Nemo|cert.
353 Christian Street, Unit 12b
Oxford, CT 06478
(475) 888-CERT (2378)
www.nemocert.com

NEMO EVALUATION REPORT (NER)

CertainTeed, LLC
20 Moores Road
Malvern, PA 19355
(610) 893-5400

SUBJECT:	**Flintglas® Built-Up Roof Systems**
SCOPE:	This NEMO Evaluation Report (henceforth 'NER') is issued under F.A.C. Rule 61G20-3 and the applicable rules and regulations governing Product Approval of construction materials in the State of Florida and ISO/IEC 17065 via NEMO|cert. NEMO Evaluations has evaluated the product described herein for compliance with the Code sections noted herein.
CODES:	2018 International Building Code 2023 Florida Building Code, 8th Edition 2023 Florida Building Code, Residential, 8th Edition TDI Third-Party Evaluation Report acceptance
FBC JURISDICTION:	Non-HVHZ and HVHZ
NEMO CATEGORY:	Built-Up Roof System
FBC CATEGORY:	Roofing
FBC SUB-CATEGORY:	Built up Roofing
CSI DIVISION:	07 00 00 Thermal and Moisture Protection 07 51 13 Built-Up Asphalt Roofing
FBC METHOD:	Method 1, Option C – Codified Material, Evaluation by Evaluation Entity
COMPLIANCE STATEMENT:	**Flintglas® Built-Up Roof Systems**, as produced by **CertainTeed, LLC**, have demonstrated compliance with the Code sections noted herein through testing in accordance with the referenced Standards, rational analysis and an ongoing quality assurance program. Compliance is subject to the Installation Requirements and Limitations of Use set forth herein.
QUALITY ASSURANCE:	Evidence of current quality assurance shall be listing and labeling in accordance with the requirements of NEMO|cert.
CONTINUED COMPLIANCE:	This NER is valid until such time the named product(s) change, the referenced Quality Assurance changes, or the evaluated Code provisions change. NEMO Evaluations requires, at minimum, a complete review of this NER with each 3-year Code Cycle.
BUILDING PERMIT REQUIREMENTS:	As required by the Building Official or Authority Having Jurisdiction to evaluate the installation of this product.
ADVERTISEMENT:	"NEMO Evaluated" may be displayed in advertising literature. If any portion of the NER is displayed, it shall be displayed in its entirety.
CERTIFICATION OF INDEPENDENCE:	✓ NEMO CERT, LLC does not have, nor does it intend to acquire or will it acquire, a financial interest in any company manufacturing or distributing products it evaluates. ✓ NEMO CERT, LLC is not owned, operated, or controlled by any company manufacturing or distributing products it evaluates. ✓ This is a building code evaluation. NEMO CERT, LLC is not, in any way, the Designer of Record for any project on which this NER, or previous versions thereof, is/was used for permitting or design guidance.

LINK TO TOP OF ATTACHMENT REQUIREMENTS

1. CODES, PROPERTIES AND STANDARDS:

CODE	SECTION	PROPERTY	STANDARD
2018 International Building Code	1504.3.1	Wind resistance	FM 4474 or UL1897
	1504.7	Impact resistance	FM 4470
	1505.1	Fire Classification	UL 790
	1507.6.5	Material standard	ASTM D3909
	1507.10.2	Material Standard	ASTM D2178, D3909, D4601, D4897
	1507.11.2	Material standard	ASTM D6163, D6164, D6222
	1507.11.2.1	Material standard	ASTM D1970
2023 Florida Building Code, 8th Edition	1504.3.1	Wind resistance	FM 4474 or UL1897
	1504.7	Impact resistance	FM 4470
	1505.1, 1516.1	Fire Classification	UL 790
	1507.6.5	Material standard	ASTM D3909
	1507.10.2, TAS 110	Material standard	ASTM D2178, D3909, D4601, D4897
	1507.11.2, TAS 110	Material standard	ASTM D6163, D6164, D6222
	TAS 110	Resistance to Foot Traffic	TAS 114, Section 8.9
	TAS 110	Wind resistance	TAS 114, Appendix C, D or J
	TAS 110	Susceptibility to Hail Damage	TAS 114, Appendix F
	TAS 110	Susceptibility to Leakage	TAS 114, Appendix G
2023 Florida Building Code, Residential, 8th Edition	R902.1	Fire Classification	UL 790
	R905.5.4	Material standard	ASTM D3909
	R905.9.2	Material standard	ASTM D2178, D3909, D4601, D4897
	R905.11.2	Material standard	ASTM D6163, D6164, D6222

2. PRODUCTS:

TABLE 1A: EVALUATED CERTAINTEED COMPONENTS
(NEMO Certified. Consult Directory of Certified Products for production location(s))

TYPE	PRODUCT NAME	MATERIAL STANDARD REFERENCE	MATERIAL STANDARD TYPE	MATERIAL STANDARD GRADE
BASE SHEETS:	All Weather/Empire™ Base Sheet	ASTM D4601	II	N/A
	Flintlastic® Base 20	ASTM D4601	II	N/A
	Flintlastic® Poly SMS Base Sheet	ASTM D4601 *(except glass mat is N/A)*	II	N/A
	Glasbase™ Base Sheet	ASTM D4601	II	N/A
BASE PLY OR PLY:	All Weather/Empire™ Base Sheet	ASTM D4601	II	N/A
	Black Diamond® Base Sheet	ASTM D1970	N/A	N/A
	Flintglas® Ply 4	ASTM D2178	IV	N/A
	Flintlastic® Base 20	ASTM D4601	II	N/A
	Flintlastic® Ultra Glass SA	ASTM D6163	I	S
	Glasbase™ Base Sheet	ASTM D4601	II	N/A
CAP PLY:	Flintglas® MS Cap Sheet	ASTM D3909	N/A	N/A
VAPOR BARRIERS:	Flintlastic® SA PlyBase	ASTM D1970	N/A	N/A
	Flintlastic® Base 20 T	ASTM D6163	I	S
	Flintlastic® GTA	ASTM D6222	I	G
	Flintlastic® SA Cap	ASTM D6164	I	G

TABLE 1B: EVALUATED CERTAINTEED ACCESSORIES
(Contact contact@nemocert.com for production location(s) of non-Certified products)

TYPE	PRODUCT	MATERIAL STANDARD
BASE SHEETS:	Flintglas® MS Cap Sheet (inverted)	ASTM D4897
CAP PLY:	Flintglas® MS Cap Sheet CoolStar	ASTM D3909
PRIMERS:	FlintPrime QD	ASTM D41

TABLE 2: COMPONENTS BY OTHERS (4.1.4) *(Refer to NOA if listed version was superseded to ensure use of latest version)*				
TYPE	**LISTED PRODUCT**	**CERTAINTEED EQUIVALENT**	**FBC**	**NOA**
ADHESIVES:	Insta Stik™ Quik Set	N/A	FL720	N/A
	Millennium One Step Foamable Adhesive	N/A	FL1800	21-1018.06
	Millennium PG-1 Pump Grade Adhesive	N/A		
	Millennium PG-1 EF ECO	N/A		
	Millennium Hurricane Force Lap and Flashing Adhesive	N/A	N/A	N/A
	Polyset Commercial Roofing Adhesive	N/A	FL1365	21-1115.05
	OlyBond 500 Adhesive Fastener	N/A	FL1608	24-0422.18
INSULATIONS:	ACFoam II	FlintBoard ISO	FL491	24-0313.05
	ACFoam III	FlintBoard ISO Cold		
	H-Shield	FlintBoard$_H$ ISO	FL491	22-1017.01
	H-Shield CG	FlintBoard$_H$ ISO Cold		
	H-Shield HD Composite CG	FlintBoard$_H$ ISO Composite		
	DuraBoard	N/A	FL4205	23-0509.05
	ENRGY 3	N/A		
	FescoBoard	N/A		
	Multi-Max FA3	N/A	FL11207	22-0815.03
	Ultra-Max	N/A		
	DensDeck	N/A	FL1250	22-1223.04
	DensDeck Prime	N/A		
	DensDeck Storm X Prime	N/A		
	SECUROCK Gypsum-Fiber Roof Board	N/A	FL4264	21-0923.05
	Structodek High Density Fiberboard Roof Insulation	N/A	FL39113	23-0623.03
	Celcore Cellular Concrete	N/A	FL2037	24-0906.02
	Concrecel Lightweight Insulating Concrete	N/A	FL5584	21-1229.06
	Elastizell Lightweight Insulating Concrete	N/A	FL4994	23-0817.05
	Mearlcrete	N/A	FL13492	24-0514.06
MECHANICAL FASTENERS:	Trufast #12 DP	FlintFast #12 Fastener	FL4500	24-0227.06
	Trufast #14 HD	FlintFast #14 Fastener		
	Trufast #15 EHD	FlintFast #15 EHD Fastener		
	Trufast ¼" Concrete Spike	N/A		
	Trufast 3" Metal Insulation Plate	FlintFast 3" Insulation Plate		
	Trufast FM-75 Base Sheet Fastener	N/A		
	Trufast FM-90 Base Sheet Fastener	N/A		
	Trufast Twin Loc-Nail Assembled Fastener	N/A		
	Dekfast DF-#12-PH3	FlintFast #12 Fastnr	FL20311	22-0913.02
	Dekfast DF-#14-PH3	FlintFast #14 Fastnr		
	Dekfast PLT-H-2-7/8	FlintFast 2-7/8" Hex Insulation Stress Plate		
	Dekfast PLT-R-3	FlintFast 3" Round Insulation Stress Plate		
	OMG #12 Standard Roofgrip	N/A	FL699	24-0627.03
	OMG #14 Heavy Duty	N/A		
	OMG #14 Roofgrip	N/A		
	OMG CD-10	N/A		
	OMG Polymer GypTec Fastener	N/A		
	OMG 3 in. Galvalume Steel Plate	N/A		
	OMG AccuTrac Plate	N/A		
	OMG AccuTrac Flat Bottom	N/A		
	OMG 3" GypTec Plate	N/A		
	OMG CR Base Sheet Fastener (1.7)	N/A		

3. INSTALLATION:

3.1 **Flintglas® Built-Up Roof Systems** shall be installed in accordance with **CertainTeed, LLC** published installation instructions, subject to the Limitations of Use noted herein.

3.1.1 Fasteners: Unless otherwise noted, fasteners and stress plates shall be as follows. Recessed plates are not for use with hardboard (e.g., gypsum-based or cement) insulations. Fasteners shall be of sufficient length for the following engagements.

TABLE 3: FASTENER REFERENCES

ROOF DECK	PARTS	FASTENER ENGAGEMENT
WOOD, ENGINEERED SHEATHING OR PLANK	FlintFast #14 Fastener with FlintFast 3" Insulation Plate or FlintFast #14 Fastnr with FlintFast 2-7/8" Hex Insulation Stress Plate or FlintFast 3" Round Insulation Stress Plate	Min. 0.75-inch penetration (engineered sheathing) or min. 1-inch embedment (plank)
	Trufast #14 HD with Trufast 3" Metal Insulation Plate	
	Dekfast DF-#14-PH3 with Dekfast PLT-H-2-7/8 or Dekfast PLT-R-3	
	OMG #12 Standard Roofgrip with AccuTrac Plate or OMG #14 Heavy Duty with OMG 3 in. Galvalume Steel Plate	
STEEL	FlintFast #12 Fastener or FlintFast #14 Fastener with FlintFast 3" Insulation Plate or FlintFast #12 Fastenr or FlintFast #14 Fastnr with FlintFast 2-7/8" Hex Insulation Stress Plate or FlintFast 3" Round Insulation Stress Plate	Min. 0.75-inch penetration
	Trufast #12 DP or Trufast #14 HD with Trufast 3" Metal Insulation Plate	
	Dekfast DF-#12-PH3 or Dekfast DF-#14-PH3 with Dekfast PLT-H-2-7/8 or Dekfast PLT-R-3.	
	OMG #12 Standard Roofgrip or OMG #14 Heavy Duty with AccuTrac Plate or OMG 3 in. Galvalume Steel Plate	
STRUCTURAL CONCRETE	FlintFast #14 Fastener with FlintFast 3" Insulation Plate or FlintFast #14 Fastnr with FlintFast 2-7/8" Hex Insulation Stress Plate or FlintFast 3" Round Insulation Stress Plate	Non-HVHZ: Min. 1-inch embedment HVHZ: Min. 1.25-inch embedment
	Trufast #14 HD or Trufast ¼" Concrete Spike with Trufast 3" Metal Insulation Plate	
	Dekfast DF-#14-PH3 with Dekfast PLT-H-2-7/8 or Dekfast PLT-R-3.	
	OMG #12 Standard Roofgrip with AccuTrac Plate or OMG #14 Heavy Duty or CD-10 with OMG 3 in. Galvalume Steel Plate	

3.1.2 Insulation:

(a) Unless otherwise noted, insulation may be any one layer or combination of Approved board(s) that meet IBC or FBC 1505, FBC R902 or FBC HVHZ 1516 and, for foam plastic, IBC or FBC Chapter 26, when installed with the roof cover.

(b) For Structural Concrete Deck or Recover Applications using System Type C-1 the base insulation layer is optional, and using System Type C-2, D-1 or D-2, the insulation is optional. Alternatively, an Approved insulation board or coverboard may be used as a separation layer. Board products shall be preliminarily attached prior to roof cover installation. The separator component shall be documented as meeting IBC or FBC 1505, FBC R902 or FBC HVHZ 1516 and, for foam plastic, IBC or FBC Chapter 26, when installed with the roof cover in Recover applications.

(c) Minimum 200 psi, minimum 2-inch thick Approved lightweight insulating concrete may be substituted for, or installed below, rigid insulation board for System Types B-1, C-1, C-2, D-1 or D-2, whereby fasteners are installed through the lightweight insulating concrete to engage the structural deck. The structural deck shall be of equal or greater type, thickness and strength to the steel and structural concrete deck listings. Roof decks and structural members shall be in accordance with applicable Code requirements to the satisfaction of the Authority Having Jurisdiction. This is a wind uplift resistance allowance and does not purport to address non-wind-uplift-related issues, such as deck venting or moisture levels within the LWIC and the potential effect on overlying components.

(d) Florida Specific: Lightweight insulating concrete (LWIC) shall be cast in accordance with FBC 1917 to the satisfaction of the Authority Having Jurisdiction. For systems where specific LWIC is referenced, refer to current LWIC Florida Product Approval or NOA for specific deck construction and limitations. Unless otherwise noted, for systems where specific LWIC is not referenced, the minimum design mix shall be 300 psi. In all cases, the minimum top-coat thickness is 2-inches. For LWIC over structural concrete, reference is made to FBC 1917.4.1, Point 1. For "pre-existent" LWIC references, listings were established through testing over lightweight concrete cast using only foaming agent (ASTM C896), water and Portland cement (ASTM C150), with no proprietary additives, in accordance with procedures adopted by Miami-Dade BCCO (FBC CER1592). Use of these listings in new construction or re-roof (tear-off) applications is at the discretion of the Designer or Record and Authority Having Jurisdiction.

(e) Unless otherwise noted, rigid board insulation or coverboard attachment patterns for Type B-1, B-2 and C-1 systems are as outlined below.

TABLE 4A: INSULATION ATTACHMENT PATTERNS – 4X4 FT BOARDS

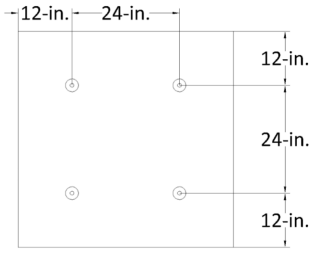
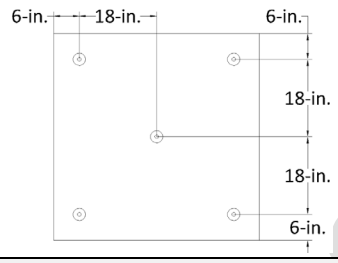
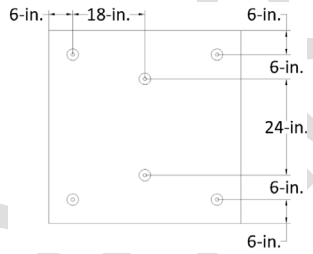
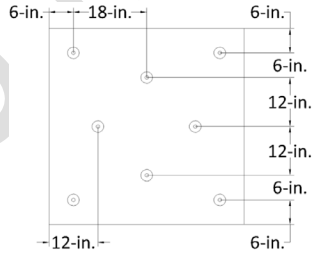
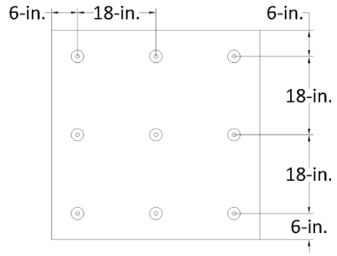
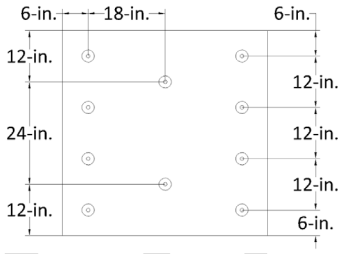
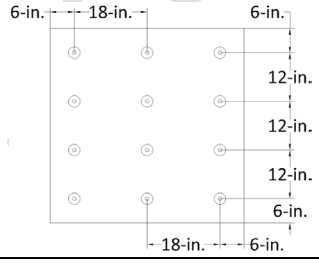
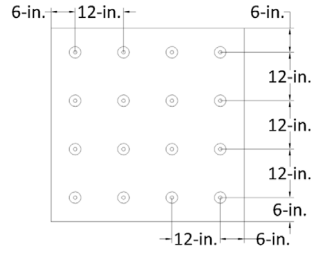
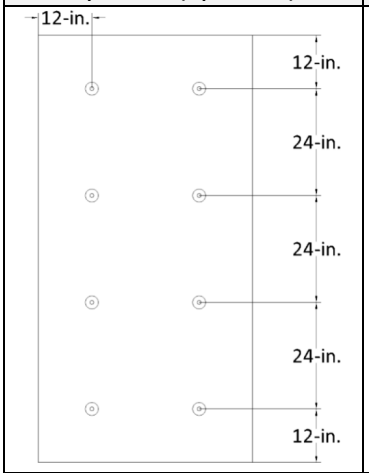
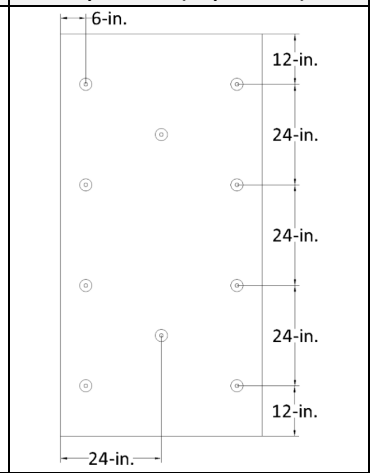
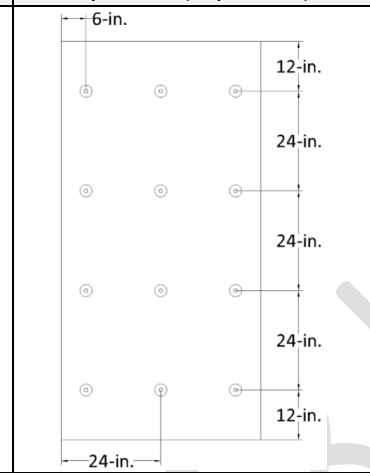
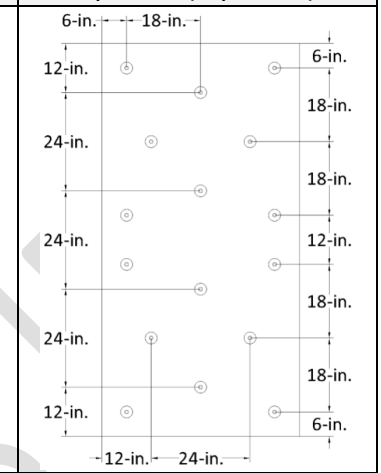
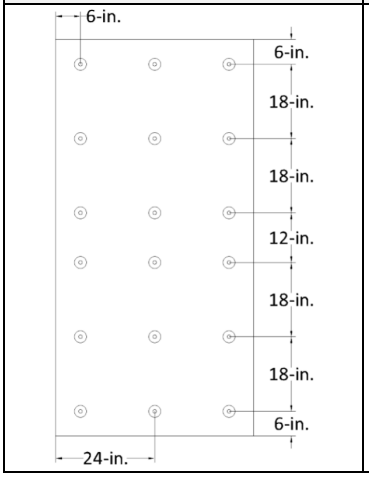
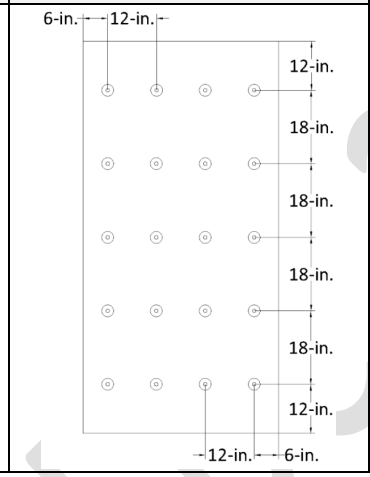
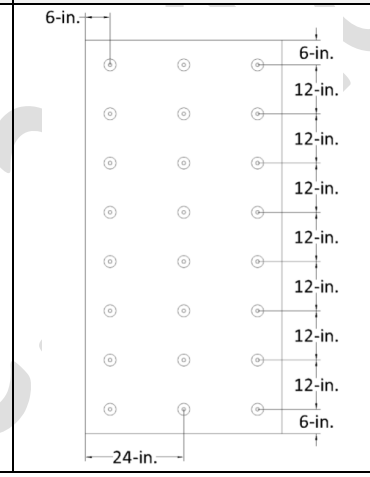
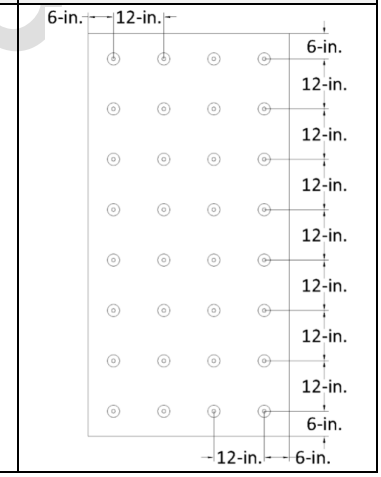
1 per 4.0 ft² (4 per board)	1 per 3.2 ft² (5 per board)	1 per 2.7 ft² (6 per board)	1 per 2.0 ft² (8 per board)
			
1 per 1.8 ft² (9 per board)	**1 per 1.6 ft² (10 per board)**	**1 per 1.3 ft² (12 per board)**	**1 per 1.0 ft² (16 per board)**
			

TABLE 4B: INSULATION ATTACHMENT PATTERNS – 4X4 FT BOARDS

1 per 4.0 ft² (8 per board)	1 per 3.2 ft² (10 per board)	1 per 2.7 ft² (12 per board)	1 per 2.0 ft² (16 per board)
			
1 per 1.8 ft² (18 per board)	**1 per 1.6 ft² (20 per board)**	**1 per 1.3 ft² (24 per board)**	**1 per 1.0 ft² (32 per board)**
			

(f) Preliminary insulation attachment for Type D-1 or D-2 systems:

- IBC or FBC Non-HVHZ: Unless otherwise noted, use Approved roofing fasteners and plates and refer to Section 2.2.10.1.3 of FM Loss Prevention Data Sheet 1-29.
- FBC HVHZ: Unless otherwise noted, use FBC HVHZ Approved roofing fasteners and plates; minimum four fasteners per 4 x 8 ft board or minimum two fasteners per 4 x 4 ft board.

3.1.3 Insulation Adhesives:

(a) Unless otherwise noted, insulation adhesive application rate is continuous ribbons, maximum 12-inch o.c. Ribbons shall be applied and insulation boards shall be set in accordance with the manufacturer's published instructions. When multiple layers(s) of insulation and/or coverboard are installed in ribbon-applied adhesive, boards shall be staggered from layer-to-layer. The maximum edge distance from the adhesive ribbon to the edge of the insulation board shall be not less than one-half the specified ribbons spacing. When applied to profiled steel roof deck, ribbons shall be applied to the top-flange so as to establish positive-contact with the overlying insulation board.

TABLE 5A: INSULATION ADHESIVE REFERENCES

ADHESIVE	REFERENCE	MINIMUM RATE	NOTE
Insta Stik Quik Set	Insta Stik	Continuous 0.75 to 1-inch wide ribbons, 12-inch o.c.	
Millennium One Step Foamable Adhesive	M-OSFA	Continuous 0.25 to 0.5-inch wide ribbons, 12-inch o.c.	
Millennium PG-1 Pump Grade Adhesive	M-PG-1	Continuous 0.5 to 0.75-inch wide ribbons, 12-inch o.c.	
Millennium PG-1 EF ECO	M-PG1-EF-ECO	Continuous 1 to 1.5-inch wide ribbons, 12-inch o.c.	
Polyset Commercial Roofing Adhesive	Polyset CRA	Continuous 2.5 to 3-inch wide ribbons, 12-inch o.c.	Formerly Polyset CR-20
Olybond 500 Adhesive Fastener	OB500	Continuous 0.75-inch wide ribbons, 12-inch o.c.	PaceCart, SpotShot, or Canister dispensing
ASTM D312, Type IV hot asphalt	N/A	Full coverage at 25-30 lbs/square	If applying hot asphalt to concrete deck, deck shall be primed with ASTM D41 primer

(b) Unless otherwise noted, all adhered insulations are flat-stock or taper board of the minimum thickness noted. Tapered polyisocyanurate at the following thickness limitations may be substituted with the following Maximum Design Pressure (MDP) limitations. In no case shall these values be used to 'increase' the MDP listings in the tables; rather if MDP listing below meets or exceeds that listed for a particular system in the tables, then the thinner board listed below may be used as a drop-in for the equivalent thicker material listed in the selected assembly.

TABLE 5B: MDP LIMITATIONS FOR TAPERED POLYISOCYANURATE INSULATIONS

ADHESIVE	INSULATION	MIN. TAPERED THICKNESS (IN)	MDP (PSF)
Insta Stik	Any polyisocyanurate listed with adhesive herein	1.0	-120.0
M-OSFA	Any polyisocyanurate listed with adhesive herein	1.0	-157.5
M-PG-1	Any polyisocyanurate listed with adhesive herein	1.0	-157.5
Polyset CRA	Any polyisocyanurate listed with adhesive herein	1.0	-117.5
OB500	Multi-Max FA3	0.5	-45.0
OB500	$FlintBoard_H$ ISO or H-Shield	0.5	-315.0
OB500	ENRGY 3	0.5	-315.0
OB500	FlintBoard ISO or ACFoam II	0.5	-487.5

(c) Adhered Insulation, Board Size:

- IBC or FBC non-HVHZ: Unless otherwise noted, refer to Section 2.2.10.6.2 of FM Loss Prevention Data Sheet 1-29.
- FBC HVHZ: Bonded polyisocyanurate insulation boards shall be maximum 4 x 4 ft.

3.1.4 Roof Covers:

(a) For bonded membrane applications, unless otherwise noted, refer to the following.

TABLE 6: MEMBRANE / ADHESIVE COMBINATIONS

SYSTEM REFERENCE	DESCRIPTION
1	Three or four plies Flintglas Ply 4 applied in hot asphalt at 25 lb/square with flood coat & gravel or approved roof coating.
2	One ply Glasbase Base Sheet, All Weather/Empire Base Sheet or Flintlastic Base 20 followed by two or three plies Flintglas Ply 4 applied in hot asphalt at 25 lb/square with flood coat & gravel or approved roof coating.
3	Two or three plies Flintglas Ply 4, followed by Flintglas MS Cap Sheet or Flintglas MS Cap Sheet CoolStar applied in hot asphalt at 25 lb/square.
4	One ply Glasbase Base Sheet, All Weather/Empire Base Sheet or Flintlastic Base 20 followed by two or three plies Flintglas Ply 4, followed by Flintglas MS Cap Sheet or Flintglas MS Cap Sheet CoolStar applied in hot asphalt at 25 lb/square.
5	Black Diamond Base Sheet or Flintlastic UltraGlass SA self-adhered, followed by two or three plies of Flintglas Ply 4 applied in hot asphalt at 25 lb/square with flood coat & gravel or approved roof coating.
6	Black Diamond Base Sheet or Flintlastic UltraGlass SA self-adhered, followed by one or two plies Flintglas Ply 4, followed by Flintglas MS Cap Sheet or Flintglas MS Cap Sheet CoolStar applied in hot asphalt at 25 lb/square.

(b) Refer to the following Code Sections for limitations pertaining to aggregate surfacing.

Code	Section No.	Section Name
2018 IBC	1504.8	Surfacing and ballast materials in hurricane-prone regions
2023 FBC	1504.8	Aggregate
2023 FBC HVHZ	1519.12	Surfacing

3.1.5 Vapor Barriers:

(a) For System Types B-1, B-2, C-1, C-2, D-1 or D-2, an optional thermal barrier and/or vapor barrier membrane may be installed atop the roof deck prior to installation of the insulation and roof cover. Refer to FM Loss Prevention Data Sheet 1-29 for design and installation recommendations and limitations.

(b) Refer to Section 4.3 herein for options where the vapor barrier forms part of the load path.

4. LIMITATIONS OF USE:

4.1 General:

4.1.1 This is a building code evaluation. NEMO CERT, LLC is not, in any way, the Designer of Record for any project on which this NER, or previous versions thereof, is/was used for permitting or design guidance. NERs are not to be construed as representing any attributes not specifically listed, nor are NERs to be construed as an endorsement of the subject of the report or a recommendation for its use. There is no warranty by NEMO CERT, LLC, express or implied, as to any finding or other matter in this report, or as to any product covered by the report.

4.1.2 Roof Decks:

(a) This NER pertains to above-deck roof components. Roof decks and structural members shall be in accordance with applicable Code requirements to the satisfaction of the Authority Having Jurisdiction.

(b) OSB sheathing is not permitted in FBC HVHZ jurisdictions.

(d) Unless otherwise noted, reference to 'structural concrete' pertains to min. 2,500 psi structural concrete, and excludes 'structural lightweight concrete'.

(e) FBC HVHZ Specific: The table below lists various 'as-tested' deck conditions in accordance with Testing Application Standard TAS 114(J). In no case shall these values be used to 'increase' the MDP listings for the selected systems; the lesser MDP applies.

TABLE 7: AS-TESTED DECK ATTACHMENT DETAILS (TAS 114, APPENDIX J)				
TYPE	AS TESTED SUB-ASSEMBLY			
	SPAN (INCH O.C.)	FASTENER	SPACING (INCH O.C.)	MDP (PSF)
15/32-inch APA rated CDX plywood	24	#8 wood screws	6	-75.0
	24	8d ring shank nails	6	-90.0
	24	#10 wood screws	6	-90.0
	24	#8 wood screws	8	-97.5
	24	#10 wood screws	4	-127.5
19/32-inch APA rated CDX plywood	24	8d ring shank nails	4	-60.0
	24	8d ring shank nails	6	-90.0
	24	#10 wood screws	6	-90.0
	24	#8 wood screws	6	-105.0
	24	#10 wood screws	4	-127.5
23/32-inch APA rated CDX plywood	24	8d ring shank nails	6	-45.0
22 ga., Type B, Grade 33 steel	72	#12 HWH Teks 5	6	-82.5
	72	#12 HWH Teks 5 with ¾" steel washers	6	-97.5
	72	Two (2) #12 HWH Teks 5 with ¾" steel washers	6	-172.5
22 ga., Type B, Grade 40 steel	72	#12 HWH Teks 5	6	-75.0
	72	5/8" puddle welds	6	-82.5
	72	#12 HWH Teks 5 with ¾" steel washers	6	-97.5
22 ga., Type B, Grade 80 steel	72	#12 HWH Teks 5	6	-82.5
	72	#12 HWH Teks 5 with ¾" steel washers	6	-112.5
	72	Two (2) #12 HWH Teks 5 with ¾" steel washers	6	-120.0
Note:	Steel deck stress analysis is the responsibility of others to the satisfaction of the Authority Having Jurisdiction			

4.1.3 Fire Classification:

(a) Refer to **IBC or FBC 1505, FBC HVHZ 1516, UL** TGFU.R11656 and the fire classification certificate for the roof cover manufacturer for requirements and limitations regarding roof assembly fire classification.

(b) Refer to **IBC or FBC 2603** for requirements and limitations concerning the use of foam plastic insulation.

4.1.4 Quality Assurance:

All components in the roof assembly shall have quality assurance surveillance. For Florida Product Approval, this shall be in accordance with **F.A.C.** Rule 61G20-3. For components listed herein that are produced by a manufacturer other than the report holder on Page 1 of this NER, refer to the supporting evidence held by the component manufacturer.

4.2 **Jurisdiction Specific:**

	IBC or FBC Non-HVHZ	FBC HVHZ
4.2.1	This NER does not include evaluation of roof edge termination. Refer to **IBC or FBC 1504.5** for requirements and limitations regarding edge securement for low-slope roofs.	This NER does not include evaluation of roof edge termination. Refer to RAS **111** for requirements and limitations regarding edge securement for low-slope roofs.
4.2.2	Refer to **IBC or FBC 1511** for requirements and limitations regarding recover installations.	Refer to **FBC HVHZ 1521** for requirements and limitations regarding recover installations.
	(a) For mechanical attachment to existing roof decks, fasteners shall be tested for withdrawal resistance. A qualified design professional shall review the data for comparison to the minimum requirements for the system. Testing shall be in accordance with ANSI/SPRI **FX-1** or TAS **105**.	For mechanical attachment to existing roof decks, fasteners shall be tested for withdrawal resistance. A qualified design professional shall review the data for comparison to the minimum requirements for the system. Testing shall be in accordance with TAS **105**.
	(b) For adhered re-roof (tear off) installation, the existing substrate shall be examined for compatibility with the adhesive. If any surface conditions exist that bring system performance into question, field uplift testing in accordance with ANSI/SPRI **IA-1**, FM Loss Prevention Data Sheet **1-52** or TAS **124** shall be conducted on mock-ups of the proposed interface.	For adhered re-roof (tear off) installation, the existing substrate shall be examined for compatibility with the adhesive to be installed. If any surface conditions exist that bring system performance into question, field uplift testing in accordance with TAS **124** shall be conducted on mock-ups of the proposed interface.

(c) For adhered recover installation, the existing roof system shall meet project design pressure requirements on its own merit to the satisfaction of the Authority Having Jurisdiction, as documented through field uplift testing in accordance with **FM Loss Prevention Data Sheet 1-52** or **TAS 124**.	For adhered recover installation, the existing roof system shall meet project design pressure requirements on its own merit to the satisfaction of the Authority Having Jurisdiction, as documented through field uplift testing in accordance with **TAS 124**.

4.2.3 Wind Load Resistance:

(a) Refer to Section 4.3 for a tabulated summary of assembly listings and maximum allowable design pressures.

(b) "MDP" = Maximum Design Pressure is the result of testing for wind load resistance based on allowable wind loads, and reflects the ultimate passing pressure divided by 2 (the 2 to 1 margin of safety per **FBC 1504.9** has already been applied). Refer to **IBC or FBC 1609** for determination of design wind loads.	"MDP" = Maximum Design Pressure is the result of testing for wind load resistance based on allowable wind loads, and reflects the ultimate passing pressure divided by 2 (the 2 to 1 margin of safety per **TAS 114** has already been applied). Refer to **FBC HVHZ 1620** or **RAS 128** for determination of design wind loads.
(c) The MDP for the selected assembly shall meet or exceed at least the Zone 1 PRIME design pressure determined in accordance with **IBC or FBC Chapter 16**. Elevated pressure zones shall employ an attachment density designed by a qualified design professional to resist the elevated pressure criteria. Commonly used methods are **ANSI/SPRI WD1**, **FM Loss Prevention Data Sheet 1-29**, **RAS 117** and **RAS 137**. Assemblies marked with an asterisk* carry the limitations set forth in **Section 2.2.10.1 of FM Loss Prevention Data Sheet 1-29** for Zone 2/3 enhancements.	Assemblies having a MDP < 45.0 psf are not permitted in FBC HVHZ jurisdictions. The MDP for the selected assembly shall meet or exceed at least the Zone 1 PRIME design pressure determined in accordance with **FBC HVHZ 1620** or **RAS 128**. Elevated pressure zones shall employ an attachment density designed by a qualified design professional to resist the elevated pressure criteria. Analysis shall be in accordance with **RAS 117** or **RAS 137**.
(d) For fully-adhered installations, the maximum design pressure for the selected assembly shall meet or exceed the critical design pressure. Rational analysis is not permitted.	For assemblies marked with an asterisk*, the maximum design pressure (MDP) limitation shall be applicable to all roof pressure zones. Rational analysis is not permitted.

4.3 System Listings and Allowable Design Pressures: See Section 4.2.3

4.3.1 Thermal Barriers / Vapor Barriers: The lesser of the MDP listings below vs. that for the selected roof assembly from Section 4.3.2 applies.

(a) Structural Concrete Decks:

TABLE 8A: STRUCTURAL CONCRETE DECK
VAPOR BARRIER FOLLOWED BY ADHERED INSULATION

OPTION #	PRIMER	VAPOR BARRIER		INSULATION ADHESIVE PER TABLE 11A (3.1.3)	MDP (PSF)
		TYPE	ATTACH		
C-VB-1.	FlintPrime QD	Flintlastic SA PlyBase	Self-adhering	OB500, 12-inch o.c.	-82.5
C-VB-2.	None	All Weather/Empire Base Sheet, 3-inch wide side laps and 6-inch wide end laps are sealed with Millennium Hurricane Force Lap and Flashing Adhesive	Millennium Hurricane Force Membrane Adhesive HS, max. 6-inch o.c.	M-OSFA or M-PG-1, 12-inch o.c.	-82.5
C-VB-3.	None	Flintlastic Ultra Poly SMS Base Sheet, 3-inch wide side laps and 6-inch wide end laps are hot-air-welded, torch-welded or sealed with Millennium Hurricane Force Lap and Flashing Adhesive	Millennium Hurricane Force Membrane Adhesive HS, max. 6-inch o.c.	M-OSFA or M-PG-1, 12-inch o.c.	-82.5
C-VB-4.	FlintPrime QD	Black Diamond Base Sheet, Flintlastic Ultra Glass SA, or Flintlastic SA Cap	Self-adhering	M-OSFA or M-PG-1, 12-inch o.c.	-97.5
C-VB-5.	FlintPrime QD	Black Diamond Base Sheet, Flintlastic Ultra Glass SA, or Flintlastic SA Cap	Self-adhering	M-OSFA or M-PG-1, 6-inch o.c.	-315.0
C-VB-6.	FlintPrime QD	Flintlastic GTA	Torch-applied	M-OSFA or M-PG-1, 12-inch o.c.	-420.0
C-VB-7.	FlintPrime QD	Flintlastic Base 20 T	Torch-applied	M-OSFA or M-PG-1, 12-inch o.c.	-495.0

4.3.2 Roof Assemblies:

TABLE	DECK	APPLICATION	TYPE	DESCRIPTION	PAGE
9A	Wood	New or Reroof (Tear-Off)	A-1	Bonded Insulation(s), Bonded Roof Cover	13
9B	Wood	New or Reroof (Tear-Off)	B-1	Mechanically Attached Base Insulation, Bonded Top Insulation(s), Bonded Roof Cover	13
9C	Wood	New or Reroof (Tear-Off)	B-3	Mechanically Attached Anchor Sheet, Bonded Insulation(s), Bonded Roof Cover	13
9D	Wood	New or Reroof (Tear-Off)	C-1	Mechanically Attached Insulation, Bonded Roof Cover	14
9E	Wood	New or Reroof (Tear-Off)	D-2	Insulated, Mechanically Attached Anchor Sheet, Bonded Roof Cover	15
9F	Wood	New or Reroof (Tear-Off)	E-2	Non-Insulated, Mechanically Attached Anchor Sheet, Bonded Roof Cover	16
9G	Wood	New, Reroof (Tear-Off), or Recover	E-2	Non-Insulated, Mechanically Attached Anchor Sheet, Bonded Roof Cover	17
10A	Steel or Structural Concrete	New, Reroof (Tear-Off), or Recover	B-1	Mechanically Attached Base Insulation, Bonded Top Insulation(s), Bonded Roof Cover	18
10B	Steel or Structural Concrete	New, Reroof (Tear-Off), or Recover	C-1	Mechanically Attached Insulation, Bonded Roof Cover	19
10C	Steel or Structural Concrete	New, Reroof (Tear-Off), or Recover	D-2	Insulated, Mechanically Attached Anchor Sheet, Bonded Roof Cover	20
11A	Structural Concrete	New or Reroof (Tear-Off)	A-1	Bonded Insulation(s), Bonded Roof Cover	21
11B	Structural Concrete	New or Reroof (Tear-Off)	F	Non-Insulated, Bonded Roof Cover	22
12A	Deck with Lightweight Concrete	New or Reroof (Tear-Off)	A-1	Bonded Insulation(s), Bonded Roof Cover	23
12B	Deck with Lightweight Concrete	New or Reroof (Tear-Off)	E-2	Non-Insulated, Mechanically Attached Anchor Sheet, Bonded Roof Cover	23
13A	Cementitious Wood Fiber	New or Reroof (Tear-Off)	A-1	Bonded Insulation(s), Bonded Roof Cover	26
13B	Cementitious Wood Fiber	New, Reroof (Tear-Off), or Recover	B-3	Mechanically Attached Anchor Sheet, Bonded Insulation(s), Bonded Roof Cover	26
13C	Cementitious Wood Fiber	Reroof (Tear-Off) or Recover	C-1	Mechanically Attached Insulation, Bonded Roof Cover	27
13D	Cementitious Wood Fiber	New, Reroof (Tear-Off), or Recover	E-2	Non-Insulated, Mechanically Attached Anchor Sheet, Bonded Roof Cover	27
14A	Existing Gypsum	Reroof (Tear-Off)	A-1	Bonded Insulation(s), Bonded Roof Cover	28
14B	Existing Gypsum	Reroof (Tear-Off)	B-3	Mechanically Attached Anchor Sheet, Bonded Insulation(s), Bonded Roof Cover	28
14C	Existing Gypsum	Reroof (Tear-Off)	C-1	Mechanically Attached Insulation, Bonded Roof Cover	29
14D	Existing Gypsum	Reroof (Tear-Off)	E-2	Non-Insulated, Mechanically Attached Anchor Sheet, Bonded Roof Cover	29
15A	Various	Recover	A-1	Bonded Insulation(s), Bonded Roof Cover	30

TABLE 9A: WOOD DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE A-1: BONDED INSULATION, BONDED ROOF COVER
NO FBC HVHZ

System No.	Deck (4.1.2)	Base Insulation Layer		Top Insulation Layer(s)		Roof Cover (3.1.4)	MDP (psf)
		Type	Attach (3.1.3)	Type	Attach (3.1.3)		
Hybrid Systems:							
W-1.	Min. 15/32-inch APA rated CDX plywood	Min. 1.5-inch ACFoam II or H-Shield	M-OSFA or M-PG1	(Optional) Additional layer(s) of base insulation and/or min. 0.25-inch DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board.	M-OSFA or M-PG1	System 5 or 6	-60.0
W-2.	Min. 15/32-inch APA rated CDX plywood	Min. 1.5-inch ACFoam II or H-Shield	M-OSFA or M-PG1, 6-inch o.c.	(Optional) Additional layer(s) of base insulation and/or min. 0.25-inch DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board.	M-OSFA or M-PG1, 6-inch o.c.	System 5 or 6	-97.5

TABLE 9B: WOOD DECKS – NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER
SYSTEM TYPE B-1: MECHANICALLY ATTACHED BASE INSULATION, BONDED TOP INSULATION, BONDED ROOF COVER

System No.	Deck (4.1.2)	Base Insulation Layer			Top Insulation Layer		Roof Cover (3.1.4)	MDP (psf)
		Type	Fastener (3.1.1, 4.2.2)	Attach (3.1.2E)	Type	Attach (3.1.3)		
Conventional Systems:								
W-3.	Min. 23/32-inch plywood	Min. 1.5-inch ACFoam II, ENRGY 3 or H-Shield	3.1.1	1 per 2.0 ft^2	Min. 0.5-inch Structodek High Density Fiberboard Roof Insulation, min. ¾-inch FescoBoard (homogeneous), min. 0.25-inch DensDeck, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	hot asphalt	System 1, 2, 3 or 4	-45.0*
Hybrid Systems:								
W-4.	Min. 15/32-inch plywood	Min. 2-inch ACFoam II or H-Shield	3.1.1	1 per 2.7 ft^2	Min. 2-inch H-Shield HD Composite CG	M-OSFA or M-PG1	System 5 or 6	-30.0 (NO FBC HVHZ)
W-5.	Min. 15/32-inch plywood	Min. 2-inch ACFoam II or H-Shield	Dekfast DF-#14-PH3 with Dekfast PLT-R-3	1 per 2.0 ft^2	Min. 2-inch H-Shield HD Composite CG	M-OSFA or M-PG1	System 5 or 6	-52.5

TABLE 9C: WOOD DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE B-3: MECHANICALLY ATTACHED ANCHOR SHEET, BONDED INSULATION, BONDED ROOF COVER

System No.	Deck (4.1.2)	Anchor Sheet			Base Insulation Layer(s)		Top Insulation Layer		Roof Cover (3.1.4)	MDP (psf)
		Type	Fastener (3.1.1, 4.2.2)	Attach (3.1.3)	Type	Attach (3.1.3)	Type	Attach (3.1.3)		
Conventional Systems:										
W-6.	Min. 19/32-inch plywood	Glasbase Base Sheet, All Weather/Empire Base Sheet, Flintlastic Base 20, Poly SMS, Ultra Poly SMS or Flintglas MS Cap (inverted)	11 ga. annular ring shank nails with min. 32 ga. x 1-5/8" diameter tin caps (FBC 1517.5)	9-inch o.c. in 4-inch lap and 12-inch o.c. in two, equally spaced, staggered center rows	Min. 1.5-inch ACFoam II, ENRGY 3, H-Shield or Multi-Max FA3	hot asphalt	Min. 0.25-inch DensDeck primed with FlintPrime QD	hot asphalt	System 1, 2, 3 or 4	-45.0*
W-7.	Min. 19/32-inch plywood	Glasbase Base Sheet, All Weather/Empire Base Sheet or Flintlastic Poly SMS Base Sheet	11 ga. annular ring shank nails with min. 32 ga. x 1-5/8" diameter tin caps (FBC 1517.5)	8-inch o.c. in 3-inch lap and 8-inch o.c. in three, equally spaced, staggered center rows	Min. 1.5-inch ACFoam II, ENRGY 3, H-Shield or Multi-Max FA3	hot asphalt full coverage or M-OSFA, Insta-Stik QS, OB500 or Polyset CRA, 4-inch o.c.	Min. 0.25-inch DensDeck primed with FlintPrime QD	hot asphalt full coverage or M-OSFA, Insta-Stik QS, OB500 or Polyset CRA, 6-inch o.c.	System 3 or 4	-52.5

TABLE 9C: WOOD DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE B-3: MECHANICALLY ATTACHED ANCHOR SHEET, BONDED INSULATION, BONDED ROOF COVER

System No.	Deck (4.1.2)	Anchor Sheet			Base Insulation Layer(s)		Top Insulation Layer		Roof Cover (3.1.4)	MDP (psf)
		Type	Fastener (3.1.1, 4.2.2)	Attach (3.1.3)	Type	Attach (3.1.3)	Type	Attach (3.1.3)		
W-8.	Min. 19/32-inch plywood	Flintglas MS Cap (inverted)	11 ga. annular ring shank nails with min. 32 ga. x 1-5/8" diameter tin caps (FBC 1517.5)	8-inch o.c. in 3-inch lap and 8-inch o.c. in three, equally spaced, staggered center rows	Min. 1.5-inch ACFoam II, ENRGY 3, H-Shield or Multi-Max FA3	hot asphalt	Min. 0.25-inch DensDeck primed with FlintPrime QD	hot asphalt	System 3 or 4	-52.5
W-9.	Min. 19/32-inch plywood	Glasbase Base Sheet, All Weather/Empire Base Sheet or Flintlastic Poly SMS Base Sheet	11 ga. annular ring shank nails with min. 32 ga. x 1-5/8" diameter tin caps (FBC 1517.5)	8-inch o.c. in 3-inch lap and 8-inch o.c. in three, equally spaced, staggered center rows	Min. 1.5-inch ACFoam II, ENRGY 3, H-Shield or Multi-Max FA3	hot asphalt full coverage or M-OSFA, Insta-Stik QS, OB500 or Polyset CRA, 4-inch o.c.	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	hot asphalt full coverage or M-OSFA, Insta-Stik QS, OB500 or Polyset CRA, 6-inch o.c.	System 3 or 4	-60.0
W-10.	Min. 19/32-inch plywood	Flintglas MS Cap (inverted)	11 ga. annular ring shank nails with min. 32 ga. x 1-5/8" diameter tin caps (FBC 1517.5)	8-inch o.c. in 3-inch lap and 8-inch o.c. in three, equally spaced, staggered center rows	Min. 1.5-inch ACFoam II, ENRGY 3, H-Shield or Multi-Max FA3	hot asphalt	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	hot asphalt	System 3 or 4	-60.0
HYBRID SYSTEMS:										
W-11.	Min. 19/32-inch plywood	Glasbase Base Sheet, All Weather/Empire Base Sheet, Flintlastic Base 20, Poly SMS, Ultra Poly SMS or Flintglas MS Cap (inverted)	11 ga. annular ring shank nails with min. 32 ga. x 1-5/8" diameter tin caps (FBC 1517.5)	9-inch o.c. in 4-inch lap and 12-inch o.c. in two, equally spaced, staggered center rows	Min. 1.5-inch ACFoam II, ENRGY 3, H-Shield or Multi-Max FA3	hot asphalt	None	N/A	System 6	-45.0*
W-12.	Min. 19/32-inch plywood	Glasbase Base Sheet or Flintglas MS Cap (inverted)	11 ga. annular ring shank nails with min. 32 ga. x 1-5/8" diameter tin caps (FBC 1517.5)	8-inch o.c. in 3-inch lap and 8-inch o.c. in three, equally spaced, staggered center rows	Min. 1.5-inch ACFoam II, ENRGY 3, H-Shield or Multi-Max FA3	hot asphalt	None	N/A	System 6	-60.0

TABLE 9D: WOOD DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE C-1: MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER

System No.	Deck (4.1.2)	Base Insulation Layer (3.1.2)	Top Insulation Layer			Roof Cover (3.1.4)	MDP (psf)
			Type	Fastener (3.1.1, 4.2.2)	Attach (3.1.3)		
CONVENTIONAL SYSTEMS:							
W-13.	Min. 23/32-inch plywood	(Optional) One or more layers, any combination, loose laid	Min. 0.5-inch Structodek High Density Fiberboard Roof Insulation, min. ¾-inch FescoBoard (homogeneous), min. 0.25-inch DensDeck, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	3.1.1	1 per 2.0 ft ^{2}	System 1, 2, 3 or 4	-45.0*

TABLE 9E: WOOD DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE D-2: INSULATED, MECHANICALLY ATTACHED ANCHOR SHEET, BONDED ROOF COVER

SYSTEM NO.	DECK (4.1.2)	INSULATION LAYER(S) (3.1.2)		ANCHOR SHEET			ROOF COVER (3.1.4)	MDP (PSF)
		TYPE	ATTACH (3.1.3)	TYPE	FASTENER (3.1.1, 4.2.2)	SPACING		
CONVENTIONAL SYSTEMS:								
W-14.	Min. 23/32-inch plywood	Min. 1.5-inch, One or more layers, any combination	Prelim. Attached	Glasbase Base Sheet, All Weather/Empire Base Sheet, Flintlastic Base 20, Flintlastic Poly SMS Base Sheet or Flintglas MS Cap (inverted)	3.1.1	12-inch o.c. at 4-inch lap and 36-inch o.c. in two, equally spaced, staggered center rows	System 1, 2, 3 or 4	-30.0* (NO FBC HVHZ)
W-15.	Min. 23/32-inch plywood	Min. 1.5-inch, One or more layers, any combination	Prelim. Attached	Glasbase Base Sheet, All Weather/Empire Base Sheet, Flintlastic Base 20, Flintlastic Poly SMS Base Sheet or Flintglas MS Cap (inverted)	3.1.1	12-inch o.c. at 4-inch lap and 24-inch o.c. in two, equally spaced, staggered center rows	System 1, 2, 3 or 4	-45.0*
W-16.	Min. 23/32-inch plywood	Min. 1.5-inch, One or more layers, any combination	Prelim. Attached	Flintlastic Poly SMS Base Sheet	3.1.1	12-inch o.c. at 4-inch lap and 36-inch o.c. in two, equally spaced, staggered center rows	System 1, 2, 3 or 4	-45.0*
W-17.	Min. 15/32-inch plywood	Min. 1.5-inch, One or more layers, any combination	Prelim. Attached	Glasbase Base Sheet, Flintlastic Base 20 or Flintlastic Poly SMS Base Sheet	OMG #14 Heavy Duty with OMG 3 in. Round Metal Plate or Trufast #12 DP or Trufast #14 HD with Trufast 3" Metal Insulation Plate	6-inch o.c. at 4-inch lap and 6-inch o.c. in three, equally spaced, staggered center rows.	System 2, 3 or 4	-97.5
W-18.	Min. 19/32-inch plywood	Min. 1.5-inch, One or more layers, any combination	Prelim. Attached	Glasbase Base Sheet, Flintlastic Base 20 or Flintlastic Poly SMS Base Sheet	3.1.1	7-inch o.c. at 3-inch lap and 7-inch o.c. in three, equally spaced, staggered center rows	System 3 or 4	-105.0
W-19.	Min. 15/32-inch plywood	Min. 1.5-inch, One or more layers, any combination	Prelim. Attached	Glasbase Base Sheet, Flintlastic Base 20 or Flintlastic Poly SMS Base Sheet	OMG #14 Heavy Duty with OMG 3 in. Round Metal Plate or Trufast #12 DP or Trufast #14 HD with Trufast 3" Metal Insulation Plate	6-inch o.c. at 4-inch lap and 6-inch o.c. in four, equally spaced, staggered center rows.	System 2, 3 or 4	-127.5
HYBRID SYSTEMS:								
W-20.	Min. 15/32-inch plywood	Min. 1.5-inch, One or more layers, any combination	Prelim. Attached	Glasbase Base Sheet, Flintlastic Base 20 or Flintlastic Poly SMS Base Sheet	OMG #14 Heavy Duty with OMG 3 in. Round Metal Plate or Trufast #12 DP or Trufast #14 HD with Trufast 3" Metal Insulation Plate. Stress plates shall be primed with FlintPrime QD.	6-inch o.c. at 4-inch lap and 6-inch o.c. in three, equally spaced, staggered center rows.	System 5 or 6	-97.5
W-21.	Min. 19/32-inch plywood	Min. 1.5-inch, One or more layers, any combination	Prelim. Attached	Glasbase Base Sheet, Flintlastic Base 20 or Flintlastic Poly SMS Base Sheet	3.1.1	7-inch o.c. at 3-inch lap and 7-inch o.c. in three, equally spaced, staggered center rows	System 6	-105.0
W-22.	Min. 15/32-inch plywood	Min. 1.5-inch, One or more layers, any combination	Prelim. Attached	Glasbase Base Sheet, Flintlastic Base 20, Flintlastic Poly SMS Base Sheet	OMG #14 Heavy Duty with OMG 3 in. Round Metal Plate or Trufast #12 DP or Trufast #14 HD with Trufast 3" Metal Insulation Plate. Stress plates shall be primed with FlintPrime QD.	6-inch o.c. at 4-inch lap and 6-inch o.c. in four, equally spaced, staggered center rows.	System 5 or 6	-127.5

TABLE 9F: WOOD DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF) SYSTEM TYPE E-2: NON-INSULATED, MECHANICALLY ATTACHED ANCHOR SHEET, BONDED ROOF COVER						
SYSTEM NO.	DECK (4.1.2)	BASE SHEET			ROOF COVER (3.1.4)	MDP (PSF)
		BASE	FASTENER (3.1.1, 4.2.2)	SPACING		
CONVENTIONAL SYSTEMS:						
W-23.	Min. 19/32-inch plywood	Glasbase Base Sheet, All Weather/Empire Base Sheet, Flintlastic Base 20 or Flintlastic Poly SMS Base Sheet	11 ga. annular ring shank nails with min. 32 ga. x 1-5/8" diameter tin caps (FBC 1517.5)	9-inch o.c. at 4-inch lap and 12-inch o.c. in two, equally spaced, staggered center rows	System 1, 2, 3 or 4	-45.0*
W-24.	Min. 15/32-inch plywood	Glasbase Base Sheet, All Weather/Empire Base Sheet, Flintlastic Base 20 or Flintlastic Poly SMS Base Sheet	12 ga. x 1-inch head diameter annular ring shank metal cap nails (FBC 1506.5)	6-inch o.c. at 3-inch lap and 6-inch o.c. in four, equally spaced, staggered center rows	System 1, 2, 3 or 4	-52.5 (NO FBC HVHZ)
W-25.	Min. 19/32-inch plywood	Glasbase Base Sheet, Flintlastic Base 20 or Flintlastic Poly SMS Base Sheet	11 ga. annular ring shank nails with min. 32 ga. x 1-5/8" diameter tin caps (FBC 1517.5)	8-inch o.c. at 4-inch lap and 8-inch o.c. in three, equally spaced, staggered center rows	System 3 or 4	-52.5
W-26.	Min. 19/32-inch plywood	Glasbase Base Sheet, Flintlastic Base 20, Flintlastic Poly SMS Base Sheet	11 ga. annular ring shank nails with min. 32 ga. x 1-5/8" diameter tin caps (FBC 1517.5)	8-inch o.c. at 4-inch lap and 8-inch o.c. in three, equally spaced, staggered center rows	System 3 or 4	-60.0
W-27.	Min. 19/32-inch plywood	Glasbase Base Sheet, Flintlastic Base 20, Flintlastic Poly SMS Base Sheet	11 ga. annular ring shank nails with min. 32 ga. x 1-5/8" diameter tin caps (FBC 1517.5)	6-inch o.c. at 4-inch lap and 6-inch o.c. in four, equally spaced, staggered center rows	System 3 or 4	-82.5
W-28.	Min. 19/32-inch plywood	Glasbase Base Sheet, Flintlastic Base 20, Flintlastic Poly SMS Base Sheet	11 ga. annular ring shank nails with min. 32 ga. x 1-5/8" diameter tin caps (FBC 1517.5)	4-inch o.c. at 3-inch lap and 4-inch o.c. in four, equally spaced, staggered center rows	System 3 or 4	-105.0
HYBRID SYSTEMS:						
W-29.	Min. 19/32-inch thick exterior grade plywood	Glasbase Base Sheet, All Weather/Empire Base Sheet, Flintlastic Base 20, Flintlastic Poly SMS Base Sheet	11 ga. annular ring shank nails with min. 32 ga. x 1-5/8" diameter tin caps (FBC 1517.5)	9-inch o.c. at 4-inch lap and 12-inch o.c. in two, equally spaced, staggered center rows	System 6	-45.0*
W-30.	Min. 15/32-inch plywood	Glasbase Base Sheet, All Weather/Empire Base Sheet, Flintlastic Base 20, Flintlastic Poly SMS Base Sheet	12 ga. x 1-inch head diameter annular ring shank metal cap nails (FBC 1506.5)	6-inch o.c. at 3-inch lap and 6-inch o.c. in four, equally spaced, staggered center rows	System 5 or 6	-52.5 (NO FBC HVHZ)
W-31.	Min. 19/32-inch plywood	Glasbase Base Sheet, Flintlastic Base 20, Flintlastic Poly SMS Base Sheet	11 ga. annular ring shank nails with min. 32 ga. x 1-5/8" diameter tin caps (FBC 1517.5)	8-inch o.c. at 4-inch lap and 8-inch o.c. in three, equally spaced, staggered center rows	System 6	-52.5
W-32.	Min. 19/32-inch plywood	Glasbase Base Sheet, Flintlastic Base 20, Flintlastic Poly SMS Base Sheet	11 ga. annular ring shank nails with min. 32 ga. x 1-5/8" diameter tin caps (FBC 1517.5)	8-inch o.c. at 4-inch lap and 8-inch o.c. in three, equally spaced, staggered center rows	System 6	-60.0
W-33.	Min. 19/32-inch plywood	Glasbase Base Sheet, Flintlastic Base 20, Flintlastic Poly SMS Base Sheet	11 ga. annular ring shank nails with min. 32 ga. x 1-5/8" diameter tin caps (FBC 1517.5)	6-inch o.c. at 4-inch lap and 6-inch o.c. in four, equally spaced, staggered center rows	System 6	-82.5
W-34.	Min. 19/32-inch plywood	Glasbase Base Sheet, Flintlastic Base 20, Flintlastic Poly SMS Base Sheet	11 ga. annular ring shank nails with min. 32 ga. x 1-5/8" diameter tin caps (FBC 1517.5)	4-inch o.c. at 3-inch lap and 4-inch o.c. in four, equally spaced, staggered center rows	System 6	-105.0

TABLE 9G: WOOD DECKS – NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER SYSTEM TYPE E-2: NON-INSULATED, MECHANICALLY ATTACHED ANCHOR SHEET, BONDED ROOF COVER						
SYSTEM NO.	DECK (4.1.2)	BASE SHEET			ROOF COVER (3.1.4)	MDP (PSF)
		BASE	FASTENER (3.1.1, 4.2.2)	SPACING		
CONVENTIONAL SYSTEMS:						
W-35.	Min. 23/32-inch plywood	Glasbase Base Sheet, All Weather/Empire Base Sheet, Flintlastic Base 20 or Flintlastic Poly SMS Base Sheet	3.1.1	12-inch o.c. at 4-inch lap and 36-inch o.c. in two, equally spaced, staggered center rows	System 1, 2, 3 or 4	-30.0* (NO FBC HVHZ)
W-36.	Min. 23/32-inch plywood	Glasbase Base Sheet, All Weather/Empire Base Sheet, Flintlastic Base 20 or Flintlastic Poly SMS Base Sheet	3.1.1	12-inch o.c. at 4-inch lap and 24-inch o.c. in two, equally spaced, staggered center rows	System 1, 2, 3 or 4	-45.0*
W-37.	Min. 23/32-inch plywood	Flintlastic Poly SMS Base Sheet	3.1.1	12-inch o.c. at 4-inch lap and 36-inch o.c. in two, equally spaced, staggered center rows	System 1, 2, 3 or 4	-45.0*
W-38.	Min. 15/32-inch plywood	Glasbase Base Sheet, Flintlastic Base 20, Flintlastic Poly SMS Base Sheet	OMG #14 Heavy Duty with OMG 3 in. Round Metal Plate or Trufast #12 DP or Trufast #14 HD with Trufast 3" Metal Insulation Plate	6-inch o.c. at 4-inch lap and 6-inch o.c. in three, equally spaced, staggered center rows	System 2, 3 or 4	-97.5
W-39.	Min. 19/32-inch plywood	Glasbase Base Sheet, Flintlastic Base 20, Flintlastic Poly SMS Base Sheet	3.1.1	7-inch o.c. at 3-inch lap and 7-inch o.c. in three, equally spaced, staggered center rows	System 3 or 4	-105.0
W-40.	Min. 15/32-inch plywood	Glasbase Base Sheet, Flintlastic Base 20, Flintlastic Poly SMS Base Sheet	OMG #14 Heavy Duty with OMG 3 in. Round Metal Plate or Trufast #12 DP or Trufast #14 HD with Trufast 3" Metal Insulation Plate	6-inch o.c. at 4-inch lap and 6-inch o.c. in four, equally spaced, staggered center rows	System 2, 3 or 4	-127.5
HYBRID SYSTEMS:						
W-41.	Min. 15/32-inch plywood	Glasbase Base Sheet, Flintlastic Base 20, Flintlastic Poly SMS Base Sheet	OMG #14 Heavy Duty with OMG 3 in. Round Metal Plate or Trufast #12 DP or Trufast #14 HD with Trufast 3" Metal Insulation Plate. Stress plates shall be primed with FlintPrime QD.	6-inch o.c. at 4-inch lap and 6-inch o.c. in three, equally spaced, staggered center rows.	System 5 or 6	-97.5
W-42.	Min. 19/32-inch plywood	Glasbase Base Sheet, Flintlastic Base 20, Flintlastic Poly SMS Base Sheet	3.1.1	7-inch o.c. at 3-inch lap and 7-inch o.c. in three, equally spaced, staggered center rows	System 6	-105.0
W-43.	Min. 15/32-inch plywood	Glasbase Base Sheet, Flintlastic Base 20, Flintlastic Poly SMS Base Sheet	OMG #14 Heavy Duty with OMG 3 in. Round Metal Plate or Trufast #12 DP or Trufast #14 HD with Trufast 3" Metal Insulation Plate. Stress plates shall be primed with FlintPrime QD.	6-inch o.c. at 4-inch lap and 6-inch o.c. in four, equally spaced, staggered center rows.	System 5 or 6	-127.5

TABLE 10A: STEEL OR STRUCTURAL CONCRETE DECKS – NEW CONSTRUCTION, REROOF (TEAR-OFF), OR RECOVER
SYSTEM TYPE B-1: MECHANICALLY ATTACHED BONDED INSULATION, BONDED TOP INSULATION(S), BONDED ROOF COVER

System No.	Deck (4.1.2)	Base Insulation Layer	Top Insulation Layer				Roof Cover (3.1.4)	MDP (psf)*
		Type	Fastener (3.1.1, 4.2.2)	Attach (3.1.2E)	Type	Attach (3.1.3)		
Conventional Systems:								
SC-1.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structrual concrete	Min. 2-inch ACFoam II, ENRGY 3 or H-Shield	3.1.1	1 per 4.0 ft²	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	hot asphalt, M-OSFA, Insta-Stik QS, OB500 or Polyset CRA	System 1, 2, 3 or 4	-37.5* (NO FBC HVHZ)
SC-2.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structrual concrete	Min. 1.5-inch ACFoam II, ENRGY 3 or H-Shield	3.1.1	1 per 2.0 ft²	Min. 0.5-inch Structodek High Density Fiberboard Roof Insulation, min. ¾-inch FescoBoard (homogeneous).	hot asphalt	System 1, 2, 3 or 4	-45.0*
SC-3.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structrual concrete	Min. 1.5-inch ACFoam II, ENRGY 3 or H-Shield	3.1.1	1 per 2.0 ft²	Min. 0.25-inch DensDeck or DensDeck Prime	hot asphalt	System 1, 2, 3 or 4	-45.0*
SC-4.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structrual concrete	Min. 1.5-inch ACFoam II, ENRGY 3 or H-Shield	3.1.1	1 per 2.0 ft²	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	hot asphalt, M-OSFA, Insta-Stik QS, OB500 or Polyset CRA	System 1, 2, 3 or 4	-45.0*
SC-5.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structrual concrete	Min. 2-inch ACFoam II, ENRGY 3 or H-Shield	3.1.1	1 per 3.2 ft²	Min. 0.5-inch Structodek High Density Fiberboard Roof Insulation, min. ¾-inch FescoBoard (homogeneous) or min. 0.25-inch DensDeck or DensDeck Prime.	hot asphalt	System 1, 2, 3 or 4	-45.0*
SC-6.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structrual concrete	Min. 1.5-inch ACFoam II, ENRGY 3 or Multi-Max FA3	3.1.1	1 per 1.3 ft²	Min. ¾-inch FescoBoard (homogeneous)	hot asphalt	System 4	-52.5
SC-7.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structrual concrete	Min. 2-inch ACFoam II, ENRGY 3 or H-Shield	3.1.1	1 per 1.6 ft²	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	hot asphalt, M-OSFA, Insta-Stik QS, OB500 or Polyset CRA	System 1, 2, 3 or 4	-60.0
SC-8.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structrual concrete	Min. 1.5-inch ACFoam II, ENRGY 3 or Multi-Max FA3	3.1.1	1 per 1.3 ft²	Min. 0.5-inch Structodek High Density Fiberboard	hot asphalt	System 4	-67.5
Hybrid Systems:								
SC-9.	Min. 22 ga., type B, Grade 40 steel or min. 2,500 psi structrual concrete	Min. 2-inch ACFoam II or H-Shield	3.1.1	1 per 2.7 ft²	Min. 2-inch H-Shield HD Composite CG	M-OSFA or M-PG1	System 5 or 6	-45.0
SC-10.	Min. 22 ga., type B, Grade 40 steel or min. 2,500 psi structrual concrete	Min. 2-inch ACFoam II or H-Shield	Dekfast DF-#12-PH3 or Dekfast DF-#14-PH3 with Dekfast PLT-R-3	1 per 2.0 ft²	Min. 2-inch H-Shield HD Composite CG	M-OSFA or M-PG1	System 5 or 6	-52.5
SC-11.	Min. 22 ga., type B, Grade 40 steel or min. 2,500 psi structrual concrete	Min. 1.5-inch ACFoam II or H-Shield	Trufast #12 DP (steel only) or Trufast #14 HD with Trufast 3" Metal Insulation Plate	1 per 1.6 ft²	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	M-OSFA, M-PG1, Insta-Stik QS or OB500	System 5 or 6	-75.0

TABLE 10B: STEEL OR STRUCTURAL CONCRETE DECKS – NEW CONSTRUCTION, REROOF (TEAR-OFF), OR RECOVER
SYSTEM TYPE C-1: MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER

SYSTEM NO.	DECK (4.1.2)	BASE INSULATION LAYER(S) (3.1.2)	TOP INSULATION LAYER			ROOF COVER (3.1.4)	MDP (PSF)
			TYPE	FASTENER (3.1.1, 4.2.2)	ATTACH (3.1.3)		
CONVENTIONAL SYSTEMS:							
SC-12.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structrual concrete	(Optional) One or more layers, any combination, loose laid	Min. ¾-inch FescoBoard (homogeneous)	3.1.1	1 per 2.7 ft²	System 1, 2, 3 or 4	-30.0* (NO FBC HVHZ)
SC-13.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structrual concrete	(Optional) One or more layers, any combination, loose laid	Min. 0.5-inch Structodek High Density Fiberboard Roof Insulation	3.1.1	1 per 4.0 ft²	System 1, 2, 3 or 4	-37.5* (NO FBC HVHZ)
SC-14.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structrual concrete	One or more layers, any combination, min. 2-inch, loose laid	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	3.1.1	1 per 4.0 ft²	System 1, 2, 3 or 4	-45.0*
SC-15.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structrual concrete	(Optional) One or more layers, any combination, loose laid	Min. 0.5-inch Structodek High Density Fiberboard Roof Insulation, min. ¾-inch FescoBoard (homogeneous) or min. 0.25-inch DensDeck	3.1.1	1 per 2.0 ft²	System 1, 2, 3 or 4	-45.0*
SC-16.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structrual concrete	Min. 2-inch ACFoam II, H-Shield or ENRGY 3, loose laid.	Min. 0.5-inch SECUROCK Gypsum-Fiber Roof Board	3.1.1	1 per 1.8 ft²	System 1, 2, 3 or 4	-60.0
SC-17.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structrual concrete	Min. 1.5-inch ACFoam II or H-Shield, loose laid	Min. 0.5-inch SECUROCK Gypsum-Fiber Roof Board	Trufast #14 HD with Trufast 3" Metal Insulation Plate	1 per 1.3 ft²	System 1 or 2 *(with hot asphalt @ 60 lb/square & gravel at 400 lb/square)*, 3 or 4	-157.5
SC-18.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structrual concrete	Min. 1.5-inch ACFoam II or H-Shield, loose laid	Min. 0.5-inch DensDeck Prime	Trufast #14 HD with Trufast 3" Metal Insulation Plate	1 per 1.0 ft²	System 1 or 2 *(with hot asphalt @ 60 lb/square & gravel at 400 lb/square)*, 3 or 4	-157.5
SC-19.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structrual concrete	Min. 1.5-inch ACFoam II or H-Shield, loose laid	Min. 0.5-inch SECUROCK Gypsum-Fiber Roof Board	Trufast #14 HD with Trufast 3" Metal Insulation Plate	1 per 1.0 ft²	System 1 or 2 *(with hot asphalt @ 60 lb/square & gravel at 400 lb/square)*, 3 or 4	-172.5
HYBRID SYSTEMS:							
SC-20.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structrual concrete	(Optional) One or more layers, any combination, loose laid	Min. 0.25-inch DensDeck, DensDeck Prime	3.1.1	1 per 2.0 ft²	System 6	-30.0* (NO FBC HVHZ)
SC-21.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structrual concrete	(Optional) One or more layers, any combination, loose laid	Min. 1.5-inch ACFoam II, ENRGY 3 or Multi-Max FA3	3.1.1	1 per 1.3 ft²	System 6	-52.5

TABLE 10C: STEEL OR STRUCTURAL CONCRETE DECKS – NEW CONSTRUCTION, REROOF (TEAR-OFF), OR RECOVER
SYSTEM TYPE D-2: INSULATED, MECHANICALLY ATTACHED ANCHOR SHEET, BONDED ROOF COVER

System No.	Deck (4.1.2)	Insulation Layer(s) (3.1.2)		Anchor Sheet			Roof Cover (3.1.4)	MDP (psf)
		Type	Attach (3.1.3)	Type	Fastener (3.1.1, 4.2.2)	Spacing		
Conventional Systems:								
SC-22.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structrual concrete	Min. 1.5-inch, One or more layers, any combination	Prelim. Attached	Glasbase Base Sheet, All Weather/Empire Base Sheet, Flintlastic Base 20 or Flintglas MS Cap (inverted)	3.1.1	12-inch o.c. at 4-inch lap and 36-inch o.c. in two, equally spaced, staggered center rows	System 1, 2, 3 or 4	-30.0* (NO FBC HVHZ)
SC-23.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structrual concrete	Min. 1.5-inch, One or more layers, any combination	Prelim. Attached	Glasbase Base Sheet, All Weather/Empire Base Sheet, Flintlastic Base 20 or Flintglas MS Cap (inverted)	3.1.1	12-inch o.c. at 4-inch lap and 24-inch o.c. in two, equally spaced, staggered center rows	System 1, 2, 3 or 4	-45.0*
SC-24.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structrual concrete	Min. 1.5-inch, One or more layers, any combination	Prelim. Attached	Flintlastic Poly SMS Base Sheet	3.1.1	12-inch o.c. at 4-inch lap and 36-inch o.c. in two, equally spaced, staggered center rows	System 1, 2, 3 or 4	-45.0*
SC-25.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structrual concrete	Min. 1.5-inch, One or more layers, any combination	Prelim. Attached	Glasbase Base Sheet, All Weather/Empire Base Sheet, Flintlastic Base 20, Flintlastic Poly SMS Base Sheet or Flintglas MS Cap (inverted)	3.1.1	12-inch o.c. at 3-inch lap and 12-inch o.c. in two, equally spaced, staggered center rows	System 3 or 4	-52.5
SC-26.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structrual concrete	Min. 1.5-inch, One or more layers, any combination	Prelim. Attached	Glasbase Base Sheet or Flintglas MS Cap (inverted)	OMG #14 Heavy Duty Fastener with OMG Flat Bottom Plate (Accutrac)	6-inch o.c. at 4-inch lap and 6-inch o.c. in two, equally spaced, staggered center rows	System 3 or 4	-67.5
SC-27.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structrual concrete	Min. 1.5-inch, One or more layers, any combination	Prelim. Attached	Flintlastic Base 20, Flintlastic Poly SMS Base Sheet or Flintglas MS Cap (inverted)	3.1.1	6-inch o.c. at 4-inch lap and 6-inch o.c. in two, equally spaced, staggered center rows	System 3 or 4	-67.5
SC-28.	Min. 22 ga., type B, Grade 80 steel or min. 2,500 psi structrual concrete	Min. 1.5-inch, One or more layers, any combination	Prelim. Attached	Flintlastic Poly SMS Base Sheet	3.1.1	12-inch o.c. at 4-inch lap and 12-inch o.c. in two, equally spaced, staggered center rows	System 2, 3 or 4	-112.5

TABLE 11A: STRUCTURAL CONCRETE DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE A-1: BONDED INSULATION, BONDED ROOF COVER
REFER TO TABLE 8A FOR VAPOR BARRIER OPTIONS

SYSTEM NO.	DECK (4.1.2)	PRIMER	BASE INSULATION LAYER		TOP INSULATION LAYER		ROOF COVER (3.1.4)	MDP (PSF)
			TYPE	ATTACH (3.1.3)	TYPE	ATTACH (3.1.3)		
CONVENTIONAL SYSTEMS:								
C-1.	Structural concrete	FlintPrime QD	Min. 2-inch ACFoam II, ENRGY 3 or H-Shield	hot asphalt	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	hot asphalt	System 1, 2, 3 or 4	-225.0
C-2.	Structural concrete	FlintPrime QD	Min. 1.5-inch ACFoam II, ENRGY 3 or H-Shield	hot asphalt	Min. 0.5-inch Structodek High Density Fiberboard	hot asphalt	System 1, 2, 3 or 4	-227.0
C-3.	Structural concrete	FlintPrime QD	Min. 1.5-inch ACFoam II, ENRGY 3 or H-Shield	hot asphalt	Min. 0.25-inch DensDeck or DensDeck Prime	hot asphalt	System 1, 2, 3 or 4	-240.0
C-4.	Structural concrete	FlintPrime QD	Min. 1.5-inch ACFoam II	hot asphalt	Min. ¾-inch FescoBoard (homogeneous)	hot asphalt	System 1, 2, 3 or 4	-412.0
C-5.	Structural concrete	FlintPrime QD	Min. 1.5-inch ACFoam II	hot asphalt	Min. 0.5-inch DuraBoard (homogeneous)	hot asphalt	System 1, 2, 3 or 4	-430.0
C-6.	Structural concrete	None	Min. 1.5-inch ACFoam II, ENRGY 3 or H-Shield	M-OSFA	Min. 0.5-inch Structodek High Density Fiberboard	M-OSFA	System 1, 2, 3 or 4	-127.5
C-7.	Structural concrete	None	Min. 1.5-inch ACFoam II, ENRGY 3 or H-Shield	M-PG1	Min. 0.5-inch Structodek High Density Fiberboard	M-PG1	System 1, 2, 3 or 4	-180.0
C-8.	Structural concrete	None	Min. 1.5-inch ACFoam II, ENRGY 3 or H-Shield	M-OSFA	Min. 0.25-inch DensDeck	M-OSFA	System 1, 2, 3 or 4	-232.5
C-9.	Structural concrete	None	Min. 1.5-inch ACFoam II, ENRGY 3 or H-Shield	M-PG1	Min. 0.25-inch DensDeck	M-PG1	System 1, 2, 3 or 4	-240.0
C-10.	Structural concrete	None	Min. 2-inch ACFoam II, ENRGY 3 or H-Shield	M-OSFA or M-PG1	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	M-OSFA or M-PG1	System 1, 2, 3 or 4	-225.0
C-11.	Structural concrete	None	Min. 1.5-inch ACFoam II, ENRGY 3 or H-Shield	M-PG1-EF-ECO	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	M-PG1-EF-ECO	System 1, 2, 3 or 4	-225.0
C-12.	Structural concrete	None	Min. 1.5-inch ACFoam II, ENRGY 3 or H-Shield	M-PG1-EF-ECO	Min. 0.25-inch DensDeck Prime	M-PG1-EF-ECO	System 1, 2, 3 or 4	-240.0
C-13.	Structural concrete	None	Min. 2-inch ACFoam II, ENRGY 3 or H-Shield	Insta Stik	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	Insta Stik	System 1, 2, 3 or 4	-225.0
C-14.	Structural concrete	None	Min. 1.5-inch ACFoam II, ENRGY 3 or H-Shield	OB500	Min. 0.5-inch Structodek High Density Fiberboard	OB500	System 1, 2, 3 or 4	-120.0
C-15.	Structural concrete	None	Min. 1.5-inch thick ACFoam II	OB500	Min. 0.25-inch DensDeck or DensDeck Prime	OB500	System 1, 2, 3 or 4	-150.0
C-16.	Structural concrete	None	Min. 2-inch ACFoam II, ENRGY 3 or H-Shield	OB500	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	OB500	System 1, 2, 3 or 4	-225.0
C-17.	Structural concrete	None	Min. 1.0-inch H-Shield, H-Shield CG, ENRGY 3 or min. 1.3-inch ACFoam III, Min. 1.5-inch Multi-Max FA3 or Ultra-Max	Polyset CRA	Min. 0.5-inch Structodek High Density Fiberboard or DuraBoard (homogeneous) or min. 1.5-inch FescoBoard (laminated)	Polyset CRA	System 1, 2,3 or 4	-180.0
C-18.	Structural concrete	None	Min. 1.0-inch H-Shield, H-Shield CG, ENRGY 3 or min. 1.3-inch ACFoam III, Min. 1.5-inch Multi-Max FA3 or Ultra-Max	Polyset CRA	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	Polyset CRA	System 1, 2, 3 or 4	-225.0

TABLE 11A: STRUCTURAL CONCRETE DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF) SYSTEM TYPE A-1: BONDED INSULATION, BONDED ROOF COVER REFER TO TABLE 8A FOR VAPOR BARRIER OPTIONS								
SYSTEM NO.	DECK (4.1.2)	PRIMER	BASE INSULATION LAYER		TOP INSULATION LAYER		ROOF COVER (3.1.4)	MDP (PSF)
			TYPE	ATTACH (3.1.3)	TYPE	ATTACH (3.1.3)		
C-19.	Structural concrete	None	Min. 1.0-inch H-Shield, H-Shield CG, ENRGY 3 or min. 1.3-inch ACFoam III, Min. 1.5-inch Multi-Max FA3 or Ultra-Max	Polyset CRA	Min. 0.25-inch DensDeck	Polyset CRA	System 1, 2, 3 or 4	-240.0
HYBRID SYSTEMS:								
C-20.	Structural concrete	None	(Optional) Min. 1.5-inch ACFoam II or H-Shield	M-OSFA, M-PG1 or M-PG1-EF-ECO	Min. 2-inch H-Shield HD Composite CG	M-OSFA,M-PG1 or M-PG1-EF-ECO	System 5 or 6	-142.5
C-21.	Structural concrete	None	Min. 1.5-inch ACFoam II or H-Shield	M-OSFA, M-PG1 or M-PG1-EF-ECO	Min. 0.25-inch DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	M-OSFA, M-PG1 or M-PG1-EF-ECO	System 5 or 6	-217.5
C-22.	Structural concrete	None	Min. 1.5-inch ACFoam II or H-Shield	M-OSFA	(Optional) Additional layer(s) base insulation	M-OSFA	System 5 or 6	-232.5
C-23.	Structural concrete	None	Min. 1.5-inch ACFoam II or H-Shield	M-PG1	(Optional) Additional layer(s) base insulation	M-PG1	System 5 or 6	-270.0
C-24.	Structural concrete	None	(Optional) Min. 1.5-inch ACFoam II or H-Shield	M-OSFA or M-PG1, 6-inch o.c.	Min. 0.25-inch DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	M-OSFA or M-PG1, 6-inch o.c.	System 5 or 6	-315.0
C-25.	Structural concrete	None	(Optional) Min. 1.5-inch ACFoam II or H-Shield	M-OSFA or M-PG1, 6-inch o.c.	Min. 2-inch H-Shield HD Composite CG	M-OSFA or M-PG1, 6-inch o.c.	System 5 or 6	-342.5
C-26.	Structural concrete	None	Min. 1.5-inch ACFoam II or H-Shield	M-PG1-EF-ECO	(Optional) Additional layer(s) base insulation	M-PG1-EF-ECO	System 5 or 6	-247.5

TABLE 11B: STRUCTURAL CONCRETE DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF) SYSTEM TYPE F: NON-INSULATED, BONDED ROOF COVER				
SYSTEM NO.	DECK (4.1.2)	PRIMER	ROOF COVER (3.1.4)	MDP (PSF)
CONVENTIONAL SYSTEMS:				
C-27.	Structural concrete	FlintPrime QD	System 1, 2, 3 or 4	-635.0
HYBRID SYSTEMS:				
C-28.	Structural concrete	FlintPrime QD	System 5 or 6	-240.0

TABLE 12A: DECK WITH LIGHTWEIGHT INSULATING CONCRETE - NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE A-1: LWC TO DECK, BONDED INSULATION, BONDED ROOF COVER

System No.	Deck (4.1.2)	Lightweight Concrete (3.1.2)	Base Insulation Layer		Coverboard		Roof Cover (3.1.4)	MDP (psf)
			Type	Attach (3.1.3)	Type	Attach (3.1.3)		
CELCORE:								
CONVENTIONAL SYSTEMS:								
LWC-1.	Structural concrete	Min. 200 psi, min. 2-inch thick Celcore Cellular Concrete	Min. 1.0-inch H-Shield, H-Shield CG, ENRGY 3 or min. 1.3-inch ACFoam III, Min. 1.5-inch Multi-Max FA3 or Ultra-Max	Polyset CRA	Min. 0.5-inch Structodek High Density Fiberboard or DuraBoard (homogeneous) or min. 1.5-inch FescoBoard (laminated)	Polyset CRA	System 1, 2, 3 or 4	-180.0
LWC-2.	Structural concrete	Min. 200 psi, min. 2-inch thick Celcore Cellular Concrete	Min. 1.0-inch H-Shield, H-Shield CG, ENRGY 3 or min. 1.3-inch ACFoam III, Min. 1.5-inch Multi-Max FA3 or Ultra-Max	Polyset CRA	Min. 0.25-inch DensDeck, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	Polyset CRA	System 1, 2, 3 or 4	-180.0
ELASTIZELL:								
CONVENTIONAL SYSTEMS:								
LWC-3.	Structural concrete	Min. 200 psi, min. 2-inch thick Elastizell	Min. 1.5-inch thick ACFoam II	OB500	Min. 0.25-inch DensDeck or DensDeck Prime	OB500	System 1, 2, 3 or 4	-150.0
LWC-4.	Structural concrete	Min. 200 psi, min. 2-inch thick Elastizell	Min. 2-inch ACFoam II, ENRGY 3 or H-Shield	OB500	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	OB500	System 1, 2, 3 or 4	-225.0
LWC-5.	Structural concrete	Min. 200 psi, min. 2-inch thick Elastizell	Min. 1.0-inch H-Shield, H-Shield CG, ENRGY 3 or min. 1.3-inch ACFoam III, Min. 1.5-inch Multi-Max FA3 or Ultra-Max	Polyset CRA	Min. 0.5-inch Structodek High Density Fiberboard or DuraBoard (homogeneous) or min. 1.5-inch FescoBoard (laminated)	Polyset CRA	System 1, 2, 3 or 4	-180.0
LWC-6.	Structural concrete	Min. 200 psi, min. 2-inch thick Elastizell	Min. 1.0-inch H-Shield, H-Shield CG, ENRGY 3 or min. 1.3-inch ACFoam III, Min. 1.5-inch Multi-Max FA3 or Ultra-Max	Polyset CRA	Min. 0.25-inch DensDeck, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	Polyset CRA	System 1, 2, 3 or 4	-180.0

TABLE 12B: LIGHTWEIGHT CONCRETE OVER STEEL OR STRUCTURAL CONCRETE DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE E-2: NON-INSULATED, MECHANICALLY ATTACHED ANCHOR SHEET, BONDED ROOF COVER

System No.	Deck (4.1.2)	Lightweight Concrete (3.1.2)		Anchor Sheet			Roof Cover (3.1.4)	MDP (psf)
		Type	Surface Treatment	Base	Fastener (3.1.1, 4.2.2)	Spacing		
PRE-EXISTENT CELLULAR LIGHTWEIGHT CONCRETE:								
CONVENTIONAL SYSTEMS:								
LWC-7.	Min. 22 ga., Type BV, Grade 33 steel, 5 ft span or structural concrete	Min. 300 psi, min. 2-inch pre-existent cellular lightweight insulating concrete. *Note: To qualify the LWIC under this assembly, a 1.8-inch Trufast Twin Loc-Nail Assembled Fastener shall achieve an average withdrawal of 88 lbf when tested per 4.2.2*	None	Glasbase Base Sheet, All Weather/Empire Base Sheet, Flintlastic Base 20, Flintlastic Poly SMS Base Sheet or Flintglas MS Cap (inverted)	Trufast Twin Loc-Nail Assembled Fastener (min. 1.8")	9-inch o.c. at the min. 4-inch lap and 9-inch o.c. in two (2), equally spaced, staggered center rows	System 1, 2, 3 or 4	-60.0
LWC-8.	Min. 22 ga., Type BV, Grade 33 steel, 5 ft span or structural concrete	Min. 300 psi, min. 2-inch pre-existent cellular lightweight insulating concrete. *Note: To qualify the LWIC under this assembly, a 1.8-inch Trufast Twin Loc-Nail Assembled Fastener shall achieve an average withdrawal of 77 lbf when tested per 4.2.2*	None	Glasbase Base Sheet, All Weather/Empire Base Sheet, Flintlastic Base 20 or Flintlastic Poly SMS Base Sheet or Flintglas MS Cap (inverted)	Trufast Twin Loc-Nail Assembled Fastener (min. 1.8")	7-inch o.c. at the 4-inch lap and 7-inch o.c. in two, equally spaced, staggered center rows	System 1, 2, 3 or 4	-67.5

TABLE 12B: LIGHTWEIGHT CONCRETE OVER STEEL OR STRUCTURAL CONCRETE DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE E-2: NON-INSULATED, MECHANICALLY ATTACHED ANCHOR SHEET, BONDED ROOF COVER

SYSTEM NO.	DECK (4.1.2)	LIGHTWEIGHT CONCRETE (3.1.2)		ANCHOR SHEET			ROOF COVER (3.1.4)	MDP (PSF)
		TYPE	SURFACE TREATMENT	BASE	FASTENER (3.1.1, 4.2.2)	SPACING		
LWC-9.	Min. 22 ga., Type BV, Grade 33 steel, 5 ft span or structural concrete	Min. 350 psi, min. 3-inch pre-existent cellular lightweight insulating concrete. *Note: To qualify the LWIC under this assembly, a 1.8-inch Trufast FM-90 Base Sheet Fastener shall achieve an average withdrawal of 97 lbf when tested per 4.2.2*	None	Flintlastic Base 20, Flintlastic Poly SMS Base Sheet or Flintglas MS Cap (inverted)	Trufast FM-90 Base Sheet Fastener	7-inch o.c. at the 4-inch lap and 10-inch o.c. in two, equally spaced, staggered center rows	System 3 or 4	-67.5
LWC-10.	Min. 22 ga., Type BV, Grade 33 steel, 5 ft span or structural concrete	Min. 300 psi, min. 2-inch pre-existent cellular lightweight insulating concrete. *Note: To qualify the LWIC under this assembly, a 1.8-inch Trufast Twin Loc-Nail Assembled Fastener shall achieve an average withdrawal of 110 lbf when tested per 4.2.2*	None	Flintlastic Poly SMS Base Sheet	Trufast Twin Loc-Nail Assembled Fastener (min. 1.8")	9-inch o.c. at the 4-inch lap and 9-inch o.c. in two, equally spaced, staggered center rows	System 3 or 4	-75.0
HYBRID SYSTEMS:								
LWC-11.	Min. 22 ga., Type BV, Grade 33 steel, 5 ft span or structural concrete	Min. 300 psi, min. 2-inch pre-existent cellular lightweight insulating concrete. *Note: To qualify the LWIC under this assembly, a 1.8-inch Trufast Twin Loc-Nail Assembled Fastener shall achieve an average withdrawal of 88 lbf when tested per 4.2.2*	None	Glasbase Base Sheet, All Weather/Empire Base Sheet, Flintlastic Base 20 or Flintlastic Poly SMS Base Sheet	Trufast Twin Loc-Nail Assembled Fastener (min. 1.8")	9-inch o.c. at the 4-inch lap and 9-inch o.c. in two, equally spaced, staggered center rows	System 6	-60.0
LWC-12.	Min. 22 ga., Type BV, Grade 33 steel, 5 ft span or structural concrete	Min. 350 psi, min. 3-inch pre-existent cellular lightweight insulating concrete. *Note: To qualify the LWIC under this assembly, a 1.8-inch Trufast FM-90 Base Sheet Fastener shall achieve an average withdrawal of 97 lbf when tested per 4.2.2*	None	Flintlastic Base 20 or Flintlastic Poly SMS Base Sheet	Trufast FM-90 Base Sheet Fastener	7-inch o.c. at the 4-inch lap and 10-inch o.c. in two, equally spaced, staggered center rows	System 6	-67.5
LWC-13.	Min. 22 ga., Type BV, Grade 33 steel, 5 ft span or structural concrete	Min. 300 psi, min. 2-inch pre-existent cellular lightweight insulating concrete. *Note: To qualify the LWIC under this assembly, a 1.8-inch Trufast Twin Loc-Nail Assembled Fastener shall achieve an average withdrawal of 110 lbf when tested per 4.2.2*	None	Flintlastic Poly SMS Base Sheet	Trufast Twin Loc-Nail Assembled Fastener (min. 1.8")	9-inch o.c. at the 4-inch lap and 9-inch o.c. in two, equally spaced, staggered center rows	System 6	-75.0
CELCORE:								
CONVENTIONAL SYSTEMS:								
LWC-14.	Min. 22 ga., Type BV, Grade 33 steel, 5 ft span or structural concrete	Min. 300 psi, min 2-inch thick Celcore Cellular Concrete.	Celcore PVA Curing Compound	Glasbase Base Sheet, All Weather/Empire Base Sheet, Flintlastic Base 20, Flintlastic Poly SMS Base Sheet or Flintglas MS Cap (inverted)	Trufast FM-90 Base Sheet Fastener	7-inch o.c. at the 3-inch lap and 7-inch o.c. in two, equally spaced, staggered center rows	System 3 or 4	-75.0
CONCRECEL:								
CONVENTIONAL SYSTEMS:								
LWC-15.	Min. 22 ga., Type BV, Grade 80 steel, 5 ft span or structural concrete	Concrecel Bonding Agent on deck, Min. 300 psi, min 2.25-inch thick Concrecel Concrete.	None	Glasbase Base Sheet, All Weather/Empire Base Sheet, Flintlastic Base 20, Flintlastic Poly SMS Base Sheet or Flintglas MS Cap (inverted)	OMG CR Base Sheet Fastener (1.7)	7-inch o.c. at the 3-inch lap and 7-inch o.c. in two, equally spaced, staggered center rows	System 1, 2, 3 or 4	-52.5

TABLE 12B: LIGHTWEIGHT CONCRETE OVER STEEL OR STRUCTURAL CONCRETE DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE E-2: NON-INSULATED, MECHANICALLY ATTACHED ANCHOR SHEET, BONDED ROOF COVER

System No.	Deck (4.1.2)	Lightweight Concrete (3.1.2)		Anchor Sheet			Roof Cover (3.1.4)	MDP (psf)
		Type	Surface Treatment	Base	Fastener (3.1.1, 4.2.2)	Spacing		
ELASTIZELL:								
CONVENTIONAL SYSTEMS:								
LWC-16.	Min. 26 ga. steel; 5-ft span or structural concrete	Min. 200 psi, min 2-inch thick Range II Elastizell Lightweight Insulating Concrete.	None	Glasbase Base Sheet, All Weather/Empire Base Sheet, Flintlastic Base 20, Flintlastic Poly SMS Base Sheet or Flintglas MS Cap (inverted)	Trufast FM-90 Base Sheet Fastener or Twin Loc-Nail (1.8 inch)	7.5-inch o.c. at the 4-inch lap and 7.5-inch o.c. in two, equally spaced, staggered center rows	System 1, 2, 3 or 4	-30.0 (NO FBC HVHZ)
LWC-17.	Min. 22 ga., Type BV, Grade 33 steel, 5 ft span or structural concrete	Min. 200 psi, min 2-inch thick Range II Elastizell Lightweight Insulating Concrete.	None	Glasbase Base Sheet, All Weather/Empire Base Sheet, Flintlastic Base 20, Flintlastic Poly SMS Base Sheet or Flintglas MS Cap (inverted)	Trufast FM-90 Base Sheet Fastener or Twin Loc-Nail (1.8 inch)	7-inch o.c. at the 4-inch lap and 7-inch o.c. in two, equally spaced, staggered center rows	System 1, 2, 3 or 4	-45.0
HYBRID SYSTEMS:								
LWC-18.	Min. 26 ga. steel, 5-ft span or structural concrete	Min. 200 psi, min 2-inch thick Range II Elastizell Lightweight Insulating Concrete.	None	Glasbase Base Sheet, All Weather/Empire Base Sheet, Flintlastic Base 20 or Flintlastic Poly SMS Base Sheet	Trufast FM-90 Base Sheet Fastener or Twin Loc-Nail (1.8 inch)	7.5-inch o.c. at the 4-inch lap and 7.5-inch o.c. in two, equally spaced, staggered center rows	System 6	-30.0 (NO FBC HVHZ)
LWC-19.	Min. 22 ga., Type BV, Grade 33 steel, 5 ft span or structural concrete	Min. 200 psi, min 2-inch thick Range II Elastizell Lightweight Insulating Concrete.	None	Glasbase Base Sheet, All Weather/Empire Base Sheet, Flintlastic Base 20 or Flintlastic Poly SMS Base Sheet	Trufast FM-90 Base Sheet Fastener or Twin Loc-Nail (1.8 inch)	7-inch o.c. at the 4-inch lap and 7-inch o.c. in two, equally spaced, staggered center rows	System 6	-45.0
MEARLCRETE:								
CONVENTIONAL SYSTEMS:								
LWC-20.	Min. 22 ga., Type BV, Grade 33 steel, 5 ft span or structural concrete	Min. 250 psi, min 2-inch thick Mearlcrete.	None	Glasbase Base Sheet, All Weather/Empire Base Sheet, Flintlastic Base 20, Flintlastic Poly SMS Base Sheet or Flintglas MS Cap (inverted)	OMG CR Base Sheet Fastener (1.7)	7-inch o.c. at the 4-inch lap and 7-inch o.c. in two, equally spaced, staggered center rows	System 1, 2, 3 or 4	-45.0
LWC-21.	Min. 22 ga., Type BV, Grade 33 steel, 5 ft span or structural concrete	Min. 250 psi, min 2-inch thick Mearlcrete.	None	Flintlastic Poly SMS Base Sheet	OMG CR Base Sheet Fastener (1.7)	7-inch o.c. at the 4-inch lap and 7-inch o.c. in two, equally spaced, staggered center rows	System 1, 2, 3 or 4	-52.5
LWC-22.	Min. 22 ga., Type BV, Grade 33 steel, 5 ft span or structural concrete	Min. 300 psi, min 2-inch thick Mearlcrete.	None	Glasbase Base Sheet, All Weather/Empire Base Sheet, Flintlastic Base 20, Flintlastic Poly SMS Base Sheet or Flintglas MS Cap (inverted)	OMG CR Base Sheet Fastener (1.7)	7-inch o.c. at the 4-inch lap and 7-inch o.c. in two, equally spaced, staggered center rows	System 3 or 4	-52.5

TABLE 13A: CEMENTITIOUS WOOD FIBER DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE A-1: BONDED INSULATION, BONDED ROOF COVER

System No.	Deck (4.1.2)	Base Insulation Layer		Top Insulation Layer		Roof Cover (3.1.4)	MDP (psf)
		Type	Attach (3.1.3)	Type	Attach (3.1.3)		
Conventional Systems:							
CWF-1.	Existing Tectum (reroof only)	Min. 1.5-inch ACFoam II, ENRGY 3 or Multi-Max FA3	OB500	Min. 0.5-inch Structodek High Density Fiberboard or min. 0.25-inch DensDeck, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	OB500	System 1, 2, 3 or 4	-45.0
CWF-2.	Tectum	Min. 1.0-inch H-Shield, H-Shield CG, ENRGY 3 or min. 1.3-inch ACFoam III, Min. 1.5-inch Multi-Max FA3 or Ultra-Max	Polyset CRA	Min. 0.5-inch Structodek High Density Fiberboard or DuraBoard (homogeneous) or min. 1.5-inch FescoBoard (laminated), min. 0.25-inch DensDeck, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	Polyset CRA	System 1, 2, 3 or 4	-52.5
Hybrid Systems:							
CWF-3.	Existing Tectum (reroof only)	Min. 1.5-inch ACFoam II, ENRGY 3 or Multi-Max FA3	OB500	Min. 0.25-inch DensDeck or DensDeck Prime	OB500	System 5 or 6	-30.0 (NO FBC HVHZ)
CWF-4.	Existing Tectum (reroof only)	Min. 1.5-inch ACFoam II, ENRGY 3 or Multi-Max FA3	OB500	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	OB500	System 5 or 6	-45.0
CWF-5.	Tectum	Min. 1.0-inch H-Shield, H-Shield CG, ENRGY 3 or min. 1.3-inch ACFoam III, Min. 1.5-inch Multi-Max FA3 or Ultra-Max	Polyset CRA	Min. 0.25-inch DensDeck or DensDeck Prime	Polyset CRA	System 5 or 6	-30.0 (NO FBC HVHZ)
CWF-6.	Tectum	Min. 1.0-inch H-Shield, H-Shield CG, ENRGY 3 or min. 1.3-inch ACFoam III, Min. 1.5-inch Multi-Max FA3 or Ultra-Max	Polyset CRA	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	Polyset CRA	System 5 or 6	-45.0

TABLE 13B: CEMENTITIOUS WOOD FIBER DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF) OR RECOVER
SYSTEM TYPE B-3: MECHANICALLY ATTACHED ANCHOR SHEET, BONDED INSULATION, BONDED ROOF COVER

System No.	Deck (4.1.2)	Anchor Sheet			Base Insulation Layer		Top Insulation Layer		Roof Cover (3.1.4)	MDP (psf)
		Type	Fastener (3.1.1, 4.2.2)	Attach (3.1.3)	Type	Attach (3.1.3)	Type	Attach (3.1.3)		
Conventional Systems:										
CWF-7.	Tectum	Glasbase Base Sheet, All Weather/Empire Base Sheet, Flintlastic Base 20, Flintlastic Poly SMS Base Sheet or Flintglas MS Cap (inverted)	Trufast Twin Loc-Nail Assembled Fastener (Field W/D > 80 lbf)	6-inch o.c. at the 4-inch lap and 10-inch o.c. in two (2), equally spaced, staggered center rows	Min. 1.5-inch ACFoam II, ENRGY 3 or Multi-Max FA3	Hot asphalt	Min. 0.75-inch FescoBoard (homogeneous) or min. 0.5-inch Structodek High Density Fiberboard	Hot asphalt	System 4	-60.0
CWF-8.	Tectum	Glasbase Base Sheet, All Weather/Empire Base Sheet, Flintlastic Base 20, Flintlastic Poly SMS Base Sheet or Flintglas MS Cap (inverted)	Trufast Twin Loc-Nail Assembled Fastener (Field W/D > 69 lbf)	7-inch o.c. at the 4-inch lap and 7-inch o.c. in two (2), equally spaced, staggered center rows	Min. 1.5-inch ACFoam II, ENRGY 3 or Multi-Max FA3	Hot asphalt	Min. 0.75-inch FescoBoard (homogeneous) or min. 0.5-inch Structodek High Density Fiberboard	Hot asphalt	System 4	-60.0
Hybrid Systems:										
CWF-9.	Tectum	Glasbase Base Sheet, All Weather/Empire Base Sheet, Flintlastic Base 20, Flintlastic Poly SMS Base Sheet or Flintglas MS Cap (inverted)	Trufast Twin Loc-Nail Assembled Fastener (Field W/D > 80 lbf)	6-inch o.c. at the 4-inch lap and 10-inch o.c. in two (2), equally spaced, staggered center rows	Min. 1.5-inch ACFoam II, ENRGY 3 or Multi-Max FA3	Hot asphalt	(Optional) Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	Hot asphalt	System 6	-60.0
CWF-10.	Tectum	Glasbase Base Sheet, All Weather/Empire Base Sheet, Flintlastic Base 20, Flintlastic Poly SMS Base Sheet or Flintglas MS Cap (inverted)	Trufast Twin Loc-Nail Assembled Fastener (Field W/D > 69 lbf)	7-inch o.c. at the 4-inch lap and 7-inch o.c. in two (2), equally spaced, staggered center rows	Min. 1.5-inch ACFoam II, ENRGY 3 or Multi-Max FA3	Hot asphalt	(Optional) Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	Hot asphalt	System 6	-60.0

BACK TO TOP
LINK TO TOP OF ATTACHMENT REQUIREMENTS

TABLE 13C: CEMENTITIOUS WOOD FIBER DECKS – REROOF (TEAR-OFF) OR RECOVER
SYSTEM TYPE C-1: MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER

System No.	Deck (4.1.2)	Base Insulation Layer (3.1.2)	Top Insulation Layer			Roof Cover (3.1.4)	MDP (psf)
			Type	Fastener (3.1.1, 4.2.2)	Attach (3.1.3)		
Conventional Systems:							
CWF-11.	Existing Tectum (reroof only)	(Optional) One or more layers, any combination, loose laid	Min. 0.5-inch Structodek High Density Fiberboard Roof Insulation	OMG Polymer GypTec with 3" GypTec Plate	1 per 2.0 ft^2	System 1, 2, 3 or 4	-45.0*
CWF-12.	Existing Tectum (reroof only)	(Optional) One or more layers, any combination, loose laid	Min. 0.25-inch DensDeck or DensDeck Prime	OMG Polymer GypTec with 3" GypTec Plate	1 per 1.8 ft^2	System 1, 2, 3 or 4	-45.0*
CWF-13.	Existing Tectum (reroof only)	(Optional) One or more layers, any combination, loose laid	Min. 0.5-inch Structodek High Density Fiberboard Roof Insulation, min. 0.25-inch DensDeck or DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	Trufast Twin Loc-Nail Assembled Fastener (minimum 1-inch embedment into deck)	1 per 2.0 ft^2	System 1, 2, 3 or 4	-45.0*

TABLE 13D: CEMENTITIOUS WOOD FIBER DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF) OR RECOVER
SYSTEM TYPE E-2: NON-INSULATED, MECHANICALLY ATTACHED ANCHOR SHEET, BONDED ROOF COVER

System No.	Deck (4.1.2)	Anchor Sheet			Roof Cover (3.1.4)	MDP (psf)
		Type	Fastener (3.1.1, 4.2.2)	Spacing		
Conventional Systems:						
CWF-14.	Tectum	Glasbase Base Sheet, All Weather/Empire Base Sheet, Flintlastic Base 20, Flintlastic Poly SMS Base Sheet or Flintglas MS Cap (inverted)	Trufast Twin Loc-Nail Assembled Fastener (Field W/D > 80 lbf)	6-inch o.c. at the 4-inch lap and 10-inch o.c. in two (2), equally spaced, staggered center rows	System 3 or 4	-60.0
CWF-15.	Tectum	Glasbase Base Sheet, All Weather/Empire Base Sheet, Flintlastic Base 20, Flintlastic Poly SMS Base Sheet or Flintglas MS Cap (inverted)	Trufast Twin Loc-Nail Assembled Fastener (Field W/D > 77 lbf)	7-inch o.c. at the 4-inch lap and 7-inch o.c. in two (2), equally spaced, staggered center rows	System 3 or 4	-67.5

TABLE 14A: GYPSUM DECKS – REROOF (TEAR-OFF)
SYSTEM TYPE A-1: BONDED INSULATION, BONDED ROOF COVER

System No.	Deck (4.1.2)	Base Insulation Layer		Top Insulation Layer		Roof Cover (3.1.4)	MDP (psf)
		Type	Attach (3.1.3)	Type	Attach (3.1.3)		
Conventional Systems:							
G-1.	Existing gypsum deck	Min. 1.5-inch ACFoam II, ENRGY 3 or H-Shield	M-OSFA	Min. 0.5-inch Structodek High Density Fiberboard	M-OSFA	System 1, 2, 3 or 4	-127.5
G-2.	Existing gypsum deck	Min. 1.5-inch ACFoam II, ENRGY 3 or H-Shield	M-OSFA	Min. 0.25-inch DensDeck	M-OSFA	System 1, 2, 3 or 4	-232.5
G-3.	Existing gypsum deck	Min. 2-inch ACFoam II, ENRGY 3 or H-Shield	M-OSFA	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	M-OSFA	System 1, 2, 3 or 4	-202.5
G-4.	Existing gypsum deck	Min. 1.5-inch ACFoam II, ENRGY 3 or H-Shield	OB500	Min. 0.5-inch Structodek High Density Fiberboard	OB500	System 1, 2, 3 or 4	-120.0
G-5.	Existing gypsum deck	Min. 1.5-inch ACFoam II, ENRGY 3 or H-Shield	OB500	Min. 0.25-inch DensDeck, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	OB500	System 1, 2, 3 or 4	-135.0
G-6.	Existing gypsum deck	Min. 1.0-inch H-Shield, H-Shield CG, ENRGY 3 or min. 1.3-inch ACFoam III, Min. 1.5-inch Multi-Max FA3 or Ultra-Max	Polyset CRA	Min. 0.5-inch Structodek High Density Fiberboard or DuraBoard (homogeneous) or min. 1.5-inch FescoBoard (laminated)	Polyset CRA	System 1, 2, 3 or 4	-180.0
G-7.	Existing gypsum deck	Min. 1.0-inch H-Shield, H-Shield CG, ENRGY 3 or min. 1.3-inch ACFoam III, Min. 1.5-inch Multi-Max FA3 or Ultra-Max	Polyset CRA	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	Polyset CRA	System 1, 2, 3 or 4	-225.0
G-8.	Existing gypsum deck	Min. 1.0-inch H-Shield, H-Shield CG, ENRGY 3 or min. 1.3-inch ACFoam III, Min. 1.5-inch Multi-Max FA3 or Ultra-Max	Polyset CRA	Min. 0.25-inch DensDeck	Polyset CRA	System 1, 2, 3 or 4	-240.0

TABLE 14B: GYPSUM DECKS – REROOF (TEAR-OFF)
SYSTEM TYPE B-3: MECHANICALLY ATTACHED ANCHOR SHEET, BONDED INSULATION, BONDED ROOF COVER

System No.	Deck (4.1.2)	Anchor Sheet			Base Insulation Layer		Top Insulation Layer		Roof Cover (3.1.4)	MDP (psf)
		Type	Fastener (3.1.1, 4.2.2)	Attach (3.1.3)	Type	Attach (3.1.3)	Type	Attach (3.1.3)		
Conventional Systems:										
G-9.	Existing gypsum deck	All Weather/Empire Base Sheet, Flintlastic Poly SMS Base Sheet or Flintglas MS Cap (inverted)	Trufast FM-75 or FM-90 Base Sheet Fastener or Twin Loc-Nail (Field W/D > 100 lbf)	9-inch o.c. at the 4-inch lap and 18-inch o.c. in two (2), equally spaced, staggered center rows	(Optional) Min. 1.5-inch ACFoam II, ENRGY 3 or Multi-Max FA3	hot asphalt	Min. ¾-inch FescoBoard (homogeneous) or min. 0.5-inch Structodek High Density Fiberboard	hot asphalt	System 1, 2, 3 or 4	-45.0*
G-10.	Existing gypsum deck	Glasbase Base Sheet, All Weather/Empire Base Sheet, Flintlastic Base 20, Flintlastic Poly SMS Base Sheet or Flintglas MS Cap (inverted)	Trufast Twin Loc-Nail (Field W/D > 80 lbf)	6-inch o.c. at the 4-inch lap and 10-inch o.c. in two (2), equally spaced, staggered center rows	Min. 1.5-inch ACFoam II, ENRGY 3 or Multi-Max FA3	hot asphalt	Min. 0.75-inch FescoBoard (homogeneous) or min. 0.5-inch Structodek High Density Fiberboard	hot asphalt	System 4	-60.0
G-11.	Existing gypsum deck	Glasbase Base Sheet, All Weather/Empire Base Sheet, Flintlastic Base 20, Flintlastic Poly SMS Base Sheet or Flintglas MS Cap (inverted)	Trufast Twin Loc-Nail (Field W/D > 69 lbf)	7-inch o.c. at the 4-inch lap and 7-inch o.c. in two (2), equally spaced, staggered center rows	Min. 1.5-inch ACFoam II, ENRGY 3 or Multi-Max FA3	hot asphalt	Min. ¾-inch FescoBoard (homogeneous) or min. 0.5-inch Structodek High Density Fiberboard	hot asphalt	System 4	-60.0
Hybrid Systems:										

TABLE 14B: GYPSUM DECKS – REROOF (TEAR-OFF)
SYSTEM TYPE B-3: MECHANICALLY ATTACHED ANCHOR SHEET, BONDED INSULATION, BONDED ROOF COVER

System No.	Deck (4.1.2)	Anchor Sheet			Base Insulation Layer		Top Insulation Layer		Roof Cover (3.1.4)	MDP (psf)
		Type	Fastener (3.1.1, 4.2.2)	Attach (3.1.3)	Type	Attach (3.1.3)	Type	Attach (3.1.3)		
G-12.	Existing gypsum deck	Glasbase Base Sheet, All Weather/Empire Base Sheet, Flintlastic Base 20, Flintlastic Poly SMS Base Sheet or Flintglas MS Cap (inverted)	Trufast Twin Loc-Nail (Field W/D > 80 lbf)	6-inch o.c. at the 4-inch lap and 10-inch o.c. in two (2), equally spaced, staggered center rows	Min. 1.5-inch ACFoam II, ENRGY 3 or Multi-Max FA3	hot asphalt	(Optional) Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	hot asphalt	System 6	-60.0
G-13.	Existing gypsum deck	Glasbase Base Sheet, All Weather/Empire Base Sheet, Flintlastic Base 20, Flintlastic Poly SMS Base Sheet or Flintglas MS Cap (inverted)	Trufast Twin Loc-Nail (Field W/D > 69 lbf)	7-inch o.c. at the 4-inch lap and 7-inch o.c. in two (2), equally spaced, staggered center rows	Min. 1.5-inch ACFoam II, ENRGY 3 or Multi-Max FA3	hot asphalt	(Optional) Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	hot asphalt	System 6	-60.0

TABLE 14C: GYPSUM DECKS – REROOF (TEAR-OFF)
SYSTEM TYPE C-1: MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER

System No.	Deck (4.1.2)	Base Insulation Layer (3.1.2)	Top Insulation Layer			Roof Cover (3.1.4)	MDP (psf)
			Type	Fastener (3.1.1, 4.2.2)	Attach (3.1.3)		
CONVENTIONAL SYSTEMS:							
G-14.	Existing gypsum deck	(Optional) One or more layers, any combination, loose laid	Min. 0.5-inch Structodek High Density Fiberboard Roof Insulation	OMG Polymer GypTec with 3" GypTec Plate	1 per 2.0 ft^2	System 1, 2, 3 or 4	-45.0*
G-15.	Existing gypsum deck	(Optional) One or more layers, any combination, loose laid	Min. 0.25-inch DensDeck or DensDeck Prime	OMG Polymer GypTec with 3" GypTec Plate	1 per 1.8 ft^2	System 1, 2, 3 or 4	-45.0*
G-16.	Existing gypsum deck	(Optional) One or more layers, any combination, loose laid	Min. 0.5-inch Structodek High Density Fiberboard Roof Insulation, Min. 0.25-inch DensDeck or DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	Trufast Twin Loc-Nail Assembled Fastener (minimum 1-inch embedment into deck)	1 per 2.0 ft^2	System 1, 2, 3 or 4	-45.0*

TABLE 14D: GYPSUM DECKS – REROOF (TEAR-OFF)
SYSTEM TYPE E-2: NON-INSULATED, MECHANICALLY ATTACHED ANCHOR SHEET, BONDED ROOF COVER

System No.	Deck (4.1.2)	Anchor Sheet			Roof Cover (3.1.4)	MDP (psf)
		Type	Fastener (3.1.1, 4.2.2)	Spacing		
CONVENTIONAL SYSTEMS:						
G-17.	Existing gypsum deck	All Weather/Empire Base Sheet, Flintlastic Poly SMS Base Sheet or Flintglas MS Cap (inverted)	Trufast FM-75 or FM-90 Base Sheet Fastener or Twin Loc-Nail (Field W/D > 100 lbf)	9-inch o.c. at the 4-inch lap and 18-inch o.c. in two (2), equally spaced, staggered center rows	System 1, 2, 3 or 4	-45.0*
G-18.	Existing gypsum deck	Glasbase Base Sheet, All Weather/Empire Base Sheet, Flintlastic Base 20, Flintlastic Poly SMS Base Sheet or Flintglas MS Cap (inverted)	Trufast Twin Loc-Nail (Field W/D > 80 lbf)	6-inch o.c. at the 4-inch lap and 10-inch o.c. in two (2), equally spaced, staggered center rows	System 3 or 4	-60.0
G-19.	Existing gypsum deck	Glasbase Base Sheet, All Weather/Empire Base Sheet, Flintlastic Base 20, Flintlastic Poly SMS Base Sheet or Flintglas MS Cap (inverted)	Trufast Twin Loc-Nail (Field W/D > 100 lbf)	9-inch o.c. at the 4-inch lap and 9-inch o.c. in two (2), equally spaced, staggered center rows	System 3 or 4	-67.5

TABLE 15A: RECOVER APPLICATIONS
SYSTEM TYPE A-1: BONDED INSULATION, BONDED ROOF COVER

[A] The reported MDP documents the allowable maximum design pressure of the new insulation and roof cover when installed atop the substrate, irrespective of the deck type (See 4.1.2) or performance of the substrate (See 4.2.2). The deck and substrate shall be capable of resisting the project design pressure requirements, not to exceed the noted MDP, to the satisfaction of the Authority Having Jurisdiction.

System No.	Substrate (4.1.2, 4.2.2)	Base Insulation Layer		Top Insulation Layer		Roof Cover (3.1.4)	MDP (psf)
		Type	Attach (3.1.3)	Type	Attach (3.1.3)		
Conventional Systems:							
R-1.	Existing fully-adhered BUR or modified bitumen roof cover	Min. 1.5-inch ACFoam II, ENRGY 3, H-Shield or Multi-Max FA3	hot asphalt	Min. 0.5-inch Structodek High Density Fiberboard, Min. ¾-inch FescoBoard (homogeneous) or Min. 0.5-inch DuraBoard (homogeneous), min. 0.25-inch DensDeck, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	hot asphalt	System 1, 2, 3 or 4	-105.0
R-2.	Existing fully-adhered BUR or modified bitumen roof cover	Min. 1.5-inch ACFoam II, ENRGY 3 or H-Shield	M-OSFA	Min. 0.5-inch Structodek High Density Fiberboard	M-OSFA	System 1, 2, 3 or 4	-127.5
R-3.	Existing fully-adhered BUR or modified bitumen roof cover	Min. 1.5-inch ACFoam II, ENRGY 3 or H-Shield	M-OSFA	Min. 0.25-inch DensDeck or SECUROCK Gypsum-Fiber Roof Board	M-OSFA	System 1, 2, 3 or 4	-157.5
R-4.	Existing fully-adhered BUR or modified bitumen roof cover	Min. 1.5-inch ACFoam II, ENRGY 3 or H-Shield	M-PG1	Min. 0.5-inch Structodek High Density Fiberboard, min. 0.25-inch DensDeck or SECUROCK Gypsum-Fiber Roof Board	M-PG1	System 1, 2, 3 or 4	-180.0
R-5.	Existing fully-adhered smooth- or granule-surface asphalt BUR or SBS modified bitumen or granule-surface APP modified bitumen	Min. 1.5-inch ACFoam II, ENRGY 3 or H-Shield	M-PG1-EF-ECO	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	M-PG1-EF-ECO	System 1, 2, 3 or 4	-225.0
R-6.	Existing fully-adhered smooth- or granule-surface asphalt BUR or SBS modified bitumen or granule-surface APP modified bitumen	Min. 1.5-inch ACFoam II, ENRGY 3 or H-Shield	M-PG1-EF-ECO	Min. 0.25-inch DensDeck Prime	M-PG1-EF-ECO	System 1, 2, 3 or 4	-240.0
R-7.	Existing fully-adhered BUR or modified bitumen roof cover	Min. 1.5-inch ACFoam II, ENRGY 3 or H-Shield	OB500	Min. 0.5-inch Structodek High Density Fiberboard, min. 0.25-inch DensDeck, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	OB500	System 1, 2, 3 or 4	-120.0
R-8.	Existing fully-adhered BUR or modified bitumen roof cover	Min. 1.0-inch H-Shield, H-Shield CG, ENRGY 3 or min. 1.3-inch ACFoam III, Min. 1.5-inch Multi-Max FA3 or Ultra-Max	Polyset CRA	Min. 0.5-inch Structodek High Density Fiberboard or DuraBoard (homogeneous) or min. 1.5-inch FescoBoard (laminated)	Polyset CRA	System 1, 2, 3 or 4	-180.0
R-9.	Existing fully-adhered BUR or modified bitumen roof cover	Min. 1.0-inch H-Shield, H-Shield CG, ENRGY 3 or min. 1.3-inch ACFoam III, Min. 1.5-inch Multi-Max FA3 or Ultra-Max	Polyset CRA	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	Polyset CRA	System 1, 2, 3 or 4	-225.0
R-10.	Existing fully-adhered BUR or modified bitumen roof cover	Min. 1.0-inch H-Shield, H-Shield CG, ENRGY 3 or min. 1.3-inch ACFoam III, Min. 1.5-inch Multi-Max FA3 or Ultra-Max	Polyset CRA	Min. 0.25-inch DensDeck	Polyset CRA	System 1, 2, 3 or 4	-240.0