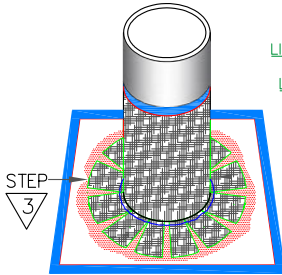


APPLY BASE COAT OF LIQUISEAL Liquid Flashing Resin PER PUBLISHED COVERAGE RATE



APPLY BASE COAT OF LIQUISEAL Liquid Flashing Resin ON HORIZONTAL SURFACES. IMMEDIATELY PRESS FLEECE INTO RESIN AND OVERLAP LIQUISEAL Flashing Fleece, MIN. 2" (5cm)

IMMEDIATELY PRESS LIQUISEAL Flashing Fleece INTO THE APPLIED LIQUISEAL Liquid Flashing Resin. APPLY SECOND COAT OF RESIN. ENSURE ALL ENDS OF FINGERS ARE PROPERLY EMBEDDED.

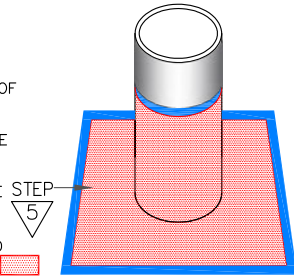


FLEECE MUST BE COVERED 1/4" - 1/2" (1cm - 1.5cm) PAST ALL EDGES

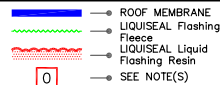
### NOTES:

- FOR MULTIPLE PIPE PENETRATIONS SEE STEP ZERO ON SHEET LF-8.1B AND FOLLOW REST OF THE STEPS AS SHOWN FOR SINGLE PIPE FLASHING.
- REFER TO TABLES ON SHEETS ATTACHMENT 1-2 FOR DETAILED INSPECTION, CLEANING AND PRIMING FOR DIFFERENT MATERIALS WITHIN THE FLASHING AREAS.
- SEE PAGE 2 OF 2 FOR ADDITIONAL NOTES.

APPLY A TOP COAT OF LIQUISEAL Liquid Flashing Resin, ENSURING THE FLEECE IS COMPLETELY SATURATED PER PUBLISHED COVERAGE RATE AND APPLY 1/4" - 1/2" (1cm - 1.5cm) BEYOND THE FLEECE EDGES

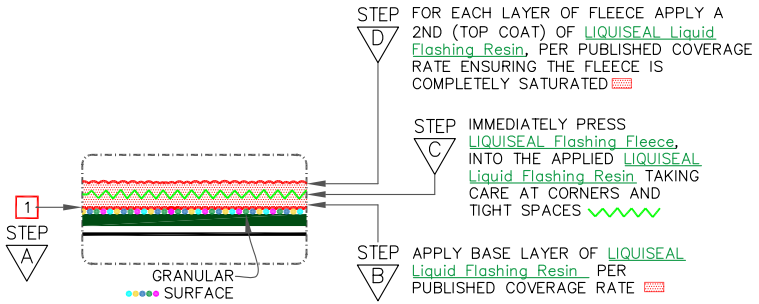


SINGLE OR MULTIPLE PIPE PENETRATIONS - PAGE 1 OF 2



LIQUID FLASHING

LF-8.1A

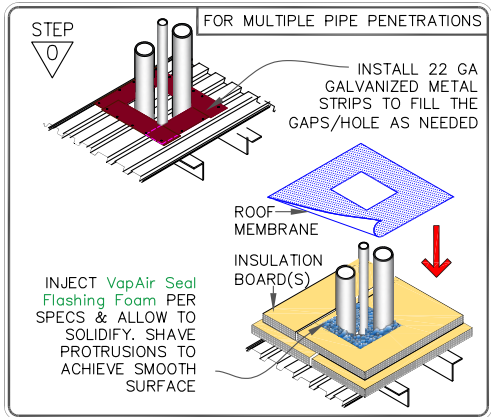


4 FASTENERS REQUIRED MIN.	<p>PLAN VIEW</p>	SEAM FASTENING PLATES & FASTENERS		DIMENSIONS	cm		
				(A)	6"	15	TO
					12"	30	
	(B)	12"	30	MAX.			
PIPE OUTSIDE DIAMETER < 6" (15cm)				PIPE OUTSIDE DIAMETER > 6" (15cm)			

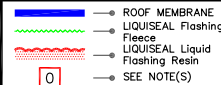
TABLE FOR FASTENER REQUIREMENTS ON MECHANICALLY FASTENED SYSTEMS. REFER TO VERSICO TYPICAL PENETRATION DETAILS FOR FLASHING OVER FASTENER HEADS.

NOTES CONTINUE FROM [LF-8.1A](#)

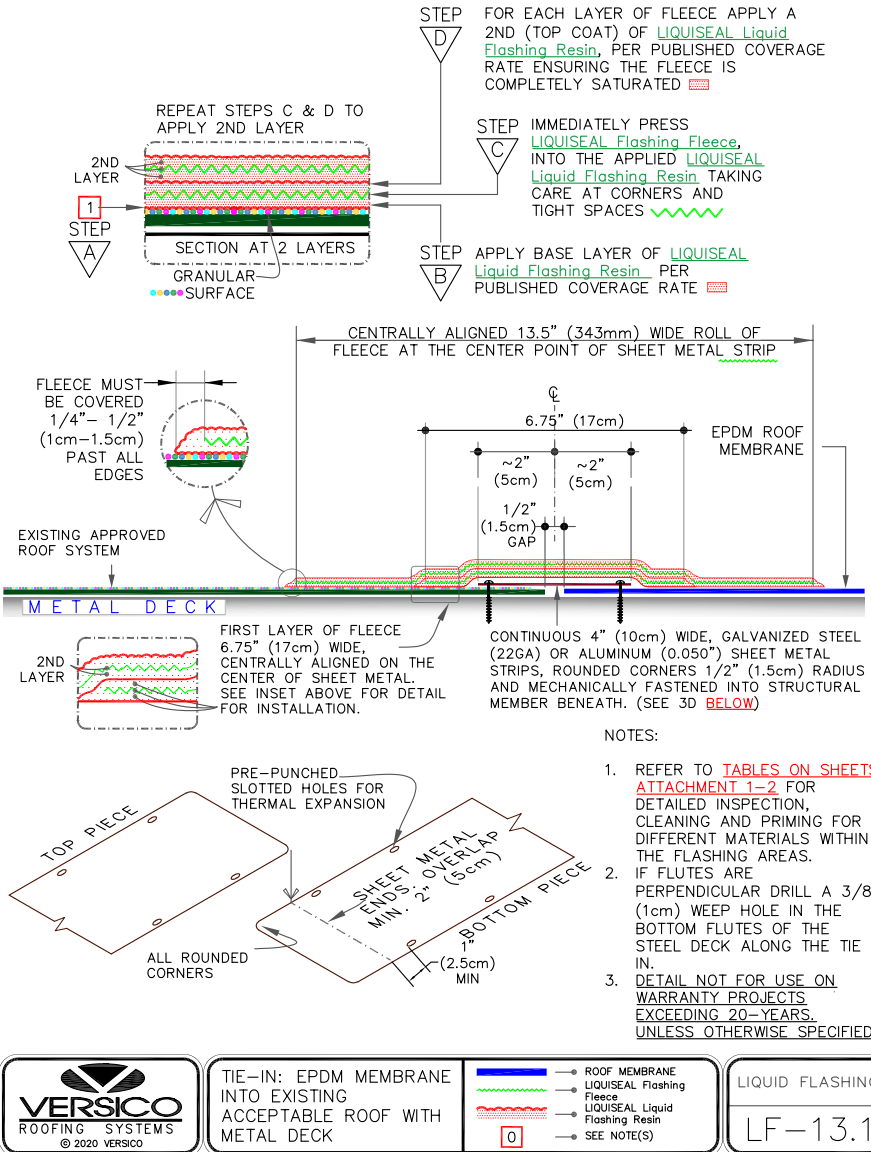
- WHEN THERE IS ENOUGH CLEARANCE BETWEEN MULTIPLE PENETRATIONS, INSTALL LIQUID FLASHING USING THIS DETAIL.
- WHEN INSTALLATION OF LIQUID FLASHING IS NOT FEASIBLE FOR MULTIPLE PIPE PENETRATIONS, THEN USE APPLICABLE STANDARD ROOF MEMBRANE DETAIL [\(C-16\)](#) FOR FIELD MEMBRANE TYPE.
- DETAIL NOT FOR USE ON WARRANTY PROJECTS EXCEEDING 20-YEARS, UNLESS OTHERWISE SPECIFIED.

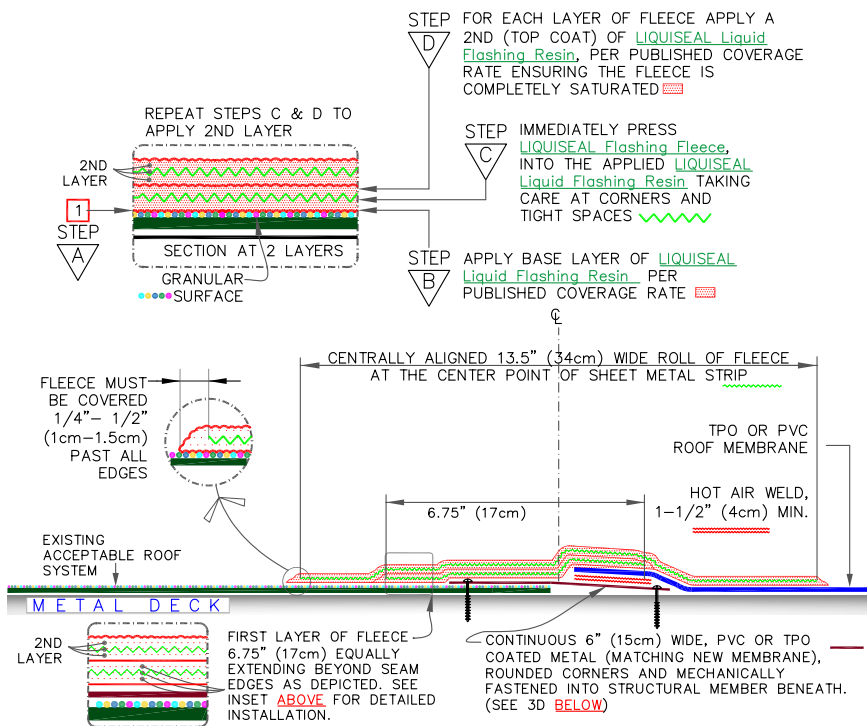


SINGLE OR MULTIPLE PIPE PENETRATIONS – PAGE 2 OF 2



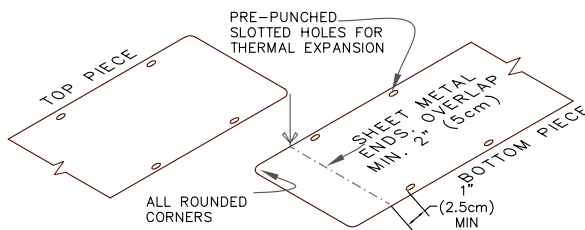
LIQUID FLASHING  
LF-8.1B



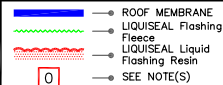


NOTES:

1. REFER TO TABLES ON SHEETS ATTACHMENT 1-2 FOR DETAILED INSPECTION, CLEANING AND PRIMING FOR DIFFERENT MATERIALS WITHIN THE FLASHING AREAS.
2. IF FLUTES ARE PERPENDICULAR DRILL A 3/8" (1cm) WEEP HOLE IN THE BOTTOM FLUTES OF THE STEEL DECK ALONG THE TIE IN.
3. DETAIL NOT FOR USE ON WARRANTY PROJECTS EXCEEDING 20-YEARS. UNLESS OTHERWISE SPECIFIED.



TIE-IN: TPO OR PVC MEMBRANE INTO EXISTING ACCEPTABLE ROOFS WITH METAL DECK (PAGE 1 OF 2)



LIQUID FLASHING

LF-13.2A

## LIQUID FLASHING

## TPO/PVC



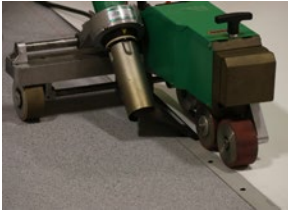
A

INSTALL COATED SHEET METAL STRIPS WITH THREADED FASTENERS. REFER TO TABLES ON SHEETS [ATTACHMENT 1-2](#) FOR DETAILED INSPECTION, CLEANING AND PRIMING FOR DIFFERENT MATERIALS WITHIN THE FLASHING AREAS.



B

PROPERLY CLEAN WITH MEMBRANE CLEANER PRIOR TO WELDING.



C

WELD TPO OR PVC MEMBRANE TO COATED METAL STRIP.



D

USE SAND PAPER GRIT # 60 TO ABRASE THE AREAS TO WHICH THE LIQUISEAL LIQUID FLASHING RESIN WILL BE APPLIED.



E

THOROUGHLY CLEAN THE TIE-IN AREA.



F

CUT TWO PIECES OF [LIQUISEAL Flashing Fleece](#), (FOR DIMENSIONS SEE [13.2A](#)).



G

APPLY PAINTER'S TAPE ALONG TIE-IN EDGE.



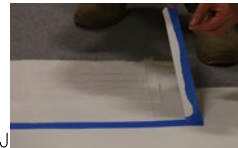
H

THOROUGHLY MIX THE RESIN, PER PUBLISHED INSTRUCTIONS.



I

INSTALL BOTH LAYERS OF PRE-CUT [LIQUISEAL Flashing Fleece](#), EMBEDDED IN RESIN (SEE [LF-13.2A](#)).

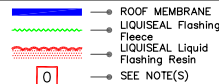


J

REMOVE TAPE IMMEDIATELY ENSURING THAT RESIN EXTENDS 1/4" - 1/2" BEYOND EDGE OF FLEECE.



TIE-IN: TPO OR PVC MEMBRANE INTO EXISTING ACCEPTABLE ROOFS WITH METAL DECK (PAGE 2 OF 2)

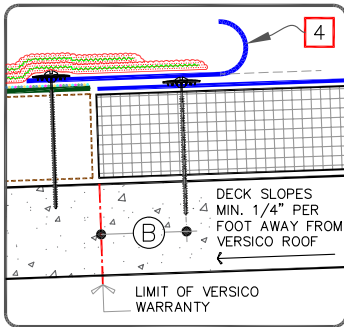
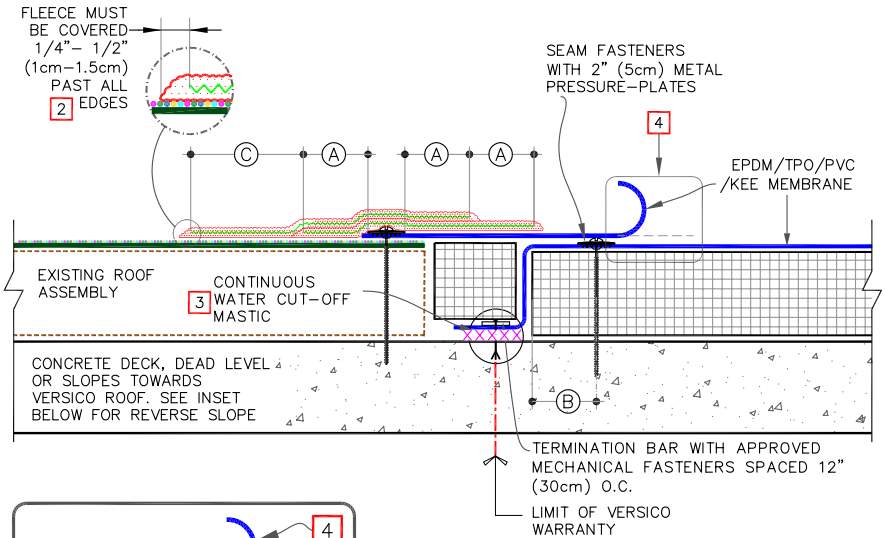


LIQUID FLASHING

LF-13.2B

LIQUID FLASHING

EPDM/TPO/PVC



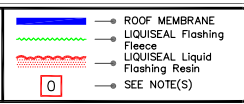
DIMENSIONS	cm	
(A)	3"	7.5 MIN.
(B)	2-3"	5-7.5 MIN.
(C)	AS REQUIRED DEPENDING ON SUBSTRATE, BUT MIN. 4" (10cm).	

NOTES:

- REFER TO TABLES ON SHEETS ATTACHMENT 1-2 FOR DETAILED INSPECTION, CLEANING AND PRIMING FOR DIFFERENT MATERIALS WITHIN THE FLASHING AREAS.
- DETAIL NOT FOR USE ON WARRANTY PROJECTS EXCEEDING 20-YEARS. UNLESS OTHERWISE SPECIFIED.
- PROPERLY FILL THE JOINTS, VOIDS AND CRACKS ENSURING PROPER SEAL AGAINST WATER MIGRATION.
- APPLICABLE SEAM DETAILS:
  - EPDM: [VGC-2.1 & U-2.1A](#)
  - TPO/PVC/KEE: [TPC-2.1](#)



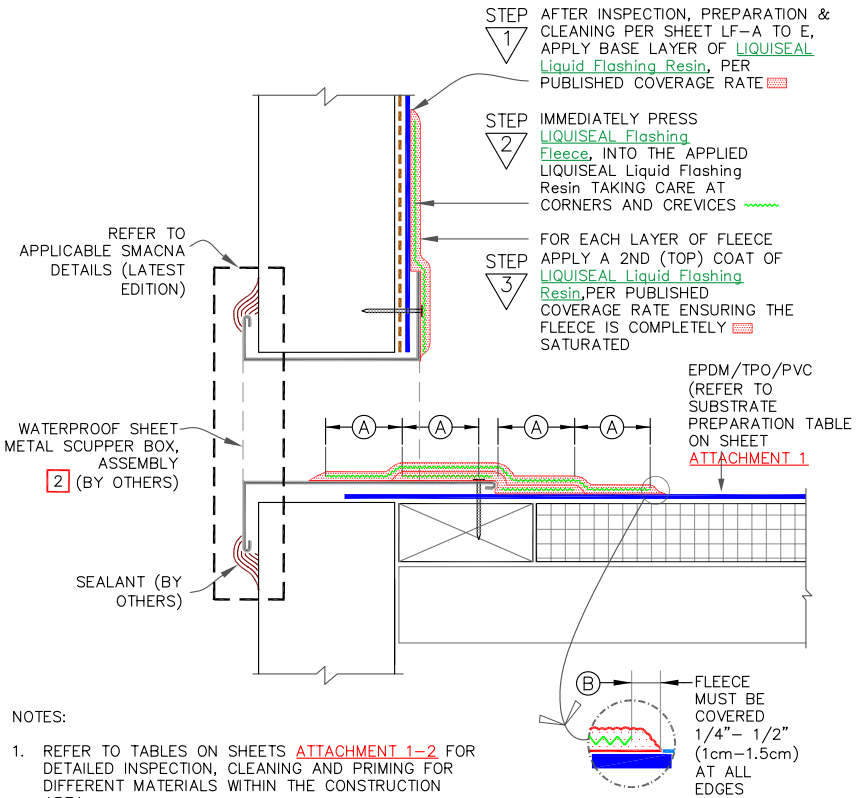
MEMBRANE TIE-IN WITH EXISTING ROOF OVER CONCRETE DECK



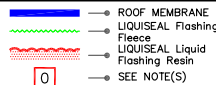
LIQUID FLASHING

LF-13.3





THROUGH-WALL SCUPPER



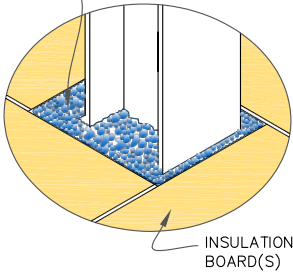
LIQUID FLASHING

LF-18.1

LIQUID FLASHING

EPDM/TPO/PVC

INJECT VapAir Seal Flashing Foam PER SPECS & ALLOW TO SOLIDIFY. SHAVE PROTRUSIONS TO ACHIEVE SMOOTH SURFACE



STEP 1

GRIND METAL WITH DIAMOND CUP GRINDING WHEEL

MEMBRANE SECURED WITH PLATES & FASTENERS PER SPECS

STEP 2



NOTE: ENSURE BODY OF PENETRATIONS & WELDS ARE COMPLETELY WATERPROOF.



DIAMOND CUP GRINDING WHEEL

STEP 3



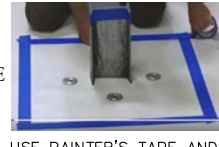
USE SAND PAPER GRIT# 60 TO ABRADE THE MEMBRANE SURFACE.

STEP 4

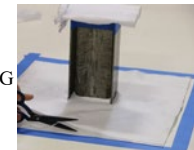


REMOVE ALL GRINDING DUST, CLEAN METAL & MEMBRANE WITH CLEAN RAGS & MEMBRANE CLEANER.

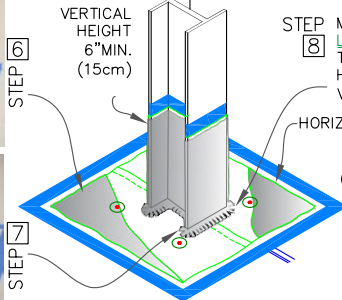
STEP 5



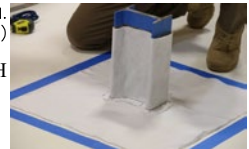
USE PAINTER'S TAPE AND TAPE OFF THE FLASHING AREA.



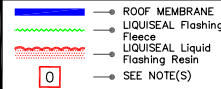
MEASURING, CUTTING & DRY FITTING TECHNIQUE



STEP 8 MAKE FINGER CUTS 2" (5cm) LONG IN LIQUISEAL Flashing Fleece AS SHOWN. THE FINGERS WILL REST ON THE HORIZONTAL SURFACE. SEE ENLARGED VIEW "1" ON PAGE 2 OF 2.



STEEL I-BEAM FLASHING (PAGE 1 OF 2)

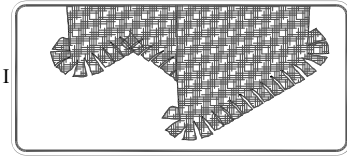


LIQUID FLASHING  
LF-30.1A

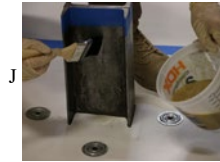
LIQUID FLASHING

EPDM/TPO/PVC

SACHET MIXING AND PRIMER APPLICATION



STEP 9



PRIME I-BEAM AND METAL PLATES. ENSURE AMBIENT AIR TEMPERATURE IS 40° & RISING. ALLOW PRIMER TO CURE UNTIL TACK-FREE.

STEP 10

APPLY 1ST COAT OF LIQUISEAL Liquid Flashing Resin & INSTALL LIQUISEAL Flashing Fleece ON VERTICAL SURFACES.



K

FLASHING FINAL INSTALLATION

STEP 11

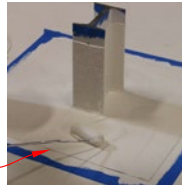


IMMEDIATELY APPLY A 2ND COAT OF LIQUISEAL Liquid Flashing Resin ENSURING THE FLEECE IS COMPLETELY SATURATED.

L

APPLY 1ST COAT OF RESIN AND INSTALL FLEECE ON HORIZONTAL SURFACES. IMMEDIATELY APPLY A 2ND COAT OF RESIN ENSURING FLEECE IS COMPLETELY SATURATED.

STEP 12



M

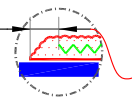
STEP 13



N

TOUCH UP AS NEEDED TO ENSURE ENTIRE FLEECE IS COMPLETELY SATURATED.

FLEECE MUST BE COVERED 1/4" - 1/2" (1cm - 1.5cm) BEYOND EDGES



STEP 14

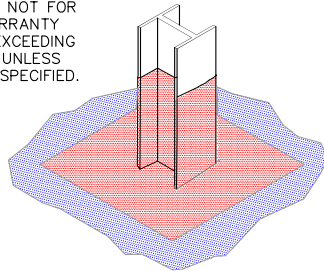


O

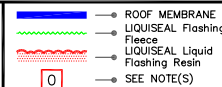
REMOVE TAPE IMMEDIATELY ENSURING THAT RESIN EXTENDS 1/4" - 1/2" (1cm - 1.5cm) BEYOND EDGE OF FLEECE

COMPLETED FLASHING

NOTE:  
1. DETAIL NOT FOR USE ON WARRANTY PROJECTS EXCEEDING 20-YEARS. UNLESS OTHERWISE SPECIFIED.



STEEL I-BEAM FLASHING  
(PAGE 2 OF 2)

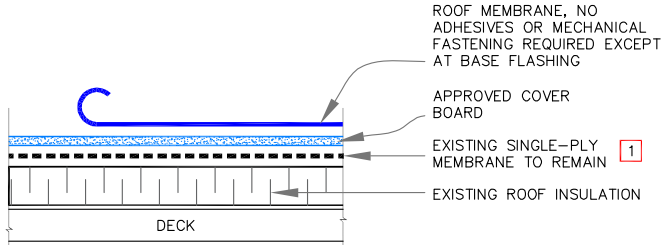


LIQUID FLASHING

LF-30.1B

VACUSEAL

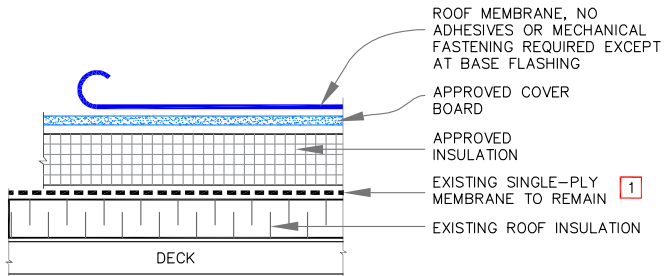
ROOF ASSEMBLY WITHOUT NEW INSULATION



NOTE:

1. EXISTING ROOF MEMBRANE MAY BE USED AS AN AIR BARRIER. IT WILL REQUIRE THOROUGH INSPECTION FOR BREACHES, DAMAGES, AND AIR TIGHTNESS OF EXISTING FLASHING. SEAL ALL DEFICIENT CONDITIONS TO ACHIEVE AN AIRTIGHT AIR BARRIER.

ROOF ASSEMBLY WITH NEW INSULATION



See sheets V-0.1 to V-0.7 & Specs for additional information



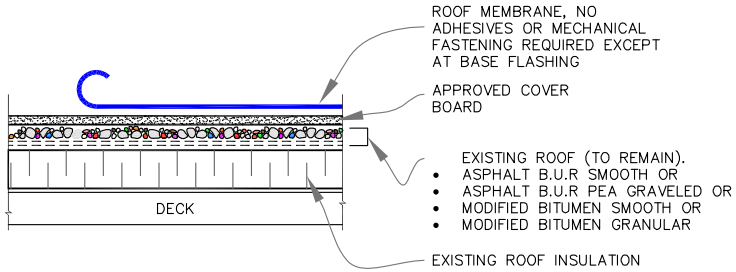
ROOF ASSEMBLY OVER EXISTING SINGLE-PLY ROOF

	NEW MEMBRANE
	EXISTING MEMBRANE
	INSULATION
	SEE NOTE(S)

VENT SECURED ROOFING SYSTEM

V-0.1

VACUSEAL







NOTES:

1. EXISTING ROOF MEMBRANE MAY BE USED AS AN AIR BARRIER. IT WILL REQUIRE THOROUGH INSPECTION FOR BREACHES, DAMAGES, BLISTERS, WRINKLES AND AIR TIGHTNESS OF EXISTING FLASHING. SEAL ALL DEFICIENT CONDITIONS TO ACHIEVE AN AIRTIGHT AIR BARRIER.
2. FOR NEW ASSEMBLY OVER COAL TAR PITCHED ROOF, CONTACT VERSICO.
3. LOOSE GRAVEL OR GRANULES MUST BE REMOVED AND THE SURFACE SHALL BE LEVELED.

See sheets [V-0.1](#) to [V-0.7](#) & Specs for additional information



ROOF ASSEMBLY OVER EXISTING ASPHALTIC ROOF

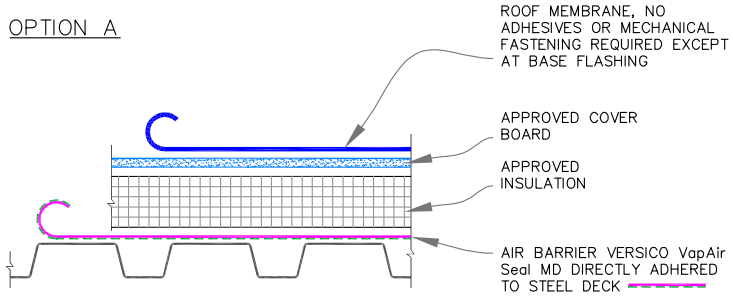
-  NEW MEMBRANE
-  EXISTING MEMBRANE
-  INSULATION
-  SEE NOTE(S)

VENT SECURED ROOFING SYSTEM

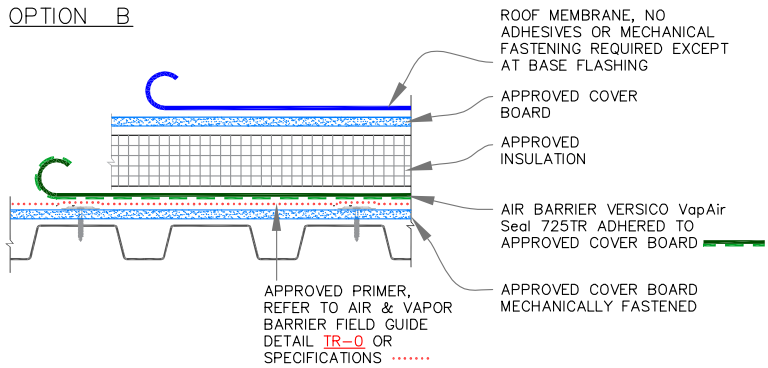
V-0.2

VACUSEAL

OPTION A



OPTION B

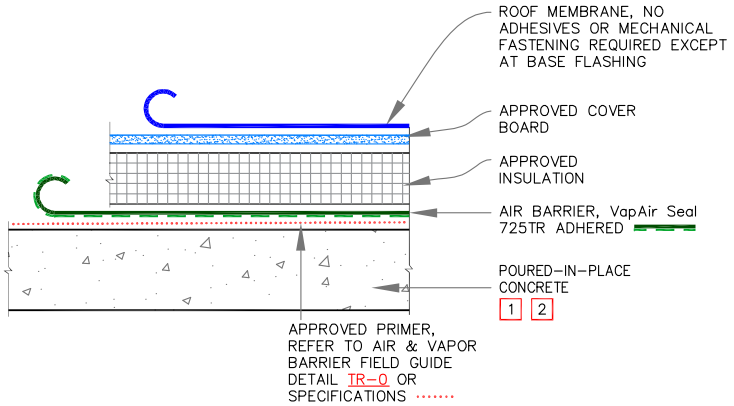


See sheets V-0.1 to V-0.7 & Specs for additional information



ROOF ASSEMBLY – OVER STEEL DECK	<p>NEW MEMBRANE</p> <p>EXISTING MEMBRANE</p> <p>INSULATION</p> <p>SEE NOTE(S)</p>
---------------------------------	---

<p>VENT SECURED ROOFING SYSTEM</p> <p>V-0.3</p>
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NOTES:

1. THE SUBSTRATE MAY NOT REQUIRE AN ADDITIONAL LAYER OF AIR BARRIER. TO ENSURE THAT A CONTINUOUS AIR-SEAL IS PROVIDED, THE SUBSTRATE MUST BE INSPECTED FOR BREACHES FOR AIR INFILTRATION AT CRACKS, JOINTS, PENETRATIONS, ROOF EDGES, PARAPET WALLS, AND SIMILAR CONDITIONS.

See sheets V-0.1 to V-0.7 & Specs for additional information



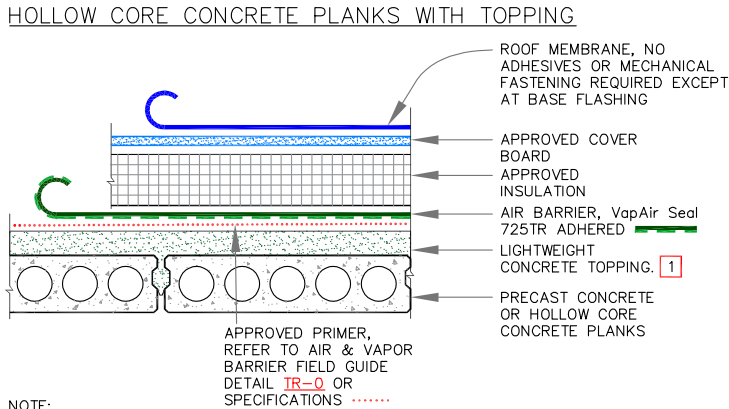
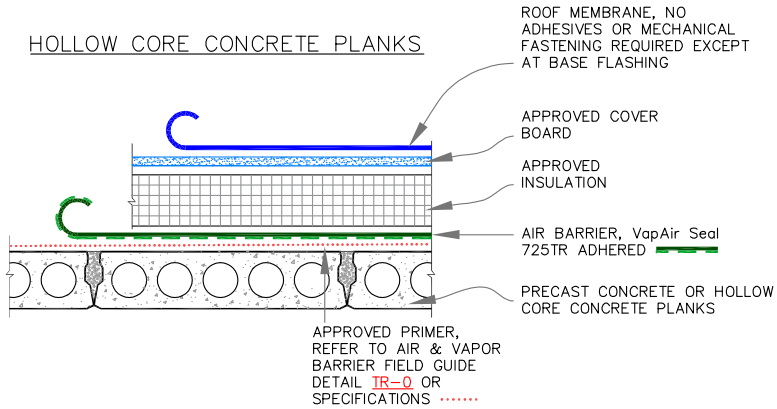
ROOF ASSEMBLY OVER  
POURED-IN-PLACE  
CONCRETE DECK

- NEW MEMBRANE
- EXISTING MEMBRANE
- INSULATION
- SEE NOTE(S)

VENT SECURED  
ROOFING SYSTEM

V-0.4

VACUSEAL



NOTE:

1. THE SUBSTRATE MAY NOT REQUIRE AN ADDITIONAL LAYER OF AIR BARRIER WHEN CONCRETE TOPPING EXISTS. TO ENSURE THAT A CONTINUOUS AIR-SEAL IS PROVIDED, THE SUBSTRATE MUST BE INSPECTED FOR BREACHES FOR AIR INFILTRATION AT CRACKS, JOINTS, PENETRATIONS, ROOF EDGES, PARAPET WALLS, AND SIMILAR CONDITIONS & PROPER REPAIRS MUST BE PERFORMED.

See sheets V-0.1 to V-0.7 & Specs for additional information



ROOF ASSEMBLY OVER CONCRETE PLANKS

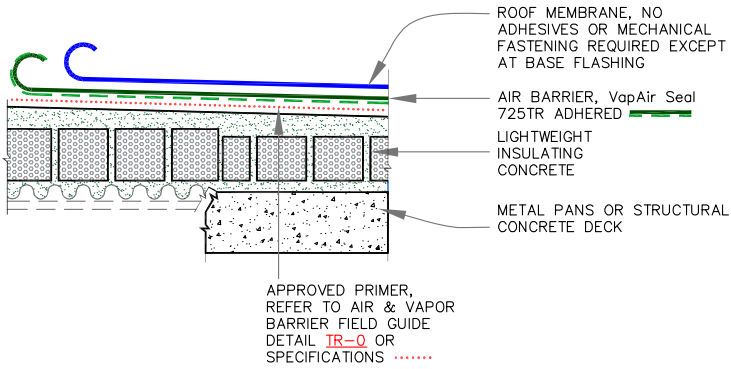
	NEW MEMBRANE
	EXISTING MEMBRANE
	INSULATION
	SEE NOTE(S)

VENT SECURED ROOFING SYSTEM

V-0.5



VACUSEAL



NOTE:

1. THE SUBSTRATE MAY NOT REQUIRE AN ADDITIONAL LAYER OF AIR BARRIER WHEN CONCRETE TOPPING EXISTS. TO ENSURE THAT CONCRETE SUBSTRATE PROVIDES A CONTINUOUS AIR-SEAL, THE SUBSTRATE MUST BE INSPECTED FOR AIR INFILTRATION. INSPECT FOR BREACHES CRACKS, JOINTS, PENETRATIONS, ROOF EDGES, PARAPET WALLS JUNCTIONS, AND SIMILAR CONDITIONS. PROPER REPAIRS MUST BE PERFORMED TO CREATE AN AIR BARRIER.

See sheets V-0.1 to V-0.7 & Specs for additional information

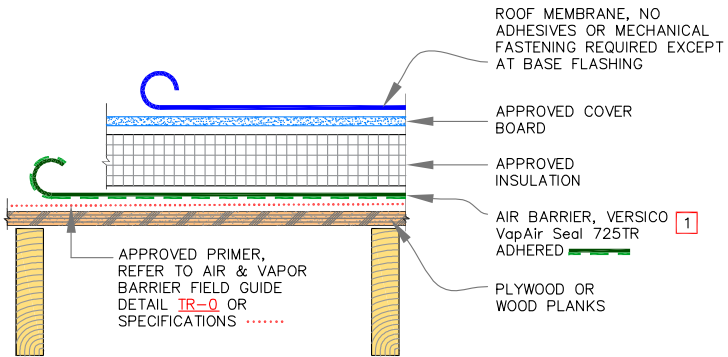


ROOF ASSEMBLY OVER LIGHTWEIGHT CONCRETE DECK

	NEW MEMBRANE
	EXISTING MEMBRANE
	INSULATION
	SEE NOTE(S)

VENT SECURED ROOFING SYSTEM
V-0.6

VACUSEAL



NOTES:

1. TO AVOID POTENTIAL DAMAGE TO AIR AND VAPOR BARRIER, PROTRUDING NAILS/FASTENERS SHALL BE REMOVED AND REPLACED WITH HEAVY GAUGE THREADED FASTENERS.
2. AS AN OPTION, THE AIR AND VAPOR BARRIER MAY BE ADHERED TO MECHANICALLY FASTENED SECURROCK OR DensDeck PRIME COVER BOARD.

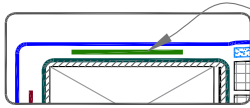
See sheets V-0.1 to V-0.7 & Specs for additional information



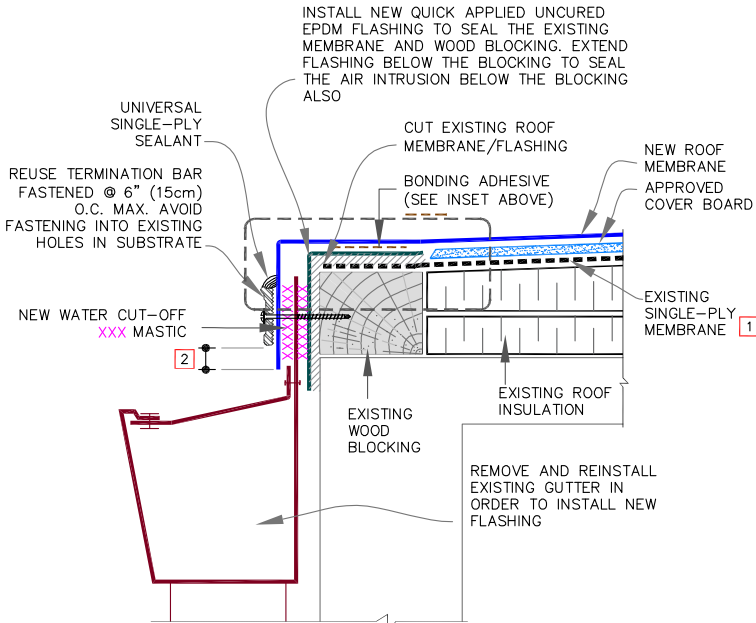
ROOF ASSEMBLY OVER WOOD DECK	<ul style="list-style-type: none"> <li>NEW MEMBRANE</li> <li>EXISTING MEMBRANE</li> <li>INSULATION</li> <li>SEE NOTE(S)</li> </ul>
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VENT SECURED ROOFING SYSTEM
V-0.7

VACUSEAL



IN LIEU OF BONDING ADHESIVE,  
3" (7.5cm) WIDE QA SEAM  
TAPE MAY BE USED WITH  
PRIMER TO SEAL BOTH THE  
MEMBRANES



NOTES:

1. EXISTING ROOF MEMBRANE MAY BE USED AS AN AIR BARRIER. IT WILL REQUIRE THOROUGH INSPECTION FOR BREACHES, DAMAGES, AND AIR TIGHTNESS OF EXISTING FLASHING. SEAL ALL DEFICIENT CONDITIONS TO ACHIEVE AN AIRTIGHT AIR BARRIER.
2. ALLOW MEMBRANE SHEET TO EXTEND 1/2" (1.5cm) MINIMUM BELOW THE METAL TERMINATION BAR.

See sheets [V-0.1](#) to [V-0.7](#) & Specs for additional information

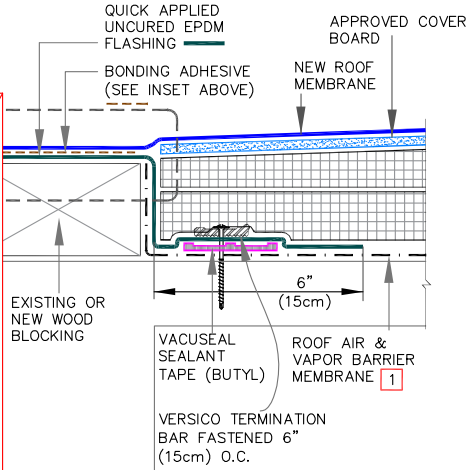
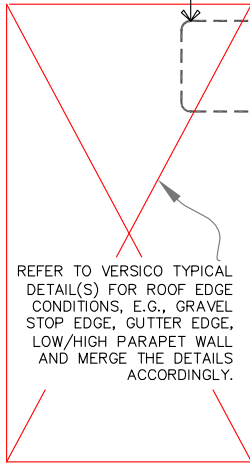
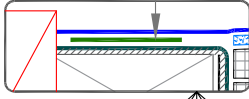


ROOF EDGE: ROOF RECOVER	
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VENT SECURED ROOFING SYSTEM
V-1.1

VACUSEAL

IN LIEU OF BONDING ADHESIVE,  
3" (7.5cm) WIDE QA SEAM  
TAPE MAY BE USED WITH  
PRIMER TO SEAL BOTH THE  
MEMBRANES



NOTES:

1. USE VapAir Seal 725TR AIR AND VAPOR BARRIER ON CONCRETE DECKS.
2. IN CASE OF METAL DECK, COORDINATE WITH VERSICO.

See sheets [V-0.1](#) to [V-0.7](#) & Specs for additional information



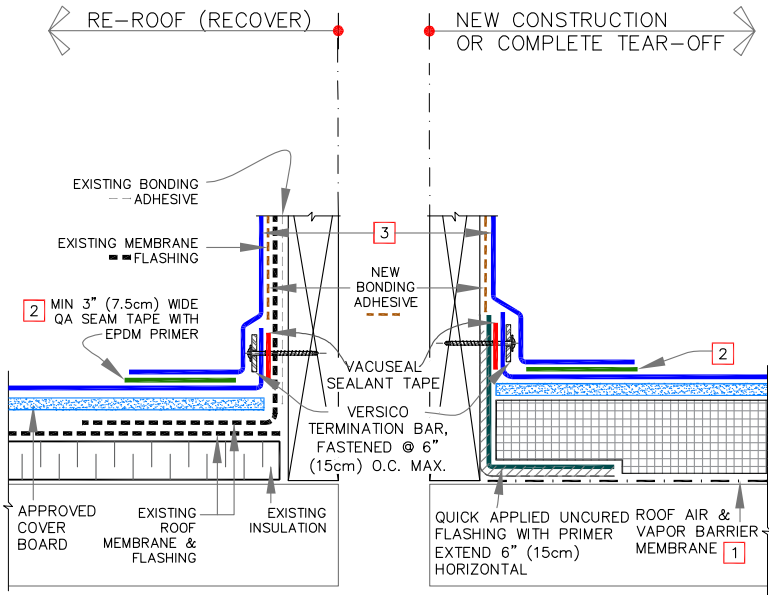
ROOF EDGE: TEAR-OFF &  
REROOFING

NEW MEMBRANE  
EXISTING MEMBRANE  
INSULATION  
0 SEE NOTE(S)

VENT SECURED  
ROOFING SYSTEM

V-1.2

VACUSEAL



NOTES:

1. ON STEEL DECKS DIRECTLY ADHERE VERSICO VapAir Seal MD. USE VERSICO VapAir Seal 725TR ON CONCRETE & WOOD DECKS OR DECKS WITH APPROVED COVER BOARDS.
2. FOR ADDITIONAL INFORMATION, REFER TO VERSICO'S THERMOSET DETAIL [VGC-5.1](#) FOR EPDM AND THERMOPLASTIC DETAIL [TPC-5.1](#) FOR TPO/PVC.
3. SELF-ADHERING EPDM CURB WRAP MAY BE SUBSTITUTED AS FLASHING ON EPDM ROOFS.

See sheets [V-0.1](#) to [V-0.7](#) & Specs for additional information



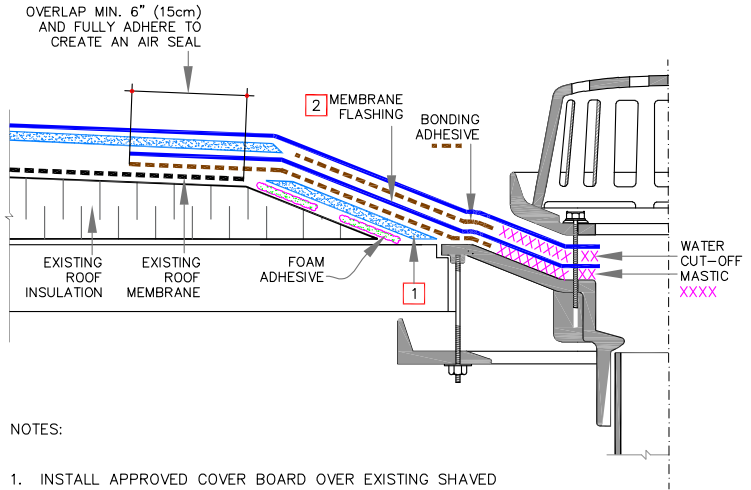
CURB BASE FLASHING – NEW CONSTRUCTION AND RE-ROOF (RECOVER)

	NEW MEMBRANE
	EXISTING MEMBRANE
	INSULATION
	SEE NOTE(S)

VENT SECURED ROOFING SYSTEM

V-5.1

VACUSEAL



NOTES:

1. INSTALL APPROVED COVER BOARD OVER EXISTING SHAVED INSULATION. CREATE A PROPER SMOOTH SUMP. SET IN FOAM ADHESIVE.
2. FULLY ADHERE MEMBRANE FLASHING TO ACHIEVE AIRTIGHT CONDITION BETWEEN DRAIN AND EXISTING ROOF MEMBRANE. WHERE, THERE IS EXISTING ROOF VAPOR BARRIER, CUT IT BACK, IN ORDER TO PROPERLY AIR SEAL.
3. FOR ADDITIONAL INFORMATION, REFER TO VERSICO'S THERMOSET DETAIL [VGC-6](#) FOR EPDM AND THERMOPLASTIC DETAIL [TPC-6](#) FOR TPO/PVC.

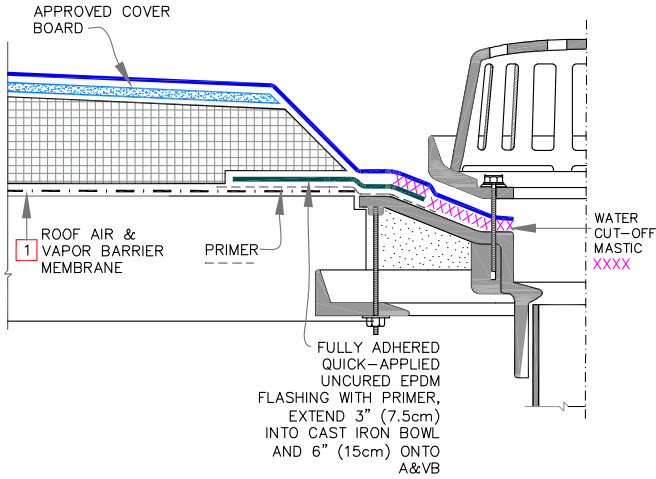
See sheets [V-0.1](#) to [V-0.7](#) & Specs for additional information



ROOF DRAIN: RE-ROOF (RECOVER)	<table border="1"> <tr> <td></td> <td>NEW MEMBRANE</td> </tr> <tr> <td></td> <td>EXISTING MEMBRANE</td> </tr> <tr> <td></td> <td>INSULATION</td> </tr> <tr> <td></td> <td>SEE NOTE(S)</td> </tr> </table>		NEW MEMBRANE		EXISTING MEMBRANE		INSULATION		SEE NOTE(S)
	NEW MEMBRANE								
	EXISTING MEMBRANE								
	INSULATION								
	SEE NOTE(S)								

VENT SECURED ROOFING SYSTEM  V-6.1
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VACUSEAL



NOTES:

1. ON STEEL DECKS DIRECTLY ADHERE VERSICO VapAir Seal MD. USE VERSICO VapAir Seal 725TR ON CONCRETE & WOOD DECKS OR DECKS WITH APPROVED COVER BOARDS.
2. FOR ADDITIONAL INFORMATION, REFER TO VERSICO'S THERMOSET DETAIL [VGC-6](#) FOR EPDM AND THERMOPLASTIC DETAIL [TPC-6](#) FOR TPO/PVC.

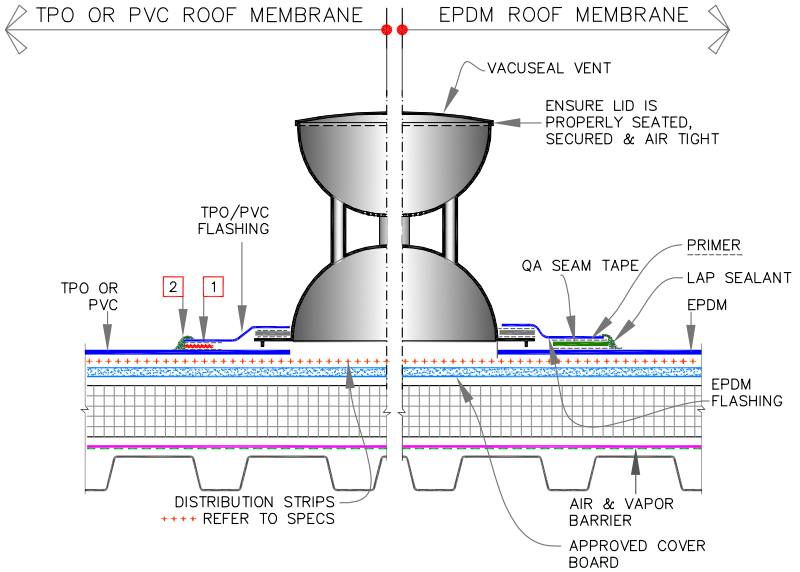
See sheets [V-0.1](#) to [V-0.7](#) & Specs for additional information



ROOF DRAIN: NEW CONSTRUCTION	<p>NEW MEMBRANE</p> <p>EXISTING MEMBRANE</p> <p>INSULATION</p> <p>0 SEE NOTE(S)</p>
------------------------------	---

VENT SECURED ROOFING SYSTEM
V-6.2

VACUSEAL



NOTES:

1. HOT AIR WELD, MIN. 1-1/2" (4cm).
2. APPROXIMATELY 1/8" (0.5cm) DIAMETER BEAD OF CUT-EDGE SEALANT IS REQUIRED ON CUT EDGES OF REINFORCED TPO MEMBRANE.

See sheets [V-01](#) to [V-07](#) & Specs for additional information



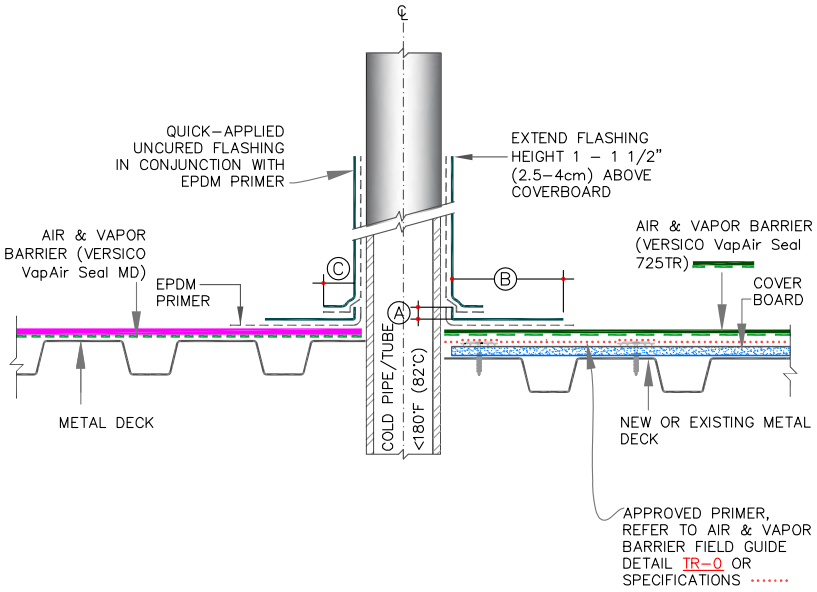
VACUSEAL VENT WITH  
PRE-APPLIED SKIRT  
FLASHING

SEE NOTE(S)

VENT SECURED  
ROOFING SYSTEM

V-8.0





NOTE:

- FOR ADDITIONAL INFORMATION, REFER TO VERSICO THERMOSET DETAIL [VGC-8.2](#).

DIMENSIONS		cm	
(A)	1/2"	1.5	MIN.
(B)	5.5"	14	MIN.
(C)	1"	2.5	MIN.

See sheets [V-01](#) to [V-07](#) & Specs for additional information



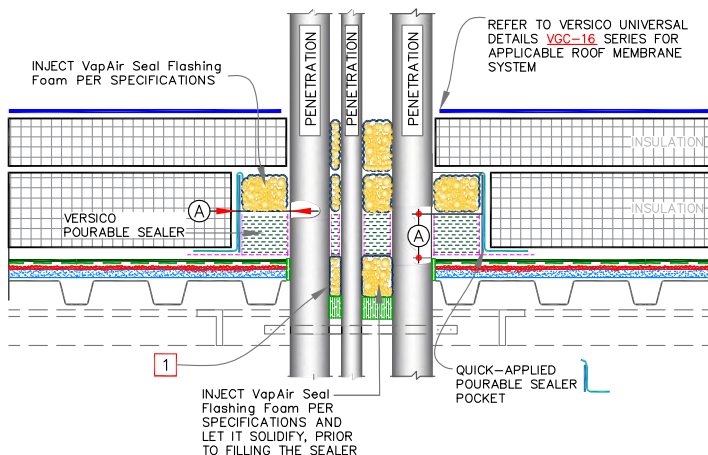
PIPE/STRUCTURAL STEEL  
TUBE THROUGH METAL  
DECK OPTION A

— NEW MEMBRANE  
- - - EXISTING MEMBRANE  
[Grid Pattern] INSULATION  
0 SEE NOTE(S)

VENT SECURED  
ROOFING SYSTEM

V-8.1

VACUSEAL



DIMENSIONS		cm	
A	1/2"	1.5	TO
	1"	2.5	

NOTES:

1. THE MAXIMUM ALLOWABLE SURFACE TEMPERATURE OF THE PENETRATION SHALL NOT EXCEED 180° F (82° C).
2. PENETRATIONS, AIR & VAPOR BARRIER, FLASHING AND METAL (INSIDE POCKET) MUST BE PRIMED WITH EPDM PRIMER PRIOR TO APPLYING POURABLE SEALER. DO NOT PRIME THE BLUE PLASTIC SUPPORT STRIP.
3. POURABLE SEALER MUST CONTACT PRIMED QUICK-APPLIED UNCURED EPDM FLASHING AND AIR & VAPOR BARRIER.
4. PIPE CLUSTERS MUST HAVE MINIMUM 1" (2.5cm) CLEARANCE BETWEEN PENETRATIONS.

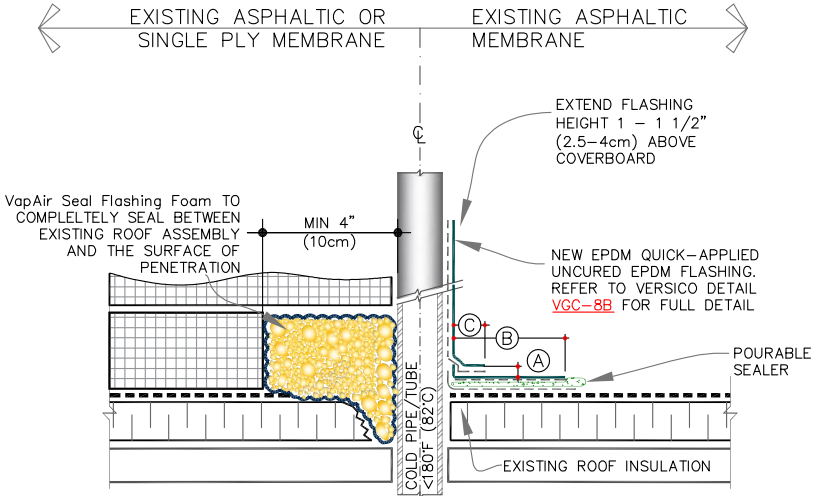
See sheets [V-0.1](#) to [V-0.7](#) & Specs for additional information



MULTIPLE PENETRATIONS THROUGH STEEL DECK – NEW CONSTRUCTION

	NEW MEMBRANE
	EXISTING MEMBRANE
	INSULATION
	SEE NOTE(S)

VENT SECURED ROOFING SYSTEM
V-8.2



DIMENSIONS		cm	
(A)	1/2"	1.5	MIN.
(B)	5.5"	14	MIN.
(C)	1"	2.5	MIN.

See sheets [V-0.1](#) to [V-0.7](#) & Specs for additional information



SINGLE PENETRATION THROUGH EXISTING ROOF ASSEMBLY

- NEW MEMBRANE
- EXISTING MEMBRANE
- INSULATION
- 0 SEE NOTE(S)

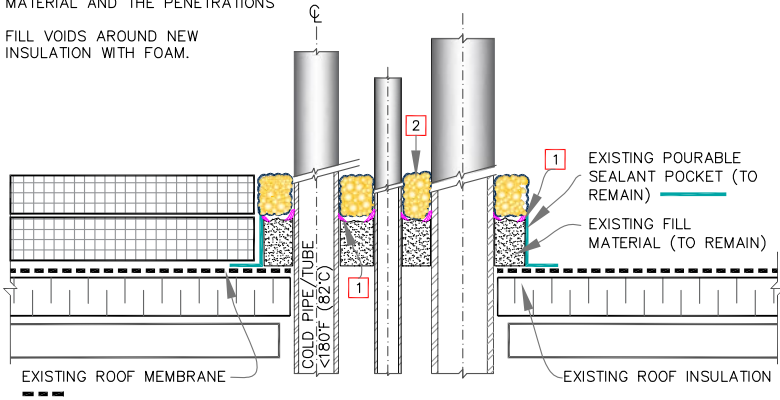
VENT SECURED ROOFING SYSTEM

V-8.3






VACUSEAL

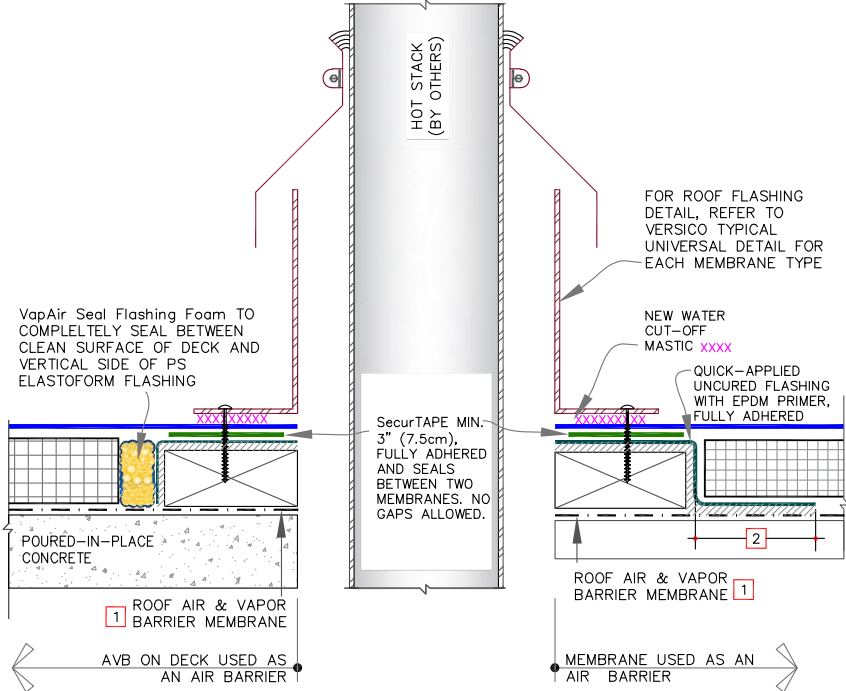
NOTES:

1. APPLY NEW SEALANT AT ALL CRACKED AND BREACHED AREAS OF POURABLE SEALERS. ENSURE A PROPER BOND BETWEEN EXISTING MATERIAL AND THE PENETRATIONS
2. FILL VOIDS AROUND NEW INSULATION WITH FOAM.



See sheets [V-0.1](#) to [V-0.7](#) & Specs for additional information

 <p>VERSICO ROOFING SYSTEMS © 2023 VERSICO</p>	<p>CLUSTER OF PENETRATIONS THROUGH EXISTING ROOF ASSEMBLY</p>	 NEW MEMBRANE	<p>VENT SECURED ROOFING SYSTEM</p> <p>V-8.4</p>
		 EXISTING MEMBRANE	
		 INSULATION	
		 SEE NOTE(S)	



NOTES:

1. ON STEEL DECKS DIRECTLY ADHERE VapAir Seal MD. USE VapAir Seal 725TR ON CONCRETE & WOOD DECKS OR DECKS WITH APPROVED COVER BOARDS.
2. OVERLAP MIN. 6" (15cm) AND FULLY ADHERE TO CREATE AN AIR SEAL.

See sheets V-01 to V-07 & Specs for additional information



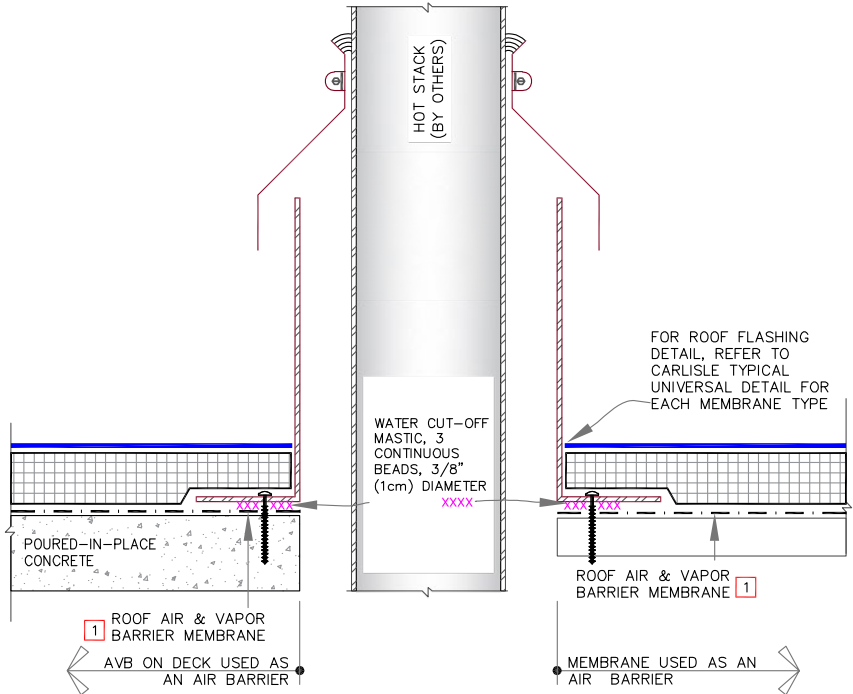
HOT STACK AIR FLASHING - OPTION A

	NEW MEMBRANE
	EXISTING MEMBRANE
	INSULATION
	SEE NOTE(S)

VENT SECURED ROOFING SYSTEM

V-8.5A

VACUSEAL



NOTES:

1. ON STEEL DECKS DIRECTLY ADHERE VapAir Seal MD. USE VapAir Seal 725TR ON CONCRETE & WOOD DECKS OR DECKS WITH APPROVED COVER BOARDS.

See sheets [V-01](#) to [V-07](#) & Specs for additional information



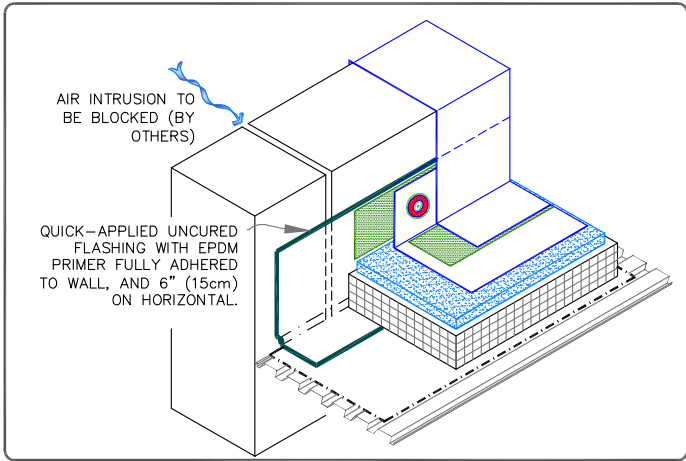
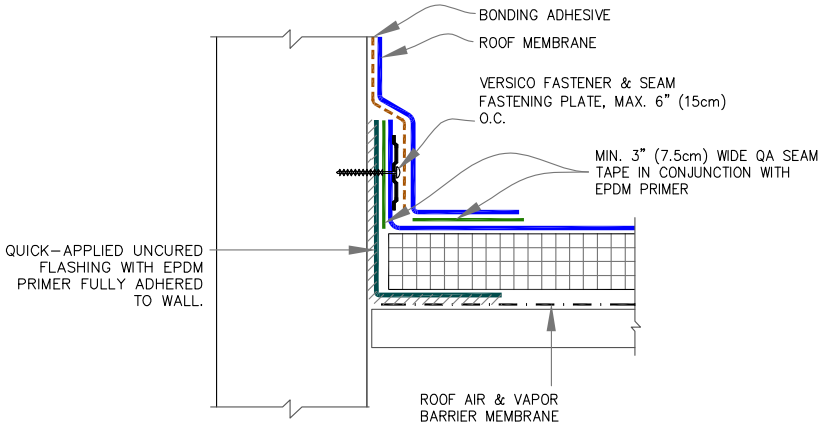
HOT STACK AIR FLASHING - OPTION B

	NEW MEMBRANE
	EXISTING MEMBRANE
	INSULATION
	SEE NOTE(S)

VENT SECURED ROOFING SYSTEM

V-8.5B

VACUSEAL



See sheets [V-01](#) to [V-07](#) & Specs for additional information



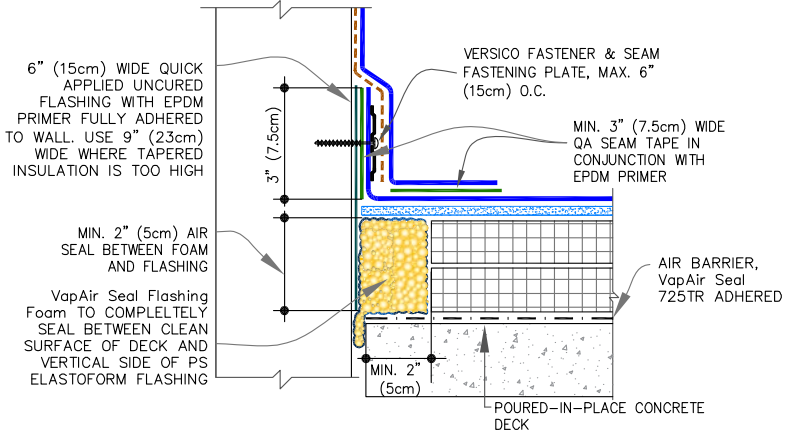
PARAPET WITH MEMBRANE  
AIR BARRIER

- NEW MEMBRANE
- EXISTING MEMBRANE
- INSULATION
- SEE NOTE(S)

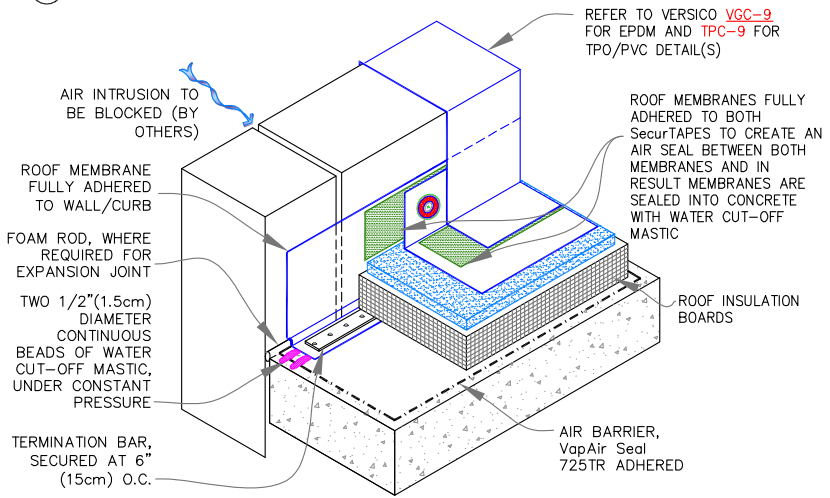
VENT SECURED  
ROOFING SYSTEM

V-12.1

VACUSEAL



A OPTION: AIR SEALING WITH FOAM



B OPTION: AIR SEALING WITH MEMBRANE FLASHING

See sheets **V-01** to **V-07** & Specs for additional information



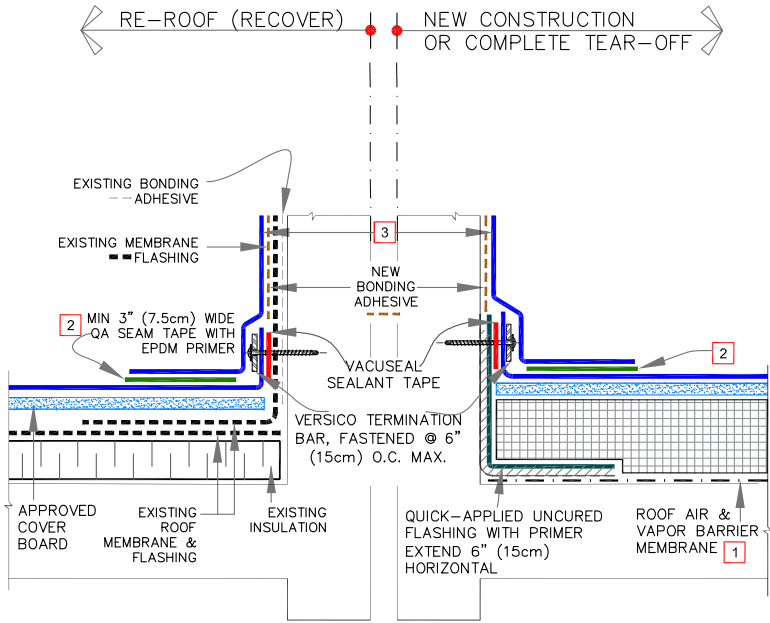
PARAPET / CURB:  
CONCRETE/LIGHTWEIGHT  
CONCRETE USED AS AN AIR  
BARRIER

NEW MEMBRANE  
EXISTING MEMBRANE  
INSULATION  
SEE NOTE(S)

VENT SECURED  
ROOFING SYSTEM  
**V-12.2**



## VACUSEAL



### NOTES:

1. ON STEEL DECKS DIRECTLY ADHERE VERSICO VapAir Seal MD. USE VERSICO VapAir Seal 725TR ON CONCRETE & WOOD DECKS OR DECKS WITH APPROVED COVER BOARDS.
2. FOR ADDITIONAL INFORMATION, REFER TO VERSICO'S THERMOSET DETAIL [VGC-5.1](#) FOR EPDM AND THERMOPLASTIC DETAIL [TPC-5.1](#) FOR TPO/PVC.
3. SELF-ADHERING EPDM CURB WRAP MAY BE SUBSTITUTED AS FLASHING ON EPDM ROOFS.

See sheets [V-01](#) to [V-07](#) & Specs for additional information



PARAPET OR WALL - NEW CONSTRUCTION AND RE-ROOF (RECOVER)

	NEW MEMBRANE
	EXISTING MEMBRANE
	INSULATION
	SEE NOTE(S)

VENT SECURED ROOFING SYSTEM
V-12.3

## SECTION 9: CONTACT INFORMATION

### Disclaimer

Versico does not engage in the practice of engineering or architecture; Versico makes no representations as to the structural design or capabilities of the roof or its structural parts.

Versico makes no warranty of fitness for a particular purpose or merchantability and shall not be liable for incidental or consequential damages under any theory of law.

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### Contact Versico

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800-992-7663

Fax: 717-960-4036

[www.versico.com](http://www.versico.com)

## NOTES

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