NEMO|etc.
Certificate of Authorization #32455
353 Christian Street, Unit #13
Oxford, CT 06478
(203) 262-9245

ENGINEER **TEST** **CONSULT**

P.E. EVALUATION REPORT (PEER)

Performance Roof Systems, Inc.
A SOPREMA Group Company
4800 Dr. Martin Luther King Jr. Blvd.
Kansas City, MO 64130
(816) 921-0221

PEER-SOPPRS-008.B.R7
FL16290-R18 (HVHZ)
Date of Issuance: 06/09/2022
Revision 7: 06/11/2026

SCOPE:
This P.E. Evaluation Report (henceforth 'PEER') is issued under **F.A.C. Rule 61G20-3** and the applicable rules and regulations governing the use of construction materials in the State of Florida. The documentation submitted has been reviewed by Robert Nieminen, P.E. for use compliance with the **8th Edition (2023) Florida Building Code, High Velocity Hurricane Zone** sections noted herein.

DESCRIPTION: Derbigum Modified Bitumen Roof Systems (HVHZ)

LABELING: Labeling shall be in accordance with the requirements of the Accredited Quality Assurance Agency noted herein.

CONTINUED COMPLIANCE: This PEER is valid until such time as the named product(s) changes, the referenced Quality Assurance or production facility location(s) changes, or Code provisions that relate to the product(s) change. Acceptance of our PEERs by the named client constitutes agreement to notify NEMO ETC, LLC of any changes to the product(s), the Quality Assurance or the production facility location(s). NEMO ETC, LLC requires a complete review of its PEER relative to updated Code requirements with each Code Cycle. Reference is made to the NEMO|etc. Directory of P.E. Evaluations to ascertain the status and/or current version of this PEER. If the PEER is not listed at the Nemo Directory, then it is no longer valid.

ADVERTISEMENT: "NEMO P.E. Evaluated" may be displayed in advertising literature. If any portion of the PEER is displayed, then it shall be in its entirety.

INSPECTION: Upon request, a copy of this entire PEER shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This PEER consists of pages 1 through 6, plus 40-pages of Appendix.

Prepared by:

Digitally signed by Robert Nieminen
Date: 2026.06.12 '17:37:08 -04'00

This item has been digitally signed and sealed by Robert Nieminen, P.E.
Printed copies of this document are not considered signed and sealed, and the signature must be verified on any electronic copies.
Robert Nieminen, Florida P.E. 59166, FBC ANE1983
NEMO ETC, LLC, Florida CA #32455

ROBERT NIEMINEN
LICENSE
NO. 59166
STATE OF FLORIDA
PROFESSIONAL ENGINEER

CERTIFICATION OF INDEPENDENCE:

1. NEMO ETC, 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.
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3. Robert Nieminen, P.E. does not have nor will acquire, a financial interest in any company manufacturing or distributing products for which the PEERs are being issued.
4. Robert Nieminen, P.E. does not have, nor will acquire, a financial interest in any other entity involved in the approval process of the product.
5. This is a building code evaluation. Neither NEMO|etc. nor Robert Nieminen, P.E. are, in any way, the Designer of Record for any project on which this PEER, or previous versions thereof, is/was used for permitting or design guidance unless retained specifically for that purpose.

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ROOFING SYSTEMS EVALUATION:

1. SCOPE:

Product Category: Roofing
Sub-Category: Modified Bitumen Roof Systems
Product Approval Method: Method 1, Option D – Codified Material, Evaluation by Engineer
Compliance Statement: Derbigum Modified Bitumen Roof Systems, as produced by **Performance Roof Systems, Inc.**, have demonstrated compliance with the following sections of the **8th Edition (2023) Florida Building Code, High Velocity Hurricane Zone (HVHZ)** through testing in accordance with the following Standards. Compliance is subject to the Installation Requirements and Limitations of Use set forth herein.

2. STANDARDS:

SECTION	PROPERTY	STANDARD
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
TAS 110	Material standard	ASTM D6162, D6163, D6164, D6222, D6223, D6298, D6509

3. REFERENCES:

ENTITY	EXAMINATION	REFERENCE	DATE
NEMO (TST6049)	ASTM D6222	4q-PRS-23-SSMBB-01.A	06/04/24
NEMO (TST6049)	ASTM D6222	4q-PRS-SSMBB-004.A	05/27/26
NEMO (TST6049)	ASTM D6222/G155	4q-PRS-SSMBB-004.B.R1	06/02/26
PRI-CMT (TST5878)	ASTM D6222/G155	691T001	04/03/20
PRI-CMT (TST5878)	ASTM D6223/G155	691T002	04/03/20
PRI-CMT (TST5878)	ASTM D6223/G155	691T003	04/03/20
PRI-CMT (TST5878)	ASTM D6509	691T0017	09/15/21
PRI-CMT (TST5878)	ASTM D6509	691T0016	09/16/21
PRI-CMT (TST5878)	ASTM D6222/G155	691T0018	10/01/21
PRI-CMT (TST5878)	ASTM D6223/G155	691T0020	10/01/21
PRI-CMT (TST5878)	ASTM D6223/G155	691T0019	11/30/21
PRI-CMT (TST5878)	ASTM D6222/G155	691T0018	04/22/22
ERD (TST6049)	TAS 114	SC5460.08.14	08/27/14
ERD (TST6049)	TAS 114	SC11955.16	11/03/16
FM (TST1867)	FM 4470	2Y3A2.AM	02/21/97
FM (TST1867)	FM 4470	2B5A5.AM	05/14/97
FM (TST1867)	FM 4470	2B5A7.AM	03/01/99
FM (TST1867)	FM 4470	3003642	07/08/99
FM (TST1867)	FM 4470	3007274	02/07/01
FM (TST1867)	FM 4470	3009889	04/03/01
FM (TST1867)	FM 4470	3011056	07/28/03
FM (TST1867)	FM 4470	3014452	07/28/03
FM (TST1867)	FM 4470/FM 4474	3D2Q3.AM	06/23/05
FM (TST1867)	FM 4470/FM 4474	3017037	09/30/05
FM (TST1867)	FM 4470/FM 4474	3023458	07/18/06
FM (TST1867)	FM 4470/FM 4474	3028039	09/11/06
FM (TST1867)	FM 4470/FM 4474	3036067	01/04/10
FM (TST1867)	FM 4470/FM 4474	3043824	04/06/12
FM (TST1867)	FM 4470/FM 4474	3046791	06/03/13
FM (TST1867)	FM 4470/FM 4474	3044067 & 3046791	09/18/13
FM (TST1867)	FM 4470/FM 4474	3051017	02/21/14
FM (TST1867)	FM 4470/FM 4474	3051408	08/13/14
FM (TST1867)	FM 4470/FM 4474	3051281 & 3053409 LTR	11/14/14
FM (TST1867)	FM 4470/FM 4474	3059931	12/19/16
FM (TST1867)	FM 4470/FM 4474	3058967	01/10/17
FM (TST1867)	FM 4470/FM 4474	PR450261	10/22/19
FM (TST1867)	FM 4470	PR471433 (Data)	03/31/26
IRT-ARCON (TST5296)	TAS 114(J)	03-001	01/17/03

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Entity	Examination	Reference	Date
IRT-ARCON (TST5296)	TAS 114(J)	03-002	01/17/03
NEMO (TST6049)	Criticality	4i-DBM-19-SSCRT-01.A	05/22/19
NEMO (TST6049)	TAS 114	4a-DBM-19-LSWUS-01.A	10/08/19
NEMO (TST6049)	Criticality	4i-SOP-22-SSCRT-02.A.R2	05/01/23
NEMO (TST6049)	FM 4474	4a-SOP-LSWUS-003.A	12/03/24
NEMO (TST6049)	Criticality	4i-SOP-SSCRT-006.A	09/15/25
NEMO (TST6049)	Criticality	4i-SOP-SSCRT-004.A.R1	09/18/25
NEMO (TST6049)	FM 4474	4a-SOP-LSWUS-002.A.R1	09/18/25
NEMO (TST6049)	TAS 114	4a-SOP-LSWUS-010.A	04/13/26
NEMO CERT (CER13842)	NER	NER-SOP-004.A.R4	04/08/26
NEMO	Traceability	PCL-AB	07/19/23
NEMO	Traceability	PCL-ATL	07/19/23
NEMO	Traceability	PCL-HNT	07/19/23
NEMO	Traceability	PCL-SFS	08/02/23
NEMO	Traceability	SPE-SELECT	05/03/24
UL, LLC. (QUA9625)	Quality Assurance	Service Confirmation	07/02/25
UL, LLC. (QUA9625)	Quality Assurance	Florida BCIS	Current

4. Product Description:

4.1 This PEER covers **Derbigum Modified Bitumen Roof Systems** installed in accordance with **Performance Roof Systems, Inc.** published installation instructions and the Limitations of Use herein.

4.1.1 For products listed as **NEMO Certified**, consult Directory of Certified Products for allowable production location(s).

Table 1: Evaluated Membranes

Type	Product	Material Standard			Manufacturing Location
		Reference	Type	Grade	
Base Sheets	Derbibase	ASTM D6509	N/A	N/A	NEMO Certified
	Derbibase Ultra	ASTM D6509	N/A	N/A	MO
	Derbibase HV	ASTM D6509	N/A	N/A	MO
APP Base Ply Membranes	Derbigum GP	ASTM D6223	I	S	MO
	Derbigum GP-FR	ASTM D6223	I	S	MO
	Derbigum XPS	ASTM D6223	II	S	MO
	Derbigum XPS-FR	ASTM D6223	II	S	MO
APP Cap Ply Membranes	Bitutak Cold	ASTM D6222	I	S	MO
	SELECT APP POLY SANDED	ASTM D6222	I	S	MO
	Bitutak MB	ASTM D6222	I	S	MO
	SELECT APP POLY SP	ASTM D6222	I	S	MO
	Derbigum P	ASTM D6222	I	S	MO
	Bitutak Cold Mineral	ASTM D6222	I	G	MO
	SELECT APP POLY GR	ASTM D6222	I	G	MO
	Bitutak MB Mineral	ASTM D6222	I	G	MO
	SELECT APP POLY FLAM GR	ASTM D6222	I	G	MO
	Derbicolor P	ASTM D6222	I	G	MO
	Derbicolor P-FR	ASTM D6222	I	G	MO
	Derbicolor P-FR CR	ASTM D6222	I	G	MO
	Derbicolor P-FR Ultra	ASTM D6222	II	G	MO
	Derbigum GP	ASTM D6223	I	S	MO
	Derbigum GP-FR	ASTM D6223	I	S	MO
	Derbigum XPS	ASTM D6223	II	S	MO
	Derbigum XPS-FR	ASTM D6223	II	S	MO
	Derbicolor GP	ASTM D6223	I	G	MO
	Derbicolor GP-FR	ASTM D6223	I	G	MO
	Derbicolor GP-FR CR	ASTM D6223	I	G	MO
	Derbicolor XPS	ASTM D6223	II	G	MO
	Derbicolor XPS-FR	ASTM D6223	II	G	MO
	Derbicolor XPS-FR CR	ASTM D6223	II	G	MO

Table 1: Evaluated Membranes					
Type	Product	Material Standard			Manufacturing Location
		Reference	Type	Grade	
SBS Base Ply Membranes	ELASTOPHENE Flam HS	ASTM D6162	II	S	Nemo Certified
	ELASTOPHENE HS Sanded	ASTM D6162	II	S	Nemo Certified
	Derbibase SA	ASTM D6163	I	S	Nemo Certified
	ELASTOPHENE Stick	ASTM D6163	I	S	Nemo Certified
	ELASTOPHENE Flam 2.2	ASTM D6163	I	S	Nemo Certified
	SELECT SBS GLASS FLAM	ASTM D6163	I	S	Nemo Certified
	ELASTOPHENE Flam 3.0	ASTM D6163	I	S	Nemo Certified
	ELASTOPHENE PS 2.2	ASTM D6163	I	S	Nemo Certified
	ELASTOPHENE PS 3.0	ASTM D6163	I	S	Nemo Certified
	ELASTOPHENE Sanded 2.2	ASTM D6163	I	S	Nemo Certified
	ELASTOPHENE Sanded 3.0	ASTM D6163	I	S	Nemo Certified
	ELASTOPHENE SP 2.2	ASTM D6163	I	S	Nemo Certified
	ELASTOPHENE SP 3.0	ASTM D6163	I	S	Nemo Certified
	COLVENT 180 TG	ASTM D6164	I	S	Nemo Certified
	COLVENT Flam 180 TG	ASTM D6164	I	S	Nemo Certified
	Derbibase SA Ultra	ASTM D6164	I	S	Nemo Certified
	SOPRALENE Stick	ASTM D6164	I	S	Nemo Certified
	SOPRALENE 180 PS 2.2	ASTM D6164	I	S	Nemo Certified
	SOPRALENE 180 PS 3.0	ASTM D6164	I	S	Nemo Certified
	SOPRALENE 180 Sanded	ASTM D6164	I	S	Nemo Certified
	SOPRALENE 180 Sanded 2.2	ASTM D6164	I	S	Nemo Certified
	SELECT SBS POLY SANDED	ASTM D6164	I	S	Nemo Certified
	SOPRALENE 180 SP 3.0	ASTM D6164	I	S	Nemo Certified
	SOPRALENE 180 SP 3.5	ASTM D6164	I	S	Nemo Certified
	SOPRALENE Flam 180	ASTM D6164	I	S	Nemo Certified
	SELECT SBS POLY FLAM	ASTM D6164	I	S	Nemo Certified
	SOPRALENE Flam Stick	ASTM D6164	I	S	Nemo Certified
	SOPRALENE 250 Sanded	ASTM D6164	I	S	Nemo Certified
	SOPRALENE 250 SP	ASTM D6164	I	S	Nemo Certified
	SOPRALENE Flam 250	ASTM D6164	I	S	Nemo Certified
SBS Cap Ply Membranes	ELASTOPHENE Flam FR GR	ASTM D6163	I	G	Nemo Certified
	ELASTOPHENE Flam LS FR GR	ASTM D6163	I	G	Nemo Certified
	ELASTOPHENE FR GR	ASTM D6163	I	G	Nemo Certified
	ELASTOPHENE LS FR GR	ASTM D6163	I	G	Nemo Certified
	SOPRALENE 180 FR GR	ASTM D6164	I	G	Nemo Certified
	SOPRALENE Flam 180 FR GR	ASTM D6164	I	G	Nemo Certified
	SOPRALENE Flam 180 GR	ASTM D6164	I	G	Nemo Certified
	SELECT SBS POLY FLAM GR	ASTM D6164	I	G	Nemo Certified
	SOPRALENE 250 FR GR	ASTM D6164	I	G	OH
	SOPRALENE Flam 250 FR GR	ASTM D6164	I	G	OH
	SOPRALAST 50 TV ALU	ASTM D6298	I	N/A	Nemo Certified
	Derbilume FR	ASTM D6298	I	N/A	OH

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5. LIMITATIONS:

5.1 This is a building code evaluation. Neither NEMO ETC, LLC nor Robert Nieminen, P.E. are, in any way, the Designer of Record for any project on which this PEER, or previous versions thereof, is/was used for permitting or design guidance. PEERs are not to be construed as representing any attributes not specifically listed, nor are PEERs to be construed as an endorsement of the subject, or a recommendation for its use. There is no warranty by NEMO ETC, LLC or Robert Nieminen, P.E., express or implied, as to any finding or other matter in this PEER, or as to any product covered by the PEER.

5.2 This PEER is exclusively for use in High Velocity Hurricane Zone jurisdictions, as defined in FBC Chapter 2 (Broward and Miami-Dade Counties).

5.3 The evaluation herein pertains to above-deck roof components; deck-attachment details pertain to 'as-tested' conditions under **Testing Application Standard** **TAS 114, Appendix J**. Roof decks shall be in accordance with **FBC HVHZ** requirements to the satisfaction of the Authority Having Jurisdiction.

5.4 This PEER does not include evaluation of fire classification. Refer to **FBC HVHZ 1516** for requirements and limitations regarding roof assembly fire classification. Refer to **FBC 2603** for requirements and limitations concerning the use of foam plastic insulation.

5.5 This PEER does not include evaluation of roof edge termination. Refer to **Roofing Application Standard** **RAS 111** for requirements and limitations regarding edge securement for low-slope roofs.

5.6 Refer to **FBC HVHZ 1521** for requirements and limitations regarding recover installations.

5.6.1 For mechanically attached components over existing roof decks, fasteners shall be tested in the existing deck 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 **Testing Application Standard** **TAS 105**.

5.6.2 For bonded insulation or membrane over existing substrates in a re-roof (tear off) or recover installation, the existing deck or existing roof surface 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 **Testing Application Standard** **TAS 124** shall be conducted on mock-ups of the proposed new roof assembly.

5.6.3 For bonded insulation or membrane over existing substrates in a recover installation, the existing roof system shall be capable of resisting project design pressures on its own merit to the satisfaction of the Authority Having Jurisdiction, as documented through field uplift testing in accordance with **Testing Application Standard** **TAS 124**.

5.7 Refer to Appendix 1 for system attachment requirements for wind load resistance.

5.7.1 "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 **Testing Application Standard** **TAS 114** has already been applied). Refer to **FBC HVHZ 1620** and **Roofing Application Standard** **RAS 128** for determination of design wind loads.

5.7.2 For mechanically attached components, the maximum design pressure for the selected assembly shall meet or exceed at least the Zone 1 PRIME design pressure determined in accordance with **FBC HVHZ 1620** or **Roofing Application Standard** **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 **Roofing Application Standard** **RAS 117** or **RAS 137**. ***This extrapolation is not permitted for systems marked with an asterisk****.

5.7.3 For tables and/or assemblies marked with an asterisk*, the maximum design pressure (MDP) limitation shall be applicable to all roof pressure zones. Rational analysis is not permitted.

5.8 All components in the roof assembly shall have quality assurance audit in accordance with **F.A.C.** **Rule 61G20-3**. Refer to the Product Approval of the component manufacturer for components listed in Appendix 1 that are produced by a Product Manufacturer other than the report holder on Page 1 of this PEER.

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6. INSTALLATION:

Derbigum Modified Bitumen Roof Systems shall be installed in accordance with **Performance Roof Systems, Inc.** published installation instructions, subject to the Limitations of Use noted herein.

7. BUILDING PERMIT REQUIREMENTS:

As required by the Building Official or Authority Having Jurisdiction to properly evaluate the installation of this product.

8. MANUFACTURING PLANTS:

Contact the named QA entity for manufacturing facilities covered by **F.A.C. Rule 61G20-3** QA requirements. Refer to Section 4 herein for products and production locations having met codified material standards.

9. QUALITY ASSURANCE ENTITY:

UL, LLC – QUA9625: (360) 817-5512; bsai.inspections@ul.com

- THE 40-PAGES THAT FOLLOW FORM PART OF THIS PEER -

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Appendix 1: Attachment Requirements for Wind Uplift Resistance

Table	Deck	Application	Type	Description	Page
1A	Wood	New, Reroof (Tear-Off) or Recover	B-1	Mechanically Attached Base Insulation, Bonded Top Insulation, Bonded Roof Cover	15
1B	Wood	New, Reroof (Tear-Off) or Recover	C-1	Mechanically Attached Insulation, Bonded Roof Cover	16
2A	Steel	New or Reroof (Tear-Off)	A-1	Bonded Insulation, Bonded Roof Cover	17
2B	Steel or Structural Concrete	New, Reroof (Tear-Off) or Recover	B-1	Mechanically Attached Base Insulation, Bonded Top Insulation, Bonded Roof Cover	18
2C	Steel	New, Reroof (Tear-Off) or Recover	B-2	Mechanically Attached Thermal Barrier, Bonded Vapor Barrier, Insulation and Roof Cover	23
2D	Steel or Structural Concrete	New, Reroof (Tear-Off) or Recover	C-1	Mechanically Attached Insulation, Bonded Roof Cover	25
2E	Steel or Structural Concrete	New, Reroof (Tear-Off) or Recover	D-2	Insulated, Mech. Attached Base Sheet, Bonded Roof Cover	26
2F	Steel	New, Reroof (Tear-Off) or Recover	D-2	Insulated, Mechanically Attached SOPRAFIX, Bonded Roof Cover	27
3A	Structural Concrete	New or Reroof (Tear-Off)	A-1	Bonded Insulation, Bonded Roof Cover	29
3B	Structural Concrete	New, Reroof (Tear-Off) or Recover	D-2	Insulated, Mechanically Attached SOPRAFIX, Bonded Roof Cover	35
3C	Structural Concrete	New or Reroof (Tear-Off)	F	Non-Insulated, Bonded Roof Cover	35
4A	Deck with Lightweight concrete	New or Reroof (Tear-Off)	E-2	Mechanically Attached Base Sheet, Bonded Roof Cover	36
4B	Deck with Lightweight concrete	New or Reroof (Tear-Off)	E-2	Mechanically Attached SOPRAFIX, Bonded Roof Cover	36
5A	Various	Recover	A-1	Bonded Insulation, Bonded Roof Cover	39
5B	Existing LWIC or Gypsum	Reroof (Tear-Off) or Recover	B-1	Mechanically Attached Base Insulation, Bonded Top Insulation, Bonded Roof Cover	40

The following notes apply to the systems outlined herein:

1 The roof system evaluation herein pertains to above-deck roof components. Roof decks and structural members shall be in accordance with FBC HVHZ requirements to the satisfaction of the Authority Having Jurisdiction. Deck-attachment details pertain to 'as-tested' conditions under Testing Application Standard TAS 114, Appendix J.

2 Unless otherwise noted, fasteners and stress plates shall be as follows. Fastener shall be of sufficient length for the following engagements:

Fastener/Plate Options			
Deck Type	By	Parts	Minimum Engagement
Wood	Performance Roof Systems	#12 or #14 Perlok Fastener with Perlok Steel Plate or Perlok-O #12 or #14 Screw with Perlok-O 3" Ribbed Plate or with Perlok-O 3" Steel Plate	Minimum ¾-inch plywood penetration or wood plank embedment
Steel	Performance Roof Systems	#12, #14 or #15 HS Perlok Fastener with Perlok Steel Plate or Perlok-O #12 or #14 Screw with Perlok-O 3" Ribbed Plate or with Perlok-O 3" Steel Plate	Minimum ¾-inch steel penetration and engage the top flute of the steel deck
Structural Concrete	Performance Roof Systems	14 Perlok Fastener or Perlok Spike with Perlok Steel Plate or Perlok-O #14 Screw or Perlok-O CD-10 with Perlok-O 3" Ribbed Plate or with Perlok-O 3" Steel Plate	Minimum 1.25-inch embedment. Fastener installed with a pilot hole in accordance with the fastener manufacturer's published installation instructions

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

4 Minimum 200 psi, minimum 2-inch thick FBC HVHZ 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 FBC 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. If mechanical attachment to the structural deck through lightweight insulating concrete is proposed, field withdrawal resistance testing shall be performed to confirm equivalent or determine enhanced fastening patterns and density. All testing and fastening design shall be in compliance with Testing Application Standard TAS 105 and Roofing Application Standard RAS 117 and/or RAS 137. Calculations shall be prepared, signed and sealed by a qualified design professional.

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5 Preliminary insulation attachment:

5A Unless otherwise noted, use FBC HVHZ Approved roofing fasteners and plates; minimum two (2) fasteners per 4 x 4 ft board or minimum four (4) fasteners per 4 x 8 ft board

5B For systems where a vapor barrier is installed refer to Section 2.2.10.1.3 of FM Loss Prevention Data Sheet 1-29.

6 Unless otherwise noted, insulation adhesive application rates are as follows.

- ✓ If applying hot asphalt to concrete deck, deck shall be primed with ASTM D41 primer.
- ✓ Ribbon or bead width is at the time of application; the ribbons/beads shall expand as noted in the manufacturer's published instructions.
- ✓ When multiple layers(s) of insulation and/or coverboard are installed in ribbon-applied adhesive, board joints shall be staggered.
- ✓ 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.

Insulation Adhesive References					
By	FBC File or NOA	Adhesive	Reference	Minimum Rate	Note
Performance Roof Systems	N/A	Permastic	Permastic	Full coverage at 1.5 to 2.0 gal/square	
SOPREMA, Inc.	22-0929.06	DUOTACK 365	DUOTACK 365	Continuous 0.5 to 0.75-inch wide ribbons, 12-inch o.c.	
	22-0224.04	DUOTACK SPF HFO	DUOTACK SPF HFO	Continuous 2.5-3.5 wide ribbons, 12-inch o.c.	
OMG	24-0422.18	OlyBond500	OB500	Continuous ¾-inch to 1-inch wide ribbons, 12-inch o.c.	*Canister, PaceCart or SpotShot*
ALTENLOH, BRINCK & CO. U.S., INC.	24-0521.02	TRUFAST Roofing Adhesive	TRUFAST RA	Continuous 0.75 to 1.0-inch wide ribbons, 12-inch o.c.	
	24-0521.02	TRUFAST Roofing Adhesive Tanks	TRUFAST RA Tanks	Continuous 0.75 to 1.0-inch wide ribbons, 12-inch o.c.	
Generic	N/A	Hot asphalt	Hot asphalt	Full coverage at 25-30 lbs/square	

7 Unless otherwise noted, all 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 table.

MDP Limitations for Tapered Polyisocyanurate Insulations			
Adhesive	Insulation	Min. Tapered Thickness (in)	MDP (psf)
DUOTACK 365	Any polyisocyanurate listed with adhesive herein	0.5	-157.5
DUOTACK SPF HFO	Any polyisocyanurate listed with adhesive herein	1.0	-117.5
OB500	ISOGARD GL	0.5	-187.5
OB500	ENRGY 3	0.5	-315.0
OB500	Derbiboard	0.5	-487.5

8 Bonded polyisocyanurate insulation boards shall be maximum 4 x 4 ft.

9 For mechanically attached components, the maximum design pressure for the selected assembly shall meet or exceed at least the Zone 1 PRIME design pressure determined in accordance with FBC HVHZ 1620 or Roofing Application Standard RAS 128. Elevated pressure zones shall employ an attachment density designed by a qualified design professional to resist the elevated pressure criteria in accordance with Roofing Application Standard RAS 117 or RAS 137. *This extrapolation is not permitted for systems marked with an asterisk*

10 For tables and/or assemblies marked with an asterisk*, the maximum design pressure for the selected assembly shall meet or exceed critical design pressure determined in accordance with FBC Chapter 16. No rational analysis is permitted for these systems.

11 For mechanically attached components over existing decks, fasteners shall be tested in the existing deck for withdrawal resistance in accordance with Testing Application Standard TAS 105. A qualified design professional shall review the data for comparison to the minimum requirements for the system. Should the fastener resistance be less than that required, a revised fastener spacing – prepared, signed and sealed by a qualified design professional in accordance with Roofing Application Standard RAS 117 or RAS 137 – may be submitted to the Building Official for review and acceptance. For systems using Trufast Versa-Fast, the number of Versa-Fast Fasteners installed through the Versa-Fast Plate may be increased from the minimum noted in order to yield minimum required withdrawal resistance.

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12 Refer to FBC HVHZ 1521 for requirements and limitations regarding recover installations. For bonded insulation or membrane over existing substrates in a re-roof (tear off) or recover installation, the existing deck or existing roof surface 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 shall be conducted on mock-ups of the proposed new roof assembly. For bonded insulation or membrane over existing substrates in a recover installation, the existing roof system shall be capable of resisting project design pressures on its own merit to the satisfaction of the Authority Having Jurisdiction, as documented through field uplift testing in accordance with Testing Application Standard TAS 124.

12A Reference to "*Existing gravel-surfaced asphaltic built-up roof, brushed / spudded and vacuumed to remove loose gravel*" in Table 7A is intended to convey an as-tested condition whereby any loose-gravel that does not remain embedded in the asphalt flood coat after brushing and/or spudding be removed. The gravel that remains embedded in the asphalt flood coat remains.

13 For Structural Concrete Deck or Recover Applications using System Type C-1 the base insulation layer is optional and for System Type C-2, D-1 or D-2, the insulation is optional. Alternatively, an FBC HVHZ Approved insulation board or coverboard may be used as a separation layer. Board products shall be preliminarily attached prior to roof cover installation **(Note 5)**. The separator component shall be documented as meeting FBC HVHZ 1516 and, for foam plastic, FBC Chapter 26, when installed with the roof cover in Recover applications.

14 Lightweight insulating concrete (LWIC) shall be cast in accordance with FBC Section 1917 to the satisfaction of the Authority Having Jurisdiction. For systems where specific LWIC is referenced, refer to current LWIC FBC HVHZ Product Approval 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 Section 1917.4.1, Point 1.

14A 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.

As a field QA measure of the pre-existent cellular lightweight concrete:

- Compressive strength testing shall be conducted in accordance with **ASTM C513** and shall yield an average result as per the system listing.
- Field withdrawal resistance testing in accordance with **Note 11** shall yield an average result as per the system listing.
- If question exists as to wind uplift performance of the pre-existent cellular lightweight concrete, or adhesion to the LWC surface, field uplift testing in accordance with **Note 12** is recommended.

All testing shall be performed by an accredited testing agency acceptable to the Authority Having Jurisdiction

15A For bonded membrane applications, unless otherwise noted, refer to the following.

ROOF COVER: MEMBRANE / ADHESIVE COMBINATIONS			
REFER	**LAYER**	**MATERIAL**	**APPLICATION**
AA	Base Ply or Ply:	PRS Glass Base, PRS Modified Glass Base, Derbibase, Derbibase Ultra, PRS Glass Ply IV, PRS Glass Ply VI	**Hot asphalt** at 25 lbs/square.
	Ply:	Derbigum GP, Derbigum XPS	
CA	Base Ply or Ply:	PRS Glass Base, PRS Modified Glass Base, Derbibase, Derbibase Ultra, Derbibase HV, PRS Glass Ply IV, PRS Glass Ply VI, Derbigum GP, Derbigum GP-FR, Derbigum XPS, Derbigum XPS-FR	**Permastic Adhesive** at 1.5 to 2.0 gal/square.
	Ply:	Derbigum GP, Derbigum GP-FR, Derbigum XPS, Derbigum XPS-FR	
	Cap Ply:	Derbigum GP, Derbigum GP-FR, Derbigum XPS, Derbigum XPS-FR, Derbicolor GP, Derbicolor P-FR*, Derbicolor P-FR CR*, Derbicolor P-FR Ultra*, Derbicolor GP-FR, Derbicolor GP-FR CR, Derbicolor XPS, Derbicolor XPS-FR, Derbicolor XPS-FR CR, Bitutak Cold, SELECT APP POLY SANDED, Derbigum P, Bitutak Cold Mineral, SELECT APP POLY GR, Derbicolor P	
	NOTES:	***Unless otherwise noted, use of Derbicolor P-FR, Derbicolor P-FR CR or Derbicolor P-FR Ultra as a cold-applied cap membrane carries a high-end maximum design pressure (MDP) limitation of -135.0 psf.***	

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Roof Cover: Membrane / Adhesive Combinations			
Refer	**Layer**	**Material**	**Application**
APP-TA	Base Ply or Ply:	Derbibase, Derbibase Ultra, Derbibase HV, Derbigum GP, Derbigum GP-FR, Derbigum XPS, Dergigum XPS-FR, Bitutak Cold, SELECT APP POLY SANDED, Derbigum P, Bitutak MB, SELECT APP POLY SP	**Torch applied**
	Cap Ply:	Derbigum GP, Derbigum GP-FR, Derbigum XPS, Derbigum XPS-FR, Derbicolor GP, Derbicolor P-FR, Derbicolor P-FR CR, Derbicolor P-FR Ultra, Derbicolor GP-FR, Derbicolor GP-FR CR, Derbicolor XPS, Derbicolor XPS-FR, Derbicolor XPS-FR CR, Bitutak Cold, SELECT APP POLY SANDED, Derbigum P, Bitutak MB, SELECT APP POLY SP, Bitutak Cold Mineral, SELECT APP POLY GR, Derbicolor P, Bitutak MB Mineral, SELECT APP POLY FLAM GR	
SBS-TA	Cap Ply:	Derbilume FR or SOPRALAST 50 TV ALU	**Torch-applied**
SBS-SA	Base Ply:	Derbibase SA, ELASTOPHENE Stick, Derbibase SA Ultra or SOPRALENE Stick	**Self-adhering**

15B For vapor barrier applications, unless otherwise noted, refer to the following.

Vapor Barrier: Membrane / Adhesive Combinations			
Refer	**Layer**	**Material**	**Application**
SBS-CA2	Vapor Barrier Base Ply:	SOPREMA ELASTOPHENE HS Sanded, ELASTOPHENE Sanded 2.2, ELASTOPHENE Sanded 3.0, ELASTOPHENE PS 2.2✧, ELASTOPHENE PS 3.0✧, SOPRALENE 180 Sanded 2.2, SELECT SBS POLY SANDED, SOPRALENE 180 Sanded, SOPRALENE 180 PS 2.2✧, SOPRALENE 180 PS 3.0✧, SOPRALENE 250 Sanded	0.5 to 1-inch wide ribbons **SOPREMA COLPLY EF Adhesive** spaced as noted
SBS-CA3	Vapor Barrier Base Ply:	SOPREMA ELASTOPHENE HS Sanded, ELASTOPHENE Sanded 2.2, ELASTOPHENE Sanded 3.0, ELASTOPHENE PS 2.2✧, ELASTOPHENE PS 3.0✧, SOPRALENE 180 Sanded 2.2, SELECT SBS POLY SANDED, SOPRALENE 180 Sanded, SOPRALENE 180 PS 2.2✧, SOPRALENE 180 PS 3.0✧, SOPRALENE 250 Sanded	**SOPREMA COLPLY EF Adhesive** at 1.5 – 2.5 gal/square
	Vapor Barrier Cap Ply:	SOPREMA ELASTOPHENE LS FR GR, ELASTOPHENE FR GR, SOPRALENE 180 FR GR, SOPRALENE 250 FR GR	
SBS-CA4	Vapor Barrier Base Ply:	SOPREMA ELASTOPHENE HS Sanded, ELASTOPHENE Sanded 2.2, ELASTOPHENE Sanded 3.0, ELASTOPHENE PS 2.2✧, ELASTOPHENE PS 3.0✧, SOPRALENE 180 Sanded 2.2, SELECT SBS POLY SANDED, SOPRALENE 180 Sanded, SOPRALENE 180 PS 2.2✧, SOPRALENE 180 PS 3.0✧, SOPRALENE 250 Sanded	**SOPREMA COLPLY Adhesive** at 1.5 - 2 gal/square
	Vapor Barrier Cap Ply:	SOPREMA ELASTOPHENE LS FR GR, ELASTOPHENE FR GR, SOPRALENE 180 FR GR, SOPRALENE 250 FR GR	
SBS-AA	Vapor Barrier Base Ply:	SOPREMA ELASTOPHENE HS Sanded, ELASTOPHENE Sanded 2.2, ELASTOPHENE Sanded 3.0, ELASTOPHENE PS 2.2✧, ELASTOPHENE PS 3.0✧, SOPRALENE 180 Sanded 2.2, SELECT SBS POLY SANDED, SOPRALENE 180 Sanded, SOPRALENE 180 PS 2.2✧, SOPRALENE 180 PS 3.0✧, SOPRALENE 250 Sanded	**Hot asphalt** at 20-40 lbs/square
	Vapor Barrier Cap Ply:	SOPREMA ELASTOPHENE LS FR GR, ELASTOPHENE FR GR, SOPRALENE 180 FR GR, SOPRALENE 250 FR GR	
SBS-TAP	Vapor Barrier Base Ply:	SOPREMA COLVENT 180 TG, COLVENT Flam 180 TG✧	**Torch-applied**, Partial Bond
SBS-TAF	Vapor Barrier Base Ply:	SOPREMA ELASTOPHENE Flam HS✧, ELASTOPHENE Flam 2.2✧, SELECT SBS GLASS FLAM✧, ELASTOPHENE Flam 3.0✧, ELASTOPHENE SP 2.2, ELASTOPHENE SP 3.0, SOPRALENE Flam 180✧, SELECT SBS POLY FLAM✧, SOPRALENE 180 SP 3.0, SOPRALENE 180 SP 3.5, SOPRALENE Flam 250✧, SOPRALENE 250 SP 4.0	**Torch-Applied**, Full Bond
	Vapor Barrier Cap Ply:	SOPREMA ELASTOPHENE Flam LS FR GR, ELASTOPHENE Flam FR GR, SOPRALENE Flam 180 GR, SELECT SBS POLY FLAM GR, SOPRALENE Flam 180 GR 3.5, SOPRALENE Flam 180 FR GR, SOPRALENE Flam 250 FR GR	
SBS-SA1	Vapor Barrier Base Ply:	Derbibase SA, ELASTOPHENE Stick, Derbibase SA Ultra, SOPRALENE Stick or SOPREMA SOPRALENE Flam Stick✧	**Self-adhering**, Full Bond
	Vapor Barrier Cap Ply:	ELASTOPHENE Stick HR FR GR	
Notes:	Base / Ply membranes marked with an asterisk (✧) have a poly-film top surface, and require installation of a torch-applied membrane overtop.		
	Sand-surfaced membranes shall be primed with ASTM D41 primer or Derbibase SA Primer at 1 gal/sq. (0.6 l/m2) prior to application of subsequent self-adhering (SBS-SA1) membranes.		
	Sand-surfaced membranes may be (optional) primed with ASTM D41 primer 1 gal/sq. (0.6 l/m2) prior to application of subsequent cold-adhesive-applied (SBS-CA3 or SBS-CA4) or torch-applied (SBS-TAF) membranes.		
	In SBS-CA3 or SBS-TAF applications over SOPRABOARD or SOPRABOARD HS, the board may be optionally primed with Detec Systems "TruGround Conductive Primer", roller-applied at 0.4 gal/square prior to membrane installation.		

15C SOPRAFIX Installations:

For steel deck applications, SOPRAFIX base sheet shall be run with its length perpendicular to the steel deck flutes.

SOPRAFIX base sheet laps are heat or hot air welded.

Insulation is required in New Construction or Re-Roof (Tear-Off), Steel Deck applications. Insulation is optional in New Construction or Re-Roof (Tear-Off), Wood, Structural Concrete or CWF applications or Recover applications. Insulation shall not be installed atop New Construction, Lightweight Insulating Concrete Decks.

Top layer of insulation shall be preliminarily attached.

15D The following surfacing may be applied to the Cap Ply without adverse effect on the system wind load performance. Refer to current Florida Product Approval for approved Performance Roof Systems roof coatings and the Roofing Materials Directory for fire ratings associated with coating usage.

Surfacing for Performance Roof Systems Modified Bitumen Roof Systems			
Option #	**Surfacing**	**By**	**FBC HVHZ File**
SURF-1	ALSAN RS 230 Field, ALSAN Trafik RS 730 Field or ALSAN RS 260 LO Field liquid-applied, reinforced membrane, or ALSAN RS 230 Flash, ALSAN Trafik RS 730 Flash or ALSAN RS 260 LO Flash liquid-applied flashing membrane (to granule-surfaced Cap Ply only)	SOPREMA	23-1011.16
SURF-2	Flood coat of hot asphalt at 60 lbs/square followed by embedded gravel at 400 lbs/square.	N/A	N/A
SURF-3	COLPLY Adhesive at 4 gal/square followed by embedded gravel at 400 lbs/square.	SOPREMA	22-0706.01

16 **Thermal Barrier and/or Vapor Barrier Options:**

16A Steel Decks: The lesser of the MDP listings below vs. that for the selected assembly applies.

Steel Decks: Thermal Barrier / Vapor Barrier Options, Followed by Bonded Insulation									
Option #	**Thermal Barrier**				**Primer**	**Vapor Barrier (Note 15B)**		**Adhesive per Table 2A or 2B (Notes 6,7,8)**	**MDP (psf)**
	Deck (Note 1)	**Type**	**Fasten**	**Attach (Note 17)**		**Base Ply**	**Cap Ply (granule)**		
S-TB/VB-1.	Min. 22 ga., type B, Grade 33 steel	Min. 0.5-inch DensDeck or DensDeck Prime	Perlok #14 HD with Perlok 3" Metal Insulation Plate	1 per 4.0 ft²	None	SBS-CA3, SBS-CA4 or SBS-AA (sanded top surface)	None	DUOTACK 365	-45.0*
S-TB/VB-2.	Min. 22 ga., type B, Grade 33 steel	Min. 0.5-inch DensDeck or DensDeck Prime	Perlok #14 HD with Perlok 3" Metal Insulation Plate	1 per 4.0 ft²	None	(Optional) SBS-CA3	SBS-CA3	DUOTACK 365	-45.0*
S-TB/VB-3.	Min. 22 ga., type B, Grade 33 steel	Min. 0.5-inch DensDeck or DensDeck Prime	Perlok #14 HD with Perlok 3" Metal Insulation Plate	1 per 4.0 ft²	None	(Optional) SBS-CA4	SBS-CA4	DUOTACK 365	-45.0*
S-TB/VB-4.	Min. 22 ga., type B, Grade 33 steel	0.25-inch DEXcell FA Glass Mat Roof Board	Perlok #14 HD with Perlok 3" Metal Insulation Plate	1 per 4.0 ft²	None	SBS-CA3 (sanded top surface)	None	DUOTACK 365	-45.0*
S-TB/VB-5.	Min. 22 ga., type B, Grade 33 steel	0.25-inch DEXcell FA Glass Mat Roof Board	Perlok #14 HD with Perlok 3" Metal Insulation Plate	1 per 4.0 ft²	None	(Optional) SBS-CA3	SBS-CA3	DUOTACK 365	-45.0*
S-TB/VB-6.	Min. 22 ga., type B, Grade 33 steel	Min. 0.5-inch DensDeck, DensDeck Prime or SECUROCK Ultralight Coated Glass Mat Roof Board	Perlok #14 HD with Perlok 3" Metal Insulation Plate	1 per 4.0 ft²	ASTM D41 primer	SBS-TAF (sanded top surface)	None	DUOTACK 365	-45.0*
S-TB/VB-7.	Min. 22 ga., type B, Grade 33 steel	Min. 0.5-inch DensDeck, DensDeck Prime or SECUROCK Ultralight Coated Glass Mat Roof Board	Perlok #14 HD with Perlok 3" Metal Insulation Plate	1 per 4.0 ft²	ASTM D41 primer	(Optional) SBS-TAF	SBS-TAF	DUOTACK 365	-45.0*
S-TB/VB-8.	Min. 22 ga., type B, Grade 33 steel	0.25-inch DEXcell FA Glass Mat Roof Board	Perlok #14 HD with Perlok 3" Metal Insulation Plate	1 per 4.0 ft²	None	SBS-TAF (sanded top surface)	None	DUOTACK 365	-45.0*
S-TB/VB-9.	Min. 22 ga., type B, Grade 33 steel	0.25-inch DEXcell FA Glass Mat Roof Board	Perlok #14 HD with Perlok 3" Metal Insulation Plate	1 per 4.0 ft²	None	(Optional) SBS-TAF	SBS-TAF	DUOTACK 365	-45.0*
S-TB/VB-10.	Min. 22 ga., type B, Grade 33 steel	Min. 0.5-inch DensDeck, DensDeck Prime or SECUROCK Ultralight Coated Glass Mat Roof Board	Perlok #14 HD with Perlok 3" Metal Insulation Plate	1 per 4.0 ft²	Derbibase SA Primer	SOPRAVAP'R or SBS-SA1 (sanded top surface)	None	DUOTACK 365	-45.0*

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Steel Decks: Thermal Barrier / Vapor Barrier Options, Followed by Bonded Insulation									
Option #	Thermal Barrier				Primer	Vapor Barrier (Note 15B)		Adhesive per Table 2A or 2B (Notes 6,7,8)	MDP (psf)
	Deck (Note 1)	Type	Fasten	Attach (Note 17)		Base Ply	Cap Ply (Granule)		
S-TB/VB-11.	Min. 22 ga., type B, Grade 33 steel	Min. 0.5-inch DensDeck, DensDeck Prime or SECUROCK Ultralight Coated Glass Mat Roof Board	Perlok #14 HD with Perlok 3" Metal Insulation Plate	1 per 4.0 ft²	Derbibase SA Primer	(Optional) SBS-SA1	SBS-TAF	DUOTACK 365	-45.0*
S-TB/VB-12.	Min. 22 ga., type B, Grade 33 steel	0.25-inch DEXcell FA Glass Mat Roof Board	Perlok #14 HD with Perlok 3" Metal Insulation Plate	1 per 4.0 ft²	Derbibase SA Primer	SOPRAVAP'R or SBS-SA1 (sanded top surface)	None	DUOTACK 365	-45.0*
S-TB/VB-13.	Min. 22 ga., type B, Grade 33 steel	0.25-inch DEXcell FA Glass Mat Roof Board	Perlok #14 HD with Perlok 3" Metal Insulation Plate	1 per 4.0 ft²	Derbibase SA Primer	(Optional) SBS-SA1	SBS-TAF	DUOTACK 365	-45.0*
S-TB/VB-14.	22 ga., Type B, Grade 40 steel	Min. 0.5-inch DEXcell FA Glass Mat Roof Board or SECUROCK Ultralight Coated Glass Mat Roof Board or min. 7/16-inch DEXcell Cement Roof Board	DUOTACK 365	12-inch o.c.	None	SBS-AA or SBS-TAF (sanded top surface)	None	DUOTACK 365	-45.0*
S-TB/VB-15.	22 ga., Type B, Grade 40 steel	Min. 0.5-inch DEXcell FA Glass Mat Roof Board or SECUROCK Ultralight Coated Glass Mat Roof Board or min. 7/16-inch DEXcell Cement Roof Board	DUOTACK 365	12-inch o.c.	None	(Optional) SBS-TAF	SBS-TAF	DUOTACK 365	-45.0*
S-TB/VB-16.	22 ga., Type B, Grade 40 steel	Min. 0.5-inch DEXcell FA Glass Mat Roof Board or SECUROCK Ultralight Coated Glass Mat Roof Board or min. 7/16-inch DEXcell Cement Roof Board	DUOTACK 365	12-inch o.c.	ELASTOCOL Stick or Derbibase SA Primer	SOPRAVAP'R or SBS-SA1 (sanded top surface)	None	DUOTACK 365	-45.0*
S-TB/VB-17.	22 ga., Type B, Grade 40 steel	Min. 0.5-inch DEXcell FA Glass Mat Roof Board or SECUROCK Ultralight Coated Glass Mat Roof Board or min. 7/16-inch DEXcell Cement Roof Board	DUOTACK 365	12-inch o.c.	ELASTOCOL Stick or Derbibase SA Primer	(Optional) SBS-SA1	SBS-TAF	DUOTACK 365	-45.0*
S-TB/VB-18.	22 ga., Type B, Grade 40 steel	Min. 0.5-inch DensDeck Prime, DEXcell FA Glass Mat Roof Board or min. 7/16-inch DEXcell Cement Roof Board	DUOTACK 365 or DUOTACK SPF HFO	12-inch o.c.	None	(Optional) SBS-CA3	SBS-CA3	DUOTACK 365 or DUOTACK SPF HFO	-45.0*
S-TB/VB-19.	Min. 22 ga., type B, Grade 33 steel	0.5-inch DEXcell FA Glass Mat Roof Board	Perlok #14 HD with Perlok 3" Metal Insulation Plate	1 per 2.0 ft²	None	SBS-CA3 (sanded top surface)	None	DUOTACK 365	-75.0
S-TB/VB-20.	Min. 22 ga., type B, Grade 33 steel	0.5-inch DEXcell FA Glass Mat Roof Board	Perlok #14 HD with Perlok 3" Metal Insulation Plate	1 per 2.0 ft²	None	SBS-TAF (sanded top surface)	None	DUOTACK 365	-75.0
S-TB/VB-21.	Min. 22 ga., type B, Grade 33 steel	0.5-inch DEXcell FA Glass Mat Roof Board	Perlok #14 HD with Perlok 3" Metal Insulation Plate	1 per 2.0 ft²	None	(Optional) SBS-TAF	SBS-TAF	DUOTACK 365	-75.0
S-TB/VB-22.	Min. 22 ga., type B, Grade 40 steel	Min. 0.5-inch DensDeck or DensDeck Prime	Perlok #14 HD with Perlok 3" Metal Insulation Plate	1 per 2.0 ft²	None	SBS-CA3, SBS-CA4 or SBS-AA (sanded top surface)	None	DUOTACK 365	-82.5
S-TB/VB-23.	Min. 22 ga., type B, Grade 40 steel	Min. 0.5-inch DEXcell FA Glass Mat Roof Board or SECUROCK Ultralight Coated Glass Mat Roof Board	Perlok #14 HD with Perlok 3" Metal Insulation Plate	1 per 2.0 ft²	None	SBS-AA (sanded top surface)	None	DUOTACK 365	-82.5
S-TB/VB-24.	Min. 22 ga., type B, Grade 40 steel	Min. 0.5-inch DensDeck, DensDeck Prime, DEXcell FA Glass Mat Roof Board or SECUROCK Ultralight Coated Glass Mat Roof Board	Perlok #14 HD with Perlok 3" Metal Insulation Plate	1 per 2.0 ft²	ASTM D41 primer	SBS-TAF (sanded top surface)	None	DUOTACK 365	-82.5
S-TB/VB-25.	Min. 22 ga., type B, Grade 40 steel	Min. 0.5-inch DensDeck, DensDeck Prime, DEXcell FA Glass Mat Roof Board or SECUROCK Ultralight Coated Glass Mat Roof Board	Perlok #14 HD with Perlok 3" Metal Insulation Plate	1 per 2.0 ft²	ASTM D41 primer	(Optional) SBS-TAF	SBS-TAF	DUOTACK 365	-82.5
S-TB/VB-26.	Min. 22 ga., type B, Grade 40 steel	Min. 0.5-inch DensDeck, DensDeck Prime, DEXcell FA Glass Mat Roof Board or SECUROCK Ultralight Coated Glass Mat Roof Board	Perlok #14 HD with Perlok 3" Metal Insulation Plate	1 per 2.0 ft²	Derbibase SA Primer	SOPRAVAP'R or SBS-SA1 (sanded top surface)	None	DUOTACK 365	-82.5

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Steel Decks: Thermal Barrier / Vapor Barrier Options, Followed by Bonded Insulation									
Option #	Thermal Barrier				Primer	Vapor Barrier (Note 15B)		Adhesive per Table 2A or 2B (Notes 6,7,8)	MDP (psf)
	Deck (Note 1)	Type	Fasten	Attach (Note 17)		Base Ply	Cap Ply (Granule)		
S-TB/VB-27.	Min. 22 ga., type B, Grade 40 steel	Min. 0.5-inch DensDeck, DensDeck Prime, DEXcell FA Glass Mat Roof Board or SECUROCK Ultralight Coated Glass Mat Roof Board	Perlok #14 HD with Perlok 3" Metal Insulation Plate	1 per 2.0 ft^2	Derbibase SA Primer	(Optional) SBS-SA1	SBS-TAF	DUOTACK 365	-82.5
S-TB/VB-28.	Min. 22 ga., Type B, Grade 33 steel	Min. 0.5-inch DEXcell FA Glass Mat Roof Board	Perlok #14 HD with Perlok 3" Metal Insulation Plate	1 per 2.0 ft^2	Derbibase SA Primer	SOPRAVAP'R	None	TRUFAST RA	-82.5
S-TB/VB-29.	22 ga., Type B, Grade 40 steel	Min. 0.5-inch DEXcell FA Glass Mat Roof Board or SECUROCK Ultralight Coated Glass Mat Roof Board or min. 7/16-inch DEXcell Cement Roof Board	DUOTACK 365	6-inch o.c.	None	SBS-AA or SBS-TAF (sanded top surface)	None	DUOTACK 365	-127.5
S-TB/VB-30.	22 ga., Type B, Grade 40 steel	Min. 0.5-inch DEXcell FA Glass Mat Roof Board or SECUROCK Ultralight Coated Glass Mat Roof Board or min. 7/16-inch DEXcell Cement Roof Board	DUOTACK 365	6-inch o.c.	None	(Optional) SBS-TAF	SBS-TAF	DUOTACK 365	-127.5
S-TB/VB-31.	22 ga., Type B, Grade 40 steel	Min. 0.5-inch DEXcell FA Glass Mat Roof Board or SECUROCK Ultralight Coated Glass Mat Roof Board or min. 7/16-inch DEXcell Cement Roof Board	DUOTACK 365	6-inch o.c.	Derbibase SA Primer	SOPRAVAP'R or SBS-SA1 (sanded top surface)	None	DUOTACK 365	-127.5
S-TB/VB-32.	22 ga., Type B, Grade 40 steel	Min. 0.5-inch DEXcell FA Glass Mat Roof Board or SECUROCK Ultralight Coated Glass Mat Roof Board or min. 7/16-inch DEXcell Cement Roof Board	DUOTACK 365	6-inch o.c.	Derbibase SA Primer	(Optional) SBS-SA1	SBS-TAF	DUOTACK 365	-127.5
S-TB/VB-33.	22 ga., Type B, Grade 40 steel	Min. 0.5-inch DensDeck Prime or SECUROCK Ultralight Coated Glass Mat Roof Board	DUOTACK SPF HFO	12-inch o.c.	ELASTOCOL Stick or Derbibase SA Primer	SOPRAVAP'R or SBS-SA1 (sanded top surface)	None	DUOTACK SPF HFO	-75.0
S-TB/VB-34.	22 ga., Type B, Grade 40 steel	Min. 0.5-inch DensDeck Prime or SECUROCK Ultralight Coated Glass Mat Roof Board	DUOTACK SPF HFO	12-inch o.c.	ELASTOCOL Stick or Derbibase SA Primer	(Optional) SBS-SA1	SBS-TAF	DUOTACK SPF HFO	-75.0
S-TB/VB-35.	22 ga., Type B, Grade 40 steel	Min. 0.5-inch DEXcell FA Glass Mat Roof Board or min. 7/16-inch DEXcell Cement Roof Board	DUOTACK SPF HFO	12-inch o.c.	None	SBS-AA (sanded top surface)	None	DUOTACK SPF HFO	-75.0
S-TB/VB-36.	22 ga., Type B, Grade 40 steel	Min. 0.5-inch DEXcell FA Glass Mat Roof Board or min. 7/16-inch DEXcell Cement Roof Board	DUOTACK SPF HFO	12-inch o.c.	Derbibase SA Primer	SOPRAVAP'R	None	DUOTACK SPF HFO	-75.0
S-TB/VB-37.	22 ga., Type B, Grade 40 steel	Min. 0.5-inch SECUROCK Ultralight Coated Glass Mat Roof Board	DUOTACK SPF HFO	12-inch o.c.	ELASTOCOL 500	SBS-TAF (sanded top surface)	None	DUOTACK SPF HFO	-75.0
S-TB/VB-38.	22 ga., Type B, Grade 40 steel	Min. 0.5-inch SECUROCK Ultralight Coated Glass Mat Roof Board	DUOTACK SPF HFO	12-inch o.c.	ELASTOCOL 500	(Optional) SBS-TAF	SBS-TAF	DUOTACK SPF HFO	-75.0
S-TB/VB-39.	22 ga., Type B, Grade 40 steel	Min. 0.5-inch SECUROCK Ultralight Coated Glass Mat Roof Board	DUOTACK SPF HFO	12-inch o.c.	Derbibase SA Primer	SOPRAVAP'R	None	DUOTACK SPF HFO	-75.0
S-TB/VB-40.	22 ga., Type B, Grade 40 steel	Min. 0.5-inch SECUROCK Ultralight Coated Glass Mat Roof Board	DUOTACK SPF HFO	12-inch o.c.	ELASTOCOL Stick or Derbibase SA Primer	SBS-SA1 (sanded top surface)	None	DUOTACK SPF HFO	-75.0
S-TB/VB-41.	22 ga., Type B, Grade 40 steel	Min. 0.5-inch SECUROCK Ultralight Coated Glass Mat Roof Board	DUOTACK SPF HFO	12-inch o.c.	ELASTOCOL Stick or Derbibase SA Primer	(Optional) SBS-SA1	SBS-TAF	DUOTACK SPF HFO	-75.0
S-TB/VB-42.	22 ga., Type B, Grade 40 steel	Min. 0.5-inch DensDeck Prime	DUOTACK SPF HFO	6-inch o.c.	ELASTOCOL Stick or Derbibase SA Primer	SOPRAVAP'R or SBS-SA1 (sanded top surface)	None	DUOTACK SPF HFO, 6-inch o.c.	-127.5

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Steel Decks: Thermal Barrier / Vapor Barrier Options, Followed by Bonded Insulation									
Option #	Thermal Barrier				Primer	Vapor Barrier (Note 15B)		Adhesive per Table 2A or 2B (Notes 6,7,8)	MDP (psf)
	Deck (Note 1)	Type	Fasten	Attach (Note 17)		Base Ply	Cap Ply (granule)		
S-TB/VB-43.	22 ga., Type B, Grade 40 steel	Min. 0.5-inch DensDeck Prime	DUOTACK SPF HFO	6-inch o.c.	ELASTOCOL Stick or Derbibase SA Primer	(Optional) SBS-SA1	SBS-TAF	DUOTACK SPF HFO, 6-inch o.c.	-127.5
S-TB/VB-44.	22 ga., Type B, Grade 40 steel	Min. 0.5-inch DEXcell FA Glass Mat Roof Board or min. 7/16-inch DEXcell Cement Roof Board	DUOTACK SPF HFO	6-inch o.c.	None	SBS-AA (sanded top surface)	None	DUOTACK SPF HFO, 6-inch o.c.	-127.5
S-TB/VB-45.	22 ga., Type B, Grade 40 steel	Min. 0.5-inch DEXcell FA Glass Mat Roof Board or min. 7/16-inch DEXcell Cement Roof Board	DUOTACK SPF HFO	6-inch o.c.	Derbibase SA Primer	SOPRAVAP'R	None	DUOTACK SPF HFO, 6-inch o.c.	-127.5
S-TB/VB-46.	22 ga., Type B, Grade 40 steel	Min. 0.5-inch SECUROCK Ultralight Coated Glass Mat Roof Board	DUOTACK SPF HFO	6-inch o.c.	ELASTOCOL 500	SBS-TAF (sanded top surface)	None	DUOTACK SPF HFO, 6-inch o.c.	-127.5
S-TB/VB-47.	22 ga., Type B, Grade 40 steel	Min. 0.5-inch SECUROCK Ultralight Coated Glass Mat Roof Board	DUOTACK SPF HFO	6-inch o.c.	ELASTOCOL 500	(Optional) SBS-TAF	SBS-TAF	DUOTACK SPF HFO, 6-inch o.c.	-127.5
S-TB/VB-48.	22 ga., Type B, Grade 40 steel	Min. 0.5-inch SECUROCK Ultralight Coated Glass Mat Roof Board	DUOTACK SPF HFO	6-inch o.c.	Derbibase SA Primer	SOPRAVAP'R	None	DUOTACK SPF HFO, 6-inch o.c.	-127.5
S-TB/VB-49.	22 ga., Type B, Grade 40 steel	Min. 0.5-inch SECUROCK Ultralight Coated Glass Mat Roof Board	DUOTACK SPF HFO	6-inch o.c.	ELASTOCOL Stick or Derbibase SA Primer	SBS-SA1 (sanded top surface)	None	DUOTACK SPF HFO, 6-inch o.c.	-127.5
S-TB/VB-50.	22 ga., Type B, Grade 40 steel	Min. 0.5-inch SECUROCK Ultralight Coated Glass Mat Roof Board	DUOTACK SPF HFO	6-inch o.c.	ELASTOCOL Stick or Derbibase SA Primer	(Optional) SBS-SA1	SBS-TAF	DUOTACK SPF HFO, 6-inch o.c.	-127.5

16B Structural Concrete Decks: The lesser of the MDP listings below vs. that for the selected assembly applies.

Concrete Decks: 1-ply Vapor Barrier Options, Followed by Bonded Insulation				
Option #	Primer	Vapor Barrier (Note 15B)	Adhesive per Table 3A (Notes 6,7,8)	MDP (psf)
C-VB-1.	none	SOPRASMART XP HD 180 Sanded applied in DUOTACK 365, ribbons 12-inch o.c. (laps are torched or sealed with a hot air gun)	DUOTACK 365	-52.5
C-VB-2.	ASTM D41	SBS-CA4 (granule top surface)	DUOTACK 365	-97.5
C-VB-3.	ASTM D41	SBS-CA4 (sanded top surface)	DUOTACK 365	-120.0
C-VB-4.	none	SBS-CA2 (sanded- or granule-top-surface), ribbons 6-inch o.c.	DUOTACK 365	-120.0
C-VB-5.	(Optional) ASTM D41	SBS-CA3 (granule top surface)	DUOTACK 365	-195.0
C-VB-6.	ASTM D41	SBS-AA (granule top surface)	DUOTACK 365	-195.0
C-VB-7.	ASTM D41	SBS-TAF (granule top surface)	DUOTACK 365	-195.0
C-VB-8.	Derbibase SA Primer	SBS-SA1 (granule top surface)	DUOTACK 365	-195.0
C-VB-9.	none	SBS-CA2 (sanded- or granule-top-surface), ribbons 6-inch o.c.	DUOTACK 365 *(ribbons shall be applied perpendicular to vapor barrier adhesive ribbons)*	-207.5
C-VB-10.	ASTM D41	SBS-TAP (sanded top surface)	DUOTACK 365	-232.5
C-VB-11.	Derbibase SA Primer	SOPRAVAP'R, self-adhering	DUOTACK 365	-240.0

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Concrete Decks: 1-ply Vapor Barrier Options, Followed by Bonded Insulation				
Option #	Primer	Vapor Barrier (Note 15B)	Adhesive per Table 3A (Notes 6,7,8)	MDP (psf)
C-VB-12.	none	SBS-CA3 (sanded top surface)	DUOTACK 365	-255.0
C-VB-13.	ASTM D41	SBS-CA3 (sanded top surface)	DUOTACK 365	-270.0
C-VB-14.	ASTM D41	SBS-AA (sanded top surface)	DUOTACK 365	-270.0
C-VB-15.	Derbibase SA Primer	One or two plies Derbibase SA or Derbibase SA Ultra, self-adhering	DUOTACK 365	-315.0
C-VB-16.	ASTM D41	SBS-TAF (sanded top surface)	DUOTACK 365	-382.5
C-VB-17.	none	SBS-CA2 (sanded- or granule-top-surface), ribbons 6-inch o.c.	DUOTACK 365, 6-inch o.c.	-445.0
C-VB-18.	ALSAN RS 222, ALSAN RS 276 or AQUAFIN VAPORTIGHT COAT-SG3	Base coat of ALSAN RS 230 applied at 3.9 gal/sq. followed by ALSAN RS Fleece into the wet base coat, and top coat of ALSAN RS 230 at 1.9 gal/sq., surfaced with ALSAN RS Quartz Aggregate to refusal. Remove loose aggregate prior to insulation adhesive placement.	DUOTACK 365	-382.5
C-VB-19.	ALSAN RS 222, ALSAN RS 276 or AQUAFIN VAPORTIGHT COAT-SG3	Base coat of ALSAN RS 230 applied at 3.9 gal/sq. followed by ALSAN RS Fleece into the wet base coat, and top coat of ALSAN RS 230 at 1.9 gal/sq., surfaced with ALSAN RS Quartz Aggregate to refusal. Remove loose aggregate prior to insulation adhesive placement.	DUOTACK 365, 6-inch o.c.	-445.0
C-VB-20.	ASTM D41	SBS-CA4 (granule top surface)	DUOTACK SPF HFO	-97.5
C-VB-21.	ASTM D41	SBS-CA4 (sanded top surface)	DUOTACK SPF HFO	-120.0
C-VB-22.	ASTM D41	Derbicolor GP, Derbicolor P-FR, Derbicolor GP-FR, Derbicolor XPS, Derbicolor XPS-FR, Bitutak Cold Mineral, SELECT APP POLY GR, Derbicolor P, Bitutak MB Mineral, SELECT APP POLY FLAM GR, torch-applied	DUOTACK SPF HFO	-150.0
C-VB-23.	(Optional) ASTM D41, ELASTOCOL 500	SBS-CA3 (granule top surface)	DUOTACK SPF HFO	-195.0
C-VB-24.	ASTM D41	SBS-AA (granule top surface)	DUOTACK SPF HFO	-195.0
C-VB-25.	ASTM D41	SBS-TAF (granule top surface)	DUOTACK SPF HFO	-195.0
C-VB-26.	ELASTOCOL Stick, Derbibase SA Primer	SBS-SA1 (granule top surface)	DUOTACK SPF HFO	-195.0
C-VB-27.	(Optional) ASTM D41, ELASTOCOL 500	SBS-CA3 (sanded top surface)	DUOTACK SPF HFO	-222.5
C-VB-28.	ASTM D41	SBS-AA (sanded top surface)	DUOTACK SPF HFO	-222.5
C-VB-29.	ASTM D41	SBS-TAP or SBS-TAF (sanded top surface)	DUOTACK SPF HFO	-222.5
C-VB-30.	ELASTOCOL Stick, Derbibase SA Primer	SBS-SA1 (sanded top surface)	DUOTACK SPF HFO	-222.5
C-VB-31.	Derbibase SA Primer	SOPRAVAP'R, self-adhering	DUOTACK SPF HFO	-392.5
C-VB-32.	ASTM D41	Derbibase or Derbibase Ultra, torch-applied	hot asphalt	-75.0
C-VB-33.	ASTM D41	SBS-AA (sanded top surface)	hot asphalt	-210.0
C-VB-34.	ASTM D41	SOPRA IV, SOPRA VI, MODIFIED SOPRA G applied in hot asphalt	hot asphalt	-270.0
C-VB-35.	none	SBS-CA2 (sanded-top-surface), ribbons 6-inch o.c.	hot asphalt	-367.5
C-VB-36.	ASTM D41	SBS-TAF (sanded top surface)	hot asphalt	-367.5
C-VB-37.	ASTM D41	Derbibase, torch-applied	OB500	-77.5
C-VB-38.	ASTM D41	Bitutak Cold Mineral, SELECT APP POLY GR, Derbicolor P in Permastic Adhesive	OB500	-165.0
C-VB-39.	ASTM D41	Bitutak Cold Mineral, SELECT APP POLY GR, Derbicolor P, Bitutak MB Mineral, SELECT APP POLY FLAM GR, torch-applied	OB500	-180.0
C-VB-40.	ASTM D41	Two (2) PRS Glass Ply IV or VI in hot asphalt	OB500	-210.0
C-VB-41.	ASTM D41	Two (2) plies PRS Glass Ply IV in Permastic Adhesive	Permastic	-52.5

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Concrete Decks: 2-ply Vapor Barrier Options, Followed by Bonded Insulation					
Option #	Primer	Vapor Barrier (Note 15B)		Adhesive per Table 3A (Notes 6,7,8)	MDP (psf)
		Base Ply	Top Ply		
C-VB-42.	ASTM D41	SBS-CA4	SBS-CA4, SBS-AA or SBS-TAF (granule top surface)	DUOTACK 365	-97.5
C-VB-43.	ASTM D41	SBS-CA4	SBS-CA4 (sanded top surface)	DUOTACK 365	-120.0
C-VB-44.	none	SBS-CA2, ribbons 6-inch o.c.	SBS-CA3 or SBS-TAF (sanded- or granule-top-surface)	DUOTACK 365	-120.0
C-VB-45.	(Optional) ASTM D41	SBS-CA3	SBS-CA3, SBS-CA4, SBS-AA, SBS-TAF or SBS-SA1 (granule top surface)	DUOTACK 365	-195.0
C-VB-46.	ASTM D41	SBS-AA or SBS-TAF	SBS-CA3, SBS-CA4, SBS-AA, SBS-TAF or SBS-SA1 (granule top surface)	DUOTACK 365	-195.0
C-VB-47.	Derbibase SA Primer	SBS-SA1	SBS-CA3, SBS-CA4, SBS-AA, SBS-TAF or SBS-SA1 (granule top surface)	DUOTACK 365	-195.0
C-VB-48.	none	SBS-CA2, ribbons 6-inch o.c.	SBS-CA3 or SBS-TAF (sanded- or granule-top-surface)	DUOTACK 365 *(ribbons shall be applied perpendicular to vapor barrier adhesive ribbons)*	-207.5
C-VB-49.	ASTM D41	SBS-TAP	SBS-TAF (sanded top surface)	DUOTACK 365	-232.5
C-VB-50.	none	SBS-CA3	SBS-CA3 (sanded top surface)	DUOTACK 365	-255.0
C-VB-51.	ASTM D41	SBS-CA3	SBS-CA3 (sanded top surface)	DUOTACK 365	-270.0
C-VB-52.	ASTM D41	BP-AA	BP-AA	DUOTACK 365	-270.0
C-VB-53.	ASTM D41	SBS-AA	SBS-AA (sanded top surface)	DUOTACK 365	-270.0
C-VB-54.	Derbibase SA Primer	SBS-SA1	SBS-SA1 (sanded top surface)	DUOTACK 365	-315.0
C-VB-55.	ASTM D41	SBS-TAF	SBS-TAF (sanded top surface)	DUOTACK 365	-382.5
C-VB-56.	none	SBS-CA2, ribbons 6-inch o.c.	SBS-CA3 (sanded- or granule-top-surface)	DUOTACK 365, 6-inch o.c.	-382.5
C-VB-57.	none	SBS-CA2, ribbons 6-inch o.c.	SBS-TAF (sanded- or granule-top-surface)	DUOTACK 365, 6-inch o.c.	-445.0
C-VB-58.	ASTM D41	SBS-AA	SBS-AA (sanded top surface)	hot asphalt	-210.0
C-VB-59.	ASTM D41	BP-AA	BP-AA	hot asphalt	-270.0
C-VB-60.	none	SBS-CA2, ribbons 6-inch o.c.	SBS-CA3 or SBS-TAF (sanded-top-surface)	hot asphalt	-367.5
C-VB-61.	ASTM D41	SBS-TAF	SBS-TAF (sanded top surface)	hot asphalt	-367.5
Note:	***Top surfaces of membranes having a sand finish shall be primed with ASTM D41 primer or Derbibase SA Primer prior to application of subsequent self-adhering membranes.***				

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16C Decks followed by Vapor Barrier followed by Lightweight Concrete (LWC): The lesser of the MDP listings below vs. that for the selected assembly from the Lightweight Concrete tables applies:

Deck Followed by Vapor Barrier followed by LWC per LWC System Tables								
Option #	Deck (Note 1)	Substrate Board			Primer	Vapor Barrier (Note 15B)		MDP (psf)
		Type	Fastener (Note 11) or Adhesive (Note 6)	Attach		Base Ply	Cap Ply	
C-VB-LWC-1.	Structural concrete	None	N/A	N/A	Derbibase SA Primer	One or two plies Derbibase SA or Derbibase SA Ultra, self-adhering	None	-60.0
C-VB-LWC-2.	Structural concrete	None	N/A	N/A	None	SBS-CA3 (sanded-top-surface)	None	-255.0
C-VB-LWC-3.	Structural concrete	None	N/A	N/A	None	(Optional) SBS-CA3	SBS-CA3 (sanded- or granule-top-surface)	-255.0
C-VB-LWC-4.	Structural concrete	None	N/A	N/A	ASTM D41	SBS-CA3 (sanded-top-surface)	None	-270.0
C-VB-LWC-5.	Structural concrete	None	N/A	N/A	ASTM D41	(Optional) SBS-CA3	SBS-CA3 (sanded- or granule-top-surface)	-270.0
C-VB-LWC-6.	Structural concrete	None	N/A	N/A	ASTM D41	SBS-TAF (sanded-top-surface)	None	-367.5
C-VB-LWC-7.	Structural concrete	None	N/A	N/A	ASTM D41	(Optional) SBS-TAF	SBS-TAF (sanded- or granule-top-surface)	-367.5
C-VB-LWC-8.	Structural concrete	None	N/A	N/A	None	SBS-CA2, ribbons 6-inch o.c.	SBS-CA3 (sanded- or granule-top-surface)	-382.5
C-VB-LWC-9.	Structural concrete	None	N/A	N/A	None	SBS-CA2 (sanded- or granule-top-surface), ribbons 6-inch o.c.	None	-445.0
C-VB-LWC-10.	Structural concrete	None	N/A	N/A	None	SBS-CA2, ribbons 6-inch o.c.	SBS-TAF (sanded- or granule-top-surface)	-445.0
CWF-VB-LWC-1.	Cementitious Wood Fiber	Min. 0.125-inch SOPRABOARD or SOPRABOARD HS	Twin Loc-Nail (1.8-inch)	1 per 1.8 ft^2	None	SBS-CA3, SBS-AA or SBS-TAF	(Optional) SBS-CA3, SBS-AA or SBS-TAF	-45.0*
CWF-VB-LWC-2.	Cementitious Wood Fiber	Min. 0.125-inch SOPRABOARD or SOPRABOARD HS	Twin Loc-Nail (1.8-inch)	1 per 1.0 ft^2	None	SBS-CA3, SBS-AA or SBS-TAF	(Optional) SBS-CA3, SBS-AA or SBS-TAF	-67.5
CWF-VB-LWC-3.	Cementitious Wood Fiber	Min. 0.125-inch SOPRABOARD or SOPRABOARD HS	DUOTACK 365 or DUOTACK SPF HFO	ribbons 6-inch o.c.	None	SBS-CA3, SBS-AA or SBS-TAF	(Optional) SBS-CA3, SBS-AA or SBS-TAF	-272.0
GYP-VB-LWC-1.	Existing gypsum	None	N/A	N/A	None	SBS-CA2, ribbons 6-inch o.c.	SBS-CA3 (sanded- or granule-top-surface)	-382.5
GYP-VB-LWC-2.	Existing gypsum	None	N/A	N/A	None	SBS-CA2 (sanded- or granule-top-surface), ribbons 6-inch o.c.	None	-445.0
GYP-VB-LWC-3.	Existing gypsum	None	N/A	N/A	None	SBS-CA2, ribbons 6-inch o.c.	SBS-TAF (sanded- or granule-top-surface)	-445.0

16D For System Types B-1, B-2, C-1, C-2, D-1 or D-2, SOPRAVAP'R 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.

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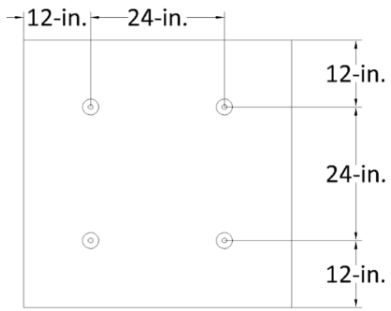
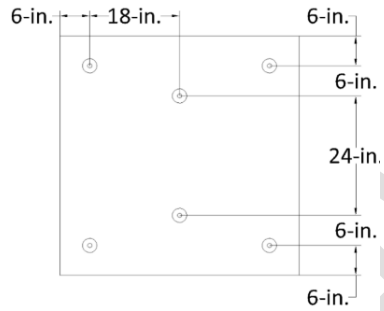
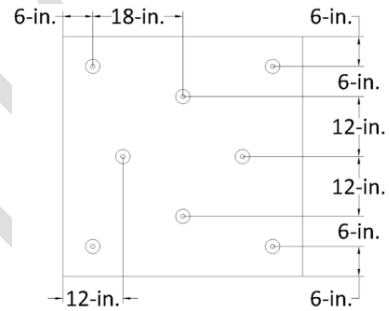
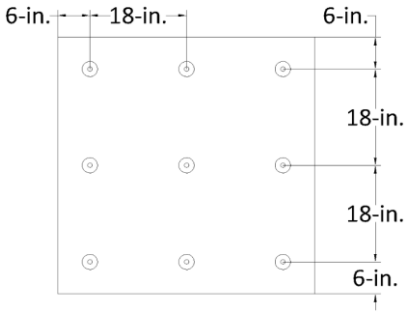
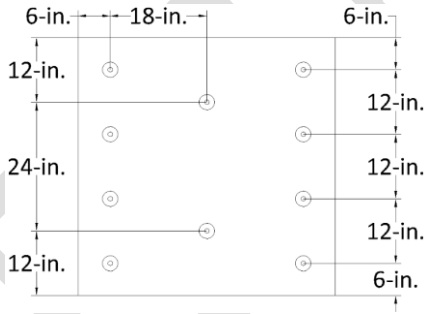
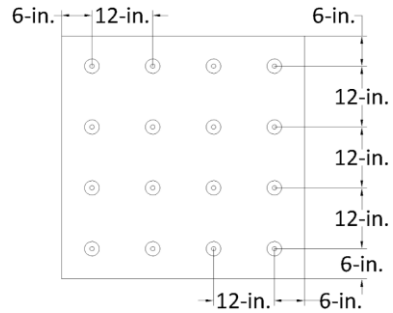
17 Unless otherwise noted, insulation or coverboard attachment patterns for Type B-1, Type B-2 and Type C-1 systems are as outlined below.

INSULATION ATTACHMENT PATTERNS – 4X4 FT BOARDS		
 **1 per 4.0 ft² (4 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 1.6 ft² (10 per board)**

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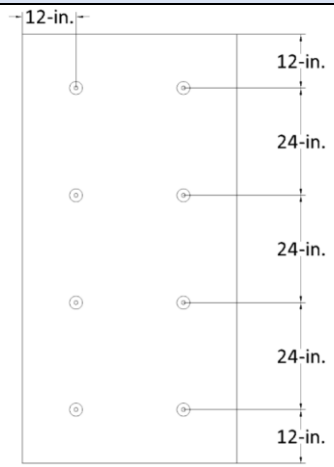
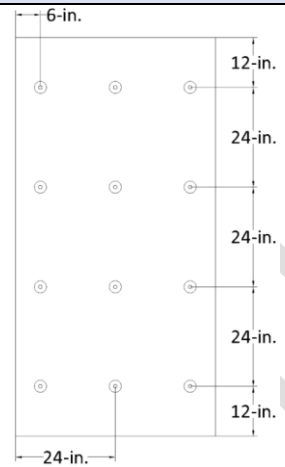
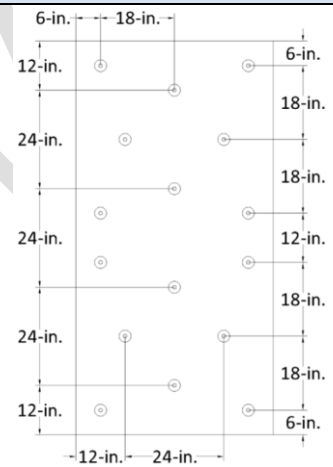
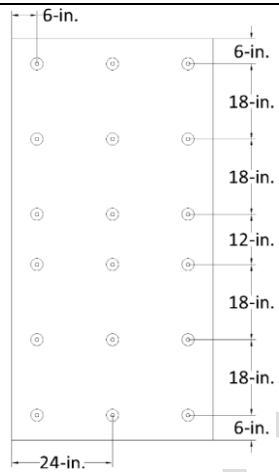
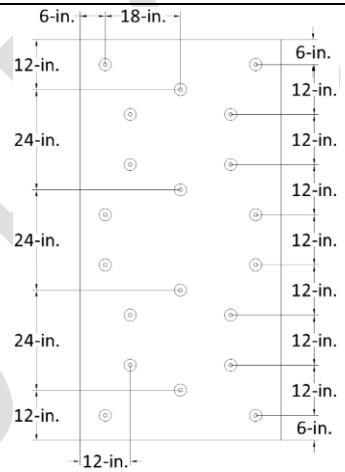
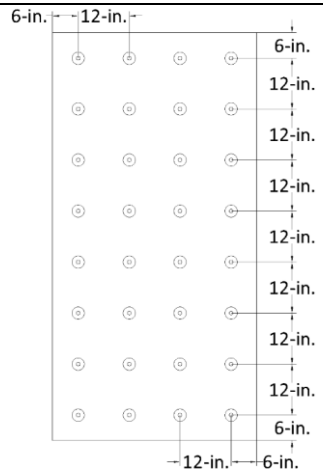
INSULATION ATTACHMENT PATTERNS – 4x8 FT BOARDS		
 **1 per 4.0 ft² (8 per board)**	 **1 per 2.7 ft² (12 per board)**	 **1 per 2.0 ft² (16 per board)**
 **1 per 1.8 ft² (18 per board)**	 **1 per 1.6 ft² (20 per board)**	 **1 per 1.0 ft² (32 per board)**

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18 The following products are interchangeable within the scope of this Evaluation Report:

Acceptable Alternates				
			Alternate	
Sub-Category	By	Listed Product Herein	Product	FBC File or NOA
Adhesives	SOPREMA	DUOTACK SPF HFO	APOC Polyset Commercial Roof Adhesive	23-0718.11
Primer	Performance Roof Systems	Derbibase SA Primer	ELASTOCOL Stick Zero	23-1130.04
Roofing Insulation	Performance Roof Systems	Derbiboard	ACFoam II, SOPRA-ISO s	24-1120.02
		Derbiboard CA	ACFoam III, SOPRA-ISO+ s	
		Derbiboard Composite	ACFoam Composite/PB	
		Derbiboard h	H-Shield, SOPRA-ISO r	24-1021.04
	SOPREMA	SOPRA-ISO+ r	H-Shield CG	
	Georgia-Pacific Gypsum	DensDeck Prime	DensDeck StormX Prime Roof Board	22-1223.04
Roofing Fastener	Performance Roof Systems	Perlok #12 DP	Trufast #12 DP	25-0129.08
		Perlok #14 HD	Trufast #14 HD	
		Perlok #15 EHD	Trufast #15 EHD	
		Perlok ¼" Concrete Spike	Trufast ¼" Concrete Spike	
		Perlok Versa-Fast Fastener	Trufast Versa-Fast Fastener	
		Perlok FM-75 Base Sheet Fastener	Trufast FM-75 Base Sheet Fastener	
		Perlok FM-90 Base Sheet Fastener	Trufast FM-90 Base Sheet Fastener	
		Perlok Twin Loc-Nail Assembled Fastener	Trufast Twin Loc-Nail Assembled Fastener	
		Perlok 2" Barbed Metal Seam Plate	Trufast 2" Barbed Metal Seam Plate or SOPREMA 2" Seam Plate	
		Perlok 2.4" Barbed Metal Seam Plate	Trufast 2.4" Scoop Seam Plate or SOPREMA 2.4" Seam Plate	
		Perlok 3" Metal Insulation Plate	Trufast 3" Metal Insulation Plate	
		Perlok Versa-Fast Plate	Trufast Versa-Fast Plate	
		Perlok-O #12 Screw	OMG #12 Standard Roofgrip	24-0627.03
		Perlok-O #14 Screw	OMG Heavy Duty	
		Perlok XHD	OMG XHD	
		Perlok-O CD-10	OMG CD-10	
		Perlok-O CRBSF 1.2	OMG CR Base Sheet Fastener (1.2")	
		Perlok-O CRBSF 1.7	OMG CR Base Sheet Fastener (1.7")	
		Perlok-O 3" Ribbed Plate	OMG 3 in. Ribbed Galvalume Plate (Flat)	
		Perlok-O 3" Steel Plate	OMG 3 in. Round Metal Plate	
		Perlok AccuTrac Flat Bottom Plate	OMG Flat Bottom Plate (Accutrac)	
		#12 Perlok Fastener	Dekfast DF-#12-PH3	22-0913.02
		#14 Perlok Fastener	Dekfast DF-#14-PH3	
		Perlok Steel Plate	Dekfast PLT-H-2-7/8	

19 "MDP" = Maximum Design Pressure is the result of testing for wind load resistance based on allowable wind loads. Refer to FBC (HVHZ) 1620 and Roofing Application Standard RAS 128 for determination of design wind loads. **(Notes 9 and 10)**

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TABLE 1A: 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 (Note 1)	Base Insulation Layer			Top Insulation Layer		Roof Cover (Note 15)			MDP (psf)
		Type	Fastener (Note 11)	Attach (Note 17)	Type	Attach (Notes 6,7,8)	Base Ply	Ply	Cap Ply	
COLD-APPLIED BASE PLY:										
W-1.	Min. 19/32-inch APA rated CDX plywood	Min 2-inch Derbiboard, Derbiboard h, or SOPRA-ISO+ r	Perlok Versa-Fast Plate with minimum one (1) Perlok Versa-Fast Fastener installed into the center-hole of the Versa-Fast Plate.	1 per 2.7 ft^2	Min. 0.25-inch DensDeck Prime, DEXcell FA Glass Mat Roof Board or SECUROCK Ultralight Coated Glass-Mat Roof Board or min. 7/16-inch DEXcell Cement Roof Board	TRUFAST RA	CA	(Optional) AA, CA or APP-TA	CA or APP-TA	-45.0*
ASPHALT-APPLIED BASE PLY:										
W-2.	Min. 19/32-inch APA rated CDX plywood	Min 2-inch Derbiboard, Derbiboard h, or SOPRA-ISO+ r	Perlok Versa-Fast Plate with minimum one (1) Versa-Fast Fastener installed into the center-hole of the Versa-Fast Plate.	1 per 2.7 ft^2	Min. 0.25-inch DensDeck Prime, DEXcell FA Glass Mat Roof Board or SECUROCK Ultralight Coated Glass-Mat Roof Board or Min. 7/16-inch DEXcell Cement Roof Board	TRUFAST RA	AA *(No Derbigum GP, Derbigum XPS)*	(Optional) AA, CA or APP-TA	CA or APP-TA	-45.0*
W-3.	Min. 19/32-inch APA rated CDX plywood	Min 2-inch Derbiboard, Derbiboard h, or SOPRA-ISO+ r	Perlok Versa-Fast Plate with minimum one (1) Versa-Fast Fastener installed into the center-hole of the Versa-Fast Plate.	1 per 2.7 ft^2	Min. 0.25-inch DensDeck Prime, DEXcell FA Glass Mat Roof Board or SECUROCK Ultralight Coated Glass-Mat Roof Board or Min. 7/16-inch DEXcell Cement Roof Board	TRUFAST RA	AA *(No Derbigum GP, Derbigum XPS)*	(Optional) AA *(No Derbigum GP, Derbigum XPS)*	SBS-TA	-45.0*
TORCH-APPLIED BASE PLY:										
W-4.	Min. 19/32-inch APA rated CDX plywood	Min 2-inch Derbiboard, Derbiboard h, or SOPRA-ISO+ r	Perlok Versa-Fast Plate with minimum one (1) Versa-Fast Fastener installed into the center-hole of the Versa-Fast Plate.	1 per 2.7 ft^2	Min. 0.25-inch DensDeck Prime, DEXcell FA Glass Mat Roof Board or SECUROCK Ultralight Coated Glass-Mat Roof Board or min. 7/16-inch DEXcell Cement Roof Board	TRUFAST RA	APP-TA	(Optional) APP-TA	APP-TA	-45.0*
SELF-ADHERING BASE PLY:										
W-5.	Min. 19/32-inch APA rated CDX plywood	Min 2-inch Derbiboard, Derbiboard h, or SOPRA-ISO+ r	Perlok Versa-Fast Plate with minimum one (1) Versa-Fast Fastener installed into the center-hole of the Versa-Fast Plate.	1 per 2.7 ft^2	Min. 0.25-inch DensDeck Prime, DEXcell FA Glass Mat Roof Board or SECUROCK Ultralight Coated Glass-Mat Roof Board or min. 7/16-inch DEXcell Cement Roof Board. Top surface shall be primed with ELASTOCOL Stick or Derbibase SA Primer	TRUFAST RA	SBS-SA	(Optional) APP-TA	APP-TA or SBS-TA	-45.0*

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TABLE 1B: WOOD DECKS – NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER SYSTEM TYPE C-1: MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER									
System No.	Deck (Note 1)	Base Insulation Layer (Note 3, Note 13)	Top Insulation Layer			Roof Cover (Note 15)			MDP (psf)
			Type	Fastener (Note 11)	Attach (Note 17)	Base Ply	Ply	Cap Ply	
TORCH-APPLIED BASE PLY:									
W-6.	Min. 19/32-inch APA rated CDX plywood; 2 ft span; blocked 4 ft o.c.; #8 wood screws, 6" o.c.	(Optional) One or more layers, any combination, loose laid	Min. 0.125-inch SOPRABOARD HS	Perlok #14 HD with Perlok 3" Metal Insulation Plate	1 per 2.7 ft^2	APP-TA	(Optional) APP-TA	APP-TA	-60.0
W-7.	Min. 19/32-inch APA rated CDX plywood; 2 ft span; blocked 4 ft o.c.; #8 wood screws, 6" o.c.	One or more layers, min. 1.5-inch, any combination, loose laid	Min. 0.125-inch SOPRABOARD HS	Perlok #14 HD or Perlok #15 EHD with Perlok 3" Metal Insulation Plate	1 per 2.0 ft^2	APP-TA	(Optional) APP-TA	APP-TA	-75.0

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TABLE 2A: STEEL DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF) SYSTEM TYPE A-1: BONDED INSULATION, BONDED ROOF COVER REFER TO NOTE 16A FOR THERMAL BARRIER / VAPOR BARRIER COMBINATION OPTIONS									
System No.	Deck (Note 1)	Base Insulation Layer		Top Insulation Layer		Roof Cover (Note 15)			MDP (psf)
		Type	Attach (Notes 6,7,8)	Type	Attach (Notes 6,7,8)	Base Ply	Ply	Cap Ply	
COLD-APPLIED BASE PLY:									
S-1.	22 ga., Type B, Grade 40 steel; 6 ft span; #12 HWH Teks 5 with ¾" washers; 6" o.c.	Min. 2-inch Derbiboard, Derbiboard CA, Derbiboard h or SOPRA-ISO+ r	DUOTACK 365, ribbons 6" o.c. (on each deck flange)	Additional optional layer(s), min. 1.5-inch base insulation followed by min. 0.25-inch DensDeck Prime or SECUROCK Ultralight Coated Glass Mat Roof Board	DUOTACK 365	CA	(Optional) CA or APP-TA	CA or APP-TA	-67.5
S-2.	22 ga., Type B, Grade 33 steel	(Optional) Min. 1.5-inch Derbiboard	DUOTACK SPF HFO	Min. 1.5-inch Derbiboard	DUOTACK SPF HFO	CA	None	CA	-45.0
S-3.	22 ga., Type B, Grade 33 steel	(Optional) Min. 1.5-inch Derbiboard	OB500	Min. 1.5-inch Derbiboard or Derbiboard CA	OB500	CA	None	CA	-45.0*
TORCH-APPLIED BASE PLY:									
S-4.	22 ga., Type B, Grade 40 steel; 6 ft span; #12 HWH Teks 5 with ¾" washers; 6" o.c.	Min. 2-inch Derbiboard, Derbiboard CA, Derbiboard h, SOPRA-ISO+ r or Multi-Max FA3	DUOTACK 365, ribbons 6" o.c. (on each deck flange)	Additional optional layer(s), min. 1.5-inch base insulation followed by min. 0.125-inch SOPRABOARD OR SOPRABOARD HS	DUOTACK 365	APP-TA	(Optional) APP-TA	APP-TA	-52.5
S-5.	22 ga., Type B, Grade 40 steel; 6 ft span; #12 HWH Teks 5 with ¾" washers; 6" o.c.	Min. 2-inch Derbiboard, Derbiboard CA, Derbiboard h or SOPRA-ISO+ r	DUOTACK 365, ribbons 6" o.c. (on each deck flange)	Additional optional layer(s), min. 1.5-inch base insulation followed by min. 0.25-inch DEXcell FA Glass Mat Roof Board	DUOTACK 365	APP-TA	(Optional) APP-TA	APP-TA	-60.0
S-6.	22 ga., Type B, Grade 40 steel; 6 ft span; Tek/5 screws with ¾" washers, 6" o.c.	Min. 2-inch Derbiboard, Derbiboard CA, Derbiboard h or SOPRA-ISO+ r	DUOTACK 365, ribbons 6" o.c. (on each deck flange)	Additional optional layer(s), min. 1.5-inch base insulation followed by min. 0.25-inch SECUROCK Ultralight Coated Glass Mat Roof Board	DUOTACK 365	APP-TA	(Optional) APP-TA	APP-TA	-75.0
S-7.	22 ga., Type B, Grade 40 steel; 6 ft span; #12 HWH Teks 5 with ¾" washers; 6" o.c.	Min. 2-inch Derbiboard, Derbiboard CA, Derbiboard h, SOPRA-ISO+ r or Multi-Max FA3	DUOTACK 365, ribbons 6" o.c. (on each deck flange)	Additional optional layer(s), min. 1.5-inch base insulation followed by min. 0.125-inch SOPRABOARD HS or min. 0.25-inch SOPRABOARD	DUOTACK 365	APP-TA	(Optional) APP-TA	APP-TA	-82.5
S-8.	22 ga., Type B, Grade 50 steel; 6 ft span; Tek/5 screws with ¾" washers, 6" o.c.	Min. 2-inch Derbiboard, Derbiboard CA, Derbiboard h, SOPRA-ISO+ r, Multi-Max FA3 or UltraMax	DUOTACK 365, ribbons 6" o.c. (on each deck flange)	Min. 0.25-in. DensDeck Prime or DEXcell FA Glass Mat Roof Board	DUOTACK 365, ribbons 6" o.c.	APP-TA	(Optional) APP-TA	APP-TA	-120.0
S-9.	22 ga., Type B, Grade 50 steel; 6 ft span; Tek/5 screws with ¾" washers, 6" o.c.	Min. 2-inch Derbiboard, Derbiboard CA, Derbiboard h, SOPRA-ISO+ r, Multi-Max FA3 or UltraMax	DUOTACK 365, ribbons 6" o.c. (on each deck flange)	Min. 0.25-in. SECUROCK Ultralight Coated Glass Mat Roof Board	DUOTACK 365, ribbons 6" o.c.	APP-TA	(Optional) APP-TA	APP-TA	-120.0

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TABLE 2B: STEEL OR STRUCTURAL CONCRETE DECKS – NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER SYSTEM TYPE B-1: MECHANICALLY ATTACHED BASE INSULATION, BONDED TOP INSULATION, BONDED ROOF COVER										
Sys. No.	Deck (Note 1)	Base Insulation Layer			Top Insulation Layer		Roof Cover (Note 15)			MDP (psf)
		Type	Fastener (Note 11)	Attach (Note 17)	Type	Attach (Notes 6,7,8)	Base Ply	Ply	Cap Ply	
COLD-APPLIED BASE PLY:										
S-10.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	Min. 1.5-inch Derbiboard	Note 2	1 per 2.0 ft^2	Min. 0.5-inch Structodek HD Fiberboard	DUOTACK 365	CA	(Optional) CA or APP-TA	CA or APP-TA	-45.0*
S-11.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	Min 1.5-inch Derbiboard or Derbiboard h	Perlok #14 HD with Perlok 3" Metal Insulation Plate	1 per 2.0 ft^2	Min. 0.25-inch DensDeck Prime or DEXcell FA Glass Mat Roof Board or Min. 0.4375-inch DEXcell Cement Roof Board	DUOTACK 365	CA	(Optional) CA or APP-TA	CA or APP-TA	-45.0*
S-12.	Min. 22 ga., type B, Grade 33 steel	Min. 0.5-inch DEXcell FA Glass Mat Roof Board	Perlok #14 HD with Perlok 3" Metal Insulation Plate	1 per 4.0 ft^2	Min. 1-inch Derbiboard, Derbiboard CA, Derbiboard h or SOPRA-ISO+ r; followed by min. 0.25-inch DensDeck Prime or DEXcell FA Glass Mat Roof Board or Min. 0.4375-inch DEXcell Cement Roof Board	DUOTACK 365	CA	(Optional) CA or APP-TA	CA or APP-TA	-45.0*
S-13.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	Min 2-inch Derbiboard, Derbiboard h or SOPRA-ISO+ r	Perlok #14 HD with Perlok 3" Metal Insulation Plate	1 per 4.0 ft^2	Min. 0.25-inch DensDeck Prime, DEXcell FA Glass Mat Roof Board or SECUROCK Ultralight Coated Glass Mat Roof Board or Min. 0.4375-inch DEXcell Cement Roof Board	DUOTACK 365	CA	(Optional) CA or APP-TA	CA or APP-TA	-45.0*
S-14.	Min. 22 ga., type B, Grade 33 steel; 6 ft span; #12 HWH Teks 5, 6" o.c. or min. 2,500 psi structrual concrete	Min 2-inch Derbiboard, Derbiboard h or SOPRA-ISO+ r	Perlok #14 HD with Perlok 3" Metal Insulation Plate	1 per 1.6 ft^2	Min. 0.25-inch DensDeck Prime or SECUROCK Ultralight Coated Glass Mat Roof Board or Min. 0.4375-inch DEXcell Cement Roof Board	DUOTACK 365	CA	(Optional) CA or APP-TA	CA or APP-TA	-67.5
S-15.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structrual concrete	Min 1.5-inch Derbiboard or Derbiboard h	Perlok #14 HD with Perlok 3" Metal Insulation Plate	1 per 2.0 ft^2	Min. 0.25-inch SECUROCK Ultralight Coated Glass Mat Roof Board	DUOTACK 365	CA	(Optional) CA or APP-TA	CA or APP-TA	-45.0*
S-16.	Min. 22 ga., type B, Grade 33 steel	Min. 0.5-inch DEXcell FA Glass Mat Roof Board	Perlok #14 HD with Perlok 3" Metal Insulation Plate	1 per 4.0 ft^2	Min. 1-inch Derbiboard, Derbiboard CA, Derbiboard h or SOPRA-ISO+ r; followed by min. 0.25-inch SECUROCK Ultralight Coated Glass Mat Roof Board	DUOTACK 365	CA	(Optional) CA or APP-TA	CA or APP-TA	-45.0*
S-17.	22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	Min. 1.5-inch Derbiboard, ISOGARD GL or ENRGY 3	Perlok Fastener with Perlok Steel Plate, Perlok-O Screw with Perlok-O 3" Steel Plate or Perlok AccuTrac Flat Bottom Metal Plate or Perlok #12 DP or #14 HD with Perlok 3" Metal Insulation Plate	1 per 2.0 ft^2	Min. 1.5-inch Derbiboard, Derbiboard CA, ISOGARD GL or ENRGY 3 (flat or tapered) or min. 0.5-inch DensDeck	DUOTACK SPF HFO	CA	None	CA	-45.0*
S-18.	22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	Min. 1.5-inch Derbiboard, ISOGARD GL or ENRGY 3	Perlok-O Screw with Perlok-O 3" Steel Plate	1 per 2.0 ft^2	Min. 1.5-inch Derbiboard, Derbiboard CA, ISOGARD GL or ENRGY 3	OB500	CA	None	CA	-45.0*

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TABLE 2B: STEEL OR STRUCTURAL CONCRETE DECKS – NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER SYSTEM TYPE B-1: MECHANICALLY ATTACHED BASE INSULATION, BONDED TOP INSULATION, BONDED ROOF COVER										
Sys. No.	Deck (Note 1)	Base Insulation Layer			Top Insulation Layer		Roof Cover (Note 15)			MDP (psf)
		Type	Fastener (Note 11)	Attach (Note 17)	Type	Attach (Notes 6,7,8)	Base Ply	Ply	Cap Ply	
S-19.	22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	Min. 2.0-inch Derbiboard, ISOGARD GL or ENRGY 3	Perlok-O Screw with Perlok-O 3" Steel Plate	1 per 4.0 ft^2	Min. 1.5-inch Derbiboard, Derbiboard CA, ISOGARD GL or ENRGY 3	OB500	CA	None	CA	-45.0*
S-20.	22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	Min. 5/8-inch DensDeck or DEXcell FA Glass Mat Roof Board	#12 or #14 Perlok Fastener with Perlok Steel Plate, Perlok-O #12 or #14 Screw with Perlok-O 3" Steel Plate or Perlok #12 DP or #14 HD with Perlok 3" Metal Insulation Plate	1 per 2.0 ft^2	One or more layers min. 1.5-inch Derbiboard or Derbiboard CA followed by optional Min. 0.5-inch DensDeck, DEXcell FA Glass Mat Roof Board or Structodek HD with Primed Red Coating or min. 7/16-inch DEXcell Cement Roof Board	OB500	CA	(Optional) CA	CA	-45.0*
S-21.	Min. 22 ga., Type B, Grade 33 steel or structural concrete	Min 1.5-inch Derbiboard, Derbiboard h or SOPRA-ISO+ r	#14 Perlok Fastener or Perlok #14 HD with Perlok 3" Metal Insulation Plate	1 per 2.0 ft^2	Min. 0.25-inch DensDeck Prime, DEXcell FA Glass Mat Roof Board, or SECUROCK Ultralight Coated Glass-Mat Roof Board or min. 7/16-inch DEXcell Cement Roof Board	TRUFAST RA	CA	(Optional) CA or APP-TA	CA or APP-TA	-45.0*
S-22.	Min. 22 ga., Type B, Grade 33 steel	Min. 0.5-inch DEXcell FA Glass Mat Roof Board	#14 Perlok Fastener or Perlok #14 HD with Perlok 3" Metal Insulation Plate	1 per 4.0 ft^2	Min. 1-inch Derbiboard, Derbiboard CA, Derbiboard h or SOPRA-ISO+ r; followed by min. 0.25-inch DensDeck Prime or DEXcell FA Glass Mat Roof Board or min. 7/16-inch DEXcell Cement Roof Board	TRUFAST RA	CA	(Optional) CA or APP-TA	CA or APP-TA	-45.0*
S-23.	Min. 22 ga., Type B, Grade 33 steel or structural concrete	Min 2-inch Derbiboard, Derbiboard h, or SOPRA-ISO+ r	#14 Perlok Fastener or Perlok #14 HD with Perlok 3" Metal Insulation Plate	1 per 4.0 ft^2	Min. 0.25-inch DensDeck Prime, DEXcell FA Glass Mat Roof Board or SECUROCK Ultralight Coated Glass-Mat Roof Board or min. 7/16-inch DEXcell Cement Roof Board	TRUFAST RA	CA	(Optional) CA or APP-TA	CA or APP-TA	-45.0*
ASPHALT-APPLIED BASE PLY:										
S-24.	Min. 22 ga., Type B, Grade 33 steel or structural concrete	Min 1.5-inch Derbiboard, Derbiboard h, or SOPRA-ISO+ r	#14 Perlok Fastener or Perlok #14 HD with Perlok 3" Metal Insulation Plate	1 per 2.0 ft^2	Min. 0.25-inch DensDeck Prime, DEXcell FA Glass Mat Roof Board or SECUROCK Ultralight Coated Glass-Mat Roof Board or min. 7/16-inch DEXcell Cement Roof Board	TRUFAST RA	AA *(No Derbigum GP, Derbigum XPS)*	(Optional) AA, CA or APP-TA	CA or APP-TA	-45.0*
S-25.	Min. 22 ga., Type B, Grade 33 steel	Min. 0.5-inch DEXcell FA Glass Mat Roof Board	#14 Perlok Fastener or Perlok #14 HD with Perlok 3" Metal Insulation Plate	1 per 4.0 ft^2	Min. 1-inch Derbiboard, Derbiboard CA, Derbiboard h, or SOPRA-ISO+ r; followed by Min. 0.25-inch DensDeck Prime, DEXcell FA Glass Mat Roof Board or SECUROCK Ultralight Coated Glass-Mat Roof Board or min. 7/16-inch DEXcell Cement Roof Board	TRUFAST RA	AA *(No Derbigum GP, Derbigum XPS)*	(Optional) AA, CA or APP-TA	CA or APP-TA	-45.0*
S-26.	Min. 22 ga., Type B, Grade 33 steel or structural concrete	Min 2-inch Derbiboard, Derbiboard h, or SOPRA-ISO+ r	#14 Perlok Fastener or Perlok #14 HD with Perlok 3" Metal Insulation Plate	1 per 4.0 ft^2	Min. 0.25-inch DensDeck Prime, DEXcell FA Glass Mat Roof Board or SECUROCK Ultralight Coated Glass-Mat Roof Board or min. 7/16-inch DEXcell Cement Roof Board	TRUFAST RA	AA *(No Derbigum GP, Derbigum XPS)*	(Optional) AA, CA or APP-TA	CA or APP-TA	-45.0*

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TABLE 2B: STEEL OR STRUCTURAL CONCRETE DECKS – NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER SYSTEM TYPE B-1: MECHANICALLY ATTACHED BASE INSULATION, BONDED TOP INSULATION, BONDED ROOF COVER										
Sys. No.	Deck (Note 1)	Base Insulation Layer			Top Insulation Layer		Roof Cover (Note 15)			MDP (psf)
		Type	Fastener (Note 11)	Attach (Note 17)	Type	Attach (Notes 6,7,8)	Base Ply	Ply	Cap Ply	
S-27.	Min. 22 ga., Type B, Grade 33 steel or structural concrete	Min 1.5-inch Derbiboard, Derbiboard h, or SOPRA-ISO+ r	#14 Perlok Fastener or Perlok #14 HD with Perlok 3" Metal Insulation Plate	1 per 2.0 ft²	Min. 0.25-inch DensDeck Prime, DEXcell FA Glass Mat Roof Board or SECUROCK Ultralight Coated Glass-Mat Roof Board or min. 7/16-inch DEXcell Cement Roof Board	TRUFAST RA	AA *(No Derbigum GP, Derbigum XPS)*	(Optional) AA *(No Derbigum GP, Derbigum XPS)*	SBS-TA	-45.0*
S-28.	Min. 22 ga., Type B, Grade 33 steel	Min. 0.5-inch DEXcell FA Glass Mat Roof Board	#14 Perlok Fastener or Perlok #14 HD with Perlok 3" Metal Insulation Plate	1 per 4.0 ft²	Min. 1-inch Derbiboard, Derbiboard CA, Derbiboard h, or SOPRA-ISO+ r; followed by min. 0.25-inch DensDeck Prime, DEXcell FA Glass Mat Roof Board or SECUROCK Ultralight Coated Glass-Mat Roof Board or min. 7/16-inch DEXcell Cement Roof Board	TRUFAST RA	AA *(No Derbigum GP, Derbigum XPS)*	(Optional) AA *(No Derbigum GP, Derbigum XPS)*	SBS-TA	-45.0*
S-29.	Min. 22 ga., Type B, Grade 33 steel or structural concrete	Min 2-inch Derbiboard, Derbiboard h, or SOPRA-ISO+ r	#14 Perlok Fastener or Perlok #14 HD with Perlok 3" Metal Insulation Plate	1 per 4.0 ft²	Min. 0.25-inch DensDeck Prime, DEXcell FA Glass Mat Roof Board or SECUROCK Ultralight Coated Glass-Mat Roof Board or min. 7/16-inch DEXcell Cement Roof Board	TRUFAST RA	AA *(No Derbigum GP, Derbigum XPS)*	(Optional) AA *(No Derbigum GP, Derbigum XPS)*	SBS-TA	-45.0*
TORCH-APPLIED BASE PLY:										
S-30.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structrual concrete	Min. 1.5-inch Derbiboard or Derbiboard h	Note 2	1 per 2.0 ft²	Min. 0.125-inch SOPRABOARD OR SOPRABOARD HS	Asphalt applied	APP-TA	(Optional) APP-TA	APP-TA	-45.0*
S-31.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structrual concrete	Min. 2-inch Derbiboard or Derbiboard h	Note 2	1 per 4.0 ft²	Min. 0.125-inch SOPRABOARD OR SOPRABOARD HS	Asphalt applied	APP-TA	(Optional) APP-TA	APP-TA	-45.0*
S-32.	Min. 22 ga. type B, Grade 33 steel; 6 ft span; #12 HWH Teks 5, 6" o.c. or min. 2,500 psi structrual concrete	Min. 2.0-inch Derbiboard	Perlok Fastener with Perlok Steel Plate, Perlok-O Screw with Perlok-O 3" Steel Plate	1 per 2.0 ft²	Min. 3/8-inch DEXcell FA Glass Mat Roof Board	Asphalt applied	APP-TA	(Optional) APP-TA	APP-TA	-60.0
S-33.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structrual concrete	Min 1.5-inch Derbiboard, Derbiboard h, SOPRA-ISO+ r, Multi-Max FA3 or Ultra-Max	Perlok #14 HD with Perlok 3" Metal Insulation Plate or #14 Perlok Fastener with Perlok Steel Plate	1 per 2.0 ft²	Min. 0.125-inch SOPRABOARD OR SOPRABOARD HS	DUOTACK 365	APP-TA	(Optional) APP-TA	APP-TA	-45.0*
S-34.	Min. 22 ga., type B, Grade 33 steel	Min. 0.5-inch DEXcell FA Glass Mat Roof Board	Perlok #14 HD with Perlok 3" Metal Insulation Plate or #14 Perlok Fastener with Perlok Steel Plate	1 per 4.0 ft²	Min. 1-inch Derbiboard, Derbiboard CA, Derbiboard h, SOPRA-ISO+ r, Multi-Max FA3 or Ultra-Max; followed by min. 0.125-inch SOPRABOARD OR SOPRABOARD HS	DUOTACK 365	APP-TA	(Optional) APP-TA	APP-TA	-45.0*

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TABLE 2B: STEEL OR STRUCTURAL CONCRETE DECKS – NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER SYSTEM TYPE B-1: MECHANICALLY ATTACHED BASE INSULATION, BONDED TOP INSULATION, BONDED ROOF COVER										
Sys. No.	Deck (Note 1)	Base Insulation Layer			Top Insulation Layer		Roof Cover (Note 15)			MDP (psf)
		Type	Fastener (Note 11)	Attach (Note 17)	Type	Attach (Notes 6,7,8)	Base Ply	Ply	Cap Ply	
S-35.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structrual concrete	Min 2-inch Derbiboard, Derbiboard h, SOPRA-ISO+ r, Multi-Max FA3 or Ultra-Max	Perlok #14 HD with Perlok 3" Metal Insulation Plate or #14 Perlok Fastener with Perlok Steel Plate	1 per 4.0 ft^2	Min. 0.125-inch SOPRABOARD OR SOPRABOARD HS	DUOTACK 365	APP-TA	(Optional) APP-TA	APP-TA	-45.0*
S-36.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structrual concrete	Min 1.5-inch Derbiboard, Derbiboard h or SOPRA-ISO+ r	Perlok #14 HD with Perlok 3" Metal Insulation Plate	1 per 2.0 ft^2	Min. 0.25-inch SECUROCK Ultralight Coated Glass Mat Roof Board	DUOTACK 365	APP-TA	(Optional) APP-TA	APP-TA	-45.0*
S-37.	Min. 22 ga., type B, Grade 33 steel	Min. 0.5-inch DEXcell FA Glass Mat Roof Board	Perlok #14 HD with Perlok 3" Metal Insulation Plate	1 per 4.0 ft^2	Min. 1-inch Derbiboard, Derbiboard CA, Derbiboard h or SOPRA-ISO+ r; followed by Min. 0.25-inch SECUROCK Ultralight Coated Glass Mat Roof Board	DUOTACK 365	APP-TA	(Optional) APP-TA	APP-TA	-45.0*
S-38.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structrual concrete	Min 2-inch Derbiboard, Derbiboard h or SOPRA-ISO+ r	Perlok #14 HD with Perlok 3" Metal Insulation Plate	1 per 4.0 ft^2	Min. 0.25-inch SECUROCK Ultralight Coated Glass Mat Roof Board	DUOTACK 365	APP-TA	(Optional) APP-TA	APP-TA	-45.0*
S-39.	Min. 22 ga. type B, Grade 33 steel; 6 ft span; #12 HWH Teks 5, 6" o.c. or min. 2,500 psi structrual concrete	Min. 1.5-inch Derbiboard, Derbiboard CA, Derbiboard h or SOPRA-ISO+ r	Dekfast DF-#15-PH3 with Dekfast PLT-3-R	1 per 1.8 ft^2	Additional layer(s) base insulation followed by min. 0.125-inch SOPRABOARD OR SOPRABOARD HS	DUOTACK 365	APP-TA	(Optional) APP-TA	APP-TA	-52.5
S-40.	Min. 22 ga. type B, Grade 33 steel; 6 ft span; #12 HWH Teks 5, 6" o.c. or min. 2,500 psi structrual concrete	Min 2-inch Derbiboard, Derbiboard h or SOPRA-ISO+ r	Perlok #14 HD with Perlok 3" Metal Insulation Plate	1 per 1.6 ft^2	Min. 0.25-inch DEXcell FA Glass Mat Roof Board or Min. 0.4375-inch DEXcell Cement Roof Board	DUOTACK 365	APP-TA	(Optional) APP-TA	APP-TA	-60.0
S-41.	Min. 22 ga., type B, Grade 33 steel; 6 ft span; #12 HWH Teks 5, 6" o.c. or min. 2,500 psi structrual concrete	Min 2-inch Derbiboard, Derbiboard h or SOPRA-ISO+ r	Perlok #14 HD with Perlok 3" Metal Insulation Plate	1 per 1.6 ft^2	Min. 0.25-inch SECUROCK Ultralight Coated Glass Mat Roof Board	DUOTACK 365	APP-TA	(Optional) APP-TA	APP-TA	-75.0
S-42.	Min. 22 ga., type B, Grade 33 steel; 6 ft span; #12 HWH Teks 5, 6" o.c. or min. 2,500 psi structrual concrete	Min 2-inch Derbiboard, Derbiboard h, SOPRA-ISO+ r, Multi-Max FA3 or Ultra-Max	Perlok #14 HD with Perlok 3" Metal Insulation Plate or #14 Perlok Fastener with Perlok Steel Plate	1 per 1.6 ft^2	Min. 0.125-inch SOPRABOARD HS or 0.25-inch SOPRABOARD	DUOTACK 365	APP-TA	(Optional) APP-TA	APP-TA	-82.5

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TABLE 2B: STEEL OR STRUCTURAL CONCRETE DECKS – NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER
SYSTEM TYPE B-1: MECHANICALLY ATTACHED BASE INSULATION, BONDED TOP INSULATION, BONDED ROOF COVER

Sys. No.	Deck (Note 1)	Base Insulation Layer			Top Insulation Layer		Roof Cover (Note 15)			MDP (psf)
		Type	Fastener (Note 11)	Attach (Note 17)	Type	Attach (Notes 6,7,8)	Base Ply	Ply	Cap Ply	
S-43.	Min. 22 ga., type B, Grade 40 steel; 6 ft span, Tek 5 screws, 6" o.c.	Min. 0.5-inch DEXcell FA Glass Mat Roof Board, mechanically attached, and followed by vapor barrier of SBS-TAF (sand-surfaced)	Perlok #14 HD with Perlok 3" Metal Insulation Plate	1 per 2.0 ft^2	INSULATION: Min. 2-inch Derbiboard, Derbiboard CA, Derbiboard h or SOPRA-ISO+ r followed by COVERBOARD: min. 0.125-inch SOPRABOARD OR SOPRABOARD HS.	DUOTACK 365	APP-TA	(Optional) APP-TA	APP-TA	-82.5
S-44.	Min. 22 ga., type B, Grade 33 steel; 6 ft span; #12 HWH Teks 5, 6" o.c. or min. 2,500 psi structrual concrete	Min. 2.0-inch Derbiboard	Perlok Fastener with Perlok Steel Plate, Perlok-O Screw with Perlok-O 3" Steel Plate	1 per 2.0 ft^2	Min. 3/8-inch DEXcell FA Glass Mat Roof Board or Min. 7/16-inch DEXcell Cement Roof Board	OB500	APP-TA	(Optional) APP-TA	APP-TA	-60.0
S-45.	Min. 22 ga., Type B, Grade 33 steel or structural concrete	Min 1.5-inch Derbiboard, Derbiboard h, or SOPRA-ISO+ r	#14 Perlok Fastener or Perlok #14 HD with Perlok 3" Metal Insulation Plate	1 per 2.0 ft^2	Min. 0.25-inch DensDeck Prime, DEXcell FA Glass Mat Roof Board or SECUROCK Ultralight Coated Glass-Mat Roof Board or Min. 7/16-inch DEXcell Cement Roof Board	TRUFAST RA	APP-TA	(Optional) APP-TA	APP-TA	-45.0*
S-46.	Min. 22 ga., Type B, Grade 33 steel	Min. 0.5-inch DEXcell FA Glass Mat Roof Board	#14 Perlok Fastener or Perlok #14 HD with Perlok 3" Metal Insulation Plate	1 per 4.0 ft^2	Min. 1-inch Derbiboard, Derbiboard CA, Derbiboard h, or SOPRA-ISO+ r; followed by Min. 0.25-inch DensDeck Prime, DEXcell FA Glass Mat Roof Board or SECUROCK Ultralight Coated Glass-Mat Roof Board or Min. 7/16-inch DEXcell Cement Roof Board	TRUFAST RA	APP-TA	(Optional) APP-TA	APP-TA	-45.0*
S-47.	Min. 22 ga., Type B, Grade 33 steel or structural concrete	Min 2-inch Derbiboard, Derbiboard h, or SOPRA-ISO+ r	#14 Perlok Fastener or Perlok #14 HD with Perlok 3" Metal Insulation Plate	1 per 4.0 ft^2	Min. 0.25-inch DensDeck Prime, DEXcell FA Glass Mat Roof Board or SECUROCK Ultralight Coated Glass-Mat Roof Board or Min. 7/16-inch DEXcell Cement Roof Board	TRUFAST RA	APP-TA	(Optional) APP-TA	APP-TA	-45.0*
SELF-ADHERING BASE PLY:										
S-48.	Min. 22 ga., Type B, Grade 33 steel or structural concrete	Min 1.5-inch Derbiboard, Derbiboard h, or SOPRA-ISO+ r	#14 Perlok Fastener or Perlok #14 HD with Perlok 3" Metal Insulation Plate	1 per 2.0 ft^2	Min. 0.25-inch DensDeck Prime, DEXcell FA Glass Mat Roof Board or SECUROCK Ultralight Coated Glass-Mat Roof Board or min. 7/16-inch DEXcell Cement Roof Board. Top surface shall be primed with ELASTOCOL Stick or Derbibase SA Primer	TRUFAST RA	SBS-SA	(Optional) APP-TA	APP-TA or SBS-TA	-45.0*
S-49.	Min. 22 ga., Type B, Grade 33 steel	Min. 0.5-inch DEXcell FA Glass Mat Roof Board	#14 Perlok Fastener or Perlok #14 HD with Perlok 3" Metal Insulation Plate	1 per 4.0 ft^2	Min. 1-inch Derbiboard, Derbiboard CA, Derbiboard h, or SOPRA-ISO+ r; followed by min. 0.25-inch DensDeck Prime, DEXcell FA Glass Mat Roof Board or SECUROCK Ultralight Coated Glass-Mat Roof Board or min. 7/16-inch DEXcell Cement Roof Board. Top surface shall be primed with ELASTOCOL Stick or Derbibase SA Primer	TRUFAST RA	SBS-SA	(Optional) APP-TA	APP-TA or SBS-TA	-45.0*

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TABLE 2B: STEEL OR STRUCTURAL CONCRETE DECKS – NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER
SYSTEM TYPE B-1: MECHANICALLY ATTACHED BASE INSULATION, BONDED TOP INSULATION, BONDED ROOF COVER

Sys. No.	Deck (Note 1)	Base Insulation Layer			Top Insulation Layer		Roof Cover (Note 15)			MDP (psf)
		Type	Fastener (Note 11)	Attach (Note 17)	Type	Attach (Notes 6,7,8)	Base Ply	Ply	Cap Ply	
S-50.	Min. 22 ga., Type B, Grade 33 steel or structural concrete	Min 2-inch Derbiboard, Derbiboard h, or SOPRA-ISO+ r	#14 Perlok Fastener or Perlok #14 HD with Perlok 3" Metal Insulation Plate	1 per 4.0 ft²	Min. 0.25-inch DensDeck Prime, DEXcell FA Glass Mat Roof Board or SECUROCK Ultralight Coated Glass-Mat Roof Board or min. 7/16-inch DEXcell Cement Roof Board. Top surface shall be primed with ELASTOCOL Stick or Derbibase SA Primer	TRUFAST RA	SBS-SA	(Optional) APP-TA	APP-TA or SBS-TA	-45.0*

TABLE 2C: STEEL DECKS – NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER
SYSTEM TYPE B-2: MECHANICALLY ATTACHED THERMAL BARRIER, BONDED VAPOR BARRIER, BONDED INSULATION, BONDED ROOF COVER

System No.	Deck (Note 1)	Thermal Barrier			Vapor Barrier	Insulation Layer(s)		Roof Cover (Note 15)			MDP (psf)
		Type	Fastener (Note 11)	Attach (Note 17)		Type	Attach (Notes 6,7,8)	Base Ply	Ply	Cap Ply	
COLD APPLIED BASE PLY:											
S-51.	Min. 22 ga., Type B, Grade 33 steel	Min. 0.5-inch DensDeck, DensDeck Prime or DEXcell FA Glass Mat Roof Board. Top surface shall be primed with Derbibase SA Primer	Perlok #14 HD with Perlok 3" Metal Insulation Plate	1 per 4.0 ft²	SOPRAVAP'R, Derbibase SA, Derbibase SA Ultra	Min. 1.5-inch Derbiboard, Derbiboard CA, Derbiboard h or SOPRA-ISO+ r followed by Min. 0.25-inch DensDeck Prime or DEXcell FA Glass Mat Roof Board or Min. 0.4375-inch DEXcell Cement Roof Board	DUOTACK 365	CA	(Optional) CA or APP-TA	CA or APP-TA	-45.0*
S-52.	Min. 22 ga., type B, Grade 33 steel; 6 ft span; #12 HWH Teks 5, 6" o.c.	Min. 0.5-inch DensDeck or DensDeck Prime. Top surface shall be primed with Derbibase SA Primer	Perlok #14 HD with Perlok 3" Metal Insulation Plate	1 per 2.0 ft²	SOPRAVAP'R, Derbibase SA, Derbibase SA Ultra	Min. 1.5-inch Derbiboard, Derbiboard CA, Derbiboard h or SOPRA-ISO+ r followed by Min. 0.25-inch DensDeck Prime	DUOTACK 365	CA	(Optional) CA or APP-TA	CA or APP-TA	-67.5
S-53.	Min. 22 ga., Type B, Grade 33 steel	Min. 0.5-inch SECUROCK Ultralight Coated Glass Mat Roof Board. Top surface shall be primed with Derbibase SA Primer	Perlok #14 HD with Perlok 3" Metal Insulation Plate	1 per 4.0 ft²	SOPRAVAP'R, Derbibase SA, Derbibase SA Ultra	Min. 1.5-inch Derbiboard, Derbiboard CA, Derbiboard h or SOPRA-ISO+ r followed by Min. 0.25-inch SECUROCK Ultralight Coated Glass Mat Roof Board	DUOTACK 365	CA	(Optional) CA or APP-TA	CA or APP-TA	-45.0*
S-54.	Min. 22 ga., type B, Grade 33 steel; 6 ft span; #12 HWH Teks 5, 6" o.c.	Min. 0.5-inch SECUROCK Ultralight Coated Glass Mat Roof Board. Top surface shall be primed with Derbibase SA Primer	Perlok #14 HD with Perlok 3" Metal Insulation Plate	1 per 2.0 ft²	SOPRAVAP'R, Derbibase SA, Derbibase SA Ultra	Min. 1.5-inch Derbiboard, Derbiboard CA, Derbiboard h or SOPRA-ISO+ r followed by Min. 0.25-inch SECUROCK Ultralight Coated Glass Mat Roof Board	DUOTACK 365	CA	(Optional) CA or APP-TA	CA or APP-TA	-67.5

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TABLE 2C: STEEL DECKS – NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER SYSTEM TYPE B-2: MECHANICALLY ATTACHED THERMAL BARRIER, BONDED VAPOR BARRIER, BONDED INSULATION, BONDED ROOF COVER											
System No.	Deck (Note 1)	Thermal Barrier			Vapor Barrier	Insulation Layer(s)		Roof Cover (Note 15)			MDP (psf)
		Type	Fastener (Note 11)	Attach (Note 17)		Type	Attach (Notes 6,7,8)	Base Ply	Ply	Cap Ply	
S-55.	22 ga., type B, Grade 33 steel	Min. 5/8-inch DensDeck or DEXcell FA Glass Mat Roof Board	#12 or #14 Perlok Fastener with Perlok Steel Plate, Perlok-O #12 or #14 Screw with Perlok-O 3" Steel Plate or Perlok #12 DP or #14 HD with Perlok 3" Metal Insulation Plate	1 per 4.0 ft²	Derbibase or Derbibase Ultra in Permastic at 1.5 to 2.0 gal/sq.	Insulation: One or more layers min. 1.5-inch Derbiboard or Derbiboard CA Coverboard: (Optional) Min. 0.5-inch DensDeck, DEXcell FA Glass Mat Roof Board or Structodek HD with Primed Red Coating or 7/16-inch DEXcell Cement Roof Board	OB500	CA	(Optional) CA	CA	-45.0*
TORCH-APPLIED BASE PLY:											
S-56.	Min. 22 ga., Type B, Grade 33 steel	Min. 0.5-inch DensDeck, DensDeck Prime, DEXcell FA Glass Mat Roof Board or SECUROCK Ultralight Coated Glass Mat Roof Board. Top surface shall be primed with Derbibase SA Primer	Perlok #14 HD with Perlok 3" Metal Insulation Plate	1 per 4.0 ft²	SOPRAVAP'R, Derbibase SA, Derbibase SA Ultra	Min. 1.5-inch Derbiboard, Derbiboard CA, Derbiboard h or SOPRA-ISO+ r followed by Min. 0.25-inch DEXcell FA Glass Mat Roof Board or SECUROCK Ultralight Coated Glass Mat Roof Board or Min. 0.4375-inch DEXcell Cement Roof Board	DUOTACK 365	APP-TA	(Optional) APP-TA	APP-TA	-45.0*
S-57.	Min. 22 ga., Type B, Grade 33 steel	Min. 0.5-inch DensDeck or DensDeck Prime. Top surface shall be primed with Derbibase SA Primer.	Perlok #14 HD with Perlok 3" Metal Insulation Plate or #14 Perlok Fastener with Perlok Steel Plate	1 per 4.0 ft²	SOPRAVAP'R, Derbibase SA, Derbibase SA Ultra	Min. 1.5-inch Derbiboard, Derbiboard CA, EnergyGuard POLYISO Insulation, ENRGY 3, ENRGY 3 CGF, Derbiboard h, SOPRA-ISO+ r or Multi-Max FA3 followed by Min. 0.125-inch SOPRABOARD OR SOPRABOARD HS	DUOTACK 365	APP-TA	(Optional) APP-TA	APP-TA	-45.0*
S-58.	Min. 22 ga., type B, Grade 33 steel; 6 ft span; #12 HWH Teks 5, 6" o.c.	Min. 0.5-inch DensDeck, DensDeck Prime, DEXcell FA Glass Mat Roof Board or SECUROCK Ultralight Coated Glass Mat Roof Board. Top surface shall be primed with Derbibase SA Primer	Perlok #14 HD with Perlok 3" Metal Insulation Plate	1 per 2.0 ft²	SOPRAVAP'R, Derbibase SA, Derbibase SA Ultra	Min. 1.5-inch Derbiboard, Derbiboard CA, Derbiboard h or SOPRA-ISO+ r followed by Min. 0.25-inch DEXcell FA Glass Mat Roof Board or SECUROCK Ultralight Coated Glass Mat Roof Board or Min. 0.4375-inch DEXcell Cement Roof Board	DUOTACK 365	APP-TA	(Optional) APP-TA	APP-TA	-60.0
S-59.	Min. 22 ga., type B, Grade 33 steel; 6 ft span; #12 HWH Teks 5, 6" o.c.	Min. 0.5-inch DensDeck or DensDeck Prime. Top surface shall be primed with Derbibase SA Primer.	Perlok #14 HD with Perlok 3" Metal Insulation Plate or #14 Perlok Fastener with Perlok Steel Plate	1 per 2.0 ft²	SOPRAVAP'R, Derbibase SA, Derbibase SA Ultra	Min. 1.5-inch Derbiboard, Derbiboard CA, EnergyGuard POLYISO Insulation, ENRGY 3, ENRGY 3 CGF, Derbiboard h, SOPRA-ISO+ r or Multi-Max FA3 followed by Min. 0.125-inch SOPRABOARD HS or 0.25-inch SOPRABOARD	DUOTACK 365	APP-TA	(Optional) APP-TA	APP-TA	-82.5

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TABLE 2D: 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 (Note 1)	Base Insulation Layer (Note 3, Note 13)	Top Insulation Layer			Roof Cover (Note 15)			MDP (psf)
			Type	Fastener (Note 11)	Attach (Note 17)	Base Ply	Ply	Cap Ply	
COLD-APPLIED BASE PLY:									
S-60.	22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination, loose laid	Min. ¾-inch JM Fesco Board	#14 Perlok with Perlok Steel Plate	1 per 1.6 ft^2	CA	None	CA	-45.0*
S-61.	22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination, loose laid	Min. 1.5-inch Derbiboard or Derbiboard CA	#14 Perlok with Perlok Steel Plate	1 per 2.7 ft^2	CA	None	CA	-45.0*
S-62.	22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination, loose laid	Min. 0.25-inch DensDeck or DEXcell FA Glass Mat Roof Board or 7/16-inch DEXcell Cement Roof Board	Perlok-O #12 or #14 Screw with Perlok-O 3" Ribbed Plate or with Perlok-O 3" Steel Plate	1 per 1.8 ft^2	CA	None	CA	-45.0*
S-63.	22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination, loose laid	Min. 0.5-inch SECUROCK Ultralight Coated Glass Mat Roof Board	Perlok #12 DP or Perlok #14 HD with Perlok 3" Metal Insulation Plate	1 per 4.0 ft^2	CA	None	CA	-45.0*
S-64.	22 ga., type B, Grade 33 steel, 6 ft span, #12 HWH Teks 5, 6" o.c. or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination, loose laid	Min. 0.25-inch SECUROCK Ultralight Coated Glass Mat Roof Board	Perlok #12 DP or Perlok #14 HD with Perlok 3" Metal Insulation Plate	1 per 1.3 ft^2	CA	None	CA	-52.5
S-65.	22 ga., type B, Grade 33 steel, 6 ft span, two (2) #12 HWH Teks 5, 6" o.c. or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination, loose laid	Min. 0.25-inch SECUROCK Ultralight Coated Glass Mat Roof Board	Perlok #12 DP or Perlok #14 HD with Perlok 3" Metal Insulation Plate	1 per 1.0 ft^2	CA	None	CA	-60.0
S-66.	Min. 22 ga., type B, Grade 33 steel; 6 ft span; #12 HWH Teks 5, 6" o.c. or min. 2,500 psi structrual concrete	(Optional) One or more layers, any combination, loose laid	Min. 0.5-inch DensDeck Prime or SECUROCK Ultralight Coated Glass Mat Roof Board or 7/16-inch DEXcell Cement Roof Board	Perlok-O #12 or #14 Screw with Perlok-O 3" Ribbed Plate or with Perlok-O 3" Steel Plate	1 per 1.6 ft^2	CA	None	CA	-67.5
TORCH-APPLIED BASE PLY:									
S-67.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination, loose laid	Min. 0.125-inch SOPRABOARD OR SOPRABOARD HS	Note 2	1 per 4.0 ft^2	APP-TA	(Optional) APP-TA	APP-TA	-45.0*
S-68.	22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination, loose laid	Min. 0.25-inch SECUROCK Ultralight Coated Glass Mat Roof Board	Perlok Fastener with Perlok Steel Plate, Perlok-O Screw with Perlok-O 3" Steel Plate	1 per 4.0 ft^2	APP-TA	(Optional) APP-TA	APP-TA	-45.0*
S-69.	Min. 22 ga., type B, Grade 33 steel; 6 ft span; #12 HWH Teks 5, 6" o.c.	(Optional) One or more layers, any combination, loose laid	Min. 0.125-inch SOPRABOARD HS	#12 Perlok Fastener with Perlok 3" Metal Insulation Plate	1 per 4.0 ft^2	APP-TA	(Optional) APP-TA	APP-TA	-45.0
S-70.	Min. 22 ga., type B, Grade 33 steel; 6 ft span; #12 HWH Teks 5, 6" o.c. or min. 2,500 psi structrual concrete	One or more layers, any combination, loose laid	Min. 0.125-inch SOPRABOARD OR SOPRABOARD HS	Note 2	1 per 2.0 ft^2	APP-TA	(Optional) APP-TA	APP-TA	-60.0
S-71.	Min. 22 ga., type B, Grade 80 steel; 6 ft span; #12 HWH Teks 5, 6" o.c.	(Optional) One or more layers, any combination, loose laid	Min. 0.125-inch SOPRABOARD HS	Perlok #14 HD with Perlok 3" Metal Insulation Plate	1 per 2.7 ft^2	APP-TA	(Optional) APP-TA	APP-TA	-60.0
S-72.	Min. 22 ga., type B, Grade 33 steel; 6 ft span; #12 HWH Teks 5, 6" o.c. or min. 2,500 psi structural concrete	(Optional) One or more layers, any combination, loose laid	Min. 0.5-inch SECUROCK Ultralight Coated Glass Mat Roof Board	Perlok Fastener with Perlok Steel Plate, Perlok-O Screw with Perlok-O 3" Steel Plate	1 per 1.8 ft^2	APP-TA	(Optional) APP-TA	APP-TA	-75.0

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TABLE 2D: 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 (Note 1)	Base Insulation Layer (Note 3, Note 13)	Top Insulation Layer			Roof Cover (Note 15)			MDP (psf)
			Type	Fastener (Note 11)	Attach (Note 17)	Base Ply	Ply	Cap Ply	
S-73.	Min. 22 ga., type B, Grade 40 steel; 6 ft span; #12 HWH Teks 5, 6" o.c.	One or more layers, min. 1.5-inch, any combination, loose laid	Min. 0.125-inch SOPRABOARD HS	Perlok #15 EHD with Perlok 3" Metal Insulation Plate	1 per 2.0 ft²	APP-TA	(Optional) APP-TA	APP-TA	-75.0
S-74.	Min. 22 ga., type B, Grade 80 steel; 6 ft span; #12 HWH Teks 5, 6" o.c. or min. 2,500 psi structural concrete	One or more layers, min. 1.5-inch, any combination, loose laid	Min. 0.125-inch SOPRABOARD HS	Perlok #14 HD with Perlok 3" Metal Insulation Plate	1 per 2.0 ft²	APP-TA	(Optional) APP-TA	APP-TA	-75.0
S-75.	Min. 22 ga., type B, Grade 40 steel; 6 ft span; #12 HWH Teks 5 with ¾" washers, 6" o.c. or min. 2,500 psi structural concrete	One or more layers, min. 2-inch, any combination, loose laid	Min. 0.125-inch SOPRABOARD HS or 0.25-inch SOPRABOARD	Perlok #14 HD with Perlok 3" Metal Insulation Plate or #14 Perlok Fastener with Perlok Steel Plate	1 per 1.0 ft²	APP-TA	(Optional) APP-TA	APP-TA	-120.0

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

System No.	Deck (Note 1)	Insulation Layer (Note 3, Note 13)		Base Sheet			Roof Cover (Note 15)		MDP (psf)
		Type	Attach (Note 5)	Type	Fastener (Note 11)	Attach	Base Ply	Cap Ply	
COLD-APPLIED BASE PLY:									
S-76.	22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	Any type, thickness or combination	Prelim Attach	Derbigum GP	Perlok Fastener with Perlok Steel Plate, Perlok-O Screw with Perlok-O 3" Steel Plate or Perlok-O #12 Screw with Perlok AccuTrac Flat Bottom Plate	6-inch o.c. at the 6-inch wide, heat-welded side laps	None	CA	-45.0
TORCH-APPLIED BASE PLY:									
S-77.	22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	Any type, thickness or combination	Prelim Attach	PRS Glass Base, Derbibase, PRS Glass Ply VI, GAFGLAS #75 or PermaPly No. 28	Perlok-O Screw with Perlok-O 3" Steel Plate or Perlok #12 DP or #14 HD with Perlok 3" Metal Insulation Plate	12-inch o.c. at the 4-inch laps and 18-inch o.c. at two, equally spaced, staggered center rows	(Optional) APP-TA	APP-TA	-45.0*
S-78.	Min. 22 ga., type B, Grade 33 steel; 6 span; #12 HWH Teks 5, 6" o.c. or min. 2,500 psi structural concrete	Any type, thickness or combination	Prelim Attach	Derbigum GP	Perlok Fastener with Perlok Steel Plate, Perlok-O Screw with Perlok-O 3" Steel Plate	6-inch o.c. at the 6-inch wide, heat-welded side laps	(Optional) APP-TA	APP-TA	-45.0
S-79.	Min. 22 ga., type B, Grade 80 steel; 6 ft span; #12 HWH Teks 5, 6" o.c.	Min. 0.5-inch ASTM C1289 polyisocyanurate followed by optional min. 0.25-inch DensDeck or DEXcell FA Glass Mat Roof Board	Loose-laid	Derbibase HV, with 3-inch heat-welded side laps prior to attach	Perlok #15 EHD with Perlok 3" Metal Insulation Plate	12-inch o.c. at the 3-inch laps and 12-inch o.c. at two (2), equally spaced, staggered center rows	Derbibase Ultra, torch-applied	APP-TA	-135.0

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TABLE 2E: STEEL OR STRUCTURAL CONCRETE DECKS – NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER SYSTEM TYPE D-2: INSULATED, MECHANICALLY ATTACHED BASE SHEET, BONDED ROOF COVER									
System No.	Deck (Note 1)	Insulation Layer (Note 3, Note 13)		Base Sheet			Roof Cover (Note 15)		MDP (psf)
		Type	Attach (Note 5)	Type	Fastener (Note 11)	Attach	Base Ply	Cap Ply	
S-80.	Min. 22 ga., type B, Grade 80 steel; 6 ft span; #12 HWH Teks 5, 6" o.c.	Min. 0.5-inch ASTM C1289 polyisocyanurate followed by optional min. 0.25-inch DensDeck or DEXcell FA Glass Mat Roof Board	Loose-laid	Derbibase HV, with 3-inch heat-welded side laps prior to attach	Perlok #15 EHD with Perlok 3" Metal Insulation Plate	12-inch o.c. at the 3-inch laps and 12-inch o.c. at two (2), equally spaced, staggered center rows	Derbibase Ultra, torch-applied	APP-TA *(no Derbicolor P-FR, Derbicolor P-FR CR)*	-172.5

TABLE 2F: STEEL DECKS – NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER SYSTEM TYPE D-2: INSULATED, MECHANICALLY ATTACHED SOPRAFIX, BONDED ROOF COVER								
System No.	Deck (Note 1)	Insulation (Note 3, Note 13)	Base Membrane			Roof Cover (Note 15)		MDP (psf)
			Type (Note 15C)	Fastener (Note 11)	Spacing	Ply	Cap	
S-81.	Min. 22 ga., Type B, Grade 33 steel	Min. 1.5-inch, One or more layers, any combination	SOPRAFIX Base 611, 612 or 614	#14 Perlok Fastener or Perlok #14 HD with Perlok 2" Barbed Metal Seam Plate	18-inch o.c. within the 4-inch wide, heat-welded side laps	(Optional) APP-TA	APP-TA	-45.0*
S-82.	Min. 22 ga., type B, Grade 40 steel; 6 ft span; #12 HWH Teks 5, 6" o.c.	(Optional) Any type, thickness or combination, loose-laid	SOPRASMART Board 180, SOPRASMART ISO HD 180, SOPRASMART XP HD 180, SOPRASMART XP ISO 180	#14 Perlok Fastener or Perlok #14 HD with Perlok 2" Barbed Metal Seam Plate	6-inch o.c. at the marked fastening line, sealed with the heat-welded, overlapping membrane from subsequent course	(Optional) APP-TA	APP-TA	-52.5*
S-83.	Min. 22 ga., type B, Grade 33 steel; 6 ft span; #12 HWH Teks 5, 6" o.c.	Min. 1.5-inch, One or more layers, any combination	SOPRAFIX Base 611, 612 or 614	Perlok #15 EHD with Perlok 2" Barbed Metal Seam Plate	12-inch o.c. within 4-inch wide, heat-welded laps	(Optional) APP-TA	APP-TA	-67.5
S-84.	Min. 22 ga., type B, Grade 80 steel; 6 ft span; #12 HWH Teks 5, 6" o.c.	Min. 1.5-inch, One or more layers, any combination	SOPRAFIX Base 611, 612 or 614	#14 Perlok Fastener or Perlok #14 HD with Perlok 2" Barbed Metal Seam Plate	12-inch o.c. within 4-inch wide, heat-welded laps	(Optional) APP-TA	APP-TA	-67.5
S-85.	Min. 22 ga., type B, Grade 33 steel; 6 ft span; #12 HWH Teks 5, 6" o.c.	Min. 1.5-inch, One or more layers, any combination	SOPRAFIX Base 611, 612 or 614	Perlok #15 EHD with Perlok 2" Barbed Metal Seam Plate or Perlok 2.4" Barbed Metal Seam Plate	12-inch o.c. within 4-inch wide, heat-welded laps	(Optional) APP-TA	APP-TA	-75.0
S-86.	Min. 22 ga., type B, Grade 80 steel; 6 ft span; #12 HWH Teks 5, 6" o.c.	Min. 1.5-inch, One or more layers, any combination	SOPRAFIX Base 611, 612 or 614	Perlok #15 EHD with Perlok 2" Barbed Metal Seam Plate or Perlok 2.4" Barbed Metal Seam Plate	12-inch o.c. within 4-inch wide, heat-welded laps	(Optional) APP-TA	APP-TA	-97.5
S-87.	Min. 22 ga., type B, Grade 33 steel; 6 ft span; #12 HWH Teks 5 with ¾" steel washers, 6" o.c.	Min. 1.5-inch, One or more layers, any combination	SOPRAFIX Base 611, 612 or 614	Perlok #15 EHD with Perlok 2" Barbed Metal Seam Plate or Perlok 2.4" Barbed Metal Seam Plate	6-inch o.c. within 4-inch wide, heat-welded laps	(Optional) APP-TA	APP-TA	-112.5

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TABLE 2F: STEEL DECKS – NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER SYSTEM TYPE D-2: INSULATED, MECHANICALLY ATTACHED SOPRAFIX, BONDED ROOF COVER								
System No.	Deck (Note 1)	Insulation (Note 3, Note 13)	Base Membrane			Roof Cover (Note 15)		MDP (psf)
			Type (Note 15C)	Fastener (Note 11)	Spacing	Ply	Cap	
S-88.	Min. 22 ga., type B, Grade 80 steel; 6 ft span; #12 HWH Teks 5 with ¾" steel washers, 6" o.c.	Min. 1.5-inch, One or more layers, any combination	SOPRAFIX Base 611, 612 or 614	#14 Perlok Fastener or Perlok #14 HD with Perlok 2" Barbed Metal Seam Plate	6-inch o.c. within 4-inch wide, heat-welded laps	(Optional) APP-TA	APP-TA	-120.0

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TABLE 3A: STRUCTURAL CONCRETE DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF) SYSTEM TYPE A-1: BONDED INSULATION, BONDED ROOF COVER REFER TO NOTE 16B FOR VAPOR BARRIER OPTIONS										
System No.	Deck (Note 1)	Primer	Base Insulation Layer		Top Insulation Layer		Roof Cover (Note 15)			MDP (psf)
			Type	Attach (Notes 6,7,8)	Type	Attach (Notes 6,7,8)	Base Ply	Ply	Cap Ply	
COLD-APPLIED BASE PLY:										
C-1.	Structural concrete	None	(Optional) Min. 1.5-inch Derbiboard or Derbiboard CA	Permastic	Min. ¾-inch JM Fesco Board	Permastic	CA	None	CA	-45.0
C-2.	Structural concrete	None	(Optional) Min. 1.5-inch Derbiboard or Derbiboard CA	Permastic	Min. 1.5-inch Derbiboard or Derbiboard CA	Permastic	CA	None	CA	-52.5
C-3.	Structural Concrete	None	(Optional) Min. 1.5-inch Derbiboard, Derbiboard CA, Derbiboard h or SOPRA-ISO+ r	DUOTACK 365	Min. 0.25-inch DEXcell FA Glass Mat Roof Board or min. 0.4375-inch DEXcell Cement Roof Board	DUOTACK 365	CA	None	CA	-67.5
C-4.	Structural Concrete	None	(Optional) Min. 1.5-inch Insulfoam IX, Derbiboard, Derbiboard CA, Derbiboard h or SOPRA-ISO+ r	DUOTACK 365	Min. 0.25-inch SECUROCK Ultralight Coated Glass Mat Roof Board	DUOTACK 365	CA	None	CA	-105.0
C-5.	Structural Concrete	None	Min. 1.5-inch Derbiboard or Derbiboard CA	DUOTACK 365	(Optional) Additional layer(s) base insulation	DUOTACK 365	CA	None	CA	-135.0
C-6.	Structural concrete	ASTM D41	Min. 1.5-inch Derbiboard	DUOTACK SPF HFO	Min. 0.25-inch SECUROCK Ultralight Coated Glass Mat Roof Board	DUOTACK SPF HFO	Derbibase in Permastic	None	CA or APP-TA	-105.0
C-7.	Structural concrete	None	(Optional) Min. 1.5-inch Derbiboard or Derbiboard CA	DUOTACK SPF HFO	Min. 1.5-inch Derbiboard or Derbiboard CA	DUOTACK SPF HFO	CA	None	CA	-120.0
C-8.	Structural concrete	None	Min. 2-inch Derbiboard, Derbiboard CA or SOPRA-ISO+ r	OB500	Min. 0.5-inch H-Shield HD, min. 0.25-inch DEXcell FA Glass Mat Roof Board or min. 7/16-inch DEXcell Cement Roof Board	OB500	CA	None	CA	-67.5*
C-9.	Structural concrete	None	(Optional) Min. 2-inch Derbiboard, Derbiboard CA, Derbiboard h or SOPRA-ISO+ r	OB500	Min. 2.0-inch H-Shield HD Composite CG	OB500	CA	None	CA	-75.0*
C-10.	Structural concrete	(Optional) ASTM D41	(Optional) Min. 1.5-inch Derbiboard	OB500	Min. 1.5-inch Derbiboard	OB500	CA	None	CA	-120.0
C-11.	Structural Concrete	None	(Optional) Min. 1.5-inch Derbiboard, Derbiboard CA, Derbiboard h, or SOPRA-ISO+ r	TRUFAST RA	Min. 7/16-inch DEXcell Cement Roof Board	TRUFAST RA	CA	None	CA	-67.5
C-12.	Structural Concrete	None	(Optional) Min. 1.5-inch Derbiboard, Derbiboard CA, Derbiboard h, or SOPRA-ISO+ r	TRUFAST RA, 4-inch o.c.	Min. 7/16-inch DEXcell Cement Roof Board	TRUFAST RA, 4-inch o.c.	CA	None	CA	-67.5
C-13.	Structural Concrete	None	(Optional) Min. 1.5-inch Derbiboard, Derbiboard CA, Derbiboard h, or SOPRA-ISO+ r	TRUFAST RA	Min. 0.25-inch DensDeck Prime	TRUFAST RA	CA	None	CA	-45.0*

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TABLE 3A: STRUCTURAL CONCRETE DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF) SYSTEM TYPE A-1: BONDED INSULATION, BONDED ROOF COVER REFER TO NOTE 16B FOR VAPOR BARRIER OPTIONS										
System No.	Deck (Note 1)	Primer	Base Insulation Layer		Top Insulation Layer		Roof Cover (Note 15)			MDP (psf)
			Type	Attach (Notes 6,7,8)	Type	Attach (Notes 6,7,8)	Base Ply	Ply	Cap Ply	
C-14.	Structural Concrete	None	(Optional) Min. 1.5-inch Derbiboard, Derbiboard CA, Derbiboard h, or SOPRA-ISO+ r	TRUFAST RA	Min. 0.25-inch DEXcell FA Glass Mat Roof Board	TRUFAST RA	CA	None	CA	-67.5
C-15.	Structural Concrete	None	(Optional) Min. 1.5-inch Derbiboard, Derbiboard CA, Derbiboard h, or SOPRA-ISO+ r	TRUFAST RA	Min. 0.25-inch DEXcell FA Glass Mat Roof Board	TRUFAST RA	CA	None	CA	-67.5
C-16.	Structural Concrete	None	(Optional) Min. 1.5-inch Derbiboard, Derbiboard CA, Derbiboard h, or SOPRA-ISO+ r	TRUFAST RA, 4-inch o.c.	Min. 0.25-inch DEXcell FA Glass Mat Roof Board	TRUFAST RA, 4-inch o.c.	CA	None	CA	-67.5
C-17.	Structural Concrete	None	(Optional) Min. 1.5-inch Derbiboard, Derbiboard CA, Derbiboard h, or SOPRA-ISO+ r	TRUFAST RA Tanks	Min. 7/16-inch DEXcell Cement Roof Board	TRUFAST RA Tanks	CA	None	CA	-67.5
C-18.	Structural Concrete	None	(Optional) Min. 1.5-inch Derbiboard, Derbiboard CA, Derbiboard h, or SOPRA-ISO+ r	TRUFAST RA Tanks, 4-inch o.c.	Min. 7/16-inch DEXcell Cement Roof Board	TRUFAST RA Tanks, 4-inch o.c.	CA	None	CA	-67.5
C-19.	Structural Concrete	None	(Optional) Min. 1.5-inch Derbiboard, Derbiboard CA, Derbiboard h, or SOPRA-ISO+ r	TRUFAST RA Tanks	Min. 0.25-inch DensDeck Prime	TRUFAST RA Tanks	CA	None	CA	-45.0*
C-20.	Structural Concrete	None	(Optional) Min. 1.5-inch Derbiboard, Derbiboard CA, Derbiboard h, or SOPRA-ISO+ r	TRUFAST RA Tanks	Min. 0.25-inch DEXcell FA Glass Mat Roof Board	TRUFAST RA Tanks	CA	None	CA	-67.5
C-21.	Structural Concrete	None	(Optional) Min. 1.5-inch Derbiboard, Derbiboard CA, Derbiboard h, or SOPRA-ISO+ r	TRUFAST RA Tanks	Min. 0.25-inch DEXcell FA Glass Mat Roof Board	TRUFAST RA Tanks	CA	None	CA	-67.5
C-22.	Structural Concrete	None	(Optional) Min. 1.5-inch Derbiboard, Derbiboard CA, Derbiboard h, or SOPRA-ISO+ r	TRUFAST RA Tanks, 4-inch o.c.	Min. 0.25-inch DEXcell FA Glass Mat Roof Board	TRUFAST RA Tanks, 4-inch o.c.	CA	None	CA	-67.5
ASPHALT-APPLIED BASE PLY:										
C-23.	Structural Concrete	None	(Optional) Min. 1.5-inch Derbiboard, Derbiboard CA, Derbiboard h, or SOPRA-ISO+ r	TRUFAST RA	Min. 7/16-inch DEXcell Cement Roof Board	TRUFAST RA	AA *(No Derbigum GP, Derbigum XPS)*	(Optional) AA or APP-TA	APP-TA	-195.0
C-24.	Structural Concrete	None	(Optional) Min. 1.5-inch Derbiboard, Derbiboard CA, Derbiboard h, or SOPRA-ISO+ r	TRUFAST RA	Min. 0.25-inch DensDeck Prime	TRUFAST RA	AA *(No Derbigum GP, Derbigum XPS)*	(Optional) AA or APP-TA	APP-TA	-195.0
C-25.	Structural Concrete	None	(Optional) Min. 1.5-inch Derbiboard, Derbiboard CA, Derbiboard h, or SOPRA-ISO+ r	TRUFAST RA	Min. 0.25-inch DEXcell FA Glass Mat Roof Board	TRUFAST RA	AA *(No Derbigum GP, Derbigum XPS)*	(Optional) AA or APP-TA	APP-TA	-187.5
C-26.	Structural Concrete	None	(Optional) Min. 1.5-inch Derbiboard, Derbiboard CA, Derbiboard h, or SOPRA-ISO+ r	TRUFAST RA, 4-inch o.c.	Min. 0.25-inch DEXcell FA Glass Mat Roof Board	TRUFAST RA, 4-inch o.c.	AA *(No Derbigum GP, Derbigum XPS)*	(Optional) AA or APP-TA	APP-TA	-227.5

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TABLE 3A: STRUCTURAL CONCRETE DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF) SYSTEM TYPE A-1: BONDED INSULATION, BONDED ROOF COVER REFER TO NOTE 16B FOR VAPOR BARRIER OPTIONS										
System No.	Deck (Note 1)	Primer	Base Insulation Layer		Top Insulation Layer		Roof Cover (Note 15)			MDP (psf)
			Type	Attach (Notes 6,7,8)	Type	Attach (Notes 6,7,8)	Base Ply	Ply	Cap Ply	
C-27.	Structural Concrete	None	(Optional) Min. 1.5-inch Derbiboard, Derbiboard CA, Derbiboard h, or SOPRA-ISO+ r	TRUFAST RA Tanks	Min. 7/16-inch DEXcell Cement Roof Board	TRUFAST RA Tanks	AA *(No Derbigum GP, Derbigum XPS)*	(Optional) AA or APP-TA	APP-TA	-195.0
C-28.	Structural Concrete	None	(Optional) Min. 1.5-inch Derbiboard, Derbiboard CA, Derbiboard h, or SOPRA-ISO+ r	TRUFAST RA Tanks	Min. 0.25-inch DensDeck Prime	TRUFAST RA Tanks	AA *(No Derbigum GP, Derbigum XPS)*	(Optional) AA or APP-TA	APP-TA	-195.0
C-29.	Structural Concrete	None	(Optional) Min. 1.5-inch Derbiboard, Derbiboard CA, Derbiboard h, or SOPRA-ISO+ r	TRUFAST RA Tanks	Min. 0.25-inch DEXcell FA Glass Mat Roof Board	TRUFAST RA Tanks	AA *(No Derbigum GP, Derbigum XPS)*	(Optional) AA or APP-TA	APP-TA	-187.5
C-30.	Structural Concrete	None	(Optional) Min. 1.5-inch Derbiboard, Derbiboard CA, Derbiboard h, or SOPRA-ISO+ r	TRUFAST RA Tanks, 4-inch o.c.	Min. 0.25-inch DEXcell FA Glass Mat Roof Board	TRUFAST RA Tanks, 4-inch o.c.	AA *(No Derbigum GP, Derbigum XPS)*	(Optional) AA or APP-TA	APP-TA	-227.5
C-31.	Structural Concrete	None	(Optional) Min. 1.5-inch Derbiboard, Derbiboard CA, Derbiboard h, or SOPRA-ISO+ r	TRUFAST RA	Min. 7/16-inch DEXcell Cement Roof Board	TRUFAST RA	AA *(No Derbigum GP, Derbigum XPS)*	(Optional) AA *(No Derbigum GP, Derbigum XPS)*	SBS-TA	-195.0
C-32.	Structural Concrete	None	(Optional) Min. 1.5-inch Derbiboard, Derbiboard CA, Derbiboard h, or SOPRA-ISO+ r	TRUFAST RA	Min. 0.25-inch DensDeck Prime	TRUFAST RA	AA *(No Derbigum GP, Derbigum XPS)*	(Optional) AA *(No Derbigum GP, Derbigum XPS)*	SBS-TA	-195.0
C-33.	Structural Concrete	None	(Optional) Min. 1.5-inch Derbiboard, Derbiboard CA, Derbiboard h, or SOPRA-ISO+ r	TRUFAST RA	Min. 0.25-inch DEXcell FA Glass Mat Roof Board	TRUFAST RA	AA *(No Derbigum GP, Derbigum XPS)*	(Optional) AA *(No Derbigum GP, Derbigum XPS)*	SBS-TA	-187.5
C-34.	Structural Concrete	None	(Optional) Min. 1.5-inch Derbiboard, Derbiboard CA, Derbiboard h, or SOPRA-ISO+ r	TRUFAST RA, 4-inch o.c.	Min. 0.25-inch DEXcell FA Glass Mat Roof Board	TRUFAST RA, 4-inch o.c.	AA *(No Derbigum GP, Derbigum XPS)*	(Optional) AA *(No Derbigum GP, Derbigum XPS)*	SBS-TA	-227.5

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TABLE 3A: STRUCTURAL CONCRETE DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF) SYSTEM TYPE A-1: BONDED INSULATION, BONDED ROOF COVER REFER TO NOTE 16B FOR VAPOR BARRIER OPTIONS										
System No.	Deck (Note 1)	Primer	Base Insulation Layer		Top Insulation Layer		Roof Cover (Note 15)			MDP (psf)
			Type	Attach (Notes 6,7,8)	Type	Attach (Notes 6,7,8)	Base Ply	Ply	Cap Ply	
C-35.	Structural Concrete	None	(Optional) Min. 1.5-inch Derbiboard, Derbiboard CA, Derbiboard h, or SOPRA-ISO+ r	TRUFAST RA Tanks	Min. 7/16-inch DEXcell Cement Roof Board	TRUFAST RA Tanks	AA *(No Derbigum GP, Derbigum XPS)*	(Optional) AA *(No Derbigum GP, Derbigum XPS)*	SBS-TA	-195.0
C-36.	Structural Concrete	None	(Optional) Min. 1.5-inch Derbiboard, Derbiboard CA, Derbiboard h, or SOPRA-ISO+ r	TRUFAST RA Tanks	Min. 0.25-inch DensDeck Prime	TRUFAST RA Tanks	AA *(No Derbigum GP, Derbigum XPS)*	(Optional) AA *(No Derbigum GP, Derbigum XPS)*	SBS-TA	-195.0
C-37.	Structural Concrete	None	(Optional) Min. 1.5-inch Derbiboard, Derbiboard CA, Derbiboard h, or SOPRA-ISO+ r	TRUFAST RA Tanks	Min. 0.25-inch DEXcell FA Glass Mat Roof Board	TRUFAST RA Tanks	AA *(No Derbigum GP, Derbigum XPS)*	(Optional) AA *(No Derbigum GP, Derbigum XPS)*	SBS-TA	-187.5
C-38.	Structural Concrete	None	(Optional) Min. 1.5-inch Derbiboard, Derbiboard CA, Derbiboard h, or SOPRA-ISO+ r	TRUFAST RA Tanks, 4-inch o.c.	Min. 0.25-inch DEXcell FA Glass Mat Roof Board	TRUFAST RA Tanks, 4-inch o.c.	AA *(No Derbigum GP, Derbigum XPS)*	(Optional) AA *(No Derbigum GP, Derbigum XPS)*	SBS-TA	-227.5
TORCH-APPLIED BASE PLY:										
C-39.	Structural Concrete	D41	Min. 1.5-inch Derbiboard, ENRGY 3, Derbiboard h or Multi-Max FA3	Asphalt applied	Min. 0.125-inch SOPRABOARD OR SOPRABOARD HS	Asphalt applied	APP-TA	(Optional) APP-TA	APP-TA	-365.0
C-40.	Structural Concrete	None	(Optional) Min. 1.5-inch Derbiboard, Derbiboard CA, Derbiboard h or SOPRA-ISO+ r	DUOTACK 365	Min. 0.25-inch DensDeck Prime	DUOTACK 365	APP-TA	(Optional) APP-TA	APP-TA	-160.0
C-41.	Structural Concrete	None	(Optional) Min. 1.5-inch Derbiboard, Derbiboard CA, Derbiboard h or SOPRA-ISO+ r	DUOTACK 365	Min. 0.25-inch SECUROCK Ultralight Coated Glass Mat Roof Board	DUOTACK 365	APP-TA	(Optional) APP-TA	APP-TA	-232.5
C-42.	Structural Concrete	None	(Optional) Min. 1.5-inch Derbiboard, Derbiboard CA, EnergyGuard POLYISO Insulation, ENRGY 3, ENRGY 3 CGF, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, Derbiboard h, SOPRA-ISO+ r or UltraMax	DUOTACK 365	Min. 0.125-inch SOPRABOARD OR SOPRABOARD HS	DUOTACK 365	APP-TA	(Optional) APP-TA	APP-TA	-382.5
C-43.	Structural Concrete	None	Min. 1.5-inch Derbiboard, ENRGY 3, Derbiboard h or Multi-Max FA3	DUOTACK SPF HFO	Min. 0.125-inch SOPRABOARD OR SOPRABOARD HS	DUOTACK SPF HFO	APP-TA	(Optional) APP-TA	APP-TA	-157.5

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TABLE 3A: STRUCTURAL CONCRETE DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF) SYSTEM TYPE A-1: BONDED INSULATION, BONDED ROOF COVER REFER TO NOTE 16B FOR VAPOR BARRIER OPTIONS										
System No.	Deck (Note 1)	Primer	Base Insulation Layer		Top Insulation Layer		Roof Cover (Note 15)			MDP (psf)
			Type	Attach (Notes 6,7,8)	Type	Attach (Notes 6,7,8)	Base Ply	Ply	Cap Ply	
C-44.	Structural concrete	None	Min. 2.0-inch Derbiboard	DUOTACK SPF HFO	Min. 0.125-inch SOPRABOARD HS or Min. 0.25-inch SECUROCK Ultralight Coated Glass Mat Roof Board	DUOTACK SPF HFO	APP-TA	(Optional) APP-TA	APP-TA	-232.5
C-45.	Structural concrete	None	Min. 0.125-inch SOPRABOARD HS	DUOTACK SPF HFO	None	N/A	APP-TA	(Optional) APP-TA	APP-TA	-350.0
C-46.	Structural concrete	None	Min. 1-inch Derbiboard, Derbiboard CA, ENRGY 3 or ISOGARD GL	OB500	0.5-inch DuraBoard	OB500	Derbibase, Derbibase Ultra, Derbibase HV or Bitutak Cold, SELECT APP POLY SANDED, Derbigum P, Bitutak MB, SELECT APP POLY SP, torch-applied	(Optional) APP-TA	APP-TA	-130.0
C-47.	Structural concrete	None	Min. 1-inch Derbiboard, Derbiboard CA, ENRGY 3 or ISOGARD GL	OB500	Min. 0.25-inch DensDeck Prime	OB500	APP-TA	(Optional) APP-TA	APP-TA	-160.0
C-48.	Structural concrete	None	Min. 1-inch Derbiboard, Derbiboard CA, ENRGY 3 or ISOGARD GL	OB500	0.5-inch DuraBoard	OB500	Derbigum GP or Derbigum XPS, torch-applied	(Optional) APP-TA	APP-TA	-160.0
C-49.	Structural Concrete	None	(Optional) Min. 1.5-inch Derbiboard, Derbiboard CA, Derbiboard h, or SOPRA-ISO+ r	TRUFAST RA	Min. 7/16-inch DEXcell Cement Roof Board	TRUFAST RA	APP-TA	(Optional) APP-TA	APP-TA	-60.0
C-50.	Structural Concrete	None	(Optional) Min. 1.5-inch Derbiboard, Derbiboard CA, Derbiboard h, or SOPRA-ISO+ r	TRUFAST RA	Min. 0.25-inch DensDeck Prime	TRUFAST RA	APP-TA	(Optional APP-TA	APP-TA	-195.0
C-51.	Structural Concrete	None	(Optional) Min. 1.5-inch Derbiboard, Derbiboard CA, Derbiboard h, or SOPRA-ISO+ r	TRUFAST RA	Min. 0.25-inch DEXcell FA Glass Mat Roof Board	TRUFAST RA	APP-TA	(Optional) APP-TA	APP-TA	-185.0
C-52.	Structural Concrete	None	(Optional) Min. 1.5-inch Derbiboard, Derbiboard CA, Derbiboard h, or SOPRA-ISO+ r	TRUFAST RA Tanks	Min. 7/16-inch DEXcell Cement Roof Board	TRUFAST RA Tanks	APP-TA	(Optional) APP-TA	APP-TA	-60.0
C-53.	Structural Concrete	None	(Optional) Min. 1.5-inch Derbiboard, Derbiboard CA, Derbiboard h, or SOPRA-ISO+ r	TRUFAST RA Tanks	Min. 0.25-inch DensDeck Prime	TRUFAST RA Tanks	APP-TA	(Optional APP-TA	APP-TA	-195.0
C-54.	Structural Concrete	None	(Optional) Min. 1.5-inch Derbiboard, Derbiboard CA, Derbiboard h, or SOPRA-ISO+ r	TRUFAST RA Tanks	Min. 0.25-inch DEXcell FA Glass Mat Roof Board	TRUFAST RA Tanks	APP-TA	(Optional) APP-TA	APP-TA	-185.0
SELF-ADHERING BASE PLY:										
C-55.	Structural Concrete	None	(Optional) Min. 1.5-inch Derbiboard, Derbiboard CA, Derbiboard h, or SOPRA-ISO+ r	TRUFAST RA	Min. 7/16-inch DEXcell Cement Roof Board. Top surface shall be primed with ELASTOCOL Stick or Derbibase SA Primer	TRUFAST RA	SBS-SA	(Optional) APP-TA	APP-TA or SBS-TA	-190.0

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TABLE 3A: STRUCTURAL CONCRETE DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF) SYSTEM TYPE A-1: BONDED INSULATION, BONDED ROOF COVER REFER TO NOTE 16B FOR VAPOR BARRIER OPTIONS										
System No.	Deck (Note 1)	Primer	Base Insulation Layer		Top Insulation Layer		Roof Cover (Note 15)			MDP (psf)
			Type	Attach (Notes 6,7,8)	Type	Attach (Notes 6,7,8)	Base Ply	Ply	Cap Ply	
C-56.	Structural Concrete	None	(Optional) Min. 1.5-inch Derbiboard, Derbiboard CA, Derbiboard h, or SOPRA-ISO+ r	TRUFAST RA, 4-inch o.c.	Min. 7/16-inch DEXcell Cement Roof Board. Top surface shall be primed with ELASTOCOL Stick or Derbibase SA Primer	TRUFAST RA, 4-inch o.c.	SBS-SA	(Optional) APP-TA	APP-TA or SBS-TA	-285.0
C-57.	Structural Concrete	None	(Optional) Min. 1.5-inch Derbiboard, Derbiboard CA, Derbiboard h, or SOPRA-ISO+ r	TRUFAST RA	Min. 0.25-inch DensDeck Prime. Top surface shall be primed with ELASTOCOL Stick or Derbibase SA Primer	TRUFAST RA	SBS-SA	(Optional) APP-TA	APP-TA or SBS-TA	-195.0
C-58.	Structural Concrete	None	(Optional) Min. 1.5-inch Derbiboard, Derbiboard CA, Derbiboard h, or SOPRA-ISO+ r	TRUFAST RA	Min. 0.25-inch DEXcell FA Glass Mat Roof Board. Top surface shall be primed with ELASTOCOL Stick, Derbibase SA Primer	TRUFAST RA	SBS-SA	(Optional) APP-TA	APP-TA or SBS-TA	-120.0
C-59.	Structural Concrete	None	(Optional) Min. 1.5-inch Derbiboard, Derbiboard CA, Derbiboard h, or SOPRA-ISO+ r	TRUFAST RA Tanks	Min. 7/16-inch DEXcell Cement Roof Board. Top surface shall be primed with ELASTOCOL Stick or Derbibase SA Primer	TRUFAST RA	SBS-SA	(Optional) APP-TA	APP-TA or SBS-TA	-190.0
C-60.	Structural Concrete	None	(Optional) Min. 1.5-inch Derbiboard, Derbiboard CA, Derbiboard h, or SOPRA-ISO+ r	TRUFAST RA Tanks, 4-inch o.c.	Min. 7/16-inch DEXcell Cement Roof Board. Top surface shall be primed with ELASTOCOL Stick or Derbibase SA Primer	TRUFAST RA Tanks, 4-inch o.c.	SBS-SA	(Optional) APP-TA	APP-TA or SBS-TA	-285.0
C-61.	Structural Concrete	None	(Optional) Min. 1.5-inch Derbiboard, Derbiboard CA, Derbiboard h, or SOPRA-ISO+ r	TRUFAST RA Tanks	Min. 0.25-inch DensDeck Prime. Top surface shall be primed with ELASTOCOL Stick or Derbibase SA Primer	TRUFAST RA Tanks	SBS-SA	(Optional) APP-TA	APP-TA or SBS-TA	-195.0
C-62.	Structural Concrete	None	(Optional) Min. 1.5-inch Derbiboard, Derbiboard CA, Derbiboard h, or SOPRA-ISO+ r	TRUFAST RA Tanks	Min. 0.25-inch DEXcell FA Glass Mat Roof Board. Top surface shall be primed with ELASTOCOL Stick or Derbibase SA Primer	TRUFAST RA Tanks	SBS-SA	(Optional) APP-TA	APP-TA or SBS-TA	-120.0

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TABLE 3B: STRUCTURAL CONCRETE DECKS – NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER SYSTEM TYPE D-2: INSULATED, MECHANICALLY ATTACHED SOPRAFIX, BONDED ROOF COVER								
System No.	Deck (Note 1)	Insulation (Note 3, Note 13)	Base Membrane			Roof Cover (Note 15)		MDP (psf)
			Type (Note 15C)	Fastener (Note 11)	Spacing	Ply	Cap	
C-63.	Structural concrete	Min. 1.5-inch, One or more layers, any combination	SOPRAFIX Base 611, 612 or 614	#14 Perlok Fastener, Perlok #14 HD or Perlok 1/4" Concrete Spike with Perlok 2" Barbed Metal Seam Plate	18-inch o.c. within 4-inch wide, heat-welded side laps	(Optional) APP-TA	APP-TA	-45.0*
C-64.	Structural concrete	Min. 1.5-inch, One or more layers, any combination	SOPRAFIX Base 611, 612 or 614	#14 Perlok Fastener, Perlok #14 HD or Perlok 1/4" Concrete Spike with Perlok 2" Barbed Metal Seam Plate	12-inch o.c. within 4-inch wide, heat-welded laps	(Optional) APP-TA	APP-TA	-67.5
C-65.	Structural concrete	Min. 1.5-inch, One or more layers, any combination	SOPRAFIX Base 611, 612 or 614	#14 Perlok Fastener, Perlok #14 HD or Perlok 1/4" Concrete Spike with Perlok 2.4" Barbed Metal Seam Plate	12-inch o.c. within 4-inch wide, heat-welded laps	(Optional) APP-TA	APP-TA	-97.5
C-66.	Structural concrete	Min. 1.5-inch, One or more layers, any combination	SOPRAFIX Base 611, 612 or 614	#14 Perlok Fastener, Perlok #14 HD or Perlok 1/4" Concrete Spike with Perlok 2" Barbed Metal Seam Plate or Perlok 2.4" Barbed Metal Seam Plate	6-inch o.c. within 4-inch wide, heat-welded laps	(Optional) APP-TA	APP-TA	-112.5

TABLE 3C: STRUCTURAL CONCRETE DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF) SYSTEM TYPE F: NON-INSULATED, BONDED ROOF COVER						
System No.	Deck	Primer	Roof Cover (Note 15)			MDP (psf)
			Base Ply	Ply	Cap Ply	
COLD-APPLIED BASE PLY:						
C-67.	Structural concrete	ASTM D41	CA	None	CA	-255.0
TORCH-APPLIED BASE PLY:						
C-68.	Structural concrete	ASTM D41	APP-TA	(Optional) APP-TA	APP-TA	-300.0

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TABLE 4A: LIGHTWEIGHT CONCRETE DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF) SYSTEM TYPE E-2: NON-INSULATED, MECHANICALLY ATTACHED BASE SHEET, BONDED ROOF COVER REFER TO NOTE 16C FOR DRY-IN / TEMPORARY ROOF OPTIONS (BETWEEN STRUCTURAL CONCRETE AND LIGHTWEIGHT CONCRETE)								
System No.	Deck (Note 1)	Lightweight Concrete (Note 14)	Base Sheet			Roof Cover (Note 15)		MDP (psf)
			Type	Fastener	Attach	Base Ply	Cap Ply	
CELCORE (NOA 24-0906.02):								
LWC-1.	Min. 22 ga., Type BV, Grade 33 steel; 5/8" puddle welds or #12 HWH Teks 5, 6" o.c. or min. 2,500 psi structural concrete	Min. 200 psi Celcore Cellular Concrete	Derbibase, Derbibase Ultra or Derbigum GP	Perlok-O CRBSF 1.7	7-inch o.c. in the 4-inch lap and 7-inch o.c. at two (2) equally spaced, staggered center rows	CA or APP-TA	CA or APP-TA	-45.0
CONCRECEL (NOA 21-1229.06):								
LWC-2.	Min. 22 ga., Type BV, Grade 80 steel; #12 HWH Teks 5, 6" o.c. or min. 2,500 psi structural concrete	Min. 200 psi Concrecel Concrete	Derbibase, Derbibase Ultra or Derbigum GP	Perlok-O CRBSF 1.7	7-inch o.c. in the 4-inch lap and 7-inch o.c. at two (2) equally spaced, staggered center rows	CA or APP-TA	CA or APP-TA	-45.0
LWC-3.	Min. 22 ga., Type BV, Grade 80 steel; #12 HWH Teks 5, 6" o.c. or min. 2,500 psi structural concrete	Deck treated with Concrecel Bonding Agent followed by min. 450 psi Concrecel Concrete	Derbibase	Perlok-O CRBSF 1.7	7-inch o.c. in the 4-inch lap and 7-inch o.c. at two (2) equally spaced, staggered center rows	(Optional) APP-TA	APP-TA	-60.0
ELASTIZELL (NOA 23-0817.05):								
LWC-4.	Min. 22 ga., Type BV, Grade 33 steel; 5/8" puddle welds or #12 HWH Teks 5, 6" o.c. or min. 2,500 psi structural concrete	Min. 200 psi Range II Elastizell Lightweight Insulating Concrete	Derbibase, Derbibase Ultra or Derbigum GP	Perlok-O CRBSF 1.7	7-inch o.c. in the 4-inch lap and 7-inch o.c. at two (2) equally spaced, staggered center rows	CA or APP-TA	CA or APP-TA	-45.0

TABLE 4B: LIGHTWEIGHT INSULATING CONCRETE OVER STEEL OR STRUCTURAL CONCRETE DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF) SYSTEM TYPE E-2: LWC TO DECK, MECHANICALLY ATTACHED SOPRAFIX, BONDED ROOF COVER REFER TO NOTE 16C FOR VAPOR BARRIER OPTIONS (BETWEEN STRUCTURAL CONCRETE AND LIGHTWEIGHT CONCRETE)								
System No.	Deck (Note 1)	Lightweight Concrete (Note 14)	Base Membrane			Roof Cover (Note 15)		MDP (psf)
			Type (Note 15C)	Fastener (Note 11)	Spacing	Ply	Cap	
CELCORE (NOA 24-0906.02):								
LWC-5.	Min. 22 ga., Type BV, Grade 40 steel; 6 ft span, min. 20 ga., Type N or DR steel; 8 ft span or min. 2,500 psi structural concrete	Deck treated with Celcore S-1. Celcore MF with Celcore HS Rheology Modifying Admixture, Min. 300 psi, Min. 2-inch top coat. Celcore PVA Curing Compound. Optional Celcore SBS (Sanded Bonding Surface) may be applied.	SOPRAFIX Base 613	2-1/4" Perlok Versa-Fast Fasteners & Plate	Versa-Fast Plate 9-inch o.c. within the 5-inch wide, heat-welded side laps. Two (2) min. 2¼" long Versa-Fast Fasteners installed 180° into the holes of the Versa-Fast Plate, parallel to the width-direction of the sheet.	(Optional) APP-TA	APP-TA	-45.0
LWC-6.	Min. 22 ga. type BV steel; 5 ft span or min. 2,500 psi structural concrete	Celcore Cellular Concrete, Min. 200 psi, Min. 2-inch top coat. Celcore PVA Curing Compound.	SOPRAFIX Base 613 or 614	Tri-Fixx	9-inch o.c. within 5-inch wide, heat-welded laps	(Optional) APP-TA	APP-TA	-45.0
LWC-7.	Min. 20 ga. Type N or DR steel; 8 ft span	Celcore MF with Celcore HS Rheology Modifying Admixture, Min. 260 psi, Min. 2-inch top coat. Celcore PVA Curing Compound.	SOPRAFIX Base 613 or 614	Tri-Fixx	9-inch o.c. within 5-inch wide, heat-welded laps	(Optional) APP-TA	APP-TA	-45.0

TABLE 4B: LIGHTWEIGHT INSULATING CONCRETE OVER STEEL OR STRUCTURAL CONCRETE DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF) SYSTEM TYPE E-2: LWC TO DECK, MECHANICALLY ATTACHED SOPRAFIX, BONDED ROOF COVER REFER TO NOTE 16C FOR VAPOR BARRIER OPTIONS (BETWEEN STRUCTURAL CONCRETE AND LIGHTWEIGHT CONCRETE)								
System No.	Deck (Note 1)	Lightweight Concrete (Note 14)	Base Membrane			Roof Cover (Note 15)		MDP (psf)
			Type (Note 15C)	Fastener (Note 11)	Spacing	Ply	Cap	
LWC-8.	Structural concrete	Treatment: Optional, Celcore S-1. LWC: Celcore MF with Celcore HS Rheology Modifying Admixture, Min. 390 psi, Min. 2-inch top coat. Celcore PVA Curing Compound. Surfacing: Optional, Celcore SBS (Sanded Bonding Surface).	SOPRAFIX Base 613	Perlok Versa-Fast Fasteners & Plate	Versa-Fast Plate 10-inch o.c. within the 5-inch wide, heat-welded side laps. Two (2) min. 2¼" long Versa-Fast Fasteners installed 180° into the holes of the Versa-Fast Plate, parallel to the width-direction of the sheet.	(Optional) APP-TA	APP-TA	-45.0
LWC-9.	Structural concrete	Treatment (Optional when Vapor Barrier installed): Celcore S-1. LWC: Celcore MF with Celcore HS Rheology Modifying Admixture, Min. 390 psi, Min. 2-inch top coat. Celcore PVA Curing Compound. Surfacing: Optional, Celcore SBS (Sanded Bonding Surface).	SOPRAFIX Base 613	Perlok Versa-Fast Fasteners & Plate	Versa-Fast Plate 10-inch o.c. within the 5-inch wide, heat-welded side laps. Four (4) min. 2¼" long Versa-Fast Fasteners installed into every-other hole of the Versa-Fast Plate, forming a square pattern with the square edges oriented in the principle directions of the roll.	(Optional) APP-TA	APP-TA	-75.0
LWC-10.	Min. 20 ga., Type N or DR steel; 8 ft span	Celcore MF with Celcore HS Rheology Modifying Admixture, Min. 390 psi, Min. 2-inch top coat. Celcore PVA Curing Compound.	SOPRAFIX Base 613	Perlok Versa-Fast Fasteners & Plate	Versa-Fast Plate 10-inch o.c. within the 5-inch wide, heat-welded side laps. Four (4) min. 2¼" long Versa-Fast Fasteners installed into every-other hole of the Versa-Fast Plate, forming a square pattern with the square edges oriented in the principle directions of the roll.	(Optional) APP-TA	APP-TA	-75.0
LWC-11.	Min. 20 ga., Type N or DR steel; 8 ft span	Celcore MF with Celcore HS Rheology Modifying Admixture, Min. 660 psi, Min. 2-inch top coat. Celcore PVA Curing Compound.	SOPRAFIX Base 613 or 614	Tri-Fixx	6-inch o.c. within 5-inch wide, heat-welded laps	(Optional) APP-TA	APP-TA	-75.0
LWC-12.	Min. 22 ga. Type BV, Grade 40 steel; 6 ft span or structural concrete	Treatment: Celcore S-1. LWC: Celcore MF with Celcore HS Rheology Modifying Admixture, Min. 660 psi, Min. 2-inch top coat. Celcore PVA Curing Compound.	SOPRAFIX Base 614	Tri-Fixx	6-inch o.c. within 5-inch wide, heat-welded laps	(Optional) APP-TA	APP-TA	-82.5
CONCRECEL (NOA 21-1229.06):								
LWC-13.	Min. 22 ga. Type BV, Grade 80 steel; 5 ft span or structural concrete	Concrecel Concrete, Min. 200 psi, Min. 2.5-inch top coat	SOPRAFIX Base 613 or 614	Tri-Fixx	10-inch o.c. within 5-inch wide, heat-welded laps	(Optional) APP-TA	APP-TA	-37.5
LWC-14.	Min. 22 ga. Type BV, Grade 80 steel; 5 ft span or structural concrete	Concrecel Concrete, Min. 200 psi, Min. 2.5-inch top coat	SOPRAFIX Base 613 or 614	Tri-Fixx	9-inch o.c. within 5-inch wide, heat-welded laps	(Optional) APP-TA	APP-TA	-45.0
LWC-15.	Min. 22 ga. Type BV, Grade 80 steel; 5 ft span or structural concrete	Concrecel Concrete, Min. 300 psi, Min. 2.25-inch top coat	SOPRAFIX Base 613 or 614	Tri-Fixx	7-inch o.c. within the 5-inch wide heat-welded side lap	(Optional) APP-TA	APP-TA	-52.5
ELASTIZELL (NOA 23-0817.05):								

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TABLE 4B: LIGHTWEIGHT INSULATING CONCRETE OVER STEEL OR STRUCTURAL CONCRETE DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF) SYSTEM TYPE E-2: LWC TO DECK, MECHANICALLY ATTACHED SOPRAFIX, BONDED ROOF COVER REFER TO NOTE 16C FOR VAPOR BARRIER OPTIONS (BETWEEN STRUCTURAL CONCRETE AND LIGHTWEIGHT CONCRETE)								
System No.	Deck (Note 1)	Lightweight Concrete (Note 14)	Base Membrane			Roof Cover (Note 15)		MDP (psf)
			Type (Note 15C)	Fastener (Note 11)	Spacing	Ply	Cap	
LWC-16.	Min. 22 ga. Type BV, Grade 33 steel; 6 ft span or structural concrete	Elastizell Lightweight Insulating Concrete, Min. 200 psi, Min. 2.5-inch top coat.	SOPRAFIX Base 613 or 614	Tri-Fixx	10-inch o.c. within 5-inch wide, heat-welded laps	(Optional) APP-TA	APP-TA	-37.5
LWC-17.	Min. 22 ga. Type BV, Grade 33 steel; 6 ft span or structural concrete	Elastizell Lightweight Insulating Concrete, Min. 200 psi, Min. 2.5-inch top coat.	SOPRAFIX Base 613 or 614	Tri-Fixx	9-inch o.c. within 5-inch wide, heat-welded laps	(Optional) APP-TA	APP-TA	-45.0
LWC-18.	Min. 22 ga. Type BV, Grade 33 steel; 6 ft span or structural concrete	Elastizell Lightweight Insulating Concrete, Min. 300 psi, Min. 2-inch top coat.	SOPRAFIX Base 613 or 614	Tri-Fixx	8-inch o.c. within 5-inch wide, heat-welded laps and 8-inch o.c. in one center row	(Optional) APP-TA	APP-TA	-67.5
MEARLCRETE (NOA 24-0514.06):								
LWC-19.	Min. 22 ga. Type BV, Grade 33 steel; 6 ft span or structural concrete	Mearlcrete, Min. 200 psi, Min. 2.5-inch top coat	SOPRAFIX Base 613 or 614	Tri-Fixx	10-inch o.c. within 5-inch wide, heat-welded laps	(Optional) APP-TA	APP-TA	-37.5
LWC-20.	Min. 22 ga. Type BV, Grade 33 steel; 6 ft span or structural concrete	Mearlcrete, Min. 200 psi, Min. 2.5-inch top coat	SOPRAFIX Base 613 or 614	Tri-Fixx	9-inch o.c. within 5-inch wide, heat-welded laps	(Optional) APP-TA	APP-TA	-45.0
LWC-21.	Min. 22 ga. Type BV, Grade 33 steel; 6 ft span or structural concrete	Mearlcrete, Min. 250 psi, Min. 2-inch top coat	SOPRAFIX Base 613 or 614	Tri-Fixx	8-inch o.c. within 5-inch wide, heat-welded laps and 8-inch o.c. in one center row	(Optional) APP-TA	APP-TA	-75.0
PRE-EXISTENT CELLULAR LWC (NOTE 14A):								
LWC-22.	Min. 22 ga. type BV steel; 5 ft span or min. 2,500 psi structural concrete	Pre-existent, min. 2-inch thick cellular lightweight concrete Compressive: 300 psi Withdrawal, Tri-Fixx: 215 lbf	SOPRAFIX Base 613 or 614	Tri-Fixx	10-inch o.c. within 5-inch wide, heat-welded laps	(Optional) APP-TA	APP-TA	-45.0
LWC-23.	Min. 22 ga. Type B, Grade 40 steel; 6 ft spans or structural concrete	Pre-existent, min. 2-inch thick cellular lightweight concrete Compressive: 370 psi Withdrawal, Tri-Fixx: 193 lbf	SOPRAFIX Base 613 or 614	Tri-Fixx	6-inch o.c. within 5-inch wide, heat-welded laps	(Optional) APP-TA	APP-TA	-67.5
LWC-24.	Min. 22 ga., Type BV, Grade 40 steel; 6 ft spans or structural concrete	Pre-existent, min. 2-inch thick cellular lightweight concrete Compressive: 500 psi Withdrawal, Tri-Fixx: 158 lbf	SOPRAFIX Base 613 or 614	Tri-Fixx	8-inch o.c. in the 5-inch wide, heat-welded side laps and 8-inch o.c. in one center row	(Optional) APP-TA	APP-TA	-82.5

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TABLE 5A: 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 Note 1) or performance of the substrate (See Note 12). 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 (Note 1, Note 12)	Base Insulation Layer		Top Insulation Layer		Roof Cover (Note 15)			MDP (psf)[A]
		Type	Attach (Notes 6,7,8)	Type	Attach (Notes 6,7,8)	Base Ply	Ply	Cap Ply	
COLD-APPLIED BASE PLY:									
R-1.	Existing smooth surface asphalt BUR or APP or SBS roof cover	(Optional) Min. 1.5-inch Derbiboard CA	Asphalt applied	Min. 1.5-inch Derbiboard CA	Asphalt applied	CA	None	CA	-75.0
R-2.	Smooth- or granule-surface modified bitumen or BUR	(Optional) Min. 1.5-inch Derbiboard, Derbiboard CA, Derbiboard h or SOPRA-ISO+ r	DUOTACK 365	Min. 0.25-inch DEXcell FA Glass Mat Roof Board or Min. 0.4375-inch DEXcell Cement Roof Board	DUOTACK 365	CA	None	CA	-67.5
R-3.	Smooth- or granule-surface modified bitumen or BUR	(Optional) Min. 1.5-inch Insulfoam IX, Derbiboard, Derbiboard CA, Derbiboard h or SOPRA-ISO+ r	DUOTACK 365	Min. 0.25-inch SECUROCK Ultralight Coated Glass Mat Roof Board	DUOTACK 365	CA	None	CA	-105.0
R-4.	Smooth- or granule-surface modified bitumen or BUR	Min. 1.5-inch Derbiboard or Derbiboard CA	DUOTACK 365	(Optional) Additional layer(s) base insulation	DUOTACK 365	CA	None	CA	-135.0
R-5.	Existing smooth surface asphalt BUR or APP or SBS roof cover	(Optional) Min. 1.5-inch Derbiboard or Derbiboard CA	DUOTACK SPF HFO	Min. 1.5-inch Derbiboard or Derbiboard CA	DUOTACK SPF HFO	CA	None	CA	-120.0
R-6.	Existing smooth surface asphalt BUR or APP or SBS roof cover	(Optional) Min. 1.5-inch Derbiboard	OB500	Min. 1.5-inch Derbiboard	OB500	CA	None	CA	-120.0
TORCH-APPLIED BASE PLY:									
R-7.	Smooth-surface SBS modified bitumen	Min. 2-inch Derbiboard, ENRGY 3, Derbiboard h or Multi-Max FA3	Asphalt applied	Min. 0.125-inch SOPRABOARD OR SOPRABOARD HS	Asphalt applied	APP-TA	(Optional) APP-TA	APP-TA	-260.0
R-8.	Smooth- or granule-surface modified bitumen or BUR	(Optional) Min. 1.5-inch Insulfoam IX	DUOTACK 365	Min. 0.125-inch SOPRABOARD OR SOPRABOARD HS	DUOTACK 365	APP-TA	(Optional) APP-TA	APP-TA	-150.0
R-9.	Smooth- or granule-surface modified bitumen or BUR	(Optional) Min. 1.5-inch Derbiboard, Derbiboard CA, Derbiboard h or SOPRA-ISO+ r	DUOTACK 365	Min. 0.25-inch DensDeck Prime	DUOTACK 365	APP-TA	(Optional APP-TA	APP-TA	-160.0
R-10.	Granule-surface modified bitumen or BUR	(Optional) Min. 1.5-inch Derbiboard, Derbiboard CA, Derbiboard h or SOPRA-ISO+ r	DUOTACK 365	Min. 0.25-inch SECUROCK Ultralight Coated Glass Mat Roof Board	DUOTACK 365	APP-TA	(Optional APP-TA	APP-TA	-195.0
R-11.	Smooth-surface SBS modified bitumen	(Optional) Min. 1.5-inch Derbiboard, Derbiboard CA, Derbiboard h or SOPRA-ISO+ r	DUOTACK 365	Min. 0.25-inch SECUROCK Ultralight Coated Glass Mat Roof Board	DUOTACK 365	APP-TA	(Optional APP-TA	APP-TA	-232.5
R-12.	Smooth-surface SBS modified bitumen	Min. 2-inch Derbiboard, Derbiboard CA, EnergyGuard POLYSIO Insulation, ENRGY 3, ENRGY 3 CGF, Derbiboard h, SOPRA-ISO+ r or Multi-Max FA3	DUOTACK 365	Min. 0.125-inch SOPRABOARD OR SOPRABOARD HS	DUOTACK 365	APP-TA	(Optional) APP-TA	APP-TA	-260.0
R-13.	Smooth- or granule-surface modified bitumen or BUR	(Optional) Min. 1.5-inch Derbiboard, ENRGY 3, Derbiboard h or Multi-Max FA3	DUOTACK SPF HFO	Min. 0.125-inch SOPRABOARD OR SOPRABOARD HS	DUOTACK SPF HFO	APP-TA	(Optional) APP-TA	APP-TA	-157.5
R-14.	Existing smooth-surface asphalt BUR	(Optional) Min. 1-inch Derbiboard, Derbiboard CA, ISO 90+GL or ENRGY 3	OB500	Min. 0.5-inch DuraBoard	OB500	APP-TA	(Optional) APP-TA	APP-TA	-130.0

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TABLE 5A: 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 Note 1) or performance of the substrate (See Note 12). 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 (Note 1, Note 12)	Base Insulation Layer		Top Insulation Layer		Roof Cover (Note 15)			MDP (psf)[A]
		Type	Attach (Notes 6,7,8)	Type	Attach (Notes 6,7,8)	Base Ply	Ply	Cap Ply	
R-15.	Existing smooth-surface asphalt BUR	(Optional) Min. 1-inch Derbiboard, Derbiboard CA, ISO 90+GL or ENRGY 3	OB500	Min. 0.5-inch DuraBoard	OB500	Derbigum GP or Derbigum XPS, torch-applied	(Optional) APP-TA	APP-TA	-130.0
R-16.	Existing smooth-surface asphalt BUR	Min. 1-inch Derbiboard, Derbiboard CA, ISO 90+GL or ENRGY 3	OB500	Min. 0.25-inch DensDeck Prime	OB500	APP-TA	(Optional) APP-TA	APP-TA	-160.0
R-17.	Existing smooth-surface asphalt BUR	Min. 1-inch Derbiboard, Derbiboard CA, ISO 90+GL or ENRGY 3	OB500	Min. 0.5-inch DuraBoard	OB500	Derbigum GP or Derbigum XPS, torch-applied	(Optional) APP-TA	APP-TA	-160.0
R-18.	Existing smooth-surface asphalt BUR	Min. 0.25-inch DensDeck Prime	OB500	None	N/A	APP-TA	(Optional) APP-TA	APP-TA	-210.0
R-19.	Existing smooth-surface asphalt BUR	Min. 0.5-inch DuraBoard	OB500	None	N/A	Derbigum GP or Derbigum XPS, torch-applied	(Optional) APP-TA	APP-TA	-210.0

TABLE 5B: RE-ROOF (TEAR-OFF) OR RECOVER APPLICATIONS
SYSTEM TYPE B-1: MECHANICALLY ATTACHED BASE INSULATION, BONDED TOP 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 Note 1) or performance of the substrate (See Note 12). 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 (Note 1, Note 12)	Vapor Barrier	Base Insulation Layer			Top Insulation Layer		Roof Cover (Note 15)			MDP (psf)[A]
			Type	Fastener (Note 11)	Attach (Note 17)	Type	Attach	Base Ply	Ply	Cap Ply	
R-20.	Pre-existent min. 360 psi aggregate or min. 320 psi cellular lightweight insulating concrete over structural concrete deck or poured gypsum or gypsum plank	(Optional) Min. 6-mil polyethylene or one or more layers Approved Derbigum base sheet or modified bitumen sheet, loose-laid	Min. 2-inch Derbiboard, Derbiboard CA, Derbiboard h or SOPRA-ISO+ r	Perlok Versa-Fast Plate with minimum two (2) Perlok Versa-Fast Fastener installed 180° into the holes of the Versa-Fast Plate to engage existing substrate (Field W/D $\geq$ 187 lbf)	1 per 1.8 ft^2	Optional additional layer(s) base insulation followed by min. 0.125-inch SOPRABOARD OR SOPRABOARD HS	DUOTACK 365	APP-TA	(Optional) APP-TA	APP-TA	-52.5

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