



NEMO|etc.

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

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EVALUATION REPORT

Soprema, Inc.
310 Quadral Drive
Wadsworth, OH 44281
(800) 356-3521

Evaluation Report 2759.06.10-R16
FL13806-R15
Date of Issuance: 06/16/2010
Revision 16: 12/02/2019

SCOPE:

This Evaluation Report is issued under **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 of the product under the Florida Building Code. The product described herein has been evaluated for compliance with the **6th Edition (2017) Florida Building Code** sections noted herein.

DESCRIPTION: Soprema Liquid Applied Roof Systems

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

CONTINUED COMPLIANCE: This Evaluation Report is valid until such time as the named product(s) changes, the referenced Quality Assurance documentation changes, or provisions of the Code that relate to the product change. Acceptance of this Evaluation Report by the named client constitutes agreement to notify Robert Nieminen, P.E. of any changes to the product(s), the Quality Assurance or the production facility location(s). NEMO|etc. requires a complete review of this Evaluation Report relative to updated Code requirements with each Code Cycle.

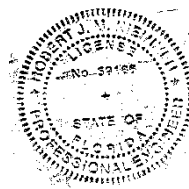
ADVERTISEMENT: The Evaluation Report number preceded by the words "NEMO|etc. Evaluated" may be displayed in advertising literature. If any portion of the Evaluation Report is displayed, then it shall be done in its entirety.

INSPECTION: Upon request, a copy of this entire Evaluation Report 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 Evaluation Report consists of pages 1 through 5, plus a 42-page Appendix.

Prepared by:

Robert J.M. Nieminen, P.E.
Florida Registration No. 59166, Florida DCA ANE1983



The facsimile seal appearing was authorized by Robert Nieminen, P.E. on 12/02/2019. This does not serve as an electronically signed document.

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.
2. NEMO ETC, LLC is not owned, operated or controlled by any company manufacturing or distributing products it evaluates.
3. Robert Nieminen, P.E. does not have nor will acquire, a financial interest in any company manufacturing or distributing products for which the evaluation reports 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 Evaluation Report, or previous versions thereof, is/was used for permitting or design guidance unless retained specifically for that purpose.

ROOFING SYSTEMS EVALUATION:
1. SCOPE:

Product Category: Roofing
Sub-Category: Liquid Applied Roof Systems
Compliance Statement: **Liquid Applied Roof Systems**, as produced by **Soprema, Inc.**, have demonstrated compliance with the following sections of the **6th Edition (2017) Florida Building Code** through testing in accordance with the following Standards. Compliance is subject to the Installation Requirements and Limitations / Conditions of Use set forth herein.

2. STANDARDS:

<u>Section</u>	<u>Property</u>	<u>Standard</u>	<u>Year</u>
1504.3.1	Wind	FM 4474	2011
1504.7	Impact	FM 4470	2012
1504.6	Physical Properties	ASTM G155	2005

3. REFERENCES:

<u>Entity</u>	<u>Examination</u>	<u>Reference</u>	<u>Date</u>
ACRC (TST4671)	TAS 114	15-033	12/15/2015
ACRC (TST4671)	TAS 114	15-035	12/16/2015
ERD (TST6049)	FM 4474	2778.07.05	07/15/2005
ERD (TST6049)	FM 4474	S32840.06.10	06/22/2010
ERD (TST6049)	FM 4474	S39920.01.12-R1	05/24/2012
ERD (TST6049)	FM 4474	S41370.07.12	07/13/2012
ERD (TST6049)	FM 4474	S43200SC	10/21/2012
ERD (TST6049)	FM 4474	S45070.08.13	08/13/2013
ERD (TST6049)	FM 4474	S47170.05.14-1	05/12/2014
ERD (TST6049)	FM 4470/4474	NG-SC9815.11.15	11/06/2015
ERD (TST6049)	FM 4474	S10695.02.16-2	02/23/2016
ERD (TST6049)	M-D 13-1362	S42600.08.15-R2	03/21/2016
ERD (TST6049)	FM 4474	S10695.02.16-1-R1	04/01/2016
ERD (TST6049)	FM 4474	SOP-SC11825.16	10/19/2016
FM (TST 1867)	FM 4470/FM 4474	3009610	10/22/2001
FM (TST 1867)	FM 4470/FM 4474	3012321	07/29/2002
FM (TST 1867)	FM 4470/FM 4474	3014751	08/27/2003
FM (TST 1867)	FM 4470/FM 4474	3018579	10/09/2003
FM (TST 1867)	FM 4470/FM 4474	3019317	06/30/2004
FM (TST 1867)	FM 4470/FM 4474	3024311	11/01/2006
FM (TST 1867)	FM 4470/FM 4474	3025185	05/22/2007
FM (TST 1867)	FM 4470/FM 4474	3036182	07/31/2009
FM (TST 1867)	FM 4470/FM 4474	3031818	02/20/2009
FM (TST 1867)	FM 4470/FM 4474	3032172	06/12/2009
FM (TST 1867)	FM 4470/FM 4474	3035625	10/29/2009
FM (TST 1867)	FM 4470/FM 4474	3042559	06/28/2011
FM (TST1867)	FM 4470/FM 4474	3042905 (released)	01/10/2012
FM (TST 1867)	FM 4470/FM 4474	3044801	02/27/2012
FM (TST1867)	FM 4470/FM 4474	3046328 (released)	09/13/2012
FM (TST1867)	FM 4470/FM 4474	3041769 (released)	09/27/2012
FM (TST1867)	FM 4470/FM 4474	3045363 (released)	10/12/2012
FM (TST 1867)	FM 4470/FM 4474	3045101	11/05/2012
FM (TST 1867)	FM 4470/FM 4474	3046765	02/15/2013
FM (TST 1867)	FM 4470/FM 4474	797-08292-267	04/22/2013
FM (TST 1867)	FM 4470/FM 4474	3046941	12/19/2013
FM (TST 1867)	FM 4470/FM 4474	3048085 (released)	02/07/2014
FM (TST 1867)	FM 4470/FM 4474	RR200234	03/16/2015

Entity	Examination	Reference	Date
FM (TST 1867)	FM 4470/FM 4474	3053841	03/27/2015
FM (TST 1867)	FM 4470/FM 4474	3051109	05/11/2015
FM (TST 1867)	FM 4470/FM 4474	RR202234	09/29/2015
FM (TST 1867)	FM 4470/FM 4474	RR202235	10/07/2015
FM (TST 1867)	FM 4470/FM 4474	3054633	12/18/2015
FM (TST 1867)	FM 4470/FM 4474	3055167 (released)	02/10/2016
FM (TST 1867)	FM 4470/FM 4474	3053475 (released)	02/11/2016
FM (TST 1867)	FM 4470/FM 4474	RR214777	09/13/2018
NEMO (TST6049)	FM 4474	4L-SOP-18-005.07.18	07/13/2018
NEMO (TST6049)	FM 4474	4L-SOP-18-005-09.18-2	09/20/2018
NEMO (TST6049)	FM 4474	4L-SOP-18-005-08.18-1	01/25/2019
NEMO (TST 6049)	M-D 13-1362	4S-SOP-18-002.02.19	02/04/2019
NEMO (TST6049)	Criticality	4i-SOP-19-SSCRT-03.A	10/22/2019
NEMO (TST6049)	FM 4474	4a-SOP-19-LSWUS-05.A	10/23/2019
NEMO (TST6049)	FM 4474	4a-SOP-19-LSWUS-07.A	11/20/2019
Various	Wind for sub-assemblies	Reference: FL3915	Current
UL, LLC. (QUA9625)	Quality Control	Service Confirmation	07/21/2016

4. PRODUCT DESCRIPTION:

4.1 This Evaluation Report covers Soprema Liquid Applied Roof Systems applied to Approved substrates as outlined in the Limitations / Conditions of Use herein. The following products make up the subject systems.

4.1.1 LIQUID APPLIED MEMBRANE COMPONENTS:

Product	Description
ALSAN RS 230 Field or Flash	Two-component, rapid curing PMMA acrylic resin; meets Miami-Dade 13-1362.
ALSAN RS Catalyst Powder	Reactive agent used to introduce curing to ALSAN RS resin products
ALSAN RS 260 LO Field or Flash	Two-component, rapid curing, 'low-odor' PMMA acrylic resin; meets Miami-Dade 13-1362.
ALSAN RS LO Catalyst Powder	Reactive agent used to introduce curing to ALSAN RS LO resin products
ALSAN RS Fleece	Non-woven, needle-punched polyester fabric reinforcement used in ALSAN RS systems

4.1.2 PRIMERS:

Product	Description
ALSAN RS 276 Primer	Two-component, rapid curing PMMA acrylic primer
ALSAN RS 222 Primer	Two-component, rapid curing PMMA acrylic primer

4.1.3 SURFACING:

Product	Description
ALSAN RS 210	Two-component, PMMA acrylic resin additive used to job-mix ALSAN RS 233 Self-Leveling Mortar
ALSAN RS 223 Powder	Proprietary powder filler additive used to job-mix ALSAN RS 233 and 263 LO Self-Leveling Mortars
ALSAN RS 233 Self-Leveling Mortar	Multi-component, PMMA acrylic resin-based surfacing wear layer.
ALSAN RS 240 LO	Two-component, PMMA acrylic resin additive used to job-mix ALSAN RS 263 LO Self-Leveling Mortar
ALSAN RS 263 LO Self-Leveling Mortar	Multi-component, low-odor PMMA acrylic resin-based surfacing wear layer.
ALSAN RS 281 Finish	Two-component, PMMA acrylic resin-based, color-pigmented finish / sealer
ALSAN RS 287 Color Finish Base	PMMA liquid, un-pigmented resin used with ALSAN RS Color Additive

4.1.3 SURFACING:

Product	Description
ALSAN RS 289 Textured Base	PMMA aggregated, trafficable surface finish resin
ALSAN RS Quartz Aggregate	Aggregate used as slip-resistant surfacing

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 Evaluation Report, or previous versions thereof, is/was used for permitting or design guidance unless retained specifically for that purpose.
- 5.2 This Evaluation Report is not for use in **FBC HVHZ** jurisdictions.
- 5.3 Refer to a current Approved Roofing Materials Directory for fire ratings of this product.
- 5.4 For steel deck installations, foam plastic insulation shall be separated from the building interior in accordance with **FBC 2603.4** unless the exceptions stated in **FBC 2603.4.1** and **2603.6** apply.
- 5.5 The roof system evaluation herein pertains to above-deck roof components. Roof decks and structural members shall be in accordance with FBC requirements to the satisfaction of the Authority Having Jurisdiction. Load resistance of the roof deck shall be documented through proper codified and/or FBC Approval documentation.
- 5.6 For recover installations, the existing roof shall be examined in accordance with **FBC 1511**.
- 5.7 For mechanically attached insulation or membrane or strip-bonded insulation, the maximum design pressure for the selected assembly shall meet or exceed the Zone 1 design pressure determined in accordance with FBC Chapter 16. Zones 2 and 3 shall employ an attachment density designed by a qualified design professional to resist the elevated pressure criteria. Commonly used methods are **ANSI/SPRI WD1**, **FM Loss Prevention Data Sheet 1-29**, **Roofing Application Standard RAS 117** and **Roofing Application Standard RAS 137**. Assemblies marked with an asterisk* carry the limitations set forth in **Section 2.2.10.1 of FM Loss Prevention Data Sheet 1-29 (January 2016)** for Zone 2/3 enhancements.
- 5.8 For assemblies with all components fully bonded in place, 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.
- 5.9 For mechanically attached insulation or membrane 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 and analysis shall be in accordance with **ANSI/SPRI FX-1** or **Testing Application Standard TAS 105**.
- 5.10 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 **ANSI/SPRI IA-1**, **ASTM E907**, **FM Loss Prevention Data Sheet 1-52** or **Testing Application Standard TAS 124** shall be conducted on mock-ups of the proposed new roof assembly.
- 5.11 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 **ASTM E907**, **FM Loss Prevention Data Sheet 1-52** or **Testing Application Standard TAS 124**.
- 5.12 Metal edge attachment (except gutters), shall be designed and installed for wind loads in accordance with FBC Chapter 16 and tested for resistance in accordance with **ANSI/SPRI ES-1** or **Roofing Application Standard RAS 111**, except the basic wind speed shall be determined from **FBC Figure 1609.3(1)**, **1609.3(2)** or **1609.3(3)**.
- 5.13 The Authority Having Jurisdiction may require integrity flood testing (**ASTM D5957**) or Electric Field Vector Mapping tests of all waterproofing systems prior to placement of overburden materials. Testing, if required, should be conducted by a qualified testing agency or professional.

- 5.14 All products in the roof assembly shall have quality assurance audit in accordance with **F.A.C. Rule 61G20-3**. This evaluation pertains to the **Soprema** components making up the roof assembly, as outlined in Appendix 1. This evaluation does not purport to address performance or QA for non-Soprema components within the assemblies.

6. INSTALLATION:

- 6.1 **Soprema Liquid Applied Roof Systems** shall be installed in accordance with **Soprema** current, published installation instructions, subject to the Limitations / Conditions of Use noted herein.
- 6.2 System attachment requirements for wind load resistance are set forth in Appendix 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 **FBC 1504.9** has already been applied). Refer to **FBC 1609** for determination of design wind loads.

7. BUILDING PERMIT REQUIREMENTS:

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

8. MANUFACTURING PLANTS:

- 8.1 Drummondville, QC & Wadsworth, OH

9. QUALITY ASSURANCE ENTITY:

UL, LLC. – QUA9625; (414) 248-6409; Karen.buchmann@us.ul.com

- THE 42-PAGES THAT FOLLOW FORM PART OF THIS EVALUATION REPORT -

APPENDIX 1: ATTACHMENT REQUIREMENTS FOR WIND UPLIFT RESISTANCE

TABLE	DECK	APPLICATION	TYPE	DESCRIPTION	PAGE
1A	Wood	New, Reroof (Tear-Off) or Recover	B-1	Mech. Attached Base Insulation, Bonded Top Insulation, Bonded Roof Cover	7-9
1B	Wood	New, Reroof (Tear-Off) or Recover	C	Mech. Attached Insulation, Bonded Roof Cover	10
1C	Wood	New, Reroof (Tear-Off) or Recover	D-2	Insulated, Mechanically Attached SOPRAPHIX, Bonded Roof Cover	11
2A	Steel	New or Reroof (Tear-Off)	A-1	Bonded Insulation, Bonded Roof Cover	12-14
2B	Steel or Structural concrete	New, Reroof (Tear-Off) or Recover	B-1	Mech. Attached Base Insulation, Bonded Top Insulation, Bonded Roof Cover	14-17
2C	Steel or Structural concrete	New, Reroof (Tear-Off) or Recover	C	Mech. Attached Insulation, Bonded Roof Cover	18-21
2D	Steel	New, Reroof (Tear-Off) or Recover	D-1	Insulated, Mechanically Attached Base Sheet, Bonded Roof Cover	21
2E	Steel	New, Reroof (Tear-Off) or Recover	D-2	Insulated, Mechanically Attached SOPRAPHIX, Bonded Roof Cover	21-22
3A	Structural concrete	New or Reroof (Tear-Off)	A-1	Bonded Insulation, Bonded Roof Cover	23-25
3B	Structural concrete	New or Reroof (Tear-Off) or Recover	D-2	Insulated, Mechanically Attached SOPRAPHIX, Bonded Roof Cover	26
3C	Structural concrete	New or Reroof (Tear-Off)	F-1	Non-Insulated, Bonded Roof Cover	27
3D	Structural concrete	New or Reroof (Tear-Off)	F-2	Non-Insulated, Bonded Base Ply(s), Bonded Roof Cover	27
4A	Lightweight concrete / concrete	New, Reroof (Tear-Off)	A-1	LWC to Deck, Bonded Insulation, Bonded Roof Cover	28
4B	Lightweight concrete / concrete	New, Reroof (Tear-Off)	A-1	LWC to Deck, Bonded Vapor Barrier, Bonded Insulation, Bonded Roof Cover	29
4C	Lightweight concrete / steel or concrete	New, Reroof (Tear-Off)	E-1	LWC to Deck, Mechanically Attached Base Sheet, Bonded Roof Cover	30
4D	Lightweight concrete / steel	New, Reroof (Tear-Off)	E-1	Thermal Barrier to Deck, Temp Roof to Thermal Barrier, LWC to Temp Roof, Mech. Attached Base Sheet, Bonded Roof Cover	30
4E	Lightweight concrete / steel or concrete	New, Reroof (Tear-Off)	E-2	LWC to Deck, Mechanically Attached SOPRAPHIX, Bonded Roof Cover	31
4F	Lightweight concrete / steel	New	F	LWC to Deck, Bonded Roof Cover	31
4G	Lightweight concrete / concrete	New	F	LWC to Deck, Bonded Roof Cover	32-33
5A	Cementitious Wood Fiber	New, Reroof (Tear-Off)	A-1	Bonded Insulation, Bonded Roof Cover	34-35
5B	Cementitious Wood Fiber	New, Reroof (Tear-Off)	A-1a	Bonded Thermal Barrier, Bonded Vapor Barrier, Bonded Insulation, Bonded Roof Cover	36-38
6A	Existing Gypsum	Reroof (Tear-Off)	A-1	Bonded Insulation, Bonded Roof Cover	39
6B	Existing Gypsum	Reroof (Tear-Off)	A-1	Temp Roof to Deck, Bonded Insulation, Bonded Roof Cover	40
7A	Various	Recover	A-1	Bonded Insulation, Bonded Roof Cover	41-42
7B	Existing LWIC or Gypsum	Reroof (Tear-Off) or Recover	E-2	Non-Insulated, Mech. Attached SOPRAPHIX, Bonded Roof Cover	42
7C	Various	Recover	F	Non-Insulated, Bonded Roof Cover	42

The following notes apply to the systems outlined herein:

- The roof system evaluation herein pertains to above-deck roof components. Roof decks and structural members shall be in accordance with FBC requirements to the satisfaction of the Authority Having Jurisdiction. Load resistance of the roof deck shall be documented through proper codified and/or FBC Approval documentation.
- Unless otherwise noted, insulation / base sheet fasteners shall be the following with the noted minimum fastener engagement for each deck type. For deck-types not listed, refer to the specific system listings herein:
 - Wood: Soprema 3 in. Insulation Plates with Soprema #12 or #14 Fasteners or Soprema 3" Metal Insulation Plate with Soprema #12 DP or #14 MP Fastener. Minimum 0.75-inch plywood penetration or minimum 1-inch wood plank embedment.
 - Steel: Soprema 3 in. Insulation Plates with Soprema #12 or #14 Fasteners or Soprema 3" Metal Insulation Plate with Soprema #12 DP or #14 MP Fastener. Minimum ¼-inch steel penetration and engage the top flute of the steel deck.
 - Structural concrete: Soprema 3 in. Insulation Plates with Soprema #14 Fasteners or Soprema 3" Metal Insulation Plate with Soprema #14 MP Fastener. Minimum 1-inch embedment into pilot hole in accordance with published installation instructions.

3. Unless otherwise noted, insulation may be any one layer or combination of polyisocyanurate, polystyrene, wood fiberboard, perlite, mineral wool, gypsum-based, cement-based roof board, SOPRABOARD, SOPRASMART Board 180, SOPRASMART Board 180 Sanded, SOPRASMART ISO HD 180, SOPRASMART ISO HD 180 Sanded, SOPRASMART XP HD 180, SOPRASMART XP HD 180 Sanded, SOPRASMART XP ISO 180 or SOPRASMART XP ISO 180 sanded that meets the QA requirements of F.A.C. Rule 61G20-3 and is documented as meeting FBC 1505.1 and, for foam plastic, FBC Chapter 26, when installed with the roof cover.
4. Minimum 200 psi, minimum 2-inch thick lightweight insulating concrete may be substituted for, or installed beneath rigid insulation board for System Type D (mechanically attached base sheet, bonded roof cover), whereby the base sheet screws and plates are installed through the LWIC to engage the structural steel or structural concrete deck. The structural deck shall be of equal or greater configuration 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. Load resistance of the roof deck shall be documented through proper codified and/or FBC Approval documentation.
5. Preliminary insulation attachment for System Type D: Unless otherwise noted, refer to Section 2.2.10.1.3 of FM Loss Prevention Data Sheet 1-29 (January 2016).
6. Unless otherwise noted, insulation adhesive application rates are as follows. Ribbon or bead width is at the time of application; the ribbons/beads shall expand as noted in the manufacturer's published instructions:
 - Hot asphalt (HA): Full coverage at 25-30 lbs/square.
 - DUOTACK: Continuous 0.5 to 0.75-inch wide ribbons, 12-inch o.c. *Note: DUOTACK Neo or DUOTACK 365 may be used anywhere DUOTACK is referenced*
 - *Note: When multiple layers(s) of insulation and/or coverboard are installed in ribbon-applied adhesive, board joints shall be staggered.*
 - *Note: 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.*
7. Unless otherwise noted, all insulations are flat stock or taper board of the minimum thickness noted. Min. 0.5-inch thick tapered polyisocyanurate may be substituted, but the maximum allowable design pressure (MDP) is -157.5 psf. 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.
8. Bonded polyisocyanurate insulation boards shall be maximum 4 x 4 ft.
9. For mechanically attached components or partially bonded insulation, the maximum design pressure for the selected assembly shall meet or exceed the Zone 1 design pressure determined in accordance with FBC Chapter 16, and Zones 2 and 3 shall employ an attachment density designed by a qualified design professional to resist the elevated pressure criteria. Commonly used methods are ANSI/SPRI WD1, FM Loss Prevention Data Sheet 1-29, Roofing Application Standard RAS 117 and Roofing Application Standard RAS 137. Assemblies marked with an asterisk* carry the limitations set forth in Section 2.2.10.1 of FM Loss Prevention Data Sheet 1-29 (January 2016) for Zone 2/3 enhancements.
10. For fully bonded assemblies, the maximum design pressure for the selected assembly shall meet or exceed critical design pressure determined in accordance with FBC Chapter 16, and no rational analysis is permitted.
11. For mechanically attached components over existing 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 and analysis shall be in accordance with ANSI/SPRI FX-1 or Testing Application Standard TAS 105.
12. For existing substrates in a bonded recover or re-roof installation, the existing roof surface or existing roof deck shall be examined for compatibility and bond performance with the selected adhesive, and the existing roof system (for recover) 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 ANSI/SPRI IA-1, ASTM E907, FM Loss Prevention Data Sheet 1-52 or Testing Application Standard TAS 124.
13. For Recover Applications using System Type D, the insulation is optional; however, the existing roof system shall be suitable for a recover application.
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 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. For "pre-existent" LWC 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). Unless otherwise noted, 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.

15. Unless otherwise noted, application rates of the components are as follows:

ALSAN RS COMPONENTS & APPLICATION RATES:	
PRODUCT	RATE
ALSAN RS 222 Primer ("RS 222")	1 gal/square
ALSAN RS 276 Primer ("RS 276")	1 gal/square
AQUAFIN VAPORTIGHT COAT-SG3 ("AVC-SG3")	Refer to AQUAFIN, Inc. published requirements.
ALSAN RS 233 Self-Leveling Mortar	1.8 gal/square (85-95 wet mils)
ALSAN RS 230 system	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.
ALSAN RS 260 LO system	Base coat of ALSAN RS 260 LO applied at 3.9 gal/sq. followed by ALSAN RS Fleece into the wet base coat, and top coat of ALSAN RS 260 LO at 1.9 gal/sq.
ALSAN RS 263 LO Self-Leveling Mortar	1.8 gal/square (85-95 wet mils)
ALSAN RS 281 Finish	0.74 gal/square (smooth-surface); 1.23 gal/square (aggregate-surface)
ALSAN RS 287 Color Finish Base	1.2 gal/square
ALSAN RS 289 Textured Base	3.2 gal/square

MODIFIED BITUMEN VAPOR BARRIER & BASE PLY REFERENCES:			
REFERENCE	LAYER	MATERIALS	APPLICATION
SBS-CA1	Base Ply:	ELASTOPHENE Sanded, SOPRALENE 180 Sanded 2.2, SOPRALENE 180 Sanded, SOPRALENE 250 Sanded	COLPLY Adhesive N at 1.5-2.0 gal/square.
	VB Cap Ply:	ELASTOPHENE LS FR GR, ELASTOPHENE FR GR, SOPRALENE 180 FR GR, SOPRALENE 250 FR GR	
SBS-CA2	Base Ply:	ELASTOPHENE Sanded, SOPRALENE 180 Sanded 2.2, SOPRALENE 180 Sanded, SOPRALENE 250 Sanded	0.5 to 1-inch wide ribbons COLPLY EF spaced as noted
SBS-CA3	Base Ply:	One or two plies ELASTOPHENE Sanded, SOPRALENE 180 Sanded 2.2, SOPRALENE 180 Sanded, SOPRALENE 250 Sanded	COLPLY EF Adhesive at 1.5 – 2.5 gal/square
	VB Cap Ply:	ELASTOPHENE LS FR GR, ELASTOPHENE FR GR, SOPRALENE 180 FR GR, SOPRALENE 250 FR GR	
SBS-CA4	Base Ply:	ELASTOPHENE Sanded, SOPRALENE 180 Sanded 2.2, SOPRALENE 180 Sanded, SOPRALENE 250 Sanded	COLPLY Adhesive at 1.5-2.0 gal/square.
	VB Cap Ply:	ELASTOPHENE LS FR GR, ELASTOPHENE FR GR, SOPRALENE 180 FR GR, SOPRALENE 250 FR GR	
SBS-TA-P	Base Ply:	COLVENT TG, COLVENT 180 TG	Torch-applied, Partial Bond
SBS-TA-F*	Base Ply:	ELASTOPHENE Flam 2.2◊, ELASTOPHENE Flam 3.0◊, ELASTOPHENE SP 2.2, COLPHENE SP 2.2, ELASTOPHENE SP 3.0, COLPHENE SP 3.0, SOPRALENE Flam 180◊, SOPRALENE 180 SP 3.0, SOPRALENE 180 SP 3.5, COLPHENE 180 SP 3.5, SOPRALENE Flam 250◊ or SOPRALENE 250 SP	Torch-Applied, Full Bond
	VB Cap Ply:	ELASTOPHENE Flam LS FR GR, ELASTOPHENE Flam FR GR, SOPRALENE Flam 180 GR, SOPRALENE Flam 180 GR 3.5, SOPRALENE Flam 180 FR GR, SOPRALENE Flam 180 FR GR 3.5, SOPRALENE Flam 250 FR GR	
SBS-SA**	Base Ply:	ELASTOPHENE Stick, ELASTOPHENE Flam Stick◊, SOPRALENE Stick, SOPRALENE Flam Stick◊	Self-adhering
	VB Cap Ply:	ELASTOPHENE Stick FR GR, 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. ALSAN products shall not be applied to a poly-film top surface.

**Top surfaces of Soprema membranes having a sand finish shall be primed with Elastocol 500, Elastocol Stick or Elastocol Stick Zero at 1 gal/sq. (0.6 l/m²) prior to application of subsequent self-adhering (SBS-SA) membranes.

16. Thermal barrier / vapor barrier combination options for use over **steel decks** followed by bonded insulation and/or coverboard carry the following MDP limitations. The lesser of the MDP listings below vs. those for "Top Insulation Layer(s)" in **Table 2A** applies:

THERMAL BARRIER / VAPOR BARRIER OPTIONS; STEEL DECKS; FOLLOWED BY BONDED TOP INSULATION LAYER(S) PER TABLE 2A:								
OPTION #	THERMAL BARRIER			PRIMER	VAPOR BARRIER		INSULATION ADHESIVE	MDP (psf)
	TYPE	FASTEN	ATTACH		TYPE	APPLICATION		
TB/VB-1.	Min. 0.5-inch DensDeck, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	Soprema #14 MP with Soprema 3" Metal Insulation Plate	1 per 4 ft ²	None	ELASTOPHENE HS Sanded, ELASTOPHENE Sanded 2.2, ELASTOPHENE Sanded 3.0, SOPRALENE 180 Sanded 2.2, SOPRALENE 180 Sanded, SOPRALENE 250 Sanded	COLPLY Adhesive, COLPLY Adhesive N, COLPLY EF Adhesive	DUOTACK	-45.0*
TB/VB-2.	0.25-inch DEXcell FA Glass Mat Roof Board	Soprema #14 MP with Soprema 3" Metal Insulation Plate	1 per 4 ft ²	None	ELASTOPHENE HS Sanded, ELASTOPHENE Sanded 2.2, ELASTOPHENE Sanded 3.0, SOPRALENE 180 Sanded 2.2, SOPRALENE 180 Sanded, SOPRALENE 250 Sanded	COLPLY Adhesive N, COLPLY EF Adhesive	DUOTACK	-45.0*
TB/VB-3.	Min. 0.5-inch DensDeck, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	Soprema #14 MP with Soprema 3" Metal Insulation Plate	1 per 4 ft ²	Elastocol 500	ELASTOPHENE SP 2.2, ELASTOPHENE SP 3.0, SOPRALENE 180 SP 3.0, SOPRALENE 180 SP 3.5	torch-applied	DUOTACK	-45.0*
TB/VB-4.	0.25-inch DEXcell FA Glass Mat Roof Board	Soprema #14 MP with Soprema 3" Metal Insulation Plate	1 per 4 ft ²	None	ELASTOPHENE SP 2.2, ELASTOPHENE SP 3.0, SOPRALENE 180 SP 3.0, SOPRALENE 180 SP 3.5	torch-applied	DUOTACK	-45.0*
TB/VB-5.	Min. 0.5-inch DensDeck, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	Soprema #14 MP with Soprema 3" Metal Insulation Plate	1 per 4 ft ²	Elastocol Stick or Elastocol Stick Zero	SOPRAVAP'R, ELASTOPHENE Stick, SOPRALENE Stick	self-adhering	DUOTACK	-45.0*
TB/VB-6.	0.25-inch DEXcell FA Glass Mat Roof Board	Soprema #14 MP with Soprema 3" Metal Insulation Plate	1 per 4 ft ²	Elastocol Stick or Elastocol Stick Zero	SOPRAVAP'R, ELASTOPHENE Stick, SOPRALENE Stick	self-adhering	DUOTACK	-45.0*
TB/VB-7.	0.5-inch DEXcell FA Glass Mat Roof Board	Soprema #14 MP with Soprema 3" Metal Insulation Plate	1 per 2 ft ²	None	ELASTOPHENE HS Sanded, ELASTOPHENE Sanded 2.2, ELASTOPHENE Sanded 3.0, SOPRALENE 180 Sanded 2.2, SOPRALENE 180 Sanded, SOPRALENE 250 Sanded	COLPLY EF Adhesive	DUOTACK	-75.0
TB/VB-8.	0.5-inch DEXcell FA Glass Mat Roof Board	Soprema #14 MP with Soprema 3" Metal Insulation Plate	1 per 2 ft ²	None	ELASTOPHENE SP 2.2, ELASTOPHENE SP 3.0, SOPRALENE 180 SP 3.0, SOPRALENE 180 SP 3.5	torch-applied	DUOTACK	-75.0
TB/VB-9.	0.5-inch DEXcell FA Glass Mat Roof Board	Soprema #14 MP with Soprema 3" Metal Insulation Plate	1 per 2 ft ²	Elastocol Stick or Elastocol Stick Zero	SOPRAVAP'R, ELASTOPHENE Stick, SOPRALENE Stick	self-adhering	DUOTACK	-75.0
TB/VB-10.	Min. 0.5-inch DensDeck, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	Soprema #14 MP with Soprema 3" Metal Insulation Plate	1 per 2 ft ²	None	ELASTOPHENE HS Sanded, ELASTOPHENE Sanded 2.2, ELASTOPHENE Sanded 3.0, SOPRALENE 180 Sanded 2.2, SOPRALENE 180 Sanded, SOPRALENE 250 Sanded	COLPLY Adhesive, COLPLY Adhesive N, COLPLY EF Adhesive	DUOTACK	-82.5
TB/VB-11.	Min. 0.5-inch DensDeck, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	Soprema #14 MP with Soprema 3" Metal Insulation Plate	1 per 2 ft ²	Elastocol 500	ELASTOPHENE SP 2.2, ELASTOPHENE SP 3.0, SOPRALENE 180 SP 3.0, SOPRALENE 180 SP 3.5	torch-applied	DUOTACK	-82.5
TB/VB-12.	Min. 0.5-inch DensDeck, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	Soprema #14 MP with Soprema 3" Metal Insulation Plate	1 per 2 ft ²	Elastocol Stick or Elastocol Stick Zero	SOPRAVAP'R, ELASTOPHENE Stick, SOPRALENE Stick	self-adhering	DUOTACK	-82.5

17. Vapor barrier options for use over **structural concrete deck** followed by insulation applied in **DUOTACK** carry the following Maximum Design Pressure (MDP) limitations. The lesser of the MDP listings below vs. those in **Table 3A** applies.

ONE-PLY VAPOR BARRIER OPTIONS; STRUCTURAL CONCRETE DECK; FOLLOWED BY BONDED INSULATION PER TABLE 3A:					
OPTION #	PRIMER	VAPOR BARRIER		INSULATION ADHESIVE	MDP (psf)
C-VB-1.	none	SOPRASMART XP HD 180 Sanded applied in DUOTACK, ribbons 12-inch o.c. (laps are torched or sealed with a hot air gun)		DUOTACK	-52.5
C-VB-2.	ASTM D41	SBS-CA1 or SBS-CA4 (granule top surface)		DUOTACK	-97.5
C-VB-3.	ASTM D41	SBS-CA1 or SBS-CA4 (sanded top surface)		DUOTACK	-120.0
C-VB-4.	none	SBS-CA3 (granule top surface)		DUOTACK	-195.0
C-VB-5.	ASTM D41	SBS-TA-F (granule top surface)		DUOTACK	-195.0
C-VB-6.	Elastocol Stick, Elastocol Stick Zero	SBS-SA1 (granule top surface)		DUOTACK	-195.0
C-VB-7.	ASTM D41	SBS-TA-P (sanded top surface)		DUOTACK	-232.5
C-VB-8.	Elastocol Stick Zero	SOPRAVAP'R, self-adhering		DUOTACK	-240.0
C-VB-9.	none	SOPRALENE 180 Sanded, SOPRALENE 250 Sanded applied in COLPLY EF Adhesive, min. 0.5-inch wide continuous ribbons, 12" o.c.		DUOTACK	-262.5
C-VB-10.	none	SBS-CA3 (sanded top surface)		DUOTACK	-270.0
C-VB-11.	Elastocol Stick, Elastocol Stick Zero	SBS-SA1 (sanded top surface)		DUOTACK	-315.0
C-VB-12.	ASTM D41	SBS-TA-F (sanded top surface)		DUOTACK	-382.5
C-VB-13.	RS 276	ALSAN RS 230 Field or ALSAN RS 260 LO Field with ALSAN RS Quartz Aggregate		DUOTACK	-382.5

MINIMUM TWO-PLY VAPOR BARRIER OPTIONS; STRUCTURAL CONCRETE DECK; FOLLOWED BY BONDED INSULATION PER TABLE 3A:					
OPTION #	PRIMER	VAPOR BARRIER		INSULATION ADHESIVE	MDP (psf)
		VB BASE PLY	VB CAP PLY		
C-VB-14.	ASTM D41	SBS-CA1 or SBS-CA4	SBS-CA1, SBS-CA4 or SBS-TA-F (granule top surface)	DUOTACK	-97.5
C-VB-15.	ASTM D41	SBS-CA1 or SBS-CA4	SBS-CA1 or SBS-CA4 (sanded top surface)	DUOTACK	-120.0
C-VB-16.	NONE	SBS-CA3	SBS-CA1, SBS-CA3, SBS-CA4, SBS-TA-F or SBS-SA1 (granule top surface)	DUOTACK	-195.0
C-VB-17.	ASTM D41	SBS-TA-F	SBS-CA1, SBS-CA3, SBS-CA4, SBS-TA-F or SBS-SA1 (granule top surface)	DUOTACK	-195.0
C-VB-18.	Elastocol Stick, Elastocol Stick Zero	SBS-SA1	SBS-CA1, SBS-CA3, SBS-CA4, SBS-TA-F or SBS-SA1 (granule top surface)	DUOTACK	-195.0
C-VB-19.	ASTM D41	SBS-TA-P	SBS-TA-F (sanded top surface)	DUOTACK	-232.5
C-VB-20.	NONE	SOPRALENE 180 Sanded or SOPRALENE 250 Sanded applied in COLPLY EF Adhesive, min. 0.5-inch wide continuous ribbons, 12-inch o.c.	SBS-CA3 (sanded top surface)	DUOTACK	-255.0
C-VB-21.	NONE	SBS-CA3	SBS-CA3 (sanded top surface)	DUOTACK	-270.0
C-VB-22.	Elastocol Stick, Elastocol Stick Zero	SBS-SA1	SBS-SA1 (sanded top surface)	DUOTACK	-315.0
C-VB-23.	ASTM D41	SBS-TA-F	SBS-TA-F (sanded top surface)	DUOTACK	-382.5

18. Optional dry-in / temporary roof options for use over **structural concrete deck** followed by **LWC** carry the following Maximum Design Pressure (MDP) limitations. The lesser of the MDP listings below vs. those in the LWC system listing tables applies.

DRY-IN / TEMPORARY ROOF OPTIONS OVER STRUCTURAL CONCRETE DECK; FOLLOWED BY LWC PER LWC SYSTEM TABLES:				
Option #	Primer	Dry-In / Temporary Roof		MDP (psf)
		Base Ply	Cap Ply	
LWC-VB-1.	ASTM D41, Elastocol 500, Elastocol Stick	N/A	SBS-TA-F	Per Table LWC System Tables
LWC-VB-2.	ASTM D41, Elastocol 500, Elastocol Stick	SBS-TA-P (sand-surfaced if no Cap Ply)	(Optional) SBS-TA-F, SBS-SA	Per Table LWC System Tables
LWC-VB-3.	Elastocol Stick Zero	SBS-SA (sand-surfaced if no Cap Ply)	(Optional) SBS-TA-F, SBS-SA	-60.0
LWC-VB-4.	ASTM D41, Elastocol 500	SBS-CA1 (sand-surfaced)	None	-187.5
LWC-VB-5.	ASTM D41, Elastocol 500	(Optional) SBS-TA-F	SBS-TA	-302.5
LWC-VB-6.	ASTM D41, Elastocol 500	SBS-TA-F (sand-surfaced)	None	-462.5

19. An optional air/vapor barrier of SOPRAVAP'R, self-adhered, may be installed atop steel roof decks prior to installation of any steel deck roof assembly noted herein.
20. Overburden of soil and plantings (for 'garden roofs'; root barriers, filter fabric, drainage components, EPS / XPS insulation, etc.) or concrete topping slabs, that are specified by the Designer of Record, acceptable to the Authority Having Jurisdiction and do not form part of the load path to the liquid applied roof system, are permissible over the assemblies noted herein with no adverse effect on the wind uplift performance of the Soprema system. The Authority Having Jurisdiction may require integrity flood testing (ASTM D5957) or Electric Field Vector Mapping tests of all waterproofing systems prior to placement of overburden materials. Testing, if required by the Authority Having Jurisdiction, should be conducted by a qualified testing agency or professional.
21. Optional finish surfacing materials, including additional application(s) of ALSAN RS 230 or 260 LO and/or ALSAN RS 233 or 263 LO Self-Leveling Mortar, ALSAN RS 281 (clear), 287 (+ color pack), 289 (+ color pack), Textured Coating and/or quartz aggregates and vinyl chips, may be applied to the final ALSAN RS surface with no adverse effect on system wind uplift performance.
22. "MDP" = Maximum Design Pressure is the result of testing for wind load resistance based on allowable wind loads. Refer to FBC 1609 for determination of design wind loads.

**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	Fasteners	Attach	Type	Attach (Notes 6&7)	Base Ply	Primer	LARS	
COLD APPLIED BASE:										
W-1.	Min. 19/32-inch APA-rated OSB or CDX plywood	Min 2-inch ACFoam II, SOPRA-ISO s, H-Shield, SOPRA-ISO r, M-Shield, H-Shield CG, SOPRA-ISO+ r, Multi-Max FA3, SOPRA-ISO x, Ultra-Max or SOPRA-ISO+ x	Trufast Versa-Fast Plates with minimum one (1) Versa-Fast Fastener installed into the center-hole of the Versa-Fast Plates.	1 per 2.67 ft ²	Min. 0.125-inch SOPRABOARD, Min. 0.25-inch DensDeck Prime, DEXcell FA Glass Mat Roof Board or SECUROCK Gypsum Fiber Roof Board or Min. 0.4375-inch DEXcell Cement Roof Board	DUOTACK	SBS-CA3	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-45.0*
W-2.	Min. 19/32-inch APA-rated OSB or CDX plywood	Min 2-inch ACFoam II, SOPRA-ISO s, H-Shield, SOPRA-ISO r, M-Shield, H-Shield CG, SOPRA-ISO+ r, Multi-Max FA3, SOPRA-ISO x, Ultra-Max or SOPRA-ISO+ x	Trufast Versa-Fast Plates with minimum one (1) Versa-Fast Fastener installed into the center-hole of the Versa-Fast Plates.	1 per 2.67 ft ²	Min. 0.125-inch SOPRABOARD primed with DETEC "TruGround Conductive Primer"	DUOTACK	SBS-CA3	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-45.0*
W-3.	Min. 19/32-inch APA-rated OSB or CDX plywood	Min 2-inch ACFoam II, SOPRA-ISO s, H-Shield, SOPRA-ISO r, M-Shield, H-Shield CG, SOPRA-ISO+ r, Multi-Max FA3, SOPRA-ISO x, Ultra-Max or SOPRA-ISO+ x	Trufast Versa-Fast Plates with minimum one (1) Versa-Fast Fastener installed into the center-hole of the Versa-Fast Plates.	1 per 2.67 ft ²	SOPRASMART Board 180 Sanded	DUOTACK	(Optional) SBS-CA3	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-45.0*
W-4.	Min. 15/32-inch APA-rated BCX plywood	Min 2-inch ACFoam II, SOPRA-ISO s, H-Shield, SOPRA-ISO r, M-Shield, H-Shield CG, SOPRA-ISO+ r, Multi-Max FA3, SOPRA-ISO x, Ultra-Max or SOPRA-ISO+ x	Trufast Versa-Fast Plates with minimum two (2) Versa-Fast Fasteners, Trufast #14 HD or Soprema #14 MP Fasteners installed 180° into the holes of the Versa-Fast Plates	1 per 1.78 ft ² (18 per 4x8 ft board)	SOPRASMART Board 180 Sanded	DUOTACK	(Optional) SBS-CA3	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-67.5
W-5.	Min. 15/32-inch APA-rated BCX plywood	Min 2-inch ACFoam II, SOPRA-ISO s, H-Shield, SOPRA-ISO r, M-Shield, H-Shield CG, SOPRA-ISO+ r, Multi-Max FA3, SOPRA-ISO x, Ultra-Max or SOPRA-ISO+ x	Trufast Versa-Fast Plates with minimum two (2) Versa-Fast Fasteners, Trufast #14 HD or Soprema #14 MP Fasteners installed 180° into the holes of the Versa-Fast Plates	1 per 1.78 ft ² (18 per 4x8 ft board)	Min. 0.25-inch DensDeck Prime, DEXcell FA Glass Mat Roof Board or SECUROCK Gypsum Fiber Roof Board or Min. 0.4375-inch DEXcell Cement Roof Board	DUOTACK	SBS-CA3	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-67.5
HOT OR TORCH APPLIED BASE:										
W-6.	Min. 19/32-inch APA-rated OSB or CDX plywood	Min 2-inch ACFoam II, SOPRA-ISO s, H-Shield, SOPRA-ISO r, M-Shield, H-Shield CG, SOPRA-ISO+ r, Multi-Max FA3, SOPRA-ISO x, Ultra-Max or SOPRA-ISO+ x	Trufast Versa-Fast Plates with minimum one (1) Versa-Fast Fastener installed into the center-hole of the Versa-Fast Plates.	1 per 2.67 ft ²	Min. 0.125-inch SOPRABOARD, Min. 0.25-inch DensDeck Prime, DEXcell FA Glass Mat Roof Board or SECUROCK Gypsum Fiber Roof Board or Min. 0.4375-inch DEXcell Cement Roof Board	DUOTACK	SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-45.0*

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	Fasteners	Attach	Type	Attach (Notes 6&7)	Base Ply	Primer	LARS	
W-7.	Min. 19/32-inch APA rated OSB or CDX plywood	Min 2-inch ACFoam II, SOPRA-ISO s, H-Shield, SOPRA-ISO r, M-Shield, H-Shield CG, SOPRA-ISO+ r, Multi-Max FA3, SOPRA-ISO x, Ultra-Max or SOPRA-ISO+ x	Trufast Versa-Fast Plates with minimum one (1) Versa-Fast Fastener installed into the center-hole of the Versa-Fast Plates.	1 per 2.67 ft ²	SOPRASMART Board 180 Sanded (for no Base Ply) or SOPRASMART Board 180 (for TA Base Ply)	DUOTACK	(Optional) SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-45.0*
W-8.	Min. 15/32-inch APA rated BCX plywood	Min 2-inch ACFoam II, SOPRA-ISO s, H-Shield, SOPRA-ISO r, M-Shield, H-Shield CG, SOPRA-ISO+ r, Multi-Max FA3, SOPRA-ISO x, Ultra-Max or SOPRA-ISO+ x	Trufast Versa-Fast Plates with minimum two (2) Versa-Fast Fasteners, Trufast #14 HD or Soprema #14 MP Fasteners installed 180° into the holes of the Versa-Fast Plates	1 per 1.78 ft ² (18 per 4x8 ft board)	Min. 0.25-inch SOPRABOARD, DensDeck Prime, DEXcell FA Glass Mat Roof Board or SECUROCK Gypsum Fiber Roof Board or Min. 0.4375-inch DEXcell Cement Roof Board	DUOTACK	SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-67.5
W-9.	Min. 15/32-inch APA rated BCX plywood	Min 2-inch ACFoam II, SOPRA-ISO s, H-Shield, SOPRA-ISO r, M-Shield, H-Shield CG, SOPRA-ISO+ r, Multi-Max FA3, SOPRA-ISO x, Ultra-Max or SOPRA-ISO+ x	Trufast Versa-Fast Plates with minimum two (2) Versa-Fast Fasteners, Trufast #14 HD or Soprema #14 MP Fasteners installed 180° into the holes of the Versa-Fast Plates	1 per 1.78 ft ² (18 per 4x8 ft board)	SOPRASMART Board 180 Sanded (for no Base Ply) or SOPRASMART Board 180 (for TA Base Ply)	DUOTACK	(Optional) SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-67.5
SELF-ADHERING BASE:										
W-10.	Min. 19/32-inch APA rated OSB or CDX plywood	Min 2-inch ACFoam II, SOPRA-ISO s, H-Shield, SOPRA-ISO r, M-Shield, H-Shield CG, SOPRA-ISO+ r, Multi-Max FA3, SOPRA-ISO x, Ultra-Max or SOPRA-ISO+ x	Trufast Versa-Fast Plates with minimum one (1) Versa-Fast Fastener installed into the center-hole of the Versa-Fast Plates.	1 per 2.67 ft ²	Min. 0.125-inch SOPRABOARD. Top surface shall be primed with Elastocol Stick Zero. or Min. 0.25-inch DensDeck Prime, DEXcell FA Glass Mat Roof Board or SECUROCK Gypsum Fiber Roof Board or Min. 0.4375-inch DEXcell Cement Roof Board. Top surface shall be primed with Elastocol Stick or Elastocol Stick Zero.	DUOTACK	SBS-SA	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-45.0*
W-11.	Min. 19/32-inch APA rated OSB or CDX plywood	Min 2-inch ACFoam II, SOPRA-ISO s, H-Shield, SOPRA-ISO r, M-Shield, H-Shield CG, SOPRA-ISO+ r, Multi-Max FA3, SOPRA-ISO x, Ultra-Max or SOPRA-ISO+ x	Trufast Versa-Fast Plates with minimum one (1) Versa-Fast Fastener installed into the center-hole of the Versa-Fast Plates.	1 per 2.67 ft ²	SOPRASMART Board 180 Sanded. Top surface shall be primed with Elastocol Stick Zero	DUOTACK	(Optional) SBS-SA	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-45.0*

**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	Fasteners	Attach	Type	Attach (Notes 6&7)	Base Ply	Primer	LARS	
W-12.	Min. 15/32-inch APA rated BCX plywood	Min 2-inch ACFoam II, SOPRA-ISO s, H-Shield, SOPRA-ISO r, M-Shield, H-Shield CG, SOPRA-ISO+ r, Multi-Max FA3, SOPRA-ISO x, Ultra-Max or SOPRA-ISO+ x	Trufast Versa-Fast Plates with minimum two (2) Versa-Fast Fasteners, Trufast #14 HD or Soprema #14 MP Fasteners installed 180° into the holes of the Versa-Fast Plates	1 per 1.78 ft ² (18 per 4x8 ft board)	Min. 0.25-inch SOPRABOARD. Top surface shall be primed with Elastocol Stick Zero	DUOTACK	SBS-SA	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-67.5
W-13.	Min. 15/32-inch APA rated BCX plywood	Min 2-inch ACFoam II, SOPRA-ISO s, H-Shield, SOPRA-ISO r, M-Shield, H-Shield CG, SOPRA-ISO+ r, Multi-Max FA3, SOPRA-ISO x, Ultra-Max or SOPRA-ISO+ x	Trufast Versa-Fast Plates with minimum two (2) Versa-Fast Fasteners, Trufast #14 HD or Soprema #14 MP Fasteners installed 180° into the holes of the Versa-Fast Plates	1 per 1.78 ft ² (18 per 4x8 ft board)	SOPRASMART Board 180 Sanded. Top surface shall be primed with Elastocol Stick Zero	DUOTACK	(Optional) SBS-SA	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-67.5
W-14.	Min. 15/32-inch APA rated BCX plywood	Min 2-inch ACFoam II, SOPRA-ISO s, H-Shield, SOPRA-ISO r, M-Shield, H-Shield CG, SOPRA-ISO+ r, Multi-Max FA3, SOPRA-ISO x, Ultra-Max or SOPRA-ISO+ x	Trufast Versa-Fast Plates with minimum two (2) Versa-Fast Fasteners, Trufast #14 HD or Soprema #14 MP Fasteners installed 180° into the holes of the Versa-Fast Plates	1 per 1.78 ft ² (18 per 4x8 ft board)	Min. 0.25-inch DensDeck Prime, DEXcell FA Glass Mat Roof Board or SECUROCK Gypsum Fiber Roof Board or Min. 0.4375-inch DEXcell Cement Roof Board. Top surface shall be primed with Elastocol Stick or Elastocol Stick Zero.	DUOTACK	SBS-SA	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-67.5

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

System No.	Deck (Note 1)	Base Insulation and/or Thermal Barrier Layer(s)	Top Insulation Layer			Roof Cover (Note 15)			MDP (psf)
			Type	Fasteners	Attach	Base Ply	Primer	LARS	
TORCH APPLIED BASE:									
W-15.	Min. 19/32-inch plywood	(Optional) One or more layers, any combination, loose laid	Min. 0.125-inch SOPRABOARD or min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	Dekfast #14 with Hex Plate or 3" Round Insulation Plate or Soprema #14 Fastener with Soprema 3 in. Insulation Plate	1 per 2.3 ft ²	SBS-TA-P or SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-30.0*
W-16.	Min. 19/32-inch plywood	(Optional) One or more layers, any combination, loose laid	Min. 0.125-inch SOPRABOARD or min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	OMG #14 Roofgrip with Flat Bottom Plate (Accutrac), Trufast #14 HD or Soprema #14 MP Fastener with Trufast 3" Metal Insulation Plate or Soprema 3" Metal Insulation Plate	1 per 2.3 ft ²	SBS-TA-P or SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-37.5*
W-17.	Min. 19/32-inch plywood	(Optional) One or more layers, any combination, loose laid	Min. 0.125-inch SOPRABOARD or min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	OMG #14 Roofgrip with Flat Bottom Plate (Accutrac), Trufast #14 HD or Soprema #14 MP Fastener with Trufast 3" Metal Insulation Plate or Soprema 3" Metal Insulation Plate	1 per 2 ft ²	SBS-TA-P or SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-45.0*
W-18.	Min. 19/32-inch plywood	(Optional) One or more layers, any combination, loose laid	Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	Note 2	1 per 1.6 ft ²	SBS-TA-P or SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-52.5
W-19.	Min. 19/32-inch plywood	(Optional) One or more layers, any combination, loose laid	Min. 0.125-inch SOPRABOARD	Dekfast #15 with 3" Round Insulation Plate or Soprema #15 Fastener with Soprema 3 in. Round Insulation Plate	1 per 1.33 ft ²	SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-75.0
SELF-ADHERING BASE:									
W-20.	Min. 19/32-inch plywood	(Optional) One or more layers, any combination, loose laid	Min. 0.125-inch SOPRABOARD primed with Elastocol 500, Elastocol Stick or Elastocol Stick Zero	Dekfast #14 with Hex Plate or 3" Round Insulation Plate or Soprema #14 Fastener with Soprema 3 in. Insulation Plate	1 per 2.3 ft ²	SBS-SA	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-30.0*
W-21.	Min. 19/32-inch plywood	(Optional) One or more layers, any combination, loose laid	Min. 0.125-inch SOPRABOARD primed with Elastocol 500, Elastocol Stick or Elastocol Stick Zero or 0.25-inch Dens Deck Prime	OMG #14 Roofgrip with Flat Bottom Plate (Accutrac), Trufast #14 HD or Soprema #14 MP Fastener with Trufast 3" Metal Insulation Plate or Soprema 3" Metal Insulation Plate	1 per 2.3 ft ²	SBS-SA	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-37.5*
W-22.	Min. 19/32-inch plywood	(Optional) One or more layers, any combination, loose laid	Min. 0.125-inch SOPRABOARD primed with Elastocol 500, Elastocol Stick or Elastocol Stick Zero or 0.25-inch Dens Deck Prime	OMG #14 Roofgrip with Flat Bottom Plate (Accutrac), Trufast #14 HD or Soprema #14 MP Fastener with Trufast 3" Metal Insulation Plate or Soprema 3" Metal Insulation Plate	1 per 2 ft ²	SBS-SA	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-45.0*

**TABLE 1C: WOOD DECKS – NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER
SYSTEM TYPE D-2: INSULATED, MECHANICALLY ATTACHED SOPRAPHIX, BONDED ROOF COVER**

System No.	Deck (Note 1)	Slip Sheet	Insulation and/or Thermal Barrier	Base Sheet			Roof Cover (Note 15)			MDP (psf)
				Type	Fasteners	Spacing	Base Ply	Primer	LARS	
W-23.	Min. 19/32-inch plywood	(Optional) One or more layers MODIFIED SOPRA-G, loose laid	Any combination, prelim attach	SOPRAPHIX Base 621, SOPRAPHIX Base 622	Soprema #14 MP Fasteners with SOPRAPHIX 2-inch Seam Plates	18-inch o.c. within the 4-inch wide, hot-air-welded side laps	(Optional) SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-37.5*
W-24.	Min. 15/32-inch plywood or OSB	(Optional) One or more layers MODIFIED SOPRA-G, loose laid	Any combination, prelim attach	SOPRAPHIX Base 621, SOPRAPHIX Base 622	Soprema #14 MP Fasteners with SOPRAPHIX 2-inch Seam Plates	12-inch o.c. within the 4-inch wide, hot-air-welded side laps	(Optional) SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-45.0*
W-25.	Min. 19/32-inch plywood	(Optional) One or more layers MODIFIED SOPRA-G, loose laid	Any combination, prelim attach	SOPRAPHIX Base 621, SOPRAPHIX Base 622	Soprema #14 MP Fasteners with SOPRAPHIX 2-inch Seam Plates	12-inch o.c. within the 4-inch wide, hot-air-welded side laps	(Optional) SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-52.5
W-26.	Min. 19/32-inch plywood	(Optional) One or more layers MODIFIED SOPRA-G, loose laid	Any combination, prelim attach	SOPRAPHIX Base 622, SOPRAPHIX Base 641	Large Head #15 Roofgrip with Polymer Batten Strip or Soprema #15 EL with SOPRAPHIX MBB or MBB-R	6-inch o.c. within 5-inch wide, heat-welded or self-adhering laps.	SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-60.0
W-27.	Min. 19/32-inch plywood	(Optional) One or more layers MODIFIED SOPRA-G, loose laid	Any combination, prelim attach	SOPRAPHIX Base 614	Large Head #15 Roofgrip with Polymer Batten Strip or Soprema #15 EL with SOPRAPHIX MBB or MBB-R	6-inch o.c. within 5-inch wide, heat-welded or self-adhering laps.	SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-60.0
W-28.	Min. 19/32-inch plywood	(Optional) One or more layers MODIFIED SOPRA-G, loose laid	Any combination, prelim attach	SOPRAPHIX Base 621, SOPRAPHIX Base 622	Soprema #14 MP Fasteners with SOPRAPHIX 2-inch Seam Plates	6-inch o.c. within the 4-inch wide, hot-air-welded side laps	(Optional) SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-82.5
W-29.	Min. 19/32-inch plywood	(Optional) One or more layers MODIFIED SOPRA-G, loose laid	Any combination, prelim attach	SOPRAPHIX Base 622, SOPRAPHIX Base 641	Large Head #15 Roofgrip with Polymer Batten Strip or Soprema #15 EL with SOPRAPHIX MBB or MBB-R	6-inch o.c. within 5-inch wide, heat-welded or self-adhering laps.	SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-90.0
W-30.	Min. 19/32-inch plywood	(Optional) One or more layers MODIFIED SOPRA-G, loose laid	Any combination, prelim attach	SOPRAPHIX Base 614	Large Head #15 Roofgrip with Polymer Batten Strip or Soprema #15 EL with SOPRAPHIX MBB or MBB-R	6-inch o.c. within 5-inch wide, heat-welded or self-adhering laps.	SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-90.0

**TABLE 2A: STEEL DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE A-1: BONDED INSULATION, BONDED ROOF COVER
REFER TO NOTE 16 FOR THERMAL BARRIER / VAPOR BARRIER COMBINATION OPTIONS**

System No.	Deck (Note 1)	Thermal Barrier		Base Insulation Layer		Top Insulation Layer		Roof Cover (Note 15)				MDP (psf)
		Type	Attach (Notes 6&7)	Type	Attach (Notes 6&7)	Type	Attach (Notes 6&7)	Base Ply	Ply	Primer	LARS	
COLD APPLIED BASE:												
S-1.	22 ga., Type B, Grade 40 steel	(Optional) Min. 0.5-inch DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	DUOTACK 365, ribbons 6" o.c. (on each deck flange)	Min. 2-inch ACFoam II, SOPRA-ISO s, ACFoam III, SOPRA-ISO+ s, H-Shield, SOPRA-ISO r, H-Shield CG, SOPRA-ISO+ r, Multi-Max FA3 or SOPRA-ISO x	TO DECK: DUOTACK 365, ribbons 6" o.c. (on each deck flange) TO THERMAL BARRIER: DUOTACK	Additional optional layer(s), min. 1.5-inch base insulation followed by min. 0.125-inch SOPRABOARD, optionally primed with DETEC "TruGround Conductive Primer"	DUOTACK	SBS-CA3	None	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-60.0
S-2.	22 ga., Type B, Grade 40 steel	(Optional) Min. 0.5-inch DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	DUOTACK 365, ribbons 6" o.c. (on each deck flange)	Min. 2-inch ACFoam II, SOPRA-ISO s, ACFoam III, SOPRA-ISO+ s, H-Shield, SOPRA-ISO r, H-Shield CG, SOPRA-ISO+ r, Multi-Max FA3 or SOPRA-ISO x	TO DECK: DUOTACK 365, ribbons 6" o.c. (on each deck flange) TO THERMAL BARRIER: DUOTACK	Additional optional layer(s), min. 1.5-inch base insulation followed by SOPRASMART Board 180 Sanded	DUOTACK	(Optional) SBS-CA3	None	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-60.0
S-3.	22 ga., Type B, Grade 40 steel	(Optional) Min. 0.5-inch DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	DUOTACK 365, ribbons 6" o.c. (on each deck flange)	Min. 2-inch ACFoam II, SOPRA-ISO s, ACFoam III, SOPRA-ISO+ s, H-Shield, SOPRA-ISO r, H-Shield CG, SOPRA-ISO+ r	TO DECK: DUOTACK 365, ribbons 6" o.c. (on each deck flange) TO THERMAL BARRIER: DUOTACK	Additional optional layer(s), min. 1.5-inch base insulation followed by min. 0.25-inch Dens Deck Prime, DEXcell FA Glass Mat Roof Board or SECUROCK Gypsum Fiber Roof Board	DUOTACK	SBS-CA3	None	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-82.5
S-4.	22 ga., Type B, Grade 40 steel	(Optional) Min. 0.5-inch DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	DUOTACK 365, ribbons 6" o.c. (on each deck flange)	Min. 2-inch ACFoam II, SOPRA-ISO s, ACFoam III, SOPRA-ISO+ s, H-Shield, SOPRA-ISO r, H-Shield CG, SOPRA-ISO+ r	TO DECK: DUOTACK 365, ribbons 6" o.c. (on each deck flange) TO THERMAL BARRIER: DUOTACK	Additional optional layer(s), min. 1.5-inch base insulation followed by min. 0.5-inch SECUROCK Gypsum Fiber Roof Board	DUOTACK	SBS-CA3	None	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-90.0

**TABLE 2A: STEEL DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE A-1: BONDED INSULATION, BONDED ROOF COVER
REFER TO NOTE 16 FOR THERMAL BARRIER / VAPOR BARRIER COMBINATION OPTIONS**

System No.	Deck (Note 1)	Thermal Barrier		Base Insulation Layer		Top Insulation Layer		Roof Cover (Note 15)				MDP (psf)
		Type	Attach (Notes 6&7)	Type	Attach (Notes 6&7)	Type	Attach (Notes 6&7)	Base Ply	Ply	Primer	LARS	
S-5.	22 ga., Type B, Grade 40 steel	(Optional) Min. 0.5-inch DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	DUOTACK 365, ribbons 6" o.c. (on each deck flange)	Min. 2-inch ACFoam II, SOPRA-ISO s, ACFoam III, SOPRA-ISO+ s, H-Shield, SOPRA-ISO r, H-Shield CG, SOPRA-ISO+ r	TO DECK: DUOTACK 365, ribbons 6" o.c. (on each deck flange) TO THERMAL BARRIER: DUOTACK	Additional optional layer(s), min. 1.5-inch base insulation followed by min. 0.5-inch Dens Deck Prime	DUOTACK	SBS-CA3	None	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-97.5
TORCH APPLIED BASE:												
S-6.	22 ga., Type B, Grade 40 steel	(Optional) Min. 0.5-inch DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	DUOTACK 365, ribbons 6" o.c. (on each deck flange)	Min. 2-inch ACFoam II, SOPRA-ISO s, ACFoam III, SOPRA-ISO+ s, H-Shield, SOPRA-ISO r, H-Shield CG, SOPRA-ISO+ r	TO DECK: DUOTACK 365, ribbons 6" o.c. (on each deck flange) TO THERMAL BARRIER: DUOTACK	Additional optional layer(s), min. 1.5-inch base insulation followed by min. 0.25-inch SOPRABOARD, Dens Deck Prime, DEXcell FA Glass Mat Roof Board or SECUROCK Gypsum Fiber Roof Board	DUOTACK	SBS-TA-F	(Optional) SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-82.5
S-7.	22 ga., Type B, Grade 40 steel	(Optional) Min. 0.5-inch DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	DUOTACK 365, ribbons 6" o.c. (on each deck flange)	Min. 2-inch ACFoam II, SOPRA-ISO s, ACFoam III, SOPRA-ISO+ s, H-Shield, SOPRA-ISO r, H-Shield CG, SOPRA-ISO+ r	TO DECK: DUOTACK 365, ribbons 6" o.c. (on each deck flange) TO THERMAL BARRIER: DUOTACK	Additional optional layer(s), min. 1.5-inch base insulation followed by min. 0.5-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	DUOTACK	SBS-TA-F	(Optional) SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-97.5
SELF-ADHERING BASE:												
S-8.	22 ga., Type B, Grade 40 steel	(Optional) Min. 0.5-inch DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	DUOTACK 365, ribbons 6" o.c. (on each deck flange)	Min. 2-inch ACFoam II, SOPRA-ISO s, ACFoam III, SOPRA-ISO+ s, H-Shield, SOPRA-ISO r, H-Shield CG, SOPRA-ISO+ r, Multi-Max FA3 or SOPRA-ISO x	TO DECK: DUOTACK 365, ribbons 6" o.c. (on each deck flange) TO THERMAL BARRIER: DUOTACK	Additional optional layer(s), min. 1.5-inch base insulation followed by min. 0.125-inch SOPRABOARD primed with Elastocol Stick Zero	DUOTACK	SBS-SA	(Optional) SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-52.5

**TABLE 2A: STEEL DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE A-1: BONDED INSULATION, BONDED ROOF COVER
REFER TO NOTE 16 FOR THERMAL BARRIER / VAPOR BARRIER COMBINATION OPTIONS**

System No.	Deck (Note 1)	Thermal Barrier		Base Insulation Layer		Top Insulation Layer		Roof Cover (Note 15)				MDP (psf)
		Type	Attach (Notes 6&7)	Type	Attach (Notes 6&7)	Type	Attach (Notes 6&7)	Base Ply	Ply	Primer	LARS	
S-9.	22 ga., Type B, Grade 40 steel	(Optional) Min. 0.5-inch DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	DUOTACK 365, ribbons 6" o.c. (on each deck flange)	Min. 2-inch ACFoam II, SOPRA-ISOs, ACFoam III, SOPRA-ISO+s, H-Shield, SOPRA-ISO r, H-Shield CG, SOPRA-ISO+r	TO DECK: DUOTACK 365, ribbons 6" o.c. (on each deck flange) TO THERMAL BARRIER: DUOTACK	Additional optional layer(s), min. 1.5-inch base insulation followed by min. 0.25-inch SOPRABOARD, Dens Deck Prime, DEXcell FA Glass Mat Roof Board or SECUROCK Gypsum Fiber Roof Board primed with Elastocol Stick Zero	DUOTACK	SBS-SA	(Optional) SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-82.5

**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**

System No.	Deck (Note 1)	Base Insulation Layer			Top Insulation Layer		Roof Cover (Note 15)				MDP (psf)
		Type	Fasten	Attach	Type	Attach (Notes 6&7)	Base Ply	Ply	Primer	LARS	
NO BASE PLY:											
S-10.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	Min. 2-inch ACFoam II, SOPRA-ISOs or H-Shield, SOPRA-ISOr, M-Shield	Note 2	1 per 1.6 ft ²	Min. 0.5-inch SECUROCK Cement Roof Board	DUOTACK	None	None	RS 276	ALSAN RS 230 system or ALSAN RS 260 LO system	-82.5
S-11.	Min. 22 ga., type B, Grade 80 steel or min. 2,500 psi structural concrete	Min. 2-inch ACFoam II, SOPRA-ISOs or H-Shield, SOPRA-ISOr, M-Shield	Note 2	1 per 1 ft ²	Min. 0.5-inch SECUROCK Cement Roof Board	DUOTACK, 6-inch o.c.	None	None	RS 276	ALSAN RS 230 system or ALSAN RS 260 LO system	-127.5
COLD-APPLIED BASE:											
S-12.	Min. 22 ga. type B, Grade 33 steel or min. 2,500 psi structural concrete	Min. 1.5-inch ACFoam II, SOPRA-ISOs, ACFoam III, SOPRA-ISO+s, H-Shield, SOPRA-ISOr, H-Shield CG, SOPRA-ISO+r or M-Shield	Soprema #15 HD with Soprema 3" Metal Insulation Plate	1 per 1.78 ft ²	Additional layer(s) base insulation followed by min. 0.125-inch SOPRABOARD, optionally primed with DETEC "TruGround Conductive Primer"	DUOTACK	SBS-CA3	None	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-52.5
S-13.	Min. 22 ga. type B, Grade 33 steel or min. 2,500 psi structural concrete	Min. 1.5-inch ACFoam II, SOPRA-ISOs, ACFoam III, SOPRA-ISO+s, H-Shield, SOPRA-ISOr, H-Shield CG, SOPRA-ISO+r or M-Shield	Soprema #15 HD with Soprema 3" Metal Insulation Plate	1 per 1.78 ft ²	Additional layer(s) base insulation followed by SOPRASMART Board 180 Sanded	DUOTACK	(Optional) SBS-CA3	None	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-52.5

**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**

System No.	Deck (Note 1)	Base Insulation Layer			Top Insulation Layer		Roof Cover (Note 15)				MDP (psf)
		Type	Fasten	Attach	Type	Attach (Notes 6&7)	Base Ply	Ply	Primer	LARS	
S-14.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	Min 2-inch ACFoam II, SOPRA-ISO s, H-Shield, SOPRA-ISO r, M-Shield, H-Shield CG, SOPRA-ISO+ r, Multi-Max FA3, SOPRA-ISO x, Ultra-Max or SOPRA-ISO+ x	Soprema #14 MP with Soprema 3" Metal Insulation Plate	1 per 1.6 ft ²	Min. 0.25-inch SOPRABOARD primed with DETEC "TruGround Conductive Primer"	DUOTACK	SBS-CA3	None	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-82.5
S-15.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	Min 2-inch ACFoam II, SOPRA-ISO s, H-Shield, SOPRA-ISO r, M-Shield, H-Shield CG, SOPRA-ISO+ r, Multi-Max FA3, SOPRA-ISO x, Ultra-Max or SOPRA-ISO+ x	Soprema #14 MP with Soprema 3" Metal Insulation Plate	1 per 1.6 ft ²	Min. 0.25-inch Dens Deck Prime, DEXcell FA Glass Mat Roof Board or SECUROCK Gypsum Fiber Roof Board or Min. 0.4375-inch DEXcell Cement Roof Board	DUOTACK	SBS-CA3	None	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-82.5
S-16.	Min. 22 ga., type B, Grade 40 steel or min. 2,500 psi structural concrete	Min 2-inch H-Shield or SOPRA-ISO r	Soprema #14 MP with Soprema 3" Metal Insulation Plate	1 per 1 ft ²	Min. 0.25-inch SOPRABOARD, optionally primed with DETEC "TruGround Conductive Primer"	DUOTACK 365, 6-inch o.c.	SBS-CA3	None	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-135.0
TORCH APPLIED BASE:											
S-17.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	Min 1.5-inch ACFoam II, SOPRA-ISO s, H-Shield, SOPRA-ISO r, M-Shield	Soprema #14 MP with Soprema 3" Metal Insulation Plate	1 per 2 ft ²	Min. 0.125-inch SOPRABOARD, Min. 0.25-inch Dens Deck Prime, DEXcell FA Glass Mat Roof Board or SECUROCK Gypsum Fiber Roof Board or Min. 0.4375-inch DEXcell Cement Roof Board	DUOTACK	SBS-TA-P, SBS-TA-F	(Optional) SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-45.0*
S-18.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	Min 1.5-inch ACFoam II, SOPRA-ISO s, H-Shield, SOPRA-ISO r, M-Shield	Soprema #14 MP with Soprema 3" Metal Insulation Plate	1 per 2 ft ²	SOPRASMART Board 180 (for TA Base Ply) or SOPRASMART Board 180 Sanded (for no Base Ply)	DUOTACK	(Optional) SBS-TA-P, SBS-TA-F	None	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-45.0*
S-19.	Min. 22 ga., type B, Grade 33 steel	Min. 0.5-inch DEXcell FA Glass Mat Roof Board	Soprema #14 MP with Soprema 3" Metal Insulation Plate	1 per 4 ft ²	Min. 1-inch ACFoam II, SOPRA-ISO s, H-Shield, SOPRA-ISO r, M-Shield; followed by min. 0.125-inch SOPRABOARD, Min. 0.25-inch Dens Deck Prime, DEXcell FA Glass Mat Roof Board or SECUROCK Gypsum Fiber Roof Board or Min. 0.4375-inch DEXcell Cement Roof Board	DUOTACK	SBS-TA-F	(Optional) SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-45.0*
S-20.	Min. 22 ga., type B, Grade 33 steel	Min. 0.5-inch DEXcell FA Glass Mat Roof Board	Soprema #14 MP with Soprema 3" Metal Insulation Plate	1 per 4 ft ²	Min. 1-inch ACFoam II, SOPRA-ISO s, H-Shield, SOPRA-ISO r, M-Shield; followed by SOPRASMART Board 180 (for TA Base Ply) or SOPRASMART Board 180 Sanded (for no Base Ply)	DUOTACK	(Optional) SBS-TA-P, SBS-TA-F	None	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-45.0*

**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**

System No.	Deck (Note 1)	Base Insulation Layer			Top Insulation Layer		Roof Cover (Note 15)				MDP (psf)
		Type	Fasten	Attach	Type	Attach (Notes 6&7)	Base Ply	Ply	Primer	LARS	
S-21.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	Min 2-inch ACFoam II, SOPRA-ISO s, H-Shield, SOPRA-ISO r, M-Shield	Soprema #14 MP with Soprema 3" Metal Insulation Plate	1 per 4 ft ²	Min. 0.125-inch SOPRABOARD, Min. 0.25-inch Dens Deck Prime, DEXcell FA Glass Mat Roof Board or SECUROCK Gypsum Fiber Roof Board or Min. 0.4375-inch DEXcell Cement Roof Board	DUOTACK	SBS-TA-P, SBS-TA-F	(Optional) SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-45.0*
S-22.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	Min 2-inch ACFoam II, SOPRA-ISO s, H-Shield, SOPRA-ISO r, M-Shield	Soprema #14 MP with Soprema 3" Metal Insulation Plate	1 per 4 ft ²	SOPRASMART Board 180 (for TA Base Ply) or SOPRASMART Board 180 Sanded (for no Base Ply)	DUOTACK	(Optional) SBS-TA-P, SBS-TA-F	None	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-45.0*
S-23.	Min. 22 ga. type B, Grade 33 steel or min. 2,500 psi structural concrete	Min. 1.5-inch ACFoam II, SOPRA-ISOs, ACFoam III, SOPRA-ISO+s, H-Shield, SOPRA-ISOr, H-Shield CG, SOPRA-ISO+r or M-Shield	Soprema #15 HD with Soprema 3" Metal Insulation Plate	1 per 1.78 ft ²	Additional layer(s) base insulation followed by min. 0.125-inch SOPRABOARD	DUOTACK	SBS-TA-F	(Optional) SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-52.5
S-24.	Min. 22 ga. type B, Grade 33 steel or min. 2,500 psi structural concrete	Min. 1.5-inch ACFoam II, SOPRA-ISOs, ACFoam III, SOPRA-ISO+s, H-Shield, SOPRA-ISOr, H-Shield CG, SOPRA-ISO+r or M-Shield	Soprema #15 HD with Soprema 3" Metal Insulation Plate	1 per 1.78 ft ²	Additional layer(s) base insulation followed by SOPRASMART Board 180 (for TA Base Ply) or SOPRASMART Board 180 Sanded (for no Base Ply)	DUOTACK	(Optional) SBS-TA-F	None	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-52.5
S-25.	Min. 22 ga. type B, Grade 33 steel or min. 2,500 psi structural concrete	Min. 2-inch ACFoam II, SOPRA-ISO s or ENRGY 3	Note 2	1 per 2 ft ²	Min. 0.375-inch SECUROCK Gypsum-Fiber Roof Board	DUOTACK	SBS-TA-P, SBS-TA-F	(Optional) SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-60.0
S-26.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	Min 2-inch ACFoam II, SOPRA-ISO s, H-Shield, SOPRA-ISO r, M-Shield, H-Shield CG, SOPRA-ISO+ r, Multi-Max FA3, SOPRA-ISO x, Ultra-Max or SOPRA-ISO+ x	Soprema #14 MP with Soprema 3" Metal Insulation Plate	1 per 1.6 ft ²	Min. 0.25-inch SOPRABOARD, Dens Deck Prime, DEXcell FA Glass Mat Roof Board or SECUROCK Gypsum Fiber Roof Board or Min. 0.4375-inch DEXcell Cement Roof Board	DUOTACK	SBS-TA-F	(Optional) SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-82.5
S-27.	Min. 22 ga., type B, Grade 40 steel or min. 2,500 psi structural concrete	Min 2-inch H-Shield or SOPRA-ISO r	Soprema #14 MP with Soprema 3" Metal Insulation Plate	1 per 1 ft ²	Min. 0.25-inch SOPRABOARD	DUOTACK 365, 6-inch o.c.	SBS-TA-F	(Optional) SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-135.0

SELF-ADHERING BASE:

**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**

System No.	Deck (Note 1)	Base Insulation Layer			Top Insulation Layer		Roof Cover (Note 15)				MDP (psf)
		Type	Fasten	Attach	Type	Attach (Notes 6&7)	Base Ply	Ply	Primer	LARS	
S-28.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	Min 1.5-inch ACFoam II, SOPRA-ISO s, H-Shield, SOPRA-ISO r, M-Shield	Soprema #14 MP with Soprema 3" Metal Insulation Plate	1 per 2 ft ²	Min. 0.125-inch SOPRABOARD primed with Elastocol Stick Zero, Min. 0.25-inch Dens Deck Prime, DEXcell FA Glass Mat Roof Board or SECUROCK Gypsum Fiber Roof Board or Min. 0.4375-inch DEXcell Cement Roof Board primed with Elastocol Stick or Elastocol Stick Zero	DUOTACK	SBS-SA	(Optional) SBS-SA or SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-45.0*
S-29.	Min. 22 ga., type B, Grade 33 steel	Min. 0.5-inch DEXcell FA Glass Mat Roof Board	Soprema #14 MP with Soprema 3" Metal Insulation Plate	1 per 4 ft ²	Min. 1-inch ACFoam II, SOPRA-ISO s, H-Shield, SOPRA-ISO r, M-Shield; followed by Min. 0.125-inch SOPRABOARD primed with Elastocol Stick Zero, Min. 0.25-inch Dens Deck Prime, DEXcell FA Glass Mat Roof Board or SECUROCK Gypsum Fiber Roof Board or Min. 0.4375-inch DEXcell Cement Roof Board primed with Elastocol Stick or Elastocol Stick Zero	DUOTACK	SBS-SA	(Optional) SBS-SA or SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-45.0*
S-30.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	Min 2-inch ACFoam II, SOPRA-ISO s, H-Shield, SOPRA-ISO r, M-Shield	Soprema #14 MP with Soprema 3" Metal Insulation Plate	1 per 4 ft ²	Min. 0.125-inch SOPRABOARD primed with Elastocol Stick Zero, Min. 0.25-inch Dens Deck Prime, DEXcell FA Glass Mat Roof Board or SECUROCK Gypsum Fiber Roof Board or Min. 0.4375-inch DEXcell Cement Roof Board primed with Elastocol Stick or Elastocol Stick Zero	DUOTACK	SBS-SA	(Optional) SBS-SA or SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-45.0*
S-31.	Min. 22 ga. type B, Grade 33 steel or min. 2,500 psi structural concrete	Min. 1.5-inch ACFoam II, SOPRA-ISOs, ACFoam III, SOPRA-ISO+s, H-Shield, SOPRA-ISOr, H-Shield CG, SOPRA-ISO+r or M-Shield	Soprema #15 HD with Soprema 3" Metal Insulation Plate	1 per 1.78 ft ²	Min. 0.125-inch SOPRABOARD; primed with Elastocol Stick Zero	DUOTACK	SBS-SA	(Optional) SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-52.5
S-32.	Min. 22 ga. type B, Grade 33 steel or min. 2,500 psi structural concrete	Min. 2-inch ACFoam II, SOPRA-ISO s or ENRGY 3	Note 2	1 per 2 ft ²	Min. 0.375-inch SECUROCK Gypsum-Fiber Roof Board	DUOTACK	SBS-SA	(Optional) SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-60.0
S-33.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	Min 2-inch ACFoam II, SOPRA-ISO s, H-Shield, SOPRA-ISO r, M-Shield, H-Shield CG, SOPRA-ISO+ r, Multi-Max FA3, SOPRA-ISO x, Ultra-Max or SOPRA-ISO+ x	Soprema #14 MP with Soprema 3" Metal Insulation Plate	1 per 1.6 ft ²	Min. 0.25-inch SOPRABOARD primed with Elastocol Stick Zero, Min. 0.25-inch Dens Deck Prime, DEXcell FA Glass Mat Roof Board or SECUROCK Gypsum Fiber Roof Board or Min. 0.4375-inch DEXcell Cement Roof Board primed with Elastocol Stick or Elastocol Stick Zero.	DUOTACK	SBS-SA	(Optional) SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-82.5

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

System No.	Deck (Note 1 & 12)	Base Insulation Layer	Top Insulation Layer			Roof Cover (Note 15)				MDP (psf)
			Type	Fasten	Attach	Base Ply	Ply	Primer	LARS	
NO BASE PLY:										
S-34.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	One or more layers, any combination, loose laid	Min. 0.5-inch SECUROCK Cement Roof Board	Note 2	1 per 1 ft ²	None	None	RS 276	ALSAN RS 230 system or ALSAN RS 260 LO system	-82.5
S-35.	Min. 22 ga., type B, Grade 80 steel or min. 2,500 psi structural concrete	One or more layers, any combination, loose laid	Min. 0.5-inch SECUROCK Cement Roof Board	Note 2	1 per 1 ft ²	None	None	RS 276	ALSAN RS 230 system or ALSAN RS 260 LO system	-150.0
COLD-APPLIED BASE:										
S-36.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	One or more layers, min. 1.5-inch, any combination, loose laid	Min. 0.25-inch Dens Deck Prime	Soprema #14 MP with Soprema 3" Metal Insulation Plate	1 per 1.78 ft ²	SBS-CA3	None	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-52.5
S-37.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	One or more layers, min. 1.5-inch, any combination, loose laid	Min. 0.5-inch Dens Deck Prime	Soprema #14 MP with Soprema 3" Metal Insulation Plate	1 per 1.78 ft ²	SBS-CA3	None	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-67.5
S-38.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	One or more layers, min. 1.5-inch, any combination, loose laid	Min. 0.5-inch Dens Deck Prime	Soprema #14 MP with Soprema 3" Metal Insulation Plate	1 per 1.6 ft ²	SBS-CA3	None	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-75.0
S-39.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	One or more layers, min. 1.5-inch, any combination, loose laid	Min. 0.5-inch Dens Deck Prime	Note 2	1 per 1 ft ²	SBS-CA3	None	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-82.5
S-40.	Min. 22 ga., type B, Grade 80 steel or min. 2,500 psi structural concrete	One or more layers, min. 1.5-inch, any combination, loose laid	Min. 0.5-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	Soprema #14 MP with Soprema 3" Metal Insulation Plate	1 per 1.33 ft ²	SBS-CA3	None	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-90.0
S-41.	Min. 22 ga., type B, Grade 80 steel or min. 2,500 psi structural concrete	One or more layers, min. 1.5-inch, any combination, loose laid	Min. 0.5-inch Dens Deck Prime	Note 2	1 per 1 ft ²	SBS-CA3	None	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-127.5
TORCH APPLIED BASE:										
S-42.	Min. 22 ga., type B, Grade 33 steel	One or more layers, min. 1.5-inch, any combination, loose laid	Min. 0.5-inch Dens Deck Prime	Note 2	1 per 4 ft ²	SBS-TA-F	(Optional) SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-45.0*
S-43.	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. 0.25-inch Dens Deck Prime	OMG HD with 3 in. Galvalume Steel Plate	1 per 4 ft ²	SBS-TA-F	(Optional) SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-45.0*
S-44.	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. 0.25-inch Dens Deck primed with Elastocol Stick	Note 2	1 per 2 ft ²	SBS-TA-P, SBS-TA-F	(Optional) SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-45.0*
S-45.	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. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	Note 2	1 per 4 ft ²	SBS-TA-F	(Optional) SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-45.0*
S-46.	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 0.375-inch SECUROCK Gypsum-Fiber Roof Board	Note 2	1 per 2.67 ft ²	SBS-TA-P, SBS-TA-F	(Optional) SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-45.0*

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

System No.	Deck (Note 1 & 12)	Base Insulation Layer	Top Insulation Layer			Roof Cover (Note 15)				MDP (psf)
			Type	Fasten	Attach	Base Ply	Ply	Primer	LARS	
S-47.	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	Note 2	1 per 4 ft ²	SBS-TA-F	(Optional) SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-45.0*
S-48.	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	Note 2	1 per 2 ft ²	SBS-TA-P, SBS-TA-F	(Optional) SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-45.0*
S-49.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional for recover) One or more layers, any combination, loose laid	Min. 0.25-inch DEXcell FA Glass Mat Roof Board	Soprema #14 MP with Soprema 3" Metal Insulation Plate	1 per 2 ft ²	SBS-TA-F	(Optional) SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-45.0*
S-50.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional for recover) One or more layers, any combination, loose laid	Min. 0.25-inch DEXcell FA Glass Mat Roof Board	Soprema #14 MP with Soprema 3" Metal Insulation Plate	1 per 1.78 ft ²	SBS-TA-F	(Optional) SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-45.0
S-51.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	One or more layers, min. 1.5-inch, any combination, loose laid	Min. 0.5-inch SECUROCK Gypsum-Fiber Roof Board	Note 2	1 per 1.78 ft ²	SBS-TA-F	(Optional) SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-52.5
S-52.	Min. 22 ga., type B, Grade 80 steel or min. 2,500 psi structural concrete	One or more layers, min. 1.4-inch, any combination, loose laid	Min. 0.25-inch Dens Deck or Dens Deck Prime	OMG #14 Roofgrip with Flat Bottom Plate (Accutrac)	1 per 1.78 ft ²	SBS-TA-F	(Optional) SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-60.0
S-53.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	One or more layers, any combination, loose laid	Min. 0.125-inch SOPRABOARD	Note 2	1 per 2 ft ²	SBS-TA-F	(Optional) SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-60.0
S-54.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	One or more layers, min. 1.5-inch, any combination, loose laid	Min. 0.5-inch Dens Deck Prime	Soprema #14 MP with Soprema 3" Metal Insulation Plate	1 per 1.78 ft ²	SBS-TA-F	(Optional) SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-67.5
S-55.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	One or more layers, min. 1.5-inch, any combination, loose laid	Min. 0.5-inch SECUROCK Gypsum-Fiber Roof Board	Soprema #14 MP with Soprema 3" Metal Insulation Plate	1 per 1.33 ft ²	SBS-TA-F (D6164 only)	(Optional) SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-67.5
S-56.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	One or more layers, any combination, loose laid	Min. 0.125-inch SOPRABOARD	Note 2	1 per 2 ft ²	SBS-TA-F (D6164 only)	(Optional) SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-67.5
S-57.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	One or more layers, min. 1.5-inch, any combination, loose laid	Min. 0.5-inch Dens Deck Prime	Soprema #14 MP with Soprema 3" Metal Insulation Plate	1 per 1.6 ft ²	SBS-TA-F	(Optional) SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-75.0
S-58.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	One or more layers, min. 1.5-inch, any combination, loose laid	Min. 0.375-inch SECUROCK Gypsum-Fiber Roof Board	Soprema #14 MP with Soprema 3" Metal Insulation Plate	1 per 1.33 ft ²	SBS-TA-F (D6164 only)	(Optional) SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-75.0
S-59.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	One or more layers, min. 1.5-inch, any combination, loose laid	Min. 0.5-inch Dens Deck Prime	Note 2	1 per 1 ft ²	SBS-TA-F	(Optional) SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-82.5
S-60.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	One or more layers, any combination, loose laid	Min. 0.5-inch SECUROCK Cement Roof Board primed with Elastocol 500	Note 2	1 per 1 ft ²	SBS-TA-F	(Optional) SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-82.5

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

System No.	Deck (Note 1 & 12)	Base Insulation Layer	Top Insulation Layer			Roof Cover (Note 15)				MDP (psf)
			Type	Fasten	Attach	Base Ply	Ply	Primer	LARS	
S-61.	Min. 22 ga., type B, Grade 80 steel or min. 2,500 psi structural concrete	One or more layers, min. 1.5-inch, any combination, loose laid	Min. 0.5-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	Soprema #14 MP with Soprema 3" Metal Insulation Plate	1 per 1.33 ft ²	SBS-TA-F	(Optional) SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-90.0
S-62.	Min. 22 ga., type B, Grade 80 steel or min. 2,500 psi structural concrete	One or more layers, min. 1.5-inch, any combination, loose laid	Min. 0.5-inch Dens Deck Prime	Note 2	1 per 1 ft ²	SBS-TA-F	(Optional) SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-127.5
S-63.	Min. 22 ga., type B, Grade 80 steel or min. 2,500 psi structural concrete	One or more layers, any combination, loose laid	Min. 0.5-inch SECUROCK Cement Roof Board primed with Elastocol 500	Note 2	1 per 1 ft ²	SBS-TA-F	(Optional) SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-150.0
S-64.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	One or more layers, min. 1.5-inch, any combination, loose laid	Min. 0.5-inch SECUROCK Gypsum-Fiber Roof Board	Soprema #14 MP with Soprema 3" Metal Insulation Plate	1 per 1.33 ft ²	SBS-TA-F	(Optional) SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-157.5
S-65.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	One or more layers, min. 1.5-inch, any combination, loose laid	Min. 0.5-inch SECUROCK Gypsum-Fiber Roof Board	Soprema #14 MP with Soprema 3" Metal Insulation Plate	1 per 1 ft ²	SBS-TA-F	(Optional) SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-172.5
SELF-ADHERING BASE:										
S-66.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional for recover) One or more layers, any combination, loose laid	Min. 0.5-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board primed with Elastocol Stick or Elastocol Stick Zero	Soprema #14 MP with Soprema 3" Metal Insulation Plate	1 per 4 ft ²	SBS-SA	(Optional) SBS-SA or SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-45.0*
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 0.375-inch SECUROCK Gypsum-Fiber Roof Board primed with D41, Elastocol Stick or Elastocol Stick Zero	Note 2	1 per 2.67 ft ²	SBS-SA	(Optional) SBS-SA or SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-45.0*
S-68.	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. 1.5-inch Ultra-Max, ACFoam III, SOPRA-ISO+ s or H-Shield CG, SOPRA-ISO+ r	Note 2	1 per 2 ft ²	SBS-SA	(Optional) SBS-SA or SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-45.0*
S-69.	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. 1.5-inch ACFoam II, SOPRA-ISO s or H-Shield, SOPRA-ISO r, M-Shield <i>mist-primed with Elastocol 500, Elastocol Stick, Elastocol Stick Zero</i>	Note 2	1 per 2 ft ²	SBS-SA	(Optional) SBS-SA or SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-45.0*
S-70.	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. 0.5-inch Temple HD6 primed with Elastocol 500, Elastocol Stick, Elastocol Stick Zero	Note 2	1 per 2 ft ²	SBS-SA	(Optional) SBS-SA or SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-45.0*
S-71.	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. 0.25-inch Dens Deck primed with D41 primer, Elastocol Stick or Elastocol Stick Zero or Dens Deck Prime	Note 2	1 per 2 ft ²	SBS-SA	(Optional) SBS-SA or SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-45.0*
S-72.	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 primed with Elastocol 500, Elastocol Stick or Elastocol Stick Zero	Note 2	1 per 2 ft ²	SBS-SA	(Optional) SBS-SA or SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-45.0*
S-73.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	(Optional for recover) One or more layers, any combination, loose laid	Min. 0.25-inch DEXcell FA Glass Mat Roof Board primed with Elastocol Stick or Elastocol Stick Zero	Soprema #14 MP with Soprema 3" Metal Insulation Plate	1 per 1.78 ft ²	SBS-SA	(Optional) SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-45.0

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

System No.	Deck (Note 1 & 12)	Base Insulation Layer	Top Insulation Layer			Roof Cover (Note 15)				MDP (psf)
			Type	Fasten	Attach	Base Ply	Ply	Primer	LARS	
S-74.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	One or more layers, min. 1.5-inch, any combination, loose laid	Min. 0.25-inch Dens Deck Prime	Soprema #14 MP with Soprema 3" Metal Insulation Plate	1 per 1.78 ft ²	SBS-SA	(Optional) SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-52.5
S-75.	Min. 22 ga., type B, Grade 80 steel or min. 2,500 psi structural concrete	One or more layers, min. 1.4-inch, any combination, loose laid	Min. 0.25-inch Dens Deck primed with D41 primer, Elastocol Stick or Elastocol Stick Zero or Dens Deck Prime	OMG #14 Roofgrip with Flat Bottom Plate (Accutrac)	1 per 1.78 ft ²	SBS-SA	(Optional) SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-60.0

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

System No.	Deck (Note 1)	Insulation	Base Sheet			Roof Cover (Note 15)			MDP (psf)
			Base	Fasteners	Spacing	Base Ply	Primer	LARS	
S-76.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	Min. 1.5-inch, One or more layers, any combination	SOPRABASE TG	Soprema #14 MP with Soprema 3" Metal Insulation Plate	12-inch o.c. at the 4-inch side laps and 12-inch o.c. at two, equally spaced, staggered center rows	SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-52.5

**TABLE 2E: 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	Base Sheet			Roof Cover (Note 15)			MDP (psf)
			Type	Fasteners	Spacing	Base Ply	Primer	LARS	
S-77.	Min. 22 ga., type B, Grade 33 steel	Min. 1.5-inch, One or more layers, any combination	SOPRAFIX Base 621 or 622	Soprema #14 MP with Soprema 2" Seam Plate	18-inch o.c. within min. 4-inch wide, heat-welded side laps	(Optional) SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-45.0*
S-78.	Min. 22 ga., type B, Grade 33 steel	Min. 1.5-inch, One or more layers, any combination	SOPRAFIX Base 621 or 622	Soprema #14 MP with Soprema 2" Seam Plate	12-inch o.c. within min. 4-inch wide, heat-welded side laps	(Optional) SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-52.5
S-79.	Min. 22 ga., type B, Grade 33 steel	Min. 1.5-inch, One or more layers, any combination	SOPRAFIX Base 621 or 622	Soprema #15 HD with Soprema 2" Seam Plate	12-inch o.c. within min. 4-inch wide, heat-welded side laps	(Optional) SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-67.5
S-80.	Min. 22 ga., type B, Grade 33 steel	Min. 1.5-inch, One or more layers, any combination	SOPRAFIX Base 611, 612 or 614	Soprema #15 HD with Soprema 2" Seam Plate	12-inch o.c. within min. 4-inch wide, heat-welded side laps	SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-67.5
S-81.	Min. 22 ga., type B, Grade 80 steel	Min. 1.5-inch, One or more layers, any combination	SOPRAFIX Base 621 or 622	Soprema #14 MP with Soprema 2" Seam Plate	12-inch o.c. within min. 4-inch wide, heat-welded side laps	(Optional) SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-67.5
S-82.	Min. 22 ga., type B, Grade 80 steel	Min. 1.5-inch, One or more layers, any combination	SOPRAFIX Base 611, 612 or 614	Soprema #14 MD with Soprema 2" Seam Plate	12-inch o.c. within min. 4-inch wide, heat-welded side laps	SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-67.5

**TABLE 2E: 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	Base Sheet			Roof Cover (Note 15)			MDP (psf)
			Type	Fasteners	Spacing	Base Ply	Primer	LARS	
S-83.	Min. 22 ga., type B, Grade 33 steel	Min. 1.5-inch, One or more layers, any combination	SOPRAFIX Base 621 or 622	Soprema #15 HD with Soprema 2.4" Seam Plate	12-inch o.c. within min. 4-inch wide, heat-welded side laps	(Optional) SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-75.0
S-84.	Min. 22 ga., type B, Grade 33 steel	Min. 1.5-inch, One or more layers, any combination	SOPRAFIX Base 641	Trufast #15 EHD or Soprema #15 HD with Trufast 2.4" Barbed Metal Seam Plate	12-inch o.c. within min. 5-inch wide, self-adhered side laps	SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-75.0
S-85.	Min. 22 ga., type B, Grade 33 steel	Min. 1.5-inch, One or more layers, any combination	SOPRAFIX Base 611, 612 or 614	Soprema #15 HD with Soprema 2.4" Seam Plate	12-inch o.c. within min. 4-inch wide, heat-welded side laps	SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-75.0
S-86.	Min. 22 ga., type B, Grade 80 steel	Min. 1.5-inch, One or more layers, any combination	SOPRAFIX Base 621 or 622	Soprema #14 MP with Soprema 2.4" Seam Plate	12-inch o.c. within min. 4-inch wide, heat-welded side laps	(Optional) SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-75.0
S-87.	Min. 22 ga., type B, Grade 80 steel	Min. 1.5-inch, One or more layers, any combination	SOPRAFIX Base 614	Soprema #15 HD with Soprema 2.4" Seam Plate	12-inch o.c. within min. 4-inch wide, heat-welded side laps	SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-97.5
S-88.	Min. 22 ga., type B, Grade 33 steel	Min. 1.5-inch, One or more layers, any combination	SOPRAFIX Base 621 or 622	Soprema #15 HD with Soprema 2" Seam Plate or Soprema 2.4" Seam Plate	6-inch o.c. within min. 4-inch wide, heat-welded side laps	(Optional) SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-112.5
S-89.	Min. 22 ga., type B, Grade 33 steel	Min. 1.5-inch, One or more layers, any combination	SOPRAFIX Base 641	Trufast #15 EHD or Soprema #15 HD with Trufast 2.4" Barbed Metal Seam Plate	6-inch o.c. within min. 5-inch wide, self-adhered side laps	SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-120.0
S-90.	Min. 22 ga., type B, Grade 33 steel	Min. 1.5-inch, One or more layers, any combination	SOPRAFIX Base 611, 612 or 614	Soprema #15 HD with Soprema 2" Seam Plate or Soprema 2.4" Seam Plate	6-inch o.c. within min. 4-inch wide, heat-welded side laps	SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-120.0
S-91.	Min. 22 ga., type B, Grade 80 steel	Min. 1.5-inch, One or more layers, any combination	SOPRAFIX Base 621 or 622	Soprema #14 or #15 HD with Soprema 2" Seam Plate	6-inch o.c. within min. 4-inch wide, heat-welded side laps	(Optional) SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-120.0
S-92.	Min. 22 ga., type B, Grade 80 steel	Min. 1.5-inch, One or more layers, any combination	SOPRAFIX Base 621 or 622	Soprema #15 HD with Soprema 2.4" Seam Plate	6-inch o.c. within min. 4-inch wide, heat-welded side laps	(Optional) SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-135.0

TABLE 3A: STRUCTURAL CONCRETE DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE A-1: BONDED INSULATION, BONDED ROOF COVER
 REFER TO NOTE 17 FOR VAPOR BARRIER OPTIONS WITH DUOTACK APPLIED INSULATION

System No.	Deck (Note 1)	Base Insulation Layer		Top Insulation Layer		Roof Cover (Note 15)				MDP (psf)
		Type	Attach	Type	Attach	Base Ply	Ply	Primer	LARS	
NO BASE PLY:										
C-1	Structural concrete	(Optional) Min. 1.5-inch ACFoam II, SOPRA-ISOs, ACFoam III, SOPRA-ISO+s, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, H-Shield, SOPRA-ISOR, M-Shield, H-Shield CG, SOPRA-ISO+r, Multi-Max FA3, SOPRA-ISOx, UltraMax, SOPRA-ISO+x	DUOTACK	Min. 0.5-inch SECUROCK Cement Roof Board	DUOTACK	None	None	RS 276	ALSAN RS 230 system or ALSAN RS 260 LO system	-382.5
COLD-APPLIED BASE PLY:										
C-2	Structural concrete	(Optional) Min. 1.5-inch ACFoam II, SOPRA-ISOs, ACFoam III, SOPRA-ISO+s, EnergyGuard POLYISO Insulation, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, H-Shield, SOPRA-ISOR, M-Shield, H-Shield CG, SOPRA-ISO+r, Multi-Max FA3, SOPRA-ISOx, UltraMax, SOPRA-ISO+x	DUOTACK	Min. 0.4375-inch DEXcell Cement Roof Board	DUOTACK	SBS-CA3	None	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-157.5
C-3	Structural Concrete	Min. 1.5-inch ACFoam II, SOPRA-ISOs, ACFoam III, SOPRA-ISO+s, EnergyGuard POLYISO Insulation, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, H-Shield, SOPRA-ISOR, M-Shield, H-Shield CG, SOPRA-ISO+r, Multi-Max FA3, SOPRA-ISOx, UltraMax, SOPRA-ISO+x	DUOTACK	Min. 0.4375-inch DEXcell Cement Roof Board	DUOTACK	SBS-CA3	None	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-190.0
C-4	Structural Concrete	Min. 1.5-inch ACFoam II, SOPRA-ISOs, ACFoam III, SOPRA-ISO+s, EnergyGuard POLYISO Insulation, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, H-Shield, SOPRA-ISOR, M-Shield, H-Shield CG, SOPRA-ISO+r, Multi-Max FA3, SOPRA-ISOx, UltraMax, SOPRA-ISO+x	DUOTACK, 6-inch o.c.	Min. 0.4375-inch DEXcell Cement Roof Board	DUOTACK, 6-inch o.c.	SBS-CA3	None	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-285.0
C-5	Structural concrete	(Optional) Min. 1.5-inch ACFoam II, SOPRA-ISOs, ACFoam III, SOPRA-ISO+s, EnergyGuard POLYISO Insulation, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, H-Shield, SOPRA-ISOR, M-Shield, H-Shield CG, SOPRA-ISO+r, Multi-Max FA3, SOPRA-ISOx, UltraMax, SOPRA-ISO+x	DUOTACK	Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum Fiber Roof Board	DUOTACK	SBS-CA3	None	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-315.0
C-6	Structural concrete	(Optional) Min. 1.5-inch ACFoam II, SOPRA-ISOs, ACFoam III, SOPRA-ISO+s, EnergyGuard POLYISO Insulation, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, H-Shield, SOPRA-ISOR, M-Shield, H-Shield CG, SOPRA-ISO+r, Multi-Max FA3, SOPRA-ISOx, UltraMax, SOPRA-ISO+x	DUOTACK	Min. 0.125-inch SOPRABOARD, optionally primed with DETEC "TruGround Conductive Primer"	DUOTACK	SBS-CA3	None	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-337.5
C-7	Structural concrete	(Optional) Min. 1.5-inch ACFoam II, SOPRA-ISOs, ACFoam III, SOPRA-ISO+s, EnergyGuard POLYISO Insulation, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, H-Shield, SOPRA-ISOR, M-Shield, H-Shield CG, SOPRA-ISO+r, Multi-Max FA3, SOPRA-ISOx, UltraMax, SOPRA-ISO+x	DUOTACK	Min. 0.125-inch SOPRABOARD, optionally primed with DETEC "TruGround Conductive Primer"	DUOTACK	SBS-CA3	None	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-382.5
C-8	Structural Concrete	Min. 0.25-inch SOPRABOARD optionally primed with DETEC "TruGround Conductive Primer"	COLPLY EF Adhesive, 6-inch o.c.	None	N/A	SBS-CA3	None	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-382.5

TABLE 3A: STRUCTURAL CONCRETE DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE A-1: BONDED INSULATION, BONDED ROOF COVER
 REFER TO NOTE 17 FOR VAPOR BARRIER OPTIONS WITH DUOTACK APPLIED INSULATION

System No.	Deck (Note 1)	Base Insulation Layer		Top Insulation Layer		Roof Cover (Note 15)				MDP (psf)
		Type	Attach	Type	Attach	Base Ply	Ply	Primer	LARS	
C-9	Structural concrete	(Optional) Min. 1.5-inch ACFoam II, SOPRA-ISOs, ACFoam III, SOPRA-ISO+s, EnergyGuard POLYISO Insulation, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, H-Shield, SOPRA-ISOr, M-Shield, H-Shield CG, SOPRA-ISO+r, Multi-Max FA3, SOPRA-ISOx, UltraMax, SOPRA-ISO+x	DUOTACK	SOPRASMART Board 180 Sanded	DUOTACK	(Optional) SBS-CA3	None	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-382.5
TORCH BASE PLY:										
C-10	Structural concrete	Min. 1.5-inch ACFoam II, SOPRA-ISOs, ACFoam III, SOPRA-ISO+s, EnergyGuard POLYISO Insulation, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, H-Shield, SOPRA-ISOr, M-Shield, H-Shield CG, SOPRA-ISO+r, Multi-Max FA3, SOPRA-ISOx, UltraMax, SOPRA-ISO+x	DUOTACK	SOPRASMART ISO HD 180 (for TA Base Ply) or SOPRASMART ISO HD 180 Sanded (for no Base Ply)	DUOTACK	(Optional) SBS-TA-F	None	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-307.5
C-11	Structural concrete	(Optional) Min. 1.5-inch ACFoam II, SOPRA-ISOs, ACFoam III, SOPRA-ISO+s, EnergyGuard POLYISO Insulation, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, H-Shield, SOPRA-ISOr, M-Shield, H-Shield CG, SOPRA-ISO+r, Multi-Max FA3, SOPRA-ISOx, UltraMax, SOPRA-ISO+x	DUOTACK	Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum Fiber Roof Board	DUOTACK	SBS-TA-F	(Optional) SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-315.0
C-12	Structural concrete	(Optional) Min. 1.5-inch ACFoam II, SOPRA-ISOs, ACFoam III, SOPRA-ISO+s, EnergyGuard POLYISO Insulation, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, H-Shield, SOPRA-ISOr, M-Shield, H-Shield CG, SOPRA-ISO+r, Multi-Max FA3, SOPRA-ISOx, UltraMax, SOPRA-ISO+x	DUOTACK	Min. 0.4375-inch DEXcell Cement Roof Board	DUOTACK	SBS-TA-F	(Optional) SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-367.5
C-13	Structural concrete	(Optional) Min. 1.5-inch ACFoam II, SOPRA-ISOs, ACFoam III, SOPRA-ISO+s, EnergyGuard POLYISO Insulation, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, H-Shield, SOPRA-ISOr, M-Shield, H-Shield CG, SOPRA-ISO+r, Multi-Max FA3, SOPRA-ISOx, UltraMax, SOPRA-ISO+x	DUOTACK	Min. 0.125-inch SOPRABOARD	DUOTACK	SBS-TA-F	(Optional) SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-382.5
C-14	Structural Concrete	Min. 0.25-inch SOPRABOARD optionally primed with DETEC "TruGround Conductive Primer"	COLPLY EF Adhesive, 6-inch o.c.	None	N/A	SBS-TA-F	(Optional) SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-382.5
C-15	Structural concrete	(Optional) Min. 1.5-inch ACFoam II, SOPRA-ISOs, ACFoam III, SOPRA-ISO+s, EnergyGuard POLYISO Insulation, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, H-Shield, SOPRA-ISOr, M-Shield, H-Shield CG, SOPRA-ISO+r, Multi-Max FA3, SOPRA-ISOx, UltraMax, SOPRA-ISO+x	DUOTACK	SOPRASMART Board 180 (for TA Base Ply) or SOPRASMART Board 180 Sanded (for no Base Ply)	DUOTACK	(Optional) SBS-TA-F	None	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-382.5
SELF-ADHERING BASE PLY:										
C-16	Structural concrete	Min. 1.5-inch ACFoam II, SOPRA-ISOs, ACFoam III, SOPRA-ISO+s, EnergyGuard POLYISO Insulation, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, H-Shield, SOPRA-ISOr, M-Shield, H-Shield CG, SOPRA-ISO+r, Multi-Max FA3, SOPRA-ISOx, UltraMax, SOPRA-ISO+x	DUOTACK	Min. 0.4375-inch DEXcell Cement Roof Board primed with Elastocol Stick or Elastocol Stick Zero	DUOTACK	SBS-SA	(Optional) SBS-SA or SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-190.0

**TABLE 3A: STRUCTURAL CONCRETE DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE A-1: BONDED INSULATION, BONDED ROOF COVER
REFER TO NOTE 17 FOR VAPOR BARRIER OPTIONS WITH DUOTACK APPLIED INSULATION**

System No.	Deck (Note 1)	Base Insulation Layer		Top Insulation Layer		Roof Cover (Note 15)				MDP (psf)
		Type	Attach	Type	Attach	Base Ply	Ply	Primer	LARS	
C-17	Structural concrete	(Optional) Min. 1.5-inch ACFoam II, SOPRA-ISOs, ACFoam III, SOPRA-ISO+s, EnergyGuard POLYISO Insulation, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, H-Shield, SOPRA-ISOr, M-Shield, H-Shield CG, SOPRA-ISO+r, Multi-Max FA3, SOPRA-ISOx, UltraMax, SOPRA-ISO+x	DUOTACK	Min. 0.125-inch SOPRABOARD primed with Elastocol Stick Zero	DUOTACK	SBS-SA	(Optional) SBS-SA	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-270.0
C-18	Structural concrete	(Optional) Min. 1.5-inch ACFoam II, SOPRA-ISOs, ACFoam III, SOPRA-ISO+s, EnergyGuard POLYISO Insulation, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, H-Shield, SOPRA-ISOr, M-Shield, H-Shield CG, SOPRA-ISO+r, Multi-Max FA3, SOPRA-ISOx, UltraMax, SOPRA-ISO+x	DUOTACK	Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum Fiber Roof Board primed with Elastocol Stick or Elastocol Stick Zero	DUOTACK	SBS-SA	(Optional) SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-315.0
C-19	Structural concrete	(Optional) Min. 1.5-inch ACFoam II, SOPRA-ISOs, ACFoam III, SOPRA-ISO+s, EnergyGuard POLYISO Insulation, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, H-Shield, SOPRA-ISOr, M-Shield, H-Shield CG, SOPRA-ISO+r, Multi-Max FA3, SOPRA-ISOx, UltraMax, SOPRA-ISO+x	DUOTACK	Min. 0.125-inch SOPRABOARD	DUOTACK	SBS-SA	(Optional) SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-382.5

**TABLE 3B: STRUCTURAL CONCRETE DECKS – NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER
SYSTEM TYPE D-2: INSULATED, MECHANICALLY ATTACHED SOPRAPHIX, BONDED ROOF COVER**

System No.	Deck (Note 1)	Insulation and/or Thermal Barrier	Base Sheet			Roof Cover (Note 15)			MDP (psf)
			Type	Fasteners	Spacing	Base Ply	Primer	LARS	
C-20	Min. 2,500 psi structural concrete	Min. 1.5-inch, One or more layers, any combination	SOPRAPHIX Base 621 or 622	Trufast #14 HD or Trufast Fluted Concrete Nail with Trufast 2" Barbed Metal Seam Plates or Soprema #14 MP with Soprema 2" Seam Plate	18-inch o.c. within 4-inch wide, heat-welded side laps	(Optional) SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-45.0*
C-21	Min. 2,500 psi structural concrete	Min. 1.5-inch, One or more layers, any combination	SOPRAPHIX Base 611, 612 or 614	Trufast #14 HD or Trufast Fluted Concrete Nail with Trufast 2" Barbed Metal Seam Plates or Soprema #14 MP with Soprema 2" Seam Plate	18-inch o.c. within 4-inch wide, heat-welded or self-adhering laps	SBS-TA	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-45.0*
C-22	Min. 2,500 psi structural concrete	Min. 1.5-inch, One or more layers, any combination	SOPRAPHIX Base 611, 612 or 614	Trufast #14 HD or Trufast Fluted Concrete Nail with Trufast 2" Barbed Metal Seam Plates or Trufast 2.4" Barbed Metal Seam Plates or Soprema #14 MP with Soprema 2" Seam Plates or Soprema 2.4" Seam Plates	12-inch o.c. within 5-inch wide, heat-welded side laps	SBS-TA	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-60.0
C-23	Min. 2,500 psi structural concrete	Min. 1.5-inch, One or more layers, any combination	SOPRAPHIX Base 621 or 622	Trufast #14 HD or Trufast Fluted Concrete Nail with Trufast 2 in. Barbed Metal Seam Plates or Soprema #14 MP with Soprema 2" Seam Plate	12-inch o.c. within 4-inch wide, heat-welded laps	(Optional) SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-67.5
C-24	Min. 2,500 psi structural concrete	Min. 1.5-inch, One or more layers, any combination	SOPRAPHIX Base 611, 612 or 614	Trufast #14 HD or Trufast Fluted Concrete Nail with Trufast 2 in. Barbed Metal Seam Plates or Soprema #14 MP with Soprema 2" Seam Plate	12-inch o.c. within 4-inch wide, heat-welded laps	SBS-TA	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-67.5
C-25	Min. 2,500 psi structural concrete	Min. 1.5-inch, One or more layers, any combination	SOPRAPHIX Base 611 or 612	Trufast #14 HD or Trufast Fluted Concrete Nail with Trufast 2.4 in. Scoop Seam Plates or Soprema #14 MP with Soprema 2.4" Seam Plate	12-inch o.c. within 4-inch wide, heat-welded laps	SBS-TA	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-75.0
C-26	Min. 2,500 psi structural concrete	Min. 1.5-inch, One or more layers, any combination	SOPRAPHIX Base 621 or 622	Trufast #14 HD or Trufast Fluted Concrete Nail with Trufast 2.4 in. Scoop Seam Plates or Soprema #15 HD with Soprema 2.4" Seam Plate	12-inch o.c. within 4-inch wide, heat-welded laps	(Optional) SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-97.5
C-27	Min. 2,500 psi structural concrete	Min. 1.5-inch, One or more layers, any combination	SOPRAPHIX Base 614	Trufast #14 HD or Trufast Fluted Concrete Nail with Trufast 2.4 in. Scoop Seam Plates or Soprema #14 MP with Soprema 2.4" Seam Plate	12-inch o.c. within 4-inch wide, heat-welded laps	SBS-TA	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-97.5
C-28	Min. 2,500 psi structural concrete	Min. 1.5-inch, One or more layers, any combination	SOPRAPHIX Base 611, 612 or 614	Trufast #14 HD or Trufast Fluted Concrete Nail with Trufast 2 in. Barbed Metal Seam Plates or Trufast 2.4 in. Scoop Seam Plates or Soprema #14 MP with Soprema 2" Seam Plate or Soprema 2.4" Seam Plate	6-inch o.c. within 4-inch wide, heat-welded laps	SBS-TA	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-120.0
C-29	Min. 2,500 psi structural concrete	Min. 1.5-inch, One or more layers, any combination	SOPRAPHIX Base 611, 612 or 614	Trufast #14 HD or Trufast Fluted Concrete Nail with Trufast 2 in. Barbed Metal Seam Plates or Trufast 2.4 in. Scoop Seam Plates or Soprema #14 MP with Soprema 2" Seam Plate or Soprema 2.4" Seam Plate	6-inch o.c. within 4-inch wide, heat-welded laps	SBS-TA	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-120.0
C-30	Min. 2,500 psi structural concrete	Min. 1.5-inch, One or more layers, any combination	SOPRAPHIX Base 621 or 622	Trufast #14 HD or Trufast Fluted Concrete Nail with Trufast 2.4 in. Scoop Seam Plates or Soprema #14 MP with Soprema 2.4" Seam Plate	6-inch o.c. within min. 4-inch wide, heat-welded side laps	(Optional) SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-135.0

**TABLE 3C: STRUCTURAL CONCRETE DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE F-1: NON-INSULATED, BONDED ROOF COVER**

System No.	Deck (Note 1)	Primer	Roof Cover (Note 15)			MDP (psf)
			Base Coat	Reinforcement	Top Coat	
C-31	Structural concrete	RS 222	RS 230 or RS 260 LO Field	ALSAN RS Fleece	RS 230 or RS 260 LO Field.	-495.0
C-32	Structural concrete	AVC-SG3	RS 230 or RS 260 LO Field	ALSAN RS Fleece	RS 230 or RS 260 LO Field.	-845.0
C-33	Structural concrete	RS 276	RS 230 or RS 260 LO Field	ALSAN RS Fleece	RS 230 or RS 260 LO Field.	-940.0

**TABLE 3D: STRUCTURAL CONCRETE DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE F-2: NON-INSULATED, BONDED BASE PLY(S), BONDED ROOF COVER**

System No.	Deck (Note 1)	Primer	Roof Cover (Note 15)			MDP (psf)
			Base Ply(s)	Primer	LARS	
C-34	Structural concrete	None	SBS-CA2, ribbons 12-inch o.c.	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-60.0
C-35	Structural concrete	None	SBS-CA2, ribbons 6-inch o.c.	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-180.0
C-36	Structural concrete	(Optional) ASTM D41	SBS-CA3	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-270.0
C-37	Structural concrete	ASTM D41	SBS-TA-P followed by (optional) one or more SBS-TA-F and/or (optional) ELASTOPHENE Flam HS FR GR, ELASTOPHENE Flam GR, ELASTOPHENE Flam LS FR GR, ELASTOPHENE Flam FR GR, ELASTOPHENE Flam HP FR GR, SOPRALENE Flam 180 GR, COLPHENE Flam 180 GR, SOPRALENE Flam 180 GR 3.5, SOPRALENE Flam 180 FR GR, COLPHENE Flam 180 FR GR, SOPRALENE Flam 250 FR GR or COLPHENE Flam 250 FR GR, torch applied Or One or more SBS-TA-F followed by (optional) ELASTOPHENE Flam HS FR GR, ELASTOPHENE Flam GR, ELASTOPHENE Flam LS FR GR, ELASTOPHENE Flam FR GR, ELASTOPHENE Flam HP FR GR, SOPRALENE Flam 180 GR, COLPHENE Flam 180 GR, SOPRALENE Flam 180 GR 3.5, SOPRALENE Flam 180 FR GR, COLPHENE Flam 180 FR GR, SOPRALENE Flam 250 FR GR or COLPHENE Flam 250 FR GR, torch applied Or One ply of ELASTOPHENE Flam HS FR GR, ELASTOPHENE Flam GR, ELASTOPHENE Flam LS FR GR, ELASTOPHENE Flam FR GR, ELASTOPHENE Flam HP FR GR, SOPRALENE Flam 180 GR, COLPHENE Flam 180 GR, SOPRALENE Flam 180 GR 3.5, SOPRALENE Flam 180 FR GR, COLPHENE Flam 180 FR GR, SOPRALENE Flam 250 FR GR or COLPHENE Flam 250 FR GR, torch applied	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-392.5

TABLE 4A: LIGHTWEIGHT INSULATING CONCRETE OVER STRUCTURAL CONCRETE DECKS - NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE A-1: LWC TO DECK, BONDED INSULATION, BONDED ROOF COVER
 REFER TO NOTE 17 FOR DRY-IN / TEMPORARY ROOF OPTIONS (BETWEEN STRUCTURAL CONCRETE AND LIGHTWEIGHT CONCRETE)

System No.	Deck (Note 1)	LWC (Note 14)	Base Insulation Layer		Coverboard		Roof Cover (Note 15)			MDP (psf)
			Type	Attach	Type	Attach	Base Ply	Primer	LARS	
CELCORE (FL2037):										
TORCH APPLIED BASE:										
LWC-1.	Structural concrete	Min. 300 psi, min 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture. After setting to support foot traffic, Celcore PVA Curing Compound is applied	Min. 0.125-inch SOPRABOARD	DUOTACK	None	N/A	SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-115.0
LWC-2.	Structural concrete	Min. 300 psi, min 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture. After setting to support foot traffic, Celcore PVA Curing Compound is applied	SOPRASMART Board 180 (for TA Base Ply) or SOPRASMART Board 180 Sanded (for no Base Ply)	DUOTACK	None	N/A	(Optional) SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-115.0
LWC-3.	Structural concrete	Min. 300 psi, min 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture. After setting to support foot traffic, Celcore PVA Curing Compound is applied	Min. 2-inch ACFoam III, SOPRA-ISO+ s, H-Shield CG or SOPRA-ISO+r	DUOTACK	Min. 0.125-inch SOPRABOARD	DUOTACK	SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-170.0
LWC-4.	Structural concrete	Min. 300 psi, min 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture. After setting to support foot traffic, Celcore PVA Curing Compound is applied	Min. 2-inch ACFoam III, SOPRA-ISO+ s, H-Shield CG or SOPRA-ISO+r	DUOTACK	SOPRASMART Board 180 or SOPRASMART ISO HD 180 (for TA Base Ply) or SOPRASMART Board 180 Sanded or SOPRASMART ISO HD 180 Sanded (for no Base Ply)	DUOTACK	(Optional) SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-170.0
SELF-ADHERING BASE:										
LWC-5.	Structural concrete	Min. 300 psi, min 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture. After setting to support foot traffic, Celcore PVA Curing Compound is applied	Min. 0.125-inch SOPRABOARD	DUOTACK	None	N/A	SBS-SA	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-115.0
LWC-6.	Structural concrete	Min. 300 psi, min 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture. After setting to support foot traffic, Celcore PVA Curing Compound is applied	Min. 2-inch ACFoam III, SOPRA-ISO+ s, H-Shield CG or SOPRA-ISO+r	DUOTACK	Min. 0.125-inch SOPRABOARD	DUOTACK	SBS-SA	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-155.0

TABLE 4B: LIGHTWEIGHT INSULATING CONCRETE OVER STRUCTURAL CONCRETE DECKS - NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE A-1: LWC TO DECK, BONDED VAPOR BARRIER, BONDED INSULATION, BONDED ROOF COVER
 REFER TO NOTE 18 FOR DRY-IN / TEMPORARY ROOF OPTIONS (BETWEEN STRUCTURAL CONCRETE AND LIGHTWEIGHT CONCRETE)

System No.	Deck (Note 1)	LWC (Note 14)	Vapor Barrier	Base Insulation Layer		Coverboard		Roof Cover (Note 15)			MDP (psf)
				Type	Attach	Type	Attach	Base Ply	Primer	LARS	
PRE-EXISTENT CELLULAR LWC:											
TORCH APPLIED BASE:											
LWC-7.	Structural Concrete	Cellular lightweight concrete, Min. 330 psi, Min. 2-inch top coat <i>Note: To qualify the LWIC under this assembly, a SOPREMA 1.7 in. Base Sheet Fastener or OMG CR Assembled Base Sheet Fastener (1.7") shall achieve an average withdrawal of 101 lbf when tested per TAS 105 or ANSI/SPRI FX-1</i>	SBS-CA2 (sanded-top)	Min. 1.5-inch AC Foam II, SOPRA-ISOs, AC Foam III, SOPRA-ISO+s, EnergyGuard POLYISO Insulation, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, H-Shield, SOPRA-ISOr, M-Shield, H-Shield CG, SOPRA-ISO+r, Multi-Max FA3, SOPRA-ISOx, UltraMax, SOPRA-ISO+x	DUOTACK	SOPRASMART XP HD 180 (for TA Base Ply) or SOPRASMART XP HD 180 Sanded (for no Base Ply)	DUOTACK	(Optional) SBS-TA-P, SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-52.5
LWC-8.	Structural Concrete	Cellular lightweight concrete, Min. 330 psi, Min. 2-inch top coat <i>Note: To qualify the LWIC under this assembly, a SOPREMA 1.7 in. Base Sheet Fastener or OMG CR Assembled Base Sheet Fastener (1.7") shall achieve an average withdrawal of 101 lbf when tested per TAS 105 or ANSI/SPRI FX-1</i>	SBS-CA2 (sanded-top)	Min. 1.5-inch AC Foam II, SOPRA-ISOs, AC Foam III, SOPRA-ISO+s, EnergyGuard POLYISO Insulation, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, H-Shield, SOPRA-ISOr, M-Shield, H-Shield CG, SOPRA-ISO+r, Multi-Max FA3, SOPRA-ISOx, UltraMax, SOPRA-ISO+x	DUOTACK	Min. 0.125-inch SOPRABOARD, Min. 0.25-inch Dens Deck Prime, DEXcell FA Glass Mat Roof Board or SECUROCK Gypsum-Fiber Roof Board or Min. 7/16-inch DEXcell Cement Roof Board	DUOTACK	TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-77.5
LWC-9.	Structural Concrete	Cellular lightweight concrete, Min. 330 psi, Min. 2-inch top coat <i>Note: To qualify the LWIC under this assembly, a SOPREMA 1.7 in. Base Sheet Fastener or OMG CR Assembled Base Sheet Fastener (1.7") shall achieve an average withdrawal of 101 lbf when tested per TAS 105 or ANSI/SPRI FX-1</i>	SBS-CA2 (sanded-top)	Min. 1.5-inch AC Foam II, SOPRA-ISOs, AC Foam III, SOPRA-ISO+s, EnergyGuard POLYISO Insulation, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, H-Shield, SOPRA-ISOr, M-Shield, H-Shield CG, SOPRA-ISO+r, Multi-Max FA3, SOPRA-ISOx, UltraMax, SOPRA-ISO+x	DUOTACK	SOPRASMART Board 180 or SOPRASMART ISO HD 180 (for TA Base Ply) or SOPRASMART Board 180 Sanded or SOPRASMART ISO HD 180 Sanded (for no Base Ply)	DUOTACK	(Optional) SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-77.5
SELF-ADHERING BASE:											
LWC-10.	Structural Concrete	Cellular lightweight concrete, Min. 330 psi, Min. 2-inch top coat <i>Note: To qualify the LWIC under this assembly, a SOPREMA 1.7 in. Base Sheet Fastener or OMG CR Assembled Base Sheet Fastener (1.7") shall achieve an average withdrawal of 101 lbf when tested per TAS 105 or ANSI/SPRI FX-1</i>	SBS-CA2 (sanded-top)	Min. 1.5-inch AC Foam II, SOPRA-ISOs, AC Foam III, SOPRA-ISO+s, EnergyGuard POLYISO Insulation, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, H-Shield, SOPRA-ISOr, M-Shield, H-Shield CG, SOPRA-ISO+r, Multi-Max FA3, SOPRA-ISOx, UltraMax, SOPRA-ISO+x	DUOTACK	Min. 0.125-inch SOPRABOARD, Min. 0.25-inch Dens Deck Prime, DEXcell FA Glass Mat Roof Board or SECUROCK Gypsum-Fiber Roof Board or Min. 7/16-inch DEXcell Cement Roof Board <u>primed with Elastocol Stick Zero</u>	DUOTACK	SBS-SA	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-77.5

TABLE 4C: LIGHTWEIGHT INSULATING CONCRETE OVER STEEL OR STRUCTURAL CONCRETE DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE E-1: LWC TO DECK, MECHANICALLY ATTACHED BASE SHEET, BONDED ROOF COVER
 REFER TO NOTE 17 FOR DRY-IN / TEMPORARY ROOF OPTIONS (BETWEEN STRUCTURAL CONCRETE AND LIGHTWEIGHT CONCRETE)

System No.	Deck (Note 1)	LWC (Note 14)	Base Sheet			Roof Cover (Note 15)			MDP (psf)
			Base	Fasten	Spacing	Base Ply	Primer	LARS	
CELCORE (FL2037):									
LWC-11.	Min. 22 ga. steel at max 5 ft spans or structural concrete	Min. 300 psi, min 2-inch thick Celcore Cellular Concrete. After setting to support foot traffic, Celcore PVA Curing Compound is applied.	MODIFIED SOPRA-G, SOPRABASE S	Soprema BSF 1.7 or ES FM-90	7-inch o.c. at the 3-inch lap and 7-inch o.c. in two, equally spaced, staggered center rows	SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-75.0
PRE-EXISTENT CELLULAR LWC:									
LWC-12.	Min. 22 ga. type B steel at max. 5 ft spans or min. 2,500 psi structural concrete	Cellular lightweight concrete, Min. 300 psi, Min. 2-inch top coat. <i>Note: To qualify the LWIC under this assembly, a 1.8-inch Twin Loc-Nail shall achieve an average withdrawal of 99 lbf when tested per TAS 105 or ANSI/SPRI FX-1</i>	SOPRABASE TG	Min. 1.8-inch ES Products Twin Loc-Nail	9-inch o.c. at 4-inch laps and 9-inch o.c. in two, equally spaced, staggered center rows	SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-67.5
LWC-13.	Min. 22 ga. type B steel at max. 5 ft spans or min. 2,500 psi structural concrete	Cellular lightweight concrete, Min. 300 psi, Min. 2-inch top coat. <i>Note: To qualify the LWIC under this assembly, a 1.8-inch Twin Loc-Nail shall achieve an average withdrawal of 110 lbf when tested per TAS 105 or ANSI/SPRI FX-1</i>	SOPRABASE S, SOPRALENE 180 Sanded 2.2, SOPRALENE 180 Sanded	Min. 1.8-inch ES Products Twin Loc-Nail	9-inch o.c. at 4-inch laps and 9-inch o.c. in two, equally spaced, staggered center rows	SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-75.0

TABLE 4D: LIGHTWEIGHT INSULATING CONCRETE OVER STEEL DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE E-1: THERMAL BARRIER TO DECK, TEMP ROOF TO THERMAL BARRIER, LWC TO TEMP ROOF, MECHANICALLY ATTACHED BASE SHEET, BONDED ROOF COVER

Sys. No.	Deck (Note 1)	Thermal Barrier			Temp Roof	LWC (Note 14)	Base Sheet			Roof Cover (Note 15)			MDP (psf)
		Type	Fast.	Attach			Base	Fasten	Spacing	Base Ply	Primer	LARS	
CELCORE (FL2037):													
LWC-14.	Min. 22 ga. type B steel at max. 6 ft spans	Min. 0.625-inch SECUROCK Gypsum-Fiber Roof Board	Note 2	1 per 1.6 ft ²	SBS-TA-F	Min. 300 psi, min 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture. After setting to support foot traffic, Celcore PVA Curing Compound.	MODIFIED SOPRA-G, SOPRABASE S	Soprema BSF 1.7 or ES FM-90	7-inch o.c. at the 3-inch lap and 7-inch o.c. in two, equally spaced, staggered center rows	SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-75.0

TABLE 4E: LIGHTWEIGHT INSULATING CONCRETE OVER STEEL OR STRUCTURAL CONCRETE DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE E-2: LWC TO DECK, MECHANICALLY ATTACHED SOPRAPHIX, BONDED ROOF COVER
 REFER TO NOTE 17 FOR DRY-IN / TEMPORARY ROOF OPTIONS (BETWEEN STRUCTURAL CONCRETE AND LIGHTWEIGHT CONCRETE)

System No.	Deck (Note 1)	LWC (Note 14)	Base Membrane			Roof Cover (Note 15)			MDP (psf)
			Base	Fasteners	Spacing	Ply	Primer	LARS	
CELCORE (FL2037):									
LWC-15.	Min. 22 ga., type BV, Grade 40 steel 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 Optional Celcore SBS (Sanded Bonding Surface) may be applied.	SOPRAPHIX Base 613	Trufast Versa-Fast Fasteners & Plates	Versa-Fast Plates spaced 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 Plates, parallel to the width-direction of the sheet.	(Optional) One or two SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-45.0
LWC-16.	Structural concrete	Treatment: Optional, Celcore S-1. LWC: Celcore MF with Celcore HS Rheology Modifying Admixture, Min. 390 psi, Min. 2-inch top coat. Surfacing: Optional, Celcore SBS (Sanded Bonding Surface).	SOPRAPHIX Base 613	Trufast Versa-Fast Fasteners & Plates	Versa-Fast Plates spaced 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 Plates, parallel to the width-direction of the sheet.	(Optional) One or two SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-45.0
LWC-17.	Structural concrete	Treatment: Optional when Dry-In/Temp Roof installed (Note 18), Celcore S-1. LWC: Celcore MF with Celcore HS Rheology Modifying Admixture, Min. 390 psi, Min. 2-inch top coat. Surfacing: Optional, Celcore SBS (Sanded Bonding Surface).	SOPRAPHIX Base 613	Trufast Versa-Fast Fasteners & Plates	Versa-Fast Plates spaced 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 Plates, forming a square pattern with the square edges oriented in the principle directions of the roll.	(Optional) One or two SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-75.0

TABLE 4F: LIGHTWEIGHT INSULATING CONCRETE OVER STEEL DECKS – NEW CONSTRUCTION
SYSTEM TYPE F: LWC TO DECK, BONDED ROOF COVER

System No.	Deck (Note 1)	LWC (Note 14)			Primer	Roof Cover (Note 15)				MDP (psf)
		Bonding Agent	Type	Treatment		Base Ply	Ply	Primer	LARS	
CELCORE (FL2037):										
LWC-18.	Min. 22 ga., type BV, Grade 40 steel at max. 6 ft spans; 5/8" puddle welds, 6" o.c.	Celcore S-1 Deck Preparation Slurry	Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, Min. 340 psi, min. 2-inch thick	Celcore PVA Curing Compound	None	SBS-CA2, 12-inch o.c.	(Optional) SBS-CA3 or SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-60.0
LWC-19.	Min. 22 ga., type BV, Grade 40 steel at max. 6 ft spans; 5/8" puddle welds, 6" o.c.	Celcore S-1 Deck Preparation Slurry	Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, Min. 340 psi, min. 2-inch thick	Celcore PVA Curing Compound	None	SBS-CA2, 6-inch o.c.	(Optional) SBS-CA3 or SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-90.0

**TABLE 4G: LIGHTWEIGHT INSULATING CONCRETE OVER STRUCTURAL CONCRETE DECKS – NEW CONSTRUCTION
SYSTEM TYPE F: LWC TO DECK, BONDED ROOF COVER**

REFER TO NOTE 18 FOR DRY-IN / TEMPORARY ROOF OPTIONS (BETWEEN STRUCTURAL CONCRETE AND LIGHTWEIGHT CONCRETE)

System No.	Deck (Note 1)	Dry-In / Temp Roof	LWC (Note 14)			Primer	Roof Cover (Note 15)				MDP (psf)
			Bonding Agent	Type	Treatment		Base Ply	Ply	Primer	LARS	
CELCORE (FL2037):											
LWC-20.	Structural Concrete	Note 18	None	Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, Min. 300 psi, min. 2-inch thick.	Celcore PVA Curing Comp	(Optional) ASTM D41, Elastocol 500, Elastocol Stick	SBS-CA2, 12-inch o.c.	(Optional) SBS-CA3 or SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-60.0
LWC-21.	Structural Concrete	Note 18	None	Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, Min. 330 psi, min. 2-inch thick	Celcore PVA Curing Compound	None	SBS-CA2, 6-inch o.c.	(Optional) SBS-CA3 or SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-180.0
LWC-22.	Structural Concrete	Note 18	None	Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, Min. 330 psi, min. 2-inch thick	Celcore PVA Curing Compound	None	SBS-CA3	(Optional) SBS-CA3 or SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-392.5
LWC-23.	Structural concrete	Note 18	None	Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, Min. 300 psi, min. 2-inch thick.	Celcore PVA Curing Compound	ASTM D41, Elastocol 500 or Elastocol Stick	SBS-TA-P	(Optional) SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-217.5
LWC-24.	Structural concrete	None	None	Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, Min. 300 psi, min. 2-inch thick.	Celcore PVA Curing Compound	ASTM D41, Elastocol 500 or Elastocol Stick	SBS-TA-P	(Optional) SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-262.5
LWC-25.	Structural concrete	Note 18	None	Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, Min. 300 psi, min. 2-inch thick.	Celcore PVA Curing Compound	None	SBS-TA-P	(Optional) SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-307.5
CONCRECEL (FL5584 & FL10500):											
LWC-26.	Structural Concrete	(Optional) Asphaltic plies with asphalt flood coat	Concrecel Bonding Agent	Concrecel Concrete, Min. 300 psi, min. 2-inch thick	Concrecel Curing Comp	(Optional) ASTM D41, Elastocol 500, Elastocol Stick	SBS-CA2, 12-inch o.c.	(Optional) SBS-CA3 or SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-60.0
LWC-27.	Structural concrete	Asphaltic plies with asphalt flood coat	Concrecel Bonding Agent	Concrecel Concrete, Min. 300 psi, min. 2-inch thick	Concrecel Curing Compound	ASTM D41, Elastocol 500 or Elastocol Stick	SBS-TA-P	(Optional) SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-202.5
LWC-28.	Structural concrete	None	None	Concrecel Concrete, Min. 300 psi, min. 2-inch thick	Concrecel Curing Compound	ASTM D41, Elastocol 500 or Elastocol Stick	SBS-TA-P	(Optional) SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-217.5
ELASTIZELL (FL4994):											
LWC-29.	Structural Concrete	Note 18	None	Elastizell, Min. 300 psi, min. 2-inch thick.	None	(Optional) ASTM D41, Elastocol 500, Elastocol Stick	SBS-CA2, 12-inch o.c.	(Optional) SBS-CA3 or SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-60.0

TABLE 4G: LIGHTWEIGHT INSULATING CONCRETE OVER STRUCTURAL CONCRETE DECKS – NEW CONSTRUCTION
SYSTEM TYPE F: LWC TO DECK, BONDED ROOF COVER
 REFER TO NOTE 18 FOR DRY-IN / TEMPORARY ROOF OPTIONS (BETWEEN STRUCTURAL CONCRETE AND LIGHTWEIGHT CONCRETE)

System No.	Deck (Note 1)	Dry-In / Temp Roof	LWC (Note 14)			Primer	Roof Cover (Note 15)				MDP (psf)
			Bonding Agent	Type	Treatment		Base Ply	Ply	Primer	LARS	
LWC-30.	Structural concrete	Note 18	None	Elastizell, Min. 300 psi, min. 2-inch thick.	None	ASTM D41, Elastocol 500 or Elastocol Stick	SBS-TA-P	(Optional) SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-217.5
PRE-EXISTENT CELLULAR LWC:											
LWC-31.	Structural Concrete	Note 18	None	Cellular lightweight concrete, Min. 330 psi, Min. 2-inch top coat <i>Note: To qualify the LWIC under this assembly, a SOPREMA 1.7 in. Base Sheet Fastener or OMG CR Assembled Base Sheet Fastener (1.7") shall achieve an average withdrawal of 101 lbf when tested per TAS 105 or ANSI/SPRI FX-1</i>	None	None	SBS-CA2, 12-inch o.c.	(Optional) SBS-CA3 or SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-60.0
LWC-32.	Structural Concrete	Note 18	None	Cellular lightweight concrete, Min. 350 psi, Min. 2-inch top coat <i>Note: To qualify the LWIC under this assembly, a SOPREMA 1.7 in. Base Sheet Fastener or OMG CR Assembled Base Sheet Fastener (1.7") shall achieve an average withdrawal of 101 lbf when tested per TAS 105 or ANSI/SPRI FX-1</i>	None	None	SBS-CA2, 6-inch o.c.	(Optional) SBS-CA3 or SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-180.0

**TABLE 5A: CEMENTITIOUS WOOF FIBER DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE A-1: BONDED INSULATION, BONDED ROOF COVER**

System No.	Deck (Note 1)	Base Insulation Layer		Top Insulation Layer		Roof Cover (Note 15)				MDP (psf)
		Type	Attach (Notes 6&7)	Type	Attach (Notes 6&7)	Base Ply	Ply	Primer	LARS	
COLD APPLIED BASE:										
CWF-1.	Min. 2-inch Tectum Plank	Min. 1.5-inch ACFoam II, SOPRA-ISO s, ACFoam III, SOPRA-ISO+ s, H-Shield, SOPRA-ISO r, M-Shield, H-Shield CG, SOPRA-ISO+ r	DUOTACK, 4-inch o.c.	Min. 0.25-inch DEXcell FA Glass Mat Roof Board	DUOTACK	SBS-CA3	(Optional) SBS-CA3, SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-163.0
CWF-2.	Min. 2-inch Tectum Plank	Min. 1.5-inch ACFoam II, SOPRA-ISO s, ACFoam III, SOPRA-ISO+ s, H-Shield, SOPRA-ISO r, M-Shield, H-Shield CG, SOPRA-ISO+ r	DUOTACK, 4-inch o.c.	Min. 0.25-inch DEXcell FA Glass Mat Roof Board	DUOTACK, 6-inch o.c.	SBS-CA3	(Optional) SBS-CA3, SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-185.0
CWF-3.	Min. 2-inch Tectum Plank	Min. 0.25-inch DEXcell FA Glass Mat Roof Board	DUOTACK, 4-inch o.c.	None	N/A	SBS-CA3	(Optional) SBS-CA3, SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-185.0
CWF-4.	Min. 2-inch Tectum Plank	Min. 1.5-inch ACFoam II, SOPRA-ISO s, ACFoam III, SOPRA-ISO+ s, H-Shield, SOPRA-ISO r, M-Shield, H-Shield CG, SOPRA-ISO+ r	DUOTACK, 4-inch o.c.	Min. 7/16-inch DEXcell Cement Roof Board	DUOTACK	SBS-CA3	(Optional) SBS-CA3, SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-190.0
CWF-5.	Min. 2-inch Tectum Plank	Min. 1.5-inch ACFoam II, SOPRA-ISO s, ACFoam III, SOPRA-ISO+ s, H-Shield, SOPRA-ISO r, M-Shield, H-Shield CG, SOPRA-ISO+ r	DUOTACK, 4-inch o.c.	Min. 7/16-inch DEXcell Cement Roof Board	DUOTACK, 6-inch o.c.	SBS-CA3	(Optional) SBS-CA3, SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-285.0
CWF-6.	Min. 2-inch Tectum Plank	Min. 7/16-inch DEXcell Cement Roof Board	DUOTACK, 4-inch o.c.	None	N/A	SBS-CA3	(Optional) SBS-CA3, SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-285.0
TORCH-APPLIED BASE:										
CWF-7.	Min. 2-inch Tectum Plank	Min. 1.5-inch ACFoam II, SOPRA-ISO s, ACFoam III, SOPRA-ISO+ s, H-Shield, SOPRA-ISO r, M-Shield, H-Shield CG, SOPRA-ISO+ r	DUOTACK, 4-inch o.c.	Min. 0.25-inch DEXcell FA Glass Mat Roof Board	DUOTACK	SBS-TA-F	(Optional) SBS-CA3, SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-163.0
CWF-8.	Min. 2-inch Tectum Plank	Min. 1.5-inch ACFoam II, SOPRA-ISO s, ACFoam III, SOPRA-ISO+ s, H-Shield, SOPRA-ISO r, M-Shield, H-Shield CG, SOPRA-ISO+ r	DUOTACK, 4-inch o.c.	Min. 0.25-inch DEXcell FA Glass Mat Roof Board	DUOTACK, 6-inch o.c.	SBS-TA-F	(Optional) SBS-CA3, SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-185.0
CWF-9.	Min. 2-inch Tectum Plank	Min. 0.25-inch DEXcell FA Glass Mat Roof Board	DUOTACK, 4-inch o.c.	None	N/A	SBS-TA-F	(Optional) SBS-CA3, SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-185.0

**TABLE 5A: CEMENTITIOUS WOOL FIBER DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE A-1: BONDED INSULATION, BONDED ROOF COVER**

System No.	Deck (Note 1)	Base Insulation Layer		Top Insulation Layer		Roof Cover (Note 15)				MDP (psf)
		Type	Attach (Notes 6&7)	Type	Attach (Notes 6&7)	Base Ply	Ply	Primer	LARS	
CWF-10.	Min. 2-inch Tectum Plank	Min. 1.5-inch ACFoam II, SOPRA-ISO s, ACFoam III, SOPRA-ISO+ s, H-Shield, SOPRA-ISO r, M-Shield, H-Shield CG, SOPRA-ISO+ r	DUOTACK, 4-inch o.c.	Min. 7/16-inch DEXcell Cement Roof Board	DUOTACK	SBS-TA-F	(Optional) SBS-CA3, SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-190.0
CWF-11.	Min. 2-inch Tectum Plank	Min. 1.5-inch ACFoam II, SOPRA-ISO s, ACFoam III, SOPRA-ISO+ s, H-Shield, SOPRA-ISO r, M-Shield, H-Shield CG, SOPRA-ISO+ r	DUOTACK, 4-inch o.c.	Min. 7/16-inch DEXcell Cement Roof Board	DUOTACK, 6-inch o.c.	SBS-TA-F	(Optional) SBS-CA3, SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-285.0
CWF-12.	Min. 2-inch Tectum Plank	Min. 7/16-inch DEXcell Cement Roof Board	DUOTACK, 4-inch o.c.	None	N/A	SBS-TA-F	(Optional) SBS-CA3, SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-285.0
SELF-ADHERING BASE:										
CWF-13.	Min. 2-inch Tectum Plank	Min. 1.5-inch ACFoam II, SOPRA-ISO s, ACFoam III, SOPRA-ISO+ s, H-Shield, SOPRA-ISO r, M-Shield, H-Shield CG, SOPRA-ISO+ r	DUOTACK, 4-inch o.c.	Min. 0.25-inch DEXcell FA Glass Mat Roof Board primed with Elastocol Stick or Elastocol Stick Zero	DUOTACK	SBS-SA	(Optional) SBS-CA3, SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-163.0
CWF-14.	Min. 2-inch Tectum Plank	Min. 1.5-inch ACFoam II, SOPRA-ISO s, ACFoam III, SOPRA-ISO+ s, H-Shield, SOPRA-ISO r, M-Shield, H-Shield CG, SOPRA-ISO+ r	DUOTACK, 4-inch o.c.	Min. 0.25-inch DEXcell FA Glass Mat Roof Board primed with Elastocol Stick or Elastocol Stick Zero	DUOTACK, 6-inch o.c.	SBS-SA	(Optional) SBS-CA3, SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-185.0
CWF-15.	Min. 2-inch Tectum Plank	Min. 0.25-inch DEXcell FA Glass Mat Roof Board	DUOTACK, 4-inch o.c.	None	N/A	SBS-SA	(Optional) SBS-CA3, SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-185.0
CWF-16.	Min. 2-inch Tectum Plank	Min. 1.5-inch ACFoam II, SOPRA-ISO s, ACFoam III, SOPRA-ISO+ s, H-Shield, SOPRA-ISO r, M-Shield, H-Shield CG, SOPRA-ISO+ r	DUOTACK, 4-inch o.c.	Min. 7/16-inch DEXcell Cement Roof Board primed with Elastocol Stick or Elastocol Stick Zero	DUOTACK	SBS-SA	(Optional) SBS-CA3, SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-190.0
CWF-17.	Min. 2-inch Tectum Plank	Min. 1.5-inch ACFoam II, SOPRA-ISO s, ACFoam III, SOPRA-ISO+ s, H-Shield, SOPRA-ISO r, M-Shield, H-Shield CG, SOPRA-ISO+ r	DUOTACK, 4-inch o.c.	Min. 7/16-inch DEXcell Cement Roof Board primed with Elastocol Stick or Elastocol Stick Zero	DUOTACK, 6-inch o.c.	SBS-SA	(Optional) SBS-CA3, SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-285.0
CWF-18.	Min. 2-inch Tectum Plank	Min. 7/16-inch DEXcell Cement Roof Board	DUOTACK, 4-inch o.c.	None	N/A	SBS-SA	(Optional) SBS-CA3, SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-285.0

**TABLE 5B: CEMENTITIOUS WOOF FIBER DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE A-1A: BONDED THERMAL BARRIER, BONDED VAPOR BARRIER, BONDED INSULATION, BONDED ROOF COVER**

System No.	Deck (Note 1)	Thermal Barrier		Primer	Vapor Barrier	Base Insulation Layer		Top Insulation Layer		Roof Cover (Note 15)				MDP (psf)
		Type	Attach (Notes 6&7)			Type	Attach (Notes 6&7)	Type	Attach (Notes 6&7)	Base Ply	Ply	Primer	LARS	
COLD APPLIED BASE:														
CFW-19.	Min. 2-inch Tectum Plank	Min. 0.25-inch DEXcell FA Glass Mat Roof Board	DUOTACK, 4-inch o.c.	None	SBS-CA3, SBS-AA or SBS-TA-F	Min. 1.5-inch ACFoam II, SOPRA-ISO s, ACFoam III, SOPRA-ISO+ s, H-Shield, SOPRA-ISO r, M-Shield, H-Shield CG, SOPRA-ISO+ r	DUOTACK	Min. 0.25-inch DEXcell FA Glass Mat Roof Board or Min. 7/16-inch DEXcell Cement Roof Board	DUOTACK	SBS-CA3	(Optional) SBS-CA3, SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-163.0
CFW-20.	Min. 2-inch Tectum Plank	Min. 0.25-inch DEXcell FA Glass Mat Roof Board	DUOTACK, 4-inch o.c.	Elastocol Stick or Elastocol Stick Zero	SOPRAVAP'R, self-adhering or SBS-SA1	Min. 1.5-inch ACFoam II, SOPRA-ISO s, ACFoam III, SOPRA-ISO+ s, H-Shield, SOPRA-ISO r, M-Shield, H-Shield CG, SOPRA-ISO+ r	DUOTACK	Min. 0.25-inch DEXcell FA Glass Mat Roof Board Min. 7/16-inch DEXcell Cement Roof Board	DUOTACK	SBS-CA3	(Optional) SBS-CA3, SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-163.0
CFW-21.	Min. 2-inch Tectum Plank	Min. 0.25-inch DEXcell FA Glass Mat Roof Board	DUOTACK, 4-inch o.c.	None	SBS-CA3, SBS-AA or SBS-TA-F	Min. 1.5-inch ACFoam II, SOPRA-ISO s, ACFoam III, SOPRA-ISO+ s, H-Shield, SOPRA-ISO r, M-Shield, H-Shield CG, SOPRA-ISO+ r	DUOTACK, 6-inch o.c.	Min. 0.25-inch DEXcell FA Glass Mat Roof Board	DUOTACK, 6-inch o.c.	SBS-CA3	(Optional) SBS-CA3, SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-185.0
CFW-22.	Min. 2-inch Tectum Plank	Min. 0.25-inch DEXcell FA Glass Mat Roof Board	DUOTACK, 4-inch o.c.	Elastocol Stick or Elastocol Stick Zero	SOPRAVAP'R, self-adhering or SBS-SA1	Min. 1.5-inch ACFoam II, SOPRA-ISO s, ACFoam III, SOPRA-ISO+ s, H-Shield, SOPRA-ISO r, M-Shield, H-Shield CG, SOPRA-ISO+ r	DUOTACK, 6-inch o.c.	Min. 0.25-inch DEXcell FA Glass Mat Roof Board	DUOTACK, 6-inch o.c.	SBS-CA3	(Optional) SBS-CA3, SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-185.0
TORCH-APPLIED BASE:														
CFW-23.	Min. 2-inch Tectum Plank	Min. 0.25-inch DEXcell FA Glass Mat Roof Board	DUOTACK, 4-inch o.c.	None	SBS-CA3, SBS-AA or SBS-TA-F	Min. 1.5-inch ACFoam II, SOPRA-ISO s, ACFoam III, SOPRA-ISO+ s, H-Shield, SOPRA-ISO r, M-Shield, H-Shield CG, SOPRA-ISO+ r	DUOTACK	Min. 0.25-inch DEXcell FA Glass Mat Roof Board or Min. 7/16-inch DEXcell Cement Roof Board	DUOTACK	SBS-TA-F	(Optional) SBS-CA3, SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-163.0
CFW-24.	Min. 2-inch Tectum Plank	Min. 0.25-inch DEXcell FA Glass Mat Roof Board	DUOTACK, 4-inch o.c.	Elastocol Stick or Elastocol Stick Zero	SOPRAVAP'R, self-adhering or SBS-SA1	Min. 1.5-inch ACFoam II, SOPRA-ISO s, ACFoam III, SOPRA-ISO+ s, H-Shield, SOPRA-ISO r, M-Shield, H-Shield CG, SOPRA-ISO+ r	DUOTACK	Min. 0.25-inch DEXcell FA Glass Mat Roof Board or Min. 7/16-inch DEXcell Cement Roof Board	DUOTACK	SBS-TA-F	(Optional) SBS-CA3, SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-163.0

**TABLE 5B: CEMENTITIOUS WOOL FIBER DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE A-1A: BONDED THERMAL BARRIER, BONDED VAPOR BARRIER, BONDED INSULATION, BONDED ROOF COVER**

System No.	Deck (Note 1)	Thermal Barrier		Primer	Vapor Barrier	Base Insulation Layer		Top Insulation Layer		Roof Cover (Note 15)				MDP (psf)
		Type	Attach (Notes 6&7)			Type	Attach (Notes 6&7)	Type	Attach (Notes 6&7)	Base Ply	Ply	Primer	LARS	
CWF-25.	Min. 2-inch Tectum Plank	Min. 0.25-inch DEXcell FA Glass Mat Roof Board	DUOTACK, 4-inch o.c.	None	SBS-CA3, SBS-AA or SBS-TA-F	Min. 1.5-inch ACFoam II, SOPRA-ISO s, ACFoam III, SOPRA-ISO+ s, H-Shield, SOPRA-ISO r, M-Shield, H-Shield CG, SOPRA-ISO+ r	DUOTACK, 6-inch o.c.	Min. 0.25-inch DEXcell FA Glass Mat Roof Board or Min. 7/16-inch DEXcell Cement Roof Board	DUOTACK, 6-inch o.c.	SBS-TA-F	(Optional) SBS-CA3, SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-185.0
CWF-26.	Min. 2-inch Tectum Plank	Min. 0.25-inch DEXcell FA Glass Mat Roof Board	DUOTACK, 4-inch o.c.	Elastocol Stick or Elastocol Stick Zero	SOPRAVAP'R, self-adhering or SBS-SA1	Min. 1.5-inch ACFoam II, SOPRA-ISO s, ACFoam III, SOPRA-ISO+ s, H-Shield, SOPRA-ISO r, M-Shield, H-Shield CG, SOPRA-ISO+ r	DUOTACK, 6-inch o.c.	Min. 0.25-inch DEXcell FA Glass Mat Roof Board or Min. 7/16-inch DEXcell Cement Roof Board	DUOTACK, 6-inch o.c.	SBS-TA-F	(Optional) SBS-CA3, SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-185.0
SELF-ADHERING BASE:														
CWF-27.	Min. 2-inch Tectum Plank	Min. 0.25-inch DEXcell FA Glass Mat Roof Board	DUOTACK, 4-inch o.c.	None	SBS-CA3, SBS-AA or SBS-TA-F	Min. 1.5-inch ACFoam II, SOPRA-ISO s, ACFoam III, SOPRA-ISO+ s, H-Shield, SOPRA-ISO r, M-Shield, H-Shield CG, SOPRA-ISO+ r	DUOTACK	Min. 0.25-inch DEXcell FA Glass Mat Roof Board or Min. 7/16-inch DEXcell Cement Roof Board. Top surface primed with Elastocol Stick or Elastocol Stick Zero	DUOTACK	SBS-SA	(Optional) SBS-CA3, SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-163.0
CWF-28.	Min. 2-inch Tectum Plank	Min. 0.25-inch DEXcell FA Glass Mat Roof Board	DUOTACK, 4-inch o.c.	Elastocol Stick or Elastocol Stick Zero	SOPRAVAP'R, self-adhering or SBS-SA1	Min. 1.5-inch ACFoam II, SOPRA-ISO s, ACFoam III, SOPRA-ISO+ s, H-Shield, SOPRA-ISO r, M-Shield, H-Shield CG, SOPRA-ISO+ r	DUOTACK	Min. 0.25-inch DEXcell FA Glass Mat Roof Board or Min. 7/16-inch DEXcell Cement Roof Board. Top surface primed with Elastocol Stick or Elastocol Stick Zero	DUOTACK	SBS-SA	(Optional) SBS-CA3, SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-163.0
CWF-29.	Min. 2-inch Tectum Plank	Min. 0.25-inch DEXcell FA Glass Mat Roof Board	DUOTACK, 4-inch o.c.	None	SBS-CA3, SBS-AA or SBS-TA-F	Min. 1.5-inch ACFoam II, SOPRA-ISO s, ACFoam III, SOPRA-ISO+ s, H-Shield, SOPRA-ISO r, M-Shield, H-Shield CG, SOPRA-ISO+ r	DUOTACK, 6-inch o.c.	Min. 0.25-inch DEXcell FA Glass Mat Roof Board or Min. 7/16-inch DEXcell Cement Roof Board. Top surface primed with Elastocol Stick or Elastocol Stick Zero	DUOTACK, 6-inch o.c.	SBS-SA	(Optional) SBS-CA3, SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-185.0

**TABLE 5B: CEMENTITIOUS WOOF FIBER DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE A-1A: BONDED THERMAL BARRIER, BONDED VAPOR BARRIER, BONDED INSULATION, BONDED ROOF COVER**

System No.	Deck (Note 1)	Thermal Barrier		Primer	Vapor Barrier	Base Insulation Layer		Top Insulation Layer		Roof Cover (Note 15)				MDP (psf)
		Type	Attach (Notes 6&7)			Type	Attach (Notes 6&7)	Type	Attach (Notes 6&7)	Base Ply	Ply	Primer	LARS	
CWF-30.	Min. 2-inch Tectum Plank	Min. 0.25-inch DEXcell FA Glass Mat Roof Board	DUOTACK, 4-inch o.c.	Elastocol Stick or Elastocol Stick Zero	SOPRAVAP'R, self-adhering or SBS-SA1	Min. 1.5-inch ACFoam II, SOPRA-ISO s, ACFoam III, SOPRA-ISO+ s, H-Shield, SOPRA-ISO r, M-Shield, H-Shield CG, SOPRA-ISO+ r	DUOTACK, 6-inch o.c.	Min. 0.25-inch DEXcell FA Glass Mat Roof Board or Min. 7/16-inch DEXcell Cement Roof Board. Top surface primed with Elastocol Stick or Elastocol Stick Zero	DUOTACK, 6-inch o.c.	SBS-SA	(Optional) SBS-CA3, SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-185.0

**TABLE 6A: GYPSUM DECKS – REROOF (TEAR-OFF)
SYSTEM TYPE A-1: BONDED INSULATION, BONDED ROOF COVER**

System No.	Deck (Notes 1 & 12)	Base Insulation Layer		Top Insulation Layer		Roof Cover (Note 15)				MDP (psf)
		Type	Attach (Notes 6&7)	Type	Attach (Notes 6&7)	Base Ply	Ply	Primer	LARS	
COLD-APPLIED BASE PLY:										
G-1	Existing poured gypsum or gypsum plank	(Optional) Min. 1.5-inch ACFoam II, SOPRA-ISO s, ACFoam III, SOPRA-ISO+ s, EnergyGuard POLYSIO Insulation, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, H-Shield, SOPRA-ISO r, M-Shield, H-Shield CG, SOPRA-ISO+ r, Multi-Max FA-3, SOPRA-ISO x	DUOTACK	Min. 0.125-inch SOPRABOARD optionally primed with DETEC "TruGround Conductive Primer"	DUOTACK	SBS-CA3	(Optional) SBS-CA3, SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-115.0
TORCHED BASE PLY:										
G-2	Existing poured gypsum or gypsum plank	(Optional) Min. 1.5-inch ACFoam II, SOPRA-ISO s, ACFoam III, SOPRA-ISO+ s, EnergyGuard POLYSIO Insulation, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, H-Shield, SOPRA-ISO r, M-Shield, H-Shield CG, SOPRA-ISO+ r, Multi-Max FA-3, SOPRA-ISO x	DUOTACK	SOPRASMART XP HD 180 (for TA Base Ply) or SOPRASMART XP HD 180 Sanded (for no Base Ply)	DUOTACK	(Optional) SBS-TA-P, SBS-TA-F	(Optional) SBS-CA3, SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-52.5
G-3	Existing poured gypsum or gypsum plank	(Optional) Min. 1.5-inch ACFoam II, SOPRA-ISO s, ACFoam III, SOPRA-ISO+ s, EnergyGuard POLYSIO Insulation, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, H-Shield, SOPRA-ISO r, M-Shield, H-Shield CG, SOPRA-ISO+ r, Multi-Max FA-3, SOPRA-ISO x	DUOTACK	Min. 0.125-inch SOPRABOARD	DUOTACK	SBS-TA-P, SBS-TA-F	(Optional) SBS-CA3, SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-155.0
G-4	Existing poured gypsum or gypsum plank	(Optional) Min. 1.5-inch ACFoam II, SOPRA-ISO s, ACFoam III, SOPRA-ISO+ s, EnergyGuard POLYSIO Insulation, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, H-Shield, SOPRA-ISO r, M-Shield, H-Shield CG, SOPRA-ISO+ r, Multi-Max FA-3, SOPRA-ISO x	DUOTACK	SOPRASMART Board 180 or SOPRASMART ISO HD 180 (for TA Base Ply) or SOPRASMART Board 180 Sanded or SOPRASMART ISO HD 180 Sanded (for no Base Ply)	DUOTACK	(Optional) SBS-TA-P, SBS-TA-F	(Optional) SBS-CA3, SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-162.5
G-5	Existing poured gypsum or gypsum plank	(Optional) Min. 1.5-inch ACFoam II, SOPRA-ISO s, ACFoam III, SOPRA-ISO+ s, EnergyGuard POLYSIO Insulation, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, H-Shield, SOPRA-ISO r, M-Shield, H-Shield CG, SOPRA-ISO+ r, Multi-Max FA-3, SOPRA-ISO x	DUOTACK	Min. 0.25-inch Dens Deck	DUOTACK	SBS-TA-F	(Optional) SBS-CA3, SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-162.5
G-6	Existing poured gypsum or gypsum plank	(Optional) Min. 2-inch ACFoam II, SOPRA-ISO s, ACFoam III, SOPRA-ISO+ s, EnergyGuard POLYSIO Insulation, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, H-Shield, SOPRA-ISO r, M-Shield, H-Shield CG, SOPRA-ISO+ r, Multi-Max FA-3, SOPRA-ISO x	DUOTACK	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	DUOTACK	SBS-TA-P, SBS-TA-F	(Optional) SBS-CA3, SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-162.5

TABLE 6B: GYPSUM DECKS – REROOF (TEAR-OFF)
SYSTEM TYPE A-1: TEMP ROOF TO DECK, BONDED INSULATION, BONDED ROOF COVER

System No.	Deck (Notes 1 &12)	Temp Roof (Note 15)	Base Insulation Layer		Coverboard		Roof Cover (Note 15)				MDP (psf)
			Type	Attach (Notes 6&7)	Type	Attach (Notes 6&7)	Base Ply	Ply	Primer	Cap	
COLD APPLIED BASE:											
G-7	Existing poured gypsum or gypsum plank	SBS-CA2 (with sanded top surface), 12-inch o.c.	(Optional) Min. 1.5-inch ACFoam II, SOPRA-ISO s, ACFoam III, SOPRA-ISO+ s, EnergyGuard POLYSIO Insulation, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, H-Shield, SOPRA-ISO r, M-Shield, H-Shield CG, SOPRA-ISO+ r, Multi-Max FA-3, SOPRA-ISO x	DUOTACK	Min. 0.125-inch SOPRABOARD optionally primed with DETEC “TruGround Conductive Primer”	DUOTACK	SBS-CA3	(Optional) SBS-CA3, SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-115.0
TORCH APPLIED BASE:											
G-8	Existing poured gypsum or gypsum plank	SBS-CA2 (with sanded top surface), 12-inch o.c.	(Optional) Min. 1.5-inch ACFoam II, SOPRA-ISO s, ACFoam III, SOPRA-ISO+ s, EnergyGuard POLYSIO Insulation, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, H-Shield, SOPRA-ISO r, M-Shield, H-Shield CG, SOPRA-ISO+ r, Multi-Max FA-3, SOPRA-ISO x	DUOTACK	Min. 0.125-inch SOPRABOARD	DUOTACK	SBS-TA-F	(Optional) SBS-CA3, SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-115.0
SELF-ADHERING BASE:											
G-9	Existing poured gypsum or gypsum plank	SBS-CA2 (with sanded top surface), 12-inch o.c.	(Optional) Min. 1.5-inch ACFoam II, SOPRA-ISO s, ACFoam III, SOPRA-ISO+ s, EnergyGuard POLYSIO Insulation, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, H-Shield, SOPRA-ISO r, M-Shield, H-Shield CG, SOPRA-ISO+ r, Multi-Max FA-3, SOPRA-ISO x	DUOTACK	Min. 0.125-inch SOPRABOARD	DUOTACK	SBS-SA	(Optional) SBS-CA3, SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-115.0

TABLE 7A: RECOVER APPLICATIONS
SYSTEM TYPE A-1: BONDED INSULATION, BONDED ROOF COVER

System No.	Substrate (Notes 1 & 12)	Base Insulation Layer		Top Insulation Layer		Roof Cover (Note 15)			MDP (psf)
		Type	Attach	Type	Attach	Base Ply	Primer	LARS	
TORCH APPLIED BASE:									
R-1	Smooth- or granule-surface modified bitumen or BUR	(Optional) Min. 1.5-inch ACFoam II, SOPRA-ISO s, ACFoam III, SOPRA-ISO+ s, EnergyGuard POLYSIO Insulation, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, H-Shield, SOPRA-ISO r, M-Shield, H-Shield CG, SOPRA-ISO+ r, Multi-Max FA-3, SOPRA-ISO x	DUOTACK	Min. 0.125-inch SOPRABOARD	DUOTACK	SBS-TA-P, SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-150.0
R-2	Smooth- or granule-surface modified bitumen or BUR	(Optional) Min. 1.5-inch ACFoam II, SOPRA-ISO s, ACFoam III, SOPRA-ISO+ s, EnergyGuard POLYSIO Insulation, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, H-Shield, SOPRA-ISO r, M-Shield, H-Shield CG, SOPRA-ISO+ r, Multi-Max FA-3, SOPRA-ISO x	DUOTACK	SOPRASMART Board 180 or SOPRASMART ISO HD 180 (for TA Base Ply) or SOPRASMART Board 180 Sanded or SOPRASMART ISO HD 180 Sanded (for no Base Ply)	DUOTACK	(Optional) SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-150.0
R-3	Smooth- or granule-surface modified bitumen or BUR	(Optional) Min. 1.5-inch ACFoam II, SOPRA-ISO s, ACFoam III, SOPRA-ISO+ s, EnergyGuard POLYSIO Insulation, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, H-Shield, SOPRA-ISO r, M-Shield, H-Shield CG, SOPRA-ISO+ r, Multi-Max FA-3, SOPRA-ISO x	DUOTACK	Min. 0.25-inch Dens Deck	DUOTACK	SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-150.0
R-4	Smooth- or granule-surface modified bitumen or BUR	(Optional) Min. 1.5-inch ACFoam II, SOPRA-ISO s, ACFoam III, SOPRA-ISO+ s, EnergyGuard POLYSIO Insulation, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, H-Shield, SOPRA-ISO r, M-Shield, H-Shield CG, SOPRA-ISO+ r, Multi-Max FA-3, SOPRA-ISO x	DUOTACK	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	DUOTACK	SBS-TA-P	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-150.0
R-5	Smooth- or granule-surface modified bitumen or BUR	(Optional) Min. 1.5-inch ACFoam II, SOPRA-ISO s, ACFoam III, SOPRA-ISO+ s, EnergyGuard POLYSIO Insulation, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, H-Shield, SOPRA-ISO r, M-Shield, H-Shield CG, SOPRA-ISO+ r, Multi-Max FA-3, SOPRA-ISO x	DUOTACK	Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	DUOTACK	SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-195.0
R-6	Smooth-surface SBS modified bitumen	Min. 2-inch ACFoam II, SOPRA-ISO s, ACFoam III, SOPRA-ISO+ s, EnergyGuard POLYSIO Insulation, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, H-Shield, SOPRA-ISO r, M-Shield, H-Shield CG, SOPRA-ISO+ r, Multi-Max FA-3, SOPRA-ISO x	DUOTACK	Min. 0.125-inch SOPRABOARD or min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	DUOTACK	SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-260.0
R-7	Smooth-surface SBS modified bitumen	Min. 2-inch ACFoam II, SOPRA-ISO s, ACFoam III, SOPRA-ISO+ s, EnergyGuard POLYSIO Insulation, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, H-Shield, SOPRA-ISO r, M-Shield, H-Shield CG, SOPRA-ISO+ r, Multi-Max FA-3, SOPRA-ISO x	DUOTACK	SOPRASMART Board 180 or SOPRASMART ISO HD 180 (for TA Base Ply) or SOPRASMART Board 180 Sanded or SOPRASMART ISO HD 180 Sanded (for no Base Ply)	DUOTACK	(Optional) SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-260.0
SELF-ADHERING BASE:									
R-8	Smooth- or granule-surface modified bitumen or BUR	Min. 1.4-inch ACFoam II, SOPRA-ISO s, ACFoam III, SOPRA-ISO+ s, EnergyGuard POLYSIO Insulation, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, H-Shield, SOPRA-ISO r, M-Shield, H-Shield CG, SOPRA-ISO+ r, Multi-Max FA-3, SOPRA-ISO x	DUOTACK	(Optional) Additional layers of base insulation	DUOTACK	SBS-SA	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-150.0
R-9	Smooth- or granule-surface modified bitumen or BUR	(Optional) Min. 1.5-inch ACFoam II, SOPRA-ISO s, ACFoam III, SOPRA-ISO+ s, EnergyGuard POLYSIO Insulation, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, H-Shield, SOPRA-ISO r, M-Shield, H-Shield CG, SOPRA-ISO+ r, Multi-Max FA-3, SOPRA-ISO x	DUOTACK	Min. 0.125-inch SOPRABOARD	DUOTACK	SBS-SA	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-150.0

TABLE 7A: RECOVER APPLICATIONS
SYSTEM TYPE A-1: BONDED INSULATION, BONDED ROOF COVER

System No.	Substrate (Notes 1 & 12)	Base Insulation Layer		Top Insulation Layer		Roof Cover (Note 15)			MDP (psf)
		Type	Attach	Type	Attach	Base Ply	Primer	LARS	
R-10	Smooth- or granule-surface modified bitumen or BUR	(Optional) Min. 2-inch ACFoam II, SOPRA-ISO s, ACFoam III, SOPRA-ISO+ s, EnergyGuard POLYSIO Insulation, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, H-Shield, SOPRA-ISO r, M-Shield, H-Shield CG, SOPRA-ISO+ r, Multi-Max FA-3, SOPRA-ISO x	DUOTACK	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	DUOTACK	SBS-SA	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-150.0

TABLE 7B: RE-ROOF (TEAR-OFF) OR RECOVER APPLICATIONS
SYSTEM TYPE E-2: MECHANICALLY ATTACHED SOPRAPHIX, BONDED ROOF COVER

System No.	Substrate (Notes 1 & 12)	Base Membrane			Roof Cover (Note 15)			MDP (psf)
		Type	Fasteners (Note 11)	Spacing	Ply	Primer	LARS	
R-11	Pre-existent min. 300 psi cellular lightweight insulating concrete over steel or structural concrete deck or poured gypsum or gypsum plank	SOPRAPHIX Base 613	Trufast Versa-Fast Fasteners & Plates to engage existing substrate (Field W/D \geq 193 lbf; see Note below)	Trufast Versa-Fast Plates spaced 9-inch o.c. within the 5-inch wide, heat-welded side laps. Minimum two (2) Versa-Fast Fasteners installed 180° into the holes of the Versa-Fast Plates, parallel to the width-direction of the sheet (see Note below).	(Optional) One or two SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-45.0
R-12	Pre-existent min. 360 psi aggregate or min. 320 psi cellular lightweight insulating concrete over structural concrete deck or poured gypsum or gypsum plank	SOPRAPHIX Base 613	Trufast Versa-Fast Fasteners & Plates to engage existing substrate (Field W/D \geq 226 lbf; see Note below)	Trufast Versa-Fast Plates spaced 9-inch o.c. within the 5-inch wide, heat-welded side laps. Minimum three (3) Versa-Fast Fasteners installed parallel to the width direction of the sheet into the holes of the Versa-Fast Plates (see Note below).	(Optional) One or two SBS-TA-F	(Optional) RS 222	ALSAN RS 230 system or ALSAN RS 260 LO system	-52.5

Note: The number of Versa-Fast Fasteners used in the Versa-Fast Plates may be increased from the minimum noted in order to achieve the required minimum field withdrawal performance noted for the system.

TABLE 7C: RECOVER APPLICATIONS
SYSTEM TYPE F: NON-INSULATED, BONDED ROOF COVER

System No.	Substrate (Notes 1 & 12)	Treatment	Roof Cover (Note 15)			MDP (psf)
			Base Coat	Reinforcement	Top Coat	
R-13	Existing granule surfaced SBS modified bitumen roof cover over structural concrete deck	Remove loose granules	RS 230 or RS 260 LO Field	ALSAN RS Fleece	RS 230 or RS 260 LO Field.	-217.5
R-14	Existing fully-adhered, PVC single ply roof cover over structural concrete deck	Clean with ALSAN RS Cleaner	RS 230 or RS 260 LO Field	ALSAN RS Fleece	RS 230 or RS 260 LO Field.	-217.5