Sure-Seal® EPDM Roofing Systems

SAT Self-Adhering Technology

Sure-White® EPDM Roofing Systems

G U I D E - S P E C
SAT ADHERED ROOFING SYSTEM

July 2026

This **GUIDE-SPEC** is a brief outline of Carlisle's Sure-Seal and Sure-White™ SAT (Self Adhering Technology) EPDM Adhered Roofing System requirements and is intended for use as a submittal document to compliment a contractor's bid package. Specifiers and Carlisle Authorized Roofing Applicators must reference and comply with applicable information contained within the current Carlisle EPDM Roofing System Specification prior to design or bid of a project.

PART I GENERAL

1.01 DESCRIPTION

The Sure-Seal and Sure-White SAT Adhered Roofing System incorporates a 60-mil Sure-Seal non-reinforced or reinforced EPDM membrane which is laminated to an elastomeric self-adhesive and is available in 10' wide by 50' or 100' sheets with up to a 25 Year maximum warranty. The membrane is adhered to the substrate with the factory applied self-adhesive. Smaller 5' wide by 40' long sheets are available in 60-mil Sure-Seal and Sure-White non-reinforced EPDM with a 3" uncoated edge for field application of SecurTAPE and Primer. Adjoining sheets of EPDM membrane are spliced together using 3" wide Factory-Applied SecurTAPE (FAT™) and Primer.

1.02 QUALITY ASSURANCE

A. The specified roofing system must be installed by a Carlisle Authorized Roofing Applicator in compliance with drawings and specifications as approved by Carlisle SynTec.

B. Upon request, an inspection shall be conducted by a Field Service Representative of Carlisle to ascertain that the membrane roofing system has been installed according to Carlisle'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.

C. For specific code approvals achieved with this system, refer to Carlisle's EPDM Code Approval Guide, DORA (Directory of Roof Assemblies), FM Approvals or UL Fire Resistance Directory for Roofing Materials and Systems.

1.03 SUBMITTALS

A. To ensure compliance with Carlisle's minimum warranty requirements, the following projects should be forwarded to Carlisle for review prior to installation, preferably prior to bid.

1. Air pressurized buildings, canopies, and buildings with large openings, cold storage buildings or freezer facilities, projects over 250' in height or projects where the membrane is expected to come in direct contact with petroleum-based products, waste products (i.e., grease, oil, animal fats, etc) and other chemicals.

B. Shop drawings must be submitted to Carlisle by the Carlisle Authorized Roofing Applicator along with a completely executed Notice of Award (Page 1 of Carlisle's Request for Warranty Form) for approval. Approved shop drawings are required for inspection of the roof and on projects where on-site technical assistance is requested.

1.04 GENERAL DESIGN CONSIDERATIONS

A. 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.

B. On new construction projects, especially in cold climate regions, moisture generated due to the construction process could adversely impact various components within the roofing

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assembly if not addressed. Refer to Design Reference D-01-21 “Construction Generated Moisture” included in the Carlisle Technical Manual.

C. 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 tilt-up panels, if present, to prevent infiltration of warm humid air and possible moisture contamination resulting from condensation. This is specifically important when adhesive is used to attach the roof insulation.

CAUTION: If left unaddressed, accumulated moisture could weaken insulation boards and facers resulting in a blow-off or increase the probability of mold growth.

D. Vapor Retarders

1. Carlisle 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.

   b. In the generally temperate climate of the United States, during the winter months, water vapor flows upward from a heated, more humid interior towards 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.

1.05 WARRANTY

A. A 10, 15 or 20 year Total System Warranty may be requested when all materials used for the roofing installation are manufactured or marketed by Carlisle. A maximum peak gust wind speed coverage of 100 miles per hour is standard, for warranties greater than 100 mph submit to Carlisle for review.

B. A 1” hail warranty is available with 60-mil SAT EPDM. Hail coverage requires an adhered cover board.

1.06 PRODUCT DELIVERY, STORAGE AND HANDLING

A. Deliver materials to the job site in the original, unopened containers labeled with the manufacturer's name, brand name and installation instructions.

B. Store SAT EPDM membrane in original undisturbed plastic wrap and protect from moisture contamination prior to installing.

C. Job site storage temperatures in excess of 90° F may affect shelf life of curable materials (i.e., adhesives and sealants).

D. When liquid adhesives and sealants are exposed to lower temperatures, restore to a minimum of 60° F before use.

1.07 JOB CONDITIONS

A. Refer to Carlisle Technical Manual for applicable project specific Job Conditions.

PART II PRODUCTS

2.01 GENERAL

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

2.02 MEMBRANE

Sure-Seal and Sure-White SAT, non-reinforced 60-mil thick EPDM (Ethylene, Propylene, Diene Terpolymer) compounded elastomer membrane laminated to an elastomeric pressure-sensitive adhesive is used for this roofing system. Membrane is available in 10' width and 50’ or 100' lengths. Membranes conform to ASTM D4637, Type I (non-reinforced) or Type II (reinforced). All sheets are supplied with 3” Factory Applied SecurTAPE.

2.03 RELATED MATERIALS

A. 90-8-30A, or Low-VOC EPDM Bonding Adhesive, CAV-GRIP III, HP-250 or Low-VOC EPDM Primer, SecurTAPE, Lap Sealant, Cured EPDM Flashing, Pressure-Sensitive Elastoform Flashing, SecurFast or AccuTrac Insulation Plates, Seam Fastening Plates and Pressure-Sensitive RUSS™ (with the corresponding fasteners) are required for use with this roofing system. Other Carlisle products, such as, insulation, insulation fasteners, edgings and termination bars are also required when a Total System Warranty is specified.

B. Other Products: Walkway Pads, Pre-Molded Pipe Flashings, Pressure-Sensitive Inside/Outside Corners, Pipe Flashings and Pourable Sealer Pockets

PART III EXECUTION

3.01 GENERAL

A. When feasible, begin the application at the highest point of the highest roof level and work to the lowest point to prevent moisture infiltration and minimize construction traffic on completed sections. This will include completion of all flashings and terminations.

3.02 ROOF DECK CRITERIA

A. A proper substrate shall be provided by the building owner. The structure shall be sufficient to withstand normal construction loads and live loads.

B. Defects in the roof deck must be reported and documented to the specifier, general contractor and building owner for assessment. The Carlisle Authorized Roofing Applicator shall not proceed unless the defects are corrected.

C. Refer to Carlisle Technical Manual for acceptable decks and the applicable Carlisle Fasteners. When mechanical attachment of insulation is specified utilize SecurFast or AccuTrac Insulation Plates.

3.03 SUBSTRATE REQUIREMENTS

A. Acceptable Carlisle substrates are limited to InsulBase Polyiso, SecurShield Polyiso, ThermaThin™ 7, SecurShield HD or HD Plus, Securock, Securock Weather Defense, DensDeck Prime, DensDeck ProFast Prime and structural concrete for the field of roof. Plywood, OSB, concrete block and masonry walls are coated with a primer coat of bonding adhesive or CAV-GRIP III.

B. The substrate must be dry, relatively smooth, free of protrusions, debris, sharp edges or foreign materials and must be free of accumulated water, ice and snow. Cracks or voids in the substrate greater than 1/4" must be filled with Flexible FAST Adhesive or other suitable material.

C. On retrofit-recover projects, cut and remove wet insulation as identified by the specifier and fill all voids with new insulation, so that it is relatively flush.

3.04 INSTALLATION

Sure-Seal SAT EPDM may only be installed when the membrane and outdoor temperature is at least 20 degrees F. Sure-White SAT EPDM may only be installed when the membrane and outdoor temperature is at least 32 degrees F. Refer to the applicable Safety Data Sheets (SDS) and Product Data Sheets for additional cautions and warnings.

A. **Insulation Attachment**

1. Carlisle Flexible FAST Adhesive may be specified for insulation securement in full spray or beads with spacing as outlined in the Carlisle Technical Manual.

2. Carlisle Fasteners with SecurFast or AccuTrac Insulation Plates may be used, when specified, to secure Carlisle Insulation at the specified density outlined in the Carlisle Technical Manual.

B. **Membrane Installation and Splicing**

10’ wide SAT EPDM is adhered to an approved substrate with factory applied self-adhesive.

1. Position SAT EPDM membrane over the acceptable substrate and allow to relax and warm for 30 minutes. Sure-Seal membrane temperature should be 50ºF or higher prior to installing.

2. Fold membrane sheet back so half the underside is exposed.

3. Remove the release liner on one half of the sheet starting from the split in the liner at the middle of the sheet. The liner should be removed at an angle to reduce risk of splitting or tearing.

4. Pull the membrane onto the substrate while avoiding wrinkles. To achieve the best adhesion, the membrane should be pulled onto the substrate at a low angle. When applying the SAT EPDM membrane it is recommended to maintain a large curve on the leading edge of the membrane. This will help eliminate creases and bubbles that cannot be removed after the sheet is in place.

5. Broom the membrane in place, with firm pressure, starting from the middle of the sheet and working towards the outer edge.

6. Fold back the remaining half of the sheet and repeat the above process.

7. After brooming, roll the membrane with a segmented roller to ensure full contact with the substrate. Roller should weigh at least 50 lbs per foot of roller width.

8. Install adjoining membrane sheets in the same manner, overlapping edges a minimum of 2-1/2" wide using 3" Factory-Applied SecurTAPE and Primer. It is recommended that all splices be shingled to avoid bucking of water.

9. At end laps, membrane shall be butted together and overlaid with a minimum of 6" wide Pressure-Sensitive Cured Cover Strip or overlapped a minimum 1" and overlaid with a minimum 6" wide Pressure-Sensitive Overlayment Strip. Refer to detail SAT-2.

C. **Additional Membrane Securement**

EPDM membrane must be secured at the perimeter of each roof level, roof section, expansion joint, curb, skylight, interior wall, penthouse, etc., at any angle change which exceeds 2" in one horizontal foot, and at other penetrations in accordance with Carlisle's details. Additional membrane securement may be provided by adhering the SAT EPDM membrane to the Pressure-Sensitive RUSS™ (Reinforced Universal Securement Strip) fastened with Seam Fastening Plates. Refer to detail SAT-12A.

D. **Membrane Flashing**

1. Flash all walls and curbs with continuous deck membrane after installing Pressure-Sensitive RUSS and Seam Fastening Plates along the angle change. Pressure-Sensitive Elastoform Flashing shall be limited to inside and outside corners, field fabricated pipe seals, scuppers and Sealant Pockets where the use of pre-molded accessories are not practical. Terminate the flashing in accordance with an appropriate Carlisle Termination Detail.

   NOTE: Plywood, OSB, concrete block or masonry walls must be primed with a coat of bonding adhesive or Cav-Grip III prior to installing Sure-Seal SAT EPDM.

2. Refer to Carlisle Technical Manual for standard membrane flashing details. SAT EPDM membrane is acceptable for use in drain and termination bar details.

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Physical properties of Sure-Seal and Sure-White SAT EPDM Membrane can be referenced in the Product Data Sheet. Attach copies of the applicable Carlisle Details that pertain to the individual project to complete a bid package submittal.