



# CREEK

## TECHNICAL SERVICES, LLC

Certificate of Authorization No. 29824

17520 Edinburgh Dr

Tampa, FL 33647

(813) 480-3421

### EVALUATION REPORT

FLORIDA BUILDING CODE, 6<sup>TH</sup> EDITION (2017)

**Manufacturer:** U.S. Ply, Inc.  
PO Box 11740  
Fort Worth, TX 76110  
(866) 787-4759  
[www.usply.com](http://www.usply.com)

*Issued December 9, 2019*

**Manufacturing Plants:** Fort Worth, TX

**Quality Assurance:** FM Approvals (QUA1860)

### SCOPE

**Category:** Roofing  
**Subcategory:** Modified Bitumen Roof System  
**Code Sections:** 1504.3.1, 1504.6, 1504.7, 1507.2.4, 1507.10.2, 1507.11.2, 1515.1.1, 1515.1.4, 1515.2.4  
**Properties:** Wind Resistance, Physical Properties, Impact Resistance

### PRODUCT DESCRIPTION

Products	Specification	Description
DuraFlex™ 190 FR SBS	ASTM D 6164	Cap sheet, Grade G, Type I, for hot asphalt and cold adhesive applications
DuraFlex™ 190 FRTG SBS	ASTM D 6164	Cap sheet, Grade G, Type I, for torched applications
DuraFlex™ 190 SBS	ASTM D 6164	Cap sheet, Grade G, Type I, for hot asphalt and cold adhesive applications
DuraFlex™ 190S SBS	ASTM D 6164	Base or ply sheet, Grade S, Type I, for mechanical attachment, hot asphalt and cold adhesive applications
DuraFlex™ 250FR SBS	ASTM D 6164	Cap sheet, Grade G, Type II, for hot mop and cold adhesive applications
DuraFlex™ 30 SBS Base	ASTM D 4601	Base or ply sheet, Type II, for mechanical attachment, hot asphalt and cold adhesive applications
DuraFlex™ 60 SBS Base	ASTM D 6163	Base or ply sheet, Grade S, Type I, for mechanical attachment, hot asphalt and cold adhesive applications
DuraFlex™ 60TG SBS Base	ASTM D 6163	Base or ply sheet, Grade S, Type I, for mechanical attachment and torched applications
DuraFlex™ 90TG SBS Base	ASTM D 6163	Base or ply sheet, Grade S, Type I, for mechanical attachment and torched applications
DuraFlex™ G4FR SBS	ASTM D 6163	Cap sheet, Grade G, Type I, for hot asphalt and cold adhesive applications
DuraFlex™ G4FRTG SBS	ASTM D 6163	Cap sheet, Grade G, Type I, for torched applications
DuraFlex™ G4M SBS	ASTM D 6163	Cap sheet, Grade G, Type I, for hot asphalt and cold adhesive applications
DuraFlex™ G4S SBS Base	ASTM D 6163	Base or ply sheet, Grade S, Type I, for mechanical attachment, hot asphalt and cold adhesive applications
DuraFlex™ SBS PolyBase	ASTM D 6164	Base or ply sheet, Grade S, Type I, for mechanical attachment, hot asphalt and cold adhesive applications
USP™ Base Sheet	ASTM D 4601	Base or ply sheet, Type II, for mechanical attachment, hot asphalt and cold adhesive applications
USP™ SBS 160M	ASTM D 6164	Cap sheet, Grade G, Type I, for hot asphalt and cold adhesive applications
USP™ Type 4	ASTM D 2178	Base or ply sheet, Type IV, for hot asphalt applications
USP™ Type 6	ASTM D 2178	Base or ply sheet, Type VI, for hot asphalt applications
USP™ Type IV Glass Ply	ASTM D 2178	Base or ply sheet, Type IV, for hot asphalt applications
USP™ Type VI Premium Glass Ply	ASTM D 2178	Base or ply sheet, Type VI, for hot asphalt applications

**REFERENCES**


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<u>Entity</u>	<u>Report No.</u>	<u>Standard</u>	<u>Year</u>
FM Approvals (TST1867)	3012321	FM 4470	2012
		FM 4474	2011
		TAS 114	2011
FM Approvals (TST1867)	3014692	FM 4470	2012
		FM 4474	2011
		TAS 114	2011
FM Approvals (TST1867)	3018332	FM 4454	2010
		FM 4474	2011
		TAS 114	2011
FM Approvals (TST1867)	3023458	FM 4470	2012
		FM 4474	2011
		TAS 114	2011
FM Approvals (TST1867)	3024973	FM 4470	2012
		FM 4474	2011
		TAS 114	2011
FM Approvals (TST1867)	3026528	FM 4470	2012
		FM 4474	2011
		TAS 114	2011
FM Approvals (TST1867)	3026836	FM 4470	2012
		FM 4474	2011
PRI Construction Materials Technologies (TST5878)	USPI-025-02-01	ASTM 6222	2011
		TAS 110	2000
PRI Construction Materials Technologies (TST5878)	USPI-026-02-01	ASTM 6222	2011
		TAS 110	2000
PRI Construction Materials Technologies (TST5878)	USPI-026-02-02	ASTM 6222	2011
		TAS 110	2000
PRI Construction Materials Technologies (TST5878)	USPI-027-02-01	ASTM 6222	2011
		TAS 110	2000
PRI Construction Materials Technologies (TST5878)	USPI-028-02-01	ASTM 6222	2011
		TAS 110	2000
PRI Construction Materials Technologies (TST5878)	USPI-029-02-01	ASTM 6222	2011
		TAS 110	2000
Trinity ERD (TST6049)	U0212.09.05-R1	FM4474	2011
		TAS 114	2011
Trinity ERD (TST6049)	U0215.05.06-1	ASTM D 6163	2000(2008)
		ASTM D 6164/D6164M	2011
Trinity ERD (TST6049)	U0215.06.10	ASTM D 6164/D6164M	2011
Trinity ERD (TST6049)	U0215.08.10	ASTM D 6164/D6164M	2011
Trinity ERD (TST6049)	U0228.12.06-R1	FM4474	2011
		TAS 114	2011
Trinity ERD (TST6049)	U0229.12.06	FM4474	2011
		TAS 114	2011
Trinity ERD (TST6049)	U0230.12.06-R1	FM4474	2011
		TAS 114	2011



## LIMITATIONS

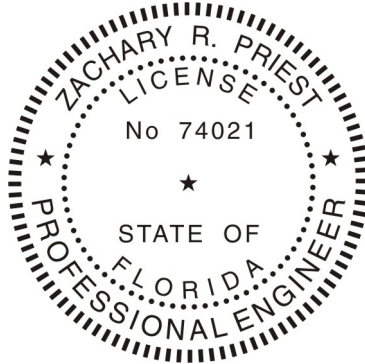
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1. This report is not for use in the HVHZ.
2. Fire classification is not within the scope of this evaluation.
3. The roof deck and the roof deck attachment shall be designed by others to meet the minimum design loads established for components and cladding and in accordance with FBC requirements.
4. Foam plastic insulation shall be installed in accordance with the FBC Section 2603.4 and 2603.6.
5. Installation of the evaluated products shall comply with this report, the FBC, and the manufacturer's published application instructions. Where discrepancies exist between these sources, the more restrictive and FBC compliant installation detail shall prevail.
6. The minimum roof slope shall be 1/4:12 for new construction.
7. For assemblies containing mechanical attachment, the allowable uplift pressure for the selected assembly shall meet or exceed the minimum design loads as determined in accordance with the FBC Chapter 16. For perimeter and corner roof zones 2 and 3, the attachment density may be increased by a qualified design professional, as necessary, to meet the design pressure requirements in these areas. Commonly used standards include RAS 117, FM LPDS 1-29, or ANSI/SPRI WD-1.
8. Reroofing applications shall be examined in accordance with FBC Section 1511. For mechanically fastened systems, a field withdrawal resistance test (ANSI/SPRI FX-1 or TAS 105) shall be conducted by a qualified professional to ensure the fastener meets the minimum design load requirements of the system. For adhered systems, a field uplift resistance test (ASTM E 907, FM LPDS 1-52, ANSI/SPRI IA-1, or TAS 124) shall be conducted to confirm conformance of the existing to the minimum design loads.
9. For assemblies containing fully adhered or ribbon adhered attachment, or where extrapolation of the assembly is not permitted, the *MDP* for the selected assembly shall meet or exceed the minimum design loads as determined in accordance with the FBC Chapter 16 without augmentation.
10. All products listed in this report shall be manufactured under a quality assurance program in compliance with Rule 61G20-3.

**COMPLIANCE STATEMENT**

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The products evaluated herein by Zachary R. Priest, P.E. have demonstrated compliance with the Florida Building Code 6<sup>th</sup> Edition (2017) as evidenced in the referenced documents submitted by the named manufacturer.



Zachary R. Priest, P.E.  
Florida Registration No. 74021  
Organization No. ANE9641

**CERTIFICATION OF INDEPENDENCE**

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CREEK Technical Services, LLC does not have, nor will it acquire, a financial interest in any company manufacturing or distributing products under this evaluation.

CREEK Technical Services, LLC is not owned, operated, or controlled by any company manufacturing or distributing products under this evaluation.

Zachary R. Priest, P.E. does not have, nor will acquire, a financial interest in any company manufacturing or distributing products under this evaluation.

Zachary R. Priest, P.E. does not have, nor will acquire, a financial interest in any other entity involved in the approval process of the product.

**APPENDICES**

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- 1) APPENDIX A – Installation (2 pages)
- 2) APPENDIX B – Nomenclature and Approved Assemblies (13 pages)



## INSTALLATION

Note - Refer to the [APPROVED ASSEMBLIES](#) section of this report within Appendix B for specific installation details of a selected assembly.

Unless otherwise specified in this report the following installation details shall be met for the named products:

Component	Product	Installation Detail
Fastening Systems	Trufast Twin Loc-Nail	1.8-inch shank; Base sheet fastener with integrated 2.7-inch diameter plate and locking staple.
	Trufast FM-90 Assembled Base Ply Fastener	1.7-inch shank; Base sheet fastener with integrated 2.7-inch diameter plate.
	Trufast FM-260 Base Ply Fastener	Dual 1.7-inch shanks; Base sheet fastener with integrated 1.2-inch wide x 2.4-inch long head; for use with LWIC decks
	Trufast FM-260V Base Ply Fastener	Dual 1.7-inch shanks with V-shaped notch at the bottoms; Base sheet fastener with integrated 1.2-inch wide x 2.4-inch long head; for use with LWIC decks
	CD-10 Fastener	Min. 1.25-inch embedment into min. 3-inch thick structural concrete
	OMG #12 Standard Fastener	Min. 0.75-inch penetration through the top rib of the steel deck or wood deck
	OMG #14 Heavy Duty Fastener	Min. 0.75-inch penetration through the top rib of the steel deck or wood deck. Min. penetration 1-inch into concrete deck.
	OMG 3" Galvalume Steel Plate	Min. 3-inch diameter Galvalume® steel plate
	OMG 3 in. Ribbed Galvalume Plate	
	Trufast #12 DP Fastener	Min. 0.75-inch penetration through the top rib of the steel deck or wood deck
	Trufast #15 EHD Fastener	Min. 0.75-inch penetration through the top rib of the steel deck or wood deck. Min. penetration 1-inch into concrete deck.
	Trufast HD Fastener	
	Trufast 3" Metal Insulation Plate	Min. 3-inch diameter steel plate
	Trufast 3" Recessed Metal Insulation Plate	
Insulation Adhesives	ASTM D 312, Type IV Asphalt	Fully adhered within the EVT range at a rate of 20-40 lbs/100 ft <sup>2</sup>
	ICP Adhesives CR-20	Applied in 2.5 to 3.5-inch wide continuous ribbons
	OMG OlyBond 500	Applied in 3/4 to 1-inch wide continuous ribbons
Membrane Adhesives	ASTM D 312, Type IV Asphalt	Fully adhered within the EVT range at a rate of 25-40 lbs/100 ft <sup>2</sup>
Insulation/Cover Boards	ACFoam-II	Min. 0.5-inch thick; Min. 20 psi polyisocyanurate board with various facers; Adhered boards shall be a maximum 4-ft x 4-ft
	ACFoam-III	
	ACFoam Composite/PB	Adhered boards shall be a maximum 4-ft x 4-ft
	ACFoam Tapered	Min. 0.5-inch thick; Min. 20 psi polyisocyanurate board with various facers; Adhered boards shall be a maximum 4-ft x 4-ft
	ENRGY 3	
	EnergyGuard Perlite	Min. 0.75-inch thick
	FescoBoard	
	Georgia-Pacific DensDeck Prime	Min. 0.25-inch thick gypsum roof board with fiberglass facer
	H-Shield	Min. 0.5-inch thick; Min. 20 psi polyisocyanurate board with various facers; Adhered boards shall be a maximum 4-ft x 4-ft
	H-Shield CG	
	H-Shield Tapered	
	Insulfoam EPS	Min 0.5-inch, Adhered boards shall be a maximum 4-ft x 4-ft
	ISO 95+GL	Min. 0.5-inch thick; Min. 20 psi polyisocyanurate board with various facers; Adhered boards shall be a maximum 4-ft x 4-ft
	Multi-Max FA3	
	Tapered Thermarroof-3	
	Thermarroof Composite-3	Min. 1.5-inch thick; Adhered boards shall be a maximum 4 ft x 4 ft
	Structodek High Density Fiberboard	Min. 0.5-inch thick
	USG SECUROCK Gypsum-Fiber Roof Board	Min. 0.25-inch thick gypsum roof board with fiber reinforcement
Base/Ply Sheets	DuraFlex 30 SBS Base	Min. 4-inch wide side-laps; Min. 6-inch end laps; Side-laps shall be installed perpendicular to the direction of the steel deck ribs and parallel to the direction of the wood trusses for mechanically attached systems
	DuraFlex 60 SBS Base	
	DuraFlex 60TG SBS Base	



Component	Product	Installation Detail
Base/Ply Sheets (Cont'd)	DuraFlex 90TG SBS Base	Min. 4-inch wide side-laps; Min. 6-inch end laps; Side-laps shall be installed perpendicular to the direction of the steel deck ribs and parallel to the direction of the wood trusses for mechanically attached systems
	DuraFlex 190 SBS	
	DuraFlexG4S SBS	
	DuraFlexSBS PolyBase	
	GAFGLAS Stratavent Perforated Venting Base	
	USP Base Sheet	
	USP NVB	
	USP Type IV	
	USP Type 4	
	USP Type VI	
	USP Type 6	
Cap Sheets	DuraFlex 190 SBS	Min. 4-inch side-laps; Min. 6-inch end-laps;
	DuraFlex 190FR SBS	
	DuraFlex 190FRTG SBS	
	DuraFlex 250FR SBS	
	DuraFlex G4FR SBS	
	DuraFlex G4FRTG SBS	
	DuraFlex G4M SBS	
	USP SBS 160M	
Cellular Lightweight Concrete	Min. 300 psi Celcore MF with HS Rheology Admixture	Slurry coat min. 1/8-inch thick; 1-inch thick EPS board (1 lbs/ft <sup>3</sup> ); Min. 2-inch thick top coat; Celcore PVA curing compound applied at rate of 300 ft <sup>2</sup> /gal
	Min. 300 psi Celcore	Slurry coat min. 1/8-inch thick; OPTIONAL: Min. 1-inch thick EPS board (1 lbs/ft <sup>3</sup> ); Min. 2-inch top coat
	Min. 200 psi Celcore MF	
	Min. 300 psi Mearlcrete	
	Min. 200 psi Elastizell	
	Min. 300 psi Cellular Lightweight Concrete	

## NOMENCLATURE

The following naming conventions are utilized to specify products in the [APPROVED ASSEMBLIES](#) section of this report. Refer to the nomenclature below when deciphering the allowable products for use in the selected assembly. Installation requirements shall be as noted in the [APPROVED ASSEMBLIES](#) and [INSTALLATION](#) section of this report.

Name	Definition
<i>As Tested</i>	Information provided to the report user based on the as tested condition of the roof system
<i>CD Fasteners &amp; Plates</i>	One of the following: -OMG 3 in. Ribbed Galvalume Plate or OMG 3" Galvalume Steel Plate with OMG #14 Heavy Duty or CD-10 fastener -Trufast 3" Metal Insulation Plate or Trufast 3" Recessed Metal Insulation Plate with Trufast HD fastener
<i>CR-20</i>	ICP Adhesives CR-20 applied 12-inch o.c. in continuous 2.5 to 3.5-inch ribbons
<i>Cover Board</i>	One layer of cover board listed in this report or <i>approved</i> under rule 61G20-3, such as gypsum, cement board, perlite, polyisocyanurate, or wood fiberboard. Insulation shall be preliminarily secured unless otherwise noted.
<i>Deck Detail</i>	<i>As Tested</i> deck construction details are described as follows:
	<i>Concrete Deck</i> Min. $f'_c = 2,500$ psi at 28 days
	<i>Steel Deck</i> Min. 22 ga, Wide Rib Deck (Type WR) conforming to ANSI/SDI-RD1.0 & FBC; 0.5% Vented for <i>LWIC</i> applications only. The following nomenclature is used to further describe the <i>As Tested</i> condition.
	<i>F&lt;#&gt;</i> <#> #12-24 HWH self-drilling screws or equivalent fastener at each flute used to secure the deck to the structural supports; Min. 0.25-inch penetration
	<i>G&lt;#&gt;</i> Min. Grade <#> of <i>Steel Deck</i>
	<i>L&lt;#&gt;</i> Max. span of <#> ft
	<i>P</i> Min. 5/8-inch diameter puddle welds at each flute used to secure the deck to the structural supports
	<i>S&lt;#&gt;</i> 1/4 "-14 HWH x7/8" self-drilling screws or equivalent fastener secured <#>-inch o.c. along the panel side laps
	<i>W</i> 3/4-inch O.D. flat washer used with indicated fastener
	<i>Wood Deck</i> APA Span-Rated plywood sheathing. The following nomenclature is used to further describe the <i>As Tested</i> condition.
	<i>T&lt;#&gt;</i> Min. <#>-inch thickness of the plywood
	<i>L&lt;#&gt;</i> Max. span of <#> inches
	<i>N&lt;#&gt;</i> 8d ring shank nails spaced <#>-inch o.c. at all intermediate supports and at the perimeter of each board
<i>DensDeck Prime</i>	Min. 0.25-inch Georgia-Pacific DensDeck Prime
<i>EHD Fasteners &amp; Plates</i>	Trufast 3" Metal Insulation Plates and Trufast #15 EHD Screws
<i>HA BUR Base</i>	One ply of the following fully bonded in ASTM D 312, Type IV hot asphalt: USP™ Base Sheet, USP™ Type IV Glass Ply, USP™ Type 4, USP™ Type VI Premium Glass Ply, or USP™ Type 6
<i>HA BUR Ply</i>	One or more plies of the following fully bonded in ASTM D 312, Type IV hot asphalt: USP™ Type IV Glass Ply, USP™ Type 4, USP™ Type VI Premium Glass Ply, or USP™ Type 6
<i>HA SBS Base</i>	One ply of the following fully bonded in ASTM D 312, Type IV hot asphalt: DuraFlex™ 30 SBS Base, DuraFlex™ 60 SBS Base, DuraFlex™ SBS PolyBase, DuraFlex™ 190S SBS, or DuraFlex™ G4S SBS Base
<i>HA SBS Cap</i>	One ply of the following fully bonded in ASTM D 312, Type IV hot asphalt: DuraFlex™ 190 SBS, DuraFlex™ G4M SBS, DuraFlex™ 190 FR SBS, DuraFlex™ G4FR SBS, DuraFlex™ 250FR SBS, or USP™ SBS 160M
<i>HA SBS Ply</i>	One or more plies of the following fully bonded in ASTM D 312, Type IV hot asphalt: DuraFlex™ 60 SBS Base or DuraFlex™ G4S SBS Base



Name	Definition
<i>HD Fasteners &amp; Plates</i>	One of the following: -OMG 3 in. Ribbed Galvalume Plate or OMG 3" Galvalume Steel Plate with #14 Heavy Duty fastener -Trufast 3" Metal Insulation Plate or Trufast 3" Recessed Metal Insulation Plate with Trufast HD fastener
<i>Hot Asphalt</i>	ASTM D 312, Type IV Asphalt
<i>Insulation</i>	One or more layers or combinations of roofing insulation listed in this report or <i>approved</i> under rule 61G20-3, such as gypsum, perlite, polyisocyanurate, polystyrene, or wood fiberboard. Insulation shall be preliminarily secured unless otherwise noted.
<i>ISO I</i>	One layer of any of the following products: -ACFoam-II -ACFoam-III -ACFoam Tapered -Multi-Max FA3 -Tapered Thermarroof-3
<i>ISO II</i>	One layer of any of the following products: -ACFoam-II -ACFoam-III -ACFoam Tapered -Multi-Max FA3 -Tapered Thermarroof-3 -H-Shield -H-Shield Tapered
<i>ISO III</i>	One layer of any of the following products: -ACFoam-II -ACFoam Tapered -Multi-Max FA3 -Tapered Thermarroof-3 -ENRGY 3 -ISO 95+ GL
<i>ISO IV</i>	One layer of any of the following products: -ACFoam-II -ACFoam-III -Multi-Max FA3 -H-Shield -H-Shield CG -ENRGY 3 -ISO 95+ GL
<i>LWIC</i>	Poured-in-place Cellular Lightweight Concrete with encapsulated insulation board
<i>MA Base</i>	One ply of the following mechanically attached as prescribed per the approved assembly: DuraFlex™ 30 SBS Base, DuraFlex™ 60 SBS Base, DuraFlex™ SBS PolyBase, USP™ Base Sheet or USP™ NVB
<i>MCRF</i>	Minimum Characteristic Resistance Force as determined by TAS 105 for the named fastener in the selected assembly
<i>MDP</i>	Maximum Design Pressure
<i>OB500</i>	OMG OlyBond 500 applied 12-inch o.c. in continuous 3/4 to 1-inch ribbons.
<i>Preliminarily Secured</i>	Fastened at minimum rate of 4 per 4 ft x 8 ft board or 2 per 4 ft x 4 ft board.





Name	Definition
<i>Recover</i>	Where assemblies are used to recover an existing roof, the existing roof shall consist of only one layer of roofing, i.e. recovering a previously recovered roof is not permitted. Recover roofing shall be conducted in compliance with FBC Section 1511. For mechanically fastened roof assemblies, the existing roof insulation thickness may be contributory in meeting the minimum insulation thickness requirements for a given assembly.
<i>SD Fasteners &amp; Plates</i>	One of the following: -OMG 3 in. Ribbed Galvalume Plate or OMG 3" Galvalume Steel Plate with OMG #12 Standard or #14 Heavy Duty fastener -Trufast 3" Metal Insulation Plate or Trufast 3" Recessed Metal Insulation Plate with Trufast #12 DP or Trufast HD fastener
<i>SECUROCK</i>	Min. 0.25-inch USG SECUROCK Gypsum-Fiber Roof Board
<i>TA SBS Base</i>	One ply of the following fully bonded by torch adhering: DuraFlex™ 60TG SBS Base or DuraFlex™ 90TG SBS Base
<i>TA SBS Cap</i>	One ply of the following fully bonded by torch adhering: DuraFlex™ G4FRTG SBS or DuraFlex™ 190 FRTG SBS
<i>TA SBS Ply</i>	One or more plies of the following fully bonded by torch adhering: DuraFlex™ 60TG SBS Base or DuraFlex™ 90TG SBS Base



## APPROVED ASSEMBLIES

The following notes shall be observed when using the assembly tables below.

1. MDPs were calculated using a 2:1 margin of safety per FBC Section 1504.9.
2. Refer to [LIMITATIONS](#) and [NOMENCLATURE](#) sections of this evaluation when using the table(s) below.
3. Refer to [INSTALLATION](#) section of this report for installation detail when the information is not explicitly stated for the selected assembly.
4. The on-center (o.c.) spacing given is the maximum allowable attachment spacing for the rated system.
5. As Tested information for roof deck construction is provided for information only. The addition of the As Tested deck information does not obviate the requirement for rational design of the roof deck and roof deck attachment in accordance with FBC requirements.

Assembly System Numbers and Definitions	
<a href="#">C-A-#</a>	Assemblies with All Layers Adhered over <i>Concrete Deck</i> (New or Existing)
<a href="#">C-AM-#</a>	Assemblies with Adhered Membranes over Fastened Insulation over <i>Concrete Deck</i> (New, Existing, or Recover)
<a href="#">C-M-#</a>	Assemblies with Fastened Base Sheets over <i>Concrete Deck</i> (New, Existing, or Recover)
<a href="#">LC-A-#</a>	Lightweight Concrete Assemblies with All Layers Adhered over <i>Concrete Deck</i> (New or Existing)
<a href="#">L-C-M-#</a>	Lightweight Concrete Assemblies with Fastened Base Sheets over <i>Concrete Deck</i> (New or Existing)
<a href="#">L-S-M-#</a>	Lightweight Concrete Assemblies with Fastened Base Sheets over <i>Steel Deck</i> (New or Existing)
<a href="#">R-A-#</a>	Recover Assemblies with All Layers Adhered
<a href="#">S-AM-#</a>	Assemblies with Adhered Membranes over Fastened Insulation over <i>Steel Deck</i> (New, Existing, or Recover)
<a href="#">S-M-#</a>	Assemblies with Fastened Base Sheets over <i>Steel Deck</i> (New, Existing, or Recover)
<a href="#">W-M-#</a>	Assemblies with Fastened Base Sheets over <i>Wood Deck</i> (New or Existing)

Assemblies with All Layers Adhered over <i>Concrete Deck</i> (New or Existing)									
System No.	Primer	Base Insulation	Base Insulation Attachment	Top Insulation	Top Insulation Attachment	Base Ply	Ply Sheet	Cap Sheet	MDP (psf)
C-A-1	-	Min. 1.5-inch, min. 1.25 pcf Insulfoam EPS	CR-20	DensDeck Prime or SECUROCK	CR-20	HA BUR Base, HA SBS Base, or TA SBS Base	OPTIONAL HA BUR Ply, HA SBS Ply, or TA SBS Ply	HA SBS Cap or TA SBS Cap	<b>-87.5 (Lim. 9)</b>
C-A-2	-	Min. 1.5-inch ACFoam II, H-Shield or ISO 95+GL	OB500	DensDeck Prime	OB500	HA BUR Base, HA SBS Base, or TA SBS Base	OPTIONAL HA BUR Ply, HA SBS Ply, or TA SBS Ply	HA SBS Cap or TA SBS Cap	<b>-150 (Lim.9)</b>
C-A-3	ASTM D 41	Min. 2-inch H-Shield	Hot Asphalt	Min. 3/4-inch EnergyGuard Perlite Roof Insulation or FescoBoard or Min. 1/2-inch Structodek High Density Fiberboard Roof Insulation	Hot Asphalt	HA BUR Base or HA SBS Base	OPTIONAL HA BUR Ply, HA SBS Ply, or TA SBS Ply	HA SBS Cap or TA SBS Cap	<b>-157.5 (Lim. 9)</b>



Assemblies with All Layers Adhered over Concrete Deck (New or Existing)									
System No.	Primer	Base Insulation	Base Insulation Attachment	Top Insulation	Top Insulation Attachment	Base Ply	Ply Sheet	Cap Sheet	MDP (psf)
C-A-4	ASTM D 41	Min. 2-inch H-Shield	Hot Asphalt	DensDeck Prime or SECUROCK	Hot Asphalt	HA BUR Base, HA SBS Base, or TA SBS Base	OPTIONAL HA BUR Ply, HA SBS Ply, or TA SBS Ply	HA SBS Cap or TA SBS Cap	-157.5 (Lim. 9)
C-A-5	-	Min. 1.5-inch, min. 1.50 pcf Insulfoam EPS	CR-20	DensDeck Prime or SECUROCK	CR-20	HA BUR Base, HA SBS Base, or TA SBS Base	OPTIONAL HA BUR Ply, HA SBS Ply, or TA SBS Ply	HA SBS Cap or TA SBS Cap	-180 (Lim. 9)
C-A-6	ASTM D 41	OPTIONAL Min. 2-inch ACFoam II or Multi-Max FA3	Hot Asphalt	Min. 1/2-inch Structodek High Density Fiberboard Roof Insulation	Hot Asphalt	HA BUR Base or HA SBS Base	OPTIONAL HA BUR Ply, HA SBS Ply, or TA SBS Ply	HA SBS Cap or TA SBS Cap	-187.5 (Lim. 9)
C-A-7	-	Min. 2-inch ACFoam II, Multi-Max FA3 or H-Shield	OB500	DensDeck Prime	OB500	HA BUR Base, HA SBS Base, or TA SBS Base	OPTIONAL HA BUR Ply, HA SBS Ply, or TA SBS Ply	HA SBS Cap or TA SBS Cap	-202.5 (Lim. 9)
C-A-8	-	Min. 2-inch ACFoam II, ISO 95+ GL, H-Shield, ENRGY 3 or Multi-Max FA3	OB500	SECUROCK	OB500	HA BUR Base, HA SBS Base, or TA SBS Base	OPTIONAL HA BUR Ply, HA SBS Ply, or TA SBS Ply	HA SBS Cap or TA SBS Cap	-225 (Lim. 9)
C-A-9	ASTM D 41	OPTIONAL Min. 2-inch ACFoam II or Multi-Max FA3	Hot Asphalt	Min. 3/4-inch FescoBoard	Hot Asphalt	HA BUR Base or HA SBS Base	OPTIONAL HA BUR Ply, HA SBS Ply, or TA SBS Ply	HA SBS Cap or TA SBS Cap	-232.5 (Lim. 9)
C-A-10	-	Min. 1.5-inch, min. 2.0 pcf Insulfoam EPS	CR-20	DensDeck Prime or SECUROCK	CR-20	HA BUR Base, HA SBS Base, or TA SBS Base	OPTIONAL HA BUR Ply, HA SBS Ply, or TA SBS Ply	HA SBS Cap or TA SBS Cap	-240 (Lim. 9)
C-A-11	-	OPTIONAL Min. 1.5-inch ISO IV	CR-20	DensDeck Prime or SECUROCK	CR-20	HA BUR Base, HA SBS Base, or TA SBS Base	OPTIONAL HA BUR Ply, HA SBS Ply, or TA SBS Ply	HA SBS Cap or TA SBS Cap	-262.5 (Lim. 9)
C-A-12	ASTM D 41	OPTIONAL Min. 2-inch ACFoam II or Multi-Max FA3	Hot Asphalt	DensDeck Prime or SECUROCK	Hot Asphalt	HA BUR Base, HA SBS Base, or TA SBS Base	OPTIONAL HA BUR Ply, HA SBS Ply, or TA SBS Ply	HA SBS Cap or TA SBS Cap	-302.5 (Lim. 9)



Assemblies with Adhered Membranes over Fastened Insulation over Concrete Deck (New, Existing, or Recover)								
System No.	Base Insulation	Base Insulation Attachment	Top Insulation	Top Insulation Attachment	Base Ply	Ply Sheet	Cap Sheet	MDP (psf)
C-AM-1	Min. 1.5-inch ISO I or min. 2-inch H-Shield or H-Shield Tapered	CD Fasteners and Plates at a rate of 1 fastener per 4-ft <sup>2</sup>	Min. 1/2-inch Structodek High Density Fiberboard or Min. 3/4-inch EnergyGuard Perlite or FescoBoard	Hot Asphalt	HA BUR Base or HA SBS Base	OPTIONAL HA BUR Ply, HA SBS Ply, or TA SBS Ply	HA SBS Cap or TA SBS Cap	-45 (Lim. 7)
C-AM-2	Min. 1.5-inch ISO I or min. 2-inch H-Shield or H-Shield Tapered	CD Fasteners and Plates at a rate of 1 fastener per 4-ft <sup>2</sup>	DensDeck Prime or SECUROCK	Hot Asphalt	HA BUR Base, HA SBS Base, or TA SBS Base	OPTIONAL HA BUR Ply, HA SBS Ply, or TA SBS Ply	HA SBS Cap or TA SBS Cap	-45 (Lim. 7)
C-AM-3	OPTIONAL Insulation	-	Min. 2-inch ACFoam Composite/PB or Thermofoam Composite-3	CD Fasteners and Plates at a rate of 1 fastener per 4-ft <sup>2</sup>	HA BUR Base or HA SBS Base	OPTIONAL HA BUR Ply, HA SBS Ply, or TA SBS Ply	HA SBS Cap or TA SBS Cap	-45 (Lim. 7)
C-AM-4	Min. 2-inch ISO II	HD Fasteners and Plates at a rate of 1 fastener per 1.45-ft <sup>2</sup>	DensDeck Prime or SECUROCK	CR-20 ribbons spaced 6-inch o.c.	HA BUR Base, HA SBS Base, or TA SBS Base	OPTIONAL HA BUR Ply, HA SBS Ply, or TA SBS Ply	HA SBS Cap or TA SBS Cap	-52.5 (Lim. 7)
C-AM-5	Min. 2-inch ISO II	HD Fasteners and Plates at a rate of 1 fastener per 1.45-ft <sup>2</sup>	DensDeck Prime or SECUROCK	OB500 ribbons spaced 6-inch o.c. or Hot Asphalt	HA BUR Base, HA SBS Base, or TA SBS Base	OPTIONAL HA BUR Ply, HA SBS Ply, or TA SBS Ply	HA SBS Cap or TA SBS Cap	-60 (Lim. 7)
C-AM-6	Min. 2-inch ISO III	CD Fasteners and Plates at a rate of 1 fastener per 1.6-ft <sup>2</sup>	Min. 1/2-inch Structodek High Density Fiberboard or Min. 3/4-inch FescoBoard	Hot Asphalt	HA BUR Base or HA SBS Base	OPTIONAL HA BUR Ply, HA SBS Ply, or TA SBS Ply	HA SBS Cap or TA SBS Cap	-67.5 (Lim. 7)
C-AM-7	Min. 2-inch ISO III	CD Fasteners and Plates at a rate of 1 fastener per 1.6-ft <sup>2</sup>	DensDeck Prime or SECUROCK	Hot Asphalt	HA BUR Base, HA SBS Base, or TA SBS Base	OPTIONAL HA BUR Ply, HA SBS Ply, or TA SBS Ply	HA SBS Cap or TA SBS Cap	-67.5 (Lim. 7)
C-AM-8	Min. 2-inch ISO II	HD Fasteners and Plates at a rate of 1 fastener per 1.45-ft <sup>2</sup>	Min. 1/2-inch Structodek High Density Fiberboard	Hot Asphalt	HA BUR Base or HA SBS Base	OPTIONAL HA BUR Ply, HA SBS Ply, or TA SBS Ply	HA SBS Cap or TA SBS Cap	-67.5 (Lim. 7)
C-AM-9	Min. 2-inch ISO II	HD Fasteners and Plates at a rate of 1 fastener per 1.45-ft <sup>2</sup>	Min. 3/4-inch EnergyGuard Perlite or FescoBoard	Hot Asphalt	HA BUR Base or HA SBS Base	OPTIONAL HA BUR Ply, HA SBS Ply, or TA SBS Ply	HA SBS Cap or TA SBS Cap	-75 (Lim. 7)



Assemblies with Fastened Base Sheets over <i>Concrete Deck</i> (New, Existing, or Recover)							
System No.	Base Insulation	Top Insulation	Base Sheet	Base Sheet Attachment	Ply Sheet	Cap Sheet	MDP (psf)
C-M-1	<i>Insulation</i>	-	USP Base, USP NVB or DuraFlex 30 SBS Base	<i>CD Fasteners and Plates</i> at 12-inch o.c. in the 2-inch lap and 18-inch o.c. in two (2) equally spaced, staggered center rows	<i>HA BUR Ply, HA SBS Ply, or TA SBS Ply</i>	<i>HA SBS Cap or TA SBS Cap</i>	<b>-45 (Lim. 7)</b>
C-M-2	<i>Insulation</i>	-	USP Base or DuraFlex 30 SBS Base	<i>CD Fasteners and Plates</i> at 6-inch o.c. in the lap and 12-inch o.c. in two (2) equally spaced, staggered center rows	<i>HA BUR Ply, HA SBS Ply, or TA SBS Ply</i>	<i>HA SBS Cap or TA SBS Cap</i>	<b>-60 (Lim. 7)</b>

Lightweight Concrete Assemblies with All Layers Adhered over <i>Concrete Deck</i> (New or Existing)							
System No.	LWIC	Base Insulation	Cover Board	Base Ply	Ply Sheet	Cap Sheet	MDP (psf)
LC-A-1	Min. 300 psi Celcore, Elastizell or Mearlcrete	OPTIONAL Min. 2-inch ISO IV ribbon adhered in CR-20	<i>DensDeck Prime</i> or <i>SECUROCK</i> ribbon adhered in CR-20	<i>HA BUR Base, HA SBS Base, or TA SBS Base</i>	OPTIONAL <i>HA BUR Ply, HA SBS Ply, or TA SBS Ply</i>	<i>HA SBS Cap or TA SBS Cap</i>	<b>-180 (Lim. 9)</b>
LC-A-2	Min. 300 psi Elastizell	OPTIONAL Min. 1.5-inch ACFoam II, ISO 95+ GL or H-Shield ribbon adhered in OB500	<i>DensDeck Prime</i> or <i>SECUROCK</i> ribbon adhered in OB500	<i>HA BUR Base, HA SBS Base, or TA SBS Base</i>	OPTIONAL <i>HA BUR Ply, HA SBS Ply, or TA SBS Ply</i>	<i>HA SBS Cap or TA SBS Cap</i>	<b>-225 (Lim. 9)</b>

Lightweight Concrete Assemblies with Fastened Base Sheets over <i>Concrete Deck</i> (New or Existing)						
System No.	LWIC	Base Sheet	Base Sheet Attachment	Ply Sheet	Cap Sheet	<i>MDP (psf)</i>
LC-M-1	Min. 200 psi Celcore MF	<i>MA Base</i>	1.8-inch Twin Loc-Nails secured 9-inch o.c. in the laps and 18-inch o.c. in two (2), equally spaced, staggered center rows	<i>HA BUR Ply, HA SBS Ply, or TA SBS Ply</i>	<i>HA SBS Cap or TA SBS Cap</i>	<b>-45 (Lim. 7)</b>
LC-M-2	Min. 200 psi Elastizell	<i>MA Base</i>	Trufast FM-90 Assembled Base-Ply Fastener or 1.8-inch Twin Loc-Nails secured 7-inch o.c. in the laps and 7-inch o.c. in two (2), equally spaced, staggered center rows	<i>HA BUR Ply, HA SBS Ply, or TA SBS Ply</i>	<i>HA SBS Cap or TA SBS Cap</i>	<b>-45 (Lim. 7)</b>



Lightweight Concrete Assemblies with Fastened Base Sheets over Concrete Deck (New or Existing)						
System No.	LWIC	Base Sheet	Base Sheet Attachment	Ply Sheet	Cap Sheet	MDP (psf)
LC-M-3	Min. 300 psi Mearlcrete	MA Base	Trufast FM-90 Assembled Base-Ply Fastener secured 7-inch o.c. in the laps and 7-inch o.c. in two (2), equally spaced, staggered center rows	HA BUR Ply, HA SBS Ply, or TA SBS Ply	HA SBS Cap or TA SBS Cap	-52.5 (Lim. 7)
LC-M-4	Min. 300 psi Cellular Lightweight Concrete (MCRF $\geq$ 88 lbf using 1.8-inch Twin Loc-Nails)	USP Base Sheet or DuraFlex 30 SBS Base	1.8-inch Twin Loc-Nails secured 9-inch o.c. in the laps and 9-inch o.c. in two (2), equally spaced, staggered center rows	OPTIONAL HA BUR Ply, HA SBS Ply, or TA SBS Ply	HA SBS Cap or TA SBS Cap	-60 (Lim. 7)
LC-M-5	Min. 300 psi Celcore MF with HS Rheology Admixture	MA Base	Trufast FM-90 Assembled Base-Ply Fastener secured 9-inch o.c. in the laps and 12-inch o.c. in two (2), equally spaced, staggered center rows	OPTIONAL HA BUR Ply, HA SBS Ply, or TA SBS Ply	HA SBS Cap or TA SBS Cap	-60 (Lim. 7)
LC-M-6	Min. 300 psi Celcore	MA Base	Trufast FM-90 Assembled Base-Ply Fastener secured 7-inch o.c. in the 3-inch side laps and 7-inch o.c. in two (2), equally spaced, staggered center rows	HA BUR Ply or HA SBS Ply	HA SBS Cap	-75 (Lim. 7)
LC-M-7	Min. 300 psi Celcore	DuraFlex 60 SBS Base or DuraFlex SBS PolyBase	Trufast FM-260 or FM-260V Base-Ply Fastener secured 7-inch o.c. in the 3-inch side laps and 7-inch o.c. in two (2), equally spaced, staggered center rows	HA BUR Ply or HA SBS Ply	HA SBS Cap	-75 (Lim. 7)

Lightweight Concrete Assemblies with Fastened Base Sheets over Steel Deck (New or Existing)							
System No.	Deck Detail	LWIC	Base Sheet	Base Sheet Attachment	Ply Sheet	Cap Sheet	MDP (psf)
LS-M-1	G33, L5, PW	Min. 200 psi Celcore MF	MA Base	1.8-inch Twin Loc-Nails secured 9-inch o.c. in the laps and 18-inch o.c. in two (2), equally spaced, staggered center rows	HA BUR Ply, HA SBS Ply, or TA SBS Ply	HA SBS Cap or TA SBS Cap	-45 (Lim. 7)
LS-M-2	G33, L5, PW	Min. 200 psi Elastizell	MA Base	Trufast FM-90 Assembled Base-Ply Fastener or 1.8-inch Twin Loc-Nails secured 7-inch o.c. in the laps and 7-inch o.c. in two (2), equally spaced, staggered center rows	HA BUR Ply, HA SBS Ply, or TA SBS Ply	HA SBS Cap or TA SBS Cap	-45 (Lim. 7)
LS-M-3	G33, L5, PW	Min. 300 psi Mearlcrete	MA Base	Trufast FM-90 Assembled Base-Ply Fastener secured 7-inch o.c. in the laps and 7-inch o.c. in two (2), equally spaced, staggered center rows	HA BUR Ply, HA SBS Ply, or TA SBS Ply	HA SBS Cap or TA SBS Cap	-52.5 (Lim. 7)



Lightweight Concrete Assemblies with Fastened Base Sheets over <i>Steel Deck</i> (New or Existing)							
System No.	Deck Detail	LWIC	Base Sheet	Base Sheet Attachment	Ply Sheet	Cap Sheet	MDP (psf)
LS-M-4	G33, L5, PW	Min. 300 psi Cellular Lightweight Concrete (MCRF $\geq$ 88 lbf using 1.8-inch Twin Loc-Nails)	USP Base Sheet or DuraFlex 30 SBS Base	1.8-inch Twin Loc-Nails secured 9-inch o.c. in the laps and 9-inch o.c. in two (2), equally spaced, staggered center rows	OPTIONAL HA BUR Ply, HA SBS Ply, or TA SBS Ply	HA SBS Cap or TA SBS Cap	-60 (Lim. 7)
LS-M-5	G33, L5, PW	Min. 300 psi Celcore MF with HS Rheology Admixture	MA Base	Trufast FM-90 Assembled Base-Ply Fastener secured 9-inch o.c. in the laps and 12-inch o.c. in two (2), equally spaced, staggered center rows	OPTIONAL HA BUR Ply, HA SBS Ply, or TA SBS Ply	HA SBS Cap or TA SBS Cap	-60 (Lim. 7)
LS-M-6	G33, L5, PW	Min. 300 psi Celcore	MA Base	Trufast FM-90 Assembled Base-Ply Fastener secured 7-inch o.c. in the 3-inch side laps and 7-inch o.c. in two (2), equally spaced, staggered center rows	HA BUR Ply or HA SBS Ply	HA SBS Cap	-75 (Lim. 7)
LS-M-7	G33, L5, PW	Min. 300 psi Celcore	DuraFlex 60 SBS Base or DuraFlex SBS PolyBase	Trufast FM-260 or FM-260V Base-Ply Fastener secured 7-inch o.c. in the 3-inch side laps and 7-inch o.c. in two (2), equally spaced, staggered center rows	HA BUR Ply or HA SBS Ply	HA SBS Cap	-75 (Lim. 7)

Recover Assemblies with All Layers Adhered									
System No.	Existing Roof	Base Insulation	Base Insulation Attachment	Top Insulation	Top Insulation Attachment	Base Ply	Ply Sheet	Cap Sheet	MDP (psf)
R-A-1	Existing asphaltic mineral surfaced cap sheet	Min. 1.5-inch, min. 1.25 pcf Insulfoam EPS	CR-20	DensDeck Prime or SECUROCK	CR-20	HA BUR Base, HA SBS Base, or TA SBS Base	OPTIONAL HA BUR Ply, HA SBS Ply, or TA SBS Ply	HA SBS Cap or TA SBS Cap	-87.5 (Lim. 9)
R-A-2	Existing asphalt BUR or mineral surfaced cap sheet	OPTIONAL Min. 1.5-inch ACFoam II, H-Shield, ISO 95+GL or Multi-Max FA3	OB500	DensDeck Prime or SECUROCK	OB500	HA BUR Base, HA SBS Base, or TA SBS Base	OPTIONAL HA BUR Ply, HA SBS Ply, or TA SBS Ply	HA SBS Cap or TA SBS Cap	-120 (Lim. 9)





Recover Assemblies with All Layers Adhered									
System No.	Existing Roof	Base Insulation	Base Insulation Attachment	Top Insulation	Top Insulation Attachment	Base Ply	Ply Sheet	Cap Sheet	MDP (psf)
R-A-3	Existing asphalt BUR or mineral surfaced cap sheet	Min. 2-inch H-Shield	Hot Asphalt	Min. 3/4-inch EnergyGuard Perlite Roof Insulation or FescoBoard or Min. 1/2-inch Structodek High Density Fiberboard Roof Insulation	Hot Asphalt	HA BUR Base, HA SBS Base, or TA SBS Base	OPTIONAL HA BUR Ply, HA SBS Ply, or TA SBS Ply	HA SBS Cap or TA SBS Cap	-157.5 (Lim. 9)
R-A-4	Existing asphalt BUR or mineral surfaced cap sheet	Min. 2-inch H-Shield	Hot Asphalt	DensDeck Prime or SECUROCK	Hot Asphalt	HA BUR Base or HA SBS Base	OPTIONAL HA BUR Ply, HA SBS Ply, or TA SBS Ply	HA SBS Cap or TA SBS Cap	-157.5 (Lim. 9)
R-A-5	Existing asphaltic mineral surfaced cap sheet	Min. 1.5-inch, min. 1.50 pcf Insulfoam EPS	CR-20	DensDeck Prime or SECUROCK	CR-20	HA BUR Base, HA SBS Base, or TA SBS Base	OPTIONAL HA BUR Ply, HA SBS Ply, or TA SBS Ply	HA SBS Cap or TA SBS Cap	-180 (Lim. 9)
R-A-6	Existing asphalt BUR or mineral surfaced cap sheet	OPTIONAL Min. 2-inch ACFoam II or Multi-Max FA3	Hot Asphalt	Min. 1/2-inch Structodek High Density Fiberboard Roof Insulation	Hot Asphalt	HA BUR Base or HA SBS Base	OPTIONAL HA BUR Ply, HA SBS Ply, or TA SBS Ply	HA SBS Cap or TA SBS Cap	-187.5 (Lim. 9)
R-A-7	Existing asphalt BUR or mineral surfaced cap sheet	OPTIONAL Min. 2-inch ACFoam II or Multi-Max FA3	Hot Asphalt	Min. 3/4-inch FescoBoard	Hot Asphalt	HA BUR Base or HA SBS Base	OPTIONAL HA BUR Ply, HA SBS Ply, or TA SBS Ply	HA SBS Cap or TA SBS Cap	-232.5 (Lim. 9)
R-A-8	Existing asphaltic mineral surfaced cap sheet	Min. 1.5-inch, min. 2.0 pcf Insulfoam EPS	CR-20	DensDeck Prime or SECUROCK	CR-20	HA BUR Base, HA SBS Base, or TA SBS Base	OPTIONAL HA BUR Ply, HA SBS Ply, or TA SBS Ply	HA SBS Cap or TA SBS Cap	-240 (Lim. 9)
R-A-9	Existing asphaltic mineral surfaced cap sheet	OPTIONAL Min. 1.5-inch ISO IV	CR-20	DensDeck Prime or SECUROCK	CR-20	HA BUR Base, HA SBS Base, or TA SBS Base	OPTIONAL HA BUR Ply, HA SBS Ply, or TA SBS Ply	HA SBS Cap or TA SBS Cap	-262.5 (Lim. 9)
R-A-10	Existing asphalt BUR or mineral surfaced cap sheet	OPTIONAL Min. 2-inch ACFoam II or Multi-Max FA3	Hot Asphalt	DensDeck Prime or SECUROCK	Hot Asphalt	HA BUR Base, HA SBS Base, or TA SBS Base	OPTIONAL HA BUR Ply, HA SBS Ply, or TA SBS Ply	HA SBS Cap or TA SBS Cap	-302.5 (Lim. 9)





Assemblies with Adhered Membranes over Fastened Insulation over Steel Deck (New, Existing, or Recover)									
System No.	Deck Detail	Base Insulation	Base Insulation Attachment	Top Insulation	Top Insulation Attachment	Base Ply	Ply Sheet	Cap Sheet	MDP (psf)
S-AM-1	G33	Min. 1.5-inch ISO I or min. 2-inch H-Shield or H-Shield Tapered	SD Fasteners and Plates at a rate of 1 fastener per 4-ft <sup>2</sup>	Min. 1/2-inch Structodek High Density Fiberboard or Min. 3/4-inch EnergyGuard Perlite or FescoBoard	Hot Asphalt	HA BUR Base or HA SBS Base	OPTIONAL HA BUR Ply, HA SBS Ply, or TA SBS Ply	HA SBS Cap or TA SBS Cap	-45 (Lim. 7)
S-AM-2	G33	Min. 1.5-inch ISO I or min. 2-inch H-Shield or H-Shield Tapered	SD Fasteners and Plates at a rate of 1 fastener per 4-ft <sup>2</sup>	DensDeck Prime or SECUROCK	Hot Asphalt	HA BUR Base, HA SBS Base, or TA SBS Base	OPTIONAL HA BUR Ply, HA SBS Ply, or TA SBS Ply	HA SBS Cap or TA SBS Cap	-45 (Lim. 7)
S-AM-3	G33	OPTIONAL Insulation	-	Min. 2-inch ACFoam Composite/PB or Thermofoam Composite-3	SD Fasteners and Plates at a rate of 1 fastener per 4-ft <sup>2</sup>	HA BUR Base or HA SBS Base	OPTIONAL HA BUR Ply, HA SBS Ply, or TA SBS Ply	HA SBS Cap or TA SBS Cap	-45 (Lim. 7)
S-AM-4	G33	Min. 2-inch ISO II	HD Fasteners and Plates at a rate of 1 fastener per 1.45-ft <sup>2</sup>	DensDeck Prime or SECUROCK	CR-20 ribbons spaced 6-inch o.c.	HA BUR Base, HA SBS Base, or TA SBS Base	OPTIONAL HA BUR Ply, HA SBS Ply, or TA SBS Ply	HA SBS Cap or TA SBS Cap	-52.5 (Lim. 7)
S-AM-5	G33	Min. 2-inch ISO II	HD Fasteners and Plates at a rate of 1 fastener per 1.45-ft <sup>2</sup>	DensDeck Prime or SECUROCK	OB500 ribbons spaced 6-inch o.c. or Hot Asphalt	HA BUR Base, HA SBS Base, or TA SBS Base	OPTIONAL HA BUR Ply, HA SBS Ply, or TA SBS Ply	HA SBS Cap or TA SBS Cap	-60 (Lim. 7)
S-AM-6	G33	Min. 2-inch ISO III	SD Fasteners and Plates at a rate of 1 fastener per 1.6-ft <sup>2</sup>	Min. 1/2-inch Structodek High Density Fiberboard or Min. 3/4-inch FescoBoard	Hot Asphalt	HA BUR Base or HA SBS Base	OPTIONAL HA BUR Ply, HA SBS Ply, or TA SBS Ply	HA SBS Cap or TA SBS Cap	-67.5 (Lim. 7)
S-AM-7	G33	Min. 2-inch ISO III	SD Fasteners and Plates at a rate of 1 fastener per 1.6-ft <sup>2</sup>	DensDeck Prime or SECUROCK	Hot Asphalt	HA BUR Base, HA SBS Base, or TA SBS Base	OPTIONAL HA BUR Ply, HA SBS Ply, or TA SBS Ply	HA SBS Cap or TA SBS Cap	-67.5 (Lim. 7)
S-AM-8	G33	Min. 2-inch ISO II	HD Fasteners and Plates at a rate of 1 fastener per 1.45-ft <sup>2</sup>	Min. 1/2-inch Structodek High Density Fiberboard	Hot Asphalt	HA BUR Base or HA SBS Base	OPTIONAL HA BUR Ply, HA SBS Ply, or TA SBS Ply	HA SBS Cap or TA SBS Cap	-67.5 (Lim. 7)
S-AM-9	G33, L6, F2	OPTIONAL Insulation	-	Min. 1/2-inch DensDeck Prime	Trufast 3" Metal Insulation Plates with Trufast HD screws at a rate of 1 fastener per 1.6-ft <sup>2</sup>	HA BUR Base, HA SBS Base, or TA SBS Base	OPTIONAL HA BUR Ply, HA SBS Ply, or TA SBS Ply	HA SBS Cap or TA SBS Cap	-67.5 (Lim. 7)



Assemblies with Adhered Membranes over Fastened Insulation over Steel Deck (New, Existing, or Recover)									
System No.	Deck Detail	Base Insulation	Base Insulation Attachment	Top Insulation	Top Insulation Attachment	Base Ply	Ply Sheet	Cap Sheet	MDP (psf)
S-AM-10	G33, L6, F2	OPTIONAL Insulation	-	Min. 1/2-inch SECUROCK	Trufast 3" Metal Insulation Plates with Trufast HD screws at a rate of 1 fastener per 1.78-ft <sup>2</sup>	HA BUR Base, HA SBS Base, or TA SBS Base	OPTIONAL HA BUR Ply, HA SBS Ply, or TA SBS Ply	HA SBS Cap or TA SBS Cap	-67.5 (Lim. 7)
S-AM-11	G33, L6, F2	OPTIONAL Insulation	-	Min. 2-inch ACFoam II	Trufast 3" Metal Insulation Plates with Trufast HD screws at a rate of 1 fastener per 1.45-ft <sup>2</sup>	GAFGLAS Stratavent Perforated Venting Base, loose laid	HA BUR Ply or HA SBS Ply	HA SBS Cap or TA SBS Cap	-67.5 (Lim. 7)
S-AM-12	G33	Min. 2-inch ISO II	HD Fasteners and Plates at a rate of 1 fastener per 1.45-ft <sup>2</sup>	Min. 3/4-inch EnergyGuard Perlite or FescoBoard	Hot Asphalt	HA BUR Base or HA SBS Base	OPTIONAL HA BUR Ply, HA SBS Ply, or TA SBS Ply	HA SBS Cap or TA SBS Cap	-75 (Lim. 7)
S-AM-13	G33, L6, F2W, S18	Min. 1.5-inch ISO	-	Min. 1/2-inch SECUROCK	EHD Fasteners and Plate at a rate of 1 fastener per 1-ft <sup>2</sup>	HA BUR Base, HA SBS Base, or TA SBS Base	OPTIONAL HA BUR Ply, HA SBS Ply, or TA SBS Ply	HA SBS Cap or TA SBS Cap	-157.5 (Lim.7)

Assemblies with Fastened Base Sheets over Steel Deck (New, Existing, or Recover)								
System No.	Deck Detail	Base Insulation	Top Insulation	Base Sheet	Base Sheet Attachment	Ply Sheet	Cap Sheet	MDP (psf)
S-M-1	G33	Insulation	-	USP Base, USP NVB or DuraFlex 30 SBS Base	SD Fasteners and Plates at 12-inch o.c. in the 2-inch lap and 18-inch o.c. in two (2) equally spaced, staggered center rows	HA BUR Ply, HA SBS Ply, or TA SBS Ply	HA SBS Cap or TA SBS Cap	-45 (Lim. 7)
S-M-2	G33	Insulation	-	USP Base or DuraFlex 30 SBS Base	SD Fasteners and Plates at 6-inch o.c. in the lap and 12-inch o.c. in two (2) equally spaced, staggered center rows	HA BUR Ply, HA SBS Ply, or TA SBS Ply	HA SBS Cap or TA SBS Cap	-60 (Lim. 7)
S-M-3	G33, L5, F2, S18	Min. 1.5-inch Insulation	-	DuraFlex SBS Polybase	EHD Fasteners and Plates at 6-inch o.c. in the lap and 6-inch o.c. in two (2) equally spaced, staggered center rows	HA SBS Base, HA SBS Ply, TA SBS Base or TA SBS Ply	HA SBS Cap or TA SBS Cap	-142.5 (Lim. 7)



Assemblies with Fastened Base Sheets over <i>Steel Deck</i> (New, Existing, or Recover)								
System No.	Deck Detail	Base Insulation	Top Insulation	Base Sheet	Base Sheet Attachment	Ply Sheet	Cap Sheet	MDP (psf)
S-M-4	G33, L6, F1, S12	Min. 1.5-inch Insulation	OPTIONAL Cover Board	DuraFlex SBS Polybase	EHD Fasteners and Plates at 12-inch o.c. in the lap and 12-inch o.c. in two (2) equally spaced, staggered center rows	HA BUR Ply, HA SBS Ply, or TA SBS Ply	HA SBS Cap or TA SBS Cap	-150 (Lim. 7)
S-M-5	G33, L6, F2, S18	Min. 1.5-inch ISO with min. 1/2-inch SECUROCK	OPTIONAL Cover Board	DuraFlex SBS Polybase	EHD Fasteners and Plates at 6-inch o.c. in the lap and 6-inch o.c. in two (2) equally spaced, staggered center rows	HA SBS Base, HA SBS Ply, TA SBS Base or TA SBS Ply	HA SBS Cap or TA SBS Cap	-157.5 (Lim.7)
S-M-6	G80, L6, F2, S12	Min. 1.5-inch Insulation	OPTIONAL Cover Board	DuraFlex SBS Polybase	EHD Fasteners and Plates at 6-inch o.c. in the lap and 6-inch o.c. in two (2) equally spaced, staggered center rows	HA SBS Base, HA SBS Ply, TA SBS Base or TA SBS Ply	HA SBS Cap or TA SBS Cap	-172.5 (Lim.7)
S-M-7	G80, L5, F2, S12	Min. 1.5-inch Insulation	OPTIONAL Cover Board	DuraFlex SBS Polybase	HD Fasteners and Plates at 6-inch o.c. in the lap and 6-inch o.c. in two (2) equally spaced, staggered center rows	HA SBS Base, HA SBS Ply, TA SBS Base or TA SBS Ply	HA SBS Cap or TA SBS Cap	-232.5 (Lim. 7)
S-M-8	G80, L6, F2W, S12	Min. 1.5-inch Insulation	OPTIONAL Cover Board	DuraFlex SBS Polybase	HD Fasteners and Plates at 6-inch o.c. in the lap and 6-inch o.c. in two (2) equally spaced, staggered center rows	HA SBS Base, HA SBS Ply, TA SBS Base or TA SBS Ply	HA SBS Cap or TA SBS Cap	-232.5 (Lim.7)

Assemblies with Fastened Base Sheets over <i>Wood Deck</i> (New or Existing)							
System No.	Deck Detail	Base Sheet	Base Sheet Attachment		Ply Sheet	Cap Sheet	MDP (psf)
W-M-1	T19/32, L24, N6	USP Base or DuraFlex 30 SBS Base	12 ga. annular ring shank nails and 32 ga., 1-5/8-inch diameter tin caps at 8-inch o.c. in the lap and three (3) equally spaced, staggered center rows		OPTIONAL HA BUR Ply, HA SBS Ply or TA SBS Ply	HA SBS Cap or TA SBS Cap	-52.5 (Lim. 7)
W-M-2	T19/32, L24, N4	USP Base or DuraFlex 30 SBS Base	12 ga. annular ring shank nails and 32 ga., 1-5/8-inch diameter tin caps at 8-inch o.c. in the lap and three (3) equally spaced, staggered center rows		OPTIONAL HA BUR Ply, HA SBS Ply or TA SBS Ply	HA SBS Cap or TA SBS Cap	-60 (Lim. 7)

END OF REPORT