



EVALUATION REPORT

FLORIDA BUILDING CODE, 8TH EDITION (2023)

Manufacturer: JOHNS MANVILLE CORPORATION
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Issued April 30, 2024

Manufacturing Plants: Scottsboro, AL

Quality Assurance: UL LLC (QUA9625)

SCOPE

Category: Roofing
Subcategory: Single Ply Roof System
Code Edition: Florida Building Code, 8th Edition (2023) High-Velocity Hurricane Zones (HVHZ)
Code Sections: 1523.1.1, 1523.6.2, 1523.6.5.2.9
Properties: Wind Resistance, Physical Properties, Impact Resistance

PRODUCT DESCRIPTION

Products	Specification	Description
JM TPO-45	ASTM D 6878 TAS 110	Nominal 45-mil thick thermoplastic polyolefin, heat-weldable, single-ply roof membrane with polyester scrim reinforcement
JM TPO-60	ASTM D 6878 TAS 110	Nominal 60-mil thick thermoplastic polyolefin, heat-weldable, single-ply roof membrane with polyester scrim reinforcement
JM TPO-80	ASTM D 6878 TAS 110	Nominal 80-mil thick thermoplastic polyolefin, heat-weldable, single-ply roof membrane with polyester scrim reinforcement
JM TPO FB 115	ASTM D 6878 TAS 110	Nominal 60-mil thick thermoplastic polyolefin, heat-weldable, single-ply roof membrane with polyester scrim reinforcement and polyester fleece backing
JM TPO FB 135	ASTM D 6878 TAS 110	Nominal 80-mil thick thermoplastic polyolefin, heat-weldable, single-ply roof membrane with polyester scrim reinforcement and polyester fleece backing
JM TPO FB 150	ASTM D 6878 TAS 110	Nominal 60-mil thick thermoplastic polyolefin, heat-weldable, single-ply roof membrane with polyester scrim reinforcement and heavy polyester fleece backing
JM TPO FB 175	ASTM D 6878 TAS 110	Nominal 80-mil thick thermoplastic polyolefin, heat-weldable, single-ply roof membrane with polyester scrim reinforcement and heavy polyester fleece backing
JM TPO SA-60 mil	ASTM D 6878 TAS 110	Nominal 60-mil thick thermoplastic polyolefin, heat-weldable, single-ply roof membrane with polyester scrim reinforcement and a self-adhesive backing

REFERENCES

<u>Entity</u>	<u>Report No.</u>	<u>Standard</u>
Atlantic & Caribbean Roof Consulting (TST4671)	ACRC 14-026	TAS 114(D) (2011)
Atlantic & Caribbean Roof Consulting (TST4671)	ACRC 14-027	TAS 114(D) (2011)
Atlantic & Caribbean Roof Consulting (TST4671)	ACRC 14-028	TAS 114(D) (2011)
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Atlantic & Caribbean Roof Consulting (TST4671)	ACRC 14-030	TAS 114(D) (2011)
Atlantic & Caribbean Roof Consulting (TST4671)	ACRC 14-031	TAS 114(D) (2011)
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Atlantic & Caribbean Roof Consulting (TST4671)	ACRC 14-033	TAS 114(D) (2011)
Atlantic & Caribbean Roof Consulting (TST4671)	ACRC 14-034	TAS 114(D) (2011)
Atlantic & Caribbean Roof Consulting (TST4671)	ACRC 14-035	TAS 114(D) (2011)
Atlantic & Caribbean Roof Consulting (TST4671)	ACRC 14-036	TAS 114(D) (2011)
Atlantic & Caribbean Roof Consulting (TST4671)	ACRC 14-037	TAS 114(D) (2011)
Atlantic & Caribbean Roof Consulting (TST4671)	ACRC 14-038	TAS 114(D) (2011)
Atlantic & Caribbean Roof Consulting (TST4671)	ACRC 14-039	TAS 114(D) (2011)
Atlantic & Caribbean Roof Consulting (TST4671)	ACRC 14-040	TAS 114(D) (2011)
Atlantic & Caribbean Roof Consulting (TST4671)	ACRC 14-041	TAS 114(D) (2011)
Atlantic & Caribbean Roof Consulting (TST4671)	ACRC 14-042	TAS 114(D) (2011)
Atlantic & Caribbean Roof Consulting (TST4671)	ACRC 14-043	TAS 114(D) (2011)
Atlantic & Caribbean Roof Consulting (TST4671)	ACRC 14-044	TAS 114(D) (2011)
Atlantic & Caribbean Roof Consulting (TST4671)	ACRC 14-045	TAS 114(D) (2011)
Atlantic & Caribbean Roof Consulting (TST4671)	ACRC 14-046	TAS 114(D) (2011)
FM Approvals (TST1867)	3009502	FM 4470 (2016)
FM Approvals (TST1867)	3012321	FM 4470 (2016)
FM Approvals (TST1867)	3014692	FM 4470 (2016)
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FM Approvals (TST1867)	3015444	FM 4470 (2016)
FM Approvals (TST1867)	3016629	FM 4470 (2016)
FM Approvals (TST1867)	3018579	FM 4450 (1989)
FM Approvals (TST1867)	3018807	FM 4470 (2016)
FM Approvals (TST1867)	3025168	FM 4470 (2016)
FM Approvals (TST1867)	3025170	FM 4470 (2016)
FM Approvals (TST1867)	3025245	FM 4470 (2016)
FM Approvals (TST1867)	3025881	FM 4470 (2016)
FM Approvals (TST1867)	3028040	FM 4470 (2016)
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FM Approvals (TST1867)	3030351	FM 4470 (2016)
FM Approvals (TST1867)	3030383	FM 4470 (2016)
FM Approvals (TST1867)	3031670	FM 4470 (2016)
FM Approvals (TST1867)	3032235	FM 4470 (2016)
FM Approvals (TST1867)	3033308	FM 4470 (2016)
FM Approvals (TST1867)	3035191	FM 4470 (2016)
FM Approvals (TST1867)	3035538	FM 4470 (2016)
FM Approvals (TST1867)	3037110	FM 4470 (2016)
FM Approvals (TST1867)	3037540	FM 4450 (1989)
FM Approvals (TST1867)	3039813	FM 4470 (2016)
FM Approvals (TST1867)	3040105	FM 4470 (2016)
FM Approvals (TST1867)	3043824	FM 4470 (2016)
FM Approvals (TST1867)	3044716	FM 4470 (2016)
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FM Approvals (TST1867)	3053026	FM 4470 (2016)
FM Approvals (TST1867)	3055227	FM 4470 (2016)
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FM Approvals (TST1867)	3056049	FM 4470 (2016)
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FM Approvals (TST1867)	3058326	FM 4470 (2016)
FM Approvals (TST1867)	3058374	FM 4470 (2016)
FM Approvals (TST1867)	3059030	FM 4470 (2016)
FM Approvals (TST1867)	3059662	FM 4470 (2016)

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FM Approvals (TST1867)	3060614	FM 4470 (2016)
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Intertek – York (ATI) (TST1558)	J0080.01-109-18	TAS 114(J) (2011)
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Intertek – York (ATI) (TST1558)	J0083.01-109-18	TAS 114(J) (2011)
Miami-Dade (EVL1528)	12-0216.01	TAS 114(J) (2011)
Miami-Dade (EVL1528)	13-0307.02	TAS 114(J) (2011)
Miami-Dade (EVL1528)	13-0617.20	TAS 114(J) (2011)

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Miami-Dade (EVL1528)	14-0627.08	TAS 114(J) (2011)
Momentum Technologies (TST2508)	RX10A8A	TAS 110 (2000)
Momentum Technologies (TST2508)	RX10A8B	TAS 110 (2000)
Momentum Technologies (TST2508)	RX14C8A	TAS 110 (2000)
Nemoj Etc LLC (TST6049)	4a-CEL-22-LSWUS-.01A	TAS 114(D) (2011)
Nemoj Etc LLC (TST6049)	4a-JM-23-LSWUS-03.A	TAS 114(J) (2011)
PRI Construction Materials Technologies (TST5878)	JMC-086-02-01	TAS 114(J) (2011)
PRI Construction Materials Technologies (TST5878)	JMC-088-02-01	ASTM D 1876 (2008); TAS 117(B) (1995)
PRI Construction Materials Technologies (TST5878)	JMC-088-02-01.9	ASTM D 1876 (2008); TAS 117(A&B) (1995); TAS 114 (2011); FM 4474 (2011)
PRI Construction Materials Technologies (TST5878)	JMC-107-02-01 Rev 4	ASTM D 903 (1998); ASTM D 1876 (2008); ASTM D 5147 (2011a); TAS 117(A&B) (1995); TAS 114(C) (1995)
PRI Construction Materials Technologies (TST5878)	JMC-108-02-01	TAS 114 (J) (2011)
PRI Construction Materials Technologies (TST5878)	JMC-109-02-01	TAS 114 (J) (2011)
PRI Construction Materials Technologies (TST5878)	JMC-114-02-01	TAS 114 (J) (2011)
PRI Construction Materials Technologies (TST5878)	JMC-131-02-01	TAS 114 (D) (2011)
PRI Construction Materials Technologies (TST5878)	JMC-132-02-01	TAS 114(D) (2011)
PRI Construction Materials Technologies (TST5878)	JMC-132-02-02	TAS 114(D) (2011)
PRI Construction Materials Technologies (TST5878)	JMC-141-02-01	TAS 114(J) (2011)
PRI Construction Materials Technologies (TST5878)	JMC-143-02-01	TAS 114(D) (2011)
PRI Construction Materials Technologies (TST5878)	JMC-162-02-01	TAS 114(D) (2011)
PRI Construction Materials Technologies (TST5878)	JMC-163-02-01	TAS 114(J) (2011)
PRI Construction Materials Technologies (TST5878)	JMC-168-02-01	TAS 114(J) (2011)
PRI Construction Materials Technologies (TST5878)	JMC-193-02-01	TAS 114(J) (2011)
PRI Construction Materials Technologies (TST5878)	JMC-193-02-01A	TAS 114(D) (2011)
PRI Construction Materials Technologies (TST5878)	JMC-196-02-01	TAS 117(A&B) (1995)
PRI Construction Materials Technologies (TST5878)	JMC-201-02-01A	TAS 114(J) (2011)
PRI Construction Materials Technologies (TST5878)	JMC-201-02-01B	TAS 114(J) (2011)
PRI Construction Materials Technologies (TST5878)	JMC-205-02-01	ASTM D 3746 [(1985(2015)e1]
PRI Construction Materials Technologies (TST5878)	JMC-209-02-01	TAS 114(J) (2011)
PRI Construction Materials Technologies (TST5878)	JMC-216-02-01	ASTM D 6878 (2021)
PRI Construction Materials Technologies (TST5878)	JMC-216-02-03	ASTM D 6878 (2021)
PRI Construction Materials Technologies (TST5878)	JMC-226-02-01	ASTM D 6878 (2021)
PRI Construction Materials Technologies (TST5878)	JMC-242-02-01	TAS 114(J) (2011)
PRI Construction Materials Technologies (TST5878)	JMC-245-02-02	TAS 114(D) (2011)
PRI Construction Materials Technologies (TST5878)	JMC-246-02-01	TAS 114(D) (2011)
PRI Construction Materials Technologies (TST5878)	JMC-267-02-02	TAS 114(D) (2011)
PRI Construction Materials Technologies (TST5878)	JMC-277-02-01	TAS 114(D) (2011)
PRI Construction Materials Technologies (TST5878)	JMC-278-02-02	TAS 114(J) (2011)
PRI Construction Materials Technologies (TST5878)	JMC-278-02-03	TAS 114(J) (2011)
PRI Construction Materials Technologies (TST5878)	JMC-303-02-01	TAS 114(J) (2011)
PRI Construction Materials Technologies (TST5878)	JMC-306-02-01	TAS 114(D) (2011)
PRI Construction Materials Technologies (TST5878)	JMC-306-02-02	TAS 114(J) (2011)
PRI Construction Materials Technologies (TST5878)	JMC-306-02-03	TAS 114(J) (2011)
PRI Construction Materials Technologies (TST5878)	JMC-311-02-01	TAS 114(D) (2011)
PRI Construction Materials Technologies (TST5878)	JMC-319-02-01.1	TAS 110 (2000)
PRI Construction Materials Technologies (TST5878)	JMC-319-02-01A	TAS 110 (2000)
PRI Construction Materials Technologies (TST5878)	JMC-319-02-02.1	TAS 110 (2000)
PRI Construction Materials Technologies (TST5878)	JMC-319-02-02A	TAS 110 (2000)
PRI Construction Materials Technologies (TST5878)	JMC-325-02-01.1	TAS 110 (2000)
PRI Construction Materials Technologies (TST5878)	JMC-339-02-03	ASTM C 1289 (2018); ASTM E 84 (2018b)
PRI Construction Materials Technologies (TST5878)	JMC-339-02-04	ASTM C 1289 (2018); ASTM E 84 (2018b)
PRI Construction Materials Technologies (TST5878)	JMC-343-02-01	TAS 114(J) (2011)
PRI Construction Materials Technologies (TST5878)	JMC-343-02-01	ASTM D 413 (1998(2017)); TAS 117(B) (1995)
PRI Construction Materials Technologies (TST5878)	JMC-353-02-01	TAS 114(J) (2011)
PRI Construction Materials Technologies (TST5878)	JMC-353-02-02	TAS 114(D) (2011)
PRI Construction Materials Technologies (TST5878)	JMC-354-02-01	TAS 114(J) (2011)
PRI Construction Materials Technologies (TST5878)	JMC-360-02-01	TAS 114(J) (2011)
PRI Construction Materials Technologies (TST5878)	410T0019	TAS 114(J) (2011)
PRI Construction Materials Technologies (TST5878)	410T0026	TAS 114(J) (2011)
PRI Construction Materials Technologies (TST5878)	507T0008	TAS 114(J) (2011)
PRI Construction Materials Technologies (TST5878)	507T0019	ASTM D 1970/D 1970M (2017a)
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PRI Construction Materials Technologies (TST5878)	507T0036	TAS 114(J) (2011)

<u>Entity</u>	<u>Report No.</u>	<u>Standard</u>
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PRi Construction Materials Technologies (TST5878)	507T0037C	TAS 110 (2000)
PRi Construction Materials Technologies (TST5878)	507T0040A	TAS 110 (2000)
PRi Construction Materials Technologies (TST5878)	507T0040B	ASTM D 6878 (2021)
PRi Construction Materials Technologies (TST5878)	507T0058	ASTM D 6878 (2021)
PRi Construction Materials Technologies (TST5878)	507T0059	TAS 114(J) (2011)
PRi Construction Materials Technologies (TST5878)	507T0062	TAS 114(J) (2011)
PRi Construction Materials Technologies (TST5878)	507T0141	TAS 114(D) (2011)
PRi Construction Materials Technologies (TST5878)	507T0147	TAS 114(D) (2011)
PRi Construction Materials Technologies (TST5878)	507T0163	TAS 114(J) (2011)
PRi Construction Materials Technologies (TST5878)	507T0187.2	FM 4470 (2016); TAS 117(A&B) (1995)
PRi Construction Materials Technologies (TST5878)	507T0193	TAS 114(J) (2011)
PRi Construction Materials Technologies (TST5878)	507T0199	TAS 114(D) (2011)
PRi Construction Materials Technologies (TST5878)	507T0225	TAS 114(J) (2011)
PRi Construction Materials Technologies (TST5878)	507T0226	TAS 114(D) (2011)
PRi Construction Materials Technologies (TST5878)	507T0226A	TAS 114(D) (2011)
PRi Construction Materials Technologies (TST5878)	507T0229	TAS 114(J) (2011)
PRi Construction Materials Technologies (TST5878)	507T0198.2	TAS 114(D) (2011)
PRi Construction Materials Technologies (TST5878)	507T0230	TAS 114(D) (2011); TAS 114(J) (2011)
PRi Construction Materials Technologies (TST5878)	507T0234.1	TAS 114(D) (2011); TAS 114(J) (2011)
PRi Construction Materials Technologies (TST5878)	507T0235	TAS 114(D) (2011); TAS 114(J) (2011)
PRi Construction Materials Technologies (TST5878)	507T0302	TAS 114(J) (2011)
PRi Construction Materials Technologies (TST5878)	507T0303	TAS 114(J) (2011)
PRi Construction Materials Technologies (TST5878)	507T0306.1	TAS 114(J) (2011)
PRi Construction Materials Technologies (TST5878)	507T0326B	TAS 114(D) (2011)
PRi Construction Materials Technologies (TST5878)	507T0327	TAS 114(D) (2011)
PRi Construction Materials Technologies (TST5878)	507T0355A.1	TAS 114(J) (2011)
PRi Construction Materials Technologies (TST5878)	507T0345B.1	TAS 114(D) (2011)
PRi Construction Materials Technologies (TST5878)	507T0355B	TAS 114(J) (2011)
PRi Construction Materials Technologies (TST5878)	507T0379	TAS 114(J) (2011)
PRi Construction Materials Technologies (TST5878)	507T0381	TAS 114(D) (2011)
PRi Construction Materials Technologies (TST5878)	507T0270A	TAS 114(J) (2011)
PRi Construction Materials Technologies (TST5878)	507T0406	TAS 114(D) (2011)
PRi Construction Materials Technologies (TST5878)	507T0428	TAS 114(J) (2011)
Robert J.M. Nieminen, P.E.	Compliance Letter 02/09/2017	TAS 114 (2011)
Trinity ERD (TST6049)	J33600.08.13	TAS 110 (2000)
Trinity ERD (TST6049)	J45020.05.13-1	TAS 114(C) (1995)
Trinity ERD (TST6049)	J45020.09.13-1-R1	TAS 114(C) (1995)
Trinity ERD (TST6049)	JM-SC11190.03.16	TAS 114(J) (2011)
Trinity ERD (TST6049)	JM-SC11320.03.16	TAS 114(D) (2011)
Trinity ERD (TST6049)	SC4910	TAS 114(J) (2011)
Trinity ERD (TST6049)	SFS-SC10010.02.16-R1	TAS 114(J) (2011);
Trinity ERD (TST6049)	JM-SC13465.04.17	TAS 114(J) (2011)
Trinity ERD (TST6049)	JM-SC13465.08.17	TAS 114(J) (2011)
Trinity ERD (TST6049)	J30820.09.10-2	TAS 114(J) (2011)



LIMITATIONS

1. This report is not for use in the non-HVHZ
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. 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. 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. 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. 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.
8. Reroofing applications shall be examined in accordance with FBC Section 1521. For mechanically fastened systems, a field withdrawal resistance test (TAS 105) 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) shall be conducted to confirm conformance of the existing to the minimum design loads.
9. 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.
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. Fire classification is not within the scope of this evaluation.
13. 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, 8th Edition (2023) 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 4/30/2024.

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 (9 pages)
- 2) [APPENDIX B](#) – Nomenclature (7 pages)
- 3) [APPENDIX C](#) – Approved Assemblies for JM TPO Single-Ply Membranes (80 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 TPO 10" Reinforced Perimeter Strip	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 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, 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
	JM Purlin Fastener	Min. 3/4-inch penetration through purlin
	JM Structural Concrete Deck Fastener	Concrete deck only; Min. 1-inch penetration into concrete deck
	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
	JM 90 Seam Plate	3-inch diameter; Galvalume steel plate with barbs
	JM TPO 10" Reinforced Perimeter Strip (RPS)	45mil reinforced TPO with self-adhesive; Membrane shall be primed with JM TPO Primer or JM Single Ply Membrane Primer (Low VOC) prior to adhering to RPS
	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	

APPENDIX A - INSTALLATION

Component	Product	Installation Detail
Fasteners, Battens Plates & JM TPO 10" Reinforced Perimeter Strip (Cont'd)	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
	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; Min. 1-inch penetration into concrete deck
	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. 1/2-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	
	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		

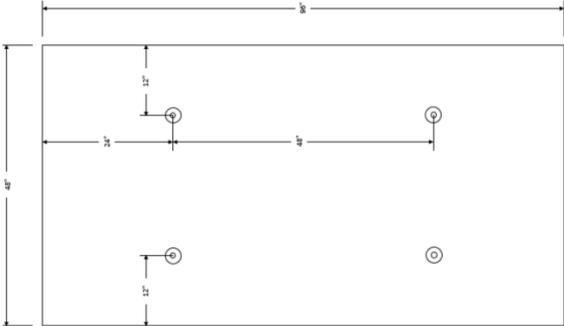
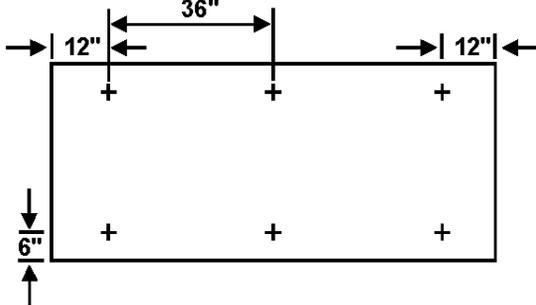
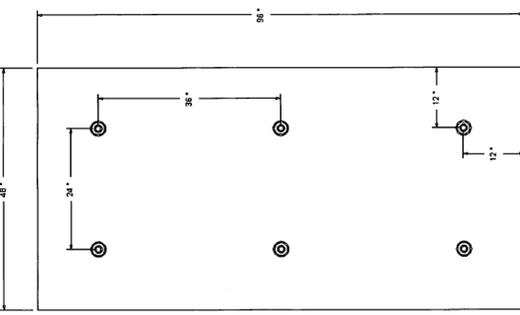
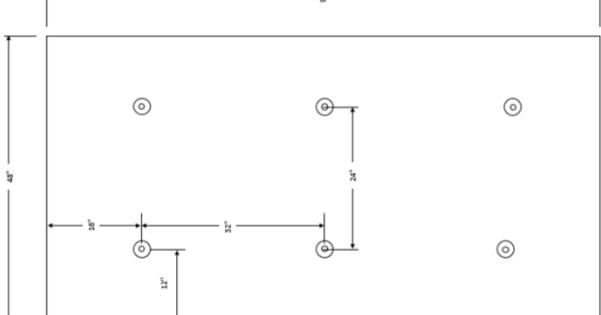
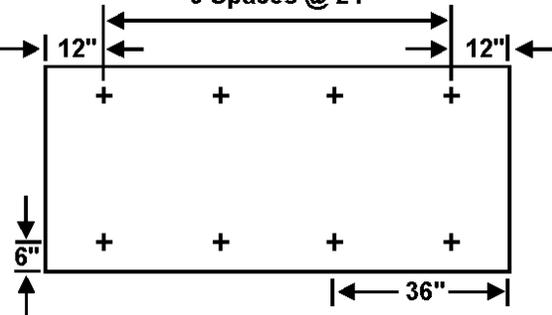
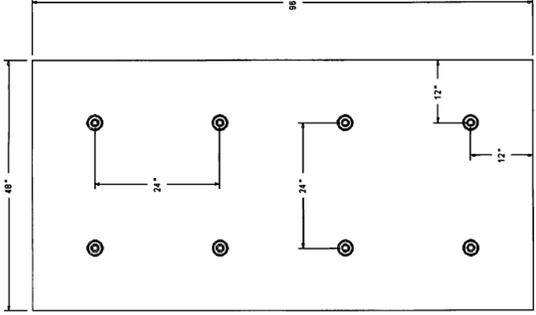
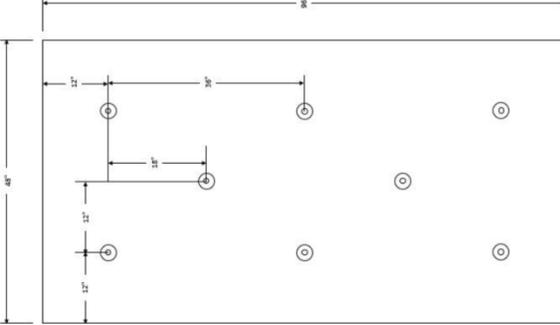
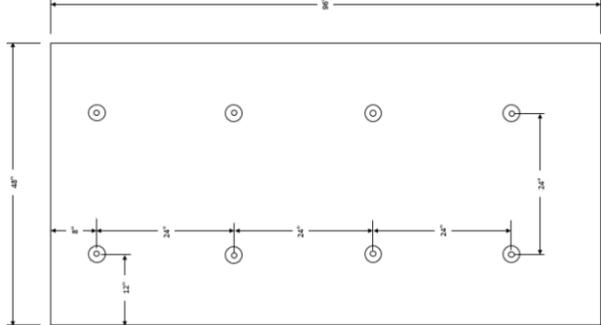


APPENDIX A - INSTALLATION

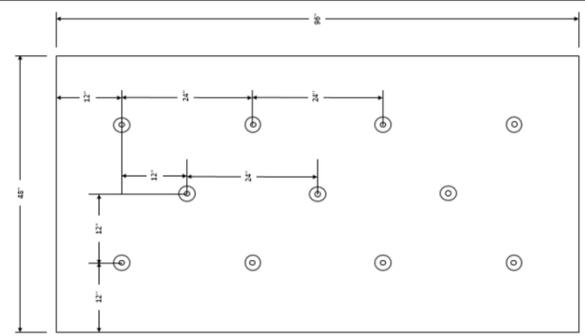
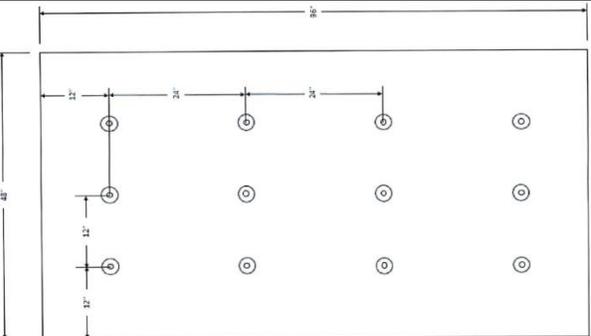
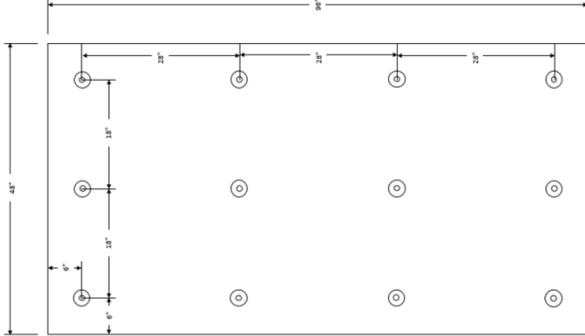
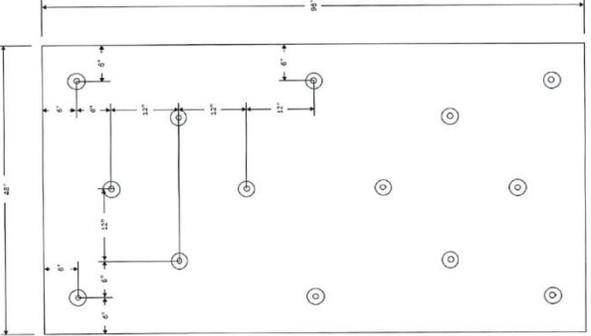
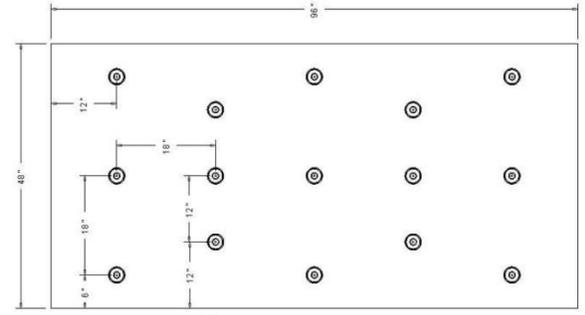
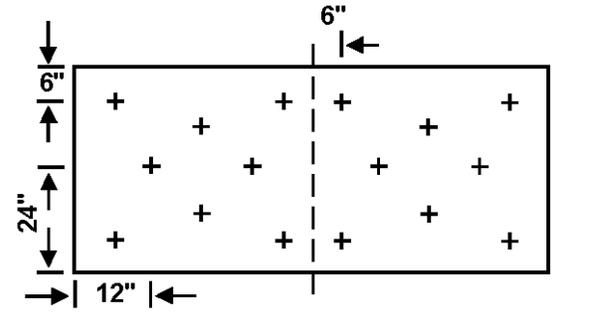
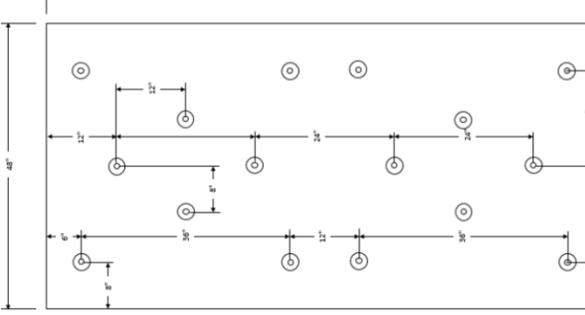
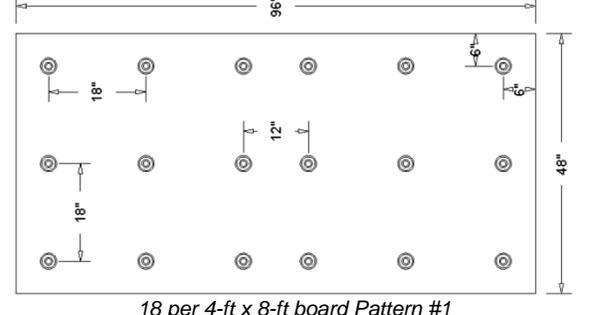
Component	Product	Installation Detail
Insulation/Cover Boards (Cont'd)	JM ENRGY 3 CGF	Min. 1/2-inch thick; Min. 20 psi; Adhered boards shall be a maximum 4 ft x 4 ft
	JM ENRGY 3 C1 CGF	
	JM ENRGY 3 FR	
	JM Fesco Board	Min. 3/4-inch thick; Min. 20 psi
	JM Fesco Foam	Min. 1 1/2-inch thick; Min. 20 psi; Adhered boards shall be a maximum 4 ft x 4 ft
	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 1/2" 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	
	JM SeparatoR CGF	1/2-inch thick; Min. 25 psi; Adhered boards shall be a maximum 4 ft x 4 ft
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		
TPO Membrane Adhesives	ASTM D 312, Type IV asphalt	Fully adhered within the EVT range at a rate of 25-40 lbs/100 ft; For use only with JM TPO FB 150 and 175 membranes only
	JM All Season Sprayable Bonding Adhesive	For JM TPO smooth backed membranes, the adhesive is applied at a total rate of 1,000ft ² /canister; Applied simultaneously to underside of membrane and substrate; For JM TPO fleece backed membranes the adhesive is applied both to the substrate and the underside of the membrane at a rate of 0.21-0.23 gal/100ft ² for a total application rate of 0.41-0.47gal/100ft ²
	JM Roofing System Urethane Adhesive	Ribbon adhered in 3/4 to 1-inch wide beads; For use only with JM TPO Fleece Backed membranes only
	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; For use with JM TPO smooth backed membranes only
	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; For use with JM TPO smooth backed membranes only
	JM TPO 1168 Membrane Adhesive	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; For use with JM TPO smooth backed membranes only
	JM TPO Water Based Membrane Adhesive	Bareback TPO shall be fully adhered in two-sided application at a combined rate of 0.6-0.8 gal/100ft ² or one-sided application applied to the substrate at a rate of 0.4-0.5 gal/100ft ² ; Fleeceback TPO shall be fully adhered in one-sided application applied to the substrate at a rate of 0.6-0.8 gal/100ft ²

APPENDIX A - INSTALLATION

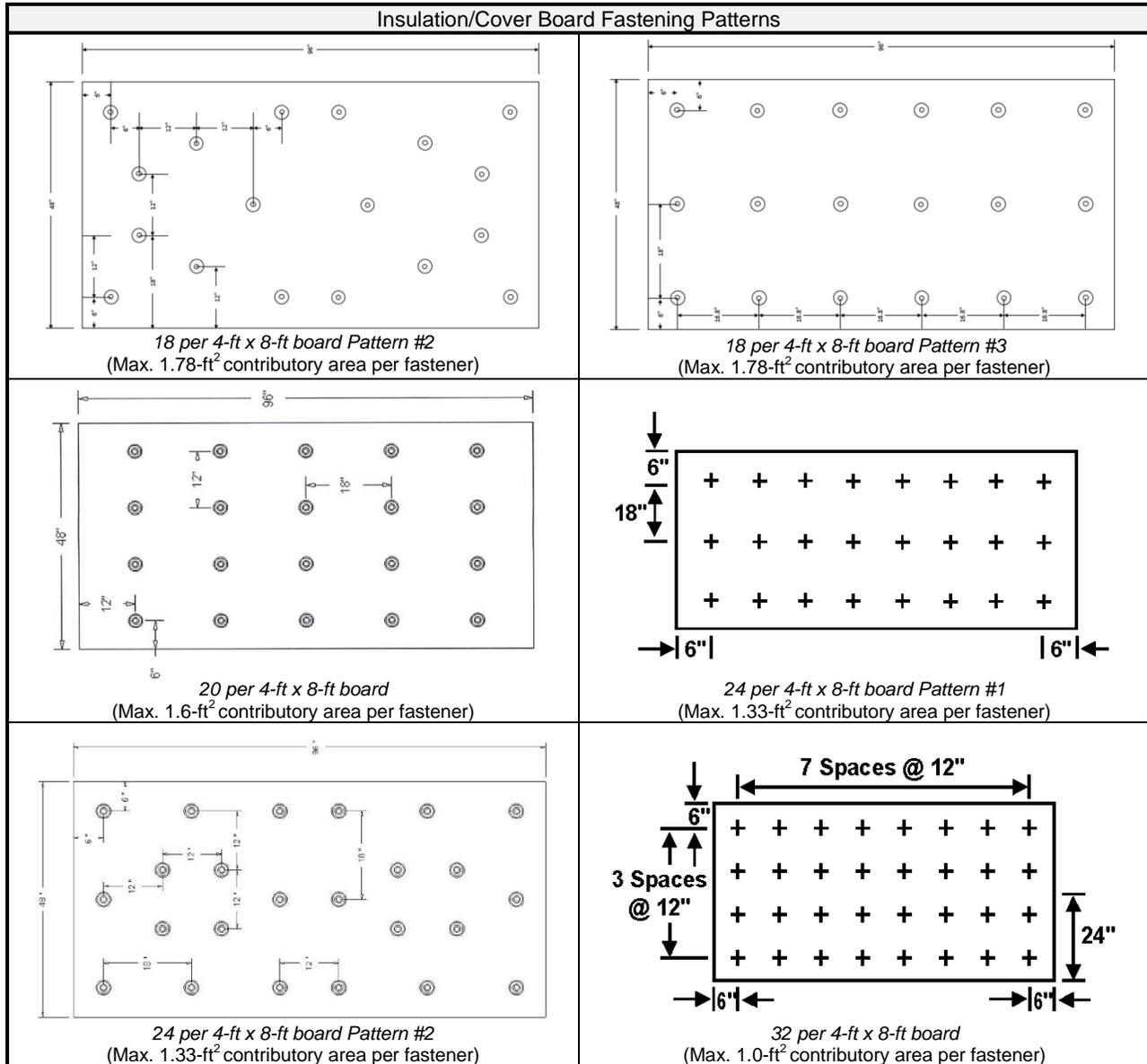
Component	Product	Installation Detail
TPO Membrane Adhesives (Cont'd)	JM Two Part Urethane Insulation Adhesive Canister	Applied in spatter pattern at a rate of 0.32 gal/100ft ² or 1/2-inch wide beads; For use only with JM TPO Fleece Backed membranes only
SA Primer	JM SA Primer Low VOC	Applied at rate of 0.5 gal/100ft ²
	JM SA Primer	Applied 0.75-1.25 gal/100ft ² on porous surfaces and 0.25-0.75 gal/100ft ² on nonporous surfaces
	JM All Season Sprayable Bonding Adhesive	Applied at rate of 500 ft ² /canister
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	
	JM DynaLastic 180 FR	
	JM DynaLastic 180 S	
	JM DynaLastic 250	
	JM DynaLastic 250 FR	
	JM DynaLastic 250 S	
	JM DynaMax	
	JM DynaMax FR	
	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
TPO Single-Ply Membranes	JM TPO-45	Min. 2-inch wide side-laps with min. 1.5-inch wide heat weld for adhered systems; In-lap fastened systems shall have min. 6-inch wide side-laps with min. 1.5-inch wide heat weld; 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 TPO-60	
	JM TPO-80	
	JM TPO FB 115	
	JM TPO FB 135	
	JM TPO FB 150	
	JM TPO FB 175	
JM TPO SA-60 mil		
Cellular Lightweight Insulating 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	Slurry coat min. 1/8-inch thick; 1" thick EPS board (1 lbs/ft ³); Min. 2-inch thick top coat
	Elastizell	
	Concrecel	
	Cellular Lightweight Concrete	

Insulation/Cover Board Fastening Patterns	
 <p>4 per 4-ft x 8-ft board (Max. 8.0-ft² contributory area per fastener)</p>	 <p>6 per 4-ft x 8-ft board Pattern #1 (Max. 5.33-ft² contributory area per fastener)</p>
 <p>6 per 4-ft x 8-ft board Pattern #2 (Max. 5.33-ft² contributory area per fastener)</p>	 <p>6 per 4-ft x 8-ft Type N (Max. 5.33-ft² contributory area per fastener)</p>
 <p>8 per 4-ft x 8-ft board Pattern #1 (Max. 4.0-ft² contributory area per fastener)</p>	 <p>8 per 4-ft x 8-ft board Pattern #2 (Max. 4.0-ft² contributory area per fastener)</p>
 <p>8 per 4-ft x 8-ft board Pattern #3 (Max. 4.0-ft² contributory area per fastener)</p>	 <p>8 per 4-ft x 8-ft board Type N (Max. 4.0-ft² contributory area per fastener)</p>

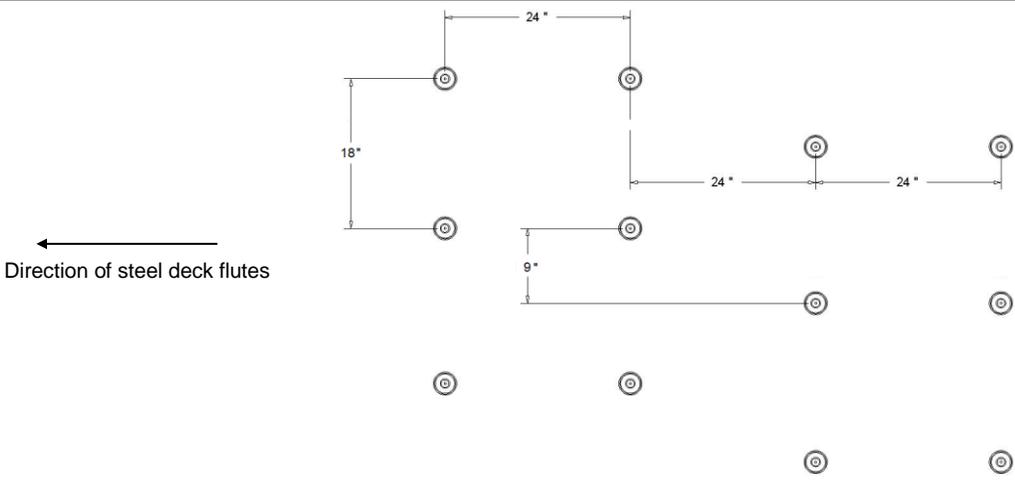
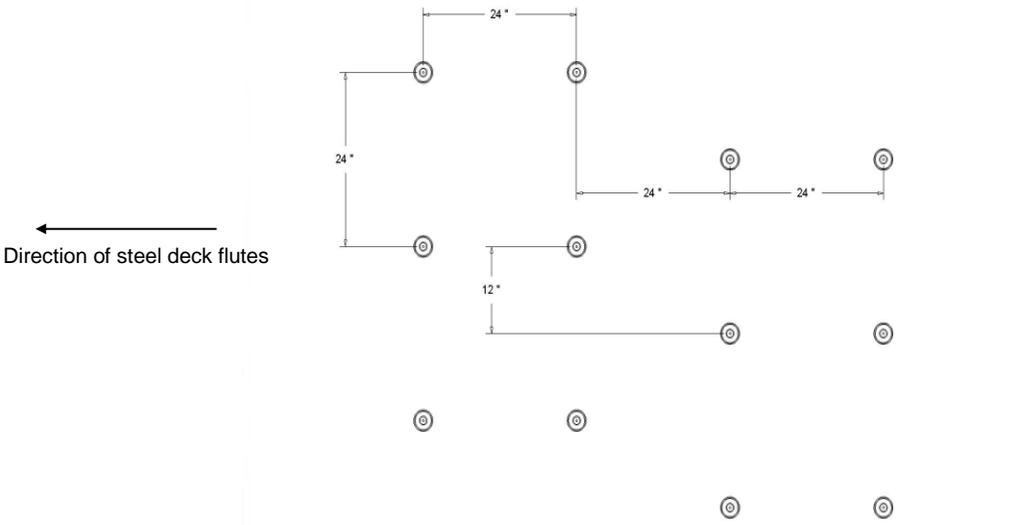
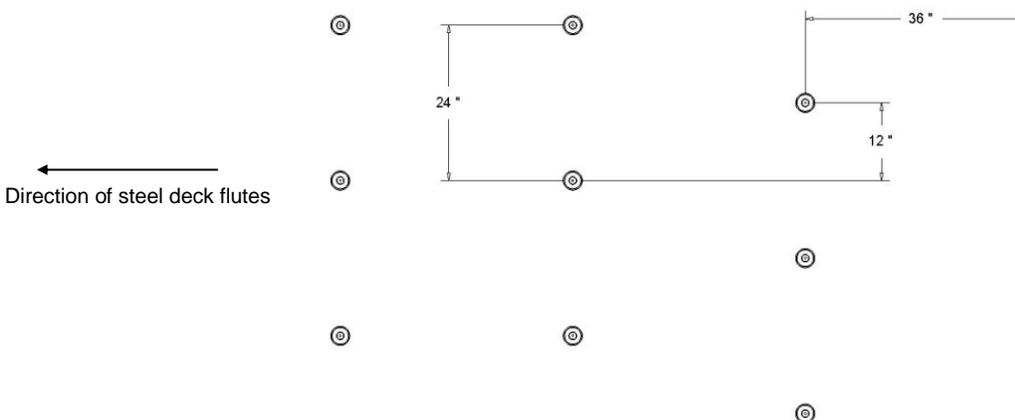
APPENDIX A - INSTALLATION

Insulation/Cover Board Fastening Patterns	
 <p><i>11 per 4-ft x 8-ft board</i> (Max. 2.9-ft² contributory area per fastener)</p>	 <p><i>12 per 4-ft x 8-ft board Pattern #1</i> (Max. 2.67-ft² contributory area per fastener)</p>
 <p><i>12 per 4-ft x 8-ft board Pattern #2</i> (Max. 2.67-ft² contributory area per fastener)</p>	 <p><i>14 per 4-ft x 8-ft board</i> (Max. 2.29-ft² contributory area per fastener)</p>
 <p><i>15 per 4-ft x 8-ft board</i> (Max. 2.13-ft² contributory area per fastener)</p>	 <p><i>16 per 4-ft x 8-ft board</i> (Max. 2.0-ft² contributory area per fastener)</p>
 <p><i>16 per 4-ft x 8-ft board Type N</i> (Max. 2.0-ft² contributory area per fastener)</p>	 <p><i>18 per 4-ft x 8-ft board Pattern #1</i> (Max. 1.78-ft² contributory area per fastener)</p>

APPENDIX A - INSTALLATION



APPENDIX A - INSTALLATION

Alternate Fastener Patterns for Induction Weld Assemblies Only	
Description	Fastening Array Repeated Using the Geometric Grid Shown Below
<p><i>1.5-ft x 2-ft staggered grid</i></p>	
<p><i>2-ft x 2-ft staggered grid</i></p>	
<p><i>2-ft x 3-ft staggered grid</i></p>	

APPENDIX A - INSTALLATION

VERSAs-FAST Metal Plate Fastening Pattern	
Description	Fastening Pattern
<p>3 Fasteners/ Plate</p> <p>Direction of fastener row within lap</p>	<p>VERSAs-FAST Fasteners located on the side of the plate that is in closest proximity to the weld seam</p>
<p>4 Fasteners (Wedge)/ Plate</p> <p>Direction of fastener row within lap</p>	<p>VERSAs-FAST Fasteners located on the side of the plate that is in closest proximity to the weld seam</p>
<p>4 Fasteners (Trapezoid)/ Plate</p> <p>Direction of fastener row within lap</p>	<p>VERSAs-FAST Fasteners located on the side of the plate that is in closest proximity to the weld seam</p>

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				
1168	JM 1168 Membrane Adhesive				
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				
2-Part UIA-C(S)	JM Two Part Urethane Insulation Adhesive Canister or JM Two-Part UIA Canister applied in spatter application at a rate of 3.5-3.9 lbs/100ft ²				
AP Fasteners & Plates	All Purpose Fastener, Trufast #14 HD Fastener or Structural Concrete Deck Fastener (concrete only) and UltraFast Metal Plate (Round) or UltraFast Metal Plate (Square) or UltraFast Plate Metal Flat				
AP Fasteners & Plates (Square)	All Purpose Fastener, Trufast #14 HD Fastener or Structural Concrete Deck Fastener (concrete only) and UltraFast Metal Plate (Square) or UltraFast Plate Metal Flat				
AP Fasteners & Trufast Plates	All Purpose Fastener, Trufast #14 HD Fastener or Structural Concrete Deck Fastener (concrete only) and Trufast 3" Metal Insulation Plate				
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 1/2" Retro-Fit Board -JM RetroPlus Roof Board -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: <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;"><i>Concrete Deck</i></td> <td>Min. $f'_c = 2,500$ psi at 28 days</td> </tr> <tr> <td><i>CWF Deck</i></td> <td>Min. 2.5-inch thick Tectum I cementitious wood fiber panels</td> </tr> </table>	<i>Concrete Deck</i>	Min. $f'_c = 2,500$ psi at 28 days	<i>CWF Deck</i>	Min. 2.5-inch thick Tectum I cementitious wood fiber panels
<i>Concrete Deck</i>	Min. $f'_c = 2,500$ psi at 28 days				
<i>CWF Deck</i>	Min. 2.5-inch thick Tectum I cementitious wood fiber panels				

APPENDIX B – NOMENCLATURE

Name	Definition
Deck Detail (Cont'd)	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.
	<i>F</i> <#> <#> 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
	<i>G</i> <#> Min. Grade <#> of <i>Steel Deck</i>
	<i>H</i> <#> <#> 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
	<i>L</i> <#> Max. span of <#> ft
	<i>P</i> Min. 5/8-inch diameter puddle welds at each flute used to secure the deck to the structural supports
	<i>S</i> <#> 1/4 "-14 HWH x7/8" self-drilling screws or equivalent fastener secured <#>-inch o.c. along the panel side laps
	<i>SD</i> <#> <#> 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
	<i>SDL</i> <#> SDL-#14-HW5/16 secured <#>-inch o.c. along the panel side laps
	<i>HS</i> <#> Hilti S0SLC 01M fastener or equivalent fastener secured <#>-inch o.c. along the panel side laps
	<i>W</i> 3/4-inch O.D. flat washer used with indicated fastener
	Solid or closely fitted min. 19/32-inch, 40/20 span rated, CDX plywood at max. 24 in. span for new construction. Min. 15/32-inch, 32/16 span rated, CDX plywood sheathing for existing construction at max. 24 in. span; The following nomenclature is used to further describe the As Tested condition.
	<i>T</i> <#> <i>P</i> Min. <#>-inch thickness of the plywood
	<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>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>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>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>EPS</i>	ASTM C 578 expanded polystyrene insulation board, min. Type IX in HVHZ
<i>Extra HL Fasteners & Plates</i>	JM Extra High Load Fasteners (<i>Wood Deck</i> or <i>Steel Deck</i>) or JM All Purpose Fasteners (<i>Concrete Deck</i>) and JM Extra High Load Plates
<i>FASTENERS</i>	JM UltraFast Fastener, Trufast #12 DP Fastener, Dekfast DF-#12-PH3, JM All Purpose Fastener, Trufast #14 HD Fastener, Dekfast DF-#14-PH3, JM High Load Fastener, Dekfast DF-#15-PH3, or Trufast #15 EHD Fastener

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" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:25%;">Board or Base Sheet</th> <th style="width:40%;">Fastener</th> <th style="width:25%;">Plate</th> <th style="width:10%;">Roof Deck</th> </tr> </thead> </table>	Board or Base Sheet	Fastener	Plate	Roof Deck
	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-PH3, 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 or OSB	
	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 or OSB	
	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, <i>DensDeck Prime</i> , <i>DEXcell FA</i> , or <i>SECUROCK</i>	JM UltraFast Fastener or JM High Load Fastener	Trufast 3" Metal Insulation Plates	Steel		
ENRGY 3, SeparatoR CGF, <i>DensDeck Prime</i> , <i>DEXcell FA</i> , or <i>SECUROCK</i>	JM UltraFast Fastener, JM All Purpose Fastener or JM High Load Fastener	Trufast 3" Metal Insulation Plates	Plywood or OSB		
Any	Trufast #12 DP Fastener, Trufast #14 HD Fastener, or Trufast #15 EHD Fastener	Trufast 3" Metal Insulation Plates	Steel or OSB		
Any	Trufast #12 DP Fastener or Trufast #15 EHD Fastener	Trufast 3" Metal Insulation Plates	Plywood		
<i>HL Fasteners & Plates</i>	<p>Any one of the following fastener and plate combinations:</p> <ol style="list-style-type: none"> 1) JM High Load Fasteners (<i>Wood Deck</i> or <i>Steel Deck</i>), Trufast #15 EHD Fasteners (<i>Steel Deck</i>) or JM All Purpose Fasteners (<i>Concrete Deck</i>) and JM High Load Plates 2) Trufast #15 EHD Fasteners (<i>Steel Deck</i>) or Trufast #14 HD Fasteners (<i>Concrete Deck</i>) and 2.4" Scoop Seam Plate, 2.4" Barbed Metal Seam Plate, or 2.4" Barbed Metal Seam Plate (14-Barb) 3) JM High Load Fasteners (<i>Wood Deck</i> or <i>Steel Deck</i>) or Dekfast DF-#14-PH3 (<i>Concrete Deck</i>) and <i>isofast</i> PLT-R-2-3/8-6B-B plates 				

APPENDIX B – NOMENCLATURE

Name	Definition																					
<i>INSULATION</i>	One of more layers in any combination of the following products: <table border="0" style="width: 100%;"> <tr> <td>-Approved EPS board</td> <td>-FESCO Board</td> <td>-1/2" 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	-1/2" 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	-1/2" Retro-Fit Board																				
-ENRGY 3	-Fesco Foam	-RetroPlus Roof Board																				
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-ENRGY 3 FR	-ProtectoR Foam	-SeparatoR																				
-ENRGY 3 C1	-ProtectoR HD	-SeparatoR CGF																				
-ENRGY 3 C1 CGF	-ProtectoR HD FR	-SeparatoR FR																				
<i>INVINSA</i>	JM Invinsa or JM Invinsa FR Roof Board																					
<i>ISOWELD-#15</i>	isoweld FI-P-6.8-TPO plates and DEKFAST DF-#15-PH3 Fasteners																					
<i>ISOWELD-#12</i>	isoweld FI-P-6.8-TPO plates and DEKFAST DF-#12-PH3 Fasteners																					
<i>IW</i>	Any one of the following fastener and plate combinations: 1) JM All Purpose Fasteners, JM High Load Fasteners, JM Structural Concrete Deck Fasteners, Dekfast DF-#14-PH3, Dekfast DF-#15-PH3, Trufast #14 HD Fasteners, or Trufast #15 EHD Fasteners and JM TPO RhinoPlates 2) Trufast #14 HD Fasteners, Trufast #15 EHD Fasteners or Trufast Fluted Concrete Nails and Trufast TPO IW Plates 3) JM All Purpose Fasteners, JM High Load Fasteners, Dekfast DF-#14-PH3, Dekfast DF-#15-PH3 and <i>isoweld</i> FI-P-6.8-TPO plates																					
<i>IW #15</i>	Any one of the following fastener and plate combinations: 1) JM High Load Fasteners, JM Structural Concrete Deck Fasteners, Dekfast DF-#15-PH3, or Trufast #15 EHD Fasteners and JM PVC RhinoPlates 2) Trufast #15 EHD Fasteners or Trufast Fluted Concrete Nails and Trufast PVC IW Plates 3) JM High Load Fasteners or Dekfast DF-#15-PH3 and <i>isoweld</i> FI-P-6.8-PVC plates																					
<i>JM TPO</i>	One ply of any one of the following products: JM TPO-45, JM TPO-60, or JM TPO-80																					
<i>JM TPO FB</i>	One ply of any one of the following products: JM TPO FB 115 or JM TPO FB 135																					
<i>JM TPO FB w/DynaBase HW</i>	JM TPO FB 115 or JM TPO FB 135 adhered over a torch applied DynaBase HW base ply																					
<i>JM TPO FB w/DynaWeld Base</i>	JM TPO FB 115 or JM TPO FB 135 adhered over a torch applied DynaWeld Base base ply																					
<i>JM TPO FB w/SBS</i>	JM TPO FB 115 or JM TPO FB 135 adhered in JM Roofing System Urethane Adhesive applied in "spatter" to any one of the following base plies as indicated below.																					
	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Base Ply</th> <th style="text-align: left;">Allowable Base Ply Adhesives</th> <th style="text-align: left;">Allowable Substrates</th> </tr> </thead> <tbody> <tr> <td>DynaBase or DynaBase PR</td> <td>JM MBR Bonding Adhesive, or DynaSet 1k</td> <td>ENRGY 3, ProtectoR HD, DEXcell FA Glass Mat Roof Board, DensDeck Prime Roof Board, SECUROCK Gypsum-Fiber Roof Board, or DEXcell Cement Roof Board</td> </tr> <tr> <td>DynaWeld Base or DynaBase HW</td> <td>Torch applied</td> <td>DEXcell FA Glass Mat Roof Board, DensDeck Prime Roof Board, or DEXcell Cement Roof Board</td> </tr> </tbody> </table>	Base Ply	Allowable Base Ply Adhesives	Allowable Substrates	DynaBase or DynaBase PR	JM MBR Bonding Adhesive, or DynaSet 1k	ENRGY 3, ProtectoR HD, DEXcell FA Glass Mat Roof Board, DensDeck Prime Roof Board, SECUROCK Gypsum-Fiber Roof Board, or DEXcell Cement Roof Board	DynaWeld Base or DynaBase HW	Torch applied	DEXcell FA Glass Mat Roof Board, DensDeck Prime Roof Board, or DEXcell Cement Roof Board												
	Base Ply	Allowable Base Ply Adhesives	Allowable Substrates																			
DynaBase or DynaBase PR	JM MBR Bonding Adhesive, or DynaSet 1k	ENRGY 3, ProtectoR HD, DEXcell FA Glass Mat Roof Board, DensDeck Prime Roof Board, SECUROCK Gypsum-Fiber Roof Board, or DEXcell Cement Roof Board																				
DynaWeld Base or DynaBase HW	Torch applied	DEXcell FA Glass Mat Roof Board, DensDeck Prime Roof Board, or DEXcell Cement Roof Board																				
<i>JM TPO HFB</i>	One ply of any one of the following products: JM TPO FB 150 or JM TPO FB 175																					
<i>JM TPO SA</i>	One ply of any one of the following products: JM TPO SA-60 mil																					
<i>LVOC MA</i>	JM LVOC Membrane Adhesive (TPO & EPDM)																					
<i>LWIC</i>	Poured-in-place Cellular Lightweight Insulating Concrete with encapsulated insulation board																					
<i>MBA</i>	JM Membrane Bonding Adhesive (TPO & EPDM)																					
<i>MCRF</i>	Minimum Characteristic Resistance Force as determined by TAS 105 for the named fastener in the selected assembly																					

APPENDIX B – NOMENCLATURE

Name	Definition
<i>MDP</i>	Maximum Design Pressure
<i>OMG Fasteners & Plates</i>	OMG XHD fasteners and 3 in. Ribbed Galvalume Plates (Flat)
<i>OSFA</i>	JM One-Step Foamable Adhesive
<i>PLT-R-3</i>	Dekfast PLT-R-3 plates
<i>Preliminarily Secured</i>	Fastened at minimum rate of 5 per 4 ft x 8 ft board or 4 per 4 ft x 4 ft board
<i>ProtectoR</i>	JM ProtectoR HD or JM ProtectoR HD FR Roof Board
<i>Recover</i>	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 1521. 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.
<i>Retro-Fit</i>	JM Retro-Fit Board
<i>RhinoPlates</i>	Any one of the following fastener and plate combinations: 1) JM High Load Fasteners (<i>Steel or Wood Deck</i>), Trufast #15 EHD Fasteners (<i>Steel Deck</i>), or JM All Purpose Fasteners (<i>Concrete Deck</i>) and JM TPO RhinoPlates 2) Trufast #15 EHD Fasteners (<i>Steel Deck</i>), Trufast #14 HD Fasteners (<i>Concrete Deck</i>), or Trufast Fluted Concrete Nails (<i>Concrete Deck</i>) and Trufast TPO IW Plates 3) JM High Load Fasteners (<i>Steel or Wood Deck</i>), JM All Purpose Fasteners (<i>Concrete Deck</i>), Dekfast DF-#14-PH3 (<i>Concrete Deck</i>) and isoweld FI-P-6.8-TPO plates
<i>RSUA</i>	JM Roofing System Urethane Adhesive
<i>RSUA(S)</i>	JM Roofing System Urethane Adhesive applied in "spatter"
<i>SECUROCK</i>	Min. 1/4-inch JM SECUROCK Gypsum-Fiber Roof Board
<i>StormX</i>	DensDeck StormX Prime
<i>TF</i>	Trufast #12 DP Fastener (<i>Steel Deck or Wood Deck</i>), Trufast #14 HD Fastener (<i>Concrete Deck, Steel Deck, or Wood Deck</i>), or Trufast #15 EHD Fasteners (<i>Concrete Deck, Steel Deck or Wood Deck</i>) with Trufast 3" Metal Insulation Plate
<i>TPO Bonding Adhesives</i>	Any one of the following products: -JM Membrane Bonding Adhesive (TPO & EPDM) -JM LVOC Membrane Adhesive (TPO & EPDM) -JM TPO Water Based Membrane Adhesive
<i>TPO WBMA</i>	JM TPO Water Based Membrane Adhesive
<i>Trufast Seam Plates</i>	Trufast 2.4" Scoop Seam Plates and Trufast #15 EHD Fasteners
<i>Trufast IW Plates</i>	Trufast TPO IW Plates and Trufast #15 EHD Fasteners (steel deck only), Trufast #14 HD Fasteners (concrete deck only), or Trufast Fluted Concrete Nails (concrete deck only)
<i>UF</i>	JM UltraFast Fasteners (<i>Steel Deck or Wood Deck</i>), JM All Purpose Fasteners (<i>Concrete Deck, Steel Deck, or Wood Deck</i>), or JM High Load Fasteners (<i>Wood Deck or Steel Deck</i>) with JM UltraFast Metal Plate (Square), UltraFast Plate Metal Flat, UltraFast Metal Plate (Round), or UltraFast Plate Metal Recessed
<i>UIA</i>	JM Urethane Insulation Adhesive
<i>UltraFast Fasteners & Trufast Plates</i>	JM UltraFast Fasteners (<i>Steel Deck and Wood Deck</i>), Trufast #12 DP Fasteners, JM All Purpose Fasteners (<i>Concrete Deck</i>), or Trufast #14 HD Fasteners and Trufast 3" Metal Insulation Plates
<i>UltraFast Plates</i>	UltraFast Metal Plate (Square), UltraFast Plate Metal Flat, UltraFast Metal Plates (Round), or UltraFast Plate Metal Recessed
<i>UltraFast Plates (Square)</i>	UltraFast Metal Plate (Square) or UltraFast Plate Metal Flat

APPENDIX B – NOMENCLATURE

Name	Definition																																																																																															
Vapor Barrier	One of the following vapor barriers installed over the deck: -4mil or 6mil Polyethylene, loose laid -JM Vapor Barrier SA or JM Vapor Barrier SAR, self-adhered to minimum 0.5-inch thick SECUROCK Gypsum-Fiber Roof Board, DEXcell FA Glass Mat Roof Board or DEXcell Cement Roof Board. The thermal barrier may be primed with JM SA Primer Low VOC, or SA Primer -DynaGrip Base SD/SA, self-adhered to minimum 0.5-inch thick SECUROCK Gypsum-Fiber Roof Board or DEXcell FA Glass Mat Roof Board -DynaBase HW, torch applied to minimum 0.5-inch thick DEXcell FA Glass Mat Roof Board																																																																																															
Vapor Barriers for Adhered Assemblies over Concrete Deck	<p>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.</p> <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>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, DynaLastic 180 FR, DynaLastic 250, DynaLastic 250 FR, DynaMax, or DynaMax FR; 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 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> <tr> <td>ASTM D 41</td> <td>DynaWeld Base</td> <td>Torch adhered</td> <td>2-Part UIA 12-inch o.c.</td> <td>-120</td> </tr> <tr> <td>ASTM D 41</td> <td>DynaWeld Base</td> <td>Torch adhered</td> <td>RSUA 12-inch o.c.</td> <td>-285</td> </tr> <tr> <td>JM SA Primer Low VOC or SA Primer</td> <td>JM Vapor Barrier SA or SAR</td> <td>Self-adhered</td> <td>OSFA or RSUA 12-inch o.c.</td> <td>-135</td> </tr> <tr> <td>JM SA Primer Low VOC or SA Primer</td> <td>JM Vapor Barrier SA or SAR</td> <td>Self-adhered</td> <td>2-Part UIA 12-inch o.c.</td> <td>-82.5</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	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, DynaLastic 180 FR, DynaLastic 250, DynaLastic 250 FR, DynaMax, or DynaMax FR; 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 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	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
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																																																																																												
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, DynaLastic 180 FR, DynaLastic 250, DynaLastic 250 FR, DynaMax, or DynaMax FR; 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 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																																																																																												
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																																																																																												

APPENDIX B – NOMENCLATURE

Name	Definition													
<i>Vapor Barriers for Adhered Assemblies over CWF Deck</i>	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>Thermal Barrier</th> <th>TB Adhesive</th> <th>Primer</th> <th>Vapor Barrier</th> <th>VB Application</th> <th>Insulation Adhesive</th> <th><i>MDP</i> (psf)</th> </tr> </thead> <tbody> <tr> <td>SECUROCK</td> <td>RSUA 12-inch o.c.</td> <td>ASTM D 41</td> <td>DynaWeld Cap</td> <td>Torch adhered</td> <td>RSUA 12-inch o.c.</td> <td>-250</td> </tr> </tbody> </table>	Thermal Barrier	TB Adhesive	Primer	Vapor Barrier	VB Application	Insulation Adhesive	<i>MDP</i> (psf)	SECUROCK	RSUA 12-inch o.c.	ASTM D 41	DynaWeld Cap	Torch adhered	RSUA 12-inch o.c.
Thermal Barrier	TB Adhesive	Primer	Vapor Barrier	VB Application	Insulation Adhesive	<i>MDP</i> (psf)								
SECUROCK	RSUA 12-inch o.c.	ASTM D 41	DynaWeld Cap	Torch adhered	RSUA 12-inch o.c.	-250								
<i>VERSA-FAST</i>	Trufast VERSA-FAST Plates and VERSA-FAST Fasteners													

APPENDIX C – APPROVED ASSEMBLIES FOR JM TPO SINGLE-PLY MEMBRANES

APPROVED ASSEMBLIES FOR JM TPO 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 1523.4.
2. Refer to [LIMITATIONS](#) and [NOMENCLATURE](#) sections of this evaluation when using the table(s) below. Items *italicized* refer to specific nomenclature used in this report.
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. Prior to application of the approved assembly an optional vapor barrier may be installed over concrete, steel, or wood decks when the approved assembly contains insulation or the membrane fastened through to the deck.
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. ENRGY 3, ENRGY 3 CGF, ENRGY 3 C1, or ENRGY 3 C1 CGF base insulation in assemblies with All Layers Adhered may be installed in one or more layers.
8. For systems C-AM-#, C-M-#, S-AM-#, and S-M-#, it is permissible to install over or substitute loose fill insulation with minimum 200psi, minimum 2-inch thick, FBC approved lightweight insulating concrete applied over the concrete or steel deck. Fasteners shall be installed through the lightweight insulating concrete anchoring into the structural deck.
9. As noted in the assembly tables below, FESCO Board, FESCO Foam, DuraBoard, 1/2" Retro-Fit Board, or RetroPlus Roof Board may be substituted for *E3*.

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>
C-W-#	Induction Welded Assemblies over <i>Concrete Deck</i>
CW-A-#	Adhered Assemblies 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-A-#	Adhered Lightweight Concrete Assemblies over <i>Concrete Deck</i> (New or Existing)
LC-AM-#	Lightweight Concrete Assemblies with Adhered Membranes over <i>Concrete Deck</i> (New or Existing)
LC-M-#	Mechanically Fastened Lightweight Concrete Assemblies over <i>Concrete Deck</i> (New, Existing, or <i>Recover</i>)
LC-W-#	Induction Welded Lightweight Concrete Assemblies over <i>Concrete Deck</i> (New, Existing, or <i>Recover</i>)
LS-A-#	Adhered Lightweight Concrete Assemblies over <i>Steel Deck</i> (New or Existing)
LS-AM-#	Lightweight Concrete Assemblies with Adhered Membranes over <i>Steel Deck</i> (New or Existing)
LS-M-#	Mechanically Fastened Lightweight Concrete Assemblies over <i>Steel Deck</i> (New, Existing, or <i>Recover</i>)
LS-W-#	Induction Welded Lightweight Concrete Assemblies over <i>Steel Deck</i> (New, Existing, or <i>Recover</i>)
R-A-#	Adhered <i>Recover</i> Assemblies
R-M-#	Mechanically Fastened <i>Recover</i> Assemblies
R-W-#	Induction Welded <i>Recover</i> Assemblies
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>)
S-W-#	Induction Welded Assemblies over <i>Steel Deck</i>
W-AM-#	Assemblies with Adhered Membranes over Insulated <i>Wood Deck</i> (New, Existing, or <i>Recover</i>)
W-M-#	Mechanically Fastened Assemblies over <i>Wood Deck</i> (New, Existing, or <i>Recover</i>)
W-W-#	Induction Welded Assemblies over <i>Wood Deck</i> (New, Existing, or <i>Recover</i>)

APPENDIX C – APPROVED ASSEMBLIES FOR JM TPO SINGLE-PLY MEMBRANES

Adhered Assemblies over Concrete Deck (New or Existing)						
System No.	Vapor Barrier	Base Insulation (Note 7)	Top Insulation or Base Ply	Membrane	Membrane Attachment	MDP (psf)
C-A-1	OPTIONAL Vapor Barriers for Adhered Assemblies over Concrete Deck	Min. 1.5-inch ENRGY 3 in RSUA, OSFA or 2-Part UIA applied 12-inch o.c.	DensDeck Prime or StormX in RSUA applied 12-inch o.c.	JM TPO FB	RSUA applied 12-inch o.c.	-45 (Lim. 9)
C-A-2	OPTIONAL Vapor Barriers for Adhered Assemblies over Concrete Deck	Min. 1.5-inch E3 in RSUA or 2-Part UIA applied 12-inch o.c.	OPTIONAL SECUROCK or JM Invinsa in RSUA or 2-Part UIA applied 12-inch o.c.	JM TPO FB	RSUA applied 12-inch o.c. or 2-Part UIA-C(S)	-67.5 (Lim. 9)
C-A-3	OPTIONAL Vapor Barriers for Adhered Assemblies over Concrete Deck	Min. 1.5-inch E3 in RSUA or 2-Part UIA applied 12-inch o.c.	OPTIONAL SECUROCK, JM Invinsa or ProtectoR HD in RSUA or 2-Part UIA applied 12-inch o.c.	JM TPO SA	Self-adhered	-67.5 (Lim. 9)
C-A-4	OPTIONAL Vapor Barriers for Adhered Assemblies over Concrete Deck	Min. 1.5-inch ENRGY 3 in OSFA or 2-Part UIA applied 12-inch o.c.	OPTIONAL JM Invinsa or ProtectoR HD in 2-Part UIA applied 12-inch o.c.	JM TPO	MBA applied at 0.83 gal/100ft ² to both membrane and substrate, TPO WBMA, ASBA	-105 (Lim. 9)
C-A-5	OPTIONAL Vapor Barriers for Adhered Assemblies over Concrete Deck	Min. 1.5-inch ENRGY 3 in OSFA or 2-Part UIA applied 12-inch o.c.	OPTIONAL JM Invinsa or ProtectoR HD in 2-Part UIA applied 12-inch o.c.	JM TPO SA	Self-adhered	-105 (Lim. 9)
C-A-6	OPTIONAL Vapor Barriers for Adhered Assemblies over Concrete Deck	-	INVINSA in 2-Part UIA, OSFA, or RSUA applied 12-inch o.c.	JM TPO SA	Self-adhered	-105 (Lim. 9)
C-A-7	OPTIONAL Vapor Barriers for Adhered Assemblies over Concrete Deck	Min. 1.5-inch E3 or ProtectoR Foam in OSFA, RSUA or 2-Part UI applied 12-inch o.c.	-	JM TPO SA	Self-adhered	-105 (Lim 9)
C-A-8	OPTIONAL Vapor Barriers for Adhered Assemblies over Concrete Deck	Min. 1.5-inch E3 or ProtectoR Foam in OSFA, RSUA or 2-Part UIA applied 12-inch o.c.	-	JM TPO FB	RSUA applied 4-inch o.c.; RSUA(S) or 2-Part UIA-C(S)	-112.5 (Lim 9)

APPENDIX C – APPROVED ASSEMBLIES FOR JM TPO SINGLE-PLY MEMBRANES

Adhered Assemblies over Concrete Deck (New or Existing)						
System No.	Vapor Barrier	Base Insulation (Note 7)	Top Insulation or Base Ply	Membrane	Membrane Attachment	MDP (psf)
C-A-9	OPTIONAL <i>Vapor Barriers for Adhered Assemblies over Concrete Deck</i>	Min. 1.5-inch ENRGY 3 in RSUA, OSFA or 2-Part UIA applied 12-inch o.c.	<i>DensDeck Prime</i> or StormX in RSUA applied 12-inch o.c.	JM TPO FB	RSUA applied 4-inch o.c. or RSUA(S)	-135 (Lim. 9)
C-A-10	OPTIONAL <i>Vapor Barriers for Adhered Assemblies over Concrete Deck</i>	Min. 1.5-inch ENRGY 3 CGF, ENRGY 3 FR or ProtectoR Foam in 2-Part UIA applied 12-inch o.c.	-	JM TPO	TPO WBMA, ASBA, or MBA	-142.5 (Lim. 9)
C-A-11	OPTIONAL <i>Vapor Barriers for Adhered Assemblies over Concrete Deck</i>	Min. 1.5-inch ENRGY 3 in OSFA, RSUA or 2-Part UIA; applied 12-inch o.c.	Min. 1-inch ENRGY 3 in OSFA, RSUA or 2-Part UIA; applied 12-inch o.c.	JM TPO	ASBA or MBA	-157.5 (Lim. 9)
C-A-12	OPTIONAL <i>Vapor Barriers for Adhered Assemblies over Concrete Deck</i>	Min. 0.5-inch ENRGY 3 or ProtectoR Foam applied in 2-Part UIA at 12-inch o.c.	-	JM TPO	TPO WBMA or ASBA	-165 (Lim. 9)
C-A-13	OPTIONAL <i>Vapor Barriers for Adhered Assemblies over Concrete Deck</i>	Min. 1-inch ENRGY 3 in OSFA, RSUA or 2-Part UIA; applied 12-inch o.c.	<i>DensDeck Prime</i> in OSFA, RSUA or 2-Part UIA applied 12-inch o.c.	JM TPO FB w/DynaBase HW	RSUA applied 12-inch o.c. or RSUA(S)	-165 (Lim. 9)
C-A-14	OPTIONAL <i>Vapor Barriers for Adhered Assemblies over Concrete Deck</i>	Min. 0.5-inch E3 or ProtectoR Foam in 2-Part UIA applied 12-inch o.c.	-	JM TPO	LVOC MA	-172.5 (Lim. 9)
C-A-15	OPTIONAL <i>Vapor Barriers for Adhered Assemblies over Concrete Deck</i>	OPTIONAL Min. 1.5-inch ENRGY 3, ENRGY 3 CGF or ENRGY 3 FR in 2-Part UIA applied 12-inch o.c.	SECUROCK in 2-Part UIA applied 12-inch o.c.	JM TPO	TPO WBMA, ASBA, 1168, or MBA	-180 (Lim. 9)
C-A-16	OPTIONAL <i>Vapor Barriers for Adhered Assemblies over Concrete Deck</i>	OPTIONAL Min. 1.5-inch ENRGY 3, ENRGY 3 CGF or ENRGY 3 FR in 2-Part UIA applied 12-inch o.c.	DEXcell CB or DEXcell FA in 2-Part UIA applied 12-inch o.c.	JM TPO	TPO WBMA or ASBA	-180 (Lim. 9)
C-A-17	OPTIONAL <i>Vapor Barriers for Adhered Assemblies over Concrete Deck</i>	Min. 1.5-inch ENRGY 3 in OSFA, RSUA or 2-Part UIA; applied 12-inch o.c.	DEXcell CB in 2-Part UIA or RSUA applied 12-inch o.c.	JM TPO FB w/DynaBase HW	RSUA applied 12-inch o.c. or RSUA(S)	-180 (Lim. 9)

APPENDIX C – APPROVED ASSEMBLIES FOR JM TPO SINGLE-PLY MEMBRANES

Adhered Assemblies over Concrete Deck (New or Existing)						
System No.	Vapor Barrier	Base Insulation (Note 7)	Top Insulation or Base Ply	Membrane	Membrane Attachment	MDP (psf)
C-A-18	OPTIONAL <i>Vapor Barriers for Adhered Assemblies over Concrete Deck</i>	Min. 1-inch ENRGY 3, in OSFA, RSUA or 2-Part UIA; applied 12-inch o.c.	<i>ProtectoR</i> in OSFA, RSUA or 2-Part UIA applied 12-inch o.c.	JM TPO	TPO WBMA, ASBA, or MBA	-187.5 (Lim. 9)
C-A-19	OPTIONAL <i>Vapor Barriers for Adhered Assemblies over Concrete Deck</i>	Min. 0.5-inch ENRGY 3, ENRGY 3 CGF, ENRGY 3 FR, or ProtectoR Foam in 2-Part UIA applied 12-inch o.c.	-	JM TPO FB	TPO WBMA	-187.5 (Lim. 9)
C-A-20	OPTIONAL <i>Vapor Barriers for Adhered Assemblies over Concrete Deck</i>	Min. 0.5-inch ENRGY 3, ENRGY 3 CGF, ENRGY 3 FR, or ProtectoR Foam in 2-Part UIA applied 12-inch o.c.	-	JM TPO	TPO WBMA (Two-sided application only) or ASBA	-195 (Lim. 9)
C-A-21	DynaWeld Base over deck primed with ASTM D 41 primer	Min. 0.5-inch E3 C1 or E3 (less ENRGY 3 FR) in 2-Part UIA, RSUA, or OSFA applied 12-inch o.c.	<i>DensDeck Prime</i> in 2-Part UIA, OSFA or RSUA applied 12-inch o.c.	JM TPO FB	2-Part UIA-C(S)	-195 (Lim. 9)
C-A-22	OPTIONAL <i>Vapor Barriers for Adhered Assemblies over Concrete Deck</i>	Min. 1.5-inch ENRGY 3, in OSFA or RSUA applied 12-inch o.c.	<i>ProtectoR</i> in OSFA or RSUA applied 12-inch o.c.	JM TPO or JM TPO FB	JM TPO: LVOC MA or MBA JM TPO FB: 2-Part UIA-C(S)	-210 (Lim. 9)
C-A-23	OPTIONAL <i>Vapor Barriers for Adhered Assemblies over Concrete Deck</i>	Min. 1.5-inch ENRGY 3, in OSFA or RSUA applied 12-inch o.c.	<i>ProtectoR</i> in OSFA or RSUA applied 12-inch o.c.	JM TPO SA	Self-adhered	-210 (Lim. 9)
C-A-24	OPTIONAL <i>Vapor Barriers for Adhered Assemblies over Concrete Deck</i>	Min. 1.5-inch ENRGY 3 in OSFA, RSUA or 2-Part UIA; applied 12-inch o.c.	<i>DEXcell FA</i> in OSFA or RSUA; applied 12-inch o.c.	JM TPO	ASBA	-217.5 (Lim. 9)
C-A-25	OPTIONAL <i>Vapor Barriers for Adhered Assemblies over Concrete Deck</i>	Min. 1.5-inch ENRGY 3 in OSFA, RSUA or 2-Part UIA; applied 12-inch o.c.	<i>DEXcell FA</i> in OSFA or RSUA; applied 12-inch o.c.	JM TPO FB w/DynaBase HW	RSUA applied 12-inch o.c. or RSUA(S)	-217.5 (Lim. 9)
C-A-26	OPTIONAL <i>Vapor Barriers for Adhered Assemblies over Concrete Deck</i>	Min. 1.5-inch ENRGY 3 in RSUA, OSFA or 2-Part UIA applied 12-inch o.c.	<i>DensDeck Prime</i> or <i>StormX</i> in RSUA applied 12-inch o.c.	JM TPO FB	RSUA applied 4-inch o.c. or RSUA(S)	-217.5 (Lim. 9)
C-A-27	OPTIONAL <i>Vapor Barriers for Adhered Assemblies over Concrete Deck</i>	Min. 1.5-inch ENRGY 3 in OSFA, RSUA or 2-Part UIA; applied 12-inch o.c.	<i>ProtectoR HD</i> in OSFA, RSUA or 2-Part UIA; applied 12-inch o.c.	JM TPO	ASBA or MBA	-225 (Lim. 9)

APPENDIX C – APPROVED ASSEMBLIES FOR JM TPO SINGLE-PLY MEMBRANES

Adhered Assemblies over Concrete Deck (New or Existing)						
System No.	Vapor Barrier	Base Insulation (Note 7)	Top Insulation or Base Ply	Membrane	Membrane Attachment	MDP (psf)
C-A-28	OPTIONAL Vapor Barriers for Adhered Assemblies over Concrete Deck	Min. 1-inch ENRGY 3 in OSFA, RSUA or 2-Part UIA; applied 12-inch o.c.	DensDeck Prime in OSFA, RSUA or 2-Part UIA applied 12-inch o.c.	JM TPO	TPO WBMA, ASBA, or 1168	-232.5 (Lim. 9)
C-A-29	DynaBase HW	-	SECUROCK in RSUA applied 12-inch o.c.	JM TPO SA	Self-adhered	-247.5 (Lim. 9)
C-A-30	DynaBase HW torch adhered over deck primed with ASTM D 41 primer	Min. 1.5-inch ENRGY 3 CGF in RSUA applied 12-inch o.c.	SECUROCK in RSUA applied 12-inch o.c.	JM TPO SA	Self-adhered	-247.5 (Lim. 9)
C-A-31	OPTIONAL Vapor Barriers for Adhered Assemblies over Concrete Deck	-	SECUROCK in 2-Part UIA, OSFA, or RSUA applied 12-inch o.c.	JM TPO SA	Self-adhered	-247.5 (Lim. 9)
C-A-32	DynaWeld Cap over deck primed with ASTM D 41 primer	Min. 0.5-inch E3 C1 or E3 (less ENRGY 3 FR) in 2-Part UIA, RSUA, or OSFA applied 12-inch o.c.	DensDeck Prime in 2-Part UIA, OSFA or RSUA applied 12-inch o.c.	JM TPO FB	2-Part UIA-C(S)	-247.5 (Lim. 9)
C-A-33	OPTIONAL Vapor Barriers for Adhered Assemblies over Concrete Deck	-	INVINSA in 2-Part UIA, OSFA, or RSUA applied 12-inch o.c.	JM TPO	TPO WBMA (Two-sided application only) or ASBA	-255 (Lim. 9)
C-A-34	OPTIONAL Vapor Barriers for Adhered Assemblies over Concrete Deck	Min. 1.5-inch ENRGY 3 in 2-Part UIA applied 12-inch o.c.	DEXcell FA in 2-Part UIA applied 12-inch o.c.	JM TPO FB w/DynaWeld Base	2-Part UIA-C(S) at 6lbs/100ft ²	-255 (Lim. 9)
C-A-35	OPTIONAL Vapor Barriers for Adhered Assemblies over Concrete Deck	-	INVINSA in 2-Part UIA, OSFA or RSUA applied 12-inch o.c.	JM TPO FB	TPO WBMA	-277.5 (Lim. 9)
C-A-36	-	Min. 1.5-inch ENRGY 3 in 2-Part UIA-C(B) applied 12-inch o.c.	-	JM TPO FB	2-Part UIA-C(S)	-277.5 (Lim. 9)
C-A-37	DynaBase HW	-	SECUROCK in RSUA applied 12-inch o.c.	JM TPO or JM TPO FB	JM TPO: TPO WBMA (Two-sided application only), LVOC MA, ASBA, or 1168 JM TPO FB: TPO WBMA or 2-Part UIA-C(S)	-292.5 (Lim. 9)
C-A-38	DynaBase HW torch adhered over deck primed with ASTM D 41 primer	Min. 1.5-inch ENRGY 3 CGF in RSUA applied 12-inch o.c.	SECUROCK in RSUA applied 12-inch o.c.	JM TPO or JM TPO FB	JM TPO: TPO WBMA (Two-sided application only), LVOC MA, ASBA, or 1168 JM TPO FB: TPO WBMA or 2-Part UIA-C(S)	-292.5 (Lim. 9)

APPENDIX C – APPROVED ASSEMBLIES FOR JM TPO SINGLE-PLY MEMBRANES

Adhered Assemblies over Concrete Deck (New or Existing)						
System No.	Vapor Barrier	Base Insulation (Note 7)	Top Insulation or Base Ply	Membrane	Membrane Attachment	MDP (psf)
C-A-39	-	Min. 1.5-inch E3 or ProtectorR Foam in 2-Part UIA applied 12-inch o.c.	-	JM TPO	MBA	-322.5 (Lim. 9)
C-A-40	-	-	DEXcell CB in 2-Part UIA or OlyBond 500 applied 12-inch o.c.	JM TPO FB	TPO WBMA	-322.5 (Lim. 9)
C-A-41	OPTIONAL DynaGrip SD/SA over deck primed with ASTM D 41 primer	Min. 1-inch E3 C1 or E3 (less ENRGY 3 FR) in 2-Part UIA, RSUA, or OSFA applied 12-inch o.c.	DensDeck Prime in 2-Part UIA, OSFA or RSUA applied 12-inch o.c.	JM TPO FB	2-Part UIA-C(S)	-337.5 (Lim. 9)
C-A-42	-	-	SECUROCK in 2-Part UIA, OSFA or RSUA applied 12-inch o.c.	JM TPO FB	TPO WBMA or 2-Part UIA-C(S)	-345 (Lim. 9)
C-A-43	-	-	SECUROCK in 2-Part UIA, OSFA or RSUA applied 12-inch o.c.	JM TPO	LVOC MA	-360 (Lim. 9)
C-A-44	-	-	DEXcell CB or DEXcell FA in 2-Part UIA or OlyBond 500 applied 12-inch o.c.	JM TPO	LVOC MA, TPO WBMA (Two-sided application only), MBA, or 1168 (DEXcell FA only)	-390 (Lim. 9)
C-A-45	-	-	DEXcell FA in 2-Part UIA or OlyBond 500 applied 12-inch o.c.	JM TPO SA	Self-adhered	-390 (Lim. 9)
C-A-46	-	-	DEXcell FA in 2-Part UIA or OlyBond 500 applied 12-inch o.c.	JM TPO	ASBA	-390 (Lim. 9)
C-A-47	-	-	DEXcell FA in 2-Part UIA or OlyBond 500 applied 12-inch o.c.	JM TPO FB	TPO WBMA or 2-Part UIA-C(S)	-390 (Lim. 9)
C-A-48	-	-	DEXcell FA in 2-Part UIA or OlyBond 500 applied 12-inch o.c.	JM TPO HFB	ASTM D 312, Type IV Asphalt	-390 (Lim. 9)
C-A-49	-	-	-	JM TPO FB	2-Part UIA-C(S)	-457.5 (Lim. 9)

APPENDIX C – APPROVED ASSEMBLIES FOR JM TPO SINGLE-PLY MEMBRANES

Adhered Assemblies over Concrete Deck (New or Existing)						
System No.	Vapor Barrier	Base Insulation (Note 7)	Top Insulation or Base Ply	Membrane	Membrane Attachment	MDP (psf)
C-A-50	-	-	SECUROCK in 2-Part UIA, OSFA or RSUA applied 12-inch o.c.	JM TPO	TPO WBMA	-465 (Lim. 9)
C-A-51	-	-	INVINSA in 2-Part UIA, OSFA or RSUA applied 12-inch o.c.	JM TPO	MBA applied 0.83 gal/100ft ²	-465 (Lim. 9)
C-A-52	-	-	SECUROCK in 2-Part UIA, OSFA or RSUA applied 12-inch o.c.	JM TPO FB	2-Part UIA-C(S)	-465 (Lim. 9)
C-A-53	-	-	SECUROCK in 2-Part UIA, OSFA, or RSUA applied 12-inch o.c.	JM TPO	MBA applied 0.83 gal/100ft ²	-495 (Lim. 9)
C-A-54	-	-	-	JM TPO FB	RSUA applied 12-inch o.c. or RSUA(S)	-502.5 (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 under min. 2-inch ENRGY 3	Fasteners & Plates secured 1 fastener per 2.67ft ²	ProtectoR HD	RSUA or 2-Part UIA applied 12-inch o.c	JM TPO SA	Self-adhered	-45 (Lim. 7)
C-AM-2	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 2-inch ENRGY 3	Fasteners & Plates secured 1 fastener per 2.67ft ²	ProtectoR HD	RSUA or 2-Part UIA applied 12-inch o.c	JM TPO or JM TPO FB	JM TPO: TPO WBMA; MBA applied at 0.83 gal/100ft ² ; LVOC MA or ASBA JM TPO FB: RSUA applied 12-inch o.c., RSUA(S), 2-Part UIA-C(S) or TPO WBMA	-45 (Lim. 7)
C-AM-3	OPTIONAL Vapor Barrier	Min. 1.5-inch E3	Simultaneously secured with top layer	ProtectoR	Fasteners & Plates secured 1 fastener per 4ft ²	JM TPO SA	Self-adhered	-45 (Lim. 9)

APPENDIX C – APPROVED ASSEMBLIES FOR JM TPO SINGLE-PLY MEMBRANES

Assemblies with Adhered Membranes over Insulated <i>Concrete Deck</i> (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-4	OPTIONAL Vapor Barrier	Min. 1.5-inch E3	Simultaneously secured with top layer	ProtectoR	Fasteners & Plates secured 1 fastener per 4ft ²	JM TPO (Min. 60 mil) or JM TPO FB	JM TPO: TPO WBMA; MBA applied at 0.83 gal/100ft ² ; LVOC MA or ASBA JM TPO FB: RSUA applied 12-inch o.c., RSUA(S), 2-Part UIA-C(S) or TPO WBMA	-45 (Lim. 9)
C-AM-5	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 2-inch ENRGY 3	AP Fasteners & Plates secured 1 fastener per 4.0ft ²	SECUROCK	OSFA, RSUA or 2-Part UIA applied 12-inch o.c.	JM TPO or JM TPO FB	JM TPO: MBA applied at 0.83-1.10 gal/100ft ² , LVOC MA, or ASBA JM TPO FB: TPO WBMA, ASBA, RSUA applied 12-inch o.c., RSUA(S) or 2-Part UIA-C(S)	-45 (Lim. 7)
C-AM-6	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 2-inch ENRGY 3	AP Fasteners & Plates secured 1 fastener per 4.0ft ²	SECUROCK	OSFA, RSUA or 2-Part UIA applied 12-inch o.c.	JM TPO SA	Self-adhered	-45 (Lim. 7)
C-AM-7	OPTIONAL Vapor Barrier	Min. 2-inch ENRGY 3, ENRGY 3 CGF, ENRGY 3 FR or E3 C1	AP Fasteners & Plates secured 1 fastener per 1ft ²	Min. 1.5-inch ENRGY 3	OSFA, RSUA or 2-Part UIA applied 4-inch o.c.	JM TPO FB	TPO WBMA or RSUA applied 12-inch o.c.	-45 (Lim. 7)
C-AM-8	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	Simultaneously secured with top layer	SECUROCK	Fasteners & Plates secured 1 fastener per 1.33ft ²	JM TPO or JM TPO FB	JM TPO: MBA applied at 0.83-1.10 gal/100ft ² , LVOC MA, or ASBA JM TPO FB: TPO WBMA, ASBA or 2-Part UIA-C(S)	-52.5 (Lim. 7)
C-AM-9	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	Simultaneously secured with top layer	SECUROCK	Fasteners & Plates secured 1 fastener per 1.33ft ²	JM TPO SA	Self-adhered	-52.5 (Lim. 7)
C-AM-10	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch ENRGY 3	AP Fasteners & Plates secured 1 fastener per 1.33ft ²	SECUROCK	OSFA, RSUA or 2-Part UIA applied 12-inch o.c.	JM TPO or JM TPO FB	JM TPO: MBA applied at 0.83-1.10 gal/100ft ² , LVOC MA, or ASBA JM TPO FB: TPO WBMA, ASBA, RSUA applied 12-inch o.c., RSUA(S) or 2-Part UIA-C(S)	-52.5 (Lim. 7)

APPENDIX C – APPROVED ASSEMBLIES FOR JM TPO 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-11	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch ENRGY 3	AP Fasteners & Plates secured 1 fastener per 1.33ft ²	SECUROCK	OSFA, RSUA or 2-Part UIA applied 12-inch o.c.	JM TPO SA	Self-adhered	-52.5 (Lim. 7)
C-AM-12	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min 1.5-inch ENRGY 3	AP Fasteners & Plates secured at a rate of 1 fastener per 1.45ft ²	JM Invinsa	RSUA or 2-Part UIA applied 12-inch o.c.	JM TPO FB	RSUA applied 12-inch o.c. or RSUA(S)	-52.5 (Lim. 7)
C-AM-13	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min 1.5-inch ENRGY 3	AP Fasteners & Plates secured at a rate of 1 fastener per 1.45ft ²	JM Invinsa or Protector HD	RSUA or 2-Part UIA applied 12-inch o.c.	JM TPO SA	Self-adhered	-52.5 (Lim. 7)
C-AM-14	OPTIONAL Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 2-inch ENRGY 3 CGF or ENRGY 3 FR	Fasteners & Plates secured 1 fastener per 2.67ft ²	JM TPO	MBA applied 0.83 gal/100ft ² to both membrane and substrate, TPO WBMA or ASBA	-52.5 (Lim. 7)
C-AM-15	OPTIONAL Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 2-inch ENRGY 3 CGF or ENRGY 3 FR	Fasteners & Plates secured 1 fastener per 2.67ft ²	JM TPO FB	2-Part UIA-C(S)	-52.5 (Lim. 7)
C-AM-16	OPTIONAL Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 2-inch ENRGY 3 CGF or ENRGY 3 FR	Fasteners & Plates secured 1 fastener per 2.67ft ²	JM TPO SA	Self-adhered	-52.5 (Lim. 7)
C-AM-17	OPTIONAL Vapor Barrier	Min. 2-inch ENRGY 3 CGF or ENRGY 3 FR	Fasteners & Plates secured 1 fastener per 2.67ft ²	Min. 1.5-inch ENRGY 3 CGF or ENRGY 3 CGF	OSFA, RSUA, or 2-Part UIA applied 6-inch o.c.	JM TPO	ASBA, TPO WBMA, MBA or LVOC MA	-52.5 (Lim. 7)
C-AM-18	OPTIONAL Vapor Barrier	Min. 2-inch ENRGY 3 CGF or ENRGY 3 FR	Fasteners & Plates secured 1 fastener per 2.67ft ²	Min. 1.5-inch ENRGY 3 CGF or ENRGY 3 CGF	OSFA, RSUA, or 2-Part UIA applied 6-inch o.c.	JM TPO SA	Self-adhered	-52.5 (Lim. 7)
C-AM-19	OPTIONAL Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 1.5-inch ENRGY 3 CGF or ENRGY 3 FR	Fasteners & Plates secured 1 fastener per 1.78ft ²	JM TPO	MBA applied 0.83 gal/100ft ² to both membrane and substrate or TPO WBMA	-52.5 (Lim. 7)

APPENDIX C – APPROVED ASSEMBLIES FOR JM TPO SINGLE-PLY MEMBRANES

Assemblies with Adhered Membranes over Insulated <i>Concrete Deck</i> (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-20	OPTIONAL <i>Vapor Barrier</i>	OPTIONAL <i>INSULATION</i> under min. 1.5-inch <i>E3</i>	Simultaneously secured with top layer	<i>SECUROCK</i>	<i>Fasteners & Plates</i> secured 1 fastener per 1.33ft ²	<i>JM TPO HFB</i>	ASTM D 312 Type IV Asphalt	-52.5 (Lim. 7)
C-AM-21	OPTIONAL <i>Vapor Barrier</i>	OPTIONAL <i>INSULATION</i> under min. 1.5-inch <i>E3</i>	Simultaneously secured with top layer	<i>SECUROCK</i>	<i>Fasteners & Plates</i> secured 1 fastener per 1.33ft ²	Base Ply: DynaBase HW Membrane: <i>JM TPO HFB</i>	Base Ply: Torch Adhered Membrane: ASTM D 312 Type IV Asphalt	-52.5 (Lim. 7)
C-AM-22	OPTIONAL <i>Vapor Barrier</i>	OPTIONAL <i>INSULATION</i> under min. 1.5-inch <i>ENRGY 3</i>	<i>AP Fasteners & Plates</i> secured 1 fastener per 1.33ft ²	<i>SECUROCK</i>	<i>OSFA, RSUA</i> or <i>2-Part UIA</i> applied 12-inch o.c.	<i>JM TPO HFB</i>	ASTM D 312 Type IV Asphalt	-52.5 (Lim. 7)
C-AM-23	OPTIONAL <i>Vapor Barrier</i>	OPTIONAL <i>INSULATION</i> under min. 1.5-inch <i>ENRGY 3</i>	<i>AP Fasteners & Plates</i> secured 1 fastener per 1.33ft ²	<i>SECUROCK</i>	<i>OSFA, RSUA</i> or <i>2-Part UIA</i> applied 12-inch o.c.	Base Ply: DynaBase HW Membrane: <i>JM TPO HFB</i>	Base Ply: Torch Adhered Membrane: ASTM D 312 Type IV Asphalt	-52.5 (Lim. 7)
C-AM-24	OPTIONAL <i>Vapor Barrier</i>	OPTIONAL <i>INSULATION</i>	Simultaneously secured with top layer	Min. 1.5-inch <i>E3</i> or <i>ProtectoR</i> <i>Foam</i>	<i>AP Fasteners & Plates</i> secured 1 fastener per 1.78ft ²	<i>JM TPO HFB</i>	ASTM D 312 Type IV Asphalt	-52.5 (Lim. 7)
C-AM-25	OPTIONAL <i>Vapor Barrier</i>	OPTIONAL <i>INSULATION</i>	Simultaneously secured with top layer	Min. 1.5-inch <i>E3</i> or <i>ProtectoR</i> <i>Foam</i>	<i>AP Fasteners & Plates</i> secured 1 fastener per 1.78ft ²	<i>JM TPO FB</i>	<i>2-Part UIA-C(S)</i>	-52.5 (Lim. 7)
C-AM-26	OPTIONAL <i>Vapor Barrier</i>	OPTIONAL <i>INSULATION</i>	Simultaneously secured with top layer	Min. 1.5-inch <i>E3</i> or <i>ProtectoR</i> <i>Foam</i>	<i>AP Fasteners & Plates</i> secured 1 fastener per 1.78ft ²	<i>JM TPO</i>	<i>LVOC MA</i> or <i>MBA</i> applied at 0.55 gal/100ft ²	-52.5 (Lim. 7)
C-AM-27	OPTIONAL <i>Vapor Barrier</i>	OPTIONAL <i>INSULATION</i>	Simultaneously secured with top layer	<i>ProtectoR HD</i>	<i>Fasteners & Plates</i> secured 1 fastener per 1.78ft ²	<i>JM TPO SA</i>	Self-adhered	-52.5 (Lim. 7)
C-AM-28	OPTIONAL <i>Vapor Barrier</i>	OPTIONAL <i>INSULATION</i>	Simultaneously secured with top layer	<i>ProtectoR HD</i>	<i>Fasteners & Plates</i> secured 1 fastener per 1.78ft ²	<i>JM TPO</i> or <i>JM TPO FB</i>	<i>JM TPO: TPO WBMA,</i> <i>MBA</i> applied at 0.83 gal/100ft ² ; <i>LVOC MA, or ASBA</i> <i>JM TPO FB: TPO WBMA</i> or <i>2-Part UIA-C(S)</i>	-52.5 (Lim. 7)

APPENDIX C – APPROVED ASSEMBLIES FOR JM TPO SINGLE-PLY MEMBRANES

Assemblies with Adhered Membranes over Insulated <i>Concrete Deck</i> (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-29	OPTIONAL <i>Vapor Barrier</i>	OPTIONAL <i>INSULATION</i> under min. 1.5-inch E3	Simultaneously secured with top layer	<i>DensDeck Prime</i>	<i>Fasteners & Plates</i> secured 1 fastener per 1.78ft ²	JM TPO or JM TPO FB	JM TPO: TPO WBMA, MBA, LVOC MA, ASBA or 1168 JM TPO FB: TPO WBMA, ASBA or 2-Part UIA-C(S)	-52.5 (Lim. 7)
C-AM-30	OPTIONAL <i>Vapor Barrier</i>	OPTIONAL <i>INSULATION</i> under min. 1.5-inch E3	Simultaneously secured with top layer	<i>DensDeck Prime</i>	<i>Fasteners & Plates</i> secured 1 fastener per 1.78ft ²	JM TPO HFB	ASTM D 312 Type IV Asphalt	-52.5 (Lim. 7)
C-AM-31	OPTIONAL <i>Vapor Barrier</i>	OPTIONAL <i>INSULATION</i> under min. 1.5-inch E3	Simultaneously secured with top layer	<i>DensDeck Prime</i>	<i>Fasteners & Plates</i> secured 1 fastener per 1.78ft ²	JM TPO SA	Self-adhered	-52.5 (Lim. 7)
C-AM-32	OPTIONAL <i>Vapor Barrier</i>	OPTIONAL <i>INSULATION</i> under min. 1.5-inch ENRGY 3	<i>AP Fasteners & Plates</i> secured at a rate of 1 fastener per 1.78ft ²	Min 0.5-inch <i>SECUROCK</i>	<i>OSFA, RSUA</i> or <i>2-Part UIA</i> applied 12-inch o.c.	JM TPO or JM TPO FB	JM TPO: MBA applied at 0.83-1.10 gal/100ft, LVOC MA, or ASBA JM TPO FB: TPO WBMA, ASBA or 2-Part UIA-C(S)	-60 (Lim. 7)
C-AM-33	OPTIONAL <i>Vapor Barrier</i>	OPTIONAL <i>INSULATION</i> under min. 1.5-inch ENRGY 3	<i>AP Fasteners & Plates</i> secured at a rate of 1 fastener per 1.78ft ²	Min 0.5-inch <i>SECUROCK</i>	<i>OSFA, RSUA</i> or <i>2-Part UIA</i> applied 12-inch o.c.	JM TPO SA	Self-adhered	-60 (Lim. 7)
C-AM-34	OPTIONAL <i>Vapor Barrier</i>	OPTIONAL <i>INSULATION</i> under min. 1.5-inch E3	Simultaneously secured with top layer	<i>SECUROCK</i>	<i>Fasteners & Plates</i> secured 1 fastener per 1.0ft ²	JM TPO or JM TPO FB	JM TPO: MBA applied at 0.83-1.10 gal/100ft ² , LVOC MA, or ASBA JM TPO FB: TPO WBMA, ASBA or 2-Part UIA-C(S)	-60 (Lim. 7)
C-AM-35	OPTIONAL <i>Vapor Barrier</i>	OPTIONAL <i>INSULATION</i> under min. 1.5-inch E3	Simultaneously secured with top layer	<i>SECUROCK</i>	<i>Fasteners & Plates</i> secured 1 fastener per 1.00ft ²	JM TPO SA	Self-adhered	-60 (Lim. 7)
C-AM-36	OPTIONAL <i>Vapor Barrier</i>	OPTIONAL <i>INSULATION</i>	Simultaneously secured with top layer	Min. 1.5-inch E3 or ProtectoR Foam	<i>AP Fasteners & Plates</i> secured 1 fastener per 1.78ft ²	JM TPO	LVOC MA	-60 (Lim. 7)
C-AM-37	OPTIONAL <i>Vapor Barrier</i>	OPTIONAL <i>INSULATION</i>	Simultaneously secured with top layer	Min. 1.5-inch ENRGY 3 CGF or ENRGY 3 FR	<i>Fasteners & Plates</i> secured 1 fastener per 1.78ft ²	JM TPO SA	Self-adhered	-60 (Lim. 7)

APPENDIX C – APPROVED ASSEMBLIES FOR JM TPO SINGLE-PLY MEMBRANES

Assemblies with Adhered Membranes over Insulated <i>Concrete Deck</i> (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-38	OPTIONAL Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 1.5-inch E3	Fasteners & Plates secured 1 fastener per 1.78ft ²	JM TPO HFB	ASTM D 312 Type IV Asphalt	-60 (Lim. 7)
C-AM-39	OPTIONAL Vapor Barrier	Min. 1.5-inch ENRGY 3 CGF or ENRGY 3 FR	Fasteners & Plates secured 1 fastener per 1.78ft ²	Min. 1.5-inch ENRGY 3 CGF or ENRGY 3 CGF	OSFA, RSUA, or 2-Part UIA applied 6-inch o.c.	JM TPO	ASBA, TPO WBMA, MBA or LVOC MA	-60 (Lim. 7)
C-AM-40	OPTIONAL Vapor Barrier	Min. 1.5-inch ENRGY 3 CGF or ENRGY 3 FR	Fasteners & Plates secured 1 fastener per 1.78ft ²	Min. 1.5-inch ENRGY 3 CGF or ENRGY 3 CGF	OSFA, RSUA, or 2-Part UIA applied 6-inch o.c.	JM TPO SA	Self-adhered	-60 (Lim. 7)
C-AM-41	OPTIONAL Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	ProtectoR HD	Fasteners & Plates secured 1 fastener per 1.78ft ²	JM TPO SA	Self-adhered	-60 (Lim. 7)
C-AM-42	OPTIONAL Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	ProtectoR HD	Fasteners & Plates secured 1 fastener per 1.78ft ²	JM TPO or JM TPO FB	JM TPO: MBA, LVOC MA, or ASBA JM TPO FB: 2-Part UIA-C(S)	-60 (Lim. 7)
C-AM-43	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	OSFA, RSUA, 2-Part UIA-C(B), or 2-Part UIA applied 6-inch o.c.	JM TPO FB	2-Part UIA-C(S)	-60 (Lim. 7)
C-AM-44	OPTIONAL Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 2-inch ENRGY 3	Fasteners & Plates secured 1 fastener per 1.6ft ²	JM TPO FB	2-Part UIA-C(S)	-60 (Lim. 7)
C-AM-45	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	Simultaneously secured with top layer	Min. 0.5-inch SECUROCK	Fasteners & Plates secured 1 fastener per 2.00ft ²	JM TPO HFB	ASTM D 312 Type IV Asphalt	-60 (Lim. 7)
C-AM-46	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	Fasteners & Plates secured 1 fastener per 1ft ²	SECUROCK, or JM Invinisa	RSUA or 2-Part UIA applied 6-inch o.c.	JM TPO FB	RSUA applied 12-inch o.c. or RSUA(S)	-67.5 (Lim. 7)
C-AM-47	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min 1.5-inch ENRGY 3	Fasteners & Plates secured at a rate of 24 per 4-ft x 8-ft Board	Min. 0.5-inch SECUROCK	RSUA or 2-Part UIA applied 12-inch o.c.	JM TPO or JM TPO FB	TPO WBMA or ASBA	-67.5 (Lim. 7)

APPENDIX C – APPROVED ASSEMBLIES FOR JM TPO SINGLE-PLY MEMBRANES

Assemblies with Adhered Membranes over Insulated <i>Concrete Deck</i> (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-48	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min 1.5-inch ENRGY 3	<i>Fasteners & Plates</i> secured at a rate of 24 per 4-ft x 8-ft Board	Min. 0.5-inch SECUROCK	RSUA or 2-Part UIA applied 12-inch o.c.	JM TPO SA	Self-adhered	-67.5 (Lim. 7)
C-AM-49	OPTIONAL Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 2-inch ENRGY 3 CGF or ENRGY 3 FR	<i>Fasteners & Plates</i> secured 1 fastener per 2.0ft ²	JM TPO	MBA applied at 0.83 gal/100ft ² to both membrane and substrate, TPO WBMA or ASBA	-67.5 (Lim. 7)
C-AM-50	OPTIONAL Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 2-inch ENRGY 3 CGF or ENRGY 3 FR	<i>Fasteners & Plates</i> secured 1 fastener per 2.0ft ²	JM TPO SA	Self-adhered	-67.5 (Lim. 7)
C-AM-51	OPTIONAL Vapor Barrier	Min. 2-inch ENRGY 3 CGF or ENRGY 3 FR	<i>Fasteners & Plates</i> secured 1 fastener per 2.0ft ²	Min. 1.5-inch ENRGY 3 CGF or ENRGY 3 CGF	OSFA, RSUA, or 2-Part UIA applied 6-inch o.c.	JM TPO	ASBA, TPO WBMA, MBA or LVOC MA	-67.5 (Lim. 7)
C-AM-52	OPTIONAL Vapor Barrier	Min. 2-inch ENRGY 3 CGF or ENRGY 3 FR	<i>Fasteners & Plates</i> secured 1 fastener per 2.0ft ²	Min. 1.5-inch ENRGY 3 CGF or ENRGY 3 CGF	OSFA, RSUA, or 2-Part UIA applied 6-inch o.c.	JM TPO SA	Self-adhered	-67.5 (Lim. 7)
C-AM-53	OPTIONAL Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 2-inch ENRGY 3 or Protector Foam	<i>Fasteners & Plates</i> secured 1 fastener per 2ft ²	JM TPO	MBA or LVOC MA applied at 1.1 gal/100ft ² , TPO WBMA (two-sided application only) or ASBA	-67.5 (Lim. 7)
C-AM-54	OPTIONAL Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 2-inch ENRGY 3	<i>Fasteners & Plates</i> secured 1 fastener per 2ft ²	JM TPO HFB	ASTM D 312 Type IV Asphalt	-67.5 (Lim. 7)
C-AM-55	OPTIONAL Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 2-inch ENRGY 3 CGF or ENRGY 3 FR	<i>Fasteners & Plates</i> secured 1 fastener per 2.0ft ²	JM TPO	TPO WBMA, ASBA, or MBA	-67.5 (Lim. 7)
C-AM-56	OPTIONAL Vapor Barrier	Min. 2-inch E3 or E3 C1	<i>Fasteners & Plates</i> secured 1 fastener per 1.6ft ²	Min. 0.5-inch Protector HD, DEXcell FA, or SECUROCK	OSFA, RSUA, 2-Part UIA-C(B) or 2-Part UIA applied 6-inch o.c.	JM TPO FB	RSUA 6-inch o.c.	-67.5 (Lim. 7)
C-AM-57	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	Simultaneously secured with top layer	Min 0.5-inch DensDeck Prime	<i>Fasteners & Plates</i> secured 1 fastener per 1.78ft ²	JM TPO or JM TPO FB	JM TPO: TPO WBMA, MBA, LVOC MA, ASBA, or 1168 JM TPO FB: TPO WBMA, ASBA or 2-Part UIA-C(S)	-67.5 (Lim. 7)

APPENDIX C – APPROVED ASSEMBLIES FOR JM TPO SINGLE-PLY MEMBRANES

Assemblies with Adhered Membranes over Insulated <i>Concrete Deck</i> (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-58	OPTIONAL <i>Vapor Barrier</i>	OPTIONAL <i>INSULATION</i> under min. 1.5-inch <i>E3</i>	Simultaneously secured with top layer	Min 0.5-inch DensDeck Prime	<i>Fasteners & Plates</i> secured 1 fastener per 1.78ft ²	<i>JM TPO HFB</i>	ASTM D 312 Type IV Asphalt	-67.5 (Lim. 7)
C-AM-59	OPTIONAL <i>Vapor Barrier</i>	OPTIONAL <i>INSULATION</i> under min. 1.5-inch <i>E3</i>	Simultaneously secured with top layer	Min 0.5-inch DensDeck Prime	<i>Fasteners & Plates</i> secured 1 fastener per 1.78ft ²	<i>JM TPO SA</i>	Self-adhered	-67.5 (Lim. 7)
C-AM-60	OPTIONAL <i>Vapor Barrier</i>	OPTIONAL <i>INSULATION</i> under min. 1.5-inch <i>E3</i>	<i>Preliminarily Secured</i> or secured with top layer	ProtectoR HD	<i>Fasteners & Plates</i> at a rate of 1 fastener per 1.33ft ²	<i>JM TPO SA</i>	Self-adhered	-75 (Lim. 7)
C-AM-61	OPTIONAL <i>Vapor Barrier</i>	OPTIONAL <i>INSULATION</i> under min. 1.5-inch <i>E3</i>	<i>Preliminarily Secured</i> or secured with top layer	ProtectoR HD	<i>Fasteners & Plates</i> at a rate of 1 fastener per 1.33ft ²	<i>JM TPO</i> or <i>JM TPO FB</i>	<i>JM TPO: TPO WBMA, MBA applied 0.83 gal/100ft², LVOC MA or ASBA</i> <i>JM TPO FB: TPO WBMA, ASBA or 2-Part UIA-C(S)</i>	-75 (Lim. 7)
C-AM-62	OPTIONAL <i>Vapor Barrier</i>	OPTIONAL <i>INSULATION</i>	Simultaneously secured with top layer	Min. 2-inch <i>E3</i> , <i>E3 C1</i> , or ProtectoR Foam	<i>Fasteners & Plates</i> secured 1 fastener per 1.6ft ²	<i>JM TPO</i>	<i>MBA, LVOC MA</i> applied at 1.1 gal/100ft ² , <i>TPO WBMA</i> (two-sided application only) or <i>ASBA</i>	-75 (Lim. 7)
C-AM-63	OPTIONAL <i>Vapor Barrier</i>	OPTIONAL <i>INSULATION</i>	Simultaneously secured with top layer	Min. 2-inch <i>E3</i> or <i>E3 C1</i>	<i>Fasteners & Plates</i> secured 1 fastener per 1.6ft ²	<i>JM TPO HFB</i>	ASTM D 312 Type IV Asphalt	-75 (Lim. 7)
C-AM-64	OPTIONAL <i>Vapor Barrier</i>	OPTIONAL <i>INSULATION</i>	Simultaneously secured with top layer	Min. 2-inch Invinsa Foam	<i>Fasteners & Plates</i> secured 1 fastener per 2.0ft ²	<i>JM TPO</i>	<i>MBA, LVOC MA</i> applied at 1.67 gal/100ft ² , <i>TPO WBMA</i> , or <i>ASBA</i>	-75 (Lim. 7)
C-AM-65	OPTIONAL <i>Vapor Barrier</i>	OPTIONAL <i>INSULATION</i>	Simultaneously secured with top layer	Min. 2-inch Invinsa Foam	<i>Fasteners & Plates</i> secured 1 fastener per 2.0ft ²	<i>JM TPO SA</i>	Self-adhered	-75 (Lim. 7)
C-AM-66	OPTIONAL <i>Vapor Barrier</i>	Min. 1.5-inch <i>E3</i>	Simultaneously secured with top layer	Min. 0.5-inch <i>SECUROCK</i>	<i>Fasteners & Plates</i> (<i>Square</i>) secured 1 fastener per 1.0ft ²	<i>JM TPO</i>	<i>MBA, LVOC MA</i> applied at 1.67 gal/100ft ² , <i>TPO WBMA</i> , or <i>ASBA</i>	-75 (Lim. 7)
C-AM-67	OPTIONAL <i>Vapor Barrier</i>	Min. 1.5-inch <i>E3</i>	Simultaneously secured with top layer	Min. 0.5-inch <i>SECUROCK</i>	<i>Fasteners & Plates</i> (<i>Square</i>) secured 1 fastener per 1.0ft ²	<i>JM TPO HFB</i>	ASTM D 312 Type IV Asphalt	-75 (Lim. 7)
C-AM-68	OPTIONAL <i>Vapor Barrier</i>	OPTIONAL <i>INSULATION</i> under min. 1.5-inch <i>E3</i>	Simultaneously secured with top layer	Min. 0.5-inch <i>SECUROCK</i>	<i>Fasteners & Plates</i> (<i>Square</i>) secured 1 fastener per 1.0ft ²	<i>JM TPO</i>	<i>TPO WBMA, ASBA, or MBA</i>	-82.5 (Lim. 7)

APPENDIX C – APPROVED ASSEMBLIES FOR JM TPO 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-69	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	Simultaneously secured with top layer	Min. 0.5-inch SECUROCK	Fasteners & Plates (Square) secured 1 fastener per 1.0ft ²	JM TPO FB	2-Part UIA-C(S)	-82.5 (Lim. 7)
C-AM-70	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	Simultaneously secured with top layer	Min. 0.5-inch SECUROCK	Fasteners & Plates (Square) secured 1 fastener per 1.0ft ²	JM TPO SA	Self-adhered	-82.5 (Lim. 7)
C-AM-71	OPTIONAL Vapor Barrier	Min. 1-inch E3	Simultaneously secured with top layer	ProtectoR HD	Fasteners & Plates secured 1 fastener per 1.33ft ²	JM TPO	MBA, LVOC MA, or ASBA	-82.5 (Lim. 7)
C-AM-72	OPTIONAL Vapor Barrier	Min. 1-inch E3	Simultaneously secured with top layer	ProtectoR HD	Fasteners & Plates secured 1 fastener per 1.33ft ²	JM TPO SA	Self-adhered	-82.5 (Lim. 7)
C-AM-73	OPTIONAL Vapor Barrier	Min. 1-inch E3	Simultaneously secured with top layer	ProtectoR HD	Fasteners & Plates secured 1 fastener per 1.33ft ²	JM TPO FB	2-Part UIA-C(S)	-82.5 (Lim. 7)
C-AM-74	OPTIONAL Vapor Barrier	Min. 2-inch E3 or E3 C1	Fasteners & Plates secured 1 fastener per 1.6ft ²	ProtectoR HD	OSFA, RSUA, 2-Part UIA-C(B), or 2-Part UIA applied 6-inch o.c.	JM TPO	TPO WBMA, MBA, LVOC MA, or ASBA	-82.5 (Lim. 7)
C-AM-75	OPTIONAL Vapor Barrier	Min. 2-inch E3 or E3 C1	AP Fasteners & Plate secured 1 fastener per 1.6ft ²	ProtectoR HD	OSFA, RSUA, 2-Part UIA-C(B), or 2-Part UIA applied 6-inch o.c.	JM TPO SA	Self-adhered	-82.5 (Lim. 7)
C-AM-76	OPTIONAL Vapor Barrier	Min. 2-inch E3 or E3 C1	AP Fasteners & Plate secured 1 fastener per 1.6ft ²	ProtectoR HD	OSFA, RSUA, 2-Part UIA-C(B) or 2-Part UIA applied 6-inch o.c.	JM TPO FB	2-Part UIA-C(S)	-82.5 (Lim. 7)
C-AM-77	OPTIONAL Vapor Barrier	Min. 2-inch E3 or E3 C1	AP Fasteners & Plate secured 1 fastener per 1.6ft ²	Min. 0.5-inch DensDeck Prime, DEXcell FA, or SECUROCK	OSFA, RSUA, 2-Part UIA-C(B), or 2-Part UIA applied 6-inch o.c.	JM TPO	ASBA, TPO WBMA, MBA or LVOC MA	-82.5 (Lim. 7)
C-AM-78	OPTIONAL Vapor Barrier	Min. 2-inch E3 or E3 C1	AP Fasteners & Plate secured 1 fastener per 1.6ft ²	Min. 0.5-inch DensDeck Prime, DEXcell FA, or SECUROCK	OSFA, RSUA, 2-Part UIA-C(B), or 2-Part UIA applied 6-inch o.c.	JM TPO SA	Self-adhered	-82.5 (Lim. 7)

APPENDIX C – APPROVED ASSEMBLIES FOR JM TPO SINGLE-PLY MEMBRANES

Assemblies with Adhered Membranes over Insulated <i>Concrete Deck</i> (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-79	OPTIONAL Vapor Barrier	Min. 2-inch E3 or E3 C1	AP Fasteners & Plate secured 1 fastener per 1.6ft ²	Min. 1.5-inch E3 or E3 C1	OSFA, RSUA, 2-Part UIA-C(B), or 2-Part UIA applied 6-inch o.c.	JM TPO	ASBA, TPO WBMA, MBA or LVOC MA	-82.5 (Lim. 7)
C-AM-80	OPTIONAL Vapor Barrier	Min. 2-inch E3 or E3 C1	AP Fasteners & Plate secured 1 fastener per 1.6ft ²	Min. 1.5-inch E3 or E3 C1	OSFA, RSUA, 2-Part UIA-C(B), or 2-Part UIA applied 6-inch o.c.	JM TPO SA	Self-adhered	-82.5 (Lim. 7)
C-AM-81	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	Simultaneously secured with top layer	Min 0.625-inch DensDeck Prime	Fasteners & Plates secured 1 fastener per 1.33ft ²	JM TPO or JM TPO FB	JM TPO: TPO WBMA, MBA, LVOC MA, ASBA, or 1168 JM TPO FB: TPO WBMA or ASBA	-90 (Lim. 7)
C-AM-82	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	Simultaneously secured with top layer	Min 0.625-inch DensDeck Prime	Fasteners & Plates secured 1 fastener per 1.33ft ²	JM TPO HFB	ASTM D 312 Type IV Asphalt	-90 (Lim. 7)
C-AM-83	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	Simultaneously secured with top layer	Min 0.625-inch DensDeck Prime	Fasteners & Plates secured 1 fastener per 1.33ft ²	JM TPO SA	Self-adhered	-90 (Lim. 7)
C-AM-84	OPTIONAL Vapor Barrier	Min. 2-inch ENRGY 3, ENRGY 3 CGF, ENRGY 3 FR or E3 C1	Fasteners & Plates secured 1 fastener per 1ft ²	Min. 1.5-inch ENRGY 3	RSUA or 2-Part UIA applied 6-inch o.c.	JM TPO or JM TPO FB	JM TPO: TPO WBMA, MBA, LVOC MA, ASBA or 1168 JM TPO FB: 2-Part UIA-C(S)	-90 (Lim. 7)
C-AM-85	OPTIONAL Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 2-inch ENRGY 3 CGF or ENRGY 3 FR	Fasteners & Plates secured 1 fastener per 1.33ft ²	JM TPO	MBA applied at 0.83 gal/100ft ² to both membrane and substrate or TPO WBMA	-105 (Lim. 7)
C-AM-86	OPTIONAL Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 2-inch ENRGY 3 CGF or ENRGY 3 FR	Fasteners & Plates secured 1 fastener per 1.33ft ²	JM TPO SA	Self-adhered	-105 (Lim. 7)
C-AM-87	OPTIONAL Vapor Barrier	Min. 1.5-inch E3	Simultaneously secured with top layer	Min. 0.5-inch DEXcell FA	Fasteners & Plates secured 1 fastener per 1.0ft ²	JM TPO	MBA, LVOC MA applied at 1.67 gal/100ft ² , TPO WBMA, or ASBA	-105 (Lim. 7)
C-AM-88	OPTIONAL Vapor Barrier	Min. 1.5-inch E3	Simultaneously secured with top layer	Min. 0.5-inch DensDeck Prime	Fasteners & Plates secured 1 fastener per 1.0ft ²	JM TPO	MBA, LVOC MA applied at 1.67 gal/100ft ² , TPO WBMA, ASBA, or 1168	-112.5 (Lim. 7)
C-AM-89	OPTIONAL Vapor Barrier	Min. 1.5-inch E3	Simultaneously secured with top layer	Min. 0.5-inch DensDeck Prime	Fasteners & Plates secured 1 fastener per 1.0ft ²	JM TPO SA	Self-adhered	-112.5 (Lim. 7)

APPENDIX C – APPROVED ASSEMBLIES FOR JM TPO SINGLE-PLY MEMBRANES

Assemblies with Adhered Membranes over Insulated <i>Concrete Deck</i> (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-90	OPTIONAL Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 2-inch E3, E3 C1, or Protector Foam	Fasteners & Plates secured 1 fastener per 1.0ft ²	JM TPO	MBA, LVOC MA applied at 1.1 gal/100ft ² or TPO WBMA (Two-sided application only)	-120 (Lim. 7)
C-AM-91	OPTIONAL Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 2-inch E3 or E3 C1	Fasteners & Plates secured 1 fastener per 1.0ft ²	JM TPO HFB	ASTM D 312 Type IV Asphalt	-120 (Lim. 7)
C-AM-92	OPTIONAL Vapor Barrier	Min. 2-inch ENRGY 3, ENRGY 3 CGF, ENRGY 3 FR or E3 C1	Fasteners & Plates secured 1 fastener per 1ft ²	Min. 1.5-inch ENRGY 3	OSFA, RSUA or 2-Part UIA applied 4-inch o.c.	JM TPO	TPO WBMA (rate 0.6-0.8 gal/100-ft ² for one-sided and two-sided application), MBA, or LVOC MA	-120 (Lim. 7)
C-AM-93	OPTIONAL Vapor Barrier	Min. 2-inch E3 or E3 C1	Fasteners & Plates secured 1 fastener per 1ft ²	Protector HD	OSFA, RSUA, 2-Part UIA-C(B), or 2-Part UIA applied 4-inch o.c.	JM TPO	TPO WBMA, MBA, LVOC MA, or ASBA	-120 (Lim. 7)
C-AM-94	OPTIONAL Vapor Barrier	Min. 2-inch ENRGY 3, ENRGY 3 CGF, ENRGY 3 FR or E3 C1	Fasteners & Plates secured 1 fastener per 1ft ²	Min. 1.5-inch ENRGY 3	OSFA, RSUA or 2-Part UIA applied 4-inch o.c.	JM TPO	ASBA or MBA	-127.5 (Lim. 7)
C-AM-95	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	Simultaneously secured with top layer	Min. 0.5-inch DEXcell FA	Fasteners & Plates secured 1 fastener per 1ft ²	JM TPO FB	2-Part UIA-C(S)	-135 (Lim. 7)
C-AM-96	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	Simultaneously secured with top layer	Min. 0.5-inch SECUROCK	Fasteners & Plates secured 1 fastener per 1.0ft ²	JM TPO or JM TPO FB	TPO WBMA (Two-sided application only for JM TPO)	-150 (Lim. 7)
C-AM-97	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	Simultaneously secured with top layer	Min. 0.5-inch SECUROCK	Fasteners & Plates secured 1 fastener per 1.0ft ²	JM TPO SA	Self-adhered	-150 (Lim. 7)

APPENDIX C – APPROVED ASSEMBLIES FOR JM TPO SINGLE-PLY MEMBRANES

Mechanically Fastened Assemblies over Concrete Deck (New or Existing)							
System No.	Base Insulation (Note 9)	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>	JM TPO (Min. 60 mil)	Attached in-lap 12-inch o.c. with <i>HL Fasteners & Plates</i> ; Fastener rows max. 66-inch .c.	-45 (Lim. 7)
C-M-2	OPTIONAL INSULATION under min. 1-inch E3	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	JM TPO	Attached in-lap 12-inch o.c. with JM All Purpose Fasteners and JM High Load Plus Plates; Fastener rows max. 90-inch o.c.	-45 (Lim. 7)
C-M-3	OPTIONAL INSULATION under min. 1.5-inch E3	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	JM TPO or JM TPO FB	Attached in-lap 12-inch o.c. with <i>HL Fasteners & Plates</i> ; Fastener rows max. 114-inch o.c.	-45 (Lim. 7)
C-M-4	OPTIONAL INSULATION under min. 1.5-inch E3	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	JM TPO or JM TPO FB	Attached in-lap 12-inch o.c. with <i>HL Fasteners & Plates</i> ; Fastener rows max. 66-inch o.c.	-45 (Lim. 7)
C-M-5	OPTIONAL INSULATION under min. 1.5-inch E3	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	JM TPO or JM TPO FB	Attached in-lap 6-inch o.c. with <i>HL Fasteners & Plates</i> ; Fastener rows max. 114-inch o.c.	-45 (Lim. 7)
C-M-6	OPTIONAL INSULATION under min. 1.5-inch E3	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	JM TPO or JM TPO FB	Attached in-lap 6-inch o.c. with <i>HL Fasteners & Plates</i> ; Fastener rows max. 114-inch o.c.	-52.5 (Lim. 7)
C-M-7	OPTIONAL INSULATION under min. 1.5-inch E3	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	JM TPO	Adhered to JM TPO 10" RPS spaced 114-inch o.c. and attached with <i>HL Fasteners & Plates</i> spaced 6-inch o.c.	-52.5 (Lim. 7)
C-M-8	OPTIONAL INSULATION under min. 1.5-inch E3	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	JM TPO (Min. 60 mil)	Attached in-lap 12-inch o.c. with <i>HL Fasteners & Plates</i> ; Fastener rows max. 54-inch o.c.	-52.5 (Lim. 7)
C-M-9	OPTIONAL INSULATION under min. 1.5-inch E3	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	JM TPO	Attached in-lap 6-inch o.c. with <i>HL Fasteners & Plates</i> ; Fastener rows max. 90-inch o.c.	-60 (Lim. 7)
C-M-10	OPTIONAL INSULATION under min. 1-inch E3	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	JM TPO or JM TPO FB	Attached in-lap 6-inch o.c. with <i>HL Fasteners & Plates</i> ; Fastener rows max. 114-inch o.c.	-60 (Lim. 7)

APPENDIX C – APPROVED ASSEMBLIES FOR JM TPO SINGLE-PLY MEMBRANES

Mechanically Fastened Assemblies over Concrete Deck (New or Existing)							
System No.	Base Insulation (Note 9)	Base Insulation Attachment	Top Insulation	Top Insulation Attachment	Membrane	Membrane Attachment	MDP (psf)
C-M-11	OPTIONAL INSULATION under min. 1.5-inch E3	Preliminarily Secured or secured with top layer	OPTIONAL Cover Board	Preliminarily Secured	JM TPO (Min. 60 mil)	Attached in-lap 6-inch o.c. with HL Fasteners & Plates; Fastener rows max. 138-inch o.c.	-60 (Lim. 7)
C-M-12	OPTIONAL INSULATION under min. 1.5-inch E3	Preliminarily Secured or secured with top layer	OPTIONAL Cover Board	Preliminarily Secured	JM TPO (Min. 60 mil)	Attached in-lap 6-inch o.c. with Trufast Seam Plates; Fastener rows max. 90-inch o.c.	-60 (Lim. 7)
C-M-13	OPTIONAL INSULATION under min. 1-inch E3	Preliminarily Secured or secured with top layer	OPTIONAL Cover Board	Preliminarily Secured	JM TPO	Attached in-lap 6-inch o.c. with HL Fasteners & Plates; Fastener rows max. 90-inch o.c.	-75 (Lim. 7)
C-M-14	OPTIONAL INSULATION under min. 1.5-inch E3	Preliminarily Secured or secured with top layer	OPTIONAL Cover Board	Preliminarily Secured	JM TPO or JM TPO FB	Attached in-lap 6-inch o.c. with HL Fasteners & Plates; Fastener rows max. 66-inch o.c.	-90 (Lim. 7)
C-M-15	OPTIONAL INSULATION under min. 1-inch E3	Preliminarily Secured or secured with top layer	OPTIONAL Cover Board	Preliminarily Secured	JM TPO or JM TPO FB	Attached in-lap 6-inch o.c. with HL Fasteners & Plates; Fastener rows max. 54-inch o.c.	-97.5 (Lim. 7)
C-M-16	OPTIONAL INSULATION under min. 1.5-inch E3	Preliminarily Secured or secured with top layer	OPTIONAL Cover Board	Preliminarily Secured	JM TPO (Min. 60 mil)	Attached in-lap 6-inch o.c. with HL Fasteners & Plates; Fastener rows max. 66-inch o.c.	(-105 Lim. 7)

Induction Welded Assemblies over Concrete Deck (New, Existing, or Recover)							
System No.	Base Insulation	Base Insulation Attachment	Top Insulation	Top Insulation Attachment	Membrane	Membrane Attachment	MDP (psf)
C-W-1	INSULATION	Preliminarily Secured or secured with top layer	OPTIONAL Cover Board	RhinoPlates at a rate of 8 per 4-ft x 8-ft board Pattern #1 (1 fastener per 4.0-ft ²)	JM TPO (Min. 60 mil)	Induction welded to weld plates	-45 (Lim. 7)
C-W-2	INSULATION	Preliminarily Secured or secured with top layer	OPTIONAL Cover Board	RhinoPlates 12-inch o.c. with rows max. 72-inch o.c.	JM TPO (Min. 60 mil)	Induction welded to weld plates	-45 (Lim. 7)
C-W-3	INSULATION	Preliminarily Secured or secured with top layer	OPTIONAL Cover Board	Attached with ISOWELD-#14 or ISOWELD-#15 at a rate of 1 fastener per 4.0-ft ²	JM TPO (Min. 60 mil)	Induction welded to Weld plates	-45 (Lim. 7)

APPENDIX C – APPROVED ASSEMBLIES FOR JM TPO SINGLE-PLY MEMBRANES

Induction Welded Assemblies over Concrete Deck (New, Existing, or Recover)							
System No.	Base Insulation	Base Insulation Attachment	Top Insulation	Top Insulation Attachment	Membrane	Membrane Attachment	MDP (psf)
C-W-4	INSULATION	<i>Preliminarily Secured or secured with top layer</i>	OPTIONAL Cover Board	Attached with ISOWELD-#14 or ISOWELD-#15 spaced 24" o.c. in rows 24" o.c.	JM TPO (Min. 60 mil)	Induction welded to Weld plates	-45 (Lim. 7)
C-W-5	INSULATION	<i>Preliminarily Secured or secured with top layer</i>	OPTIONAL Cover Board	Attached with ISOWELD-#14 or ISOWELD-#15 spaced 12" o.c. in rows 60" o.c.	JM TPO (Min. 60 mil)	Induction welded to Weld plates	-45 (Lim. 7)
C-W-6	INSULATION	<i>Preliminarily Secured or secured with top layer</i>	OPTIONAL Cover Board	Attached with ISOWELD-#14 or ISOWELD-#15 spaced in a 2-ft x 3-ft staggered grid	JM TPO (Min. 60 mil)	Induction welded to Weld plates	-45 (Lim. 7)
C-W-7	INSULATION	<i>Preliminarily Secured or secured with top layer</i>	OPTIONAL Cover Board	RhinoPlates at a rate of 6 per 4-ft x 8-ft board Pattern #2 (1 fastener per 5.33-ft ²); Board installed with 6-inch stagger from preceding course	JM TPO (Min. 60 mil)	Induction welded to Weld plates	-52.5 (Lim. 7)
C-W-8	INSULATION	<i>Preliminarily Secured or secured with top layer</i>	OPTIONAL Cover Board	Trufast IW Plates attached 1 fastener per 4.0ft ² ; End joints offset 12-inches between board rows	JM TPO (Min. 60 mil)	Induction welded to Weld plates	-52.5 (Lim. 7)
C-W-9	INSULATION	<i>Preliminarily Secured or secured with top layer</i>	OPTIONAL Cover Board	Attached with ISOWELD-#14 or ISOWELD-#15 spaced in a 2-ft x 2-ft staggered grid	JM TPO (Min. 60 mil)	Induction welded to Weld plates	-60 (Lim. 7)
C-W-10	INSULATION	<i>Preliminarily Secured or secured with top layer</i>	OPTIONAL Cover Board	RhinoPlates at a rate of 8 per 4-ft x 8-ft board Pattern #2 (1 fastener per 4.0-ft ²); Board installed with 6-inch stagger from preceding course	JM TPO (Min. 60 mil)	Induction welded to Weld plates	-67.5 (Lim. 7)
C-W-11	INSULATION	<i>Preliminarily Secured or secured with top layer</i>	OPTIONAL Cover Board	RhinoPlates at a rate of 12 per 4-ft x 8-ft board Pattern #1 (1 fastener per 2.67-ft ²)	JM TPO (Min. 60 mil)	Induction welded to weld plates	-75 (Lim. 7)
C-W-12	INSULATION	<i>Preliminarily Secured or secured with top layer</i>	OPTIONAL Cover Board	Attached with ISOWELD-#14 or ISOWELD-#15 at a rate of 1 fastener per 3.2-ft ²	JM TPO (Min. 60 mil)	Induction welded to Weld plates	-75 (Lim. 7)
C-W-13	INSULATION	<i>Preliminarily Secured or secured with top layer</i>	OPTIONAL Cover Board	Attached with ISOWELD-#14 or ISOWELD-#15 spaced in a 1.5-ft x 2-ft staggered grid	JM TPO (Min. 60 mil)	Induction welded to Weld plates	-82.5 (Lim. 7)

APPENDIX C – APPROVED ASSEMBLIES FOR JM TPO SINGLE-PLY MEMBRANES

Induction Welded Assemblies over Concrete Deck (New, Existing, or Recover)							
System No.	Base Insulation	Base Insulation Attachment	Top Insulation	Top Insulation Attachment	Membrane	Membrane Attachment	MDP (psf)
C-W-14	INSULATION	Preliminarily Secured or secured with top layer	OPTIONAL Cover Board	RhinoPlates in a 24-inch by 16-inch grid pattern	JM TPO (Min. 60 mil)	Induction welded to weld plates	-90 (Lim. 7)
C-W-15	INSULATION	Preliminarily Secured or secured with top layer	OPTIONAL Cover Board	RhinoPlates at a rate of 15 per 4-ft x 8-ft board (1 fastener per 2.13-ft ²)	JM TPO (Min. 60 mil)	Induction welded to weld plates	-90 (Lim. 7)
C-W-16	INSULATION	Preliminarily Secured or secured with top layer	OPTIONAL Cover Board	RhinoPlates at a rate of 12 per 4-ft x 8-ft board Pattern #1 (1 fastener per 2.67-ft ²); Board installed with 6-inch stagger from preceding course	JM TPO (Min. 60 mil)	Induction welded to Weld plates	-90 (Lim. 7)
C-W-17	INSULATION	Preliminarily Secured or secured with top layer	OPTIONAL Cover Board	Trufast IW Plates attached 6-inch o.c. in rows 60-inch o.c.	JM TPO (Min. 60 mil)	Induction welded to Weld plates	-90 (Lim. 7)
C-W-18	INSULATION	Preliminarily Secured or secured with top layer	OPTIONAL Cover Board	Attached with ISOWELD-#14 or ISOWELD-#15 spaced 18" o.c. in rows 18" o.c.	JM TPO (Min. 60 mil)	Induction welded to Weld plates	-97.5 (Lim. 7)
C-W-19	INSULATION	Preliminarily Secured or secured with top layer	OPTIONAL Cover Board	Attached with ISOWELD-#14 or ISOWELD-#15 spaced 6" o.c. in rows 60" o.c.	JM TPO (Min. 60 mil)	Induction welded to Weld plates	-97.5 (Lim. 7)
C-W-20	INSULATION	Preliminarily Secured or secured with top layer	OPTIONAL Cover Board	Trufast IW Plates attached 1 fastener per 2.0ft ² ; End joints offset 12-inches between board rows	JM TPO (Min. 60 mil)	Induction welded to Weld plates	-105 (Lim. 7)

Adhered Assemblies over Cementitious Wood Fiber Deck (New or Existing)								
System No.	Vapor Barrier	Base Insulation (Note 7)	Base Insulation Attachment	Top Insulation	Top Insulation Attachment	Membrane	Membrane Attachment	MDP (psf)
CW-A-1	OPTIONAL Vapor Barriers for Adhered Assemblies over CWF Deck	OPTIONAL Min. 1.5-inch ENRGY 3	OSFA or RSUA applied 12-inch o.c.	JM Invinso or Protector R HD	OSFA, 2-Part UIA, or RSUA applied 12-inch o.c.	JM TPO FB	RSUA applied 12-inch o.c., RSUA(S), or TPO WBMA	-122.5 (Lim. 9)

APPENDIX C – APPROVED ASSEMBLIES FOR JM TPO SINGLE-PLY MEMBRANES

Adhered Assemblies over Cementitious Wood Fiber Deck (New or Existing)								
System No.	Vapor Barrier	Base Insulation (Note 7)	Base Insulation Attachment	Top Insulation	Top Insulation Attachment	Membrane	Membrane Attachment	MDP (psf)
CW-A-2	OPTIONAL Vapor Barriers for Adhered Assemblies over CWF Deck	Min. 1.5-inch ENRGY 3	RSUA applied 12-inch o.c.	OPTIONAL SECUROCK	RSUA, OSFA, or 2-Part UIA applied 12-inch o.c.	JM TPO or JM TPO FB	JM TPO: TPO WBMA, LVOC MA, ASBA, or MBA JM TPO FB: TPO WBMA, ASBA, RSUA applied 12-inch o.c., RSUA(S) or 2-Part UIA-C(S)	-135 (Lim. 9)
CW-A-3	OPTIONAL Vapor Barriers for Adhered Assemblies over CWF Deck	Min. 1.5-inch ENRGY 3	RSUA applied 12-inch o.c.	OPTIONAL SECUROCK	RSUA, OSFA or 2-Part UIA applied 12-inch o.c.	JM TPO SA	Self-adhered	-135 (Lim. 9)
CW-A-4	-	OPTIONAL Min. 1.5-inch ENRGY 3	OSFA applied 12-inch o.c.	SECUROCK	RSUA, OSFA or 2-Part UIA applied 12-inch o.c.	JM TPO or JM TPO FB	JM TPO: LVOC MA, ASBA, 1168, or MBA JM TPO FB: RSUA applied 12-inch o.c. or RSUA(S)	-140 (Lim. 9)
CW-A-5	-	OPTIONAL Min. 1.5-inch ENRGY 3	OSFA applied 12-inch o.c.	SECUROCK	RSUA, OSFA or 2-Part UIA applied 12-inch o.c.	JM TPO SA	Self-adhered	-140 (Lim. 9)
CW-A-6	OPTIONAL Vapor Barriers for Adhered Assemblies over CWF Deck	Min. 1.5-inch ENRGY 3	RSUA applied 12-inch o.c.	-	-	JM TPO or JM TPO FB	JM TPO: TPO WBMA, LVOC, ASBA, or MBA JM TPO FB: TPO WBMA, ASBA, RSUA applied 12-inch o.c., RSUA(S), or 2-Part UIA-C(S)	-150 (Lim. 9)
CW-A-7	OPTIONAL Vapor Barriers for Adhered Assemblies over CWF Deck	SECUROCK	RSUA, OSFA, or 2-Part UIA applied 12-inch o.c.	-	-	JM TPO or JM TPO FB	JM TPO: TPO WBMA LVOC MA, ASBA, 1168, or MBA JM TPO FB: TPO WBMA, ASBA, RSUA applied 12-inch o.c., RSUA(S), or 2-Part UIA-C(S)	-157.5 (Lim. 9)
CW-A-8	OPTIONAL Vapor Barriers for Adhered Assemblies over CWF Deck	SECUROCK	RSUA, OSFA, or 2-Part UIA applied 12-inch o.c.	-	-	JM TPO SA	Self-adhered	-157.5 (Lim. 9)
CW-A-9	-	Min. 1.5-inch ENRGY 3 or ProtectoR Foam	OSFA applied 12-inch o.c.	-	-	JM TPO or JM TPO FB	JM TPO: TPO WBMA, LVOC, ASBA, or MBA JM TPO FB: TPO WBMA, RSUA applied 12-inch o.c., RSUA(S), or 2-Part UIA-C(S)	-157.5 (Lim. 9)

APPENDIX C – APPROVED ASSEMBLIES FOR JM TPO SINGLE-PLY MEMBRANES

Adhered Assemblies over Cementitious Wood Fiber Deck (New or Existing)								
System No.	Vapor Barrier	Base Insulation (Note 7)	Base Insulation Attachment	Top Insulation	Top Insulation Attachment	Membrane	Membrane Attachment	MDP (psf)
CW-A-10	OPTIONAL Vapor Barriers for Adhered Assemblies over CWF Deck	Min. 1.5-inch ENRGY 3	OSFA or RSUA applied 12-inch o.c.	Protector R HD	OSFA or RSUA applied 12-inch o.c.	JM TPO or JM TPO FB	JM TPO: LVOC MA, ASBA or MBA JM TPO FB: 2-Part UIA-C(S)	-157.5 (Lim. 9)
CW-A-11	OPTIONAL Vapor Barriers for Adhered Assemblies over CWF Deck	Min. 1.5-inch ENRGY 3	OSFA or RSUA applied 12-inch o.c.	DensDeck Prime	OSFA or RSUA applied 12-inch o.c.	JM TPO or JM TPO FB	JM TPO: TPO WBMA, ASBA, 1168 or MBA JM TPO FB: 2-Part UIA-C(S)	-157.5 (Lim. 9)
CW-A-12	OPTIONAL Vapor Barriers for Adhered Assemblies over CWF Deck	JM Invinsa	RSUA applied 12-inch o.c.	-	-	JM TPO FB	TPO WBMA	-160 (Lim. 9)
CW-A-13	-	Min. 475 psi Celcore MF with HS Rheology Admixture installed	Poured-in-place	-	-	JM TPO FB	RSUA applied 12-inch o.c. or RSUA(S)	-167.5 (Lim. 9)
CW-A-14	-	Min. 475 psi Celcore MF with HS Rheology Admixture installed	Poured-in-place	-	-	JM TPO FB	RSUA applied 4-inch o.c. or RSUA(S)	-197.5 (Lim. 9)
CW-A-15	OPTIONAL Vapor Barriers for Adhered Assemblies over CWF Deck	Min. 1.5-inch ENRGY 3	RSUA applied 12-inch o.c.	-	-	JM TPO or JM TPO FB	JM TPO: MBA or 1168 JM TPO FB: 2-Part UIA-C(S)	-255 (Lim. 9)
CW-A-16	OPTIONAL Vapor Barriers for Adhered Assemblies over CWF Deck	Min. 1.5-inch E3 C1 or E3 (less ENRGY 3 FR)	RSUA applied 12-inch o.c.	DensDeck Prime	RSUA applied 12-inch o.c.	JM TPO FB	2-Part UIA-C(S)	-255 (Lim. 9)
CW-A-17	OPTIONAL Vapor Barriers for Adhered Assemblies over CWF Deck	Min. 1.5-inch ENRGY 3 CGF	RSUA applied 12-inch o.c.	SECUROCK	RSUA applied 12-inch o.c.	JM TPO or JM TPO FB	JM TPO: TPO WBMA (Two-sided application only), LVOC MA, ASBA, or 1168 JM TPO FB: TPO WBMA or 2-Part UIA-C(S)	-255 (Lim. 9)

APPENDIX C – APPROVED ASSEMBLIES FOR JM TPO SINGLE-PLY MEMBRANES

Assemblies with All Layers Adhered over Gypsum Deck (New or Existing)							
System No.	Base Sheet or Insulation (Note 7)	Base Sheet or Insulation Attachment	Top Insulation	Top Insulation Attachment	Membrane	Membrane Attachment	MDP (psf)
G-A-1	Min. 1.5-inch E3 or ProtectoR Foam	2-Part UIA applied 12-inch o.c.	-	-	JM TPO or JM TPO FB	JM TPO: TPO WBMA, LVOC MA, ASBA, or MBA JM TPO FB: TPO WBMA, RSUA applied 12-inch o.c., RSUA(S), or 2-Part UIA-C(S)	-75 (Lim. 9)
G-A-2	OPTIONAL Min. 1.5-inch E3	2-Part UIA applied 12-inch o.c.	JM Invinsa	2-Part UIA applied 12-inch o.c.	JM TPO or JM TPO FB	JM TPO: MBA applied at 0.83 gal/100ft ² to both membrane and substrate or ASBA JM TPO FB: TPO WBMA, ASBA, RSUA applied 12-inch o.c., RSUA(S), or 2-Part UIA-C(S)	-75 (Lim. 9)
G-A-3	OPTIONAL Min. 1.5-inch E3	2-Part UIA applied 12-inch o.c.	ProtectoR HD	2-Part UIA applied 12-inch o.c.	JM TPO	MBA applied at 0.83 gal/100ft ² to both membrane and substrate or ASBA	-75 (Lim. 9)
G-A-4	OPTIONAL Min. 1.5-inch E3	2-Part UIA applied 12-inch o.c.	JM Invinsa or ProtectoR HD	2-Part UIA applied 12-inch o.c.	JM TPO SA	Self-adhered	-75 (Lim. 9)
G-A-5	OPTIONAL Min. 1.5-inch E3	2-Part UIA applied 12-inch o.c.	SECUROCK	RSUA or 2-Part UIA applied 12-inch o.c.	JM TPO or JM TPO FB	JM TPO: TPO WBMA, LVOC MA, ASBA, 1168, or MBA JM TPO FB: TPO WBMA, ASBA, RSUA applied 12-inch o.c., RSUA(S), or 2-Part UIA-C(S)	-75 (Lim. 9)
G-A-6	OPTIONAL Min. 1.5-inch E3	2-Part UIA applied 12-inch o.c.	SECUROCK	RSUA or 2-Part UIA applied 12-inch o.c.	JM TPO SA	Self-adhered	-75 (Lim. 9)
G-A-7	Min. 1.5-inch ENRGY 3 or ProtectoR Foam	OSFA applied 12-inch o.c.	-	-	JM TPO or JM TPO FB	JM TPO: TPO WBMA, LVOC MA, ASBA, or MBA JM TPO FB: TPO WBMA, RSUA applied 12-inch o.c., RSUA(S), or 2-Part UIA-C(S)	-77.5 (Lim. 9)
G-A-8	OPTIONAL Min. 1.5-inch ENRGY 3	OSFA applied 12-inch o.c.	JM Invinsa	OSFA applied 12-inch o.c.	JM TPO or JM TPO FB	JM TPO: MBA applied at 0.83 gal/100ft ² to both membrane and substrate JM TPO FB: TPO WBMA, ASBA, RSUA applied 12-inch o.c., RSUA(S), or 2-Part UIA-C(S)	-77.5 (Lim. 9)

APPENDIX C – APPROVED ASSEMBLIES FOR JM TPO SINGLE-PLY MEMBRANES

Assemblies with All Layers Adhered over Gypsum Deck (New or Existing)							
System No.	Base Sheet or Insulation (Note 7)	Base Sheet or Insulation Attachment	Top Insulation	Top Insulation Attachment	Membrane	Membrane Attachment	MDP (psf)
G-A-9	OPTIONAL Min. 1.5-inch ENRGY 3	OSFA applied 12-inch o.c.	ProtectoR HD	OSFA applied 12-inch o.c.	JM TPO	MBA applied at 0.83 gal/100ft ² to both membrane and substrate or ASBA	-77.5 (Lim. 9)
G-A-10	OPTIONAL Min. 1.5-inch ENRGY 3	OSFA applied 12-inch o.c.	JM Invinsa or ProtectoR HD	OSFA applied 12-inch o.c.	JM TPO SA	Self-adhered	-77.5 (Lim. 9)
G-A-11	OPTIONAL Min. 1.5-inch ENRGY 3	OSFA applied 12-inch o.c.	SECUROCK	RSUA or OSFA applied 12-inch o.c.	JM TPO or JM TPO FB	JM TPO: TPO WBMA, LVOC MA, ASBA, 1168, or MBA JM TPO FB: TPO WBMA, ASBA, RSUA applied 12-inch o.c., RSUA(S), or 2-Part UIA-C(S)	-77.5 (Lim. 9)
G-A-12	OPTIONAL Min. 1.5-inch ENRGY 3	OSFA applied 12-inch o.c.	SECUROCK	RSUA or OSFA applied 12-inch o.c.	JM TPO SA	Self-adhered	-77.5 (Lim. 9)
G-A-13	-	-	-	-	JM TPO FB	RSUA applied 12-inch o.c. or RSUA(S)	-85 (Lim. 9)
G-A-14	Min. 1.5-inch E3 or ProtectoR Foam	2-Part UIA applied 12-inch o.c.	-	-	JM TPO or JM TPO FB	JM TPO: TPO WBMA, LVOC MA, ASBA, or MBA JM TPO FB: TPO WBMA or 2-Part UIA-C(S)	-90 (Lim. 9)
G-A-15	JM Invinsa	OSFA applied 12-inch o.c.	-	-	JM TPO or JM TPO FB	JM TPO: MBA applied at 0.83 gal/100ft ² or ASBA JM TPO FB: TPO WBMA, RSUA applied 12-inch o.c., RSUA(S) or 2-Part UIA-C(S)	-92.5 (Lim. 9)
G-A-16	Min. 1-inch E3 or ProtectoR Foam	RSUA applied 12-inch o.c.	-	-	JM TPO	MBA, LVOC MA, TPO WBMA or ASBA	-105 (Lim. 9)
G-A-17	Min. 1-inch E3 or ProtectoR Foam	RSUA applied 12-inch o.c.	-	-	JM TPO SA	Self-adhered	-105 (Lim. 9)
G-A-18	Min. 1-inch E3 or ProtectoR Foam	RSUA applied 12-inch o.c.	-	-	JM TPO FB	RSUA(S), 2-Part UIA(S), or TPO WBMA	-105 (Lim. 9)
G-A-19	OPTIONAL Min. 1-inch E3	RSUA applied 12-inch o.c.	DensDeck Prime, DEXcell FA, ProtectoR HD, or SECUROCK	RSUA applied 12-inch o.c.	JM TPO	MBA, LVOC MA, TPO WBMA or ASBA	-105 (Lim. 9)

APPENDIX C – APPROVED ASSEMBLIES FOR JM TPO SINGLE-PLY MEMBRANES

Assemblies with All Layers Adhered over Gypsum Deck (New or Existing)							
System No.	Base Sheet or Insulation (Note 7)	Base Sheet or Insulation Attachment	Top Insulation	Top Insulation Attachment	Membrane	Membrane Attachment	MDP (psf)
G-A-20	OPTIONAL Min. 1-inch E3	RSUA applied 12-inch o.c.	<i>DensDeck Prime</i> , <i>DEXcell FA</i> , ProtectoR HD, or <i>SECUROCK</i>	RSUA applied 12-inch o.c.	JM TPO SA	Self-adhered	-105 (Lim. 9)
G-A-21	OPTIONAL Min. 1-inch E3	RSUA applied 12-inch o.c.	<i>DensDeck Prime</i> , <i>DEXcell FA</i> , ProtectoR HD, or <i>SECUROCK</i>	RSUA applied 12-inch o.c.	JM TPO FB	RSUA(S), 2-Part UIA(S), or TPO WBMA	-105 (Lim. 9)
G-A-22	-	-	-	-	JM TPO FB	RSUA applied 6-inch o.c. or RSUA(S)	-155 (Lim. 9)

Assemblies with Adhered Membranes over Insulated Gypsum Deck (New or Existing)							
System No.	Base Insulation	Base Insulation Attachment	Top Insulation or Base Sheet	Top Insulation or Base Sheet Attachment	Membrane	Membrane Attachment	MDP (psf)
G-AM-1	-	-	PermaPly 28	Min. 1.8-inch JM UltraLok Fastener secured 7-inch o.c. at the lap and 7-inch o.c. in two (2) equally spaced and staggered rows in the field	JM TPO HFB	ASTM D 312, Type IV hot asphalt	-52.5 (Lim. 7)

Adhered Lightweight Concrete Assemblies over Concrete Deck (New or Existing)							
System No.	LWIC	Insulation/Cover Board (Note 7)	Insulation/Cover Board Attachment	Membrane	Membrane Attachment	MDP (psf)	
LC-A-1	Min. 350 Celcore MF with HS Rheology Admixture	Base Layer: OPTIONAL Min. 0.5-inch ENRGY 3 Top Layer: SeparatoR CGF	OSFA or RSUA applied 12-inch o.c.	JM TPO FB	2-Part UIA-C(S)	-45 (Lim. 9)	
LC-A-2	Min. 350psi Celcore MF with HS Rheology Admixture	Base Layer: OPTIONAL Min. 0.5-inch ENRGY 3 Top Layer: <i>DensDeck Prime</i>	OSFA or RSUA applied 12-inch o.c.	JM TPO FB	TPO WBMA	-45 (Lim. 9)	

APPENDIX C – APPROVED ASSEMBLIES FOR JM TPO SINGLE-PLY MEMBRANES

Adhered Lightweight Concrete Assemblies over Concrete Deck (New or Existing)						
System No.	LWIC	Insulation/Cover Board (Note 7)	Insulation/Cover Board Attachment	Membrane	Membrane Attachment	MDP (psf)
LC-A-3	Min 340psi Celcore MF with HS Rheology Admixture over deck treated with Celcore S-1	Min. 1.5-inch ENRGY 3 or ProtectoR Foam	RSUA applied 12-inch o.c.	JM TPO or JM TPO FB	JM TPO: MBA applied at 0.83 gal/100ft ² , TPO WBMA (two-sided application only), LVOC MA or ASBA JM TPO FB: TPO WBMA or 2-Part UIA-C(S)	-77.5 (Lim. 9)
LC-A-4	Min 340psi Celcore MF with HS Rheology Admixture over deck treated with Celcore S-1	Min. 1.5-inch ENRGY 3 or ProtectoR Foam	RSUA applied 12-inch o.c.	JM TPO SA	Self-adhered	-77.5 (Lim. 9)
LC-A-5	Min 340psi Celcore MF with HS Rheology Admixture over deck treated with Celcore S-1	Base Layer: OPTIONAL Min. 1.5-inch ENRGY 3 or ENRGY 3 CGF Top Layer: SECUROCK	Base and Top layer secured with RSUA applied 12-inch o.c.	JM TPO or JM TPO FB	JM TPO: TPO WBMA, LVOC MA ASBA, 1168, or MBA JM TPO FB: TPO WBM, ASBA or 2-Part UIA-C(S)	-77.5 (Lim. 9)
LC-A-6	Min 340psi Celcore MF with HS Rheology Admixture over deck treated with Celcore S-1	Base Layer: OPTIONAL Min. 1.5-inch ENRGY 3 or ENRGY 3 CGF Top Layer: SECUROCK	Base and Top layer secured with RSUA applied 12-inch o.c.	JM TPO SA	Self-adhered	-77.5 (Lim. 9)
LC-A-7	Min. 300psi LWIC	Min. 1.5-inch ENRGY 3 or ProtectoR Foam	2-Part UIA applied 12-inch o.c.	JM TPO or JM TPO FB	JM TPO: MBA applied at 0.83 gal/100ft ² , TPO WBMA, LVOC MA or ASBA JM TPO FB: TPO WBMA or 2-Part UIA-C(S)	-80 (Lim. 9)
LC-A-8	Min. 300psi LWIC	Min. 1.5-inch ENRGY 3 or ProtectoR Foam	2-Part UIA applied 12-inch o.c.	JM TPO SA	Self-adhered	-80 (Lim. 9)
LC-A-9	Min. 300psi LWIC	Base Layer: OPTIONAL Min. 1.5-inch ENRGY 3 or ENRGY 3 AGF Top Layer: SECUROCK	2-Part UIA applied 12-inch o.c.	JM TPO or JM TPO FB	JM TPO: TPO WBMA, LVOC MA, ASBA, 1168, or MBA JM TPO FB: TPO WBMA, ASBA or 2-Part UIA-C(S)	-80 (Lim. 9)

APPENDIX C – APPROVED ASSEMBLIES FOR JM TPO SINGLE-PLY MEMBRANES

Adhered Lightweight Concrete Assemblies over Concrete Deck (New or Existing)						
System No.	LWIC	Insulation/Cover Board (Note 7)	Insulation/Cover Board Attachment	Membrane	Membrane Attachment	MDP (psf)
LC-A-10	Min. 300psi LWIC	Base Layer: OPTIONAL Min. 1.5-inch ENRGY 3 or ENRGY 3 AGF Top Layer: SECUROCK	2-Part UIA applied 12-inch o.c.	JM TPO SA	Self-adhered	-80 (Lim. 9)
LC-A-11	Min. 350psi Celcore MF with HS Rheology Admixture	Base Layer: OPTIONAL Min. 0.5-inch ENRG Y 3 Top Layer: DEXcell FA, SECUROCK, ProtectoR HD or SeparatoR CGF	OSFA applied 12-inch o.c.	JM TPO FB	TPO WBMA	-90 (Lim. 9)
LC-A-12	Min. 350psi Celcore MF with HS Rheology Admixture	Base Layer: Min. 0.5-inch ENRGY 3 Top Layer: ProtectoR HD, SECUROCK, or StormX	OSFA applied 12-inch o.c.	JM TPO FB	2-Part UIA-C(S)	-90 (Lim. 9)
LC-A-13	Min. 350psi Celcore MF with HS Rheology Admixture	Base Layer: OPTIONAL Min. 0.5-inch ENRGY 3 Top Layer: DensDeck Prime	OSFA applied 12-inch o.c.	JM TPO HFB	ASTM D 312 Type IV Asphalt	-90 (Lim. 9)
LC-A-14	Min. 350psi Celcore MF with HS Rheology Admixture	Base Layer: Min. 0.5-inch ENRGY 3 Top Layer: DEXcell FA or SECUROCK	RSUA applied 12-inch o.c.	JM TPO FB	TPO WBMA	-105 (Lim. 9)
LC-A-15	Min. 390psi Celcore MF with HS Rheology Admixture installed over OPTIONAL JM Vapor Barrier SA, DynaBase HW, or DynaWeld 180 S over ASTM D 41 primed concrete	-	-	JM TPO FB	RSUA applied 6-inch o.c. or RSUA(S)	-112.5 (Lim. 9)

APPENDIX C – APPROVED ASSEMBLIES FOR JM TPO SINGLE-PLY MEMBRANES

Adhered Lightweight Concrete Assemblies over Concrete Deck (New or Existing)						
System No.	LWIC	Insulation/Cover Board (Note 7)	Insulation/Cover Board Attachment	Membrane	Membrane Attachment	MDP (psf)
LC-A-16	Min. 350psi Celcore MF with HS Rheology Admixture	Base Layer: OPTIONAL Min. 0.5-inch ENRGY 3 Top Layer: ProtectoR HD or SECUROCK	RSUA applied 12-inch o.c.	JM TPO FB	2-Part UIA-C(S)	-112.5 (Lim. 9)
LC-A-17	Min. 350psi Celcore MF with HS Rheology Admixture	Base Layer: OPTIONAL Min. 0.5-inch ENRGY 3 Top Layer: DensDeck Prime	RSUA applied 12-inch o.c.	JM TPO HFB	ASTM D 312 Type IV Asphalt	-112.5 (Lim. 9)
LC-A-18	Min. 310psi Elastizell with Zell-Crete Fibers	Min. 1.5-inch ENRGY 3 or ProtectoR Foam	2-Part UIA applied 12-inch o.c.	JM TPO or JM TPO FB	JM TPO: MBA applied at 0.83 gal/100ft ² , TPO WBMA, LVOC MA or ASBA JM TPO FB: TPO WBMA or 2-Part UIA-C(S)	-130 (Lim. 9)
LC-A-19	Min. 310psi Elastizell with Zell-Crete Fibers	Min. 1.5-inch ENRGY 3 or ProtectoR Foam	2-Part UIA applied 12-inch o.c.	JM TPO SA	Self-adhered	-130 (Lim. 9)
LC-A-20	Min. 310psi Elastizell with Zell-Crete Fibers	Base Layer: OPTIONAL Min. 1.5-inch ENRGY 3 or ENRGY 3 AGF Top Layer: SECUROCK	2-Part UIA applied 12-inch o.c.	JM TPO or JM TPO FB	JM TPO: TPO WBMA, LVOC MA, ASBA, 1168, or MBA JM TPO FB: TPO WBMA, ASBA or 2-Part UIA-C(S)	-130 (Lim. 9)
LC-A-21	Min. 310psi Elastizell with Zell-Crete Fibers	Base Layer: OPTIONAL Min. 1.5-inch ENRGY 3 or ENRGY 3 AGF Top Layer: SECUROCK	2-Part UIA applied 12-inch o.c.	JM TPO SA	Self-adhered	-130 (Lim. 9)
LC-A-22	Min. 380psi Concrecel	-	-	JM TPO FB	RSUA applied 12-inch o.c. or RSUA(S)	-147.5 (Lim. 9)
LC-A-23	Min. 400psi Celcore MF with HS Rheology Admixture with DynaBase PR adhered in DynaSet 1k applied 12-inch o.c.	-	-	JM TPO FB	2-Part UIA-C(S)	-157.5 (Lim. 9)

APPENDIX C – APPROVED ASSEMBLIES FOR JM TPO SINGLE-PLY MEMBRANES

Adhered Lightweight Concrete Assemblies over Concrete Deck (New or Existing)						
System No.	LWIC	Insulation/Cover Board (Note 7)	Insulation/Cover Board Attachment	Membrane	Membrane Attachment	MDP (psf)
LC-A-24	Min. 480psi Celcore MF with HS Rheology Admixture installed over OPTIONAL DynaBase HW	-	-	JM TPO FB	RSUA applied 12-inch o.c. or RSUA(S)	-167.5 (Lim. 9)
LC-A-25	Min. 350psi Celcore MF with HS Rheology Admixture	DynaBase PR under Min. 1.5-inch ENRGY 3	DynaBase PR applied in DynaSet 1k 12-inch o.c.; ENERGY 3 applied in RSUA 12-inch o.c.	JM TPO or JM TPO FB	JM TPO: MBA, LVOC MA, 1168, ASBA, or TPO WBMA (Two-sided application only) JM TPO FB: TPO WBMA, or 2-Part UIA-C(S)	-170 (Lim. 9)
LC-A-26	Min. 400psi Celcore MF with HS Rheology Admixture	DynaBase PR under Min. 1.5-inch ENRGY 3	DynaBase PR applied in DynaSet 1k 12-inch o.c.; ENERGY 3 applied in RSUA 12-inch o.c.	JM TPO or JM TPO FB	JM TPO: MBA, LVOC MA, 1168, ASBA, or TPO WBMA (Two-sided application only) JM TPO FB: TPO WBMA, or 2-Part UIA-C(S)	-170 (Lim. 9)
LC-A-27	Min. 380psi Concrecel	-	-	JM TPO FB	RSUA applied 6-inch o.c. or RSUA(S)	-172.5 (Lim. 9)
LC-A-28	Min. 700psi cellular lightweight concrete (MCRF = 152lbf with JM Lightweight Concrete (LWC) CR Base Fasteners)	-	-	JM TPO FB	ASBA, 2-Part UIA-C(S) or TPO WBMA	-180 (Lim. 9)
LC-A-29	Min. 400psi Celcore MF with HS Rheology Admixture with DynaBase PR adhered in DynaSet 1k applied 12-inch o.c.	Min. 0.5-inch ENRGY 3 followed by ProtectoR HD or SeparatoR CGF	RSUA applied 12-inch o.c.	JM TPO FB	TPO WBMA	-180 (Lim. 9)
LC-A-30	Min. 350psi Celcore MF with HS Rheology Admixture	Min. 0.5-inch ENRGY 3 followed by ProtectoR HD or SeparatoR CGF	RSUA applied 12-inch o.c.	JM TPO FB	TPO WBMA	-187.5 (Lim. 9)
LC-A-31	Min. 300psi Celcore MF with HS Rheology Admixture installed over torch adhered DynaWeld 180 S	-	-	JM TPO FB	ASBA or TPO WBMA	-202.5 (Lim. 9)
LC-A-32	Min. 360psi Celcore MF with HS Rheology Admixture installed over torch adhered DynaWeld 180 S	-	-	JM TPO FB	RSUA applied 8-inch o.c. or RSUA(S)	-202.5 (Lim. 9)
LC-A-33	Min. 300psi Celcore MF with HS Rheology Admixture installed over torch adhered DynaWeld 180 S	-	-	JM TPO	ASBA, LVOC MA, or MBA	-202.5 (Lim. 9)
LC-A-34	Min. 400psi Celcore MF with HS Rheology Admixture	-	-	JM TPO FB	2-Part UIA-C(S), ASBA, or TPO WBMA	-210 (Lim. 9)
LC-A-35	Min. 360psi Celcore MF with HS Rheology Admixture	-	-	JM TPO	ASBA or LVOC MA	-222.5 (Lim. 9)

APPENDIX C – APPROVED ASSEMBLIES FOR JM TPO SINGLE-PLY MEMBRANES

Adhered Lightweight Concrete Assemblies over Concrete Deck (New or Existing)						
System No.	LWIC	Insulation/Cover Board (Note 7)	Insulation/Cover Board Attachment	Membrane	Membrane Attachment	MDP (psf)
LC-A-36	Min. 350psi Celcore MF with HS Rheology Admixture	StormX over OPTIONAL min. 0.5-inch ENRGY 3	RSUA applied 12-inch o.c.	JM TPO FB	2-Part UIA-C(S)	-240 (Lim. 9)
LC-A-37	Min. 380psi Concrecel	-	-	JM TPO	LVOC MA or MBA	-257.5 (Lim. 9)
LC-A-38	Min. 480psi Celcore MF with HS Rheology Admixture installed over OPTIONAL DynaBase HW	-	-	JM TPO FB	RSUA applied 4-inch o.c. or RSUA(S)	-257.5 (Lim. 9)
LC-A-39	Min. 350psi Celcore MF with HS Rheology Admixture	Min. 1.5-inch ENRGY 3	RSUA applied 12-inch o.c.	JM TPO or JM TPO FB	JM TPO: MBA, LVOC MA, 1168, or ASBA JM TPO FB: 2-Part UIA-C(S)	-277.5 (Lim. 9)
LC-A-40	Min. 220 Elastizell with Zell-Crete Fibers (no EPS Board)	-	-	JM TPO FB	RSUA applied 6-inch o.c. or RSUA(S)	-290 (Lim. 9)
LC-A-41	Min. 300psi Celcore MF with HS Rheology Admixture installed over torch adhered DynaWeld Cap 180 FR treated with Celcore S-1	-	-	JM TPO	ASBA, LVOC MA, or MBA	-305 (Lim. 9)
LC-A-42	Min. 300psi Celcore MF with HS Rheology Admixture installed over torch adhered DynaWeld Cap 180 FR treated with Celcore S-1	-	-	JM TPO FB	ASBA or TPO WBMA	-305 (Lim. 9)
LC-A-43	Min. 360psi Celcore MF with HS Rheology Admixture installed over torch adhered DynaWeld Cap 180 FR treated with Celcore S-1	-	-	JM TPO FB	RSUA applied 8-inch o.c. or RSUA(S)	-305 (Lim. 9)
LC-A-44	Min. 360psi Celcore MF with HS Rheology Admixture	-	-	JM TPO	MBA	-337.5 (Lim. 9)
LC-A-45	Min. 290psi Celcore MF with HS Rheology Admixture	-	-	JM PVC FB	2-Part UIA-C(B) applied 12-inch o.c.	-345 (Lim. 9)
LC-A-46	Min. 360psi Celcore MF with HS Rheology Admixture	-	-	JM TPO FB	RSUA applied 8-inch o.c. or RSUA(S)	-502.5 (Lim. 9)
LC-A-47	Min. 290psi Celcore MF with HS Rheology Admixture	-	-	JM TPO FB	2-Part UIA-C(S), ASBA, or TPO WBMA	-502.5 (Lim. 9)
LC-A-48	Min. 290psi Celcore MF with HS Rheology Admixture	-	-	JM TPO	ASBA, LVOC MA, or MBA	-502.5 (Lim. 9)
LC-A-49	Min. 300psi Concrecel	-	-	JM TPO	ASBA, LVOC MA, or MBA	-502.5 (Lim. 9)
LC-A-50	Min. 300psi Concrecel	-	-	JM TPO FB	RSUA(S), 2-Part UIA(S), ASBA, or TPO WBMA	-502.5 (Lim. 9)

APPENDIX C – APPROVED ASSEMBLIES FOR JM TPO SINGLE-PLY MEMBRANES

Lightweight Concrete Assemblies with Adhered Membranes over <i>Concrete Deck (New or Existing)</i>						
System No.	LWIC	Base Sheet	Insulation	Cover Board	Membrane	MDP (psf)
LC-AM-1	Min. 200psi Elastizell with Zell-Crete Fibers	PermaPly 28 secured with min. 1.7-inch LWC CR Base Sheet Fasteners secured 9-inch o.c. at the lap and 9-inch o.c. in two (2) equally spaced staggered rows in the field	-	-	JM TPO HFB fully adhered in ASTM D 312 hot asphalt	-45 (Lim. 7)
LC-AM-2	Min. 350psi Celcore MF with HS Rheology Admixture	DynaBase, 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 ENRGY 3 or ENRGY 3 CGF adhered in 2-Part UIA applied 12-inch o.c.	-	JM TPO adhered in TPO WBMA, MBA, ASBA, LVOC MA, or 1168	-45 (Lim. 7)
LC-AM-3	Min. 350psi Celcore MF with HS Rheology Admixture	DynaBase, 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 ENRGY 3 or ENRGY 3 CGF adhered in 2-Part UIA applied 12-inch o.c.	-	JM TPO SA	-45 (Lim. 7)
LC-AM-4	Min. 350psi Celcore MF with HS Rheology Admixture	DynaBase, 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 ENRGY 3 or ENRGY 3 CGF adhered in 2-Part UIA applied 12-inch o.c.	-	JM TPO FB adhered in 2-Part UIA-C(S)	-45 (Lim. 7)
LC-AM-5	Min. 350psi Celcore MF with HS Rheology Admixture	DynaBase, 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	-	JM Invinsa, Protector HD, SeparatoR CGF, SECUROCK or DensDeck Prime adhered in 2-Part UIA applied 12-inch o.c.	JM TPO adhered in TPO WBMA	-45 (Lim. 7)

APPENDIX C – APPROVED ASSEMBLIES FOR JM TPO SINGLE-PLY MEMBRANES

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-6	Min. 350psi Celcore MF with HS Rheology Admixture	DynaBase, 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	-	SECUROCK or DensDeck Prime adhered in 2-Part UIA applied 12-inch o.c.	JM TPO HFB adhered in ASTM D 312 hot asphalt	-45 (Lim. 7)
LC-AM-7	Min. 340psi Celcore MF with HS Rheology Admixture; or Existing LWIC with MCRF = 73lbf using min. 1.8-inch Trufast Twin Loc-Nail	PermaPly 28 secured with min. 1.8-inch Trufast Twin Loc-Nails secured 6-inch o.c. at the 4-inch side laps and 6-inch o.c. in two (2) equally spaced rows in the field	-	Min. 0.5-inch DensDeck Prime or SECUROCK adhered in RSUA applied over fasteners rows (approx. 10.7-inch o.c.)	JM TPO adhered in TPO WBMA, MBA, LVOC MA, or ASBA	-82.5 (Lim. 7)
LC-AM-8	Min. 340psi Celcore MF with HS Rheology Admixture; or Existing LWIC with MCRF = 73lbf using min. 1.8-inch Trufast Twin Loc-Nail	PermaPly 28 secured with min. 1.8-inch Trufast Twin Loc-Nails secured 6-inch o.c. at the 4-inch side laps and 6-inch o.c. in two (2) equally spaced rows in the field	-	Min. 0.5-inch DensDeck Prime or SECUROCK adhered in RSUA applied over fasteners rows (approx. 10.7-inch o.c.)	JM TPO SA	-82.5 (Lim. 7)
LC-AM-9	Min. 340psi Celcore MF with HS Rheology Admixture; or Existing LWIC with MCRF = 73lbf using min. 1.8-inch Trufast Twin Loc-Nail	PermaPly 28 secured with min. 1.8-inch Trufast Twin Loc-Nails secured 6-inch o.c. at the 4-inch side laps and 6-inch o.c. in two (2) equally spaced rows in the field	-	Min. 0.5-inch DensDeck Prime or SECUROCK adhered in RSUA applied over fasteners rows (approx. 10.7-inch o.c.)	JM TPO FB w/SBS	-82.5 (Lim. 7)
LC-AM-10	Min. 340psi Celcore MF with HS Rheology Admixture; or Existing LWIC with MCRF = 73lbf using min. 1.8-inch Trufast Twin Loc-Nail	PermaPly 28 secured with min. 1.8-inch Trufast Twin Loc-Nails secured 6-inch o.c. at the 4-inch side laps and 6-inch o.c. in two (2) equally spaced rows in the field	-	Min. 0.5-inch SECUROCK adhered in RSUA applied over fasteners rows (approx. 10.7-inch o.c.)	JM TPO FB adhered in 2-Part UIA(S)	-82.5 (Lim. 7)

Mechanically Fastened Lightweight Concrete Assemblies over Concrete Deck (New, Existing, or Recover)						
System No.	LWIC	Insulation/Cover Board	Insulation/Cover Board Attachment	Membrane	Membrane Attachment	MDP (psf)
LC-M-1	Min. 270psi Celcore MF with HS Rheology Admixture	-	-	JM TPO (Min. 60 mil)	Attached in-lap 6-inch o.c. with VERSA-FAST at a rate of 4 Fasteners (Trapezoid) /Plate; Fastener rows max. 90-inch o.c.	-60 (Lim. 7)

APPENDIX C – APPROVED ASSEMBLIES FOR JM TPO SINGLE-PLY MEMBRANES

Mechanically Fastened Lightweight Concrete Assemblies over Concrete Deck (New, Existing, or Recover)						
System No.	LWIC	Insulation/Cover Board	Insulation/Cover Board Attachment	Membrane	Membrane Attachment	MDP (psf)
LC-M-2	Min. 200psi Elastizell with Zell-Crete Fibers	-	-	JM TPO	Attached in-lap 6-inch o.c. with HL Fasteners & Plates; Fastener rows max. 90-inch o.c.	-67.5 (Lim. 7)
LC-M-3	Min. 270psi Celcore MF with HS Rheology Admixture	-	-	JM TPO (Min. 60 mil)	Attached in-lap 6-inch o.c. with VERSA-FAST at a rate of 4 Fasteners (Trapezoid) /Plate; Fastener rows max. 66-inch o.c.	-67.5 (Lim. 7)
LC-M-4	Min. 270psi Celcore MF with HS Rheology Admixture	-	-	JM TPO	JM Polymer Membrane Batten spaced 30-inch o.c. and secured with Trufast VERSA-FAST fasteners spaced 3-inch o.c.; Battens covered with min. 5-inch wide JM TPO cover strip	-67.5 (Lim. 7)

Induction Welded Lightweight Concrete Assemblies over Concrete Deck (New or Existing) (New, Existing, or Recover)						
System No.	LWIC	Insulation/Cover Board	Insulation/Cover Board Attachment	Membrane	Membrane Attachment	MDP (psf)
LC-W-1	Min. 200psi Elastizell with Zell-Crete Fibers	-	JM TPO RhinoPlates and JM All Purpose Fasteners secured (into Concrete Deck) 6-inch o.c. in rows spaced 96-inch o.c.	JM TPO (Min. 60 mil)	Induction welded to plates	-60 (Lim. 7)

Adhered Lightweight Concrete Assemblies over Steel Deck (New or Existing)							
System No.	Deck Detail	LWIC	Insulation/Cover Board (Note 7)	Insulation/Cover Board Attachment	Membrane	Membrane Attachment	MDP (psf)
LS-A-1	G33	Min. 480psi Celcore MF with HS Rheology	-	-	JM TPO FB	RSUA applied 12-inch o.c. or RSUA(S)	-45 (Lim. 9)
LS-A-2	G33, P, L6, S18	Min. 700psi cellular lightweight concrete (MCRF = 121lbf with JM Lightweight Concrete (LWC) CR Base Fasteners)	-	-	JM TPO FB	2-Part UIA-C(S)	-52.5 (Lim. 9)
LS-A-3	G33	Min 340psi Celcore MF with HS Rheology Admixture over deck treated with Celcore S-1	Min. 1.5-inch ENRGY 3 or ProtectorR Foam	RSUA applied 12-inch o.c.	JM TPO or JM TPO FB	JM TPO: MBA applied at 0.83 gal/100ft ² , TPO WBMA, LVOC MA or ASBA JM TPO FB: TPO WBMA or 2-Part UIA-C(S)	-77.5 (Lim. 9)

APPENDIX C – APPROVED ASSEMBLIES FOR JM TPO SINGLE-PLY MEMBRANES

Adhered Lightweight Concrete Assemblies over Steel Deck (New or Existing)							
System No.	Deck Detail	LWIC	Insulation/Cover Board (Note 7)	Insulation/Cover Board Attachment	Membrane	Membrane Attachment	MDP (psf)
LS-A-4	G33	Min 340psi Celcore MF with HS Rheology Admixture over deck treated with Celcore S-1	Min. 1.5-inch ENRGY 3 or ProtectoR Foam	RSUA applied 12-inch o.c.	JM TPO SA	Self-adhered	-77.5 (Lim. 9)
LS-A-5	G33	Min 340psi Celcore MF with HS Rheology Admixture over deck treated with Celcore S-1	Base Layer: OPTIONAL Min. 1.5-inch ENRGY 3 or ENRGY 3 CGF Top Layer: SECUROCK	Base and Top layer secured with RSUA applied 12-inch o.c.	JM TPO or JM TPO FB	JM TPO: TPO WBMA, LVOC MA, ASBA, 1168, or MBA JM TPO FB: TPO WBMA, ASBA or 2-Part UIA-C(S)	-77.5 (Lim. 9)
LS-A-6	G33	Min 340psi Celcore MF with HS Rheology Admixture over deck treated with Celcore S-1	Base Layer: OPTIONAL Min. 1.5-inch ENRGY 3 or ENRGY 3 CGF Top Layer: SECUROCK	Base and Top layer secured with RSUA applied 12-inch o.c.	JM TPO SA	Self-adhered	-77.5 (Lim. 9)
LS-A-7	G33	Min. 300psi LWIC	Min. 1.5-inch ENRGY 3 or ProtectoR Foam	2-Part UIA applied 12-inch o.c.	JM TPO or JM TPO FB	JM TPO: MBA applied at 0.83 gal/100ft ² , TPO WBMA, LVOC MA or ASBA JM TPO FB: TPO WBMA or 2-Part UIA-C(S)	-80 (Lim. 9)
LS-A-8	G33	Min. 300psi LWIC	Min. 1.5-inch ENRGY 3 or ProtectoR Foam	2-Part UIA applied 12-inch o.c.	JM TPO SA	Self-adhered	-80 (Lim. 9)
LS-A-9	G33	Min. 300psi LWIC	Base Layer: OPTIONAL Min. 1.5-inch ENRGY 3 or ENRGY 3 AGF Top Layer: SECUROCK	2-Part UIA applied 12-inch o.c.	JM TPO or JM TPO FB	JM TPO: TPO WBMA, LVOC MA, ASBA, 1168, or MBA JM TPO FB: TPO WBMA, ASBA or 2-Part UIA-C(S)	-80 (Lim. 9)

APPENDIX C – APPROVED ASSEMBLIES FOR JM TPO SINGLE-PLY MEMBRANES

Adhered Lightweight Concrete Assemblies over Steel Deck (New or Existing)							
System No.	Deck Detail	LWIC	Insulation/Cover Board (Note 7)	Insulation/Cover Board Attachment	Membrane	Membrane Attachment	MDP (psf)
LS-A-10	G33	Min. 300psi LWIC	Base Layer: OPTIONAL Min. 1.5-inch ENRGY 3 or ENRGY 3 AGF Top Layer: SECUROCK	2-Part UIA applied 12-inch o.c.	JM TPO SA	Self-adhered	-80 (Lim. 9)
LS-A-11	G33, P. L6, S24	Min. 290psi Celcore MF with HS Rheology Admixture over deck treated with Celcore S-1	-	-	JM TPO FB	2-Part UIA-C(S), ASBA, or TPO WBMA	-90 (Lim. 9)
LS-A-12	G33, P. L6, S24	Min. 290psi Celcore MF with HS Rheology Admixture over deck treated with Celcore S-1	-	-	JM TPO	ASBA, LVOC MA, or MBA	-90 (Lim. 9)
LS-A-13	G80, P, L5, S15	Min. 250psi Elastizell with Zell-Crete Fibers	-	-	JM TPO FB	RSUA applied 6-inch o.c. or RSUA(S)	-97.5 (Lim. 9)
LS-A-14	G80, P, L5, S15	Min. 250psi Elastizell with Zell-Crete Fibers	-	-	JM TPO	LVOC MA	-97.5 (Lim. 9)
LS-A-15	G33	Min. 310psi Elastizell with Zell-Crete Fibers	Base Layer: OPTIONAL Min. 1.5-inch ENRGY 3 or ENRGY 3 AGF Top Layer: SECUROCK	2-Part UIA ribbons spaced 12-inch o.c.	JM TPO or JM TPO FB	JM TPO: TPO WBMA, LVOC MA, ASBA, 1168, or MBA JM TPO FB: TPO WBMA or 2-Part UIA-C(S)	-130 (Lim. 9)
LS-A-16	G33	Min. 310psi Elastizell with Zell-Crete Fibers	Base Layer: OPTIONAL Min. 1.5-inch ENRGY 3 or ENRGY 3 AGF Top Layer: SECUROCK	2-Part UIA applied 12-inch o.c.	JM TPO SA	Self-adhered	-130 (Lim. 9)
LS-A-17	G33	Min. 200psi Elastizell with Zell-Crete Fibers	-	-	JM TPO	MBA applied at 0.83 gal/100ft ²	-180 (Lim. 9)
LS-A-18	G33	Min. 700psi cellular lightweight concrete (MCRF = 152lb with JM Lightweight Concrete (LWC) CR Base Fasteners)	-	-	JM TPO FB	2-Part UIA-C(S)	-180 (Lim. 9)
LS-A-19	G33	Min. 150psi LWIC	-	-	JM TPO	MBA applied at 0.83 gal/100ft ²	-265 (Lim. 9)

APPENDIX C – APPROVED ASSEMBLIES FOR JM TPO SINGLE-PLY MEMBRANES

Adhered Lightweight Concrete Assemblies over Steel Deck (New or Existing)							
System No.	Deck Detail	LWIC	Insulation/Cover Board (Note 7)	Insulation/Cover Board Attachment	Membrane	Membrane Attachment	MDP (psf)
LS-A-20	G33	Min. 300psi Concrecel	-	-	JM TPO	ASBA, LVOC MA, or MBA	-502.5 (Lim. 9)
LS-A-21	G33	Min. 300psi Concrecel	-	-	JM TPO FB	RSUA(S), 2-Part UIA(S), ASBA, or TPO WBMA	-502.5 (Lim. 9)

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, S18	Min. 200psi Elastizell with Zell-Crete Fibers	PermaPly 28 secured with min. 1.7-inch LWC CR Base Sheet Fasteners secured 9-inch o.c. at the lap and 9-inch o.c. in two (2) equally spaced staggered rows in the field	-	-	JM TPO HFB adhered in ASTM D 312 hot asphalt	-45 (Lim. 7)
LS-AM-2	G33, P, L6, S24	Min. 350psi Celcore MF with HS Rheology Admixture	DynaBase, 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 ENRGY 3 or ENRGY 3 CGF adhered in 2-Part UIA applied 12-inch o.c.	-	JM TPO adhered in TPO WBMA, MBA, ASBA, LVOC MA, or 1168	-45 (Lim. 7)
LS-AM-3	G33, P, L6, S24	Min. 350psi Celcore MF with HS Rheology Admixture	DynaBase, 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 ENRGY 3 or ENRGY 3 CGF adhered in 2-Part UIA applied 12-inch o.c.	-	JM TPO SA	-45 (Lim. 7)
LS-AM-4	G33, P, L6, S24	Min. 350psi Celcore MF with HS Rheology Admixture	DynaBase, 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 ENRGY 3 or ENRGY 3 CGF adhered in 2-Part UIA applied 12-inch o.c.	-	JM TPO FB adhered in 2-Part UIA-C(S)	-45 (Lim. 7)

APPENDIX C – APPROVED ASSEMBLIES FOR JM TPO 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-5	G33, P, L6, S24	Min. 350psi Celcore MF with HS Rheology Admixture	DynaBase, 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 ENRGY 3 or ENRGY 3 CGF adhered in 2-Part UIA, OSFA, or RSUA applied 12-inch o.c.	-	JM TPO FB adhered in RSUA applied 4-inch o.c.	-45 (Lim. 7)
LS-AM-6	G33, P, L6, S24	Min. 350psi Celcore MF with HS Rheology Admixture	DynaBase, 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 ENRGY 3 adhered in 2-Part UIA, OSFA, or RSUA applied 12-inch o.c.	-	JM TPO HFB adhered in ASTM D 312 hot asphalt	-45 (Lim. 7)
LS-AM-7	G33, P, L6, S24	Min. 350psi Celcore MF with HS Rheology Admixture	DynaBase, 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	-	JM InvinSA, ProtectoR HD, SeparatoR CGF, SECUROCK or DensDeck Prime adhered in 2-Part UIA applied 12-inch o.c.	JM TPO adhered in TPO WBMA	-45 (Lim. 7)
LS-AM-8	G33, P, L6, S24	Min. 350psi Celcore MF with HS Rheology Admixture	DynaBase, 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	-	SECUROCK or DensDeck Prime adhered in 2-Part UIA applied 12-inch o.c.	JM TPO HFB adhered in ASTM D 312 hot asphalt	-45 (Lim. 7)
LS-AM-9	G40, P, L6, S14	Min. 340psi Celcore MF with HS Rheology Admixture over deck treated with Celcore S-1; or Existing LWIC with MCRF = 731bf using min. 1.8-inch Trufast Twin Loc-Nail	PermaPly 28 secured with min. 1.8-inch Trufast Twin Loc-Nails secured 6-inch o.c. at the 4-inch side laps and 6-inch o.c. in two (2) equally spaced rows in the field	-	Min. 0.5-inch DensDeck Prime or SECUROCK adhered in RSUA applied over fasteners rows (approx. 10.7-inch o.c.)	JM TPO adhered in TPO WBMA, MBA, LVOC MA, or ASBA	-82.5 (Lim. 7)

APPENDIX C – APPROVED ASSEMBLIES FOR JM TPO 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-10	G40, P, L6, S14	Min. 340psi Celcore MF with HS Rheology Admixture over deck treated with Celcore S-1; or Existing LWIC with MCRF = 73lbf using min. 1.8-inch Trufast Twin Loc-Nail	PermaPly 28 secured with min. 1.8-inch Trufast Twin Loc-Nails secured 6-inch o.c. at the 4-inch side laps and 6-inch o.c. in two (2) equally spaced rows in the field	-	Min. 0.5-inch DensDeck Prime or SECUROCK adhered in RSUA applied over fasteners rows (approx. 10.7-inch o.c.)	JM TPO SA	-82.5 (Lim. 7)
LS-AM-11	G40, P, L6, S14	Min. 340psi Celcore MF with HS Rheology Admixture over deck treated with Celcore S-1; or Existing LWIC with MCRF = 73lbf using min. 1.8-inch Trufast Twin Loc-Nail	PermaPly 28 secured with min. 1.8-inch Trufast Twin Loc-Nails secured 6-inch o.c. at the 4-inch side laps and 6-inch o.c. in two (2) equally spaced rows in the field	-	Min. 0.5-inch DensDeck Prime or SECUROCK adhered in RSUA applied over fasteners rows (approx. 10.7-inch o.c.)	JM TPO FB w/SBS	-82.5 (Lim. 7)
LS-AM-12	G40, P, L6, S14	Min. 340psi Celcore MF with HS Rheology Admixture over deck treated with Celcore S-1; or Existing LWIC with MCRF = 73lbf using min. 1.8-inch Trufast Twin Loc-Nail	PermaPly 28 secured with min. 1.8-inch Trufast Twin Loc-Nails secured 6-inch o.c. at the 4-inch side laps and 6-inch o.c. in two (2) equally spaced rows in the field	-	Min. 0.5-inch SECUROCK adhered in RSUA applied over fasteners rows (approx. 10.7-inch o.c.)	JM TPO FB adhered in 2-Part UIA(S)	-82.5 (Lim. 7)

Mechanically Fastened Lightweight Concrete Assemblies over Steel Deck (New, Existing, or Recover)							
System No.	Deck Detail	LWIC	Insulation/Cover Board	Insulation/Cover Board Attachment	Membrane	Membrane Attachment	MDP (psf)
LS-M-1	G33, P, L6, S24	Min. 270psi Celcore MF with HS Rheology Admixture over deck treated with Celcore S-1	-	-	JM TPO (Min. 60 mil)	Attached in-lap 6-inch o.c. with VERSA-FAST at a rate of 4 Fasteners (Trapezoid) /Plate; Fastener rows max. 90-inch o.c.	-60 (Lim. 7)
LS-M-2	G33, P, L6, S18	Min. 200psi Elastizell with Zell-Crete Fibers	-	-	JM TPO	Attached in-lap 6-inch o.c. with HL Fastener & Plates; Fastener rows max. 90-inch o.c.	-67.5 (Lim. 7)

APPENDIX C – APPROVED ASSEMBLIES FOR JM TPO SINGLE-PLY MEMBRANES

Mechanically Fastened Lightweight Concrete Assemblies over Steel Deck (New, Existing, or Recover)							
System No.	Deck Detail	LWIC	Insulation/Cover Board	Insulation/Cover Board Attachment	Membrane	Membrane Attachment	MDP (psf)
LS-M-3	G33, P, L6, S24	Min. 270psi Celcore MF with HS Rheology Admixture over deck treated with Celcore S-1	-	-	JM TPO (Min. 60 mil)	Attached in-lap 6-inch o.c. with <i>VERSA-FAST</i> at a rate of 4 Fasteners (Trapezoid) /Plate; Fastener rows max. 66-inch o.c.	-67.5 (Lim. 7)
LS-M-4	G33, P, L6, S24	Min. 270psi Celcore MF with HS Rheology Admixture over deck treated with Celcore S-1	-	-	JM TPO	JM Polymer Membrane Batten spaced 30-inch o.c. and secured with Trufast <i>VERSA-FAST</i> fasteners spaced 3-inch o.c.; Battens covered with min. 5-inch wide JM TPO cover strip	-67.5 (Lim. 7)

Induction Welded Lightweight Concrete Assemblies over Steel Deck (New or Existing) (New, Existing, or Recover)							
System No.	Deck Detail	LWIC	Insulation/Cover Board	Insulation/Cover Board Attachment	Membrane	Membrane Attachment	MDP (psf)
LS-W-1	G33, P, L6, S18	Min. 200psi Elastizell with Zell-Crete Fibers	-	JM TPO RhinoPlates and High Load Fasteners (into <i>Steel Deck</i>) secured 6-inch o.c. in rows spaced 96-inch o.c.-	JM TPO (Min. 60 mil)	Induction welded to plates	-60 (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	BUR or Mod-Bit Roofing with mineral surfacing	-	-	JM TPO FB	RSUA applied 12-inch o.c. or RSUA(S)	-45 (Lim. 9)	
R-A-2	BUR or Granular Mod-Bit Roofing over <i>Steel Deck</i> , cementitious panel, gypsum, or treated wood	-	<i>DensDeck Prime</i> in RSUA applied 12-inch o.c.	JM TPO FB	RSUA applied 12-inch o.c. or RSUA(S)	-45 (Lim. 9)	
R-A-3	BUR or Granular Mod-Bit Roofing over <i>Concrete Deck</i>	OPTIONAL Min. 1.5-inch ENRGY 3 in RSUA, OSFA or 2-Part UIA applied 12-inch o.c.	<i>DensDeck Prime</i> or StormX in RSUA applied 12-inch o.c.	JM TPO FB	RSUA applied 12-inch o.c. or RSUA(S)	-45 (Lim. 9)	

APPENDIX C – APPROVED ASSEMBLIES FOR JM TPO 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-4	BUR or Granular Mod-Bit Roofing over cementitious panel, gypsum, or treated wood	-	<i>DensDeck Prime</i> in 2-Part UIA or <i>RSUA</i> applied 12-inch o.c.	<i>JM TPO FB</i>	2-Part UIA-C(S)	-45 (Lim. 9)
R-A-5	BUR or Granular Mod-Bit Roofing over <i>Steel Deck</i> , cementitious panel, or treated wood	OPTIONAL Min. 0.5-inch ENRGY 3 adhered in <i>RSUA</i> , 2-Part UIA, 2-Part UIA-C(B), or <i>OSFA</i> applied 12-inch o.c.	SeparatoR CGF or SeparatoR FR adhered in <i>RSUA</i> , 2-Part UIA, 2-Part UIA-C(B), or <i>OSFA</i> applied 12-inch o.c.	<i>JM TPO SA</i>	Self adhered	-90 (Lim. 9)
R-A-6	BUR or Granular Mod-Bit Roofing over <i>Steel Deck</i> , cementitious panel, or treated wood	OPTIONAL Min. 0.5-inch ENRGY 3 adhered in <i>RSUA</i> , 2-Part UIA, 2-Part UIA-C(B), or <i>OSFA</i> applied 12-inch o.c.	SeparatoR CGF or SeparatoR FR adhered in <i>RSUA</i> , 2-Part UIA, 2-Part UIA-C(B), or <i>OSFA</i> applied 12-inch o.c.	<i>JM TPO</i>	LVOC MA or 1168	-105 (Lim. 9)
R-A-7	BUR or Granular Mod-Bit Roofing over <i>Steel Deck</i> , cementitious panel, or treated wood	OPTIONAL Min. 0.5-inch ENRGY 3 adhered in <i>RSUA</i> , 2-Part UIA, 2-Part UIA-C(B), or <i>OSFA</i> applied 12-inch o.c.	ProtectoR HD adhered in <i>RSUA</i> , 2-Part UIA, 2-Part UIA-C(B), or <i>OSFA</i> applied 12-inch o.c.	<i>JM TPO FB</i>	TPO WBMA or 2-Part UIA-C(S)	-105 (Lim. 9)
R-A-8	BUR or Granular Mod-Bit Roofing over <i>Steel Deck</i> , cementitious panel, or treated wood	OPTIONAL Min. 0.5-inch ENRGY 3 adhered in <i>RSUA</i> , 2-Part UIA, 2-Part UIA-C(B), or <i>OSFA</i> applied 12-inch o.c.	ProtectoR HD adhered in <i>RSUA</i> , 2-Part UIA, 2-Part UIA-C(B), or <i>OSFA</i> applied 12-inch o.c.	<i>JM TPO</i>	MBA, LVOC MA, ASBA, 1168, or TPO WBMA	-105 (Lim. 9)
R-A-9	BUR or Granular Mod-Bit Roofing over <i>Steel Deck</i> , cementitious panel, or treated wood	OPTIONAL Min. 0.5-inch ENRGY 3 adhered in <i>RSUA</i> , 2-Part UIA, 2-Part UIA-C(B), or <i>OSFA</i> applied 12-inch o.c.	ProtectoR HD adhered in <i>RSUA</i> , 2-Part UIA, 2-Part UIA-C(B), or <i>OSFA</i> applied 12-inch o.c.	<i>JM TPO SA</i>	Self adhered	-105 (Lim. 9)
R-A-10	BUR or Granular Mod-Bit Roofing over <i>Steel Deck</i> , cementitious panel, or treated wood	OPTIONAL Min. 0.5-inch ENRGY 3 adhered in <i>RSUA</i> , 2-Part UIA, 2-Part UIA-C(B), or <i>OSFA</i> applied 12-inch o.c.	<i>DEXcell FA</i> adhered in <i>RSUA</i> or <i>OSFA</i> applied 12-inch o.c.	<i>JM TPO</i>	TPO WBMA or ASBA	-105 (Lim. 9)
R-A-11	BUR or Granular Mod-Bit Roofing over <i>Steel Deck</i> , cementitious panel, or treated wood	OPTIONAL Min. 0.5-inch ENRGY 3 adhered in <i>RSUA</i> , 2-Part UIA, 2-Part UIA-C(B), or <i>OSFA</i> applied 12-inch o.c.	<i>DEXcell FA</i> adhered in <i>RSUA</i> or <i>OSFA</i> applied 12-inch o.c.	<i>JM TPO FB</i>	2-Part UIA-C(S)	-105 (Lim. 9)

APPENDIX C – APPROVED ASSEMBLIES FOR JM TPO 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-12	BUR or Granular Mod-Bit Roofing over <i>Steel Deck</i> , cementitious panel, or treated wood	OPTIONAL Min. 0.5-inch ENRGY 3 adhered in <i>RSUA</i> , <i>2-Part UIA</i> , <i>2-Part UIA-C(B)</i> , or <i>OSFA</i> applied 12-inch o.c.	<i>DEXcell FA</i> adhered in <i>RSUA</i> or <i>OSFA</i> applied 12-inch o.c.	<i>JM TPO HFB</i>	ASTM D 312 Type IV Asphalt	-105 (Lim. 9)
R-A-13	BUR or Granular Mod-Bit Roofing over <i>Steel Deck</i> , cementitious panel, or treated wood	OPTIONAL Min. 0.5-inch ENRGY 3 adhered in <i>RSUA</i> , <i>2-Part UIA</i> , <i>2-Part UIA-C(B)</i> , or <i>OSFA</i> applied 12-inch o.c.	<i>SECUROCK</i> or <i>DensDeck Prime</i> adhered in <i>RSUA</i> , <i>2-Part UIA</i> , <i>2-Part UIA-C(B)</i> , or <i>OSFA</i> applied 12-inch o.c.	<i>JM TPO</i>	<i>TPO WBMA</i> , <i>LVOC MA</i> , <i>TPO WBMA</i> , <i>ASBA</i> , or <i>1168</i>	-105 (Lim. 9)
R-A-14	BUR or Granular Mod-Bit Roofing over <i>Steel Deck</i> , cementitious panel, or treated wood	OPTIONAL Min. 0.5-inch ENRGY 3 adhered in <i>RSUA</i> , <i>2-Part UIA</i> , <i>2-Part UIA-C(B)</i> , or <i>OSFA</i> applied 12-inch o.c.	<i>SECUROCK</i> or <i>DensDeck Prime</i> adhered in <i>RSUA</i> , <i>2-Part UIA</i> , <i>2-Part UIA-C(B)</i> , or <i>OSFA</i> applied 12-inch o.c.	<i>JM TPO SA</i>	Self adhered	-105 (Lim. 9)
R-A-15	BUR or Granular Mod-Bit Roofing over <i>Steel Deck</i> , cementitious panel, or treated wood	OPTIONAL Min. 0.5-inch ENRGY 3 adhered in <i>RSUA</i> , <i>2-Part UIA</i> , <i>2-Part UIA-C(B)</i> , or <i>OSFA</i> applied 12-inch o.c.	<i>SECUROCK</i> or <i>DensDeck Prime</i> adhered in <i>RSUA</i> , <i>2-Part UIA</i> , <i>2-Part UIA-C(B)</i> , or <i>OSFA</i> applied 12-inch o.c.	<i>JM TPO FB</i>	<i>2-Part UIA-C(S)</i>	-105 (Lim. 9)
R-A-16	BUR or Granular Mod-Bit Roofing over <i>Steel Deck</i> , cementitious panel, or treated wood	OPTIONAL Min. 0.5-inch ENRGY 3 adhered in <i>RSUA</i> , <i>2-Part UIA</i> , <i>2-Part UIA-C(B)</i> , or <i>OSFA</i> applied 12-inch o.c.	<i>SECUROCK</i> or <i>DensDeck Prime</i> adhered in <i>RSUA</i> , <i>2-Part UIA</i> , <i>2-Part UIA-C(B)</i> , or <i>OSFA</i> applied 12-inch o.c.	<i>JM TPO HFB</i>	ASTM D 312 Type IV Asphalt	-105 (Lim. 9)
R-A-17	BUR or Granular Mod-Bit Roofing over <i>Concrete Deck</i>	OPTIONAL Min. 0.5-inch ENRGY 3 adhered in <i>RSUA</i> , <i>2-Part UIA</i> , <i>2-Part UIA-C(B)</i> , or <i>OSFA</i> applied 12-inch o.c.	SeparatoR CGF or SeparatoR FR adhered in <i>RSUA</i> , <i>2-Part UIA</i> , <i>2-Part UIA-C(B)</i> , or <i>OSFA</i> applied 12-inch o.c.	<i>JM TPO FB</i>	<i>RSUA</i> applied 4-inch o.c. or <i>RSUA(S)</i>	-112.5 (Lim. 9)
R-A-18	BUR or Granular Mod-Bit Roofing over <i>Concrete Deck</i>	OPTIONAL Min. 0.5-inch ENRGY 3 adhered in <i>RSUA</i> , <i>2-Part UIA</i> , <i>2-Part UIA-C(B)</i> , or <i>OSFA</i> applied 12-inch o.c.	SeparatoR CGF or SeparatoR FR adhered in <i>RSUA</i> , <i>2-Part UIA</i> , <i>2-Part UIA-C(B)</i> , or <i>OSFA</i> applied 12-inch o.c.	<i>JM TPO SA</i>	Self adhered	-120 (Lim. 9)
R-A-19	BUR or Granular Mod-Bit Roofing over over <i>Concrete Deck</i> , <i>Steel Deck</i> , cementitious panel, or treated wood	Min. 1-inch ENRGY 3 adhered in <i>RSUA</i> , <i>2-Part UIA</i> , <i>2-Part UIA-C(B)</i> , or <i>OSFA</i> applied 12-inch o.c.	-	<i>JM TPO</i>	<i>MBA</i> , <i>LVOC MA</i> , <i>ASBA</i> , <i>1168</i> , or <i>TPO WBMA</i>	-157.5 (Lim. 9)

APPENDIX C – APPROVED ASSEMBLIES FOR JM TPO 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	BUR or Granular Mod-Bit Roofing over Concrete Deck, Steel Deck, cementitious panel, or treated wood	Min. 1-inch ENRGY 3 adhered in <i>RSUA, 2-Part UIA, 2-Part UIA-C(B)</i> , or <i>OSFA</i> applied 12-inch o.c.	-	<i>JM TPO SA</i>	Self adhered	-157.5 (Lim. 9)
R-A-21	BUR or Granular Mod-Bit Roofing over over Concrete Deck, Steel Deck, cementitious panel, or treated wood	Min. 1-inch ENRGY 3 adhered in <i>RSUA, 2-Part UIA, 2-Part UIA-C(B)</i> , or <i>OSFA</i> applied 12-inch o.c.	-	<i>JM TPO FB</i>	<i>2-Part UIA-C(S)</i> , <i>RSUA</i> applied 12-inch o.c., or <i>RSUA(S)</i>	-157.5 (Lim. 9)
R-A-22	BUR or Granular Mod-Bit Roofing over Concrete Deck	OPTIONAL Min. 0.5-inch ENRGY 3 adhered in <i>RSUA, 2-Part UIA, 2-Part UIA-C(B)</i> , or <i>OSFA</i> applied 12-inch o.c.	<i>DEXcell FA</i> adhered in <i>RSUA</i> or <i>OSFA</i> applied 12-inch o.c.	<i>JM TPO</i>	<i>TPO WBMA</i>	-180 (Lim. 9)
R-A-23	BUR or Granular Mod-Bit Roofing over Concrete Deck	OPTIONAL Min. 0.5-inch ENRGY 3 adhered in <i>RSUA, 2-Part UIA, 2-Part UIA-C(B)</i> , or <i>OSFA</i> applied 12-inch o.c.	<i>SECUROCK</i> or <i>DensDeck Prime</i> adhered in <i>RSUA, 2-Part UIA, 2-Part UIA-C(B)</i> , or <i>OSFA</i> applied 12-inch o.c.	<i>JM TPO</i>	<i>TPO WBMA, LVOC MA, TPO WBMA, ASBA, or 1168</i>	-180 (Lim. 9)
R-A-24	BUR or Granular Mod-Bit Roofing over Concrete Deck	OPTIONAL Min. 0.5-inch ENRGY 3 adhered in <i>RSUA, 2-Part UIA, 2-Part UIA-C(B)</i> , or applied 12-inch o.c.	<i>SECUROCK</i> or <i>DensDeck Prime</i> adhered in <i>RSUA, 2-Part UIA, 2-Part UIA-C(B)</i> , or <i>OSFA</i> applied 12-inch o.c.	<i>JM TPO SA</i>	Self adhered	-180 (Lim. 9)
R-A-25	BUR or Granular Mod-Bit Roofing over Concrete Deck	OPTIONAL Min. 0.5-inch ENRGY 3 adhered in <i>RSUA, 2-Part UIA, 2-Part UIA-C(B)</i> , or <i>OSFA</i> applied 12-inch o.c.	<i>SECUROCK</i> or <i>DensDeck Prime</i> adhered in <i>RSUA, 2-Part UIA, 2-Part UIA-C(B)</i> , or <i>OSFA</i> applied 12-inch o.c.	<i>JM TPO FB</i>	<i>2-Part UIA-C(S)</i>	-180 (Lim. 9)
R-A-26	BUR or Granular Mod-Bit Roofing over Concrete Deck	OPTIONAL Min. 0.5-inch ENRGY 3 adhered in <i>RSUA, 2-Part UIA, 2-Part UIA-C(B)</i> , or <i>OSFA</i> applied 12-inch o.c.	<i>SECUROCK</i> or <i>DensDeck Prime</i> adhered in <i>RSUA, 2-Part UIA, 2-Part UIA-C(B)</i> , or <i>OSFA</i> applied 12-inch o.c.	<i>JM TPO HFB</i>	ASTM D 312 Type IV Asphalt	-180 (Lim. 9)
R-A-27	BUR or Granular Mod-Bit Roofing over Concrete Deck	OPTIONAL Min. 0.5-inch ENRGY 3 adhered in <i>RSUA, 2-Part UIA, 2-Part UIA-C(B)</i> , or <i>OSFA</i> applied 12-inch o.c.	SeparatoR CGF or SeparatoR FR adhered in <i>RSUA, 2-Part UIA, 2-Part UIA-C(B)</i> , or <i>OSFA</i> applied 12-inch o.c.	<i>JM TPO FB</i>	<i>TPO WBMA</i>	-187.5 (Lim. 9)

APPENDIX C – APPROVED ASSEMBLIES FOR JM TPO 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-28	BUR or Granular Mod-Bit Roofing over Concrete Deck	OPTIONAL Min. 0.5-inch ENRGY 3 adhered in <i>RSUA</i> , <i>2-Part UIA</i> , <i>2-Part UIA-C(B)</i> , or <i>OSFA</i> applied 12-inch o.c.	ProtectoR HD adhered in <i>RSUA</i> , <i>2-Part UIA</i> , <i>2-Part UIA-C(B)</i> , or <i>OSFA</i> applied 12-inch o.c.	<i>JM TPO</i>	<i>TPO WBMA</i>	-187.5 (Lim. 9)
R-A-29	BUR or Granular Mod-Bit Roofing over Concrete Deck	OPTIONAL Min. 0.5-inch ENRGY 3 adhered in <i>RSUA</i> , <i>2-Part UIA</i> , <i>2-Part UIA-C(B)</i> , or <i>OSFA</i> applied 12-inch o.c.	ProtectoR HD adhered in <i>RSUA</i> , <i>2-Part UIA</i> , <i>2-Part UIA-C(B)</i> , or <i>OSFA</i> applied 12-inch o.c.	<i>JM TPO FB</i>	<i>TPO WBMA</i>	-187.5 (Lim. 9)
R-A-30	BUR or Granular Mod-Bit Roofing over Concrete Deck	OPTIONAL Min. 0.5-inch ENRGY 3 adhered in <i>RSUA</i> , <i>2-Part UIA</i> , <i>2-Part UIA-C(B)</i> , or <i>OSFA</i> applied 12-inch o.c.	SeparatoR CGF or SeparatoR FR adhered in <i>RSUA</i> , <i>2-Part UIA</i> , <i>2-Part UIA-C(B)</i> , or <i>OSFA</i> applied 12-inch o.c.	<i>JM TPO</i>	<i>TPO WBMA</i>	-195 (Lim. 9)
R-A-31	BUR or Granular Mod-Bit Roofing over Concrete Deck	OPTIONAL Min. 0.5-inch ENRGY 3 adhered in <i>RSUA</i> , <i>2-Part UIA</i> , <i>2-Part UIA-C(B)</i> , or <i>OSFA</i> applied 12-inch o.c.	ProtectoR HD adhered in <i>RSUA</i> , <i>2-Part UIA</i> , <i>2-Part UIA-C(B)</i> , or <i>OSFA</i> applied 12-inch o.c.	<i>JM TPO FB</i>	<i>2-Part UIA-C(S)</i>	-210 (Lim. 9)
R-A-32	BUR or Granular Mod-Bit Roofing over Concrete Deck	OPTIONAL Min. 0.5-inch ENRGY 3 adhered in <i>RSUA</i> , <i>2-Part UIA</i> , <i>2-Part UIA-C(B)</i> , or <i>OSFA</i> applied 12-inch o.c.	ProtectoR HD adhered in <i>RSUA</i> , <i>2-Part UIA</i> , <i>2-Part UIA-C(B)</i> , or <i>OSFA</i> applied 12-inch o.c.	<i>JM TPO</i>	<i>LVOC MA</i>	-210 (Lim. 9)
R-A-33	BUR or Granular Mod-Bit Roofing over Concrete Deck	OPTIONAL Min. 0.5-inch ENRGY 3 adhered in <i>RSUA</i> , <i>2-Part UIA</i> , <i>2-Part UIA-C(B)</i> , or <i>OSFA</i> applied 12-inch o.c.	ProtectoR HD adhered in <i>RSUA</i> , <i>2-Part UIA</i> , <i>2-Part UIA-C(B)</i> , or <i>OSFA</i> applied 12-inch o.c.	<i>JM TPO SA</i>	Self-adhered	-210 (Lim. 9)
R-A-34	BUR over Concrete Deck	Min. 1.5-inch <i>E3</i> adhered in <i>2-Part UIA</i> applied 12-inch o.c.	-	<i>JM TPO HFB</i>	ASTM D 312 Type IV Asphalt	-217.5 (Lim. 9)
R-A-35	BUR or Granular Mod-Bit Roofing over Concrete Deck	OPTIONAL Min. 0.5-inch ENRGY 3 adhered in <i>RSUA</i> , <i>2-Part UIA</i> , <i>2-Part UIA-C(B)</i> , or <i>OSFA</i> applied 12-inch o.c.	SeparatoR CGF or SeparatoR FR adhered in <i>RSUA</i> , <i>2-Part UIA</i> , <i>2-Part UIA-C(B)</i> , or <i>OSFA</i> applied 12-inch o.c.	<i>JM TPO</i>	<i>LVOC MA</i> or <i>1168</i>	-217.5 (Lim. 9)

APPENDIX C – APPROVED ASSEMBLIES FOR JM TPO 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-36	BUR or Granular Mod-Bit Roofing over Concrete Deck	OPTIONAL Min. 0.5-inch ENRGY 3 adhered in <i>RSUA</i> , <i>2-Part UIA</i> , <i>2-Part UIA-C(B)</i> , or <i>OSFA</i> applied 12-inch o.c.	<i>DEXcell FA</i> adhered in <i>RSUA</i> or <i>OSFA</i> applied 12-inch o.c.	<i>JM TPO</i>	<i>ASBA</i>	-217.5 (Lim. 9)
R-A-37	BUR or Granular Mod-Bit Roofing over Concrete Deck	OPTIONAL Min. 0.5-inch ENRGY 3 adhered in <i>RSUA</i> , <i>2-Part UIA</i> , <i>2-Part UIA-C(B)</i> , or <i>OSFA</i> applied 12-inch o.c.	<i>DEXcell FA</i> adhered in <i>RSUA</i> or <i>OSFA</i> applied 12-inch o.c.	<i>JM TPO FB</i>	<i>2-Part UIA-C(S)</i>	-217.5 (Lim. 9)
R-A-38	BUR or Granular Mod-Bit Roofing over Concrete Deck	OPTIONAL Min. 0.5-inch ENRGY 3 adhered in <i>RSUA</i> , <i>2-Part UIA</i> , <i>2-Part UIA-C(B)</i> , or <i>OSFA</i> applied 12-inch o.c.	<i>DEXcell FA</i> adhered in <i>RSUA</i> or <i>OSFA</i> applied 12-inch o.c.	<i>JM TPO HFB</i>	ASTM D 312 Type IV Asphalt	-217.5 (Lim. 9)
R-A-39	BUR or Granular Mod-Bit Roofing over Concrete Deck	OPTIONAL Min. 1.5-inch ENRGY 3 in <i>RSUA</i> , <i>OSFA</i> or <i>2-Part UIA</i> applied 12-inch o.c.	<i>DensDeck Prime</i> or <i>StormX</i> in <i>RSUA</i> applied 12-inch o.c.	<i>JM TPO FB</i>	<i>RSUA</i> applied 4-inch o.c. or <i>RSUA(S)</i>	-217.5 (Lim. 9)
R-A-40	BUR or Granular Mod-Bit Roofing over Concrete Deck	OPTIONAL Min. 0.5-inch ENRGY 3 adhered in <i>RSUA</i> , <i>2-Part UIA</i> , <i>2-Part UIA-C(B)</i> , or <i>OSFA</i> applied 12-inch o.c.	<i>ProtectoR HD</i> adhered in <i>RSUA</i> , <i>2-Part UIA</i> , <i>2-Part UIA-C(B)</i> , or <i>OSFA</i> applied 12-inch o.c.	<i>JM TPO</i>	<i>ASBA</i> or <i>MBA</i>	-225 (Lim. 9)
R-A-41	Smooth SBS Mod-Bit Roofing over Steel Deck	-	-	<i>JM TPO FB</i>	<i>2-Part UIA-C(S)</i> at 6lbs/100ft ²	-325 (Lim. 9)
R-A-42	Granular Mod-Bit Roofing or Granular BUR over Steel Deck	-	-	<i>JM TPO FB</i>	<i>2-Part UIA-C(S)</i> at 6lbs/100ft ²	-330 (Lim. 9)
R-A-43	BUR or Granular Mod-Bit Roofing over Steel Deck or Concrete Deck	-	<i>DensDeck Prime</i> in <i>2-Part UIA</i> applied 12-inch o.c.	<i>JM TPO FB</i>	<i>2-Part UIA-C(S)</i>	-337.5 (Lim. 9)
R-A-44	Granular Mod-Bit Roofing or Granular BUR over Concrete Deck	-	<i>ProtectoR HD</i> adhered in <i>RSUA</i> applied 12-inch o.c.	<i>JM TPO</i>	<i>MBA</i> or <i>LVOC MA</i>	-400 (Lim. 9)
R-A-45	Granular Mod-Bit Roofing or Granular BUR over Concrete Deck	-	<i>ProtectoR HD</i> adhered in <i>RSUA</i> applied 12-inch o.c.	<i>JM TPO SA</i>	Self-adhered	-400 (Lim. 9)

APPENDIX C – APPROVED ASSEMBLIES FOR JM TPO 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-46	Granular Mod-Bit Roofing or Granular BUR over Concrete Deck	-	ProtectoR HD adhered in RSUA applied 12-inch o.c.	JM TPO FB	2-Part UIA-C(S)	-400 (Lim. 9)
R-A-47	Granular Mod-Bit Roofing or Granular BUR over Concrete Deck	-	-	JM TPO FB	RSUA applied 12-inch o.c. or RSUA(S)	-440 (Lim. 9)
R-A-48	Granular Mod-Bit Roofing or Granular BUR over Concrete Deck	-	-	JM TPO FB	2-Part UIA-C(S) at 6lbs/100ft ²	-502.5 (Lim. 9)

Mechanically Fastened Recover Assemblies								
System No.	Deck Detail	Base Insulation	Base Insulation Attachment	Top Insulation (Note 9)	Top Insulation Attachment	Membrane	Membrane Attachment	MDP (psf)
R-M-1	Existing metal roof having Min. 14 ga. steel purlins at max. 5ft o.c.	Min. 1.5-inch E3 or EPS placed between ribs	Preliminarily Secured or secured with top layer	Min. 1-inch E3 or Cover Board	Preliminarily Secured	JM TPO or JM TPO FB	Attached in-lap 12-inch o.c. with JM Purlin Fasteners and High Load Plates to structural supports; Fastener rows max. 60-inch o.c.	-45 (Lim. 7)
R-M-2	Steel Deck (G80, F2W, L6, S24) or Concrete Deck	OPTIONAL INSULATION	Preliminarily Secured or secured with top layer	Min. 0.5-inch E3 or Cover Board	Preliminarily Secured	JM TPO	Attached in-lap 12-inch o.c. with High Load Fasteners and JM High Load Plus Plates for Steel Deck or JM All Purpose Fasteners and JM High Load Plus Plates for Concrete Deck; Fastener rows max. 90-inch o.c.	-45 (Lim. 7)
R-M-3	Steel Deck (G80, F1, L6, S18) or Concrete Deck	OPTIONAL INSULATION	Preliminarily Secured or secured with top layer	Min. 0.5-inch E3 or Cover Board (Insulation is OPTIONAL with JM TPO FB)	Preliminarily Secured	JM TPO or JM TPO FB	Attached in-lap 12-inch o.c. with Extra HL Fasteners & Plates; Fastener rows max. 114-inch o.c.	-45 (Lim. 7)
R-M-4	Steel Deck (G80, F1, L6, S18) or Concrete Deck	OPTIONAL INSULATION	Preliminarily Secured or secured with top layer	Min. 0.5-inch E3 or Cover Board (Insulation is OPTIONAL with JM TPO FB)	Preliminarily Secured	JM TPO or JM TPO FB	Attached in-lap 6-inch o.c. with HL Fasteners & Plates; Fastener rows max. 114-inch o.c.	-45 (Lim. 7)

APPENDIX C – APPROVED ASSEMBLIES FOR JM TPO SINGLE-PLY MEMBRANES

Mechanically Fastened Recover Assemblies								
System No.	Deck Detail	Base Insulation	Base Insulation Attachment	Top Insulation (Note 9)	Top Insulation Attachment	Membrane	Membrane Attachment	MDP (psf)
R-M-5	Steel Deck (G80, F1, L6, S18) or Concrete Deck	OPTIONAL INSULATION	Preliminarily Secured or secured with top layer	Min. 0.5-inch E3 or Cover Board (Insulation is OPTIONAL with JM TPO FB)	Preliminarily Secured	JM TPO or JM TPO FB	Attached in-lap 6-inch o.c. with Extra HL Fasteners & Plates; Fastener rows max. 114-inch o.c.	-52.5 (Lim. 7)
R-M-6	Wood Deck (T19/32P, L24, N6)	OPTIONAL INSULATION	Preliminarily Secured or secured with top layer	Min. 0.5-inch E3 or Cover Board (Insulation is OPTIONAL with JM TPO FB)	Preliminarily Secured	JM TPO or JM TPO FB	Attached in-lap 6-inch o.c. with HL Fasteners & Plates; Fastener rows max. 54-inch o.c.	-60 (Lim. 7)
R-M-7	Steel Deck (G80, F1, L6, S18) or Concrete Deck	OPTIONAL INSULATION	Preliminarily Secured or secured with top layer	Min. 0.5-inch E3 or Cover Board	Preliminarily Secured	JM TPO	Attached in-lap 6-inch o.c. with HL Fasteners & Plates; Fastener rows max. 90-inch o.c.	-60 (Lim. 7)
R-M-8	Steel Deck (G33, L6, P) or Concrete Deck	OPTIONAL INSULATION	Preliminarily Secured or secured with top layer	Min. 0.5-inch E3 or Cover Board (Insulation is OPTIONAL with JM TPO FB)	Preliminarily Secured	JM TPO or JM TPO FB	Attached in-lap 6-inch o.c. with HL Fasteners & Plates; Fastener rows max. 114-inch o.c.	-60 (Lim. 7)
R-M-9	Existing metal roof having Min. 16 ga. steel purlins at max. 5ft o.c.	Min. 1.5-inch E3 or EPS placed between ribs	Preliminarily Secured or secured with top layer	Min. 1-inch E3 or Cover Board	Preliminarily Secured	JM TPO	Attached in-lap 6-inch o.c. with JM Purlin Fasteners and High Load Plates to structural supports; Fastener rows max. 114-inch o.c.	-60 (Lim. 7)
R-M-10	Existing metal roof having Min. 16 ga. steel purlins at max. 5ft o.c.	Min. 1.5-inch E3 or EPS placed between ribs	Preliminarily Secured or secured with top layer	Min. 1-inch E3 or Cover Board	Preliminarily Secured	JM TPO (Min. 60 mil)	Attached in-lap 6-inch o.c. with JM Purlin Fasteners and High Load Plates to structural supports; Fastener rows max. 138-inch o.c.	-67.5 (Lim. 7)
R-M-11	Steel Deck (G33, L6, P) or Concrete Deck	OPTIONAL INSULATION	Preliminarily Secured or secured with top layer	Min. 0.5-inch E3 or Cover Board	Preliminarily Secured	JM TPO	Attached in-lap 6-inch o.c. with HL Fasteners & Plates; Fastener rows max. 90-inch o.c.	-75 (Lim. 7)
R-M-12	Existing metal roof having Min. 16 ga. steel purlins at max. 5ft o.c.	Min. 1.5-inch E3 or EPS placed between ribs	Preliminarily Secured or secured with top layer	Min. 1-inch E3 or Cover Board	Preliminarily Secured	JM TPO	Attached in-lap 6-inch o.c. with JM Purlin Fasteners and High Load Plates to structural supports; Fastener rows max. 90-inch o.c.	-75 (Lim. 7)
R-M-13	Existing metal roof having Min. 16 ga. steel purlins at max. 5ft o.c.	Min. 1.5-inch E3 or EPS placed between ribs	Preliminarily Secured or secured with top layer	Min. 1-inch E3 or Cover Board	Preliminarily Secured	JM TPO	Attached in-lap 6-inch o.c. with JM Purlin Fasteners and High Load Plates to structural supports; Fastener rows max. 60-inch o.c.	-82.5 (Lim. 7)

APPENDIX C – APPROVED ASSEMBLIES FOR JM TPO SINGLE-PLY MEMBRANES

Mechanically Fastened Recover Assemblies								
System No.	Deck Detail	Base Insulation	Base Insulation Attachment	Top Insulation (Note 9)	Top Insulation Attachment	Membrane	Membrane Attachment	MDP (psf)
R-M-14	Existing metal roof having Min. 16 ga. steel purlins at max. 5ft o.c.	Min. 1.5-inch E3 or EPS placed between ribs	Preliminarily Secured or secured with top layer	Min. 1-inch E3 or Cover Board	Preliminarily Secured	JM TPO	Attached in-lap 6-inch o.c. with JM Purlin Fasteners and High Load Plates to structural supports; Fastener rows max. 54-inch o.c.	-97.5 (Lim. 7)
R-M-15	Steel Deck (G33, L6, P) or Concrete Deck	OPTIONAL INSULATION	Preliminarily Secured or secured with top layer	Min. 0.5-inch E3 or Cover Board (Insulation is OPTIONAL with JM TPO FB)	Preliminarily Secured	JM TPO or JM TPO FB	Attached in-lap 6-inch o.c. with HL Fasteners & Plates; Fastener rows max. 54-inch o.c.	-97.5 (Lim. 7)
R-M-16	Existing metal roof having Min. 16 ga. steel purlins at max. 5ft o.c.	Min. 1.5-inch E3 or EPS placed between ribs	Preliminarily Secured or secured with top layer	Min. 1-inch E3 or Cover Board	Preliminarily Secured	JM TPO (Min. 60 mil)	Attached in-lap 6-inch o.c. with JM Purlin Fasteners and High Load Plates to structural supports; Fastener rows max. 66-inch o.c.	-105 (Lim. 7)

Induction Welded Recover Assemblies								
System No.	Existing Roof	Base Insulation	Base Insulation Attachment	Top Insulation	Top Insulation Attachment	Membrane	Membrane Attachment	MDP (psf)
R-W-1	Existing metal roof having Min. 16 ga. steel purlins at max. 5ft o.c.	Min. 1.5-inch E3 or EPS placed between ribs	Preliminarily Secured or secured with top layer	Min. 1-inch E3 or Cover Board	JM Purlin Fasteners and JM TPO RhinoPlates secured 18-inch o.c. along the purlins	JM TPO (Min. 60 mil)	Induction welded to weld plates	-45 (Lim. 7)
R-W-2	Existing metal roof having Min. 16 ga. steel purlins at max. 5ft o.c.	Min. 1.5-inch E3 or EPS placed between ribs	Preliminarily Secured or secured with top layer	Min. 1-inch E3 or Cover Board	JM Purlin Fasteners and JM TPO RhinoPlates secured 6-inch o.c. along the purlins with fastener rows max. 120-inch o.c.	JM TPO (Min. 60 mil)	Induction welded to weld plates	-45 (Lim. 7)
R-W-3	Existing metal roof having Min. 16 ga. steel purlins at max. 5ft o.c.	Min. 1.5-inch E3 or EPS placed between ribs	Preliminarily Secured or secured with top layer	OPTIONAL Cover Board	Attached with ISOWELD-#12 or ISOWELD-#15 spaced 12-inch o.c. along the purlins	JM TPO (Min. 60 mil)	Induction welded to Weld plates	-45 (Lim. 7)
R-W-4	Steel Deck (G33, L6, P) or Concrete Deck	OPTIONAL Min. 1.5-inch INSULATION	Preliminarily Secured or secured with top layer	Min. 0.5-inch E3 or Cover Board	Attached with High Load Fasteners and JM TPO RhinoPlates, Trufast TPO IW Plates, or isoweld FI-P-6.8-TPO plates at a rate of 8 per 4-ft x 8-ft board Pattern #1 (1 fastener per 4.0-ft ²)	JM TPO (Min. 60 mil)	Induction welded to weld plates	-45 (Lim. 7)

APPENDIX C – APPROVED ASSEMBLIES FOR JM TPO SINGLE-PLY MEMBRANES

Induction Welded Recover Assemblies								
System No.	Existing Roof	Base Insulation	Base Insulation Attachment	Top Insulation	Top Insulation Attachment	Membrane	Membrane Attachment	MDP (psf)
R-W-5	Wood Deck (T15/32P, L24, N6)	OPTIONAL INSULATION	Preliminarily Secured or secured with top layer	Min. 0.5-inch E3 or Cover Board	Min. 2.25-inch JM All Purpose Fastener and JM TPO RhinoPlates, Trufast TPO IW Plates, or <i>isoweld</i> FI-P-6.8-TPO plates secured max. 24-inch o.c. through sheathing into wood structural supports in rows max. 24" o.c.	JM TPO (Min. 60 mil)	Induction welded to weld plates	-52.5 (Lim. 7)
R-W-6	Wood Deck (T15/32P, L24, N6)	OPTIONAL INSULATION	Preliminarily Secured or secured with top layer	Min. 0.5-inch E3 or Cover Board	Min. 2.25-inch JM All Purpose Fastener and JM TPO RhinoPlates, Trufast TPO IW Plates, or <i>isoweld</i> FI-P-6.8-TPO plates secured max. 9-inch o.c. through sheathing into wood structural supports in rows max. 48" o.c.	JM TPO (Min. 60 mil)	Induction welded to weld plates	-60 (Lim. 7)
R-W-7	Existing metal roof having Min. 16 ga. steel purlins at max. 5ft o.c.	Min. 1.5-inch E3 or EPS placed between ribs	Preliminarily Secured or secured with top layer	Min. 1-inch E3 or Cover Board	JM Purlin Fasteners and JM TPO RhinoPlates secured 12-inch o.c. along the purlins	JM TPO (Min. 60 mil)	Induction welded to weld plates	-67.5 (Lim. 7)
R-W-8	Steel Deck (G33, L6, P) or Concrete Deck	OPTIONAL INSULATION	Preliminarily Secured or secured with top layer	Min. 0.5-inch E3 or Cover Board	Attached with High Load Fasteners and JM TPO RhinoPlates, Trufast TPO IW Plates, or <i>isoweld</i> FI-P-6.8-TPO plates at a rate of 12 per 4-ft x 8-ft board Pattern #1 (1 fastener per 2.67-ft ²)	JM TPO (Min. 60 mil)	Induction welded to weld plates	-75 (Lim. 7)
R-W-9	Steel Deck (G33, F2W, L6) or Concrete Deck	OPTIONAL INSULATION	Preliminarily Secured or secured with top layer	Min. 0.5-inch E3 or Cover Board	Attached with High Load Fasteners and JM TPO RhinoPlates, Trufast TPO IW Plates, or <i>isoweld</i> FI-P-6.8-TPO plates at a rate of 15 per 4-ft x 8-ft board (1 fastener per 2.13-ft ²)	JM TPO (Min. 60 mil)	Induction welded to weld plates	-90 (Lim. 7)
R-W-10	Existing metal roof having Min. 16 ga. steel purlins at max. 5ft o.c.	Min. 1-inch E3 or EPS placed between ribs	Preliminarily Secured or secured with top layer	OPTIONAL INSULATION	Attached with Trufast TPO IW Plates and Trufast #12 Purlin Fasteners spaced 6-inch o.c. along the purlins	JM TPO (Min. 60 mil)	Induction welded to Weld plates	-90 (Lim. 7)
R-W-11	Existing metal roof having Min. 16 ga. steel purlins at max. 5ft o.c.	Min. 1.5-inch E3 or EPS placed between ribs	Preliminarily Secured or secured with top layer	Min. 1-inch E3 or Cover Board	Attached with ISOWELD-#12 or ISOWELD-#15 spaced 6-inch o.c. along the purlins	JM TPO (Min. 60 mil)	Induction welded to Weld plates	-97.5 (Lim. 7)

APPENDIX C – APPROVED ASSEMBLIES FOR JM TPO SINGLE-PLY MEMBRANES

Induction Welded Recover Assemblies								
System No.	Existing Roof	Base Insulation	Base Insulation Attachment	Top Insulation	Top Insulation Attachment	Membrane	Membrane Attachment	MDP (psf)
R-W-12	Wood Deck (T15/32P, L24, N6)	OPTIONAL INSULATION	Preliminarily Secured or secured with top layer	Min. 0.5-inch E3 or Cover Board	Min. 2.25-inch JM All Purpose Fastener and JM TPO RhinoPlates, Trufast TPO IW Plates, or <i>isoweld</i> FI-P-6.8-TPO plates secured max. 6-inch o.c. through sheathing into wood structural supports in rows max. 48" o.c.	JM TPO (Min. 60 mil)	Induction welded to weld plates	-112.5 (Lim. 7)
R-W-13	Existing metal roof having Min. 16 ga. steel purlins at max. 5ft o.c.	Min. 1.5-inch E3 or EPS placed between ribs	Preliminarily Secured or secured with top layer	Min. 1-inch E3 or Cover Board	JM Purlin Fasteners and JM TPO RhinoPlates secured 6-inch o.c. along the purlins	JM TPO (Min. 60 mil)	Induction welded to weld plates	-120 (Lim. 7)

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, P, L6, S24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 2-inch ENRGY 3	Fasteners & Plates at a rate of 1 fastener per 2.67ft ²	ProtectoR HD	RSUA or 2-Part UIA applied 12-inch o.c	JM TPO SA	Self-adhered	-45 (Lim. 7)
S-AM-2	G33, P, L6, S24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 2-inch ENRGY 3	Fasteners & Plates at a rate of 1 fastener per 2.67ft ²	ProtectoR HD	RSUA or 2-Part UIA applied 12-inch o.c	JM TPO or JM TPO FB	JM TPO: TPO WBMA; MBA applied at 0.83 gal/100ft ² ; LVOC MA or ASBA JM TPO FB: RSUA applied 12-inch o.c., RSUA(S), 2-Part UIA-C(S), TPO WBMA, or ASBA	-45 (Lim. 7)
S-AM-3	G33	OPTIONAL Vapor Barrier	Min. 1.5-inch E3	Simultaneously secured with top layer	ProtectoR	Fasteners & Plates secured 1 fastener per 4ft ²	JM TPO SA	Self-adhered	-45 (Lim. 9)
S-AM-4	G33	OPTIONAL Vapor Barrier	Min. 1.5-inch E3	Simultaneously secured with top layer	ProtectoR	Fasteners & Plates secured 1 fastener per 4ft ²	JM TPO (Min. 60 mil) or JM TPO FB	JM TPO: TPO WBMA; MBA applied at 0.83 gal/100ft ² ; LVOC MA or ASBA JM TPO FB: RSUA applied 12-inch o.c., RSUA(S), 2-Part UIA-C(S), TPO WBMA, or ASBA	-45 (Lim. 9)

APPENDIX C – APPROVED ASSEMBLIES FOR JM TPO 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-5	G33	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	Simultaneously secured with top layer	Min. 0.5-inch SECUROCK	Fasteners & Plates or UltraFast Fasteners & Trufast Plates secured 1 fastener per 4.0ft ²	JM TPO or JM TPO FB	JM TPO: MBA applied at 0.83-1.10 gal/100ft ² , LVOC MA, or ASBA JM TPO FB: TPO WBMA, ASBA or 2-Part UIA-C(S)	-45 (Lim. 9)
S-AM-6	G33	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	Simultaneously secured with top layer	Min. 0.5-inch SECUROCK	Fasteners & Plates or UltraFast Fasteners & Trufast Plates secured 1 fastener per 4.0ft ²	JM TPO SA	Self-adhered	-45 (Lim. 9)
S-AM-7	G33	OPTIONAL Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 1.5-inch ENRGY 3 or Protector Foam	Fasteners & Plates secured 1 fastener per 2.0ft ²	JM TPO	MBA applied at 0.83 gal/100ft ² to both membrane and substrate, TPO WBMA, ASBA or LVOC MA	-45 (Lim. 9)
S-AM-8	G33	OPTIONAL Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 1.5-inch ENRGY 3 or Protector Foam	Fasteners & Plates secured 1 fastener per 2.0ft ²	JM TPO SA	Self-adhered	-45 (Lim. 9)
S-AM-9	G33, F2, L6, S24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 2-inch ENRGY 3	Fasteners & Plates secured 1 fastener per 4.0ft ²	SECUROCK	OSFA, RSUA or 2-Part UIA; Applied 12-inch o.c.	JM TPO or JM TPO FB	JM TPO: MBA applied at 0.83-1.10 gal/100ft ² , LVOC MA or ASBA JM TPO FB: TPO WBMA, ASBA, RSUA applied 12-inch o.c., RSUA(S), or 2-Part UIA-C(S)	-45 (Lim. 7)
S-AM-10	G33, F2, L6, S24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 2-inch ENRGY 3	Fasteners & Plates secured 1 fastener per 4.0ft ²	SECUROCK	OSFA, RSUA or 2-Part UIA applied 12-inch o.c.	JM TPO SA	Self-adhered	-45 (Lim. 7)
S-AM-11	22 GA Type N; G80, H1, L12, HS24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 2-inch E3	JM All Purpose Fasteners and Dekfast PLT-H-2-7/8 Plates secured at a rate of 16 per 4-ft x 8-ft board Type N	JM TPO	ASBA, LVOC MA or MBA	-45 (Lim. 7)
S-AM-12	22 GA Type N; G80, H1, L12, HS24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 2-inch E3	JM All Purpose Fasteners and Dekfast PLT-H-2-7/8 Plates secured at a rate of 16 per 4-ft x 8-ft board Type N	JM TPO FB	2-Part UIA-C(S)	-45 (Lim. 7)

APPENDIX C – APPROVED ASSEMBLIES FOR JM TPO 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-13	G33, F1, L6, S24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	Simultaneously secured with top layer	SECUROCK	DF or Fasteners & Plates secured 1 fastener per 1.33ft ²	JM TPO or JM TPO FB	JM TPO: MBA applied at 0.83-1.10 gal/100ft ² , LVOC MA or ASBA JM TPO FB: TPO WBMA, ASBA or 2-Part UIA-C(S)	-52.5 (Lim. 7)
S-AM-14	G33, F1, L6, S24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	Simultaneously secured with top layer	SECUROCK	DF or Fasteners & Plates secured 1 fastener per 1.33ft ²	JM TPO SA	Self-adhered	-52.5 (Lim. 7)
S-AM-15	G33, F2, L6, S24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch ENRGY 3	Fasteners & Plates secured 1 fastener per 1.33ft ²	SECUROCK	RSUA or 2-Part UIA applied 12-inch o.c.	JM TPO or JM TPO FB	JM TPO: MBA applied at 0.83-1.10 gal/100ft ² , LVOC MA, or ASBA JM TPO FB: TPO WBMA, ASBA, RSUA applied 12-inch o.c., RSUA(S), or 2-Part UIA-C(S)	-52.5 (Lim. 7)
S-AM-16	G33, F2, L6, S24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch ENRGY 3	Fasteners & Plates secured 1 fastener per 1.33ft ²	SECUROCK	RSUA or 2-Part UIA applied 12-inch o.c.	JM TPO SA	Self-adhered	-52.5 (Lim. 7)
S-AM-17	G33, P, L6, S20	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch ENRGY 3	Fasteners & Plates secured at a rate of 1 fastener per 1.45ft ²	JM Invinsa	RSUA or 2-Part UIA applied 12-inch o.c.	JM TPO FB	RSUA applied 12-inch o.c. or RSUA(S)	-52.5 (Lim. 7)
S-AM-18	G33, P, L6, S20	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch ENRGY 3	Fasteners & Plates secured at a rate of 1 fastener per 1.45ft ²	JM Invinsa or ProtectoR HD	RSUA or 2-Part UIA applied 12-inch o.c.	JM TPO SA	Self-adhered	-52.5 (Lim. 7)
S-AM-19	G33, P, L6, S24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 1.5-inch ENRGY 3 CGF or ENRGY 3 FR	Fasteners & Plates secured 1 fastener per 1.78ft ²	JM TPO	MBA applied at 0.83 gal/100ft ² to both membrane and substrate or TPO WBMA or ASBA	-52.5 (Lim. 7)
S-AM-20	G33, F2, L6, S24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 2-inch ENRGY 3 CGF or ENRGY 3 FR	Fasteners & Plates secured 1 fastener per 2.67ft ²	JM TPO	MBA applied at 0.83 gal/100ft ² to both membrane and substrate, TPO WBMA or ASBA	-52.5 (Lim. 7)

APPENDIX C – APPROVED ASSEMBLIES FOR JM TPO 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 FR	Fasteners & Plates secured 1 fastener per 2.67ft ²	JM TPO SA	Self-adhered	-52.5 (Lim. 7)
S-AM-22	G33, F2, L6, S24	OPTIONAL Vapor Barrier	Min. 2-inch ENRGY 3 CGF or ENRGY 3 FR	Fasteners & Plates secured 1 fastener per 2.67ft ²	Min. 1.5-inch ENRGY 3 CGF or ENRGY 3 CGF	OSFA, RSUA, or 2-Part UIA applied 6-inch o.c.	JM TPO	ASBA, TPO WBMA, MBA or LVOC MA	-52.5 (Lim. 7)
S-AM-23	G33, F2, L6, S24	OPTIONAL Vapor Barrier	Min. 2-inch ENRGY 3 CGF or ENRGY 3 FR	Fasteners & Plates secured 1 fastener per 2.67ft ²	Min. 1.5-inch ENRGY 3 CGF or ENRGY 3 CGF	OSFA, RSUA, or 2-Part UIA applied 6-inch o.c.	JM TPO SA	Self-adhered	-52.5 (Lim. 7)
S-AM-24	G33, F1, L6, S24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	Simultaneously secured with top layer	SECUROCK	DF or Fasteners & Plates secured 1 fastener per 1.33ft ²	JM TPO HFB	Base Ply: Torch Adhered Membrane: ASTM D 312 Type IV Asphalt	-52.5 (Lim. 7)
S-AM-25	G33, F1, L6, S24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	Simultaneously secured with top layer	SECUROCK	DF or Fasteners & Plates secured 1 fastener per 1.33ft ²	JM TPO HFB	ASTM D 312 Type IV Asphalt	-52.5 (Lim. 7)
S-AM-26	G33, F2, L6, S24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch ENRGY 3	Fasteners & Plates secured 1 fastener per 1.33ft ²	SECUROCK	OSFA, RSUA or 2-Part UIA applied 12-inch o.c.	JM TPO HFB	ASTM D 312 Type IV Asphalt	-52.5 (Lim. 7)
S-AM-27	G33, F2, L6, S24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch ENRGY 3	Fasteners & Plates secured 1 fastener per 1.33ft ²	SECUROCK	OSFA, RSUA or 2-Part UIA applied 12-inch o.c.	JM TPO HFB	Base Ply: Torch Adhered Membrane: ASTM D 312 Type IV Asphalt	-52.5 (Lim. 7)
S-AM-28	G33, F2, L6, S18	OPTIONAL Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 1.5-inch E3 or Protector Foam	Fasteners & Plates secured 1 fastener per 1.78ft ²	JM TPO HFB	ASTM D 312 Type IV Asphalt	-52.5 (Lim. 7)
S-AM-29	G33, F2, L6, S18	OPTIONAL Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 1.5-inch E3 or Protector Foam	Fasteners & Plates secured 1 fastener per 1.78ft ²	JM TPO FB	2-Part UIA-C(S)	-52.5 (Lim. 7)
S-AM-30	G33, F2, L6, S18	OPTIONAL Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 1.5-inch E3 or Protector Foam	Fasteners & Plates secured 1 fastener per 1.78ft ²	JM TPO	LVOC MA or MBA applied at 0.55 gal/100ft ²	-52.5 (Lim. 7)

APPENDIX C – APPROVED ASSEMBLIES FOR JM TPO 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-31	G33, F1, L6, S24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	ProtectoR HD	Fasteners & Plates secured 1 fastener per 1.78ft ²	JM TPO SA	Self-adhered	-52.5 (Lim. 7)
S-AM-32	G33, F1, L6, S24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	ProtectoR HD	Fasteners & Plates secured 1 fastener per 1.78ft ²	JM TPO or JM TPO FB	JM TPO: TPO WBMA, MBA applied at 0.83 gal/100ft ² , LVOC MA applied at 0.83 gal/100ft ² or ASBA JM TPO FB: TPO WBMA or ASBA	-52.5 (Lim. 7)
S-AM-33	G33, F1, L6, S12	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	Simultaneously secured with top layer	DensDeck Prime	Fasteners & Plates or UltraFast Fasteners & Trufast Plates secured 1 fastener per 1.78ft ²	JM TPO or JM TPO FB	JM TPO: TPO WBMA, MBA, LVOC MA, ASBA or 1168 JM TPO FB: TPO WBMA, ASBA or 2-Part UIA-C(S)	-52.5 (Lim. 7)
S-AM-34	G33, F1, L6, S12	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	Simultaneously secured with top layer	DensDeck Prime	Fasteners & Plates or UltraFast Fasteners & Trufast Plates secured 1 fastener per 1.78ft ²	JM TPO HFB	ASTM D 312 Type IV Asphalt	-52.5 (Lim. 7)
S-AM-35	G33, F1, L6, S12	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	Simultaneously secured with top layer	DensDeck Prime	Fasteners & Plates or UltraFast Fasteners & Trufast Plates secured 1 fastener per 1.78ft ²	JM TPO SA	Self-adhered	-52.5 (Lim. 7)
S-AM-36	G33, F1, L6, S24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	Simultaneously secured with top layer	StormX	OMG Fasteners & Plates secured 8 per 4-ft x 8-ft board Pattern #3	JM TPO or JM TPO FB	JM TPO: TPO WBMA, MBA, LVOC MA, ASBA or 1168 JM TPO FB: TPO WBMA, ASBA or 2-Part UIA-C(S)	-52.5 (Lim. 7)
S-AM-37	G33, F1, L6, S24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	Simultaneously secured with top layer	StormX	OMG Fasteners & Plates secured 8 per 4-ft x 8-ft board Pattern #3	JM TPO HFB	ASTM D 312 Type IV Asphalt	-52.5 (Lim. 7)
S-AM-38	G33, F1, L6, S24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	Simultaneously secured with top layer	StormX	OMG Fasteners & Plates secured 8 per 4-ft x 8-ft board Pattern #3	JM TPO SA	Self-adhered	-52.5 (Lim. 7)
S-AM-39	G33, F1, L6, S30	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch ENRGY 3	Fasteners & Plates secured at a rate of 1 fastener per 1.78ft ²	Min 1/2-inch SECUROCK	OSFA, RSUA or 2-Part UIA applied 12-inch o.c.	JM TPO or JM TPO FB	JM TPO: MBA applied at 0.83-1.10 gal/100ft ² , LVOC MA, or ASBA JM TPO FB: TPO WBMA, ASBA or 2-Part UIA-C(S)	-60 (Lim. 7)

APPENDIX C – APPROVED ASSEMBLIES FOR JM TPO 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-40	G33, F1, L6, S30	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch ENRGY 3	Fasteners & Plates secured at a rate of 1 fastener per 1.78ft ²	Min 1/2-inch SECUROCK	OSFA, RSUA or 2-Part UIA applied 12-inch o.c.	JM TPO SA	Self-adhered	-60 (Lim. 7)
S-AM-41	G33, F2W, L6, S24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	Simultaneously secured with top layer	SECUROCK	DF or Fasteners & Plates secured 1 fastener per 1.00ft ²	JM TPO or JM TPO FB	JM TPO: MBA applied at 0.83-1.10 gal/100ft ² , LVOC MA, or ASBA JM TPO FB: TPO WBMA, ASBA or 2-Part UIA-C(S)	-60 (Lim. 7)
S-AM-42	G80, F1W, L6, S24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	Simultaneously secured with top layer	SECUROCK	DF or Fasteners & Plates secured 1 fastener per 1.00ft ²	JM TPO or JM TPO FB	JM TPO: MBA applied at 0.83-1.10 gal/100ft ² , LVOC MA, or ASBA JM TPO FB: TPO WBMA, ASBA or 2-Part UIA-C(S)	-60 (Lim. 7)
S-AM-43	G33, F2W, L6, S24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	Simultaneously secured with top layer	SECUROCK	DF or Fasteners & Plates secured 1 fastener per 1.00ft ²	JM TPO HFB	ASTM D 312 Type IV Asphalt	-60 (Lim. 7)
S-AM-44	G33, F2, L6, S24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 1.5-inch E3 or Protector Foam	Fasteners & Plates secured 1 fastener per 1.78ft ²	JM TPO	LVOC MA or MBA applied at 0.55 gal/100ft ²	-60 (Lim. 7)
S-AM-45	G33, F2, L6, S24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 1.5-inch ENRGY 3 CGF or ENRGY 3 FR	Fasteners & Plates secured 1 fastener per 1.78ft ²	JM TPO SA	Self-adhered	-60 (Lim. 7)
S-AM-46	G33, F2, L6, S24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 1.5-inch E3 or Protector Foam	Fasteners & Plates secured 1 fastener per 1.78ft ²	JM TPO HFB	ASTM D 312 Type IV Asphalt	-60 (Lim. 7)
S-AM-47	G33, F2, L6, S24	OPTIONAL Vapor Barrier	Min. 1.5-inch ENRGY 3 CGF or ENRGY 3 FR	Fasteners & Plates secured 1 fastener per 1.78ft ²	Min. 1.5-inch ENRGY 3 CGF or ENRGY 3 CGF	OSFA, RSUA, or 2-Part UIA applied 6-inch o.c.	JM TPO	ASBA, TPO WBMA, MBA or LVOC MA	-60 (Lim. 7)

APPENDIX C – APPROVED ASSEMBLIES FOR JM TPO 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-48	G33, F2, L6, S24	OPTIONAL Vapor Barrier	Min. 1.5-inch ENRGY 3 CGF or ENRGY 3 FR	Fasteners & Plates secured 1 fastener per 1.78ft ²	Min. 1.5-inch ENRGY 3 CGF or ENRGY 3 CGF	OSFA, RSUA, or 2-Part UIA applied 6-inch o.c.	JM TPO SA	Self-adhered	-60 (Lim. 7)
S-AM-49	G33, F1, L6, S24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	ProtectoR HD	Fasteners & Plates secured 1 fastener per 1.78ft ²	JM TPO SA	Self-adhered	-60 (Lim. 7)
S-AM-50	G33, F1, L6, S24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	ProtectoR HD	Fasteners & Plates secured 1 fastener per 1.78ft ²	JM TPO or JM TPO FB	JM TPO: MBA, LVOC MA, or ASBA JM TPO FB: 2-Part UIA-C(S)	-60 (Lim. 7)
S-AM-51	G33, F2, L6, S18	OPTIONAL Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 2-inch ENRGY 3 or ProtectoR Foam	Fasteners & Plates secured 1 fastener per 1.6ft ²	JM TPO FB	2-Part UIA-C(S)	-60 (Lim. 7)
S-AM-52	G33, F1, L6, S24	OPTIONAL Vapor Barrier	Min. 2-inch E3 or E3 C1	UltraFast Fasteners & Plate) 1 fastener per 1.6ft ²	Min. 1.5-inch E3 or E3 C1	OSFA, RSUA, 2-Part UIA-C(B), or 2-Part UIA applied 6-inch o.c.	JM TPO FB	2-Part UIA-C(S)	-60 (Lim. 7)
S-AM-53	G33, F1, L6, S24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	Simultaneously secured with top layer	Min 0.5-inch DensDeck Prime	OMG #12 Standard Roofgrip fasteners and OMG 3 in. Ribbed Galvalume Plate (Flat) or UltraFast Plate Metal Flat secured 16 per 4-ft x 8-ft board	JM TPO or JM TPO FB	JM TPO: TPO WBMA, MBA, LVOC MA, ASBA or 1168 JM TPO FB: TPO WBMA, ASBA or 2-Part UIA-C(S)	-60 (Lim. 7)
S-AM-54	G33, F1, L6, S24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	Simultaneously secured with top layer	Min 0.5-inch DensDeck Prime	OMG #12 Standard Roofgrip fasteners and OMG 3 in. Ribbed Galvalume Plate (Flat) or UltraFast Plate Metal Flat secured 16 per 4-ft x 8-ft board	JM TPO HFB	ASTM D 312 Type IV Asphalt	-60 (Lim. 7)
S-AM-55	G33, F1, L6, S24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	Simultaneously secured with top layer	Min 0.5-inch DensDeck Prime	OMG #12 Standard Roofgrip fasteners and OMG 3 in. Ribbed Galvalume Plate (Flat) or UltraFast Plate Metal Flat secured 16 per 4-ft x 8-ft board	JM TPO SA	Self-adhered	-60 (Lim. 7)

APPENDIX C – APPROVED ASSEMBLIES FOR JM TPO 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-56	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 DEXcell FA	OSFA, or RSUA applied 6" o.c.	JM TPO	JM TPO: TPO WBMA, MBA, LVOC MA, or ASBA	-60 (Lim. 7)
S-AM-57	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 DEXcell FA	OSFA, or RSUA applied 6" o.c.	JM TPO SA	Self-adhered	-60 (Lim. 7)
S-AM-58	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 DensDeck Prime or SECUROCK	2-Part UIA, OSFA, or RSUA applied 6" o.c.	JM TPO	JM TPO: TPO WBMA, MBA, LVOC MA, ASBA, or 1168	-60 (Lim. 7)

APPENDIX C – APPROVED ASSEMBLIES FOR JM TPO 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-59	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 DensDeck Prime	2-Part UIA, OSFA, or RSUA applied 6" o.c.	JM TPO SA	Self-adhered	-60 (Lim. 7)
S-AM-60	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 DEXcell FA	OSFA, or RSUA applied 6" o.c.	JM TPO	JM TPO: TPO WBMA, MBA, LVOC MA, or ASBA	-60 (Lim. 7)
S-AM-61	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 DEXcell FA	OSFA, or RSUA applied 6" o.c.	JM TPO SA	Self-adhered	-60 (Lim. 7)
S-AM-62	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 DensDeck Prime or SECUROCK	2-Part UIA, OSFA, or RSUA applied 6" o.c.	JM TPO	JM TPO: TPO WBMA, MBA, LVOC MA, ASBA, or 1168	-60 (Lim. 7)

APPENDIX C – APPROVED ASSEMBLIES FOR JM TPO 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-63	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 DensDeck Prime	2-Part UIA, OSFA, or RSUA applied 6" o.c.	JM TPO SA	Self-adhered	-60 (Lim. 7)
S-AM-64	G40, P, L6, S15	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	Simultaneously secured with top layer	Min. 0.5-inch SECUROCK	Fasteners & Plates secured 1 fastener per 2.00ft ²	JM TPO HFB	ASTM D 312 Type IV Asphalt	-60 (Lim. 7)
S-AM-65	G33, F2W, L6, S18	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	Fasteners & Plates secured 1 fastener per 1ft ²	SECUROCK or JM Invinisa	RSUA or 2-Part UIA applied 6-inch o.c.	JM TPO FB	RSUA applied 12-inch o.c. or RSUA(S)	-67.5 (Lim. 7)
S-AM-66	G80, F1, L6, S30	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch ENRGY 3	Fasteners & Plates secured at a rate of 24 per 4-ft x 8-ft Board	Min. 1/2-inch SECUROCK	OSFA, RSUA or 2-Part UIA applied 12-inch o.c.	JM TPO	TPO WBMA	-67.5 (Lim. 7)
S-AM-67	G80, F1, L6, S30	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch ENRGY 3	Fasteners & Plates secured at a rate of 24 per 4-ft x 8-ft Board	Min. 1/2-inch SECUROCK	OSFA, RSUA or 2-Part UIA applied 12-inch o.c.	JM TPO FB	TPO WBMA, ASBA or 2-Part UIA-C(S)	-67.5 (Lim. 7)
S-AM-68	G80, F1, L6, S30	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch ENRGY 3	Fasteners & Plates secured at a rate of 24 per 4-ft x 8-ft Board	Min. 1/2-inch SECUROCK	OSFA, RSUA or 2-Part UIA applied 12-inch o.c.	JM TPO SA	Self-adhered	-67.5 (Lim. 7)
S-AM-69	G33, F2, L6, S24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 2-inch ENRGY 3 CGF or ENRGY 3 FR	Fasteners & Plates secured 1 fastener per 2.0ft ²	JM TPO	MBA applied at 0.83 gal/100ft ² to both membrane and substrate, TPO WBMA or ASBA	-67.5 (Lim. 7)
S-AM-70	G33, F2, L6, S24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 2-inch ENRGY 3 CGF or ENRGY 3 FR	Fasteners & Plates secured 1 fastener per 2.0ft ²	JM TPO SA	Self-adhered	-67.5 (Lim. 7)
S-AM-71	G33, F2, L6, S24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 2-inch ENRGY 3 CGF or ENRGY 3 FR	Fasteners & Plates secured 1 fastener per 2.0ft ²	JM TPO	TPO WBMA or ASBA	-67.5 (Lim. 7)

APPENDIX C – APPROVED ASSEMBLIES FOR JM TPO 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-72	G33, F1, L6, S24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 2-inch ENERGY 3 or ProtectoR Foam	Fasteners & Plates secured 1 fastener per 2ft ²	JM TPO	MBA, LVOC MA applied at 1.1 gal/100ft ² , TPO WBMA (two-sided application only) or ASBA	-67.5 (Lim. 7)
S-AM-73	G33, F1, L6, S24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 2-inch ENERGY 3 or ProtectoR Foam	Fasteners & Plates secured 1 fastener per 2ft ²	JM TPO HFB	ASTM D 312 Type IV Asphalt	-67.5 (Lim. 7)
S-AM-74	G33, F2, L6, S24	OPTIONAL Vapor Barrier	Min. 2-inch ENRGY 3 CGF or ENRGY 3 FR	Fasteners & Plates secured 1 fastener per 2.0ft ²	Min. 1.5-inch ENRGY 3 CGF or ENRGY 3 CGF	OSFA, RSUA, or 2-Part UIA applied 6-inch o.c.	JM TPO	ASBA, TPO WBMA, MBA or LVOC MA	-67.5 (Lim. 7)
S-AM-75	G33, F2, L6, S24	OPTIONAL Vapor Barrier	Min. 2-inch ENRGY 3 CGF or ENRGY 3 FR	Fasteners & Plates secured 1 fastener per 2.0ft ²	Min. 1.5-inch ENRGY 3 CGF or ENRGY 3 CGF	OSFA, RSUA, or 2-Part UIA applied 6-inch o.c.	JM TPO SA	Self-adhered	-67.5 (Lim. 7)
S-AM-76	G33, F1, L6, S24	OPTIONAL Vapor Barrier	Min. 2-inch E3 or E3 C1	UltraFast Fasteners & Plate secured 1 fastener per 1.6ft ²	Min. 0.5-inch ProtectoR HD, DEXcell FA, or SECUROCK	OSFA, RSUA, 2-Part UIA-C(B) or 2-Part UIA applied 6-inch o.c.	JM TPO FB	RSUA 6-inch o.c.	-67.5 (Lim. 7)
S-AM-77	G33, F1, L6, S12	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	Simultaneously secured with top layer	Min 0.5-inch DensDeck Prime	Fasteners & Plates or UltraFast Fasteners & Trufast Plates secured 1 fastener per 1.78ft ²	JM TPO or JM TPO FB	JM TPO: TPO WBMA, MBA, LVOC MA, ASBA or 1168 JM TPO FB: TPO WBMA, ASBA or 2-Part UIA-C(S)	-67.5 (Lim. 7)
S-AM-78	G33, F1, L6, S12	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	Simultaneously secured with top layer	Min 0.5-inch DensDeck Prime	Fasteners & Plates or UltraFast Fasteners & Trufast Plates secured 1 fastener per 1.78ft ²	JM TPO HFB	ASTM D 312 Type IV Asphalt	-67.5 (Lim. 7)
S-AM-79	G33, F1, L6, S12	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	Simultaneously secured with top layer	Min 0.5-inch DensDeck Prime	Fasteners & Plates secured or UltraFast Fasteners & Trufast Plates secured 1 fastener per 1.78ft ²	JM TPO SA	Self-adhered	-67.5 (Lim. 7)
S-AM-80	G33, F1, L6, S24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	Simultaneously secured with top layer	StormX	OMG Fasteners & Plates secured 12 per 4-ft x 8-ft board	JM TPO or JM TPO FB	JM TPO: TPO WBMA, MBA, LVOC MA, ASBA or 1168 JM TPO FB: TPO WBMA, ASBA or 2-Part UIA-C(S)	-67.5 (Lim. 7)

APPENDIX C – APPROVED ASSEMBLIES FOR JM TPO 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-81	G33, F1, L6, S24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	Simultaneously secured with top layer	StormX	OMG Fasteners & Plates secured 12 per 4-ft x 8-ft board	JM TPO HFB	ASTM D 312 Type IV Asphalt	-67.5 (Lim. 7)
S-AM-82	G33, F1, L6, S24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	Simultaneously secured with top layer	StormX	OMG Fasteners & Plates secured 12 per 4-ft x 8-ft board	JM TPO SA	Self-adhered	-67.5 (Lim. 7)
S-AM-83	G33, P, L6, S24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	Preliminarily Secured or secured with top layer	ProtectoR HD	Fasteners & Plates at a rate of 1 fastener per 1.33ft ²	JM TPO SA	Self-adhered	-75 (Lim. 7)
S-AM-84	G33, P, L6, S24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	Preliminarily Secured or secured with top layer	ProtectoR HD	Fasteners & Plates at a rate of 1 fastener per 1.33ft ²	JM TPO or JM TPO FB	JM TPO: TPO WBMA, MBA applied at 0.83 gal/100ft ² , LVOC MA or ASBA JM TPO FB: TPO WBMA, ASBA or 2-Part UIA-C(S)	-75 (Lim. 7)
S-AM-85	G33, F1, L6, S24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 2-inch E3, E3 C1, or ProtectoR Foam	Fasteners & Plates secured 1 fastener per 1.6ft ²	JM TPO	MBA, LVOC MA applied at 1.1 gal/100ft ² , TPO WBMA (two-sided application only) or ASBA	-75 (Lim. 7)
S-AM-86	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	JM TPO HFB	ASTM D 312 Type IV Asphalt	-75 (Lim. 7)
S-AM-87	G33, F2, L6, S24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 2-inch InvinSA Foam	Fasteners & Plates secured 1 fastener per 2.0ft ²	JM TPO	MBA, LVOC MA applied at 1.67 gal/100ft ² , TPO WBMA or ASBA	-75 (Lim. 7)
S-AM-88	G33, F2, L6, S24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 2-inch InvinSA Foam	Fasteners & Plates secured 1 fastener per 2.0ft ²	JM TPO SA	Self-adhered	-75 (Lim. 7)
S-AM-89	G33, F2, L6, S24	OPTIONAL Vapor Barrier	Min. 1.5-inch E3	Simultaneously secured with top layer	Min. 0.5-inch SECUROCK	Fasteners & Plates or UltraFast Fasteners & Trufast Plates secured 1 fastener per 1.0ft ²	JM TPO	MBA, LVOC MA applied at 1.67 gal/100ft ² , TPO WBMA or ASBA	-75 (Lim. 7)
S-AM-90	G33, F2, L6, S24	OPTIONAL Vapor Barrier	Min. 1.5-inch E3	Simultaneously secured with top layer	Min. 0.5-inch SECUROCK	Fasteners & Plates or UltraFast Fasteners & Trufast Plates secured 1 fastener per 1.0ft ²	JM TPO HFB	ASTM D 312 Type IV Asphalt	-75 (Lim. 7)

APPENDIX C – APPROVED ASSEMBLIES FOR JM TPO 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-91	G33, F1, L6, S24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	Simultaneously secured with top layer	StormX	OMG Fasteners & Plates secured 14 per 4-ft x 8-ft board	JM TPO or JM TPO FB	JM TPO: TPO WBMA, MBA, LVOC MA, ASBA or 1168 JM TPO FB: TPO WBMA or ASBA	-75 (Lim. 7)
S-AM-92	G33, F1, L6, S24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	Simultaneously secured with top layer	StormX	OMG Fasteners & Plates secured 14 per 4-ft x 8-ft board	JM TPO HFB	ASTM D 312 Type IV Asphalt	-75 (Lim. 7)
S-AM-93	G33, F1, L6, S24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	Simultaneously secured with top layer	StormX	OMG Fasteners & Plates secured 14 per 4-ft x 8-ft board	JM TPO SA	Self-adhered	-75 (Lim. 7)
S-AM-94	G33, F2, L6, S24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	Simultaneously secured with top layer	Min. 0.5-inch SECUROCK	Fasteners & Plates or UltraFast Fasteners & TruFast Plates secured 1 fastener per 1.0ft ²	JM TPO FB	2-Part UIA-C(S)	-82.5 (Lim. 7)
S-AM-95	G33, F2, L6, S24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	Simultaneously secured with top layer	Min. 0.5-inch SECUROCK	Fasteners & Plates or UltraFast Fasteners & TruFast Plates secured 1 fastener per 1.0ft ²	JM TPO SA	Self-adhered	-82.5 (Lim. 7)
S-AM-96	G80, F1W, L6, S24	Min. 0.5-inch DEXcell FA; Fasteners & Plates secured 1 fastener per 1.0ft ² ; JM Vapor Barrier SA self-adhered over SA Primer	Min. 1.5-inch E3	RSUA or 2-Part UIA applied 6-inch o.c.	Min. 0.5-inch DEXcell FA	RSUA applied 6-inch o.c.	JM TPO FB	RSUA applied 6-inch o.c. or RSUA(S)	-82.5 (Lim. 7)
S-AM-97	G33, F2, L6, S24	Min. 0.5-inch DEXcell FA secured with top layer; JM Vapor Barrier SA self-adhered	Min. 1.5-inch E3	Simultaneously secured with top layer	Min. 0.5-inch DEXcell FA	Fasteners & Plates secured 1 fastener per 1.0ft ²	JM TPO FB	RSUA applied 4-inch o.c. or RSUA(S)	-82.5 (Lim. 7)
S-AM-98	G33, F2, L6, S24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 2-inch E3, E3 C1, or Protector Foam	Fasteners & Plates secured 1 fastener per 1.0ft ²	JM TPO	MBA or LVOC MA applied at 1.1 gal/100ft ² or TPO WBMA (two-sided application only)	-82.5 (Lim. 7)

APPENDIX C – APPROVED ASSEMBLIES FOR JM TPO 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-99	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 1.0ft ²	JM TPO HFB	ASTM D 312 Type IV Asphalt	-82.5 (Lim. 7)
S-AM-100	G33, F2, L6, S24	OPTIONAL Vapor Barrier	Min. 1.5-inch E3	Simultaneously secured with top layer	Min. 0.5-inch DEXcell FA	Fasteners & Plates secured 1 fastener per 1.0ft ²	JM TPO	MBA, LVOC MA applied at 1.67 gal/100ft ² , TPO WBMA, or ASBA	-82.5 (Lim. 7)
S-AM-101	G33, F2, L6, S24	OPTIONAL Vapor Barrier	Min. 1.5-inch E3	Simultaneously secured with top layer	Min. 0.5-inch DensDeck Prime	Fasteners & Plates or UltraFast Fasteners & Trufast Plates secured 1 fastener per 1.0ft ²	JM TPO	MBA, LVOC MA applied at 1.67 gal/100ft ² , TPO WBMA, or ASBA	-82.5 (Lim. 7)
S-AM-102	G33, F2, L6, S24	OPTIONAL Vapor Barrier	Min. 1.5-inch E3	Simultaneously secured with top layer	Min. 0.5-inch DensDeck Prime	Fasteners & Plates or UltraFast Fasteners & Trufast Plates secured 1 fastener per 1.0ft ²	JM TPO SA	Self-adhered	-82.5 (Lim. 7)
S-AM-103	G33, H1, L6, SH24	OPTIONAL Vapor Barrier	Min. 1-inch E3	Simultaneously secured with top layer	ProtectoR HD	Fasteners & Plates 1 fastener per 1.33ft ²	JM TPO	MBA, LVOC MA, or ASBA	-82.5 (Lim. 7)
S-AM-104	G33, H1, L6, SH24	OPTIONAL Vapor Barrier	Min. 1-inch E3	Simultaneously secured with top layer	ProtectoR HD	Fasteners & Plates 1 fastener per 1.33ft ²	JM TPO SA	Self-adhered	-82.5 (Lim. 7)
S-AM-105	G33, H1, L6, SH24	OPTIONAL Vapor Barrier	Min. 1-inch E3	Simultaneously secured with top layer	ProtectoR HD	Fasteners & Plates 1 fastener per 1.33ft ²	JM TPO FB	2-Part UIA-C(S)	-82.5 (Lim. 7)
S-AM-106	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	OSFA, RSUA, 2-Part UIA-C(B), or 2-Part UIA applied 6-inch o.c.	JM TPO	TPO WBMA, MBA, LVOC MA, or ASBA	-82.5 (Lim. 7)
S-AM-107	G33, F1, L6, S24	OPTIONAL Vapor Barrier	Min. 2-inch E3 or E3 C1	UltraFast Fasteners & Plate secured 1 fastener per 1.6ft ²	ProtectoR HD	OSFA, RSUA, 2-Part UIA-C(B), or 2-Part UIA applied 6-inch o.c.	JM TPO SA	Self-adhered	-82.5 (Lim. 7)
S-AM-108	G33, F1, L6, S24	OPTIONAL Vapor Barrier	Min. 2-inch E3 or E3 C1	UltraFast Fasteners & Plate secured 1 fastener per 1.6ft ²	ProtectoR HD	OSFA, RSUA, 2-Part UIA-C(B) or 2-Part UIA applied 6-inch o.c.	JM TPO FB	2-Part UIA-C(S)	-82.5 (Lim. 7)
S-AM-109	G33, F1, L6, S24	OPTIONAL Vapor Barrier	Min. 2-inch E3 or E3 C1	Fasteners & Plates secured 1 fastener per 1.6ft ²	Min. 0.5-inch DensDeck Prime, DEXcell FA, or SECUROCK	OSFA, RSUA, 2-Part UIA-C(B), or 2-Part UIA applied 6-inch o.c.	JM TPO	ASBA, TPO WBMA, MBA or LVOC MA	-82.5 (Lim. 7)

APPENDIX C – APPROVED ASSEMBLIES FOR JM TPO 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-110	G33, F1, L6, S24	OPTIONAL Vapor Barrier	Min. 2-inch E3 or E3 C1	Fasteners & Plates secured 1 fastener per 1.6ft ²	Min. 0.5-inch DensDeck Prime, DEXcell FA, or SECUROCK	OSFA, RSUA, 2-Part UIA-C(B), or 2-Part UIA applied 6-inch o.c.	JM TPO SA	Self-adhered	-82.5 (Lim. 7)
S-AM-111	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	OSFA, RSUA, 2-Part UIA-C(B), or 2-Part UIA applied 6-inch o.c.	JM TPO	ASBA, TPO WBMA, MBA or LVOC MA	-82.5 (Lim. 7)
S-AM-112	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	OSFA, RSUA, 2-Part UIA-C(B), or 2-Part UIA applied 6-inch o.c.	JM TPO SA	Self-adhered	-82.5 (Lim. 7)
S-AM-113	G33, F1W, L6, S24	OPTIONAL Vapor Barrier	Min. 2-inch ENRGY 3, ENRGY 3 CGF, ENRGY 3 FR or E3 C1	Fasteners & Plates secured 1 fastener per 1ft ²	Min. 1.5-inch ENRGY 3	OSFA, RSUA, 2-Part UIA-C(B) or 2-Part UIA applied 4-inch o.c.	JM TPO	TPO WBMA (rate 0.6-0.8 gal/100-ft ² for one-sided and two-sided application), MBA, ASBA, or LVOC MA	-82.5 (Lim. 7)
S-AM-114	G33, F2, L6, S24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 2-inch ENRGY 3 or Protector Foam	Fasteners & Plates secured 1 fastener per 1.0ft ²	JM TPO	TPO WBMA (rate 0.6-0.8 gal/100-ft ² for one-sided and two-sided application), MBA, or LVOC MA	-82.5 (Lim. 7)
S-AM-115	G33, F2, L6, S24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 2-inch E3, E3 C1, or Protector Foam	Fasteners & Plates secured 1 fastener per 1.0ft ²	JM TPO	ASBA or MBA	-82.5 (Lim. 7)
S-AM-116	G33, F1, L6, S24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	Simultaneously secured with top layer	StormX	OMG Fasteners & Plates secured 12 per 4-ft x 8-ft board Pattern #2	JM TPO SA	Self-adhered	-82.5 (Lim. 7)
S-AM-117	G33, F1, L6, S24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	Simultaneously secured with top layer	StormX	OMG Fasteners & Plates secured 12 per 4-ft x 8-ft board Pattern #2	JM TPO or JM TPO FB	JM TPO: TPO WBMA, MBA, LVOC MA, ASBA or 1168 JM TPO FB: TPO WBMA or ASBA	-82.5 (Lim. 7)
S-AM-118	G33, F1, L6, S24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	Simultaneously secured with top layer	StormX	OMG Fasteners & Plates secured 12 per 4-ft x 8-ft board Pattern #2	JM TPO HFB	ASTM D 312 Type IV Asphalt	-82.5 (Lim. 7)

APPENDIX C – APPROVED ASSEMBLIES FOR JM TPO 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-119	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 DEXcell FA	OSFA, or RSUA applied 6" o.c.	JM TPO	JM TPO: TPO WBMA, MBA, LVOC MA, or ASBA	-82.5 (Lim. 7)
S-AM-120	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 DEXcell FA	OSFA, or RSUA applied 6" o.c.	JM TPO SA	Self-adhered	-82.5 (Lim. 7)
S-AM-121	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 DensDeck Prime or SECUROCK	2-Part UIA, OSFA, or RSUA applied 6" o.c.	JM TPO	JM TPO: TPO WBMA, MBA, LVOC MA, ASBA, or 1168	-82.5 (Lim. 7)

APPENDIX C – APPROVED ASSEMBLIES FOR JM TPO 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-122	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 DensDeck Prime	2-Part UIA, OSFA, or RSUA applied 6" o.c.	JM TPO SA	Self-adhered	-82.5 (Lim. 7)
S-AM-123	G80, F2, L6, S12	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	Simultaneously secured with top layer	Min 0.625-inch DensDeck Prime	Fasteners & Plates or UltraFast Fasteners & Trufast Plates secured 1 fastener per 1.33ft ²	JM TPO or JM TPO FB	JM TPO: TPO WBMA, MBA, LVOC MA, ASBA or 1168 JM TPO FB: TPO WBMA or ASBA	-90 (Lim. 7)
S-AM-124	G80, F2, L6, S12	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	Simultaneously secured with top layer	Min 0.625-inch DensDeck Prime	Fasteners & Plates secured 1 fastener per 1.33ft ²	JM TPO HFB	ASTM D 312 Type IV Asphalt	-90 (Lim. 7)
S-AM-125	G80, F2, L6, S12	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	Simultaneously secured with top layer	Min 0.625-inch DensDeck Prime	Fasteners & Plates or UltraFast Fasteners & Trufast Plates secured 1 fastener per 1.33ft ²	JM TPO SA	Self-adhered	-90 (Lim. 7)
S-AM-126	G33, F1, L6, S24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 2-inch E3 or E3 C1	FASTENERS and PLT-R-3 or UltraFast Plates (Square) secured 24 per 4-ft x 8-ft board Pattern #2	JM TPO	MBA or LVOC MA applied at 1.1 gal/100ft ² or TPO WBMA (two-sided application only)	-90 (Lim. 7)
S-AM-127	G33, P, L6, S24	OPTIONAL Vapor Barrier	Min. 2-inch ENRGY 3, ENRGY 3 CGF, ENRGY 3 FR or E3 C1	Fasteners & Plates secured 1 fastener per 1ft ²	Min. 1.5-inch ENRGY 3	RSUA or 2-Part UIA applied 6-inch o.c.	JM TPO or JM TPO FB	JM TPO: TPO WBMA, MBA, LVOC MA, ASBA or 1168 JM TPO FB: 2-Part UIA-C(S)	-90 (Lim. 7)
S-AM-128	G33, P, L6, S24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	Simultaneously secured with top layer	Min. 0.5-inch DEXcell FA	Fasteners & Plates secured 24 per 4-ft x 8-ft board Pattern #2	JM TPO FB w/SBS	RSUA(S)	-90 (Lim. 7)

APPENDIX C – APPROVED ASSEMBLIES FOR JM TPO 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-129	G33, F1, L6, S24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	Simultaneously secured with top layer	StormX	OMG Fasteners & Plates secured 18 per 4-ft x 8-ft board Pattern #1	JM TPO SA	Self-adhered	-97.5 (Lim. 7)
S-AM-130	G33, F1, L6, S24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	Simultaneously secured with top layer	StormX	OMG Fasteners & Plates secured 18 per 4-ft x 8-ft board Pattern #1	JM TPO	MBA, LVOC MA applied at 1.67 gal/100ft ² , TPO WBMA (two-sided application only), or ASBA	-97.5 (Lim. 7)
S-AM-131	G80, F2, L6, S24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 2-inch ENRGY 3 CGF or ENRGY 3 FR	Fasteners & Plates secured 1 fastener per 1.33ft ²	JM TPO	MBA applied at 0.83 gal/100ft ² to both membrane and substrate or TPO WBMA	-105 (Lim. 7)
S-AM-132	G80, F2, L6, S24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 2-inch ENRGY 3 CGF or ENRGY 3 FR	Fasteners & Plates secured 1 fastener per 1.33ft ²	JM TPO SA	Self-adhered	-105 (Lim. 7)
S-AM-133	G80, F2, L6, S24	OPTIONAL Vapor Barrier	Min. 1.5-inch E3	Simultaneously secured with top layer	Min. 0.5-inch DEXcell FA	Fasteners & Plates secured 1 fastener per 1.0ft ²	JM TPO	MBA, LVOC MA applied at 1.67 gal/100ft ² , TPO WBMA, or ASBA	-105 (Lim. 7)
S-AM-134	G80, F2, L6, S24	OPTIONAL Vapor Barrier	Min. 1.5-inch E3	Simultaneously secured with top layer	Min. 0.5-inch DensDeck Prime	Fasteners & Plates or UltraFast Fasteners & Trufast Plates secured 1 fastener per 1.0ft ²	JM TPO	MBA, LVOC MA applied at 1.67 gal/100ft ² , TPO WBMA (two-sided application only), or ASBA	-112.5 (Lim. 7)
S-AM-135	G80, F2, L6, S24	OPTIONAL Vapor Barrier	Min. 1.5-inch E3	Simultaneously secured with top layer	Min. 0.5-inch DensDeck Prime	Fasteners & Plates or UltraFast Fasteners & Trufast Plates secured 1 fastener per 1.0ft ²	JM TPO SA	Self-adhered	-112.5 (Lim. 7)
S-AM-136	G80, F2, L6, S24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 2-inch E3, E3 C1, or Protector Foam	Fasteners & Plates secured 1 fastener per 1.0ft ²	JM TPO	TPO WBMA (rate 0.6-0.8 gal/100-ft ² for one-sided and two-sided application), MBA, or LVOC MA	-112.5 (Lim. 7)
S-AM-137	G80, F2, L6, S24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 2-inch E3, E3 C1, or Protector Foam	Fasteners & Plates secured 1 fastener per 1.0ft ²	JM TPO	ASBA or MBA	-112.5 (Lim. 7)

APPENDIX C – APPROVED ASSEMBLIES FOR JM TPO 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-138	G33, F1, L6, S24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	Simultaneously secured with top layer	StormX	OMG Fasteners & Plates secured 20 per 4-ft x 8-ft board or 18 per 4-ft x 8-ft board Pattern #2	JM TPO SA	Self-adhered	-112.5 (Lim. 7)
S-AM-139	G33, F1, L6, S24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	Simultaneously secured with top layer	StormX	OMG Fasteners & Plates secured 20 per 4-ft x 8-ft board or 18 per 4-ft x 8-ft board Pattern #2	JM TPO	MBA, LVOC MA applied at 1.67 gal/100ft ² , TPO WBMA (two-sided application only), or ASBA	-112.5 (Lim. 7)
S-AM-140	G80, F2, L6, S24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 2-inch E3, E3 C1, or ProtectoR Foam	Fasteners & Plates secured 1 fastener per 1.0ft ²	JM TPO	MBA or LVOC MA applied at 1.1 gal/100ft ² or TPO WBMA (two-sided application only)	-120 (Lim. 7)
S-AM-141	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 1.0ft ²	JM TPO HFB	ASTM D 312 Type IV Asphalt	-120 (Lim. 7)
S-AM-142	G33, F1, L6, S24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	Preliminarily Secured or secured with top layer	ProtectoR HD	Fasteners & Plates at a rate of 1 fastener per 1ft ²	JM TPO	MBA or ASBA	-120 (Lim. 7)
S-AM-143	G80, F1W, L6, S24	OPTIONAL Vapor Barrier	Min. 2-inch ENRGY 3, ENRGY 3 CGF, ENRGY 3 FR or E3 C1	Fasteners & Plates secured 1 fastener per 1ft ²	Min. 1.5-inch ENRGY 3	OSFA, RSUA or 2-Part UIA applied 4-inch o.c.	JM TPO	TPO WBMA (rate 0.6-0.8 gal/100-ft ² for one-sided and two-sided application), MBA, or LVOC MA	-120 (Lim. 7)
S-AM-144	G80, F2, L6, S24	OPTIONAL Vapor Barrier	Min. 2-inch E3 or E3 C1	Fasteners & Plates secured 1 fastener per 1ft ²	ProtectoR HD	OSFA, RSUA, 2-Part UIA-C(B), or 2-Part UIA applied 4-inch o.c.	JM TPO	TPO WBMA, MBA, LVOC MA, or ASBA	-120 (Lim. 7)
S-AM-145	G80, F1W, L6, S24	OPTIONAL Vapor Barrier	Min. 2-inch ENRGY 3, ENRGY 3 CGF, ENRGY 3 FR or E3 C1	Fasteners & Plates secured 1 fastener per 1ft ²	Min. 1.5-inch ENRGY 3	OSFA, RSUA or 2-Part UIA applied 4-inch o.c.	JM TPO	ASBA or MBA	-127.5 (Lim. 7)
S-AM-146	G80, F2, L6, S18	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	Simultaneously secured with top layer	Min. 0.5-inch DEXcell FA	Fasteners & Plates secured 1 fastener per 1ft ²	JM TPO FB	2-Part UIA-C(S)	-135 (Lim. 7)

APPENDIX C – APPROVED ASSEMBLIES FOR JM TPO 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-147	G80, F2, L6, S24	Min. 0.5-inch DEXcell FA secured with top layer; JM Vapor Barrier SA self-adhered	Min. 1.5-inch E3	Simultaneously secured with top layer	Min. 0.5-inch DEXcell FA	Fasteners & Plates secured 1 fastener per 1.0ft ²	JM TPO FB	RSUA applied 4-inch o.c.	-142.5 (Lim. 7)
S-AM-148	G80, F1W, L6, S24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	Simultaneously secured with top layer	Min. 0.5-inch SECUROCK	Fasteners & Plates or UltraFast Fasteners & Trufast Plates secured 1 fastener per 1.00ft ²	JM TPO or JM TPO FB	TPO WBMA (two-sided application only for JM TPO)	-150 (Lim. 7)
S-AM-149	G80, F1W, L6, S24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	Simultaneously secured with top layer	Min. 0.5-inch SECUROCK	Fasteners & Plates or UltraFast Fasteners & Trufast Plates secured 1 fastener per 1.00ft ²	JM TPO SA	Self-adhered	-150 (Lim. 7)

Mechanically Fastened Assemblies over Steel Deck (New, Existing, or Recover)									
System No.	Deck Detail	Base Insulation (Note 9)	Base Insulation Attachment	Top Insulation	Top Insulation Attachment	Membrane	Membrane Attachment	MDP (psf)	
S-M-1	G33, P, L6, S24	OPTIONAL INSULATION under min. 1.5-inch E3	Preliminarily Secured or secured with top layer	OPTIONAL Cover Board	Preliminarily Secured	JM TPO (Min. 60 mil)	Attached in-lap 12-inch o.c. with HL Fasteners & Plates; Fastener rows max. 66-inch o.c.	-45 (Lim. 7)	
S-M-2	G80, F2W, L6, S24	OPTIONAL INSULATION under min. 1-inch E3	Preliminarily Secured or secured with top layer	OPTIONAL Cover Board	Preliminarily Secured	JM TPO	Attached in-lap 12-inch o.c. with High Load Fasteners and JM High Load Plus Plates or OMG XHD Fasteners and JM 90 Seam Plates; Fastener rows max. 90-inch o.c.	-45 (Lim. 7)	
S-M-3	G80, F1, L6, S18	OPTIONAL INSULATION under min. 1.5-inch E3	Preliminarily Secured or secured with top layer	OPTIONAL Cover Board	Preliminarily Secured	JM TPO or JM TPO FB	Attached in-lap 12-inch o.c. with Extra HL Fasteners & Plates; Fastener rows max. 114-inch o.c.	-45 (Lim. 7)	
S-M-4	G80, F1, L6, S18	OPTIONAL INSULATION under min. 1.5-inch E3	Preliminarily Secured or secured with top layer	OPTIONAL Cover Board	Preliminarily Secured	JM TPO or JM TPO FB	Attached in-lap 6-inch o.c. with HL Fasteners & Plates; Fastener rows max. 114-inch o.c.	-45 (Lim. 7)	

APPENDIX C – APPROVED ASSEMBLIES FOR JM TPO SINGLE-PLY MEMBRANES

Mechanically Fastened Assemblies over <i>Steel Deck (New, Existing, or Recover)</i>								
System No.	Deck Detail	Base Insulation (Note 9)	Base Insulation Attachment	Top Insulation	Top Insulation Attachment	Membrane	Membrane Attachment	MDP (psf)
S-M-5	G80, F1, L5, S18	OPTIONAL INSULATION under min. 1.5-inch E3	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	JM TPO	Attached in-lap 6-inch o.c. with <i>HL Fasteners & Plates</i> ; Fastener rows max. 138-inch o.c.	-45 (Lim. 7)
S-M-6	22 GA Type N; G80, H1, L12, HS24	OPTIONAL INSULATION under min. 1.5-inch E3	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	JM TPO (Min. 60 mil)	Attached in-lap 8-inch o.c. with <i>HL Fasteners & Plates</i> ; Fastener rows max. 138-inch o.c.	-45 (Lim. 7)
S-M-7	G33, F1, L6, S24	OPTIONAL INSULATION under min. 1.5-inch E3	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	JM TPO or JM TPO FB	Attached in-lap 12-inch o.c. with <i>HL Fasteners & Plates</i> ; Fastener rows max. 66-inch o.c.	-45 (Lim. 7)
S-M-8	G80, F1, L6, S24	OPTIONAL INSULATION under min. 1.5-inch E3	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	JM TPO (Min. 60 mil)	Attached in-lap 12-inch o.c. with High Load Fasteners and JM 90 Seam Plates; Fastener rows max. 114-inch o.c.	-45 (Lim. 7)
S-M-9	G80, F1, L6, S18	OPTIONAL INSULATION under min. 1.5-inch E3	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	JM TPO or JM TPO FB	Attached in-lap 6-inch o.c. with <i>Extra HL Fasteners & Plates</i> ; Fastener rows max. 114-inch o.c.	-52.5 (Lim. 7)
S-M-10	G33, H1, L6, SH24	OPTIONAL INSULATION under min. 1-inch E3	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	JM TPO or JM TPO FB	Attached in-lap 6-inch o.c. with <i>HL Fasteners & Plates</i> ; Fastener rows max. 114-inch o.c.	-52.5 (Lim. 7)
S-M-11	G80, F1, L4.5, S18	OPTIONAL INSULATION under min. 1.5-inch E3	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	JM TPO	Attached in-lap 6-inch o.c. with <i>HL Fasteners & Plates</i> ; Fastener rows max. 138-inch o.c.	-52.5 (Lim. 7)
S-M-12	G33, F1, L6, S18	OPTIONAL INSULATION under min. 1.5-inch E3	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	JM TPO	Adhered to JM TPO 10" RPS spaced 114-inch o.c. and attached with <i>HL Fasteners & Plates</i> spaced 6-inch o.c.	-52.5 (Lim. 7)
S-M-13	G33, F1, L6, S24	OPTIONAL INSULATION under min. 1.5-inch E3	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	JM TPO (Min. 60 mil)	Attached in-lap 12-inch o.c. with <i>HL Fasteners & Plates</i> ; Fastener rows max. 54-inch o.c.	-52.5 (Lim. 7)
S-M-14	22 GA Type N; G80, H1, L12, HS24	OPTIONAL INSULATION under min. 1.5-inch E3	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	JM TPO (Min. 60 mil)	Attached in-lap 8-inch o.c. with <i>HL Fasteners & Plates</i> ; Fastener rows max. 90-inch o.c.	-60 (Lim. 7)

APPENDIX C – APPROVED ASSEMBLIES FOR JM TPO SINGLE-PLY MEMBRANES

Mechanically Fastened Assemblies over <i>Steel Deck (New, Existing, or Recover)</i>								
System No.	Deck Detail	Base Insulation (Note 9)	Base Insulation Attachment	Top Insulation	Top Insulation Attachment	Membrane	Membrane Attachment	MDP (psf)
S-M-15	G80, F1, L6, S18	OPTIONAL INSULATION under min. 1.5-inch E3	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	JM TPO	Attached in-lap 6-inch o.c. with HL Fasteners & Plates; Fastener rows max. 90-inch o.c.	-60 (Lim. 7)
S-M-16	G33, P, L6	OPTIONAL INSULATION under min. 1-inch E3	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	JM TPO or JM TPO FB	Attached in-lap 6-inch o.c. with HL Fasteners & Plates; Fastener rows max. 114-inch o.c.	-60 (Lim. 7)
S-M-17	G33, H1, L6, SH24	OPTIONAL INSULATION under min. 1.5-inch E3	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	JM TPO (Min. 60 mil)	Attached in-lap 6-inch o.c. with HL Fasteners & Plates; Fastener rows max. 138-inch o.c.	-60 (Lim. 7)
S-M-18	G33, P, L6, S24	OPTIONAL INSULATION under min. 1.5-inch E3	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	JM TPO (Min. 60 mil)	Attached in-lap 6-inch o.c. with HL Fasteners & Plates; Fastener rows max. 138-inch o.c.	-60 (Lim. 7)
S-M-19	G33, F1, L6, S24	OPTIONAL INSULATION under min. 1.5-inch E3	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	JM TPO (Min. 60 mil)	Attached in-lap 6-inch o.c. with Trufast Seam Plates; Fastener rows max. 90-inch o.c.	-60 (Lim. 7)
S-M-20	G80, P, L6, S24	OPTIONAL INSULATION under min. 1.5-inch E3	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	JM TPO (Min. 60 mil)	Attached in-lap 6-inch o.c. with HL Fasteners & Plates; Fastener rows max. 138-inch o.c.	-67.5 (Lim. 7)
S-M-21	G33, H1, L6, SH24	OPTIONAL INSULATION under min. 1.5-inch E3	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	JM TPO (Min. 60 mil)	Attached in-lap 6-inch o.c. with Extra HL Fasteners & Plates; Fastener rows max. 138-inch o.c.	-67.5 (Lim. 7)
S-M-22	G33, P, L6	OPTIONAL INSULATION under min. 1-inch E3	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	JM TPO	Attached in-lap 6-inch o.c. with HL Fasteners & Plates; Fastener rows max. 90-inch o.c.	-75 (Lim. 7)
S-M-23	G33, F1, L6, S24	OPTIONAL INSULATION under min. 1.5-inch E3	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	JM TPO or JM TPO FB	Attached in-lap 6-inch o.c. with HL Fasteners & Plates; Fastener rows max. 66-inch o.c.	-90 (Lim. 7)
S-M-24	G33, P, L6	OPTIONAL INSULATION under min. 1-inch E3	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	JM TPO or JM TPO FB	Attached in-lap 6-inch o.c. with HL Fasteners & Plates; Fastener rows max. 54-inch o.c.	-97.5 (Lim. 7)

APPENDIX C – APPROVED ASSEMBLIES FOR JM TPO SINGLE-PLY MEMBRANES

Mechanically Fastened Assemblies over Steel Deck (New, Existing, or Recover)								
System No.	Deck Detail	Base Insulation (Note 9)	Base Insulation Attachment	Top Insulation	Top Insulation Attachment	Membrane	Membrane Attachment	MDP (psf)
S-M-25	G33, H1, L6, SH24	OPTIONAL INSULATION under min. 1.5-inch E3	Preliminarily Secured or secured with top layer	OPTIONAL Cover Board	Preliminarily Secured	JM TPO (Min. 60 mil)	Attached in-lap 6-inch o.c. with HL Fasteners & Plates; Fastener rows max. 66-inch o.c.	(-105 Lim. 7)

Induction Welded 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-W-1	G33, P, L6	INSULATION	Preliminarily Secured or secured with top layer	OPTIONAL Cover Board	Attached with RhinoPlates at a rate of 8 per 4-ft x 8-ft board Pattern #1 (1 fastener per 4.0-ft ²)	JM TPO (Min. 60 mil)	Induction welded to Weld plates	-45 (Lim. 7)
S-W-2	G33, H1, L6, SH24	INSULATION	Preliminarily Secured or secured with top layer	OPTIONAL Cover Board	Attached with RhinoPlates fastened 12-inch o.c.; Fastener rows max. 72-inch o.c.	JM TPO (Min. 60 mil)	Induction welded to Weld plates	-45 (Lim. 7)
S-W-3	G33, F1, L6, S30	INSULATION	Preliminarily Secured or secured with top layer	OPTIONAL Cover Board	Attached with ISOWELD-#15 at a rate of 1 fastener per 4.0-ft ²	JM TPO (Min. 60 mil)	Induction welded to Weld plates	-45 (Lim. 7)
S-W-4	G80, SD1W, L6, SDL24	INSULATION	Preliminarily Secured or secured with top layer	OPTIONAL Cover Board	Attached with ISOWELD-#15 spaced 24" o.c. in rows 24-inch o.c.	JM TPO (Min. 60 mil)	Induction welded to Weld plates	-45 (Lim. 7)
S-W-5	G80, SD1W, L6, SDL24	INSULATION	Preliminarily Secured or secured with top layer	OPTIONAL Cover Board	Attached with ISOWELD-#12 or ISOWELD-#15 spaced 12-inch o.c. in rows 60-inch o.c.	JM TPO (Min. 60 mil)	Induction welded to Weld plates	-45 (Lim. 7)
S-W-6	G80, F1, L6, S36	INSULATION	Preliminarily Secured or secured with top layer	OPTIONAL Cover Board	Attached with ISOWELD-#12 or ISOWELD-#15 spaced in a 2-ft x 3-ft staggered grid	JM TPO (Min. 60 mil)	Induction welded to Weld plates	-45 (Lim. 7)
S-W-7	G33, H1, L6, SH24	INSULATION	Preliminarily Secured or secured with top layer	OPTIONAL Cover Board	Attached with RhinoPlates at a rate of 6 per 4-ft x 8-ft board Pattern #2 (1 fastener per 5.33-ft ²); Board length perpendicular to deck flutes with 6-inch stagger from preceding course	JM TPO (Min. 60 mil)	Induction welded to Weld plates	-52.5 (Lim. 7)

APPENDIX C – APPROVED ASSEMBLIES FOR JM TPO SINGLE-PLY MEMBRANES

Induction Welded 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-W-8	G33, F1, L6, S12	INSULATION	<i>Preliminarily Secured or secured with top layer</i>	OPTIONAL Cover Board	Trufast IW Plates attached 1 fastener per 4.0ft ² ; Boards placed perpendicular to deck ribs; End joints offset 12-inches between board rows	JM TPO (Min. 60 mil)	Induction welded to Weld plates	-52.5 (Lim. 7)
S-W-9	22 GA Type N; G80, H1, L12, HS24	OPTIONAL INSULATION under min. 1.5-inch E3	<i>Preliminarily Secured or secured with top layer</i>	OPTIONAL Cover Board	Attached with RhinoPlates at a rate of 8 per 4-ft x 8-ft board Type N; Insulation/Cover Boards laid perpendicular to deck flutes; Boards ends offset 8-inch from previous row	JM TPO	Induction welded to Weld plates	-52.5 (Lim. 7)
S-W-10	G33, P, L6, S36	INSULATION	<i>Preliminarily Secured or secured with top layer</i>	OPTIONAL Cover Board	Attached with ISOWELD-#15 spaced in a 2-ft x 2-ft staggered grid	JM TPO (Min. 60 mil)	Induction welded to Weld plates	-60 (Lim. 7)
S-W-11	G33, F1, L6, S12	INSULATION	<i>Preliminarily Secured or secured with top layer</i>	OPTIONAL Cover Board	Trufast IW Plates attached 6-inch o.c. in rows 60-inch o.c.	JM TPO (Min. 60 mil)	Induction welded to Weld plates	-60 (Lim. 7)
S-W-12	G33, H1, L6, SH24	INSULATION	<i>Preliminarily Secured or secured with top layer</i>	OPTIONAL Cover Board	Attached with RhinoPlates at a rate of 8 per 4-ft x 8-ft board Pattern #2 (1 fastener per 4.0-ft ²); Board length perpendicular to deck flutes with 6-inch stagger from preceding course	JM TPO (Min. 60 mil)	Induction welded to Weld plates	-67.5 (Lim. 7)
S-W-13	G33, F2, L6, S18	INSULATION	<i>Preliminarily Secured or secured with top layer</i>	OPTIONAL Cover Board	Attached with RhinoPlates at a rate of 8 per 4-ft x 8-ft board Pattern #1 (1 fastener per 4.0-ft ²)	JM TPO (Min. 60 mil)	Induction welded to Weld plates	-67.5 (Lim. 7)
S-W-14	G33, P, L6	INSULATION	<i>Preliminarily Secured or secured with top layer</i>	OPTIONAL Cover Board	Attached with RhinoPlates at a rate of 12 per 4-ft x 8-ft board (1 fastener per 2.67-ft ²)	JM TPO (Min. 60 mil)	Induction welded to Weld plates	-75 (Lim. 7)
S-W-15	G33, F1, L6, S30	INSULATION	<i>Preliminarily Secured or secured with top layer</i>	OPTIONAL Cover Board	Attached with ISOWELD-#15 at a rate of 1 fastener per 3.2-ft ²	JM TPO (Min. 60 mil)	Induction welded to Weld plates	-75 (Lim. 7)
S-W-16	G33, F2, L6, S24	INSULATION	<i>Preliminarily Secured or secured with top layer</i>	OPTIONAL Cover Board	Attached with RhinoPlates in a 24-inch by 16-inch grid pattern	JM TPO (Min. 60 mil)	Induction welded to Weld plates	-82.5 (Lim. 7)

APPENDIX C – APPROVED ASSEMBLIES FOR JM TPO SINGLE-PLY MEMBRANES

Induction Welded 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-W-17	G33, P, L6, S36	INSULATION	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	Attached with <i>ISOWELD-#15</i> spaced in a 1.5-ft x 2-ft staggered grid	JM TPO (Min. 60 mil)	Induction welded to Weld plates	-82.5 (Lim. 7)
S-W-18	G33, F1W, L6, S12	INSULATION	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>Trufast IW Plates</i> attached 1 fastener per 2.0ft ² ; Boards placed perpendicular to deck ribs; End joints offset 12-inches between board rows	JM TPO (Min. 60 mil)	Induction welded to Weld plates	-82.5 (Lim. 7)
S-W-19	G80, F2, L6, S24	INSULATION	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	Attached with <i>RhinoPlates</i> in a 24-inch by 16-inch grid pattern	JM TPO (Min. 60 mil)	Induction welded to Weld plates	-90 (Lim. 7)
S-W-20	G33, F2W, L6	INSULATION	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	Attached with <i>RhinoPlates</i> at a rate of 15 per 4-ft x 8-ft board (1 fastener per 2.13-ft ²)	JM TPO (Min. 60 mil)	Induction welded to Weld plates	-90 (Lim. 7)
S-W-21	G33, H1, L6, S24	INSULATION	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	Attached with <i>RhinoPlates</i> at a rate of 12 per 4-ft x 8-ft board Pattern #1 (1 fastener per 2.67-ft ²); Board length perpendicular to deck flutes with 6-inch stagger from preceding course	JM TPO (Min. 60 mil)	Induction welded to Weld plates	-90 (Lim. 7)
S-W-22	G33, F1, L5, S30	INSULATION	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	Attached with <i>ISOWELD-#15</i> spaced 6-inch o.c. in rows 60-inch o.c.	JM TPO (Min. 60 mil)	Induction welded to Weld plates	-90 (Lim. 7)
S-W-23	G80, F1, L6, S12	INSULATION	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>Trufast IW Plates</i> attached 6-inch o.c. in rows 60-inch o.c.	JM TPO (Min. 60 mil)	Induction welded to Weld plates	-90 (Lim. 7)
S-W-24	G80, SD1W, L6, SDL24	INSULATION	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	Attached with <i>ISOWELD-#15</i> spaced 18-inch o.c. in rows 18-inch o.c.	JM TPO (Min. 60 mil)	Induction welded to Weld plates	-97.5 (Lim. 7)
S-W-25	G80, SD1W, L6, SDL24	INSULATION	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	Attached with <i>ISOWELD-#12</i> or <i>ISOWELD-#15</i> spaced 6-inch o.c. in rows 60-inch o.c.	JM TPO (Min. 60 mil)	Induction welded to Weld plates	-97.5 (Lim. 7)
S-W-26	G80, F1W, L6, S12	INSULATION	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>Trufast IW Plates</i> attached 1 fastener per 2.0ft ² ; Boards placed perpendicular to deck ribs; End joints offset 12-inches between board rows	JM TPO (Min. 60 mil)	Induction welded to Weld plates	-105 (Lim. 7)

APPENDIX C – APPROVED ASSEMBLIES FOR JM TPO 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-1	T15/32P, L24, N6	OPTIONAL INSULATION	Preliminarily Secured or secured with top layer	ProtectoR	Trufast VERSA-FAST fastener or FASTENERS and PLT-R-3 secured at a rate of 18 per 4-ft x 8-ft board Pattern #3	JM TPO or JM TPO FB	JM TPO: MBA, TPO WBMA, LVOC MA, or ASBA JM TPO FB: 2-Part UIA-C(S), TPO WBMA or ASBA	-45 (Lim. 7)
W-AM-2	T15/32P, L24, N6	OPTIONAL INSULATION	Preliminarily Secured or secured with top layer	ProtectoR	Trufast VERSA-FAST fastener or FASTENERS and PLT-R-3 secured at a rate of 18 per 4-ft x 8-ft board Pattern #3	JM TPO SA	Self-adhered	-45 (Lim. 7)
W-AM-3	T19/32P, L24, N4 w/blocking at end joints and attachment into blocking	OPTIONAL INSULATION	Preliminarily Secured or secured with top layer	SECUROCK or DensDeck Prime	All Purpose Fasteners and UltraFast Plates (Square) secured 1 fastener per 1.45ft ²	JM TPO	ASBA, TPO WBMA, MBA or LVOC MA	-45 (Lim. 7)
W-AM-4	T19/32P, L24, N4 w/blocking at end joints and attachment into blocking	OPTIONAL INSULATION	Preliminarily Secured or secured with top layer	SECUROCK or DensDeck Prime	All Purpose Fasteners and UltraFast Plates (Square) secured 1 fastener per 1.45ft ²	JM TPO FB	TPO WBMA, ASBA or 2-Part UIA-C(S)	-45 (Lim. 7)
W-AM-5	T19/32P, L24, N4 w/blocking at end joints and attachment into blocking	OPTIONAL INSULATION	Preliminarily Secured or secured with top layer	SECUROCK or DensDeck Prime	All Purpose Fasteners and UltraFast Plates (Square) secured 1 fastener per 1.45ft ²	JM TPO SA	Self-adhered	-45 (Lim. 7)

APPENDIX C – APPROVED ASSEMBLIES FOR JM TPO 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-6	<u>T19/32P, L24, N4 w/blocking at end joints and attachment into blocking</u>	OPTIONAL INSULATION	Preliminarily Secured or secured with top layer	DensDeck Prime	All Purpose Fasteners and UltraFast Plates (Square) secured 1 fastener per 1.45ft ²	JM TPO FB	ASTM D 312 Type IV Asphalt	-45 (Lim. 7)
W-AM-7	T15/32P, L24, N6	Optional INSULATION and/or Vapor Barrier	Preliminarily Secured or secured with top layer	Min. 2-inch ENRGY 3	Fasteners & Plates secured 16 per 4-ft x 8-ft board	JM TPO or JM TPO FB	JM TPO: LVOC MA or MBA JM TPO FB: 2-Part UIA-C(S)	-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. 2-inch ENRGY 3 CGF or ENRGY 3 FR	Fasteners & Plates secured 16 per 4-ft x 8-ft board	JM TPO or JM TPO FB	JM TPO: MBA, TPO WBMA, LVOC MA, or ASBA JM TPO FB: 2-Part UIA-C(S)	-52.5 (Lim. 7)
W-AM-9	T15/32P, L24, N6	Optional INSULATION and/or Vapor Barrier	Preliminarily Secured or secured with top layer	Min. 2-inch ENRGY 3 CGF or ENRGY 3 FR	Fasteners & Plates secured 16 per 4-ft x 8-ft board	JM TPO SA	Self-adhered	-52.5 (Lim. 7)
W-AM-10	T15/32P, L24, N6	Min. 2-inch E3	Fasteners & Plates secured 16 per 4-ft x 8-ft board	Min. 1.5-inch ENRGY 3	2-Part UIA, OSFA, or RSUA applied 6" o.c.	JM TPO or JM TPO FB	JM TPO: LVOC MA or MBA JM TPO FB: 2-Part UIA-C(S)	-52.5 (Lim. 7)
W-AM-11	T15/32P, L24, N6	Min. 2-inch E3	Fasteners & Plates secured 16 per 4-ft x 8-ft board	Min. 1.5-inch ENRGY 3 CGF	2-Part UIA, OSFA, or RSUA applied 6" o.c.	JM TPO or JM TPO FB	JM TPO: MBA, TPO WBMA, LVOC MA, or ASBA JM TPO FB: 2-Part UIA-C(S)	-52.5 (Lim. 7)
W-AM-12	T15/32P, L24, N6	Min. 2-inch E3	Fasteners & Plates secured 16 per 4-ft x 8-ft board	Min. 1.5-inch ENRGY 3 CGF	2-Part UIA, OSFA, or RSUA applied 6" o.c.	JM TPO SA	Self-adhered	-52.5 (Lim. 7)
W-AM-13	T15/32P, L24, N6	Min. 2-inch E3	Fasteners & Plates secured 16 per 4-ft x 8-ft board	ProtectoR HD	2-Part UIA, OSFA, or RSUA applied 6" o.c.	JM TPO	TPO WBMA, MBA, LVOC MA, or ASBA	-52.5 (Lim. 7)
W-AM-14	T15/32P, L24, N6	Min. 2-inch E3	Fasteners & Plates secured 16 per 4-ft x 8-ft board	ProtectoR HD	2-Part UIA, OSFA, or RSUA applied 6" o.c.	JM TPO SA	Self-adhered	-52.5 (Lim. 7)

APPENDIX C – APPROVED ASSEMBLIES FOR JM TPO 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-15	T15/32P, L24, N6	Min. 2-inch E3	Fasteners & Plates secured 16 per 4-ft x 8-ft board	ProtectoR HD	2-Part UIA, OSFA, or RSUA applied 6" o.c.	JM TPO FB	2-Part UIA-C(S)	-52.5 (Lim. 7)
W-AM-16	T15/32P, L24, N6	Min. 2-inch E3	Fasteners & Plates secured 16 per 4-ft x 8-ft board	Min. 0.5-inch DEXcell FA, SECUROCK, or DensDeck Prime	2-Part UIA, OSFA, or RSUA applied 6" o.c.	JM TPO	ASBA, TPO WBMA, MBA or LVOC MA	-52.5 (Lim. 7)
W-AM-17	T15/32P, L24, N6	Min. 2-inch E3	Fasteners & Plates secured 16 per 4-ft x 8-ft board	Min. 0.5-inch DEXcell FA, SECUROCK, or DensDeck Prime	2-Part UIA, OSFA, or RSUA applied 6" o.c.	JM TPO SA	Self-adhered	-52.5 (Lim. 7)
W-AM-18	T19/32P, L24, N6	OPTIONAL INSULATION	Preliminarily Secured or secured with top layer	Min. 1.5-inch ENRGY 3 CGF or ENRGY 3 FR	FASTENERS (no UltraFast Fastener) with UltraFast Plates (Square) secured at a rate of 18 per 4-ft x 8-ft board Pattern #1	JM TPO or JM TPO FB	JM TPO: MBA, TPO WBMA, LVOC MA, or ASBA JM TPO FB: 2-Part UIA-C(S)	-60 (Lim. 7)
W-AM-19	T19/32P, L24, N6	OPTIONAL INSULATION	Preliminarily Secured or secured with top layer	Min. 1.5-inch ENRGY 3 CGF or ENRGY 3 FR	FASTENERS (no UltraFast Fastener) with UltraFast Plates (Square) secured at a rate of 18 per 4-ft x 8-ft board Pattern #1	JM TPO SA	Self-adhered	-60 (Lim. 7)
W-AM-20	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 Pattern #2	JM TPO or JM TPO FB	JM TPO: ASBA, TPO WBMA, MBA or LVOC MA JM TPO FB: 2-Part UIA-C(S)	-75 (Lim. 7)
W-AM-21	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 Pattern #2	JM TPO SA	Self-adhered	-75 (Lim. 7)
W-AM-22	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 Pattern #2	JM TPO or JM TPO FB	JM TPO: ASBA, TPO WBMA, MBA or LVOC MA JM TPO FB: 2-Part UIA-C(S)	-82.5 (Lim. 7)

APPENDIX C – APPROVED ASSEMBLIES FOR JM TPO 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-23	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 Pattern #2	JM TPO SA	Self-adhered	-82.5 (Lim. 7)
W-AM-24	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 Pattern #2	JM TPO	ASBA, TPO WBMA, MBA or LVOC MA	-82.5 (Lim. 7)
W-AM-25	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 Pattern #2	JM TPO SA	Self-adhered	-82.5 (Lim. 7)
W-AM-26	T15/32P, L24, N6	Min. 2-inch E3	Fasteners & Plates secured 24 per 4-ft x 8-ft board Pattern #2	Min. 1.5-inch E3 or E3 C1	2-Part UIA, OSFA, or RSUA applied 6" o.c.	JM TPO	ASBA, TPO WBMA, MBA or LVOC MA	-82.5 (Lim. 7)
W-AM-27	T15/32P, L24, N6	Min. 2-inch E3	Fasteners & Plates secured 24 per 4-ft x 8-ft board Pattern #2	Min. 1.5-inch E3 or E3 C1	2-Part UIA, OSFA, or RSUA applied 6" o.c.	JM TPO SA	Self-adhered	-82.5 (Lim. 7)
W-AM-28	T15/32P, L24, N6	Min. 2-inch E3	Fasteners & Plates secured 24 per 4-ft x 8-ft board Pattern #2	ProtectoR HD	2-Part UIA, OSFA, or RSUA applied 6" o.c.	JM TPO	TPO WBMA, MBA, LVOC MA, or ASBA	-82.5 (Lim. 7)
W-AM-29	T15/32P, L24, N6	Min. 2-inch E3	Fasteners & Plates secured 24 per 4-ft x 8-ft board Pattern #2	ProtectoR HD	2-Part UIA, OSFA, or RSUA applied 6" o.c.	JM TPO SA	Self-adhered	-82.5 (Lim. 7)
W-AM-30	T15/32P, L24, N6	Min. 2-inch E3	Fasteners & Plates secured 24 per 4-ft x 8-ft board Pattern #2	ProtectoR HD	2-Part UIA, OSFA, or RSUA applied 6" o.c.	JM TPO FB	2-Part UIA-C(S)	-82.5 (Lim. 7)
W-AM-31	T15/32P, L24, N6	Min. 2-inch E3	Fasteners & Plates secured 24 per 4-ft x 8-ft board Pattern #2	Min. 0.5-inch DEXcell FA, SECUROCK, or DensDeck Prime	2-Part UIA, OSFA, or RSUA applied 6" o.c.	JM TPO	ASBA, TPO WBMA, MBA or LVOC MA	-82.5 (Lim. 7)
W-AM-32	T15/32P, L24, N6	Min. 2-inch E3	Fasteners & Plates secured 24 per 4-ft x 8-ft board Pattern #2	Min. 0.5-inch DEXcell FA, SECUROCK, or DensDeck Prime	2-Part UIA, OSFA, or RSUA applied 6" o.c.	JM TPO SA	Self-adhered	-82.5 (Lim. 7)

APPENDIX C – APPROVED ASSEMBLIES FOR JM TPO SINGLE-PLY MEMBRANES

Mechanically Fastened Assemblies over Wood Deck (New, Existing, or Recover)									
System No.	Deck Detail	Thermal Barrier	Base Insulation	Base Insulation Attachment	Top Insulation	Top Insulation Attachment	Membrane	Membrane Attachment	MDP (psf)
W-M-1	T19/32P, L24, N6	As required	Min. 0.5-inch INSULATION	Preliminarily Secured or secured with top layer	OPTIONAL Cover Board	Preliminarily Secured	JM TPO	Attached in-lap 6-inch o.c. with VERSA-FAST at a rate of 3 Fasteners/Plate; Fastener rows max. 138-inch o.c.	-52.5 (Lim. 7)
W-M-2	T19/32P, L24, N6	As required	Min. 0.25-inch INSULATION	Preliminarily Secured or secured with top layer	OPTIONAL Cover Board	Preliminarily Secured	JM TPO	Attached in-lap 6-inch o.c. with HL Fasteners & Plates; Fastener rows max. 54-inch o.c.	-60 (Lim. 7)
W-M-3	T19/32P, L24, N6	As required	Min. 0.25-inch INSULATION	Preliminarily Secured or secured with top layer	OPTIONAL Cover Board	Preliminarily Secured	JM TPO	Attached in-lap 6-inch o.c. with All Purpose Fasteners and High Load Plates; Fastener rows max. 90-inch o.c.	-60 (Lim. 7)
W-M-4	T19/32P, L24, N4 w/blocking at end joints and attachment into blocking	As required	OPTIONAL INSULATION	Preliminarily Secured or secured with top layer	Min. 0.25-inch DensDeck, DensDeck Prime, DEXcell FA, or SECUROCK	Preliminarily Secured	JM TPO	Attached in-lap 6-inch o.c. with HL Fasteners & Plates; Fastener rows max. 90-inch o.c.	-60 (Lim. 7)

Induction Welded Assemblies over Wood Deck (New, Existing, or Recover)									
System No.	Deck Detail	Thermal Barrier	Base Insulation	Base Insulation Attachment	Top Insulation	Top Insulation Attachment	Membrane	Membrane Attachment	MDP (psf)
W-W-1	T15/32P, L24, N6	As required	Min. 0.25-inch INSULATION	Preliminarily Secured or secured with top layer	OPTIONAL Cover Board	JM All Purpose Fasteners (min. 1.5-inch embedment into wood supports) and JM TPO Rhino Plates, Trufast TPO IW Plates, or isoweld FI-P-6.8-TPO plates secured max. 24-inch o.c. through sheathing into wood structural supports in rows max. 24-inch o.c.	JM TPO (Min. 60 mil)	Induction welded to weld plates	-52.5 (Lim. 7)

APPENDIX C – APPROVED ASSEMBLIES FOR JM TPO SINGLE-PLY MEMBRANES

Induction Welded Assemblies over <i>Wood Deck (New, Existing, or Recover)</i>									
System No.	Deck Detail	Thermal Barrier	Base Insulation	Base Insulation Attachment	Top Insulation	Top Insulation Attachment	Membrane	Membrane Attachment	MDP (psf)
W-W-2	T15/32P, L24, N6	As required	Min. 0.25-inch INSULATION	Preliminarily Secured or secured with top layer	OPTIONAL Cover Board	JM All Purpose Fasteners (min. 1.5-inch embedment into wood supports) and JM TPO Rhino Plates, Trufast TPO IW Plates, or <i>isoweld</i> FI-P-6.8-TPO plates secured max. 9-inch o.c. through sheathing into wood structural supports in rows max. 48-inch o.c.	JM TPO (Min. 60 mil)	Induction welded to weld plates	-60 (Lim. 7)
W-W-3	T15/32P, L24, N6	As required	Min. 0.25-inch INSULATION	Preliminarily Secured or secured with top layer	OPTIONAL Cover Board	JM All Purpose Fasteners (min. 1.5-inch embedment into wood supports) and JM TPO Rhino Plates, Trufast TPO IW Plates, or <i>isoweld</i> FI-P-6.8-TPO plates secured max. 6-inch o.c. through sheathing into wood structural supports in rows max. 48-inch o.c.	JM TPO (Min. 60 mil)	Induction welded to weld plates	-112.5 (Lim. 7)

END OF REPORT