

Canadian Standards Association (CSA) Wind Uplift Test Results

Feb-26

ADHERED Membrane ADHERED Insulation										
STEEL DECK: MIN. 22 GA, GRADE 33										
General construction note : (1) 6 mil Polyethylene, VapAir Seal MD, 725TR over Steel Deck or over Optional Thermal Barrier.										
MEMBRANE / ADHESIVE	TOP INSULATION OR COVER BOARD	BASE INSULATION	THERMAL BARRIER	Air/ Vapor Barrier	DESIGN WIND UPLIFT RESISTANCE		TESTED UPLIFT RESISTANCE		MIN. FASTENER PULLOUT: (lbf)	REFERENCE
					PSF	kPa	psf	kPa		
Membrane: Sure-Seal FleeceBACK, Sure-White FleeceBACK Adhesive: Flexible FAST Adhesive 6-inch ribbons, or splatter applied	Optional: SecurShield HD / HD Plus or 1/4-inch DensDeck Prime or Securock Adhesive: Flexible FAST ribbons spaced 12-inch o.c.	1.5" InsulBase or SecurShield or 2" SecurShield HD Composite Adhesive: FAST 100 LV or Flexible FAST ribbons spaced 6-inch o.c. direct to vapor Barrier or 12-inch o.c. over Thermal Barrier or other insulation layers	Optional: 1/2-inch DensDeck Prime or Securock Adhesive: Flexible FAST ribbons 6-inch o.c.	725TR	168	8.1	252	12.1	NA	UL SYSTEM Adhered #10
Membrane: Sure-Weld FleeceBACK Adhesive: Flexible FAST Adhesive 6-inch ribbons, or splatter-applied	Optional: SecurShield HD / HD Plus or 1/4-inch DensDeck Prime or Securock Adhesive: Flexible FAST ribbons spaced 12-inch o.c.	1.5" InsulBase or SecurShield or 2" SecurShield HD Composite Adhesive: FAST 100 LV or Flexible FAST ribbons spaced 6-inch o.c. direct to vapor Barrier or 12-inch o.c. over Thermal Barrier or other insulation layers	Optional: 1/2-inch DensDeck Prime or Securock Adhesive: Flexible FAST ribbons 6-inch o.c.	725TR	168	8.1	252	12.1	NA	UL SYSTEM Adhered #10
Membrane: Sure-Flex PVC FleeceBACK, Sure-Flex KEE HP FleeceBACK, Sure-Flex KEE HP FRS FleeceBACK, minimum 105-mil. Adhesive: Flexible FAST Adhesive 6-inch ribbons, or splatter-applied	Optional: SecurShield HD / HD Plus or 1/4-inch DensDeck Prime or Securock Adhesive: Flexible FAST ribbons spaced 12-inch o.c.	1.5" InsulBase or SecurShield or 2" SecurShield HD Composite Adhesive: FAST 100 LV or Flexible FAST ribbons spaced 6-inch o.c. direct to vapor Barrier or 12-inch o.c. over Thermal Barrier or other insulation layers	Optional: 1/2-inch DensDeck Prime or Securock Adhesive: Flexible FAST ribbons 6-inch o.c.	725 TR	168	8.064	252	12.096	NA	UL SYSTEM Adhered #10
Membrane: Sure-Flex PVC* or *Sure-Flex PVC FRS, Adhesive: CAV-GRIP PVC or Low VOC PVC Bonding Adhesive	Optional: Minimum 0.25-inch DensDeck Prime or SECUROCK, min. 5/16-inch EcoStorm VSH or Min. 1/2-inch SecurShield HD or SecurShield HD Plus Adhesive: Flexible FAST or Flexible FAST Dual Tank Adhesive* ribbons spaced 12-inch o.c.	Minimum: 1.5-inch InsulBase, InsulBase NH, SecurShield or SecurShield NH applied Adhesive: Flexible FAST* or Flexible FAST Dual Tank Adhesive ribbons spaced 6-inch o.c. when applying direct to vapor-barrier, positioned atop the top flanges of the steel deck, or spaced 12-inch o.c. when applying to thermal barrier or prior layers of insulation.	Minimum: 0.5-inch DensDeck Prime or SECUROCK Adhesive: Flexible FAST or *Flexible FAST Dual Tank Adhesive ribbons spaced 6-inch o.c., positioned atop the top flanges of the steel deck	90TG Base or 120TG Base	84	4	126	6	N/A	UL SYSTEM Adhered #12
Membrane: Sure-Flex KEE HP Adhesive: Low VOC PVC Bonding Adhesive	Optional: Minimum 0.25-inch DensDeck Prime or SECUROCK, min. 5/16-inch EcoStorm VSH or Min. 1/2-inch SecurShield HD or SecurShield HD Plus Adhesive: Flexible FAST or Flexible FAST Dual Tank Adhesive* ribbons spaced 12-inch o.c.	Minimum: 1.5-inch InsulBase, InsulBase NH, SecurShield or SecurShield NH applied Adhesive: Flexible FAST* or Flexible FAST Dual Tank Adhesive ribbons spaced 6-inch o.c. when applying direct to vapor-barrier, positioned atop the top flanges of the steel deck, or spaced 12-inch o.c. when applying to thermal barrier or prior layers of insulation.	Minimum: 0.5-inch DensDeck Prime or SECUROCK Adhesive: Flexible FAST or *Flexible FAST Dual Tank Adhesive ribbons spaced 6-inch o.c., positioned atop the top flanges of the steel deck	90TG Base or 120TG Base	84	4	126	6	N/A	UL SYSTEM Adhered #12
Membrane: Sure-Seal FR*, Sure-Tough, Sure-White Adhesive: Sure-Seal 90-8-30A Bonding Adhesive, CAV-GRIP III Adhesive/Primer or EPDM x23 LOW-VOC Bonding Adhesive	Optional: Minimum 1/4-inch DensDeck Prime or SECUROCK, or minimum 1/2-inch SecurShield HD or SecurShield HD Plus Adhesive: Flexible FAST Adhesive ribbons spaced 12-inch o.c. or Flexible FAST Adhesive splatter applied.	Minimum: 1-1/2 inch thick, InsulBase, SecurShield, or minimum 2-inch thick SecurShield HD Composite Adhesive: Flexible FAST Adhesive or Flexible FAST Dual Tanks ribbons spaced 6-inch o.c.	Minimum: 1/2-inch DensDeck Prime or SECUROCK Adhesive: Flexible FAST Adhesive ribbons spaced 6-inch o.c. along the top flanges of the steel deck.	Sure MB 70 SA,	113	5.4	170	8.1	N/A	UL SYSTEM Adhered #13
Membrane: Sure-Flex PVC, Sure-Flex KEE HP Adhesive: Low VOC PVC Bonding Adhesive	Optional: Minimum 1/4-inch DensDeck Prime or SECUROCK, or minimum 1/2-inch SecurShield HD or SecurShield HD Plus Adhesive: Flexible FAST Adhesive ribbons spaced 12-inch o.c. or Flexible ribbons spaced 12-inch o.c. or Flexible	Minimum: 1-1/2 inch thick, InsulBase, SecurShield, or minimum 2-inch thick SecurShield HD Composite Adhesive: Flexible FAST Adhesive or Flexible FAST Dual Tanks ribbons spaced 6-inch o.c.	Minimum: 1/2-inch DensDeck Prime or SECUROCK Adhesive: Flexible FAST Adhesive ribbons spaced 6-inch o.c. along the top flanges of the steel deck.	Sure MB 70 SA,	113	5.4	170	8.1	N/A	UL SYSTEM Adhered #13
Membrane: Sure-Weld, Sure-Weld HS, or Spectro-Weld Adhesive: Sure-Weld Bonding Adhesive, CAV-GRIP III Adhesive/Primer, or LOW-VOC Bonding Adhesive	Optional: Minimum 1/4-inch DensDeck Prime or SECUROCK, or minimum 1/2-inch SecurShield HD or SecurShield HD Plus Adhesive: Flexible FAST Adhesive ribbons spaced 12-inch o.c. or Flexible FAST Adhesive splatter applied.	Minimum: 1-1/2 inch thick, InsulBase, SecurShield, or minimum 2-inch thick SecurShield HD Composite Adhesive: Flexible FAST Adhesive or Flexible FAST Dual Tanks ribbons spaced 6-inch o.c.	Minimum: 1/2-inch DensDeck Prime or SECUROCK Adhesive: Flexible FAST Adhesive ribbons spaced 6-inch o.c. along the top flanges of the steel deck.	Sure MB 70 SA,	113	5.4	170	8.1	N/A	UL SYSTEM Adhered #13
Membrane: Sure-Seal AFX or Sure-Weld AFX Adhesive: full mopping of hot roofing asphalt at a rate of 25 lbs/100-R2	Optional: Minimum 1/4-inch DensDeck Prime or SECUROCK, or minimum 1/2-inch SecurShield HD or SecurShield HD Plus Adhesive: Flexible FAST Adhesive ribbons spaced 12-inch o.c. or Flexible FAST Adhesive splatter applied.	Minimum: 1-1/2 inch thick, InsulBase, SecurShield, or minimum 2-inch thick SecurShield HD Composite Adhesive: Flexible FAST Adhesive or Flexible FAST Dual Tanks ribbons spaced 6-inch o.c.	Minimum: 1/2-inch DensDeck Prime or SECUROCK Adhesive: Flexible FAST Adhesive ribbons spaced 6-inch o.c. along the top flanges of the steel deck.	Sure MB 70 SA,	113	5.4	170	8.1	N/A	UL SYSTEM Adhered #13
Membrane: Sure-Flex PVC FleeceBACK, Sure-Flex KEE HP FleeceBACK, Sure-Flex KEE HP FRS FleeceBACK, Sure-Seal FleeceBACK, Sure-White FleeceBACK or Sure-Weld FleeceBACK Adhesive: Flexible FAST Adhesive, Flexible FAST Dual Tank Adhesive either in ribbons spaced 6-inch o.c. or splatter-applied	Optional: Minimum 1/4-inch DensDeck Prime or SECUROCK, or minimum 1/2-inch SecurShield HD or SecurShield HD Plus Adhesive: Flexible FAST Adhesive ribbons spaced 12-inch o.c. or Flexible FAST Adhesive splatter applied.	Minimum: 1-1/2 inch thick, InsulBase, SecurShield, or minimum 2-inch thick SecurShield HD Composite Adhesive: Flexible FAST Adhesive or Flexible FAST Dual Tanks ribbons spaced 6-inch o.c.	Minimum: 1/2-inch DensDeck Prime or SECUROCK Adhesive: Flexible FAST Adhesive ribbons spaced 6-inch o.c. along the top flanges of the steel deck.	Sure MB 70 SA,	113	5.4	170	8.1	N/A	UL SYSTEM Adhered #13
Membrane: Sure-Seal FR, Sure-Tough, or Sure-White Adhesive: Sure-Seal 90-8-30A, CAV-GRIP III, EPDM x23 LOW-VOC Bonding Adhesive	Optional: Minimum 1/4-inch DensDeck Prime or SECUROCK, or minimum 1/2-inch SecurShield HD or SecurShield HD Plus Adhesive: Flexible FAST Adhesive ribbons spaced 12-inches o.c. or Flexible FAST Adhesive splatter applied.	Minimum: 1-1/2-inch, InsulBase, SecurShield, or minimum 2 inch thick *SecurShield HD Composite Adhesive: Flexible FAST Adhesive or Flexible FAST Dual Tanks ribbons spaced 6-inches o.c. .	Minimum: 1/2-inch DensDeck Prime, or SECUROCK Adhesive: Flexible FAST Adhesive* ribbons spaced 6-inches o.c. along the top flanges of the steel deck	90TG Base or 120TG Base	113	5.4	170	8.1	N/A	UL SYSTEM Adhered #14

ADHERED Membrane ADHERED Insulation

STEEL DECK: MIN. 22 GA, GRADE 33

General construction note : (1) 6 mil Polyethylene, VapAir Seal MD, 725TR over Steel Deck or over Optional Thermal Barrier.

<p>Membrane: Sure-Flex PVC or Sure-Flex KEE HP, minimum 45-mil thick Adhesive: Low VOC PVC Bonding Adhesive</p>	<p>Optional: Minimum 1/4-inch DensDeck Prime or SECUROCK, or minimum 1/2 inch thick SecurShield HD or SecurShield HD Plus Adhesive: Flexible FAST Adhesive ribbons spaced 12-inches o.c. or Flexible FAST Adhesive splatter applied.</p>	<p>Minimum: 1-1/2-inch, InsulBase, SecurShield, or minimum 2 inch thick "SecurShield HD Composite" Adhesive: Flexible FAST Adhesive or Flexible FAST Dual Tanks ribbons spaced 6-inches o.c. .</p>	<p>Minimum: 1/2-inch DensDeck Prime, or SECUROCK Adhesive: Flexible FAST Adhesive" ribbons spaced 6-inches o.c. along the top flanges of the steel deck</p>	90TG Base or 120TG Base	113	5.4	170	8.1	N/A	UL SYSTEM Adhered #14
<p>Membrane: Sure-Weld, Sure-Weld HS, or Spectro-Weld Adhesive: Sure-Weld Bonding Adhesive, CAV-GRIP III Adhesive/Primer, or LOW-VOC Bonding Adhesive</p>	<p>Optional: Minimum 1/4-inch DensDeck Prime or SECUROCK, or minimum 1/2 inch thick SecurShield HD or SecurShield HD Plus Adhesive: Flexible FAST Adhesive ribbons spaced 12-inches o.c. or Flexible FAST Adhesive splatter applied.</p>	<p>Minimum: 1-1/2-inch, InsulBase, SecurShield, or minimum 2 inch thick "SecurShield HD Composite" Adhesive: Flexible FAST Adhesive or Flexible FAST Dual Tanks ribbons spaced 6-inches o.c. .</p>	<p>Minimum: 1/2-inch DensDeck Prime, or SECUROCK Adhesive: Flexible FAST Adhesive" ribbons spaced 6-inches o.c. along the top flanges of the steel deck</p>	90TG Base or 120TG Base	113	5.4	170	8.1	N/A	UL SYSTEM Adhered #14
<p>Membrane: Sure-Seal AFX or Sure-Weld AFX Adhesive: full mopping of hot roofing asphalt</p>	<p>Optional: Minimum 1/4-inch DensDeck Prime or SECUROCK, or minimum 1/2 inch thick SecurShield HD or SecurShield HD Plus Adhesive: Flexible FAST Adhesive ribbons spaced 12-inches o.c. or Flexible FAST Adhesive splatter applied.</p>	<p>Minimum: 1-1/2-inch, InsulBase, SecurShield, or minimum 2 inch thick "SecurShield HD Composite" Adhesive: Flexible FAST Adhesive or Flexible FAST Dual Tanks ribbons spaced 6-inches o.c. .</p>	<p>Minimum: 1/2-inch DensDeck Prime, or SECUROCK Adhesive: Flexible FAST Adhesive" ribbons spaced 6-inches o.c. along the top flanges of the steel deck</p>	90TG Base or 120TG Base	113	5.4	170	8.1	N/A	UL SYSTEM Adhered #14
<p>Membrane: Sure-Flex PVC FleeceBACK, Sure-Flex KEE HP FleeceBACK, Sure-Flex KEE HP FRS FleeceBACK, Sure-Seal FleeceBACK, Sure-White FleeceBACK or Sure-Weld FleeceBACK Adhesive: Flexible FAST Adhesive, or Flexible FAST Dual Tank Adhesive either in continuous ribbons spaced 6-inch o.c. or splatter-applied with Flexible FAST Adhesive</p>	<p>Optional: Minimum 1/4-inch DensDeck Prime or SECUROCK, or minimum 1/2 inch thick SecurShield HD or SecurShield HD Plus Adhesive: Flexible FAST Adhesive ribbons spaced 12-inches o.c. or Flexible FAST Adhesive splatter applied.</p>	<p>Minimum: 1-1/2-inch, InsulBase, SecurShield, or minimum 2 inch thick "SecurShield HD Composite" Adhesive: Flexible FAST Adhesive or Flexible FAST Dual Tanks ribbons spaced 6-inches o.c. .</p>	<p>Minimum: 1/2-inch DensDeck Prime, or SECUROCK Adhesive: Flexible FAST Adhesive" ribbons spaced 6-inches o.c. along the top flanges of the steel deck</p>	90TG Base or 120TG Base	113	5.4	170	8.1	N/A	UL SYSTEM Adhered #14
<p>Membrane: Sure-Seal FR or Sure-White Adhesive: 90-8-30A, CAV-GRIP III Adhesive/Primer, EPDM x23 LOW-VOC Bonding Adhesive</p>	<p>Optional: SecurShield HD / HD Plus or 1/4" DensDeck Prime or Securock or Flexible FAST ribbons 12" o.c.</p>	<p>Minimum: 1-1/2-inch InsulBase or SecurShield; or 2-inch SecurShield HD Composite Adhesive: Flexible FAST ribbons spaced 6-inch o.c. direct to Vapor Barrier, or 12-inch o.c. over Thermal Barrier or other insulation layers</p>	<p>Optional: 1/2-inch DensDeck Prime or Securock Adhesive: Flexible FAST ribbons spaced 6-inches o.c.</p>	725 TR	113	5.4	170	8.1	N/A	UL SYSTEM Adhered #8
<p>Membrane: Sure-Flex PVC or Sure-Flex KEE HP, Adhesive: Low VOC PVC Bonding Adhesive"</p>	<p>Optional: SecurShield HD / HD Plus or 1/4" DensDeck Prime or Securock or Flexible FAST ribbons 12" o.c.</p>	<p>Minimum: 1-1/2-inch InsulBase or SecurShield; or 2-inch SecurShield HD Composite Adhesive: Flexible FAST ribbons spaced 6-inch o.c. direct to Vapor Barrier, or 12-inch o.c. over Thermal Barrier or other insulation layers</p>	<p>Optional: 1/2-inch DensDeck Prime or Securock Adhesive: Flexible FAST ribbons spaced 6-inches o.c.</p>	725TR	113	5.4	170	8.1	N/A	UL SYSTEM Adhered #8
<p>Membrane: Sure-Weld, Sure-Weld HS, or Spectro-Weld Adhesive: Sure-Weld Bonding Adhesive", "CAV-GRIP III Adhesive/Primer", or "LOW-VOC Bonding Adhesive</p>	<p>Optional: SecurShield HD / HD Plus or 1/4" DensDeck Prime or Securock or Flexible FAST ribbons 12" o.c.</p>	<p>Minimum: 1-1/2-inch InsulBase or SecurShield; or 2-inch SecurShield HD Composite Adhesive: Flexible FAST ribbons spaced 6-inch o.c. direct to Vapor Barrier, or 12-inch o.c. over Thermal Barrier or other insulation layers</p>	<p>Optional: 1/2-inch DensDeck Prime or Securock Adhesive: Flexible FAST ribbons spaced 6-inches o.c.</p>	725TR	113	5.4	170	8.1	N/A	UL SYSTEM Adhered #8
<p>Membrane: Sure-Seal FleeceBACK", "Sure-White FleeceBACK" or "Sure-Weld FleeceBACK" Adhesive: Flexible FAST Adhesive or Flexible FAST Dual Tank Adhesive 6-inch ribbons or splatter-applied.</p>	<p>Optional: SecurShield HD / HD Plus or 1/4" DensDeck Prime or Securock or Flexible FAST ribbons 12" o.c.</p>	<p>Minimum: 1-1/2-inch InsulBase or SecurShield; or 2-inch SecurShield HD Composite Adhesive: Flexible FAST ribbons spaced 6-inch o.c. direct to Vapor Barrier, or 12-inch o.c. over Thermal Barrier or other insulation layers</p>	<p>Optional: 1/2-inch DensDeck Prime or Securock Adhesive: Flexibel FAST ribbons spaced 6-inches o.c.</p>	725TR	113	5.4	170	8.1	N/A	UL SYSTEM Adhered #8
<p>Membrane: Sure-Weld AFX Adhesive: full mopping of hot roofing asphalt</p>	<p>Optional: SecurShield HD / HD Plus or 1/4" DensDeck Prime or Securock or Flexible FAST ribbons 12" o.c.</p>	<p>Minimum: 1-1/2-inch InsulBase or SecurShield; or 2-inch SecurShield HD Composite Adhesive: Flexible FAST ribbons spaced 6-inch o.c. direct to Vapor Barrier, or 12-inch o.c. over Thermal Barrier or other insulation layers</p>	<p>Optional: 1/2-inch DensDeck Prime or Securock Adhesive: Flexibel FAST ribbons spaced 6-inches o.c.</p>	725TR	113	5.4	170	8.1	N/A	UL SYSTEM Adhered #8
<p>Membrane: Sure-Seal FleeceBACK or Sure-White FleeceBACK, Sure-Flex FleeceBACK, Sure-Flex KEE-HP FleeceBACK, Sure-Flex FRS FleeceBACK or Sure-Flex KEE-HP FRS FleeceBACK / Flexible FAST ribbons 6" o.c. Adhesive: Flexible FAST ribbons spaced 6-inches o.c.</p>	<p>SecurShield HD /HD Plus or 1/4" DensDeck Prime or Securock Adhesive: Flexible FAST ribbons spaced 6-inches o.c.</p>	<p>Min. 2" InsulBase, SecurShield or SecurShield HD Composite Adhesive: Flexible FAST ribbons spaced 6-inches o.c.</p>	<p>None</p>	6-mil Poly	60	3	90	4	NA	Intertek E3908.01
<p>Membrane: Sure-Flex PVC, Sure-Flex PVC FRS Adhesive: CAV-GRIP PVC, Low VOC PVC Bonding Adhesive</p>	<p>Optional: Min. 0.25-inch DensDeck Prime, Securock, Min. 5/16" EcoStorm VSH, .5" SecurShield HD, SecurShield HD Plus Adhesive: Flexible FAST or Flexible FAST Dual Tank adhesive ribbons spaced 6" oc applied to vapor barrier or 12" oc applied to thermal barrier</p>	<p>Minimum: 1/2-inch InsulBase, "InsulBase NH", "SecurShield or SecurShield NH Adhesive: Flexible FAST or Flexible FAST Dual Tank Adhesive ribbons spaced 6-inch o.c.</p>	<p>Optional: Min. 0.5-inch DensDeck Prime or SECUROCK Adhesive: Flexible FAST or Flexible FAST Dual Tank Adhesive ribbons spaced 6-inch o.c., positioned atop the top-flanges of the steel deck.</p>	725 TR	84	4.0	128	6.1	N/A	UL SYSTEM Adhered #7

ADHERED Membrane ADHERED Insulation

STEEL DECK: MIN. 22 GA, GRADE 33

General construction note : (1) 6 mil Polyethylene, VapAir Seal MD, 725TR over Steel Deck or over Optional Thermal Barrier.

<p>Membrane: Sure-Flex KEE HP Adhesive: Low VOC PVC Bonding Adhesive</p>	<p>Optional: Min. 0.25-inch DensDeck Prime, Securock, Min. 5/16" EcoStorm VSH, .5" SecurShield HD, SecurShield HD Plus Adhesive: Flexible FAST or Flexible FAST Dual Tank adhesive ribbons spaced 8" oc applied to vapor barrier or 12" oc applied to thermal barrier</p>	<p>Minimum: 1/2-inch InsuBase, "InsuBase NH", "SecurShield or SecurShield NH" Adhesive: Flexible FAST or Flexible FAST Dual Tank Adhesive ribbons spaced 6-inch o.c.</p>	<p>Optional: Min. 0.5-inch DensDeck Prime or SECUROCK Adhesive: Flexible FAST or Flexible FAST Dual Tank Adhesive ribbons spaced 6-inch o.c., positioned atop the top-flanges of the steel deck.</p>	725TR	84	4.0	128	6.1	N/A	UL SYSTEM Adhered #7
<p>Membrane: Sure-Flex PVC Adhesive: Cav-Grip PVC Adhesive</p>	<p>Optional: Minimum 1/2-inch SecurShield HD or SecurShield HD Plus Adhesive: Flexible FAST Adhesive ribbons spaced 12-inches o.c.</p>	<p>Minimum: 1-1/2-inch InsuBase, SecurShield, or minimum 2-inch thick SecurShield HD Composite Adhesive: Flexible FAST, Flexible FAST Dual Tank Adhesive ribbons spaced 6-inches o.c. along top flanges of steel deck to vapor barrier above or spaced 12-inches o.c. when applied to thermal barrier or insulation.</p>	<p>Optional: Minimum 1/2-inch DensDeck Prime or SECUROCK Adhesive: Flexible FAST Adhesive ribbons spaced 6 inches o.c. along the top flanges of the steel deck.</p>	725 TR	113	5.4	169	8.1	N/A	UL SYSTEM Adhered #9
<p>Membrane: Sure-Flex PVC Adhesive: Cav-Grip PVC Adhesive</p>	<p>Optional: Minimum 1/2-inch SecurShield HD or SecurShield HD Plus Adhered: Flexible FAST Adhesive" spaced 12 inches o.c</p>	<p>Minimum: 1-1/2 inch thick "HP-H, InsuBase, SecurShield, or minimum 2 inch thick SecurShield HD Composite Adhered: Flexible FAST Adhesive, Flexible FAST Dual Tank Adhesive ribbons spaced 6 inches o.c. along top flanges of steel deck to vapor barrier above or spaced 12-inches o.c. when applied to thermal barrier or insulation.</p>	<p>Minimum: 1/2-inch DensDeck Prime or SECUROCK Adhesive: Flexible FAST Adhesive ribbons spaced 6 inches o.c. along the top flanges of the steel deck.</p>	Sure MB 70 SA,	113	5.4	169	8.1	N/A	UL SYSTEM Adhered #15
<p>Membrane: Sure-Flex PVC Adhesive: Cav-Grip PVC Adhesive</p>	<p>Optional: Minimum 1/2 inch SecurShield HD or "SecurShield HD Plus Adhered: Flexible FAST Adhesive spaced 12-inches o.c</p>	<p>Minimum: 1-1/2 inch, InsuBase, SecurShield, or minimum 2 inch thick SecurShield HD Composite Adhered: Flexible FAST, Flexible FAST Dual Tank Adhesive ribbons spaced 6-inches o.c. along top flanges of steel deck to vapor barrier above or spaced 12-inches o.c. when applied to thermal barrier or insulation.</p>	<p>Minimum: 1/2-inch DensDeck Prime, SECUROCK Adhered: Flexible FAST Adhesive ribbons spaced 6-inches o.c. along the top flanges of the steel deck.</p>	Sure MB 90TG Base	113	5.4	169	8.1	N/A	UL SYSTEM Adhered #16
<p>Membrane: Sure-Flex PVC, Sure-Flex PVC FRS Adhesive: CAV-GRIP PVC adhesive, Low VOC PVC Bonding Adhesive</p>	<p>(Optional) Min. 0.25-inch DensDeck or SECUROCK min. 5/16-inch EcoStorm VSH or Min. 0.5-inch SecurShield HD or SecurShield HD Plus Adhesive: Flexible FAST or Flexible FAST Dual Tank Adhesive ribbons spaced 12-inches o.c.</p>	<p>Minimum: 1-1/2-inch InsuBase, InsuBase NH, SecurShield or SecurShield NH Adhesive: Flexible FAST or Flexible FAST Dual Tank Adhesive ribbons spaced 6-inch o.c. (when applying direct-to-vapor-barrier), or spaced 12-inch o.c. (when applying to thermal barrier or prior layers of insulation).</p>	<p>Min. 1/2-inch DensDeck Prime or SECUROCK Adhesive: Flexible FAST or Flexible FAST Dual Tank Adhesive ribbons spaced 6-inch o.c., positioned atop the top-flanges of the steel deck.</p>	SA70	84	4.0	126	6.0	N/A	UL SYSTEM Adhered #11
<p>Membrane: Sure-Flex KEE HP Adhesive: Low VOC PVC Bonding Adhesive</p>	<p>(Optional) Min. 0.25-inch DensDeck or SECUROCK min. 5/16-inch EcoStorm VSH or Min. 0.5-inch SecurShield HD or SecurShield HD Plus Adhesive: Flexible FAST or Flexible FAST Dual Tank Adhesive ribbons spaced 12-inches o.c.</p>	<p>Minimum: 1-1/2-inch InsuBase, InsuBase NH, SecurShield or SecurShield NH Adhesive: Flexible FAST or Flexible FAST Dual Tank Adhesive ribbons spaced 6-inch o.c. (when applying direct-to-vapor-barrier), or spaced 12-inch o.c. (when applying to thermal barrier or prior layers of insulation).</p>	<p>Min. 1/2-inch DensDeck Prime or SECUROCK Adhesive: Flexible FAST or Flexible FAST Dual Tank Adhesive ribbons spaced 6-inch o.c., positioned atop the top-flanges of the steel deck.</p>	SA70	84	4.0	126	6.0	N/A	UL SYSTEM Adhered #11

**Adhered Membrane
Mechanically Fastened Coverboard or Insulation**

STEEL DECK-MIN. 22 GA, GRADE 33

General Construction Note: (1) 6 mil. Polyethylene, VapAir Seal MD, 725TR over Steel Deck or over Optional Thermal Barrier

Membrane: Sure-Seal SAT, self-adhering Adhesive: self-adhering	Minimum: 2-inch InsuBase Fastened: SecurFast Insulation Plates @ 1 per 4 S.F.	Optional: Any thickness InsuBase, SecurShield, SecurShield HD Composite, Insulfoam EPS Loose-laid	Optional: Any UL Classified board Loose Laid, adhered or mechanically attached	Note 1	33	1.6	50	2.4	200	UL SYSTEM Adhered #1
Membrane: Sure-Weld Adhesive: Sure-Weld Bonding Adhesive	Minimum: 1/4-inch DensDeck Prime Fastened: Insulfast @ 1 per 2.67 S.F.	Minimum: 2 layers min. 1.75" InsuBase or SecurShield Loose-laid	None	6-mil Poly	40	1.9	60	2.9	411	Intertek F1583.06
Membrane: Sure-Flex Adhesive: PVC Bonding Adhesive	Minimum: 1/4" DensDeck Prime Attachment: Insulfast @ 1 per 2.67 S.F.	Minimum: 2 layers min. 1.75" InsuBase or SecurShield Loose-laid	None	6-mil Poly	39	1.9	59	2.8	411	Intertek F1583.07
Membrane: Sure-Weld SAT Adhesive: self-adhering	Minimum: 2-inch InsuBase Fastened: InsulFast Fasteners & SecurFast Insulation Plates @ 1 per 4 S.F.	Optional - Any thickness InsuBase, SecurShield, SecurShield HD Composite, Insulfoam EPS Loose-laid	Optional: Any UL Classified board Loose Laid, adhered or mechanically attached	Note 1	42	2.0	63	3.0	250	UL SYSTEM Adhered #2
Membrane: Sure-Seal FR, Sure-Tough or Sure-White Adhesive: 90-8-30A, "CAV-GRIP III Adhesive/Primer", or EPDM x23 LOW-VOC	SecurShield HD /HD Plus or 1/4-inch DensDeck Prime or Securock Adhesive: Flexible FAST ribbons 12-inches o.c.	Minimum: 2inch InsuBase or SecurShield Fastened: Insulfast @ 1 per 4 S.F.	Optional: Any UL Classified board Loose Laid, adhered or mechanically attached	Note 1	53	2.5	80	3.8	315	UL SYSTEM Adhered #3
Membrane: Sure-Flex PVC or Sure-Flex KEE HP Adhesive: Low VOC PVC Bonding Adhesive, or Sure-Flex PVC, Cav-Grip PVC Adhesive	SecurShield HD /HD Plus or 1/4-inch DensDeck Prime or Securock Adhesive: Flexible FAST ribbons 12-inches o.c.	Minimum: 2inch InsuBase or SecurShield Fastened: Insulfast @ 1 per 4 S.F.	Optional: Any UL Classified board Loose Laid, adhered or mechanically attached	Note 1	53	2.5	80	3.8	315	UL SYSTEM Adhered #3
Membrane: Sure-Weld, "Sure-Weld HS, or Spectro-Weld" Adhesive: Sure-Weld Bonding Adhesive, CAV-GRIP III Adhesive/Primer, or LOW-VOC Bonding Adhesive	SecurShield HD /HD Plus or 1/4-inch DensDeck Prime or Securock Adhesive: Flexible FAST ribbons 12-inches o.c.	Minimum: 2inch InsuBase or SecurShield Fastened: Insulfast @ 1 per 4 S.F.	Optional: Any UL Classified board Loose Laid, adhered or mechanically attached	Note 1	53	2.5	80	3.8	315	UL SYSTEM Adhered #3
Membrane: Sure-Seal AFX" or "Sure-Weld AFX" Adhesive: full mopping of hot roofing asphalt	SecurShield HD /HD Plus or 1/4-inch DensDeck Prime or Securock Adhesive: Flexible FAST ribbons 12-inches o.c.	Minimum: 2inch InsuBase or SecurShield Fastened: Insulfast @ 1 per 4 S.F.	Optional: Any UL Classified board Loose Laid, adhered or mechanically attached	Note 1	53	2.5	80	3.8	315	UL SYSTEM Adhered #3
Membrane: Sure-Flex PVC FleeceBACK, Sure-Flex KEE HP FleeceBACK, Sure-Flex KEE HP FRS FleeceBACK, Sure-Seal FleeceBACK, Sure-White FleeceBACK, or Sure-Weld FleeceBACK Adhesive: Flexible FAST Adhesive, or Flexible FAST Dual Tank Adhesive continuous 6-inch ribbons or splatter-applied	SecurShield HD /HD Plus or 1/4-inch DensDeck Prime or Securock Adhesive: Flexible FAST ribbons 12-inches o.c.	Minimum: 2inch InsuBase or SecurShield Fastened: Insulfast @ 1 per 4 S.F.	Optional: Any UL Classified board Loose Laid, adhered or mechanically attached	Note 1	53	2.5	80	3.8	315	UL SYSTEM Adhered #3
Membrane: Sure-Seal FR, Sure-Tough or Sure-White Adhesive: 90-8-30A, CAV-GRIP III Adhesive/Primer", or "EPDM x23 LOW-VOC Bonding Adhesive	Minimum: 1.5" InsuBase, SecurShield, SecurShield HD Composite Fastened: Insulfast@ 1 per 2.67 S.F.	N/A	Optional: Any UL Classified board Loose Laid, adhered or mechanically attached	Note 1	53	2.5	80	3.8	214	UL SYSTEM Adhered #4
Membrane: Sure-Flex PVC" or "Sure-Flex KEE HP Adhesive: Low VOC PVC Bonding Adhesive or Cav-Grip PVC Adhesive	Minimum: 1.5" InsuBase, SecurShield, SecurShield HD Composite Fastened: Insulfast@ 1 per 2.67 S.F.	N/A	Optional: Any UL Classified board Loose Laid, adhered or mechanically attached	Note 1	53	2.5	80	3.8	214	UL SYSTEM Adhered #4
Membrane: "Sure-Weld", "Sure-Weld HS", or "Spectro-Weld" Adhesive: Sure-Weld Bonding Adhesive", "CAV-GRIP III Adhesive/Primer", or LOW-VOC Bonding Adhesive	Minimum: 1.5" InsuBase, SecurShield, SecurShield HD Composite Fastened: Insulfast@ 1 per 2.67 S.F.	N/A	Optional: Any UL Classified board Loose Laid, adhered or mechanically attached	Note 1	53	2.5	80	3.8	214	UL SYSTEM Adhered #4
Membrane: Sure-Weld AFX Adhesive: Full mopping of hot roofing asphalt	Minimum: 1.5" InsuBase, SecurShield, SecurShield HD Composite Fastened: Insulfast@ 1 per 2.67 S.F.	N/A	Optional: Any UL Classified board Loose Laid, adhered or mechanically attached	Note 1	53	2.5	80	3.8	214	UL SYSTEM Adhered #4
Membrane: "Sure-Flex KEE HP FRS FleeceBACK", "Sure-Seal FleeceBACK", "Sure-White FleeceBACK", Sure-Flex PVC FleeceBACK, Sure-Flex KEE HP FleeceBACK, or "Sure-Weld FleeceBACK Adhesive: Flexible FAST Adhesive, or Flexible FAST Dual Tank Adhesive applied in 6-inch ribbons, or splatter-applied.	Minimum: 1.5" InsuBase, SecurShield, SecurShield HD Composite Fastened: Insulfast@ 1 per 2.67 S.F.	N/A	Optional: Any UL Classified board Loose Laid, adhered or mechanically attached	Note 1	53	2.5	80	3.8	214	UL SYSTEM Adhered #4
Membrane: Sure-Seal FR, Sure-Tough or Sure-White Adhesive: 90-8-30A	Minimum: 1/4-inch Securock Fastened: Insulfast @ 1 per 2.67 S.F.	Minimum: 2-inch InsuBase or SecurShield Loose-laid	Optional: Any UL Classified board Loose Laid, adhered or mechanically attached	Note 1	67	3.2	101	4.8	267	UL SYSTEM Adhered #5
Membrane: Sure-Flex PVC or "Sure-Flex KEE HP Adhesive: Low VOC PVC Bonding Adhesive, Cav-Grip PVC Adhesive	Minimum: 1/4-inch Securock Fastened: Insulfast @ 1 per 2.67 S.F.	Minimum: 2-inch InsuBase or SecurShield Loose-laid	Optional: Any UL Classified board Loose Laid, adhered or mechanically attached	Note 1	67	3.2	101	4.8	267	UL SYSTEM Adhered #5

**Adhered Membrane
Mechanically Fastened Coverboard or Insulation**
STEEL DECK: MIN.22 GA, GRADE 33

General construction note: (1) 6 mil Polyethylene, VapAir Seal MD, 725 TR over Steel Deck or over Optional Thermal Barrier

Membrane: Sure-Weld, Sure-Weld HS, or Spectro-Weld Adhesive: Sure-Weld Bonding Adhesive, CAV-GRIP III Adhesive/Primer, or LOW-VOC Bonding Adhesive	Minimum: 1/4-inch Securock Fastened: Insulfast @ 1 per 2.67 S.F.	Minimum: 2-inch InsulBase or SecurShield Loose-laid	Optional: Any UL Classified board Loose Laid, adhered or mechanically attached	Note 1	67	3.2	101	4.8	267	UL SYSTEM Adhered #5
Membrane: Sure-Flex PVC FleeceBACK, Sure-Flex KEE HP FleeceBACK, Sure-Flex KEE HP FRS FleeceBACK, Sure-Seal FleeceBACK, Sure-White FleeceBACK or Sure-Weld FleeceBACK Adhesive: Flexible FAST Adhesive, or Flexible FAST Dual Tank Adhesive 6-inch ribbons or splatter-applied.	Minimum: 1/4-inch Securock Fastened: Insulfast @ 1 per 2.67 S.F.	Minimum: 2-inch InsulBase or SecurShield Loose-laid	Optional: Any UL Classified board Loose Laid, adhered or mechanically attached	Note 1	67	3.2	101	4.8	267	UL SYSTEM Adhered #5
Membrane: Sure-Weld AFX Adhesive: Full mopping of hot roofing asphalt	Minimum: 1/4-inch Securock Fastened: Insulfast @ 1 per 2.67 S.F.	Minimum: 2-inch InsulBase or SecurShield Loose-laid	Optional: Any UL Classified board Loose Laid, adhered or mechanically attached	Note 1	67	3.2	101	4.8	267	UL SYSTEM Adhered #5
Membrane: Sure-Seal FR EPDM, Sure-White, Sure Tough Adhesive: 90-8-30A, EPDM X-23 Bonding Adhesive	Minimum: 1/2-inch SECUROCK Fastened: HP fasteners @ 1 per 2 S.F.	Minimum: 1-1/2-inch InsulBase, SecurShield, SecurShield HD Composite or Insulfoam EPS Loose-laid	Optional: Any UL Classified board Loose Laid, adhered or mechanically attached	VapAir Seal MD	80	3.8	120	5.8	240	UL SYSTEM Adhered #6
Membrane: Sure-Flex, Sure-Flex FRS or Sure-Flex KEE HP Adhesive: PVC Bonding Adhesive, Low VOC PVC Bonding Adhesive or Hydrobond Bonding Adhesive	Minimum: 2-inch InsulBase, SecurShield or SecurShield HD Composite Fastened: Insulfast @ 1 per 4 S.F.	Optional: Any thickness InsulBase, SecurShield, SecurShield HD Composite Loose-laid	Optional: Min. 1/4" DensDeck, DensDeck Prime or Securock Loose-laid, adhered or mechanically attached	6-mil Polly	38	1.8	57	2.7	228.0	exp CSYI 209665-03
Membrane: Sure-Seal FR, Sure-Tough or Sure-White Adhesive: 90-8-30A Bonding Adhesive, Low VOC Bonding Adhesive or Aqua Base Bonding Adhesive	Minimum: 2-inch InsulBase, SecurShield or SecurShield HD Composite Fastened: Insulfast @ 1 per 4 S.F.	Optional: Any thickness InsulBase, SecurShield, SecurShield HD Composite Loose-laid	Optional: Min. 1/4" DensDeck, DensDeck Prime or Securock Loose-laid, adhered or mechanically attached	6-mil Polly	37	1.8	56	2.7	222	exp CSYI 209665-04
Membrane: Sure-Weld or Sure-Weld HS Adhesive: Sure-Weld Bonding Adhesive, Low VOC Bonding Adhesive or Aqua Base Bonding Adhesive	Minimum: 2-inch InsulBase, SecurShield or SecurShield HD Composite Fastened: Insulfast @ 1 per 4 S.F.	Optional: Any thickness InsulBase, SecurShield, SecurShield HD Composite Loose-laid	Optional: Min. 1/4-inch DensDeck, DensDeck Prime or Securock Loose-laid, adhered or mechanically attached	725TR	35	1.7	53	2.5	210	exp CSYI 11646-5071
Membrane: Sure-Seal FR Adhesive: 90-8-30A	Minimum: 1/4-inch DensDeck Prime Fastened: Insulfast @ 1 per 2.67 S.F.	2 layers Minimum 1-3/4-inch InsulBase or SecurShield Loose-laid	None	6-mil Polly	47	2.3	71	3.4	411	Intertek E3908.08
Membrane: Sure-Seal FR, Sure-Tough or Sure-White Adhesive: 90-8-30A, 1168 Bonding Adhesive or X-23 Bonding Adhesive	Minimum: 1/2-inch SecurShield HD Plus or min. 2" SecurShield HD Composite Fastened: Insulfast @ 1 per 4 S.F.	Optional: When SecurShield HD Composite is used as top insulation layer Min. 1-3/4-inch InsulBase or SecurShield Loose-laid	Optional: Any UL Classified board Loose Laid, adhered or mechanically attached	6-mil Polly	33	1.6	50	2.4	411	Intertek E3908.05
Membrane: Sure-Weld AFX Adhesive: Hot Asphalt	HP Recovery Board Adhered: Hot Asphalt	2 layers Minimum 1-3/4-inch InsulBase or SecurShield Fastened: Insulfast @ 1 per 4 S.F.	Optional: Any UL Classified board Loose Laid, adhered or mechanically attached	6-mil Polly	33	1.6	50	2.4	411	Intertek E3908.04

Induction Welded Systems

STEEL DECK: MIN. 22 GA, GRADE 33

General construction note : 6 mil Polyethylene, VapAir Seal MD, 725TR over Steel Deck or over Optional Thermal Barrier.

MEMBRANE / ATTACHMENT	TOP INSULATION OR COVER BOARD	BASE INSULATION	THERMAL BARRIER	Air/ Vapor Barrier	DESIGN WIND UPLIFT RESISTANCE		TESTED UPLIFT RESISTANCE		MIN. FASTENER PULLOUT ³ (lbf)	REFERENCE
					PSF	kPa	PSF	kPa		
ATTACHMENT METHOD										
Membrane: Sure-Flex Fastened: RhinoBond Plates with HP-X Fasteners @ 1 per 5.3 S.F.	Optional: (except when EPS is used) SecurShield HD / HD Plus, HP Recovery Board or 1/4-inch DensDeck Prime or Securock Loose-laid	Minimum: 2-inch InsulBase, SecurShield or SecurShield HD Composite, or Insulfoam EPS, Loose-laid	Optional: Any UL Classified board Loose Laid, adhered or mechanically attached	Note 1	64	3.072	96	4.608	513	UL SYSTEM Mech. Fastened #4
Membrane: Sure-Weld Fastened: RhinoBond Plates with HP- X Fasteners @ 1 per 5.3 S.F.	Optional: (except when EPS is used) SecurShield HD / HD Plus, HP Recovery Board or 1/4-inch DensDeck Prime or Securock Loose-laid	Minimum: 2-inch InsulBase, SecurShield or SecurShield HD Composite, or Insulfoam EPS, Loose-laid	Optional: Any UL Classified board Loose Laid, adhered or mechanically attached	Note 1	70	3.36	105	5.04	560	UL SYSTEM Mech. Fastened #5
Membrane: Sure-Weld Fastened: RhinoBond Plates with HP- X Fasteners @ 1 per 4.0 S.F.	Optional: (except when EPS is used) SecurShield HD / HD Plus, HP Recovery Board or 1/4-inch DensDeck Prime or Securock Loose-laid	Minimum: 2-inch InsulBase, SecurShield or SecurShield HD Composite, or Insulfoam EPS, Loose-laid	Optional: Any UL Classified board Loose Laid, adhered or mechanically attached	VapAir Seal MD	73	3.5	110	5.27	440	UL SYSTEM Mech. Fastened #6
Membrane: Sure-Weld Fastened: RhinoBond Plates with HP- X Fasteners @ 1 per 1.6 S.F.	Optional: (except when EPS is used): SecurShield HD / HD Plus, HP Recovery Board or 1/4-inch DensDeck Prime or Securock Loose-laid	Minimum: 1.5-inch InsulBase, SecurShield or SecurShield HD Composite or Insulfoam EPS Loose-laid	Optional: Any UL Classified board Loose Laid, adhered or mechanically attached	Note 1	135	6.46	202.5	9.72		UL SYSTEM Mech. Fastened #10

Notes:

1. Unless otherwise specified, acceptable vapor barriers include minimum 6-mil polyethylene, loose-laid , adhered mechanically fastened, or torch adhered barriers may be installed in this assembly.
2. Design Wind Uplift Resistance determined by dividing the tested uplift value achieved by a 1.5 safety factor, as required by the CSA 123 Standard.
3. For re-roof or recover construction, fastener field pullout resistance testing must yield minimum value indicated. Not applicable to assemblies without fasteners.
4. Calculated value = (Design Wind Uplift Resistance) x (1.5 - CSA 123.21 safety factor) x (Top insulation layer fastening rate).

Mechanically Fastened

STEEL DECK: MIN. 22 GA, GRADE 33

General construction note : 6 mil Polyethylene, VapAir Seal MD, 725TR over Steel Deck or over Optional Thermal Barrier.

MEMBRANE / ATTACHMENT	TOP INSULATION OR COVER BOARD	BASE INSULATION	THERMAL BARRIER	Air/ Vapor Barrier	DESIGN WIND UPLIFT RESISTANCE		TESTED UPLIFT RESISTANCE		MIN. FASTENER PULLOUT ² (lbf)	REFERENCE
	ATTACHMENT METHOD				PSF	kPa	PSF	kPa		
Membrane: 10' wide Sure-Tough or Sure-Tough FR Fastened: Polymer Seam Plates with HP Fasteners spaced 12-inches o.c.	SecurShield HD / HD Plus, HP Recovery Board or 1/4-inch DensDeck Prime or Securock Fastened: Insulfast @ 1 per 5.3 S.F.	Minimum: 2-inch InsulBase or SecurShield or SecurShield HD Composite Loose-laid	Optional: Any UL Classified board Loose Laid, adhered or mechanically attached	Note 1	47	2.3	71	3.4	373 (Insulation) 665 (Membrane)	UL SYSTEM Mech Fastened #1
Membrane: 10' wide Sure-Tough or Sure-Tough FR Fastened: Polymer Fastening Bar with HP-X Fasteners spaced 12-inches o.c.	Optional: Any thickness InsulBase, SecurShield, SecurShield HD Composite Loose-laid	Optional: Any thickness InsulBase, SecurShield, SecurShield HD Composite Loose-laid	Optional: Any UL Classified board Loose Laid, adhered or mechanically attached	6-mil Poly	42	2.0	63	3.0	411	Intertek F1583.05
Membrane: 8' wide Sure-Tough or Sure-Tough FR Fastened: Polymer Fastening Bar with HP-X Fasteners spaced 12-inches o.c.	Optional: Any thickness InsulBase, SecurShield, SecurShield HD Composite Loose-laid	Optional: Any thickness InsulBase, SecurShield, SecurShield HD Composite Loose-laid	Optional: Any UL Classified board Loose Laid, adhered or mechanically attached	6-mil Poly	40	1.9	60	2.9	411	Intertek F1583.04
Membrane: 8' wide Sure-Tough or Sure-Tough FR Fastened: Polymer Fastening Bar with HP-X Fasteners spaced 12-inches o.c.	SecurShield HD / HD Plus or 1/4-inch DensDeck Prime or Securock Adhered: Flexible FAST ribbons spaced 6-inches o.c.	Two layers min. 1-3/4-inch InsulBase or SecurShield Fastened: Insulfast @ 1 per 4 S.F.	Optional: Any UL Classified board Loose Laid, adhered or mechanically attached	6-mil Poly	40	1.9	60	2.9	411	Intertek E3908.03
Membrane: 8' wide Sure-Tough or Sure-Tough FR Fastened: Polymer Fastening Bar with HP-X Fasteners spaced 12-inches o.c.	Min. 1-3/4-inch InsulBase, SecurShield or SecurShield HD Composite Fastened: Insulfast @ 1 per 4 S.F.	Minimum: 1-3/4-inch InsulBase or SecurShield Loose-laid	Optional: Any UL Classified board Loose Laid, adhered or mechanically attached	6-mil Poly	40	1.9	60	2.9	411	Intertek E3908.03
Membrane: 6' wide Sure-Tough or Sure-Tough FR Fastened: Polymer Fastening plates with HP Fasteners spaced 6-inches o.c.	Optional (Except when Insulfoam EPS is used): 1/4-inch DensDeck Prime or Securock 1/2-inch HP Recovery Board, SecurShield HD, SecurShield HD Plus Fastened: InsulFast @ 1 per 3.2 S.F.	InsulBase, SecurShield, SecurShield HD Composite or Insulfoam EPS Fastened: Insulfast @ 1 per 3.2 S.F. (Fasteners not required when coverboard is used).	Optional: Any UL Classified board Loose Laid, adhered or mechanically attached	Note 1	75	3.6	113	5.4	338	UL System Mech Fastened #7
Membrane: 81" wide Sure-Flex Fastened: Piranha Plates with HP-X Fasteners spaced 12-inches o.c.	Optional: SecurShield HD / HD Plus, HP Recovery Board or 1/4-inch DensDeck Prime or Securock Fastened: Insulfast @ 1 per 5.3 S.F.	Minimum: 2-inch InsulBase, SecurShield or SecurShield HD Composite Fastened: Insulfast @ 1 per 5.3 S.F. (Loose-laid if cover board is used)	Optional: Any UL Classified board Loose Laid, adhered or mechanically attached	Note 1	54	2.6	81	3.9	433 (Insulation) 511 (Membrane)	UL SYSTEM Mech. Fastened #3
Membrane: 81" wide Sure-Flex Fastened: Piranha Plates with HP-X Fasteners spaced 12" o.c.	Minimum: 2-inch InsulBase or SecurShield Fastened: Insulfast @ 1 per 4 S.F.	Optional - Any thickness InsulBase, SecurShield, SecurShield HD Composite / Loose-laid	Optional: Any UL Classified board Loose Laid, adhered or mechanically attached	6 mil Poly	g	#VALUE!	#VALUE!	#VALUE!	411	Intertek F1583.03
Membrane: 10' wide Sure-Flex, Sure-Flex KEE HP Fastened: Piranha Plates with HP-X Fasteners spaced 12" o.c.	Optional: SecurShield HD / HD Plus, HP Recovery Board or 1/4-inch DensDeck Prime or Securock / Insulfast @ 1 per 4 S.F.	Min. 2" InsulBase, SecurShield or SecurShield HD Composite / Insulfast @ 1 per 4 S.F. or Loose-laid if top layer of insulation is used	Optional: Min. 1/4" DensDeck, DensDeck Prime or Securock / Loose-laid, adhered or mechanically attached	725 TR	47	2.3	71	3.4	670 (Membrane)	exp CSY1 11646-5070
Membrane: 10' wide Sure-Flex Fastened: Piranha Plates with HP-X Fasteners spaced 12" o.c.	Minimum: 2-inch InsulBase or SecurShield / Insulfast @ 1 per 4 S.F.	Optional - Any thickness InsulBase, SecurShield, SecurShield HD Composite / Loose-laid	Optional: Any UL Classified board Loose Laid, adhered or mechanically attached	6-mil Poly	42	2	63	3.0	411	Intertek F1583.02
Membrane: 8' wide Sure-Weld Fastened: Piranha Plates with HP-X Fasteners spaced 12" o.c.	SecurShield HD / HD Plus, HP Recovery Board or 1/4-inch DensDeck Prime or Securock Fastened: Insulfast @ 1 per 5.3 S.F.	Minimum: 2-inch InsulBase or SecurShield / Loose-laid or SecurShield HD Composite / Insulfast @ 1 per 5.3 S.F.	Optional: Any UL Classified board Loose Laid, adhered or mechanically attached	Note 1	87	4.2	131	6.3	693 (Insulation) 960 (Membrane)	UL SYSTEM Mech. Fastened #8
Membrane: 8' wide Sure-Weld Fastened: Piranha Plates with HP-X Fasteners spaced 12" o.c.	Minimum: 2-inch InsulBase or SecurShield Fastened: Insulfast @ 1 per 5.3 S.F.	Optional - Any thickness InsulBase, SecurShield, SecurShield HD Composite / Loose-laid	Optional: Any UL Classified board Loose Laid, adhered or mechanically attached	Note 1	54	2.6	81	3.9	433 (Insulation) 511 (Membrane)	UL SYSTEM Mech. Fastened #2
Membrane: 8' wide Sure-Weld Fastened: Piranha Plates with HP-X Fasteners spaced 12" o.c.	Minimum: 2-inch InsulBase or SecurShield Fastened: Insulfast @ 1 per 4 S.F.	Optional: Any thickness InsulBase, SecurShield, SecurShield HD Composite / Loose-laid	Optional: Any UL Classified board Loose Laid, adhered or mechanically attached	6-mil Poly	50	2.4	75	3.6	411	Intertek F1583.01
Membrane: 4' wide Sure-Weld Fastened: Piranha Plates with HP-X Fasteners spaced 6" o.c.	Optional: (except when Insulfoam EPS is used): Min. 1/4-inch DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board or SECUROCK Glass-Mat Roof Board or 1/2-inch HP Recovery Board, SecurShield HD SecurShield HD Plus Fastened: Insulfast @ 1 per 5.3 S.F.	Minimum: 1.5" InsulBase, SecurShield, SecurShield HD Composite or Insulfoam EPS Fastened: Insulfast @ 1 per 5.3 S.F. (fasteners not required when coverboard is used)	Optional: Any UL Classified board Loose Laid, adhered or mechanically attached	Note 1	104	5.0	156	7.5	277	UL SYSTEM Mech. Fastened #9

Notes:

- Unless otherwise specified, acceptable vapor barriers include minimum 6-mil polyethylene, loose-laid, adhered mechanically fastened, or torch adhered barriers may be installed in this assembly.
- Design Wind Uplift Resistance determined by dividing the tested uplift value achieved by a 1.5 safety factor, as required by the CSA 123 Standard.
- For re-roof or recover construction, fastener field pullout resistance testing must yield minimum value indicated. Not applicable to assemblies without fasteners.
- Calculated value = (Design Wind Uplift Resistance) x (1.5 - CSA 123.21 safety factor) x (Top insulation layer fastening rate).

RapidLock Roofing Systems

STEEL DECK: MIN. 22 GA, GRADE 33

General construction note : 6 mil Polyethylene, VapAir Seal MD, 725TR over Steel Deck or over Optional Thermal Barrier.

MEMBRANE	TOP INSULATION OR COVER BOARD	BASE INSULATION	THERMAL BARRIER	Air/ Vapor Barrier	DESIGN WIND UPLIFT		TESTED UPLIFT RESISTANCE		MIN. FASTENER PULLOUT* (lbf)	REFERENCE
	ATTACHMENT METHOD				PSF	kPa	PSF	kPa		
Sure-Seal FleeceBACK RL	Minimum: 2-inch InsulBase RL Fastened: Insulfast @ 1 per 4 S.F	Optional: InsulBase, SecurShield, SecurShield HD Composite, or Insulfoam EPS, any combination, any thickness Loose-laid	Optional: Any UL Classified board Loose Laid, adhered or mechanically attached	Note 1	33	1.6	50	2.4	200	UL System Hook and Loop #3
Membrane: Sure-Seal FleeceBACK RL	Minimum: Minimum 1/2-inch SecurShield HD RL Adhered: Flexible FAST or Flexible FAST Dual-Tank ribbons spaced 12-inches o.c. or Flexible FAST splatter.	Minimum: 2-inch InsulBase, SecurShield or SecurShield HD Composite Fastened: InsulFast Fasteners @ 1 per 4 S.F.	Optional: Any UL Classified board Loose Laid, adhered or mechanically attached	Note 1	33	1.6	50	2.4	200	UL System Hook and Loop #2
Sure-Seal FleeceBACK RL	1/2-inch SecurShield HD RL Fastened: Insulfast @ 1 per 2 S.F	Optional: InsulBase, SecurShield, SecurShield HD Composite, or Insulfoam EPS, any combination, any thickness Loose-laid	Optional: Any UL Classified board Loose Laid, adhered or mechanically attached	Note 1	60	2.9	90	4.3	180	UL System Hook and Loop #8
Sure-Seal FleeceBACK RL	1/2-inch SecurShield HD RL Adhesive: Flexible FAST ribbons 6" o.c.	Minimum: 2-inch thick Carlisle InsulBase, SecurShield, or SecurShield HD Composite Adhesive: Flexible FAST, or Flexible FAST Dual-Tank ribbons spaced maximum 6-inches o.c.	Optional - 1/2-inch DensDeck Prime or Securcock Adhesive: Flexible FAST ribbons Spaced 6-inches o.c.	725TR (Cav-Grip III Primer)	60	2.9	90	4.3	N/A	UL System Hook and Loop #9
Membrane: Sure-Weld FleeceBACK RL or Membrane: Sure-Flex FleeceBACK RL	Minimum: 2-inch InsulBase RL Fastened: Insulfast @ 1 per 4 S.F.	Optional: InsulBase, SecurShield, SecurShield HD Composite, or Insulfoam EPS, any combination, any thickness Loose-laid	Optional: Any UL Classified board Loose Laid, adhered or mechanically attached	Note 1	27	1.3	41	1.9	160	UL SYSTEM Hook and Loop #1
Membrane: Sure-Weld FleeceBACK RL Membrane: Sure-Flex FleeceBACK RL	Minimum: 2-inch InsulBase RL Fastened: Insulfast @ 1 per 1.6 S.F.	Optional: InsulBase, SecurShield, SecurShield HD Composite, or Insulfoam EPS, any thickness Loose-laid	Optional: Any UL Classified board Loose Laid, adhered or mechanically attached	Note 1	33	1.6	50	2.4	80	UL SYSTEM Hook and Loop #4
Membrane: Sure-Weld FleeceBACK RL Membrane: Sure-Flex FleeceBACK RL	Minimum: 1/2-inch SecurShield HD RL Adhered: Flexible FAST ribbons spaced 6 inches o.c.	Minimum: 2-inch InsulBase, SecurShield, or SecurShield HD Composite Adhesive: Flexible FAST, or Flexible FAST Dual-Tank ribbons spaced maximum 6-inches o.c.	Optional: 1/2-inch DensDeck Prime or Securcock Adhesive: Flexible FAST ribbons spaced 6-inches o.c.	725TR (Cav-Grip III Primer)	33	1.6	50	2.4	NA	UL SYSTEM Hook and Loop #6
Membrane: Sure-Weld FleeceBACK RL Membrane: Sure-Flex FleeceBACK RL	Minimum: 1/2-inch SecurShield HD RL Adhesive: Flexible FAST ribbons spaced 12 inches o.c.		Optional: Any UL Classified board Loose Laid, adhered or mechanically attached	Note 1	33	1.6	50	2.4	200	UL SYSTEM Hook and Loop #5
Membrane: Sure-Weld FleeceBACK RL Membrane: Sure-Flex FleeceBACK RL	Minimum: 1/2-inch SecurShield HD RL Fastened: Insulfast @ 1 per 2 S.F.	Minimum: 1" InsulBase, SecurShield or SecurShield HD Composite Loose-Laid	Optional: Any UL Classified board Loose Laid, adhered or mechanically attached	Note 1	45	2.2	68	3.2	135	UL SYSTEM Hook and Loop #7
Membrane: Sure-Weld FleeceBACK RL Membrane: Sure-Flex FleeceBACK RL	Minimum: 1/2-inch SecurShield HD RL Adhesive: Flexible FAST or Flexible FAST Dual Tank Ribbons spaced 6-inches o.c.	Minimum: 2-inch InsulBase, SecurShield or SecurShield HD Composite Adhesive: Flexible FAST or Flexible FAST Dual Tank Ribbons spaced 6-inches o.c.	1/2-inch DensDeck Prime or Securcock Adhesive: Flexible FAST or Flexible FAST Dual Tank Ribbons spaced 6-inches o.c.	SA 70 Cav-Grip III Primer	33	2	50	2.40	N/A	UL SYSTEM Hook and Loop #10
Membrane: Sure-Weld FleeceBACK RL Membrane: Sure-Flex FleeceBACK RL	Minimum: 1/2-inch SecurShield HD RL Adhered: Flexible FAST ribbons spaced 6 inches o.c.	Minimum: 2-inch InsulBase, SecurShield, or SecurShield HD Composite Adhesive: Flexible FAST, or Flexible FAST Dual-Tank ribbons spaced maximum 6-inches o.c.	Optional: 1/2-inch DensDeck Prime or Securcock Adhesive: Flexible FAST or Flexible FAST Dual Tank Ribbons spaced 6-inches o.c.	Sure MB 90TG Base/ 120TG Base	33	2	50	2	N/A	UL SYSTEM Hook and Loop #11
Membrane: Sure-Seal FleeceBACK RL	Minimum: 1/2-inch SecurShield HD RL Adhesive: Flexible FAST or Flexible FAST Dual Tank Ribbons spaced 6-inches o.c.	Minimum: 2-inch InsulBase, SecurShield or SecurShield HD Composite Adhesive: Flexible FAST or Flexible FAST Dual Tank Ribbons spaced 6-inches o.c.	Optional: 1/2-inch DensDeck Prime or Securcock Adhesive: Flexible FAST or Flexible Fast Dual Tank Ribbons spaced 6-inches o.c.	SA 70 Cav-Grip III Primer	60	2.9	90	4.3	N/A	UL SYSTEM Hook and Loop #12
Membrane: Sure-Seal FleeceBACK RL	Minimum: 1/2-inch SecurShield HD RL Adhesive: Flexible FAST or Flexible FAST Dual Tank Ribbons spaced 6-inches o.c.	Minimum: 2-inch InsulBase, SecurShield or SecurShield HD Composite Adhesive: Flexible FAST or Flexible FAST Dual Tank Ribbons spaced 6-inches o.c.	Optional: 1/2-inch DensDeck Prime or Securcock Adhesive: Flexible FAST or Flexible Fast Dual Tank Ribbons spaced 6-inches o.c.	Sure MB 90TG Base/ 120TG Base	60	2.9	90	4.3	N/A	UL SYSTEM Hook and Loop #13

Notes:

- Unless otherwise specified, acceptable vapor barriers include minimum 6-mil polyethylene, loose-laid, adhered mechanically fastened, or torch adhered barriers may be installed in this assembly.
- Design Wind Uplift Resistance determined by dividing the tested uplift value achieved by a 1.5 safety factor, as required by the CSA 123 Standard.
- For re-roof or recover construction, fastener field pulout resistance testing must yield minimum value indicated. Not applicable to assemblies without fasteners.
- Calculated value = (Design Wind Uplift Resistance) x (1.5 - CSA 123.21 safety factor) x (Top insulation layer fastening rate).