

## Product Evaluation

RC465 | 0920

Engineering Services Program

The following product has been evaluated for compliance with the wind loads specified in the International Residential Code (IRC) and the International Building Code (IBC).

This product evaluation is not an endorsement of this product or a recommendation that this product be used. The Texas Department of Insurance has not authorized the use of any information contained in the product evaluation for advertising, or other commercial or promotional purpose.

This product evaluation is intended for use by those individuals who are following the design wind load criteria in Chapter 3 of the IRC and Section 1609 of the IBC. The design loads determined for the building or structure shall not exceed the design load rating specified for the products shown in the limitations section of this product evaluation. This product evaluation does not relieve a Texas licensed engineer of his responsibilities as outlined in the Texas Insurance Code, the Texas Administrative Code, and the Texas Engineering Practice Act.

For more information, contact TDI Engineering Services Program at (800) 248-6032.

**Evaluation ID:** RC-465

**Effective Date:** September 1, 2020

**Re-evaluation Date:** September 2024

**Product Name:** Siplast Modified Bitumen Roof Coverings

**Manufacturer:** Siplast, Inc.  
1111 Hwy 67 South  
Arkadelphia, AR 71923  
(800) 643-7591  
www.siplast.com

### General Description:

Products	Specification	Description
Parabase	ASTM D 4601	Base or ply sheet for mechanical attachment or hot asphalt applications
Parabase FS	ASTM D 4601	Base sheet for mechanical attachment applications
Parabase Plus	ASTM D 4601	Base or ply sheet for mechanical attachment or hot asphalt applications
Paradiene 20	ASTM D 6163	Base or ply sheet for hot asphalt or cold adhesive applications
Paradiene 20 SA	ASTM D 6163	Base or ply sheet for self-adhesive applications
Paradiene 20 TS	ASTM D 6163	Base sheet for torch adhering applications
Paradiene 20 TG	ASTM D 6163	Base or ply sheet for torch adhering applications
Paradiene 20 TG F	ASTM D 6163	Base sheet or ply sheet for torch adhering applications
Paradiene 20 EG	ASTM D 6163	Base or ply sheet for hot asphalt or cold adhesive applications
Paradiene 20 EG TG	ASTM D 6163	Base or ply sheet for torch adhering applications
Paradiene 20 HV	ASTM D 6163	Base or ply sheet for hot asphalt or cold adhesive applications
Paradiene 20 HV TG	ASTM D 6163	Base or ply sheet for torch adhering applications
Paradiene 20 HT	ASTM D 6163	Base or ply sheet for hot asphalt or cold adhesive applications
Paradiene 20 HT TG	ASTM D 6163	Base or ply sheet for torch adhering applications
Paradiene 20 PR	ASTM D 6164	Base or ply sheet for hot asphalt or cold adhesive applications

Products	Specification	Description
Paradiene 20 PR TG	ASTM D 6164	Base or ply sheet for torch adhering applications
Paradiene 30 TG	ASTM D 6163	Cap sheet for torch adhering applications
Paradiene 30 MW FR	ASTM D 6163	Cap sheet for cold adhesive applications
Paradiene 30 FR	ASTM D 6163	Cap sheet for cold adhesive applications
Paradiene 30 FR BW	ASTM D 6163	Cap sheet for cold adhesive applications
Paradiene 30 FR TG	ASTM D 6163	Cap sheet for torch adhering applications
Paradiene 30 FR TG	ASTM D 6163	Cap sheet for torch adhering applications
Paradiene 30 FR TG Eco-Activ	ASTM D 6163	Cap sheet for torch adhering applications
Paradiene 30 CR FR	ASTM D 6163	Cap sheet for cold adhesive applications
Paradiene 30 HT FR	ASTM D 6163	Cap sheet for cold adhesive applications
Paradiene 30 HT FR TG	ASTM D 6163	Cap sheet for torch adhering applications
Paradiene 30 HT CR FR TG	ASTM D 6163	Cap sheet for torch adhering applications
Paradiene 40 FR	ASTM D 6163	Cap sheet for cold adhesive applications
Paradiene 40 FR BW	ASTM D 6163	Cap sheet for cold adhesive applications
Paradiene 40 FR Eco- Active	ASTM D 6163	Cap sheet for cold adhesive applications
Paradiene 40 CR FR	ASTM D 6163	Cap sheet for cold adhesive applications
Paradiene 40 FR TG	ASTM D 6163	Cap sheet for torch adhering applications
Paradiene 40 FR TG Eco-Activ	ASTM D 6163	Cap sheet for torch adhering applications
Paradiene 40 CR FR TG	ASTM D 6163	Cap sheet for torch adhering applications
Parafor 50 LT	ASTM D 6164	Cap sheet for hot asphalt, cold adhesive or torch adhering applications.
Parafor 50 TG	ASTM D 6164	Cap sheet for torch adhering applications
Teranap 1M Film	ASTM D 6164	Cap for sheet with or torch adhering applications in plaza deck systems.
Teranap 1M Sand	ASTM D 6164	Ply sheet for hot asphalt, cold adhesive or torch adhering applications in plaza deck systems.
Irex 40	ASTM D 6163	Base or ply sheet for mechanical attachment, hot asphalt, and torch adhering applications

### Limitations:

1. Fire classification is not within the scope of this evaluation.
2. 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.
3. The minimum roof slope shall be 1/4:12 for new construction.

**Installation:**

Note - Refer to the Assemblies section of this evaluation report for specific installation details of a selected assembly.

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

Component	Product	Installation Detail
Fasteners	NVS Fastener	2.7" diameter plate x 1" shank; heads must be primed with PA-1125 Primer
	Zono-tite Fastener	2.7" diameter plate x 1.7" shank; heads must be primed with PA-1125 Primer
	Siplast Parafast Roofing Fasteners	Min. 3/4" penetration through the top rib of the steel deck
	Siplast Parafast Plates	Min. 3" diameter Galvalume® steel plate
	Siplast Parafast XHD Roofing Fasteners	Min. 3/4" penetration through the top rib of the steel deck
	Siplast Parafast 125 Tri Rib Plates	Min. 3" diameter Galvalume® ribbed steel plate
Primer	ASTM D 41	Applied at a rate of 0.5 gal/100 ft <sup>2</sup>
	PA-1125	Applied at a rate of 1-1.5 gal/100 ft <sup>2</sup>
Insulation Adhesives	OMG Olybond 500 Adhesive Fastener	Partially adhered in 3/4 to 1" wide ribbons
	Siplast Para-Stik	
	Siplast Parafast Insulation Adhesive	
Membrane Adhesives	PA-311	Fully adhered at a rate of 1.5-2.5 gal/100 ft <sup>2</sup>
	SFT Adhesive	Fully adhered at a rate of 1.5 gal/100 ft <sup>2</sup> for cap sheets or 2.0 gal/100 ft <sup>2</sup> for base/ply sheets
Insulation/C over Boards	ACH Foam Technologies Foam Control EPS - FM	Min. 1.8 lbs/ft <sup>3</sup> , ASTM C 578, Type IX; Adhered boards must be a maximum 4' x 4'
	Georgia-Pacific DensDeck Prime	Min. 1/4" thick; Adhered boards shall be a maximum 4' x 4'
	Siplast Paratherm H	Min. 1" thick; Adhered boards shall be a maximum 4' x 4'
	Siplast Paratherm W	
	Atlas Roofing ACFoam-III	
	USG SECUROCK Gypsum-Fiber Roof Board	Min. 1/4" thick; Adhered boards shall be a maximum 4' x 4'
Base/Ply Sheets	Parabase	Min. 3" side laps
	Parabase FS	
	Parabase Plus	
	Paradiene 20	
	Paradiene 20 SA	
	Paradiene 20 TS	
	Paradiene 20 TG	
	Paradiene 20 TG F	
	Paradiene 20 EG	
	Paradiene 20 EG TG	
	Paradiene 20 HV	
	Paradiene 20 HV TG	
	Paradiene 20 HT	
	Paradiene 20 HT TG	
	Paradiene 20 PR	
Paradiene 20 PR TG		
Cap Sheets	Paradiene 30 TG	Min. 3" side laps
	Paradiene 30 MW FR	
	Paradiene 30 FR	

Component	Product	Installation Detail
	Paradiene 30 FR BW	Min. 3" side laps
	Paradiene 30 FR TG	
	Paradiene 30 FR TG BW	
	Paradiene 30 FR TG Eco-Activ	
	Paradiene 30 CR FR	
	Paradiene 30 CR FR TG	
	Paradiene 30 HT FR	
	Paradiene 30 HT FR TG	
	Paradiene 30 HT CR FR TG	
	Paradiene 40 FR	
	Paradiene 40 FR BW	
	Paradiene 40 FR Eco-Active	
	Paradiene 40 CR FR	
	Paradiene 40 FR TG	
	Paradiene 40 FR TG Eco-Activ	
	Paradiene 40 CR FR TG	
	Parafor 50 LT	
	Parafor 50 TG	
Teranap 1M Film		
Teranap 1M Sand		
Lightweight Insulating Concrete	Min. 300 psi NVS®	Installed over Structural Concrete; Slurry coat min. 1/8" thick; Min. 1" thick Insulperm board; Min. 1 1/4" topcoat; $f'_c \geq 300$ psi at 28 days.
	Min. 300 psi Insulcel	Installed over Structural Concrete; Slurry coat min. 1/8" thick; Min. 1" thick Insulperm board; Min. 2" topcoat; $f'_c \geq 300$ psi at 28 days.
	Min. 300 psi Insulcel with RT pellets	Installed over Structural Concrete; Slurry coat min. 1/8" thick; Min. 1" thick Insulperm board; Min. 2" topcoat; RT pellets applied at a rate of 4lbs/100 ft <sup>2</sup> immediately after screeding. $f'_c \geq 300$ psi at 28 days.
	Min. 200 psi ZIC	Min. 2" thick & $f'_c \geq 200$ psi at 28 days, ZIC aggregate lightweight concrete with 1:4 ratio Portland cement volume to ZIC concrete aggregate.
Coatings	PC-227 Elastomeric Coating	For use over Siplast roofing systems to coat granule surfaced Paradiene and Parafor membranes. Applied over cap sheet in two coats, each at a rate of 1.0 gal/100 ft <sup>2</sup> .

<b>Insulation/Cover Board Fastening Patterns</b>	
Description	Fastening Pattern
8 per 4' x 8' board	<p>(Max. 4.0ft<sup>2</sup> contributory area per fastener)</p>
20 per 4' x 8' board	<p>(Max. 1.6ft<sup>2</sup> contributory area per fastener)</p>
32 per 4' x 8' board	<p>(Max. 1.00ft<sup>2</sup> contributory area per fastener)</p>

**Nomenclature:**

The following naming conventions are utilized to specify products in the Assemblies section of this report:

Name	Definition
Cold Cap	Paradiene 30 FR, Paradiene 30 FR BW, Paradiene 30 MW FR, Paradiene 30 CR FR, Paradiene 30 HT FR, Paradiene 40 CR FR, Paradiene 40 FR, Paradiene 40 FR BW, Paradiene 40 FR Eco-Activ, Paradiene 30 MW FR, or Parafor 50 LT fully bonded in PA-311
Cold Cap LS	Paradiene 30 FR, Paradiene 30 MW FR, Paradiene 30 CR FR, Paradiene 30 HT FR, Paradiene 40 CR FR, Paradiene 40 FR, Paradiene 40 FR Eco-Activ, Paradiene 30 MW FR, or Parafor 50 LT fully bonded in PA-311
Concrete Deck	Min. $f'_c = 2,500$ psi at 28 days
Adhered Base	One or more plies of Paradiene 20, Paradiene 20 HT, Paradiene 20 EG or Paradiene 20 HV
Fastened-Base	One or more plies of Parabase, Parabase FS, Parabase Plus
Hot asphalt	ASTM D 312, Type IV asphalt applied in EVT range at a rate of 20-25 lbs/100ft <sup>2</sup>
LWIC	Poured-in-place cellular Lightweight Concrete with encapsulated insulation board
MDP	Maximum Design Pressure
Mopped Ply	One or more plies of Paradiene 20, Paradiene 20 HV, Paradiene 20 EG, Paradiene 20 PR, or Paradiene 20 HT fully bonded in hot asphalt at a rate 20-40 lbs/100ft <sup>2</sup>
Parafast	Siplast Parafast Roofing Fasteners and Plates
Parafast-IA	Siplast Parafast Insulation Adhesive
Parafast XHD	Siplast Parafast XHD Roofing Fasteners and Parafast 125 Tri Rib Plates
Paratherm	Paratherm H or Paratherm W
SECUROCK	Minimum 1/4" USG SECUROCK Gypsum-Fiber Roof Board
Steel Deck	Min. 22 ga, ( $F_y \geq 33$ ksi) Wide Rib Deck (Type WR) conforming to ANSI/SDI-RD1.0; 0.5% vented for cellular LWIC and 1.5% vented for aggregate LWIC applications only (Refer to span restrictions in Assemblies tables)
Teranap w/Paver	Teranap 1M Sand fully bonded by torch adhering with 24 in. x 24 in. x 2 in thick concrete Hanover Pavers set over Hanover pedestals that are fully bonded to the Teranap with Siplast PS 304 elastomeric sealant.
Torched Cap	Paradiene 30 TG, Paradiene 30 FR TG, Paradiene 30 FR TG BW, Paradiene 30 CR FR TG, Paradiene 30 FR TG Eco-Activ, Paradiene 30 HT FR TG, Paradiene 30 HT CR FR TG, Paradiene 40 FR TG, Paradiene 40 FR TG Eco-Activ or fully bonded by torch adhering
Torched Ply	Paradiene 20 TG, Paradiene 20 HV TG, Paradiene 20 EG TG, Paradiene 20 HT TG, or Paradiene 20 PR TG fully bonded by torch adhering
Torched Ply2	Paradiene 20 TG F or Paradiene HT TG F fully bonded by torch adhering (Shall be used with <i>Torched Cap</i> only)

**Assemblies:**

<b>Assemblies with All Layers Adhered over Concrete Deck (New or Existing)</b>									
<b>System No.</b>	<b>Vapor Barrier</b>	<b>Base Insulation</b>	<b>Base Attachment</b>	<b>Top Insulation</b>	<b>Top Attachment</b>	<b>Base Ply</b>	<b>Ply Sheet</b>	<b>Cap Sheet</b>	<b>MDP (psf)</b>
#1	Tradesman SBS Class SA Base self-adhered to deck primed with ASTM D 41 asphalt primer	Min. 1.5" Paratherm	Para-Stick applied in ribbons spaced 12" o.c.	DensDeck Prime	Para-Stick applied in ribbons spaced 12" o.c.	Adhered Base adhered in PA-311 Adhesive	OPTIONAL Adhered Base adhered in PA-311 Adhesive	Cold Cap	-60
#2	-	Min. 1.5" Paratherm	Para-Stick applied in ribbons spaced 12" o.c.	SECUROCK	Para-Stick applied in ribbons spaced 12" o.c.	Paradiene TS SA self-adhered	OPTIONAL Adhered Base adhered in PA-311 Adhesive	Cold Cap LS	-60
#3	Paradiene 20 SA self-adhered to deck primed with ASTM D 41 asphalt primer	Min. 1.5" Paratherm	Para-Stick applied in ribbons spaced 12" o.c.	DensDeck Prime	Para-Stick applied in ribbons spaced 12" o.c.	Adhered Base fully adhered in PA-311 Adhesive	OPTIONAL Adhered Base fully adhered in PA-311 Adhesive	Cold Cap	-67.5
#4	-	One or more layers of min. 1" ACH Foam Control EPS - FM	Parafast-IA applied in ribbons spaced 12" o.c.	Min. 0.25" DensDeck Prime	Parafast-IA applied in ribbons spaced 12" o.c.	Adhered Base fully adhered in PA-311 Adhesive	OPTIONAL Adhered Base fully adhered in PA-311 Adhesive	Cold Cap	-90
#5	-	Min. 1" ACH Foam Technologies Foam Control EPS	Para-Stick applied in ribbons spaced 12" o.c.	DensDeck Prime	Para-Stick applied in ribbons spaced 12" o.c.	Paradiene 20 SA self-adhered	-	Torched Cap or Veral Aluminum or Copper torch applied	-105

Assemblies with All Layers Adhered over Concrete Deck (New or Existing)									
System No.	Vapor Barrier	Base Insulation	Base Attachment	Top Insulation	Top Attachment	Base Ply	Ply Sheet	Cap Sheet	MDP (psf)
#6	-	Min. 1.5" Paratherm	Para-Stick applied in ribbons spaced 12" o.c.	DensDeck Prime	Para-Stick applied in ribbons spaced 12" o.c.	Paradiene 20 TS SA self-adhered	OPTIONAL Torched Ply or Torched Ply2	Torched Cap or Veral Aluminum or Copper torch applied	-112.5
#7	-	Min. 1.5" Paratherm	Para-Stick applied in ribbons spaced 12" o.c.	SECUROCK	Para-Stick applied in ribbons spaced 12" o.c.	Paradiene 20 SA self-adhered	OPTIONAL Adhered Base adhered in PA-311 Adhesive	Cold Cap LS	-112.5
#8	-	Min. 1.5" Paratherm	Para-Stick applied in ribbons spaced 12" o.c.	DensDeck Prime	Para-Stick applied in ribbons spaced 12" o.c.	Adhered Base fully adhered in SFT Adhesive	OPTIONAL Adhered Base fully adhered in SFT Adhesive	Paradiene 30 FR or Paradiene 30 HT FR fully adhered in SFT Adhesive	-150
#9	Irex 40 torch adhered to primed deck with ASTM D 41 primer	One or more layers of min. 1.5" Paratherm H	Parafast-IA applied in ribbons spaced 12" o.c.	Min. 0.25" DensDeck Prime	Parafast-IA applied in ribbons spaced 12" o.c.	Adhered Base fully adhered in PA-311 Adhesive	OPTIONAL Adhered Base fully adhered in PA-311 Adhesive	Cold Cap	-150
#10	-	Min. 1.5" Paratherm H	Para-Stick applied in ribbons spaced 12" o.c.	-	-	Paradiene 20 TS SA self-adhered	OPTIONAL Torched Ply or Torched Ply2	Torched Cap or Veral Aluminum or Copper torch applied	-157.5
#11	Paradiene 20 TG torch adhered	Min. 1.5" Paratherm	Olybond 500 applied in ribbons spaced 12" o.c.	DensDeck Prime	Olybond 500 applied in ribbons spaced 12" o.c.	Torched Ply or Torched Ply2	OPTIONAL Torched Ply or Torched Ply2	Paradiene 30 FR TG, Paradiene 30 HT FR TG or Paradiene 30 TG torch adhered; Cap sheet coated with PC-227	-157.5



<b>Assemblies with All Layers Adhered over Concrete Deck (New or Existing)</b>									
<b>System No.</b>	<b>Vapor Barrier</b>	<b>Base Insulation</b>	<b>Base Attachment</b>	<b>Top Insulation</b>	<b>Top Attachment</b>	<b>Base Ply</b>	<b>Ply Sheet</b>	<b>Cap Sheet</b>	<b>MDP (psf)</b>
#12	-	Min. 2" AC Foam-III	Para-Stick applied in ribbons spaced 12" o.c.	-	-	Paradiene 20 TS SA self-adhered	OPTIONAL Torchd Ply or Torchd Ply2	Torchd Cap or Veral Aluminum or Copper torch applied	-165
#13	-	Min. 1.5" Paratherm	Para-Stick applied in ribbons spaced 12" o.c.	SECUROCK	Para-Stick applied in ribbons spaced 12" o.c.	Adhered Base fully adhered in PA-311 Adhesive	OPTIONAL Adhered Base fully adhered in PA-311 Adhesive	Paradiene 30 FR or Paradiene 30 HT FR fully adhered in PA-311 Adhesive	-180
#14	-	Min. 1.5" Paratherm	Para-Stick applied in ribbons spaced 12" o.c.	SECUROCK	Para-Stick applied in ribbons spaced 12" o.c.	Adhered Base fully adhered in SFT Adhesive	OPTIONAL Adhered Base fully adhered in SFT Adhesive	Paradiene 30 FR or Paradiene 30 HT FR fully adhered in SFT Adhesive	-210
#15	Paradiene 20 fully adhered in SFT Adhesive	Min. 1.5" Paratherm	Para-Stick applied in ribbons spaced 12" o.c.	SECUROCK	Para-Stick applied in ribbons spaced 12" o.c.	Adhered Base fully adhered in SFT Adhesive	OPTIONAL Adhered Base fully adhered in SFT Adhesive	Paradiene 30 FR or Paradiene 30 HT FR fully adhered in SFT Adhesive	-232.5
#16	OPTIONAL Paradiene 20, 20 HT, or 20 EG fully adhered in hot asphalt or Paradiene 20 TG, 20 HT TG, or 20 EG TG torch adhered	Min. 1.5" Paratherm W	Para-Stick applied in ribbons spaced 12" o.c.	SECUROCK	Para-Stick applied in ribbons spaced 12" o.c.	Paradiene 20 TS SA self-adhered	OPTIONAL Torchd Ply or Torchd Ply2	Torchd Cap or Veral Aluminum or Copper torch applied	-247.5

Assemblies with All Layers Adhered over Concrete Deck (New or Existing)									
System No.	Vapor Barrier	Base Insulation	Base Attachment	Top Insulation	Top Attachment	Base Ply	Ply Sheet	Cap Sheet	MDP (psf)
#17	OPTIONAL Paradiene 20, 20 HT, or 20 EG fully adhered in hot asphalt or Paradiene 20 TG, 20 HT TG, or 20 EG TG torch adhered	Min. 1.5" Paratherm W	Para-Stick applied in ribbons spaced 12" o.c.	SECUROCK	Para-Stick applied in ribbons spaced 12" o.c.	Torched Ply or Torched Ply2 or Paradiene 20 SA self-adhered	OPTIONAL Torched Ply or Torched Ply2	Torched Cap or Veral Aluminum or Copper torch applied	-255
#18	Irex 40 torch adhered to primed deck with ASTM D 41 primer	Min. 1.5" Paratherm	Para-Stick applied in ribbons spaced 6" o.c.	DensDeck Prime	Para-Stick applied in ribbons spaced 6" o.c.	Torched Ply or Torched Ply2 or Paradiene 20 SA self-adhered	OPTIONAL Torched Ply or Torched Ply2	Torched Cap or Veral Aluminum or Copper torch applied	-255
#19	-	-	-	-	-	Paradiene 20 TS over primed concrete deck with Paradiene PA-1125	OPTIONAL Torched Ply or Torched Ply2	Torched Cap	-352.5
#20	-	-	-	-	-	Torched Ply or Torched Ply2 over primed concrete deck with Paradiene PA-1125	OPTIONAL Torched Ply or Torched Ply2	Torched Cap	-367.5

Concrete deck

Assemblies with All Layers Adhered over Poured Gypsum Deck (New or Existing)								
System No.	Base Insulation	Base Attachment	Top Insulation	Top Attachment	Base Ply	Ply Sheet	Cap Sheet	MDP (psf)
#21	Min. 1.5" Paratherm	Para-Stick applied in ribbons spaced 12" o.c.	DensDeck Prime primed with PA-1125	Para-Stick applied in ribbons spaced 12" o.c.	Torched Ply or Torched Ply2	OPTIONAL Torched Ply or Torched Ply2	Torched Cap	-257.5

Lightweight Concrete Assemblies with All Layers Adhered over Concrete Deck (New or Existing)							
System No.	Vapor Barrier	LWIC	Base Sheet	Base Sheet Attachment	Ply Sheet	Cap Sheet	MDP (psf)
#22	Irex 40 (OPTIONAL)	Min. 300 psi Insulcel with RT pellets	Paradiene 20 TS	Torch Adhered	OPTIONAL Torched Ply or Torched Ply2	Teranap w/Hanover Paver	-170
#23	Irex 40	Min. 300 psi Insulcel with RT pellets	Paradiene 20 TS	Torch Adhered	OPTIONAL Torched Ply or Torched Ply2	Torched Cap	-292.5
#24	N/A	Min. 300 psi Insulcel with RT pellets	Paradiene 20 TS	Torch Adhered	OPTIONAL Torched Ply or Torched Ply2	Torched Cap	-317.5

Concrete deck

Mechanically Fastened Lightweight Concrete Assemblies over Concrete Deck (New or Existing)							
System No.	Vapor Barrier	LWIC	Base Sheet	Base Sheet Attachment	Ply Sheet	Cap Sheet	MDP (psf)
#25	Properly prepared BUR (OPTIONAL)	Min. 300 psi NVS®	Fastened-Base	NVS Fastener installed 7" o.c. in the laps, 10" o.c. in three equally spaced rows in the field of the roll	Mopped Ply, Torched Ply or Torched Ply2	Torched Cap	-75
#26	Properly prepared BUR (OPTIONAL)	Min. 300 psi Insulcel	Fastened-Base	Zono-tite Fastener installed 7" o.c. in the laps, 10" o.c. in three equally spaced rows in the field of the roll	Mopped Ply, Torched Ply or Torched Ply2	Torched Cap	-75
#27	Irex 40 (OPTIONAL)	Min. 300 psi Insulcel	Fastened-Base 4" side lap	Zono-tite Fastener installed 7" o.c. in the laps, 10" o.c. in three staggered rows in the field of the roll	Mopped Ply, Torched Ply or Torched Ply2	Torched Cap	-82.5

<b>Mechanically Fastened Lightweight Concrete Assemblies over Concrete Deck (New or Existing)</b>							
<b>System No.</b>	<b>Vapor Barrier</b>	<b>LWIC</b>	<b>Base Sheet</b>	<b>Base Sheet Attachment</b>	<b>Ply Sheet</b>	<b>Cap Sheet</b>	<b>MDP (psf)</b>
#28	N/A	Min. 200 psi ZIC	Fastened-Base	Zono-tite Fastener installed 7" o.c. in the laps, 7" o.c. in three staggered rows in the field of the roll	Mopped Ply, Torched Ply or Torched Ply2	Torched Cap	-82.5
#29	Irex 40 (OPTIONAL)	Min. 300 psi NVS®	Fastened-Base	NVS Fastener installed 6" o.c. in the laps, 6" o.c. in five staggered rows in the field of the roll	Torched Ply or Torched Ply2	Torched Cap	-135

Concrete deck

<b>Lightweight Concrete Assemblies with All Layers Adhered over Steel Deck (New or Existing)</b>							
<b>System No.</b>	<b>Max. Deck Span</b>	<b>LWIC</b>	<b>Base Sheet</b>	<b>Base Sheet Attachment</b>	<b>Ply Sheet</b>	<b>Cap Sheet</b>	<b>MDP (psf)</b>
#30	5'	Min. 300 psi Insulcel with RT pellets	Paradiene 20 TS	Torch Adhered	OPTIONAL Torched Ply or Torched Ply2	Torched Cap	-97.5

Steel deck attached to structural supports with 3/8" diameter weld washers at each flute

<b>Mechanically Fastened Lightweight Concrete Assemblies over Steel Deck (New or Existing)</b>							
<b>System No.</b>	<b>Max. Deck Span</b>	<b>LWIC</b>	<b>Base Sheet</b>	<b>Base Sheet Attachment</b>	<b>Ply Sheet</b>	<b>Cap Sheet</b>	<b>MDP (psf)</b>
#31	6'	Min. 200 psi ZIC	Fastened-Base	Zono-tite Fastener installed 7" o.c. in the laps, 7" o.c. in three staggered rows in the field of the roll	Mopped Ply, Torched Ply, or Torched Ply2	Torched Cap	-82.5

Steel deck attached to structural supports with minimum 5/8" diameter puddle welds at each flute and side laps stitched maximum 12" Tek fasteners

Assemblies with Adhered Membranes over Steel Deck (New, Existing, or Recover)								
System No.	Max. Deck Span	Thermal Barrier	Base Insulation	Top Insulation	Base Sheet	Ply Sheet	Cap Sheet	MDP (psf)
#32	5'	Min. 0.5" SECUROCK or DensDeck Prime secured with Parafast at 8 per 4' x 8' board primed with ASTM D 41 asphalt primer and covered with self-adhered Paradiene 20 SA	Min. 1.5" Paratherm installed with Para-Stick applied in ribbons spaced 12" o.c.	DensDeck Prime installed with Para-Stick applied in ribbons spaced 12" o.c.	Paradiene 20 TG, Paradiene 20 HT TG or Paradiene 20 EG TG torch adhered	OPTIONAL Paradiene 20 TG, Paradiene 20 HT TG or Paradiene 20 EG TG torch adhered	Paradiene 30 FR TG, Paradiene 30 HT FR TG or Paradiene 30 TG torch adhered	-45 <sup>1</sup>
#33	6'	-	Min. 1.5" Paratherm simultaneously secured with top insulation	Min. 1/2" SECUROCK through fastened with Parafast at 32 per 4' x 8' board	Adhered Base fully adhered in PA-311 Adhesive	OPTIONAL Adhered Base fully adhered in PA-311 Adhesive	Paradiene 30 FR or Paradiene 30 HT FR fully adhered in PA-311 Adhesive	-52.5 <sup>1</sup>
#34	6'	Min. 0.5" DensDeck Prime secured with Parafast at 20 per 4' x 8' board with Paradiene 20 TG torch adhered	One or more layers of min. 1.5" Paratherm H installed with Siplast Parafast-IA applied in ribbons spaced 12" o.c.	Min. 0.25" DensDeck Prime installed with Siplast Parafast-IA applied in ribbons spaced 12" o.c.	Torched Ply or Torched Ply2	OPTIONAL Torched Ply or Torched Ply2	Torched Cap or Veral Aluminum or Copper torch applied	-82.52 <sup>3</sup>
#35	6'	Min. 0.5" DensDeck Prime secured with Parafast at 20 per 4' x 8' board with Paradiene 20 TG torch adhered	One or more layers of min. 1.5" Paratherm H installed with Siplast Parafast-IA applied in ribbons spaced 12" o.c.	Min. 0.25" DensDeck Prime installed with Siplast Parafast-IA applied in ribbons spaced 12" o.c.	Torched Ply or Torched Ply2	OPTIONAL Torched Ply or Torched Ply2	Torched Cap or Veral Aluminum or Copper torch applied	-90 <sup>2, 3</sup>
#36	6'	-	Min. 1.5" Paratherm simultaneously secured with top insulation	Min. 1/2" DensDeck Prime or SECUROCK through fastened with Parafast at 32 per 4' x 8' board	Adhered Base fully adhered in SFT Adhesive	OPTIONAL Adhered Base fully adhered in SFT Adhesive	Paradiene 30 FR or Paradiene 30 HT FR fully adhered in SFT Adhesive	-82.5 <sup>1</sup>

Assemblies with Adhered Membranes over Steel Deck (New, Existing, or Recover)								
System No.	Max. Deck Span	Thermal Barrier	Base Insulation	Top Insulation	Base Sheet	Ply Sheet	Cap Sheet	MDP (psf)
#37	6'	-	Min. 1.5" Paratherm simultaneously secured with top insulation	Min. 1/2" DensDeck Prime through fastened with Parafast at 32 per 4'x 8' board	Adhered Base fully adhered in SFT Adhesive	OPTIONAL Adhered Base fully adhered in SFT Adhesive	Paradiene 30 FR or Paradiene 30 HT FR fully adhered in SFT Adhesive	-90 <sup>1, 2</sup>
#38	6'	-	Min. 1.5" Paratherm simultaneously secured with top insulation	Min. 1/2" DensDeck Prime through fastened with Parafast XHD at 32 per 4'x 8' board. Plates are primed with ASTM D 41 primer	Paradiene 20 SA self-adhered	OPTIONAL Mopped Ply, Torched Ply or Torched Ply2	Torched Cap	-97.5 <sup>3</sup>
#39	6'	-	Min. 1.5" Paratherm loose laid	Min. 1/2" SECUROCK through fastened with Parafast at 32 per 4'x 8' board	Adhered Base fully adhered in SFT Adhesive	OPTIONAL Adhered Base fully adhered in SFT Adhesive	Paradiene 30 FR or Paradiene 30 HT FR fully adhered in SFT Adhesive	-120 <sup>1, 2</sup>

<sup>1</sup>Steel deck attached to structural supports with two (2) Traxx/5 or Teks 5 fasteners and washers at each flute and side laps stitched maximum of 12" on center with Traxx/1 or Teks 1 fasteners

<sup>2</sup>Minimum Grade 80 Steel Deck

<sup>3</sup>Steel deck attached to structural supports with one (1) Traxx/5 or Teks 5 fastener and washer at each flute and side laps stitched maximum 24" on center with Traxx/1 or Teks 1 fasteners