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EVALUATION REPORT

Johns Manville
P.O. Box 5108
Denver, CO 80217
(303) 978-4879

Evaluation Report J8230.11.07-R8
FL9930-R8
Date of Issuance: 11/14/2007
Revision 8: 06/15/2017

SCOPE:

This Evaluation Report is issued under **Rule 61G20-3** and the applicable rules and regulations governing the use of construction materials in the State of Florida. The documentation submitted has been reviewed by Robert Nieminen, P.E. for use of the product under the Florida Building Code. The product described herein has been evaluated for compliance with the **5th Edition (2014) Florida Building Code** sections noted herein.

DESCRIPTION: JM PVC Single Ply Roof Systems

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

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

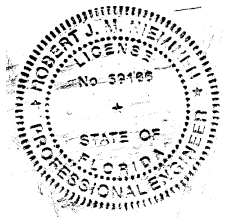
ADVERTISEMENT: The Evaluation Report number preceded by the words "TRINITY|ERD Evaluated" may be displayed in advertising literature. If any portion of the Evaluation Report is displayed, then it shall be done in its entirety.

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

This Evaluation Report consists of pages 1 through 4, plus a 31-page Appendix.

Prepared by:

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



The facimilie seal appearing was authorized by Robert Nieminen, P.E. on 06/15/2017. This does not serve as an electronically signed document. Signed, sealed hardcopies have been transmitted to the Product Approval Administrator and to the named client

CERTIFICATION OF INDEPENDENCE:

1. Exterior Research & Design, LLC. d/b/a Trinity|ERD does not have, nor does it intend to acquire or will it acquire, a financial interest in any company manufacturing or distributing products it evaluates.
2. Exterior Research & Design, LLC. d/b/a Trinity|ERD is not owned, operated or controlled by any company manufacturing or distributing products it evaluates.
3. Robert Nieminen, P.E. does not have nor will acquire, a financial interest in any company manufacturing or distributing products for which the evaluation reports are being issued.
4. Robert Nieminen, P.E. does not have, nor will acquire, a financial interest in any other entity involved in the approval process of the product.
5. This is a building code evaluation. Neither Trinity|ERD nor Robert Nieminen, P.E. are, in any way, the Designer of Record for any project on which this Evaluation Report, or previous versions thereof, is/was used for permitting or design guidance unless retained specifically for that purpose.

ROOFING SYSTEMS EVALUATION:

1. SCOPE:

Product Category: Roofing
Sub-Category: Single Ply Roof Systems
Compliance Statement: **JM PVC Single Ply Roof Systems**, as produced by the **Johns Manville**, have demonstrated compliance with the following sections of the **5th Edition (2014) Florida Building Code** through testing in accordance with the following Standards. Compliance is subject to the Installation Requirements and Limitations / Conditions of Use set forth herein.

2. STANDARDS:

Section	Property	Standard	Year
1504.3.1	Wind	FM 4474	2004
1504.7	Impact	FM 4470	1992
1507.13.2	Physical Properties	ASTM D4434	2009
1523.6.2	Wind	TAS 114	2011

3. REFERENCES:

Entity	Examination	Reference	Date
ACRC, LLC (TST4671)	TAS 114	06-045	12/15/2006
ACRC, LLC (TST4671)	TAS 114	14-026	11/19/2014
ACRC, LLC (TST4671)	TAS 114	14-028	11/19/2014
ACRC, LLC (TST4671)	TAS 114	14-035	11/25/2014
ACRC, LLC (TST4671)	TAS 114	14-042	12/04/2014
ACRC, LLC (TST4671)	TAS 114	14-043	12/04/2014
ERD (TST 6049)	FM 4470 / TAS 114	J45020.09.13-1-R1	09/12/2013
ERD (TST 6049)	FM 4470 / TAS 114	J45020.09.13-2-R1	09/12/2013
ERD (TST 6049)	FM 4474	SC7565.01.15-2	01/21/2015
ERD (TST 6049)	FM 4474	JM-SC11320.03.16	03/10/2016
ERD (TST 6049)	FM 4474	JM-SC12145.02.17	02/06/2017
ERD (TST 6049)	FM 4474	JM-SC13465.04.17	04/19/2017
FM Approvals (TST1867)	FM 4470	3009502	12/21/2000
FM Approvals (TST1867)	FM 4470	3008869	03/19/2001
FM Approvals (TST1867)	FM 4470	3012321	07/29/2002
FM Approvals (TST1867)	FM 4470	Letter J.I. 3014692	12/20/2002
FM Approvals (TST1867)	FM 4470	3015444	07/11/2003
FM Approvals (TST1867)	FM 4470	3014692	08/05/2003
FM Approvals (TST1867)	FM 4470	3014751	08/27/2003
FM Approvals (TST1867)	FM 4470	3018579	10/09/2003
FM Approvals (TST1867)	FM 4470	3016629	12/12/2003
FM Approvals (TST1867)	FM 4470/4474	3018807	06/25/2004
FM Approvals (TST1867)	FM 4470/4474	3025881	08/09/2006
FM Approvals (TST1867)	FM 4470/4474	3030351	08/01/2007
FM Approvals (TST1867)	FM 4470/4474	Product Revision 797	09/07/2007
FM Approvals (TST1867)	FM 4470/4474	797-03290-267	11/02/2007
FM Approvals (TST1867)	FM 4470/4474	3028040	11/14/2007
FM Approvals (TST1867)	FM 4470/4474	797-03350-267	12/10/2007
FM Approvals (TST1867)	FM 4470/4474	797-03425-267	01/16/2008
FM Approvals (TST1867)	FM 4470/4474	3035191	05/20/2009
FM Approvals (TST1867)	FM 4470/4474	3034810	09/10/2009
FM Approvals (TST1867)	FM 4470/4474	3035538	10/02/2009
FM Approvals (TST1867)	FM 4470/4474	3037110	10/02/2009
FM Approvals (TST1867)	FM 4470/4474	3037540	10/20/2010
FM Approvals (TST1867)	FM 4470/4474	3043824	04/06/2012
FM Approvals (TST1867)	FM 4470/4474	3044716	10/19/2012
FM Approvals (TST1867)	FM 4470/4474	3046174	04/03/2013

Entity	Examination	Reference	Date
FM Approvals (TST1867)	FM 4470/4474	3056303	11/05/2015
FM Approvals (TST1867)	FM 4470/4474	3056049	01/13/2016
FM Approvals (TST1867)	FM 4470/4474	3058374	04/13/2016
FM Approvals (TST1867)	FM 4470/4474	3055845	05/25/2016
FM Approvals (TST1867)	FM 4470/4474	3058201	08/29/2016
FM Approvals (TST1867)	FM 4470/4474	3060138	01/11/2017
MTI (TST2508)	Physical Properties	NX21J0A	06/01/2011
MTI (TST2508)	Physical Properties	NX21J0C	06/01/2011
MTI (TST2508)	Physical Properties	NX21J0B	07/20/2011
MTI (TST2508)	Physical Properties	CX23G3A	07/16/2015
PRI (TST 5878)	FM 4470/4474	JMC-163-02-01	09/06/2013
PRI (TST 5878)	FM 4470/4474	JMC-193-02-01A	04/28/2014
PRI (TST 5878)	FM 4470/4474	JMC-246-02-01	03/29/2016
UL LLC (QUA9625)	Quality Control	R10167, Service Confirmation	Exp. 06/23/2019

4. PRODUCT DESCRIPTION:

The following roof covers are mechanically attached or fully adhered to Approved substrates using fasteners, stress plates and adhesives, as outlined in the Limitations / Conditions of Use herein.

- **JM PVC** is a nominal 50-mil (1.2 mm), 60-mil (1.5 mm) or 80 mil (2.0 mm) thick, polyester scrim reinforced, single-ply roof membrane coated with a proprietary PVC compound.
- **JM PVC SD Plus** is a nominal 50-mil (1.2 mm), 60-mil (1.5 mm) or 80 mil (2.0 mm) thick, polyester scrim reinforced, single-ply roof membrane coated with a proprietary PVC compound.
- **JM PVC Fleece Backed** is a nominal 50-mil (1.2 mm) or 60-mil (1.5 mm) thick, polyester scrim reinforced, single-ply roof membrane coated with a proprietary PVC compound and a felt backing.

5. LIMITATIONS:

5.1 This is a building code evaluation. Neither Trinity|ERD nor Robert Nieminen, P.E. are, in any way, the Designer of Record for any project on which this Evaluation Report, or previous versions thereof, is/was used for permitting or design guidance unless retained specifically for that purpose.

5.2 This Evaluation Report is not for use in HVHZ.

5.3 Refer to a current Roofing Materials Directory for fire ratings of this product.

5.4 For steel deck installations, foam plastic insulation shall be separated from the building interior in accordance with **FBC 2603.4** unless the exceptions stated in **FBC 2603.4.1** or **2603.6** apply.

5.5 The roof system evaluation herein pertains to above-deck roof components. Roof decks and structural members shall be in accordance with FBC requirements to the satisfaction of the Authority Having Jurisdiction. Load resistance of the roof deck shall be documented through proper codified and/or FBC Approval documentation.

5.6 For recover installations, the existing roof shall be examined in accordance with **FBC 1510**.

5.7 For mechanically attached insulation or membrane or strip-bonded insulation, the maximum design pressure for the selected assembly shall meet or exceed the Zone 1 design pressure determined in accordance with **FBC Chapter 16**. Zones 2 and 3 shall employ an attachment density designed by a qualified design professional to resist the elevated pressure criteria. Commonly used methods are **ANSI/SPRI WD1, FM Loss Prevention Data Sheet 1-29, RAS 117 and RAS 137**. Assemblies marked with an asterisk* carry the limitations set forth in **Section 2.2.10.1 of FM Loss Prevention Data Sheet 1-29 (January 2016)** for Zone 2/3 enhancements.

5.8 For assemblies with all components fully bonded in place, the maximum design pressure for the selected assembly shall meet or exceed critical design pressure determined in accordance with FBC Chapter 16. No rational analysis is permitted for these systems.

5.9 For mechanically attached insulation or membrane over existing roof decks, fasteners shall be tested in the existing deck for withdrawal resistance. A qualified design professional shall review the data for comparison to the minimum requirements for the system. Testing and analysis shall be in accordance with **ANSI/SPRI FX-1** or **TAS 105**.

5.10 For bonded insulation or membrane over existing substrates in a re-roof (tear off) or recover installation, the existing deck or existing roof surface shall be examined for compatibility with the adhesive to be installed. If any surface conditions exist that bring system performance into question, field uplift testing in accordance with **ANSI/SPRI IA-1, ASTM E907**, **FM Loss Prevention Data Sheet 1-52** or **TAS 124** shall be conducted on mock-ups of the proposed new roof assembly.

5.11 For bonded insulation or membrane over existing substrates in a recover installation, the existing roof system shall be capable of resisting project design pressures on its own merit to the satisfaction of the Authority Having Jurisdiction, as documented through field uplift testing in accordance with **ASTM E907**, **FM Loss Prevention Data Sheet 1-52** or **TAS 124**.

5.12 Metal edge attachment (except gutters), shall be designed and installed for wind loads in accordance with FBC Chapter 16 and tested for resistance in accordance with **ANSI/SPRI ES-1** or **RAS 111**, except the basic wind speed shall be determined from **FBC Figure 1609**.

5.13 All products in the roof assembly shall have quality assurance audit in accordance with the FBC and **F.A.C. Rule 61G20-3**.

6. INSTALLATION:

6.1 **JM PVC Single Ply Roof Systems** shall be installed in accordance with **Johns Manville** published installation instructions, subject to the Limitations / Conditions of Use noted herein.

6.2 System attachment requirements for wind load resistance are set forth in Appendix 1. ”MDP” = Maximum Design Pressure is the result of testing for wind load resistance based on allowable wind loads, and reflects the ultimate passing pressure divided by 2 (the 2 to 1 margin of safety per **FBC 1504.9** has already been applied). Refer to **FBC 1609** for determination of design wind loads.

6.3 For mechanically fastened membrane systems (Type D) over profiled steel deck, membrane shall be installed running perpendicular to steel deck flutes.

7. BUILDING PERMIT REQUIREMENTS:

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

8. MANUFACTURING PLANTS:

Contact the named QA entity for manufacturing facilities covered by **F.A.C. Rule 61G20-3** QA requirements.

9. QUALITY ASSURANCE ENTITY:

UL LLC– QUA9625; (847) 664-3623; LeAnna.Gradecki@ul.com

- THE 31-PAGES THAT FOLLOW FORM PART OF THIS EVALUATION REPORT -

APPENDIX 1: ATTACHMENT REQUIREMENTS FOR WIND UPLIFT RESISTANCE

The following notes apply to the systems outlined herein:

1. The evaluation herein pertains to above-deck roof components. Roof decks and structural members shall be in accordance with FBC requirements to the satisfaction of the Authority Having Jurisdiction. Load resistance of the roof deck shall be documented through proper codified and/or FBC Approval documentation.

2. Fasteners shall be of sufficient length for the following engagements:
   - Wood Deck: UltraFast Fasteners or All Purpose Fasteners with UltraFast Metal Plates. Minimum ¾-inch plywood penetration or minimum 1-inch wood plank embedment.
   - Steel Deck: UltraFast Fasteners or All Purpose Fasteners with UltraFast Metal Plates. Minimum ¾-inch steel penetration, engage the top flute of the steel deck.
   - Structural Concrete: All Purpose Fasteners with UltraFast Metal Plates or Structural Concrete Fasteners with UltraFast Metal Plates (flat bottom only). Minimum 1-inch embedment. Fasteners installed with a pilot hole in accordance with the fastener manufacturer's published installation instructions

3. Unless otherwise noted, insulation may be any one layer or combination of polyisocyanurate, polystyrene, wood fiberboard, perlite or gypsum-based roof board that meets the QA requirements of F.A.C. Rule 61G20-3 and is documented as meeting FBC 1505.1 and, for foam plastic, FBC Chapter 26, when installed with the roof cover.

4. Minimum 200 psi, minimum 2-inch thick lightweight insulating concrete may be substituted for 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. Roof decks and structural members shall be in accordance with FBC requirements to the satisfaction of the Authority Having Jurisdiction. Load resistance of the roof deck shall be documented through proper codified and/or FBC Approval documentation.

5. Preliminary insulation attachment for System Type D = Minimum four fasteners per 4 x 8 ft board or minimum two fasteners per 4 x 4 ft board.

6. Unless otherwise noted, insulation adhesive application rates are as follows. Ribbon or bead width is at the time of application; the ribbons/beads shall expand as noted in the manufacturer's published instructions.
   - Hot asphalt [HA]: Full coverage at 25 lbs/sq.
   - JM MBR Bonding Adhesive [MBR-BA]: Continuous ¾-inch wide ribbons, 12-inch o.c. or full coverage at 1.5 gal/square
   - JM One-Step Foamable Adhesive [JM-OSFA]: Continuous ½-inch beads, 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 Two-Part Urethane Insulation Adhesive [UIA-TWO-PART]: Continuous ¾-inch wide ribbons, 12-inch o.c. *JM Green Two-Part Urethane Insulation Adhesive may be used where UIA-TWO-PART is referenced.*
   - ICP Adhesives CR-20: Continuous 2½ to 3½-inch ribbons, 12-inch o.c.
   - *Note: When multiple layers(s) of insulation and/or coverboard are installed in ribbon-applied adhesive, board joints shall be staggered.*
   - *Note: The maximum edge distance from the adhesive ribbon to the edge of the insulation board shall be not less than one-half the specified ribbons spacing.*

7. Unless otherwise noted, all insulations are flat stock or taper board of the minimum thickness noted. Tapered polyisocyanurate at the following thickness limitations may be substituted with the following Maximum Design Pressure (MDP) limitations. In no case shall these values be used to 'increase' the MDP listings in the tables; rather if MDP listing below meets or exceeds that listed for a particular system in the tables, then the thinner board listed below may be used as a drop-in for the equivalent thicker material listed in the table:
   - JM One-Step Foamable Adhesive [JM-OSFA]: MDP -157.5 psf (Min. 0.5-inch thick)
   - JM Roofing System Urethane Adhesive (JM-RSUA): MDP -157.5 psf (Min. 0.5-inch thick)
   - JM Two-Part Urethane Insulation Adhesive [UIA-TWO-PART]: MDP -315.0 psf (Min. 0.5-inch thick ENRGY 3 or JM ISO 3)
   - ICP Adhesives CR-20: MDP -117.5 psf (Min. 1.0-inch thick)

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

9. For mechanically attached components or partially bonded insulation, the maximum design pressure for the selected assembly shall meet or exceed the Zone 1 design pressure determined in accordance with FBC Chapter 16, and Zones 2 and 3 shall employ an attachment density designed by a qualified design professional to resist the elevated pressure criteria. Commonly used methods are ANSI/SPRI WD-1, FM Loss Prevention Data Sheet 1-29, Roofing Application Standard RAS 117 or RAS 137. Assemblies marked with an asterisk* carry the limitations set forth in Section 2.2.10.1 of FM Loss Prevention Data Sheet 1-29 (January 2016) for Zone 2/3 enhancements.

10. For assemblies with all components fully bonded in place, the maximum design pressure for the selected assembly shall meet or exceed critical design pressure determined in accordance with FBC Chapter 16, and no rational analysis is permitted.

11. For mechanically attached components over existing decks, fasteners shall be tested in the existing deck for withdrawal resistance. A qualified design professional shall review the data for comparison to the minimum requirements for the system. Testing shall be in accordance with ANSI/SPRI FX-1 or Testing Application Standard TAS 105.

12. For existing substrates in a bonded recover or re-roof installation, the existing roof surface or existing roof deck shall be examined for compatibility and bond performance with the selected adhesive, and the existing roof system (for recover) shall be capable of resisting project design pressures on its own merit to the satisfaction of the Authority Having Jurisdiction, as documented through field uplift testing in accordance with ANSI/SPRI IA-1, ASTM E907, FM Loss Prevention Data Sheet 1-52 or Testing Application Standard TAS 124.

13. For System Type D, steel deck applications, the roof membrane shall be run with its length perpendicular to the steel deck flutes.

14. For Recover Applications using System Type D, the insulation is optional. Alternatively, Invinsa Roof Board, Dens Deck, Dens Deck Prime, DEXcell FA Glass Mat Roof Board or SECUROCK Gypsum-Fiber Roof Board 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.

15. LWIC shall be cast in accordance with FBC Section 1917 to the satisfaction of the Authority Having Jurisdiction. For systems where specific LWIC is referenced, refer to current LWIC Product Approval for specific deck construction and limitations. For systems where specific LWIC is not referenced, the minimum design mix shall be 300 psi. In all cases, the minimum top-coat thickness is 2-inches. For LWIC over structural concrete, reference is made to FBC Section 1917.4.1, Point 1.

16. For adhered membrane systems, side laps shall be minimum 3-inch wide sealed with min. 1.5-inch heat weld. Membrane adhesive application rates are as follows:

ADHESIVE APPLICATION RATES			
Membrane	**Adhesive**	**Method**	**Rate**
JM PVC or JM PVC SD Plus	JM PVC Membrane Adhesive (Low VOC) [JM PVC MA-LVOC]	Contact (both sides)	1.67 gal/square (½ applied to substrate and ½ applied to membrane)
JM PVC or JM PVC SD Plus	JM PVC Membrane Adhesive (Water Based) [JM PVC MA-WB]	Contact (both sides)	1.10 gal/square (½ applied to substrate and ½ applied to membrane) **for use over RetroPlus Board**
JM PVC or JM PVC SD Plus	TACC LA-432	Contact (both sides)	2.0 gal/square (½ applied to substrate and ½ applied to membrane)
JM PVC	TACC FA-636	Contact (both sides)	1.34 gal/square (½ applied to substrate and ½ applied to membrane)
JM PVC	JM PVC Membrane Adhesive (Water Based) [JM PVC MA-WB]	Wet lay (substrate)	0.67 gal/square
JM PVC Fleece Backed	JM PVC Membrane Adhesive (Low VOC) [JM PVC MA-LVOC]	Wet lay (substrate)	1 gal/square
JM PVC Fleece Backed	JM PVC Membrane Adhesive (Water Based) [JM PVC MA-WB]	Wet lay (substrate)	1 gal/square
JM PVC Fleece Backed	MBR Low VOC Membrane Adhesive at 2-2.5 gal/square	Wet lay (substrate)	2 to 2.5 gal/square
JM PVC Fleece Backed	JM Roofing System Urethane Adhesive (JM-RSUA)	Wet lay (substrate)	0.5 to 0.75-inch wide ribbons spaced as noted in tables herein.
JM PVC Fleece Backed	JM Single Ply Two Part Urethane Insulation Adhesive (JM-SP-UIA-TWO-PART)	Wet lay (substrate)	0.5 to 0.75-inch wide ribbons spaced as noted in tables herein.
JM PVC Fleece Backed	Hot asphalt full mop	Wet lay (substrate)	25 lbs/square.

17. For Hybrid Systems, consisting of JM PVC Fleece Backed applied in hot-asphalt full-mop over modified bitumen base ply(s), the following base ply references apply.

JOHNS MANVILLE BASE / PLY SHEETS FOR USE IN HYBRID JM PVC FLEECE BACKED APPLICATIONS			
Reference	**Layer**	**Material**	**Application**
BP-AA (Base and Ply sheets, Asphalt-Applied)	Base	One or more GlasBase Plus, PermaPly 28	Hot asphalt at 20-40 lbs/square
	Ply	One or more GlasPly IV, GlasPly Premier, GlasBase Plus, PermaPly 28	
SBS-AA (SBS, Asphalt-Applied)	Base / Ply:	One or more DynaPly T1, DynaBase, DynaBase XT, DynaBase PR, DynaLastic 180 S, DynaLastic 250 S, DynaLastic 250 FR S	Hot asphalt at 20-40 lbs/square
SBS-TA (SBS, Torch-Applied)	Base / Ply:	One or more DynaBase HW, DynaWeld Base, DynaWeld 180 S	Torch-Applied

18. Modified bitumen vapor barrier options for use over **structural concrete deck** followed by adhered insulation **applied as follows** carry the following Maximum Design Pressure (MDP) limitations. The **lesser** of the MDP listings below vs. those in **Table 3A** applies:

VAPOR BARRIER OPTIONS; STRUCTURAL CONCRETE DECK; FOLLOWED BY ADHERED INSULATION PER TABLE 3A:				
Option #	**Primer**	**Vapor Barrier**	**Insulation Adhesive**	**MDP (psf)**
1	ASTM D41	Two plies GlasPly IV, GlasPly Premier in hot asphalt	JM Roofing System Urethane Adhesive (RSUA), 12-inch o.c.	-180.0
2	ASTM D41	Two plies GlasPly IV, GlasPly Premier in hot asphalt	JM One-Step Foamable Adhesive (OSFA), 12-inch o.c.	-180.0
3	ASTM D41	DynaPly T1, DynaBase, DynaBase XT, DynaBase PR, DynaLastic 180 S, DynaLastic 250 S, DynaLastic 250 FR S in hot asphalt or DynaBase HW, DynaWeld Base, DynaWeld 180 S torch-applied	JM One-Step Foamable Adhesive (OSFA), 12-inch o.c.	-180.0
4	JM SA Primer Low VOC	JM Vapor Barrier SA, self-adhered	JM Two-Part Urethane Insulation Adhesive (UIA-2), 12-inch o.c.	-277.5
5	JM SA Primer Low VOC	JM Vapor Barrier SA, self-adhered	JM Roofing System Urethane Adhesive (RSUA), 12-inch o.c.	-277.5
6	ASTM D41	DynaPly T1, DynaBase, DynaBase XT, DynaBase PR, DynaLastic 180 S, DynaLastic 250 S, DynaLastic 250 FR S in hot asphalt or DynaBase HW, DynaWeld Base, DynaWeld 180 S torch-applied	JM Two-Part Urethane Insulation Adhesive (UIA-2), 12-inch o.c.	-277.5
7	ASTM D41	DynaPly T1, DynaBase, DynaBase XT, DynaBase PR, DynaLastic 180 S, DynaLastic 250 S, DynaLastic 250 FR S in hot asphalt	JM Roofing System Urethane Adhesive (RSUA), 12-inch o.c.	-277.5
8	ASTM D41	DynaBase HW, DynaWeld Base, DynaWeld 180 S torch-applied	JM Roofing System Urethane Adhesive (RSUA), 12-inch o.c.	-292.5

19. "MDP" = Maximum Design Pressure is the result of testing for wind load resistance based on allowable wind loads. Refer to FBC 1609 for determination of design wind pressures.

TABLE 1A: WOOD DECKS - NEW CONSTRUCTION OR REROOF (TEAR-OFF) SYSTEM TYPE A: BONDED INSULATION, BONDED ROOF COVER							
System No.	Deck (Note 1)	Base Insulation Layer		Top Insulation Layer		Roof Cover / Adhesive	MDP (psf)
		Type	Attach	Type	Attach		
W-1.	Min. 15/32" BCX plywood or OSB	One or more layers min. 1.5-inch ENRGY 3	CR-20	Min. 0.25-inch Invinsa Roof Board	CR-20	JM PVC / TACC LA 432, TACC FA 636, JM PVC MA-LVOC	-52.5

TABLE 1B-1: WOOD DECKS - NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER SYSTEM TYPE C-1: MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER							
System No.	Deck (Note 1)	Base Insulation Layer	Top Insulation Layer			Roof Cover / Adhesive (Note 16)	MDP (psf)
			Type	Fasteners	Attach		
JM PVC APPLICATIONS:							
W-2.	Min. 23/32" (nominal ¾") thick plywood or wood plank	Min. 0.25-inch Dens Deck or SECUROCK Gypsum-Fiber Roof Board followed by min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, JM ISO 3 or 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, loose laid	Min. 0.25-inch Dens Deck	UltraFast Pre-Assembled Phillips or UltraFast Pre-Assembled Hex or UltraFast Square Recessed Metal Plate with UltraFast #12 or #14	1 per 2 ft2	JM PVC / TACC LA 432, JM PVC MA-WB, JM PVC MA-LVOC	-30.0*
W-3.	Min. 23/32" (nominal ¾") thick plywood or wood plank	Min. 0.25-inch Dens Deck or SECUROCK Gypsum-Fiber Roof Board followed by min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, JM ISO 3 or 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, loose laid	Min. 0.25-inch Dens Deck	OMG 3 in. Galvalume Steel Plates with OMG #12 or #14 HD	1 per 2.67 ft2	JM PVC / TACC LA 432, JM PVC MA-WB, JM PVC MA-LVOC	-30.0*
W-4.	Min. 23/32" (nominal ¾") thick plywood or wood plank	Min. 0.25-inch Dens Deck or SECUROCK Gypsum-Fiber Roof Board followed by min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, JM ISO 3 or 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, loose laid	Min. 0.5-inch Dens Deck	OMG 3 in. Galvalume Steel Plates with OMG #12 or #14 HD	1 per 3.2 ft2	JM PVC / TACC LA 432, JM PVC MA-WB, JM PVC MA-LVOC	-30.0*
W-5.	Min. 19/32" APA rated OSB or min. 15/32" APA rated plywood	(Optional) One or more layers, any type, thickness or combination, loose laid	Min. 0.25-inch DEXcell FA Glass Mat Roof Board or Min. 7/16-inch DEXcell Cement Roof Board	All Purpose Fasteners with UltraFast Square Metal Plates	1 per 2.67 ft2	JM PVC / JM PVC MA-WB, JM PVC MA-LVOC	-37.5*
W-6.	Min. 23/32" (nominal ¾") thick plywood or wood plank	Min. 0.25-inch Dens Deck or SECUROCK Gypsum-Fiber Roof Board followed by min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, JM ISO 3 or 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, loose laid	Min. 0.25-inch Dens Deck	UltraFast Pre-Assembled Phillips or UltraFast Pre-Assembled Hex or UltraFast Square Recessed Metal Plate with UltraFast #12 or #14	1 per 1.8 ft2	JM PVC / TACC LA 432, JM PVC MA-WB, JM PVC MA-LVOC	-45.0*
W-7.	Min. 23/32" (nominal ¾") thick plywood or wood plank	Min. 0.25-inch Dens Deck or SECUROCK Gypsum-Fiber Roof Board followed by min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, JM ISO 3 or 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, loose laid	Min. 0.25-inch Dens Deck	OMG 3 in. Galvalume Steel Plates with OMG #12 or #14 HD	1 per 2.13 ft2	JM PVC / TACC LA 432, JM PVC MA-WB, JM PVC MA-LVOC	-45.0*
W-8.	Min. 23/32" (nominal ¾") thick plywood or wood plank	Min. 0.25-inch Dens Deck or SECUROCK Gypsum-Fiber Roof Board followed by min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, JM ISO 3 or 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, loose laid	Min. 5/8-inch Dens Deck or Dens Deck Prime	OMG 3 in. Galvalume Steel Plates with OMG #12 or #14 HD	1 per 4 ft2	JM PVC / TACC LA 432, JM PVC MA-WB, JM PVC MA-LVOC	-45.0*

TABLE 1B-1: WOOD DECKS - NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER SYSTEM TYPE C-1: MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER							
System No.	Deck (Note 1)	Base Insulation Layer	Top Insulation Layer			Roof Cover / Adhesive (Note 16)	MDP (psf)
			Type	Fasteners	Attach		
W-9.	Min. 15/32" TECO rated plywood or OSB	(Optional) One or more layers, any type, thickness or combination, loose laid	Min. 0.25-inch DEXcell FA Glass Mat Roof Board or Min. 7/16-inch DEXcell Cement Roof Board	All Purpose Fasteners with UltraFast Square Metal Plates	1 per 2.67 ft2	JM PVC / JM PVC MA-WB, JM PVC MA-LVOC	-45.0*
W-10.	Min. 7/16" APA rated OSB or min. 15/32" APA rated plywood	(Optional) One or more layers, any type, thickness or combination, loose laid	Min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF	All Purpose Fasteners with UltraFast Square Metal Plates	1 per 2 ft2	JM PVC / JM PVC MA-WB, JM PVC MA-LVOC	-45.0*
W-11.	Min. 23/32" (nominal ¾") thick plywood or wood plank	Min. 0.25-inch Dens Deck or SECUROCK Gypsum-Fiber Roof Board	Min. 2-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF	UltraFast Pre-Assembled Phillips or UltraFast Pre-Assembled Hex or UltraFast Square Recessed Metal Plate with UltraFast #12 or #14	1 per 4 ft2	JM PVC / TACC LA 432, JM PVC MA-WB, JM PVC MA-LVOC	-45.0*
JM PVC FLEECE BACKED APPLICATIONS:							
W-12.	Min. 19/32" APA rated OSB or min. 15/32" APA rated plywood	(Optional) One or more layers, any type, thickness or combination, loose laid	Min. 0.25-inch DEXcell FA Glass Mat Roof Board or Min. 7/16-inch DEXcell Cement Roof Board	All Purpose Fasteners with UltraFast Square Metal Plates	1 per 2.67 ft2	JM PVC Fleece Backed / JM PVC MA-WB	-37.5*
W-13.	Min. 15/32" TECO rated plywood or OSB	(Optional) One or more layers, any type, thickness or combination, loose laid	Min. 0.25-inch DEXcell FA Glass Mat Roof Board or Min. 7/16-inch DEXcell Cement Roof Board	All Purpose Fasteners with UltraFast Square Metal Plates	1 per 2.67 ft2	JM PVC Fleece Backed / JM PVC MA-WB	-45.0*

TABLE 1B-2: WOOD DECKS - NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER SYSTEM TYPE C-2: MECHANICALLY ATTACHED INSULATION, PLATE-BONDED ROOF COVER						
System No.	Deck (Note 1)	Insulation Layer	Attach		Roof Cover	MDP (psf)
			Fasteners	Density		
W-14.	Min. 19/32" APA rated OSB	One or more layers, any combination	All Purpose Fasteners with JM PVC RhinoPlates	1 per 5.33 ft² (6 parts per 4x8 ft board)	Min. 60-mil JM PVC bonded to JM PVC RhinoPlates with RhinoBond Portable Bonding Tool, per manufacturer's published instructions.	-22.5*
W-15.	Min. 15/32" APA rated plywood at 24" span	One or more layers, any combination	All Purpose Fasteners with JM PVC RhinoPlates	1 per 2.67 ft² (16" x 24" grid)	Min. 60-mil JM PVC bonded to JM PVC RhinoPlates with RhinoBond Portable Bonding Tool, per manufacturer's published instructions.	-37.5
W-16.	Min. 7/16" APA rated OSB at 24" span	One or more layers, any combination	All Purpose Fasteners with JM PVC RhinoPlates, installed to engage wood joists	18" o.c. in rows spaced 48" o.c. (Fasteners engage wood joists)	Min. 60-mil JM PVC bonded to JM PVC RhinoPlates with RhinoBond Portable Bonding Tool, per manufacturer's published instructions.	-45.0*
W-17.	Min. 15/32" TECO rated OSB or Min. 19/32" APA rated plywood	One or more layers, any combination	All Purpose Fasteners with JM PVC RhinoPlates	1 per 4 ft² (24" x 24" grid)	Min. 60-mil JM PVC bonded to JM PVC RhinoPlates with RhinoBond Portable Bonding Tool, per manufacturer's published instructions.	-45.0*

TABLE 1C: WOOD DECKS - NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER SYSTEM TYPE D: INSULATED, MECHANICALLY ATTACHED ROOF COVER								
System No.	Deck (Note 1)	Insulation			Roof Cover			MDP (psf)
		Base Layer	Top Layer	Attach	Membrane	Fasteners	Attach	
W-18.	Min. 23/32" (nominal ¾") thick plywood or wood plank	Min. 0.25-inch Dens Deck or SECUROCK Gypsum-Fiber Roof Board	Min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF	Prelim attach	Min. 50 mil JM PVC	High Load Fasteners with High Load Plates	18-inch o.c. within 5-inch wide laps spaced 73-inch o.c. Laps sealed with 2-inch heat weld.	-30.0
W-19.	Min. 23/32" (nominal ¾") thick plywood or wood plank	Min. 0.25-inch Dens Deck or SECUROCK Gypsum-Fiber Roof Board	Min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF	Prelim attach	Min. 50 mil JM PVC	High Load Fasteners with High Load Plates	12-inch o.c. within 5-inch wide laps spaced 73-inch o.c. Laps sealed with 2-inch heat weld.	-45.0

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

System No.	Deck (Note 1)	Base Insulation Layer			Top Insulation Layer		Roof Cover		MDP (psf)
		Type	Fasten	Attach	Type	Attach	Base Ply(s) (Note 17)	Roof Cover / Adhesive (Note 16)	
JM PVC APPLICATIONS:									
S-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, 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF	Note 2	1 per 2 ft^2	Min. 0.5-inch RetroPlus Board	JM-RSUA	None	JM PVC / JM PVC MA-WB, JM PVC MA-LVOC	-45.0*
S-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, 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF	Note 2	1 per 2 ft^2	Min. 0.5-inch RetroPlus Board	UIA-TWO-PART	None	JM PVC / JM PVC MA-WB, JM PVC MA-LVOC	-45.0*
S-3.	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, 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF	Note 2	1 per 2 ft^2	Min. 0.25-inch DEXcell FA Glass Mat Roof Board or min. 7/16-inch DEXcell Cement Roof Board	UIA-TWO-PART	None	JM PVC / JM PVC MA-WB, JM PVC MA-LVOC	-45.0*
S-4.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi concrete	Min. 2-inch ENRGY 3, ValuTherm	Note 2 (round plates)	1 per 2 ft^2	Min. 2-inch ENRGY 3, ValueTherm	UIA-TWO-PART	None	JM PVC / JM PVC MA-LVOC	-52.5
S-5.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi concrete	Min. 1.5-inch ENRGY 3, ValuTherm	Note 2	1 per 1.33 ft^2	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	UIA-TWO-PART	None	JM PVC / JM PVC MA-WB, JM PVC MA-LVOC	-52.5
JM PVC FLEECE BACKED APPLICATIONS:									
S-6.	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, 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF	Note 2	1 per 2 ft^2	Min. 0.5-inch RetroPlus Board	JM-RSUA	None	JM PVC Fleece Backed / JM PVC MA-WB	-45.0*
S-7.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi concrete	Min. 1.5-inch ENRGY 3, ValuTherm	Note 2	1 per 1 ft^2	Min. 0.5-inch Invinsa Roof Board or SECUROCK Gypsum-Fiber Roof Board	JM-RSUA, 6-inch o.c.	None	JM PVC Fleece Backed / JM-RSUA, 12-inch o.c.	-67.5
S-8.	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, 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF	Note 2	1 per 2 ft^2	Min. 0.5-inch RetroPlus Board	UIA-TWO-PART	None	JM PVC Fleece Backed / JM PVC MA-WB	-45.0*
S-9.	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, 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF	Note 2	1 per 2 ft^2	Min. 0.25-inch DEXcell FA Glass Mat Roof Board or min. 7/16-inch DEXcell Cement Roof Board	UIA-TWO-PART	None	JM PVC Fleece Backed / JM PVC MA-WB	-45.0*

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

System No.	Deck (Note 1)	Base Insulation Layer			Top Insulation Layer		Roof Cover		MDP (psf)
		Type	Fasten	Attach	Type	Attach	Base Ply(s) (Note 17)	Roof Cover / Adhesive (Note 16)	
S-10.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi concrete	Min. 1.5-inch ENRGY 3, ValuTherm	Note 2	1 per 1.33 ft^2	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	UIA-TWO-PART	None	JM PVC Fleece Backed / JM PVC MA-WB	-52.5
S-11.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi concrete	Min. 1.5-inch ENRGY 3, ValuTherm	Note 2	1 per 1 ft^2	Min. 0.5-inch Invinsa Roof Board or SECUROCK Gypsum-Fiber Roof Board	UIA-TWO-PART, 6-inch o.c.	None	JM PVC Fleece Backed / JM-RSUA, 12-inch o.c.	-67.5
HYBRID JM PVC FLEECE BACKED APPLICATIONS:									
S-12.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi concrete	Min. 1.5-inch ENRGY 3, Fesco Foam or DuraFoam	Note 2	1 per 2 ft^2	Min. 0.5-inch Retro-Fit Board or DuraBoard, min. 0.75-inch Fesco Board (flat or tapered) or min. 1.5-inch Fesco Foam or DuraFoam	HA	BP-AA, SBS-AA	JM PVC Fleece Backed / Hot asphalt	-52.5
S-13.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi concrete	Min. 1.5-inch ENRGY 3, Fesco Foam or DuraFoam	Note 2	1 per 1.78 ft^2	Min. 0.5-inch Retro-Fit Board or DuraBoard or min. 1.5-inch Fesco Foam or DuraFoam	HA	BP-AA, SBS-AA	JM PVC Fleece Backed / Hot asphalt	-60.0
S-14.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi concrete	Min. 2-inch ENRGY 3	Note 2	1 per 2 ft^2	Min. 3/8-inch SECUROCK Gypsum-Fiber Roof Board	HA	BP-AA, SBS-AA, SBS-TA	JM PVC Fleece Backed / Hot asphalt	-60.0
S-15.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi concrete	Min. 2-inch ENRGY 3	Note 2	1 per 2 ft^2	Min. 3/8-inch SECUROCK Gypsum-Fiber Roof Board	RSUA, 6-inch o.c.	BP-AA, SBS-AA, SBS-TA	JM PVC Fleece Backed / Hot asphalt	-60.0
S-16.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi concrete	Min. 2-inch ENRGY 3	Note 2	1 per 2 ft^2	Min. 3/8-inch SECUROCK Gypsum-Fiber Roof Board	UIA-TWO-PART	BP-AA, SBS-AA, SBS-TA	JM PVC Fleece Backed / Hot asphalt	-60.0

TABLE 2A-2: STEEL DECKS - NEW CONSTRUCTION, REROOF (TEAR-OFF)

SYSTEM TYPE B-2: MECHANICALLY ATTACHED THERMAL BARRIER, BONDED TEMP ROOF, BONDED TOP INSULATION, BONDED ROOF COVER

System No.	Deck (Note 1)	Thermal Barrier			Temp Roof		Base Insulation		Top Insulation		Roof Cover		MDP (psf)
		Type	Fasten	Attach	Type	Attach	Type	Attach	Type	Attach	Base Ply(s) (Note 17)	Roof Cover / Adhesive (Note 16)	
JM PVC APPLICATIONS:													
S-17.	Min. 22 ga., Grade 33 steel	Min. 0.5-inch DEXcell FA Glass Mat Roof Board	Note 2	1 per 4 ft^2	JM SA Primer Low VOC followed by JM Vapor Barrier SA	Self-adhered	One or more layers, min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF	UIA-TWO-PART	Min. 0.25-inch DEXcell FA Glass Mat Roof Board or SECUROCK Gypsum-Fiber Roof Board	UIA-TWO-PART	None	JM PVC / JM PVC MA-WB, JM PVC MA-LVOC	-45.0*
S-18.	Min. 22 ga., Grade 33 steel	Min. 0.5-inch DEXcell FA Glass Mat Roof Board	Note 2	1 per 4 ft^2	JM SA Primer Low VOC followed by JM Vapor Barrier SA	Self-adhered	One or more layers, min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF	UIA-TWO-PART	Min. 7/16-inch DEXcell Cement Roof Board	UIA-TWO-PART	None	JM PVC / JM PVC MA-WB, JM PVC MA-LVOC	-45.0*
S-19.	Min. 22 ga., Grade 33 steel	Min. 0.5-inch DEXcell FA Glass Mat Roof Board	Note 2	1 per 4 ft^2	JM SA Primer Low VOC followed by JM Vapor Barrier SA	Self-adhered	One or more layers, min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF	UIA-TWO-PART	Min. 0.5-inch RetroPlus Board	UIA-TWO-PART	None	JM PVC / JM PVC MA-WB, JM PVC MA-LVOC	-45.0*
S-20.	Min. 22 ga., Grade 33 steel	Min. 0.5-inch DEXcell FA Glass Mat Roof Board	Note 2	1 per 4 ft^2	JM SA Primer Low VOC followed by JM Vapor Barrier SA	Self-adhered	One or more layers, min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF	UIA-TWO-PART	Min. 2-inch ENRGY 3	UIA-TWO-PART	None	JM PVC / JM PVC MA-LVOC	-45.0*
JM PVC FLEECE BACKED APPLICATIONS:													
S-21.	Min. 22 ga., Grade 33 steel	Min. 0.5-inch DEXcell FA Glass Mat Roof Board	Note 2	1 per 4 ft^2	JM SA Primer Low VOC followed by JM Vapor Barrier SA	Self-adhered	One or more layers, min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF	UIA-TWO-PART	Min. 0.25-inch DEXcell FA Glass Mat Roof Board or SECUROCK Gypsum-Fiber Roof Board	UIA-TWO-PART	None	JM PVC Fleece Backed / JM PVC MA-WB	-45.0*
S-22.	Min. 22 ga., Grade 33 steel	Min. 0.5-inch DEXcell FA Glass Mat Roof Board	Note 2	1 per 4 ft^2	JM SA Primer Low VOC followed by JM Vapor Barrier SA	Self-adhered	One or more layers, min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF	UIA-TWO-PART	Min. 7/16-inch DEXcell Cement Roof Board	UIA-TWO-PART	None	JM PVC Fleece Backed / JM PVC MA-WB	-45.0*
S-23.	Min. 22 ga., Grade 33 steel	Min. 0.5-inch DEXcell FA Glass Mat Roof Board	Note 2	1 per 4 ft^2	JM SA Primer Low VOC followed by JM Vapor Barrier SA	Self-adhered	One or more layers, min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF	UIA-TWO-PART	Min. 0.5-inch RetroPlus Board	UIA-TWO-PART	None	JM PVC Fleece Backed / JM PVC MA-WB	-45.0*
S-24.	Min. 22 ga., Grade 33 steel	Min. 0.5-inch DEXcell FA Glass Mat Roof Board	Note 2	1 per 4 ft^2	JM SA Primer Low VOC followed by JM Vapor Barrier SA	Self-adhered	One or more layers, min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF	UIA-TWO-PART	Min. 0.5-inch Invinsa Roof Board or SECUROCK Gypsum-Fiber Roof Board	UIA-TWO-PART	None	JM PVC Fleece Backed / JM-RSUA, 12-inch o.c.	-45.0*

TABLE 2A-2: STEEL DECKS - NEW CONSTRUCTION, REROOF (TEAR-OFF)

SYSTEM TYPE B-2: MECHANICALLY ATTACHED THERMAL BARRIER, BONDED TEMP ROOF, BONDED TOP INSULATION, BONDED ROOF COVER

System No.	Deck (Note 1)	Thermal Barrier			Temp Roof		Base Insulation		Top Insulation		Roof Cover		MDP (psf)
		Type	Fasten	Attach	Type	Attach	Type	Attach	Type	Attach	Base Ply(s) (Note 17)	Roof Cover / Adhesive (Note 16)	
S-25.	Min. 22 ga., Grade 80 steel	Min. 0.5-inch DEXcell FA Glass Mat Roof Board	Note 2	1 per 1 ft^2	JM SA Primer followed by JM Vapor Barrier SA	Self-adhered	Min. 1.5-inch ENRGY 3, ENRGY 3.E, ValuTherm, JM ISO 3, R-Panel, SeparatoR, ENRGY 3 25 PSI, ENRGY 3.E 25 PSI, ValuTherm 25 PSI, R-Panel 25 PSI	RSUA, 6-inch o.c.	Min. 0.5-inch DEXcell FA Glass Mat Roof Board	RSUA, 6-inch o.c.	None	JM PVC Fleece Backed / JM-RSUA, 6-inch o.c.	-82.5
HYBRID JM PVC FLEECE BACKED APPLICATIONS:													
S-26.	Min. 22 ga., Grade 33 steel	Min. 0.5-inch DEXcell FA Glass Mat Roof Board	Note 2	1 per 4 ft^2	JM SA Primer Low VOC followed by JM Vapor Barrier SA	Self-adhered	One or more layers, min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF	UIA-TWO-PART	Min. 3/8-inch SECUROCK Gypsum-Fiber Roof Board	UIA-TWO-PART	BP-AA, SBS-AA, SBS-TA	JM PVC Fleece Backed / Hot asphalt	-45.0*

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

System No.	Deck (Note 1)	Base Insulation Layer	Top Insulation Layer			Roof Cover		MDP (psf)
			Type	Fasteners	Attach	Base Ply(s) (Note 17)	Roof Cover / Adhesive (Note 16)	
JM PVC APPLICATIONS:								
S-27.	Min. 22 ga., Type B, Grade 33 steel	Min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, JM ISO 3 or 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, loose laid	Min. 0.25-inch Dens Deck	Note 2	1 per 2 ft2	None	JM PVC / TACC LA 432, JM PVC MA-WB, JM PVC MA-LVOC	-30.0*
S-28.	Min. 22 ga., Type B, Grade 33 steel	in. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, JM ISO 3 or 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, loose laid	Min. 0.25-inch Dens Deck	OMG 3 in. Galvalume Steel Plates with OMG #12 or #14 HD	1 per 2.67 ft2	None	JM PVC / TACC LA 432, JM PVC MA-WB, JM PVC MA-LVOC	-30.0*
S-29.	Min. 22 ga., Type B, Grade 33 steel	Min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, JM ISO 3 or 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, loose laid	Min. 0.5-inch Dens Deck	OMG 3 in. Galvalume Steel Plates with OMG #12 or #14 HD	1 per 3.2 ft2	None	JM PVC / TACC LA 432, JM PVC MA-WB, JM PVC MA-LVOC	-30.0*
S-30.	Min. 22 ga., Type B, Grade 33 steel	(Optional) ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, JM ISO 3 or 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, loose laid	Min. 2-inch Fesco Foam	Note 2; All Purpose Fastener only	1 per 5.3 ft2	None	JM PVC / JM PVC MA-WB, JM PVC MA-LVOC	-37.5*
S-31.	Min. 22 ga., Type B, Grade 33 steel	Min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, JM ISO 3 or 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, loose laid	Min. 0.25-inch Dens Deck	Note 2	1 per 1.8 ft2	None	JM PVC / TACC LA 432, JM PVC MA-WB, JM PVC MA-LVOC	-45.0*
S-32.	Min. 22 ga., Type B, Grade 33 steel	Min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, JM ISO 3 or 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, loose laid	Min. 0.25-inch Dens Deck	OMG 3 in. Galvalume Steel Plates with OMG #12 or #14 HD	1 per 2.13 ft2	None	JM PVC / TACC LA 432, JM PVC MA-WB, JM PVC MA-LVOC	-45.0*
S-33.	Min. 22 ga., Type B, Grade 33 steel	Min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, JM ISO 3 or 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, loose laid	Min. 5/8-inch Dens Deck or Dens Deck Prime	OMG 3 in. Galvalume Steel Plates with OMG #12 or #14 HD	1 per 4 ft2	None	JM PVC / TACC LA 432, JM PVC MA-WB, JM PVC MA-LVOC	-45.0*
S-34.	Min. 22 ga., Type B, Grade 33 steel	Min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, JM ISO 3 or 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, loose laid	Min. 0.5-inch SECUROCK Gypsum-Fiber Roof Board	Note 2 (square plates)	1 per 4 ft2	None	JM PVC / JM PVC MA-LVOC	-45.0*
S-35.	Min. 22 ga., Type B, Grade 33 steel	Min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, JM ISO 3 or 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, loose laid	Min. 0.25-inch DEXcell FA Glass Mat Roof Board or 7/16-inch DEXcell Cement Roof Board	Note 2	1 per 3.2 ft2	None	JM PVC / JM PVC MA-WB, JM PVC MA-LVOC	-45.0*
S-36.	Min. 22 ga., Type B, Grade 33 steel	Min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, JM ISO 3 or 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, loose laid	Min. 0.5-inch DEXcell FA Glass Mat Roof Board	Note 2	1 per 4 ft2	None	JM PVC / JM PVC MA-WB, JM PVC MA-LVOC	-45.0*
S-37.	Min. 22 ga., Type B, Grade 33 steel	Min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, JM ISO 3 or 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, loose laid	Min. 0.375-inch SECUROCK Gypsum-Fiber Roof Board	Note 2 (square plates)	1 per 2.67 ft2	None	JM PVC / JM PVC MA-LVOC	-45.0*
S-38.	Min. 22 ga., Type B, Grade 33 steel	Min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, JM ISO 3 or 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, loose laid	Min. 0.25-inch Invinsa Roof Board or Invinsa FR	Note 2 (square plates)	1 per 2 ft2	None	JM PVC / JM PVC MA-LVOC	-45.0*

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

System No.	Deck (Note 1)	Base Insulation Layer	Top Insulation Layer			Roof Cover		MDP (psf)
			Type	Fasteners	Attach	Base Ply(s) (Note 17)	Roof Cover / Adhesive (Note 16)	
S-39.	Min. 22 ga., Type B, Grade 33 steel	Min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, JM ISO 3 or 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, loose laid	Min. 0.25-inch InvinsaPlus	Note 2	1 per 4 ft2	None	JM PVC / JM PVC MA-WB, JM PVC MA-LVOC	-45.0*
S-40.	Min. 22 ga., Type B, Grade 33 steel	(Optional) Min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, JM ISO 3 or 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, loose laid	Min. 1.75-inch Invinsa Foam	Note 2 (square plates)	1 per 2 ft2	None	JM PVC / TACC LA 432, JM PVC MA-WB, JM PVC MA-LVOC	-45.0*
S-41.	Min. 22 ga., Type B, Grade 33 steel	(Optional) ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, JM ISO 3 or 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, loose laid	Min. 2-inch Invinsa Foam	Note 2; All Purpose Fastener only	1 per 5.3 ft2	None	JM PVC / TACC LA 432, JM PVC MA-WB, JM PVC MA-LVOC	-45.0*
S-42.	Min. 22 ga., Type B, Grade 33 steel	(Optional) Min. 0.25-inch Dens Deck or SECUROCK Gypsum-Fiber Roof Board	Min. 2-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF	Note 2	1 per 4 ft2	None	JM PVC / TACC LA 432, JM PVC MA-WB, JM PVC MA-LVOC	-45.0*
S-43.	Min. 22 ga., Type B, Grade 33 steel	Min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, JM ISO 3 or 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, loose laid	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	Note 2 (square plates)	1 per 1.33 ft2	None	JM PVC / JM PVC MA-LVOC	-52.5
S-44.	Min. 22 ga., Type B, Grade 33 steel	Min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, JM ISO 3 or 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, loose laid	Min. 0.25-inch InvinsaPlus	Note 2	1 per 2.67 ft2	None	JM PVC / JM PVC MA-WB, JM PVC MA-LVOC	-52.5
S-45.	Min. 22 ga., Type B, Grade 80 steel	Min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, JM ISO 3 or 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, loose laid	Min. 0.25-inch InvinsaPlus	Note 2	1 per 2 ft2	None	JM PVC / JM PVC MA-WB, JM PVC MA-LVOC	-60.0
JM PVC SD PLUS APPLICATIONS:								
S-46.	Min. 22 ga., Type B, Grade 33 steel	(Optional) Min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, JM ISO 3 or 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, loose laid	Min. 1.75-inch Invinsa Foam	Note 2 (square plates)	1 per 2 ft2	None	JM PVC SD Plus / TACC LA 432, JM PVC MA-WB, JM PVC MA-LVOC	-45.0*
S-47.	Min. 22 ga., Type B, Grade 33 steel	(Optional) ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, JM ISO 3 or 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, loose laid	Min. 2-inch Invinsa Foam	Note 2; All Purpose Fastener only	1 per 5.3 ft2	None	JM PVC SD Plus / TACC LA 432, JM PVC MA-WB, JM PVC MA-LVOC	-45.0*
S-48.	Min. 22 ga., Type B, Grade 33 steel	(Optional) One or more layers, any combination, loose laid	Min. 2-inch ENRGY 3 CGF, ValuTherm CGF, ENRGY 3 FR, Invinsa Foam	Note 2 (square plates)	1 per 2.67 ft2	None	JM PVC SD Plus / JM PVC MA-LVOC	-52.5
JM PVC FLEECE BACKED APPLICATIONS:								
S-49.	Min. 22 ga., Type B, Grade 33 steel	(Optional) ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, JM ISO 3 or 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, loose laid	Min. 2-inch Fesco Foam	Note 2; All Purpose Fastener only	1 per 5.3 ft2	None	JM PVC Fleece Backed / JM PVC MA-WB	-37.5*
S-50.	Min. 22 ga., Type B, Grade 33 steel	(Optional) Min. 0.25-inch Dens Deck or SECUROCK Gypsum-Fiber Roof Board	Min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, PSI-25	OMG 3 in. Galvalume Steel Plates with OMG #12 or #14 HD	1 per 2 ft2	None	JM PVC Fleece Backed / hot asphalt	-45.0*

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

System No.	Deck (Note 1)	Base Insulation Layer	Top Insulation Layer			Roof Cover		MDP (psf)
			Type	Fasteners	Attach	Base Ply(s) (Note 17)	Roof Cover / Adhesive (Note 16)	
S-51.	Min. 22 ga., Type B, Grade 33 steel	(Optional) ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, JM ISO 3 or 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, loose laid	Min. 2-inch Invinsa Foam	Note 2; All Purpose Fastener only	1 per 5.3 ft2	None	JM PVC Fleece Backed / JM PVC MA-WB, JM PVC MA-LVOC	-45.0*
S-52.	Min. 22 ga., Type B, Grade 33 steel	Min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, JM ISO 3 or 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, loose laid	Min. 0.5-inch SECUROCK Gypsum-Fiber Roof Board	Note 2 (square plates)	1 per 4 ft2	None	JM PVC Fleece Backed / JM PVC MA-WB	-45.0*
S-53.	Min. 22 ga., Type B, Grade 33 steel	Min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, JM ISO 3 or 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, loose laid	Min. 0.25-inch DEXcell FA Glass Mat Roof Board or 7/16-inch DEXcell Cement Roof Board	Note 2	1 per 3.2 ft2	None	JM PVC Fleece Backed / JM PVC MA-WB	-45.0*
S-54.	Min. 22 ga., Type B, Grade 33 steel	Min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, JM ISO 3 or 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, loose laid	Min. 0.5-inch DEXcell FA Glass Mat Roof Board	Note 2	1 per 4 ft2	None	JM PVC Fleece Backed / JM PVC MA-WB	-45.0*
S-55.	Min. 22 ga., Type B, Grade 33 steel	Min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, JM ISO 3 or 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, loose laid	Min. 0.375-inch SECUROCK Gypsum-Fiber Roof Board	Note 2 (square plates)	1 per 2.67 ft2	None	JM PVC Fleece Backed / JM PVC MA-WB	-45.0*
S-56.	Min. 22 ga., Type B, Grade 33 steel	Min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, JM ISO 3 or 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, loose laid	Min. 0.25-inch InvinsaPlus	Note 2	1 per 4 ft2	None	JM PVC Fleece Backed / JM PVC MA-WB	-45.0*
S-57.	Min. 22 ga., Type B, Grade 33 steel	Min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, JM ISO 3 or 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, loose laid	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	Note 2 (square plates)	1 per 1.33 ft2	None	JM PVC Fleece Backed / JM PVC MA-WB	-52.5
S-58.	Min. 22 ga., Type B, Grade 33 steel	Min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, JM ISO 3 or 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, loose laid	Min. 0.25-inch InvinsaPlus	Note 2	1 per 2.67 ft2	None	JM PVC Fleece Backed / JM PVC MA-WB	-52.5
S-59.	Min. 22 ga., Type B, Grade 80 steel	Min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, JM ISO 3 or 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, loose laid	Min. 0.25-inch InvinsaPlus	Note 2	1 per 2 ft2	None	JM PVC Fleece Backed / JM PVC MA-WB	-60.0
S-60.	Min. 22 ga., Type B, Grade 33 steel	Min. 0.5-inch DEXcell FA Glass Mat Roof Board, loose laid, followed by JM Vapor Barrier SA, self-adhered, followed by Min. 1.5-inch ENRGY 3, ENRGY 3.E, ValuTherm, JM ISO 3, R-Panel, SeparatoR, ENRGY 3 25 PSI, ENRGY 3.E 25 PSI, ValuTherm 25 PSI, R-Panel 25 PSI, ENRGY 3 AGF, ValuTherm AGF, ENRGY 3 25 PSI AGF, ValuTherm 25 PSI AGF, ENRGY 3 CGF, ValuTherm CGF, ENRGY 3 25 PSI CGF, ValuTherm 25 PSI CGF, ENRGY 3 FR, ENRGY 3 25 PSI FR, loose laid	Min. 0.5-inch DEXcell FA Glass Mat Roof Board	Note 2	1 per 1 ft2	None	JM PVC Fleece Backed / JM-RSUA, 4-inch o.c.	-82.5
S-61.	Min. 22 ga., Type B, Grade 80 steel	Min. 0.5-inch DEXcell FA Glass Mat Roof Board, loose laid, followed by JM Vapor Barrier SA, self-adhered, followed by Min. 1.5-inch ENRGY 3, ENRGY 3.E, ValuTherm, JM ISO 3, R-Panel, SeparatoR, ENRGY 3 25 PSI, ENRGY 3.E 25 PSI, ValuTherm 25 PSI, R-Panel 25 PSI, ENRGY 3 AGF, ValuTherm AGF, ENRGY 3 25 PSI AGF, ValuTherm 25 PSI AGF, ENRGY 3 CGF, ValuTherm CGF, ENRGY 3 25 PSI CGF, ValuTherm 25 PSI CGF, ENRGY 3 FR, ENRGY 3 25 PSI FR, loose laid	Min. 0.5-inch DEXcell FA Glass Mat Roof Board	Note 2	1 per 1 ft2	None	JM PVC Fleece Backed / JM-RSUA, 4-inch o.c.	-142.5
HYBRID JM PVC FLEECE BACKED APPLICATIONS:								
S-62.	Min. 22 ga., type B, Grade 33 steel	One or more layers, any combination, loose laid	Min. 0.5-inch Retro-Fit Board or DuraBoard, min. 0.75-inch Fesco Board or min. 1.5-inch Fesco Foam or DuraFoam	Note 2	1 per 2 ft^2	BP-AA, SBS-AA	JM PVC Fleece Backed / hot asphalt	-52.5

TABLE 2B-1: STEEL DECKS - NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER SYSTEM TYPE C-1: MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER								
System No.	Deck (Note 1)	Base Insulation Layer	Top Insulation Layer			Roof Cover		MDP (psf)
			Type	Fasteners	Attach	Base Ply(s) (Note 17)	Roof Cover / Adhesive (Note 16)	
S-63.	Min. 22 ga., type B, Grade 33 steel	One or more layers, any combination, loose laid	Min. 0.75-inch DuraBoard	Note 2	1 per 1.45 ft^2	BP-AA, SBS-AA	JM PVC Fleece Backed / hot asphalt	-60.0
S-64.	Min. 22 ga., type B, Grade 33 steel	One or more layers, any combination, loose laid	Min. 0.5-inch Retro-Fit Board or min. 0.75-inch Fesco Board	Note 2	1 per 1.33 ft^2	BP-AA, SBS-AA	JM PVC Fleece Backed / hot asphalt	-60.0
S-65.	Min. 22 ga., type B, Grade 33 steel	One or more layers, any combination, loose laid	Min. 0.5-inch SECUROCK Gypsum-Fiber Roof Board	Note 2	1 per 1.78 ft^2	BP-AA, SBS-AA, SBS-TA	JM PVC Fleece Backed / hot asphalt	-60.0

TABLE 2B-2: STEEL DECKS - NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER SYSTEM TYPE C-2: MECHANICALLY ATTACHED INSULATION, PLATE-BONDED ROOF COVER						
System No.	Deck (Note 1)	Insulation Layer	Attach		Roof Cover	MDP (psf)
			Fasteners	Density		
S-66.	Min. 22 ga., type B, Grade 33 steel	One or more layers, any combination	High Load Fasteners with JM PVC RhinoPlates	1 per 5.33 ft² (6 parts per 4 x 8 ft board)	JM PVC or JM PVC SD Plus bonded to JM PVC RhinoPlates with RhinoBond Portable Bonding Tool, per manufacturer's published instructions.	-45.0
S-67.	Min. 22 ga., type B, Grade 33 steel	One or more layers, any combination	High Load Fasteners with JM PVC RhinoPlates	1 per 4 ft² (24 x 24-inch grid)	JM PVC or JM PVC SD Plus bonded to JM PVC RhinoPlates with RhinoBond Portable Bonding Tool, per manufacturer's published instructions.	-67.5
S-68.	Min. 22 ga., type B, Grade 33 steel	One or more layers, any combination	High Load Fasteners with JM PVC RhinoPlates	1 per 2.13 ft² (15 parts per 4 x 8 ft board) Fasteners are 6-, 24- and 42-inches from the board's long edge and 12-, 30-, 48-, 66- and 84-inches from the board's short edge.	JM PVC or JM PVC SD Plus bonded to JM PVC RhinoPlates with RhinoBond Portable Bonding Tool, per manufacturer's published instructions.	-90.0

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

System No.	Deck (Note 1)	Insulation			Roof Cover			MDP (psf)
		Base Layer	Top Layer	Attach	Membrane	Fasteners	Attach	
S-69.	Min. 22 ga., Type B, Grade 33 steel	One or more layers min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, JM ISO 3, 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF	(Optional) Min. 0.25-inch Invinsa Roof Board, Dens Deck or SECUROCK Gypsum-Fiber Roof Board	Prelim. attached	Min. 50 mil JM PVC	High Load Fasteners with High Load Plates	18-inch o.c. within 5-inch wide laps spaced 73-inch o.c. Laps sealed with 1.5-inch heat weld.	-30.0
S-70.	Min. 22 ga., Type B, Grade 80 steel	One or more layers min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, JM ISO 3, 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF	(Optional) Min. 0.25-inch Invinsa Roof Board, Dens Deck or SECUROCK Gypsum-Fiber Roof Board	Prelim. attached	Min. 50 mil JM PVC	High Load Fasteners with High Load Plates	18-inch o.c. within 5-inch wide laps spaced 73-inch o.c. Laps sealed with 2-inch heat weld.	-30.0
S-71.	Min. 22 ga., Type B, Grade 33 steel	One or more layers min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, JM ISO 3, 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF	(Optional) Min. 0.25-inch Invinsa Roof Board, Dens Deck or SECUROCK Gypsum-Fiber Roof Board	Prelim. attached	Min. 50 mil JM PVC	High Load Fasteners with High Load Plates	6-inch o.c. within 6-inch wide laps spaced 72-inch o.c. Laps sealed with 2-inch heat weld.	-30.0
S-72.	Min. 22 ga., Type B, Grade 33 steel	One or more layers min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, JM ISO 3, 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF		1 per 6.4 ft^2	Min. 50 mil JM PVC	High Load Fasteners with High Load Plates	6-inch o.c. within 6-inch wide laps spaced 72-inch o.c. Laps sealed with 2-inch heat weld.	-37.5
S-73.	Min. 22 ga., Type B, Grade 33 steel	One or more layers min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, JM ISO 3, 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF		1 per 6.4 ft^2	Min. 50 mil JM PVC	Extra High Load Fasteners with Extra High Load Plates	12-inch o.c. within 6-inch wide laps spaced 72-inch o.c. Laps sealed with 2-inch heat weld.	-37.5
S-74.	Min. 22 ga., Type B, Grade 33 steel	One or more layers min. 1-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, JM ISO 3, 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF	(Optional) Min. 0.25-inch Invinsa Roof Board, Dens Deck or SECUROCK Gypsum-Fiber Roof Board	Prelim. attached	Min. 50 mil JM PVC	Extra High Load Fasteners with Extra 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.	-37.5
S-75.	Min. 22 ga., Type B, Grade 33 steel	One or more layers min. 0.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, JM ISO 3, 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF	(Optional) Min. 0.25-inch Invinsa Roof Board, Dens Deck or SECUROCK Gypsum-Fiber Roof Board	Prelim. attached	Min. 50 mil JM PVC	High Load Fasteners with High Load Plates	6-inch o.c. within 6-inch wide laps spaced 72-inch o.c. Laps sealed with 1.5-inch heat weld.	-45.0
S-76.	Min. 22 ga., Type B, Grade 80 steel	One or more layers min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, JM ISO 3, 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF	(Optional) Min. 0.25-inch Invinsa Roof Board, Dens Deck or SECUROCK Gypsum-Fiber Roof Board	Prelim. attached	Min. 50 mil JM PVC	High Load Fasteners with High Load Plates	18-inch o.c. within 6-inch wide laps spaced 72-inch o.c. Laps sealed with 2-inch heat weld.	-45.0
S-77.	Min. 22 ga., Type B, Grade 33 steel	One or more layers min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, JM ISO 3, 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF	(Optional) Min. 0.25-inch Invinsa Roof Board, Dens Deck or SECUROCK Gypsum-Fiber Roof Board	Prelim. attached	Min. 50 mil JM PVC	High Load Fasteners with High Load Plates	12-inch o.c. within 5-inch wide laps spaced 73-inch o.c. Laps sealed with 1.5-inch heat weld.	-45.0
S-78.	Min. 22 ga., Type B, Grade 33 steel	One or more layers min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, JM ISO 3, 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF	(Optional) Min. 0.25-inch Invinsa Roof Board, Dens Deck or SECUROCK Gypsum-Fiber Roof Board	Prelim. attached	Min. 50 mil JM PVC	High Load Fasteners with High Load Plates	6-inch o.c. within 5.5-inch wide laps spaced 114-inch o.c. Laps sealed with 2-inch heat weld.	-45.0

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

System No.	Deck (Note 1)	Insulation			Roof Cover			MDP (psf)
		Base Layer	Top Layer	Attach	Membrane	Fasteners	Attach	
S-79.	Min. 22 ga., Type B, Grade 80 steel	One or more layers min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, JM ISO 3, 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF	(Optional) Min. 0.25-inch Invinsa Roof Board, Dens Deck or SECUROCK Gypsum-Fiber Roof Board	Prelim. attached	Min. 50 mil JM PVC	High Load Fasteners with High Load Plates	12-inch o.c. within 5.5-inch wide laps spaced 144-inch o.c. Laps sealed with 2-inch heat weld.	-45.0
S-80.	Min. 22 ga., Type B, Grade 80 steel	One or more layers min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, JM ISO 3, 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF	(Optional) Min. 0.25-inch Invinsa Roof Board, Dens Deck or SECUROCK Gypsum-Fiber Roof Board	Prelim. attached	Min. 60 mil JM PVC	High Load Fasteners with High Load Plates	12-inch o.c. within 5-inch wide laps spaced 73-inch o.c. Laps sealed with 2-inch heat weld.	-52.5
S-81.	18-22 ga., type B, Grade 33 steel	One or more layers min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, JM ISO 3, 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF	(Optional) Min. 0.25-inch Invinsa Roof Board, Dens Deck or SECUROCK Gypsum-Fiber Roof Board	Prelim. attached	Min. 50 mil JM PVC	High Load Fasteners with High Load Plates	6-inch o.c. within 5-inch wide laps spaced 73-inch o.c. Laps sealed with 1.5-inch heat weld.	-60.0
S-82.	18-22 ga., type B, Grade 33 steel	One or more layers min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, JM ISO 3, 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF	(Optional) Min. 0.25-inch Invinsa Roof Board, Dens Deck or SECUROCK Gypsum-Fiber Roof Board	Prelim. attached	Min. 50 mil JM PVC	Extra High Load Fasteners with OMG 2¾ Super XHD barbed stress plates	6-inch o.c. within 5.5-inch wide laps spaced 114-inch o.c. Laps sealed with 2-inch heat weld.	-60.0
S-83.	Min. 22 ga., Type B, Grade 80 steel	One or more layers min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, JM ISO 3, 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF	(Optional) Min. 0.25-inch Invinsa Roof Board, Dens Deck or SECUROCK Gypsum-Fiber Roof Board	Prelim. attached	Min. 50 mil JM PVC	High Load Fasteners with High Load Plates	6-inch o.c. within 4.5-inch wide laps spaced 114-inch o.c. Laps sealed with 2-inch heat weld.	-60.0
S-84.	Min. 22 ga., Type B, Grade 80 steel	One or more layers min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, JM ISO 3, 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF	(Optional) Min. 0.25-inch Invinsa Roof Board, Dens Deck or SECUROCK Gypsum-Fiber Roof Board	Prelim. attached	Min. 60 mil JM PVC	High Load Fasteners with High Load Plates	6-inch o.c. within 6-inch wide laps spaced 72-inch o.c. Laps sealed with 2-inch heat weld.	-75.0

TABLE 2C-2: STEEL DECKS – NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER SYSTEM TYPE D-2: INSULATED, MECHANICALLY ATTACHED BASE SHEET, BONDED ROOF COVER									
System No.	Deck (Note 1)	Insulation Layer(s)		Base or Anchor Sheet			Roof Cover		MDP (psf)
		Type	Attach	Base	Fasteners	Attach	Base Ply(s) (Note 17)	Roof Cover / Adhesive (Note 16)	
S-85.	Min. 22 ga., type B, Grade 33 steel	One or more layers, any combination	Prelim. Attached	DynaLastic 180 S or DynaWeld 180 S	High Load Fasteners and Plates	18-inch o.c. within the 5-inch wide, heat welded lap	(Optional) SBS-AA, SBS-TA	JM PVC Fleece Backed / Hot asphalt	-45.0*
S-86.	Min. 22 ga., type B, Grade 33 steel	One or more layers, any combination	Prelim. Attached	PermaPly 28, GlasBase Plus, DynaBase or Ventsulation	Note 2	9-inch o.c. at the 4-inch lap and 18-inch o.c. in two, equally spaced, staggered center rows	BP-AA, SBS-AA, SBS-TA	JM PVC Fleece Backed / Hot asphalt	-60.0
S-87.	Min. 22 ga., type B, Grade 33 steel	One or more layers, any combination	Prelim. Attached	DynaLastic 180 S or DynaWeld 180 S	High Load Fasteners and Plates	12-inch o.c. within the 5-inch wide, heat welded lap	(Optional) SBS-AA, SBS-TA	JM PVC Fleece Backed / Hot asphalt	-60.0
S-88.	Min. 22 ga., type B, Grade 33 steel	One or more layers, min. 1-inch, any combination	Loose-laid	DynaFast 180 S	High Load Fasteners and APB Plates or High Load Plates	6-inch o.c. within the min. 4-inch wide, heat-welded side laps.	(Optional) SBS-AA, SBS-TA	JM PVC Fleece Backed / Hot asphalt	-60.0
S-89.	Min. 22 ga., type B, Grade 80 steel	One or more layers, min. 1-inch, any combination	Prelim. Attached	DynaFast 180 S	High Load Fasteners and High Load Plates	6-inch o.c. within the min. 4-inch wide, heat-welded side laps.	None	JM PVC Fleece Backed / JM-RSUA, 36-inch o.c.	-142.5

TABLE 3A: STRUCTURAL CONCRETE DECKS - NEW CONSTRUCTION OR REROOF (TEAR-OFF)

SYSTEM TYPE A-1: BONDED INSULATION, BONDED ROOF COVER

NOTE: REFER TO NOTE 18 FOR VAPOR BARRIER OPTIONS

System No.	Deck (Note 1)	Primer	Base Insulation Layer		Top Insulation Layer		Roof Cover		MDP (psf)
			Type	Attach	Type	Attach	Base Ply(s) (Note 17)	Roof Cover / Adhesive (Note 16)	
JM PVC APPLICATIONS:									
C-1.	Min. 2,500 psi structural concrete	None	One or more layers, min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, JM ISO 3, 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF	JM-OSFA	Min. 0.25-inch Invinsa Roof Board	JM-OSFA or MBR-BA	None	JM PVC / TACC LA 432, TACC FA 636, JM PVC MA-WB, JM PVC MA-LVOC	-75.0
C-2.	Min. 2,500 psi structural concrete	None	(Optional) One or more layers, min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, JM ISO 3, 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF	JM-OSFA	Min. 1.5-inch Invinsa Foam	JM-OSFA	None	JM PVC / TACC LA 432, TACC FA 636, JM PVC MA-WB, JM PVC MA-LVOC	-75.0
C-3.	Min. 2,500 psi structural concrete	None	One or more layers, min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, JM ISO 3, 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF	JM-RSUA	Min. 0.25-inch Invinsa Roof Board	JM-RSUA	None	JM PVC / TACC LA 432, TACC FA 636, JM PVC MA-WB, JM PVC MA-LVOC	-67.5
C-4.	Min. 2,500 psi structural concrete	None	(Optional) One or more layers, min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, JM ISO 3, 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF	JM-RSUA	Min. 1.5-inch Invinsa Foam	JM-RSUA	None	JM PVC / TACC LA 432, TACC FA 636, JM PVC MA-WB, JM PVC MA-LVOC	-67.5
C-5.	Min. 2,500 psi structural concrete	None	Min. 1.5-inch ENRGY 3 CGF, ValuTherm CGF, ENRGY 3 25 PSI CGF, ValuTherm 25 PSI CGF	JM-RSUA	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	JM-RSUA	None	JM PVC / JM PVC MA-LVOC	-292.5
C-6.	Min. 2,500 psi structural concrete	None	One or more layers, min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, JM ISO 3, 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF	UIA-TWO-PART	Min. 0.25-inch Invinsa Roof Board	UIA-TWO-PART or MBR-BA	None	JM PVC / TACC LA 432, TACC FA 636, JM PVC MA-WB, JM PVC MA-LVOC	-105.0
C-7.	Min. 2,500 psi structural concrete	None	(Optional) One or more layers, min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, JM ISO 3, 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF	UIA-TWO-PART	Min. 1.5-inch Invinsa Foam	UIA-TWO-PART	None	JM PVC / TACC LA 432, TACC FA 636, JM PVC MA-WB, JM PVC MA-LVOC	-105.0
C-8.	Min. 2,500 psi structural concrete	None	One or more layers, min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, JM ISO 3, 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF	UIA-TWO-PART	Min. 0.25-inch DEXcell FA Glass Mat Roof Board or min. 7/16-inch DEXcell Cement Roof Board	UIA-TWO-PART	None	JM PVC / JM PVC MA-WB, JM PVC MA-LVOC	-120.0

TABLE 3A: STRUCTURAL CONCRETE DECKS - NEW CONSTRUCTION OR REROOF (TEAR-OFF)

SYSTEM TYPE A-1: BONDED INSULATION, BONDED ROOF COVER

NOTE: REFER TO NOTE 18 FOR VAPOR BARRIER OPTIONS

System No.	Deck (Note 1)	Primer	Base Insulation Layer		Top Insulation Layer		Roof Cover		MDP (psf)
			Type	Attach	Type	Attach	Base Ply(s) (Note 17)	Roof Cover / Adhesive (Note 16)	
C-9.	Min. 2,500 psi structural concrete	None	Min. 1.5-inch ENRGY 3, ENRGY 3 25 PSI, ValuTherm	UIA-TWO-PART	Min. 0.25-inch DEXcell FA Glass Mat Roof Board or min. 7/16-inch DEXcell Cement Roof Board	UIA-TWO-PART	None	JM PVC / JM PVC MA-LVOC	-390.0
C-10.	Min. 2,500 psi structural concrete	None	One or more layers, min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, JM ISO 3, 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF	CR-20	Min. 0.25-inch Invinsa Roof Board	CR-20 or MBR-BA	None	JM PVC / TACC LA 432, TACC FA 636, JM PVC MA-WB, JM PVC MA-LVOC	-112.5
JM PVC FLEECE BACKED APPLICATIONS:									
C-11.	Min. 2,500 psi structural concrete	None	Min. 1.5-inch ENRGY 3, ENRGY 3.E, ENRGY 3.E 25 PSI, ValuTherm, JM ISO 3, R-Panel, ENRGY 3 25 PSI, ValuTherm 25 PSI, R-Panel 25 PSI, ENRGY 3 AGF, ValuTherm AGF, ENRGY 3 25 PSI AGF, ValuTherm 25 PSI AGF, ENRGY 3 CGF, ValuTherm CGF, ENRGY 3 25 PSI CGF, ValuTherm 25 PSI CGF, ENRGY 3 FR, ENRGY 3 25 PSI FR	JM-OSFA	(Optional) Additional layers of base insulation	JM-OSFA	None	JM PVC Fleece Backed / JM-RSUA or JM-SP-UIA-TWO-PART, 4-inch o.c.	-112.5
C-12.	Min. 2,500 psi structural concrete	None	Min. 1.5-inch ENRGY 3, ValuTherm	JM-RSUA	(Optional) Additional layers of base insulation	JM-RSUA	None	JM PVC Fleece Backed / JM-RSUA, 12-inch o.c.	-67.5
C-13.	Min. 2,500 psi structural concrete	None	Min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, JM ISO 3, 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF	JM-RSUA	Min. 0.5-inch Invinsa Roof Board or SECUROCK Gypsum-Fiber Roof Board	JM-RSUA	None	JM PVC Fleece Backed / JM-RSUA, 12-inch o.c.	-67.5
C-14.	Min. 2,500 psi structural concrete	None	Min. 1.5-inch ENRGY 3, ENRGY 3.E, ENRGY 3.E 25 PSI, ValuTherm, JM ISO 3, R-Panel, ENRGY 3 25 PSI, ValuTherm 25 PSI, R-Panel 25 PSI, ENRGY 3 AGF, ValuTherm AGF, ENRGY 3 25 PSI AGF, ValuTherm 25 PSI AGF, ENRGY 3 CGF, ValuTherm CGF, ENRGY 3 25 PSI CGF, ValuTherm 25 PSI CGF, ENRGY 3 FR, ENRGY 3 25 PSI FR	JM-RSUA	(Optional) Additional layers of base insulation	JM-RSUA	None	JM PVC Fleece Backed / JM-RSUA or JM-SP-UIA-TWO-PART, 4-inch o.c.	-112.5
C-15.	Min. 2,500 psi structural concrete	None	Min. 1.5-inch ENRGY 3, ValuTherm	UIA-TWO-PART	(Optional) Additional layers of base insulation	UIA-TWO-PART	None	JM PVC Fleece Backed / JM-RSUA, 12-inch o.c.	-67.5
C-16.	Min. 2,500 psi structural concrete	None	Min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, JM ISO 3, 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF	UIA-TWO-PART	Min. 0.5-inch Invinsa Roof Board or SECUROCK Gypsum-Fiber Roof Board	UIA-TWO-PART	None	JM PVC Fleece Backed / JM-RSUA, 12-inch o.c.	-67.5

TABLE 3A: STRUCTURAL CONCRETE DECKS - NEW CONSTRUCTION OR REROOF (TEAR-OFF)

SYSTEM TYPE A-1: BONDED INSULATION, BONDED ROOF COVER

NOTE: REFER TO NOTE 18 FOR VAPOR BARRIER OPTIONS

System No.	Deck (Note 1)	Primer	Base Insulation Layer		Top Insulation Layer		Roof Cover		MDP (psf)
			Type	Attach	Type	Attach	Base Ply(s) (Note 17)	Roof Cover / Adhesive (Note 16)	
C-17.	Min. 2,500 psi structural concrete	None	Min. 1.5-inch ENRGY 3, ENRGY 3.E, ENRGY 3.E 25 PSI, ValuTherm, JM ISO 3, R-Panel, ENRGY 3 25 PSI, ValuTherm 25 PSI, R-Panel 25 PSI, ENRGY 3 AGF, ValuTherm AGF, ENRGY 3 25 PSI AGF, ValuTherm 25 PSI AGF, ENRGY 3 CGF, ValuTherm CGF, ENRGY 3 25 PSI CGF, ValuTherm 25 PSI CGF, ENRGY 3 FR, ENRGY 3 25 PSI FR	UIA-TWO-PART	(Optional) Additional layers of base insulation	UIA-TWO-PART	None	JM PVC Fleece Backed / JM-RSUA or JM-SP-UIA-TWO-PART, 4-inch o.c.	-112.5
C-18.	Min. 2,500 psi structural concrete	None	One or more layers, min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, JM ISO 3, 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF	UIA-TWO-PART	Min. 0.25-inch DEXcell FA Glass Mat Roof Board or min. 7/16-inch DEXcell Cement Roof Board	UIA-TWO-PART	None	JM PVC Fleece Backed / JM PVC MA-WB	-120.0
C-19.	Min. 2,500 psi structural concrete	None	Min. 1.5-inch ENRGY 3, ENRGY 3 25 PSI, ValuTherm	UIA-TWO-PART	Min. 0.25-inch DEXcell FA Glass Mat Roof Board or min. 7/16-inch DEXcell Cement Roof Board	UIA-TWO-PART	None	JM PVC Fleece Backed / JM PVC MA-WB	-390.0
HYBRID JM PVC FLEECE BACKED APPLICATIONS:									
C-20.	Min. 2,500 psi structural concrete	ASTM D41	Min. 0.75-inch FescoBoard or DuraBoard (homogeneous)	HA	(Optional) Min. 0.75-inch FescoBoard or DuraBoard (homogeneous)	HA	BP-AA, SBS-AA	JM PVC Fleece Backed / hot asphalt	-167.5
C-21.	Min. 2,500 psi structural concrete	ASTM D41	Min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF	HA	Min. 0.5-inch Retro-Fit Board or min. 0.75-inch Fesco Board or DuraBoard	HA	BP-AA, SBS-AA	JM PVC Fleece Backed / hot asphalt	-217.5
C-22.	Min. 2,500 psi structural concrete	ASTM D41	(Optional) Min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF	HA	Min. 1.5-inch Fesco Foam or DuraFoam	HA	BP-AA, SBS-AA	JM PVC Fleece Backed / hot asphalt	-217.5
C-23.	Min. 2,500 psi structural concrete	ASTM D41	Min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF	HA	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	HA	BP-AA, SBS-AA, SBS-TA	JM PVC Fleece Backed / hot asphalt	-217.5
C-24.	Min. 2,500 psi structural concrete	None	(Optional) Min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF	UIA	Min. 0.75-inch FescoBoard (homogeneous)	UIA or MBR-BA, 12-inch o.c.	BP-AA, SBS-AA	JM PVC Fleece Backed / hot asphalt	-112.5
C-25.	Min. 2,500 psi structural concrete	None	Min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF	JM-RSUA	Min. 0.5-inch Retro-Fit Board	JM-RSUA	BP-AA, SBS-AA	JM PVC Fleece Backed / hot asphalt	-105.0
C-26.	Min. 2,500 psi structural concrete	None	Min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF	JM-RSUA	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	JM-RSUA	BP-AA, SBS-AA	JM PVC Fleece Backed / hot asphalt	-217.5
C-27.	Min. 2,500 psi structural concrete	None	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	JM-RSUA	None	N/A	DynaBase HW, torch-applied	JM PVC Fleece Backed / JM-RSUA, 4-inch o.c.	-112.5

TABLE 3A: STRUCTURAL CONCRETE DECKS - NEW CONSTRUCTION OR REROOF (TEAR-OFF)

SYSTEM TYPE A-1: BONDED INSULATION, BONDED ROOF COVER

NOTE: REFER TO NOTE 18 FOR VAPOR BARRIER OPTIONS

System No.	Deck (Note 1)	Primer	Base Insulation Layer		Top Insulation Layer		Roof Cover		MDP (psf)
			Type	Attach	Type	Attach	Base Ply(s) (Note 17)	Roof Cover / Adhesive (Note 16)	
C-28.	Min. 2,500 psi structural concrete	None	(Optional) Min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF	UIA-TWO-PART	Min. 0.75-inch FescoBoard (homogeneous)	UIA-TWO-PART	BP-AA, SBS-AA	JM PVC Fleece Backed / hot asphalt	-217.5
C-29.	Min. 2,500 psi structural concrete	None	(Optional) Min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF	UIA-TWO-PART	Min. 0.5-inch Retro-Fit Board or DuraBoard	UIA-TWO-PART	BP-AA, SBS-AA	JM PVC Fleece Backed / hot asphalt	-217.5
C-30.	Min. 2,500 psi structural concrete	None	Min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF	UIA-TWO-PART	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	UIA-TWO-PART	BP-AA, SBS-AA	JM PVC Fleece Backed / hot asphalt	-217.5
C-31.	Min. 2,500 psi structural concrete	None	Min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF	CR-20	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	CR-20	BP-AA, SBS-AA, SBS-TA	JM PVC Fleece Backed / hot asphalt	-217.5

TABLE 3B: STRUCTURAL CONCRETE DECKS - NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER SYSTEM TYPE C-2: MECHANICALLY ATTACHED INSULATION, PLATE-BONDED ROOF COVER						
System No.	Deck (Note 1)	Insulation Layer	Attach		Roof Cover	MDP (psf)
			Fasteners	Density		
C-32.	Min. 2,500 psi structural concrete	One or more layers, any combination	High Load Fasteners with JM PVC RhinoPlates	1 per 5.33 ft² (6 parts per 4 x 8 ft board)	JM PVC or JM PVC SD Plus bonded to JM PVC RhinoPlates with RhinoPlates with RhinoBond Portable Bonding Tool, per manufacturer's published instructions.	-45.0
C-33.	Min. 2,500 psi structural concrete	One or more layers, any combination	High Load Fasteners with JM PVC RhinoPlates	1 per 4 ft² (8 parts per 4 x 8 ft board)	JM PVC or JM PVC SD Plus bonded to JM PVC RhinoPlates with RhinoPlates with RhinoBond Portable Bonding Tool, per manufacturer's published instructions.	-67.5
C-34.	Min. 2,500 psi structural concrete	One or more layers, any combination	High Load Fasteners with JM PVC RhinoPlates	1 per 2.13 ft² (15 parts per 4 x 8 ft board) Fasteners are 6-, 24- and 42-inches from the board's long edge and 12-, 30-, 48-, 66- and 84-inches from the board's short edge.	JM PVC or JM PVC SD Plus bonded to JM PVC RhinoPlates with RhinoBond Portable Bonding Tool, per manufacturer's published instructions.	-90.0

TABLE 3C: STRUCTURAL CONCRETE DECKS - NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER SYSTEM TYPE D: INSULATED, MECHANICALLY ATTACHED ROOF COVER								
System No.	Deck (Note 1)	Insulation			Roof Cover			MDP (psf)
		Base Layer	Top Layer	Attach	Membrane	Fasteners	Attach	
C-35.	Min. 2,500 psi structural concrete	One or more layers min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, JM ISO 3, 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF	(Optional) Min. 0.25-inch Invinsa Roof Board	Prelim attach	Min. 50 mil JM PVC	High Load Fasteners with High Load Plates	18-inch o.c. within 5-inch wide laps spaced 73-inch o.c. Laps sealed with 2-inch heat weld.	-30.0
C-36.	Min. 2,500 psi structural concrete	One or more layers min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, JM ISO 3, 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF	(Optional) Min. 0.25-inch Invinsa Roof Board	Prelim attach	Min. 50 mil JM PVC	High Load Fasteners with High Load Plates	6-inch o.c. within 6-inch wide laps spaced 72-inch o.c. Laps sealed with 2-inch heat weld.	-30.0
C-37.	Min. 2,500 psi structural concrete	One or more layers min. 1-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, JM ISO 3, 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF	(Optional) Min. 0.25-inch Invinsa Roof Board, Dens Deck or SECUROCK Gypsum-Fiber Roof Board	Prelim. attached	Min. 50 mil JM PVC	High Load Fasteners or JM Structural Concrete Deck Fastener with Extra 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.	-37.5
C-38.	Min. 2,500 psi structural concrete	One or more layers min. 0.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, JM ISO 3, 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF	(Optional) Min. 0.25-inch Invinsa Roof Board, Dens Deck or SECUROCK Gypsum-Fiber Roof Board	Prelim. attached	Min. 50 mil JM PVC	High Load Fasteners or JM Structural Concrete Deck Fastener with High Load Plates	6-inch o.c. within 6-inch wide laps spaced 72-inch o.c. Laps sealed with 1.5-inch heat weld.	-45.0

TABLE 3C: STRUCTURAL CONCRETE DECKS - NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER SYSTEM TYPE D: INSULATED, MECHANICALLY ATTACHED ROOF COVER								
System No.	Deck (Note 1)	Insulation			Roof Cover			MDP (psf)
		Base Layer	Top Layer	Attach	Membrane	Fasteners	Attach	
C-39.	Min. 2,500 psi structural concrete	One or more layers min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, JM ISO 3, 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF	(Optional) Min. 0.25-inch Invinsa Roof Board	Prelim attach	Min. 50 mil JM PVC	High Load Fasteners with High Load Plates	18-inch o.c. within 6-inch wide laps spaced 72-inch o.c. Laps sealed with 2-inch heat weld.	-45.0
C-40.	Min. 2,500 psi structural concrete	One or more layers min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, JM ISO 3, 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF	(Optional) Min. 0.25-inch Invinsa Roof Board	Prelim attach	Min. 50 mil JM PVC	High Load Fasteners with High Load Plates	12-inch o.c. within 5.5-inch wide laps spaced 144-inch o.c. Laps sealed with 2-inch heat weld.	-45.0
C-41.	Min. 2,500 psi structural concrete	One or more layers min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, JM ISO 3, 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF	(Optional) Min. 0.25-inch Invinsa Roof Board	Prelim attach	Min. 60 mil JM PVC	High Load Fasteners with High Load Plates	12-inch o.c. within 5-inch wide laps spaced 73-inch o.c. Laps sealed with 2-inch heat weld.	-52.5
C-42.	Min. 2,500 psi structural concrete	One or more layers min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, JM ISO 3, 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF	(Optional) Min. 0.25-inch Invinsa Roof Board	Prelim attach	Min. 50 mil JM PVC	High Load Fasteners with High Load Plates	6-inch o.c. within 4.5-inch wide laps spaced 114-inch o.c. Laps sealed with 2-inch heat weld.	-60.0
C-43.	Min. 2,500 psi structural concrete	One or more layers min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, JM ISO 3, 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF	(Optional) Min. 0.25-inch Invinsa Roof Board	Prelim attach	Min. 60 mil JM PVC	High Load Fasteners with High Load Plates	6-inch o.c. within 6-inch wide laps spaced 72-inch o.c. Laps sealed with 2-inch heat weld.	-75.0

TABLE 3D: STRUCTURAL CONCRETE DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF) SYSTEM TYPE F: NON-INSULATED, BONDED ROOF COVER					
System No.	Deck (Note 1)	Primer	Roof Cover		MDP (psf)
			Base Ply(s) (Note 17)	Roof Cover / Adhesive (Note 16)	
C-44.	Min. 2,500 psi structural concrete	ASTM D41	BP-AA, SBS-AA	JM PVC Fleece Backed / hot asphalt	-217.5

TABLE 4A: LIGHTWEIGHT CONCRETE DECKS - NEW CONSTRUCTION OR REROOF (TEAR-OFF) SYSTEM TYPE A: BONDED INSULATION, BONDED ROOF COVER								
System No.	Deck (Note 1)	LWC (Note 15)	Base Insulation Layer		Coverboard		Roof Cover / Adhesive	MDP (psf)
			Type	Attach	Type	Attach		
LWC-1.	Min. 2,500 psi structural concrete	Min. 160 psi Elastizell Range II LWIC, min. 2 inch top coat thickness	One or more layers min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, JM ISO-3	UIA-TWO-PART	Min. 0.25-inch Invinsa Roof Board	UIA-TWO-PART	JM PVC / TACC LA 432, TACC FA 636, JM PVC MA-WB, JM PVC MA-LVOC	-105.0
LWC-2.	Min. 2,500 psi structural concrete	Min. 160 psi Elastizell Range II LWIC, min. 2 inch top coat thickness	(Optional) One or more layers min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, JM ISO-3	UIA-TWO-PART	Min. 1.5-inch Invinsa Foam	UIA-TWO-PART	JM PVC / TACC LA 432, TACC FA 636, JM PVC MA-WB, JM PVC MA-LVOC	-105.0
LWC-3.	Min. 2,500 psi structural concrete	Min. 200 psi Elastizell Range II, Mearlcrete or Celcore LWIC, min. 2 inch top coat thickness	One or more layers min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, JM ISO-3	CR-20	Min. 0.25-inch Invinsa Roof Board	CR-20	JM PVC / TACC LA 432, TACC FA 636, JM PVC MA-WB, JM PVC MA-LVOC	-112.5

TABLE 4B-1: LIGHTWEIGHT CONCRETE DECKS - NEW CONSTRUCTION OR REROOF (TEAR-OFF) SYSTEM TYPE F: LWC TO DECK, BONDED ROOF COVER					
System No.	Deck (Note 1)	LWC (Note 15)	Roof Cover		MDP (psf)
			Type	Attach	
LWC-4.	Min. 22 ga., Type BV, Grade 33 vented steel at max 6 ft spans	Min. 330 psi & MCRF 233.614 lbf with Trufast FM-90 or OMG 1.7" BSF. A 0.25-inch thick slurry of LWC followed by EPS (density 1.0 lb) firmly pressed into the slurry and min. 2-inch LWC pressed over the EPS board.	JM PVC Fleece Backed	JM PVC MA-WB	-90.0
LWC-5.	Min. 2,500 psi structural concrete	Min. 354 psi, min. 2" thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture with optional 1" thick, 1.0 pcf EPS holey board.	JM PVC Fleece Backed	JM PVC MA-WB	-367.5
LWC-6.	Min. 2,500 psi structural concrete	Min. 379 psi, min. 2" thick Concrecel Concrete, with optional 1" thick, 1.0 pcf EPS holey board and surfacing of Concrecel Curing Compound.	JM PVC Fleece Backed	MBR Low VOC Membrane Adhesive	-342.5
LWC-7.	Min. 22 ga., Type BV, Grade 33 vented steel or min. 2.500 psi concrete	Min. 213 psi, min. 2" thick Elastizell, min. 370 psi, min. 2" thick Concrecel Concrete or min. 380 psi, min. 2" thick Celcore Cellular Concrete with optional 1" thick, 1.0 pcf EPS holey board. Concrecel treated with Concrecel Curing Compound. Celcore treated with Celcore Curing Compound	JM PVC Fleece Backed	JM-RSUA, 12-inch o.c.	-67.5
LWC-8.	Min. 2,500 psi structural concrete	Min. 213 psi, min. 2" thick Elastizell with optional 1" thick, 1.0 pcf EPS holey board.	JM PVC Fleece Backed	JM-RSUA, 4-inch o.c. (full coverage)	-390.0
LWC-9.	Min. 2,500 psi structural concrete	Min. 370 psi, min. 2" thick Concrecel Concrete with optional 1" thick, 1.0 pcf EPS holey board and surfacing of Concrecel Curing Compound.	JM PVC Fleece Backed	JM-RSUA, 4-inch o.c. (full coverage)	-480.0
LWC-10.	Min. 2,500 psi structural concrete	Min. 380 psi, min. 2" thick Celcore Cellular Concrete with optional 1" thick, 1.0 pcf EPS holey board and surfacing of Celcore Curing Compound.	JM PVC Fleece Backed	JM-RSUA, 4-inch o.c. (full coverage)	-502.5

TABLE 4B-2: LIGHTWEIGHT CONCRETE DECKS - NEW CONSTRUCTION OR REROOF (TEAR-OFF) SYSTEM TYPE F: VAPOR BARRIER TO DECK, LWC TO VAPOR BARRIER, BONDED ROOF COVER						
System No.	Deck (Note 1)	Vapor Barrier	LWC (Note 15)	Roof Cover		MDP (psf)
				Type	Attach	
LWC-11.	Min. 2,500 psi structural concrete primed with ASTM D41 primer	DynaBase HW, torch-applied	Min. 213 psi, min. 2" thick Elastizell with optional 1" thick, 1.0 pcf EPS holey board.	JM PVC Fleece Backed	JM-RSUA, 4-inch o.c. (full coverage)	-85.0
LWC-12.	Min. 2,500 psi structural concrete primed with ASTM D41 primer	DynaBase HW, torch-applied	Min. 380 psi, min. 2" thick Celcore Cellular Concrete with optional 1" thick, 1.0 pcf EPS holey board and surfacing of Celcore Curing Compound.	JM PVC Fleece Backed	JM-RSUA, 4-inch o.c. (full coverage)	-262.5

TABLE 5A: CEMENTITIOUS WOOD FIBER DECKS - NEW CONSTRUCTION OR REROOF (TEAR-OFF) SYSTEM TYPE A: BONDED INSULATION, BONDED ROOF COVER							
System No.	Deck (Note 1)	Base Insulation Layer		Top Insulation Layer		Roof Cover / Adhesive	MDP (psf)
		Type	Attach	Type	Attach		
CWF-1.	Min. 2.5-inch Tectum Plank or Tectum LS Plank	One or more layers min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, JM ISO-3	UIA-TWO-PART	Min. 0.25-inch Invinsa Roof Board	UIA-TWO-PART	JM PVC / TACC LA 432, TACC FA 636, JM PVC MA-WB, JM PVC MA-LVOC	-45.0
CWF-2.	Min. 2.5-inch Tectum Plank or Tectum LS Plank	(Optional) One or more layers min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, JM ISO-3	UIA-TWO-PART	Min. 1.5-inch Invinsa Foam	UIA-TWO-PART	JM PVC / TACC LA 432, TACC FA 636, JM PVC MA-WB, JM PVC MA-LVOC	-45.0
CWF-3.	Min. 2.5-inch Tectum Plank or Tectum LS Plank	One or more layers min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, JM ISO-3	CR-20	Min. 0.25-inch Invinsa Roof Board	CR-20	JM PVC / TACC LA 432, TACC FA 636, JM PVC MA-WB, JM PVC MA-LVOC	-52.5

TABLE 5B: CEMENTITIOUS WOOD FIBER DECKS - NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER SYSTEM TYPE C: MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER							
System No.	Deck (Note 1)	Base Insulation Layer	Top Insulation Layer			Roof Cover / Adhesive	MDP (psf)
			Type	Fasteners	Attach		
CWF-4.	Min. 2.5-inch Tectum Plank or Tectum LS Plank	(Optional) Min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF loose laid	Min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF loose laid	UltraLok Fasteners (min. 1" embedment)	1 per 1.78 ft2	JM PVC / TACC LA 432, JM PVC MA-WB, JM PVC MA-LVOC	-37.5*
CWF-5.	Min. 2.5-inch Tectum Plank or Tectum LS Plank	(Optional) Min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF loose laid	Min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF loose laid	UltraLok Fasteners (min. 1" embedment)	1 per 1.33 ft2	JM PVC / TACC LA 432, JM PVC MA-WB, JM PVC MA-LVOC	-45.0*

TABLE 6A: GYPSUM DECKS - REROOF (TEAR-OFF) SYSTEM TYPE A: BONDED INSULATION, BONDED ROOF COVER							
System No.	Deck (Notes 1 & 12)	Base Insulation Layer		Top Insulation Layer		Roof Cover / Adhesive	MDP (psf)
		Type	Attach	Type	Attach		
G-1.	Existing poured gypsum or gypsum plank	One or more layers min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF,	JM-OSFA	Min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF,	JM-OSFA	JM PVC Fleece Backed / hot asphalt	-45.0
G-2.	Existing poured gypsum or gypsum plank	One or more layers min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, JM ISO-3	UIA-TWO-PART	Min. 0.25-inch Invinsa Roof Board	UIA-TWO-PART	JM PVC / TACC LA 432, TACC FA 636, JM PVC MA-WB, JM PVC MA-LVOC	-105.0
G-3.	Existing poured gypsum or gypsum plank	(Optional) One or more layers min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, JM ISO-3	UIA-TWO-PART	Min. 1.5-inch Invinsa Foam	UIA-TWO-PART	JM PVC / TACC LA 432, TACC FA 636, JM PVC MA-WB, JM PVC MA-LVOC	-105.0
G-4.	Existing poured gypsum or gypsum plank	One or more layers min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, JM ISO-3	CR-20	Min. 0.25-inch Invinsa Roof Board	CR-20	JM PVC / TACC LA 432, TACC FA 636, JM PVC MA-WB, JM PVC MA-LVOC	-112.5

TABLE 6B: GYPSUM DECKS - REROOF (TEAR-OFF) OR RECOVER SYSTEM TYPE C: MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER							
System No.	Deck (Note 1)	Base Insulation Layer	Top Insulation Layer			Roof Cover / Adhesive	MDP (psf)
			Type	Fasteners	Attach		
G-5.	Existing poured gypsum or gypsum plank	(Optional) Min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF loose laid	Min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF loose laid	UltraLok Fasteners (min. 1" embedment)	1 per 1.78 ft2	JM PVC / TACC LA 432, JM PVC MA-WB, JM PVC MA-LVOC	-37.5*
G-6.	Existing poured gypsum or gypsum plank	(Optional) Min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF loose laid	Min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm 25 PSI AGF, ValuTherm 25 PSI CGF loose laid	UltraLok Fasteners (min. 1" embedment)	1 per 1.33 ft2	JM PVC / TACC LA 432, JM PVC MA-WB, JM PVC MA-LVOC	-45.0*

TABLE 7A: RECOVER APPLICATIONS SYSTEM TYPE A: BONDED INSULATION, BONDED ROOF COVER								
System No.	Substrate (Notes 1 & 12)	Base Insulation Layer		Top Insulation Layer		Roof Cover		MDP (psf)
		Type	Attach	Type	Attach	Base Ply(s) (Note 17)	Roof Cover / Adhesive (Note 16)	
JM PVC APPLICATIONS:								
R-1.	Existing asphaltic BUR or mineral surface cap sheet	Min. 0.25-inch Invinsa Roof Board	MBR-BA, full coverage at 1.5 gal/square	None	N/A	None	JM PVC / TACC LA 432, TACC FA 636, JM PVC MA-WB, JM PVC MA-LVOC	-112.5
R-2.	Existing asphaltic BUR or mineral surface cap sheet	One or more layers min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, JM ISO-3	UIA-TWO-PART	Min. 0.25-inch Invinsa Roof Board	UIA-TWO-PART	None	JM PVC / TACC LA 432, TACC FA 636, JM PVC MA-WB, JM PVC MA-LVOC	-105.0
R-3.	Existing asphaltic BUR or mineral surface cap sheet	(Optional) One or more layers min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, JM ISO-3	UIA-TWO-PART	Min. 1.5-inch Invinsa Foam	UIA-TWO-PART	None	JM PVC / TACC LA 432, TACC FA 636, JM PVC MA-WB, JM PVC MA-LVOC	-105.0
R-4.	Existing asphaltic BUR or mineral surface cap sheet	One or more layers min. 1.5-inch ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, JM ISO-3	CR-20	Min. 0.25-inch Invinsa Roof Board	CR-20	None	JM PVC / TACC LA 432, TACC FA 636, JM PVC MA-WB, JM PVC MA-LVOC	-112.5
HYBRID JM PVC FLEECE BACKED APPLICATIONS:								
R-5.	Existing smooth-surfaced, SBS modified bitumen	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	JM-RSUA	None	N/A	DynaBase HW, torch-applied	JM PVC Fleece Backed / JM-RSUA, 4-inch o.c.	-112.5

TABLE 7B: RECOVER OVER EXISTING METAL PANEL ROOF SYSTEM TYPE C-2: MECHANICALLY ATTACHED INSULATION, PLATE-BONDED ROOF COVER						
System No.	Deck (Note 1)	Insulation Layer	Attach		Roof Cover	MDP (psf)
			Fasteners	Density		
R-6.	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, 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, JM ISO 3 or ValuTherm between ribs or over panels of existing non-structural metal roof followed by additional base layer or Min. 0.25-inch Dens Deck, Invinsa Roof Board or SECUROCK Gypsum-Fiber Roof Board or min. 7/16-inch OSB	Preliminary Securement: UltraFast Plate-Bonded Securement: JM Purlin Fasteners with JM PVC RhinoPlates	Insulation preliminarily secured with fasteners/plates in Note 2. JM Purlin Fasteners with JM PVC Rhino Plates spaced 6-inch o.c. at every-other structural steel support (max. 120-inch o.c.)	Min. 60-mil JM PVC bonded to JM PVC RhinoPlates with RhinoBond Portable Bonding Tool, per manufacturer's published instructions.	-45.0
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, 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, JM ISO 3 or ValuTherm between ribs or over panels of existing non-structural metal roof followed by additional base layer or Min. 0.25-inch Dens Deck, Invinsa Roof Board or SECUROCK Gypsum-Fiber Roof Board or min. 7/16-inch OSB	Preliminary Securement: UltraFast Plate-Bonded Securement: JM Purlin Fasteners with JM PVC RhinoPlates	Insulation preliminarily secured with fasteners/plates in Note 2. JM Purlin Fasteners with JM PVC Rhino Plates spaced 18-inch o.c. at every structural steel support (max. 60-inch o.c.)	Min. 60-mil JM PVC bonded to JM PVC RhinoPlates with RhinoBond Portable Bonding Tool, per manufacturer's published instructions.	-45.0
R-8.	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, 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, JM ISO 3 or ValuTherm between ribs or over panels of existing non-structural metal roof followed by additional base layer or Min. 0.25-inch Dens Deck, Invinsa Roof Board or SECUROCK Gypsum-Fiber Roof Board or min. 7/16-inch OSB	Preliminary Securement: UltraFast Plate-Bonded Securement: JM Purlin Fasteners with JM PVC RhinoPlates	Insulation preliminarily secured with fasteners/plates in Note 2. JM Purlin Fasteners with JM PVC Rhino Plates spaced 12-inch o.c. at every structural steel support (max. 60-inch o.c.)	Min. 60-mil JM PVC bonded to JM PVC RhinoPlates with RhinoBond Portable Bonding Tool, per manufacturer's published instructions.	-67.5
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, 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, JM ISO 3 or ValuTherm between ribs or over panels of existing non-structural metal roof followed by additional base layer or Min. 0.25-inch Dens Deck, Invinsa Roof Board or SECUROCK Gypsum-Fiber Roof Board or min. 7/16-inch OSB	Preliminary Securement: UltraFast Plate-Bonded Securement: JM Purlin Fasteners with JM PVC RhinoPlates	Insulation preliminarily secured with fasteners/plates in Note 2. JM Purlin Fasteners with JM PVC Rhino Plates spaced 6-inch o.c. at every structural steel support (max. 60-inch o.c.)	Min. 60-mil JM PVC bonded to JM PVC RhinoPlates with RhinoBond Portable Bonding Tool, per manufacturer's published instructions.	-120.0

TABLE 7C: RECOVER OVER EXISTING METAL PANEL ROOF SYSTEM TYPE D: INSULATED, MECHANICALLY ATTACHED ROOF COVER								
System No.	Deck (Note 1)	Insulation			Roof Cover			MDP (psf)
		Base Layer	Top Layer	Attach	Membrane	Fasteners	Attach	
R-10.	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, 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, JM ISO 3 or ValuTherm between ribs or over panels of existing non-structural metal roof	Additional base layer or Min. 0.25-inch Dens Deck, Invinsa Roof Board or SECUROCK Gypsum-Fiber Roof Board or min. 7/16-inch OSB	Prelim. Attach	JM PVC	JM Purlin Fasteners with High Load Plates	Fasteners spaced 18-inch o.c. within 5-inch wide laps engage structural supports spaced 60-inch o.c. Laps sealed with 1.5-inch heat weld.	-45.0
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, 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, JM ISO 3 or ValuTherm between ribs or over panels of existing non-structural metal roof	Additional base layer or Min. 0.25-inch Dens Deck, Invinsa Roof Board or SECUROCK Gypsum-Fiber Roof Board or min. 7/16-inch OSB	Prelim. Attach	JM PVC	JM Purlin Fasteners with High Load 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.	-52.5
R-12.	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, 25 PSI, ENRGY 3 25 PSI AGF, ENRGY 3 25 PSI CGF, JM ISO 3 or ValuTherm between ribs or over panels of existing non-structural metal roof	Additional base layer or Min. 0.25-inch Dens Deck, Invinsa Roof Board or SECUROCK Gypsum-Fiber Roof Board or min. 7/16-inch OSB	Prelim. Attach	JM PVC	JM Purlin Fasteners with High Load 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.	-75.0

TABLE 7D: RECOVER APPLICATIONS SYSTEM TYPE F: NON-INSULATED, BONDED ROOF COVER				
System No.	Substrate (Notes 1 & 12)	Roof Cover		MDP (psf)
		Type	Attach	
R-13.	Existing asphaltic granule surface cap sheet	JM PVC Fleece Backed	JM-RSUA, 12-inch o.c.	-45.0