

Sure-Seal® Hot Mopped Roofing System

"Attachment V"

25 –Year Total System Warranty – Design Enhancements

April 2004

Information contained in this Attachment outlines necessary enhancements required for projects where a 25-year Total System Warranty is specified. While certain specific requirements have been outlined herein, application procedures for items such as membrane mopping and splicing of the membrane are contained in HM-System Specification. At the applicator's or specifier's discretion, projects may be forward to Carlisle for evaluation prior to installation or bid.

A. Description

This roofing assembly incorporates Sure-Seal AFX-Plus FleeceBACK Membrane and Carlisle Modified Base Sheet. The membrane is mopped directly to the Carlisle Modified Base Sheet with modified SEBS asphalt at the rate of 18-22 pounds per square. The Base Sheet is mopped directly to a fastened base sheet, a primed structural concrete deck, or Carlisle's 1/2" HP Recovery Board with Type III or IV Asphalt at a rate of 28-32 pounds per square.

When insulation is specified beneath the HP Recovery Board, all layers may either be mechanically fastened or mopped to the appropriate decking material. Adjoining sheets of AFX-Plus Membrane are spliced together with 6" wide Factory-Applied SecurTAPE. End laps shall be overlapped and overlaid with 6" and 9" Pressure-Sensitive Flashing respectively. All field and flashing splices are sealed with Sure-Seal Lap Sealant.

B. Special Requirements

1. AFX Plus 105-mil thick Membrane is required. All "T" joints must be overlaid with Pressure-Sensitive Flashing.
2. Field splices located in areas where ponded water may occur or those that resist water flow must be overlaid with 6" wide Pressure-Sensitive Flashing.
3. Building height shall not exceed 40 feet.
4. A minimum slope of 1/4" per horizontal foot preferred; however, 1/8" slope with sufficient number of drains and crickets/saddles may be accepted.
5. All products specified for this roofing assembly must be products manufactured, marketed or specifically approved by Carlisle as outlined in this Specification.
6. On retrofit projects, all existing roofing material must be totally removed.
7. Shop drawings must include all pertaining details.

C. Acceptable decks – asphalt adhesive and/ or Sure-Seal Fasteners options:

1. **Structural Concrete, rated 3,000 psi or greater** – Prime the deck with "Cut Back" Asphalt Primer and use Type III or IV Asphalt for insulation or base sheets attachment. Sure-Seal CD-10 (hammer-driven) or HD 14-10 (threaded) Fasteners with a minimum pullout value of 800 pounds per fasteners may be used to secure multiple layers of insulation.
2. **22 gauge or heavier Steel, Wood Plank, 15/32 inch thick Plywood, Fibrous Cement, and Gypsum** – When fasteners are used insure pull-out values are in compliance with those referenced in Carlisle's Design "A" Adhered Roofing System Specifications, Part I, "Attachment I" for appropriate Carlisle Fastener and pull-out value.

D. Insulation Attachment

1. When insulation is to be mopped to a structure concrete deck, the deck must be primed with "Cut Back" asphalt primer (ASTM D 41) prior to mopping base sheets or insulation. Depending on surface porosity, "cut back asphalt" must be applied at a rate between of 1 to 2 gallons per 100 square feet.

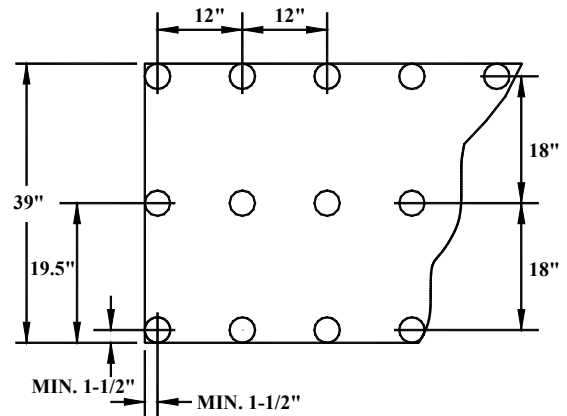
2. When specified, additional layers of insulation may be hot mopped at a rate of 28 – 32 pounds per square with Type III or IV Asphalt or mechanically fastened at a rate of one fastener and insulation plate every two square feet. Refer to paragraph C above.
3. When the Carlisle Modified Base Sheet is to be mopped to roof insulation, ½” Carlisle HP Recovery Board will be required as a separator. The wood fiber board may be mopped to the Sure-Seal Polyisocyanurate Insulation or mechanically fastened prior to mopping the modified base sheet.
4. Wood decks (excluding Orient Strand Board) when no insulation is specified above the deck, Carlisle HP or HP-X Fasteners with 3” diameter insulation plates maybe used to attach the Carlisle Modified Base Sheet in rows 18” apart, 12” on center. Refer to the fastening pattern below.

Note: OSB Deck of any thickness is not acceptable as a substrate for this extended membrane system warranty.

5. On insulated steel or wood deck (excluding OSB), multiply layers of Sure-Seal Polyisocyanurate Insulation (25 psi min.) maybe overlaid with Carlisle Modified Base Sheet which maybe fastened with Carlisle HP or HP-X Fasteners and 3” diameter insulation plates in accordance with fastening pattern shown.

E. Metal Accessories

1. Carlisle SecurEdge (secured with HP Fasteners), SecurEdge 1000, 2000, or 3000 or Metal Termination Bar/Gutter.
2. When the use of Carlisle SecurEdge is not feasible, conventional meal fascia systems or Carlisle Drip Edge, which require flashings to be “Stripped-in”, must be overlaid with 2 layers of Semi-Cured Pressure-Sensitive Flashing (6” wide followed by 9” wide).
3. Carlisle Termination Bar is required when a compression bar termination is specified and must be utilized with counterflashing by others.
4. Certain metal accessories by others may be used upon Carlisle acceptance.



**MODIFIED BASE SHEET
FASTENING PATTERN
(EXCLUDING OSB)**