

UL Solutions Evaluation Report

UL ER10167-01

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UL Category Code: **ULFB – MEMBRANE ROOFING**

CSI MasterFormat®

DIVISION: 07 00 00 THERMAL AND MOISTURE PROTECTION
Sub-level 2: 07 50 00 – Membrane Roofing
Sub-level 2: 07 54 00 – Thermoplastic Membrane Roofing
Sub-level 3: 07 54 23 – Thermoplastic-Polyolefin Roofing

Company:

Johns Manville
717 17th St.
Denver, CO 80202-3330 USA
www.jm.com

- 1. Subject:** **JM TPO 45, JM TPO 60, JM TPO 72, JM TPO 80**
JM TPO Reflexsa
JM TPO FB 115, JM TPO FB 135, JM TPO FB 150, JM TPO FB 175
JM TPO SA

2. Scope of evaluation

Compliance with the following codes:

- 2024, 2021, 2018, 2015, 2012, 2009, and 2006 *International Building Code®* (IBC)
- 2024, 2021, 2018, 2015, 2012, 2009, and 2006 *International Residential Code®* (IRC)

The products were evaluated for the following properties:

- Roofing Systems for Exterior Fire Exposure (UL790, ASTM E108)
- Roofing Systems, Wind Uplift Resistance (FM4474)
- Physical Properties (ASTM D6878, ASTM G155)
- Impact Resistance (FM4470)
- Foot Traffic Resistance (FM4470)

3. Referenced documents

- UL790 (ASTM E108), Standard Test Methods for Fire Tests of Roof Coverings
- ASTM D6878, Standard Specification for Thermoplastic Polyolefin Based Sheet Roofing
- ASTM G155, Standard Practice for Operating Xenon Arc Light Apparatus for Exposure of Non-Metallic Materials
- FM4470, Single-Ply, Polymer-Modified Bitumen Sheet, Built-Up Roof (BUR) and Liquid Applied Roof Assemblies for use in Class 1 and Noncombustible Roof Deck Construction
- FM4474, Evaluating the Simulated Wind Uplift Resistance of Roof Assemblies Using Static Positive and/or Negative Differential Pressures
- ICC ES Acceptance Criteria for Membrane Roof-Covering Systems (AC75)
- ICC ES Acceptance Criteria for Quality Documentation (AC10)

4. Uses

The JM TPO, JM TPO SA, JM TPO FB and JM TPO Reflexsa single-ply roof membranes are used as roof coverings in mechanically fastened or fully adhered Class A, B or C roof covering assemblies installed on combustible or non-combustible roof decks.

5. Product description

5.1 General

The JM TPO, JM TPO SA, JM TPO FB and JM TPO Reflexsa membrane roofing systems described in this report consist of single-ply roofing membranes, insulation where used, barrier board or slip sheet where used, flashing, mechanical fasteners and adhesives that are installed on a combustible or non-combustible roof deck.

The roofing assemblies incorporating the membranes comply with the following properties when installed as described in this report.

5.2 Fire Classification: Roofing assemblies covered under this report have been tested for fire classification Class A in accordance with UL790 or ASTM E108, as required by Section 1505.1 of the IBC and Section R902.1 of the IRC.

5.3 Wind Uplift Resistance: Roofing assemblies covered under this report have been tested for wind uplift resistance in accordance with FM4474, and therefore qualify for use under Roofing membranes

Section 1504.4.1 of the 2024 and 2021 IBC and Section 1504.3.1 of the 2018, 2015, 2012, 2009 and 2006 IBC.

The roofing assemblies shall be designed to resist the design wind load pressures for components and cladding in accordance with Section 1609 of the IBC and Section R905 of the IRC.

5.4 Physical Properties: The roofing membranes covered under this Report have been tested for physical properties in accordance with ASTM D6878 and ASTM G155, and therefore qualify for use under Section 1507.12.2 and Section 1504.7 of the 2024 and 2021 IBC, Section 1507.13.2 and Section 1504.6 of the 2018, 2015, 2012, 2009 and 2006 IBC, Section R905.12.2 of the 2024 IRC, and Section R905.13.2 of the 2021, 2018, 2015, 2012, 2009, and 2006 IRC.

5.5 Impact Test: The single-ply roofing membranes covered under this Report have been tested for impact resistance in accordance with "Resistance to Foot Traffic Test" in Section 4.6 of FM4470 and therefore qualify for use under Section 1504.8 of the 2021 IBC and Section 1504.7 of the 2024, 2018, 2015, 2012, 2009 and 2006 IBC.

5.6 Membranes:

5.6.1 JM TPO: Thermoplastic, polyester reinforced membrane manufactured using an ultraviolet-resistance thermoplastic polyolefin formulation.

5.6.2 JM TPO 45 is a nominal 45 mil membrane and available in a white weathering surface (grey or tan are special order). The membrane is supplied in 500-ft.², 600-ft.², 800-ft.², 1000-ft.² or 1200-ft.² rolls.

5.6.3 JM TPO 60 is a nominal 60 mil membrane and available in a white, grey or tan weathering surface. The membrane supplied in 500-ft.², 600-ft.², 800-ft.², 1000-ft.², or 1200-ft.² rolls.

5.6.4 JM TPO 72 is a nominal 72 mil membrane and available in a white, grey or tan weathering surface. The membrane is supplied in 750-ft.² rolls and is a special order item.

5.6.5 JM TPO 80 is a nominal 80 mil membrane and available in a white weathering surface (grey or tan are special order). The membrane is supplied in 375-ft.², 450-ft.², 600-ft.², 750-ft.² or 900-ft.² rolls.

5.6.6 Reflexsa is a nominal 60 mil membrane and available in a bright white weathering surface. The membrane is supplied in 500-ft.2 and 1000-ft.2 rolls and is a special order item.

5.6.7 JM TPO FB: Thermoplastic polyolefin membrane with a reinforced polyester fabric and integral polyester fleece backing.

5.6.8 JM TPO FB 115 is a nominal 60 mil membrane and available in white weathering surface (grey or tan are special order). The membrane is supplied in 1000-ft.² rolls.

5.6.9 JM TPO FB 135 is a nominal 80 mil membrane and available in white weathering surface (grey or tan are special order). The membrane is supplied in 500-ft.² rolls.

5.6.10 JM TPO FB 150 is a nominal 60 mil membrane and available in white weathering surface (grey or tan are special order). The membrane is supplied in 750-ft.² rolls.

5.6.11 JM TPO FB 175 is a nominal 80 mil membrane and available in white weathering surface (grey or tan are special order). The membrane is supplied in 500-ft.² rolls.

5.6.12 JM TPO SA is a nominal 60 mil. self-adhered membrane and available in white weathering surface (grey or tan are special order). The membrane is supplied in 1000-ft.² rolls.

5.7 Insulation:

Foam plastic insulation when used shall have a flame spread index of not more than 75 when tested at the maximum thickness intended for the use in accordance with UL723 or ASTM E84 to qualify for use under Section 2603.3 and Exception 3 of the 2024, 2021, 2018 and 2015 IBC or under Section R906.1 of the 2024 and 2021 IRC the foam plastic insulation when installed as part of a Class A, B or C roof-covering assembly, provided the assembly complies with UL1256. To qualify for use under Section 2603.3 and Exception 3 of the 2012, 2009 and 2006 IBC or Section R906.1 of the 2018, 2015, 2012 and 2009 IRC the foam plastic insulation when installed as part of a Class A, B or C roof-covering assembly, provided the assembly complies with FM4450 or UL1256. To qualify for use under Section 2603.4.1.5 of the 2024, 2021, 2018 and 2015 IBC, a thermal barrier is not required for foam plastic insulation that is part of a Class A, B or C roof-covering assembly, provided the assembly with foam plastic insulation complies with UL1256. To qualify for use under Section 2603.4.1.5 of the 2012, 2009 and 2006 IBC, a thermal barrier is not required for foam plastic insulation that is part of a Class A, B or C roof-covering assembly, provided the assembly with foam plastic insulation complies with FM4450 or UL1256.

5.8 Fasteners:

Fasteners used to mechanically fasten insulation and membranes to the roof deck, shall be corrosion resistant and shall be one of the fasteners identified in Note 2 in the Appendix of this Report.

5.9 Adhesive:

The adhesive used to adhere Johns Manville's TPO membranes to the insulation or roofing substrate shall be as noted in the Appendix of this Report.

5.10 Asphalt:

Hot roofing asphalt, when specified in the roofing assemblies shall conform to ASTM D312, Type IV.

6. Installation

Johns Manville single ply membranes shall be installed in accordance with the applicable code, this report and the manufacturer's published installation instructions. The membranes shall be installed in accordance with Section 1507.12 of the 2024 and 2021 IBC, Section 1507.13 of the 2018, 2015, 2012, 2009 and 2006 IBC or Section R905.12 of the 2024 IRC or Section R905.13 of the 2021, 2018, 2015, 2012, 2009, and 2006 IRC as applicable, except as noted in this report.

The manufacturer's published installation instructions shall be available at all times on the jobsite during installation.

The slope of the roof on which the membranes are installed shall be a minimum of 1/4:12 (2% slope) and shall not be more than the maximum slope indicated in the Tables in the Appendix of this Report.

Penetrations and terminations of the roof covering shall be flashed and made watertight in accordance with the requirements of the membrane manufacturer, Section 1503.2 of the IBC or Section R903.2 of the IRC and applicable code.

6.1 Fire Classified Roof Covering:

6.1.1 New Construction: Roof assemblies utilizing Johns Manville JM TPO 45, JM TPO 60, JM TPO 72, JM TPO 80, JM TPO SA, JM TPO Reflexsa, JM TPO FB 115, JM TPO FB 135, JM TPO FB 150 and JM TPO FB 175 thermoplastic single ply roof coverings are described in Product iQ® database for Roofing Systems, (TGFU), File R10167 and in Tables provided in the Appendix.

6.1.2 Reroofing: The existing roof shall be inspected in accordance with the provisions and limitations of Section 1512 of the 2024 and 2021 IBC, Section 1511 of the 2018 and 2015 IBC, Section 1510 of the 2012, 2009 and 2006 or Section R908 of the 2024, 2021, 2018 and 2015 IRC, Section R907 of the 2012, 2009 and 2006 IRC, as applicable. The existing roof deck shall be inspected to verify that the structure to be reroofed is structurally sound and adequate to support and secure the roofing membrane. Prior to installation of new roof coverings, inspection by and approval from the code official having jurisdiction is required.

Johns Manville JM TPO membranes may be installed over existing Classified Class A, B or C roofing systems as described in the Product iQ® database for Roofing Systems ([TGFU](#)), File R10167 under the heading Class A, B and C (TPO) for Maintenance and Repair for applicable coverage and details of the roof assemblies and in the Tables in the Appendix of this Report.

Class A, B or C roof coverings may be installed over existing classified roof assemblies under the following conditions without additional roof classification tests, provided the resulting classification is the lower of the new and existing roof classifications under the following conditions:

- New uninsulated roof coverings installed only over existing uninsulated assemblies.
- New insulated roof coverings installed over existing uninsulated assemblies only.

6.2 Wind Resistance:

6.2.1 New Construction: The allowable wind uplift pressures for the roof assemblies are noted in the Tables in this Report. Metal edge securement for all systems shall be designed in accordance with ANSI/SPRI ES-1, complying with Section 1504.6 of the 2024 and 2021 IBC, Section 1504.5 of the 2018, 2015, 2012, 2009 and 2006 IBC. For certifications of metal edge securement systems in accordance with ANSI/SPRI ES-1, See UL's Product iQ® database Roof-edge Systems, Metal for Use with Low-slope Roofing Systems ([TGJZ](#)).

6.2.2 Reroofing: Roof covering systems employing mechanical fasteners shall be qualified, to the satisfaction of the code official, as to the adequacy of fasteners penetrating through existing roof coverings into structural substrates. Since the composition and/or conditions of any particular underlying existing roofing materials may vary and reroofing material may vary, reroofing with adhered systems is outside the scope of this report.

7. Conditions of use

The Johns Manville single ply roofing membranes described in this Report comply with, or are suitable alternatives to, what is specified in those codes listed in Section 2 of this Report, subject to the following conditions:

7.1 Materials and methods of installation shall comply with this Report and the manufacturer's published installation instructions. In the event of a conflict between the installation instructions and this Report, this Report governs.

- 7.2** Johns Manville thermoplastic single ply roofing membranes shall be installed by professional roofing contractors trained and approved by the manufacturer.
- 7.3** See Product iQ® database Roofing Systems (TGFU) File R10167. Also refer to the Tables in the Appendix of this Report.
- 7.4** Above-deck thermal insulation board shall comply with the applicable standards listed in Table 1508.2 in Section 1508.2 of the IBC or Table R906.2 in Section R906 of the IRC.
- 7.5** Wind uplift pressures on any roof area, including edges and corner zones shall not exceed the allowable wind pressure for the roof covering installed in that particular area. Refer to the Tables in this Report.
- 7.6** For assemblies containing mechanical attachment for the perimeter and corner roof zones 2 and 3, the attachment density may be increased by a qualified design professional, as necessary, to meet the design pressure requirements in these areas.
- 7.7** The allowable wind uplift pressures listed in the Tables of this Report are for the roof systems only. The deck and framing to which the roofing system is attached shall be designed for the applicable components and cladding, wind loads in accordance with the applicable codes.
- 7.8** When application is over an existing roof, documentation of the wind uplift resistance of the composite roof construction shall be submitted to the code official.
- 7.9** The metal edge securement shall be designed and installed for wind loads in accordance with Chapter 16 of the IBC and test for resistance in accordance with Test Methods RE-1, RE-2 and RE-3 of ANSI/SPRI ES-1. The basic wind speed, V , shall be determined from Figures 1609.3(1) through 1609.3(12) of the 2024 and 2021 IBC or Figures 1609.3(1) through 1609.3(8) of the 2018 IBC as applicable. The ultimate wind speed, V_{ult} wind speed shall be determined from Figures 1609.3(1) through 1609.3(3) of the 2015 IBC or Figure 1609A, 1609B, or 1609C of the 2012 IBC as applicable. The basic wind speed shall be determined from Figure 1609 of the 2009 and 2006 IBC as applicable. The ultimate design wind speed shall be determined from Figures R301.2(2) and R301.2.1(1) of the 2024 and 2021 IRC or Figures R301.2(5)A and R301.2(5)B of the 2018 IRC or Figures R301.2(4)A and R301.2(4)B of the 2015 IRC. The basic wind speed shall be determined from Figures R301.2(4)A through R301.2(4)C of the 2012 IRC as applicable or Figure R301.2(4) of the 2009 and 2006 IRC.
- 7.10** The Johns Manville membranes covered under this report are produced under the UL LLC Classification and Follow-Up Service Program, which includes audits in accordance with quality elements of ICC-ES Acceptance Criteria for Quality Documentation, AC 10.
- 7.11** The Johns Manville membranes described in this evaluation report are identified by a marking bearing the report holder's name (Johns Manville), the plant identification, the product designation, the UL Classification Mark, and the evaluation report number UL ER10167-03. The validity of the evaluation report is contingent upon this identification appearing on the product or UL Classification Mark certificate.

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Manufacturer Name	City, State	Factory Identification
Johns Manville	Macon, GA	1023
Johns Manville	Plattsburgh, NY	1025
Johns Manville	South Gate, CA	1028

8. Supporting evidence

- 8.1** Data in accordance with ICC-ES Acceptance Criteria for Membrane Roof-Covering Systems, AC75.
- 8.2** Manufacturer's descriptive product literature, including installation instructions.
- 8.3** UL Classification Reports in accordance with UL790. See UL Product Certification Category under File R10167 for Roofing Systems (TGFU).
- 8.4** Data in accordance with FM4474.
- 8.5** Data in accordance with FM4470.
- 8.6** Data in accordance with ASTM D6878 and ASTM G155.
- 8.7** Documentation of quality system elements in accordance with ICC-ES Acceptance Criteria for Quality Documentation, AC10.

9. Identification

The Johns Manville thermoplastic single ply membranes described in this evaluation report are identified by a marking bearing the report holder's name (Johns Manville), the plant identification, the product designation, the UL Classification Mark, and the evaluation report number UL ER10167-03. The validity of the evaluation report is contingent upon this identification appearing on the product or UL Classification Mark certificate.

10. Use of UL Solutions Evaluation Report

- 10.1** The approval of building products, materials or systems is under the responsibility of the applicable authorities having jurisdiction.
- 10.2** UL Evaluation Reports shall not be used in any manner that implies an endorsement of the product, material or system by UL.
- 10.3** The current status of this report, as well as a complete directory of UL Evaluation Reports may be found at UL.com via our UL Products iQ® database:

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APPENDIX 1: ATTACHMENT REQUIREMENTS FOR WIND UPLIFT RESISTANCE

Table	Deck	Application	Type	Description
1A-1	Wood	New, Reroof (Tear-Off)	A-1	Adhered Insulation, Bonded Roof Cover
1A-2	Wood	New, Reroof (Tear-Off), Recover	C-1	Mechanically Attached Insulation, Bonded Roof Cover
1A-3	Wood	New, Reroof (Tear-Off), Recover	C-2	Mechanically Attached Insulation, Plate-Bonded Roof Cover
1B	Wood	New, Reroof (Tear-Off), Recover	D	Insulated, Mechanically Attached Roof Cover
2A	Steel or Conc.	New, Reroof (Tear-Off), Recover	B	Mechanically Attached Base Insulation, Bonded Top Insulation, Bonded Roof Cover
2B-1	Steel or Conc.	New, Reroof (Tear-Off), Recover	C-1	Mechanically Attached Insulation, Bonded Roof Cover
2B-2	Steel or Conc.	New, Reroof (Tear-Off), Recover	C-2	Mechanically Attached Insulation, Plate-Bonded or Strip-Bonded Roof Cover
2C	Steel or Conc.	New, Reroof (Tear-Off), Recover	D	Insulated, Mechanically Attached Roof Cover
3A-1	Steel	New, Reroof (Tear-Off)	A	Bonded Insulation, Bonded Roof Cover
3A-2	Steel	New, Reroof (Tear-Off)	B	Mechanically Attached Base Insulation, Bonded Top Insulation, Bonded Roof Cover
3B-1	Steel	New, Reroof (Tear-Off)	C-1	Mechanically Attached Insulation, Bonded Roof Cover
3B-2	Steel	New, Reroof (Tear-Off), Recover	C-2	Mechanically Attached Insulation, Plate-Bonded or Strip-Bonded Roof Cover
3B-3	Steel	New, Reroof (Tear-Off)	C-1	Mechanically Attached Insulation, Bonded Roof Cover
4A-1	Concrete	New, Reroof (Tear-Off), Recover	A-1a	Bonded Insulation, Bonded Roof Cover
4A-2	Concrete	New, Reroof (Tear-Off)	A-1b	Bonded Temp Roof, Bonded Insulation, Bonded Roof Cover
4B	Concrete	New, Reroof (Tear-Off)	C-1	Mechanically Attached Insulation, Bonded Roof Cover
4C	Concrete	New, Reroof (Tear-Off), Recover	D	Insulated, Mechanically Attached Roof Cover
5A	LWIC	New, Reroof (Tear-Off)	A	Bonded Insulation, Bonded Roof Cover
5B-1	LWIC	New, Reroof (Tear-Off)	E-1a	Non-Insulated, Mechanically Attached Base Sheet, Bonded Membrane
5B-2	LWIC	New, Reroof (Tear-Off), Recover	E-1b	Non-Insulated, Mechanically Attached or Welded Roof Cover
5C	LWIC	New, Reroof (Tear-Off)	F	Non-Insulated, Bonded Roof Cover
6A	Gypsum	New or Reroof (Tear-Off)	A	Bonded Insulation, Bonded Roof Cover
6B	Gypsum	New, Reroof (Tear-Off)	E	Non-Insulated, Mechanically Attached Base Sheet, Bonded Membrane
6C	Gypsum	New, Reroof (Tear-Off)	F	Non-Insulated, Bonded Roof Cover
7A	CWF	New, Reroof (Tear-Off)	A	Bonded Insulation, Bonded Roof Cover
7B	OSB	New, Reroof (Tear-Off)	D	Insulated, Mechanically Attached Roof Cover
8A	Various	Recover	A-1	Bonded Insulation, Bonded Roof Cover
8B	Various	Recover Over Existing Metal Roof	C-2	Mech. Attached Insulation, Plate-Bonded Roof Cover
8C	Various	Recover Over Existing Metal Roof	D	Insulated, Mechanically Attached Roof Cover
8D	Various	Recover	F	Non-Insulated, Bonded Roof Cover

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The following notes apply to the systems outlined herein:

1. Roof decks shall be in accordance with IBC or IRC requirements to the satisfaction of the AHJ. Wind load resistance of the roof deck shall be documented through proper codified and/or FBC Approval documentation. Wind load resistance of the roof deck shall be documented through proper codified Approval documentation.
2. Unless otherwise noted, fasteners and stress plates for insulation attachment shall be as follows. Fasteners shall be of sufficient length for the following engagements:
 - Steel Deck: UltraFast #12 or All Purpose #14 with UltraFast 3 in. Round Metal Plates or UltraFast Square Metal Plates. Minimum ¾-inch steel penetration, engage the top flute of the steel deck.
 - Concrete Deck: All Purpose #14 with UltraFast 3 in. Round Metal Plates or UltraFast Square Metal Plates or JM Structural Concrete Deck Fasteners and Plates. Minimum 1-inch embedment. Fasteners installed with a pilot hole in accordance with the fastener manufacturer's published installation instructions.
3. Minimum 200 psi, minimum 2-inch thick lightweight insulating concrete may be substituted for rigid insulation board for System Type D (mechanically attached membrane), whereby the membrane fasteners are installed through the LWIC to engage the structural steel or concrete deck. The structural deck shall be of equal or greater configuration to the steel and concrete deck listings.
4. Preliminary insulation attachment for System Type D = Minimum four fasteners per 4 x 8 ft board or minimum two fasteners per 4 x 4 ft board.
5. 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 20-25 lbs./sq.
➤ JM Two-Part Urethane Insulation Adhesive [JM TWO-PART UIA]:	Continuous 0.75-inch ribbons, 12-inch o.c.
➤ JM Two-Part Urethane Insulation Adhesive Canister [JM TWO-PART UIA-C]:	Continuous 0.75 to 1-inch ribbons, 12-inch o.c.
➤ JM Roofing System Urethane Adhesive (JM-RSUA):	Continuous 0.5 to 0.75-inch wide ribbons, 12-inch o.c.
➤ JM One-Step Foamable Adhesive [JM-OSFA]:	Continuous 0.75-inch ribbons, 12-inch o.c.

Note: When multiple layer(s) of insulation and/or coverboard are installed in ribbon-applied adhesive, adhesive ribbons shall be staggered from layer-to-layer a distance of one- half the ribbon spacing.

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

6. Bonded polyisocyanurate insulation boards shall be maximum 4 x 4 ft.
7. For System Type D, steel deck applications, the roof membrane shall be run with its length perpendicular to the steel deck flutes.
8. For Recover Applications using System Type D, the insulation is optional. Alternatively, min. 0.25-inch Invinsa, DensDeck, DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board or 0.5-inch ProtectoR HD may be used as a separator board, preliminarily attached prior to roof cover installation. The existing roof system shall be suitable for a recover application.

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9. For adhered membrane systems, side laps shall be minimum 2-inch wide sealed with min. 1.5-inch heat weld. Adhesive application rates are as follows:

Membrane	Adhesive	M	Rate
JM TPO	JM TPO Water Based Membrane Adhesive [JM TPO WB-MA]	C o	See systems below for rate (½ applied to substrate and ½ applied to membrane)
JM TPO	JM LVOC Membrane Adhesive (TPO & EPDM) [JM LVOC-MA]	C o	See systems below for rate (½ applied to substrate and ½ applied to membrane)
JM TPO	JM Membrane Bonding Adhesive (TPO & EPDM) [JM MBA]	C o	See systems below for rate (½ applied to substrate and ½ applied to membrane) or 50 to 90 ft ² /gal. Wet lay to
JM TPO	JM All Season Sprayable Bonding Adhesive [JM-ASSBA]		Spray applied 0.21 gal/sq with a 2 in. overlap on both the membrane and substrate (total 0.41 gal/sq)
JM TPO FB	JM Roofing System Urethane Adhesive (JM-RSUA)	W	0.5 to 1-inch wide ribbons spaced as noted in tables herein.
JM TPO FB	JM TPO Water Based Membrane Adhesive [JM TPO WB-MA]	W	See system below for rate
JM TPO FB	JM Two-Part Urethane Insulation Adhesive Canister [JM TWO-PART UIA-C1]		Splatter applied at a rate of 0.32 gal/100 ft ²
JM TPO FB	ASTM D 312, Type IV Hot Asphalt [HA]	W	Fully Adhered within the EVT range at a rate of 25-40
JM-TPO FB	JM All Season Sprayable Bonding Adhesive [JM-ASSBA]		Spray applied 0.21 gal/sq with a 2 in. overlap on both the membrane and substrate (total 0.41 gal/sq)

10. Deck Details Key:

Concrete Deck	Min. f'_c = 2,500 psi at 28 days
CWF Deck	Min. 2.5-inch thick Tectum I cementitious wood fiber panels bearing UL Certification Marking for Structural Cement-Fiber Units (CIYT)
Steel Deck	Min. 22 ga, Wide Rib Deck (Type WR) conforming to ANSI/SDI-RD1.0 & FBC; 0.5% Vented for LWIC applications only. The following nomenclature is used to further describe the As Tested condition.
$G<\#>$	Min. Grade <\#> of Steel Deck
$L<\#>$	Max. span of <\#> ft
Wood Deck	$T<\#>P$ Min. <\#>-inch thickness of the plywood
	$T<\#>O$ Min. <\#>-inch thickness of the OSB
	$L<\#>$ Max. span of <\#> inches
	$N<\#>$ Min. 0.113-inch diameter x 2-3/8-inch ring shank nails spaced <\#>-inch o.c. at all intermediate supports and at the perimeter of each board
	$16S<\#>$ Min. 16 ga. staples, 1.5-inch x 1-inch crown spaced <\#>-inch o.c. at all intermediate supports and at the perimeter of each board
	$10d<\#1>/<\#2>$ Joints staggered <\#1> feet attached <\#2>-inches o.c. using 10d ring shank nails at all supports
	$8d<\#1>/<\#2>$ Joints staggered <\#1> feet attached <\#2>-inches o.c. using 8d ring shank nails at all supports

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11. One of any of the following cover boards may be used in the tables below where "Cover Board" is listed as an insulation layer.

<i>Cover Board</i>	One layer of any of the following products: -Georgia-Pacific Gypum LLC DensDeck -Georgia-Pacific Gypsum LLC DensDeck Prime -JM Invinsa Roof Board -JM Invinsa FR Roof Board -JM ProtectoR HD -JM SECUROCK Glass-Mat Roof Board -JM SECUROCK Gypsum-Fiber Roof Board -National Gypsum Co. DEXcell FA Glass Mat Roof Board -National Gypsum Co. DEXcell Glass Mat Roof Board -National Gypsum Co. DEXcell Cement Roof Board
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12. One or more layers of any of the following insulations may be used in the tables below where "INSULATION" or "Polyisocyanurate Insulation" is listed as an insulation layer.

<i>INSULATION</i>	One of more layers in any combination of the following products: -ENRGY 3 -ENRGY 3 AGF -ENRGY 3 CGF -ENRGY 3 FR -SeparatoR FR (See Note 13) -Fesco Board -Fesco Foam -Invinsa Roof Board -Invinsa FR Roof Board -Retro-Fit Board -RetroPlus Roof Board -SECUROCK Glass-Mat Roof Board -SECUROCK Gypsum-Fiber Roof Board
<i>Polyisocyanurate Insulation</i>	ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, JM ISO 3, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF

13. Min 0.5" thick SeparatoR FR insulation can be added in mechanically fastened roof cover, recover assemblies in place of min. 0.5" thick ENRGY 3 FR.

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**TABLE 1A-1: WOOD DECKS - NEW CONSTRUCTION or REROOF (Tear-Off)
SYSTEM TYPE A-1: ADHERED INSULATION, BONDED ROOF COVER**

System No.	Deck (See Note 1 and 10)	Base Insulation Layer (See Note 12 and 13)		Top Insulation Layer		Roof Cover		Tested Wind Uplift (psf)	Fire Rating UL790/E108	
		Type	Attach	Type	Attach	Type	Attach		Class	Max Incline (in.)
W-1	Wood Deck (T7/16O, N24)	-	-	ProtectoR HD	JM-RSUA	JM TPO 45, 60 or 80	JM MBA, JM TPO WB-MA	90	A	1/4
							JMC LVOC- MA			1/2
W-2	Wood Deck (T7/16O, N24)	-	-	ProtectoR HD	JM-RSUA	JM FB 115 or 135	JM TWO- PART UIA-C1 or JM TPO WB-MA	90	A	1/2
W-3	Wood Deck (T7/16O, N24)	-	-	ProtectoR HD	JM-RSUA	JM TPO SA	Self-Adhered	90	A	1/4
W-4	Wood Deck (T7/16O, N24)	-	-	ProtectoR HD, 0.5 inch DensDeck Prime or DEXcell FA glass Mat Board	JM-RSUA applied in ribbons 6 in. o.c.	JM TPO 45, 60 or 80	JM MBA, JM TPO WB-MA, JM LVOC-MA, JM ASSBA	165	A	1/4
W-5	Wood Deck (T7/16O, N24)	-	-	ProtectoR HD	JM-RSUA in ribbons 6 in. o.c.	JM FB 115 or 135	JM TWO- PART UIA-C1 or JM TPO WB-MA	165	A	1/2
W-6	Wood Deck (T7/16O, N24)	-	-	ProtectoR HD	JM-RSUA in ribbons 6 in. o.c.	JM TPO SA	Self-Adhered	165	A	1/4

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TABLE 1A-2: WOOD DECKS - NEW CONSTRUCTION or REROOF (Tear-Off) or RECOVER SYSTEM TYPE C-1: MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER										
System No.	Deck (See Note 1 and 10)	Base Insulation Layer (See Note 12 and 13)	Top Insulation Layer			Roof Cover		Tested Wind Uplift (psf)	Fire Rating UL790/E108	
			Type	Fasteners	Attach	Type	Attach		Class	Max Incline (in.)
JM TPO APPLICATIONS:										
W-7	Wood Deck (T19/32P, N24)	(Optional) INSULATION	Min. 1.5-in ENRGY 3 CGF, or ENRGY 3 FR	UltraFast Fasteners and Plates	1 per 4 ft ²	JM TPO 45, 60 or 80	JM MBA or JM TPO WB-MA	75	A	1/4
							JM LVOC-MA			1/2
W-8	Wood Deck (T7/16O, N24)	(Optional) INSULATION	ProtectoR HD	JM All Purpose Fasteners with UltraFast Plate Metal Flat	1 per 2.13 ft ²	JM TPO 45, 60 or 80	JM MBA or JM TPO WB-MA	90	A	1/4
							JM LVOC-MA			1/2
W-9	Wood Deck (T19/32P, L24, 8d4/6)	(Optional) INSULATION	Min. 0.25-in. DensDeck	UltraFast #14 with UltraFast Metal Plates (Round or Square)	1 per 1.45 ft ²	JM TPO 45, 60 or 80	JM LVOC MA, 1.67 GAL/SQ.	90	A	1-1/2
W-10	Wood Deck (T19/32P, N24)	(Optional) INSULATION	Min. 1.5-in. ENRGY 3 CGF, or ENRGY 3 FR	UltraFast Fasteners with Dekfast PLT-R-3 Plates	1 per 2.67 ft ²	JM TPO 45, 60 or 80	JM MBA or JM TPO WB-MA	90	A	1/4
							JM LVOC-MA			1/2
W-11	Wood Deck (T19/32P, N24)	(Optional) INSULATION	Min. 1.5-in. ENRGY 3 CGF or ENRGY 3 FR	JM All Purpose Fasteners with UltraFast Plate Metal Flat\	1 per 1.78 ft ²	JM TPO 45, 60 or 80	JM MBA or JM TPO WB-	120	A	1/4
							JM LVOC-MA			1/2

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TABLE 1A-2: WOOD DECKS - NEW CONSTRUCTION or REROOF (Tear-Off) or RECOVER SYSTEM TYPE C-1: MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER										
System No.	Deck (See Note 1 and 10)	Base Insulation Layer (See Note 12 and 13)	Top Insulation Layer			Roof Cover		Tested Wind Uplift (psf)	Fire Rating UL790/E108	
			Type	Fasteners	Attach	Type	Attach		Class	Max Incline (in.)
JM TPO FB APPLICATIONS:										
W-12	Wood Deck (T19/32P, N24)	(Optional) INSULATION	Min. 1.5-in. ENRGY CGF, or ENRGY 3 FR	UltraFast Fasteners and Plates	1 per 4 ft ²	JM TPO FB 115 or 135	JM TWO-PART UIA-C1	75	A	1/2
W-13	Wood Deck (T7/16O, N24)	(Optional) INSULATION	ProtectoR HD	JM All Purpose Fasteners with UltraFast Plate Metal Flat	1 per 2.13 ft ²	JM TPO FB 115 or 135	JM TWO-PART UIA-C1 or JM TPO WB-MA	90	A	1/2
W-14	Wood Deck (T19/32P, N24)	(Optional) INSULATION	Min. 1.5-in. ENRGY 3, ENRGY 3 CGF, or ENRGY 3 FR	UltraFast Fasteners with Dekfast PLT-R-3 Plates	1 per 2.67 ft ²	JM TPO FB 115 or 135	JM TWO-PART UIA-C1	90	A	1/2
W-15	Wood Deck (T19/32P, N24)	(Optional) INSULATION	Min. 1.5-in. ENRGY 3 CGF or ENRGY 3 FR	JM All Purpose Fasteners with UltraFast Plate Metal Flat	1 per 1.78 ft ²	JM TPO FB 115 or 135	JM TWO-PART UIA-C1	120	A	1/2
JM TPO SA APPLICATIONS:										
W-16	Wood Deck (T19/32P, N24)	(Optional) INSULATION	Min. 1.5-in. ENRGY 3 CGF, or ENRGY 3 FR	UltraFast Fasteners and Plates	1 per 4 ft ²	JM TPO SA	Self-adhered	75	A	1/4
W-17	Wood Deck (T7/16O, N24)	(Optional) INSULATION	ProtectoR HD	JM All Purpose Fasteners with UltraFast Plate Metal Flat	1 per 2.13 ft ²	JM TPO SA	Self-adhered	90	A	1/4
W-18	Wood Deck (T19/32P, N24)	(Optional) INSULATION	Min. 1.5-in. ENRGY 3 CGF, or ENRGY 3 FR	UltraFast Fasteners with Dekfast PLT-R-3 Plates	1 per 2.67 ft ²	JM TPO SA	Self-adhered	90	A	1/4
W-19	Wood Deck (T19/32P, N24)	(Optional) INSULATION	Min. 1.5-in. ENRGY 3 CGF or ENRGY 3 FR	JM All Purpose Fasteners with UltraFast Plate Metal Flat	1 per 1.78 ft ²	JM TPO SA	Self-adhered	120	A	1/4

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**TABLE 1A-2: WOOD DECKS - NEW CONSTRUCTION or REROOF (Tear-Off) or RECOVER
SYSTEM TYPE C-2: MECHANICALLY ATTACHED INSULATION, PLATE BONDED ROOF COVER**

System No.	Deck (See Note 1 and 10)	Base Insulation Layer (See Note 12)	Top Insulation Layer			Roof Cover		Tested Wind Uplift (psf)	Fire Rating UL790/E108	
			Type (See Note 11)	Fasteners	Attach	Type	Attach		Class	Max Incline (in.)
W-20	Wood Deck (T7/16O or T15/32P, L24)	(Optional) INSULATION	Min. 0.25-in. Invinsa Roof Board or min. 3/8-in. SECUROCK Gypsum Fiber Roof Board or	Min. 2-in. JM All Purpose Fasteners and JM TPO RhinoPlates	Attached 24-in. o.c. in rows spaced 4-ft; Fasteners secured through the deck into the structural wood supports. Fasteners should penetrate min. 1.5-in. into the wood supports.	JM TPO 60 or 80	Induction Welded to JM TPO RhinoPlates	75	A	1
			Min. 0.5-in. SeparatoR CGF or ProtectoR HD						A	1/2
			min. 3-in. ENRGY 3						C	1/2
W-21	Wood Deck (T7/16O or T15/32P, L24)	(Optional) INSULATION	Cover Board	Min. 2-in. JM All Purpose Fasteners and JM TPO RhinoPlates	Attached max. 18-in. o.c. into every-other wood joist spaced 4-ft o.c. Fasteners secured through the deck into the structural wood supports. Fasteners should penetrate min. 1.5-in. into the wood supports (1 fastener per 6 ft) ²	JM TPO 60 or 80	Induction Welded to JM TPO RhinoPlates	90	A	1
W-22	Wood Deck (T15/32P, L24, N6)	(Optional) INSULATION	Min. 0.25" Invinsa Roof Board, or min. 0.25" SECUROCK Gypsum Fiber Roof Board	Min. 2" JM All Purpose Fasteners and JM TPO RhinoPlates	Attached max. 24-in. o.c. through deck into wood structural supports in row max. 24-in. o.c. Fasteners should penetrate min. 1.5-in. into the wood supports. (1 fastener per 4 ft ²)	JM TPO 45, 60, or 80	Induction Welded to JM TPO RhinoPlates	105	A	1
			Min. 0.5-in. SeparatoR CGF or ProtectoR HD							1/2
W-23	Wood Deck (T15/32P, L24, N6)	(Optional) INSULATION	Min. 0.25" Invinsa Roof Board, or min. 0.25" SECUROCK Gypsum Fiber Roof Board	Min. 2" JM All Purpose Fasteners and JM TPO RhinoPlates	Secured 9-in. o.c. through deck into wood structural supports in rows spaced max. 48-in. o.c. Fasteners should penetrate min. 1.5-in. into the wood supports.	JM TPO 45, 60, or 80	Induction Welded to JM TPO RhinoPlates	120	A	1
			Min. 0.5-in. SeparatoR CGF or ProtectoR HD							1/2
W-24	Wood Deck (T15/32P, L24, N6)	(Optional) INSULATION	Min. 0.25" Invinsa Roof Board, or min. 0.25" SECUROCK Gypsum Fiber Roof Board	Min. 2" JM All Purpose Fasteners and JM TPO RhinoPlates	Secured 6-in. o.c. through deck into wood structural supports in rows spaced 48-in. o.c. Fasteners should penetrate min. 1.5-in. into the wood supports.	JM TPO 45, 60, or 80	Induction Welded to JM TPO RhinoPlates	225	A	1
			Min. 0.5-in. SeparatoR CGF or ProtectoR HD							1/2

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**TABLE 1B: WOOD DECKS - NEW CONSTRUCTION, REROOF (Tear-Off) or RECOVER
SYSTEM TYPE D: INSULATED, MECHANICALLY ATTACHED ROOF COVER (STRESS PLATES)**

System No.	Deck (See Note 1)	Insulation (See Note 12)		Roof Cover			Tested Wind Uplift (psf)	Fire Rating UL790/E108	
		Type	Attachment	Membrane	Fasteners	Attachment		Class	Max Incline (in.)
W-25	Wood Deck (T7/16O, L24)	Min. 0.5-in. SeparatoR CGF	Prelim. Attached	JM TPO 45, 60, or 80	Four (4) Trufast Versa-Fast Fasteners in each Trufast Versa-Fast Metal Plates	Plates spaced 6-inch o.c. within 6-inch wide laps; fastener rows spaced 138-inch o.c. Laps sealed with 1.5-inch heat weld.	75	A	1/2
W-26	Wood Deck (T19/32P, L24, N6)	(Optional) INSULATION followed by min. 0.25-in. Invinsa FR Roof Board, or min. 3/8-in. SECUROCK Gypsum-Fiber Roof Board,	Prelim. Attached	JM TPO 45, 60, or 80	JM APB Plates and High Load Fasteners	Fasteners spaced 4" o.c. within 6" wide laps; fastener rows spaced 114" o.c. Laps sealed with 1.5" heat weld.	75	A	1
		Min. 0.5-in. SeparatoR CGF or ProtectoR HD, min. 1.5-in. ENRGY 3 CGF							1/2
W-27	Wood Deck (T19/32P, L24, 8d4/6)	(Optional) INSULATION followed by min. 1/2-in. ProtectoR HD,	Prelim. Attached	JM TPO 45, 60, or 80	All Purpose Fasteners and JM High Load Plates	Fasteners spaced 6" o.c. within 6" wide laps; fastener rows spaced 90" o.c. Laps sealed with 1.5" heat weld.	75	A	1/2
		1/2-in. ProtectoR HD FR							1
W-28	Wood Deck (T19/32P, N24)	(Optional) INSULATION followed by min. 0.25-in. Invinsa FR Roof Board, 1/2-in. or min. 3/8-in. SECUROCK Gypsum-Fiber Roof Board,	Prelim. Attached	JM TPO 45, 60 or 80	Three (3) Trufast Versa-Fast Fasteners in each Trufast Versa-Fast Metal Plates	Plates spaced 6-inch o.c. within 6-inch wide laps; fastener rows spaced 138-inch o.c. Laps sealed with 1.5-inch heat weld.	105	A	1
		Min. 0.5-in. SeparatoR CGF or ProtectoR HD, min. 1.5-in. ENRGY 3 CGF							1/2
W-29	Wood Deck (T19/32P, L24, N6)	(Optional) INSULATION followed by min. 3/8-in. SECUROCK Gypsum-Fiber Roof Board	Prelim. Attached	JM TPO 45, 60, or 80	JM High Load Fasteners and JM High Load Plates	Fasteners spaced 6-inch o.c. within 6-inch wide laps; fastener rows spaced 54-inch o.c. Laps sealed with 1.5-inch heat weld.	120	A	1
		Min. 0.5-in. ProtectoR HD or SeparatoR CGF							1/2
W-30	Wood Deck (T19/32P, L24, 10d2/4)	(Optional) INSULATION followed by Min. 0.25-in. DensDeck	UltraFast #12 with UltraFast Metal Plates attached 1 per 6.4 ft ²	JM TPO 45, 60 or 80	JM High Load Fasteners and Plates	Fasteners spaced 6-inch o.c. at 6-inch wide laps spaced 90-inch o.c.	120	A	2

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**TABLE 2A: STEEL or CONCRETE DECKS - NEW CONSTRUCTION or REROOF (Tear-Off) or RECOVER
SYSTEM TYPE B: MECHANICALLY ATTACHED BASE INSULATION, BONDED TOP INSULATION, BONDED ROOF COVER**

System No.	Deck (See Note 1)	Base Insulation Layer			Top Insulation Layer		Roof Cover		Tested Wind Uplift (psf)	Fire Rating UL790/E108	
		Type	Fastener	Attach	Type	Attach	Type	Attach		Class	Max Incline (in.)
JM TPO APPLICATIONS:											
SC-1	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi concrete	Min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, JM ISO 3, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF	See Note 2	1 per 2 ft ²	Min. 0.5-in. JM RetroPlus Board	JM TWO-PART UIA	JM TPO 45, 60, 72 or 80, JM TPO Reflexsa	JM LVOC MA, 1.67 gal/sq.	90	A	1/2
SC-2	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi concrete	Min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, JM ISO 3, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF	See Note 2	1 per 2 ft ²	Min. 0.5-inch JM RetroPlus Board	JM-RSUA	JM TPO 45, 60, 72 or 80, JM TPO Reflexsa	JM LVOC MA, 1.67 gal/sq.	90	A	1/2
SC-3	Min. 2,500 psi concrete (New, Existing, or Recover) or Grade 33 steel Deck	(optional) INSULATION followed by min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR	All Purpose Fasteners or JM UltraFast Fasteners (Steel Deck Only) and JM UltraFast Plates (Round or Square) or Structural Concrete Deck Fasteners (concrete deck only) with JM UltraFast Metal Plates (round)	1 per 2 ft ²	Min. 0.5-inch JM RetroPlus Board	JM TWO-PART UIA or JM TWO-PART UIA-C	JM TPO 45, 60, or 80	JM MBA, 1.66 gal/sq.	90	A	1/4
SC-4	Min. 2,500 psi concrete or G33 steel deck	(optional) INSULATION followed by min. 2-inch ENRGY 3, ENRGY 3 AGF,	Structural Concrete Deck Fasteners (Concrete Deck Only) with UltraFast 3" Round Metal Plates or UltraFast	1 per 4 ft ²	Min. 0.25-inch SECUROCK	JM-RSUA or JM TWO-PART UIA or	JM TPO 45 60, or 80	JM MBA, 1.66 gal/sq.	90	A	1-1/2

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**TABLE 2A: STEEL or CONCRETE DECKS - NEW CONSTRUCTION or REROOF (Tear-Off) or RECOVER
SYSTEM TYPE B: MECHANICALLY ATTACHED BASE INSULATION, BONDED TOP INSULATION, BONDED ROOF COVER**

System No.	Deck (See Note 1)	Base Insulation Layer			Top Insulation Layer		Roof Cover		Tested Wind Uplift (psf)	Fire Rating UL790/E108	
		Type	Fastener	Attach	Type	Attach	Type	Attach		Class	Max Incline (in.)
		ENRGY 3 CGF, ENRGY 3 FR	Fasteners (Steel Deck Only) or All Purpose Fasteners (concrete Deck only) with JM UltraFast Plates (Round and Square)		Gypsum Fiber Roof Board	JM TWO-PART UIA-C		JM LVOC MA, 1.66 gal/sq.			1/2
SC-5	Min. 2,500 psi concrete or G33, L6 steel deck	(optional) INSULATION followed by min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR	Structural Concrete Deck Fasteners (Concrete Deck Only) with UltraFast 3" Round Metal Plates or UltraFast Fasteners (Steel Deck Only) or All Purpose Fasteners (concrete Deck only) with JM UltraFast Plates (Round and Square)	1 per 1.33 ft ²	Min. 0.25-inch SECUROCK Gypsum Fiber Roof Board	JM-RSUA or JM TWO-PART UIA or JM TWO-PART UIA-C	JM TPO 45, 60, or 80	JM MBA, 1.66 gal/sq	90	A	1-1/2
								JM LVOC MA, 1.66 gal/sq.			1/2
SC-6	Min. 2,500 psi concrete or G33, L6 steel deck	(optional) INSULATION followed by min. 1.5-inch ENRGY 3	Structural Concrete Deck Fasteners (Concrete Deck Only) with UltraFast 3" Round Metal Plates or UltraFast Fasteners (Steel Deck Only) or All Purpose Fasteners (concrete Deck only) with JM UltraFast Plates (Round and Square)	1 per 1.78 ft ²	Min. 0.5-inch SECUROCK Gypsum Fiber Roof Board	JM-RSUA or JM TWO-PART UIA or JM TWO-PART UIA-C	JM TPO 45, 60, or 80	JM MBA, 1.66 gal/sq.	120	A	1-1/2
								JM LVOC MA, 1.66 gal/sq.			1/2
SC-7	Min. 2,500 psi concrete or G33, L6 steel deck	(optional) INSULATION followed by min. 2-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR	UltraFast Fasteners (Steel Deck Only), All Purpose Fasteners, (Steel Deck Only) with JM UltraFast Plates (Square or Round) or All Purpose Fasteners or Structural Concrete Fasteners (Concrete Deck Only) with JM UltraFast Plates (Round)	1 per 2 ft ²	Min. 0.5-inch SECUROCK Gypsum Fiber Roof Board	JM-RSUA or JM TWO-PART UIA or JM TWO-PART UIA-C	JM TPO 45, 60, or 80	JM TPO WB-MA, 0.59-0.77 gal/sq.	135	A	2
JM TPO FB APPLICATIONS:											
SC-8	Min. 2,500 psi concrete or G33 steel deck	(optional) INSULATION followed by min. 2-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR	Structural Concrete Deck Fasteners (Concrete Deck Only) with UltraFast 3" Round Metal Plates or	1 per 4 ft ²	Min. 0.25-inch SECUROCK	JM-RSUA or JM TWO-PART UIA or JM TWO-PART UIA-C	JM TPO FB 115 or 135	JM TPO WB-MA, 0.59-0.77 gal/sq.	90	A	2

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**TABLE 2A: STEEL or CONCRETE DECKS - NEW CONSTRUCTION or REROOF (Tear-Off) or RECOVER
SYSTEM TYPE B: MECHANICALLY ATTACHED BASE INSULATION, BONDED TOP INSULATION, BONDED ROOF COVER**

System No.	Deck (See Note 1)	Base Insulation Layer			Top Insulation Layer		Roof Cover		Tested Wind Uplift (psf)	Fire Rating UL790/E108	
		Type	Fastener	Attach	Type	Attach	Type	Attach		Class	Max Incline (in.)
			UltraFast Fasteners (Steel Deck Only) or All Purpose Fasteners (concrete Deck only) with JM UltraFast Plates (Round and Square)		Gypsum Fiber Roof Board			JM-RSUA, 12" o.c			1/2
SC-9 (Cont'd on next page)	Min. 2,500 psi concrete or G33, L6 steel deck	(optional) INSULATION followed by min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR	Structural Concrete Deck Fasteners (Concrete Deck Only) with UltraFast 3" Round Metal Plates or UltraFast Fasteners (Steel Deck Only) or All Purpose Fasteners (concrete Deck only) with JM UltraFast Plates (Round and Square)	1 per 1.33 ft ²	Min. 0.25-inch SECUROCK Gypsum Fiber Roof Board	JM-RSUA or JM TWO-PART UIA or JM TWO-PART UIA-C	JM TPO FB 115 or 135	JM TPO WB-MA, 0.59-0.77 gal/sq.	105	A	2
								JM-RSUA, 12" o.c			1/2
SC-10	Min. 2,500 psi concrete (New, Existing, or Recover) or G40, L6 Steel Deck (New, Existing, or Recover)	(optional) INSULATION followed by min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR	All Purpose Fasteners (Concrete Deck Only) or Structural Concrete Deck Fasteners (Concrete Deck Only) with UltraFast 3" Round Metal Plates or UltraFast Fasteners (Steel Deck Only) with JM UltraFast Plates (Round and Square)	1 per 1.45 ft ²	Min. 0.25-inch Invinsa or ProtectoR HD,	JM-RSUA or JM TWO-PART UIA or JM TWO-PART UIA-C	JM TPO FB 115 or 135	JM-RSUA, 12" o.c.	105	A	1/2
SC-11	Min. 2,500 psi concrete or G33, L6 steel deck	(optional) INSULATION followed by min. 1.5-inch ENRGY 3	Structural Concrete Deck Fasteners (Concrete Deck Only) with UltraFast 3" Round Metal Plates or UltraFast Fasteners (Steel Deck Only) or All Purpose Fasteners (Concrete Deck Only) with JM UltraFast Plates (Round and Square)	1 per 1.33 ft ²	Min. 0.25-inch SECUROCK Gypsum Fiber Roof Board	JM-RSUA, or JM TWO-PART UIA or JM TWO-PART UIA-C	JM TPO FB 150	Base Ply (Optional): Torch Adhered; Membrane: HA	105	A	1/4
							JM TPO FB 175			A	1/2

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**TABLE 2A: STEEL or CONCRETE DECKS - NEW CONSTRUCTION or REROOF (Tear-Off) or RECOVER
SYSTEM TYPE B: MECHANICALLY ATTACHED BASE INSULATION, BONDED TOP INSULATION, BONDED ROOF COVER**

System No.	Deck (See Note 1)	Base Insulation Layer			Top Insulation Layer		Roof Cover		Tested Wind Uplift (psf)	Fire Rating UL790/E108	
		Type	Fastener	Attach	Type	Attach	Type	Attach		Class	Max Incline (in.)
SC-12	Min. 2,500 psi concrete or G33, L6 steel deck	(optional) INSULATION followed by min. 1.5-inch ENRGY 3	Structural Concrete Deck Fasteners (Concrete Deck Only) with UltraFast 3" Round Metal Plates or UltraFast Fasteners (Steel Deck Only) or All Purpose Fasteners (Concrete Deck Only) with JM UltraFast Plates (Round and Square)	1 per 1.78 ft ²	Min. 0.5-inch SECUROCK Gypsum Fiber Roof Board	JM-RSUA, or JM TWO-PART UIA or JM TWO-PART UIA-C	JM TPO FB 115 or 135	JM TPO WB-MA, 0.59-0.77 gal/sq.	120	A	2
SC-13	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi concrete	Min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, JM ISO 3, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF	See Note 2	1 per 1 ft ²	Min. 0.5-inch Invinsa or SECUROCK Gypsum-Fiber Roof Board	JM-RSUA	JM TPO FB 115 or 135	JM-RSUA, 12-inch o.c.	135	A	1/2
SC-14	Min. 2,500 psi concrete or G33, L6 steel deck	(optional) INSULATION followed by min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR	Structural Concrete Deck Fasteners (Concrete Deck Only) with UltraFast 3" Round Metal Plates or UltraFast Fasteners (Steel Deck Only) or All Purpose Fasteners (Concrete Deck Only) with JM UltraFast Plates (Round and Square)	1 per 1 ft ²	Min. 0.5-inch SECUROCK Gypsum Fiber Roof Board or Invinsa	JM-RSUA or JM TWO-PART UIA or JM TWO-PART UIA-C; Applied 6-inch o.c.	JM TPO FB 115 or 135	JM-RSUA, 12" o.c.	135	A	1/2
SC-15	Min. 2,500 psi concrete or G80, L6 steel deck	(optional) INSULATION followed by min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR	All Purpose Fasteners (Concrete Deck Only) or Structural Concrete Deck Fasteners (Concrete Deck Only) with UltraFast 3" Round Metal Plates or UltraFast Fasteners (Steel Deck Only) with JM UltraFast Plates (Round and Square)	1 per 1.33 ft ²	Min. 0.5-inch SECUROCK Gypsum Fiber Roof Board	JM-RSUA or JM TWO-PART UIA or JM TWO-PART UIA-C	JM TPO FB 115 or 135	JM TPO WB-MA, 0.59-0.77 gal/sq.	135	A	2

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**TABLE 2A: STEEL or CONCRETE DECKS - NEW CONSTRUCTION or REROOF (Tear-Off) or RECOVER
SYSTEM TYPE B: MECHANICALLY ATTACHED BASE INSULATION, BONDED TOP INSULATION, BONDED ROOF COVER**

System No.	Deck (See Note 1)	Base Insulation Layer			Top Insulation Layer		Roof Cover		Tested Wind Uplift (psf)	Fire Rating UL790/E108	
		Type	Fastener	Attach	Type	Attach	Type	Attach		Class	Max Incline (in.)
JM TPO SA APPLICATIONS:											
SC-16	Min. 2,500 psi concrete or G33 steel deck	(optional) <i>INSULATION</i> followed by min. 2-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR	Structural Concrete Deck Fasteners (Concrete Deck Only) with UltraFast 3" Round Metal Plates or UltraFast Fasteners (Steel Deck Only) or All Purpose Fasteners (Concrete Deck Only) with JM UltraFast Plates (Round and Square)	1 per 4 ft ²	Min. 0.25-inch SECUROCK Gypsum Fiber Roof Board	JM-RSUA, or JM TWO-PART UIA or JM TWO-PART UIA-C	JM TPO SA	Self-Adhered	90	A	2
SC-17	Min. 2,500 psi concrete or G33, L6 steel deck	(optional) <i>INSULATION</i> followed by min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR	Structural Concrete Deck Fasteners (Concrete Deck Only) with UltraFast 3" Round Metal Plates or UltraFast Fasteners (Steel Deck Only) or All Purpose Fasteners (Concrete Deck Only) with JM UltraFast Plates (Round and Square)	1 per 1.33 ft ²	Min. 0.25-inch SECUROCK Gypsum Fiber Roof Board	JM-RSUA, or JM TWO-PART UIA or JM TWO-PART UIA-C	JM TPO SA	Self-Adhered	105	A	2
SC-18	Min. 2,500 psi concrete (New, Existing, or Recover) or G40, L6 Steel Deck (New, Existing, or Recover)	(optional) <i>INSULATION</i> followed by min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR	Structural Concrete Deck Fasteners (Concrete Deck Only) with UltraFast 3" Round Metal Plates or UltraFast Fasteners (Steel Deck Only) or All Purpose Fasteners (Concrete Deck Only) with JM UltraFast Plates (Round and Square)	1 per 1.45 ft ²	Min. 0.25-inch Invinsa or ProtectoR HD	JM-RSUA or JM TWO-PART UIA or JM TWO-PART UIA-C	JM TPO SA	Self-Adhered	105	A	1/4
SC-19	Min. 2,500 psi concrete or G33, L6 steel deck	(optional) <i>INSULATION</i> followed by min. 1.5-inch ENRGY 3	Structural Concrete Deck Fasteners (Concrete Deck Only) with UltraFast 3" Round Metal Plates or UltraFast Fasteners (Steel Deck Only) or All Purpose Fasteners (Concrete Deck Only) with JM UltraFast Plates (Round and Square)	1 per 1.78 ft ²	Min. 0.5-inch SECUROCK Gypsum Fiber Roof Board	JM-RSUA or JM TWO-PART UIA or JM TWO-PART UIA-C	JM TPO SA	Self-Adhered	120	A	2

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**TABLE 2A: STEEL or CONCRETE DECKS - NEW CONSTRUCTION or REROOF (Tear-Off) or RECOVER
SYSTEM TYPE B: MECHANICALLY ATTACHED BASE INSULATION, BONDED TOP INSULATION, BONDED ROOF COVER**

System No.	Deck (See Note 1)	Base Insulation Layer			Top Insulation Layer		Roof Cover		Tested Wind Uplift (psf)	Fire Rating UL790/E108	
		Type	Fastener	Attach	Type	Attach	Type	Attach		Class	Max Incline (in.)
SC-20	Min. 2,500 psi concrete or G80, L6 steel deck	(optional) <i>INSULATION</i> followed by min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR	All Purpose Fasteners (Concrete Deck Only) or Structural Concrete Deck Fasteners (Concrete Deck Only) with UltraFast 3" Round Metal Plates or UltraFast Fasteners (Steel Deck Only) with JM UltraFast Plates (Round and Square)	1 per 1.33 ft ²	Min. 0.5-inch SECUROCK Gypsum Fiber Roof Board	JM-RSUA or JM TWO-PART UIA or JM TWO-PART UIA-C	JM TPO SA	Self-Adhered	135	A	2

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TABLE 2B-1: STEEL or CONCRETE DECKS - NEW CONSTRUCTION, REROOF (Tear-Off) or RECOVER SYSTEM TYPE C-1: MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER										
System No.	Roof Deck	Base Insulation Layer	Top Insulation Layer			Roof Cover		Tested Wind uplift (psf)	Fire Rating UL790/E108	
			Type	Fasteners	Attach	Type	Attach		Class	Max Incline (in.)
JM TPO APPLICATIONS:										
SC-21	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi concrete	(Optional) One or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, JM ISO 3, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF, any combination, loose laid	Min. 1.75-inch Invinsa Foam	See Note 2	1 per 4 ft ²	JM TPO 45, 60, 72 or 80, JM TPO Reflexsa	JM LVOC MA, 1.67 gal/sq.	60	A	1/2
SC-22	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi concrete	One or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, JM ISO 3, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF, any combination, loose laid	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	See Note 2	1 per 2.67 ft ²	JM TPO 45, 60, 72 or 80, JM TPO Reflexsa	JM LVOC MA, 1.67 gal/sq.	75	A	1/2
SC-23	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi concrete	(Optional) One or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, JM ISO 3, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF, any combination, loose laid	Min. 2-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, JM ISO 3, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF	See Note 2	1 per 4 ft ²	JM TPO 45, 60, 72 or 80, JM TPO Reflexsa	JM LVOC MA, 1.67 gal/sq.	90	A	1/2

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TABLE 2B-1: STEEL or CONCRETE DECKS - NEW CONSTRUCTION, REROOF (Tear-Off) or RECOVER SYSTEM TYPE C-1: MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER

System No.	Roof Deck	Base Insulation Layer	Top Insulation Layer			Roof Cover		Tested Wind uplift (psf)	Fire Rating UL790/E108	
			Type	Fasteners	Attach	Type	Attach		Class	Max Incline (in.)
SC-24	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi concrete	(Optional) One or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, JM ISO 3, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF, any combination, loose laid	Min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, JM ISO 3, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF	See Note 2	1 per 2 ft ²	JM TPO 45, 60, 72 or 80, JM TPO Reflexsa	JM LVOC MA, 1.67 gal/sq.	90	A	1/2
SC-25	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi concrete	One or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, JM ISO 3, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF, any combination, loose laid	Min. 1.75-inch Invinsa Foam	See Note 2	1 per 2.9 ft ²	JM TPO 45, 60, 72 or 80, JM TPO Reflexsa	JM LVOC MA, 1.67 gal/sq.	90	A	1/2
SC-26	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi concrete	(Optional) min. 4 mil Polyethylene loose laid followed by min. 1.5" ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, JM ISO 3, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF, loose laid	0.5" ProtectoR HD	UltraFast Metal Plates (Square) and UltraFast Fasteners #12 or All Purpose Fasteners	1 per 2.9 ft ² or 1 per 4 ft ²	JM TPO 45, 60, 72, or 80	JM TPO WB-MA, 0.56 gal./sq. to substrate only or two sided application	90	A	3/4
							JM MBA, 1.67 gal./sq.		A	1/2
							JM LVOC-MA, 1.67 gal./sq.		A	1/2
SC-27	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi concrete	(Optional) JM Vapor Barrier SA, self-adhered to min. 0.5" SECUROCK Gypsum Fiber, DEXCell FA Glass Mat, or DEXCell Cement Roof Board (Optionally primed with JM SA Primer Low VOC) followed by	0.5" ProtectoR HD	UltraFast Metal Plates (Square) and UltraFast Fasteners #12 or All Purpose Fasteners	1 per 2.9 ft ² or 1 per 4 ft ²	JM TPO 45, 60, 72, or 80	JM TPO WB-MA, 0.56 gal./sq. to substrate only or two sided application	90	A	3/4

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TABLE 2B-1: STEEL or CONCRETE DECKS - NEW CONSTRUCTION, REROOF (Tear-Off) or RECOVER SYSTEM TYPE C-1: MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER

System No.	Roof Deck	Base Insulation Layer	Top Insulation Layer			Roof Cover		Tested Wind uplift (psf)	Fire Rating UL790/E108	
			Type	Fasteners	Attach	Type	Attach		Class	Max Incline (in.)
						JM MBA, 1.67 gal./sq.	JM LVOC-MA, 1.67 gal./sq.		A	1/2
SC-28	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi concrete	(Optional) DynaGrip Base SD/SA, self-adhered to min. 0.5" SECURock Gypsum Fiber, or DEXCell FA Glass Mat, followed by min. 1.5" ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, JM ISO 3, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF, loose laid	0.5" ProtectoR HD	UltraFast Metal Plates (Square) and UltraFast Fasteners #12 or All Purpose Fasteners	1 per 2.9 ft ² or 1 per 4 ft ²	JM TPO 45, 60, 72, or 80	JM TPO WB-MA, 0.56 gal./sq. to substrate only or two sided application	90	A	3/4
						JM MBA, 1.67 gal./sq.				
						JM LVOC-MA, 1.67 gal./sq.				
SC-29	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi concrete	(Optional) DynaBase HW, Torch adhered to min. 0.5" DEXCell FA Glass Mat, followed by min. 1.5" ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, JM ISO 3, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF, loose laid	0.5" ProtectoR HD	UltraFast Metal Plates (Square) and UltraFast Fasteners #12 or All Purpose Fasteners	1 per 2.9 ft ² or 1 per 4 ft ²	JM TPO 45, 60, 72, or 80	JM TPO WB-MA, 0.56 gal./sq. to substrate only or two sided application	90	A	3/4
						JM MBA, 1.67 gal./sq.				
						JM LVOC-MA, 1.67 gal./sq.				
SC-30	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi concrete	Min. 1.5" INSULATION	0.5" ProtectoR HD	JM UltraFast #12 (Steel Deck only) with UltraFast Metal Plates (Square) or Structural Concrete Fasteners (concrete deck only) or JM All Purpose Fasteners with UltraFast Metal Plates (Round), UltraFast Plus Plates, High Load Plates, or Extra High Load Plates, or JM	1 per 1.33 ft ²	JM TPO 45, 60, or 80	JM TPO WB-MA	135	A	1/2

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TABLE 2B-1: STEEL or CONCRETE DECKS - NEW CONSTRUCTION, REROOF (Tear-Off) or RECOVER SYSTEM TYPE C-1: MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER

System No.	Roof Deck	Base Insulation Layer	Top Insulation Layer			Roof Cover		Tested Wind uplift (psf)	Fire Rating UL790/E108	
			Type	Fasteners	Attach	Type	Attach		Class	Max Incline (in.)
				High Load Fasteners (Steel Deck only) with High Load Plates or Extra High Load Plates, or JM Extra High Load Fasteners (Steel Deck only) with Extra High Load Plates						
SC-31	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi concrete	One or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, JM ISO 3, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF, any combination, loose laid	Min. 0.625-inch SECUROCK Gypsum-Fiber Roof Board	See Note 2 (square plates)	1 per 4 ft ²	JM TPO 45, 60, 72 or 80, JM TPO Reflexsa	JM LVO MA, 1.67 gal/sq.	90	A	1/2
SC-32	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi concrete	(Optional) One or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, JM ISO 3, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF, any combination, loose laid	Min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, JM ISO 3, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF	See Note 2	1 per 1.78 ft ²	JM TPO 45, 60, 72 or 80, JM TPO Reflexsa	JM LVO MA, 1.67 gal/sq.	105	A	1/2
SC-33	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi concrete	One or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, JM ISO 3, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF, any combination, loose laid	Min. 7/16-inch APA rated OSB	See Note 2 (square plates)	1 per 1.78 ft ²	JM TPO 45, 60, 72 or 80, JM TPO Reflexsa	JM LVO MA, 1.67 gal/sq.	150	A	1/2

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TABLE 2B-1: STEEL or CONCRETE DECKS - NEW CONSTRUCTION, REROOF (Tear-Off) or RECOVER SYSTEM TYPE C-1: MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER

System No.	Roof Deck	Base Insulation Layer	Top Insulation Layer			Roof Cover		Tested Wind uplift (psf)	Fire Rating UL790/E108	
			Type	Fasteners	Attach	Type	Attach		Class	Max Incline (in.)
SC-34	Min. 22 ga., type B, Grade 33 steel	Min. 1.5 in. ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, JM ISO 3, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF, any combination, loose laid	Min. 0.5-inch SECUROCK Gypsum-Fiber Roof Board	See Note 2 (square plates)	1 per 1 ft ²	JM TPO 45, 60, 72 or 80	JM LVOC MA, 1.67 gal/sq.	270	A	1/2
JM TPO FB APPLICATIONS:										
SC-35	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi concrete	(Optional) min. 4 mil Polyethylene loose laid followed by min. 1.5" ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, JM ISO 3, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF, loose laid	0.5" ProtectoR HD	UltraFast Metal Plates (Square) and UltraFast Fasteners #12 or All Purpose Fasteners	1 per 2.9 ft ²	JM TPO FB 100, 115, or 135	JM TPO WB-MA, 0.56 gal./sq. to substrate only	75	A	3/4
SC-36	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi concrete	(Optional) JM Vapor Barrier SA, self-adhered to min. 0.5" SECUROCK Gypsum Fiber, DEXCell FA Glass Mat, or DEXCell Cement Roof Board (Optionally primed with JM SA Primer Low VOC) followed by min. 1.5" ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, JM ISO 3, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF, loose laid	0.5" ProtectoR HD	UltraFast Metal Plates (Square) and UltraFast Fasteners #12 or All Purpose Fasteners	1 per 2.9 ft ²	JM TPO FB 100, 115, or 135	JM TPO WB-MA, 0.56 gal./sq. to substrate only	75	A	3/4

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TABLE 2B-1: STEEL or CONCRETE DECKS - NEW CONSTRUCTION, REROOF (Tear-Off) or RECOVER SYSTEM TYPE C-1: MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER

System No.	Roof Deck	Base Insulation Layer	Top Insulation Layer			Roof Cover		Tested Wind uplift (psf)	Fire Rating UL790/E108	
			Type	Fasteners	Attach	Type	Attach		Class	Max Incline (in.)
SC-37	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi concrete	(Optional) DynaGrip Base SD/SA, self-adhered to min. 0.5" SECUROCK Gypsum Fiber, or DEXCell FA Glass Mat, followed by min. 1.5" ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, JM ISO 3, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF, loose laid	0.5" ProtectoR HD	UltraFast Metal Plates (Square) and UltraFast Fasteners #12 or All Purpose Fasteners	1 per 2.9 ft ²	JM TPO FB 100, 115, or 135	JM TPO WB-MA, 0.56 gal./sq. to substrate only	75	A	3/4
SC-38	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi concrete	(Optional) DynaBase HW, Torch adhered to min. 0.5" DEXCell FA Glass Mat, followed by min. 1.5" ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, JM ISO 3, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF, loose laid	0.5" ProtectoR HD	UltraFast Metal Plates (Square) and UltraFast Fasteners #12 or All Purpose Fasteners	1 per 2.9 ft ²	JM TPO FB 100, 115, or 135	JM TPO WB-MA, 0.56 gal./sq. to substrate only	75	A	3/4
SC-39	Min. 2,500 psi structural concrete or (not recover) G33 Steel Deck	(Optional) INSULATION	Min. 1.5" ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, or ENRGY 3 FR	JM All Purpose Fasteners or JM UltraFast Fasteners (steel deck only) and JM UltraFast Plates (Round or Square)	1 fastener per 2 ft ²	JM TPO FB 150 or 175	HA	90	A	1/4
SC-40	Min. 2,500 psi structural concrete or (not Recover) G33 Steel Deck	(Optional) INSULATION	Min. 1.5" ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, or ENRGY 3 FR	JM All Purpose Fasteners or JM UltraFast Fasteners (steel deck only) and JM UltraFast Plates (Square or Round)	1 fastener per 1.78 ft ²	JM TPO FB 150 or 175	HA	105	A	1/4

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TABLE 2B-1: STEEL or CONCRETE DECKS - NEW CONSTRUCTION, REROOF (Tear-Off) or RECOVER SYSTEM TYPE C-1: MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER

System No.	Roof Deck	Base Insulation Layer	Top Insulation Layer			Roof Cover		Tested Wind uplift (psf)	Fire Rating UL790/E108	
			Type	Fasteners	Attach	Type	Attach		Class	Max Incline (in.)
JM TPO SA APPLICATIONS:										
SC-41	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi concrete	(Optional) min. 4 mil Polyethylene loose laid followed by min. 1.5" ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, JM ISO 3, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF, loose laid	0.5-inch ProtectoR HD	UltraFast Metal Plates (Square) and UltraFast Fasteners #12 or All Purpose Fasteners	1 per 2.9 ft ²	JM TPO SA	Self-Adhered	90	A	1/2
SC-42	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi concrete	(Optional) JM Vapor Barrier SA, self-adhered to min. 0.5" SECUROCK Gypsum Fiber, DEXCell FA Glass Mat, or DEXCell Cement Roof Board (Optionally primed with JM SA Primer Low VOC) followed by min. 1.5" ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, JM ISO 3, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF, loose laid	0.5-inch ProtectoR HD	UltraFast Metal Plates (Square) and UltraFast Fasteners #12 or All Purpose Fasteners	1 per 2.9 ft ²	JM TPO SA	Self-Adhered	90	A	1/2
SC-43	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi concrete	(Optional) DynaGrip Base SD/SA, self-adhered to min. 0.5" SECUROCK Gypsum Fiber, or DEXCell FA Glass Mat, followed by min. 1.5" ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, JM ISO 3, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF, loose laid	0.5-inch ProtectoR HD	UltraFast Metal Plates (Square) and UltraFast Fasteners #12 or All Purpose Fasteners	1 per 2.9 ft ²	JM TPO SA	Self-Adhered	90	A	1/2

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TABLE 2B-1: STEEL or CONCRETE DECKS - NEW CONSTRUCTION, REROOF (Tear-Off) or RECOVER SYSTEM TYPE C-1: MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER

System No.	Roof Deck	Base Insulation Layer	Top Insulation Layer			Roof Cover		Tested Wind uplift (psf)	Fire Rating UL790/E108	
			Type	Fasteners	Attach	Type	Attach		Class	Max Incline (in.)
SC-44	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi concrete	(Optional) DynaBase HW, Torch adhered to min. 0.5" DEXCell FA Glass Mat, followed by min. 1.5" ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, JM ISO 3, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF, loose laid	0.5-inch ProtectoR HD	UltraFast Metal Plates (Square) and UltraFast Fasteners #12 or All Purpose Fasteners	1 per 2.9 ft ²	JM TPO SA	Self-Adhered	90	A	1/2

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

System No.	Deck (See Note 1)	Insulation Layer	Attachment		Roof Cover / Adhesive	Tested Wind Uplift (psf)	Fire Rating UL790/E108	
			Fasteners	Spacing			Class	Max Incline (in.)
SC-45	Min. 22 ga., type B, Grade 33 steel at max. 6 ft span or min. 2,500 psi concrete	Min. 1.5-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, JM ISO 3, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF, any combination	JM TPO RhinoPlates and High Load Fasteners	18-inch o.c. at rows spaced 60-inch o.c.	JM TPO 45, 60, 72 or 80, JM TPO Reflexsa bonded to JM TPO RhinoPlates with Rhinobond Plate bonding tool at 6 seconds per plate so tool reaches 400°F and cooled with RhinoBond Cooling Clamps. Laps sealed with 1.5-inch heat weld	75	A	3/4
SC-46	Min. 22 ga., type B, Grade 33 steel at max. 6 ft span or min. 2,500 psi concrete	Min. 1.5-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, JM ISO 3, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF, any combination	JM TPO RhinoPlates and High Load Fasteners	6-inch o.c. at rows spaced 120-inch o.c.	JM TPO 45, 60, 72 or 80, JM TPO Reflexsa bonded to JM TPO RhinoPlates with Rhinobond Plate bonding tool at 6 seconds per plate so tool reaches 400°F and cooled with RhinoBond Cooling Clamps. Laps sealed with 1.5-inch heat weld.	90	A	3/4
SC-47	Min. 22 ga., type B, Grade 33 steel at max. 6 ft span or min. 2,500 psi concrete	Min. 1.5-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, JM ISO 3, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF, any combination	JM TPO RhinoPlates and High Load Fasteners	12-inch o.c. at rows spaced 60-inch o.c.	JM TPO 45, 60, 72 or 80, JM TPO Reflexsa bonded to JM TPO RhinoPlates with Rhinobond Plate bonding tool at 6 seconds per plate so tool reaches 400°F and cooled with RhinoBond Cooling Clamps. Laps sealed with 1.5-inch heat weld.	105	A	3/4
SC-48	Min. 22 ga., type B, Grade 33 steel at max. 6 ft span or min. 2,500 psi concrete	Min. 1.5-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, JM ISO 3, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF, any combination	JM TPO RhinoPlates and High Load Fasteners	6-inch o.c. at rows spaced 60-inch o.c.	JM TPO 45, 60, 72 or 80, JM TPO Reflexsa bonded to JM TPO RhinoPlates with Rhinobond Plate bonding tool at 6 seconds per plate so tool reaches 400°F and cooled with RhinoBond Cooling Clamps. Laps sealed with 1.5-inch heat weld.	210	A	3/4
SC-49	Min. 22 ga., type B, Grade 33 steel at max. 6 ft span or min. 2,500 psi concrete	Min. 1.5-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, JM ISO 3, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF, any combination	JM TPO RhinoPlates and High Load Fasteners	1 per 5.33 ft ² (6 parts per 4 x 8 ft board)	JM TPO 45, 60, 72 or 80, JM TPO Reflexsa bonded to JM TPO RhinoPlates with Rhinobond Plate bonding tool at 6 seconds per plate so tool reaches 400°F and cooled with RhinoBond Cooling Clamps. Laps sealed with 1.5-inch heat weld.	90	A	3/4
SC-50	Min. 22 ga., type B, Grade 33 steel at max. 6 ft span or min. 2,500 psi concrete	Min. 1.5-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, JM ISO 3, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF, any combination	JM TPO RhinoPlates and High Load Fasteners	1 per 4 ft ² (8 parts per 4 x 8 ft board)	JM TPO 45, 60, 72 or 80, JM TPO Reflexsa bonded to JM TPO RhinoPlates with Rhinobond Plate bonding tool at 6 seconds per plate so tool reaches 400°F and cooled with RhinoBond Cooling Clamps. Laps sealed with 1.5-inch heat weld.	135	A	3/4
SC-51 (Cont'd on next page)	Min. 22 ga., type B, Grade 33 steel at max. 6 ft span	Min. 1.5-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, JM ISO 3, ValuTherm, ValuTherm AGF, ValuTherm	JM TPO 10" RPS fastened with JM High Load Seam	Fasteners 6-inch o.c. through RPS at rows spaced 114-inch o.c.	JM TPO 45, 60, 72 or 80, JM TPO Reflexsa underside is primed with Primer 240 or ADCO SPC-3 Primer and walked-in over the self-adhering RPS.	105	A	3/4

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

System No.	Deck (See Note 1)	Insulation Layer	Attachment		Roof Cover / Adhesive	Tested Wind Uplift (psf)	Fire Rating UL790/E108	
			Fasteners	Spacing			Class	Max Incline (in.)
	or min. 2,500 psi concrete	CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF, any combination	Plates and High Load Fasteners		Laps sealed with 1.5-inch heat weld.			
SC-52	Min. 2,500 psi concrete or G33, L6 Steel Deck	(optional) <i>INSULATION</i> followed by min. 1-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, or ENRGY 3 FR followed by min. 0.25" Invinsa Roof Board, 1" ENRGY 3, or 0.25" SECUROCK Gypsum Fiber Roof Board	JM TPO RhinoPlates and JM All Purpose Fasteners (Concrete Deck only) or High Load Fasteners (Steel Deck Only)	1 per 2.67 ft ²	JM TPO 60 or 80 induction welded to JM TPO RhinoPlates	150	A	3/4
SC-53	(not Recover) Min. 2,500 psi concrete or (not Recover) G80, L6 Steel Deck	(optional) <i>INSULATION</i> followed by min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, or ENRGY 3 FR	JM TPO RhinoPlates and JM All Purpose Fasteners (Concrete Deck only) or High Load Fasteners (Steel Deck Only)	24-inch by 16-inch grid pattern	JM TPO 60 or 80 induction welded to JM TPO RhinoPlates	180	A	3/4
SC-54	Min. 2,500 psi concrete or G33, L6 Steel Deck	(optional) <i>INSULATION</i> followed by min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, or ENRGY 3 FR followed by min. 0.25" Invinsa Roof Board, 1" ENRGY 3, or 0.25" SECUROCK Gypsum Fiber Roof Board	JM TPO RhinoPlates and JM All Purpose Fasteners (Concrete Deck only) or High Load Fasteners (Steel Deck Only)	1 per 2.13 ft ²	JM TPO 60 or 80 induction welded to JM TPO RhinoPlates	180	A	3/4

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

System No.	Deck (See Note 1)	Insulation		Roof Cover			Tested Wind Uplift (psf)	Fire Rating UL790/E108	
		Type	Attach	Membrane	Fasteners	Attachment		Class	Max Incline (in.)
SYSTEMS OVER MIN. GRADE 33 STEEL DECK OR STRUCTURAL CONCRETE (AS NOTED)									
SC-55	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	Min. 1.5-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, JM ISO 3, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF, any combination	Prelim. attached	JM TPO 45, 60, 72 or 80, JM TPO Reflexsa (8 ft sheet)	High Load Fasteners (steel or concrete) or JM Structural Concrete Deck Fasteners (concrete only) with High Load Seam Plates	12-inch o.c. within 6-inch wide laps spaced 90-inch o.c. Laps sealed with 1.5-inch heat weld outside lap	60	A	3/4
SC-56	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	Min. 1.5-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, JM ISO 3, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF, any combination	Prelim. attached	JM TPO 45, 60, 72 or 80, JM TPO Reflexsa (10 ft sheet)	High Load Fasteners (steel or concrete) or JM Structural Concrete Deck Fasteners (concrete only) with High Load Seam Plates	12-inch o.c. within 6-inch wide laps spaced 114-inch o.c. Laps sealed with 1.5-inch heat weld outside lap	60	A	3/4
SC-57	Min. 22 ga., type B, Grade 33 steel	Min. 1.5-inch <i>INSULATION</i> followed by (Optional) Cover Board	Prelim. attached	JM TPO 60 or 80	JM High Load Fasteners and High Load Plates	12-inch o.c. within 6-inch wide laps spaced 138-inch o.c. Laps sealed with 1.5-inch heat weld outside lap	60	A	3/4
SC-58	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	Min. 1.5-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, JM ISO 3, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF, any combination	Prelim. attached	JM TPO 45, 60, 72 or 80, JM TPO Reflexsa (10 ft sheet)	Extra High Load Fasteners (steel only) or JM Structural Concrete Deck Fasteners (concrete only) with Extra High Load Seam Plates	12-inch o.c. within 6-inch wide laps spaced 114-inch o.c. Laps sealed with 1.5-inch heat weld outside lap	75	A	3/4
SC-59	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	Min. 1.5-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, JM ISO 3, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF, any combination	Prelim. attached	JM TPO 45, 60, 72 or 80, JM TPO Reflexsa (8 ft sheet)	Extra High Load Fasteners (steel only) or JM Structural Concrete Deck Fasteners (concrete only) with Extra High Load Seam Plates	12-inch o.c. within 6-inch wide laps spaced 90-inch o.c. Laps sealed with 1.5-inch heat weld outside lap	90	A	3/4
SC-60	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	Min. 1.5-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, JM ISO 3, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF, any combination	Prelim. attached	JM TPO 45, 60, 72 or 80, JM TPO Reflexsa (10 ft sheet)	High Load Fasteners (steel or concrete) or JM Structural Concrete Deck Fasteners (concrete only) with High Load Seam Plates	6-inch o.c. within 6-inch wide laps spaced 114-inch o.c. Laps sealed with 1.5-inch heat weld outside lap	90	A	3/4

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

System No.	Deck (See Note 1)	Insulation		Roof Cover			Tested Wind Uplift (psf)	Fire Rating UL790/E108	
		Type	Attach	Membrane	Fasteners	Attachment		Class	Max Incline (in.)
SC-61 (Con't on next page)	Min. 22 ga., type B, Grade 33 steel	Min. 1.5-inch <i>INSULATION</i> followed by (Optional) Cover Board	Prelim. attached	JM TPO 60 or 80	JM High Load Fasteners with JM High Load Plates or JM Extra High Load Fastener with JM Extra High Load Plate	12-inch o.c. within 6-inch wide laps spaced 66-inch o.c. Laps sealed with 1.5-inch heat weld outside lap	90	A	3/4
SC-62	Min. 22 ga., type B, Grade 33 steel	Min. 1.5-inch <i>INSULATION</i> followed by (Optional) Cover Board	Prelim. attached	JM TPO 60 or 80	JM High Load Fasteners with JM High Load Plates or JM Extra High Load Fastener with JM Extra High Load Plate	6-inch o.c. within 6-inch wide laps spaced 138-inch o.c. Laps sealed with 1.5-inch heat weld outside lap	120	A	3/4
SC-63	Min. 22 ga., type B, Grade 33 steel	Min. 1.5-inch <i>INSULATION</i> followed by (Optional) Cover Board	Prelim. attached	JM TPO 45, 60, or 80	JM High Load Fasteners and High Load Plates	6-inch o.c. within 6-inch wide laps spaced 114-inch o.c. Laps sealed with 1.5-inch heat weld outside lap	120	A	3/4
SC-64	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	Min. 1.5-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, JM ISO 3, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF, any combination	Prelim. attached	JM TPO 45, 60, 72 or 80, JM TPO Reflexsa (8 ft sheet)	High Load Fasteners (steel or concrete) or JM Structural Concrete Deck Fasteners (concrete only) with High Load Seam Plates	6-inch o.c. within 6-inch wide laps spaced 90-inch o.c. Laps sealed with 1.5-inch heat weld outside lap	120	A	3/4
SC-65	Min. 22 ga., type B, Grade 33 steel	Min. 1.5-inch <i>INSULATION</i> followed by (Optional) Cover Board	Prelim. attached	JM TPO 60 or 80	JM Extra High Load Fastener with JM Extra High Load Plate	6-inch o.c. within 6-inch wide laps spaced 138-inch o.c. Laps sealed with 1.5-inch heat weld outside lap	135	A	3/4
SC-66	Min. 22 ga., type B, Grade 33 steel	Min. 1.5-inch <i>INSULATION</i> followed by (Optional) Cover Board	Prelim. attached	JM TPO 60 or 80	JM High Load Fasteners with JM High Load Plates	6-inch o.c. within 6-inch wide laps spaced 138-inch o.c. Laps sealed with 1.5-inch heat weld outside lap	135	A	3/4
SC-67	Min. 22 ga., type B, Grade 33 steel	Min. 1.5-inch <i>INSULATION</i> followed by (Optional) Cover Board	Prelim. attached	JM TPO 45, 60, or 80	JM High Load Fasteners and High Load Plates	6-inch o.c. within 6-inch wide laps spaced 90-inch o.c. Laps sealed with 1.5-inch heat weld outside lap	150	A	3/4

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

System No.	Deck (See Note 1)	Insulation		Roof Cover			Tested Wind Uplift (psf)	Fire Rating UL790/E108	
		Type	Attach	Membrane	Fasteners	Attachment		Class	Max Incline (in.)
SC-68	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi structural concrete	Min. 2-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, JM ISO 3, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF, any combination	Prelim. attached	JM TPO 45, 60, 72 or 80, JM TPO Reflexsa (5 ft sheet)	High Load Fasteners (steel or concrete) or JM Structural Concrete Deck Fasteners (concrete only) with High Load Seam Plates	6-inch o.c. within 6-inch wide laps spaced 54-inch o.c. Laps sealed with 1.5-inch heat weld outside lap	165	A	3/4
SC-69 (Con't on next page)	Min. 22 ga., type B, Grade 40 steel	Min. 1.5-inch <i>INSULATION</i> followed by (Optional) Cover Board	Prelim. attached	JM TPO 60 or 80	JM High Load Fasteners with JM High Load Plates or JM Extra High Load Fastener with JM Extra High Load Plate	6-inch o.c. within 6-inch wide laps spaced 66-inch o.c. Laps sealed with 1.5-inch heat weld outside lap	210	A	3/4
SC-70	Min. 22 ga., type B, Grade 40 steel	Min. 1.5-inch <i>INSULATION</i> followed by (Optional) Cover Board	Prelim. Attached	JM TPO 60 or 80	JM High Load Fasteners and High Load Plates	12-inch o.c. within 6-inch wide laps spaced 66-inch o.c. Laps sealed with 1.5-inch heat weld outside lap	210	A	3/4
SYSTEMS OVER MIN. GRADE 80 STEEL DECK OR STRUCTURAL CONCRETE (AS NOTED)									
SC-71	(New Deck Only) Steel Deck (G80, L6)	(Optional) min. 4 mil Polyethylene loose laid Or (Optional) JM Vapor Barrier SA, self-adhered to min. 0.5" SECUROCK Gypsum Fiber, DEXCell FA Glass Mat, or DEXCell Cement Roof Board (Optionally primed with JM SA Primer Low VOC) Or (Optional) DynaGrip Base SD/SA, self-adhered to min. 0.5" SECUROCK Gypsum Fiber, or DEXCell FA Glass Mat Or (Optional) DynaBase HW, Torch adhered to min. 0.5" DEXCell FA Glass Mat Followed by min. 1.5" <i>INSULATION</i> followed by (Optional) Cover Board	Prelim. attached	JM TPO 45, 60, 72, or 80	JM High Load Fasteners or JM Extra High Load Fastener with JM High Load Seam Plates	12-inch o.c. within 6-inch wide laps spaced 138-inch o.c. Laps sealed with 1.5-inch heat weld outside lap	60	A	3/4-in. with ENRGY3/polyisocyanurate 1-in. with Invinsa/Invinsa FR 1-1/2-in. with RetroPlus, Invinsa Foam/Invinsa Foam FR 2-in. with DensDeck, DEXCell, and SECUROCK
SC-72	(Recover Deck only) Steel Deck (G80, L6)	Followed by min. 1-inch <i>INSULATION</i> or	Prelim. attached	JM TPO 45, 60, 72, or 80	JM High Load Fasteners or JM Extra High Load Fastener with JM High Load Seam Plates	12-inch o.c. within 6-inch wide laps spaced 138-inch o.c. Laps sealed	60	A	3/4-in. with ENRGY3/polyisocyanurate 1-in. with Invinsa/Invinsa FR

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

System No.	Deck (See Note 1)	Insulation		Roof Cover			Tested Wind Uplift (psf)	Fire Rating UL790/E108	
		Type	Attach	Membrane	Fasteners	Attachment		Class	Max Incline (in.)
		(Optional) <i>INSULATION</i> followed by <i>Cover Board</i> (max. 1-inch thick total thickness)				with 1.5-inch heat weld outside lap			1-1/2-in. with RetroPlus, Invinsa Foam/Invinsa Foam FR 2 in. with DensDeck, DEXCell, and SECUROCK
SC-73	Min. 22 ga., type B, Grade 80 steel or min. 2,500 psi structural concrete	Min. 1.5-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, JM ISO 3, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF, any combination	Prelim. attached	JM TPO 45, 60, 72 or 80, JM TPO Reflexsa (8 ft sheet)	High Load Fasteners (steel or concrete) or JM Structural Concrete Deck Fasteners (concrete only) with High Load Seam Plates	12-inch o.c. within 6-inch wide laps spaced 90-inch o.c. Laps sealed with 1.5-inch heat weld outside lap	75	A	3/4
SC-74	Min. 22 ga., type B, Grade 80 steel or min. 2,500 psi structural concrete	Min. 1.5-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, JM ISO 3, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF, any combination	Prelim. attached	JM TPO 45, 60, 72 or 80, JM TPO Reflexsa (10 ft sheet)	High Load Fasteners (steel or concrete) or JM Structural Concrete Deck Fasteners (concrete only) with High Load Seam Plates	12-inch o.c. within 6-inch wide laps spaced 114-inch o.c. Laps sealed with 1.5-inch heat weld outside lap	75	A	3/4
SC-75	Steel Deck (G80, L6)	(optional) <i>INSULATION</i> followed by min. 1-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR, followed by (Optional) <i>Cover Board</i>	Prelim. attached	JM TPO 60 or 80	JM High Load Fasteners and High Load Plates	12-inch o.c. within 6-inch wide laps spaced 90-inch o.c. Laps sealed with 1.5-inch heat weld outside lap	75	A	3/4
SC-76	Min. 22 ga., type N, Grade 80 steel	Min. 1.5-inch <i>INSULATION</i> followed by (Optional) <i>Cover Board</i>	Prelim. Secured	JM TPO 60 or 80	JM High Load Fasteners and High Load Plates	8-inch o.c. within 6-inch wide laps spaced 138-inch o.c. Laps sealed with 1.5-inch heat weld outside lap	90	A	3/4
SC-77	Steel Deck (G80, L6)	(optional) <i>INSULATION</i> followed by min. 1-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR followed by (Optional) <i>Cover Board</i>	Prelim. Secured	JM TPO 45, 60, or 80	JM High Load Fasteners and High Load Plus Plates	12-inch o.c. within 6-inch wide laps spaced 90-inch o.c. Laps sealed with 1.5-inch heat weld outside lap	90	A	3/4
SC-78	Min. 22 ga., type B, Grade	Min. 1.5-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF,	Prelim. attached	JM TPO 45, 60, 72 or 80,	Extra High Load Fasteners (steel only)	12-inch o.c. within 6-inch wide laps	90	A	3/4

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

System No.	Deck (See Note 1)	Insulation		Roof Cover			Tested Wind Uplift (psf)	Fire Rating UL790/E108	
		Type	Attach	Membrane	Fasteners	Attachment		Class	Max Incline (in.)
	80 steel or min. 2,500 psi structural concrete	ENRGY 3 CGF, ENRGY 3 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, JM ISO 3, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF, any combination		JM TPO Reflexsa (8 ft sheet)	or JM Structural Concrete Deck Fasteners (concrete only) with Extra High Load Seam Plates	spaced 90-inch o.c. Laps sealed with 1.5-inch heat weld outside lap			
SC-79	Min. 22 ga., type B, Grade 80 steel or min. 2,500 psi structural concrete	Min. 1.5-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, JM ISO 3, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF, any combination	Prelim. attached	JM TPO 45, 60, 72 or 80, JM TPO Reflexsa (10 ft sheet)	High Load Fasteners (steel or concrete) or JM Structural Concrete Deck Fasteners (concrete only) with High Load Seam Plates	6-inch o.c. within 6-inch wide laps spaced 114-inch o.c. Laps sealed with 1.5-inch heat weld outside lap	90	A	3/4
SC-80	Min. 22 ga., type B, Grade 80 steel or min. 2,500 psi structural concrete	Min. 1.5-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, JM ISO 3, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF, any combination	Prelim. attached	JM TPO 45, 60, 72 or 80, JM TPO Reflexsa (10 ft sheet)	Extra High Load Fasteners (steel only) or JM Structural Concrete Deck Fasteners (concrete only) with Extra High Load Seam Plates	12-inch o.c. within 6-inch wide laps spaced 114-inch o.c. Laps sealed with 1.5-inch heat weld outside lap	90	A	3/4
SC-81	Min. 22 ga., type B, Grade 80 steel or min. 2,500 psi structural concrete	Min. 1.5-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, JM ISO 3, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF, any combination	Prelim. attached	JM TPO 45, 60, 72 or 80, JM TPO Reflexsa (10 ft sheet)	Extra High Load Fasteners (steel only) or JM Structural Concrete Deck Fasteners (concrete only) with Extra High Load Seam Plates	6-inch o.c. within 6-inch wide laps spaced 114-inch o.c. Laps sealed with 1.5-inch heat weld outside lap	105	A	3/4
SC-82	Min. 22 ga., type B, Grade 80 steel or min. 2,500 psi structural concrete	Min. 1.5-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, JM ISO 3, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF, any combination	Prelim. attached	JM TPO 45, 60, 72 or 80, JM TPO Reflexsa (8 ft sheet)	High Load Fasteners (steel or concrete) or JM Structural Concrete Deck Fasteners (concrete only) with High Load Seam Plates	6-inch o.c. within 6-inch wide laps spaced 90-inch o.c. Laps sealed with 1.5-inch heat weld outside lap	105	A	3/4

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

System No.	Deck (See Note 1)	Insulation		Roof Cover			Tested Wind Uplift (psf)	Fire Rating UL790/E108	
		Type	Attach	Membrane	Fasteners	Attachment		Class	Max Incline (in.)
SC-83	Min. 22 ga., type N, Grade 80 steel	Min. 1.5-inch <i>INSULATION</i> followed by (Optional) Cover Board	Prelim. attached	JM TPO 60 or 80	JM High Load Fasteners and High Load Plates	8-inch o.c. within 6-inch wide laps spaced 90-inch o.c. Laps sealed with 1.5-inch heat weld outside lap	120	A	3/4

**TABLE 3A-1: STEEL DECKS - NEW CONSTRUCTION or REROOF (Tear-Off)
SYSTEM TYPE A-1A: BONDED INSULATION, BONDED ROOF COVER**

System No.	Roof Deck	Vapor Barrier	Base Insulation Layer		Top Insulation Layer		Roof Cover		Tested Wind Uplift (psf)	Fire Rating UL790/E108	
			Type	Attach	Type	Attach	Type	Attach		Class	Max Incline (in.)
JM TPO APPLICATIONS:											
S-1	Min. 22 ga., type B, Grade 33 steel	(Optional) JM Vapor Barrier SA Or JM Vapor Barrier SAR	Min. 1.5-inch ENRGY 3 or ENRGY 3 CGF	RSUA spaced 12-inch o.c.	ProtectoR HD, SECUROCK or DensDeck Prime	JM TWO-PART UIA, OFSA, or RSUA spaced 12" o.c.	JM TPO 45, 60, or 80	JM MBA, 1.1 gal/sq., JM LVOC-MA, 1.10 gal/sq., or JM ASSBA spray applied at 0.21 gal/sq (0.09 L/m ²) with a 2 in. (51 mm) overlap on both the membrane and substrate [total 0.41 gal/sq (0.17 L/m ²)].	90	A	1/2
S-2	Min. 22 ga., type B, Grade 33 steel	JM Vapor Barrier SAR	Min. 1.5-inch ENRGY 3 or ENRGY 3 CGF	RSUA spaced 6-inch o.c.	ProtectoR HD, SECUROCK or DensDeck Prime	JM TWO-PART UIA, OFSA, or RSUA spaced 6 o.c.	JM TPO 45, 60, or 80	JM MBA, 1.1 gal/sq., JM LVOC-MA, 1.10 gal/sq., or JM ASSBA spray applied at 0.21 gal/sq (0.09 L/m ²) with a 2 in. (51 mm) overlap on both the membrane and substrate [total 0.41 gal/sq (0.17 L/m ²)].	105	A	1/2
S-3	Min. 22 ga., type B, Grade 33 steel	None	Min. 1.5-inch ENRGY 3 or ENRGY 3 CGF	RSUA spaced 6-inch o.c.	ProtectoR HD, SECUROCK or DensDeck Prime	JM TWO-PART UIA, OFSA, or RSUA spaced 6" o.c.	JM TPO 45, 60, or 80	JM MBA, 1.1 gal/sq., JM LVOC-MA, 1.10 gal/sq., or JM ASSBA spray applied at 0.21 gal/sq (0.09 L/m ²) with a 2 in. (51 mm) overlap on both the membrane and substrate [total 0.41 gal/sq (0.17 L/m ²)].	165	A	1/2
S-4	Min. 22 ga., type B, Grade 33 steel	Min. 0.5-inch DensDeck Prime with DF or TF at 1 fastener per 4ft ² over Optional Vapor Barrier	Min. 1.5-inch ENRGY 3	JM TWO-PART UIA, OFSA, or RSUA applied 12" o.c.	(Optional) ProtectoR HD, SECUROCK or DensDeck Prime	JM TWO-PART UIA, OFSA, or RSUA applied 12" o.c.	JM TPO 45, 60, or 80	JM MBA, 1.1 gal/sq., JM LVOC-MA, 1.10 gal/sq., or JM ASSBA spray applied at 0.21 gal/sq (0.09 L/m ²) with a 2 in. (51 mm) overlap on both the membrane and substrate [total 0.41 gal/sq (0.17 L/m ²)].	90	A	1/2

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TABLE 3A-1: STEEL DECKS - NEW CONSTRUCTION or REROOF (Tear-Off) SYSTEM TYPE A-1A: BONDED INSULATION, BONDED ROOF COVER											
System No.	Roof Deck	Vapor Barrier	Base Insulation Layer		Top Insulation Layer		Roof Cover		Tested Wind Uplift (psf)	Fire Rating UL790/E108	
			Type	Attach	Type	Attach	Type	Attach		Class	Max Incline (in.)
JM TPO FB APPLICATIONS:											
S-5	Min. 22 ga., type B, Grade 33 steel	(Optional) JM Vapor Barrier SA	Min. 1.5-inch ENRGY 3 or ENRGY 3 CGF	RSUA spaced 12-inch o.c.	ProtectoR HD, SECUROCK or DensDeck Prime	JM TWO-PART UIA, OFSA, or RSUA spaced 12" o.c.	JM TPO FB 115 or 135	JM TWO-PART UIA-C1	90	A	1/2
S-6	Min. 22 ga., type B, Grade 33 steel	JM Vapor Barrier JM Vapor SAR	Min. 1.5-inch ENRGY 3 or ENRGY 3 CGF	RSUA spaced 6-inch o.c.	ProtectoR HD, SECUROCK or DensDeck Prime	JM TWO-PART UIA, OFSA, or RSUA spaced 6 o.c.	JM TPO FB 115 or 135	JM TWO-PART UIA-C1	105	A	1/2
S-7	Min. 22 ga., type B, Grade 33 steel	-	Min. 1.5-inch ENRGY 3 or ENRGY 3 CGF	RSUA spaced 6-inch o.c.	ProtectoR HD, SECUROCK or DensDeck Prime	JM TWO-PART UIA, OFSA, or RSUA spaced 6 o.c.	JM TPO FB 115 or 135	JM TWO-PART UIA-C1	165	A	1/2
S-8	Min. 22 ga., type B, Grade 33 steel	Min. 0.5-inch DensDeck Prime with DF or TF at 1 fastener per 4ft ² over Optional Vapor Barrier	Min. 1.5-inch ENRGY 3	JM TWO-PART UIA, OFSA, or RSUA applied 12" o.c.	(Optional) ProtectoR HD, SECUROCK or DensDeck Prime	JM TWO-PART UIA, OFSA, or RSUA applied 12" o.c.	JM TPO FB 115 or 135	JM TWO-PART UIA-C1	90	A	1/2
JM TPO SA APPLICATIONS:											
S-9	Min. 22 ga., type B, Grade 33 steel	(Optional) JM Vapor Barrier SA	Min. 1.5-inch ENRGY 3 or ENRGY 3 CGF	RSUA spaced 12-inch o.c.	ProtectoR HD, SECUROCK or DensDeck Prime	JM TWO-PART UIA, OFSA, or RSUA spaced 12" o.c.	JM TPO SA	Self-Adhered	90	A	1/4-in. for ProtectoRHD 2-in. for SECUROCK or DensDeck Prime
S-10	Min. 22 ga., type B, Grade 33 steel	JM Vapor Barrier SAR	Min. 1.5-inch ENRGY 3 or ENRGY 3 CGF	RSUA spaced 6 inch o.c.	ProtectoR HD, SECUROCK or DensDeck Prime	JM TWO-PART UIA, OFSA, or RSUA spaced 6 o.c.	JM TPO SA	Self-Adhered	105	A	1/4

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**TABLE 3A-1: STEEL DECKS - NEW CONSTRUCTION or REROOF (Tear-Off)
SYSTEM TYPE A-1A: BONDED INSULATION, BONDED ROOF COVER**

System No.	Roof Deck	Vapor Barrier	Base Insulation Layer		Top Insulation Layer		Roof Cover		Tested Wind Uplift (psf)	Fire Rating UL790/E108	
			Type	Attach	Type	Attach	Type	Attach		Class	Max Incline (in.)
S-11	Min. 22 ga., type B, Grade 33 steel	-	Min. 1.5-inch ENRGY 3 or ENRGY 3 CGF	RSUA spaced 6 inch o.c.	ProtectoR HD, SECURock or DensDeck Prime	JM TWO-PART UIA, OFSA, or RSUA spaced 6 o.c.	JM TPO SA	Self-Adhered	165	A	1/4
S-12	Min. 22 ga., type B, Grade 33 steel	Min. 0.5-inch DensDeck Prime with DF or TF at 1 fastener per 4ft ² over Optional Vapor Barrier	Min. 1.5-inch ENRGY 3	JM TWO-PART UIA, OFSA, or RSUA applied 12" o.c.	(Optional) ProtectoR HD, SECURock or DensDeck Prime	JM TWO-PART UIA, OFSA, or RSUA applied 12" o.c.	JM TPO SA	Self-Adhered	90	A	1/4

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**TABLE 3A-2: STEEL DECKS - NEW CONSTRUCTION or REROOF (Tear-Off)
SYSTEM TYPE B: MECHANICALLY ATTACHED BASE INSULATION, BONDED TOP INSULATION, BONDED ROOF COVER**

System No.	Deck (See Note 1 and 10)	Thermal Barrier and Vapor Retarder	Base Insulation Layer			Top Insulation Layer		Roof Cover		Tested Wind Uplift (psf)	Fire Rating UL790/E108	
			Type	Fastener	Attach	Type	Attach	Type	Attach		Class	Max Incline (in.)
JM TPO FB APPLICATIONS:												
S-13	Steel Deck (G80, L6)	Min. 0.5-inch DEXcell FA; UltraFast Fasteners and UltraFast Plates (Square or Round) secured 1 fastener per 1.0ft ² ; followed by JM Vapor Barrier SA self-adhered over SA Primer	min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR	JM-RSUA or JM TWO-PART UIA or JM TWO PART UIA-C	6" o.c.	Min. 0.5" DEXcell FA	JM-RSUA; 6" o.c.	JM TPO FB 115 or 135	JM-RSUA; 6" o.c.	165	A	1/2

**TABLE 3B-1: STEEL DECKS - NEW CONSTRUCTION, REROOF (Tear-Off)
SYSTEM TYPE C-1: MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER**

System No.	Roof Deck	Base Insulation Layer	Top Insulation Layer			Roof Cover		Tested Wind Uplift (psf)	Fire Rating UL790/E108	
			Type	Fasteners	Attach	Type	Attach		Class	Max Incline (in.)
JM TPO APPLICATIONS:										
S-14	Grade 33 Steel Deck	(Optional) INSULATION	Min. 2" Fesco Foam	JM UltraFast Fasteners and JM UltraFast Plates (Square or Round)	1 fastener per 5.3 ft ²	JM TPO 45, 60, or 80	JM MBA, 50 to 90 ft ² /gal., or JM LVOC-MA 1.10 gal/sq	75	A	1/2
S-15	Grade 33 Steel Deck	(Optional) INSULATION	Min. 2" Invinsa Foam	JM UltraFast Fasteners and JM UltraFast Plates (Square or Round)	1 fastener per 5.3 ft ²	JM TPO 45, 60, or 80	JM MBA, 50 to 90 ft ² /gal., JM TPO WB-MA, 1.2-1.6 gal/sq. or JM LVOC-MA 1.10 gal/sq	90	A	1/2
S-16	Min. 22 ga., type N, Grade 80 steel	(Optional) INSULATION	Min. 2-inch ENRGY 3, ENRGY 3 CGF, ENRGY 3 FR	JM UltraFast Fasteners and JM UltraFast Plates (Square or Round)	1 fastener per 2 ft ²	JM TPO 45, 60, or 80	JM MBA, 50 to 90 ft ² /gal. JM LVOC-MA 1.26-1.42 gal/sq	90	A	1/2

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**TABLE 3B-1: STEEL DECKS - NEW CONSTRUCTION, REROOF (Tear-Off)
SYSTEM TYPE C-1: MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER**

System No.	Roof Deck	Base Insulation Layer	Top Insulation Layer			Roof Cover		Tested Wind Uplift (psf)	Fire Rating UL790/E108	
			Type	Fasteners	Attach	Type	Attach		Class	Max Incline (in.)
S-17	Steel Deck (G33, L6)	(Optional) INSULATION	Min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR	JM UltraFast Fasteners or All Purpose Fasteners and JM UltraFast Plates Square Metal Plates	1 fastener per 1.78 ft ²	JM TPO 45, 60, or 80	JM LVOC-MA 1.26-1.42 gal/sq or JM MBA, 1.10 gal/sq.	120	A	1/2
S-18	Min. 22 ga., type B, Grade 33 steel (New)	(Optional) min. 4 mil Polyethylene loose laid Or (Optional) JM Vapor Barrier SA, self-adhered to min. 0.5" SECUROCK Gypsum Fiber, DEXCell FA Glass Mat, or DEXCell Cement Roof Board (Optionally primed with JM SA Primer Low VOC) Or (Optional) DynaGrip Base SD/SA, self-adhered to min. 0.5" SECUROCK Gypsum Fiber, or DEXCell FA Glass Mat Or (Optional) DynaBase HW, Torch adhered to min. 0.5" DEXCell FA Glass Mat	Min. 2 in. ENRGY 3, ENRGY 3.E, ValuTherm, JM ISO 3, R-Panel, Tapered ENERGY 3, Tapered ENERGY 3.E, Tapered ValuTherm, JM ISO 3 Tapered, Tapered R-Panel, ENRGY 3 25 PSI, ENRGY 3.E 25 PSI, ValuTherm 25 PSI, R-Panel 25 PSI, Tapered ENERGY 3 25 PSI, Tapered ValuTherm 25 PSI, Tapered R-Panel 25 PSI, ENRGY 3 CGF, ValuTherm CGF, Tapered ENERGY 3 CGF, Tapered ValuTherm CGF, ENRGY 3 25 PSI CGF, ValuTherm 25 PSI CGF, Tapered ENERGY 3 25 PSI CGF, Tapered ValuTherm 25 PSI CGF, ENRGY 3 FR, Tapered ENERGY 3 FR, ENRGY 3 25 PSI FR, Tapered ENERGY 3 25 PSI FR	UltraFast Metal Plates (Round) and UltraFast Fasteners #12 or All Purpose Fasteners	1 per 1.6 ft ²	JM TPO 45, 60, 72, or 80	JM TPO WB-MA, 0.63 gal./sq. to substrate only or two sided application or JM MBA, 1.10 gal./sq.	120	A	1/2
							JM LVOC MA, 1.10 gal./sq.		A	1/2

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**TABLE 3B-1: STEEL DECKS - NEW CONSTRUCTION, REROOF (Tear-Off)
SYSTEM TYPE C-1: MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER**

System No.	Roof Deck	Base Insulation Layer	Top Insulation Layer			Roof Cover		Tested Wind Uplift (psf)	Fire Rating UL790/E108	
			Type	Fasteners	Attach	Type	Attach		Class	Max Incline (in.)
S-19	Min. 22 ga., type B, Grade 33 steel (New)	(Optional) min. 4 mil Polyethylene loose laid Or (Optional) JM Vapor Barrier SA, self-adhered to min. 0.5" SECUROCK Gypsum Fiber, DEXCell FA Glass Mat, or DEXCell Cement Roof Board (Optionally primed with JM SA Primer Low VOC) Or (Optional) DynaGrip Base SD/SA, self-adhered to min. 0.5" SECUROCK Gypsum Fiber, or DEXCell FA Glass Mat Or (Optional) DynaBase HW, Torch adhered to min. 0.5" DEXCell FA Glass Mat	Min. 2" ENRGY 3 C1, ENRGY 3 C1 CGF, Tapered ENRGY 3 C1, Tapered ENRGY 3 C1 CGF	UltraFast Metal Plates (Round) and UltraFast Fasteners #12 or All Purpose Fasteners	1 per 1.6 ft ²	JM TPO 45, 60, 72, or 80	JM TPO WB-MA, 0.63 gal./sq. to substrate only or two sided application or JM MBA, 1.10 gal./sq. Or JM LVOC MA, 1.10 gal./sq.	120	A	1/2
S-20	Min. 22 ga., type B, Grade 33 steel (New)	(optional) INSULATION	Min. 2" ENRGY 3 CGF or ENRGY 3 FR	UltraFast Metal Plates (Square) or UltraFast Plus Metal Plates (Square) and UltraFast #12 Hex Head, UltraFast #12 Phillips Head, All Purpose Fasteners, or High Load Fasteners	1 per 2 ft ²	JM TPO 45, 60, 72, or 80	JM TPO WB-MA, 0.63 gal./sq. to substrate only or two sided application	135	A	1/2
S-21	Min. 22 ga., type B, Grade 33 steel (New)	(Optional) min. 4 mil Polyethylene loose laid Or (Optional) JM Vapor Barrier SA, self-adhered to min. 0.5" SECUROCK Gypsum Fiber, DEXCell FA Glass Mat, or DEXCell Cement Roof Board (Optionally primed with JM SA Primer Low VOC) Or (Optional) DynaGrip Base SD/SA, self-adhered to min. 0.5"	Min. 2" Invinsa Foam	UltraFast Metal Plates (Square) and UltraFast Fasteners #12 or All Purpose Fasteners	1 per 2 ft ²	JM TPO 45, 60, 72, or 80	JM TPO WB-MA, 0.56 gal./sq. to substrate only or two sided application	150	A	3/4
							JM MBA, 1.67 gal./sq.		A	1/2

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TABLE 3B-1: STEEL DECKS - NEW CONSTRUCTION, REROOF (Tear-Off) SYSTEM TYPE C-1: MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER										
System No.	Roof Deck	Base Insulation Layer	Top Insulation Layer			Roof Cover		Tested Wind Uplift (psf)	Fire Rating UL790/E108	
			Type	Fasteners	Attach	Type	Attach		Class	Max Incline (in.)
							JM LVOC MA, 1.67 gal./sq.		A	1/2
S-22	Min. 22 ga., type B, Grade 33 steel (New)	(Optional) min. 4 mil Polyethylene loose laid Or (Optional) JM Vapor Barrier SA, self-adhered to min. 0.5" SECUROCK Gypsum Fiber, DEXCell FA Glass Mat, or DEXCell Cement Roof Board (Optionally primed with JM SA Primer Low VOC) Or (Optional) DynaGrip Base SD/SA, self-adhered to min. 0.5" SECUROCK Gypsum Fiber, or DEXCell FA Glass Mat Or (Optional) DynaBase HW, Torch adhered to min. 0.5" DEXCell FA Glass Mat	Min. 0.5" SECUROCK Gypsum Fiber Roof Board	UltraFast Metal Plates (Square) or UltraFast AccuTrac Plate and UltraFast Fasteners #12 or All Purpose Fasteners	1 per 1.6 ft ²	JM TPO 45, 60, 72, or 80	JM MBA, 1.67 gal./sq.	150	A	1-1/2
		Followed by min. 1.5" ENRGY 3, ENRGY 3.E, ValuTherm, JM ISO 3, R-Panel, Tapered ENRGY 3, Tapered ENRGY 3.E, Tapered ValuTherm, JM ISO 3 Tapered, Tapered R-Panel, ENRGY 3 25 PSI, ENRGY 3.E 25 PSI, ValuTherm 25 PSI, R-Panel 25 PSI, Tapered ENRGY 3 25 PSI, Tapered ENRGY 3.E 25 PSI, Tapered ValuTherm 25 PSI, Tapered R-Panel 25 PSI, ENRGY 3 CGF, ValuTherm CGF, Tapered ENRGY 3 CGF, Tapered ValuTherm CGF, ENRGY 3 25 PSI CGF, ValuTherm 25 PSI CGF, Tapered ENRGY 3 25 PSI CGF, Tapered ValuTherm 25 PSI CGF, ENRGY 3 FR, Tapered ENRGY 3 FR, ENRGY 3 25 PSI FR, Tapered ENRGY 3 25 PSI FR, ENRGY 3 C1, ENRGY 3					JM LVOC MA, 1.67 gal./sq.			

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**TABLE 3B-1: STEEL DECKS - NEW CONSTRUCTION, REROOF (Tear-Off)
SYSTEM TYPE C-1: MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER**

System No.	Roof Deck	Base Insulation Layer	Top Insulation Layer			Roof Cover		Tested Wind Uplift (psf)	Fire Rating UL790/E108	
			Type	Fasteners	Attach	Type	Attach		Class	Max Incline (in.)
									A	2
S-23	Min. 22 ga., type B, Grade 33 steel (New)	C1 CGF, Tapered ENRGY 3 C1, Tapered ENRGY 3 C1 CGF, ENRGY 3 AGF, ValuTherm AGF, Tapered ENRGY 3 AGF, Tapered ValuTherm AGF, ENRGY 3 25 PSI AGF, ValuTherm 25 PSI AGF, Tapered ENRGY 3 25 PSI AGF, Tapered ValuTherm 25 PSI AGF, ENRGY 3 Foil Faced, ENRGY 3 Foil Faced 25 PSI, ENRGY 3 Plus, ENRGY 3 Plus 25 PSI, Tapered ENRGY 3 Plus, or Tapered ENRGY 3 Plus 25 PSI, Loose laid				JM TPO WB-MA, 0.56 gal./sq. to substrate only or two sided application	165	A	1/2	
		(Optional) min. 4 mil Polyethylene loose laid Or (Optional) JM Vapor Barrier SA, self-adhered to min. 0.5" SECUROCK Gypsum Fiber, DEXCell FA Glass Mat, or DEXCell Cement Roof Board (Optionally primed with JM SA Primer Low VOC) Or (Optional) DynaGrip Base SD/SA, self-adhered to min. 0.5" SECUROCK Gypsum Fiber, or DEXCell FA Glass Mat Or (Optional) DynaBase HW, Torch adhered to min. 0.5" DEXCell FA Glass Mat	Min. 2" ENRGY 3 CGF or ENRGY 3 FR	UltraFast Metal Plates (Round or Square) and UltraFast Fasteners #12 or All Purpose Fasteners	1 per 1 ft ²	JM TPO 45, 60, 72, or 80	JM LVOC MA, 1.10 gal./sq. JM TPO WB-MA, 0.63 gal./sq. to substrate only or two sided application or JM MBA, 1.10 gal./sq.	A	1/4	
S-24	Min. 22 ga., type B, Grade 33 steel	(optional) INSULATION	Min. 2" ENRGY 3, ENRGY 3 CGF or ENRGY 3 FR	UltraFast Fasteners and UltraFast Plate Metal Flat	1 per 1.33 ft ²	JM TPO 45, 60, 72, or 80	JM MBA or JM TPO WB-MA JM LVOC-MA, 1.67 gal./sq.	180	A	1/4 1/2
S-25 (Cont'd on next page)	Min. 22 ga., type B, Grade 33 steel (New)	(Optional) min. 4 mil Polyethylene loose laid Or (Optional) JM Vapor Barrier SA, self-adhered to min. 0.5" SECUROCK Gypsum Fiber, DEXCell FA Glass Mat, or DEXCell	Min. 0.5" DEXCell FA Glass Mat Roof Board	UltraFast Metal Plates (Square) and UltraFast Fasteners #12 or All Purpose Fasteners	1 per 1 ft ²	JM TPO 45, 60, 72, or 80	JM MBA, 1.67 gal./sq. Or JM LVOC MA, 1.67 gal./sq. Or JM TPO WB-MA, 0.59 gal./sq. to substrate only	165	A	1-1/2

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TABLE 3B-1: STEEL DECKS - NEW CONSTRUCTION, REROOF (Tear-Off) SYSTEM TYPE C-1: MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER										
System No.	Roof Deck	Base Insulation Layer	Top Insulation Layer			Roof Cover		Tested Wind Uplift (psf)	Fire Rating UL790/E108	
			Type	Fasteners	Attach	Type	Attach		Class	Max Incline (in.)
Min. 22 ga., type B, Grade 80 steel (New)	Cement Roof Board (Optionally primed with JM SA Primer Low VOC) Or (Optional) DynaGrip Base SD/SA, self-adhered to						or two sided application	210		

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**TABLE 3B-1: STEEL DECKS - NEW CONSTRUCTION, REROOF (Tear-Off)
SYSTEM TYPE C-1: MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER**

System No.	Roof Deck	Base Insulation Layer	Top Insulation Layer			Roof Cover		Tested Wind Uplift (psf)	Fire Rating UL790/E108	
			Type	Fasteners	Attach	Type	Attach		Class	Max Incline (in.)
		min. 0.5" SECUROCK Gypsum Fiber, or DEXCell FA Glass Mat Or (Optional) DynaBase HW, Torch adhered to min. 0.5" DEXCell FA Glass Mat Followed by min. 1.5" ENRGY 3, ENRGY 3.E, ValuTherm, JM ISO 3, R-Panel, Tapered ENRGY 3, Tapered ENRGY 3.E, Tapered ValuTherm, JM ISO 3 Tapered, Tapered R-Panel, ENRGY 3 25 PSI, ENRGY 3.E 25 PSI, ValuTherm 25 PSI, R-Panel 25 PSI, Tapered ENRGY 3 25 PSI, Tapered ENRGY 3.E 25 PSI, Tapered ValuTherm 25 PSI, Tapered R-Panel 25 PSI, ENRGY 3 CGF, ValuTherm CGF, Tapered ENRGY 3 CGF, Tapered ValuTherm CGF, ENRGY 3 25 PSI CGF, ValuTherm 25 PSI CGF, Tapered ENRGY 3 25 PSI CGF, Tapered ValuTherm 25 PSI CGF, ENRGY 3 FR, Tapered ENRGY 3 FR, ENRGY 3 25 PSI FR, Tapered ENRGY 3 25 PSI FR, ENRGY 3 C1, ENRGY 3 C1 CGF, Tapered ENRGY 3 C1, Tapered ENRGY 3 C1 CGF, ENRGY 3 AGF, ValuTherm AGF, Tapered ENRGY 3 AGF, Tapered ValuTherm AGF, ENRGY 3 25 PSI AGF, ValuTherm 25 PSI AGF, Tapered ENRGY 3 25 PSI AGF, Tapered ValuTherm 25 PSI AGF, ENRGY 3 Foil Faced, ENRGY 3 Foil Faced 25 PSI, ENRGY 3 Plus, ENRGY 3 Plus 25 PSI, Tapered ENRGY 3 Plus, or Tapered ENRGY 3 Plus 25 PSI, Loose laid								

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**TABLE 3B-1: STEEL DECKS - NEW CONSTRUCTION, REROOF (Tear-Off)
SYSTEM TYPE C-1: MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER**

System No.	Roof Deck	Base Insulation Layer	Top Insulation Layer			Roof Cover		Tested Wind Uplift (psf)	Fire Rating UL790/E108	
			Type	Fasteners	Attach	Type	Attach		Class	Max Incline (in.)
S-26 (Cont'd on next page)	Min. 22 ga., type B, Grade 33 steel (New)	(Optional) min. 4 mil Polyethylene loose laid Or (Optional) JM Vapor Barrier SA, self-adhered to min. 0.5" SECUROCK Gypsum Fiber, DEXCell FA Glass Mat, or DEXCell Cement Roof Board (Optionally primed with JM SA Primer Low VOC) Or (Optional) DynaGrip Base SD/SA, self-adhered to min. 0.5" SECUROCK Gypsum Fiber, or DEXCell FA Glass Mat Or (Optional) DynaBase HW, Torch adhered to min. 0.5" DEXCell FA Glass Mat	Min. 0.5" DensDeck Prime	UltraFast Metal Plates (Square) or UltraFast AccuTrac Plate and UltraFast Fasteners #12 or All Purpose Fasteners	1 per 1 ft ²	JM TPO 45, 60, 72, or 80	JM MBA, 1.67 gal./sq.	165	A	1-1/2
	Min. 22 ga., type B, Grade 80 steel (New)	225								
	Min. 22 ga., type B, Grade 33 steel (New)	Followed by min. 1.5" ENRGY 3, ENRGY 3.E, ValuTherm, JM ISO 3, R-Panel, Tapered ENERGY 3, Tapered ENERGY 3.E, Tapered ValuTherm, JM ISO 3 Tapered, Tapered R-Panel, ENRGY 3 25 PSI, ENRGY 3.E 25 PSI, ValuTherm 25 PSI, R-Panel 25 PSI,					JM LVOC MA, 1.67 gal./sq. Or JM TPO WB-MA, 0.59 gal./sq. to substrate only or two sided application	165	A	1/2

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**TABLE 3B-1: STEEL DECKS - NEW CONSTRUCTION, REROOF (Tear-Off)
SYSTEM TYPE C-1: MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER**

System No.	Roof Deck	Base Insulation Layer	Top Insulation Layer			Roof Cover		Tested Wind Uplift (psf)	Fire Rating UL790/E108	
			Type	Fasteners	Attach	Type	Attach		Class	Max Incline (in.)
	Min. 22 ga., type B, Grade 80 steel (New)	Tapered ENRGY 3 25 PSI, Tapered ENRGY 3.E 25 PSI, Tapered ValuTherm 25 PSI, Tapered R-Panel 25 PSI, ENRGY 3 CGF, ValuTherm CGF, Tapered ENRGY 3 CGF, (Cont'd on next page) Tapered ValuTherm CGF, ENRGY 3 25 PSI CGF, ValuTherm 25 PSI CGF, Tapered ENRGY 3 25 PSI CGF, Tapered ValuTherm 25 PSI CGF, ENRGY 3 FR, Tapered ENRGY 3 FR, ENRGY 3 25 PSI FR, Tapered ENRGY 3 25 PSI FR, ENRGY 3 C1, ENRGY 3 C1 CGF, Tapered ENRGY 3 C1, Tapered ENRGY 3 C1 CGF, ENRGY 3 AGF, ValuTherm AGF, Tapered ENRGY 3 AGF, Tapered ValuTherm AGF, ENRGY 3 25 PSI AGF, ValuTherm 25 PSI AGF, Tapered ENRGY 3 25 PSI AGF, Tapered ValuTherm 25 PSI AGF, ENRGY 3 Foil Faced, ENRGY 3 Foil Faced 25 PSI, ENRGY 3 Plus, ENRGY 3 Plus 25 PSI, Tapered ENRGY 3 Plus, or Tapered ENRGY 3 Plus 25 PSI, Loose laid						225		
S-27	Min. 22 ga., type B, Grade 80 steel (New)	(Optional) min. 4 mil Polyethylene loose laid Or (Optional) JM Vapor Barrier SA, self-adhered to min. 0.5" SECUROCK Gypsum Fiber, DEXCell FA Glass Mat, or DEXCell Cement Roof Board (Optionally	Min. 2" ENRGY 3 CGF or ENRGY 3 FR	UltraFast Metal Plates (Round or Square) and UltraFast Fasteners #12 or All Purpose Fasteners	1 per 1 ft ²	JM TPO 45, 60, 72, or 80	JM LVOC MA, 1.10 gal./sq.	240	A	1/2

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**TABLE 3B-1: STEEL DECKS - NEW CONSTRUCTION, REROOF (Tear-Off)
SYSTEM TYPE C-1: MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER**

System No.	Roof Deck	Base Insulation Layer primed with JM SA Primer Low VOC Or (Optional) DynaGrip Base SD/SA, self-adhered to min. 0.5" SECUROCK Gypsum Fiber, or DEXCell FA Glass Mat Or (Optional) DynaBase HW, Torch adhered to min. 0.5" DEXCell FA Glass Mat	Top Insulation Layer			Roof Cover		Tested Wind Uplift (psf)	Fire Rating UL790/E108	
			Type	Fasteners	Attach	Type	Attach		Class	Max Incline (in.)
							JM TPO WB-MA, 0.63 gal./sq. to substrate only or two sided application or JM MBA, 1.10 gal./sq.		A	1/2
S-28	Steel Deck (G80, L6)	(optional) INSULATION followed by min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR	Min. 0.5-inch SECUROCK Gypsum Fiber Roof Board	JM UltraFast Fasteners with JM UltraFast Plates (Square)	1 per 1 ft ²	JM TPO 45, 60, or 80	JM TPO WB-MA, 1.18-1.54 gal/sq.	300	A	1-1/2
JM TPO FB APPLICATIONS:										
S-29	Min. 22 ga., type N, Grade 80 steel	(Optional) INSULATION	Min. 2-inch ENRGY 3, ENRGY 3 CGF, ENRGY 3 FR	JM UltraFast Fasteners and JM UltraFast Plates (Square or Round)	1 fastener per 2 ft ²	JM TPO FB 115 or FB 135	JM TWO-PART UIA-C1	90	A	1/2
S-30	Steel Deck (G80, L6)	(optional) INSULATION followed by min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR	Min. 0.5-inch SECUROCK Gypsum Fiber Roof Board	JM UltraFast Fasteners with JM UltraFast Plates (Square)	1 per 1 ft ²	JM TPO FB 150	HA	120	A	1/2
						JM TPO FB 175			A	1

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**TABLE 3B-1: STEEL DECKS - NEW CONSTRUCTION, REROOF (Tear-Off)
SYSTEM TYPE C-1: MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER**

System No.	Roof Deck	Base Insulation Layer	Top Insulation Layer			Roof Cover		Tested Wind Uplift (psf)	Fire Rating UL790/E108	
			Type	Fasteners	Attach	Type	Attach		Class	Max Incline (in.)
S-31	Min. 22 ga., type B, Grade 33 steel (New)	(Optional) min. 4 mil Polyethylene loose laid Or (Optional) JM Vapor Barrier SA, self-adhered to min. 0.5" SECUROCK Gypsum Fiber, DEXCell FA Glass Mat, or DEXCell Cement Roof Board (Optionally primed with JM SA Primer Low VOC) Or (Optional) DynaGrip Base SD/SA, self-adhered to min. 0.5" SECUROCK Gypsum Fiber, or DEXCell FA Glass Mat Or (Optional) DynaBase HW, Torch adhered to min. 0.5" DEXCell FA Glass Mat	min. 2" ENRGY 3, ENRGY 3.E, ValuTherm, JM ISO 3, R-Panel, Tapered ENRGY 3, Tapered ENRGY 3.E, Tapered ValuTherm, JM ISO 3 Tapered, Tapered R-Panel, ENRGY 3 25 PSI, ENRGY 3.E 25 PSI, ValuTherm 25 PSI, R-Panel 25 PSI, Tapered ENRGY 3 25 PSI, Tapered ENRGY 3.E 25 PSI, Tapered ValuTherm 25 PSI, Tapered R-Panel 25 PSI, ENRGY 3 CGF, ValuTherm CGF, Tapered ENRGY 3 CGF, Tapered ValuTherm CGF, ENRGY 3 25 PSI CGF, ValuTherm 25 PSI CGF, Tapered ENRGY 3 25 PSI CGF, Tapered ValuTherm 25 PSI CGF, ENRGY 3 FR, Tapered ENRGY 3 FR, ENRGY 3 25 PSI FR, Tapered ENRGY 3 25 PSI FR, ENRGY 3 C1, ENRGY 3 C1 CGF, Tapered ENRGY 3 C1, Tapered ENRGY 3 C1 CGF	UltraFast Metal Plates (Round) and UltraFast Fasteners #12 or All Purpose Fasteners	1 per 1.6 ft ²	JM TPO FB 150 or 175	HA	120	A	1/4

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**TABLE 3B-1: STEEL DECKS - NEW CONSTRUCTION, REROOF (Tear-Off)
SYSTEM TYPE C-1: MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER**

System No.	Roof Deck	Base Insulation Layer	Top Insulation Layer			Roof Cover		Tested Wind Uplift (psf)	Fire Rating UL790/E108	
			Type	Fasteners	Attach	Type	Attach		Class	Max Incline (in.)
S-32	Min. 22 ga., type B, Grade 33 steel (New)	(optional) INSULATION	min. 1.5" ENRGY 3, ENRGY 3.E, ValuTherm, JM ISO 3, R-Panel, Tapered ENRGY 3, Tapered ENRGY 3.E, Tapered ValuTherm, JM ISO 3 Tapered, Tapered R-Panel, ENRGY 3 25 PSI, ENRGY 3.E 25 PSI, ValuTherm 25 PSI, R-Panel 25 PSI, Tapered ENRGY 3 25 PSI, Tapered ENRGY 3.E 25 PSI, Tapered ValuTherm 25 PSI, Tapered R-Panel 25 PSI, ENRGY 3 CGF, ValuTherm CGF, Tapered ENRGY 3 CGF, ValuTherm CGF, ENRGY 3 25 PSI CGF, ValuTherm 25 PSI CGF, Tapered ENRGY 3 25 PSI CGF, Tapered ValuTherm 25 PSI CGF, ENRGY 3 FR, Tapered ENRGY 3 FR, ENRGY 3 25 PSI FR, Tapered ENRGY 3 25 PSI FR, ENRGY 3 AGF, ValuTherm AGF, Tapered ENRGY 3 AGF, Tapered ValuTherm AGF, ENRGY 3 25 PSI AGF, ValuTherm 25 PSI AGF, Tapered ENRGY 3 25 PSI AGF, Tapered ValuTherm 25 PSI AGF,	UltraFast Metal Plates (Round or Square) and UltraFast Fasteners #12 or All Purpose Fasteners	1 per 1.78 ft ²	JM TPO FB 150 or 175	HA	120	A	1/4

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S-33	Min. 22 ga., type B, Grade 33 steel (New)	<p>(Optional) min. 4 mil Polyethylene loose laid Or (Optional) JM Vapor Barrier SA, self-adhered to min. 0.5" SECUROCK Gypsum Fiber, DEXCell FA Glass Mat, or DEXCell Cement Roof Board (Optionally primed with JM SA Primer Low VOC) Or (Optional) DynaGrip Base SD/SA, self-adhered to min. 0.5" SECUROCK Gypsum Fiber, or DEXCell FA Glass Mat Or (Optional) DynaBase HW, Torch adhered to min. 0.5" DEXCell FA Glass Mat</p> <p>Followed by min. 1.5" ENRGY 3, ENRGY 3.E, ValuTherm, JM ISO 3, R-Panel, Tapered ENERGY 3, Tapered ENRGY 3.E, Tapered ValuTherm, JM ISO 3 Tapered, Tapered R-Panel, ENRGY 3 25 PSI, ENRGY 3.E 25 PSI, ValuTherm 25' PSI, R-Panel 25 PSI, Tapered ENERGY 3 25 PSI, Tapered ENRGY 3.E 25 PSI, Tapered ValuTherm 25 PSI, Tapered R-Panel 25 PSI, ENRGY 3 CGF, ValuTherm CGF, Tapered ENRGY 3 CGF, Tapered ValuTherm CGF, ENRGY 3 25 PSI CGF, ValuTherm 25 PSI CGF, Tapered ENRGY 3 25 PSI CGF, Tapered ValuTherm 25 PSI CGF, ENRGY 3 FR, Tapered ENRGY 3 FR, ENRGY 3 25 PSI FR, Tapered ENRGY 3 25 PSI FR, ENRGY 3 C1, ENRGY 3 C1 CGF, Tapered ENRGY 3 C1 CGF, ENRGY 3 AGF, ValuTherm AGF, Tapered ENRGY 3 AGF, Tapered ValuTherm AGF, ENRGY 3 25 PSI AGF, ValuTherm 25 PSI AGF, Tapered ENRGY 3 25 PSI AGF, Tapered ValuTherm 25 PSI AGF, ENRGY 3 Foil Faced, ENRGY 3 Foil Faced 25 PSI, ENRGY 3 Plus, ENRGY 3 Plus 25 PSI, Tapered</p>	Min. 0.5" SECUROCK Gypsum Fiber Roof Board	UltraFast Metal Plates (Square) or UltraFast AccuTrac Plate and UltraFast Fasteners #12 or All Purpose Fasteners	1 per 1.6 ft ²	JM TPO FB 150 or 175	HA	150	A	3/4
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**TABLE 3B-1: STEEL DECKS - NEW CONSTRUCTION, REROOF (Tear-Off)
SYSTEM TYPE C-1: MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER**

System No.	Roof Deck	Base Insulation Layer	Top Insulation Layer			Roof Cover		Tested Wind Uplift (psf)	Fire Rating UL790/E108	
			Type	Fasteners	Attach	Type	Attach		Class	Max Incline (in.)
		ENRGY 3 Plus, or Tapered ENRGY 3 Plus 25 PSI, Loose laid								
S-34	Steel Deck (G33, L6)	Min. 0.5" DEXcell FA followed by JM Vapor Barrier SA self-adhered	min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR followed by min. 0.5" DEXcell FA	JM UltraFast Fasteners and JM UltraFast Plates (Square or Round)	1 per 1 ft ²	JM TPO FB 115 or 135	JM-RSUA; 4" o.c.	165	A	1/2
S-35	Steel Deck (G80, L6)	Min. 0.5" DEXcell FA; JM Vapor Barrier SA self-adhered	min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR followed by min. 0.5" DEXcell FA	JM UltraFast Fasteners and JM UltraFast Plates (Square or Round)	1 per 1 ft ²	JM TPO FB 115 or 135	JM-RSUA; 4" o.c.	285	A	1/2
S-36	Steel Deck (G80, L6)	(optional) INSULATION followed by min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR	Min. 0.5-inch SECUROCK Gypsum Fiber Roof Board	JM UltraFast Fasteners with JM UltraFast Plates (Square)	1 per 1 ft ²	JM TPO FB 115 or 135	JM TPO WB-MA, 1.18-1.54 gal/sq.	300	A	2

JM TPO SA APPLICATIONS:

S-37	Grade 33 Steel Deck	(Optional) INSULATION	Min. 2" Invinsa Foam	JM UltraFast fasteners and JM UltraFast Plates (Square or Round)	1 fastener per 5.3 ft ²	JM TPO SA	Self-Adhered	90	A	1/4
S-38	Grade 33 Steel Deck	(optional) INSULATION followed by min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR	Min. 0.375-inch SECUROCK Gypsum Fiber Roof Board	JM UltraFast Fasteners with JM UltraFast Plates (Square)	1 per 2.67 ft ²	JM TPO SA	Self-Adhered	90	A	1/4
S-39	Grade 33 Steel Deck	(optional) INSULATION followed by min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR	Min. 0.5-inch SECUROCK Gypsum Fiber Roof Board	JM UltraFast Fasteners with JM UltraFast Plates (Square)	1 per 4 ft ²	JM TPO SA	Self-Adhered	90	A	1/4
S-40	Grade 33 Steel Deck	(optional) INSULATION	Min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR	JM UltraFast Fasteners and JM UltraFast Plates (Round or Square)	1 per 2 ft ²	JM TPO SA	Self-Adhered	90	A	1/4
S-41	Steel Deck (G33, L6)	(Optional) INSULATION	Min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR	JM UltraFast fasteners and JM UltraFast Plates (Square)	1 fastener per 1.78 ft ²	JM TPO SA	Self-Adhered	120	A	1/4

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**TABLE 3B-1: STEEL DECKS - NEW CONSTRUCTION, REROOF (Tear-Off)
SYSTEM TYPE C-1: MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER**

System No.	Roof Deck	Base Insulation Layer	Top Insulation Layer			Roof Cover		Tested Wind Uplift (psf)	Fire Rating UL790/E108	
			Type	Fasteners	Attach	Type	Attach		Class	Max Incline (in.)
S-42	Min. 22 ga., type B, Grade 33 steel (New)	(Optional) min. 4 mil Polyethylene loose laid Or (Optional) JM Vapor Barrier SA, self-adhered to min. 0.5" SECUROCK Gypsum Fiber, DEXCell FA Glass Mat, or DEXCell Cement Roof Board (Optionally primed with JM SA Primer Low VOC) Or (Optional) DynaGrip Base SD/SA, self-adhered to min. 0.5" SECUROCK Gypsum Fiber, or DEXCell FA Glass Mat Or (Optional) DynaBase HW, Torch adhered to min. 0.5" DEXCell FA Glass Mat	min. 2" ENRGY 3, ENRGY 3.E, ValuTherm, JM ISO 3, R-Panel, Tapered ENRGY 3, Tapered ENRGY 3.E, Tapered ValuTherm, JM ISO 3 Tapered, Tapered R-Panel, ENRGY 3 25 PSI, ENRGY 3.E 25 PSI, ValuTherm 25 PSI, R-Panel 25 PSI, Tapered ENRGY 3 25 PSI, Tapered ValuTherm 25 PSI, Tapered R-Panel 25 PSI, ENRGY 3 CGF, ValuTherm CGF, Tapered ENRGY 3 CGF, Tapered ValuTherm CGF, ENRGY 3 25 PSI CGF, ValuTherm 25 PSI CGF, Tapered ENRGY 3 25 PSI CGF, Tapered ValuTherm 25 PSI CGF, ENRGY 3 FR, Tapered ENRGY 3 FR, ENRGY 3 25 PSI FR, Tapered ENRGY 3 25 PSI FR, ENRGY 3 C1, ENRGY 3 C1 CGF, Tapered ENRGY 3 C1 CGF	UltraFast Metal Plates (Round) and UltraFast Fasteners #12 or All Purpose Fasteners	1 per 1.6 ft ²	JM TPO SA	Self-Adhered	120	A	1/4
S-43	Min. 22 ga., type B, Grade 33 steel (New)	(Optional) min. 4 mil Polyethylene loose laid Or (Optional) JM Vapor Barrier SA, self-adhered to min. 0.5" SECUROCK Gypsum Fiber, DEXCell FA Glass Mat, or DEXCell Cement Roof Board (Optionally primed with JM SA Primer Low VOC) Or (Optional) DynaGrip Base SD/SA, self-adhered to min. 0.5" SECUROCK Gypsum Fiber, or DEXCell FA Glass Mat Or (Optional) DynaBase HW, Torch adhered to min. 0.5" DEXCell FA Glass Mat	Min. 2" Invinsa Foam	UltraFast Metal Plates (Square) and UltraFast Fasteners #12 or All Purpose Fasteners	1 per 2 ft ²	JM TPO SA	Self-Adhered	150	A	1/2

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S-44	Min. 22 ga., type B, Grade 33 steel (New)	<p>(Optional) min. 4 mil Polyethylene loose laid Or (Optional) JM Vapor Barrier SA, self-adhered to min. 0.5" SECUROCK Gypsum Fiber, DEXCell FA Glass Mat, or DEXCell Cement Roof Board (Optionally primed with JM SA Primer Low VOC) Or (Optional) DynaGrip Base SD/SA, self-adhered to min. 0.5" SECUROCK Gypsum Fiber, or DEXCell FA Glass Mat Or (Optional) DynaBase HW, Torch adhered to min. 0.5" DEXCell FA Glass Mat</p> <p>Followed by min. 1.5" ENRGY 3, ENRGY 3.E, ValuTherm, JM ISO 3, R-Panel, Tapered ENERGY 3, Tapered ENRGY 3.E, Tapered ValuTherm, JM ISO 3 Tapered, Tapered R-Panel, ENRGY 3 25 PSI, ENRGY 3.E 25 PSI, ValuTherm 25' PSI, R-Panel 25 PSI, Tapered ENERGY 3 25 PSI, Tapered ENRGY 3.E 25 PSI, Tapered ValuTherm 25 PSI, Tapered R-Panel 25 PSI, ENRGY 3 CGF, ValuTherm CGF, Tapered ENRGY 3 CGF, Tapered ValuTherm CGF, ENRGY 3 25 PSI CGF, ValuTherm 25 PSI CGF, Tapered ENRGY 3 25 PSI CGF, Tapered ValuTherm 25 PSI CGF, ENRGY 3 FR, Tapered ENRGY 3 FR, ENRGY 3 25 PSI FR, Tapered ENRGY 3 25 PSI FR, ENRGY 3 C1, ENRGY 3 C1 CGF, Tapered ENRGY 3 C1 CGF, ENRGY 3 AGF, ValuTherm AGF, Tapered ENRGY 3 AGF, Tapered ValuTherm AGF, ENRGY 3 25 PSI AGF, ValuTherm 25 PSI AGF, Tapered ENRGY 3 25 PSI AGF, Tapered ValuTherm 25 PSI AGF, ENRGY 3 Foil Faced, ENRGY 3 Foil Faced 25 PSI, ENRGY 3 Plus, ENRGY 3 Plus 25 PSI, Tapered</p>	Min. 0.5" SECUROCK Gypsum Fiber Roof Board	UltraFast Metal Plates (Square) or UltraFast AccuTrac Plate and UltraFast Fasteners #12 or All Purpose Fasteners	1 per 1.6 ft ²	JM TPO SA	Self-Adhered	150	A	2
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**TABLE 3B-1: STEEL DECKS - NEW CONSTRUCTION, REROOF (Tear-Off)
SYSTEM TYPE C-1: MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER**

System No.	Roof Deck	Base Insulation Layer	Top Insulation Layer			Roof Cover		Tested Wind Uplift (psf)	Fire Rating UL790/E108	
			Type	Fasteners	Attach	Type	Attach		Class	Max Incline (in.)
		ENRGY 3 Plus, or Tapered ENRGY 3 Plus 25 PSI, Loose laid								
S-45	Min. 22 ga., type B, Grade 33 steel (New)	(Optional) min. 4 mil Polyethylene loose laid Or (Optional) JM Vapor Barrier SA, self-adhered to min. 0.5" SECUROCK Gypsum Fiber, DEXCell FA Glass Mat, or DEXCell Cement Roof Board (Optionally primed with JM SA Primer Low VOC) Or (Optional) DynaGrip Base SD/SA, self-adhered to min. 0.5" SECUROCK Gypsum Fiber, or DEXCell FA Glass Mat Or	Min. 0.5" DensDeck Prime	UltraFast Metal Plates (Square) or UltraFast AccuTrac Plate and UltraFast Fasteners #12 or All Purpose Fasteners	1 per 1 ft ²	JM TPO SA	Self-Adhered	165	A	2

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TABLE 3B-1: STEEL DECKS - NEW CONSTRUCTION, REROOF (Tear-Off) SYSTEM TYPE C-1: MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER										
System No.	Roof Deck	Base Insulation Layer	Top Insulation Layer			Roof Cover		Tested Wind Uplift (psf)	Fire Rating UL790/E108	
			Type	Fasteners	Attach	Type	Attach		Class	Max Incline (in.)
Min. 22 ga., type B, Grade 80 steel (New)		(Optional) DynaBase HW, Torch adhered to min. 0.5" DEXCell FA Glass Mat Followed by min. 1.5" ENRGY 3, ENRGY 3.E, ValuTherm, JM ISO 3, R-Panel, Tapered ENERGY 3, Tapered ENRGY 3.E, Tapered ValuTherm, JM ISO 3 Tapered, Tapered R-Panel, ENRGY 3 25 PSI, ENRGY 3.E 25 PSI, ValuTherm 25 PSI, R-Panel 25 PSI, Tapered ENRGY 3 25 PSI, Tapered ENRGY 3.E 25 PSI, Tapered ValuTherm 25 PSI, Tapered R-Panel 25 PSI, ENRGY 3 CGF, ValuTherm CGF, Tapered ENRGY 3 CGF, Tapered ValuTherm CGF, ENRGY 3 25 PSI CGF, ValuTherm 25 PSI CGF, Tapered ENRGY 3 25 PSI CGF, Tapered ValuTherm 25 PSI CGF, ENRGY 3 FR, Tapered ENRGY 3 FR, ENRGY 3 25 PSI FR, Tapered ENRGY 3 25 PSI FR, ENRGY 3 C1, ENRGY 3 C1 CGF, Tapered ENRGY 3 C1, Tapered ENRGY 3 C1 CGF, ENRGY 3 AGF, ValuTherm AGF, Tapered ENRGY 3 AGF, Tapered ValuTherm AGF, ENRGY 3 25 PSI AGF, ValuTherm 25 PSI AGF, Tapered ENRGY 3 25 PSI AGF, Tapered ValuTherm 25 PSI AGF, ENRGY 3 Foil Faced, ENRGY 3 Foil Faced 25 PSI, ENRGY 3 Plus, ENRGY 3 Plus 25 PSI, Tapered ENRGY 3 Plus, or Tapered ENRGY 3 Plus 25 PSI, Loose laid					225			
S-46	Min. 22 ga., type B, Grade 33 steel (New)	(Optional) min. 4 mil Polyethylene loose laid Or (Optional) JM Vapor Barrier SA, self-adhered to min. 0.5" SECUROCK Gypsum Fiber, DEXCell FA Glass Mat, or DEXCell	Min. 2" ENRGY 3 CGF or ENRGY 3 FR	UltraFast Metal Plates (Round or Square) and UltraFast Fasteners #12 or All Purpose Fasteners	1 per 1 ft ²	JM TPO SA	Self-Adhered	165	A	1/4

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TABLE 3B-1: STEEL DECKS - NEW CONSTRUCTION, REROOF (Tear-Off) SYSTEM TYPE C-1: MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER										
System No.	Roof Deck	Base Insulation Layer	Top Insulation Layer			Roof Cover		Tested Wind Uplift (psf)	Fire Rating UL790/E108	
			Type	Fasteners	Attach	Type	Attach		Class	Max Incline (in.)
	Min. 22 ga., type B, Grade 80 steel (New)	Cement Roof Board (Optionally primed with JM SA Primer Low VOC) Or (Optional) DynaGrip Base SD/SA, self-adhered to min. 0.5" SECUROCK Gypsum Fiber, or DEXCell FA Glass Mat Or (Optional) DynaBase HW, Torch adhered to min. 0.5" DEXCell FA Glass Mat						240		
S-47	Steel Deck (G80, L6)	(optional) INSULATION followed by min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR	Min. 0.5-inch SECUROCK Gypsum Fiber Roof Board	JM UltraFast Fasteners with JM UltraFast Plates (Square)	1 per 1 ft ²	JM TPO SA	Self-Adhered	300	A	1/4

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**TABLE 3B-2: STEEL DECKS - NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER
SYSTEM TYPE C-2: MECHANICALLY ATTACHED INSULATION, PLATE-BONDED**

System No.	Deck (See Note 1)	Insulation Layer	Attachment		Roof Cover / Adhesive	Tested Wind Uplift (psf)	Fire Rating UL790/E108	
			Fasteners	Spacing			Class	Max Incline (in.)
JM TPO APPLICATIONS:								
S-48	Min. 22 ga., type N, Grade 80 steel	Min. 1.5-inch <i>INSULATION</i> followed by (Optional) <i>Cover Board</i>	JM TPO RhinoPlates and JM High Load Fasteners or JM Extra High Load Fasteners	1 per 5.33 ft ²	JM TPO 45, 60 or 80 induction welded to JM TPO RhinoPlates. 3.25-inch wide side laps sealed with 1.5-inch heat weld.	75	A	1/2
S-49	Min. 22 ga., type B, Grade 33 steel	Min. 1.5-inch <i>INSULATION</i> followed by (Optional) <i>Cover Board</i>	JM TPO RhinoPlates and JM High Load Fasteners or JM Extra High Load Fasteners	12-inch o.c. in rows spaced 72-inch o.c.	JM TPO 60 or 80 induction welded to JM TPO RhinoPlates. 3.25" wide side laps sealed with 1.5-inch heat weld.	90	A	1/2
S-50	Min. 22 ga., type B, Grade 33 steel	Min. 1.5-inch <i>INSULATION</i> followed by (Optional) <i>Cover Board</i>	JM TPO RhinoPlates and JM High Load Fasteners or JM Extra High Load Fasteners	1 per 5.33 ft ²	JM TPO 60 or 80 induction welded to JM TPO RhinoPlates. 3.25" wide side laps sealed with 1.5-inch heat weld.	105	A	1/2
S-51	Min. 22 ga., type N, Grade 80 steel	Min. 1.5-inch <i>INSULATION</i> followed by (Optional) <i>Cover Board</i>	JM TPO RhinoPlates and JM High Load Fasteners or JM Extra High Load Fasteners	1 per 4 ft ²	JM TPO 45, 60 or 80 induction welded to JM TPO RhinoPlates. 3.25" wide side laps sealed with 1.5-inch heat weld.	105	A	1/2
S-52	Min. 2,500 psi structural concrete deck or (not recover) G33, L6 steel deck	(optional) <i>INSULATION</i> followed by min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, or ENRGY 3 FR followed by (optional) <i>Cover Board</i>	JM TPO RhinoPlates and JM High Load Fasteners	1 per 4 ft ²	JM TPO 60 or 80 induction welded to JM TPO RhinoPlates	135	A	1/2
S-53	(not Recover) G33, L6 Steel Deck	(optional) <i>INSULATION</i> followed by min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, or ENRGY 3 FR	JM TPO RhinoPlates and JM All Purpose Fasteners (Concrete Deck only) or High Load Fasteners (Steel Deck Only)	24-inch by 16-inch grid pattern	JM TPO 60 or 80 induction welded to JM TPO RhinoPlates	165	A	1/2
S-54	Min. 22 ga., type B, Grade 40 steel	Min. 1.5-inch <i>INSULATION</i> followed by (Optional) <i>Cover Board</i>	JM TPO RhinoPlates and JM High Load Fasteners or JM Extra High Load Fasteners	1 per 2.67 ft ²	JM TPO 60 or 80 induction welded to JM TPO RhinoPlates. 3.25" wide side laps sealed with 1.5-inch heat weld.	180	A	1/2

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**TABLE 4A-1: CONCRETE DECKS - NEW CONSTRUCTION or REROOF (Tear-Off) or RECOVER
SYSTEM TYPE A-1A: BONDED INSULATION, BONDED ROOF COVER**

System No.	Roof Deck	Primer	Base Insulation Layer		Top Insulation Layer		Roof Cover		Tested Wind Uplift (psf)	Fire Rating UL790/E108	
			Type	Attach	Type	Attach	Type	Attach		Class	Max Incline (in.)
JM TPO APPLICATIONS:											
C-1	Min. 2,500 psi concrete	None	Min. 1.5-inch ENRGY 3	JM TWO-PART UIA or JM TWO-PART UIA-C	(Optional) Invinsa, min. 0.25-inch or ProtectoR HD	JM TWO-PART UIA or JM TWO-PART UIA-C	JM TPO 45, 60, or 80	JM MBA, 1.1 gal/sq., JM LVOC-MA, 1.10 gal/sq., (not with Invinsa) or JM TPO WB-MA, 0.83 gal/sq.	210	A	1/2
C-2	Min. 2,500 psi concrete	None	Min. 0.5" RetroPlus Board	HA	None	None	JM TPO 45, 60, or 80	JM MBA, 1.10 gal/sq.	210	A	1/4
C-3	Min. 2,500 psi concrete (not recover)	None	Min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR	JM-RSUA or JM-OSFA or JM TWO-PART UIA or JM TWO-PART UIA-C	None	None	JM TPO 45, 60, or 80	JM LVOC-MA, 1.10 gal/sq.	350	A	1/2
C-4	Min. 2,500 psi concrete (not recover)	None	Min. 1.5-inch ENRGY 3, ENRGY 3 CGF, ENRGY 3 FR	JM TWO-PART UIA or JM TWO-PART UIA-C	None	None	JM TPO 45, 60, or 80	JM TPO WB-MA, 1.26-1.66 gal/sq.	385	A	1/2
C-5	Min. 2,500 psi concrete (not recover)	None	Min. 0.25-inch Invinsa	JM-RSUA or JM-OSFA or JM TWO-PART UIA or JM TWO-PART UIA-C	None	None	JM TPO 45, 60, or 80	JM TPO WB-MA, 1.12-1.42 gal/sq.	510	A	1/2
C-6	Min. 2,500 psi concrete (not recover)	None	Min. 1.5-inch ENRGY 3, ENRGY 3 CGF, ENRGY 3 FR	JM TWO-PART UIA or JM TWO-PART UIA-C	None	None	JM TPO 45, 60, or 80	JM MBA, 1.10 gal/sq.	650	A	1/2
C-7	Min. 2,500 psi concrete (not recover)	None	Min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, JM ISO 3, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF, Invinsa Foam	JM TWO-PART UIA	Min. 1.5-inch Invinsa Foam	JM TWO-PART UIA	JM TPO 45, 60, 72 or 80, JM TPO Reflexsa	JM LVOC MA, 1.67 gal/sq.	660	A	1/2
C-8	Min. 2,500 psi concrete (not recover)	None	Min. 0.25-inch SECUROCK Gypsum Fiber Roof Board	JM-RSUA or JM-OSFA or JM TWO-PART UIA or JM	None	None	JM TPO 45, 60, or 80	JM LVOC-MA, 1.67 gal/sq.	720	A	1/2

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**TABLE 4A-1: CONCRETE DECKS - NEW CONSTRUCTION or REROOF (Tear-Off) or RECOVER
SYSTEM TYPE A-1A: BONDED INSULATION, BONDED ROOF COVER**

System No.	Roof Deck	Primer	Base Insulation Layer		Top Insulation Layer		Roof Cover		Tested Wind Uplift (psf)	Fire Rating UL790/E108	
			Type	Attach	Type	Attach	Type	Attach		Class	Max Incline (in.)
				TWO-PART UIA-C							
C-9	Min. 2,500 psi concrete	None	Min. 7/16" DEXCell Cement Roof Board or Min. 0.25" DEXCell FA Glass Mat Roof Board	JM TWO-PART UIA or JM TWO-PART UIA-C or OlyBond 500	None	None	JM TPO 45, 60, or 80	JM LVOC-MA, 1.10-1.67 gal/sq.	680	A	1/4
								JM TPO WB-MA, 1.2-1.6 gal/sq.			1/2
								JM MBA, 50 to 90 ft./gal.			1/2
C-10	Min. 2,500 psi concrete (not recover)	None	Min. 0.25-inch SECUROCK Gypsum Fiber Roof Board	JM-RSUA or JM-OSFA or JM TWO-PART UIA or JM TWO-PART UIA-C	None	None	JM TPO 45, 60, or 80	JM TPO WB-MA, 1.18-1.54 gal/sq.	930	A	1/2
C-11	Min. 2,500 psi concrete (not recover)	None	Min. 0.25-inch Invinsa	JM-RSUA or JM-OSFA or JM TWO-PART UIA or JM TWO-PART UIA-C	None	None	JM TPO 45, 60, or 80	JM MBA, 1.66 gal/sq.	930	A	3/4
C-12	Min. 2,500 psi concrete (not recover)	None	Min. 0.25-inch SECUROCK Gypsum Fiber Roof Board	JM-RSUA or JM-OSFA or JM TWO-PART UIA or JM TWO-PART UIA-C	None	None	JM TPO 45, 60, or 80	JM MBA, 1.66 gal/sq.	990	A	3/4
C-13	Min. 2,500 psi concrete	None	Min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, JM ISO 3, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF	JM TWO-PART UIA	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	JM TWO-PART UIA	JM TPO 45, 60, 72 or 80, JM TPO Reflexsa	JM LVOC MA, 1.67 gal/sq.	495	A	1/2
C-14	Min. 2,500 psi concrete	None	Min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, JM ISO 3, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF	JM-RSUA	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	JM-RSUA	JM TPO 45, 60, 72 or 80, JM TPO Reflexsa	JM LVOC MA, 1.67 gal/sq.	495	A	1/2
C-15	Min. 2,500 psi concrete	None	Min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 25	JM-OSFA	Min. 0.25-inch SECUROCK	JM-OSFA	JM TPO 45, 60, 72 or		495		

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**TABLE 4A-1: CONCRETE DECKS - NEW CONSTRUCTION or REROOF (Tear-Off) or RECOVER
SYSTEM TYPE A-1A: BONDED INSULATION, BONDED ROOF COVER**

System No.	Roof Deck	Primer	Base Insulation Layer		Top Insulation Layer		Roof Cover		Tested Wind Uplift (psf)	Fire Rating UL790/E108	
			Type	Attach	Type	Attach	Type	Attach		Class	Max Incline (in.)
			PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, JM ISO 3, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF		Gypsum-Fiber Roof Board		80, JM TPO Reflexsa			JM LVOC MA, 1.67 gal/sq.	
JM TPO FB APPLICATIONS:											
C-16	Min. 2,500 psi concrete	None	Min. 1.5-inch ENRGY 3, ValuTherm	JM TWO-PART UIA	(Optional) Additional layers of base insulation	JM TWO-PART UIA	JM TPO FB 115 or 135	JM-RSUA, 12-inch o.c.	135	A	1/2
C-17	Min. 2,500 psi concrete	None	Min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, JM ISO 3, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF	JM TWO-PART UIA	Min. 0.5-inch Invinsa, SECUROCK Gypsum-Fiber Roof Board or ProtectoR HD	JM TWO-PART UIA	JM TPO FB 115 or 135	JM-RSUA, 12-inch o.c.	135	A	1/2
C-18	Min. 2,500 psi concrete	None	Min. 1.5-inch ENRGY 3, ValuTherm	JM-RSUA	(Optional) Additional layers of base insulation	JM-RSUA	JM TPO FB 115 or 135	JM-RSUA, 12-inch o.c.	135	A	1/2
C-19	Min. 2,500 psi concrete	None	Min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, JM ISO 3, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF	JM-RSUA	Min. 0.5-inch Invinsa or SECUROCK Gypsum-Fiber Roof Board or ProtectoR HD	JM-RSUA	JM TPO FB 115 or 135	JM-RSUA, 12-inch o.c.	135	A	1/2
C-20	Min. 2,500 psi concrete	None	Min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR	JM-RSUA or JM-OSFA or JM TWO-PART UIA or JM TWO-PART UIA-C	None	None	JM TPO FB 115 or 135	JM-RSUA, 4" o.c. or JM TWO-PART UIA, 4" o.c. or JM TWO-PART UIA-C1	225	A	1/2
C-21	Min. 2,500 psi concrete	None	Min. 1.5-inch ENRGY 3, ENRGY 3 CGF, ENRGY 3 FR	JM TWO-PART UIA or JM TWO-PART UIA-C	None	None	JM TPO FB 115 or 135	JM TPO WB-MA, 1.26-1.66 gal/sq.	375	A	3/4
C-22	Min. 2,500 psi structural concrete	None	Min. 1.5" ENRGY 3, ENRGY 3 AGF, or ENRGY 3 CGF	JM TWO-PART UIA or JM TWO-PART	None	None	JM TPO FB 150 or 175	HA	435	A	1/4

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**TABLE 4A-1: CONCRETE DECKS - NEW CONSTRUCTION or REROOF (Tear-Off) or RECOVER
SYSTEM TYPE A-1A: BONDED INSULATION, BONDED ROOF COVER**

System No.	Roof Deck	Primer	Base Insulation Layer		Top Insulation Layer		Roof Cover		Tested Wind Uplift (psf)	Fire Rating UL790/E108		
			Type	Attach	Type	Attach	Type	Attach		Class	Max Incline (in.)	
	(new or recover deck)			UIA-C; 12" o.c.								
C-23	Min. 2,500 psi concrete	None	Min. 0.25-inch Invinsa	JM-RSUA or JM-OSFA or JM TWO-PART UIA or JM TWO-PART UIA-C	None	None	JM TPO FB 115 or 135	JM TPO WB-MA, 1.12-1.42 gal/sq.	555	A	3/4	
C-24	Min. 2,500 psi concrete	None	Min. 7/16" DEXCell Cement Roof Board	JM TWO-PART UIA or JM TWO-PART UIA-C or OlyBond 500	None	None	JM TPO FB 115 or 135	JM TPO WB-MA, 1.2-1.6 gal/sq.	645	A	1/2	
C-25	Min. 2,500 psi concrete	None	Min. 0.25-inch SECUROCK Gypsum Fiber Roof Board	JM-RSUA or JM-OSFA or JM TWO-PART UIA or JM TWO-PART UIA-C	None	None	JM TPO FB 115 or 135	JM TPO WB-MA, 1.18-1.54 gal/sq.	690	A	1/2	
C-26	Min. 2,500 psi concrete	None	Min. 0.25" DEXCell FA Glass Mat Roof Board	JM TWO-PART UIA or JM TWO-PART UIA-C or OlyBond 500	None	None	JM TPO FB 115 or 135	JM TPO WB-MA, 1.2-1.6 gal/sq.	780	A	1/2	
							JM TPO FB 150	HA		A	1/2	
							JM TPO 175			A	1	
C-27	Min. 2,500 psi concrete	None	None	None	None	None	JM TPO FB 115 or 135	JM TWO-PART UIA-C1	915	A	1/2	
C-28	Min. 2,500 psi concrete	None	None	None	None	None	JM TPO FB 115 or 135	JM TWO-PART UIA-C1	990	A	1/2	
C-29	Min. 2,500 psi concrete	None	None	None	None	None	JM TPO FB 115 or 135	JM-RUSA2; 12" o.c.	1005	A	1/2	

JM TPO SA APPLICATIONS:

C-30	Min. 2,500 psi concrete (New, Existing, or Recover)	None	Min. 1.5-inch ENRGY 3	JM TWO-PART UIA or JM TWO-PART UIA-C	(Optional) Invinsa, min. 0.25-inch or Protector HD	JM TWO-PART UIA or JM TWO-PART UIA-C	JM TPO SA	Self-Adhered	210	A	1/4
C-31	Min. 2,500 psi concrete	None	Min. 0.25-inch Invinsa or Min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, or ENRGY 3 FR	JM-RSUA or JM-OSFA or JM TWO-PART UIA or JM	None	None	JM TPO SA	Self-Adhered	210	A	1/4

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**TABLE 4A-1: CONCRETE DECKS - NEW CONSTRUCTION or REROOF (Tear-Off) or RECOVER
SYSTEM TYPE A-1A: BONDED INSULATION, BONDED ROOF COVER**

System No.	Roof Deck	Primer	Base Insulation Layer		Top Insulation Layer		Roof Cover		Tested Wind Uplift (psf)	Fire Rating UL790/E108	
			Type	Attach	Type	Attach	Type	Attach		Class	Max Incline (in.)
				TWO-PART UIA-C							
C-32	Min. 2,500 psi concrete	None	Min. 0.25-inch SECUROCK Gypsum Fiber Roof Board	JM-RSUA or JM-OSFA or JM TWO-PART UIA or JM TWO-PART UIA-C	None	None	JM TPO SA	Self-Adhered	495	A	2
C-33	Min. 2,500 psi concrete	None	Min. 0.25" DEXCell FA Glass Mat Roof Board	JM TWO-PART UIA or JM TWO-PART UIA-C	None	None	JM TPO SA	Self-Adhered	780	A	1/4

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**TABLE 4A-2: CONCRETE DECKS - NEW CONSTRUCTION or REROOF (Tear-Off)
SYSTEM TYPE A-1B: BONDED TEMP ROOF, BONDED INSULATION, BONDED ROOF COVER**

System No.	Deck (See Note 1)	Primer	Temporary Roof		Base Insulation Layer		Top Insulation Layer or Base Ply		Roof Cover		Tested Wind Uplift (psf)	Fire Rating UL790/E108	
			Type	Attach	Type	Attach	Type	Attach	Type	Attach		Class	Max Incline (in.)
JM TPO FB APPLICATIONS:													
C-34	Min. 2,500 psi concrete	JM SA Primer Low VOC	JM Vapor Barrier SA	Self-Adhered	Min. 1.5-inch ENRGY 3, ValuTherm	JM TWO-PART UIA	(Optional) Additional layers of base insulation	JM TWO-PART UIA	JM TPO FB 115 or 135	JM-RSUA, 12-inch o.c.	135	A	1/2
C-35	Min. 2,500 psi concrete	JM SA Primer Low VOC	JM Vapor Barrier SA	Self-Adhered	Min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, JM ISO 3, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF	JM TWO-PART UIA	Min. 0.5-inch Invinsa, SECUROCK Gypsum-Fiber Roof Board or ProtectoR HD or min. 1.5-inch Invinsa Foam	JM TWO-PART UIA	JM TPO FB 115 or 135	JM-RSUA, 12-inch o.c.	135	A	1/2
C-36	Min. 2,500 psi concrete	JM SA Primer Low VOC	JM Vapor Barrier SA	Self-Adhered	Min. 1.5-inch ENRGY 3, ValuTherm	JM-RSUA	(Optional) Additional layers of base insulation	JM-RSUA	JM TPO FB 115 or 135	JM-RSUA, 12-inch o.c.	135	A	1/2
C-37	Min. 2,500 psi concrete	JM SA Primer Low VOC	JM Vapor Barrier SA	Self-Adhered	Min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, JM ISO 3, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF	JM-RSUA	Min. 0.5-inch Invinsa, SECUROCK Gypsum-Fiber Roof Board or ProtectoR HD	JM-RSUA	JM TPO FB 115 or 135	JM-RSUA, 12-inch o.c.	135	A	1/2
C-38 (Con't on next page)	Min. 2,500 psi concrete	JM SA Primer Low VOC	(optional) JM Vapor Barrier SA	Self-Adhered	Min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR	JM-RSUA or JM TWO-PART UIA or	(Optional) Min. 0.25-inch SECUROCK Gypsum Fiber Roof	JM-RSUA or JM TWO-PART UIA or JM TWO-	JM TPO FB 115	JM-RSUA 12" o.c.	135	A	1/2

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**TABLE 4A-2: CONCRETE DECKS - NEW CONSTRUCTION or REROOF (Tear-Off)
SYSTEM TYPE A-1B: BONDED TEMP ROOF, BONDED INSULATION, BONDED ROOF COVER**

System No.	Deck (See Note 1)	Primer	Temporary Roof		Base Insulation Layer		Top Insulation Layer or Base Ply		Roof Cover		Tested Wind Uplift (psf)	Fire Rating UL790/E108	
			Type	Attach	Type	Attach	Type	Attach	Type	Attach		Class	Max Incline (in.)
						JM TWO-PART UIA-C	Board, Invinsa or ProtectoR HD	PART UIA-C	or 135				
C-39	Min. 2500 psi concrete	None			Min. 1.5 inch ERNGY 3 i	JM RSUA, JM Two Part UIA	ProtectoR HD	JM Two Part UIA or JM RSUA	JM TPO	JM TPO LVOC, MBA	420	A	1/4
C-40	Min. 2500 psi concrete	None			Min. 1.5 inch ERNGY 3 i	JM RSUA, JM Two Part UIA	ProtectoR HD	JM Two Part UIA or JM RSUA	JM TPO FB 115 or 135	JM JM TWO-PART UIA-C1	420	A	1/4
C-41	Min. 2,500 psi concrete	ASTM D 41 primer	DynaBase HW	torch adhered	Min. 1.5-inch ENRGY 3 CGF	JM-RSUA	Min. 0.25-inch SECUROCK Gypsum Fiber Roof Board	JM-RSUA	JM TPO FB 115 or 135	JM TPO WB-MA, 1.18-1.54 gal/sq.	595	A	2
C-42	Min. 2,500 psi concrete	None	DynaBase HW	torch adhered	Min. 0.25-inch SECUROCK Gypsum Fiber Roof Board	JM-RSUA	None	None	JM TPO FB 115 or 135	JM TPO WB-MA, 1.18-1.54 gal/sq.	595	A	2

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TABLE 4A-2: CONCRETE DECKS - NEW CONSTRUCTION or REROOF (Tear-Off) SYSTEM TYPE A-1B: BONDED TEMP ROOF, BONDED INSULATION, BONDED ROOF COVER													
System No.	Deck (See Note 1)	Primer	Temporary Roof		Base Insulation Layer		Top Insulation Layer or Base Ply		Roof Cover		Tested Wind Uplift (psf)	Fire Rating UL790/E108	
			Type	Attach	Type	Attach	Type	Attach	Type	Attach		Class	Max Incline (in.)
JM TPO SA APPLICATIONS:													
C-43	Min. 2,500 psi concrete	JM SA Primer Low VOC	(optional) JM Vapor Barrier SA		Min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR	JM-RSUA or JM TWO-PART UIA or JM TWO-PART UIA-C	(Optional) Min. 0.25-inch SECUROCK Gypsum Fiber Roof Board or Invinsa, ProtectoR HD	JM-RSUA or JM TWO-PART UIA or JM TWO-PART UIA-C	JM TPO SA	Self-Adhered	135	A	1/4
C-44	Min. 2,500 psi concrete	None	DynaBase HW	torch adhered	Min. 0.25-inch SECUROCK Gypsum Fiber Roof Board	JM-RSUA	None	None	JM TPO SA	Self-Adhered	495	A	1/4
C-45	Min. 2,500 psi concrete	ASTM D 41 primer	DynaBase HW	torch adhered	Min. 1.5-inch ENRGY 3 CGF	JM-RSUA	Min. 0.25-inch SECUROCK Gypsum Fiber Roof Board	JM-RSUA	JM TPO SA	Self-Adhered	495	A	1/4
JM TPO APPLICATIONS:													
C-46	Min. 2,500 psi concrete	None	DynaBase PR, DynaLastic 180 S, DynaLasitc 250 S, DynaFast 180S	DynaSet 1k applied in ribbons 0.5-0.75 in. wide spaced 12 in. o.c.	Min. 1.5 inch ENRGY 3, ENRGY 3 CGF	JM-RSUA or JM TWO-PART UIA or JM TWO-PART UIA-C	None	Two Part UIA, JM RSUA or JM Two Part UIA-C	JM TPO	JM MBA JM LVOC MA	465 psf	A	1/4
C-47	Min. 2,500 psi concrete	None	DynaBase PR, DynaLastic 180 S, DynaLasitc 250 S, DynaFast 180S	DynaSet 1k applied in ribbons 0.5-0.75 in. wide spaced 12 in. o.c.	Min. 1.5 inch ENRGY 3, ENRGY 3 CGF	JM-RSUA or JM TWO-PART UIA or JM TWO-PART UIA-C	None	Two Part UIA, JM RSUA or JM Two Part UIA-C	JM TPO	JM ASSBA	315	A	1/4

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**TABLE 4A-2: CONCRETE DECKS - NEW CONSTRUCTION or REROOF (Tear-Off)
SYSTEM TYPE A-1B: BONDED TEMP ROOF, BONDED INSULATION, BONDED ROOF COVER**

System No.	Deck (See Note 1)	Primer	Temporary Roof		Base Insulation Layer		Top Insulation Layer or Base Ply		Roof Cover		Tested Wind Uplift (psf)	Fire Rating UL790/E108	
			Type	Attach	Type	Attach	Type	Attach	Type	Attach		Class	Max Incline (in.)
C-48	Min. 2,500 psi concrete	None	DynaBase PR, DynaLastic 180 S, DynaLasitc 250 S, DynaFast 180S	DynaSet 1k applied in ribbons 0.5-0.75 in. wide spaced 12 in. o.c.	Min. 1.5 inch ENRGY 3, ENRGY 3 CGF	JM-RSUA or JM TWO-PART UIA or JM TWO-PART UIA-C	None	Two Part UIA, JM RSUA or JM Two Part UIA-C	JM TPO	JM TPO WB-MA 0.43 gal/sq (0.18 L/m ²) on the substrate only	330	A	1/4
C-49	Min. 2,500 psi concrete	None	DynaBase PR, DynaLastic 180 S, DynaLasitc 250 S, DynaFast 180S	DynaSet 1k applied in ribbons 0.5-0.75 in. wide spaced 12 in. o.c.	Min. 1.5 inch ENRGY 3, ENRGY 3 CGF	JM-RSUA or JM TWO-PART UIA or JM TWO-PART UIA-C	None	Two Part UIA, JM RSUA or JM Two Part UIA-C	JM TPO FB 115 or 135	JM Two Part Urethane Insulation Adhesive Canister, applied in splatter pattern at 0.318 gal/sq (0.13 L/m ²)	465	A	1-1/2
C-50	Min. 2,500 psi concrete	None		DynaSet 1k applied in ribbons 0.5-0.75 in. wide spaced 12 in. o.c.	Min. 1.5 inch ENRGY 3, ENRGY 3 CGF	JM-RSUA or JM TWO-PART UIA or JM TWO-PART UIA-C	None	Two Part UIA, JM RSUA or JM Two Part UIA-C	JM TPO FB 115 or 135	JM Two Part Urethane Insulation Adhesive Canister, applied in splatter pattern at 0.318 gal/sq (0.13 L/m ²)	555	A	1-1/2
C-51	Min. 2,500 psi concrete	ASTM D 41 primer	DynaBase HW	torch adhered	Min. 1.5-inch ENRGY 3 CGF	JM-RSUA	Min. 0.25-inch SECUROCK Gypsum Fiber Roof Board	JM-RSUA	JM TPO 46, 60, or 80	JM TPO WB-MA, 1.18-1.54 gal/sq.	595	A	1/4
										JM LVOC-MA, 1.66 gal/sq.			3/4
C-52	Min. 2,500 psi concrete	None	DynaBase HW	torch adhered	Min. 0.25-inch SECUROCK Gypsum Fiber Roof Board	JM-RSUA	None	None	JM TPO 45, 60, or 80	JM TPO WB-MA, 1.18-1.54 gal/sq. or JM LVOC-MA, 1.66 gal/sq.	595	A	1/4
										3/4			

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TABLE 4B: CONCRETE DECKS - NEW CONSTRUCTION or REROOF (Tear-Off) SYSTEM TYPE C-1: MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER										
System No.	Deck (See Note 1)	Base Insulation Layer	Top Insulation Layer			Roof Cover		Tested Wind Uplift (psf)	Fire Rating UL790/E108	
			Type	Fasteners	Attach	Type	Attach		Class	Max Incline (in.)
JM TPO APPLICATIONS:										
C-53	Min. 2,500 psi concrete or G33 Steel	(optional) <i>INSULATION</i> followed by min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR	Min. 0.375-inch SECUROCK Gypsum Fiber Roof Board	All Purpose Fasteners (Concrete Deck Only) or Structural Concrete Deck Fasteners (Concrete Deck Only) with UltraFast 3" Round Metal Plates or UltraFast Fasteners (Steel Deck Only) with JM UltraFast Plates (Square)	1 per 2.67 ft ²	JM TPO 45, 60, or 80	JM MBA, 1.66-2.2 gal/sq.	90	A	1-1/2
C-54	Min. 2,500 psi concrete or G33 Steel	(optional) <i>INSULATION</i> followed by min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR	Min. 0.5-inch SECUROCK Gypsum Fiber Roof Board	All Purpose Fasteners (Concrete Deck Only) or Structural Concrete Deck Fasteners (Concrete Deck Only) with UltraFast 3" Round Metal Plates or UltraFast Fasteners (Steel Deck Only) with JM UltraFast Plates (Square)	1 per 4 ft ²	JM TPO 45, 60, or 80	JM MBA, 1.66-2.2 gal/sq. or JM LVOC MA	90	A	1-1/2
C-55	Min. 2,500 psi concrete or G33 Steel	(optional) <i>INSULATION</i>	Min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR	Structural Concrete Deck Fasteners (Concrete Deck Only) with UltraFast 3" Round Metal Plates or UltraFast Fasteners (Steel Deck Only) or All Purpose Fasteners (Concrete Deck Only) with JM UltraFast Plates (Round and Square)	1 per 2 ft ²	JM TPO 45, 60, or 80	JM MBA, 1.66 gal/sq. or JM TPO WB-MA, 1.26-1.66 gal/sq. or JM LVOC , 1.10 gal/sq	90	A	1-1/2
C-56	Min. 2,500 psi concrete or G33, F1, L6, S24 Steel Deck	(optional) <i>INSULATION</i> followed by min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR	Min. 0.25-inch SECUROCK Gypsum Fiber Roof Board	All Purpose Fasteners (Concrete Deck Only) or Structural Concrete Deck Fasteners (Concrete Deck Only) with UltraFast 3" Round Metal Plates or UltraFast Fasteners (Steel Deck Only) with JM UltraFast Plates (Square)	1 per 1.33 ft ²	JM TPO 45, 60, or 80	JM MBA, 1.66-2.2 gal/sq. or JM LVOC MA	105	A	1-1/2
C-57	Min. 2,500 psi concrete or G33, F2, L6, S24 Steel Deck	(optional) <i>INSULATION</i>	Min. 2-inch ENRGY 3 CGF, ENRGY 3 FR	All Purpose Fasteners (Concrete Deck Only) or Structural Concrete Deck Fasteners (Concrete Deck Only) with UltraFast 3" Round Metal Plates or UltraFast Fasteners (Steel Deck Only) with JM UltraFast Plates (Round and Square)	1 per 2.67 ft ²	JM TPO 45, 60, or 80	JM MBA, 1.66 gal/sq.	105	A	1/2

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**TABLE 4B: CONCRETE DECKS - NEW CONSTRUCTION or REROOF (Tear-Off)
SYSTEM TYPE C-1: MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER**

System No.	Deck (See Note 1)	Base Insulation Layer	Top Insulation Layer			Roof Cover		Tested Wind Uplift (psf)	Fire Rating UL790/E108	
			Type	Fasteners	Attach	Type	Attach		Class	Max Incline (in.)
C-58	Min. 2,500 psi concrete (New, Existing, or Recover) or G33, P, L6, S24 steel deck (New, Existing, or Recover)	(optional) INSULATION	Min. 1.5-inch ENRGY 3 CGF, ENRGY 3 FR	(Concrete Deck Only) All Purpose Fasteners or (Steel Deck Only) JM UltraFast Fasteners with UltraFast Square Metal Plates	1 per 1.78 ft ²	JM TPO 45, 60, or 80	JM TPO MBA or JM TPO WB-MA, 1.26-1.66 gal/sq.	105	A	1/2
C-59	Min. 2,500 psi concrete or G33, F2W, L6, S24 steel deck	(optional) INSULATION followed by min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR	Min. 0.25-inch SECUROCK Gypsum Fiber Roof Board	All Purpose Fasteners (Concrete Deck Only) or Structural Concrete Deck Fasteners (Concrete Deck Only) with UltraFast 3" Round Metal Plates or UltraFast Fasteners (Steel Deck Only) with JM UltraFast Plates (Square)	1 per 1 ft ²	JM TPO 45, 60, or 80	JM MBA, 1.66-2.2 gal/sq. or JM TPO LVOC MA	120	A	1-1/2
C-60	Min. 2,500 psi concrete or G33, F2, L6, S24 steel deck	(optional) INSULATION	Min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR	(Concrete Deck Only) All Purpose Fasteners or (Steel Deck Only) JM UltraFast Fasteners with UltraFast Square Metal Plates	1 per 1.78 ft ²	JM TPO 45, 60, or 80	JM TPO LVOC MA, 1.66-2.2 gal/sq	120	A	1/2
C-61	Min. 2,500 psi concrete or G33, F2, L6, S24 steel deck	(optional) INSULATION	Min. 2-inch ENRGY 3 CGF, ENRGY 3 FR	All Purpose Fasteners (Concrete Deck Only) or Structural Concrete Deck Fasteners (Concrete Deck Only) with UltraFast 3" Round Metal Plates or UltraFast Fasteners (Steel Deck Only) with JM UltraFast Plates (Round and Square)	1 per 2 ft ²	JM TPO 45, 60, or 80	JM MBA, 1.66 gal/sq. or JM TPO WB-MA, 1.26-1.66 gal/sq.	135	A	1/2
C-62	Min. 2,500 psi concrete or G33, F2, L6, S24 steel deck	(optional) INSULATION followed by min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR	Min. 0.5-inch SECUROCK Gypsum Fiber Roof Board	(Concrete Deck Only) All Purpose Fasteners or (Steel Deck Only) JM UltraFast Fasteners with UltraFast Square Metal Plates	1 per 1 ft ²	JM TPO 45, 60, or 80	JM TPO WB-MA, 1.18-1.54 gal/sq.	165	A	2
C-63	Min. 2,500 psi concrete or G80, F2, L6, S24 steel deck	(optional) INSULATION	Min. 2-inch ENRGY 3 CGF, ENRGY 3 FR	All Purpose Fasteners (Concrete Deck Only) or Structural Concrete Deck Fasteners (Concrete Deck Only) with UltraFast 3" Round Metal Plates or UltraFast Fasteners (Steel Deck Only) with JM UltraFast Plates (Round and Square)	1 per 1.33 ft ²	JM TPO 45, 60, or 80	JM MBA, 1.66 gal/sq. or JM TPO WB-MA, 1.26-1.66 gal/sq.	210	A	1/2

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**TABLE 4B: CONCRETE DECKS - NEW CONSTRUCTION or REROOF (Tear-Off)
SYSTEM TYPE C-1: MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER**

System No.	Deck (See Note 1)	Base Insulation Layer	Top Insulation Layer			Roof Cover		Tested Wind Uplift (psf)	Fire Rating UL790/E108	
			Type	Fasteners	Attach	Type	Attach		Class	Max Incline (in.)
C-64	Min. 2,500 psi concrete or G80, F1W, L6, S24 steel deck	(optional) <i>INSULATION</i> followed by min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR	Min. 0.5-inch SECUROCK Gypsum Fiber Roof Board	All Purpose Fasteners (Concrete Deck Only) or Structural Concrete Deck Fasteners (Concrete Deck Only) with UltraFast 3" Round Metal Plates or UltraFast Fasteners (Steel Deck Only) with JM UltraFast Plates (Square)	1 per 1 ft ²	JM TPO 45, 60, or 80	JM TPO WB-MA, 1.18-1.54 gal/sq.	300	A	2
JM TPO FB APPLICATIONS:										
C-65	Min. 2,500 psi concrete or G33 Steel	(optional) <i>INSULATION</i> followed by min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR	Min. 0.375-inch SECUROCK Gypsum Fiber Roof Board	All Purpose Fasteners (Concrete Deck Only) or Structural Concrete Deck Fasteners (Concrete Deck Only) with UltraFast 3" Round Metal Plates or UltraFast Fasteners (Steel Deck Only) with JM UltraFast Plates (Square)	1 per 2.67 ft ²	JM TPO FB 115 or 135	JM TPO WB-MA, 1.18-1.54 gal/sq.	90	A	2
C-66	Min. 2,500 psi concrete or G33 Steel	(optional) <i>INSULATION</i> followed by min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR	Min. 0.5-inch SECUROCK Gypsum Fiber Roof Board	All Purpose Fasteners (Concrete Deck Only) or Structural Concrete Deck Fasteners (Concrete Deck Only) with UltraFast 3" Round Metal Plates or UltraFast Fasteners (Steel Deck Only) with JM UltraFast Plates (Square)	1 per 4 ft ²	JM TPO FB 115 or 135	JM TPO WB-MA, 1.18-1.54 gal/sq.	90	A	2
C-67	Min. 2,500 psi concrete or G33, F1, L6, S24 Steel Deck	(optional) <i>INSULATION</i> followed by min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR	Min. 0.25-inch SECUROCK Gypsum Fiber Roof Board	All Purpose Fasteners (Concrete Deck Only) or Structural Concrete Deck Fasteners (Concrete Deck Only) with UltraFast 3" Round Metal Plates or UltraFast Fasteners (Steel Deck Only) with JM UltraFast Plates (Square)	1 per 1.33 ft ²	JM TPO FB 115 or 135	JM TPO WB-MA, 1.18-1.54 gal/sq.	105	A	2
C-68	Min. 2,500 psi concrete or G33, F1, L6, S24 Steel Deck	(optional) <i>INSULATION</i> followed by min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR	Min. 0.25-inch SECUROCK Gypsum Fiber Roof Board	All Purpose Fasteners (Concrete Deck Only) or Structural Concrete Deck Fasteners (Concrete Deck Only) with UltraFast 3" Round Metal Plates or UltraFast Fasteners (Steel Deck Only) with JM UltraFast Plates (Square)	1 per 1.33 ft ²	JM TPO FB 150 or 175	Base Ply (Optional): Torched Adhered; Membrane: HA	105	A	1/2
C-69	Min. 2,500 psi concrete (New, Existing, or Recover) or G33, F2, L6, S18 Steel Deck	(optional) <i>INSULATION</i>	Min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR	All Purpose Fasteners or JM UltraFast Fasteners (Steel Deck Only) and JM UltraFast Plates (Square or Round)	1 per 1.78 ft ²	JM TPO FB 150 or 175	HA	105	A	3/4

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**TABLE 4B: CONCRETE DECKS - NEW CONSTRUCTION or REROOF (Tear-Off)
SYSTEM TYPE C-1: MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER**

System No.	Deck (See Note 1)	Base Insulation Layer	Top Insulation Layer			Roof Cover		Tested Wind Uplift (psf)	Fire Rating UL790/E108	
			Type	Fasteners	Attach	Type	Attach		Class	Max Incline (in.)
C-70	Min. 2,500 psi concrete or G33, F2W, L6, S24 Steel Deck	(optional) <i>INSULATION</i> followed by min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR	Min. 0.25-inch SECUROCK Gypsum Fiber Roof Board	All Purpose Fasteners (Concrete Deck Only) or Structural Concrete Deck Fasteners (Concrete Deck Only) with UltraFast 3" Round Metal Plates or UltraFast Fasteners (Steel Deck Only) with JM UltraFast Plates (Square)	1 per 1 ft ²	JM TPO FB 115 or 135	JM TPO WB-MA, 1.18-1.54 gal/sq.	120	A	2
C-71	Min. 2,500 psi concrete or G33, F2, L6, S24 steel deck	(optional) <i>INSULATION</i> followed by min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR	Min. 0.5-inch SECUROCK Gypsum Fiber Roof Board	(Concrete Deck Only) All Purpose Fasteners JM UltraFast Fasteners (Steel Deck Only) and UltraFast Square Metal Plates	1 per 1 ft ²	JM TPO FB 115 or 135	JM TPO WB-MA, 1.18-1.54 gal/sq.	165	A	2
C-72	Min. 2,500 psi concrete or G80, F1W, L6, S24 steel deck	(optional) <i>INSULATION</i> followed by min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR	Min. 0.5-inch SECUROCK Gypsum Fiber Roof Board	(Concrete Deck Only) All Purpose Fasteners JM UltraFast Fasteners (Steel Deck Only) and UltraFast Square Metal Plates	1 per 1 ft ²	JM TPO FB 115 or 135	JM TPO WB-MA, 1.18-1.54 gal/sq.	300	A	2
JM TPO SA APPLICATIONS:										
C-73	Min. 2,500 psi concrete or G33, F1, L6, S24 Steel Deck	(optional) <i>INSULATION</i> followed by min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR	Min. 0.25-inch SECUROCK Gypsum Fiber Roof Board	All Purpose Fasteners (Concrete Deck Only) or Structural Concrete Deck Fasteners (Concrete Deck Only) with UltraFast 3" Round Metal Plates or UltraFast Fasteners (Steel Deck Only) with JM UltraFast Plates (Square)	1 per 1.33 ft ²	JM TPO SA	Self-Adhered	105	A	2
C-74	Min. 2,500 psi concrete or G33, F2, L6, S24 Steel Deck	(optional) <i>INSULATION</i>	Min. 2-inch ENRGY 3 CGF, ENRGY 3 FR	All Purpose Fasteners (Concrete Deck Only) or Structural Concrete Deck Fasteners (Concrete Deck Only) with UltraFast 3" Round Metal Plates or UltraFast Fasteners (Steel Deck Only) with JM UltraFast Plates (Round and Square)	1 per 2.67 ft ²	JM TPO SA	Self-Adhered	105	A	1/4
C-75	Min. 2,500 psi concrete or G33, F2W, L6, S24 Steel Deck	(optional) <i>INSULATION</i> followed by min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR	Min. 0.25-inch SECUROCK Gypsum Fiber Roof Board	All Purpose Fasteners (Concrete Deck Only) or Structural Concrete Deck Fasteners (Concrete Deck Only) with UltraFast 3" Round Metal Plates or UltraFast Fasteners (Steel Deck Only) with JM UltraFast Plates (Square)	1 per 1 ft ²	JM TPO SA	Self-Adhered	120	A	2

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**TABLE 4B: CONCRETE DECKS - NEW CONSTRUCTION or REROOF (Tear-Off)
SYSTEM TYPE C-1: MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER**

System No.	Deck (See Note 1)	Base Insulation Layer	Top Insulation Layer			Roof Cover		Tested Wind Uplift (psf)	Fire Rating UL790/E108	
			Type	Fasteners	Attach	Type	Attach		Class	Max Incline (in.)
C-76	Min. 2,500 psi concrete or G33, F2, L6, S24	(optional) INSULATION	Min. 1.5-inch ENRGY 3 CGF, ENRGY 3 FR	(Concrete Deck Only) All Purpose Fasteners JM UltraFast Fasteners (Steel Deck Only) and UltraFast Square Metal Plates	1 per 1.78 ft ²	JM TPO SA	Self-Adhered	120	A	1/4
C-77	Min. 2,500 psi concrete or G33, F2, L6, S24 Steel Deck	(optional) INSULATION	Min. 2-inch ENRGY 3 CGF, ENRGY 3 FR	All Purpose Fasteners (Concrete Deck Only) or Structural Concrete Deck Fasteners (Concrete Deck Only) with UltraFast 3" Round Metal Plates or UltraFast Fasteners (Steel Deck Only) with JM UltraFast Plates (Round and Square)	1 per 2 ft ²	JM TPO SA	Self-Adhered	135	A	1/4
C-78	Min. 2,500 psi concrete or G33, F2, L6, S24 Steel Deck	(optional) INSULATION followed by min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR	Min. 0.5-inch SECUROCK Gypsum Fiber Roof Board	(Concrete Deck Only) All Purpose Fasteners JM UltraFast Fasteners (Steel Deck Only) and UltraFast Square Metal Plates	1 per 1 ft ²	JM TPO SA	Self-Adhered	165	A	2
C-79	Min. 2,500 psi concrete or G80, F2, L6, S24 Steel Deck	(optional) INSULATION	Min. 2-inch ENRGY 3 CGF, ENRGY 3 FR	All Purpose Fasteners (Concrete Deck Only) or Structural Concrete Deck Fasteners (Concrete Deck Only) with UltraFast 3" Round Metal Plates or UltraFast Fasteners (Steel Deck Only) with JM UltraFast Plates (Round and Square)	1 per 1.33 ft ²	JM TPO SA	Self-Adhered	210	A	1/4
C-80	Min. 2,500 psi concrete or G80, F1W, L6, S24	(optional) INSULATION followed by min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR	Min. 0.5-inch SECUROCK Gypsum Fiber Roof Board	(Concrete Deck Only) All Purpose Fasteners JM UltraFast Fasteners (Steel Deck Only) and UltraFast Square Metal Plates	1 per 1 ft ²	JM TPO SA	Self-Adhered	300	A	2

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**TABLE 4C: CONCRETE DECKS - NEW CONSTRUCTION, REROOF (Tear-Off), or RECOVER
SYSTEM TYPE D: INSULATED, MECHANICALLY ATTACHED ROOF COVER (STRESS PLATES)**

System No.	Deck (See Note 1)	Insulation		Roof Cover			Tested Wind Uplift (psf)	Fire Rating UL790/E108	
		Type	Attachment	Membrane	Fasteners	Attachment		Class	Max Incline (in.)
C-81	Min. 2,500 psi concrete or G33, L6 steel deck	(optional) <i>INSULATION</i> followed by min. 1-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, or ENRGY 3 FR followed by min. 0.25" Invinsa Roof Board or Protector HD	Prelim. attached	JM TPO 46, 60, or 80 (10 ft sheet)	All Purpose Fasteners (Concrete deck only) or High Load Fasteners (Steel Deck only) with High Load Plus Plates	12-in. oc within 6-in. wide laps spaced 114-in. oc Laps sealed with 1.5-in. heat weld outside lap	60	A	3/4
C-82	Min. 2,500 psi concrete or G80, L6, F2W, S24 Steel Deck	(optional) <i>INSULATION</i> followed by min. 1-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, or ENRGY 3 FR	Prelim. attached	JM TPO 60 or 80 (8 ft sheet)	All Purpose Fasteners (Concrete Deck only) or High Load Fasteners (Steel Deck Only) with High Load Plates	12-in. oc within 6-in. wide laps spaced 90-in. oc Laps sealed with 1.5-in. heat weld outside lap	75	A	3/4
C-834	Min. 2,500 psi concrete or G80, L6, F2W, S24 Steel Deck	(optional) <i>INSULATION</i> followed by min. 1-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, or ENRGY 3 FR	Prelim. attached	JM TPO 45, 60, or 80 (8 ft sheet)	All Purpose Fasteners (Concrete Deck only) or High Load Fasteners (Steel Deck Only) with High Load Plus Plates	12-in. oc within 6-in. wide laps spaced 90-in. oc Laps sealed with 1.5-in. heat weld outside lap	90	A	3/4
C-84	Min. 2,500 psi concrete (not recover) or G80 F1, L6, S18 Steel Deck (not recover)	(optional) <i>INSULATION</i> followed by min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, or ENRGY 3 FR followed by (optional) min. 1" ENRGY 3, min. 0.25" DensDeck, SECUROCK Gypsum Roof Board, Invinsa Roof Board or Protector HD	Prelim. attached	JM TPO 45, 60, or 80 (10 ft sheet)	All Purpose Fasteners with High Load Plates (Concrete Deck Only) or Extra High Load Fasteners and Extra High Load Plates (Steel Deck Only)	12-in. oc within 6-in. wide laps spaced 114-in. oc Laps sealed with 1.5-in. heat weld outside lap	90	A	3/4
C-85	Min. 2,500 psi concrete (not recover) or G80 F1, L6, S18 Steel Deck (not recover)	(optional) <i>INSULATION</i> followed by min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, or ENRGY 3 FR followed by (optional) min. 0.5" ENRGY 3, min. 0.25" DensDeck, SECUROCK Gypsum Roof Board or Invinsa Roof Board or Protector HD	Prelim. attached	JM TPO 45, 60, or 80 (10 ft sheet)	All Purpose Fasteners (Concrete Deck Only) or High Load Fasteners (Steel Deck Only) with High Load Plates	6-in. oc within 6-in. wide laps spaced 114-in. oc Laps sealed with 1.5-in. heat weld outside lap	90	A	3/4
C-86	Min. 2,500 psi concrete (not recover) or G80 F1, L6, S18 Steel Deck (not recover)	(optional) <i>INSULATION</i> followed by min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, or ENRGY 3 FR followed by (optional) min. 1" ENRGY 3, min. 0.25" DensDeck, SECUROCK Gypsum Roof Board, Invinsa Roof Board or Protector HD	Prelim. attached	JM TPO 45, 60, or 80 (10 ft sheet)	All Purpose Fasteners with High Load Plates (Concrete Deck Only) or Extra High Load Fasteners and Extra High Load Plates (Steel Deck Only)	6-in. oc within 6-in. wide laps spaced 114-in. oc Laps sealed with 1.5-in. heat weld outside lap	105	A	3/4
C-87	Min. 2,500 psi concrete (not recover) or G33 F3, L6, Steel Deck (not recover)	(optional) <i>INSULATION</i> followed by min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, or ENRGY 3 FR followed by (optional) min. 0.5" ENRGY 3, min. 0.25" DensDeck, SECUROCK Gypsum Roof Board, Invinsa Roof Board or Protector HD	Prelim. attached	JM TPO 45, 60, or 80 (8 ft sheet)	All Purpose Fasteners (Concrete Deck Only) or High Load Fasteners (Steel Deck Only) with High Load Plates	6-in. oc within 6-in. wide laps spaced 90-in. oc Laps sealed with 1.5-in. heat weld outside lap	120	A	3/4

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TABLE 4C: CONCRETE DECKS - NEW CONSTRUCTION, REROOF (Tear-Off), or RECOVER SYSTEM TYPE D: INSULATED, MECHANICALLY ATTACHED ROOF COVER (STRESS PLATES)

System No.	Deck (See Note 1)	Insulation		Roof Cover			Tested Wind Uplift (psf)	Fire Rating UL790/E108	
		Type	Attachment	Membrane	Fasteners	Attachment		Class	Max Incline (in.)
C-88	Min. 2,500 psi concrete or G33, P, L6 Steel Deck	(optional) <i>INSULATION</i> followed by min. 0.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, SeparatoR FR (Recover Only) or ENRGY 3 FR followed by min. 0.25" Invinsa Roof Board or ProtectoR HD or SECUROCK or min. 0.5" ENRGY 3	Prelim. attached	JM TPO 45, 60, or 80 (10 ft sheet)	All Purpose Fasteners (Concrete Deck Only) or High Load Fasteners (Steel Deck Only) with High Load Plates	6-in. oc within 6-in. wide laps spaced 114-in. oc Laps sealed with 1.5-in. heat weld outside lap	120	A	3/4
C-8	Min. 2,500 psi concrete or G33, P, L6 Steel Deck	(optional) <i>INSULATION</i> followed by min. 0.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, SeparatoR FR (Recover Only) or ENRGY 3 FR followed by min. 0.25" Invinsa Roof Board, ProtectoR HD or SECUROCK or min. 0.5" ENRGY 3	Prelim. attached	JM TPO 45, 60, or 80 (8 ft sheet)	All Purpose Fasteners (Concrete Deck Only) or High Load Fasteners (Steel Deck Only) with High Load Plates	6-in. oc within 6-in. wide laps spaced 90-in. oc Laps sealed with 1.5-in. heat weld outside lap	150	A	3/4
C-90	Min. 2,500 psi concrete or G33, P, L6 Steel Deck	(optional) <i>INSULATION</i> followed by min. 0.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, SeparatoR FR (Recover Only) or ENRGY 3 FR followed by min. 0.25" Invinsa Roof Board, ProtectoR HD or SECUROCK or min. 0.5" ENRGY 3	Prelim. attached	JM TPO 45, 60, or 80 (5 ft sheet)	All Purpose Fasteners (Concrete Deck Only) or High Load Fasteners (Steel Deck Only) with High Load Plates	6-in. oc within 6-in. wide laps spaced 54-in. oc Laps sealed with 1.5-in. heat weld outside lap	195	A	3/4

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TABLE 5A: LIGHTWEIGHT CONCRETE DECKS - NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE A: BONDED INSULATION, BONDED ROOF COVER

System No.	Deck (See Note 1)		Insulation/Cover Board		Roof Cover		Tested Wind Uplift (psf)	Fire Rating UL790/E108	
	Structural	LWC	Type	Attach	Type	Attach		Class	Max Incline (in.)
JM TPO APPLICATIONS:									
LW-1	Min. 2,500 psi concrete or G33 Steel Deck	Min. 1/8" think slurry coat of min. 340 psi. Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture applied over deck treated with Celcore S-1, followed by a 1" thick, EPS board and a min. 2" thick top coat. Celcore PVA Curing Compound applied at a rate of 300 ft ² /gal.	Min. 1.5" ENRGY 3	JM RSUA, 12" o.c.	JM TPO 45, 60, 80	JM MBA, 1.66 gal/sq. JM TPO WB-MA, 1.26-1.42 gal/sq., or JM LVOC MA, 1.6 gal/sq	155	A	1/2
LW-2	Min. 2,500 psi concrete or G33 Steel Deck	Min. 1/8" think slurry coat of min. 340 psi. Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture applied over deck treated with Celcore S-1, followed by a 1" thick, EPS board and a min. 2" thick top coat. Celcore PVA Curing Compound applied at a rate of 300 ft ² /gal.	<u>BASE</u> Min. 1.5" ENRGY 3 or ENRGY 3 CGF <u>TOP</u> SECUROCK Gypsum-Fiber Roof Board	JM RSUA, 12" o.c.	JM TPO 45, 60, 80	JM TPO WB-MA, 1.18-1.54 gal/sq. JM LVOC MA, 1.6 gal/sq	155	A	1/2
LW-3	Min. 2,500 psi concrete or G33 Steel Deck	Min. 300 psi Poured in place Cellular Lightweight Concrete with encapsulated insulation board	<u>Min. 1.5"</u> <u>ENERGY 3</u>	JM TWO-PART UIA, 12" o.c. or JM TWO-PART UIA-C	JM TPO 45, 60, 80	JM MBA, 1.66 gal/sq., JM TPO WB-MA, 1.26-1.42 gal/sq., or JM LVOC MA, 1.6 gal/sq	160	A	1/2
LW-4	Min. 2,500 psi concrete or G33 Steel Deck	Min. 300 psi Poured in place Cellular Lightweight Concrete with encapsulated insulation board	<u>BASE</u> Min. 1.5" ENRGY 3 or ENRGY 3 AGF <u>TOP</u> SECUROCK Gypsum-Fiber Roof Board	JM TWO-PART UIA, 12" o.c. or JM TWO-PART UIA-C	JM TPO 45, 60, 80	JM TPO WB-MA, 1.18-1.54 gal/sq. JM LVOC MA, 1.6 gal/sq.	160	A	1/2

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TABLE 5A: LIGHTWEIGHT CONCRETE DECKS - NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE A: BONDED INSULATION, BONDED ROOF COVER

System No.	Deck (See Note 1)		Insulation/Cover Board		Roof Cover		Tested Wind Uplift (psf)	Fire Rating UL790/E108	
	Structural	LWC	Type	Attach	Type	Attach		Class	Max Incline (in.)
LW-5	Min. 2,500 psi concrete or G33 Steel Deck	Min. 1/8" thick slurry coat of min. 310 psi. Elastizell with Zell-Crete Fibers applied over deck, followed by a 1" thick, EPS board and a min. 2" thick top coat.	Min. 1.5" ENRGY 3	JM TWO-PART UIA, 12" o.c. or JM TWO-PART UIA-C	JM TPO 45, 60, 80	JM MBA, 1.66 gal/sq., JM TPO WB-MA, 1.26-1.42 gal/sq.or JM LVOC MA, 1.6 gal/sq	260	A	1/2
LW-6	Min. 2,500 psi concrete or G33 Steel Deck	Min. 1/8" thick slurry coat of min. 310 psi. Elastizell with Zell-Crete Fibers applied over deck, followed by a 1" thick, EPS board and a min. 2" thick top coat.	<u>BASE</u> Min. 1.5" ENRGY 3 or ENRGY 3 AGF <u>TOP</u> SECUROCK Gypsum-Fiber Roof Board	JM TWO-PART UIA, 12" o.c. or JM TWO-PART UIA-C	JM TPO 45, 60, 80	JM TPO WB-MA, 1.18-1.54 gal/sq.	260	A	1/2
						JM LVOC MA, 1.6 gal/sq		A	1/2
JM TPO FB APPLICATIONS:									
LW-7	Min. 2,500 psi concrete or G33 Steel Deck	Min. 1/8" thick slurry coat of min. 340 psi. Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture applied over deck treated with Celcore S-1, followed by a 1" thick, EPS board and a min. 2" thick top coat. Celcore PVA Curing Compound applied at a rate of 300 ft ² /gal.	Min. 1.5" ENRGY 3	JM RSUA, 12" o.c.	JM TPO FB 115 or 135	JM TPO WB-MA, 1.18-1.54 gal/sq.	155	A	1/2
LW-8	Min. 2,500 psi concrete or G33 Steel Deck	Min. 1/8" thick slurry coat of min. 340 psi. Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture applied over deck treated with Celcore S-1, followed by a 1" thick, EPS board and a min. 2" thick top coat. Celcore PVA Curing Compound applied at a rate of 300 ft ² /gal.	<u>BASE</u> Min. 1.5" ENRGY 3 or ENRGY 3 CGF <u>TOP</u> SECUROCK Gypsum-Fiber Roof Board	JM RSUA, 12" o.c.	JM TPO FB 115 or 135	JM TPO WB-MA, 1.18-1.54 gal/sq.	155	A	2

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TABLE 5A: LIGHTWEIGHT CONCRETE DECKS - NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE A: BONDED INSULATION, BONDED ROOF COVER

System No.	Deck (See Note 1)		Insulation/Cover Board		Roof Cover		Tested Wind Uplift (psf)	Fire Rating UL790/E108	
	Structural	LWC	Type	Attach	Type	Attach		Class	Max Incline (in.)
LW-9	Min. 2,500 psi concrete or G33 Steel Deck	Min. 300 psi Poured in place Cellular Lightweight Concrete with encapsulated insulation board	Min. 1.5" ENRGY 3	JM TWO-PART UIA, 12" o.c. or JM TWO-PART UIA-C	JM TPO FB 115 or 135	JM TPO WB-MA, 1.18-1.54 gal/sq.	160	A	1/2
LW-10	Min. 2,500 psi concrete or G33 Steel Deck	Min. 300 psi Poured in place Cellular Lightweight Concrete with encapsulated insulation board	<u>BASE</u> Min. 1.5" ENRGY 3 or ENRGY 3 AGF <u>TOP</u> SECUROCK Gypsum-Fiber Roof Board	JM TWO-PART UIA, 12" o.c. or JM TWO-PART UIA-C	JM TPO FB 115 or 135	JM TPO WB-MA, 1.18-1.54 gal/sq.	160	A	2
LW-11	Min. 2,500 psi concrete or G33 Steel Deck	Min. 1/8" think slurry coat of min. 310 psi. Elastizell with Zell-Crete Fibers applied over deck, followed by a 1" thick, EPS board and a min. 2" thick top coat.	Min. 1.5" ENRGY 3	JM TWO-PART UIA, 12" o.c. or JM TWO-PART UIA-C	JM TPO FB 115 or 135	JM TPO WB-MA, 1.18-1.54 gal/sq.	260	A	1/2
LW-12	Min. 2,500 psi concrete or G33 Steel Deck	Min. 1/8" think slurry coat of min. 310 psi. Elastizell with Zell-Crete Fibers applied over deck, followed by a 1" thick, EPS board and a min. 2" thick top coat.	<u>BASE</u> Min. 1.5" ENRGY 3 or ENRGY 3 AGF <u>TOP</u> SECUROCK Gypsum-Fiber Roof Board	JM TWO-PART UIA, 12" o.c. or JM TWO-PART UIA-C	JM TPO FB 115 or 135	JM TPO WB-MA, 1.18-1.54 gal/sq.	260	A	2

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TABLE 5A: LIGHTWEIGHT CONCRETE DECKS - NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE A: BONDED INSULATION, BONDED ROOF COVER

System No.	Deck (See Note 1)		Insulation/Cover Board		Roof Cover		Tested Wind Uplift (psf)	Fire Rating UL790/E108	
	Structural	LWC	Type	Attach	Type	Attach		Class	Max Incline (in.)
JM TPO SA APPLICATIONS:									
LW-13	Min. 2,500 psi concrete or G33 Steel Deck	Min. 1/8" thick slurry coat of min. 340 psi. Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture applied over deck treated with Celcore S-1, followed by a 1" thick, EPS board and a min. 2" thick top coat. Celcore PVA Curing Compound applied at a rate of 300 ft ² /gal.	Min. 1.5" ENRGY 3	JM RSUA, 12" o.c.	JM TPO SA	Self-Adhered	155	A	1/4
LW-14	Min. 2,500 psi concrete or G33 Steel Deck	Min. 1/8" thick slurry coat of min. 340 psi. Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture applied over deck treated with Celcore S-1, followed by a 1" thick, EPS board and a min. 2" thick top coat. Celcore PVA Curing Compound applied at a rate of 300 ft ² /gal.	<u>BASE</u> Min. 1.5" ENRGY 3 or ENRGY 3 CGF <u>TOP</u> SECUROCK Gypsum-Fiber Roof Board	JM RSUA, 12" o.c.	JM TPO SA	Self-Adhered	155	A	2
LW-15	Min. 2,500 psi concrete or G33 Steel Deck	Min. 300 psi Poured in place Cellular Lightweight Concrete with encapsulated insulation board	Min. 1.5" ENRGY 3	JM TWO-PART UIA, 12" o.c. or JM TWO-PART UIA-C	JM TPO SA	Self-Adhered	160	A	1/4
LW-16	Min. 2,500 psi concrete or G33 Steel Deck	Min. 300 psi Poured in place Cellular Lightweight Concrete with encapsulated insulation board	<u>BASE</u> Min. 1.5" ENRGY 3 or ENRGY 3 AGF <u>TOP</u> SECUROCK Gypsum-Fiber Roof Board	JM TWO-PART UIA, 12" o.c. or JM TWO-PART UIA-C	JM TPO SA	Self-Adhered	160	A	2

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TABLE 5A: LIGHTWEIGHT CONCRETE DECKS - NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE A: BONDED INSULATION, BONDED ROOF COVER

System No.	Deck (See Note 1)			Insulation/Cover Board		Roof Cover		Tested Wind Uplift (psf)	Fire Rating UL790/E108	
	Structural	LWC	Type	Attach	Type	Attach	Class		Max Incline (in.)	
LW-17	Min. 2,500 psi concrete or G33 Steel Deck	Min. 1/8" thick slurry coat of min. 310 psi. Elastizell with Zell-Crete Fibers applied over deck, followed by a 1" thick, EPS board and a min. 2" thick top coat.	Min. 1.5" ENRGY 3	JM TWO-PART UIA, 12" o.c. or JM TWO-PART UIA-C	JM TPO SA	Self-Adhered	260	A	1/4	
LW-18	Min. 2,500 psi concrete or G33 Steel Deck	Min. 1/8" think slurry coat of min. 310 psi. Elastizell with Zell-Crete Fibers applied over deck, followed by a 1" thick, EPS board and a min. 2" thick top coat.	<u>BASE</u> Min. 1.5" ENRGY 3 or ENRGY 3 AGF <u>TOP</u> SECUROCK Gypsum-Fiber Roof Board	JM TWO-PART UIA, 12" o.c. or JM TWO-PART UIA-C	JM TPO SA	Self-Adhered	260	A	2	

TABLE 5B-1: LIGHTWEIGHT CONCRETE DECKS - NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE E-1A: NON-INSULATED, MECHANICALLY ATTACHED BASE SHEET, BONDED MEMBRANE

System No.	Deck (See Note 1)			Base Sheet		Roof Cover		Tested Wind Uplift(psf)	Fire Rating UL790/E108	
	Structural	LWC	Type	Attach	Type	Attach	Class		Max Incline (in.)	
JM TPO FB APPLICATIONS:										
LW-19	Min. 2,500 psi concrete or G33, P, L6, S18 Steel Deck	Min. 1/8" think slurry coat of min. 200 psi. Elastizell with Zell-Crete Fibers applied over deck, followed by a 1" thick, EPS board and a min. 2" thick top coat.	PermaPly 28	Min. 1.7" LWC CR Base Sheet Fasteners secured 9" o.c. at the lap and 9" o.c. in two equally spaced staggered rows in the field	JM TPO FB 150 JM TPO 175	HA	90	A	1/4	A 1/2

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**TABLE 5B-2: LIGHTWEIGHT CONCRETE DECKS - NEW CONSTRUCTION OR REROOF (TEAR-OFF) OR RECOVER
SYSTEM TYPE E-1B: NON-INSULATED, MECHANICALLY ATTACHED OR WELDED ROOF COVER**

System No.	Deck (See Note 1)		Roof Cover		Tested Wind Uplift (psf)	Fire Rating UL790/E108	
	Structural	LWC	Type	Attach		Class	Max Incline (in.)
JM TPO APPLICATIONS:							
LW-20	Min. 2,500 psi concrete or G40, P, L6, S18 Steel Deck	Min. 1/8" thick slurry coat of min. 200 psi. Elastizell with Zell-Crete Fibers applied over deck, followed by a 1" thick, EPS board and a min. 2" thick top coat.	JM TPO 60, or 80	Induction welded to JM TPO RhinoPlates and JM All Purpose Fasteners (Concrete Deck only) or High Load Fasteners (Steel Deck Only) secured 6" o.c. in rows spaced 96" o.c.	120	A	3/4
LW-21	Min. 2,500 psi concrete or G40, P, L6, S18 Steel Deck	Min. 1/8" thick slurry coat of min. 200 psi. Elastizell with Zell-Crete Fibers applied over deck, followed by a 1" thick, EPS board and a min. 2" thick top coat.	JM TPO 45, 60, or 80 (8 ft sheet)	Attached in-lap 6" o.c. with JM All Purpose Fasteners (Concrete Deck Only) or High Load Fasteners (Steel Deck Only) and High Load Plates; Fastener rows max. 90" o.c.	135	A	3/4

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TABLE 5C: LIGHTWEIGHT CONCRETE DECKS - NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE F: NON-INSULATED, BONDED ROOF COVER

System No.	Deck (See Note 1)			Roof Cover		Tested Wind Uplift (psf)	Fire Rating UL790/E108	
	Structural	Vapor Barrier	LWC	Type	Attach		Class	Max Incline (in.)
JM TPO FB APPLICATIONS:								
LW-22	G33, L6, F1W, S12 Steel Deck	-	Min. 1/8" think slurry coat of min. 475 psi. Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, followed by a 1" thick, EPS board and a min. 2" thick top coat. Celcore PVA Curing Compound applied at a rate of 300 ft ² /gal.	JM TPO FB 115 or 135	JM RSUA, 12" o.c.	90	A	1/2
LW-23	G80 Steel Deck	-	Min. 1/8" think slurry coat of min. 213.5 psi. Elastizell with Zell-Crete Fibers applied over deck, followed by a 1" thick, EPS board and a min. 2" thick top coat.	JM TPO FB 115 or 135	JM RSUA, 6" o.c.	195	A	1/2
LW-24	Min. 2,500 psi concrete	(Optional) JM Vapor Barrier SA or DynaBase HW over ASTM D 41 primed concrete deck	Min. 1/8" think slurry coat of min. 383.5 psi. Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, followed by a 1" thick, EPS board and a min. 2" thick top coat.	JM TPO FB 115 or 135	JM RSUA, 6" o.c.	225	A	1/2
LW-25	Min. 2,500 psi concrete	-	Min. 1/8" think slurry coat of min. 375 psi. Concrecel applied over deck, followed by a 1" thick, EPS board and a min. 2" thick top coat.	JM TPO FB 115 or 135	JM RSUA, 12" o.c.	295	A	1/2
LW-26	Min. 2,500 psi concrete	(Optional) DynaBase HW	Min. 1/8" think slurry coat of min. 475 psi. Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, followed by a 1" thick, EPS board and a min. 2" thick top coat. Celcore PVA Curing Compound applied at a rate of 300 ft ² /gal.	JM TPO FB 115 or 135	JM RSUA, 12" o.c.	335	A	1/2
LW-27	Cementitious Wood Fiber	-	Min. 1/8" think slurry coat of min. 475 psi. Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, followed by a 1" thick, EPS board and a min. 2" thick top coat. Celcore PVA Curing Compound applied at a rate of 300 ft ² /gal.	JM TPO FB 115 or 135	JM RSUA, 12" o.c.	335	A	1/2

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TABLE 5C: LIGHTWEIGHT CONCRETE DECKS - NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE F: NON-INSULATED, BONDED ROOF COVER

System No.	Deck (See Note 1)			Roof Cover		Tested Wind Uplift (psf)	Fire Rating UL790/E108	
	Structural	Vapor Barrier	LWC	Type	Attach		Class	Max Incline (in.)
LW-28	Min. 2,500 psi concrete	-	Min. 1/8" thick slurry coat of min. 375 psi. Concrecel applied over deck, followed by a 1" thick, EPS board and a min. 2" thick top coat.	JM TPO FB 115 or 135	JM RSUA, 6" o.c.	345	A	1/2
LW-29	Cementitious Wood Fiber	-	Min. 1/8" thick slurry coat of min. 475 psi. Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, followed by a 1" thick, EPS board and a min. 2" thick top coat. Celcore PVA Curing Compound applied at a rate of 300 ft ² /gal.	JM TPO FB 115 or 135	JM RSUA, 4" o.c.	395	A	1/2
LW-30	Min. 2,500 psi concrete	(Optional) DynaBase HW	Min. 1/8" thick slurry coat of min. 475 psi. Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, followed by a 1" thick, EPS board and a min. 2" thick top coat. Celcore PVA Curing Compound applied at a rate of 300 ft ² /gal.	JM TPO FB 115 or 135	JM RSUA, 4" o.c.	515	A	1/2
LW-31	Min. 2,500 psi concrete	-	Min. 213.5 psi. Elastizell applied over deck	JM TPO FB 115 or 135	JM RSUA, 6" o.c.	480	A	1/2

JM TPO APPLICATIONS:

LW-32	G80 Steel Deck	-	Min. 1/8" thick slurry coat of min. 250 psi. Elastizell with Zell-Crete Fibers applied over deck, followed by a 1" thick, EPS board and a min. 2" thick top coat.	JM TPO 45, 60, or 80	JM LVOC-MA, 1.10-1.67 gal/sq.	195	A	1/4
LW-33	G33 Steel Deck	-	Min. 1/8" thick slurry coat of min. 200 psi. Elastizell with Zell-Crete Fibers applied over deck, followed by a 1" thick, EPS board and a min. 2" thick top coat.	JM TPO 45, 60, or 80	JM MBA, 1.66 gal/sq.	360	A	1/2
LW-34	G33 Steel Deck	-	Min. 150 psi Poured in place Cellular Lightweight Concrete with encapsulated insulation board	JM TPO 45, 60, or 80	JM MBA, 1.66 gal/sq.	530	A	1/2

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TABLE 5C: LIGHTWEIGHT CONCRETE DECKS - NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE F: NON-INSULATED, BONDED ROOF COVER

System No.		Deck (See Note 1)				Roof Cover		Tested Wind Uplift (psf)	Fire Rating UL790/E108		
		Structural	Vapor Barrier	LWC		Type	Attach		Class	Max Incline (in.)	
LW-35		Min. 2,500 psi concrete	-	Min. 1/8" thick slurry coat of min. 375 psi. Concrecel applied over deck, followed by a 1" thick, EPS board and a min. 2" thick top coat.		JM TPO 45, 60, or 80	JM LVOC-MA, 1.10-1.67 gal/sq.	515	A	1/4	
LW-36		Min. 2,500 psi concrete	-	Min. 379 psi, min. 2" thick Concrecel Concrete, with optional 1" thick, 1.0pcf EPS holey board and surfacing of Concrecel Curing Compound.		JM TPO 45, 60, 72 or 80, JM TPO Reflexsa	JM LVOC-MA, 1.10-1.67 gal/sq.	570	A	3/4	
LW-37	Min. 2,500 psi concrete	-	Min. 350 psi, min. 2" thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1" thick, 1.0pcf EPS holey board and surfacing of Celcore PVA Curing Compound.				JM TPO 45, 60, 72 or 80, JM TPO Reflexsa	JM LVOC-MA, 1.10-1.67 gal/sq.	735	A	3/4

TABLE 6A: GYPSUM DECKS - NEW OR REROOF (TEAR-OFF)
SYSTEM TYPE A: BONDED INSULATION, BONDED ROOF COVER

System No.	Deck (See Note 1)	Base Insulation Layer		Top Insulation Layer		Roof Cover		Tested Wind Uplift (psf)	Fire Rating UL790/E108	
		Type	Attach	Type	Attach	Type	Attach		Class	Max Incline (in.)
JM TPO APPLICATIONS:										
G-1	New or Existing poured gypsum	Min. 1.5-inch ENRGY 3, ENRGY 3 AGF, or ENRGY 3 CGF	JM TWO-PART UIA, 12" o.c. or JM UIA TWO-PART-C	-	-	JM TPO 60, 72, or 80	JM TPO WB-MA, 0.83 gal/sq. or JM LVOC-MA, 1.10 gal/sq.	150	A	1/2
G-2	New or Existing poured gypsum	Min. 1.5-inch ENRGY 3, ENRGY 3 AGF, or ENRGY 3 CGF	JM TWO-PART UIA, 12" o.c. or JM UIA TWO-PART-C	JM Invinsa Roof Board	JM TWO-PART UIA, 12" o.c. or JM UIA TWO-PART-C	JM TPO 60, 72, or 80	JM MBA, 1.66 gal/sq.	150	A	1/4
G-3	New or Existing poured gypsum	Min. 1.5-inch ENRGY 3, ENRGY 3 AGF, or ENRGY 3 CGF	JM TWO-PART UIA, 12" o.c. or JM TWO-PART UIA-C	SECUROCK Gypsum-Fiber Roof Board	JM RSUA or JM TWO-PART UIA, 12" o.c. or JM TWO-PART UIA-C	JM TPO 60, 72, or 80	JM TPO WB MA, 0.59 0.77 gal/sq JM LVOC MA, 1.66 gal/sq	150	A	2 1/2
G-4	New or Existing poured gypsum	Min. 1-inch ENRGY 3	JM OSFA, 12" o.c.	-	-	JM TPO 60, 72, or 80	JM TPO WB MA, 0.83 gal/sq or JM LVOC MA, 1.66 gal/sq	155	A	1/2

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

System No.	Deck (See Note 1)	Base Insulation Layer		Top Insulation Layer		Roof Cover		Tested Wind Uplift (psf)	Fire Rating UL790/E108	
		Type	Attach	Type	Attach	Type	Attach		Class	Max Incline (in.)
G-5	New or Existing poured gypsum	Min. 1.5-inch ENRGY 3, ENRGY 3 AGF, or ENRGY 3 CGF	JM TWO-PART UIA, 12" o.c. or JM TWO-PART UIA-C	-	-	JM TPO 60, 72, or 80	JM TPO WB-MA, 0.83 gal/sq. or JM LVOC MA, 1.66 gal/sq	180	A	1/2
G-6	New or Existing poured gypsum	-	-	JM Invinsa Roof Board	JM OSFA, 12" o.c.	JM TPO 60, 72, or 80	JM MBA, 1.66 gal/sq.	185	A	1/4
G-7	Existing poured gypsum or gypsum plank	Min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, JM ISO 3, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF	JM TWO-PARTUIA	(Optional) Additional layers of base insulation	JM TWO-PARTUIA	JM TPO 45, 60, 72 or 80, JM TPO Reflexsa	JM LVOC MA, 1.67 gal/sq.	225	A	1/2
JM TPO FB APPLICATIONS:										
G-8	New or Existing poured gypsum	Min. 1.5-inch ENRGY 3, ENRGY 3 AGF, or ENRGY 3 CGF	JM TWO-PART UIA, 12" o.c. or JM TWO-PART UIA-C	-	-	JM TPO FB 115 or 135	JM TPO WB-MA, 0.83 gal/sq. or JM RSUA, 12" o.c.	150	A	1/2
G-9	New or Existing poured gypsum	Min. 1.5-inch ENRGY 3, ENRGY 3 AGF, or ENRGY 3 CGF	JM TWO-PART UIA, 12" o.c. or JM TWO-PART UIA-C	JM Invinsa Roof Board	JM TWO-PART UIA, 12" o.c. or JM TWO-PART UIA-C	JM TPO FB 115 or 135	JM RSUA, 12" o.c.	150	A	1/2
							JM TPO WB-MA, 0.56-0.71 gal/sq.			3/4
G-10	New or Existing poured gypsum	Min. 1.5-inch ENRGY 3, ENRGY 3 AGF, or ENRGY 3 CGF	JM TWO-PART UIA, 12" o.c. or JM TWO-PART UIA-C	SECUROCK Gypsum-Fiber Roof Board	JM RSUA or JM TWO-PART UIA, 12" o.c. or JM TWO-PART UIA-C	JM TPO FB 115 or 135	JM TPO WB-MA, 0.59-0.77 gal/sq.	150	A	2
							JM RSUA, 12" o.c.			1/2
G-11	New or Existing poured gypsum	Min. 1-inch ENRGY 3	JM OSFA, 12" o.c.	-	-	JM TPO FB 115 or 135	JM TPO WB-MA, 0.63-0.83 gal/sq. or JM RSUA, 12" o.c.	155	A	1/2
G-12	New or Existing poured gypsum	Min. 1-inch ENRGY 3	JM OSFA, 12" o.c.	SECUROCK Gypsum-Fiber Roof Board	JM RSUA	JM TPO FB 115 or 135	JM TPO WB-MA, 0.59-0.77 gal/sq.	155	A	2
							JM RSUA, 12" o.c.			1/2

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

System No.	Deck (See Note 1)	Base Insulation Layer		Top Insulation Layer		Roof Cover		Tested Wind Uplift (psf)	Fire Rating UL790/E108	
		Type	Attach	Type	Attach	Type	Attach		Class	Max Incline (in.)
G-13	New or Existing poured gypsum	Min. 1.5-inch ENRGY 3, ENRGY 3 AGF, or ENRGY 3 CGF	JM TWO-PART UIA, 12" o.c. or JM TWO-PART UIA-C	-	-	JM TPO FB 115 or 135	JM TPO WB-MA, 0.59-0.83 gal/sq.	180	A	1/2
G-14	New or Existing poured gypsum	-	-	JM Invinsa Roof Board	JM OSFA, 12" o.c.	JM TPO FB 115 or 135	JM RSUA, 12" o.c.	185	A	1/2
							JM TPO WB-MA, 0.56-0.71 gal/sq.			2
JM TPO SA APPLICATIONS:										
G-16	New or Existing poured gypsum	Min. 1.5-inch ENRGY 3, ENRGY 3 AGF, or ENRGY 3 CGF	JM TWO-PART UIA, 12" o.c. or JM TWO-PART UIA-C	JM Invinsa Roof Board	JM TWO-PART UIA, 12" o.c. or JM TWO-PART UIA-C	JM TPO SA	Self-Adhered	150	A	1/2
G-17	New or Existing poured gypsum	Min. 1.5-inch ENRGY 3, ENRGY 3 AGF, or ENRGY 3 CGF	JM TWO-PART UIA, 12" o.c. or JM TWO-PART UIA-C	SECUROCK Gypsum-Fiber Roof Board	JM RSUA or JM TWO-PART UIA, 12" o.c. or JM TWO-PART UIA-C	JM TPO SA	Self-Adhered	150	A	2
G-18	New or Existing poured gypsum	Min. 1.5-inch ENRGY 3	JM OSFA, 12" o.c.	SECUROCK Gypsum-Fiber Roof Board	JM RSUA 12" o.c.	JM TPO SA	Self-Adhered	155	A	2

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TABLE 6B: GYPSUM DECKS – NEW OR REROOF (TEAR-OFF)
SYSTEM TYPE E: NON-INSULATED, MECHANICALLY FASTENED BASE SHEET, BONDED ROOF COVER

System No.	Deck	Base Sheet			Roof Cover		Tested Wind Uplift (psf)	Fire Rating UL790/E108	
		Type	Attach		Type	Attach		Class	Max Incline (in.)
G-19	New or Existing poured gypsum	PermaPly 28	Min. 1.8" JM UltraLok Fastener secured 7" o.c. at the lap and 7" o.c. in two equally spaced and staggered rows in the field			JM TPO FB 150	HA	105	A 1/4
						JM TPO 175			A 1/2

TABLE 6C: GYPSUM DECKS – NEW OR REROOF (TEAR-OFF)
SYSTEM TYPE F: NON-INSULATED, BONDED ROOF COVER

System No.	Deck	Roof Cover		Tested Wind Uplift (psf)	Fire Rating UL790/E108	
		Type	Attach		Class	Max Incline (in.)
G-20	New or Existing poured gypsum	JM TPO FB 115 or 135	JM-RSUA, 12-in. oc	165	A	1/2
G-21	New or Existing poured gypsum	JM TPO FB 115 or 135	JM-RSUA, 6-in. oc	310	A	1/2

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**TABLE 7A: CEMENTITIOUS WOOD FIBER DECKS - NEW CONSTRUCTION or REROOF (Tear-Off)
SYSTEM TYPE A: BONDED INSULATION, BONDED ROOF COVER**

System No.	Roof Deck	Base Insulation Layer		Top Insulation Layer		Roof Cover		Tested Wind Uplift (psf)	Fire Rating UL790/E108	
		Type	Attach	Type	Attach	Type	Attach		Class	Max Incline (in.)
JM TPO APPLICATIONS:										
CWF-1	CWF	Min. 1.5-inch ENRGY 3	JM-RSUA	(Optional) SECUROCK Gypsum-Fiber Roof Board	JM TWO-PART UIA, JM TWO-PART UIA-C, JM-RSUA	JM TPO 45, 60, or 80	JM TPO WB-MA, 0.83 gal/sq. JM LVOC MA, 1.66 gal/sq.	270	A	1/4
							JM LVOC MA, 1.66 gal/sq.		A	1/2
CWF-2	CWF	(Optional) Min. 1.5-inch ENRGY 3	JM-OSFA	SECUROCK Gypsum-Fiber Roof Board	JM-OSFA, JM TWO-PART UIA, JM UIA-TWO PART-C, JM-RSUA	JM TPO 45, 60, or 80	JM TPO WB-MA, 0.83 gal/sq. JM LVOC MA, 1.66 gal/sq.	280	A	1/2
							JM LVOC MA, 1.66 gal/sq.		A	1/2
CWF-3	CWF	-	-	SECUROCK Gypsum-Fiber Roof Board	JM TWO-PART UIA, JM TWO-PART-C, JM-RSUA	JM TPO 45, 60, or 80	JM TPO WB-MA, 0.83 gal/sq. JM LVOC-MA, 1.66 gal/sq.	315	A	1/2
							JM LVOC-MA, 1.66 gal/sq.		A	3/4
CWF-4	CWF	Min. 1.5-inch ENRGY 3	JM-OSFA	-	-	JM TPO 45, 60, or 80	JM TPO WB-MA, 0.83 gal/sq. JM LVOC MA, 1.66 gal/sq.	315	A	1/4
							JM LVOC MA, 1.66 gal/sq.		A	1/2
JM TPO FB APPLICATIONS:										
CWF-5	CWF	(Optional) Min. 1.5-inch ENRGY 3	JM-OSFA or JM-RSUA	JM Invinsa Roof Board	JM-OSFA, JM TWO-PART UIA, JM TWO-PART UIA-C, JM-RSUA	JM TPO FB 115 or 135	JM-RSUA, 12-inches o.c. JM TPO WB-MA, 0.83 gal/sq.	245	A	1/2
							JM TPO WB-MA, 0.83 gal/sq.		A	1/2
CWF-6	CWF	Min. 1.5-inch ENRGY 3	JM-RSUA	(Optional) SECUROCK Gypsum-Fiber Roof Board	JM TWO-PART UIA, JM TWO-PART UIA-C, JM-RSUA	JM TPO FB 115 or 135	JM RSUA, 12-inches o.c. JM TPO WB-MA, 0.83 gal/sq.	270	A	1/2
							JM TPO WB-MA, 0.83 gal/sq.		A	1/2
CWF-7	CWF	(Optional) Min. 1.5-inch ENRGY 3	JM-OSFA	SECUROCK Gypsum-Fiber Roof Board	JM-OSFA, JM TWO-PART UIA, JM TWO-PART UIA-C, JM-RSUA	JM TPO FB 115 or 135	JM TPO WB-MA, 0.83 gal/sq. JM-RSUA, 12" o.c.	280	A	2
							JM-RSUA, 12" o.c.		A	1/2
CWF-8	CWF	-	-	SECUROCK Gypsum-Fiber Roof Board	JM-OSFA, JM TWO-PART UIA, JM TWO-PART UIA-C, JM-RSUA	JM TPO FB 115 or 135	JM TPO WB-MA, 0.83 gal/sq.	315	A	2
CWF-9	CWF	Min. 1.5-inch ENRGY 3	JM-OSFA	-	-	JM TPO FB 115 or 135	JM TPO WB-MA, 0.83 gal/sq. JM RSUA, 12" o.c.	315	A	1/2
							JM RSUA, 12" o.c.		A	1/2
CWF-10	CWF	-	-	JM Invinsa Roof Board	JM-RSUA	JM TPO FB 115 or 135	JM TPO WB-MA, 0.83 gal/sq.	320	A	1/2

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TABLE 7A: CEMENTITIOUS WOOD FIBER DECKS - NEW CONSTRUCTION or REROOF (Tear-Off) SYSTEM TYPE A: BONDED INSULATION, BONDED ROOF COVER											
System No.	Roof Deck	Base Insulation Layer		Top Insulation Layer			Roof Cover		Tested Wind Uplift (psf)	Fire Rating UL790/E108	
		Type	Attach	Type	Attach	Type	Attach	Type		Class	Max Incline (in.)
JM TPO SA APPLICATIONS:											
CWF-11	CWF	Min. 1.5-inch ENRGY 3	JM-RSUA	(Optional) SECUROCK Gypsum-Fiber Roof Board	JM TWO-PART UIA, JM TWO-PART UIA-C, JM-RSUA	JM TPO SA	Self-Adhered	270	A	1/4	
CWF-12	CWF	(Optional) Min. 1.5-inch ENRGY 3	JM-OSFA	SECUROCK Gypsum-Fiber Roof Board	JM-OSFA, JM TWO-PART UIA, JM TWO-PART UIA-C, JM-RSUA	JM TPO SA	Self-Adhered	280	A	2	
CWF-13	CWF	-	-	SECUROCK Gypsum-Fiber Roof Board	JM TWO-PART UIA, JM TWO-PART UIA-C, JM-RSUA	JM TPO SA	Self-Adhered	315	A	2	

TABLE 7B: O S B DECKS - NEW CONSTRUCTION, REROOF (Tear-Off), or RECOVER SYSTEM TYPE D: INSULATED, MECHANICALLY ATTACHED ROOF COVER (STRESS PLATES)											
System No.	Deck (See Note 1)	Insulation		Roof Cover					Tested Wind Uplift (psf)	Fire Rating UL790/E108	
		Type	Attachment	Membrane	Fasteners	Attachment				Class	Max Incline (in.)
JM TPO APPLICATIONS											
OSB-1	7/16 OSB	Min. 0.5-in JM SeparatoR CGF (Loose Laid)	-	JM TPO 45	Four (4) 2-1/4" Trufast Versa-Fast Fasteners in each Trufast Versa-Fast Metal Plates	6-in. oc within 6-in. wide laps spaced 138-in. oc Laps sealed with 1.5-in. heat weld outside lap	75	A	1/2		

TABLE 8A: RECOVER APPLICATIONS SYSTEM TYPE A: BONDED INSULATION, BONDED ROOF COVER											
System No.	Substrate	Base Insulation Layer			Top Insulation Layer		Roof Cover		Tested Wind Uplift (psf)	Fire Rating UL790/E108	
		Type		Attach	Type	Attach	Type	Attach		Class	Max Incline (in.)
JM TPO APPLICATIONS:											
R-1	Existing asphaltic BUR	Min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, JM ISO 3, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF	JM TWO-PART UIA	(Optional) Additional layers of base insulation	JM TWO-PART UIA	JM TPO 45, 60, 72 or 80, JM TPO Reflexsa	JM LVOC MA, 1.67 gal/sq.	240	A	1/2	

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**TABLE 8B: RECOVER OVER EXISTING METAL PANEL ROOF
SYSTEM TYPE C-2: MECHANICALLY ATTACHED INSULATION, PLATE-BONDED ROOF COVER**

System No.	Deck (See Note 1)	Insulation Layer	Attachment		Roof Cover	Tested Wind Uplift (psf)	Fire Rating UL790/E108	
			Fasteners	Density			Class	Max Incline (in.)
R-2	Existing wood, steel or concrete deck atop min. 16 ga. (0.0598") purlins or steel supports spaced max. 5 ft o.c.	ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, JM ISO 3, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF between ribs or over panels of existing non-structural metal roof followed by additional base layer or Min. 0.25-inch DensDeck, Invinsa or SECUROCK Gypsum-Fiber Roof Board or min. 7/16-inch OSB	Preliminary Securement: UltraFast Plate-Bonded Securement: JM Purlin Fasteners with JM TPO RhinoPlates	Insulation preliminarily secured with fasteners/plates in Note 2. JM Purlin Fasteners with JM TPO Rhino Plates spaced 6-inch o.c. at every-other structural steel support (max. 120-inch o.c.)	JM TPO bonded to JM TPO RhinoPlates with Rhinobond Plate bonding tool at 6 seconds per plate so tool reaches 400°F and cooled with RhinoBond Cooling Clamps	90	A	1/2
R-3	Existing wood, steel or concrete deck atop min. 16 ga. (0.0598") purlins or steel supports spaced max. 5 ft o.c.	ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, JM ISO 3, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF between ribs or over panels of existing non-structural metal roof followed by additional base layer or Min. 0.25-inch DensDeck, Invinsa or SECUROCK Gypsum-Fiber Roof Board or min. 7/16-inch OSB	Preliminary Securement: UltraFast Plate-Bonded Securement: JM Purlin Fasteners with JM TPO RhinoPlates	Insulation preliminarily secured with fasteners/plates in Note 2. JM Purlin Fasteners with JM TPO Rhino Plates spaced 18-inch o.c. at every structural steel support (max. 60-inch o.c.)	JM TPO bonded to JM TPO RhinoPlates with Rhinobond Plate bonding tool at 6 seconds per plate so tool reaches 400°F and cooled with RhinoBond Cooling Clamps	90	A	1/2
R-4	Existing wood, steel or concrete deck atop min. 16 ga. (0.0598") purlins or steel supports spaced max. 5 ft o.c.	ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, JM ISO 3, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF between ribs or over panels of existing non-structural metal roof followed by additional base layer or Min. 0.25-inch DensDeck, Invinsa or SECUROCK Gypsum-Fiber Roof Board or min. 7/16-inch OSB	Preliminary Securement: UltraFast Plate-Bonded Securement: JM Purlin Fasteners with JM TPO RhinoPlates	Insulation preliminarily secured with fasteners/plates in Note 2. JM Purlin Fasteners with JM TPO Rhino Plates spaced 12-inch o.c. at every structural steel support (max. 60-inch o.c.)	JM TPO bonded to JM TPO RhinoPlates with Rhinobond Plate bonding tool at 6 seconds per plate so tool reaches 400°F and cooled with RhinoBond Cooling Clamps	135	A	1/2
R-5	Existing wood, steel or concrete deck atop min. 16 ga. (0.0598") purlins or steel supports spaced max. 5 ft o.c.	ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, JM ISO 3, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF between ribs or over panels of existing non-structural metal roof followed by additional base layer or Min. 0.25-inch DensDeck, Invinsa or SECUROCK Gypsum-Fiber Roof Board or min. 7/16-inch OSB	Preliminary Securement: UltraFast Plate-Bonded Securement: JM Purlin Fasteners with JM TPO RhinoPlates	Insulation preliminarily secured with fasteners/plates in Note 2. JM Purlin Fasteners with JM TPO Rhino Plates spaced 6-inch o.c. at every structural steel support (max. 60-inch o.c.)	JM TPO bonded to JM TPO RhinoPlates with Rhinobond Plate bonding tool at 6 seconds per plate so tool reaches 400°F and cooled with RhinoBond Cooling Clamps	240	A	1/2

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**TABLE 8C: RECOVER OVER EXISTING METAL PANEL ROOF
SYSTEM TYPE D: INSULATED, MECHANICALLY ATTACHED ROOF COVER**

System No.	Deck (See Note 1)	Insulation			Roof Cover			Tested Wind Uplift (psf)	Fire Rating UL790/E108	
		Base Layer	Top Layer	Attach	Membrane	Fasteners	Attachment		Class	Max Incline (in.)
R-6	Existing metal roof having Min. 16 ga. steel purlins at max. 5 ft o.c.	(Optional) <i>INSULATION</i> under min. 1.5 ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, or ENRGY 3 FR	Min. 1-inch <i>INSULATION</i> or min. 0.25-inch <i>Cover Board</i>	Prelim. Attached	JM TPO 45, 60, or 80	JM Purlin Fasteners and High Load Plates	Fasteners spaced 12" o.c. within 6" wide laps; fastener rows spaced 60" o.c. Laps sealed with 1.5" heat weld.	75	A	1/2
R-7	Existing wood, steel or concrete deck atop min. 16 ga. (0.0598") purlins or steel supports spaced max. 5 ft o.c.	ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, JM ISO 3, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF between ribs or over panels of existing non-structural metal roof	Additional base layer or Min. 0.25-inch DensDeck, Invinsa, SECUROCK Gypsum-Fiber Roof Board or ProtectoR HD, or min. 7/16-inch OSB	Prelim. Attached	JM TPO 45, 60, 72 or 80, JM TPO Reflexsa	JM Purlin Fasteners with High Load Seam Plates	Fasteners spaced 12-inch o.c. within 5-inch wide laps engage structural supports spaced 60-inch o.c. Laps sealed with 1.5-inch heat weld.	75	A	1/2
R-8	Existing metal roof having Min. 14 ga. steel purlins at max. 5 ft o.c.	(Optional) <i>INSULATION</i> under min. 1.5 ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, or ENRGY 3 FR	Min. 1-inch <i>INSULATION</i> or min. 0.25-inchi <i>Cover Board</i>	Prelim. Attached	JM TPO 45, 60, or 80	JM Purlin Fasteners and High Load Plates	Fasteners spaced 12" o.c. within 6" wide laps; fastener rows spaced 60" o.c. Laps sealed with 1.5" heat weld.	90	A	1/2
R-9	Existing wood, steel or concrete deck atop min. 16 ga. (0.0598") purlins or steel supports spaced max. 5 ft o.c.	ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, JM ISO 3, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF between ribs or over panels of existing non-structural metal roof	Additional base layer or Min. 0.25-inch DensDeck, Invinsa, SECUROCK Gypsum-Fiber Roof Board or ProtectoR HD , or or min. 7/16-inch OSB	Prelim. Attached	JM TPO 45, 60, 72 or 80, JM TPO Reflexsa	JM Purlin Fasteners with Extra High Load Seam Plates	Fasteners spaced 12-inch o.c. within 5-inch wide laps engage structural supports spaced 60-inch o.c. Laps sealed with 1.5-inch heat weld.	90	A	1/2

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**TABLE 8C: RECOVER OVER EXISTING METAL PANEL ROOF
SYSTEM TYPE D: INSULATED, MECHANICALLY ATTACHED ROOF COVER**

System No.	Deck (See Note 1)	Insulation			Roof Cover			Tested Wind Uplift (psf)	Fire Rating UL790/E108	
		Base Layer	Top Layer	Attach	Membrane	Fasteners	Attachment		Class	Max Incline (in.)
R-10	Existing metal roof having Min. 16 ga. steel purlins at max. 5 ft o.c.	(Optional) <i>INSULATION</i> under min. 1.5 ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, or ENRGY 3 FR	Min. 1-inch <i>INSULATION</i> or min. 0.25-inch <i>Cover Board</i>	Prelim. Attached	JM TPO 45, 60, or 80	JM Purlin Fasteners and High Load Plates	Fasteners spaced 6" o.c. within 6" wide laps; fastener rows spaced 60" o.c. Laps sealed with 1.5" heat weld.	165	A	1/2
R-11	Existing wood, steel or concrete deck atop min. 16 ga. (0.0598") purlins or steel supports spaced max. 5 ft o.c.	ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, JM ISO 3, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF between ribs or over panels of existing non-structural metal roof	Additional base layer or Min. 0.25-inch DensDeck, Invinsa, SECURock Gypsum-Fiber Roof Board or ProtectoR HD, or min. 7/16-inch OSB	Prelim. Attached	JM TPO 45, 60, 72 or 80, JM TPO Reflexsa	JM Purlin Fasteners with High Load Seam Plates	Fasteners spaced 6-inch o.c. within 5-inch wide laps engage structural supports spaced 60-inch o.c. Laps sealed with 1.5-inch heat weld.	165	A	1/2

**TABLE 8D: RECOVER APPLICATIONS
SYSTEM TYPE F: NON-INSULATED, BONDED ROOF COVER**

System No.	Substrate (See Notes 1 & 10)	Roof Cover			Tested Wind Uplift (psf)	Fire Rating UL790/E108	
		Type	Attach	Class		Max Incline (in.)	
R-12	Existing asphaltic granule surface cap sheet	JM TPO FB 115 or 135	JM-RSUA, 12-in. oc	90	A	3/4	
R-13	BUR or Mod-Bit Roofing with mineral surfacing	JM TPO FB 115 or 135	JM-RSUA, 12-in. oc	90	A	3/4	

TABLE 1: ADHERED ASSEMBLIES OVER CONCRETE DECK (NEW OR EXISITNG)

System No.	Vapor Barrier	Base Insulation Layer	Top Insulation Layer	Roof Cover			MDP (psf)	FIRE RATING UL790/ASTM E108	
				Base Ply	Ply Sheet	Cap Sheet		Class	Maximum Incline
1	-	Min. 1.5-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR, DuraBoard any combination secured with 2-Part UIA ribbons spaced 12-inch OC	DuraBoard secured with 2-Part UIA ribbons spaced 12-inch OC	CA SBS Ply	CA SBS BUR Ply; HA SBS BUR Ply; or TA SBS BUR Ply	CA SBS Cap; HA SBS Cap; or TA SBS Cap	82.5	A	1/2:12
2	-	Min. 1.5-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR any combination secured with 2-Part UIA ribbons spaced 12-inch OC	FescoBoard secured with 2-Part UIA ribbons spaced 12-inch OC	GlasPly Premier, GlasPly IV or PermaPly 28 fully bonded in ASTM D312 Type IV Asphalt	(Optional) HA SBS BUR Ply; or TA SBS Ply	HA SBS Cap; or TA SBS Cap	112.5	A	1/2:12
3	(Optional) HA SBS BUR Base 2	Min. 1.5-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR or FescoFoam or DuraFoam any combination fully adhered in ASTM D312, Type IV Asphalt	Retro-Fit Board or DuraBoard fully adhered in ASTM D312, Type IV Asphalt	HA SBS BUR Base 2	(Optional) HA SBS BUR Ply; or TA SBS Ply	HA SBS Cap; or TA SBS Cap	155.0	A	1/2:12
4	(Optional) HA SBS BUR Base 2	Min. 1.5-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR or FescoFoam or DuraFoam, FescoBoard, Retro-Fit Board OR Min. 3-4-inch DuraBoard any combination fully adhered in ASTM D312, Type IV Asphalt	(Optional) Retro-Fit Board or Min. ¾-inch DuraBoard fully adhered in ASTM D312, Type IV Asphalt	HA SBS BUR Base	(Optional) HA SBS BUR Ply; or TA SBS Ply	HA SBS Cap; or TA SBS Cap	167.5	A	1/2:12
5	-	-	-	HA SBS BUR Base or DynaPly T1 fully bonded in ASTM D312 Type IV Asphalt	(Optional) HA SBS BUR Ply; or TA SBS Ply	HA SBS Cap; or TA SBS Cap	275	A	1/2:12
6	-	FescoBoard secured in 2-Part UIA ribbons spaced 12-inch OC	-	HA SBS BUR Base	(Optional) HA SBS BUR Ply; or TA SBS Ply	HA SBS Cap; or TA SBS Cap	285	A	1/2:12
7	-	DuraBoard or Retro-Fit Board secured in 2-Part UIA ribbons spaced 12-inch OC	-	HA SBS BUR Base	(Optional) HA SBS BUR Ply; or TA SBS Ply	HA SBS Cap; or TA SBS Cap	305	A	1/2:12

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TABLE 1: ADHERED ASSEMBLIES OVER CONCRETE DECK (NEW OR EXISITNG)

System No.	Vapor Barrier	Base Insulation Layer	Top Insulation Layer	Roof Cover			MDP (psf)	FIRE RATING UL790/ASTM E108	
				Base Ply	Ply Sheet	Cap Sheet		Class	Maximum Incline
8	-	Min. 1.5-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF or DuraFoam fully adhered in ASTM D312, Type IV Asphalt	(Optional) FescoBoad, Retro-Fit Board or Min. 3/4-inch DuraBoard fully adhered in ASTM D312, Type IV Asphalt	GlasPly Premier, GlasPly IV or PermaPly 28 fully adhered in ASTM D312, Type IV Asphalt	(Optional) HA SBS BUR Ply; or TA SBS Ply	HA SBS Cap; or TA SBS Cap	305	A	1/2:12
9	-	-	-	TA SBS Ply	(Optional) TA SBS Ply	TA SBS Cap	315	A	1/2:12
10	-	Min 2-inch thick, one or more layers, ENRGY 3 or ENRGY 3 AGF secured with 2-Part UIA ribbons spaced 12-inch OC	Min. 0.25-inch Gypsum-Fiber Roof Board secured with 2-Part UIA ribbons spaced 12-inch OC	HA SBS BUR Ply; or TA SBS Ply	(Optional) HA SBS BUR Ply; or TA SBS Ply	HA SBS Cap; or TA SBS Cap	367.5	A	1/2:12
11	-	Min 2-inch thick, one or more layers, ENRGY 3 or ENRGY 3 AGF secured with 2-Part UIA ribbons spaced 12-inch OC	-	HA SBS BUR Base	(Optional) HA SBS BUR Ply; or TA SBS Ply	HA SBS Cap; or TA SBS Cap	367.5	A	1/2:12
12	-	Min 2-inch thick ENRGY 3 AGF secured with 2-Part UIA ribbons spaced 12-inch OC or fully adhered in ASTM D312, Type IV Asphalt	Min. 0.25-inch Gypsum-Fiber Roof Board secured with 2-Part UIA ribbons spaced 12-inch OC or fully adhered in ASTM D312, Type IV Asphalt	HA SBS BUR Ply or TA SBS Ply	(Optional) HA SBS BUR Ply; or TA SBS Ply	HA SBS Cap; or TA SBS Cap	397.5	A	1/2:12
13	-	Min.2-inch thick ENRGY 3 secured with 2-Part UIA ribbons spaced 12-inch OC	Min. 0.25-inch Gypsum-Fiber Roof Board secured with 2-Part UIA ribbons spaced 12-inch OC	HA SBS BUR Ply or TA SBS Ply	HA SBS BUR Ply; or TA SBS Ply	HA SBS Cap; or TA SBS Cap	442.5	A	1/2:12
14	-	Min.2-inch thick ENRGY 3 fully adhered in ASTM D312, Type IV Asphalt	Min. 0.25-inch Gypsum-Fiber Roof Board fully adhered in ASTM D312, Type IV Asphalt	HA SBS BUR Ply or TA SBS Ply	HA SBS BUR Ply; or TA SBS Ply	HA SBS Cap; or TA SBS Cap	495	A	1/2:12
15	-	Min.2-inch thick ENRGY 3 fully adhered in ASTM D312, Type IV Asphalt	Min. 0.25-inch Gypsum-Fiber Roof Board fully adhered in ASTM D312, Type IV Asphalt	TA SBS Ply	-	TA SBS Cap	535.5	A	1/2:12

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TABLE 2: Adhered Assemblies over Insulated Concrete Deck (New, Existing or Recover)

System No.	Base Insulation Layer		Top Insulation Layer		Roof Cover			MDP (psf)	FIRE RATING UL790/ASTM E108	
	Type	Attach	Type	Attach	Base Ply	Ply Sheet	Cap Sheet		Class	Maximum Incline
15	Min. 1-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR, FescoFoam, FescoBoard, DuraFoam OR Min. 3/4-inch DuraBoard,any combination	Simultaneously fastened with Top Insulation	FescoFoam, FescoBoard, DuraFoam, Retro-Fit board or Min. 3/4-inch DuraBoard	All Purpose Fasteners and UltraFast Plates (round or square) at a rate of 16 per 4-ft x 8-ft Board	HA SBS BUR Base	(Optional) CA SBS BUR Ply; HA SBS BUR Ply; or TA SBS BUR Ply	CA SBS Cap; HA SBS Cap; or TA SBS Cap	52.5	A	1/2:12
16	Min. 1.5-inch ENRGY 3, FescoFoam or DuraFoam	All Purpose Fasteners and UltraFast Plates (round or square) at a rate of 18 per 4-ft x 8-ft Board	FescoFoam, DuraFoam, Retro-Fit, RetroPlus or DuraBoard	ASTM D312,Type IV Asphalt	HA SBS BUR Base	(Optional) CA SBS BUR Ply; HA SBS BUR Ply; or TA SBS BUR Ply	CA SBS Cap; HA SBS Cap; or TA SBS Cap	60.0	A	1/2:12
17	Min. 1.5-inch ENRGY 3	All Purpose Fasteners and UltraFast Plates (round or square)s at a rate of 18 per 4-ft x 8-ft Board	Min. 0.5-inch Gypsum-Fiber Roof Board	2-Part UIA applied 12-inch OC	CA SBS BUR Ply;or HA SBS BUR Ply	(Optional) CA SBS BUR Ply; HA SBS BUR Ply; or TA SBS BUR Ply	CA SBS Cap; HA SBS Cap; or TA SBS Cap	60.0	A	1/2:12
18	Min. 2-inch ENRGY 3, FescoFoam or DuraFoam	All Purpose Fasteners and UltraFast Plates (round or square) at a rate of 22 per 4-ft x 8-ft Board	Retro-Fit, RetroPlus, DuraBoard or Min. 2-inch FescoFoam or DuraFoam	ASTM D312,Type IV Asphalt	HA SBS BUR Base	(Optional) CA SBS BUR Ply; HA SBS BUR Ply; or TA SBS BUR Ply	CA SBS Cap; HA SBS Cap; or TA SBS Cap	75.0	A	1/2:12

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TABLE 2: Adhered Assemblies over Insulated Concrete Deck (New, Existing or Recover)

System No.	Base Insulation Layer		Top Insulation Layer		Roof Cover			MDP (psf)	FIRE RATING UL790/ASTM E108	
	Type	Attach	Type	Attach	Base Ply	Ply Sheet	Cap Sheet		Class	Maximum Incline
19	Min. 1-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR, any combination	Simultaneously fastened with Top Insulation	FescoBoard or Min. 3/4-inch DuraBoard	All Purpose Fasteners and UltraFast Plates (round or square) at a rate of 24 per 4-ft x 8-ft Board	TA SBS Ply	-	TA SBS Cap	75	A	1/2:12
20	Min. 1.5-inch ENRGY 3	All Purpose Fasteners and UltraFast Plates (round or square) at a rate of 32 per 4-ft x 8-ft Board	Min. 0.5-inch Gypsum-Fiber Roof Board	2-Part UIA applied 12-inch OC	CA SBS BUR Ply; or HA SBS BUR Ply	(Optional) CA SBS BUR Ply; HA SBS BUR Ply; or TA SBS BUR Ply	CA SBS Cap; HA SBS Cap; or TA SBS Cap	82.5	A	1/2:12
21	Min. 1-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR, any combination	Simultaneously fastened with Top Insulation	Min. 0.5-inch Gypsum-Fiber Roof Board	All Purpose Fasteners and UltraFast Plates (round or square) at a rate of 22 per 4-ft x 8-ft Board	CA SBS BUR Ply; or HA SBS BUR Ply	(Optional) CA SBS BUR Ply; HA SBS BUR Ply; or TA SBS BUR Ply	CA SBS Cap; HA SBS Cap; or TA SBS Cap	82.5	A	1/2:12

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TABLE 3: MECHANICALLY FASTENED ASSEMBLIES OVER CONCRETE DECK (New, Existing or Recover)

System No.	Base Insulation Layer	Top Insulation Layer	Roof Cover				MDP (psf)	FIRE RATING UL790/ASTM E108	
			Base Sheet	Attach	Ply Sheet	Cap Sheet		Class	Maximum Incline
22	(Optional) Insulation	Min. 1-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR, any combination	DynaFast 180 S	All Purpose Fasteners and APB Plates spaced 18-inch OC within min. 4-inch heat welded side lap	(Optional) CA SBS BUR Ply; HA SBS BUR Ply; or TA SBS BUR Ply (Min. 4-inch side laps)	CA SBS Cap; HA SBS Cap; or TA SBS Cap (Min. 4-inch side laps)	47.5	A	1/2:12
23	(Optional) Insulation	Min. 1-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR, any combination	DynaFast 180 HW or DynaFast 250 HW	All Purpose Fasteners and APB Plates spaced 18-inch OC within min. 4-inch heat welded side lap	(Optional) TA SBS BUR Ply (Min. 4-inch side laps)	TA SBS Cap (Min. 4-inch side laps)	47.5	A	1/2:12
24	(Optional) Insulation	Min. 1-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR, any combination	DynaFast 180 HW or DynaFast 250 HW	All Purpose Fasteners and High Load Plates spaced 6-inch OC within min. 4-inch heat welded side lap in rows max. 70-inch OC	(Optional) TA SBS BUR Ply (Min. 4-inch side laps)	TA SBS Cap (Min. 4-inch side laps)	52.5	A	1/2:12
25	(Optional) Insulation	Min. 1-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR, any combination	DynaFast 180 S	All Purpose Fasteners and High Load Plates spaced 6-inch OC within min. 4-inch heat welded side lap in rows max. 70-inch OC	(Optional) CA SBS BUR Ply; HA SBS BUR Ply; or TA SBS BUR Ply (Min. 4-inch side laps)	CA SBS Cap; HA SBS Cap; or TA SBS Cap (Min. 4-inch side laps)	52.5	A	1/2:12
26	Min. 1.5-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR or FescoFoam, DuraFoam, FescoBoard or Retro-Fit Board, any combination	(Optional) Insulation	MA Base	All Purpose Fasteners and UltraFast Plates (round or square) 9-inch OC at min. 4-inch side lap and 16-inches OC in two equally spaced, staggered rows in the field of the roll	(Optional) CA SBS BUR Ply; HA SBS BUR Ply; or TA SBS BUR Ply	CA SBS Cap; HA SBS Cap; or TA SBS Cap (Min. 4-inch side laps)	60.0	A	1/2:12

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TABLE 3: MECHANICALLY FASTENED ASSEMBLIES OVER CONCRETE DECK (New, Existing or Recover)

System No.	Base Insulation Layer	Top Insulation Layer	Roof Cover				MDP (psf)	FIRE RATING UL790/ASTM E108	
			Base Sheet	Attach	Ply Sheet	Cap Sheet		Class	Maximum Incline
27	(Optional) Insulation	Min. 1-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR, any combination	DynaLastic 180 S or DynaLastic 250 S	All Purpose Fasteners and High Load Plates spaced 12-inch OC within min. 5-inch heat welded side lap	(Optional) CA SBS Cap; HA SBS Cap; or TA SBS Cap (Min. 4-inch side laps)	CA SBS Cap; HA SBS Cap; or TA SBS Cap (Min. 4-inch side laps)	67.5	A	1/2:12
28	Min. 1-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR, any combination	(Optional) Insulation	DynaLastic 180 S or DynaLastic 250 S	All Purpose Fasteners and APB Plates spaced 12-inch OC within min. 4-inch heat welded side lap	TA SBS Ply (Min. 4-inch side laps)	TA SBS Cap (Min. 4-inch side laps)	67.5	A	1/2:12
29	(Optional) Insulation	Min. 1-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR, any combination	DynaLastic 180 S or DynaLastic 250 S	All Purpose Fasteners and APB Plates spaced 12-inch OC within min. 4-inch heat welded side lap	TA SBS Ply (Min. 4-inch side laps)	TA SBS Cap (Min. 4-inch side laps)	67.5	A	1/2:12
30	(Optional) Insulation	Min. 1-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR, any combination	DynaFast 180 S, DynaFast 250 S or DynaFast 250 HW	All Purpose Fasteners and High Load Plates spaced 12-inch OC within min. 4-inch heat welded side lap	(Optional) TA SBS Ply (Min. 4-inch side laps)	TA SBS Cap (Min. 4-inch side laps)	67.5	A	1/2:12
31	(Optional) Insulation	Min. 1-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR, any combination	DynaFast 180 S	All Purpose Fasteners and High Load Plates spaced 12-inch OC within min. 4-inch heat welded side lap	(Optional) CA SBS BUR Ply; HA SBS BUR Ply; or TA SBS BUR Ply (Min. 4-inch side laps)	CA SBS Cap; HA SBS Cap; or TA SBS Cap (Min. 4-inch side laps)	67.5	A	1/2:12
32	(Optional) Insulation	Min. 1-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR, any combination	DynaFast 180 S, DynaFast 250 S or DynaFast 250 HW	All Purpose Fasteners and APB Plates spaced 6-inch OC within min. 4-inch heat welded side lap	(Optional) TA SBS Ply (Min. 4-inch side laps)	TA SBS Cap (Min. 4-inch side laps)	105.0	A	1/2:12

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TABLE 3: MECHANICALLY FASTENED ASSEMBLIES OVER CONCRETE DECK (New, Existing or Recover)

System No.	Base Insulation Layer	Top Insulation Layer	Roof Cover				MDP (psf)	FIRE RATING UL790/ASTM E108	
			Base Sheet	Attach	Ply Sheet	Cap Sheet		Class	Maximum Incline
33	(Optional) Insulation	Min. 1-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR, any combination	DynaFast 180 S,	All Purpose Fasteners and APB Plates spaced 6-inch OC within min. 4-inch heat welded side lap	(Optional) CA SBS BUR Ply; HA SBS BUR Ply; or TA SBS BUR Ply (Min. 4-inch side laps)	CA SBS Cap; HA SBS Cap; or TA SBS Cap (Min. 4-inch side laps)	105.0	A	1/2:12
34	Min. 1.5-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR, any combination	Retro-Fit Board	DynaLastic 180 S	Attached in min. 4-inch side lap 6-inch OC with JM Structural Concrete Fasteners or JM All Purpose Fasteners and High Load Plates	TA SBS Ply	TA SBS Cap	112.5	A	1/2:12
35	Min. 1.5-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR, any combination	Retro-Fit Board or Min. 5/8-inch plywood	DynaFast 180 S, DynaFast 180 HW or DynaFast 250 HW	Attached in min. 5-inch heat welded side lap 6-inch OC with JM Structural Concrete Fasteners or JM All Purpose Fasteners and High Load Plates	(Optional) TA SBS Ply	TA SBS Cap	112.5	A	1/2:12
36	FescoBoard under Min. 1.5-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR, any combination	Min. 5/8-inch plywood	DynaLastic 180 S	Attached in min. 5-inch heat welded side lap 6-inch OC with JM Structural Concrete Fasteners or JM All Purpose Fasteners and High Load Plates	(Optional) TA SBS Ply	TA SBS Cap	135.0	A	1/2:12
37	Min. 1.5-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR, any combination	Retro-Fit Board	DynaLastic 180 S	Attached in min. 5-inch heat welded side lap 6-inch OC with JM Structural Concrete Fasteners or JM All Purpose Fasteners and High Load Plates	(Optional) TA SBS Ply	TA SBS Cap	135.0	A	1/2:12

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TABLE 3: MECHANICALLY FASTENED ASSEMBLIES OVER CONCRETE DECK (New, Existing or Recover)

System No.	Base Insulation Layer	Top Insulation Layer	Roof Cover				MDP (psf)	FIRE RATING UL790/ASTM E108	
			Base Sheet	Attach	Ply Sheet	Cap Sheet		Class	Maximum Incline
38	FescoBoard under Min. 1.5-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR, any combination	Min. 5/8-inch plywood	DynaLastic 180 S	Attached in min. 4-inch side lap 6-inch OC with JM Structural Concrete Fasteners or JM All Purpose Fasteners and High Load Plates	TA SBS Ply	TA SBS Cap	150.0	A	1/2:12
39	Min. 1.5-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR, any combination	Retro-Fit Board	DynaLastic 180 S	Attached in min. 4-inch side lap 6-inch OC with JM Structural Concrete Fasteners or JM All Purpose Fasteners and High Load Plates	TA SBS Ply	TA SBS Cap	150.0	A	1/2:12

TABLE 4: ADHERED ASSEMBLIES OVER STRUCTURAL CEMENT BOARDS (New or Existing)

System No.	Base Insulation Layer		Top Insulation Layer		Roof Cover			MDP (psf)	FIRE RATING UL790/ASTM E108	
	Type	Attach	Type	Attach	Base Ply	Ply Sheet	Cap Sheet		Class	Maximum Incline
40	Min. 1.5-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR, any combination	RSUA applied 12-inch OC	Retro-Fit Board	RSUA applied 12-inch OC	CA SBS Ply	(Optional) CA SBS BUR Ply; HA SBS BUR Ply; or TA SBS BUR Ply	CA SBS Cap; HA SBS Cap; or TA SBS Cap	105.0	A	1/2:12

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TABLE 5: ADHERED ASSEMBLIES OVER STRUCTURAL CEMENT BOARDS (New or Existing)

System No.	Base Insulation Layer or Anchor Sheet		Top Insulation Layer		Roof Cover			MDP (psf)	FIRE RATING UL790/ASTM E108	
	Type	Attach	Type	Attach	Base Ply	Ply Sheet	Cap Sheet		Class	Maximum Incline
41	MA Base	Twin-Loc Nails with integral plate spaced 9-inch OC at the 3-inch side lap and two rows (2) staggered 12-inch OC in the field	Min. 1.3-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR, FescoFoam, DuroFoam, FescoBoard or Min. 3/4-inch DuraBoard.any combination	ASTM D312, Type IV Asphalt	HA SBS BUR Base	(Optional) CA SBS BUR Ply; HA SBS BUR Ply; or TA SBS BUR Ply	CA SBS Cap; HA SBS Cap; or TA SBS Cap	82.5	A	1/2:12

TABLE 6: MECHANICALLY FASTENED ASSEMBLIES OVER STRUCTURAL CEMENT BOARDS (New or Existing)

System No.	Insulation	Roof Cover				MDP (psf)	FIRE RATING UL790/ASTM E108	
		Base Ply	Attach	Ply Sheet	Cap Sheet		Class	Maximum Incline
42	Min. 375 psi Celcore MF with HS Rheology Admixture poured in place	DynaWeld Base	Min. 1.7-inch JM LWC CR Base Fastener installed 7-inch OC in 4-inch side laps, 7-inch OC in two (2) equally spaced, staggered rows in the field	(Optional) TA SBS Ply	TA SBS Cap	45.0	A	1/2:12
43	Min. 375 psi Celcore MF with HS Rheology Admixture poured in place	DynaWeld Base	Min. 1.7-inch JM LWC CR Base Fastener installed 7-inch OC in 4-inch side laps, 7-inch OC in three (3) equally spaced, staggered rows in the field	(Optional) TA SBS Ply	TA SBS Cap	52.5	A	1/2:12
44	Min. 475 psi Celcore MF with HS Rheology Admixture poured in place	DynaFast 180 HW, DynaFast 180 S or DynaFast 250 HW	Min. 1.8-inch Twin-Loc Nails and Straight Line Batten Bar spaced 6-inch OC within the 4-inch wide heat welded laps	(Optional) TA SBS Ply (Min. 4-inch side laps)	TA SBS Cap (Min. 4-inch side laps)	60.0	A	1/2:12
45	Min. 475 psi Celcore MF with HS Rheology Admixture poured in place	DynaFast 180 S	Min. 1.8-inch Twin-Loc Nails and Straight Line Batten Bar spaced 6-inch OC within the 4-inch wide heat welded laps	(Optional) CA SBS BUR Ply; HA SBS BUR Ply; or TA SBS Ply (Min. 4-inch side laps)	CA SBS Cap; HA SBS Cap; or TA SBS Cap (Min. 4-inch side laps)	60.0	A	1/2:12
46	Min. 475 psi Celcore MF with HS Rheology Admixture poured in place	PermaPly 28	Min. 1.7-inch JM LWC CR Base Fastener installed 6-inch OC in 4-inch side laps, 6-inch OC in three (3) equally spaced staggered rows in the field	CA SBS BUR Ply; HA SBS BUR Ply; or TA SBS Ply	CA SBS Cap; HA SBS Cap; or TA SBS Cap	60.0	A	1/2:12

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TABLE 6: MECHANICALLY FASTENED ASSEMBLIES OVER STRUCTURAL CEMENT BOARDS (New or Existing)

System No.	Insulation	Roof Cover				MDP (psf)	FIRE RATING UL790/ASTM E108	
		Base Ply	Attach	Ply Sheet	Cap Sheet		Class	Maximum Incline
47	-	MA Base	Twin-Loc Nails with integral plate spaced 9-inch OC at the 3-inch side lap and two rows (2) staggered 12-i9nch OC in the field	(Optional) HA SBS BUR Ply; or TA SBS BUR Ply	HA SBS Cap; or TA SBS Cap	82.5	A	1/2:12
48	(Optional) Insulation	DynaFast 180 HW, DynaFast 180 S or DynaFast 250 HW	Min. 1.8-inch Twin-Loc Nails and Straight Line Batten Bar spaced 6-inch OC within the 4-inch wide heat welded side laps and 6-inch OC in one intermediate row centered in the field of the roll	(Optional) TA SBS BUR Ply (Min.4-inch side laps)	TA SS Cap (Min. 4-inch side laps)	90.0	A	1/2:12
49	(Optional) Insulation		Min. 1.8-inch Twin-Loc Nails and Straight Line Batten Bar spaced 6-inch OC within the 4-inch wide heat welded side laps and 6-inch OC in one intermediate row centered in the field of the roll	(Optional) CA SBS BUR Ply; HA SBS BUR Ply; or TA SBS BUR Ply (Min. 4-inch side laps)	CA SBS Cap; HA SBS Cap; or TA SBS Cap (Min. 4-inch side laps)	90.0	A	1/2:12

TABLE 7: ADHERED ASSEMBLIES OVER POURED-GYPSUM DECK (New, Existing or Recover)

System No.	Base Insulation Layer or Anchor Sheet		Top Insulation Layer		Roof Cover			MDP (psf)	FIRE RATING UL790/ASTM E108	
	Type	Attach	Type	Attach	Base Ply	Ply Sheet	Cap Sheet		Class	Maximum Incline
50	Min. 1.5-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR, any combination	Polymer Auger Fasteners and Plates secured at a rate of 8 per 4-ft x 8-ft Board	FescoBoard, Retro-Fit, RetroPlus or Min. 3/4-inch DuraBoard	ASTM D312 Type IV Asphalt	HA SBS BUR Base	(Optional) CA SBS Ply; HA SBS BUR Ply; or TA SBS BUR Ply	CA SBS Cap; HA SBS Cap; or TA SBS Cap	45.0	A	1/2:12
51	FescoBoard or Min. 3/4-inch DuraBoard	Polymer Auger Fasteners and Plates secured at a rate of 16 per 4-ft x 8-ft Board	FescoBoard, Retro-Fit, RetroPlus or Min. 3/4-inch DuraBoard	ASTM D312 Type IV Asphalt	HA SBS BUR Base	(Optional) CA SBS Ply; HA SBS BUR Ply; or TA SBS BUR Ply	CA SBS Cap; HA SBS Cap; or TA SBS Cap	45.0	A	1/2:12

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TABLE 7: ADHERED ASSEMBLIES OVER POURED-GYPSUM DECK (New, Existing or Recover) (cont)

System No.	Base Insulation Layer or Anchor Sheet		Top Insulation Layer		Roof Cover			MDP (psf)	FIRE RATING UL790/ASTM E108	
	Type	Attach	Type	Attach	Base Ply	Ply Sheet	Cap Sheet		Class	Maximum Incline
52	(Optional) Insulation	Simultaneously fastened with Top Insulation	FescoBoard or Min. 3/4-inch DuraBoard	Polymer Auger Fasteners and Plates secured at a rate of 16 per 4-ft x 8-ft Board	HA SBS BUR Base	(Optional) CA SBS Ply; HA SBS BUR Ply; or TA SBS BUR Ply	CA SBS Cap; HA SBS Cap; or TA SBS Cap	45.0	A	1/2:12
53	MA Base or DynaPly T1	Twin-Loc Nails with integral plate spaced 9-inch OC at the 3-inch side lap and two rows (2) staggered 12-inch OC in the field	Min. 1.4-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR, FescoFoam, DuraFoam, Fesco Board, Retro-Fit, RetroPlus or Min. 3/4-inch DuraBoard, any combination	ASTN D312, Type IV Asphalt	HA SBS BUR Base	(Optional) CA SBS Ply; HA SBS BUR Ply; or TA SBS BUR Ply	CA SBS Cap; HA SBS Cap; or TA SBS Cap	75.0	A	1/2:12

TABLE 8: MECHANICALLY FASTENED ASSEMBLIES OVER POURED GYPSUM DECK (New or Existing)

System No.	Insulation	Roof Cover				MDP (psf)	FIRE RATING UL790/ASTM E108	
		Base Ply	Attach	Ply Sheet	Cap Sheet		Class	Maximum Incline
54	Insulation	MA Base	Polymer Auger Fasteners and Plates s9-inch OC at the side lap and two rows (2) staggered 12-inch OC in the field	(Optional) CA SBS BUR Ply; HA SBS BUR Ply; or TA SBS BUR Ply	CA SBS Cap; HA SBS Cap; or TA SBS Cap	45.0	A	1/2:12
55	-	MA Base	Min. 1.8-inch Twin-Loc Nails with integral plate spaced 9-inch OC at the 3-inch side lap and two rows (2) staggered 12-inch OC in the field	(Optional) HA SBS BUR Ply; or TA SBS BUR Ply	HA SBS Cap; or TA SBS Cap	75.0	A	1/2:12

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TABLE 8: MECHANICALLY FASTENED ASSEMBLIES OVER POURED GYPSUM DECK (New or Existing) (cont)

System No.	Insulation	Roof Cover				MDP (psf)	FIRE RATING UL790/ASTM E108	
		Base Ply	Attach	Ply Sheet	Cap Sheet		Class	Maximum Incline
56	(Optional) Insulation	DynaFast 180 HW, DynaFast 180 S or DynaFast 250 HW	Min. 1.8-inch Twin-Loc Nails and Straight Line Batten Bar spaced 6-inch OC within the 4-inch wide heat welded side laps and 6-inch OC in one intermediate row centered in the field of the roll	(Optional) TA SBS BUR Ply (Min. 4-inch side laps)	TA SBS Cap (Min. 4-inch side laps)	90.0	A	1/2:12
57	(Optional) Insulation	DynaFast 180 S	Min. 1.8-inch Twin-Loc Nails and Straight Line Batten Bar spaced 6-inch OC within the 4-inch wide heat welded side laps and 6-inch OC in one intermediate row centered in the field of the roll	(Optional) CA SBS BUR Ply; HA SBS BUR Ply; or TA SBS BUR Ply (Min. 4-inch side laps)	CA SBS Cap; HA SBS Cap; or TA SBS Cap (Min. 4-inch side laps)	90.0	A	1/2:12

TABLE 9: MECHANICALLY FASTENED LIGHTWEIGHT CONCRETE ASSEMBLIES OVER CONCRETE DECK (New, Existing or Recover)

System No.	Vapor Barrier	LWIC	Insulation Layer/Cover Board		Roof Cover			MDP (psf)	FIRE RATING UL790/ASTM E108	
			Type	Attach	Base Ply	Ply Sheet	Cap Sheet		Class	Maximum Incline
58	-	Min. 262 psi LWIC	Min. 0.25-inch Gypsum-Fiber Roof Board	2-Part UIA ribbons spaced 12-inch OC	HA SBS BUR Ply; or TA SBS BUR Ply	(Optional) HA SBS BUR Ply; or TA SBS BUR Ply	HA SBS Cap; or TA SBS Cap	210.0	A	1/2:12

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TABLE 10: MECHANICALLY FASTENED LIGHTWEIGHT CONCRETE ASSEMBLIES OVER CONCRETE DECK (New or Existing)

System No.	Vapor Barrier	LWIC	Roof Cover				MDP (psf)	FIRE RATING UL790/ASTM E108	
			Base Sheet or Insulation	Attach	Ply Sheet	Cap Sheet		Class	Maximum Incline
59	-	Min. 283 psi LWIC	MA Base	1.4-inch JM UltraLok or 1.7-inch LWC CR Base Sheet Fastener installed 7-inch OC in 3-inch side laps, 7-inch OC in two (2) equally spaced, staggered rows in the field	CA SBS BUR Ply; HA SBS BUR Ply; or TA SBS Ply	CA SBS Cap; HA SBS Cap; or TA SBS Cap	30.0	A	1/2:12
60	-	Min. 200 psi LWIC	MA Base	1.4-inch JM UltraLok Fastener installed 9-inch OC in 3-inch side laps, 12-inch OC in two (2) equally spaced, staggered rows in the field	CA SBS BUR Ply; HA SBS BUR Ply; or TA SBS Ply	CA SBS Cap; HA SBS Cap; or TA SBS Cap	30.0	A	1/2:12
61	-	Min. 283 psi LWIC	MA Base	1.4-inch JM UltraLok or 1.7-inch LWC CR Base Sheet Fastener installed 7-inch OC in 3-inch side laps, 7-inch OC in two (2) equally spaced, staggered rows in the field	DynaGrip Base SD/SA	HA SBS Cap; or TA SBS Cap	30.0	A	1/2:12
62	-	Min. 200 psi LWIC	MA Base	1.4-inch JM UltraLok Fastener installed 9-inch OC in 3-inch side laps, 12-inch OC in two (2) equally spaced, staggered rows in the field	DynaGrip Base SD/SA	HA SBS Cap; or TA SBS Cap	30.0	A	1/2:12
63	(Optional) DynaBase HW over ASTM D 41 primed concrete	Min. 375 psi Ealstizell with Zell-Crete Fibers	DynaFast 180 HW or DynaFast 205 HW	Min. 1.8-inch Twin-Loc Nails and Straight Line Batten Bar spaced 9-inch OC within the 4-inch wide heat welded side laps	(Optional) TA SBS Ply (Min. 4-inch side laps)	TA SBS Cap (Min. 4-inch side laps)	37.5	A	1/2:12
64	(Optional) DynaBase HW over ASTM D 41 primed concrete	Min. 375 psi Ealstizell with Zell-Crete Fibers	DynaFast 180 S	Min. 1.8-inch Twin-Loc Nails and Straight Line Batten Bar spaced 9-inch OC within the 4-inch wide heat welded side laps	(Optional) CA SBS Ply; HA SBS BUR Ply; or TA SBS Ply (Min. 4-inch side laps)	CA SBS Cap; HA SBS Cap; or TA SBS Cap (Min. 4-inch side laps)	37.5	A	1/2:12

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TABLE 10: MECHANICALLY FASTENED LIGHTWEIGHT CONCRETE ASSEMBLIES OVER CONCRETE DECK (New or Existing)

System No.	Vapor Barrier	LWIC	Roof Cover				MDP (psf)	FIRE RATING UL790/ASTM E108	
			Base Sheet or Insulation	Attach	Ply Sheet	Cap Sheet		Class	Maximum Incline
65	(Optional) SBS TA VB	Min. 300 psi Celcore MF	MA Base 2	Min. 1.7-inch JM LWC CR Base Fastener installed 7-inch OC in 4-inch side laps, 7-inch OC in two (2) equally spaced, staggered rows in the field	(Optional) TA SBS Ply	TA SBS Cap	45.0	A	1/2:12
66	(Optional) SBS TA VB	Min. 347 psi Celcore MF with HS Rheology Admixture	MA Base 3	Min. 1.7-inch JM LWC CR Base Fastener installed 12-inch OC in 4-inch side laps, 12-inch OC in three (3) equally spaced, staggered rows in the field	TA SBS Ply	CA SBS Cap; HA SBS Cap; or TA SBS Cap	45.0	A	1/2:12
67	-	Min. 200 psi LWIC	Invinsa Roof Board	Min. 1.8-inch JM UltraLok secured at a rate of 32 per 4-ft x 8-ft board	DynaGrip Base SD/SA with Optional TA SBS Ply	TA SBS Cap; or HA SBS Cap (Min. 4-inch side laps)	45.0	A	1/2:12
68	(Optional) SBS TA VB	Min. 325 psi Celcore MF	MA Base 2	Min. 1.7-inch JM LWC CR Base Fastener installed 7-inch OC in 4-inch side laps, 7-inch OC in three (3) equally spaced, staggered rows in the field	(Optional) TA SBS Ply	TA SBS Cap	52.5	A	1/2:12
69	(Optional) SBS TA VB	Min. 414 psi Celcore MF with HS Rheology Admixture and Celcore S-1	MA Base 2	Min. 1.7-inch JM LWC CR Base Fastener installed 12-inch OC in 4-inch side laps, 12-inch OC in two (2) equally spaced, staggered rows in the field	TA SBS Ply	CA SBS Cap; HA SBS Cap; or TA SBS Cap	52.5	A	1/2:12
70	(Optional) SBS TA VB	Min. 414 psi Celcore MF with HS Rheology Admixture and Celcore S-1	DynaFast 180 HW, DynaFast 180 S or DynaFast 250 HW	Min. 1.8-inch Twin-Loc Nails and Straight Line Batten Bar spaced 6-inch OC within the 4-inch wide heat welded side laps	(Optional) TA SBS Ply (Min. 4-inch side laps)	TA SBS Cap (Min. 4-inch side laps)	52.5	A	1/2:12
71	(Optional) SBS TA VB	Min. 414 psi Celcore MF with HS Rheology Admixture and Celcore S-1	DynaFAst 180 S	Min. 1.8-inch Twin-Loc Nails and Straight Line Batten Bar spaced 6-inch OC within the 4-inch wide heat welded side laps	(Optional) CA SBS BUR Ply; HA SBS BUR Ply; or TA SBS Ply (Min. 4-inch side laps)	CA SBS Cap; HA SBS Cap; or TA SBS Cap	52.5	A	1/2:12

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TABLE 10: MECHANICALLY FASTENED LIGHTWEIGHT CONCRETE ASSEMBLIES OVER CONCRETE DECK (New or Existing)

System No.	Vapor Barrier	LWIC	Roof Cover				MDP (psf)	FIRE RATING UL790/ASTM E108	
			Base Sheet or Insulation	Attach	Ply Sheet	Cap Sheet		Class	Maximum Incline
72	(Optional) SBS TA VB	Min. 414 psi Celcore MF with HS Rheology Admixture and Celcore S-1	MA Base 2	Min. 1.7-inch JM LWC CR Base Fastener installed 12-inch OC in 4-inch side laps, 12-inch OC in two (2) equally spaced, staggered rows in the field	TA SBS Ply	TA SBS Cap	60.0	A	1/2:12
73	-	Min. 200 psi Mearlcrete	PermaPly 28 or Ventsulation	Min. 1.7-inch LWC Base Sheet Fastener installed 7-inch OC in 3-inch side laps, 7-inch OC in two (2) equally spaced, staggered rows in the field	(Optional) HA SBS BUR Ply or TA SBS Ply	HA SBS Cap or TA SBS Cap	60.0	A	1/2:12
74	(Optional) SBS TA VB	Min. 475 psi Celcore MF with HS Rheology Admixture	DynaFast 180 HW, DynaFast 180 S or DynaFast 250 HW	Min. 1.8-inch Twin-Loc Nails and Straight Line Batten Bar spaced 6-inch OC within the 4-inch wide heat welded side laps	(Optional) TA SBS Ply (Min. 4-inch side laps)	TA SBS Cap (Min. 4-inch side laps)	60.0	A	1/2:12
75	(Optional) SBS TA VB	Min. 400 psi Elastizell with Zell-Crete Fibers	DynaFast 180 HW or DynaFast 250 HW	All Purpose Fasteners and High Load Plates spaced 12-inch OC within min. 5-inch heat welded laps	(Optional) TA SBS Ply (Min. 4-inch side laps)	TA SBS Cap (Min. 4-inch side laps)	60.0	A	1/2:12
76	(Optional) SBS TA VB	Min. 400 psi Elastizell with Zell-Crete Fibers	DynaFast 180 S	All Purpose Fasteners and High Load Plates spaced 12-inch OC within min. 5-inch heat welded laps	(Optional) CA SBS BUR Ply; HA SBS BUR Ply; or TA SBS Ply (Min. 4-inch side laps)	CA SBS Cap; HA SBS Cap; or TA SBS Cap (Min. 4-inch side laps)	60.0	A	1/2:12
77	(Optional) SBS TA VB	Min. 475 psi Celcore MF with HS Rheology Admixture	DynaFast 180 S	Min. 1.8-inch Twin-Loc Nails and Straight Line Batten Bar spaced 6-inch OC within the 4-inch wide heat welded side laps	(Optional) CA SBS BUR Ply; HA SBS BUR Ply; or TA SBS Ply (Min. 4-inch side laps)	CA SBS Cap; HA SBS Cap; or TA SBS Cap (Min. 4-inch side laps)	60.0	A	1/2:12

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TABLE 10: MECHANICALLY FASTENED LIGHTWEIGHT CONCRETE ASSEMBLIES OVER CONCRETE DECK (New or Existing)

System No.	Vapor Barrier	LWIC	Roof Cover				MDP (psf)	FIRE RATING UL790/ASTM E108	
			Base Sheet or Insulation	Attach	Ply Sheet	Cap Sheet		Class	Maximum Incline
78	(Optional) SBS TA VB	Min. 375 psi Celcore MF with HS Rheology Admixture	PermaPly 28	Min. 1.7-inch JM LWC Base Fastener installed 6-inch OC in 4-inch side laps, 6-inch OC in three (3) equally spaced, staggered rows in the field	CA SBS BUR Ply; HA SBS BUR Ply; or TA SBS Ply	CA SBS Cap; HA SBS Cap; or TA SBS Cap	60.0	A	1/2:12
79	(Optional) DynaBase HW over ASTM D 41 primed concrete	Min. 400 psi Elastizell with Zell-Crete Fibers	PermaPly 28, GlasBase Plus, DynaBase or Ventsulation Felt	Min. 1.7-inch JM LWC CR Base Fastener installed 7-inch OC in 4-inch side laps, 7-inch OC in two (2) equally spaced, staggered rows in the field	HA SBS BUR Ply; or TA SBS Ply	HA SBS Cap; or TA SBS Cap	75.0	A	1/2:12

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TABLE 11: MECHANICALLY FASTENED LIGHTWEIGHT CONCRETE ASSEMBLIES OVER STEEL DECK (New or Existing)

System No.	Deck	LWIC	Roof Cover				MDP (psf)	FIRE RATING UL790/ASTM E108	
			Base Sheet or Insulation	Attach	Ply Sheet	Cap Sheet		Class	Maximum Incline
80	Min. 22 ga., type WR, Grade 33 steel (L5)	Min. 282 psi LWIC	MA Base	1.4-inch JM UltraLok or 1.7-inch LWC CR Base Sheet Fastener installed 7-inch OC in 3-inch side laps, 7-inch OC in two (2) equally spaced, staggered rows in the field	CA SBS BUR Ply; HA SBS BUR Ply; or TA SBS Ply	CA SBS Cap; HA SBS Cap; or TA SBS Cap	30.0	A	1/2:12
81	Min. 22 ga., type WR, Grade 33 steel (L5)	Min. 200 psi LWIC	MA Base	1.4-inch JM UltraLok Fastener installed 9-inch OC in 3-inch side laps, 12-inch OC in two (2) equally spaced, staggered rows in the field	CA SBS BUR Ply; HA SBS BUR Ply; or TA SBS Ply	CA SBS Cap; HA SBS Cap; or TA SBS Cap	30.0	A	1/2:12
82	Min. 22 ga., type WR, Grade 33 steel (L5)	Min. 283 psi LWIC	MA Base	1.4-inch JM UltraLok or 1.7-inch LWC CR Base Sheet Fastener installed 7-inch OC in 3-inch side laps, 7-inch OC in two (2) equally spaced, staggered rows in the field	DynaGrip Base SD/SA	HA SBS Cap; or TA SBS Cap	30.0	A	1/2:12
83	Min. 22 ga., type WR, Grade 33 steel (L5)	Min. 200 psi LWIC	MA Base	1.4-inch JM UltraLok Fastener installed 9-inch OC in 3-inch side laps, 12-inch OC in two (2) equally spaced, staggered rows in the field	DynaGrip Base SD/SA	HA SBS Cap; or TA SBS Cap	30.0	A	1/2:12
84	Min. 22 ga., type WR, Grade 33 steel (L5, P, S12)	Min. 375 psi Elastizell with Zell-Crete Fibers	DynaFast 180 HW or DynaFast 250 HW	Min. 1.8-inch Twin-Loc Nails and Straight Line Batten Bar spaced 9-inch OC within the 4-inch wide heat welded side laps	(Optional) TA SBS Ply (Min. 4-inch side laps)	TA SBS Cap (Min. 4-inch side laps)	37.5	A	1/2:12
85	Min. 22 ga., type WR, Grade 33 steel (L5, P, S12)	Min. 375 psi Elastizell with Zell-Crete Fibers	DynaFast 180 S	Min. 1.8-inch Twin-Loc Nails and Straight Line Batten Bar spaced 9-inch OC within the 4-inch wide heat welded side laps	(Optional) CA SBS BUR Ply; HA SBS BUR Ply; or TA SBS Ply (Min. 4-inch side laps)	CA SBS Cap; HA SBS Cap; or TA SBS Cap (Min. 4-inch side laps)	37.5	A	1/2:12

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TABLE 11: MECHANICALLY FASTENED LIGHTWEIGHT CONCRETE ASSEMBLIES OVER STEEL DECK (New or Existing)

System No.	Deck	LWIC	Roof Cover				MDP (psf)	FIRE RATING UL790/ASTM E108	
			Base Sheet or Insulation	Attach	Ply Sheet	Cap Sheet		Class	Maximum Incline
86	Min. 22 ga., type WR, Grade 33 steel (L5, F1, S12)	Min. 300 psi Celcore MF	MA Base 2	Min. 1.7-inch JM LWC CR Base Fastener installed 7-inch OC in 4-inch side laps, 7-inch OC in two (2) equally spaced, staggered rows in the field	(Optional) TA SBS Ply	TA SBS Cap	45.0	A	1/2:12
87	Min. 22 ga., type WR, Grade 33 steel (L5, P, S12)	Min. 347 psi Celcore MF with HS Rheology Admixture and Celcore S-1	MA Base 3	Min. 1.7-inch JM LWC CR Base Fastener installed 7-inch OC in 4-inch side laps, 7-inch OC in two (2) equally spaced, staggered rows in the field	TA SBS Ply	CA SBS Cap; HA SBS Cap; or TA SBS Cap	45.0	A	1/2:12
88	Min. 22 ga., type WR, Grade 33 steel (L5, F1, S12)	Min. 200 psi LWIC	Invinsa Roof Board	Min. 1.8-inch JM UltraLok secured at a rate of 32 per 4-ft x 8-ft board	DynaGrip Base SD/SA with (Optional) TA SBS Ply	TA SBS Cap; or HA SBS Cap (Min. 4-inch side laps)	45.0	A	1/2:12
89	Min. 22 ga., type WR, Grade 33 steel (L5, F1, S12)	Min. 325 psi Celcore MF	MA Base 2	Min. 1.7-inch JM LWC CR Base Fastener installed 7-inch OC in 4-inch side laps, 7-inch OC in three (3) equally spaced, staggered rows in the field	(Optional) TA SBS Ply	TA SBS Cap	52.5	A	1/2:12
90	Min. 22 ga., type WR, Grade 33 steel (L5, P, S12)	Min. 400 psi Celcore MF with HS Rheology Admixture and Celcore S-1	MA Base 2	Min. 1.7-inch JM LWC CR Base Fastener installed 7-inch OC in 4-inch side laps, 7-inch OC in two (2) equally spaced, staggered rows in the field	TA SBS Ply	TA SBS Cap	52.5	A	1/2:12
91	Min. 22 ga., type WR, Grade 33 steel (L5, P, S15)	Min. 400 psi Celcore MF with HS Rheology Admixture and Celcore S-1	DynaFast 180 HW, DynaFast 180 S or DynaFast 250 HW	Min. 1.8-inch Twin-Loc Nails and Straight Line Batten Bar spaced 6-inch OC within the 4-inch wide heat welded side laps	(Optional) TA SBS Ply (Min. 4-inch side laps)	TA SBS Cap (Min. 4-inch side laps)	52.5	A	1/2:12
92	Min. 22 ga., type WR, Grade 33 steel (L5, P, S15)	Min. 400 psi Celcore MF with HS Rheology Admixture and Celcore S-1	DynaFast 180 S	Min. 1.8-inch Twin-Loc Nails and Straight Line Batten Bar spaced 6-inch OC within the 4-inch wide heat welded side laps	(Optional) CA SBS BUR Ply; HA SBS BUR Ply; or TA SBS Ply (Min. 4-inch side laps)	CA SBS Cap; HA SBS Cap; or TA SBS Cap (Min. 4-inch side laps)	52.5	A	1/2:12

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TABLE 11: MECHANICALLY FASTENED LIGHTWEIGHT CONCRETE ASSEMBLIES OVER STEEL DECK (New or Existing)

System No.	Deck	LWIC	Roof Cover				MDP (psf)	FIRE RATING UL790/ASTM E108	
			Base Sheet or Insulation	Attach	Ply Sheet	Cap Sheet		Class	Maximum Incline
93	Min. 22 ga., type WR, Grade 33 steel (L5)	Min. 414 psi Celcore MF with HS Rheology Admixture and Celcore S-1	MA Base 2	Min. 1.7-inch JM LWC CR Base Fastener installed 12-inch OC in 4-inch side laps, 12-inch OC in two (2) equally spaced, staggered rows in the field	TA SBS Ply	TA SBS Cap	60.0	A	1/2:12
94	Min. 22 ga., type WR, Grade 33 steel (L5, P, S12)	Min. 400 psi Elastizell with Zell-Crete Fibers	DynaFast 180 HW or DynaFast 250 HW	HL Fasteners & Plates spaced 12-inch OC within min. 5-in. heat welded side laps	(Optional) TA SBS Ply (Min. 4-inch side laps)	TA SBS Cap (Min. 4-inch side laps)	60.0	A	1/2:12
95	Min. 22 ga., type WR, Grade 33 steel (L5, P, S12)	Min. 400 psi Elastizell with Zell-Crete Fibers	DynaFast 180 S	HL Fasteners & Plates spaced 12-inch OC within min. 5-in. heat welded side laps	(Optional) CA SBS BUR Ply; HA SBS Cap; or TA SBS Ply (Min. 4-inch side laps)	CA SBS Cap; HA SBS Cap; or TA SBS Cap (Min. 4-inch side laps)	60.0	A	1/2:12
96	Min. 22 ga., type WR, Grade 33 steel (L5, P, S15)	Min. 475 psi Celcore MF with HS Rheology Admixture and Celcore S-1	DynaFast 180 HW, DynaFast 180 S or DynaFast 250 HW	Min. 1.8-inch Twin-Loc Nails and Straight Line Batten Bar spaced 6-inch OC within the 4-inch wide heat welded side laps	(Optional) TA SBS Ply (Min. 4-inch side laps)	TA SBS Cap (Min. 4-inch side laps)	60.0	A	1/2:12
97	Min. 22 ga., type WR, Grade 33 steel (L5, P, S15)	Min. 475 psi Celcore MF with HS Rheology Admixture and Celcore S-1	DynaFast 180 S	Min. 1.8-inch Twin-Loc Nails and Straight Line Batten Bar spaced 6-inch OC within the 4-inch wide heat welded side laps	(Optional) CA SBS BUR Ply; HA SBS BUR Ply; or TA SBS Ply (Min. 4-inch side laps)	CA SBS Cap; HA SBS Cap; or TA SBS Cap (Min. 4-inch side laps)	60.0	A	1/2:12
98	Min. 22 ga., type WR, Grade 33 steel (L5, F1, S20)	Min. 475 psi Celcore MF with HS Rheology Admixture and Celcore S-1	PermaPly 28	Min. 1.7-inch JM LWC CR Base Fastener installed 6-inch OC in 4-inch side laps, 12-inch OC in three (3) equally spaced, staggered rows in the field	CA SBS BUR Ply; HA SBS BUR Ply; or TA SBS Ply	CA SBS Cap; HA SBS Cap; or TA SBS Cap	60.0	A	1/2:12
99	Min. 22 ga., type WR, Grade 33 steel (L5, P, S12)	Min. 400 psi Elastizell with Zell-Crete Fibers	PermaPly 28, GlasBase Pluys, DynaBase or Ventsulation Felt	Min. 1.7-inch JM LWC CR Base Fastener installed 6-inch OC in 4-inch side laps, 12-inch OC in three (3) equally spaced, staggered rows in the field	HA SBS BUR Ply; or TA SBS Ply	HA SBS Cap; or TA SBS Cap	75.0	A	1/2:12

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TABLE 12: MECHANICAL FASTENED ASSEMBLIES OVER RECOVER WITH ADHERED MEMBRANES

System No.	Deck	LWIC	Roof Cover				MDP (psf)	FIRE RATING UL790/ASTM E108	
			Base Sheet	Attach	Ply Sheet	Cap Sheet		Class	Maximum Incline
100	Min. 22 ga., type WR, Grade 33 steel (P, L5, S12)	Min. 200 psi LWIC	DynaFast 180 S, DynaFast 180 HW or DynaFast 250 HW	HL Fasteners & Plates spaced 6-inch OC within min. 4-in. heat welded side laps	(Optional) TA SBS Ply (Min. 4-inch side laps)	TA SBS Cap (Min. 4-inch side laps)	97.5	A	1/2:12
101	Min. 22 ga., type WR, Grade 33 steel (P, L5, S12)	Min. 200 psi LWIC	DynaFast 180 S	HL Fasteners & Plates spaced 6-inch OC within min. 4-in. heat welded side laps	(Optional) CA SBS BUR Ply; HA SBS Cap; or TA SBS Cap (Min. 4-inch side laps)	CA SBS Cap; HA SBS Cap; or TA SBS Cap (Min. 4-inch side laps)	97.5	A	1/2:12

TABLE 13: ASSEMBLIES WITH ADHERED MEMBRANES OVER INSULATED STEEL DECK (New, Existing or Recover)

System No.	Deck	Base Insulation Layer		Top Insulation Layer		Roof Cover			MDP (psf)	FIRE RATING UL790/ASTM E108	
		Type	Attach	Type	Attach	Base Sheet	Ply Sheet	Cap Sheet		Class	Maximum Incline
102	Min. 22 ga., type WR, Grade 80 steel (P, L5)	Min. 1.5-inch thick, one or more layers, ENRGY 3, FescoFoam or DuraFoam; or Min. 1-inch Fesco Board or DuraBoard, any combination	UF Fasteners & Plates secured at a rate of 16 per 4-ft x 8-ft Board	FescoFoam or DuraFoam; Min. 1-inch Fesco Board; Retro-Fit, RetroPlus or DuraBoard	ASTM D312 Type IV Asphalt	HA SBS BUR Base	(Optional) CA SBS BUR Ply; HA SBS BUR Ply; or TA SBS Cap	CA SBS Cap; HA SBS Cap; or TA SBS Cap	52.5	A	1/2:12
103	Min. 22 ga., type WR, Grade 80 steel (P, L5)	Min. 1.5-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR; FescoFoam or DuraFoam; or Min. 1-inch Fesco Board or DuraBoard, any combination	Simultaneously fastened with Top Insulation	FescoFoam or DuraFoam; Fesco Board; Retro-Fit, RetroPlus or DuraBoard	UF Fasteners & Plates or UltraFast Fasteners with UltraFast Plastic Plates secured at a rate of 16 per 4-ft x 8-ft Board	HA SBS BUR Base	(Optional) CA SBS BUR Cap; HA SBS BUR Ply; or TA SBS Cap	CA SBS Cap; HA SBS Cap; or TA SBS Cap	52.5	A	1/2:12

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TABLE 13: ASSEMBLIES WITH ADHERED MEMBRANES OVER INSULATED STEEL DECK (New, Existing or Recover)

System No.	Deck	Base Insulation Layer		Top Insulation Layer		Roof Cover		MDP (psf)	FIRE RATING UL790/ASTM E108	
		Type	Attach	Type	Attach	Base Sheet	Ply Sheet		Class	Maximum Incline
104	Min. 22 ga., type WR, Grade 33 steel (L6, F1, S24)	Min. 1.5-inch thick, one or more layers, ENRGY 3, FescoFoam or DuraFoam; any combination	<i>UF Fasteners & Plates secured at a rate of 18 per 4-ft x 8-ft Board</i>	FescoFoam or DuraFoam; Fesco Board; Retro-Fit, RetroPlus or DuraBoard	ASTM D 312 Type IV Asphalt	HA SBS BUR Base	(Optional) CA SBS BUR Cap; HA SBS Cap; or TA SBS Cap	CA SBS Cap; HA SBS Cap; or TA SBS Cap	60.0	A 1/2:12
105	Min. 22 ga., type WR, Grade 33 steel (L6, F1, S30)	Min. 1.5-inch thick, one or more layers, ENRGY 3	<i>UF Fasteners & Plates secured at a rate of 18 per 4-ft x 8-ft Board</i>	Min. 0.5-inch Gypsum-Fiber Roof Board,	2-Part UIA applied 12-inch OC	CA SBS BUR Ply; or HA SBS BUR Ply	(Optional) CA SBS BUR Cap; HA SBS Cap; or TA SBS Cap	CA SBS Cap; HA SBS Cap; or TA SBS Cap	60.0	A 1/2:12
106	Min. 22 ga., type WR, Grade 80 steel (L6, F1, S30)	Min. 1.5-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR any combination	<i>UF Fasteners & Plates secured at a rate of 24 per 4-ft x 8-ft Board</i>	Min. 0.5-inch Gypsum-Fiber Roof Board,	2-Part UIA applied 12-inch OC	CA SBS BUR Ply; HA SBS BUR Ply	(Optional) CA SBS BUR Cap; HA SBS Cap; or TA SBS Cap	CA SBS Cap; HA SBS Cap; or TA SBS Cap	67.5	A 1/2:12
107	Min. 22 ga., type WR, Grade 33 steel (L6, F1, S30)	Min. 2-inch thick, one or more layers, ENRGY 3, FescoFoam or DuraFoam	<i>UF Fasteners & Plates secured at a rate of 24 per 4-ft x 8-ft Board</i>	Retro-Fit, RetroPlus or DuraBoard or Min. 2-inch FescoFoam or DuraFoam	ASTM D312 Type IV Asphalt	HA SBS BUR Base	(Optional) CA SBS BUR Cap; HA SBS Cap; or TA SBS Cap	CA SBS Cap; HA SBS Cap; or TA SBS Cap	75.0	A 1/2:12

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TABLE 13: ASSEMBLIES WITH ADHERED MEMBRANES OVER INSULATED STEEL DECK (New, Existing or Recover)

System No.	Deck	Base Insulation Layer		Top Insulation Layer		Roof Cover			MDP (psf)	FIRE RATING UL790/ASTM E108	
		Type	Attach	Type	Attach	Base Sheet	Ply Sheet	Cap Sheet		Class	Maximum Incline
108	Min. 22 ga., type WR, Grade 80 steel (L6, F1, S30)	Min. 1.5-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR any combination	Simultaneously fastened with Top Insulation	Min. 3/4-inch DuraBoard	UF Fasteners & Plates or UltraFast with UltraFast Plastic Plates secured at a rate of 24 per 4-ft x 8-ft Board	DynaWeld Base fully bonded by heat fused	(Optional) CA SBS BUR Cap; HA SBS BUR Ply; or TA SBS BUR Ply	CA SBS Cap; HA SBS Cap; or TA SBS Cap	75.0	A	1/2:12
109	Min. 22 ga., type WR, Grade 80 steel (L6, F1, S30)	Min. 1.5-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR; FescoFoam or DuraFoam; FescoBoard or Min. 3/4-inch DuraBoard, any combination	Simultaneously fastened with Top Insulation	Min. 0.5-inch Gypsum-Fiber Roof Board,	UF Fasteners & Plates or UltraFast with UltraFast Plastic Plates secured at a rate of 18 per 4-ft x 8-ft Board	HA SBS BUR Ply	(Optional) CA SBS BUR Cap; HA SBS BUR Ply; or TA SBS BUR Ply	CA SBS Cap; HA SBS Cap; or TA SBS Cap	75.0	A	1/2:12
110	Min. 22 ga., type WR, Grade 33 steel (L6, F2, S24)	Min. 1.5-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR, any combination	UF Fasteners & Plates secured at a rate of 18 per 4-ft x 8-ft Board	Min. 0.5-inch Gypsum-Fiber Roof Board,	2-Part UIA applied 12-inch OC	CA SBS BUR Ply; or HA SBS BUR Ply	(Optional) CA SBS BUR Cap; HA SBS BUR Ply; or TA SBS BUR Ply	CA SBS Cap; HA SBS Cap; or TA SBS Cap	82.5	A	1/2:12
111	Min. 22 ga., type WR, Grade 33 steel (L6, F2, S24)	Min. 1.5-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR, any combination	Simultaneously fastened with Top Insulation	Min. 0.5-inch Gypsum-Fiber Roof Board,	UF Fasteners & Plates secured at a rate of 22 per 4-ft x 8-ft Board	CA SBS BUR Ply; or HA SBS BUR Ply	(Optional) CA SBS BUR Cap; HA SBS BUR Ply; or TA SBS BUR Ply	CA SBS Cap; HA SBS Cap; or TA SBS Cap	82.5	A	1/2:12

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TABLE 13: ASSEMBLIES WITH ADHERED MEMBRANES OVER INSULATED STEEL DECK (New, Existing or Recover)

System No.	Deck	Base Insulation Layer		Top Insulation Layer		Roof Cover			MDP (psf)	FIRE RATING UL790/ASTM E108	
		Type	Attach	Type	Attach	Base Sheet	Ply Sheet	Cap Sheet		Class	Maximum Incline
112	Min. 22 ga., type WR, Grade 80 steel (L6, F1, S24)	Min. 2-inch ENRGY 3	<i>UF Fasteners & Plates secured at a rate of 22 per 4-ft x 8-ft Board</i>	Min. 0.5-inch Gypsum-Fiber Roof Board,	2-Part UIA applied 12-inch OC	CA SBS BUR Ply; or HA SBS BUR Ply	(Optional) CA SBS BUR Cap; HA SBS BUR Ply; or TA SBS BUR Ply	CA SBS Cap; HA SBS Cap; or TA SBS Cap	90.0	A	1/2:12
113	Min. 22 ga., type WR, Grade 80 steel (L6, F1, S24)	Min. 1.5-inch ENRGY 3	<i>UF Fasteners & Plates or UltraFast with UltraFast Plastic Plates secured at a rate of 32 per 4-ft x 8-ft Board</i>	Min. 0.5-inch Gypsum-Fiber Roof Board,	2-Part UIA applied 12-inch OC	CA SBS BUR Ply; or HA SBS BUR Ply	(Optional) CA SBS BUR Cap; HA SBS BUR Ply; or TA SBS BUR Ply	CA SBS Cap; HA SBS Cap; or TA SBS Cap	90.0	A	1/2:12

TABLE 14: MECHANICALLY FASTENED ASSEMBLIES OVER STEEL DECK (New, Existing, or Recover)

System No.	Deck	Base Insulation	Top Insulation	Roof Cover				MDP (psf)	FIRE RATING UL790/ASTM E108	
				Base Sheet	Attach	Ply Sheet	Cap Sheet		Class	Maximum Incline
114	Min. 22 ga., type WR, Grade 33 steel (L5)	(Optional) Insulation	Min. 1-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR, any combination	DynaFast 180 S	<i>APB Fasteners & Plates spaced 18-inch OC within min. 4-in. heat welded side laps</i>	(Optional) CA SBS BUR Ply; HA SBS BUR Ply; or TA SBS BUR Ply (Min. 4-inch side laps)	CA SBS Cap; HA SBS Cap; or TA SBS Cap (Min. 4-inch side laps)	47.5	A	1/2:12
115	Min. 22 ga., type WR, Grade 33 steel (L5)	(Optional) Insulation	Min. 1-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR, any combination	DynaFast 180 HW or DynaFast 250 HW	<i>APB Fasteners & Plates spaced 18-inch OC within min. 4-in. heat welded side laps</i>	(Optional) TA SBS Ply (Min. 4-inch side laps)	TA SBS Cap (Min. 4-inch side laps)	47.5	A	1/2:12
116	Min. 22 ga., type WR, Grade 33 steel (L6, F1W, S24)	(Optional) Insulation	Min. 1-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR, any combination	DynaFast 180 HW or DynaFast 250 HW	<i>HL Fasteners & Plates spaced 6-inch OC within min. 4-in. heat welded side laps in rows max. 70-inch OC</i>	(Optional) TA SBS Ply (Min. 4-inch side laps)	TA SBS Cap (Min. 4-inch side laps)	52.5	A	1/2:12

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TABLE 14: MECHANICALLY FASTENED ASSEMBLIES OVER STEEL DECK (New, Existing, or Recover)

System No.	Deck	Base Insulation	Top Insulation	Roof Cover				MDP (psf)	FIRE RATING UL790/ASTM E108	
				Base Sheet	Attach	Ply Sheet	Cap Sheet		Class	Maximum Incline
117	Min. 22 ga., type WR, Grade 33 steel (L6, F1W, S24)	(Optional) Insulation	Min. 1-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR, any combination	DynaFast 180 S	<i>HL Fasteners & Plates</i> spaced 6-inch OC within min. 4-in. heat welded side laps in rows max. 70-inch OC	(Optional) CA SBS BUR Ply; HA SBS BUR Ply; or TA SBS BUR Ply (Min. 4-inch side laps)	CA SBS Cap; HA SBS Cap; or TA SBS Cap (Min. 4-inch side laps)	52.5	A	1/2:12
118	Min. 22 ga., type WR, Grade 33 steel (L5,)	Min. 1.5-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR; FescoFoam, DuraFoam or Retro-Fit Board, any combination	(Optional) Insulation	MA Base	<i>UF Fasteners & Plates</i> spaced 9-inch OC at min. 4-in. side lap and 18-inches OC in two (2) equally spaced, staggered rows in the field of the roll	(Optional) CA SBS BUR Ply; HA SBS BUR Ply; or TA SBS BUR Ply	CA SBS Cap; HA SBS Cap; or TA SBS Cap	60.0	A	1/2:12
119	Min. 22 ga., type WR, Grade 33 steel (L6, F1, S24)	(Optional) Insulation	Min. 1-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR, any combination	DynaLastic 180 S or DynaLastic 250 S	<i>HL Fasteners & Plates</i> spaced 12-inch OC within min. 5-in. heat welded side lap	(Optional) CA SBS BUR Ply; HA SBS BUR Ply; or TA SBS BUR Ply	CA SBS Cap; HA SBS Cap; or TA SBS Cap	67.5	A	1/2:12
120	Min. 22 ga., type WR, Grade 33 steel (L6, F1, S24)	Min. 1-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR, any combination	(Optional) Insulation	DynaLastic 180 S or DynaLastic 250 S	<i>APB Fasteners & Plates</i> spaced 12-inch OC within min. 4-in. heat welded side laps	TA SBS Ply (Min. 4-inch side laps)	TA SBS Cap (Min. 4-inch side laps)	67.5	A	1/2:12
121	Min. 22 ga., type WR, Grade 33 steel (L6, F1, S24)	(Optional) Insulation	Min. 1-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR, any combination	DynaLastic 180 S or DynaLastic 250 S	<i>APB Fasteners & Plates</i> spaced 12-inch OC within min. 4-in. heat welded side laps	TA SBS Ply (Min. 4-inch side laps)	TA SBS Cap (Min. 4-inch side laps)	67.5	A	1/2:12
122	Min. 22 ga., type WR, Grade 33 steel (L6, P)	(Optional) Insulation	Min. 1-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR, any combination	DynaFast 180 S, DynaFast 180 HW or DynaFast 250 HW	<i>HL Fasteners & Plates</i> spaced 12-inch OC within min. 4-in. heat welded side lap	(Optional) TA SBS Ply (Min. 4-inch side laps)	TA SBS Cap (Min. 4-inch side laps)	67.5	A	1/2:12

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TABLE 14: MECHANICALLY FASTENED ASSEMBLIES OVER STEEL DECK (New, Existing, or Recover)

System No.	Deck	Base Insulation	Top Insulation	Roof Cover				MDP (psf)	FIRE RATING UL790/ASTM E108	
				Base Sheet	Attach	Ply Sheet	Cap Sheet		Class	Maximum Incline
123	Min. 22 ga., type WR, Grade 33 steel (L6, P)	(Optional) Insulation	Min. 1-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR, any combination	DynaFast 180 S	HL Fasteners & Plates spaced 12-inch OC within min. 4-in. heat welded side lap	(Optional) CA SBS BUR Ply; HA SBS BUR Ply; or TA SBS BUR Ply (Min. 4-inch side laps)	CA SBS Cap; HA SBS Cap; or TA SBS Cap (Min. 4-inch side laps)	67.5	A	1/2:12
124	Min. 22 ga., type WR, Grade 33 steel (L6, P)	(Optional) Insulation	Min. 1-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR, any combination	DynaFast 180 S, DynaFast 180 HW or DynaFast 250 HW	High Load LH Fasteners and Polymer Membrane Batten OR High Load Fasteners and Metal Membrane batten or Deep Well Batten Strip spaced 6-inch OC within min. 4-inch heat welded side laps in rows max. 71-inch OC	(Optional) TA SBS Ply (Min. 4-inch side laps)	TA SBS Cap (Min. 4-inch side laps)	90.0	A	1/2:12
125	Min. 22 ga., type WR, Grade 33 steel (L6, P)	(Optional) Insulation	Min. 1-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR, any combination	DynaFast 180 S	High Load LH Fasteners and Polymer Membrane Batten OR High Load Fasteners and Metal Membrane batten or Deep Well Batten Strip spaced 6-inch OC within min. 4-inch heat welded side laps in rows max 71-inch OC	(Optional) CA SBS BUR Ply; HA SBS BUR Ply; or TA SBS BUR Ply (Min. 4-inch side laps)	CA SBS Cap; HA SBS Cap; or TA SBS Cap (Min. 4-inch side laps)	90.0	A	1/2:12
126	Min. 22 ga., type WR, Grade 33 steel (L6, P)	(Optional) Insulation	Min. 1-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR, any combination	DynaFast 180 S, DynaFast 180 HW or DynaFast 250 HW	APB Fasteners & Plates spaced 12-inch OC within min. 4-in. heat welded side laps	(Optional) TA SBS Ply (Min. 4-inch side laps)	TA SBS Cap (Min. 4-inch side laps)	105.0	A	1/2:12
127	Min. 22 ga., type WR, Grade 33 steel (L6, P)	(Optional) Insulation	Min. 1-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR, any combination	DynaFast 180 S	APB Fasteners & Plates spaced 6-inch OC within min. 4-in. heat welded side laps	(Optional) CA SBS BUR Ply; HA SBS BUR Ply; or TA SBS BUR Ply (Min. 4-inch side laps)	CA SBS Cap; HA SBS Cap; or TA SBS Cap (Min. 4-inch side laps)	105.0	A	1/2:12

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TABLE 14: MECHANICALLY FASTENED ASSEMBLIES OVER STEEL DECK (New, Existing, or Recover)

System No.	Deck	Base Insulation	Top Insulation	Roof Cover				MDP (psf)	FIRE RATING UL790/ASTM E108	
				Base Sheet	Attach	Ply Sheet	Cap Sheet		Class	Maximum Incline
128	Min. 22 ga., type WR, Grade 80 steel (L6, F2W, S24)	(Optional) Insulation	Min. 1-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR, any combination	DynaFast 180 S	HL Fasteners & Plates spaced 6-inch OC within min. 4-in. heat welded side lap	(Optional) CA SBS BUR Ply; HA SBS BUR Ply; or TA SBS BUR Ply (Min. 4-inch side laps)	CA SBS Cap; HA SBS Cap; or TA SBS Cap (Min. 4-inch side laps)	105.0	A	1/2:12
129	Min. 22 ga., type WR, Grade 33 steel (L6, F2W, S14)	Min. 1-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR, any combination	(Optional) Insulation	DynaLastic 180 S or DynaLastic 250 S	HL Fasteners & Plates spaced 6-inch OC within min. 4-in. side lap	TA SBS Ply	TA SBS Cap	112.5	A	1/2:12
130	Min. 22 ga., type WR, Grade 33 steel (L6, F2W, S14)	Min. 1-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR, any combination	(Optional) Insulation	DynaFast 180 S, DynaFast 180 HW or DynaFast 250 HW	HL Fasteners & Plates or APB Fastener & Plastes spaced 6-inch OC over min 5-in. side lap	(Optional) TA SBS Ply	TA SBS Cap	112.5	A	1/2:12
131	Min. 22 ga., type WR, Grade 33 steel (L6, F2W, S14)	Min. 1-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR, any combination	(Optional) Insulation	DynaLastic 180 S or DynaLastic 250 S	HL Fasteners & Plates spaced 6-inch OC within min. 5-in. heat welded side laps	(Optional) TA SBS Ply	TA SBS Cap	112.5	A	1/2:12
132	Min. 22 ga., type WR, Grade 33 steel (L6, F2W, S14)	FescoBoard under Min. 1-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR, any combination	Min. 5/8-inch Plywood	DynaLastic 180 S or DynaLastic 250 S	HL Fasteners & Plates spaced 6-inch OC within min. 5-in. heat welded side laps	(Optional) TA SBS Ply	TA SBS Cap	135.0	A	1/2:12
133	Min. 22 ga., type WR, Grade 33 steel (L6, F2W, S14)	Min. 1-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR, any combination	Retro-Fit	DynaLastic 180 S or DynaLastic 250 S	HL Fasteners & Plates spaced 6-inch OC within min. 5-in. heat welded side laps	(Optional) TA SBS Ply	TA SBS Cap	135.0	A	1/2:12

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TABLE 14: MECHANICALLY FASTENED ASSEMBLIES OVER STEEL DECK (New, Existing, or Recover)

System No.	Deck	Base Insulation	Top Insulation	Roof Cover				MDP (psf)	FIRE RATING UL790/ASTM E108	
				Base Sheet	Attach	Ply Sheet	Cap Sheet		Class	Maximum Incline
134	Min. 22 ga., type WR, Grade 80 steel (L6, F1W)	(Optional) Insulation	Min. 1-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR, any combination	DynaFast 180 S, DynaFast 180 HW or DynaFast 250 HW	<i>HL Fasteners & Plates</i> spaced 6-inch OC within min. 4-in. heat welded side laps	(Optional) TA SBS Ply (Min. 4-inch side laps)	TA SBS Cap (Min 4-inch side laps)	142.5	A	1/2:12
135	Min. 22 ga., type WR, Grade 33 steel (L6, F1W)	FescoBoard under Min. 1-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR, any combination	Min. 5/8-inch plywood	DynaLastic 180 S or DynaLastic 250 S	<i>HL Fasteners & Plates</i> spaced 6-inch OC over min. 4-in. side laps	TA SBS Ply	TA SBS Cap	150.0	A	1/2:12
136	Min. 22 ga., type WR, Grade 33 steel (L6, F2W, S14)	Min. 1-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR, any combination	Retro-Fit Board	DynaLastic 180 S or DynaLastic 250 S	<i>HL Fasteners & Plates</i> spaced 6-inch OC over min. 4-in. side laps	TA SBS Ply	TA SBS Cap	150.0	A	1/2:12
137	Min. 22 ga., type WR, Grade 80 steel (L6, F1W)	(Optional) Insulation	Min. 1-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR, any combination	DynaFast 250 HW	<i>HL Fasteners & Plates</i> spaced 6-inch OC within min. 4-in. heat welded side laps	(Optional) DynaFast 250 HW heat fused (Min. 4-inch side laps)	DynaWeld 180 FR, DynaWeld 180 FR CF, DynaWeld 250, DynaWeld 250 FR or DynaWeld 250 FR CR	165.0	A	1/2:12
138	Min. 22 ga., type WR, Grade 33 steel (L6, F2W, S14)	Min. 1-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR, any combination	Min. 5/8-inch plywood	DynaLastic 180 S or DynaLastic 250 S	<i>UF Fasteners & Plates</i> spaced 12-inch OC over min. 4-in. side lap and 12-inches OC in three (3) equally spaced, staggered rows in the field of the roll	TA SBS Ply	TA SBS Cap	195.0	A	1/2:12

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TABLE 15: ASSEMBLIES WITH ADHERED MEMBRANES OVER INSULATED WOOD DECK (New, Existing or Recover)

System No.	Deck	Anchor Sheet	Anchor Attachment	Base Insulation Layer	Top Insulation Layer	Roof Cover			MDP (psf)	FIRE RATING UL790/ASTM E108	
						Base Ply	Ply Sheet	Cap Sheet		Class	Maximum Incline
139	Min. 19/32 in. plywood at 24 in. spans with blocking at supported joint attached with min. #12-3" Olympic STC screws; secured 6-in. oc at all intermediate supports and 6 in. oc at the perimeter of each board	PermPly 28 or Ventsulation	UF Fasteners & Plates spaced 8-inch OC at 3-in. side lap three (3) row staggered in the center of the roll 8-inch OC	Min. 1.5-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR, any combination in ASTM D312, Type IV Asphalt	FescoFoam, DuraFoam, Fesco Board, Retro-Fit, RetroPlus pr DuraBoard in ASTM D318, Type IV Asphalt	HA SBS BUR Base	CA SBS BUR Ply; HA SBS BUR Ply; or TA SBS BUR Ply	CA SBS Cap; HA SBS Cap; or TA SBS Cap	52.5	A	1/2:12
140	Min. 15/32 in. plywood at 24 in. spans with blocking at supported joint attached with min. #8 x 2-inch wood screws; secured 6 in. oc at all intermediate supports and 6 in. oc at the perimeter of each board	Two plies PermaPly 28, DynaBase, GlasBase Plus or Ventsulation	Min. 12 ga. Ring shank nails and min. 32 ga. 1-5/8-inch diameter tin caps 9-inch OC at 3-inch side lap and two rows staggered in center 12-inch OC	Min. 1.5-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR, any combination in ASTM D312, Type IV Asphalt	FescoFoam, DuraFoam, Fesco Board, Retro-Fit, RetroPlus pr DuraBoard in ASTM D318, Type IV Asphalt	HA SBS BUR Base	CA SBS BUR Ply; HA SBS BUR Ply; or TA SBS BUR Ply	CA SBS Cap; HA SBS Cap; or TA SBS Cap	52.5	A	1/2:12
141	Min. 19/32 in. plywood at 24 in. spans with blocking at supported joint attached with min. #12-3" Olympic STC screws; secured 6-in. oc at all intermediate supports and 6 in. oc at the perimeter of each board	PermPly 28 or Ventsulation	Min. 12 ga. Ring shank nails and min. 32 ga. 1-5/8-inch diameter tin caps 9-inch OC at 3-inch side lap and two rows staggered in center 9-inch OC	Min. 1.5-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR, any combination in ASTM D312, Type IV Asphalt	FescoFoam, DuraFoam, Fesco Board, Retro-Fit, RetroPlus pr DuraBoard in ASTM D318, Type IV Asphalt	HA SBS BUR Base	CA SBS BUR Ply; HA SBS BUR Ply; or TA SBS BUR Ply	CA SBS Cap; HA SBS Cap; or TA SBS Cap	60.0	A	1/2:12
142	Min. 19/32 in. plywood at 24 in. spans with blocking at supported joint attached with min. 10d ring shank nails; secured 6-inch OC at all intermediate supports and 6 in. oc at the perimeter of each board	-	-	Min. 1.5-inch ENRGY 3 fastened with UF Fasteners & Plates secured at a rate of 24 per 4-ft x 8-ft board	DuraBoard in ASTM D312, Type IV Asphalt	(Optional) HA SBS BUR Base	(Optional) CA SBS BUR Ply; HA SBS BUR Ply; or TA SBS BUR Ply	HA SBS Cap or TA SBS Cap	60.0	A	1/2:12

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TABLE 16: MECHANICALLY FASTENED ASSEMBLIES OVER WOOD DECK (New, Existing or Recover)

System No.	Deck	Insulation	Roof Cover				MDP (psf)	FIRE RATING UL790/ASTM E108	
			Base Sheet	Attach	Ply Sheet	Cap Sheet		Class	Maximum Incline
143	Min. 19/32 in. plywood at 24 in. spans with blocking at supported joint attached with min. #12-3" Olympic STC screws; secured 6-in. oc at all intermediate supports and 6 in. oc at the perimeter of each board	(Optional) Min. 1.3-inch Insulation	PermaPly 28 or Ventsulation	UF Fasteners & Plates 8-inch OC at side lap and three rows staggered in center of the roll 8-inch OC	HA SBS BUR Ply; or TA SBS Ply	HA SBS Cap or TA SBS Cap	52.5	A	1/2:12
144	Min. 19/32 in. plywood at 24 in. spans with blocking at supported joint attached with min. #12-3" Olympic STC screws; secured 6-in. oc at all intermediate supports and 6 in. oc at the perimeter of each board	-	Two plies PermaPly 28, DynaBase, GlasBase Plus or Ventsulation	Min. 12 ga. Ring shank nails and min. 32 ga. 1-5/8-inch diameter tin caps 9-inch OC at 3-inch side lap and two rows staggered in center 12-inch OC	HA SBS BUR Ply; or TA SBS Ply	HA SBS Cap or TA SBS Cap	52.5	A	1/2:12
145	Min. 15/32 in. plywood at 24 in. spans with blocking at supported joint attached with min. #8 x 2-inch wood screws; secured 6 in. oc at all intermediate supports and 6 in. oc at the perimeter of each board	Min. 1-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR, any combination in	DynaFast 180 HW, DynaFast 180 S, DynaFast 250 HW	APB Fasteners & Plates spaced 9-inch OC within 4-inch heat welded side laps	TA SBS Ply (Min. 4-inch side laps)	TA SBS Cap (Min. 4-inch side laps)	60.0	A	1/2:12
146	Min. 15/32 in. plywood at 24 in. spans with blocking at supported joint attached with min. #8 x 2-inch wood screws; secured 6 in. oc at all intermediate supports and 6 in. oc at the perimeter of each board	Min. 1-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR, any combination in	DynaFast 180 S	APB Fasteners & Plates spaced 9-inch OC within 4-inch heat welded side laps	CA SBS Ply; HA SBS Ply; or TA SBS Ply (Min. 4-inch side laps)	CA SBS Ply; HA SBS Ply; or TA SBS Cap (Min. 4-inch side laps)	60.0	A	1/2:12

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TABLE 16: MECHANICALLY FASTENED ASSEMBLIES OVER WOOD DECK (New, Existing or Recover)

System No.	Deck	Insulation	Roof Cover				MDP (psf)	FIRE RATING UL790/ASTM E108	
			Base Sheet	Attach	Ply Sheet	Cap Sheet		Class	Maximum Incline
147	Min. 19/32 in. plywood at 24 in. spans with blocking at supported joint attached with min. #12-3" Olympic STC screws; secured 6-in. oc at all intermediate supports and 6 in. oc at the perimeter of each board	-	PermaPly 28 or Ventsulation	Min. 12 ga. Ring shank nails and min. 32 ga. 1-5/8-inch diameter tin caps 9-inch OC at 3-inch side lap and two rows staggered in center 12-inch OC	HA SBS Ply; or TA SBS Ply	HA SBS Ply; or TA SBS Cap	60.0	A	1/2:12
148	Min. 15/32 in. plywood at 24 in. spans with blocking at supported joint attached with min. #8 x 2-inch wood screws; secured 6 in. oc at all intermediate supports and 6 in. oc at the perimeter of each board	Min. 1-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR, any combination in	DynaFast 180 HW, DynaFast 180 S, DynaFast 250 HW	High Load LH Fasteners and Polymer Membrane Batten or High Load Fasteners and Deep Well Batten strip spaced 6-inch OC within the 4-inch heat welded side laps	TA SBS Ply (Min. 4-inch side laps)	TA SBS Cap (Min. 4-inch side lap)	82.5	A	1/2:12
149	Min. 15/32 in. plywood at 24 in. spans with blocking at supported joint attached with min. #8 x 2-inch wood screws; secured 6 in. oc at all intermediate supports and 6 in. oc at the perimeter of each board	Min. 1-inch thick, one or more layers, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR, any combination in	DynaFast 180 S	High Load LH Fasteners and Polymer Membrane Batten or High Load Fasteners and Deep Well Batten strip spaced 6-inch OC within the 4-inch heat welded side laps	CA SBS BUR Ply; HA SBS BUR Ply or TA SBS BUR Ply (Min. 4-inch side laps)	CA SBS Cap; HA SBS Cap or TA SBS Cap (Min. 4-inch side laps)	82.5	A	1/2:12

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TABLE 16: MECHANICALLY FASTENED ASSEMBLIES OVER WOOD DECK (New, Existing or Recover)

System No.	Deck	Base Insulation Layer			Top Insulation Layer		Roof Cover					MDP (psf)	FIRE RATING UL790/ASTM E108		
		Type	Fasteners	Attach	Type	Attach	Base Sheet	Attach	Ply Sheet	Attach	Cap Sheet		Class	Maximum Incline	
150	Min. 19/32-inch plywood at max. 24-inch span	Min. 1.4 in. ENRGY 3	UltraFast Fasteners or All Purpose Fasteners with Ultra Fast Metal Plates	Min. 3/4-inch penetration or minimum 1-inch wood plank embedment (1 per 2.67 ft ²)	Min. 0.5-inch Retro-Fit Board	ASTM D312, Type IV Asphalt	One ply GlasPly IV	ASTM D312, Type IV Asphalt HA	One or more plies GlasPly IV	ASTM D312, Type IV Asphalt HA	GlasKap CR	ASTM D312, Type IV Asphalt HA	45.0	A	1/2:12

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*UL Solutions Headquarters
333 Pfingsten Road
Northbrook, IL 60062-2096 USA
T: 847.272.8800
UL.com/Solutions*