



EVALUATION REPORT

FLORIDA BUILDING CODE, 7TH EDITION (2020)

Manufacturer: JOHNS MANVILLE CORPORATION
 P.O. Box 5108
 Denver, CO 80217
 (303) 978-2478
www.jm.com

Issued April 24, 2023

Manufacturing Plants: Milan, OH

Quality Assurance: UL LLC (QUA9625)

SCOPE

Category: Roofing
Subcategory: Single Ply Roof System
Code Edition: Florida Building Code, 7th Edition (2020) including High-Velocity Hurricane Zones (HVHZ)
Code Sections: 1504.3.1, 1504.4, 1507.12.2,
Properties: Wind Resistance, Physical Properties, Impact Resistance

PRODUCT DESCRIPTION

Products	Specification	Description
JM EPDM NR - 45	ASTM D 4637, Type I	Nominal 45-mil thick ethylene propylene diene monomer, single-ply roof membrane
JM EPDM NR - 60	ASTM D 4637, Type I	Nominal 60-mil thick ethylene propylene diene monomer, single-ply roof membrane
JM EPDM NR - 90	ASTM D 4637, Type I	Nominal 90-mil thick ethylene propylene diene monomer, single-ply roof membrane
JM EPDM R - 45	ASTM D 4637, Type II	Nominal 45-mil thick ethylene propylene diene monomer, single-ply roof membrane with denier polyester mat reinforcement
JM EPDM R - 60	ASTM D 4637, Type II	Nominal 60-mil thick ethylene propylene diene monomer, single-ply roof membrane with denier polyester mat reinforcement
JM EPDM R - 75	ASTM D 4637, Type II	Nominal 75-mil thick ethylene propylene diene monomer, single-ply roof membrane with denier polyester mat reinforcement
JM EPDM NR FIT - 45	ASTM D 4637, Type I	Nominal 45-mil thick ethylene propylene diene monomer, single-ply roof membrane with factory in-seam tape
JM EPDM NR FIT - 60	ASTM D 4637, Type I	Nominal 60-mil thick ethylene propylene diene monomer, single-ply roof membrane with factory in-seam tape
JM EPDM NR FIT - 90	ASTM D 4637, Type I	Nominal 90-mil thick ethylene propylene diene monomer, single-ply roof membrane with factory in-seam tape
JM EPDM R FIT - 60	ASTM D 4637, Type II	Nominal 60-mil thick ethylene propylene diene monomer, single-ply roof membrane with factory in-seam tape and denier polyester mat reinforcement
JM EPDM R FIT - 75	ASTM D 4637, Type II	Nominal 75-mil thick ethylene propylene diene monomer, single-ply roof membrane with factory in-seam tape and denier polyester mat reinforcement

REFERENCES

<u>Entity</u>	<u>Report No.</u>	<u>Standard</u>
FM Approvals (TST1867)	3018732	FM 4470 (2016)
FM Approvals (TST1867)	3043302	FM 4470 (2016)
FM Approvals (TST1867)	3044619	FM 4470 (2016)
FM Approvals (TST1867)	3046790	FM 4470 (2016)
FM Approvals (TST1867)	3052787	FM 4470 (2016)
FM Approvals (TST1867)	3054215	FM 4470 (2016)
FM Approvals (TST1867)	3057904	FM 4470 (2016)
FM Approvals (TST1867)	3058326	FM 4470 (2016)
FM Approvals (TST1867)	3058681	FM 4470 (2016)
FM Approvals (TST1867)	3063526	FM 4470 (2016)
FM Approvals (TST1867)	PR450753	FM 4470 (2016)
FM Approvals (TST1867)	PR451542	FM 4470 (2016)
FM Approvals (TST1867)	PR451795	FM 4470 (2016)
FM Approvals (TST1867)	PR452385	FM 4470 (2016)
FM Approvals (TST1867)	PR453717	FM 4470 (2016)
FM Approvals (TST1867)	PR453769	FM 4470 (2016)
FM Approvals (TST1867)	PR454134	FM 4470 (2016)
FM Approvals (TST1867)	PR454167	FM 4470 (2016)
FM Approvals (TST1867)	PR454361	FM 4470 (2016)
FM Approvals (TST1867)	PR454859	FM 4470 (2016)
FM Approvals (TST1867)	PR455671	FM 4470 (2016)
FM Approvals (TST1867)	PR459758	FM 4470 (2016)
FM Approvals (TST1867)	PR460648	FM 4470 (2016)
FM Approvals (TST1867)	PR461495	FM 4470 (2016)
FM Approvals (TST1867)	RR221434	FM 4470 (2016)
FM Approvals (TST1867)	RR224220	FM 4470 (2016)
FM Approvals (TST1867)	RR224581	FM 4470 (2016)
FM Approvals (TST1867)	RR228007	FM 4470 (2016)
FM Approvals (TST1867)	RR228035	FM 4470 (2016)
FM Approvals (TST1867)	RR231410	FM 4470 (2016)
FM Approvals (TST1867)	RR231509	FM 4470 (2016)
FM Approvals (TST1867)	RR231509	FM 4470 (2016)
FM Approvals (TST1867)	RR232746	FM 4470 (2016)
FM Approvals (TST1867)	RR233094	FM 4470 (2016)
FM Approvals (TST1867)	RR460477	FM 4470 (2016)
FM Approvals (TST1867)	RR234750	FM 4470 (2016)
FM Approvals (TST1867)	RR234751	FM 4470 (2016)
FM Approvals (TST1867)	RR236242	FM 4470 (2016)
FM Approvals (TST1867)	3062025	FM 4470 (2016)
PRI Construction Materials Technologies (TST5878)	JMC-088-02-01	ASTM D 1876 (2008); TAS 117(A&B) (1995); TAS 114 (2011); FM 4474 (2011)
PRI Construction Materials Technologies (TST5878)	JMC-246-02-01	FM 4474(B) (2011); TAS 114(D) (2011)
PRI Construction Materials Technologies (TST5878)	JMC-359-02-01	FM 4474 (2011); TAS 114(J) (2011)
PRI Construction Materials Technologies (TST5878)	JMC-359-02-02	ASTM D4637/D4637M (2014e1)
PRI Construction Materials Technologies (TST5878)	JMC-359-02-02	ASTM D4637/D4637M (2014e1)
PRI Construction Materials Technologies (TST5878)	507T0004	FM 4474(D) (2011); TAS 114(J) (2011)
PRI Construction Materials Technologies (TST5878)	507T0009	FM 4474(C) (2011)
PRI Construction Materials Technologies (TST5878)	507T0011	FM 4474(D) (2011); TAS 114(J) (2011)
PRI Construction Materials Technologies (TST5878)	507T0031	FM 4474(C) (2011)
PRI Construction Materials Technologies (TST5878)	507T0153B	FM 4474(C) (2011)
PRI Construction Materials Technologies (TST5878)	507T0199	TAS 114(D) (2011)
PRI Construction Materials Technologies (TST5878)	507T0193	FM 4474(D) (2011); TAS 114(J) (2011)
PRI Construction Materials Technologies (TST5878)	507T0217.1	FM 4474(D) (2011)
PRI Construction Materials Technologies (TST5878)	507T0218	FM 4474(C) (2011)
PRI Construction Materials Technologies (TST5878)	507T0234.1	FM 4474 (D)(2011); TAS 114(J) (2011)
PRI Construction Materials Technologies (TST5878)	507T0256A	FM 4474(C) (2011)
PRI Construction Materials Technologies (TST5878)	507T0256B	FM 4474(C) (2011)
PRI Construction Materials Technologies (TST5878)	507T0302	FM 4474 (D)(2011); TAS 114(J) (2011)
PRI Construction Materials Technologies (TST5878)	507T0303	FM 4474 (D)(2011); TAS 114(J) (2011)
PRI Construction Materials Technologies (TST5878)	507T0306.1	FM 4474 (D)(2011); TAS 114(J) (2011)
PRI Construction Materials Technologies (TST5878)	507T0320	FM 4474(C) (2011)
PRI Construction Materials Technologies (TST5878)	507T0331	FM 4474(C) (2011)
PRI Construction Materials Technologies (TST5878)	507T0339	FM 4474(D) (2011)

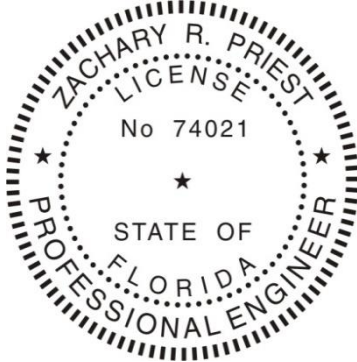


LIMITATIONS

1. Fire classification is not within the scope of this evaluation.
2. Foam plastic insulation shall be separated from the building interior in accordance with the FBC 2603.4 and 2603.6.
3. The roof deck and the roof deck attachment information are provided based on testing. FBC requirements for the rational design of the roof deck, including the attachment, are not within the scope of this evaluation.
4. In the HVHZ, fastener spacing for insulation attachment is determined using a Minimum Characteristic Force (F') of 275 lbf as demonstrated via testing to TAS 105. If the field tested fastener value is below 275 lbf, then insulation attachment shall not be acceptable.
5. In the HVHZ, fastener spacing for base sheets or membrane attachment shall meet the minimum fastener resistance value and the *MDP* for the specified assembly. It is permissible for a qualified professional to submit a revised fastener spacing utilizing the withdrawal resistance value obtained from TAS 105 testing and calculations performed in accordance with RAS 117 and/or RAS 137, when the fastener resistance is found less than required.
6. In the HVHZ, if mechanical attachment through the lightweight insulating concrete to the structural deck is proposed, a field fastener withdrawal test shall be conducted in compliance with TAS 105 to determine equivalent or increased attachment densities. Revised fastener densities shall be submitted utilizing the withdrawal resistance value obtained from TAS 105 testing and calculations performed in accordance with RAS 117 and/or RAS 137.
7. **HVHZ:** For assemblies containing mechanical attachment, the allowable uplift pressure for the selected assembly shall meet or exceed the minimum design loads as determined in accordance with the FBC Chapter 16. The attachment density may be increased by a qualified design professional, as necessary, to meet the design pressure requirements in the periphery zones. Calculations shall be conducted in compliance with RAS 117 and/or RAS 137.
Non-HVHZ: For assemblies containing mechanical attachment or adhered in ribbon-applied adhesive, the allowable uplift pressure for the selected assembly shall meet or exceed the minimum design loads as determined in accordance with the FBC Chapter 16. The attachment density may be increased by a qualified design professional, as necessary, to meet the design pressure requirements in the periphery zones. Calculations shall be conducted in compliance with RAS 117, RAS 137, or Section 2.2.10.1 FM LPDS 1-29 (February 2020).
8. Reroofing applications shall be examined in accordance with FBC Section 1511 outside of the HVHZ and FBC Section 1521 within the HVHZ. For mechanically fastened systems, a field withdrawal resistance test (TAS 105 in the HVHZ; ANSI/SPRI FX-1 or TAS 105 in the non-HVHZ) shall be conducted by a qualified professional to ensure the fastener meets the minimum design load requirements of the system. For adhered systems, a field uplift resistance test (TAS 124 in the HVHZ; ASTM E 907, FM LPDS 1-52, ANSI/SPRI IA-1, or TAS 124 in the non-HVHZ) shall be conducted to confirm conformance of the existing to the minimum design loads.
9. **HVHZ:** For assemblies containing fully adhered or ribbon adhered attachment, or where extrapolation of the assembly is not permitted, the *MDP* for the selected assembly shall meet or exceed the minimum design loads as determined in accordance with the FBC Chapter 16 without augmentation.
Non-HVHZ: For assemblies adhered in ribbon-applied adhesive, the allowable uplift pressure for the selected assembly shall meet or exceed the minimum design loads as determined in accordance with the FBC Chapter 16. The attachment density may be increased by a qualified design professional, as necessary, to meet the design pressure requirements in the periphery zones. Calculations shall be conducted in compliance with Section 2.2.10.1 FM LPDS 1-29 (February 2020).
10. Installation of the evaluated products shall comply with this report, the FBC, and the manufacturer's published application instructions. Where discrepancies exist between these sources, the more restrictive and FBC compliant installation detail shall prevail.
11. The minimum roof slope shall be 1/4:12 for new construction.
12. All products listed in this report shall be manufactured under a quality assurance program in compliance with Rule 61G20-3.

COMPLIANCE STATEMENT

The products evaluated herein by Zachary R. Priest, P.E. have demonstrated compliance with the Florida Building Code, 7th Edition (2020) including High-Velocity Hurricane Zones (HVHZ) as evidenced in the referenced documents submitted by the named manufacturer.



This item has been digitally signed and sealed by Zachary R. Priest, PE, on 4/24/2023.

Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Zachary R. Priest, P.E.
Florida Registration No. 74021
Organization No. ANE9641

CERTIFICATION OF INDEPENDENCE

CREEK Technical Services, LLC does not have, nor will it acquire, a financial interest in any company manufacturing or distributing products under this evaluation.

CREEK Technical Services, LLC is not owned, operated, or controlled by any company manufacturing or distributing products under this evaluation.

Zachary R. Priest, P.E. does not have, nor will acquire, a financial interest in any company manufacturing or distributing products under this evaluation.

Zachary R. Priest, P.E. does not have, nor will acquire, a financial interest in any other entity involved in the approval process of the product.

APPENDICES

1. [APPENDIX A](#) – Installation (5 pages)
2. [APPENDIX B](#) – Nomenclature (5 pages)
3. [APPENDIX C](#) – Approved Assemblies for JM EPDM Single-Ply Membranes (22 pages)

APPENDIX A - INSTALLATION

INSTALLATION

Note - Refer to the [APPROVED ASSEMBLIES](#) section of this report for specific installation details of a selected assembly.

Unless otherwise specified in this report the following installation details shall be met for the named products:

Component	Product	Installation Detail
Fasteners, Battens & Plates	JM All Purpose Fastener	#14 fasteners; Min. 3/4-inch penetration through the top rib of the steel deck or wood deck; Min. 1-inch penetration into concrete deck
	JM APB Plates	2-inch diameter; Galvalume steel plate with reinforcing ribs and barbs
	JM Extra High Load Fastener	#21 fastener; Min. 3/4-inch penetration through the top rib of the steel deck
	JM Extra High Load Plates	3-inch diameter; Galvalume steel plate with eyehooks
	JM High Load Plates	2 3/8-inch diameter; Galvalume steel plate with eyehooks
	JM High Load Plus Plates	2 3/4-inch diameter; Galvalume steel plate with barbs
	JM High Load Fastener	#15 fastener; Min. 3/4-inch penetration through the top rib of the steel deck or wood deck
	JM High Load LH Fastener	#15 fastener with oversized head; Min. 3/4-inch penetration through the top rib of the steel deck or wood deck
	JM Polymer Auger Fastener and Plate (3")	Polymer fastener and 3" diameter galvalume steel plate; Min. 1.5-inch penetration in gypsum deck
	JM UltraFast Fastener	#12 fastener; Min. 3/4-inch penetration through the top rib of the steel deck or wood deck
	JM UltraFast Metal Plate (Round) or UltraFast Plate Metal Recessed	3-inch diameter round; Galvalume steel plate; Only for use with the following products: ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR, ENRGY 3 C1, ENRGY 3 C1 CGF, RetroPlus, Retro-Fit, SeparatoR, SeparatoR CGF, SeparatoR CGF FR, DuraBoard, DuraFoam, Fesco, and Fesco Foam
	JM UltraFast Metal Plate (Square) or UltraFast Plate Metal Flat	3-inch square; Galvalume steel plate
	JM UltraLok Fastener	Min. 1.8-inch galvanized steel tube and coated-steel locking staple pre-assembled with 2.7-inch diameter Galvalume steel plate
	JM Polymer Membrane Batten	Membrane anchors and plastic strips; Installed perpendicular to steel deck ribs
	JM Purlin Fastener	Min. 3/4-inch penetration through purlin
	JM TPO RhinoPlate	Min. 3-inch diameter for TPO membranes; Induction welded in the field of membrane; welds not permitted at lap seams; For use only with min. 60 mil thick bareback membrane
	OMG 3 in. Ribbed Galvalume Plate (Flat)	3-inch diameter round; Galvalume steel plate
	OMG #12 Standard Roofgrip	#12 fastener; Min. 3/4-inch penetration through the top rib of the steel deck or wood deck
	OMG CR Base Sheet Fastener	Base sheet fastener with 1.75-inch galvanized steel shank coated with CR-10 and integrated 2.75-inch diameter Galvalume plate.
	OMG XHD	#15 fastener; Min. 3/4-inch penetration through the top rib of the steel deck or wood deck
SFS Intec Dekfast DF-#12-PH3 Fastener	#12 fasteners; Min. 3/4-inch penetration through the top rib of the steel deck or wood deck	
SFS Intec Dekfast DF-#14-PH3 Fastener	#15 fasteners; Min. 3/4-inch penetration through the top rib of the steel deck or wood deck; Min. 1-inch penetration into concrete deck	
SFS Intec Dekfast DF-#15-PH3 Fastener	#15 fasteners; Min. 3/4-inch penetration through the top rib of the steel deck or wood deck; Min. 1-inch penetration into concrete deck	
SFS Intec Dekfast PLT-H-2-7/8	2-7/8" hexagonal galvalume steel stress plate	
SFS Intec Dekfast PLT-R-3	3-inch diameter round; Galvalume steel plate	



APPENDIX A - INSTALLATION

Component	Product	Installation Detail
<i>Fasteners, Battens & Plates (Cont'd)</i>	SFS Intec FI-P-6.8-TPO	Min. 3-inch diameter for TPO membranes; Induction welded in the field of membrane; welds not permitted at lap seams; For use only with min. 60 mil thick bareback membrane
	SFS Intec <i>isofast</i> PLT-R-2-3/8-BL	2-3/8-inch diameter; Galvalume steel plate
	Trufast 2.4" Barbed Metal Seam Plate	2.4-inch diameter; Galvalume steel plate
	Trufast 2.4" Barbed Metal Seam Plate (14-Barb)	
	Trufast 2.4" Scoop Seam Plate	
	Trufast 3" Metal Insulation Plate	3-inch diameter round; Galvalume steel plate
	Trufast #12 Purlin Fastener	Installed into min. 16ga. steel purlins
	Trufast #12 DP Fastener	#12 fasteners; Min. 3/4-inch penetration through the top rib of the steel deck or wood deck
	Trufast #14 HD Fastener	#14 fasteners; Min. 3/4-inch penetration through the top rib of the steel deck or wood deck; Min. 1-inch penetration into concrete deck
	Trufast #15 EHD Fastener	#15 fasteners; Min. 3/4-inch penetration through the top rib of the steel deck or wood deck
	Trufast Fluted Concrete Nails	Concrete deck only
	Trufast Deep Well Batten Bar	Galvalume steel membrane batten with recessed holes
	Trufast Straight Line Batten Bar	Galvalume steel membrane batten for use with Twin-Loc Nail without integrated plate
	Trufast TPO IW Plates	Min. 3-inch diameter for TPO membranes; Induction welded in the field of membrane; welds not permitted at lap seams; For use only with min. 60 mil thick bareback membrane
	Trufast Twin Loc-Nail	Min. 1.4-inch shank; Base sheet fastener with and without integrated 2.7-inch diameter plate
Trufast VERSA-FAST fastener	Min. 2 1/4-inch length; Min. 3/4-inch penetration through wood deck	
Insulation Adhesives	JM MBR Bonding Adhesive	Fully adhered at a rate of 1.5-2.0 gal/100 ft ²
	JM One-Step Foamable Adhesive	Ribbon adhered in 3/4 to 1-inch wide beads
	ICP Adhesives CR-20	
	OMG OlyBond 500	Ribbon adhered in 3/4 to 1-inch wide beads
	JM Two Part Urethane Insulation Adhesive Canister or JM Two-Part UIA Canister	
	JM Two Part Urethane Insulation Adhesive or JM Two-Part UIA	
	JM Roofing System Urethane Adhesive	
JM Urethane Insulation Adhesive	Ribbon adhered in 1/2-inch wide beads	
ASTM D 312, Type IV asphalt	Fully adhered within the EVT range at a rate of 25-40 lbs/100 ft ²	
Insulation/Cover Boards	EPS	Min. 0.5-inch, min. 1.8 pcf (HVHZ) or min. 1.5 pcf (non-HVHZ) expanded polystyrene; Adhered boards shall be a maximum 4-ft x 4-ft
	Georgia-Pacific DensDeck	Min. 1/4-inch thick
	Georgia-Pacific DensDeck Prime	
	Georgia-Pacific DensDeckStorm X Prime	Min. 5/8-inch thick
	JM ENRGY 3	Min. 1/2-inch thick; Min. 20 psi; Adhered boards shall be a maximum 4 ft x 4 ft
	JM ENRGY 3 C1	
	JM ENRGY 3 AGF	
	JM ENRGY 3 CGF	
	JM ENRGY 3 C1 CGF	
	JM ENRGY 3 FR	
JM Fesco Board	Min. 3/4-inch thick; Min. 20 psi	
JM Fesco Foam	Min. 1.5-inch thick; Min. 20 psi; Adhered boards shall be a maximum 4 ft x 4 ft	



APPENDIX A - INSTALLATION

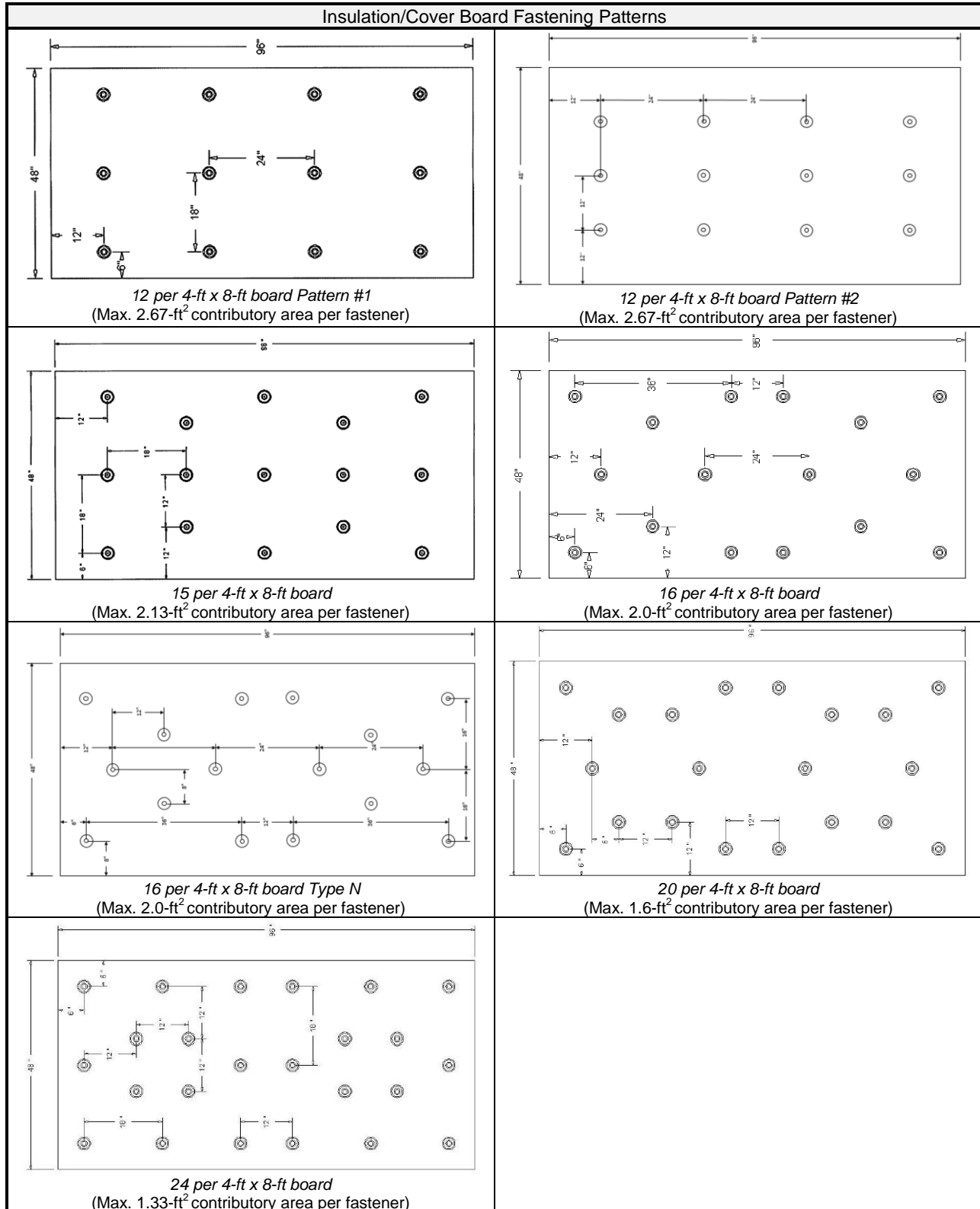
Component	Product	Installation Detail
Insulation/Cover Boards (Cont'd)	JM InvinSA Roof Board	1/4-inch thick; Adhered boards shall be a maximum 4 ft x 4 ft
	JM InvinSA Foam Roof Board	
	JM InvinSA FR Roof Board	1/4-inch thick; Adhered boards shall be a maximum 4 ft x 4 ft
	JM ProtectoR Foam	Min. 2-inch thick; Min. 80psi top layer; Min. 20psi bottom layer; Adhered boards shall be a maximum 4 ft x 4 ft
	JM ProtectoR HD	1/2-inch thick; Min. 80 psi; Adhered boards shall be a maximum 4 ft x 4 ft
	JM ProtectoR HD FR	
	JM Retro-Fit Board	1/2-inch thick; Adhered boards shall be a maximum 4 ft x 4 ft
	JM RetroPlus Roof Board	
	JM SECUROCK Glass-Mat Roof Board	Min. 1/4-inch thick
	JM SECUROCK Gypsum-Fiber Roof Board	
	JM SeparatoR	1/2-inch thick; Min. 25 psi; Adhered boards shall be a maximum 4 ft x 4 ft
	JM SeparatoR CGF	
	JM SeparatoR FR	
	National Gypsum DEXcell Cement Roof Board	Min. 7/16-inch thick; Adhered boards shall be a maximum 4 ft x 4 ft
	National Gypsum DEXcell Glass Mat Roof Board	Min. 1/4-inch thick
National Gypsum DEXcell FA Glass Mat Roof Board		
EPDM Single-Ply Membranes	JM EPDM NR - 45	Min. 3-inch wide side laps are primed with JM EPDM Tape Primer Plus, JM EPDM Tape Primer Plus (Low VOC), or JM Single Ply Primer (Low VOC) and adhered with JM EPDM Seam Tape Plus; Laps shall be installed perpendicular to steel deck ribs for row fastened systems
	JM EPDM NR - 60	
	JM EPDM NR - 90	
	JM EPDM R - 45	For in-lap fastened systems, the min. 6-inch wide side laps are primed with JM EPDM Tape Primer Plus, JM EPDM Tape Primer Plus (Low VOC), or JM Single Ply Primer (Low VOC) and adhered with JM EPDM Seam Tape Plus; Laps shall be installed perpendicular to steel deck ribs
	JM EPDM R - 60	
	JM EPDM R - 75	Min. 3-inch wide side laps are primed with JM EPDM Tape Primer Plus, JM EPDM Tape Primer Plus (Low VOC), or JM Single Ply Primer (Low VOC) and adhered with factory applied seam tape; Laps shall be installed perpendicular to steel deck ribs for row fastened systems
	JM EPDM NR FIT - 45	
	JM EPDM NR FIT - 60	
	JM EPDM NR FIT - 90	
	JM EPDM R FIT - 60	For in-lap fastened systems, the min. 6-inch wide side laps are primed with JM EPDM Tape Primer Plus, JM EPDM Tape Primer Plus (Low VOC), or JM Single Ply Primer (Low VOC) and adhered with factory applied seam tape; Laps shall be installed perpendicular to steel deck ribs
JM EPDM R FIT - 75		
EPDM Membrane Adhesives	JM All Season Sprayable Bonding Adhesive	Fully adhered at a total rate of 1,000ft ² /canister; Applied simultaneously to underside of membrane and substrate;
	JM Membrane Bonding Adhesive (TPO & EPDM)	Fully adhered at rate of 50-90 ft ² /gal (1.1-2.0 gal/100ft ²); Applied simultaneously to underside of membrane and substrate
	JM LVOC Membrane Adhesive (TPO & EPDM)	Fully adhered at rate of 50-90 ft ² /gal (1.1-2.0 gal/100ft ²); Applied simultaneously to underside of membrane and substrate
	JM EPDM Water Based Membrane Adhesive	Fully adhered at rate of 140 ft ² /gal (0.5 gal/100ft ²); Applied simultaneously to underside of membrane and substrate; or Fully adhered at rate of 140 - 220 ft ² /gal(0.5-0.7 gal/100ft ²); Applied to substrate only



APPENDIX A - INSTALLATION

Component	Product	Installation Detail
EPDM Membrane Accessories	JM EPDM 10" Reinforced Perimeter Strip (RPS)	Self-adhered to membrane primed with JM EPDM Tape Primer Plus, JM EPDM Tape Primer Plus (Low VOC), or JM Single Ply Membrane Primer (Low VOC)
	JM EPDM Peel & Stick Sealing Strip	Self-adhered to membrane primed with JM Single Ply Membrane Primer (Low VOC)
	JM EPDM Seam Tape Plus	3-inch or 6-inch wide seam tape
EPDM Membrane Primers	JM EPDM Tape Primer Plus	Applied at a rate of 500ft ² /gal for JM EPDM NR membranes and 375ft ² /gal for JM EPDM R membranes
	JM EPDM Tape Primer Plus (Low VOC)	Applied at a rate of 150 – 225ft ² /gal
	JM Single Ply Membrane Primer (Low VOC)	Applied at a rate of 200ft ² /gal
Vapor Barriers	JM DynaBase HW	Min. 3-inch wide side-laps; Min. 6-inch end laps; Torch adhered ; Concrete decks primed prior to torch
	JM DynaWeld Base	
	JM DynaWeld Cap	
	JM DynaBase	Min. 3-inch wide side-laps; Min. 6-inch end laps; Applied with hot or cold <i>approved</i> adhesives
	JM DynaBase PR	
	JM DynaLastic 180 S	
	JM DynaLastic 250 S	
	JM DynaFast 180 S	Min. 3-inch wide side-laps; Min. 6-inch end laps; Applied with hot or cold <i>approved</i> adhesives
	JM DynaGrip Base SD/SA	Min. 3-inch wide side-laps; Min. 6-inch end laps; Self-adhered
	JM DynaGrip Base PR SD/SA	
JM Vapor Barrier SA	Self-adhered to primed wood, gypsum or concrete decks; Min. 3-inch sides laps; Min. 6-inch end laps	
JM Vapor Barrier SAR	Self-adhered to primed wood, gypsum or concrete decks; Min. 3-inch sides laps; Min. 6-inch end laps	
Vapor Barrier Adhesives	DynaSet 1k	Min. 4-inch laps sealed at a rate of 1.5-2.0gal/100ft ² ; Applied to substrate in 0.5-0.75-inch wide continuous ribbons
	DynaSet 2k	
Base Sheets	JM DynaBase	Min. 3-inch wide side-laps; Min. 6-inch end laps; Applied with hot or cold <i>approved</i> adhesives
	JM DynaBase HW	Min. 3-inch wide side-laps; Min. 6-inch end laps; Torch adhered
	JM DynaFast 180 S	Min. 3-inch wide side-laps; Min. 6-inch end laps; Side-laps shall be installed perpendicular to the direction of the steel deck ribs and parallel to the direction of the wood trusses for mechanically attached systems
	JM Ventsulation Felt	Min. 4-inch wide side-laps; Min. 6-inch end laps
Cellular Lightweight Concrete	Celcore MF with HS Rheology Admixture	Slurry coat min. 1/8-inch thick; 1-inch thick EPS board (1 lbs/ft ³); Min. 2-inch thick top coat; Celcore PVA curing compound applied at rate of 300 ft ² /gal
	Mearlcrete	
	Elastizell	Slurry coat min. 1/8-inch thick; 1" thick EPS board (1 lbs/ft ³); Min. 2-inch thick top coat
	Concrecel	
	Cellular Lightweight Concrete	

APPENDIX A - INSTALLATION



APPENDIX B – NOMENCLATURE

NOMENCLATURE

The following naming conventions are utilized to specify products in the [APPROVED ASSEMBLIES](#) section of this report. Refer to the nomenclature below when deciphering the allowable products for use in the selected assembly. Installation requirements shall be as noted in the [APPROVED ASSEMBLIES](#) section of this report.

Name	Definition		
2-Part UIA	JM Two Part Urethane Insulation Adhesive, JM Two-Part UIA, JM Two Part Urethane Insulation Adhesive Canister, or JM Two-Part UIA Canister		
2-Part UIA-C(B)	JM Two Part Urethane Insulation Adhesive Canister or JM Two-Part UIA Canister applied in 1/2-inch wide beads		
APB Fasteners & Plates	JM APB Plates and JM High Load Fasteners (<i>Wood Deck</i> or <i>Steel Deck</i>) or JM All Purpose Fasteners (<i>Concrete Deck</i>)		
As Tested	Information provided to the report user based on the as tested condition of the roof system		
ASBA	JM All Season Sprayable Bonding Adhesive		
Cover Board	One layer of any of the following products: -Georgia-Pacific DensDeck -Georgia-Pacific DensDeck Prime -Georgia-Pacific DensDeck StormX Prime -JM Invinsa Roof Board -JM Invinsa FR Roof Board -JM ProtectorR HD -JM ProtectorR HD FR -JM SECUROCK Glass-Mat Roof Board -JM SECUROCK Gypsum-Fiber Roof Board -JM Separator -JM Separator CGF -JM Separator FR -National Gypsum DEXcell FA Glass Mat Roof Board -National Gypsum DEXcell Glass Mat Roof Board -National Gypsum DEXcell Cement Roof Board		
Deck Detail	All decks shall be designed by others in accordance with FBC requirements. As Tested deck construction details are described as follows:		
	Concrete Deck	Min. $f'_c = 2,500$ psi at 28 days	
	CWF Deck	Min. 2.5-inch thick Tectum I cementitious wood fiber panels	
	Steel Deck	Min. 22 ga, Wide Rib Deck (Type WR) conforming to ANSI/SDI-RD1.0 & FBC; 0.5% Vented for LWIC applications only. The following nomenclature is used to further describe the As Tested condition.	
		F<#>	<#> of #12-24 HWH self-drilling screws or equivalent fasteners at each flute used to secure the deck to the structural supports; Min. 1/4-inch penetration
		G<#>	Min. Grade <#> of Steel Deck
		H<#>	<#> of Hilti X-HSN 24 fastener or equivalent fasteners at each flute used to secure the deck to the structural supports; Min. 1/4-inch penetration
		L<#>	Max. span of <#> ft
		P	Min. 5/8-inch diameter puddle welds at each flute used to secure the deck to the structural supports
		S<#>	1/4"-14 HWH x7/8" self-drilling screws or equivalent fastener secured <#>-inch o.c. along the panel side laps
SD<#>		<#> of SFS Intec SD5-#12-HW5/16 Fasteners at each flute used to secure the deck to the structural supports; Min. 1/4-inch penetration	
SDL<#>	SDL-#14-HW5/16 secured <#>-inch o.c. along the panel side laps		
HS<#>	Hilti S-SLC 01M fastener or equivalent fastener secured <#>-inch o.c. along the panel side laps		
W	3/4-inch O.D. flat washer used with indicated fastener		

APPENDIX B – NOMENCLATURE

Name	Definition										
<i>Deck Detail (Cont'd)</i>	<p>HVHZ: APA Span-Rated sheathing. The following nomenclature is used to further describe the <i>As Tested</i> condition:</p> <table border="1"> <tr> <td><i>T<#>P</i></td> <td>Min. <#>-inch thickness of the plywood</td> </tr> <tr> <td><i>T<#>O</i></td> <td>Min. <#>-inch thickness of the OSB</td> </tr> <tr> <td><i>L<#></i></td> <td>Max. span of <#> inches</td> </tr> <tr> <td><i>N<#></i></td> <td>Min. 0.113-inch diameter x 2-3/8-inch ring shank nails spaced <#>-inch o.c. at all intermediate supports and at the perimeter of each board</td> </tr> <tr> <td><i>16S<#></i></td> <td>Min. 16 ga. staples, 1.5-inch x 1-inch crown spaced <#>-inch o.c. at all intermediate supports and at the perimeter of each board</td> </tr> </table>	<i>T<#>P</i>	Min. <#>-inch thickness of the plywood	<i>T<#>O</i>	Min. <#>-inch thickness of the OSB	<i>L<#></i>	Max. span of <#> inches	<i>N<#></i>	Min. 0.113-inch diameter x 2-3/8-inch ring shank nails spaced <#>-inch o.c. at all intermediate supports and at the perimeter of each board	<i>16S<#></i>	Min. 16 ga. staples, 1.5-inch x 1-inch crown spaced <#>-inch o.c. at all intermediate supports and at the perimeter of each board
	<i>T<#>P</i>	Min. <#>-inch thickness of the plywood									
	<i>T<#>O</i>	Min. <#>-inch thickness of the OSB									
	<i>L<#></i>	Max. span of <#> inches									
	<i>N<#></i>	Min. 0.113-inch diameter x 2-3/8-inch ring shank nails spaced <#>-inch o.c. at all intermediate supports and at the perimeter of each board									
<i>16S<#></i>	Min. 16 ga. staples, 1.5-inch x 1-inch crown spaced <#>-inch o.c. at all intermediate supports and at the perimeter of each board										
<i>DensDeck</i>	Min. 1/4-inch Georgia-Pacific DensDeck										
<i>DensDeck Prime</i>	Min. 1/4-inch Georgia-Pacific DensDeck Prime; or Georgia-Pacific DensDeck StormX Prime										
<i>DEXcell CB</i>	Min. 1/4-inch National Gypsum DEXcell Cement Roof Board										
<i>DEXcell FA</i>	Min. 1/4-inch National Gypsum DEXcell FA Glass Mat Roof Board										
<i>DF</i>	Dekfast DF-#12-PH3 (<i>Steel Deck</i> , or <i>Wood Deck</i>), Dekfast DF-#14-PH# (<i>Concrete Deck</i> , <i>Steel Deck</i> , or <i>Wood Deck</i>), or Dekfast DF-#15-PH3 (<i>Steel Deck</i> , or <i>Wood Deck</i>) with Dekfast PLT-R-3										
<i>E3</i>	JM ENRGY 3 or JM ENRGY 3 CGF										
<i>E3 C1</i>	JM ENRGY 3 C1 or JM ENRGY 3 C1 CGF										
<i>EPDM NR</i>	One ply of any one of the following products: JM EPDM NR – 45, JM EPDM NR – 60, or JM EPDM NR - 90										
<i>EPDM NR FIT</i>	One ply of any one of the following products: JM EPDM NR FIT – 45, JM EPDM NR FIT – 60, or JM EPDM NR FIT - 90										
<i>EPDM R</i>	One ply of any one of the following products: JM EPDM R – 45, JM EPDM R – 60, or JM EPDM R - 75										
<i>EPDM R FIT</i>	One ply of any one of the following products: JM EPDM R FIT – 60 or JM EPDM R FIT – 75										

APPENDIX B – NOMENCLATURE

Name	Definition																																																
<i>Fasteners & Plates</i>	Choose one of the following fastener and plate combinations for the given conditions: <table border="1"> <thead> <tr> <th>Board or Base Sheet</th> <th>Fastener</th> <th>Plate</th> <th>Roof Deck</th> </tr> </thead> <tbody> <tr> <td>Any</td> <td>JM All Purpose Fastener, JM Structural Concrete Deck Fastener, Dekfast DF-#14-PH3, or Trufast #14 HD Fastener</td> <td>JM UltraFast Metal Plate (Square), UltraFast Plate Metal Flat, UltraFast Metal Plate (Round), or UltraFast Plate Metal Recessed</td> <td>Concrete</td> </tr> <tr> <td>Any</td> <td>JM UltraFast Fastener, Trufast #12 DP Fastener, Trufast #14 HD Fastener, JM High Load Fastener, Dekfast DP-#15-PH3, or Trufast #15 EHD Fastener</td> <td>JM UltraFast Metal Plate (Square), UltraFast Plate Metal Flat, UltraFast Metal Plate (Round), or UltraFast Plate Metal Recessed</td> <td>Steel</td> </tr> <tr> <td>Any</td> <td>JM UltraFast Fastener, Trufast #12 DP Fastener, Dekfast DF-#12-PH3, JM All Purpose Fastener, Dekfast DF-#14-PH#, JM High Load Fastener, Dekfast DF-#15-PH3, or Trufast #15 EHD Fastener</td> <td>JM UltraFast Metal Plate (Square), UltraFast Plate Metal Flat, UltraFast Metal Plate (Round), or UltraFast Plate Metal Recessed</td> <td>Plywood</td> </tr> <tr> <td>Any</td> <td>Dekfast DF-#14-PH3</td> <td>Dekfast PLT-R-3</td> <td>Concrete</td> </tr> <tr> <td>Any</td> <td>Dekfast DF-#12-PH3 or Dekfast DP-#15-PH3</td> <td>Dekfast PLT-R-3</td> <td>Steel</td> </tr> <tr> <td>Any</td> <td>Dekfast DF-#12-PH3, Dekfast DF-#14-PH#, or Dekfast DF-#15-PH3</td> <td>Dekfast PLT-R-3</td> <td>Plywood</td> </tr> <tr> <td>Any</td> <td>JM All Purpose Fastener, JM Structural Concrete Deck Fastener, or Trufast #14 HD Fastener</td> <td>Trufast 3" Metal Insulation Plates</td> <td>Concrete</td> </tr> <tr> <td>ENRGY 3, SeparatoR CGF, DensDeck Prime, DEXcell FA, or SECUROCK</td> <td>JM UltraFast Fastener or JM High Load Fastener</td> <td>Trufast 3" Metal Insulation Plates</td> <td>Steel</td> </tr> <tr> <td>ENRGY 3, SeparatoR CGF, DensDeck Prime, DEXcell FA, or SECUROCK</td> <td>JM UltraFast Fastener, JM All Purpose Fastener or JM High Load Fastener</td> <td>Trufast 3" Metal Insulation Plates</td> <td>Plywood</td> </tr> <tr> <td>Any</td> <td>Trufast #12 DP Fastener, Trufast #14 HD Fastener, or Trufast #15 EHD Fastener</td> <td>Trufast 3" Metal Insulation Plates</td> <td>Steel</td> </tr> <tr> <td>Any</td> <td>Trufast #12 DP Fastener or Trufast #15 EHD Fastener</td> <td>Trufast 3" Metal Insulation Plates</td> <td>Plywood</td> </tr> </tbody> </table>	Board or Base Sheet	Fastener	Plate	Roof Deck	Any	JM All Purpose Fastener, JM Structural Concrete Deck Fastener, Dekfast DF-#14-PH3, or Trufast #14 HD Fastener	JM UltraFast Metal Plate (Square), UltraFast Plate Metal Flat, UltraFast Metal Plate (Round), or UltraFast Plate Metal Recessed	Concrete	Any	JM UltraFast Fastener, Trufast #12 DP Fastener, Trufast #14 HD Fastener, JM High Load Fastener, Dekfast DP-#15-PH3, or Trufast #15 EHD Fastener	JM UltraFast Metal Plate (Square), UltraFast Plate Metal Flat, UltraFast Metal Plate (Round), or UltraFast Plate Metal Recessed	Steel	Any	JM UltraFast Fastener, Trufast #12 DP Fastener, Dekfast DF-#12-PH3, JM All Purpose Fastener, Dekfast DF-#14-PH#, JM High Load Fastener, Dekfast DF-#15-PH3, or Trufast #15 EHD Fastener	JM UltraFast Metal Plate (Square), UltraFast Plate Metal Flat, UltraFast Metal Plate (Round), or UltraFast Plate Metal Recessed	Plywood	Any	Dekfast DF-#14-PH3	Dekfast PLT-R-3	Concrete	Any	Dekfast DF-#12-PH3 or Dekfast DP-#15-PH3	Dekfast PLT-R-3	Steel	Any	Dekfast DF-#12-PH3, Dekfast DF-#14-PH#, or Dekfast DF-#15-PH3	Dekfast PLT-R-3	Plywood	Any	JM All Purpose Fastener, JM Structural Concrete Deck Fastener, or Trufast #14 HD Fastener	Trufast 3" Metal Insulation Plates	Concrete	ENRGY 3, SeparatoR CGF, DensDeck Prime, DEXcell FA, or SECUROCK	JM UltraFast Fastener or JM High Load Fastener	Trufast 3" Metal Insulation Plates	Steel	ENRGY 3, SeparatoR CGF, DensDeck Prime, DEXcell FA, or SECUROCK	JM UltraFast Fastener, JM All Purpose Fastener or JM High Load Fastener	Trufast 3" Metal Insulation Plates	Plywood	Any	Trufast #12 DP Fastener, Trufast #14 HD Fastener, or Trufast #15 EHD Fastener	Trufast 3" Metal Insulation Plates	Steel	Any	Trufast #12 DP Fastener or Trufast #15 EHD Fastener	Trufast 3" Metal Insulation Plates	Plywood
	Board or Base Sheet	Fastener	Plate	Roof Deck																																													
	Any	JM All Purpose Fastener, JM Structural Concrete Deck Fastener, Dekfast DF-#14-PH3, or Trufast #14 HD Fastener	JM UltraFast Metal Plate (Square), UltraFast Plate Metal Flat, UltraFast Metal Plate (Round), or UltraFast Plate Metal Recessed	Concrete																																													
	Any	JM UltraFast Fastener, Trufast #12 DP Fastener, Trufast #14 HD Fastener, JM High Load Fastener, Dekfast DP-#15-PH3, or Trufast #15 EHD Fastener	JM UltraFast Metal Plate (Square), UltraFast Plate Metal Flat, UltraFast Metal Plate (Round), or UltraFast Plate Metal Recessed	Steel																																													
	Any	JM UltraFast Fastener, Trufast #12 DP Fastener, Dekfast DF-#12-PH3, JM All Purpose Fastener, Dekfast DF-#14-PH#, JM High Load Fastener, Dekfast DF-#15-PH3, or Trufast #15 EHD Fastener	JM UltraFast Metal Plate (Square), UltraFast Plate Metal Flat, UltraFast Metal Plate (Round), or UltraFast Plate Metal Recessed	Plywood																																													
	Any	Dekfast DF-#14-PH3	Dekfast PLT-R-3	Concrete																																													
	Any	Dekfast DF-#12-PH3 or Dekfast DP-#15-PH3	Dekfast PLT-R-3	Steel																																													
	Any	Dekfast DF-#12-PH3, Dekfast DF-#14-PH#, or Dekfast DF-#15-PH3	Dekfast PLT-R-3	Plywood																																													
	Any	JM All Purpose Fastener, JM Structural Concrete Deck Fastener, or Trufast #14 HD Fastener	Trufast 3" Metal Insulation Plates	Concrete																																													
	ENRGY 3, SeparatoR CGF, DensDeck Prime, DEXcell FA, or SECUROCK	JM UltraFast Fastener or JM High Load Fastener	Trufast 3" Metal Insulation Plates	Steel																																													
	ENRGY 3, SeparatoR CGF, DensDeck Prime, DEXcell FA, or SECUROCK	JM UltraFast Fastener, JM All Purpose Fastener or JM High Load Fastener	Trufast 3" Metal Insulation Plates	Plywood																																													
Any	Trufast #12 DP Fastener, Trufast #14 HD Fastener, or Trufast #15 EHD Fastener	Trufast 3" Metal Insulation Plates	Steel																																														
Any	Trufast #12 DP Fastener or Trufast #15 EHD Fastener	Trufast 3" Metal Insulation Plates	Plywood																																														
<i>INSULATION</i>	One of more layers in any combination of the following products: <table border="0"> <tr> <td>-Approved EPS board</td> <td>-Fesco Board</td> <td>-Retro-Fit Board</td> </tr> <tr> <td>-ENRGY 3</td> <td>-Fesco Foam</td> <td>-RetroPlus Roof Board</td> </tr> <tr> <td>-ENRGY 3 AGF</td> <td>-Invinsa Roof Board</td> <td>-SECUROCK Glass-Mat Roof Board</td> </tr> <tr> <td>-ENRGY 3 CGF</td> <td>-Invinsa FR Roof Board</td> <td>-SECUROCK Gypsum-Fiber Roof Board</td> </tr> <tr> <td>-ENRGY 3 FR</td> <td>-ProtectoR Foam</td> <td>-SeparatoR</td> </tr> <tr> <td>-ENRGY 3 C1</td> <td>-ProtectoR HD</td> <td>-SeparatoR CGF</td> </tr> <tr> <td>-ENRGY 3 C1 CGF</td> <td>-ProtectoR HD FR</td> <td>-SeparatoR FR</td> </tr> </table>	-Approved EPS board	-Fesco Board	-Retro-Fit Board	-ENRGY 3	-Fesco Foam	-RetroPlus Roof Board	-ENRGY 3 AGF	-Invinsa Roof Board	-SECUROCK Glass-Mat Roof Board	-ENRGY 3 CGF	-Invinsa FR Roof Board	-SECUROCK Gypsum-Fiber Roof Board	-ENRGY 3 FR	-ProtectoR Foam	-SeparatoR	-ENRGY 3 C1	-ProtectoR HD	-SeparatoR CGF	-ENRGY 3 C1 CGF	-ProtectoR HD FR	-SeparatoR FR																											
-Approved EPS board	-Fesco Board	-Retro-Fit Board																																															
-ENRGY 3	-Fesco Foam	-RetroPlus Roof Board																																															
-ENRGY 3 AGF	-Invinsa Roof Board	-SECUROCK Glass-Mat Roof Board																																															
-ENRGY 3 CGF	-Invinsa FR Roof Board	-SECUROCK Gypsum-Fiber Roof Board																																															
-ENRGY 3 FR	-ProtectoR Foam	-SeparatoR																																															
-ENRGY 3 C1	-ProtectoR HD	-SeparatoR CGF																																															
-ENRGY 3 C1 CGF	-ProtectoR HD FR	-SeparatoR FR																																															
<i>LVOC</i>	JM LVOC Membrane Adhesive (TPO & EPDM)																																																
<i>LWIC</i>	Poured-in-place Cellular Lightweight Concrete with encapsulated insulation board																																																

APPENDIX B – NOMENCLATURE

Name	Definition																																																																											
MBA	JM Membrane Bonding Adhesive (TPO & EPDM)																																																																											
MCRF	Minimum Characteristic Resistance Force as determined by TAS 105 for the named fastener in the selected assembly																																																																											
MDP	Maximum Design Pressure																																																																											
OSFA	JM One-Step Foamable Adhesive																																																																											
Preliminarily Secured	Fastened at minimum rate of 5 per 4 ft x 8 ft board or 4 per 4 ft x 4 ft board.																																																																											
ProtectoR	JM ProtectoR HD or JM ProtectoR HD FR Roof Board																																																																											
Recover	Where assemblies are used to recover an existing roof, the existing roof shall consist of only one layer of roofing, i.e. recovering a previously recovered roof is not permitted. Recover roofing shall be conducted in compliance with FBC Section 1511 outside of the HVHZ and FBC Section 1521 within the HVHZ. For mechanically fastened roof assemblies and induction welded assemblies, i.e. systems x-M-# and x-W-#, the insulation layer is optional, or any INSULATION board or slip sheet may be used as separation layer prior to installing the approved roof assembly.																																																																											
RSUA	JM Roofing System Urethane Adhesive																																																																											
SECUROCK	Min. 1/4-inch JM SECUROCK Gypsum-Fiber Roof Board																																																																											
TF	Trufast #12 DP Fastener (<i>Steel Deck</i> or <i>Wood Deck</i>), Trufast #14 HD Fastener (<i>Concrete Deck</i> , <i>Steel Deck</i> , or <i>Wood Deck</i>), or Trufast #15 EHD Fasteners (<i>Concrete Deck</i> , <i>Steel Deck</i> or <i>Wood Deck</i>) with Trufast 3" Metal Insulation Plate																																																																											
UF	JM UltraFast Fasteners (<i>Steel Deck</i> or <i>Wood Deck</i>), JM All Purpose Fasteners (<i>Concrete Deck</i> , <i>Steel Deck</i> , or <i>Wood Deck</i>), or JM High Load Fasteners (<i>Wood Deck</i> or <i>Steel Deck</i>) with JM UltraFast Metal Plate (Square), UltraFast Plate Metal Flat, UltraFast Metal Plate (Round), or UltraFast Plate Metal Recessed																																																																											
UltraFast Fasteners & Plates (Square)	JM UltraFast Fasteners (<i>Steel Deck</i> and <i>Wood Deck</i>), Trufast #12 DP Fastener (<i>Steel Deck</i>), JM All Purpose Fasteners (<i>Concrete Deck</i>), or Trufast #14 HD Fasteners (<i>Concrete Deck</i>) and UltraFast Metal Plate (Square) or UltraFast Plate Metal Flat																																																																											
Vapor Barrier	Any <i>Approved</i> vapor barrier																																																																											
Vapor Barriers for Adhered Assemblies over Concrete Deck	One of the following options may be utilized as allowed by the <i>Approved Assembly</i> . The <i>MDP</i> shall be limited to the lesser of rating of the <i>Approved Assembly</i> and the <i>MDP</i> for the chosen vapor barrier.																																																																											
	<table border="1"> <thead> <tr> <th>Primer</th> <th>Vapor Barrier</th> <th>VB Application</th> <th>Insulation Adhesive</th> <th>MDP (psf)</th> </tr> </thead> <tbody> <tr> <td>None</td> <td>DynaBase HW</td> <td>Torch adhered</td> <td>OSFA 12-inch o.c.</td> <td>-172.5</td> </tr> <tr> <td>None</td> <td>DynaBase HW</td> <td>Torch adhered</td> <td>2-Part UIA 12-inch o.c.</td> <td>-135</td> </tr> <tr> <td>ASTM D 41</td> <td>DynaBase HW</td> <td>Torch adhered</td> <td>2-Part UIA 12-inch o.c.</td> <td>-172.5</td> </tr> <tr> <td>None</td> <td>DynaBase HW</td> <td>Torch adhered</td> <td>RSUA 12-inch o.c.</td> <td>-195</td> </tr> <tr> <td>ASTM D 41</td> <td>DynaGrip Base SD/SA</td> <td>Self-adhered</td> <td>OSFA 12-inch o.c.</td> <td>-90</td> </tr> <tr> <td>ASTM D 41</td> <td>DynaGrip Base SD/SA</td> <td>Self-adhered</td> <td>2-Part UIA 12-inch o.c.</td> <td>-97.5</td> </tr> <tr> <td>ASTM D 41</td> <td>DynaGrip Base SD/SA</td> <td>Self-adhered</td> <td>RSUA 12-inch o.c.</td> <td>-82.5</td> </tr> <tr> <td>ASTM D 41</td> <td>DynaGrip Base PR SD/SA</td> <td>Self-adhered</td> <td>RSUA 12-inch o.c.</td> <td>-202.5</td> </tr> <tr> <td>ASTM D 41</td> <td>DynaGrip Base PR SD/SA</td> <td>Self-adhered</td> <td>2-Part UIA 12-inch o.c.</td> <td>-262.5</td> </tr> <tr> <td>None</td> <td>DynaLastic 180 S, DynaLastic 250 S, DynaFast 180 S, or DynaBase PR; Laps sealed with DynaSet 1k</td> <td>DynaSet 1k 12-inch o.c.</td> <td>OSFA, 2-Part UIA, or RSUA 12-inch o.c.</td> <td>-232.5</td> </tr> <tr> <td>None</td> <td>DynaLastic 180 S, DynaLastic 250 S, DynaFast 180 S, or DynaBase PR; Laps sealed with DynaSet 1k</td> <td>DynaSet 1k 12-inch o.c.</td> <td>ASTM D 312, Type IV Asphalt</td> <td>-337.5</td> </tr> <tr> <td>None</td> <td>DynaLastic 180 S, DynaLastic 250 S, DynaFast 180 S, or DynaBase PR; Laps sealed with DynaSet 2k</td> <td>DynaSet 2k 12-inch o.c.</td> <td>OSFA, 2-Part UIA, or RSUA 12-inch o.c.</td> <td>-97.5</td> </tr> <tr> <td>None</td> <td>DynaLastic 180 S, DynaLastic 250 S, DynaFast 180 S, or DynaBase PR; Laps sealed with DynaSet 2k</td> <td>DynaSet 2k 12-inch o.c.</td> <td>ASTM D 312, Type IV Asphalt</td> <td>-75</td> </tr> <tr> <td>ASTM D 41</td> <td>DynaWeld Base</td> <td>Torch adhered</td> <td>OSFA 12-inch o.c.</td> <td>-150</td> </tr> </tbody> </table>	Primer	Vapor Barrier	VB Application	Insulation Adhesive	MDP (psf)	None	DynaBase HW	Torch adhered	OSFA 12-inch o.c.	-172.5	None	DynaBase HW	Torch adhered	2-Part UIA 12-inch o.c.	-135	ASTM D 41	DynaBase HW	Torch adhered	2-Part UIA 12-inch o.c.	-172.5	None	DynaBase HW	Torch adhered	RSUA 12-inch o.c.	-195	ASTM D 41	DynaGrip Base SD/SA	Self-adhered	OSFA 12-inch o.c.	-90	ASTM D 41	DynaGrip Base SD/SA	Self-adhered	2-Part UIA 12-inch o.c.	-97.5	ASTM D 41	DynaGrip Base SD/SA	Self-adhered	RSUA 12-inch o.c.	-82.5	ASTM D 41	DynaGrip Base PR SD/SA	Self-adhered	RSUA 12-inch o.c.	-202.5	ASTM D 41	DynaGrip Base PR SD/SA	Self-adhered	2-Part UIA 12-inch o.c.	-262.5	None	DynaLastic 180 S, DynaLastic 250 S, DynaFast 180 S, or DynaBase PR; Laps sealed with DynaSet 1k	DynaSet 1k 12-inch o.c.	OSFA, 2-Part UIA, or RSUA 12-inch o.c.	-232.5	None	DynaLastic 180 S, DynaLastic 250 S, DynaFast 180 S, or DynaBase PR; Laps sealed with DynaSet 1k	DynaSet 1k 12-inch o.c.	ASTM D 312, Type IV Asphalt	-337.5	None	DynaLastic 180 S, DynaLastic 250 S, DynaFast 180 S, or DynaBase PR; Laps sealed with DynaSet 2k	DynaSet 2k 12-inch o.c.	OSFA, 2-Part UIA, or RSUA 12-inch o.c.	-97.5	None	DynaLastic 180 S, DynaLastic 250 S, DynaFast 180 S, or DynaBase PR; Laps sealed with DynaSet 2k	DynaSet 2k 12-inch o.c.	ASTM D 312, Type IV Asphalt	-75	ASTM D 41	DynaWeld Base	Torch adhered	OSFA 12-inch o.c.	-150
	Primer	Vapor Barrier	VB Application	Insulation Adhesive	MDP (psf)																																																																							
	None	DynaBase HW	Torch adhered	OSFA 12-inch o.c.	-172.5																																																																							
	None	DynaBase HW	Torch adhered	2-Part UIA 12-inch o.c.	-135																																																																							
	ASTM D 41	DynaBase HW	Torch adhered	2-Part UIA 12-inch o.c.	-172.5																																																																							
	None	DynaBase HW	Torch adhered	RSUA 12-inch o.c.	-195																																																																							
	ASTM D 41	DynaGrip Base SD/SA	Self-adhered	OSFA 12-inch o.c.	-90																																																																							
	ASTM D 41	DynaGrip Base SD/SA	Self-adhered	2-Part UIA 12-inch o.c.	-97.5																																																																							
	ASTM D 41	DynaGrip Base SD/SA	Self-adhered	RSUA 12-inch o.c.	-82.5																																																																							
	ASTM D 41	DynaGrip Base PR SD/SA	Self-adhered	RSUA 12-inch o.c.	-202.5																																																																							
	ASTM D 41	DynaGrip Base PR SD/SA	Self-adhered	2-Part UIA 12-inch o.c.	-262.5																																																																							
	None	DynaLastic 180 S, DynaLastic 250 S, DynaFast 180 S, or DynaBase PR; Laps sealed with DynaSet 1k	DynaSet 1k 12-inch o.c.	OSFA, 2-Part UIA, or RSUA 12-inch o.c.	-232.5																																																																							
	None	DynaLastic 180 S, DynaLastic 250 S, DynaFast 180 S, or DynaBase PR; Laps sealed with DynaSet 1k	DynaSet 1k 12-inch o.c.	ASTM D 312, Type IV Asphalt	-337.5																																																																							
	None	DynaLastic 180 S, DynaLastic 250 S, DynaFast 180 S, or DynaBase PR; Laps sealed with DynaSet 2k	DynaSet 2k 12-inch o.c.	OSFA, 2-Part UIA, or RSUA 12-inch o.c.	-97.5																																																																							
None	DynaLastic 180 S, DynaLastic 250 S, DynaFast 180 S, or DynaBase PR; Laps sealed with DynaSet 2k	DynaSet 2k 12-inch o.c.	ASTM D 312, Type IV Asphalt	-75																																																																								
ASTM D 41	DynaWeld Base	Torch adhered	OSFA 12-inch o.c.	-150																																																																								

APPENDIX B – NOMENCLATURE

Name	Definition				
<i>Vapor Barriers for Adhered Assemblies over Concrete Deck (Cont'd)</i>	Primer	Vapor Barrier	VB Application	Insulation Adhesive	MDP (psf)
	ASTM D 41	DynaWeld Base	Torch adhered	2-Part UIA 12-inch o.c.	-120
	ASTM D 41	DynaWeld Base	Torch adhered	RSUA 12-inch o.c.	-285
	JM SA Primer Low VOC or SA Primer	JM Vapor Barrier SA or SAR	Self-adhered	OSFA or RSUA 12-inch o.c.	-135
	JM SA Primer Low VOC or SA Primer	JM Vapor Barrier SA or SAR	Self-adhered	2-Part UIA 12-inch o.c.	-82.5
WBMA	JM EPDM Water Based Membrane Adhesive				

APPENDIX D – APPROVED ASSEMBLIES FOR JM EPDM SINGLE-PLY MEMBRANES
APPROVED ASSEMBLIES FOR JM EPDM SINGLE-PLY MEMBRANES

The following notes shall be observed when using the assembly tables below.

- 1 Allowable pressures were calculated using a 2:1 margin of safety per FBC Section 1504.9.
- 2 Refer to [LIMITATIONS](#) and [NOMENCLATURE](#) sections of this evaluation when using the table(s) below.
- 3 Refer to [INSTALLATION](#) section of this report for installation detail when the information is not explicitly stated for the selected assembly.
- 4 The on-center (o.c.) spacing given is the maximum allowable attachment spacing for the rated system.
- 5 JM Vapor Barrier SA or JM Vapor Barrier SAR may be installed direct to deck prior to installing the roof assembly components for the following assembly types: C-M-#, C-W-#, LC-M-#, LC-W-#, LS-M-#, LS-W-#, S-M-#, S-W-#, W-M-#, and W-W-#
- 6 *As Tested* information for roof deck construction is provided for information only. The addition of the *As Tested* deck information does not obviate the requirement for rational design of the roof deck and roof deck attachment in accordance with FBC requirements.
- 7 Base Insulation in assemblies with All Layers Adhered may be installed in one or more layers.

Assembly System Numbers and Definitions	
C-A-#	Adhered Assemblies over <i>Concrete Deck</i> (New or Existing)
C-AM-#	Assemblies with Adhered Membranes over Insulated <i>Concrete Deck</i> (New, Existing, or <i>Recover</i>)
C-M-#	Mechanically Fastened Assemblies over <i>Concrete Deck</i> (New, Existing, or <i>Recover</i>)
CW-A-#	Adhered Assemblies over Cementitious Wood Fiber Decks (New or Existing)
CW-AM-#	Assemblies with Adhered Membranes over Cementitious Wood Fiber Decks (New or Existing)
G-A-#	Assemblies with All Layers Adhered over Gypsum Deck (New or Existing)
G-AM-#	Assemblies with Adhered Membranes over Insulated Gypsum Deck (New or Existing)
LC-AM-#	Lightweight Concrete Assemblies with Adhered Membranes over <i>Concrete Deck</i> (New or Existing)
LS-AM-#	Lightweight Concrete Assemblies with Adhered Membranes over <i>Steel Deck</i> (New or Existing)
R-A-#	Adhered <i>Recover</i> Assemblies
R-M-#	Mechanically Fastened <i>Recover</i> Assemblies
S-A-#	Adhered Assemblies over <i>Steel Deck</i> (New or Existing)
S-AM-#	Assemblies with Adhered Membranes over Insulated <i>Steel Deck</i> (New, Existing, or <i>Recover</i>)
S-M-#	Mechanically Fastened Assemblies over <i>Steel Deck</i> (New, Existing or <i>Recover</i>)
W-A-#	Adhered Assemblies over <i>Wood Deck</i> (New or Existing)
W-AM-#	Assemblies with Adhered Membranes over Insulated <i>Wood Deck</i> (New, Existing, or <i>Recover</i>)

APPENDIX D – APPROVED ASSEMBLIES FOR JM EPDM SINGLE-PLY MEMBRANES

Adhered Assemblies over Concrete Deck (New or Existing)						
System No.	Vapor Barrier	Base Insulation <i>(Note 7)</i>	Top Insulation	Membrane	Membrane Attachment	MDP (psf)
C-A-1	OPTIONAL <i>Vapor Barriers for Adhered Assemblies over Concrete Deck</i>	OPTIONAL Min. 0.5-inch ENRGY 3 in 2-Part UIA, RSUA, or OSFA applied 12-inch o.c.	ProtectoR HD in 2-Part UIA, RSUA, or OSFA applied 12-inch o.c.	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	WBMA	-60 (Lim. 9)
C-A-2	OPTIONAL <i>Vapor Barriers for Adhered Assemblies over Concrete Deck</i>	OPTIONAL Min. 0.5-inch ENRGY 3 in 2-Part UIA, RSUA, or OSFA applied 12-inch o.c.	Invinsa in OSFA applied 12-inch o.c.	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	ASBA	-142.5 (Lim. 9)
C-A-3	OPTIONAL <i>Vapor Barriers for Adhered Assemblies over Concrete Deck</i>	Min. 1.5-inch ENRGY 3 in 2-Part UIA applied 12-inch o.c.	-	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	ASBA	-142.5 (Lim. 9)
C-A-4	OPTIONAL <i>Vapor Barriers for Adhered Assemblies over Concrete Deck</i>	Min. 1.5-inch ENRGY 3 in 2-Part UIA applied 12-inch o.c.	-	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	WBMA	-165 (Lim. 9)
C-A-5	OPTIONAL <i>Vapor Barriers for Adhered Assemblies over Concrete Deck</i>	OPTIONAL Min. 0.5-inch ENRGY 3 in 2-Part UIA, RSUA, or OSFA applied 12-inch o.c.	DEXcell FA in 2-Part UIA, RSUA, or OSFA applied 12-inch o.c.	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	WBMA	-165 (Lim. 9)
C-A-6	OPTIONAL <i>Vapor Barriers for Adhered Assemblies over Concrete Deck</i>	OPTIONAL Min. 0.5-inch ENRGY 3 in 2-Part UIA, RSUA, or OSFA applied 12-inch o.c.	Invinsa in OSFA applied 12-inch o.c.	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	WBMA	-172.5 (Lim. 9)
C-A-7	OPTIONAL <i>Vapor Barriers for Adhered Assemblies over Concrete Deck</i>	-	SeparatoR CGF in 2-Part UIA, RSUA, or OSFA applied 12-inch o.c.	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	WBMA	-172.5 (Lim. 9)
C-A-8	OPTIONAL <i>Vapor Barriers for Adhered Assemblies over Concrete Deck</i>	Min. 0.5-inch ENRGY 3 in 2-Part UIA, RSUA, or OSFA applied 12-inch o.c.	SeparatoR CGF in 2-Part UIA, RSUA, or OSFA applied 12-inch o.c.	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	WBMA	-172.5 (Lim. 9)
C-A-9	OPTIONAL <i>Vapor Barriers for Adhered Assemblies over Concrete Deck</i>	OPTIONAL Min. 0.5-inch ENRGY 3 in 2-Part UIA, RSUA, or OSFA applied 12-inch o.c.	DensDeck Prime or SECUROCK in 2-Part UIA, RSUA, or OSFA applied 12-inch o.c.	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	ASBA, MBA, LVOC, or WBMA	-180 (Lim. 9)
C-A-10	<i>Vapor Barriers for Adhered Assemblies over Concrete Deck</i>	Min. 0.5-inch ENRGY 3 in 2-Part UIA, RSUA, or OSFA applied 12-inch o.c.	Invinsa in 2-Part UIA, RSUA, or OSFA applied 12-inch o.c.	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	WBMA	-187.5 (Lim. 9)

APPENDIX D – APPROVED ASSEMBLIES FOR JM EPDM SINGLE-PLY MEMBRANES

Adhered Assemblies over Concrete Deck (New or Existing)						
System No.	Vapor Barrier	Base Insulation <i>(Note 7)</i>	Top Insulation	Membrane	Membrane Attachment	MDP (psf)
C-A-11	OPTIONAL <i>Vapor Barriers for Adhered Assemblies over Concrete Deck</i>	OPTIONAL Min. 0.5-inch ENRGY 3 in 2-Part UIA, RSUA, or OSFA applied 12-inch o.c.	DEXcell FA in 2-Part UIA, RSUA, or OSFA applied 12-inch o.c.	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	ASBA	-195 (Lim. 9)
C-A-12	OPTIONAL <i>Vapor Barriers for Adhered Assemblies over Concrete Deck</i>	OPTIONAL Min. 0.5-inch ENRGY 3 in 2-Part UIA, RSUA, or OSFA applied 12-inch o.c.	SeparatoR CGF, ProtectoR HD in 2-Part UIA, RSUA, or OSFA applied 12-inch o.c.	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	ASBA	-210 (Lim. 9)
C-A-13	<i>Vapor Barriers for Adhered Assemblies over Concrete Deck</i>	Min. 0.5-inch ENRGY 3 in 2-Part UIA, RSUA, or OSFA applied 12-inch o.c.	SeparatoR CGF in WB2-Part UIA, RSUA, or OSFA applied 12-inch o.c.	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	WBMA	-210 (Lim. 9)
C-A-14	OPTIONAL <i>Vapor Barriers for Adhered Assemblies over Concrete Deck</i>	-	SECUROCK in RSUA, or OSFA, or 2-Part UIA applied 12-inch o.c.	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	ASBA	-210 (Lim. 9)
C-A-15	OPTIONAL <i>Vapor Barriers for Adhered Assemblies over Concrete Deck</i>	OPTIONAL Min. 0.5-inch ENRGY 3 in 2-Part UIA, RSUA, or OSFA applied 12-inch o.c.	DEXcell FA in 2-Part UIA, RSUA, or OSFA applied 12-inch o.c.	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	MBA or LVOC	-217.5 (Lim. 9)
C-A-16	<i>Vapor Barriers for Adhered Assemblies over Concrete Deck</i>	Min. 0.5-inch ENRGY 3 in 2-Part UIA, RSUA, or OSFA applied 12-inch o.c.	Invinsa in 2-Part UIA, RSUA, or OSFA applied 12-inch o.c.	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	ASBA	-217.5 (Lim. 9)
C-A-17	OPTIONAL <i>Vapor Barriers for Adhered Assemblies over Concrete Deck</i>	OPTIONAL Min. 0.5-inch ENRGY 3 in 2-Part UIA, RSUA, or OSFA applied 12-inch o.c.	ProtectoR HD in 2-Part UIA, RSUA, or OSFA applied 12-inch o.c.	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	MBA or LVOC	-225 (Lim. 9)
C-A-18	<i>Vapor Barriers for Adhered Assemblies over Concrete Deck</i>	Min. 0.5-inch ENRGY 3 in 2-Part UIA, RSUA, or OSFA applied 12-inch o.c.	Invinsa in 2-Part UIA, RSUA, or OSFA applied 12-inch o.c.	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	MBA or LVOC	-232.5 (Lim. 9)
C-A-19	OPTIONAL <i>Vapor Barriers for Adhered Assemblies over Concrete Deck</i>	Min. 0.5-inch ENRGY 3 in 2-Part UIA, RSUA, or OSFA applied 12-inch o.c.	SeparatoR CGF in 2-Part UIA, RSUA, or OSFA applied 12-inch o.c.	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	MBA or LVOC	-247.5 (Lim. 9)
C-A-20	OPTIONAL <i>Vapor Barriers for Adhered Assemblies over Concrete Deck</i>	Min. 0.5-inch ENRGY 3 in 2-Part UIA, RSUA, or OSFA applied 12-inch o.c.	Invinsa in OSFA applied 12-inch o.c.	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	MBA or LVOC	-247.5 (Lim. 9)

APPENDIX D – APPROVED ASSEMBLIES FOR JM EPDM SINGLE-PLY MEMBRANES

Adhered Assemblies over Concrete Deck (New or Existing)						
System No.	Vapor Barrier	Base Insulation <i>(Note 7)</i>	Top Insulation	Membrane	Membrane Attachment	MDP (psf)
C-A-21	OPTIONAL <i>Vapor Barriers for Adhered Assemblies over Concrete Deck</i>	Min. 1.5-inch E3 in 2-Part UIA applied 12-inch o.c.	-	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	MBA or LVOC	-315 (Lim. 9)
C-A-22	OPTIONAL <i>Vapor Barriers for Adhered Assemblies over Concrete Deck</i>	-	SeparatoR CGF in 2-Part UIA, RSUA, or OSFA applied 12-inch o.c.	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	MBA or LVOC	-330 (Lim. 9)
C-A-23	OPTIONAL <i>Vapor Barriers for Adhered Assemblies over Concrete Deck</i>	-	Invinsa in OSFA applied 12-inch o.c.	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	MBA or LVOC	-465 (Lim. 9)
C-A-24	OPTIONAL <i>Vapor Barriers for Adhered Assemblies over Concrete Deck</i>	-	SECUROCK in RSUA, or OSFA, or 2-Part UIA applied 12-inch o.c.	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	MBA or LVOC	-495 (Lim. 9)

Assemblies with Adhered Membranes over Insulated Concrete Deck (New, Existing, or Recover)								
System No.	Thermal/Vapor Barrier	Base Insulation	Base Insulation Attachment	Top Insulation or Base Sheet	Top Insulation or Base Sheet Attachment	Membrane	Membrane Attachment	MDP (psf)
C-AM-1	Optional Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 1-inch ENRGY 3 CGF	UltraFast Fasteners & Plates (Square) secured 1 fastener per 4ft ²	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	ASBA, MBA, LVOC, or WBMA	-30 (Lim. 7; Non-HVHZ)
C-AM-2	Optional Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 2-inch ENRGY 3 CGF	Fasteners & Plates secured 15 per 4-ft x 8-ft board	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	ASBA, MBA, LVOC, or WBMA	-37.5 (Lim. 7; Non-HVHZ)
C-AM-3	Optional Vapor Barrier	OPTIONAL INSULATION under Min. 0.5-inch E3 or E3 C1	Simultaneously secured with top layer	ProtectoR	Fasteners & Plates secured 1 fastener per 4ft ²	Min. 60mil EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	ASBA, MBA, LVOC, or WBMA	-37.5 (Lim. 7; Non-HVHZ)
C-AM-4	Optional Vapor Barrier	OPTIONAL INSULATION under Min. 1.5-inch E3 or E3 C1	Simultaneously secured with top layer	DensDeck Prime	Fasteners & Plates secured 12 per 4-ft x 8-ft board Pattern #2	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	ASBA, MBA, LVOC, or WBMA	-37.5 (Lim. 7; Non-HVHZ)

APPENDIX D – APPROVED ASSEMBLIES FOR JM EPDM SINGLE-PLY MEMBRANES

Assemblies with Adhered Membranes over Insulated Concrete Deck (New, Existing, or Recover)								
System No.	Thermal/Vapor Barrier	Base Insulation	Base Insulation Attachment	Top Insulation or Base Sheet	Top Insulation or Base Sheet Attachment	Membrane	Membrane Attachment	MDP (psf)
C-AM-5	Optional Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 1.5-inch E3 or E3 C1	Fasteners & Plates secured 1 fastener per 2.67ft ²	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	ASBA, MBA, LVOC, or WBMA	-45 (Lim. 7; Non-HVHZ)
C-AM-6	Optional Vapor Barrier	OPTIONAL INSULATION under Min. 0.5-inch E3 or E3 C1	Simultaneously secured with top layer	Invinsa or Min. 0.5-inch SECUROCK	Fasteners & Plates secured 1 fastener per 2ft ²	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	ASBA, MBA, LVOC, or WBMA	-45 (Lim. 7; Non-HVHZ)
C-AM-7	Optional Vapor Barrier	Min. 1.5-inch E3 or E3 C1	Fasteners & Plates secured 1 fastener per 2.67ft ²	DensDeck Prime over OPTIONAL layer of Min. 1.5-inch E3 or E3 C1	2-Part UIA, OSFA, or RSUA applied 12" o.c.	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	ASBA, MBA, LVOC, or WBMA	-45 (Lim. 7; Non-HVHZ)
C-AM-8	Optional Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 2-inch ENRGY 3 CGF	UltraFast Fasteners & Plates (Square) secured 12 per 4-ft x 8-ft board Pattern #1	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	ASBA, MBA, LVOC, or WBMA	-45 (Lim. 7)
C-AM-9	Optional Vapor Barrier	OPTIONAL INSULATION under Min. 1.5-inch E3 or E3 C1	Simultaneously secured with top layer	Min. 0.5-inch DensDeck Prime	DF or TF secured 1 fastener per 4ft ²	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	ASBA, MBA, LVOC, or WBMA	-45 (Lim. 7; Non-HVHZ)
C-AM-10	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under Min. 1.5-inch E3 or E3 C1	Simultaneously secured with top layer	ProtectoR	Fasteners & Plates secured 1 fastener per 4ft ²	Min. 60 mil EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	ASBA, MBA, LVOC, or WBMA	-45 (Lim. 7; Non-HVHZ)
C-AM-11	Optional Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 2-inch ENRGY 3 or ENRGY 3 C1	Fasteners & Plates secured 1 fastener per 1.6ft ²	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	WBMA	-60 (Lim. 7)
C-AM-12	Optional Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 2-inch ENRGY 3 CGF or ENRGY 3 C1 CGF	Fasteners & Plates secured 1 fastener per 1.6ft ²	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	WBMA	-75 (Lim. 7)
C-AM-13	Optional Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 2-inch E3 or E3 C1	Fasteners & Plates secured 1 fastener per 1.6ft ²	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	ASBA, MBA, LVOC, or WBMA	-75 (Lim. 7)

APPENDIX D – APPROVED ASSEMBLIES FOR JM EPDM SINGLE-PLY MEMBRANES

Assemblies with Adhered Membranes over Insulated Concrete Deck (New, Existing, or Recover)								
System No.	Thermal/ Vapor Barrier	Base Insulation	Base Insulation Attachment	Top Insulation or Base Sheet	Top Insulation or Base Sheet Attachment	Membrane	Membrane Attachment	MDP (psf)
C-AM-14	Optional Vapor Barrier	Min. 2-inch E3 or E3 C1	Fasteners & Plates secured 1 fastener per 1ft ²	Min. 1.5-inch ENRGY 3	2-Part UIA, OSFA, or RSUA applied 4" o.c.	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	ASBA, MBA, LVOC, or WBMA	-82.5 (Lim. 7)
C-AM-15	Optional Vapor Barrier	Min. 2-inch E3 or E3 C1	Fasteners & Plates secured 1 fastener per 1.6ft ²	Min. 1.5-inch E3 or E3 C1	2-Part UIA, OSFA, or RSUA applied 6" o.c.	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	ASBA, MBA, LVOC, or WBMA	-82.5 (Lim. 7)
C-AM-16	Optional Vapor Barrier	Min. 2-inch E3 or E3 C1	Fasteners & Plates secured 1 fastener per 1.6ft ²	ProtectoR HD, or Min 0.5-inch DEXcell FA, SECUROCK, or DensDeck Prime	2-Part UIA, OSFA, or RSUA applied 6" o.c.	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	ASBA, MBA, LVOC, or WBMA	-82.5 (Lim. 7)
C-AM-17	Optional Vapor Barrier	Min. 2-inch E3	Fasteners & Plates secured 1 fastener per 1ft ²	Min. 1.5-inch ENRGY 3	2-Part UIA or RSUA applied 6" o.c.	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	ASBA, MBA, LVOC, or WBMA	-90 (Lim. 7)
C-AM-18	Optional Vapor Barrier	OPTIONAL INSULATION under Min. 1.5-inch E3 or E3 C1	Simultaneously secured with top layer	Min. 0.5-inch SECUROCK	Fasteners & Plates secured 1 fastener per 1ft ²	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	WBMA	-105 (Lim. 7)
C-AM-19	Optional Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 2-inch ENRGY 3 CGF or ENRGY 3 C1 CGF	Fasteners & Plates secured 1 fastener per 1ft ²	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	WBMA	-120 (Lim. 7)
C-AM-20	Optional Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 2-inch E3 or E3 C1	Fasteners & Plates secured 1 fastener per 1ft ²	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	ASBA, MBA or LVOC	-120 (Lim. 7)
C-AM-21	Optional Vapor Barrier	Min. 2-inch E3 or E3 C1	Fasteners & Plates secured 1 fastener per 1ft ²	ProtectoR HD	2-Part UIA, OSFA, or RSUA applied 4" o.c.	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	ASBA, MBA, LVOC, or WBMA	-120 (Lim. 7)
C-AM-22	Optional Vapor Barrier	Min. 2-inch E3 or E3 C1	Fasteners & Plates secured 1 fastener per 1ft ²	Min. 1.5-inch ENRGY 3	2-Part UIA, OSFA, or RSUA applied 4" o.c.	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	ASBA	-127.5 (Lim. 7)

APPENDIX D – APPROVED ASSEMBLIES FOR JM EPDM SINGLE-PLY MEMBRANES

Mechanically Fastened Assemblies over Concrete Deck (New or Existing)							
System No.	Base Insulation	Base Insulation Attachment	Top Insulation	Top Insulation Attachment	Membrane	Membrane Attachment	MDP (psf)
C-M-1	OPTIONAL INSULATION under min. 1.5-inch E3	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	EPDM R	Attached in-lap with APB Fastener & Plates with High Load Fasteners spaced 6" o.c.; Laps spaced 114-inch o.c.	-45 (Lim. 7)

Assemblies with Adhered Membranes over Cementitious Wood Fiber Deck (New or Existing)						
System No.	Base Insulation/Sheet Base Insulation/Sheet Attachment	Insulation	Cover Board	Membrane	Membrane Attachment	MDP (psf)
CW-AM-1	DynaBase or Ventsulation Felt secured with JM UltraLok Fasteners spaced 9-inch o.c. at the min. 4-inch wide laps and 18-inch o.c. in two staggered rows in the field of the roll	-	Min. 2-inch ENRGY 3 or ENRGY 3 CGF adhered in RSUA applied 12-inch o.c.	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	ASBA, MBA, LVOC, or WBMA	-30 (Lim. 7; Non-HVHZ)
CW-AM-2	DynaBase or Ventsulation Felt secured with JM UltraLok Fasteners spaced 9-inch o.c. at the min. 2-inch wide laps and 18-inch o.c. in two staggered rows in the field of the roll	-	Min. 0.5-inch E3, E3 C1, SeparatoR, or SeparatoR CGF adhered in 2-Part UIA applied 12-inch o.c.	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	ASBA, MBA, LVOC, or WBMA	-45 (Lim. 7; Non-HVHZ)
CW-AM-3	DynaBase or Ventsulation Felt secured with JM UltraLok Fasteners spaced 9-inch o.c. at the min. 2-inch wide laps and 18-inch o.c. in two staggered rows in the field of the roll	-	DensDeck Prime, Invinsa, ProtectoR HD, or SECUROCK adhered in 2-Part UIA applied 12-inch o.c.	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	ASBA, MBA, LVOC, or WBMA	-45 (Lim. 7; Non-HVHZ)
CW-AM-4	DynaBase or Ventsulation Felt secured with JM UltraLok Fasteners spaced 9-inch o.c. at the min. 2-inch wide laps and 18-inch o.c. in two staggered rows in the field of the roll	Min. 0.5-inch E3 or E3 C1 adhered in 2-Part UIA applied 12-inch o.c.	SeparatoR CGF adhered in 2-Part UIA or OSFA applied 12-inch o.c.	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	ASBA, MBA, LVOC, or WBMA	-45 (Lim. 7; Non-HVHZ)
CW-AM-5	DynaBase or Ventsulation Felt secured with JM UltraLok Fasteners spaced 9-inch o.c. at the min. 2-inch wide laps and 18-inch o.c. in two staggered rows in the field of the roll	Min. 0.5-inch E3 or E3 C1 adhered in 2-Part UIA applied 12-inch o.c.	DEXcell FA adhered in RSUA or OSFA applied 12-inch o.c.	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	ASBA, MBA, LVOC, or WBMA	-45 (Lim. 7; Non-HVHZ)

APPENDIX D – APPROVED ASSEMBLIES FOR JM EPDM SINGLE-PLY MEMBRANES

Assemblies with Adhered Membranes over Cementitious Wood Fiber Deck (New or Existing)						
System No.	Base Insulation/Sheet Base Insulation/Sheet Attachment	Insulation	Cover Board	Membrane	Membrane Attachment	MDP (psf)
CW-AM-6	DynaBase or Ventsulation Felt secured with JM UltraLok Fasteners spaced 9-inch o.c. at the min. 2-inch wide laps and 18-inch o.c. in two staggered rows in the field of the roll	Min. 0.5-inch E3 or E3 C1 adhered in 2-Part UIA applied 12-inch o.c.	DensDeck Prime, Invinsa, ProtectoR HD, or SECUROCK adhered in 2-Part UIA, RSUA or OSFA applied 12-inch o.c.	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	ASBA, MBA, LVOC, or WBMA	-45 (Lim. 7; Non-HVHZ)

Assemblies with All Layers Adhered over Gypsum Deck (New or Existing)						
System No.	Vapor Barrier	Base Insulation (Note 7)	Cover Board	Membrane	Membrane Attachment	MDP (psf)
G-A-1	OPTIONAL GlasPly IV, GlasPly Premier, PermaPly 28, or DynaBase in ASTM D 312, Type IV asphalt	OPTIONAL Min. 1.5-inch E3 adhered in 2-Part UIA applied 12-inch o.c.	ProtectoR HD adhered in 2-Part UIA, RSUA or OSFA applied 12-inch o.c.	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	ASBA, MBA, LVOC, or WBMA	-45 (Lim. 9; Non-HVHZ)

Assemblies with Adhered Membranes over Insulated Gypsum Deck (New or Existing)						
System No.	Base Sheet	Insulation	Cover Board	Membrane	Membrane Attachment	MDP (psf)
G-AM-1	-	Min. 1.5-inch E3 attached with JM Polymer Auger Fasteners and Plates (3") at a rate of 1 fastener per 2ft ²	-	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	ASBA, MBA, LVOC, or WBMA	-45 (Lim. 7; Non-HVHZ)
G-AM-2	DynaBase or Ventsulation Felt secured with JM UltraLok Fasteners spaced 9-inch o.c. at the min. 2-inch wide laps and 18-inch o.c. in two staggered rows in the field of the roll	Min. 0.5-inch E3 or E3 C1 adhered in 2-Part UIA applied 12-inch o.c.	SeparatoR CGF adhered in 2-Part UIA or OSFA applied 12-inch o.c.	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	ASBA, MBA, LVOC, or WBMA	-45 (Lim. 7; Non-HVHZ)
G-AM-3	DynaBase or Ventsulation Felt secured with JM UltraLok Fasteners spaced 9-inch o.c. at the min. 2-inch wide laps and 18-inch o.c. in two staggered rows in the field of the roll	Min. 0.5-inch E3 or E3 C1 adhered in 2-Part UIA applied 12-inch o.c.	DEXcell FA adhered in RSUA or OSFA applied 12-inch o.c.	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	ASBA, MBA, LVOC, or WBMA	-45 (Lim. 7; Non-HVHZ)

APPENDIX D – APPROVED ASSEMBLIES FOR JM EPDM SINGLE-PLY MEMBRANES

Assemblies with Adhered Membranes over Insulated Gypsum Deck (New or Existing)						
System No.	Base Sheet	Insulation	Cover Board	Membrane	Membrane Attachment	MDP (psf)
G-AM-4	DynaBase or Ventsulation Felt secured with JM UltraLok Fasteners spaced 9-inch o.c. at the min. 2-inch wide laps and 18-inch o.c. in two staggered rows in the field of the roll	Min. 0.5-inch <i>E3</i> or <i>E3 C1</i> adhered in 2-Part <i>UIA</i> applied 12-inch o.c.	<i>DensDeck Prime</i> , <i>Invinsa</i> , <i>ProtectoR HD</i> , or <i>SECUROCK</i> adhered in 2-Part <i>UIA</i> , <i>RSUA</i> or <i>OSFA</i> applied 12-inch o.c.	<i>EPDM NR</i> , <i>EPDM NR FIT</i> , <i>EPDM R</i> , or <i>EPDM R FIT</i>	ASBA, MBA, LVOC, or WBMA	-45 (Lim. 7; Non-HVHZ)

Lightweight Concrete Assemblies with Adhered Membranes over Concrete Deck (New or Existing)						
System No.	LWIC	Base Sheet	Insulation	Cover Board	Membrane	MDP (psf)
LC-AM-1	Min. 350psi Celcore MF with HS Rheology Admixture	DynaLastic 180 S, GlasBase Plus, or Ventsulation Felt secured with min. 1.7-inch LWC CR Base Sheet Fasteners secured 7-inch o.c. at the 3-inch lap and 7-inch o.c. in two (2) equally spaced staggered rows in the field	Min. 0.5-inch <i>E3</i> , <i>E3 C1</i> , <i>SeparatoR</i> , or <i>SeparatoR CGF</i> in 2-Part <i>UIA</i> applied 12-inch o.c.	<i>SeparatoR CGF</i> in 2-Part <i>UIA</i> , <i>RSUA</i> , or <i>OSFA</i> applied 12-inch o.c.	<i>EPDM NR</i> , <i>EPDM NR FIT</i> , <i>EPDM R</i> , or <i>EPDM R FIT</i> adhered in ASBA, MBA, LVOC, or WBMA	-45 (Lim. 7)
LC-AM-2	Min. 350psi Celcore MF with HS Rheology Admixture	DynaLastic 180 S, GlasBase Plus, or Ventsulation Felt secured with min. 1.7-inch LWC CR Base Sheet Fasteners secured 7-inch o.c. at the 3-inch lap and 7-inch o.c. in two (2) equally spaced staggered rows in the field	Min. 0.5-inch <i>E3</i> , <i>E3 C1</i> , <i>SeparatoR</i> , or <i>SeparatoR CGF</i> in 2-Part <i>UIA</i> applied 12-inch o.c.	<i>DEXcell FA</i> in <i>RSUA</i> or <i>OSFA</i> applied 12-inch o.c.	<i>EPDM NR</i> , <i>EPDM NR FIT</i> , <i>EPDM R</i> , or <i>EPDM R FIT</i> adhered in ASBA, MBA, LVOC, or WBMA	-45 (Lim. 7)
LC-AM-3	Min. 350psi Celcore MF with HS Rheology Admixture	DynaLastic 180 S, GlasBase Plus, or Ventsulation Felt secured with min. 1.7-inch LWC CR Base Sheet Fasteners secured 7-inch o.c. at the 3-inch lap and 7-inch o.c. in two (2) equally spaced staggered rows in the field	Min. 0.5-inch <i>E3</i> , <i>E3 C1</i> , <i>SeparatoR</i> , or <i>SeparatoR CGF</i> in 2-Part <i>UIA</i> applied 12-inch o.c.	<i>DensDeck Prime</i> , <i>SECUROCK</i> , <i>Invinsa</i> , or <i>ProtectoR HD</i> in <i>RSUA</i> , 2-Part <i>UIA</i> , or <i>OSFA</i> applied 12-inch o.c.	<i>EPDM NR</i> , <i>EPDM NR FIT</i> , <i>EPDM R</i> , or <i>EPDM R FIT</i> adhered in ASBA, MBA, LVOC, or WBMA	-45 (Lim. 7)

APPENDIX D – APPROVED ASSEMBLIES FOR JM EPDM SINGLE-PLY MEMBRANES

Lightweight Concrete Assemblies with Adhered Membranes over Steel Deck (New or Existing)							
System No.	Deck Detail	LWIC	Base Sheet	Insulation	Cover Board	Membrane	MDP (psf)
LS-AM-1	G33, P, L6, S24	Min. 350psi Celcore MF with HS Rheology Admixture	DynaLastic 180 S, GlasBase Plus, or Ventsulation Felt secured with min. 1.7-inch LWC CR Base Sheet Fasteners secured 7-inch o.c. at the 3-inch lap and 7-inch o.c. in two (2) equally spaced staggered rows in the field	Min. 0.5-inch E3, E3 C1, SeparatoR, or SeparatoR CGF in 2-Part UIA applied 12-inch o.c.	SeparatoR CGF in 2-Part UIA, RSUA, or OSFA applied 12-inch o.c.	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT adhered in ASBA, MBA, LVOC, or WBMA	-45 (Lim. 7)
LS-AM-2	G33, P, L6, S24	Min. 350psi Celcore MF with HS Rheology Admixture	DynaLastic 180 S, GlasBase Plus, or Ventsulation Felt secured with min. 1.7-inch LWC CR Base Sheet Fasteners secured 7-inch o.c. at the 3-inch lap and 7-inch o.c. in two (2) equally spaced staggered rows in the field	Min. 0.5-inch E3, E3 C1, SeparatoR, or SeparatoR CGF in 2-Part UIA applied 12-inch o.c.	DEXcell FA in RSUA or OSFA applied 12-inch o.c.	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT adhered in ASBA, MBA, LVOC, or WBMA	-45 (Lim. 7)
LS-AM-3	G33, P, L6, S24	Min. 350psi Celcore MF with HS Rheology Admixture	DynaLastic 180 S, GlasBase Plus, or Ventsulation Felt secured with min. 1.7-inch LWC CR Base Sheet Fasteners secured 7-inch o.c. at the 3-inch lap and 7-inch o.c. in two (2) equally spaced staggered rows in the field	Min. 0.5-inch E3, E3 C1, SeparatoR, or SeparatoR CGF in 2-Part UIA applied 12-inch o.c.	DensDeck Prime, SECUROCK, Invinsa, or Protector HD in RSUA, 2-Part UIA, or OSFA applied 12-inch o.c.	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT adhered in ASBA, MBA, LVOC, or WBMA	-45 (Lim. 7)

Adhered Recover Assemblies						
System No.	Existing Roof	Base Insulation (Note 7)	Top Insulation or Base Ply	Membrane	Membrane Attachment	MDP (psf)
R-A-1	Granule Mod-Bit or BUR over Steel Deck, cementitious panel, gypsum, or treated wood	OPTIONAL Min. 0.5-inch ENRGY 3 in 2-Part UIA, RSUA, or OSFA applied 12-inch o.c.	SeparatoR CGF in 2-Part UIA, RSUA, or OSFA applied 12-inch o.c.	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	ASBA, MBA, LVOC, or WBMA	-45 (Lim. 9)
R-A-2	Granule Mod-Bit or BUR over gypsum	OPTIONAL Min. 0.5-inch ENRGY 3 in 2-Part UIA, RSUA, or OSFA applied 12-inch o.c.	Protector HD, DEXcell FA, DensDeck Prime, or SECUROCK in 2-Part UIA, RSUA, or OSFA applied 12-inch o.c.	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	ASBA, MBA, LVOC, or WBMA	-45 (Lim. 9)

APPENDIX D – APPROVED ASSEMBLIES FOR JM EPDM SINGLE-PLY MEMBRANES

Adhered Recover Assemblies						
System No.	Existing Roof	Base Insulation (Note 7)	Top Insulation or Base Ply	Membrane	Membrane Attachment	MDP (psf)
R-A-3	Smooth APP or SBS Mod-Bit, Granule Mod-Bit, or BUR over <i>Steel Deck</i> , cementitious panel, gypsum, or treated wood	OPTIONAL Min. 0.5-inch ENRGY 3 in 2-Part UIA, RSUA, or OSFA applied 12-inch o.c.	<i>DensDeck Prime</i> in 2-Part UIA, RSUA, or OSFA applied 12-inch o.c.	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	ASBA, MBA, LVOC, or WBMA	-45 (Lim. 9)
R-A-4	Smooth APP or SBS Mod-Bit, Granule Mod-Bit, or BUR over <i>Steel Deck</i> , cementitious panel, gypsum, or treated wood	OPTIONAL Min. 0.5-inch ENRGY 3 in 2-Part UIA, RSUA, or OSFA applied 12-inch o.c.	Invinsa in 2-Part UIA, RSUA, or OSFA applied 12-inch o.c.	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	ASBA, MBA, LVOC, or WBMA	-45 (Lim. 9)
R-A-5	Smooth APP or SBS Mod-Bit, Granule Mod-Bit, or BUR over <i>Steel Deck</i> , cementitious panel, gypsum, or treated wood	OPTIONAL Min. 0.5-inch ENRGY 3 in 2-Part UIA, RSUA, or OSFA applied 12-inch o.c.	ProtectoR HD or SECUROCK in 2-Part UIA, RSUA, or OSFA applied 12-inch o.c.	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	ASBA, LVOC or WBMA	-45 (Lim. 9)
R-A-6	Smooth APP or SBS Mod-Bit, Granule Mod-Bit, or BUR over <i>Steel Deck</i> , cementitious panel, gypsum, or treated wood	OPTIONAL Min. 0.5-inch ENRGY 3 in 2-Part UIA, RSUA, or OSFA applied 12-inch o.c.	DEXcell FA in RSUA or OSFA applied 12-inch o.c.	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	ASBA, MBA, or LVOC	-45 (Lim. 9)
R-A-7	Granule Mod-Bit or BUR over <i>Steel Deck</i> or Concrete Deck	OPTIONAL Min. 0.5-inch ENRGY 3 in 2-Part UIA, RSUA, or OSFA applied 12-inch o.c.	ProtectoR HD in 2-Part UIA, RSUA, or OSFA applied 12-inch o.c.	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	WBMA	-60 (Lim. 9)
R-A-8	Granule Mod-Bit or BUR over <i>Steel Deck</i> , cementitious panel, or treated wood	OPTIONAL Min. 0.5-inch ENRGY 3 in 2-Part UIA, RSUA, or OSFA applied 12-inch o.c.	DEXcell FA, <i>DensDeck Prime</i> , or SECUROCK in 2-Part UIA, RSUA, or OSFA applied 12-inch o.c.	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	ASBA, MBA, LVOC, or WBM	-105 (Lim. 9)
R-A-9	Smooth APP or SBS Mod-Bit, Granule Mod-Bit, or BUR over Concrete Deck	Min. 1.5-inch ENRGY 3 in 2-Part UIA, RSUA, or OSFA applied 12-inch o.c.	<i>DensDeck Prime</i> in 2-Part UIA, RSUA, or OSFA applied 12-inch o.c.	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	ASBA, MBA, LVOC, or WBMA	-127.5 (Lim. 9)

APPENDIX D – APPROVED ASSEMBLIES FOR JM EPDM SINGLE-PLY MEMBRANES

Adhered Recover Assemblies						
System No.	Existing Roof	Base Insulation (Note 7)	Top Insulation or Base Ply	Membrane	Membrane Attachment	MDP (psf)
R-A-10	Smooth APP or SBS Mod-Bit, Granule Mod-Bit, or BUR over Concrete Deck	Min. 1.5-inch ENRGY 3 in 2-Part UIA, RSUA, or OSFA applied 12-inch o.c.	SECUROCK in 2-Part UIA, RSUA, or OSFA applied 12-inch o.c.	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	ASBA, LVOC, or WBMA	-127.5 (Lim. 9)
R-A-11	Granule Mod-Bit or BUR over Concrete Deck	OPTIONAL Min. 0.5-inch ENRGY 3 in 2-Part UIA, RSUA, or OSFA applied 12-inch o.c.	DEXcell FA in 2-Part UIA, RSUA, or OSFA applied 12-inch o.c.	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	WBMA	-165 (Lim. 9)
R-A-12	Granule Mod-Bit or BUR over Concrete Deck	OPTIONAL Min. 0.5-inch ENRGY 3 in 2-Part UIA, RSUA, or OSFA applied 12-inch o.c.	SeparatoR CGF in 2-Part UIA, RSUA, or OSFA applied 12-inch o.c.	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	WBMA	-172.5 (Lim. 9)
R-A-13	Smooth APP or SBS Mod-Bit, Granule Mod-Bit, or BUR over Concrete Deck	Min. 1.5-inch ENRGY 3 in 2-Part UIA, RSUA, or OSFA applied 12-inch o.c.	Invinsa in 2-Part UIA, RSUA, or OSFA applied 12-inch o.c.	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	ASBA, MBA, LVOC, or WBMA	-172.5 (Lim. 9)
R-A-14	Smooth APP Mod-Bit, Granule Mod-Bit or BUR over Concrete Deck	OPTIONAL Min. 0.5-inch ENRGY 3 in 2-Part UIA, RSUA, or OSFA applied 12-inch o.c.	DensDeck Prime or SECUROCK in 2-Part UIA, RSUA, or OSFA applied 12-inch o.c.	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	ASBA, MBA, LVOC, or WBMA	-180 (Lim. 9)
R-A-15	Smooth APP or SBS Mod-Bit, Granule Mod-Bit, or BUR over Concrete Deck	Min. 1.5-inch ENRGY 3 in 2-Part UIA, RSUA, or OSFA applied 12-inch o.c.	ProtectoR HD in 2-Part UIA, RSUA, or OSFA applied 12-inch o.c.	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	LVOC or WBMA	-187.5 (Lim. 9)
R-A-16	Smooth APP or SBS Mod-Bit, Granule Mod-Bit, or BUR over Concrete Deck	Min. 1.5-inch ENRGY 3 in 2-Part UIA, RSUA, or OSFA applied 12-inch o.c.	DEXcell FA in RSUA or OSFA applied 12-inch o.c.	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	ASBA	-195 (Lim. 9)
R-A-17	Granule Mod-Bit or BUR over Concrete Deck	OPTIONAL Min. 0.5-inch ENRGY 3 in 2-Part UIA, RSUA, or OSFA applied 12-inch o.c.	ProtectoR HD in 2-Part UIA, RSUA, or OSFA applied 12-inch o.c.	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	ASBA	-210 (Lim. 9)
R-A-18	Smooth APP or SBS Mod-Bit, Granule Mod-Bit, or BUR over Concrete Deck	Min. 1.5-inch ENRGY 3 in 2-Part UIA, RSUA, or OSFA applied 12-inch o.c.	SeparatoR CGF in 2-Part UIA, RSUA, or OSFA applied 12-inch o.c.	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	ASBA, LVOC, or WBMA	-210 (Lim. 9)
R-A-19	Granule Mod-Bit or BUR over Concrete Deck	OPTIONAL Min. 0.5-inch ENRGY 3 in 2-Part UIA, RSUA, or OSFA applied 12-inch o.c.	DEXcell FA in 2-Part UIA, RSUA, or OSFA applied 12-inch o.c.	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	ASBA	-217.5 (Lim. 9)

APPENDIX D – APPROVED ASSEMBLIES FOR JM EPDM SINGLE-PLY MEMBRANES

Adhered Recover Assemblies						
System No.	Existing Roof	Base Insulation (Note 7)	Top Insulation or Base Ply	Membrane	Membrane Attachment	MDP (psf)
R-A-20	Granule Mod-Bit or BUR over Concrete Deck	OPTIONAL Min. 0.5-inch ENRGY 3 in 2-Part UIA, RSUA, or OSFA applied 12-inch o.c.	DEXcell FA in 2-Part UIA, RSUA, or OSFA applied 12-inch o.c.	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	MBA or LVOC	-217.5 (Lim. 9)
R-A-21	Granule Mod-Bit or BUR over Concrete Deck	OPTIONAL Min. 0.5-inch ENRGY 3 in 2-Part UIA, RSUA, or OSFA applied 12-inch o.c.	ProtectoR HD in 2-Part UIA, RSUA, or OSFA applied 12-inch o.c.	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	MBA or LVOC	-225 (Lim. 9)
R-A-22	Granule Mod-Bit or BUR over Concrete Deck	Min. 0.5-inch ENRGY 3 in 2-Part UIA, RSUA, or OSFA applied 12-inch o.c.	SeparatoR CGF in 2-Part UIA, RSUA, or OSFA applied 12-inch o.c.	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	MBA or LVOC	-247.5 (Lim. 9)
R-A-23	Granule Mod-Bit or BUR over Concrete Deck	-	SeparatoR CGF in 2-Part UIA, RSUA, or OSFA applied 12-inch o.c.	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	MBA or LVOC	-315 (Lim. 9)

Mechanically Fastened Recover Assemblies								
System No.	Deck Detail	Base Insulation	Base Insulation Attachment	Top Insulation	Top Insulation Attachment	Membrane	Membrane Attachment	MDP (psf)
R-M-1	Existing Metal Roof over Min. 16ga. steel purlins	OPTIONAL INSULATION under Min. 1-inch E3 or E3 C1	Preliminarily Secured or secured with top layer	Cover Board or Min. 1-inch E3 or E3 C1	Preliminarily Secured	EPDM R or EPDM R FIT	Attached in-lap with JM Purlin Fasteners installed 12-inch o.c. along the Polymer Membrane Batten through existing roof into purlins; Laps spaced 114-inch o.c.; Min. 6-inch wide laps sealed with min. 3-inch wide seam tape	-30 (Lim. 7; Non-HVHZ)
R-M-2	Existing Metal Roof over Min. 16ga. steel purlins	OPTIONAL INSULATION under Min. 1-inch E3 or E3 C1	Preliminarily Secured or secured with top layer	Cover Board or Min. 1-inch E3 or E3 C1	Preliminarily Secured	EPDM NR or EPDM NR FIT – 60 or 90	Attached with JM Purlin Fasteners installed 6-inch o.c. along the Polymer Membrane Batten through the membrane in the field (not in the lap); Battens spaced 72-inch o.c.; Battens covered with JM EPDM Peel & Stick Sealing Strip	-37.5 (Lim. 7; Non-HVHZ)

APPENDIX D – APPROVED ASSEMBLIES FOR JM EPDM SINGLE-PLY MEMBRANES

Mechanically Fastened Recover Assemblies								
System No.	Deck Detail	Base Insulation	Base Insulation Attachment	Top Insulation	Top Insulation Attachment	Membrane	Membrane Attachment	MDP (psf)
R-M-3	Existing Metal Roof over Min. 16ga. steel purlins	OPTIONAL INSULATION under Min. 1-inch E3 or E3 C1	Preliminarily Secured or secured with top layer	Cover Board or Min. 1-inch E3 or E3 C1	Preliminarily Secured	EPDM R or EPDM R FIT	Attached in-lap with JM Purlin Fasteners installed 12-inch o.c. along the Polymer Membrane Batten through existing roof into purlins; Laps spaced 114-inch o.c.; Min. 6-inch wide laps sealed with min. 3-inch wide seam tape; JM EPDM 10" RPS attached with JM Purlin Fasteners installed 12-inch o.c. along the Polymer Membrane Batten through existing roof into purlins; JM EPDM 10" RPS spaced 114-inch o.c. and centered between laps; Membrane adhered to JM EPDM 10" RPS	-45 (Lim. 7)
R-M-4	Existing Metal Roof over Min. 16ga. steel purlins	OPTIONAL INSULATION under Min. 1-inch E3 or E3 C1	Preliminarily Secured or secured with top layer	Cover Board or Min. 1-inch E3 or E3 C1	Preliminarily Secured	EPDM R or EPDM R FIT	Attached in-lap with JM Purlin Fasteners installed 6-inch o.c. along the Polymer Membrane Batten or with High Load Plates through existing roof into purlins; Laps spaced 114-inch o.c.; Min. 6-inch wide laps sealed with min. 3-inch wide seam tape	-45 (Lim. 7)
R-M-5	Existing Metal Roof over Min. 16ga. steel purlins	OPTIONAL INSULATION under Min. 1-inch E3 or E3 C1	Preliminarily Secured or secured with top layer	Cover Board or Min. 1-inch E3 or E3 C1	Preliminarily Secured	EPDM R or EPDM R FIT	JM EPDM 10" RPS attached with JM Purlin Fasteners and High Load Plates installed 6-inch o.c. through existing roof into purlins; JM EPDM 10" RPS spaced 114-inch o.c.; Membrane adhered to JM EPDM 10" RPS	-52.5 (Lim. 7)

APPENDIX D – APPROVED ASSEMBLIES FOR JM EPDM SINGLE-PLY MEMBRANES

Adhered Assemblies over Steel Deck (New or Existing)								
System No.	Deck	Vapor Barrier	Base Insulation (Note 7)	Middle Insulation	Top Insulation/ Cover Board	Membrane	Membrane Attachment	MDP (psf)
S-A-1	G33	Optional JM Vapor Barrier SA	Min. 1.5-inch ENRGY 3 or ENRGY 3 CGF applied in 2-Part UIA or RSUA spaced 12-inch o.c.	OPTIONAL Min. 1-inch ENRGY 3 or ENRGY 3 CGF applied in 2-Part UIA or RSUA spaced 12-inch o.c.	Min. 1-inch ENRGY 3 or ENRGY 3 CGF applied in 2-Part UIA or RSUA spaced 12-inch o.c.	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	ASBA, MBA, LVOC, or WBMA	-45 (Lim. 9; Non-HVHZ)
S-A-2	G33	Optional JM Vapor Barrier SA	Min. 1.5-inch ENRGY 3 or ENRGY 3 CGF applied in 2-Part UIA or RSUA spaced 12-inch o.c.	OPTIONAL Min. 1-inch ENRGY 3 or ENRGY 3 CGF applied in 2-Part UIA or RSUA spaced 12-inch o.c.	DensDeck Prime applied in 2-Part UIA, OSFA, or RSUA spaced 12" o.c.	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	ASBA, MBA, LVOC, or WBMA	-45 (Lim. 9; Non-HVHZ)
S-A-3	G33	Optional JM Vapor Barrier SA	Min. 1.5-inch ENRGY 3 or ENRGY 3 CGF applied in 2-Part UIA or RSUA spaced 12-inch o.c.	OPTIONAL Min. 1-inch ENRGY 3 or ENRGY 3 CGF applied in 2-Part UIA or RSUA spaced 12-inch o.c.	ProtectoR HD, DEXcell FA, or SECUROCK applied in 2-Part UIA, OSFA, or RSUA spaced 12" o.c.	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	ASBA, MBA, LVOC, or WBMA	-45 (Lim. 9; Non-HVHZ)

Assemblies with Adhered Membranes over Insulated Steel Deck (New, Existing, or Recover)									
System No.	Deck Detail	Thermal/ Vapor Barrier	Base Insulation	Base Insulation Attachment	Top Insulation or Coverboard	Top Insulation or Coverboard Attachment	Membrane	Membrane Attachment	MDP (psf)
S-AM-1	G33	Optional Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 1-inch ENRGY 3 CGF	UltraFast Fasteners & Plates (Square) secured 1 fastener per 4ft ²	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	ASBA, MBA, LVOC, or WBMA	-30 (Lim. 7; Non-HVHZ)
S-AM-2	G33, F1, L6, S24	Optional Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 2-inch ENRGY 3 CGF	Fasteners & Plates secured 15 per 4-ft x 8-ft board	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	ASBA, MBA, LVOC, or WBMA	-37.5 (Lim. 7; Non-HVHZ)
S-AM-3	G33	Optional Vapor Barrier	OPTIONAL INSULATION under Min. 0.5-inch E3 or E3 C1	Simultaneously secured with top layer	ProtectoR	Fasteners & Plates secured 1 fastener per 4ft ²	Min. 60mil EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	ASBA, MBA, LVOC, or WBMA	-37.5 (Lim. 7; Non-HVHZ)
S-AM-4	G33	Optional Vapor Barrier	OPTIONAL INSULATION under Min. 1.5-inch E3 or E3 C1	Simultaneously secured with top layer	DensDeck Prime	Fasteners & Plates secured 12 per 4-ft x 8-ft board Pattern #2	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	ASBA, MBA, LVOC, or WBMA	-37.5 (Lim. 7; Non-HVHZ)
S-AM-5	G33	Optional Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 1.5-inch E3 or E3 C1	Fasteners & Plates secured 1 fastener per 2.67ft ²	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	ASBA, MBA, LVOC, or WBMA	-45 (Lim. 7; Non-HVHZ)

APPENDIX D – APPROVED ASSEMBLIES FOR JM EPDM SINGLE-PLY MEMBRANES

Assemblies with Adhered Membranes over Insulated Steel Deck (New, Existing, or Recover)									
System No.	Deck Detail	Thermal/Vapor Barrier	Base Insulation	Base Insulation Attachment	Top Insulation or Coverboard	Top Insulation or Coverboard Attachment	Membrane	Membrane Attachment	MDP (psf)
S-AM-6	G33	Optional Vapor Barrier	OPTIONAL INSULATION under Min. 0.5-inch E3 or E3 C1	Simultaneously secured with top layer	Invinsa or Min. 0.5-inch SECUROCK	Fasteners & Plates secured 1 fastener per 2ft ²	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	ASBA, MBA, LVOC, or WBMA	-45 (Lim. 7; Non-HVHZ)
S-AM-7	G33	Optional Vapor Barrier	Min. 1.5-inch E3 or E3 C1	Fasteners & Plates secured 1 fastener per 2.67ft ²	DensDeck Prime over OPTIONAL layer of Min. 1.5-inch E3 or E3 C1	2-Part UIA, OSFA, or RSUA applied 12" o.c.	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	ASBA, MBA, LVOC, or WBMA	-45 (Lim. 7; Non-HVHZ)
S-AM-8	G33	Min. 0.5-inch DensDeck Prime secured with DF or TF at 1 fastener per 4ft ² over OPTIONAL Vapor Barrier	Min. 1.5-inch ENRGY 3	2-Part UIA, OSFA, or RSUA applied 12" o.c.	OPTIONAL ProtectoR HD, DEXcell FA, SECUROCK, or DensDeck Prime	2-Part UIA, OSFA, or RSUA applied 12" o.c.	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	ASBA, MBA, LVOC, or WBMA	-45 (Lim. 7; Non-HVHZ)
S-AM-9	G33	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under Min. 1.5-inch E3 or E3 C1	Simultaneously secured with top layer	ProtectoR	Fasteners & Plates secured 1 fastener per 4ft ²	Min. 60 mil EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	ASBA, MBA, LVOC, or WBMA	-45 (Lim. 7; Non-HVHZ)
S-AM-10	G33	Optional Vapor Barrier	Min. 1.5-inch E3	Fasteners & Plates secured 1 fastener per 2.67ft ²	Min. 1-inch E3	2-Part UIA or RSUA applied 12" o.c.	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	ASBA, MBA, LVOC, or WBMA	-45 (Lim. 7; Non-HVHZ)
S-AM-11	G33	Optional Vapor Barrier	Min. 2-inch E3	Fasteners & Plates secured 1 fastener per 4ft ²	Min. 1-inch E3	2-Part UIA or RSUA applied 12" o.c.	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	ASBA, MBA, LVOC, or WBMA	-45 (Lim. 7; Non-HVHZ)
S-AM-12	G33, F1, L6, S24	Optional Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 2-inch ENRGY 3 CGF	UltraFast Fasteners & Plates (Square) secured 12 per 4-ft x 8-ft board Pattern #1	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	ASBA, MBA, LVOC, or WBMA	-45 (Lim. 7)
S-AM-13	22GA Type N, G80, H1, L12, HS24	Optional Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 2-inch E3	Fasteners & Plates secured 16 per 4-ft x 8-ft board Type N	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	ASBA, MBA, LVOC, or WBMA	-45 (Lim. 7)

APPENDIX D – APPROVED ASSEMBLIES FOR JM EPDM SINGLE-PLY MEMBRANES

Assemblies with Adhered Membranes over Insulated Steel Deck (New, Existing, or Recover)									
System No.	Deck Detail	Thermal/Vapor Barrier	Base Insulation	Base Insulation Attachment	Top Insulation or Coverboard	Top Insulation or Coverboard Attachment	Membrane	Membrane Attachment	MDP (psf)
S-AM-14	G33, F1, L6, S24	Optional Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 2-inch ENRGY 3 or ENRGY 3 C1	Fasteners & Plates secured 1 fastener per 1.6ft ²	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	WBMA	-60 (Lim. 7)
S-AM-15	G33, F1, L6, S24	JM Vapor Barrier SA or SAR adhered to min. 0.5-inch DEXcell FA secured with UF at 1 fastener per 2.0ft ² and primed with JM SA Primer Low VOC	Min. 1.5-inch ENRGY 3	2-Part UIA or RSUA applied 6" o.c.	Min. 0.5-inch ProtectoR HD or DEXcell FA	2-Part UIA, OSFA, or RSUA applied 6" o.c.	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	ASBA, MBA, LVOC, or WBMA	-60 (Lim. 7)
S-AM-16	G33, F1, L6, S24	DynaBase HW adhered to min. 0.5-inch DEXcell FA secured with UF at 1 fastener per 2.0ft ²	Min. 1.5-inch ENRGY 3	2-Part UIA or RSUA applied 6" o.c.	Min. 0.5-inch ProtectoR HD or DEXcell FA	2-Part UIA, OSFA, or RSUA applied 6" o.c.	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	ASBA, MBA, LVOC, or WBMA	-60 (Lim. 7)
S-AM-17	G33, F1, L6, S24	Optional Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 2-inch ENRGY 3 CGF or ENRGY 3 C1 CGF	Fasteners & Plates secured 1 fastener per 1.6ft ²	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	WBMA	-75 (Lim. 7)
S-AM-18	G33, F1, L6, S24	Optional Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 2-inch E3 or E3 C1	Fasteners & Plates secured 1 fastener per 1.6ft ²	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	ASBA, MBA, LVOC, or WBMA	-75 (Lim. 7)
S-AM-19	G33, F2, L6, S18	Optional Vapor Barrier	OPTIONAL INSULATION under Min. 1.5-inch E3 or E3 C1	Simultaneously secured with top layer	Min. 0.5-inch SECUROCK	Fasteners & Plates secured 1 fastener per 1ft ²	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	WBMA	-82.5 (Lim. 7)
S-AM-20	G33, F2, L6, S24	Optional Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 2-inch E3 or E3 C1	Fasteners & Plates secured 1 fastener per 1ft ²	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	ASBA, MBA, LVOC, or WBMA	-82.5 (Lim. 7)

APPENDIX D – APPROVED ASSEMBLIES FOR JM EPDM SINGLE-PLY MEMBRANES

Assemblies with Adhered Membranes over Insulated Steel Deck (New, Existing, or Recover)									
System No.	Deck Detail	Thermal/Vapor Barrier	Base Insulation	Base Insulation Attachment	Top Insulation or Coverboard	Top Insulation or Coverboard Attachment	Membrane	Membrane Attachment	MDP (psf)
S-AM-21	G33, F2, L6, S24	Optional Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 2-inch ENRGY 3 CGF or ENRGY 3 C1 CGF	Fasteners & Plates secured 1 fastener per 1ft ²	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	WBMA	-82.5 (Lim. 7)
S-AM-22	G33, F2, L6, S24	Optional Vapor Barrier	Min. 2-inch E3 or E3 C1	Fasteners & Plates secured 1 fastener per 1ft ²	Min. 1.5-inch ENRGY 3	2-Part UIA, OSFA, or RSUA applied 4" o.c.	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	ASBA, MBA, LVOC, or WBMA	-82.5 (Lim. 7)
S-AM-23	G33, F1, L6, S24	Optional Vapor Barrier	Min. 2-inch E3 or E3 C1	Fasteners & Plates secured 1 fastener per 1.6ft ²	Min. 1.5-inch E3 or E3 C1	2-Part UIA, OSFA, or RSUA applied 6" o.c.	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	ASBA, MBA, LVOC, or WBMA	-82.5 (Lim. 7)
S-AM-24	G33, F1, L6, S24	Optional Vapor Barrier	Min. 2-inch E3 or E3 C1	Fasteners & Plates secured 1 fastener per 1.6ft ²	ProtectoR HD, or Min. 0.5-inch DEXcell FA, SECUROCK, or DensDeck Prime	2-Part UIA, OSFA, or RSUA applied 6" o.c.	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	ASBA, MBA, LVOC, or WBMA	-82.5 (Lim. 7)
S-AM-25	G33, F1, L6, S24	JM Vapor Barrier SA or SAR adhered to min. 0.5-inch DEXcell FA secured with UF at 1 fastener per 1.33ft ² and primed with JM SA Primer Low VOC	Min. 1.5-inch ENRGY 3	2-Part UIA or RSUA applied 6" o.c.	Min. 0.5-inch ProtectoR HD or DEXcell FA	2-Part UIA, OSFA, or RSUA applied 6" o.c.	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	ASBA, MBA, LVOC, or WBMA	-82.5 (Lim. 7)
S-AM-26	G33, P, L6, S24	Optional Vapor Barrier	Min. 2-inch E3	Fasteners & Plates secured 1 fastener per 1ft ²	Min. 1.5-inch ENRGY 3	2-Part UIA or RSUA applied 6" o.c.	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	ASBA, MBA, LVOC, or WBMA	-90 (Lim. 7)
S-AM-27	G80, F2, L6, S18	Optional Vapor Barrier	OPTIONAL INSULATION under Min. 1.5-inch E3 or E3 C1	Simultaneously secured with top layer	Min. 0.5-inch SECUROCK	Fasteners & Plates secured 1 fastener per 1ft ²	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	WBMA	-105 (Lim. 7)
S-AM-28	G80, F2, L6, S24	Optional Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 2-inch ENRGY 3 CGF or ENRGY 3 C1 CGF	Fasteners & Plates secured 1 fastener per 1ft ²	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	WBMA	-120 (Lim. 7)

APPENDIX D – APPROVED ASSEMBLIES FOR JM EPDM SINGLE-PLY MEMBRANES

Assemblies with Adhered Membranes over Insulated Steel Deck (New, Existing, or Recover)									
System No.	Deck Detail	Thermal/Vapor Barrier	Base Insulation	Base Insulation Attachment	Top Insulation or Coverboard	Top Insulation or Coverboard Attachment	Membrane	Membrane Attachment	MDP (psf)
S-AM-29	G80, F2, L6, S24	Optional Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 2-inch E3 or E3 C1	Fasteners & Plates secured 1 fastener per 1ft ²	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	ASBA, MBA or LVOC	-120 (Lim. 7)
S-AM-30	G80, F1W, L6, S24	Optional Vapor Barrier	Min. 2-inch E3 or E3 C1	Fasteners & Plates secured 1 fastener per 1ft ²	ProtectoR HD	2-Part UIA, OSFA, or RSUA applied 4" o.c.	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	ASBA, MBA, LVOC, or WBMA	-120 (Lim. 7)
S-AM-31	G80, F1W, L6, S24	Optional Vapor Barrier	Min. 2-inch E3 or E3 C1	Fasteners & Plates secured 1 fastener per 1ft ²	Min. 1.5-inch ENRGY 3	2-Part UIA, OSFA, or RSUA applied 4" o.c.	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	ASBA	-127.5 (Lim. 7)

Mechanically Fastened Assemblies over Steel Deck (New, Existing, or Recover)								
System No.	Deck Detail	Base Insulation	Base Insulation Attachment	Top Insulation	Top Insulation Attachment	Membrane	Membrane Attachment	MDP (psf)
S-M-1	G33, F1, L6, S24	OPTIONAL INSULATION under min. 1.5-inch E3	Preliminarily Secured or secured with top layer	OPTIONAL Cover Board	Preliminarily Secured	EPDM NR	JM EPDM 10" RPS attached with High Load Fasteners installed 12-inch o.c. along the Polymer Membrane Batten; JM EPDM 10" RPS spaced 72-inch o.c.; Membrane adhered to JM EPDM 10" RPS	-30 (Lim. 7; Non-HVHZ)
S-M-2	G33, F1, L6, S24	OPTIONAL INSULATION under min. 1.5-inch E3	Preliminarily Secured or secured with top layer	OPTIONAL Cover Board	Preliminarily Secured	EPDM NR – 60 or 90	Attached with High Load Fasteners installed 12-inch o.c. along the Polymer Membrane Batten; Battens spaced 114-inch o.c.; Battens covered with JM EPDM Peel & Stick Sealing Strip	-37.5 (Lim. 7; Non-HVHZ)
S-M-3	22GA Type N, G80, H1, L12, HS24	OPTIONAL INSULATION under min. 1.5-inch E3	Preliminarily Secured or secured with top layer	OPTIONAL Cover Board	Preliminarily Secured	EPDM R	Attached with High Load Fasteners and High Load Plates installed 8-inch o.c.; Laps spaced 114-inch o.c.;	-37.5 (Lim. 7; Non-HVHZ)
S-M-4	G33, F1, L6, S24	OPTIONAL INSULATION under min. 2-inch E3	Preliminarily Secured or secured with top layer	OPTIONAL Cover Board	Preliminarily Secured	EPDM NR	Attached with UltraFast Fasteners installed 6-inch o.c. along the Polymer Membrane Batten through the membrane in the field (not in the laps); Battens spaced 72-inch o.c.; Battens covered with JM EPDM Peel & Stick Sealing Strip	-45 (Lim. 7)
S-M-5	G80, F1, L6, S24	OPTIONAL INSULATION under min. 1.5-inch E3	Preliminarily Secured or secured with top layer	OPTIONAL Cover Board	Preliminarily Secured	EPDM R	Attached in-lap with APB Fastener & Plates with High Load Fasteners spaced 6" o.c.; Laps spaced 114-inch o.c.	-45 (Lim. 7)

APPENDIX D – APPROVED ASSEMBLIES FOR JM EPDM SINGLE-PLY MEMBRANES

Mechanically Fastened Assemblies over Steel Deck (New, Existing, or Recover)								
System No.	Deck Detail	Base Insulation	Base Insulation Attachment	Top Insulation	Top Insulation Attachment	Membrane	Membrane Attachment	MDP (psf)
S-M-6	G33, F1, L6, S24	OPTIONAL INSULATION under min. 1.5-inch E3	Preliminarily Secured or secured with top layer	OPTIONAL Cover Board	Preliminarily Secured	EPDM R	Attached in-lap with High Load Fasteners installed 6-inch o.c. along the Polymer Membrane Batten; Laps spaced 114-inch o.c.; 6-inch wide seam tape	-52.5 (Lim. 7)
S-M-7	G33, F1, L6, S24	OPTIONAL INSULATION under min. 1.5-inch E3	Preliminarily Secured or secured with top layer	OPTIONAL Cover Board	Preliminarily Secured	EPDM R FIT	Attached in-lap with High Load Fasteners installed 6-inch o.c. along the Polymer Membrane Batten; Laps spaced 116-inch o.c.	-60 (Lim. 7)

Adhered Assemblies over Wood Deck (New or Existing)								
System No.	Deck Detail	Base Insulation (Note 7)	Base Insulation Attachment	Top Insulation or Coverboard	Top Insulation or Coverboard Attachment	Membrane	Membrane Attachment	MDP (psf)
W-A-1	7/160, L24	-	-	ProtectoR HD	2-Part UIA or RSUA 12-inch o.c.	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	MBA, LVOC, WBMA, or ASBA	-45 (Lim. 9; Non-HVHZ)
W-A-2	7/160, L24	-	-	ProtectoR HD	RSUA 6-inch o.c.	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	MBA, LVOC, WBMA, or ASBA	-90 (Lim. 9; Non-HVHZ)

Assemblies with Adhered Membranes over Insulated Wood Deck (New, Existing, or Recover)								
System No.	Deck Detail	Base Insulation	Base Insulation Attachment	Top Insulation or Coverboard	Top Insulation or Coverboard Attachment	Membrane	Membrane Attachment	MDP (psf)
W-AM-1	T7/160, L24	Optional INSULATION and/or Vapor Barrier	Preliminarily Secured or secured with top layer	Min. 1.5-inch E3 or E3 C1	Trufast VERSA-FAST fastener and UltraFast Metal Plate (Round) secured 12 per 4-ft x 8-ft board Pattern #2	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	MBA, LVOC, WBMA, or ASBA	-30 (Lim. 7; Non-HVHZ)
W-AM-2	T19/32P, L24	Optional INSULATION and/or Vapor Barrier	Preliminarily Secured or secured with top layer	Min. 1.5-inch ENRGY 3 CGF or ENRGY 3 FR	DF, TF or UF secured 1 fastener per 4ft ²	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	MBA, LVOC, WBMA, or ASBA	-37.5 (Lim. 7; Non-HVHZ)

APPENDIX D – APPROVED ASSEMBLIES FOR JM EPDM SINGLE-PLY MEMBRANES

Assemblies with Adhered Membranes over Insulated Wood Deck (New, Existing, or Recover)								
System No.	Deck Detail	Base Insulation	Base Insulation Attachment	Top Insulation or Coverboard	Top Insulation or Coverboard Attachment	Membrane	Membrane Attachment	MDP (psf)
W-AM-3	T7/16O, L24	Optional INSULATION and/or Vapor Barrier	Preliminarily Secured or secured with top layer	DensDeck Prime	Trufast VERSA-FAST fastener and UltraFast Metal Plate (Square) secured 12 per 4-ft x 8-ft board Pattern #2	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	MBA, LVOC, WBMA, or ASBA	-37.5 (Lim. 7; Non-HVHZ)
W-AM-4	T19/32P, L24	Optional INSULATION and/or Vapor Barrier	Preliminarily Secured or secured with top layer	Min. 1.5-inch E3 or E3 C1	DF or TF secured 12 per 4-ft x 8-ft board Pattern #2	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	MBA, LVOC, WBMA, or ASBA	-45 (Lim. 7; Non-HVHZ)
W-AM-5	T15/32P, L24, N6	Optional INSULATION and/or Vapor Barrier	Preliminarily Secured or secured with top layer	Min. 2-inch E3	Fasteners & Plates secured 16 per 4-ft x 8-ft board	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	MBA, LVOC, WBMA, or ASBA	-52.5 (Lim. 7)
W-AM-6	T15/32P, L24, N6	Min. 2-inch E3	Fasteners & Plates secured 16 per 4-ft x 8-ft board	Min. 1.5-inch E3 or E3 C1	2-Part UIA, OSFA, or RSUA applied 6" o.c.	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	MBA, LVOC, WBMA, or ASBA	-52.5 (Lim. 7)
W-AM-7	T15/32P, L24, N6	Min. 2-inch E3	Fasteners & Plates secured 16 per 4-ft x 8-ft board	ProtectoR HD, or Min. 0.5-inch DEXcell FA, SECUROCK, or DensDeck Prime	2-Part UIA, OSFA, or RSUA applied 6" o.c.	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	MBA, LVOC, WBMA, or ASBA	-52.5 (Lim. 7)
W-AM-8	T15/32P, L24, N6	Optional INSULATION and/or Vapor Barrier	Preliminarily Secured or secured with top layer	Min. 0.5-inch DEXcell FA	JM UltraFast Plate Metal Flat and All Purpose Fastener secured 24 per 4-ft x 8-ft board	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	MBA, LVOC, WBMA, or ASBA	-75 (Lim. 7)
W-AM-9	T19/32P, L24, N6	Optional INSULATION and/or Vapor Barrier	Preliminarily Secured or secured with top layer	Min. 0.5-inch DEXcell FA	JM UltraFast Plate Metal Flat and All Purpose Fastener secured 24 per 4-ft x 8-ft board	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	MBA, LVOC, WBMA, or ASBA	-82.5 (Lim. 7)
W-AM-10	T15/32P, L24, N6	Optional INSULATION and/or Vapor Barrier	Preliminarily Secured or secured with top layer	Min. 2-inch E3	Fasteners & Plates secured 24 per 4-ft x 8-ft board	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	MBA, LVOC, WBMA, or ASBA	-82.5 (Lim. 7)
W-AM-11	T15/32P, L24, N6	Min. 2-inch E3	Fasteners & Plates secured 24 per 4-ft x 8-ft board	Min. 1.5-inch E3 or E3 C1	2-Part UIA, OSFA, or RSUA applied 6" o.c.	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	MBA, LVOC, WBMA, or ASBA	-82.5 (Lim. 7)

APPENDIX D – APPROVED ASSEMBLIES FOR JM EPDM SINGLE-PLY MEMBRANES

Assemblies with Adhered Membranes over Insulated Wood Deck (New, Existing, or Recover)								
System No.	Deck Detail	Base Insulation	Base Insulation Attachment	Top Insulation or Coverboard	Top Insulation or Coverboard Attachment	Membrane	Membrane Attachment	MDP (psf)
W-AM-12	T15/32P, L24, N6	Min. 2-inch E3	Fasteners & Plates secured 24 per 4-ft x 8-ft board	ProtectoR HD, or Min. 0.5-inch DEXcell FA, SECUROCK, or DensDeck Prime	2-Part UIA, OSFA, or RSUA applied 6" o.c.	EPDM NR, EPDM NR FIT, EPDM R, or EPDM R FIT	MBA, LVOC, WBMA, or ASBA	-82.5 (Lim. 7)

END OF REPORT