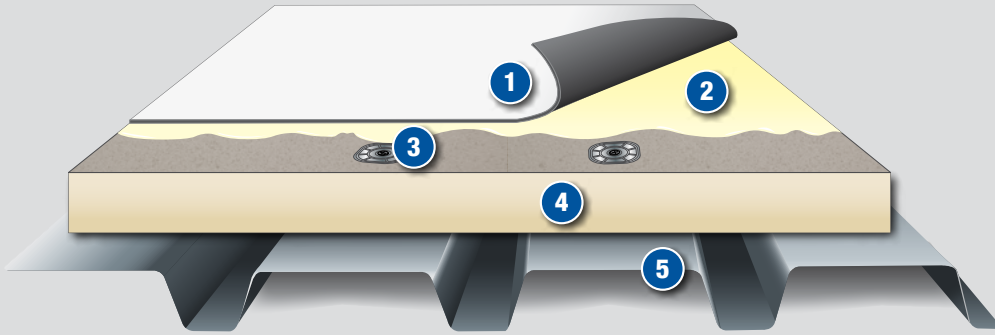


Sure-Weld[®] TPO

Fully Adhered Roofing Systems

Warranty Submittal Sheet



Typical Applications

- 1** Sure-Weld TPO Membrane
- 2** Carlisle Bonding Adhesive
- 3** Carlisle Fasteners and Plates
- 4** Carlisle Approved Insulation
- 5** Approved Roof Deck

Sure-Weld 25 and 30-year Total System Warranties*

- 1. Membrane:**
 - 80-mil Sure-Weld TPO
 - 80-mil Spectro-Weld TPO
 - 80-mil Sure-Weld HS
- 2. Membrane Bonding Adhesive:**
 - Sure-Weld TPO Bonding Adhesive
 - Low-VOC 1168
 - Sure-Weld TPO Low VOC Bonding Adhesive
 - CAV-GRIP™ III Low VOC Adhesive/Primer
- 3. Carlisle Insulation Fasteners and Insulation Plates or Adhesive:**
 - FAST™ Adhesive
 - Flexible FAST Adhesive
 - HP (steel/wood)
 - InsulFast™ (steel/wood)
 - ASAP (steel/wood)
 - CD-10 (concrete)
 - HP-X™ (steel/wood)
 - HD 14-10 (concrete)
- 4. Cover Board (optional):**
 - SecurShield® HD
 - SecurShield HD Plus
 - SECUROCK® Gypsum-Fiber
 - DensDeck® Prime
 - HP Recovery Board
 - EcoStorm VSH™
- 5. Carlisle Approved Insulation:**
 - InsulBase® Polyiso (25-psi)
 - SecurShield Polyiso (25-psi)
 - SecurShield HD Composite
 - Insulfoam EPS (cover board required)
 - Insulfoam EPS Composite
 - XPS (cover board required)
 - StormBase®
 - OPTIM-R® (SecurShield HD coverboard required)
 - ChannelDry® (SecurShield insulation required)
- 6. Vapor Barrier (optional):**
 - VapAir Seal™ 725TR (direct to concrete, wood, gypsum, or thermal barrier)
 - VapAir Seal MD (direct to metal deck only, fastening of above insulation board required)
 - SureMB 90/120TG Base (direct to concrete or thermal barrier only)
 - SureMB 90 Base Ply (see Carlisle Specs and Details)
 - Polyethylene (by others, fastening of above insulation board required)
 - G2 Base Sheet
 - Vented Base Sheet
- 7. Thermal Barrier (optional, not for use directly over concrete decks):**
 - DensDeck Prime
 - SECUROCK Gypsum-Fiber
- 8. Deck:**
 - 22-gauge steel or heavier
 - Structural concrete
 - Wood plank
 - Minimum ½" plywood
 - Gypsum (Adhesive attachment only)
 - Cementitious wood fiber (Adhesive attachment only)
 - Approved lightweight insulating concrete (Adhesive attachment only)
- 9. Metal Edging:**
 - Carlisle 2,000, 3,000, 4,000 Prefabricated
- 10. Applicable Details:**
 - A-1A.1, A-2, U-1A.1, U-1B, U-1C, U-1D, U-1E, U-1F, U-2, U-3A, U-3B, U-5A, U-5B, U-5C, U-5D, U-6A, U-6B, U-6C, U-6C.1, U-8A, U-8A.1, U-8C, U-8D, U-8E, U-8FU-9A, U-9B, U-9E, U-9F, U-9G, U-12A, U-12B, U-12B.1, U-12C, U-12G, U-12H, U-13A, U-13B, U-13C, U-13D, U-13E, U-13F, U-15A, U-15C, U-15D, U-15D.1, U-15F, U-15H, U-16A, U-16B, U-18A, U-20A, U-20B, U-22, U-24, U-30.
- 11. Construction Type:**
 - New construction
 - Complete tear-off
- 12. Slope:**
 - Positive slope required.

*Buildings up to 100-feet tall with 55-mph wind speed coverage. Projects requiring warranty wind speeds greater than 55 mph should be reviewed by a Carlisle representative. All products must be supplied by Carlisle to be included in the warranty coverage. All roof systems can only be accepted upon inspection by a Carlisle SynTec Field Service Representative. Carlisle reserves the right to change or enhance any of the above components due to specific or unique project conditions. The intent of this document is to verify the proposed roof assembly meets the requested warranty. Carlisle is not responsible for local and state building code requirements, and any discrepancy should be clarified by the design professional of record. Refer to Carlisle's most currently published specifications and details for additional information.

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Insulation Fastening Rates 25 and 30-year Warranties

Top layer of insulation / coverboard	4' x 8' board ²	Bead adhesive spacing for 4' x 4' boards ^{1,4}	
		Field	Field Perimeter
Minimum 1.5"-thick Carlisle InsulBase Polyiso (25-psi), SecurShield Polyiso (25-psi), or SecurShield HD Composite Polyiso Insulation	16	6" o.c.	6" o.c.
Minimum 2.0"-thick Carlisle InsulBase Polyiso (25-psi), SecurShield Polyiso (25-psi), or SecurShield HD Composite Polyiso Insulation	16	6" o.c.	6" o.c.
½"-thick SecurShield HD Plus ³ or EcoStorm VSH	16	6" o.c.	6" o.c.
Minimum ¼"-thick DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board ³	16	6" o.c.	6" o.c.
½"-thick SecurShield HD or HP Recovery Board ³	16	6" o.c.	6" o.c.
1½" StormBase	17	6" o.c.	6" o.c.
OPTIM-R	N/A	6" o.c.	6" o.c.
ChannelDry	16	N/A	N/A

¹ For structural concrete decks, bead spacing can be 12" on center in the field and 6" on center in the perimeters.

² For buildings 51'-100' tall, enhance a minimum 12'-wide perimeter with 50% more insulation fasteners and plates.

³ Cover boards must be installed over a minimum 1"-thick Carlisle approved insulation on Steel Decks.

⁴ Cementitious Wood Fiber & Gypsum - Full Spray (FS)