



EVALUATION REPORT

FLORIDA BUILDING CODE, 7TH EDITION (2020)

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

Issued February 14, 2021

Manufacturing Plants: Pawtucket, RI
 Lancaster, SC

Quality Assurance: UL LLC (QUA9625)

SCOPE

Category: Roofing
Subcategory: Single Ply Roof System
Code Edition: Florida Building Code, 7th Edition (2020) including High-Velocity Hurricane Zones (HVHZ)
Code Sections: 1504.3.1, 1504.6, 1504.7, 1507.13, 1515.1.1 , 1515.1.4, 1515.2.4, 1523.1.1, 1523.6.2, 1523.6.5.2.9
Properties: Wind Resistance, Physical Properties, Impact Resistance

PRODUCT DESCRIPTION

Products	Specification	Description
JM PVC-50 mil	ASTM D 4434	Nominal 50-mil thick polyvinyl chloride with DuPont™ Elvaloy KEE single-ply roof membrane with polyester scrim reinforcement
JM PVC-60 mil	ASTM D 4434	Nominal 60-mil thick polyvinyl chloride with DuPont™ Elvaloy KEE single-ply roof membrane with polyester scrim reinforcement
JM PVC-80 mil	ASTM D 4434	Nominal 80-mil thick polyvinyl chloride with DuPont™ Elvaloy KEE single-ply roof membrane with polyester scrim reinforcement
JM PVC Fleece Backed-50 mil	ASTM D 4434	Nominal 50-mil thick polyvinyl chloride with DuPont™ Elvaloy KEE single-ply roof membrane with polyester scrim reinforcement and polyester fleece backing
JM PVC Fleece Backed-60 mil	ASTM D 4434	Nominal 60-mil thick polyvinyl chloride with DuPont™ Elvaloy KEE single-ply roof membrane with polyester scrim reinforcement and polyester fleece backing
JM PVC Fleece Backed-80 mil	ASTM D 4434	Nominal 80-mil thick polyvinyl chloride with DuPont™ Elvaloy KEE single-ply roof membrane with polyester scrim reinforcement and polyester fleece backing
JM PVC SD Plus-50 mil	ASTM D 4434	Nominal 50-mil thick polyvinyl chloride single-ply roof membrane with polyester scrim reinforcement
JM PVC SD Plus-60 mil	ASTM D 4434	Nominal 60-mil thick polyvinyl chloride single-ply roof membrane with polyester scrim reinforcement
JM PVC SD Plus-80 mil	ASTM D 4434	Nominal 80-mil thick polyvinyl chloride single-ply roof membrane with polyester scrim reinforcement

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)
Atlantic & Caribbean Roof Consulting (TST4671)	ACRC 14-029	TAS 114(D) (2011)
Atlantic & Caribbean Roof Consulting (TST4671)	ACRC 14-030	TAS 114(D) (2011)
Atlantic & Caribbean Roof Consulting (TST4671)	ACRC 14-031	TAS 114(D) (2011)
Atlantic & Caribbean Roof Consulting (TST4671)	ACRC 14-032	TAS 114(D) (2011)
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)
FM Approvals (TST1867)	3014751	FM 4470 (2016)
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)
FM Approvals (TST1867)	3030259	FM 4470 (2016)
FM Approvals (TST1867)	3030351	FM 4470 (2016)
FM Approvals (TST1867)	3030383	FM 4470 (2016)
FM Approvals (TST1867)	3031670	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)
FM Approvals (TST1867)	3046174	FM 4470 (2016)
FM Approvals (TST1867)	3051609	FM 4470 (2016)
FM Approvals (TST1867)	3052787	FM 4470 (2016)
FM Approvals (TST1867)	3053026	FM 4470 (2016)
FM Approvals (TST1867)	3055227	FM 4470 (2016)
FM Approvals (TST1867)	3055491	FM 4470 (2016)
FM Approvals (TST1867)	3055845	FM 4470 (2016)
FM Approvals (TST1867)	3056049	FM 4470 (2016)
FM Approvals (TST1867)	3056303	FM 4470 (2016)
FM Approvals (TST1867)	3056677	FM 4470 (2016)
FM Approvals (TST1867)	3058201	FM 4470 (2016)
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)
FM Approvals (TST1867)	3060138	FM 4470 (2016)
FM Approvals (TST1867)	3060573	FM 4470 (2016)

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This evaluation report is provided for State of Florida product approval under Rule 61G20-3. The manufacturer shall notify CREEK Technical Services, LLC of any product changes or quality assurance changes throughout the duration for which this report is valid. This evaluation report does not express nor imply warranty, installation, recommended use, or other product attributes that are not specifically addressed herein.

<u>Entity</u>	<u>Report No.</u>	<u>Standard</u>
FM Approvals (TST1867)	3060614	FM 4470 (2016)
FM Approvals (TST1867)	3061218	FM 4470 (2016)
FM Approvals (TST1867)	3061328	FM 4470 (2016)
FM Approvals (TST1867)	3062897	FM 4470 (2016)
FM Approvals (TST1867)	3063554	FM 4470 (2016)
FM Approvals (TST1867)	PR449524	FM 4470 (2016)
FM Approvals (TST1867)	PR450753	FM 4470 (2016)
FM Approvals (TST1867)	PR451795	FM 4470 (2016)
FM Approvals (TST1867)	PR452385	FM 4470 (2016)
FM Approvals (TST1867)	PR452580	FM 4470 (2016)
FM Approvals (TST1867)	PR453724	FM 4470 (2016)
FM Approvals (TST1867)	PR454134	FM 4470 (2016)
FM Approvals (TST1867)	PR454134	FM 4470 (2016)
FM Approvals (TST1867)	PR454135	FM 4470 (2016)
FM Approvals (TST1867)	PR454167	FM 4470 (2016)
FM Approvals (TST1867)	PR454270	FM 4470 (2016)
FM Approvals (TST1867)	PR454361	FM 4470 (2016)
FM Approvals (TST1867)	PR454859	FM 4470 (2016)
FM Approvals (TST1867)	PR454859	FM 4470 (2016)
FM Approvals (TST1867)	PR455344	FM 4470 (2016)
FM Approvals (TST1867)	PR455671	FM 4470 (2016)
FM Approvals (TST1867)	PR455897	FM 4470 (2016)
Intertek – York (ATI) (TST1558)	J0079.01-109-18	FM 4474 (2011); TAS 114(J) (2011); UL 1897 (2012)
Intertek – York (ATI) (TST1558)	J0080.01-109-18	FM 4474 (2011); TAS 114(J) (2011); UL 1897 (2012)
Intertek – York (ATI) (TST1558)	J0082.01-109-18	FM 4474 (2011); TAS 114(J) (2011); UL 1897 (2012)
Intertek – York (ATI) (TST1558)	J0083.01-109-18	FM 4474 (2011); TAS 114(J) (2011); UL 1897 (2012)
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)
Miami-Dade (EVL1528)	14-0627.08	TAS 114(J) (2011)
Momentum Technologies (TST2508)	CX23G3A	ASTM D 4434 (2012)
Momentum Technologies (TST2508)	NX21J0A	ASTM D 4434 (2012)
Momentum Technologies (TST2508)	NX21J0B	ASTM D 4434 (2012)
Momentum Technologies (TST2508)	NX21J0C	ASTM D 4434 (2012)
PRI Construction Materials Technologies (TST5878)	JMC-086-02-01	FM 4474 (2011); 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-088-02-01.8	ASTM D 1876 (2008); TAS 117(A&B) (1995); TAS 114 (2011); FM 4474 (2011)
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	FM 4474 (2011); TAS 114 (J) (2011)
PRI Construction Materials Technologies (TST5878)	JMC-109-02-01	FM 4474 (2011); TAS 114 (J) (2011)
PRI Construction Materials Technologies (TST5878)	JMC-114-02-01	FM 4474 (2011); TAS 114 (J) (2011)
PRI Construction Materials Technologies (TST5878)	JMC-131-02-01	FM 4474 (2011); TAS 114 (D) (2011)
PRI Construction Materials Technologies (TST5878)	JMC-132-02-01	FM 4474 (2011); TAS 114(D) (2011)
PRI Construction Materials Technologies (TST5878)	JMC-132-02-02	FM 4474 (2011); TAS 114(D) (2011)
PRI Construction Materials Technologies (TST5878)	JMC-141-02-01	FM 4474 (2011); TAS 114(J) (2011)
PRI Construction Materials Technologies (TST5878)	JMC-143-02-01	FM 4474 (2011); TAS 114(D) (2011)
PRI Construction Materials Technologies (TST5878)	JMC-162-02-01	FM 4474 (2011); TAS 114(D) (2011)
PRI Construction Materials Technologies (TST5878)	JMC-163-02-01	FM 4474 (2011); TAS 114(J) (2011)
PRI Construction Materials Technologies (TST5878)	JMC-168-02-01	FM 4474 (2011); TAS 114(J) (2011)
PRI Construction Materials Technologies (TST5878)	JMC-193-02-01	FM 4474 (2011); TAS 114(J) (2011)
PRI Construction Materials Technologies (TST5878)	JMC-193-02-01A	FM 4474 (2011); 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	FM 4474 (2011); TAS 114(J) (2011)
PRI Construction Materials Technologies (TST5878)	JMC-201-02-01B	FM 4474 (2011); TAS 114(J) (2011)
PRI Construction Materials Technologies (TST5878)	JMC-205-02-01	ASTM D 3746 [(1985)(2015)]
PRI Construction Materials Technologies (TST5878)	JMC-209-02-01	FM 4474 (2011); TAS 114(J) (2011)
PRI Construction Materials Technologies (TST5878)	JMC-225-02-01	FM 4474 (2011)

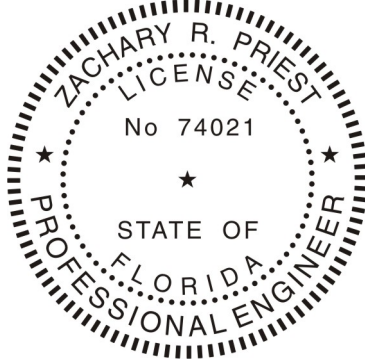
Entity	Report No.	Standard
PRI Construction Materials Technologies (TST5878)	JMC-242-02-01	FM 4474(D) (2011); TAS 114(J) (2011)
PRI Construction Materials Technologies (TST5878)	JMC-245-02-02	FM 4474(B) (2011); TAS 114(D) (2011)
PRI Construction Materials Technologies (TST5878)	JMC-246-02-01	FM 4474(B) (2011); TAS 114(D) (2011)
PRI Construction Materials Technologies (TST5878)	JMC-267-02-02	FM 4474(B) (2011); TAS 114(D) (2011)
PRI Construction Materials Technologies (TST5878)	JMC-277-02-01	FM 4474(B) (2011); TAS 114(D) (2011)
PRI Construction Materials Technologies (TST5878)	JMC-278-02-01A	FM 4474(C) (1995)
PRI Construction Materials Technologies (TST5878)	JMC-278-02-02	FM 4474(D) (2011); TAS 114(J) (2011); UL 1897 (2012)
PRI Construction Materials Technologies (TST5878)	JMC-278-02-03	FM 4474(D) (2011); TAS 114(J) (2011)
PRI Construction Materials Technologies (TST5878)	JMC-303-02-01	FM 4474(D) (2011); TAS 114(J) (2011); UL 1897 (2012)
PRI Construction Materials Technologies (TST5878)	JMC-306-02-01	FM 4474(B) (2011); TAS 114(D) (2011)
PRI Construction Materials Technologies (TST5878)	JMC-306-02-02	FM 4474(D) (2011); TAS 114(J) (2011); UL 1897 (2012)
PRI Construction Materials Technologies (TST5878)	JMC-306-02-03	FM 4474(D) (2011); TAS 114(J) (2011); UL 1897 (2012)
PRI Construction Materials Technologies (TST5878)	JMC-311-02-01	FM 4474(B) (2011); TAS 114(D) (2011)
PRI Construction Materials Technologies (TST5878)	JMC-339-02-03	ASTM C 1289 (2015); ASTM E 84 (2016)
PRI Construction Materials Technologies (TST5878)	JMC-339-02-04	ASTM C 1289 (2015); ASTM E 84 (2016)
PRI Construction Materials Technologies (TST5878)	JMC-343-02-01	FM 4474(D) (2011); TAS 114(J) (2011); UL 1897 (2012)
PRI Construction Materials Technologies (TST5878)	JMC-343-02-01	ASTM D 413 (1998(2017)); TAS 117(B) (1995); FM 4474(D) (2011); TAS 114(J) (2011); UL 1897 (2012)
PRI Construction Materials Technologies (TST5878)	JMC-353-02-01	FM 4474(D) (2011); TAS 114(J) (2011); UL 1897 (2012)
PRI Construction Materials Technologies (TST5878)	JMC-353-02-02	TAS 114(D) (2011)
PRI Construction Materials Technologies (TST5878)	JMC-354-02-01	FM 4474(D) (2011); TAS 114(J) (2011); UL 1897 (2012)
PRI Construction Materials Technologies (TST5878)	JMC-360-02-01	FM 4474(D) (2011); TAS 114(J) (2011); UL 1897 (2012)
PRI Construction Materials Technologies (TST5878)	507T0008	FM 4474(D) (2011); TAS 114(J) (2011); UL 1897 (2012)
PRI Construction Materials Technologies (TST5878)	507T0019	ASTM D 1970/D 1970M (2015a)
PRI Construction Materials Technologies (TST5878)	507T0019	ASTM D 2178 (2015)
PRI Construction Materials Technologies (TST5878)	507T0009	FM 4474(C) (2011)
PRI Construction Materials Technologies (TST5878)	507T0031	FM 4474(C) (2011)
PRI Construction Materials Technologies (TST5878)	507T0031A.1	FM 4474(C) (2011)
PRI Construction Materials Technologies (TST5878)	507T0036	FM 4474(D) (2011); TAS 114(J) (2011); UL 1897 (2012)
PRI Construction Materials Technologies (TST5878)	507T0036B	FM 4474(D) (2011); TAS 114(J) (2011); UL 1897 (2012)
PRI Construction Materials Technologies (TST5878)	507T0059	FM 4474(D) (2011); TAS 114(J) (2011)
PRI Construction Materials Technologies (TST5878)	507T0062	FM 4474(D) (2011); TAS 114(J) (2011)
PRI Construction Materials Technologies (TST5878)	507T0095	FM 4474(B) (2011);
PRI Construction Materials Technologies (TST5878)	507T0096	FM 4474(C) (2011);
PRI Construction Materials Technologies (TST5878)	507T0112	FM 4474(D) (2011); TAS 114(J) (2011); UL 1897 (2012)
PRI Construction Materials Technologies (TST5878)	507T0114	FM 4474(C) (2011)
Robert J.M. Nieminen, P.E.	Compliance Letter 02/09/2017	TAS 114 (2011)
NEMO etc (TST6049)	4a-CEL-LSWUS-01.C	FM 4474(D) (2011); TAS 114(J) (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)	JM-SC12145.02.17	FM 4474(C) (2011)
Trinity ERD (TST6049)	SC4910	FM 4474 (2011); TAS 114(J) (2011)
Trinity ERD (TST6049)	SFS-SC10010.02.16-R1	FM 4474(D) (2011); TAS 114(J) (2011); UL 1897 (2012)

LIMITATIONS

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

COMPLIANCE STATEMENT

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



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

CERTIFICATION OF INDEPENDENCE

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

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

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

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

APPENDICES

- 1) [APPENDIX A](#) – Installation (5 pages)
- 2) [APPENDIX B](#) – Nomenclature (4 pages)
- 3) [APPENDIX D](#) – Approved Assemblies for JM PVC Single-Ply Membranes (47 pages)

APPENDIX A - INSTALLATION

INSTALLATION

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

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

Component	Product	Installation Detail
Fasteners, Battens & Plates	JM All Purpose Fastener	#14 fasteners; Min. 3/4-inch penetration through the top rib of the steel deck or wood deck; Min. 1-inch penetration into concrete deck
	JM APB Plates	2-inch diameter; Galvalume steel plate with reinforcing ribs and barbs
	JM Extra High Load Fastener	#21 fastener; Min. 3/4-inch penetration through the top rib of the steel deck;
	JM Extra High Load Plates	3-inch diameter; Galvalume steel plate with eyehooks
	JM High Load Plates	2 3/8-inch diameter; Galvalume steel plate with eyehooks
	JM High Load Plus Plates	2 3/4-inch diameter; Galvalume steel plate with barbs
	JM High Load Fastener	#15 fastener; Min. 3/4-inch penetration through the top rib of the steel deck or wood deck;
	JM High Load LH Fastener	#15 fastener with oversized head; Min. 3/4-inch penetration through the top rib of the steel deck or wood deck;
	JM 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)	3-inch diameter round; Galvalume steel plate; Only for use with the following products: ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 FR, ENRGY 3 C1, ENRGY 3 C1 CGF, RetroPlus, Retro-Fit, SeparatoR, SeparatoR CGF, SeparatoR CGF FR, DuraBoard, DuraFoam, Fesco, and Fesco Foam
	JM UltraFast Metal Plate (Square)	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 PVC RhinoPlate	Min. 3-inch diameter for PVC membranes; Induction welded in the field of membrane; welds not permitted at lap seams; For use only with bareback membrane
	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.
	SFS Intec Dekfast DF-#12-PH3 Fastener	#12 fasteners; Min. 3/4-inch penetration through the top rib of the steel deck or wood deck;
	SFS Intec Dekfast DF-#14-PH3 Fastener	#15 fasteners; Min. 3/4-inch penetration through the top rib of the steel deck or wood deck; Min. 1-inch penetration into concrete deck
	SFS Intec Dekfast DF-#15-PH3 Fastener	#15 fasteners; Min. 3/4-inch penetration through the top rib of the steel deck or wood deck; Min. 1-inch penetration into concrete deck
	SFS Intec FI-P-6.8-PVC	Min. 3-inch diameter for PVC 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 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 Twin Loc-Nail	Min. 1.4-inch shank; Base sheet fastener with and without integrated 2.7-inch diameter plate.	
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	

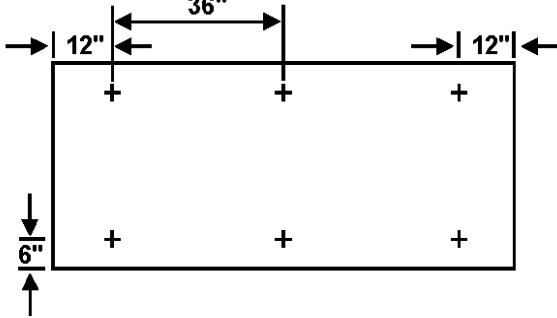
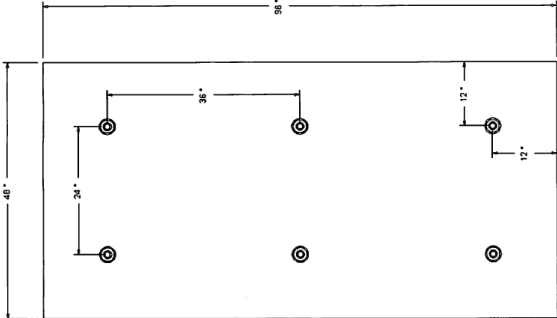
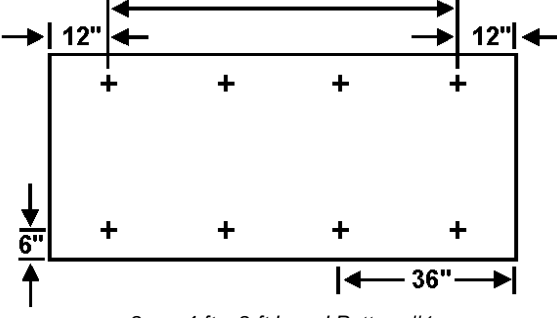
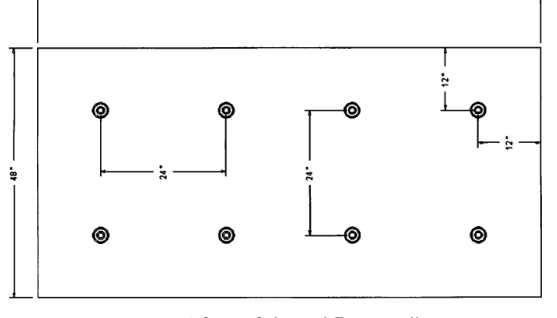
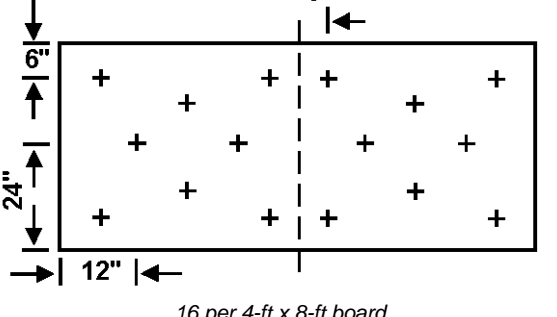
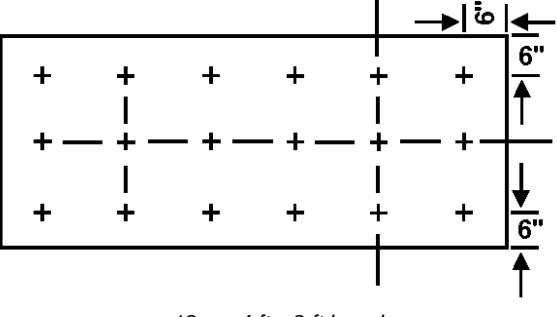
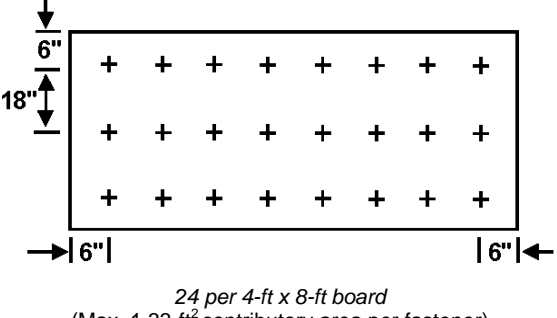
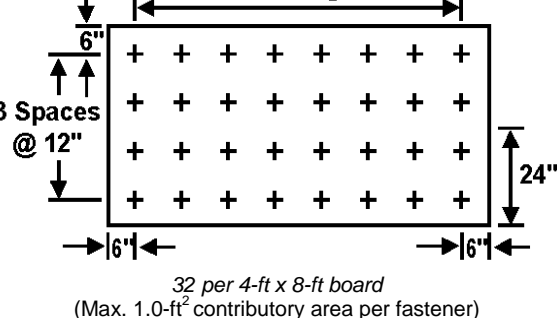
APPENDIX A - INSTALLATION

Component	Product	Installation Detail
Insulation Adhesives (Cont'd)	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	Ribbon adhered in 1/2-inch wide beads
	JM Urethane Insulation Adhesive	
		ASTM D 312, Type IV asphalt
Insulation/Cover Boards	EPS	Min. 0.5-inch, min. 1.8 pcf (HVHZ) or min. 1.5 pcf (non-HVHZ) expanded polystyrene; Adhered boards shall be a maximum 4-ft x 4-ft
	Georgia-Pacific DensDeck	Min. 1/4-inch thick
	Georgia-Pacific DensDeck Prime	
	Georgia-Pacific DensDeckStorm X	Min. 5/8-inch thick
	JM ENRGY 3	Min. 1/2-inch thick; Min. 20 psi; Adhered boards shall be a maximum 4 ft x 4 ft
	JM ENRGY 3 C1	
	JM ENRGY 3 AGF	
	JM ENRGY 3 CGF	
	JM ENRGY 3 C1 CGF	
	JM ENRGY 3 FR	
	JM Fesco Board	Min. 3/4-inch thick; Min. 20 psi
	JM Fesco Foam	Min. 1.5-inch thick; Min. 20 psi; Adhered boards shall be a maximum 4 ft x 4 ft
	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	
	JM ProtectoR Foam	Min. 2-inch thick; Min. 80psi top layer; Min. 20psi bottom layer; Adhered boards shall be a maximum 4 ft x 4 ft
	JM ProtectoR HD	1/2-inch thick; Min. 80 psi; Adhered boards shall be a maximum 4 ft x 4 ft
	JM ProtectoR HD FR	
	JM Retro-Fit Board	1/2-inch thick; Adhered boards shall be a maximum 4 ft x 4 ft
	JM RetroPlus Roof Board	
	JM SECUROCK Glass-Mat Roof Board	Min. 1/4-inch thick
	JM SECUROCK Gypsum-Fiber Roof Board	
JM SeparatoR	1/2-inch thick; Min. 25 psi; Adhered boards shall be a maximum 4 ft x 4 ft	
JM SeparatoR CGF		
JM SeparatoR FR		
National Gypsum DEXcell Cement Roof Board	Min. 7/16-inch thick; Adhered boards shall be a maximum 4 ft x 4 ft	
National Gypsum DEXcell Glass Mat Roof Board	Min. 1/4-inch thick	
National Gypsum DEXcell FA Glass Mat Roof Board		
PVC Membrane Adhesives	ASTM D 312, Type IV asphalt	Fully adhered within the EVT range at a rate of 25-40 lbs/100 ft ² ; For use only with JM PVC Fleece Backed membranes only
	JM PVC All Season Sprayable Bonding Adhesive	Fully adhered at rate of 500 ft ² /canister; Applied simultaneously to underside of membrane and substrate; For use with JM PVC smooth backed membranes only
	JM PVC Membrane Adhesive (Low VOC)	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 PVC smooth backed membranes only

APPENDIX A - INSTALLATION

Component	Product	Installation Detail
PVC Membrane Adhesives (Cont'd)	JM PVC Water Based Membrane Adhesive	Bareback PVC shall be fully adhered in one-sided application applied to the substrate at a rate of 0.4-0.5 gal/100ft ² ; Fleeceback PVC shall be fully adhered in one-sided application applied to the substrate at a rate of 0.6-0.8 gal/100ft ²
	JM Roofing System Urethane Adhesive	Ribbon adhered in 1/2 to 3/4-inch wide beads; For use only with JM PVC Fleece Backed membranes only
	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 PVC Fleece Backed membranes only
SA Primer	JM SA Primer Low VOC	Applied at rate of 0.5 gal/sq.
	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 to primed concrete deck
	JM DynaBase	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 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
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
PVC Single-Ply Membranes	JM PVC-50 mil	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 PVC-60 mil	
	JM PVC-80 mil	
	JM PVC Fleece Backed-50 mil	
	JM PVC Fleece Backed-60 mil	
	JM PVC Fleece Backed-80 mil	
	JM PVC SD Plus-50 mil	
	JM PVC SD Plus-60 mil	
JM PVC SD Plus-80 mil		
Cellular Lightweight Concrete	Celcore MF with HS Rheology Admixture	Slurry coat min. 1/8-inch thick; 1-inch thick EPS board (1 lbs/ft ³); Min. 2-inch thick top coat; Celcore PVA curing compound applied at rate of 300 ft ² /gal.
	Mearlcrete	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	

APPENDIX A - INSTALLATION

Insulation/Cover Board Fastening Patterns	
 <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>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>16 per 4-ft x 8-ft board (Max. 2.0-ft² contributory area per fastener)</p>	 <p>18 per 4-ft x 8-ft board (Max. 1.78-ft² contributory area per fastener)</p>
 <p>24 per 4-ft x 8-ft board (Max. 1.33-ft² contributory area per fastener)</p>	 <p>32 per 4-ft x 8-ft board (Max. 1.0-ft² contributory area per fastener)</p>

APPENDIX A - INSTALLATION

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

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 or Structural Concrete Deck Fastener (concrete only) and UltraFast Metal Plate (Round) or UltraFast Metal Plate (Square)
AP Fasteners & Plates (Square)	All Purpose Fastener or Structural Concrete Deck Fastener (concrete only) and UltraFast Metal Plate (Square)
APB Fasteners & Plates	JM APB Plates and JM High Load Fasteners (<i>Wood Deck</i> or <i>Steel Deck</i>) or JM All Purpose Fasteners (<i>Concrete Deck</i>)
As Tested	Information provided to the report user based on the as tested condition of the roof system
ASBA	JM All Season Sprayable Bonding Adhesive
Cover Board	One layer of any of the following products: -Georgia-Pacific DensDeck -Georgia-Pacific DensDeck Prime - Georgia-Pacific DensDeck StormX Prime -JM Invinsa Roof Board -JM Invinsa FR Roof Board -JM ProtectorR HD -JM ProtectorR HD FR -JM SECUROCK Glass-Mat Roof Board -JM SECUROCK Gypsum-Fiber Roof Board -National Gypsum DEXcell FA Glass Mat Roof Board -National Gypsum DEXcell Glass Mat Roof Board -National Gypsum DEXcell Cement Roof Board
Deck Detail	All decks shall be designed by others in accordance with FBC requirements. As Tested deck construction details are described as follows:
	Concrete Deck Min. $f_c = 2,500$ psi at 28 days
	CWF Deck Min. 2.5-inch thick Tectum I cementitious wood fiber panels

APPENDIX B – NOMENCLATURE

Name	Definition
<i>Deck Detail (Cont'd)</i>	Min. 22 ga, Wide Rib Deck (Type WR) conforming to ANSI/SDI-RD1.0 & FBC; 0.5% Vented for <i>LWIC</i> applications only. The following nomenclature is used to further describe the <i>As Tested</i> 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
	HVHZ: APA Span-Rated sheathing. The following nomenclature is used to further describe the <i>As Tested</i> condition:
	<i>T</i> <#> <i>P</i> Min. <#>-inch thickness of the plywood
	<i>T</i> <#> <i>O</i> Min. <#>-inch thickness of the OSB
<i>L</i> <#> Max. span of <#> inches	
<i>N</i> <#> Min. 0.113-inch diameter x 2-3/8-inch ring shank nails spaced <#>-inch o.c. at all intermediate supports and at the perimeter of each board	
<i>16S</i> <#> Min. 16 ga. staples, 1.5-inch x 1-inch crown spaced <#>-inch o.c. at all intermediate supports and at the perimeter of each board	
<i>DensDeck</i>	Min. 1/4-inch Georgia-Pacific DensDeck
<i>DensDeck Prime</i>	Min. 1/4-inch Georgia-Pacific DensDeck Prime; or 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, JM ENRGY 3 AGF, JM ENRGY 3 CGF or JM ENRGY 3 FR
<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>HL Fasteners & Plates</i>	JM High Load Fasteners (<i>Wood Deck</i> or <i>Steel Deck</i>) or JM All Purpose Fasteners (<i>Concrete Deck</i>) and JM High Load Plates

APPENDIX B – NOMENCLATURE

Name	Definition
INSULATION	One of more layers in any combination of the following products: -ENRGY 3 -ENRGY 3 AGF -ENRGY 3 CGF -ENRGY 3 FR -ENRGY 3 C1 -ENRGY 3 C1 CGF -Fesco Board -Fesco Foam -Invinsa Roof Board -Invinsa FR Roof Board -ProtectoR Foam -ProtectoR HD -ProtectoR HD FR -Retro-Fit Board -RetroPlus Roof Board -SECUROCK Glass-Mat Roof Board -SECUROCK Gypsum-Fiber Roof Board -EPS (flute fill only)
INVINSA	JM Invinsa or JM Invinsa FR Roof Board
ISOWELD -#15	isoweld FI-P-6.8-PVC plates and DEKFAST DF-#15-PH3 Fasteners
ISOWELD-#12	isoweld FI-P-6.8-PVC plates and DEKFAST DF-#12-PH3 Fasteners
JM PVC	One ply of any one of the following products: JM PVC-50 mil, JM PVC-60 mil, or JM PVC-80 mil
JM PVC FB	One ply of any one of the following products: JM PVC Fleece Backed-50 mil, JM PVC Fleece Backed-60 mil or JM PVC Fleece Backed-80 mil
JM PVC FB/DynaFast	One ply of JM PVC Fleece Backed-50 mil or JM PVC Fleece Backed-60 mil fully adhered in ASTM D 312 Type asphalt over DynaFast 180 S. DynaFast 180 S fastened to deck as described in <i>Approved Assembly</i>
JM PVC SD Plus	One ply of any one of the following products: JM PVC SD Plus-50 mil, JM PVC SD Plus-60 mil, or JM PVC SD Plus-80 mil
LWIC	Poured-in-place Cellular Lightweight Concrete with encapsulated insulation board
MCRF	Minimum Characteristic Resistance Force as determined by TAS 105 for the named fastener in the selected assembly
MDP	Maximum Design Pressure
OSFA	JM One-Step Foamable Adhesive
<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.
ProtectoR	JM ProtectoR HD or JM ProtectoR HD FR Roof Board
PVC ASSBA	JM PVC All Season Sprayable Bonding Adhesive
PVC MA (LowVOC)	JM PVC Membrane Adhesive (Low VOC)
PVC WBMA	JM PVC Water Based Membrane Adhesive

APPENDIX B – NOMENCLATURE

Name	Definition
<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 1511 outside of the HVHZ and FBC Section 1521 within the HVHZ. For mechanically fastened roof assemblies and induction welded assemblies, i.e. systems x-M-# and x-W-#, the insulation layer is optional, or any INSULATION board or slip sheet may be used as separation layer prior to installing the approved roof assembly.
<i>Retro-Fit</i>	JM Retro-Fit Board
<i>RetroPlus</i>	JM RetroPlus Roof Board
<i>RSUA</i>	JM Roofing System Urethane Adhesive
<i>SECUROCK</i>	Min. 1/4-inch JM SECUROCK Gypsum-Fiber Roof Board
<i>UIA</i>	JM Urethane Insulation Adhesive
<i>UltraFast Fasteners & Plates</i>	JM UltraFast Fasteners (<i>Steel Deck</i> and <i>Wood Deck</i>) or JM All Purpose Fasteners (<i>Concrete Deck</i>) and JM UltraFast Metal Plates (Round or Square)
<i>UltraFast Fasteners & Plates (Square)</i>	JM UltraFast Fasteners (<i>Steel Deck</i> and <i>Wood Deck</i>) or JM All Purpose Fasteners (<i>Concrete Deck</i>) and JM UltraFast Metal Plates (Square)
<i>UltraFast Plates</i>	JM UltraFast Metal Plates (Round or Square)
<i>Vapor Barrier</i>	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
<i>VB DynaBase HW</i>	One ply of DynaBase HW torch adhered to concrete deck up to a maximum <i>MDP</i> as shown below. The <i>MDP</i> of the roof assembly shall be limited to the lesser of rating of the <i>Approved Assembly</i> and the <i>MDP</i> below. <ol style="list-style-type: none"> 1. Board layers adhered in <i>OSFA</i> applied at 12" o.c.; <i>MDP</i> = -172.5psf 2. Board layers adhered in <i>2-Part UIA</i> applied at 12" o.c.; <i>MDP</i> = -135psf 3. Board layers adhered in <i>RSUA</i> applied at 12" o.c.; <i>MDP</i> = -195psf
<i>VB DynaGrip Base SD/SA</i>	One ply of DynaGrip Base SD/SA self-adhered to concrete deck primed with ASTM D 41 primer up to a maximum <i>MDP</i> as shown below. The <i>MDP</i> of the roof assembly shall be limited to the lesser of rating of the <i>Approved Assembly</i> and the <i>MDP</i> below. <ol style="list-style-type: none"> 1. Board layers adhered in <i>OSFA</i> applied at 12" o.c.; <i>MDP</i> = -90psf 2. Board layers adhered in <i>2-Part UIA</i> applied at 12" o.c.; <i>MDP</i> = -97.5psf 3. Board layers adhered in <i>RSUA</i> applied at 12" o.c.; <i>MDP</i> = -82.5psf
<i>VB DynaWeld Base</i>	One ply of DynaGrip Base SD/SA self-adhered to concrete deck primed with ASTM D 41 primer up to a maximum <i>MDP</i> as shown below. The <i>MDP</i> of the roof assembly shall be limited to the lesser of rating of the <i>Approved Assembly</i> and the <i>MDP</i> below. <ol style="list-style-type: none"> 1. Board layers adhered in <i>OSFA</i> applied at 12" o.c.; <i>MDP</i> = -150psf 2. Board layers adhered in <i>2-Part UIA</i> applied at 12" o.c.; <i>MDP</i> = -120psf 3. Board layers adhered in <i>RSUA</i> applied at 12" o.c.; <i>MDP</i> = -195psf
<i>VB SAR</i>	One ply of JM Vapor Barrier SAR applied to concrete deck primed with JM SA Primer Low VOC up to a maximum <i>MDP</i> as shown below. The <i>MDP</i> of the roof assembly shall be limited to the lesser of rating of the <i>Approved Assembly</i> and the <i>MDP</i> below. <ol style="list-style-type: none"> 1. Board layers adhered to Vapor Barrier SAR in <i>OSFA</i> applied at 12" o.c.; <i>MDP</i> = -135psf 2. Board layers adhered to Vapor Barrier SAR in <i>2-Part UIA</i> applied at 12" o.c.; <i>MDP</i> = -82.5psf 3. Not for use with <i>RSUA</i>

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

APPROVED ASSEMBLIES FOR JM PVC SINGLE-PLY MEMBRANES

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

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

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 <i>CWF Deck</i> (New or Existing)
CW-M-#	Mechanically Fastened Assemblies over <i>CWF Deck</i> (New, Existing, or <i>Recover</i>)
G-A-#	Adhered Assemblies over Poured Gypsum Deck (New or Existing)
G-M-#	Mechanically Fastened Assemblies over Poured Gypsum Deck (New, Existing or <i>Recover</i>)
LC-A-#	Adhered Lightweight Concrete Assemblies 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>)
LS-A-#	Adhered Lightweight Concrete Assemblies 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>)
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 or Existing)
W-W-#	Induction Welded Assemblies over <i>Wood Deck</i> (New or Existing)

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

Adhered Assemblies over Concrete Deck (New or Existing)						
System No.	Vapor Barrier	Base Insulation	Top Insulation or Base Ply	Membrane	Membrane Attachment	MDP (psf)
C-A-1	OPTIONAL JM Vapor Barrier SA applied over deck primed with JM SA Primer Low VOC, VB DynaBase HW, VB DynaGrip SD/SA, or VB DynaWeld Base	Min. 1.5-inch ENRGY 3 adhered with OSFA, RSUA or 2-Part UIA at 12-inch o.c.	DensDeck Prime adhered with 2-Part UIA at 12-inch o.c.	JM PVC JM PVC SD Plus	PVC WBMA or PVC ASSBA	-45 (Lim. 9)
C-A-2	OPTIONAL JM Vapor Barrier SA applied over deck primed with JM SA Primer Low VOC, VB DynaBase HW, VB DynaGrip SD/SA, or VB DynaWeld Base	Min. 1.5-inch E3 in RSUA or 2-Part UIA applied 12-inch o.c.	OPTIONAL SECUROCK, RetroPlus, or JM InvinSA in RSUA or 2-Part UIA applied 12-inch o.c.	JM PVC FB	RSUA applied 12-inch o.c.	-67.5 (Lim. 9)
C-A-3	OPTIONAL DynaBase HW or JM Vapor Barrier SA applied over deck primed with JM SA Primer Low VOC	Min. 1.5-inch E3 in RSUA applied 12-inch o.c.	SECUROCK in OSFA, RSUA, or 2-Part UIA applied 12-inch o.c.	JM PVC FB	RSUA applied 12-inch o.c.	-67.5 (Lim. 9)
C-A-4	OPTIONAL VB SAR, VB DynaBase HW, or VB DynaWeld Base	Min. 1.5-inch E3 (no FR) in UIA, 2-Part UIA, OSFA or RSUA applied 12-inch o.c.	OPTIONAL JM InvinSA or ProtectoR HD in UIA or 2-Part UIA applied 12-inch o.c.	JM PVC	PVC MA (LowVOC)	-105 (Lim. 9)
C-A-5	OPTIONAL VB SAR, VB DynaBase HW, or VB DynaWeld Base	Min. 1.5-inch E3 (no FR) in UIA, 2-Part UIA, OSFA or RSUA applied 12-inch o.c.	OPTIONAL JM InvinSA or ProtectoR HD in UIA or 2-Part UIA applied 12-inch o.c.	JM PVC SD Plus	PVC MA (LowVOC)	-105 (Lim. 9)
C-A-6	OPTIONAL VB SAR, VB DynaBase HW, or VB DynaWeld Base	Min. 1.5-inch E3 (no FR) in UIA, 2-Part UIA, OSFA or RSUA applied 12-inch o.c.	OPTIONAL ProtectoR HD in UIA or 2-Part UIA applied 12-inch o.c.	JM PVC or JM PVC SD Plus	PVC ASSBA	-105 (Lim. 9)
C-A-7	OPTIONAL VB SAR, VB DynaBase HW, or VB DynaWeld Base	Min. 1.5-inch E3 (no FR) adhered with UIA, or 2-Part UIA, OSFA or RSUA at 12-inch o.c.	JM InvinSA or ProtectoR HD adhered with UIA at 12-inch o.c.	JM PVC	PVC MA (LowVOC) applied at 0.83 gal/100ft ²	-112.5 (Lim. 9)
C-A-8	OPTIONAL VB SAR, VB DynaBase HW, or VB DynaWeld Base	Min. 1.5-inch E3 (no FR) adhered with UIA, or 2-Part UIA, OSFA or RSUA at 12-inch o.c.	JM InvinSA or ProtectoR HD adhered with UIA at 12-inch o.c.	JM PVC SD Plus	PVC MA (LowVOC) applied at 0.83 gal/100ft ²	-112.5 (Lim. 9)

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

Adhered Assemblies over Concrete Deck (New or Existing)						
System No.	Vapor Barrier	Base Insulation	Top Insulation or Base Ply	Membrane	Membrane Attachment	MDP (psf)
C-A-9	OPTIONAL VB SAR, VB DynaBase HW, or VB DynaWeld Base	Min. 1.5-inch E3 (no FR) adhered with UIA, or 2-Part UIA, OSFA or RSUA at 12-inch o.c.	ProtectoR HD adhered with UIA at 12-inch o.c.	JM PVC or JM PVC SD Plus	PVC ASSBA	-112.5 (Lim. 9)
C-A-9	OPTIONAL VB SAR, VB DynaBase HW, or VB DynaWeld Base	Min. 1.5-inch E3 (no FR) or ProtectoR Foam applied in RSUA, OSFA or 2-Part UIA applied 12-inch o.c.	-	JM PVC FB	RSUA applied 4-inch o.c.	-112.5 (Lim 9)
C-A-10	- OPTIONAL VB DynaBase HW or VB DynaWeld Base	Min. 1.5-inch ENRGY 3 adhered with OSFA, RSUA or 2-Part UIA at 12-inch o.c.	Min. 1-inch ENRGY 3 adhered with OSFA, RSUA or 2-Part UIA at 12-inch o.c.	JM PVC JM PVC SD Plus	PVC WBMA, PVC MA (LowVOC) , or PVC ASSBA	-127.5 (Lim. 9)
C-A-11	OPTIONAL VB SAR, VB DynaBase HW, or VB DynaWeld Base	Min. 1.5-inch ENRGY 3 adhered with OSFA or RSUA at 12-inch o.c.	Min. 1-inch ENRGY 3 adhered with OSFA or RSUA at 12-inch o.c.	JM PVC JM PVC SD Plus	PVC WBMA, PVC MA (LowVOC) , or PVC ASSBA	-127.5 (Lim. 9)
C-A-12	- OPTIONAL VB DynaBase HW or VB DynaWeld Base	Min. 1.5-inch ENRGY 3 adhered with OSFA, RSUA or 2-Part UIA at 12-inch o.c.	ProtectoR HD adhered with OSFA, RSUA or 2-Part UIA at 12-inch o.c.	JM PVC FB	PVC WBMA	-142.5 (Lim. 9)
C-A-13	- OPTIONAL VB DynaBase HW or VB DynaWeld Base	Min. 1.5-inch ENRGY 3 adhered with OSFA, RSUA or 2-Part UIA at 12-inch o.c.	DensDeck Prime adhered with OSFA, RSUA or 2-Part UIA at 12-inch o.c.	JM PVC FB	PVC WBMA	-142.5 (Lim. 9)
C-A-14	- OPTIONAL VB DynaBase HW or VB DynaWeld Base	Min. 1.5-inch ENRGY 3 adhered with OSFA, RSUA or 2-Part UIA at 12-inch o.c.	Separator CGF adhered with OSFA, RSUA or 2-Part UIA at 12-inch o.c.	JM PVC FB	PVC WBMA	-150 (Lim. 9)
C-A-15	-	Min. 1.5-inch E3 (no FR), min. 1-inch Fesco, min. 1.5-inch Fesco Foam, or Retro-Fit in ASTM D 312 Type asphalt	-	JM PVC FB	ASTM D 312 Type IV Asphalt	-150 (Lim. 9)
C-A-16	OPTIONAL VB DynaBase HW or VB DynaWeld Base	Min. 1.5-inch ENRGY 3 adhered with OSFA or RSUA at 12-inch o.c.	Min. 1-inch ENRGY 3 adhered with OSFA or RSUA at 12-inch o.c.	JM PVC FB	2-Part UIA-C(S) or PVC WBMA	-180 (Lim. 9)
C-A-17	- OPTIONAL VB DynaBase HW or VB DynaWeld Base	Min. 1.5-inch ENRGY 3 adhered with OSFA or RSUA at 12-inch o.c.	Min. 1-inch ENRGY 3 adhered with OSFA or RSUA at 12-inch o.c.	JM PVC SD Plus	PVC ASSBA	-180 (Lim. 9)
C-A-18	OPTIONAL VB DynaBase HW or VB DynaWeld Base	Min. 1.5-inch E3 (no FR) adhered with OSFA or RSUA at 12-inch o.c.	ProtectoR HD adhered with RSUA at 12-inch o.c.	JM PVC JM PVC SD Plus	PVC WBMA or PVC MA (LowVOC)	-180 (Lim. 9)

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

Adhered Assemblies over Concrete Deck (New or Existing)						
System No.	Vapor Barrier	Base Insulation	Top Insulation or Base Ply	Membrane	Membrane Attachment	MDP (psf)
C-A-19	OPTIONAL VB DynaBase HW or VB DynaWeld Base	Min. 1.5-inch E3 (no FR) adhered with OSFA or RSUA at 12-inch o.c.	ProtectoR HD adhered with RSUA at 12-inch o.c.	JM PVC SD Plus	PVC ASSBA	-180 (Lim. 9)
C-A-20	OPTIONAL VB DynaBase HW or VB DynaWeld Base	Min. 1.5-inch E3 (no FR) adhered with OSFA or RSUA at 12-inch o.c.	ProtectoR HD adhered with RSUA at 12-inch o.c.	JM PVC FB	2-Part UIA-C(S) or PVC WBMA	-180 (Lim. 9)
C-A-21	OPTIONAL DynaBase HW torch adhered over deck primed with ASTM D 41 primer	Min. 1.5-inch E3 (no FR) in RSUA applied 12-inch o.c.	SECUROCK in RSUA applied 12-inch o.c.	JM PVC FB	2-Part UIA-C(S)	-180 (Lim. 9)
C-A-22	OPTIONAL VB DynaBase HW or VB DynaWeld Base	Min. 1.5-inch ENRGY 3 adhered with OSFA, RSUA or 2-Part UIA at 12-inch o.c.	ProtectoR HD adhered with OSFA, RSUA or 2-Part UIA at 12-inch o.c.	JM PVC JM PVC SD Plus	PVC WBMA	-180 (Lim. 9)
C-A-23	OPTIONAL VB DynaBase HW or VB DynaWeld Base	Min. 1.5-inch ENRGY 3 adhered with OSFA, RSUA or 2-Part UIA at 12-inch o.c.	ProtectoR HD adhered with OSFA, RSUA or 2-Part UIA at 12-inch o.c.	JM PVC SD Plus	PVC ASSBA	-180 (Lim. 9)
C-A-24	-	Min. 1.5-inch ENRGY 3 adhered with OSFA, RSUA or 2-Part UIA at 12-inch o.c.	Min. 1-inch ENRGY 3 adhered with OSFA, RSUA or 2-Part UIA at 12-inch o.c.	JM PVC FB	PVC WBMA	-187.5 (Lim. 9)
C-A-25	-	Min. 1.5-inch E3 (no FR) in 2-Part UIA, OSFA or RSUA applied 12-inch o.c. or ASTM D 312 Type IV Asphalt	-	JM PVC	PVC MA (LowVOC)	-217.5 (Lim. 9)
C-A-26	-	Min. 1.5-inch E3 (no FR) in 2-Part UIA, OSFA or RSUA applied 12-inch o.c. or ASTM D 312 Type IV Asphalt	-	JM PVC FB	ASTM D 312 Type IV Asphalt or 2-Part UIA-C(S)	-217.5 (Lim. 9)
C-A-27	-	-	-	JM PVC FB	PVC WBMA	-217.5 (Lim. 9)
C-A-28	DynaBase HW	SECUROCK in RSUA applied 12-inch o.c.	DynaBase HW	JM PVC FB	RSUA applied 12-inch o.c.	-217.5 (Lim. 9)
C-A-29	-	Min. 1.5-inch ENRGY 3 adhered with OSFA, RSUA or 2-Part UIA at 12-inch o.c.	Separator CGF adhered with OSFA, RSUA or 2-Part UIA at 12-inch o.c.	JM PVC JM PVC SD Plus	PVC WBMA	-225 (Lim. 9)
C-A-30	-	Min. 1.5-inch ENRGY 3 adhered with OSFA, RSUA or 2-Part UIA at 12-inch o.c.	Separator CGF adhered with OSFA, RSUA or 2-Part UIA at 12-inch o.c.	JM PVC SD Plus	PVC ASSBA	-225 (Lim. 9)

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

Adhered Assemblies over Concrete Deck (New or Existing)						
System No.	Vapor Barrier	Base Insulation	Top Insulation or Base Ply	Membrane	Membrane Attachment	MDP (psf)
C-A-31	-	Min. 1.5-inch ENRGY 3 or ProtectoR Foam in 2-Part UIA-C(B) applied 12-inch o.c.	-	JM PVC FB	2-Part UIA-C(S)	-277.5 (Lim. 9)
C-A-32	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 PVC JM PVC SD Plus	PVC MA (Low VOC)	-292.5 (Lim. 9)
C-A-33	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 PVC FB	2-Part UIA-C(S)	-292.5 (Lim. 9)
C-A-34	-	Min. 1-inch E3 C1 or E3 (less ENRGY 3 FR) in 2-Part UIA applied 12-inch o.c.	DensDeck Prime in 2-Part UIA, OSFA or RSUA applied 12-inch o.c.	JM PVC FB	2-Part UIA-C(S)	-337.5 (Lim. 9)
C-A-35	-	DEXcell CB or DEXcell FA in 2-Part UIA or OlyBond 500 applied 12-inch o.c.	-	JM PVC JM PVC SD Plus	PVC MA (Low VOC)	-390 (Lim. 9)
C-A-36	-	DEXcell FA in 2-Part UIA or OlyBond 500 applied 12-inch o.c.	-	JM PVC FB	2-Part UIA-C(S)	-390 (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	Min. 1.5-inch E3	Simultaneously secured with top layer	ProtectoR	AP Fasteners & Plates (Square) secured 1 fastener per 2.67ft ²	JM PVC	PVC MA (LowVOC) or PVC ASSBA	-30 (Lim. 7; Non-HVHZ)
C-AM-2	OPTIONAL Vapor Barrier	Min. 1.5-inch E3	Simultaneously secured with top layer	ProtectoR	AP Fasteners & Plates (Square) secured 1 fastener per 2.67ft ²	JM PVC SD Plus	PVC MA (LowVOC) or PVC ASSBA	-30 (Lim. 7; Non-HVHZ)
C-AM-3	OPTIONAL Vapor Barrier	Min. 1.5-inch E3	Simultaneously secured with top layer	ProtectoR	AP Fasteners & Plates (Square) secured 1 fastener per 2.67ft ²	JM PVC FB	RSUA applied 12-inch o.c. or 2-Part UIA-C(S)	-30 (Lim. 7; Non-HVHZ)

APPENDIX D – APPROVED ASSEMBLIES FOR JM PVC 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-4	OPTIONAL Vapor Barrier	Min. 1.5-inch E3	Simultaneously secured with top layer	ProtectoR	AP Fasteners & Plates (Square) secured 1 fastener per 4ft ²	JM PVC	PVC MA (LowVOC) or PVC ASSBA	-45 (Lim. 7; Non-HVHZ)
C-AM-5	OPTIONAL Vapor Barrier	Min. 1.5-inch E3	Simultaneously secured with top layer	ProtectoR	AP Fasteners & Plates (Square) secured 1 fastener per 4ft ²	JM PVC SD Plus	PVC MA (LowVOC) or PVC ASSBA	-45 (Lim. 7; Non-HVHZ)
C-AM-6	OPTIONAL Vapor Barrier	Min. 1.5-inch E3	Simultaneously secured with top layer	ProtectoR	AP Fasteners & Plates (Square) secured 1 fastener per 4ft ²	JM PVC FB	RSUA applied 12-inch o.c. or 2-Part UIA-C(S)	-45 (Lim. 7; Non-HVHZ)
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 PVC or PVC SD Plus	PVC WBMA or PVC ASSBA	-45 (Lim. 7)
C-AM-8	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 PVC FB	RSUA applied 12-inch o.c., or PVC WBMA	-45 (Lim. 7)
C-AM-9	OPTIONAL Vapor Barrier	Min. 2-inch E3 or E3 C1	AP 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 PVC FB	RSUA 12-inch o.c.	-45 (Lim. 7)
C-AM-10	OPTIONAL Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 2-inch ENRGY 3	AP Fasteners & Plates secured 8 per 4-ft x 8-ft board Pattern #2	JM PVC or JM PVC SD Plus	PVC ASSBA	-45 (Lim. 7; Non-HVHZ)
C-AM-11	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	Simultaneously secured with top layer	SECUROCK	AP Fasteners & Plates (Square) secured 1 fastener per 1.33ft ²	JM PVC or JM PVC SD Plus	PVC MA (LowVOC) applied at 1-1.1 gal/100ft ² or PVC ASSBA	-52.5 (Lim. 7)
C-AM-12	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	Simultaneously secured with top layer	SECUROCK	AP Fasteners & Plates (Square) secured 1 fastener per 1.33ft ²	JM PVC FB	2-Part UIA-C(S)	-52.5 (Lim. 7)

APPENDIX D – APPROVED ASSEMBLIES FOR JM PVC 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-13	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	Simultaneously secured with top layer	SECUROCK	AP Fasteners & Plates (Square) secured 1 fastener per 1.33ft ²	Base Ply: DynaBase HW Membrane: JM PVC FB	Base Ply: Torch Adhered Membrane: RSUA applied 12-inch o.c.	-52.5 (Lim. 7)
C-AM-14	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 PVC or JM PVC SD Plus	PVC MA (LowVOC) applied 1-1.1 gal/100ft ² or PVC ASSBA	-52.5 (Lim. 7)
C-AM-15	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.	Base Ply: DynaBase HW Membrane: JM PVC FB	Base Ply: Torch Adhered Membrane: RSUA applied 12-inch o.c.	-52.5 (Lim. 7)
C-AM-16	OPTIONAL Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 1.5-inch E3	AP Fasteners & Plates secured 1 fastener per 1.78ft ²	JM PVC FB	ASTM D 312 Type IV Asphalt	-52.5 (Lim. 7)
C-AM-17	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	Simultaneously secured with top layer	DensDeck Prime	AP Fasteners & Plates (Square) secured 1 fastener per 1.78ft ²	JM PVC or JM PVC SD Plus	PVC MA (LowVOC), PVC WBMA, or PVC ASSBA	-52.5 (Lim. 7)
C-AM-18	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	Simultaneously secured with top layer	DensDeck Prime	AP Fasteners & Plates (Square) secured 1 fastener per 1.78ft ²	JM PVC FB	ASTM D 312 Type IV Asphalt or 2-Part UIA-C(S)	-52.5 (Lim. 7)
C-AM-19	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	Simultaneously secured with top layer	SECUROCK	AP Fasteners & Plates (Square) secured 1 fastener per 1.00ft ²	JM PVC or JM PVC SD Plus	PVC MA (LowVOC) applied at 1-1.1 gal/100ft ²	-60 (Lim. 7)
C-AM-20	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	Simultaneously secured with top layer	SECUROCK	AP Fasteners & Plates (Square) secured 1 fastener per 1.00ft ²	JM PVC FB	2-Part UIA-C(S)	-60 (Lim. 7)
C-AM-21	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch ENRGY 3	AP 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.	Base Ply: DynaBase HW Membrane: JM PVC FB	Base Ply: Torch Adhered Membrane: RSUA applied 12-inch o.c.	-60 (Lim. 7)

APPENDIX D – APPROVED ASSEMBLIES FOR JM PVC 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-22	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch ENRGY 3	AP 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 PVC or JM PVC SD Plus	PVC MA (LowVOC) applied at 1-1.1 gal/100ft ²	-60 (Lim. 7)
C-AM-23	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch ENRGY 3	AP 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 PVC FB	2-Part UIA-C(S)	-60 (Lim. 7)
C-AM-24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch ENRGY 3	Simultaneously secured with top layer	SECUROCK	AP Fasteners & Plates (Square) secured 1 fastener per 1.78ft ²	Base Ply: DynaBase HW Membrane: JM PVC FB	Base Ply: Torch Adhered Membrane: RSUA applied 12-inch o.c.	-60 (Lim. 7)
C-AM-25	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 PVC FB	2-Part UIA-C(S)	-60 (Lim. 7)
C-AM-26	OPTIONAL Vapor Barrier	Min. 2-inch E3 or E3 C1	AP 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 PVC FB	2-Part UIA-C(S)	-60 (Lim. 7)
C-AM-27	OPTIONAL Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 2-inch ENRGY 3 or ProtectoR Foam	AP Fasteners & Plates secured 1 fastener per 1.6ft ²	JM PVC FB	2-Part UIA-C(S)	-60 (Lim. 7)
C-AM-28	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	AP Fasteners & Plates secured 1 fastener per 1ft ²	SECUROCK, RetroPlus, or JM InvinSA	RSUA or 2-Part UIA applied 6-inch o.c.	JM PVC FB	RSUA applied 12-inch o.c.	-67.5 (Lim. 7)
C-AM-29	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	AP Fasteners & Plates secured 1 fastener per 1ft ²	SECUROCK	OSFA, RSUA or 2-Part UIA applied 6-inch o.c.	Base Ply: DynaBase HW Membrane: JM PVC FB	Base Ply: Torch Adhered Membrane: RSUA applied 12-inch o.c.	-67.5 (Lim. 7)
C-AM-30	OPTIONAL Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 2-inch ENRGY 3 CGF or ENRGY 3 FR	AP Fasteners & Plates (Square) secured 1 fastener per 2.0ft ²	JM PVC or JM PVC SD Plus	PVC MA (LowVOC) or PVC ASSBA	-67.5 (Lim. 7)
C-AM-31	OPTIONAL Vapor Barrier	Min. 2-inch E3 or E3 C1	AP Fasteners & Plates 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 PVC FB	RSUA 12-inch o.c.	-67.5 (Lim. 7)

APPENDIX D – APPROVED ASSEMBLIES FOR JM PVC 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-32	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	Simultaneously secured with top layer	Min 0.5-inch DensDeck Prime	AP Fasteners & Plates (Square) secured 1 fastener per 1.78ft ²	JM PVC or JM PVC SD Plus	PVC MA (LowVOC), PVC WBMA, or PVC ASSBA	-67.5 (Lim. 7)
C-AM-33	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	Simultaneously secured with top layer	Min 0.5-inch DensDeck Prime	AP Fasteners & Plates (Square) secured 1 fastener per 1.78ft ²	JM PVC FB	ASTM D 312 Type IV Asphalt or 2-Part UIA-C(S)	-67.5 (Lim. 7)
C-AM-34	OPTIONAL Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 2-inch E3 (no AGF), E3 C1, or ProtectoR Foam	AP Fasteners & Plates secured 1 fastener per 1.6ft ²	JM PVC or JM PVC SD Plus	PVC MA (LowVOC) or PVC ASSBA	-75 (Lim. 7)
C-AM-35	OPTIONAL Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 2-inch E3 (no AGF) or E3 C1	AP Fasteners & Plates secured 1 fastener per 1.6ft ²	JM PVC FB	ASTM D 312 Type IV Asphalt or 2-Part UIA-C(S)	-75 (Lim. 7)
C-AM-36	OPTIONAL Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 2-inch Invinsa Foam	AP Fasteners & Plates (Square) secured 1 fastener per 2.0ft ²	JM PVC SD Plus	PVC MA (LowVOC)	-75 (Lim. 7)
C-AM-37	OPTIONAL Vapor Barrier	Min. 1.5-inch E3	Simultaneously secured with top layer	Min. 0.5-inch SECUROCK	AP Fasteners & Plates (Square) secured 1 fastener per 1.6ft ²	JM PVC SD Plus	PVC MA (LowVOC) or PVC ASSBA	-75 (Lim. 7)
C-AM-38	OPTIONAL Vapor Barrier	Min. 2-inch E3 or E3 C1	AP Fasteners & Plates secured 1 fastener per 1.6ft ²	Min. 0.5-inch ProtectoR HD, DensDeck Prime, or SECUROCK	OSFA, RSUA, 2-Part UIA-C(B), or 2-Part UIA applied 6-inch o.c.	JM PVC or PVC SD Plus	PVC ASSBA	-82.5 (Lim. 7)
C-AM-39	OPTIONAL Vapor Barrier	Min. 2-inch E3 or E3 C1	AP Fasteners & Plates secured 1 fastener per 1.6ft ²	Min. 0.5-inch ProtectoR HD, DensDeck Prime, DEXcell FA, or SECUROCK	OSFA, RSUA, 2-Part UIA-C(B), or 2-Part UIA applied 6-inch o.c.	JM PVC or PVC SD Plus	PVC MA (LowVOC)	-82.5 (Lim. 7)
C-AM-40	OPTIONAL Vapor Barrier	Min. 2-inch E3 or E3 C1	AP Fasteners & Plates 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 PVC FB	2-Part UIA-C(S)	-82.5 (Lim. 7)
C-AM-41	OPTIONAL Vapor Barrier	Min. 2-inch E3 or E3 C1	AP 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 PVC or PVC SD Plus	PVC MA (LowVOC)	-82.5 (Lim. 7)
C-AM-42	OPTIONAL Vapor Barrier	Min. 2-inch E3 or E3 C1	AP Fasteners & Plates secured 1 fastener per 1.6ft ²	Min. 1.5-inch E3 (no AGF) or E3 C1	OSFA, RSUA, 2-Part UIA-C(B), or 2-Part UIA applied 6-inch o.c.	JM PVC or PVC SD Plus	PVC ASSBA	-82.5 (Lim. 7)

APPENDIX D – APPROVED ASSEMBLIES FOR JM PVC 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-43	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	Simultaneously secured with top layer	Min 0.625-inch DensDeck Prime	AP Fasteners & Plates (Square) secured 1 fastener per 1.33ft ²	JM PVC or JM PVC SD Plus	PVC MA (LowVOC) or PVC WBMA	-90 (Lim. 7)
C-AM-44	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	Simultaneously secured with top layer	Min 0.625-inch DensDeck Prime	AP Fasteners & Plates (Square) secured 1 fastener per 1.33ft ²	JM PVC FB	ASTM D 312 Type IV Asphalt	-90 (Lim. 7)
C-AM-45	OPTIONAL Vapor Barrier	Min. 1.5-inch E3	Simultaneously secured with top layer	Min. 0.5-inch DEXcell FA	AP Fasteners & Plates (Square) secured 1 fastener per 1.0ft ²	JM PVC or JM PVC SD Plus	PVC MA (LowVOC) applied at 1.0 gal/100ft ²	-105 (Lim. 7)
C-AM-46	OPTIONAL Vapor Barrier	Min. 1.5-inch E3	Simultaneously secured with top layer	Min. 0.5-inch DEXcell FA	AP Fasteners & Plates (Square) secured 1 fastener per 1.0ft ²	JM PVC FB	ASTM D 312 Type IV Asphalt or 2-Part UIA-C(S)	-105 (Lim. 7)
C-AM-47	OPTIONAL Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 2-inch ENRGY 3 CGF or ENRGY 3 FR	AP Fasteners & Plates (Square) secured 1 fastener per 1.33ft ²	JM PVC SD Plus	PVC MA (LowVOC)	-105 (Lim. 7)
C-AM-48	OPTIONAL Vapor Barrier	Min. 1.5-inch E3	Simultaneously secured with top layer	Min. 0.5-inch DensDeck Prime	AP Fasteners & Plates (Square) secured 1 fastener per 1.0ft ²	JM PVC or JM PVC SD Plus	PVC MA (LowVOC)	-112.5 (Lim. 7)
C-AM-49	OPTIONAL Vapor Barrier	Min. 1.5-inch E3	Simultaneously secured with top layer	Min. 0.5-inch DensDeck Prime	AP Fasteners & Plates (Square) secured 1 fastener per 1.0ft ²	JM PVC FB	ASTM D 312 Type IV Asphalt or 2-Part UIA-C(S)	-112.5 (Lim. 7)
C-AM-50	OPTIONAL Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 2-inch E3 (no AGF), E3 C1, or Protector Foam	AP Fasteners & Plates secured 1 fastener per 1.0ft ²	JM PVC or JM PVC SD Plus	PVC MA (LowVOC)	-120 (Lim. 7)
C-AM-51	OPTIONAL Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 2-inch E3 (no AGF) or E3 C1	AP Fasteners & Plates secured 1 fastener per 1.0ft ²	JM PVC FB	ASTM D 312 Type IV Asphalt or 2-Part UIA-C(S)	-120 (Lim. 7)
C-AM-52	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 PVC or PVC SD Plus	PVC MA (LowVOC)	-120 (Lim. 7)
C-AM-53	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 PVC FB	ASTM D 312 Type IV Asphalt	-120 (Lim. 7)

APPENDIX D – APPROVED ASSEMBLIES FOR JM PVC 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-54	OPTIONAL Vapor Barrier	Min. 2-inch E3 or E3 C1	AP 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 PVC or PVC SD Plus	PVC MA (LowVOC)	-120 (Lim. 7)
C-AM-55	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	Simultaneously secured with top layer	Min. 0.5-inch DEXcell FA	AP Fasteners & Plates secured 1 fastener per 1ft ²	JM PVC FB	2-Part UIA-C(S)	-135 (Lim. 7)

Mechanically Fastened Assemblies over Concrete Deck (New or Existing)							
System No.	Base Insulation	Base Insulation Attachment	Top Insulation	Top Insulation Attachment	Membrane	Membrane Attachment	MDP (psf)
C-M-1	OPTIONAL INSULATION under min. 1-inch E3	Preliminarily Secured or secured with top layer	OPTIONAL Cover Board	Preliminarily Secured	JM PVC	Attached in-lap 6-inch o.c. with Extra HL Fastener & Plates; Fastener rows max. 114-inch o.c.	-37.5 (Lim. 7; Non-HVHZ)
C-M-2	OPTIONAL INSULATION under min. 1-inch E3	Preliminarily Secured or secured with top layer	OPTIONAL Cover Board	Preliminarily Secured	JM PVC	Attached in-lap 12-inch o.c. with HL Fasteners & Plates; Min. 5-inch wide side laps; Fastener rows max. 73-inch o.c.	-45 (Lim. 7)
C-M-3	OPTIONAL INSULATION under min. 1-inch E3	Preliminarily Secured or secured with top layer	OPTIONAL Cover Board	Preliminarily Secured	JM PVC or PVC SD Plus	Attached in-lap 6-inch o.c. with HL Fasteners & Plates; Min. 6-inch wide side laps; Fastener rows max. 114-inch o.c.	-45 (Lim. 7)
C-M-4	OPTIONAL INSULATION under min. 1-inch E3	Preliminarily Secured or secured with top layer	OPTIONAL Cover Board	Preliminarily Secured	JM PVC SD Plus	Attached in-lap 12-inch o.c. with HL Fasteners & Plates; Min. 6-inch wide side laps; Fastener rows max. 54-inch o.c.	-45 (Lim. 7)
C-M-5	OPTIONAL INSULATION under min. 1.5-inch E3	Preliminarily Secured or secured with top layer	OPTIONAL Cover Board	Preliminarily Secured	JM PVC	Attached in-lap 6-inch o.c. with HL Fasteners & Plates; Fastener rows max. 72-inch o.c.	-45 (Lim. 7)
C-M-6	OPTIONAL INSULATION under min. 1.5-inch E3	Preliminarily Secured or secured with top layer	OPTIONAL Cover Board	Preliminarily Secured	JM PVC (Min. 60 mil)	Attached in-lap 12-inch o.c. with HL Fasteners & Plates; Min. 5-inch wide side laps with min. 2-inch wide heat welds; Fastener rows max. 73-inch o.c.	-52.5 (Lim. 7)
C-M-7	OPTIONAL INSULATION under min. 1.5-inch E3	Preliminarily Secured or secured with top layer	OPTIONAL Cover Board	Preliminarily Secured	JM PVC FB/ DynaFast	HL Fasteners & Plates spaced 6-inch o.c within each min. 4-inch heat welded side laps in rows max. 70-inch o.c.	-52.5 (Lim. 9)

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

Mechanically Fastened Assemblies over Concrete Deck (New or Existing)							
System No.	Base Insulation	Base Insulation Attachment	Top Insulation	Top Insulation Attachment	Membrane	Membrane Attachment	MDP (psf)
C-M-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 PVC	Attached in-lap 6-inch o.c. with <i>HL Fasteners & Plates</i> ; Min. 5-inch wide side laps; Fastener rows max. 73-inch o.c.	-60 (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 PVC SD Plus	Attached in-lap 6-inch o.c. with <i>HL Fasteners & Plates</i> ; Min. 6-inch wide side laps; Fastener rows max. 54-inch o.c.	-60 (Lim. 7)
C-M-10	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 PVC or JM PVC FB	Attached in-lap 6-inch o.c. with <i>HL Fasteners & Plates</i> ; Min. 4.5-inch wide side laps with min. 2-inch wide heat welds; Fastener rows max. 114-inch o.c.	-60 (Lim. 7)
C-M-11	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 PVC	Attached in-lap 6-inch o.c. with <i>HL Fasteners & Plates</i> ; Min. 5.5-inch wide side laps with min. 2-inch wide heat welds; Fastener rows max. 114-inch o.c.	-60 (Lim. 7)
C-M-12	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 PVC	Attached in-lap 6-inch o.c. with Extra High Load Fasteners & OMG Super XHD 2-3/4 Barbed Plates; Min. 5.5-inch wide side laps with min. 2-inch wide heat welds; Fastener rows max. 114-inch o.c.	-60 (Lim. 7)
C-M-13	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 PVC FB/ DynaFast	<i>APB Fasteners & Plates</i> spaced 6-inch o.c within each min. 4-inch heat welded side lap.	-60 (Lim. 9)
C-M-14	OPTIONAL INSULATION under min. 1-inch E3	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	JM PVC FB/ DynaFast	<i>HL Fasteners & Plates</i> spaced 12-inch o.c within each min. 4-inch heat welded side lap.	-60 (Lim. 9)
C-M-15	OPTIONAL INSULATION under min. 1-inch E3	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	JM PVC FB/ DynaFast	High Load LH Fasteners and Polymer Membrane Batten OR High Load Fasteners and Deep Well Batten strip spaced 6-inch o.c. within min. 4-inch heat welded side laps in rows max. 71-inch o.c.	-60 (Lim. 9)
C-M-16	OPTIONAL INSULATION under min. 1-inch E3	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	JM PVC (Min. 60 mil)	Attached in-lap 6-inch o.c. with <i>HL Fasteners & Plates</i> ; Min. 6-inch wide side laps with min. 2-inch wide heat welds; Fastener rows max. 72-inch o.c.	-75 (Lim. 7)

APPENDIX D – APPROVED ASSEMBLIES FOR JM PVC 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-1	OPTIONAL INSULATION under min. 1-inch E3	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	JM PVC SD Plus (Min. 60 mil)	Induction welded to JM PVC RhinoPlates with All Purpose Fasteners placed max. 12" o.c. in rows max. 72" o.c.	-37.5 (Lim. 7; Non-HVHZ)
C-W-2	INSULATION	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	Attached with ISOWELD-#14 or ISOWELD-#15 spaced 12" o.c. in rows 60" o.c.	JM PVC JM PVC SD Plus (Min. 60 mil)	Induction welded to Isoweld plates	-37.5 (Lim. 7; Non-HVHZ)
C-W-3	INSULATION	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	Attached with ISOWELD-#14 or ISOWELD-#15 spaced in a 2-ft x 3-ft staggered grid	JM PVC JM PVC SD Plus (Min. 60 mil)	Induction welded to Isoweld plates	-37.5 (Lim. 7; Non-HVHZ)
C-W-4	INSULATION	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	Attached with ISOWELD-#14 or ISOWELD-#15 spaced in a 2-ft x 3-ft staggered grid	JM PVC JM PVC SD Plus (Min. 60 mil)	Induction welded to Isoweld plates	-37.5 (Lim. 7; Non-HVHZ)
C-W-5	OPTIONAL INSULATION under min. 1-inch E3	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	JM PVC SD Plus (Min. 60 mil)	Induction welded to JM PVC RhinoPlates with All Purpose Fasteners placed max. 12" o.c. in rows max. 60" o.c.	-45 (Lim. 7)
C-W-6	INSULATION	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	Attached with ISOWELD-#14 or ISOWELD-#15 spaced 24" o.c. in rows 24" o.c.	JM PVC JM PVC SD Plus (Min. 60 mil)	Induction welded to Isoweld plates	-45 (Lim. 7)
C-W-7	INSULATION	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	Attached with ISOWELD-#14 or ISOWELD-#15 spaced 12" o.c. in rows 60" o.c.	JM PVC JM PVC SD Plus (Min. 60 mil)	Induction welded to Isoweld plates	-45 (Lim. 7)
C-W-8	OPTIONAL INSULATION under min. 1-inch E3	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	Attached with All Purpose Fasteners and JM PVC RhinoPlates in a 2-ft x 2-ft staggered grid pattern	JM PVC SD Plus (Min. 60 mil)	Induction welded to JM PVC RhinoPlates	-52.5 (Lim. 7)
C-W-9	INSULATION	<i>Preliminarily Secured</i> 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 PVC JM PVC SD Plus (Min. 60 mil)	Induction welded to Isoweld plates	-60 (Lim. 7)
C-W-10	OPTIONAL INSULATION under min. 1-inch E3	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	Attached with All Purpose Fasteners and JM PVC RhinoPlates at a rate of 8 per 4-ft x 8-ft board Pattern #1 (1 fastener per 4.0-ft ²)	JM PVC (Min. 60 mil)	Induction welded to JM PVC RhinoPlates	-67.5 (Lim. 7)

APPENDIX D – APPROVED ASSEMBLIES FOR JM PVC 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-11	INSULATION	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	Attached with ISOWELD-#14 or ISOWELD-#15 spaced 18" o.c. in rows 24" o.c.	JM PVC JM PVC SD Plus (Min. 60 mil)	Induction welded to Isoweld plates	-67.5 (Lim. 7)
C-W-12	OPTIONAL INSULATION under min. 1-inch E3	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	JM PVC SD Plus (Min. 60 mil)	Induction welded to JM PVC RhinoPlates with All Purpose Fasteners placed max. 6" o.c. in rows max. 72" o.c.	-82.5 (Lim. 7)
C-W-13	INSULATION	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	Attached with ISOWELD-#14 or ISOWELD-#15 spaced in a 1.5-ft x 2-ft staggered grid	JM PVC JM PVC SD Plus (Min. 60 mil)	Induction welded to Isoweld plates	-82.5 (Lim. 7)
C-W-14	INSULATION	<i>Preliminarily Secured</i> 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 PVC JM PVC SD Plus (Min. 60 mil)	Induction welded to Isoweld plates	-82.5 (Lim. 7)
C-W-15	OPTIONAL INSULATION under min. 1-inch E3	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	JM PVC SD Plus (Min. 60 mil)	Induction welded to JM PVC RhinoPlates with All Purpose Fasteners placed max. 6" o.c. in rows max. 60" o.c.	-90 (Lim. 7)
C-W-16	OPTIONAL INSULATION under min. 1-inch E3	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	Attached with All Purpose Fasteners and JM PVC RhinoPlates at a rate of 15 per 4-ft x 8-ft board (1 fastener per 2.13-ft ²)	JM PVC (Min. 60 mil)	Induction welded to JM PVC RhinoPlates	-90 (Lim. 7)
C-W-17	INSULATION	<i>Preliminarily Secured</i> 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 PVC JM PVC SD Plus (Min. 60 mil)	Induction welded to Isoweld plates	-90 (Lim. 7)

Adhered Assemblies over CWF Deck (New or Existing)							
System No.	Base Insulation	Base Insulation Attachment	Top Insulation	Top Insulation Attachment	Membrane	Membrane Attachment	MDP (psf)
CW-A-1	OPTIONAL Min. 1-inch ENRGY 3	OSFA applied 12-inch o.c.	JM Invinsa or ProtectoR HD	OSFA or 2-Part UIA applied 12-inch o.c.	JM PVC	PVC MA (LowVOC) applied at 0.83 gal/100ft ² or PVC WBMA	-112.5 (Lim. 9)
CW-A-2	OPTIONAL Min. 1-inch ENRGY 3	OSFA applied 12-inch o.c.	JM Invinsa or ProtectoR HD	OSFA or 2-Part UIA applied 12-inch o.c.	JM PVC SD Plus	PVC MA (LowVOC) applied at 0.83 gal/100ft ² or PVC WBMA	-112.5 (Lim. 9)
CW-A-3	OPTIONAL Min. 1-inch ENRGY 3	OSFA applied 12-inch o.c.	SECUROCK	RSUA, OSFA, or 2-Part UIA applied 12-inch o.c.	JM PVC or JM PVC SD Plus	PVC MA (LowVOC)	-140 (Lim. 9)

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

Adhered Assemblies over CWF Deck (New or Existing)							
System No.	Base Insulation	Base Insulation Attachment	Top Insulation	Top Insulation Attachment	Membrane	Membrane Attachment	MDP (psf)
CW-A-4	Min. 1-inch ENRGY 3 or ProtectoR Foam	OSFA applied 12-inch o.c.	-	-	JM PVC	PVC MA (LowVOC) applied at 0.83 gal/100ft ²	-157.5 (Lim. 9)
CW-A-5	Min. 1-inch ENRGY 3	OSFA applied 12-inch o.c.	-	-	JM PVC SD Plus	PVC MA (LowVOC) applied at 0.83 gal/100ft ²	-157.5 (Lim. 9)
CW-A-6	Min. 475 psi Celcore MF with HS Rheology Admixture installed	Poured-in-place	-	-	JM PVC FB	RSUA applied 12-inch o.c.	-167.5 (Lim. 9)
CW-A-7	Min. 475 psi Celcore MF with HS Rheology Admixture installed	Poured-in-place	-	-	JM PVC FB	RSUA applied 4-inch o.c.	-197.5 (Lim. 9)

Mechanically Fastened Assemblies over CWF Deck (New or Existing)							
System No.	Base Insulation	Base Insulation Attachment	Top Insulation	Top Insulation Attachment	Membrane	Membrane Attachment	MDP (psf)
CW-M-1	-	-	-	-	JM PVC FB/ DynaFast	1.8" Twin Loc-Nail without integrated plate fastened 6-inch o.c. along Straight Line Batten Bar within min. 4-inch heat welded side laps and in one intermediate row centered between side laps	-60 (Lim. 9)

Adhered Assemblies over Poured Gypsum Deck (New or Existing)							
System No.	Base Insulation	Base Insulation Attachment	Top Insulation	Top Insulation Attachment	Membrane	Membrane Attachment	MDP (psf)
G-A-1	Min. 1.5-inch E3 (no FR) or ProtectoR Foam	2-Part UIA applied 12-inch o.c.	-	-	JM PVC	PVC MA (LowVOC) or PVC ASSBA (E3 only, no AGF)	-60 (Lim. 9)
G-A-2	Min. 1.5-inch E3 (no FR) or ProtectoR Foam	2-Part UIA applied 12-inch o.c.	-	-	JM PVC FB	RSUA applied 12-inch o.c.	-60 (Lim. 9)
G-A-3	Min. 1.5-inch E3 (no FR)	2-Part UIA applied 12-inch o.c.	JM Invinsa or ProtectoR HD	2-Part UIA applied 12-inch o.c.	JM PVC	PVC MA (LowVOC) applied at 0.83 gal/100ft ² , PVC WBMA or PVC ASSBA (no Invinsa)	-60 (Lim. 9)
G-A-4	Min. 1.5-inch E3 (no FR)	2-Part UIA applied 12-inch o.c.	JM Invinsa or ProtectoR HD	2-Part UIA applied 12-inch o.c.	JM PVC SD Plus	PVC MA (LowVOC) applied at 0.83 gal/100ft ² , PVC WBMA or PVC ASSBA (no Invinsa)	-60 (Lim. 9)

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

Adhered Assemblies over Poured Gypsum Deck (New or Existing)							
System No.	Base Insulation	Base Insulation Attachment	Top Insulation	Top Insulation Attachment	Membrane	Membrane Attachment	MDP (psf)
G-A-5	Min. 1.5-inch E3 (no FR)	2-Part UIA applied 12-inch o.c.	SECUROCK	RSUA or 2-Part UIA applied 12-inch o.c.	JM PVC or JM PVC SD Plus	PVC MA (LowVOC), PVC WBMA or PVC ASSBA	-60 (Lim. 9)
G-A-6	Min. 1-inch ENRGY 3 or ProtectorR Foam	OSFA applied 12-inch o.c.	-	-	JM PVC or JM PVC SD Plus	PVC MA (LowVOC); Applied 1.67 gal/100ft ² , PVC WBMA or PVC ASSBA (no ProtectorR Foam)	-77.5 (Lim. 9)
G-A-7	Min. 1-inch ENRGY 3	OSFA applied 12-inch o.c.	JM Invinsa or ProtectorR HD	OSFA applied 12-inch o.c.	JM PVC	PVC MA (LowVOC) applied at 0.83 gal/100ft ² , PVC WBMA or PVC ASSBA (no Invinsa)	-77.5 (Lim. 9)
G-A-8	Min. 1-inch ENRGY 3	OSFA applied 12-inch o.c.	JM Invinsa or ProtectorR HD	OSFA applied 12-inch o.c.	JM PVC SD Plus	PVC MA (LowVOC) applied at 0.83 gal/100ft ² , PVC WBMA or PVC ASSBA (no Invinsa)	-77.5 (Lim. 9)
G-A-9	Min. 1-inch ENRGY 3	OSFA applied 12-inch o.c.	JM Invinsa or ProtectorR HD	OSFA applied 12-inch o.c.	JM PVC FB	2-Part UIA-C(S) or PVC WBMA	-77.5 (Lim. 9)
G-A-10	OPTIONAL Min. 1-inch ENRGY 3	OSFA applied 12-inch o.c.	SECUROCK	RSUA or OSFA applied 12-inch o.c.	JM PVC or JM PVC SD Plus	PVC MA (LowVOC) or PVC ASSBA	-77.5 (Lim. 9)
G-A-11	OPTIONAL Min. 1-inch ENRGY 3	OSFA applied 12-inch o.c.	SECUROCK	RSUA or OSFA applied 12-inch o.c.	JM PVC FB	2-Part UIA-C(S)	-77.5 (Lim. 9)
G-A-12	JM Invinsa	OSFA applied 12-inch o.c.	-	-	JM PVC	PVC MA (LowVOC) applied at 0.83 gal/100ft ² or PVC WBMA	-92.5 (Lim. 9)
G-A-13	JM Invinsa	OSFA applied 12-inch o.c.	-	-	JM PVC SD Plus	PVC MA (LowVOC) applied at 0.83 gal/100ft ² or PVC WBMA	-92.5 (Lim. 9)
G-A-14	Min. 1.5-inch E3 (no FR)	UIA at 12-inch o.c.	JM Invinsa or ProtectorR HD	UIA applied 12-inch o.c.	JM PVC	PVC MA (LowVOC) applied at 0.83 gal/100ft ² or PVC WBMA	-112.5 (Lim. 9)
G-A-15	Min. 1.5-inch E3 (no FR)	UIA at 12-inch o.c.	ProtectorR HD	UIA applied 12-inch o.c.	JM PVC	PVC ASSBA	-112.5 (Lim. 9)
G-A-16	Min. 1.5-inch E3 (no FR)	UIA at 12-inch o.c.	JM Invinsa or ProtectorR HD	UIA applied 12-inch o.c.	JM PVC SD Plus	PVC MA (LowVOC) applied at 0.83 gal/100ft ² or PVC WBMA	-112.5 (Lim. 9)
G-A-17	Min. 1.5-inch E3 (no FR)	UIA at 12-inch o.c.	ProtectorR HD	UIA applied 12-inch o.c.	JM PVC SD Plus	PVC ASSBA	-112.5 (Lim. 9)
G-A-18	Min. 1.5-inch ENRGY 3 or ProtectorR Foam	OSFA applied 12-inch o.c.	-	-	JM PVC SD Plus	PVC ASSBA	-142.5 (Lim. 9; Non-HVHZ)
G-A-19	Min. 1.5-inch E3 or ProtectorR Foam	OSFA applied 12-inch o.c.	-	-	JM PVC FB	2-Part UIA-C(S)	-150 (Lim. 9; Non-HVZH)

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

Adhered Assemblies over Poured Gypsum Deck (New or Existing)							
System No.	Base Insulation	Base Insulation Attachment	Top Insulation	Top Insulation Attachment	Membrane	Membrane Attachment	MDP (psf)
G-A-20	Min. 1.5-inch ENRGY 3 or ProtectoR Foam	OSFA applied 12-inch o.c.	-	-	JM PVC or JM PVC SD Plus	PVC MA (LowVOC)	-150 (Lim. 9; Non-HVHZ)
G-A-21	Min. 1.5-inch ENRGY 3 or ProtectoR Foam	OSFA applied 12-inch o.c.	-	-	JM PVC SD Plus	PVC ASSBA	-150 (Lim. 9; Non-HVHZ)
G-A-22	OPTIONAL Min. 1.5-inch ENRGY 3	OSFA applied 12-inch o.c.	ProtectoR	OSFA applied 12-inch o.c.	JM PVC FB	2-Part UIA-C(S)	-150 (Lim. 9; Non-HVHZ)
G-A-23	OPTIONAL Min. 1.5-inch ENRGY 3	OSFA applied 12-inch o.c.	ProtectoR	OSFA applied 12-inch o.c.	JM PVC or JM PVC SD Plus	PVC WBMA or PVC MA (LowVOC)	-150 (Lim. 9; Non-HVHZ)
G-A-24	OPTIONAL Min. 1.5-inch ENRGY 3	OSFA applied 12-inch o.c.	ProtectoR	OSFA applied 12-inch o.c.	JM PVC SD Plus	PVC ASSBA	-150 (Lim. 9; Non-HVHZ)
G-A-25	OPTIONAL Min. 1.5-inch ENRGY 3	OSFA applied 12-inch o.c.	DensDeck Prime	OSFA applied 12-inch o.c.	JM PVC or JM PVC SD Plus	PVC MA (LowVOC)	-150 (Lim. 9; Non-HVHZ)
G-A-26	OPTIONAL Min. 1.5-inch ENRGY 3	OSFA applied 12-inch o.c.	DensDeck Prime	OSFA applied 12-inch o.c.	JM PVC SD Plus	PVC ASSBA	-150 (Lim. 9; Non-HVHZ)
G-A-27	OPTIONAL Min. 1.5-inch ENRGY 3	OSFA applied 12-inch o.c.	DensDeck Prime	OSFA applied 12-inch o.c.	JM PVC FB	2-Part UIA-C(S) or ASTM D 312, Type IV Asphalt	-150 (Lim. 9; Non-HVHZ)
G-A-28	OPTIONAL Min. 1.5-inch ENRGY 3	OSFA applied 12-inch o.c.	SECUROCK	OSFA applied 12-inch o.c.	JM PVC FB	RSUA applied 12-inch o.c. after DynaBase HW torched adhered	-150 (Lim. 9; Non-HVHZ)
G-A-29	OPTIONAL Min. 1.5-inch ENRGY 3	OSFA applied 12-inch o.c.	SECUROCK	OSFA applied 12-inch o.c.	JM PVC or JM PVC SD Plus	PVC MA (LowVOC)	-150 (Lim. 9; Non-HVHZ)

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

Adhered Assemblies over Poured Gypsum Deck (New or Existing)							
System No.	Base Insulation	Base Insulation Attachment	Top Insulation	Top Insulation Attachment	Membrane	Membrane Attachment	MDP (psf)
G-A-30	OPTIONAL Min. 1.5-inch ENRGY 3	OSFA applied 12-inch o.c.	SECUROCK	OSFA applied 12-inch o.c.	JM PVC SD Plus	PVC ASSBA	-150 (Lim. 9; Non- HVHZ)
G-A-31	OPTIONAL Min. 1.5-inch ENRGY 3	OSFA applied 12-inch o.c.	SECUROCK	OSFA applied 12-inch o.c.	JM PVC FB	2-Part UIA-C(S) or ASTM D 312, Type IV Asphalt	-150 (Lim. 9; Non- HVHZ)
G-A-32	OPTIONAL Min. 1.5-inch ENRGY 3	OSFA applied 12-inch o.c.	DEXcell CB	OSFA applied 12-inch o.c.	JM PVC or JM PVC SD Plus	PVC MA (LowVOC)	-150 (Lim. 9; Non- HVHZ)
G-A-33	OPTIONAL Min. 1.5-inch ENRGY 3	OSFA applied 12-inch o.c.	DEXcell CB	OSFA applied 12-inch o.c.	JM PVC SD Plus	PVC ASSBA	-150 (Lim. 9; Non- HVHZ)
G-A-34	OPTIONAL Min. 1.5-inch ENRGY 3	OSFA applied 12-inch o.c.	DEXcell FA	OSFA applied 12-inch o.c.	JM PVC or JM PVC SD Plus	PVC MA (LowVOC)	-150 (Lim. 9; Non- HVHZ)
G-A-35	OPTIONAL Min. 1.5-inch ENRGY 3	OSFA applied 12-inch o.c.	DEXcell FA	OSFA applied 12-inch o.c.	JM PVC FB	2-Part UIA-C(S) or ASTM D 312, Type IV Asphalt	-150 (Lim. 9; Non- HVZH)
G-A-36	Min. 1.5-inch E3 or ProtectoR Foam	RSUA applied 12-inch o.c.	-	-	JM PVC FB	2-Part UIA-C(S)	-180 (Lim. 9; Non- HVHZ)
G-A-37	OPTIONAL Min. 1.5-inch ENRGY 3	RSUA applied 12-inch o.c.	ProtectoR	RSUA applied 12-inch o.c.	JM PVC FB	2-Part UIA-C(S)	-180 (Lim. 9; Non- HVHZ)
G-A-38	OPTIONAL Min. 1.5-inch ENRGY 3	RSUA applied 12-inch o.c.	ProtectoR	RSUA applied 12-inch o.c.	JM PVC SD Plus	PVC ASSBA	-180 (Lim. 9; Non- HVHZ)
G-A-39	OPTIONAL Min. 1.5-inch ENRGY 3	RSUA applied 12-inch o.c.	ProtectoR	RSUA applied 12-inch o.c.	JM PVC or JM PVC SD Plus	PVC MA (LowVOC)	-180 (Lim. 9; Non- HVHZ)

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

Adhered Assemblies over Poured Gypsum Deck (New or Existing)							
System No.	Base Insulation	Base Insulation Attachment	Top Insulation	Top Insulation Attachment	Membrane	Membrane Attachment	MDP (psf)
G-A-40	OPTIONAL Min. 1.5-inch ENRGY 3	RSUA applied 12-inch o.c.	DensDeck Prime	RSUA applied 12-inch o.c.	JM PVC or JM PVC SD Plus	PVC MA (LowVOC)	-210 (Lim. 9; Non- HVHZ)
G-A-41	OPTIONAL Min. 1.5-inch ENRGY 3	RSUA applied 12-inch o.c.	DensDeck Prime	RSUA applied 12-inch o.c.	JM PVC SD Plus	PVC ASSBA	-210 (Lim. 9; Non- HVHZ)
G-A-42	OPTIONAL Min. 1.5-inch ENRGY 3	RSUA applied 12-inch o.c.	DensDeck Prime	RSUA applied 12-inch o.c.	JM PVC FB	2-Part UIA-C(S) or ASTM D 312, Type IV Asphalt	-210 (Lim. 9; Non- HVHZ)
G-A-43	OPTIONAL Min. 1.5-inch ENRGY 3	RSUA applied 12-inch o.c.	SECUROCK	RSUA applied 12-inch o.c.	JM PVC FB	RSUA applied 12-inch o.c. after DynaBase HW torched adhered	-210 (Lim. 9; Non- HVHZ)
G-A-44	OPTIONAL Min. 1.5-inch ENRGY 3	RSUA applied 12-inch o.c.	SECUROCK	RSUA applied 12-inch o.c.	JM PVC or JM PVC SD Plus	PVC MA (LowVOC)	-210 (Lim. 9; Non- HVHZ)
G-A-45	OPTIONAL Min. 1.5-inch ENRGY 3	RSUA applied 12-inch o.c.	SECUROCK	RSUA applied 12-inch o.c.	JM PVC SD Plus	PVC ASSBA	-210 (Lim. 9; Non- HVHZ)
G-A-46	OPTIONAL Min. 1.5-inch ENRGY 3	RSUA applied 12-inch o.c.	SECUROCK	RSUA applied 12-inch o.c.	JM PVC FB	2-Part UIA-C(S) or ASTM D 312, Type IV Asphalt	-210 (Lim. 9; Non- HVHZ)
G-A-47	OPTIONAL Min. 1.5-inch ENRGY 3	RSUA applied 12-inch o.c.	DEXcell CB	RSUA applied 12-inch o.c.	JM PVC or JM PVC SD Plus	PVC MA (LowVOC)	-210 (Lim. 9; Non- HVHZ)
G-A-48	OPTIONAL Min. 1.5-inch ENRGY 3	RSUA applied 12-inch o.c.	DEXcell CB	RSUA applied 12-inch o.c.	JM PVC SD Plus	PVC ASSBA	-210 (Lim. 9; Non- HVHZ)
G-A-49	OPTIONAL Min. 1.5-inch ENRGY 3	RSUA applied 12-inch o.c.	DEXcell FA	RSUA applied 12-inch o.c.	JM PVC or JM PVC SD Plus	PVC MA (LowVOC)	-210 (Lim. 9; Non- HVHZ)

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

Adhered Assemblies over Poured Gypsum Deck (New or Existing)							
System No.	Base Insulation	Base Insulation Attachment	Top Insulation	Top Insulation Attachment	Membrane	Membrane Attachment	MDP (psf)
G-A-50	OPTIONAL Min. 1.5-inch ENRGY 3	RSUA applied 12-inch o.c.	DEXcell FA	RSUA applied 12-inch o.c.	JM PVC FB	2-Part UIA-C(S), or ASTM D 312, Type IV Asphalt	-210 (Lim. 9; Non- HVHZ)
G-A-51	Min. 1.5-inch ENRGY 3 or ProtectoR Foam	RSUA applied 12-inch o.c.	-	-	JM PVC or JM PVC SD Plus	PVC MA (LowVOC)	-210 (Lim. 9; Non- HVHZ)
G-A-52	Min. 1.5-inch ENRGY 3 or ProtectoR Foam	RSUA applied 12-inch o.c.	-	-	JM PVC SD Plus	PVC ASSBA	-210 (Lim. 9; Non- HVHZ)
G-A-53	Min. 1.5-inch ENRGY 3	RSUA applied 12-inch o.c.	-	-	JM PVC FB	ASTM D 312 Type IV Asphalt	-210 (Lim. 9; Non- HVHZ)

Mechanically Attached Assemblies over Poured Gypsum Deck (New, Existing, or Recover)							
System No.	Base Insulation	Base Insulation Attachment	Top Insulation	Top Insulation Attachment	Membrane	Membrane Attachment	MDP (psf)
G-M-1	-	-	-	-	JM PVC FB/ DynaFast	1.8" Twin Loc-Nail without integrated plate fastened 6-inch o.c. along Straight Line Batten Bar within min. 4-inch heat welded side laps and in one intermediate row centered between side laps	-60 (Lim. 9)

Adhered Lightweight Concrete Assemblies over Concrete Deck (New or Existing)							
System No.	LWIC	Insulation/Cover Board	Insulation/Cover Board Attachment	Membrane	Membrane Attachment	MDP (psf)	
LC-A-1	Min. 250 psi Elastizell with Zell-Crete Fibers installed over DynaBase HW over ASTM D 41 primed concrete	-	-	JM PVC FB	RSUA applied 6-inch o.c.	-75 (Lim. 9)	
LC-A-2	Min 340 psi 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 PVC or JM PVC SD Plus	PVC MA (LowVOC), PVC WBMA or PVC ASSBA	-77.5 (Lim. 9)	
LC-A-3	Min 340 psi 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 PVC FB	RSUA applied 4-inch o.c.	-77.5 (Lim. 9)	

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

Adhered Lightweight Concrete Assemblies over Concrete Deck (New or Existing)						
System No.	LWIC	Insulation/Cover Board	Insulation/Cover Board Attachment	Membrane	Membrane Attachment	MDP (psf)
LC-A-4	Min 340 psi Celcore MF with HS Rheology Admixture over deck treated with Celcore S-1	Base Layer: Min. 1.5-inch ENRGY 3 or ENRGY 3 CGF Top Layer: SECUROCK	Base and Top layer in RSUA applied 12-inch o.c.	JM PVC	PVC MA (LowVOC) or PVC ASSBA	-77.5 (Lim. 9)
LC-A-5	Min 340 psi Celcore MF with HS Rheology Admixture over deck treated with Celcore S-1	Base Layer: Min. 1.5-inch ENRGY 3 or ENRGY 3 CGF Top Layer: SECUROCK	Base and Top layer in RSUA applied 12-inch o.c.	JM PVC SD Plus	PVC MA (LowVOC) or PVC ASSBA	-77.5 (Lim. 9)
LC-A-6	Min 340 psi Celcore MF with HS Rheology Admixture over deck treated with Celcore S-1	Base Layer: Min. 1.5-inch ENRGY 3 or ENRGY 3 CGF Top Layer: SECUROCK	Base and Top layer in RSUA applied 12-inch o.c.	JM PVC FB	2-Part UIA-C(S)	-77.5 (Lim. 9)
LC-A-7	Min. 300 psi LWIC	Min. 1.5-inch ENRGY 3	2-Part UIA applied 12-inch o.c.	JM PVC or JM PVC SD Plus	PVC MA (LowVOC), PVC WBMA or PVC ASSBA	-80 (Lim. 9)
LC-A-8	Min. 300 psi LWIC	Min. 1.5-inch ENRGY 3	2-Part UIA applied 12-inch o.c.	JM PVC FB	PVC WBMA	-80 (Lim. 9)
LC-A-9	Min. 300 psi LWIC	Base Layer: Min. 1.5-inch ENRGY 3 or ENRGY 3 AGF Top Layer: SECUROCK	2-Part UIA applied 12-inch o.c.	JM PVC	PVC MA (LowVOC) or PVC ASSBA	-80 (Lim. 9)
LC-A-10	Min. 300 psi LWIC	Base Layer: Min. 1.5-inch ENRGY 3 or ENRGY 3 AGF Top Layer: SECUROCK	2-Part UIA applied 12-inch o.c.	JM PVC SD Plus	PVC MA (LowVOC) or PVC ASSBA	-80 (Lim. 9)
LC-A-11	Min. 250 psi Elastizell with Zell-Crete Fibers installed over DynaBase HW over ASTM D 41 primed concrete	-	-	JM PVC FB	RSUA applied 12-inch o.c.	-85 (Lim. 9)

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

Adhered Lightweight Concrete Assemblies over Concrete Deck (New or Existing)						
System No.	LWIC	Insulation/Cover Board	Insulation/Cover Board Attachment	Membrane	Membrane Attachment	MDP (psf)
LC-A-12	Min. 330 psi LWIC	-	-	JM PVC FB	PVC WBMA	-90 (Lim. 9)
LC-A-13	Min. 383.5 psi Celcore MF with HS Rheology Admixture installed over OPTIONAL JM Vapor Barrier SA, DynaBase HW, DynaWeld 180 S over ASTM D 41 primed concrete	-	-	JM PVC FB	PVC WBMA or RSUA applied 6-inch o.c.	-92.5 (Lim. 9)
LC-A-14	Min. 383.5 psi Celcore MF with HS Rheology Admixture installed over OPTIONAL JM Vapor Barrier SA, DynaBase HW, DynaWeld 180 S over ASTM D 41 primed concrete	-	-	JM PVC FB	PVC WBMA or RSUA applied 12-inch o.c.	-102.5 (Lim. 9)
LC-A-15	Min. 160 psi Elastizell	Base Layer: Min. 1.5-inch E3 (no FR) Top Layer: JM InvinSA or ProtectoR HD	Base Layer: UIA applied 6-inch o.c. or 2-Part UIA applied 12-inch o.c. Top Layer: UIA applied 12-inch o.c.	JM PVC	PVC MA (LowVOC) applied at 0.83 gal/100ft ² or PVC WBMA	-112.5 (Lim. 9)
LC-A-15	Min. 160 psi Elastizell	Base Layer: Min. 1.5-inch E3 (no FR) Top Layer: ProtectoR HD	Base Layer: UIA applied 6-inch o.c. or 2-Part UIA applied 12-inch o.c. Top Layer: UIA applied 12-inch o.c.	JM PVC or JM PVC SD Plus	PVC ASSBA	-112.5 (Lim. 9)
LC-A-16	Min. 160 psi Elastizell	Base Layer: Min. 1.5-inch E3 (no FR) Top Layer: JM InvinSA or ProtectoR HD	Base Layer: UIA applied 6-inch o.c. or 2-Part UIA applied 12-inch o.c. Top Layer: UIA applied 12-inch o.c.	JM PVC SD Plus	PVC MA (LowVOC) applied at 0.83 gal/100ft ² or PVC WBMA	-112.5 (Lim. 9)
LC-A-17	Min. 250 psi Elastizell with Zell-Crete Fibers	-	-	JM PVC FB	RSUA applied 12-inch o.c.	-117.5 (Lim. 9)
LC-A-18	Min. 310 psi Elastizell with Zell-Crete Fibers	Min. 1.5-inch ENRGY 3 or ProtectoR Foam	2-Part UIA applied 12-inch o.c.	JM PVC or JM PVC SD Plus	PVC MA (LowVOC), PVC WBMA, or PVC ASSBA	-127.5 (Lim. 9)

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

Adhered Lightweight Concrete Assemblies over Concrete Deck (New or Existing)						
System No.	LWIC	Insulation/Cover Board	Insulation/Cover Board Attachment	Membrane	Membrane Attachment	MDP (psf)
LC-A-19	Min. 310 psi Elastizell with Zell-Crete Fibers	Base Layer: Min. 1.5-inch ENRGY 3 or ENRGY 3 AGF Top Layer: <i>SECUROCK</i>	<i>2-Part UIA</i> applied 12-inch o.c.	<i>JM PVC</i> or <i>JM PVC SD Plus</i>	<i>PVC MA (LowVOC)</i> or <i>PVC ASSBA</i>	-130 (Lim. 9)
LC-A-20	Min. 310 psi Elastizell with Zell-Crete Fibers	Base Layer: Min. 1.5-inch ENRGY 3 or ENRGY 3 AGF Top Layer: <i>SECUROCK</i>	<i>2-Part UIA</i> applied 12-inch o.c.	<i>JM PVC FB</i>	<i>2-Part UIA-C(S)</i>	-130 (Lim. 9)
LC-A-21	Min. 375 psi Concrecel	-	-	<i>JM PVC FB</i>	<i>RSUA</i> applied 12-inch o.c.	-147.5 (Lim. 9)
LC-A-22	Min. 475 psi Celcore MF with HS Rheology Admixture installed over OPTIONAL DynaBase HW or DynaWeld 180 S	-	-	<i>JM PVC FB</i>	<i>PVC WBMA</i> or <i>RSUA</i> applied 12-inch o.c.	-167.5 (Lim. 9)
LC-A-23	Min. 375 psi Concrecel	-	-	<i>JM PVC FB</i>	<i>RSUA</i> applied 6-inch o.c.	-172.5 (Lim. 9)
LC-A-24	Min. 550 psi Elastizell with Zell-Fibers	-	-	<i>JM PVC FB</i>	<i>RSUA</i> applied 12-inch o.c.	-177.5 (Lim. 9)
LC-A-25	Min. 300 psi Celcore MF with HS Rheology Admixture installed over torch adhered DynaWeld 180 S	-	-	<i>JM PVC SD Plus</i>	<i>PVC MA (LowVOC)</i>	-202.5 (Lim. 9)
LC-A-26	Min. 300 psi Celcore MF with HS Rheology Admixture installed over torch adhered DynaWeld 180 S	-	-	<i>JM PVC FB</i> (Min. 60-mil)	<i>PVC WBMA</i> or <i>RSUA</i> applied 4-inch o.c.	-202.5 (Lim. 9)
LC-A-27	Min. 262 psi LWIC	<i>SECUROCK</i>	<i>2-Part UIA</i> applied 12-inch o.c.	Base Ply: DynaBase HW Membrane: <i>JM PVC FB</i>	Base Ply: Torch adhered Membrane: <i>RSUA</i> applied 12-inch o.c.	-210 (Lim. 9; Non-HVHZ)
LC-A-28	Min. 550 psi Elastizell with Zell-Fibers	-	-	<i>JM PVC FB</i>	<i>RSUA</i> applied 6-inch o.c.	-225 (Lim. 9)
LC-A-29	Min. 360 psi Celcore MF with HS Rheology Admixture	-	-	<i>JM PVC SD Plus</i>	<i>PVC MA (LowVOC)</i>	-222.5 (Lim. 9)
LC-A-30	Min. 360 psi Celcore MF with HS Rheology Admixture	-	-	<i>JM PVC FB</i> (Min. 60-mil)	<i>PVC WBMA</i> or <i>RSUA</i> applied 4-inch o.c.	-222.5 (Lim. 9)

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

Adhered Lightweight Concrete Assemblies over Concrete Deck (New or Existing)						
System No.	LWIC	Insulation/Cover Board	Insulation/Cover Board Attachment	Membrane	Membrane Attachment	MDP (psf)
LC-A-31	Min. 475 psi Celcore MF with HS Rheology Admixture installed over OPTIONAL DynaBase HW	-	-	JM PVC FB	RSUA applied 4-inch o.c.	-257.5 (Lim. 9)
LC-A-32	Min. 383.5 psi Celcore MF with HS Rheology Admixture (No EPS Board) installed over DynaBase HW over ASTM D 41 primed concrete	-	-	JM PVC FB	RSUA applied 6-inch o.c.	-262.5 (Lim. 9)
LC-A-33	Min. 250 Elastizell with Zell-Crete Fibers (no EPS Board)	-	-	JM PVC FB	RSUA applied 6-inch o.c.	-290 (Lim. 9)
LC-A-34	Min. 300 psi Celcore MF with HS Rheology Admixture installed over torch adhered DynaWeld Cap 180 FR treated with Celcore S-1	-	-	JM PVC SD Plus	PVC MA (LowVOC)	-305 (Lim. 9)
LC-A-35	Min. 300 psi Celcore MF with HS Rheology Admixture installed over torch adhered DynaWeld Cap 180 FR treated with Celcore S-1	-	-	JM PVC FB (Min. 60-mil)	PVC WBMA or RSUA applied 4-inch o.c.	-305 (Lim. 9)
LC-A-36	Min. 375 psi Concrecel	-	-	JM PVC FB	MBR Low VOC Membrane Adhesive	-342.5 (Lim. 9)
LC-A-37	Min. 370 psi Concrecel (No EPS Board)	-	-	JM PVC FB	RSUA applied 12-inch o.c.	-375 (Lim. 9)
LC-A-38	Min. 250 psi Elastizell with Zell-Crete Fibers (no EPS Board)	-	-	JM PVC FB	RSUA applied 4-inch o.c.	-390 (Lim. 9)
LC-A-39	Min. 383.5 psi Celcore MF with HS Rheology Admixture (no EPS board) installed over ASTM D 41 primed concrete	-	-	JM PVC FB	RSUA applied 12-inch o.c.	-417.5 (Lim. 9)
LC-A-40	Min. 370 psi Concrecel (No EPS board)	-	-	JM PVC FB	RSUA applied 6-inch o.c.	-480 (Lim. 9)
LC-A-41	Min. 383.5 psi Celcore MF with HS Rheology Admixture (No EPS Board)	-	-	JM PVC FB	RSUA applied 6-inch o.c.	-502.5 (Lim. 9)

Mechanically Attached 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. 475 psi Celcore MF with HS Rheology	-	-	JM PVC FB/ DynaFast	1.8" Twin Loc-Nail without integrated plate fastened 6-inch o.c. along Straight Line Batten Bar within min. 4-inch heat welded side laps and in one intermediate row centered between side laps	-60 (Lim. 9)

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

Mechanically Attached 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. 350 psi Celcore MF with HS Rheology Admixture over deck treated with Celcore S-1	-	-	JM PVC FB/ DynaFast	(4) 2.25" VERSA-FAST Fasteners installed in each VERSA-FAST Metal Plate; Plates spaced 10-inch o.c. within the 5-inch wide, torched adhered side laps	-67.5 (Lim. 9)

Adhered Lightweight Concrete Assemblies over Steel Deck (New or Existing)							
System No.	Deck Detail	LWIC	Insulation/Cover Board	Insulation/Cover Board Attachment	Membrane	Membrane Attachment	MDP (psf)
LS-A-1	G33, P, L5, S15	Min. 475 psi Celcore MF with HS Rheology	-	-	JM PVC FB	RSUA applied 12-inch o.c.	-60 (Lim. 9)
LS-A-2	G80, P, L5, S15	Min. 383.5 psi Celcore MF with HS Rheology Admixture	-	-	JM PVC FB	RSUA applied 12-inch o.c.	-75 (Lim. 9)
LS-A-3	G80, P, L5, S15	Min. 383.5 psi Celcore MF with HS Rheology Admixture	-	-	JM PVC FB	RSUA applied 6-inch o.c.	-75 (Lim. 9)
LS-A-4	G33	Min 340 psi 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 PVC or JM PVC SD Plus	PVC MA (LowVOC), PVC WBMA, or PVC ASSBA	-77.5 (Lim. 9)
LS-A-5	G33	Min 340 psi 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 PVC FB	RSUA applied 4-inch o.c. or PVC WBMA	-77.5 (Lim. 9)
LS-A-6	G33	Min 340 psi Celcore MF with HS Rheology Admixture over deck treated with Celcore S-1	Base Layer: Min. 1.5-inch ENRGY 3 or ENRGY 3 CGF Top Layer: SECUROCK	Base and Top layer in RSUA applied 12-inch o.c.	JM PVC	PVC MA (LowVOC) or PVC ASSBA	-77.5 (Lim. 9)
LS-A-7	G33	Min 340 psi Celcore MF with HS Rheology Admixture over deck treated with Celcore S-1	Base Layer: Min. 1.5-inch ENRGY 3 or ENRGY 3 CGF Top Layer: SECUROCK	Base and Top layer in RSUA applied 12-inch o.c.	JM PVC SD Plus	PVC MA (LowVOC) or PVC ASSBA	-77.5 (Lim. 9)
LS-A-8	G33	Min. 300 psi LWIC	Min. 1.5-inch ENRGY 3 or ProtectoR Foam	2-Part UIA applied 12-inch o.c.	JM PVC or JM PVC SD Plus	PVC MA (LowVOC), PVC WBMA, or PVC ASSBA	-80 (Lim. 9)
LS-A-9	G33	Min. 300 psi LWIC	Min. 1.5-inch ENRGY 3 or ProtectoR Foam	2-Part UIA applied 12-inch o.c.	JM PVC FB	PVC WBMA	-80 (Lim. 9)

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

Adhered Lightweight Concrete Assemblies over Steel Deck (New or Existing)							
System No.	Deck Detail	LWIC	Insulation/Cover Board	Insulation/Cover Board Attachment	Membrane	Membrane Attachment	MDP (psf)
LS-A-10	G33	Min. 300 psi LWIC	Base Layer: Min. 1.5-inch ENRGY 3 or ENRGY 3 AGF Top Layer: SECUROCK	2-Part UIA applied 12-inch o.c.	JM PVC	PVC MA (LowVOC) or PVC ASSBA	-80 (Lim. 9)
LS-A-11	G33	Min. 300 psi LWIC	Base Layer: Min. 1.5-inch ENRGY 3 or ENRGY 3 AGF Top Layer: SECUROCK	2-Part UIA applied 12-inch o.c.	JM PVC SD Plus	PVC MA (LowVOC) or PVC ASSBA	-80 (Lim. 9)
LS-A-12	G80, P, L5, S12	Min. 370 psi Concrecel	-	-	JM PVC FB	RSUA applied 12-inch o.c.	-97.5 (Lim. 9)
LS-A-13	G80, P, L5, S15	Min. 250 psi Elastizell with Zell-Crete Fibers	-	-	JM PVC FB	RSUA applied 12-inch o.c.	-97.5 (Lim. 9)
LS-A-14	G80, P, L5, S15	Min. 250 psi Elastizell with Zell-Crete Fibers	-	-	JM PVC FB	RSUA applied 6-inch o.c.	-97.5 (Lim. 9)
LS-A-15	G33	Min. 310 psi Elastizell with Zell-Crete Fibers	Min. 1.5-inch ENRGY 3 or ProtectoR Foam	2-Part UIA applied 12-inch o.c.	JM PVC or JM PVC SD Plus	PVC MA (LowVOC), PVC WBMA, or PVC ASSBA	-127.5 (Lim. 9)
LS-A-16	G33	Min. 310 psi Elastizell with Zell-Crete Fibers	Base Layer: Min. 1.5-inch ENRGY 3 or ENRGY 3 AGF Top Layer: SECUROCK	2-Part UIA applied 12-inch o.c.	JM PVC or JM PVC SD Plus	PVC MA (LowVOC) or PVC ASSBA	-130 (Lim. 9)

Mechanically Attached 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, L5, S15	Min. 475 psi Celcore MF with HS Rheology Admixture	-	-	JM PVC FB/ DynaFast	1.8" Twin Loc-Nail without integrated plate fastened 6-inch o.c. along Straight Line Batten Bar within min. 4-inch heat welded side laps and in one intermediate row centered between side laps	-60 (Lim. 9)

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

Mechanically Attached Lightweight Concrete Assemblies over <i>Steel Deck (New, Existing, or Recover)</i>							
System No.	Deck Detail	LWIC	Insulation/ Cover Board	Insulation/Cover Board Attachment	Membrane	Membrane Attachment	MDP (psf)
LS-M-2	G33, P, L6, S18	Min. 350 psi Celcore MF with HS Rheology Admixture over deck treated with Celcore S-1	-	-	JM PVC FB/ DynaFast	Four (4) 2.25" VERSA-FAST Fasteners installed in each VERSA-FAST Metal Plate; Plates spaced 10-inch o.c. within the 5-inch wide, torched adhered side laps	-67.5 (Lim. 9)

Adhered Recover Assemblies							
System No.	Deck Detail	Base Insulation	Top Insulation	Membrane	Membrane Attachment	MDP (psf)	
R-A-1	BUR or Mod-Bit Roofing with mineral surfacing	-	-	JM PVC FB	RSUA applied 12-inch o.c.	-45 (Lim. 9)	
R-A-2	BUR or Granular Mod-Bit Roofing over <i>Concrete Deck, Steel Deck, cementitious panel, or treated wood</i>	OPTIONAL Min. 0.5-inch ENRGY 3 adhered in RSUA, 2-Part UIA, 2-Part UIA-C(B), or OSF applied 12-inch o.c.	SeparatoR CGF or SeparatoR FR adhered in RSUA, 2-Part UIA, 2-Part UIA-C(B), or OSFA applied 12-inch o.c.	JM PVC or JM PVC SD Plus	PVC MA (LowVOC)	-52.5 (Lim. 9)	
R-A-3	BUR over <i>Concrete Deck</i>	Min. 1.5-inch E3 (no FR) applied in 2-Part UIA spaced 12-inch o.c.	OPTIONAL JM Invinsa applied in 2-Part UIA spaced 12-inch o.c.	JM PVC or JM PVC SD Plus	PVC MA (LowVOC)	-105 (Lim. 9)	
R-A-4	BUR over <i>Concrete Deck</i>	Min. 1.5-inch E3 (no FR) applied in 2-Part UIA spaced 12-inch o.c.	OPTIONAL JM Invinsa applied in 2-Part UIA spaced 12-inch o.c.	JM PVC FB	ASTM D 312 Type IV Asphalt	-105 (Lim. 9)	
R-A-5	BUR or Granular Mod-Bit Roofing over <i>Concrete Deck</i>	OPTIONAL Min. 0.5-inch ENRGY 3 adhered in RSUA, 2-Part UIA, 2-Part UIA-C(B), or OSF applied 12-inch o.c.	SeparatoR CGF or SeparatoR FR adhered in RSUA, 2-Part UIA, 2-Part UIA-C(B), or OSFA applied 12-inch o.c.	JM PVC, JM PVC SD Plus or JM PVC FB	PVC WBMA	-105 (Lim. 9)	
R-A-6	BUR or Granular Mod-Bit Roofing over <i>Steel Deck, cementitious panel, or treated wood</i>	OPTIONAL Min. 0.5-inch ENRGY 3 adhered in RSUA, 2-Part UIA, 2-Part UIA-C(B), or OSF applied 12-inch o.c.	ProtectoR HD adhered in RSUA, 2-Part UIA, 2-Part UIA-C(B), or OSFA applied 12-inch o.c.	JM PVC FB	2-Part UIA-C(S) or PVC WBMA	-105 (Lim. 9)	
R-A-7	BUR or Granular Mod-Bit Roofing over <i>Steel Deck, cementitious panel, or treated wood</i>	OPTIONAL Min. 0.5-inch ENRGY 3 adhered in RSUA, 2-Part UIA, 2-Part UIA-C(B), or OSF applied 12-inch o.c.	ProtectoR HD adhered in RSUA, 2-Part UIA, 2-Part UIA-C(B), or OSFA applied 12-inch o.c.	JM PVC JM PVC SD Plus	PVC WBMA, PVC MA (LowVOC), or PVC ASSBA	-105 (Lim. 9)	

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

Adhered Recover Assemblies						
System No.	Deck Detail	Base Insulation	Top Insulation	Membrane	Membrane Attachment	MDP (psf)
R-A-8	BUR or Granular Mod-Bit Roofing over Steel Deck, cementitious panel, or treated wood	OPTIONAL Min. 0.5-inch ENRGY 3 adhered in RSUA, 2-Part UIA, 2-Part UIA-C(B), or OSF applied 12-inch o.c.	SECUROCK or DensDeck Prime adhered in RSUA, 2-Part UIA, 2-Part UIA-C(B), or OSFA applied 12-inch o.c.	JM PVC FB	2-Part UIA-C(S) or ASTM D 312 Type IV Asphalt	-105 (Lim. 9)
R-A-9	BUR or Granular Mod-Bit Roofing over Steel Deck, cementitious panel, or treated wood	OPTIONAL Min. 0.5-inch ENRGY 3 adhered in RSUA, 2-Part UIA, 2-Part UIA-C(B), or OSF applied 12-inch o.c.	DensDeck Prime adhered in RSUA, 2-Part UIA, 2-Part UIA-C(B), or OSFA applied 12-inch o.c.	JM PVC FB	PVC WBMA	-105 (Lim. 9)
R-A-10	BUR or Granular Mod-Bit Roofing over Steel Deck, cementitious panel, or treated wood	OPTIONAL Min. 0.5-inch ENRGY 3 adhered in RSUA, 2-Part UIA, 2-Part UIA-C(B), or OSF applied 12-inch o.c.	SECUROCK or DensDeck Prime adhered in RSUA, 2-Part UIA, 2-Part UIA-C(B), or OSFA applied 12-inch o.c.	JM PVC JM PVC SD Plus	PVC MA (LowVOC) or PVC ASSBA	-105 (Lim. 9)
R-A-11	BUR or Granular Mod-Bit Roofing over Steel Deck, cementitious panel, or treated wood	OPTIONAL Min. 0.5-inch ENRGY 3 adhered in RSUA, 2-Part UIA, 2-Part UIA-C(B), or OSF applied 12-inch o.c.	DEXcell FA adhered in RSUA or OSFA applied 12-inch o.c.	JM PVC or JM PVC SD Plus	PVC MA (LowVOC)	-105 (Lim. 9)
R-A-12	BUR or Granular Mod-Bit Roofing over Steel Deck, cementitious panel, or treated wood	OPTIONAL Min. 0.5-inch ENRGY 3 adhered in RSUA, 2-Part UIA, 2-Part UIA-C(B), or OSF applied 12-inch o.c.	DEXcell FA adhered in RSUA or OSFA applied 12-inch o.c.	JM PVC FB	2-Part UIA-C(S), PVC WBMA or ASTM D 312 Type IV Asphalt	-105 (Lim. 9)
R-A-13	BUR over Concrete Deck	Min. 1.5-inch E3 (no FR) applied in UIA spaced 6-inch o.c. or 2-Part UIA spaced 12-inch o.c.	JM Invinsa or Protector HD applied in UIA applied spaced 12-inch o.c.	JM PVC	PVC MA (LowVOC) applied at 0.83 gal/100ft ² , PVC WBMA, or PVC ASSBA	-112.5 (Lim. 9)
R-A-14	BUR over Concrete Deck	Min. 1.5-inch E3 (no FR) applied in UIA spaced 6-inch o.c. or 2-Part UIA spaced 12-inch o.c.	JM Invinsa or Protector HD applied in UIA spaced 12-inch o.c.	JM PVC SD Plus	PVC MA (LowVOC) applied at 0.83 gal/100ft ² , PVC WBMA, or PVC ASSBA	-112.5 (Lim. 9)
R-A-15	BUR over Concrete Deck	Min. 1.5-inch E3 (no FR) applied in UIA spaced 6-inch o.c. or 2-Part UIA spaced 12-inch o.c.	JM Invinsa or Protector HD applied in UIA spaced 12-inch o.c.	JM PVC FB	2-Part UIA-C(S) or PVC WBMA	-112.5 (Lim. 9)

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

Adhered Recover Assemblies						
System No.	Deck Detail	Base Insulation	Top Insulation	Membrane	Membrane Attachment	MDP (psf)
R-A-16	BUR or Granular Mod-Bit Roofing over Concrete Deck	OPTIONAL Min. 0.5-inch ENRGY 3 adhered in RSUA, 2-Part UIA, 2-Part UIA-C(B), or OSF applied 12-inch o.c.	DensDeck Prime adhered in RSUA, 2-Part UIA, 2-Part UIA-C(B), or OSFA applied 12-inch o.c.	JM PVC FB	PVC WBMA	-142.5 (Lim. 9)
R-A-17	BUR or Granular Mod-Bit Roofing over Concrete Deck, Steel Deck, cementitious panel, or treated wood	-	Min. 1-inch ENRGY 3 adhered in RSUA, 2-Part UIA, 2-Part UIA-C(B), or OSF applied 12-inch o.c.	JM PVC FB	2-Part UIA-C(S) or RSUA applied 12-inch o.c.	-157.5 (Lim. 9)
R-A-18	BUR or Granular Mod-Bit Roofing over Concrete Deck	OPTIONAL Min. 0.5-inch ENRGY 3 adhered in RSUA, 2-Part UIA, 2-Part UIA-C(B), or OSF applied 12-inch o.c.	ProtectoR HD adhered in RSUA, 2-Part UIA, 2-Part UIA-C(B), or OSFA applied 12-inch o.c.	JM PVC JM PVC SD Plus	PVC WBMA or PVC MA (LowVOC)	-180 (Lim. 9)
R-A-19	BUR or Granular Mod-Bit Roofing over Concrete Deck	OPTIONAL Min. 0.5-inch ENRGY 3 adhered in RSUA, 2-Part UIA, 2-Part UIA-C(B), or OSF applied 12-inch o.c.	ProtectoR HD adhered in RSUA, 2-Part UIA, 2-Part UIA-C(B), or OSFA applied 12-inch o.c.	JM PVC SD Plus	PVC ASSBA	-180 (Lim. 9)
R-A-20	BUR or Granular Mod-Bit Roofing over Concrete Deck	OPTIONAL Min. 0.5-inch ENRGY 3 adhered in RSUA, 2-Part UIA, 2-Part UIA-C(B), or OSF applied 12-inch o.c.	ProtectoR HD adhered in RSUA, 2-Part UIA, 2-Part UIA-C(B), or OSFA applied 12-inch o.c.	JM PVC FB	2-Part UIA-C(S) or PVC WBMA	-180 (Lim. 9)
R-A-21	BUR or Granular Mod-Bit Roofing over Concrete Deck	OPTIONAL Min. 0.5-inch ENRGY 3 adhered in RSUA, 2-Part UIA, 2-Part UIA-C(B), or OSF applied 12-inch o.c.	SECUROCK or DensDeck Prime adhered in RSUA, 2-Part UIA, 2-Part UIA-C(B), or OSFA applied 12-inch o.c.	JM PVC JM PVC SD Plus	PVC MA (LowVOC)	-180 (Lim. 9)
R-A-22	BUR or Granular Mod-Bit Roofing over Concrete Deck	OPTIONAL Min. 0.5-inch ENRGY 3 adhered in RSUA, 2-Part UIA, 2-Part UIA-C(B), or OSF applied 12-inch o.c.	SECUROCK or DensDeck Prime adhered in RSUA, 2-Part UIA, 2-Part UIA-C(B), or OSFA applied 12-inch o.c.	JM PVC SD Plus	PVC ASSBA	-180 (Lim. 9)
R-A-23	BUR or Granular Mod-Bit Roofing over Concrete Deck	OPTIONAL Min. 0.5-inch ENRGY 3 adhered in RSUA, 2-Part UIA, 2-Part UIA-C(B), or OSF applied 12-inch o.c.	SECUROCK or DensDeck Prime adhered in RSUA, 2-Part UIA, 2-Part UIA-C(B), or OSFA applied 12-inch o.c.	JM PVC FB	2-Part UIA-C(S) or ASTM D 312 Type IV Asphalt	-180 (Lim. 9)
R-A-24	BUR over Concrete Deck	-	Min. 1.5-inch E3 (no FR) applied in 2-Part UIA spaced 12-inch o.c.	JM PVC or JM PVC SD Plus	PVC MA (LowVOC)	-217.5 (Lim. 9)
R-A-25	BUR over Concrete Deck	-	Min. 1.5-inch E3 (no FR) applied in 2-Part UIA spaced 12-inch o.c.	JM PVC SD Plus	PVC ASSBA	-217.5 (Lim. 9)
R-A-26	BUR or Granular Mod-Bit Roofing over Concrete Deck	OPTIONAL Min. 0.5-inch ENRGY 3 adhered in RSUA, 2-Part UIA, 2-Part UIA-C(B), or OSF applied 12-inch o.c.	SeparatoR CGF or SeparatoR FR adhered in RSUA, 2-Part UIA, 2-Part UIA-C(B), or OSFA applied 12-inch o.c.	JM PVC or JM PVC SD Plus	PVC MA (LowVOC)	-217.5 (Lim. 9)

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

Adhered Recover Assemblies						
System No.	Deck Detail	Base Insulation	Top Insulation	Membrane	Membrane Attachment	MDP (psf)
R-A-27	BUR or Granular Mod-Bit Roofing over Concrete Deck	OPTIONAL Min. 0.5-inch ENRGY 3 adhered in RSUA, 2-Part UIA, 2-Part UIA-C(B), or OSF applied 12-inch o.c.	SeparatoR CGF or SeparatoR FR adhered in RSUA, 2-Part UIA, 2-Part UIA-C(B), or OSFA applied 12-inch o.c.	JM PVC SD Plus	PVC ASSBA	-217.5 (Lim. 9)
R-A-28	BUR over Concrete Deck	-	Min. 1.5-inch E3 (no FR) applied in 2-Part UIA spaced 12-inch o.c.	JM PVC FB	ASTM D 312 Type IV Asphalt	-217.5 (Lim. 9)
R-A-29	BUR or Granular Mod-Bit Roofing over Concrete Deck	OPTIONAL Min. 0.5-inch ENRGY 3 adhered in RSUA, 2-Part UIA, 2-Part UIA-C(B), or OSF applied 12-inch o.c.	DEXcell FA adhered in RSUA or OSFA applied 12-inch o.c.	JM PVC or JM PVC SD Plus	PVC MA (LowVOC)	-217.5 (Lim. 9)
R-A-30	BUR or Granular Mod-Bit Roofing over Concrete Deck	OPTIONAL Min. 0.5-inch ENRGY 3 adhered in RSUA, 2-Part UIA, 2-Part UIA-C(B), or OSF applied 12-inch o.c.	DEXcell FA adhered in RSUA or OSFA applied 12-inch o.c.	JM PVC FB	2-Part UIA-C(S), PVC WBMA or ASTM D 312 Type IV Asphalt	-217.5 (Lim. 9)

Mechanically Fastened Recover Assemblies								
System No.	Deck Detail	Base Insulation	Base Insulation Attachment	Top Insulation	Top Insulation Attachment	Membrane	Membrane Attachment	MDP (psf)
R-M-1	Steel Deck (G33, P, 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 PVC SD Plus	Attached in-lap 6-inch o.c. with HL Fasteners & Plates; Min. 6-inch wide side laps; Fastener rows max. 114-inch o.c.	-45 (Lim. 7)
R-M-2	Steel Deck (G33, F1, 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 PVC SD Plus	Attached in-lap 12-inch o.c. with HL Fasteners & Plates; Min. 6-inch wide side laps; Fastener rows max. 54-inch o.c.	-45 (Lim. 7)
R-M-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	Min. 1-inch E3, or Cover Board	Preliminarily Secured	JM PVC	Attached in-lap 18-inch o.c. with JM Purlin Fasteners and High Load Plates along structural supports; Fastener rows max. 5ft o.c.	-45 (Lim. 7)
R-M-3	Steel Deck (G33, F1, L6) or Concrete Deck	OPTIONAL INSULATION	Preliminarily Secured or secured with top layer	Min. 0.5-inch E3 or Cover Board	Preliminarily Secured	JM PVC FB/ DynaFast	HL Fasteners & Plates spaced 6-inch o.c within each min. 4-inch heat welded side laps in rows max. 70-inch o.c.	-52.5 (Lim. 9)
R-M-4	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 PVC	Attached in-lap 12-inch o.c. with JM Purlin Fasteners and High Load Plates along structural supports; Fastener rows max. 5ft o.c.	-52.5 (Lim. 7)

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

Mechanically Fastened Recover Assemblies								
System No.	Deck Detail	Base Insulation	Base Insulation Attachment	Top Insulation	Top Insulation Attachment	Membrane	Membrane Attachment	MDP (psf)
R-M-5	Steel Deck (G33, F1, 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 PVC SD Plus	Attached in-lap 6-inch o.c. with HL Fasteners & Plates; Min. 6-inch wide side laps; Fastener rows max. 54-inch o.c.	-60 (Lim. 7)
R-M-6	LWIC over Steel Deck (G33, F1, L5, S12) or Concrete Deck	OPTIONAL INSULATION	Preliminarily Secured or secured with top layer	OPTIONAL INSULATION	Preliminarily Secured	JM PVC FB (min. 60 mil)	Attached in-lap 6-inch o.c. with HL Fasteners & Plates; Fastener rows max. 114-inch o.c.	-60 (Lim. 7)
R-M-7	Steel Deck (G33, P, L6)	OPTIONAL INSULATION	Preliminarily Secured or secured with top layer	Min. 0.5-inch E3 or Cover Board	Preliminarily Secured	JM PVC FB/ DynaFast	High Load LH Fasteners and Polymer Membrane Batten OR High Load Fasteners and Deep Well Batten strip spaced 6-inch o.c. within min. 4-inch heat welded side laps in rows max. 71-inch o.c.	-60 (Lim. 9)
R-M-8	Steel Deck (G33, F1, L6) or Concrete Deck	OPTIONAL INSULATION	Preliminarily Secured or secured with top layer	Min. 0.5-inch E3 or Cover Board	Preliminarily Secured	JM PVC FB/ DynaFast	APB Fasteners & Plates spaced 6-inch o.c. within each min. 4-inch heat welded side lap.	-60 (Lim. 9)
R-M-9	Steel Deck (G33, F1 or P, L6) or Concrete Deck	OPTIONAL INSULATION	Preliminarily Secured or secured with top layer	Min. 0.5-inch E3 or Cover Board	Preliminarily Secured	JM PVC FB/ DynaFast	HL Fasteners & Plates spaced 12-inch o.c. within each min. 4-inch heat welded side lap.	-60 (Lim. 9)
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 PVC	Attached in-lap 6-inch o.c. with JM Purlin Fasteners and High Load Plates along structural supports; Fastener rows max. 5ft o.c.	-75 (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	Steel Deck (G33, L6) or Concrete Deck	OPTIONAL INSULATION	Preliminarily Secured or secured with top layer	Min. 0.5-inch E3, or Cover Board	Preliminarily Secured	JM PVC SD Plus (Min. 60 mil)	Induction welded to JM PVC RhinoPlates placed max. 12" o.c. in rows max. 72" o.c.	-37.5 (Lim. 7; Non-HVHZ)
R-W-2	Steel Deck (G33, F1, 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 PVC SD Plus (Min. 60 mil)	Induction welded to JM PVC RhinoPlates placed max. 12" o.c. in rows max. 60" o.c.	-45 (Lim. 7)

APPENDIX D – APPROVED ASSEMBLIES FOR JM PVC 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-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	<i>Preliminarily Secured</i> or secured with top layer	Min. 1-inch E3, or Cover Board	JM Purlin Fasteners and JM PVC RhinoPlates secured to structural supports 6-inch o.c.; Fastener rows max. 120-inch o.c.	JM PVC (Min. 60 mil)	Induction welded to JM PVC RhinoPlates	-45 (Lim. 7)
R-W-4	Existing metal roof having Min. 16 ga. steel purlins at max. 5ft o.c.	Min. 1.5-inch E3 or EPS placed between ribs	<i>Preliminarily Secured</i> or secured with top layer	Min. 1-inch E3, or Cover Board	JM Purlin Fasteners and JM PVC RhinoPlates secured to structural supports 18-inch o.c.; Fastener rows max. 60-inch o.c.	JM PVC (Min. 60 mil)	Induction welded to JM PVC RhinoPlates	-45 (Lim. 7)
R-W-5	Existing metal roof having Min. 16 ga. steel purlins at max. 5ft o.c.	INSULATION	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	Attached with ISOWELD-#12 or ISOWELD-#15 spaced 12" o.c. in rows 60" o.c.	JM PVC JM PVC SD Plus (Min. 60 mil)	Induction welded to Isoweld plates	-45 (Lim. 7)
R-W-6	Steel Deck (G33, F1, L6, S24) or Concrete Deck	OPTIONAL INSULATION	<i>Preliminarily Secured</i> or secured with top layer	Min. 0.5-inch E3, or Cover Board	High Load Fasteners and JM PVC RhinoPlates at a rate of 8 per 4-ft x 8-ft board (staggered) (1 fastener per 4.0-ft ²)	JM PVC SD Plus (Min. 60 mil)	Induction welded to JM PVC RhinoPlates	-52.5 (Lim. 7)
R-W-7	Concrete Deck	OPTIONAL INSULATION under min. 1.5-inch E3	<i>Preliminarily Secured</i> or secured with top layer	Optional SECUROCK	JM All Purpose Fasteners and JM PVC RhinoPlates secured at a rate of 8 per 4-ft x 8-ft board Pattern #1 (1 fastener per 4.0-ft ²)	JM PVC (Min. 60 mil)	Induction welded to JM PVC RhinoPlates	-67.5 (Lim. 7)
R-W-8	Existing metal roof having Min. 16 ga. steel purlins at max. 5ft o.c.	Min. 1.5-inch E3 or EPS placed between ribs	<i>Preliminarily Secured</i> or secured with top layer	Min. 1-inch E3, or Cover Board	JM Purlin Fasteners and JM PVC RhinoPlates secured to structural supports 12-inch o.c.; Fastener rows max. 60-inch o.c.	JM PVC (Min. 60 mil)	Induction welded to JM PVC RhinoPlates	-67.5 (Lim. 7)
R-W-9	Steel Deck (G33, F1, L6, S24) or Concrete Deck	OPTIONAL INSULATION	<i>Preliminarily Secured</i> or secured with top layer	Min. 0.5-inch E3, or Cover Board	<i>Preliminarily Secured</i>	JM PVC SD Plus (Min. 60 mil)	Induction welded to JM PVC RhinoPlates placed max. 6" o.c. in rows max. 72" o.c.	-82.5 (Lim. 7)
R-W-10	Steel Deck (G33, F1, L6, S24) or Concrete Deck	OPTIONAL INSULATION	<i>Preliminarily Secured</i> or secured with top layer	Min. 0.5-inch E3, or Cover Board	<i>Preliminarily Secured</i>	JM PVC SD Plus (Min. 60 mil)	Induction welded to JM PVC RhinoPlates placed max. 6" o.c. in rows max. 60" o.c.	-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	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL E3 or Cover Board	Attached with ISOWELD-#15 spaced 6" o.c. in rows 60" o.c.	JM PVC JM PVC SD Plus (Min. 60 mil)	Induction welded to Isoweld plates	-90 (Lim. 7)
R-W-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	<i>Preliminarily Secured</i> or secured with top layer	Min. 1-inch E3, or Cover Board	JM Purlin Fasteners and JM PVC RhinoPlates secured to structural supports 6-inch o.c.; Fastener rows max. 60-inch o.c.	JM PVC (Min. 60 mil)	Induction welded to JM PVC RhinoPlates	-120 (Lim. 7)

APPENDIX D – APPROVED ASSEMBLIES FOR JM PVC 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-1	G33, P, L6, S24	OPTIONAL Vapor Barrier	Min. 1.5-inch E3	Simultaneously secured with top layer	ProtectoR	UltraFast Fasteners & Plates (Square) secured 1 fastener per 2.67ft ²	JM PVC	PVC MA (LowVOC) or PVC ASSBA	-30 (Lim. 7; Non-HVHZ)
S-AM-2	G33, P, L6, S24	OPTIONAL Vapor Barrier	Min. 1.5-inch E3	Simultaneously secured with top layer	ProtectoR	UltraFast Fasteners & Plates (Square) secured 1 fastener per 2.67ft ²	JM PVC SD Plus	PVC MA (LowVOC) or PVC ASSBA	-30 (Lim. 7; Non-HVHZ)
S-AM-3	G33, P, L6, S24	OPTIONAL Vapor Barrier	Min. 1.5-inch E3	Simultaneously secured with top layer	ProtectoR	UltraFast Fasteners & Plates (Square) secured 1 fastener per 2.67ft ²	JM PVC FB	RSUA applied 12-inch o.c. or 2-Part UIA-C(S)	-30 (Lim. 7; Non-HVHZ)
S-AM-4	G33	OPTIONAL Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 2-inch Fesco Foam	UltraFast Fasteners & Plates secured 1 fastener per 5.3ft ²	JM PVC	PVC MA (LowVOC)	-37.5 (Lim. 9; Non-HVHZ)
S-AM-5	G33	OPTIONAL Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 2-inch Fesco Foam	UltraFast Fasteners & Plates secured 1 fastener per 5.3ft ²	JM PVC SD Plus	PVC MA (LowVOC)	-37.5 (Lim. 9; Non-HVHZ)
S-AM-6	G33	ProtectoR attached with UltraFast Fasteners & Plates (Square) at 8 per 4-ft x 8-ft board Pattern #2; JM Vapor SA or JM Vapor Barrier SAR with JM SA Primer or JM SA Primer Low VOC	ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 C1, or ENRGY 3 C1 CGF	OSFA, RSUA, or 2-Part UIA applied 12-inch o.c.	ProtectoR, Retro-Fit, RetroPlus, SeparatorR CGF, SeparatorR FR, INVINSA, DensDeck, DensDeck Prime, DEXcell FA, or SECUROCK	OSFA, RSUA, or 2-Part UIA applied 12-inch o.c.	JM PVC, or JM PVC SD Plus	PVC MA (LowVOC)	-37.5 (Lim. 7; Non-HVHZ)

APPENDIX D – APPROVED ASSEMBLIES FOR JM PVC 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-7	G33	<i>ProtectoR</i> attached with <i>UltraFast Fasteners & Plates (Square)</i> at 8 per 4-ft x 8-ft board Pattern #2; JM Vapor SA or JM Vapor Barrier SAR with JM SA Primer or JM SA Primer Low VOC	ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 C1, or ENRGY 3 C1 CGF	<i>OSFA, RSUA, or 2-Part UIA</i> applied 12-inch o.c.	<i>ProtectoR, INVINSA, DensDeck Prime, DEXcell FA or SECUROCK</i>	<i>OSFA, RSUA, or 2-Part UIA</i> applied 12-inch o.c.	<i>JM PVC or JM PVC SD Plus</i>	<i>PVC ASSBA</i>	-37.5 (Lim. 7; Non-HVHZ)
S-AM-8	G33	<i>ProtectoR</i> attached with <i>UltraFast Fasteners & Plates (Square)</i> at 8 per 4-ft x 8-ft board Pattern #2; JM Vapor SA or JM Vapor Barrier SAR with JM SA Primer or JM SA Primer Low VOC	ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, ENRGY 3 C1, or ENRGY 3 C1 CGF	<i>OSFA, RSUA, or 2-Part UIA</i> applied 12-inch o.c.	<i>ProtectoR, Retro-Fit, RetroPlus, SeparatorR CGF, SeparatorR FR, INVINSA, DensDeck, DensDeck Prime, DEXcell FA, or SECUROCK</i>	<i>OSFA, RSUA, or 2-Part UIA</i> applied 12-inch o.c.	<i>JM PVC FB</i>	<i>RSUA</i> applied 12-inch o.c. or <i>2-Part UIA-C(S)</i>	-37.5 (Lim. 7; Non-HVHZ)
S-AM-9	G33	OPTIONAL Vapor Barrier	Min. 1.5-inch E3	Simultaneously secured with top layer	<i>ProtectoR</i>	<i>UltraFast Fasteners & Plates (Square)</i> secured 1 fastener per 4ft ²	<i>JM PVC</i>	<i>PVC MA (LowVOC)</i> or <i>PVC ASSBA</i>	-45 (Lim. 7; Non-HVHZ)
S-AM-10	G33	OPTIONAL Vapor Barrier	Min. 1.5-inch E3	Simultaneously secured with top layer	<i>ProtectoR</i>	<i>UltraFast Fasteners & Plates (Square)</i> secured 1 fastener per 4ft ²	<i>JM PVC SD Plus</i>	<i>PVC MA (LowVOC)</i> or <i>PVC ASSBA</i>	-45 (Lim. 7; Non-HVHZ)

APPENDIX D – APPROVED ASSEMBLIES FOR JM PVC 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-11	G33	OPTIONAL Vapor Barrier	Min. 1.5-inch E3	Simultaneously secured with top layer	ProtectoR	UltraFast Fasteners & Plates (Square) secured 1 fastener per 4ft ²	JM PVC FB	RSUA applied 12-inch o.c. or 2-Part UIA-C(S)	-45 (Lim. 7; Non-HVHZ)
S-AM-12	G33	OPTIONAL Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 2-inch Invinsa Foam	UltraFast Fasteners & Plates secured 1 fastener per 5.3ft ²	JM PVC or JM PVC SD Plus	PVC MA (LowVOC)	-45 (Lim. 7; Non-HVHZ)
S-AM-13	G33, F1W, L6, S24	OPTIONAL Vapor Barrier	Min. 2-inch ENRGY 3, ENRGY 3 CGF, ENRGY 3 FR or E3 C1	UltraFast 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 PVC or PVC SD Plus	PVC WBMA or PVC ASSBA	-45 (Lim. 7)
S-AM-14	G33, F1W, L6, S24	OPTIONAL Vapor Barrier	Min. 2-inch ENRGY 3, ENRGY 3 CGF, ENRGY 3 FR or E3 C1	UltraFast 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 PVC FB	RSUA applied 12-inch o.c or PVC WBMA	-45 (Lim. 7)
S-AM-15	G33, F1, L6, S24	OPTIONAL Vapor Barrier	Min. 2-inch E3 or E3 C1	UltraFast 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 PVC FB	RSUA 12-inch o.c.	-45 (Lim. 7)
S-AM-16	G33	OPTIONAL Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 2-inch ENRGY 3	AP Fasteners & Plates secured 8 per 4-ft x 8-ft board Pattern #2	JM PVC or JM PVC SD Plus	PVC ASSBA	-45 (Lim. 7; Non-HVHZ)
S-AM-17	G33, F1, L6, S24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	Simultaneously secured with top layer	SECUROCK	UltraFast Fasteners & Plates (Square) secured 1 fastener per 1.33ft ²	Base Ply: DynaBase HW Membrane: JM PVC FB	Base Ply: Torch Adhered Membrane: RSUA applied 12-inch o.c.	-52.5 (Lim. 7)
S-AM-18	G33, F1, L6, S24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	Simultaneously secured with top layer	SECUROCK	UltraFast Fasteners & Plates (Square) secured 1 fastener per 1.33ft ²	JM PVC or JM PVC SD Plus	PVC MA (LowVOC) applied at 1-1.1 gal/100ft ² or PVC ASSBA	-52.5 (Lim. 7)
S-AM-19	G33, F1, L6, S24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	Simultaneously secured with top layer	SECUROCK	UltraFast Fasteners & Plates (Square) secured 1 fastener per 1.33ft ²	JM PVC FB	2-Part UIA-C(S)	-52.5 (Lim. 7)

APPENDIX D – APPROVED ASSEMBLIES FOR JM PVC 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-20	G33, F2, L6, S24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	UltraFast Fasteners & Plates secured 1 fastener per 1.33ft ²	SECUROCK	OSFA, RSUA or 2-Part UIA applied 12-inch o.c.	JM PVC or JM PVC SD Plus	PVC MA (LowVOC) applied at 1-1.1 gal/100ft ² or PVC ASSBA	-52.5 (Lim. 7)
S-AM-21	G33, F2, L6, S24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	UltraFast Fasteners & Plates secured 1 fastener per 1.33ft ²	SECUROCK	OSFA, RSUA or 2-Part UIA applied 12-inch o.c.	JM PVC FB	2-Part UIA-C(S)	-52.5 (Lim. 7)
S-AM-22	G33, F2, L6, S24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	UltraFast Fasteners & Plates secured 1 fastener per 1.33ft ²	SECUROCK	OSFA, RSUA or 2-Part UIA applied 12-inch o.c.	Base Ply: DynaBase HW Membrane: JM PVC FB	Base Ply: Torch Adhered Membrane: RSUA applied 12-inch o.c.	-52.5 (Lim. 7)
S-AM-23	G33, F2, L6, S18	OPTIONAL Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 1.5-inch E3 or ProtectoR Foam	UltraFast Fasteners & Plates secured 1 fastener per 1.78ft ²	JM PVC FB	ASTM D 312 Type IV Asphalt	-52.5 (Lim. 7)
S-AM-24	G33, F1, L6, S12	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	Simultaneously secured with top layer	DensDeck Prime	UltraFast Fasteners & Plates (Square) secured 1 fastener per 1.78ft ²	JM PVC or JM PVC SD Plus	PVC MA (LowVOC), PVC WBMA, or PVC ASSBA	-52.5 (Lim. 7)
S-AM-25	G33, F1, L6, S12	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	Simultaneously secured with top layer	DensDeck Prime	UltraFast Fasteners & Plates (Square) secured 1 fastener per 1.78ft ²	JM PVC FB	ASTM D 312 Type IV Asphalt or 2-Part UIA-C(S)	-52.5 (Lim. 7)
S-AM-26	G33, F2W, L6, S24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	Simultaneously secured with top layer	SECUROCK	UltraFast Fasteners & Plates (Square) secured 1 fastener per 1.00ft ²	JM PVC or JM PVC SD Plus	PVC MA (LowVOC) applied at 1-1.1 gal/100ft ² or PVC ASSBA	-60 (Lim. 7)
S-AM-27	G33, F2W, L6, S24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	Simultaneously secured with top layer	SECUROCK	UltraFast Fasteners & Plates (Square) secured 1 fastener per 1.00ft ²	JM PVC FB	2-Part UIA-C(S)	-60 (Lim. 7)
S-AM-28	G33, F1, L6, S30	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch ENRGY 3	UltraFast 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.	Base Ply: DynaBase HW Membrane: JM PVC FB	Base Ply: Torch Adhered Membrane: RSUA applied 12-inch o.c.	-60 (Lim. 7)

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

Assemblies with Adhered Membranes over Insulated Steel Deck (New, Existing, or Recover)									
System No.	Deck Detail	Thermal/Vapor Barrier	Base Insulation	Base Insulation Attachment	Top Insulation or Coverboard	Top Insulation or Coverboard Attachment	Membrane	Membrane Attachment	MDP (psf)
S-AM-29	G33, F1, L6, S30	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch ENRGY 3	UltraFast 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 PVC or JM PVC SD Plus	PVC MA (LowVOC) applied at 1-1.1 gal/100ft ² or PVC ASSBA	-60 (Lim. 7)
S-AM-30	G33, F1, L6, S30	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch ENRGY 3	UltraFast 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 PVC FB	2-Part UIA-C(S)	-60 (Lim. 7)
S-AM-31	G33, P, L6, S20	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	Simultaneously secured with top layer	SECUROCK	UltraFast Fasteners & Plates (Square) secured 1 fastener per 1.78ft ²	Base Ply: DynaBase HW Membrane: JM PVC FB	Base Ply: Torch Adhered Membrane: RSUA applied 12-inch o.c.	-60 (Lim. 7)
S-AM-32	G33, F1, L6, S24	OPTIONAL Vapor Barrier	Min. 2-inch E3 or E3 C1	UltraFast 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 PVC FB	2-Part UIA-C(S)	-60 (Lim. 7)
S-AM-33	G33, F1W, L6, S24	OPTIONAL Vapor Barrier	Min. 2-inch ENRGY 3, ENRGY 3 CGF, ENRGY 3 FR or E3 C1	UltraFast 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 PVC FB	2-Part UIA-C(S)	-60 (Lim. 7)
S-AM-34	G33, F2, L6, S18	OPTIONAL Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 2-inch ENRGY 3 or ProtectoR Foam	AP Fasteners & Plates secured 1 fastener per 1.6ft ²	JM PVC FB	2-Part UIA-C(S)	-60 (Lim. 7)
S-AM-35	G33, F2W, L6, S18	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	UltraFast Fasteners & Plates secured 1 fastener per 1ft ²	SECUROCK, RetroPlus, or JM Invinsa	RSUA or 2-Part UIA applied 6-inch o.c.	JM PVC FB	RSUA applied 12-inch o.c.	-67.5 (Lim. 7)
S-AM-36	G33, F2W, L6, S18	OPTIONAL Vapor Barrier	OPTIONAL INSULATION under min. 1.5-inch E3	UltraFast Fasteners & Plates secured 1 fastener per 1ft ²	SECUROCK	OSFA, RSUA or 2-Part UIA applied 6-inch o.c.	Base Ply: DynaBase HW Membrane: JM PVC FB	Base Ply: Torch Adhered Membrane: RSUA applied 12-inch o.c.	-67.5 (Lim. 7)

APPENDIX D – APPROVED ASSEMBLIES FOR JM PVC 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-37	G33, F2, L6, S24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 2-inch ENRGY 3 CGF or ENRGY 3 FR	UltraFast Fasteners & Plates (Square) secured 1 fastener per 2.0ft ²	JM PVC or PVC SD Plus	PVC MA (LowVOC) or PVC ASSBA	-67.5 (Lim. 7)
S-AM-38	G33, F2, L6, S24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 2-inch ENRGY 3 CGF or ENRGY 3 FR	UltraFast Fasteners & Plates (Square) secured 1 fastener per 2.0ft ²	JM PVC FB	2-Part UIA-C(S)	-67.5 (Lim. 7)
S-AM-39	G33, F1, L6, S24	OPTIONAL Vapor Barrier	Min. 2-inch E3 or E3 C1	UltraFast Fasteners & Plates 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 PVC FB	RSUA 12-inch o.c.	-67.5 (Lim. 7)
S-AM-40	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	UltraFast Fasteners & Plates (Square) secured 1 fastener per 1.78ft ²	JM PVC or JM PVC SD Plus	PVC MA (LowVOC), PVC WBMA, or PVC ASSBA	-67.5 (Lim. 7)
S-AM-41	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	UltraFast Fasteners & Plates (Square) secured 1 fastener per 1.78ft ²	JM PVC FB	ASTM D 312 Type IV Asphalt or 2-Part UIA-C(S)	-67.5 (Lim. 7)
S-AM-42	G33, F, L6, S24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 2-inch E3 (no AGF), E3 C1, or Protector Foam	UltraFast Fasteners & Plates secured 1 fastener per 1.6ft ²	JM PVC or PVC SD Plus	PVC MA (LowVOC) or PVC ASSBA	-75 (Lim. 7)
S-AM-43	G33, F, L6, S24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 2-inch E3 (no AGF), E3 C1, or Protector Foam	UltraFast Fasteners & Plates secured 1 fastener per 1.6ft ²	JM PVC FB	2-Part UIA-C(S)	-75 (Lim. 7)
S-AM-44	G33, F, L6, S24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 2-inch E3 (no AGF) or E3 C1	UltraFast Fasteners & Plates secured 1 fastener per 1.6ft ²	JM PVC FB	ASTM D 312 Type IV Asphalt	-75 (Lim. 7)
S-AM-45	G33, F2, L6, S24	OPTIONAL Vapor Barrier	Min. 1.5-inch E3	Simultaneously secured with top layer	Min. 2-inch Invinsa Foam	UltraFast Fasteners & Plates (Square) secured 1 fastener per 2.0ft ²	JM PVC SD Plus	PVC MA (LowVOC)	-75 (Lim. 7)

APPENDIX D – APPROVED ASSEMBLIES FOR JM PVC 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-46	G33, F2, L6, S24	OPTIONAL Vapor Barrier	Min. 1.5-inch E3	Simultaneously secured with top layer	Min. 0.5-inch SECUROCK	UltraFast Fasteners & Plates (Square) secured 1 fastener per 1.6ft ²	JM PVC SD Plus	PVC MA (LowVOC) or PVC ASSBA	-75 (Lim. 7)
S-AM-47	G80, F1W, L6, S24	Min. 0.5-inch DEXcell FA; UltraFast 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 PVC FB (Min. 60 mil)	RSUA applied 6-inch o.c. or 2-Part UIA-C(S)	-82.5 (Lim. 7)
S-AM-48	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	UltraFast Fasteners & Plates (Square) secured 1 fastener per 1.0ft ²	JM PVC FB (Min. 60 mil)	RSUA applied 4-inch o.c. or 2-Part UIA-C(S)	-82.5 (Lim. 7)
S-AM-49	G33, F2, L6, S24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 2-inch E3 (no AGF), E3 C1, or ProtectoR Foam	UltraFast Fasteners & Plates secured 1 fastener per 1.0ft ²	JM PVC or PVC SD Plus	PVC MA (LowVOC) or PVC ASSBA	-82.5 (Lim. 7)
S-AM-50	G33, F2, L6, S24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 2-inch E3 (no AGF) or E3 C1	UltraFast Fasteners & Plates secured 1 fastener per 1.0ft ²	JM PVC FB	ASTM D 312 Type IV Asphalt or 2-Part UIA-C(S)	-82.5 (Lim. 7)
S-AM-51	G33, F2, L6, S24	OPTIONAL Vapor Barrier	Min. 1.5-inch E3	Simultaneously secured with top layer	Min. 0.5-inch DEXcell FA	UltraFast Fasteners & Plates (Square) secured 1 fastener per 1.0ft ²	JM PVC or PVC SD Plus	PVC MA (LowVOC) applied at 1.0 gal/100ft ²	-82.5 (Lim. 7)
S-AM-52	G33, F2, L6, S24	OPTIONAL Vapor Barrier	Min. 1.5-inch E3	Simultaneously secured with top layer	Min. 0.5-inch DensDeck Prime	UltraFast Fasteners & Plates (Square) secured 1 fastener per 1.0ft ²	JM PVC or PVC SD Plus	PVC MA (LowVOC) applied at 1.0 gal/100ft ² or PVC ASSBA	-82.5 (Lim. 7)
S-AM-53	G33, F2, L6, S24	OPTIONAL Vapor Barrier	Min. 1.5-inch E3	Simultaneously secured with top layer	Min. 0.5-inch DensDeck Prime	UltraFast Fasteners & Plates (Square) secured 1 fastener per 1.0ft ²	JM PVC FB	ASTM D 312 Type IV Asphalt or 2-Part UIA-C(S)	-82.5 (Lim. 7)

APPENDIX D – APPROVED ASSEMBLIES FOR JM PVC 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-54	G33, F1W, L6, S24	OPTIONAL Vapor Barrier	Min. 2-inch ENRGY 3, ENRGY 3 CGF, ENRGY 3 FR or E3 C1	<i>UltraFast Fasteners & Plates</i> secured 1 fastener per 1ft ²	Min. 1.5-inch ENRGY 3	OSFA, RSUA or 2-Part UIA applied 4-inch o.c.	JM PVC or PVC SD Plus	PVC MA (LowVOC) or PVC ASSBA	-82.5 (Lim. 7)
S-AM-55	G33, F1W, L6, S24	OPTIONAL Vapor Barrier	Min. 2-inch ENRGY 3, ENRGY 3 CGF, ENRGY 3 FR or E3 C1	<i>UltraFast Fasteners & Plates</i> secured 1 fastener per 1ft ²	Min. 1.5-inch ENRGY 3	OSFA, RSUA or 2-Part UIA applied 4-inch o.c.	JM PVC FB	ASTM D 312 Type IV	-82.5 (Lim. 7)
S-AM-56	G33, F1, L6, S24	OPTIONAL Vapor Barrier	Min. 2-inch E3 or E3 C1	<i>UltraFast Fasteners & Plates</i> secured 1 fastener per 1.6ft ²	Min. 0.5-inch Protector HD, DensDeck Prime, DEXcell FA, or SECUROCK	OSFA, RSUA, 2-Part UIA-C(B), or 2-Part UIA applied 6-inch o.c.	JM PVC or PVC SD Plus	PVC MA (LowVOC)	-82.5 (Lim. 7)
S-AM-57	G33, F1, L6, S24	OPTIONAL Vapor Barrier	Min. 2-inch E3 or E3 C1	<i>UltraFast Fasteners & Plates</i> secured 1 fastener per 1.6ft ²	Min. 0.5-inch Protector HD, DensDeck Prime, or SECUROCK	OSFA, RSUA, 2-Part UIA-C(B), or 2-Part UIA applied 6-inch o.c.	JM PVC or PVC SD Plus	PVC ASSBA	-82.5 (Lim. 7)
S-AM-58	G33, F1, L6, S24	OPTIONAL Vapor Barrier	Min. 2-inch E3 or E3 C1	<i>UltraFast 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 PVC FB	2-Part UIA-C(S)	-82.5 (Lim. 7)
S-AM-59	G33, F1, L6, S24	OPTIONAL Vapor Barrier	Min. 2-inch E3 or E3 C1	<i>UltraFast Fasteners & Plates</i> secured 1 fastener per 1.6ft ²	Min. 1.5-inch E3 (no AGF) or E3 C1	OSFA, RSUA, 2-Part UIA-C(B), or 2-Part UIA applied 6-inch o.c.	JM PVC or PVC SD Plus	PVC MA (LowVOC) or PVC ASSBA	-82.5 (Lim. 7)
S-AM-60	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	<i>UltraFast Fasteners & Plates (Square)</i> secured 1 fastener per 1.33ft ²	JM PVC or JM PVC SD Plus	PVC MA (LowVOC) or PVC WBMA	-90 (Lim. 7)
S-AM-61	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	<i>UltraFast Fasteners & Plates (Square)</i> secured 1 fastener per 1.33ft ²	JM PVC FB	ASTM D 312 Type IV Asphalt	-90 (Lim. 7)

APPENDIX D – APPROVED ASSEMBLIES FOR JM PVC 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-62	G80, F2, L6, S24	OPTIONAL Vapor Barrier	Min. 1.5-inch E3	Simultaneously secured with top layer	Min. 0.5-inch DEXcell FA	UltraFast Fasteners & Plates (Square) secured 1 fastener per 1.0ft ²	JM PVC or PVC SD Plus	PVC MA (LowVOC) applied at 1.0 gal/100ft ²	-105 (Lim. 7)
S-AM-63	G80, F2, L6, S24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 2-inch ENRGY 3 CGF or ENRGY 3 FR	UltraFast Fasteners & Plates (Square) secured 1 fastener per 1.33ft ²	JM PVC SD Plus	PVC MA (LowVOC)	-105 (Lim. 7)
S-AM-64	G80, F2, L6, S24	OPTIONAL Vapor Barrier	Min. 1.5-inch E3	Simultaneously secured with top layer	Min. 0.5-inch DensDeck Prime	UltraFast Fasteners & Plates (Square) secured 1 fastener per 1.0ft ²	JM PVC or PVC SD Plus	PVC MA (LowVOC) applied at 1.0 gal/100ft ²	-112.5 (Lim. 7)
S-AM-65	G80, F2, L6, S24	OPTIONAL Vapor Barrier	Min. 1.5-inch E3	Simultaneously secured with top layer	Min. 0.5-inch DensDeck Prime	UltraFast Fasteners & Plates (Square) secured 1 fastener per 1.0ft ²	JM PVC FB	ASTM D 312 Type IV Asphalt	-112.5 (Lim. 7)
S-AM-66	G80, F2, L6, S24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 2-inch E3 (no AGF), E3 C1, or ProtectoR Foam	UltraFast Fasteners & Plates secured 1 fastener per 1.0ft ²	JM PVC or PVC SD Plus	PVC MA (LowVOC)	-120 (Lim. 7)
S-AM-67	G80, F2, L6, S24	OPTIONAL Vapor Barrier	OPTIONAL INSULATION	Simultaneously secured with top layer	Min. 2-inch E3 (no AGF) or E3 C1	UltraFast Fasteners & Plates secured 1 fastener per 1.0ft ²	JM PVC FB	ASTM D 312 Type IV Asphalt	-120 (Lim. 7)
S-AM-68	G80, F1W, L6, S24	OPTIONAL Vapor Barrier	Min. 2-inch ENRGY 3, ENRGY 3 CGF, ENRGY 3 FR or E3 C1	UltraFast 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 PVC or PVC SD Plus	PVC MA (LowVOC)	-120 (Lim. 7)
S-AM-69	G80, F1W, L6, S24	OPTIONAL Vapor Barrier	Min. 2-inch ENRGY 3, ENRGY 3 CGF, ENRGY 3 FR or E3 C1	UltraFast 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 PVC FB	ASTM D 312 Type IV Asphalt	-120 (Lim. 7)
S-AM-70	G80, F2, L6, S24	OPTIONAL Vapor Barrier	Min. 2-inch E3 or E3 C1	UltraFast 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 PVC or PVC SD Plus	PVC MA (LowVOC)	-120 (Lim. 7)

APPENDIX D – APPROVED ASSEMBLIES FOR JM PVC 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-71	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	AP Fasteners & Plates secured 1 fastener per 1ft ²	JM PVC FB	2-Part UIA-C(S)	-135 (Lim. 7)
S-AM-72	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	UltraFast Fasteners & Plates (Square) secured 1 fastener per 1.0ft ²	JM PVC FB	RSUA applied 4-inch o.c.	-142.5 (Lim. 7)

Mechanically Fastened Assemblies over Steel Deck (New, Existing, or Recover)								
System No.	Deck Detail	Base Insulation	Base Insulation Attachment	Top Insulation	Top Insulation Attachment	Membrane	Membrane Attachment	MDP (psf)
S-M-1	G33, H1, L6, SH24	OPTIONAL INSULATION under min. 1-inch E3	Preliminarily Secured or secured with top layer	OPTIONAL Cover Board	Preliminarily Secured	JM PVC (Min. 60 mil)	Attached in-lap 12-inch o.c. with HL Fasteners & Plates; Fastener rows max. 138-inch o.c.	-30 (Lim. 7; Non-HVHZ)
S-M-2	G33, L6	OPTIONAL INSULATION under min. 1-inch E3	Preliminarily Secured or secured with top layer	OPTIONAL Cover Board	Preliminarily Secured	JM PVC	Attached in-lap 6-inch o.c. with Extra HL Fastener & Plates; Min. 6-inch wide side laps; Fastener rows max. 114-inch o.c.	-37.5 (Lim. 7; Non-HVHZ)
S-M-3	G33, F1 or P, L6, S24	OPTIONAL INSULATION under min. 1-inch E3	Preliminarily Secured or secured with top layer	OPTIONAL Cover Board	Preliminarily Secured	JM PVC or JM PVC SD Plus	Attached in-lap 6-inch o.c. with HL Fasteners & Plates; Min. 6-inch wide side laps; Fastener rows max. 114-inch o.c.	-45 (Lim. 7)
S-M-4	G33, F1, L6, S24	OPTIONAL INSULATION under min. 1-inch E3	Preliminarily Secured or secured with top layer	OPTIONAL Cover Board	Preliminarily Secured	JM PVC SD Plus	Attached in-lap 12-inch o.c. with HL Fasteners & Plates; Min. 6-inch wide side laps; Fastener rows max. 54-inch o.c.	-45 (Lim. 7)
S-M-5	G33, F1 or P, L6, S24	OPTIONAL INSULATION under min. 1-inch E3	Preliminarily Secured or secured with top layer	OPTIONAL Cover Board	Preliminarily Secured	JM PVC	Attached in-lap 6-inch o.c. with HL Fasteners & Plates; Min. 6-inch wide side laps; Fastener rows max. 114-inch o.c.	-45 (Lim. 7)
S-M-6	G80, F1, L6, S30	OPTIONAL INSULATION under min. 1.5-inch E3	Preliminarily Secured or secured with top layer	OPTIONAL Cover Board	Preliminarily Secured	JM PVC	Attached in-lap 12-inch o.c. with HL Fasteners & Plates; Min. 5-inch wide side laps; Fastener rows max. 73-inch o.c.	-45 (Lim. 7)

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

Mechanically Fastened Assemblies over Steel Deck (New, Existing, or Recover)								
System No.	Deck Detail	Base Insulation	Base Insulation Attachment	Top Insulation	Top Insulation Attachment	Membrane	Membrane Attachment	MDP (psf)
S-M-7	G33, P, L6	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 PVC	Attached in-lap 6-inch o.c. with <i>HL Fasteners & Plates</i> ; Min. 6-inch wide side laps; Fastener rows max. 72-inch o.c.	-45 (Lim. 7)
S-M-8	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 PVC (Min. 60 mil)	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-9	G80, F1, L6, S30	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 PVC (Min. 60 mil)	Attached in-lap 12-inch o.c. with <i>HL Fasteners & Plates</i> ; Min. 5-inch wide side laps with min. 2-inch wide heat welds; Fastener rows max. 73-inch o.c.	-52.5 (Lim. 7)
S-M-10	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 PVC FB/ DynaFast	<i>HL Fasteners & Plates</i> spaced 6-inch o.c within each min. 4-inch heat welded side laps in rows max. 70-inch o.c.	-52.5 (Lim. 9)
S-M-11	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 PVC SD Plus	Attached in-lap 6-inch o.c. with <i>HL Fasteners & Plates</i> ; Min. 6-inch wide side laps; Fastener rows max. 54-inch o.c.	-60 (Lim. 7)
S-M-12	G80, F1, L6, S30	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 PVC	Attached in-lap 6-inch o.c. with <i>HL Fasteners & Plates</i> ; Min. 5-inch wide side laps; Fastener rows max. 73-inch o.c.	-60 (Lim. 7)
S-M-13	G80, F1, L6, S30	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 PVC or JM PVC FB	Attached in-lap 6-inch o.c. with <i>HL Fasteners & Plates</i> ; Min. 4.5-inch wide side laps with min. 2-inch wide heat welds; Fastener rows max. 114-inch o.c.	-60 (Lim. 7)
S-M-14	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 PVC	Attached in-lap 6-inch o.c. with <i>HL Fasteners & Plates</i> ; Min. 5.5-inch wide side laps with min. 2-inch wide heat welds; Fastener rows max. 114-inch o.c.	-60 (Lim. 7)
S-M-15	G80, F1, L6, S24	OPTIONAL INSULATION under min. 1-inch E3	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	JM PVC	Attached in-lap 6-inch o.c. with Extra High Load Fasteners & OMG Super XHD 2-3/4 Barbed Plates; Min. 5.5-inch wide side laps with min. 2-inch wide heat welds; Fastener rows max. 114-inch o.c.	-60 (Lim. 7)

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

Mechanically Fastened Assemblies over Steel Deck (New, Existing, or Recover)								
System No.	Deck Detail	Base Insulation	Base Insulation Attachment	Top Insulation	Top Insulation Attachment	Membrane	Membrane Attachment	MDP (psf)
S-M-16	G33, P, L6	OPTIONAL INSULATION under min. 1-inch E3	Preliminarily Secured or secured with top layer	OPTIONAL Cover Board	Preliminarily Secured	JM PVC FB/ DynaFast	APB Fasteners & Plates spaced 6-inch o.c within each min. 4-inch heat welded side lap.	-60 (Lim. 9)
S-M-17	G33, P, L6	OPTIONAL INSULATION under min. 1-inch E3	Preliminarily Secured or secured with top layer	OPTIONAL Cover Board	Preliminarily Secured	JM PVC FB/ DynaFast	HL Fasteners & Plates spaced 12-inch o.c within each min. 4-inch heat welded side lap.	-60 (Lim. 9)
S-M-18	G33, P, L6	OPTIONAL INSULATION under min. 1-inch E3	Preliminarily Secured or secured with top layer	OPTIONAL Cover Board	Preliminarily Secured	JM PVC FB/ DynaFast	High Load LH Fasteners and Polymer Membrane Batten OR High Load Fasteners and Deep Well Batten strip spaced 6-inch o.c. within min. 4-inch heat welded side laps in rows max. 71-inch o.c.	-60 (Lim. 9)
S-M-19	G80, F1, L6, S30	OPTIONAL INSULATION under min. 1-inch E3	Preliminarily Secured or secured with top layer	OPTIONAL Cover Board	Preliminarily Secured	JM PVC (Min. 60 mil)	Attached in-lap 6-inch o.c. with HL Fasteners & Plates; Min. 6-inch wide side laps with min. 2-inch wide heat welds; Fastener rows max. 72-inch o.c.	-75 (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, L6	OPTIONAL INSULATION under min. 1-inch E3	Preliminarily Secured or secured with top layer	OPTIONAL Cover Board	Preliminarily Secured	JM PVC SD Plus (Min. 60 mil)	Induction welded to JM PVC RhinoPlates with High Load Fasteners placed max. 12" o.c. in rows max. 72" o.c.	-37.5 (Lim. 7; Non-HVHZ)
S-W-2	G33, SD1W, L6, SDL24	INSULATION	Preliminarily Secured or secured with top layer	OPTIONAL Cover Board	Attached with ISOWELD-#15 spaced 12" o.c. in rows 60" o.c.	JM PVC JM PVC SD Plus (Min. 60 mil)	Induction welded to Isoweld plates	-37.5 (Lim. 7; Non-HVHZ)
S-W-3	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 PVC JM PVC SD Plus (Min. 60 mil)	Induction welded to Isoweld plates	-37.5 (Lim. 7; Non-HVHZ)
S-W-4	G33, P, L6, S36	INSULATION	Preliminarily Secured or secured with top layer	OPTIONAL Cover Board	Attached with ISOWELD-#15 spaced in a 2-ft x 3-ft staggered grid	JM PVC JM PVC SD Plus (Min. 60 mil)	Induction welded to Isoweld plates	-37.5 (Lim. 7; Non-HVHZ)

APPENDIX D – APPROVED ASSEMBLIES FOR JM PVC 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-5	G33, F1, L6, S24	OPTIONAL INSULATION under min. 1-inch E3	Preliminarily Secured or secured with top layer	OPTIONAL Cover Board	Preliminarily Secured	JM PVC SD Plus (Min. 60 mil)	Induction welded to JM PVC RhinoPlates with High Load Fasteners placed max. 12" o.c. in rows max. 60" o.c.	-45 (Lim. 7)
S-W-6	G33, 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" o.c.	JM PVC JM PVC SD Plus (Min. 60 mil)	Induction welded to Isoweld plates	-45 (Lim. 7)
S-W-7	G80, F1, L6, S36	INSULATION	Preliminarily Secured or secured with top layer	OPTIONAL Cover Board	Attached with ISOWELD-#12 or ISOWELD-#15 spaced 12" o.c. in rows 60" o.c.	JM PVC JM PVC SD Plus (Min. 60 mil)	Induction welded to Isoweld plates	-45 (Lim. 7)
S-W-8	G33, P, L6, S24	OPTIONAL INSULATION under min. 1-inch E3	Preliminarily Secured or secured with top layer	OPTIONAL Cover Board	High Load Fasteners and JM PVC RhinoPlates in a 2-ft x 2-ft staggered grid pattern	JM PVC SD Plus (Min. 60 mil)	Induction welded to JM PVC RhinoPlates	-52.5 (Lim. 7)
S-W-9	G33, SD1W, L6, SDL24	INSULATION	Preliminarily Secured or secured with top layer	OPTIONAL Cover Board	Attached with ISOWELD-#15 spaced 6" o.c. in rows 60" o.c.	JM PVC JM PVC SD Plus (Min. 60 mil)	Induction welded to Isoweld plates	-60 (Lim. 7)
S-W-10	G33, F1, L6, S18	OPTIONAL INSULATION under min. 1-inch E3	Preliminarily Secured or secured with top layer	OPTIONAL Cover Board	High Load Fasteners and JM PVC RhinoPlates at a rate of 8 per 4-ft x 8-ft board Pattern #1 (1 fastener per 4.0-ft ²)	JM PVC (Min. 60 mil)	Induction welded to JM PVC RhinoPlates	-67.5 (Lim. 7)
S-W-11	G33, SD1W, L6, SDL24	INSULATION	Preliminarily Secured or secured with top layer	OPTIONAL Cover Board	Attached with ISOWELD-#15 or ISOWELD-#14 spaced 18" o.c. in rows 24" o.c.	JM PVC JM PVC SD Plus (Min. 60 mil)	Induction welded to Isoweld plates	-67.5 (Lim. 7)
S-W-12	G33, F1, L6, S24	OPTIONAL INSULATION under min. 1-inch E3	Preliminarily Secured or secured with top layer	OPTIONAL Cover Board	Preliminarily Secured	JM PVC SD Plus (Min. 60 mil)	Induction welded to JM PVC RhinoPlates with High Load Fasteners placed max. 6" o.c. in rows max. 72" o.c.	-82.5 (Lim. 7)
S-W-13	G33, P, L6, S36	INSULATION	Preliminarily Secured or secured with top layer	OPTIONAL Cover Board	Attached with ISOWELD-#15 spaced in a 1.5-ft x 2-ft staggered grid	JM PVC JM PVC SD Plus (Min. 60 mil)	Induction welded to Isoweld plates	-82.5 (Lim. 7)
S-W-14	G33, SD1W, L6, SDL24	INSULATION	Preliminarily Secured or secured with top layer	OPTIONAL Cover Board	Attached with ISOWELD-#15 spaced 18" o.c. in rows 18" o.c.	JM PVC JM PVC SD Plus (Min. 60 mil)	Induction welded to Isoweld plates	-82.5 (Lim. 7)

APPENDIX D – APPROVED ASSEMBLIES FOR JM PVC 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-15	G33, F1, L6, S24	OPTIONAL INSULATION under min. 1-inch E3	Preliminarily Secured or secured with top layer	OPTIONAL Cover Board	Preliminarily Secured	JM PVC SD Plus (Min. 60 mil)	Induction welded to JM PVC RhinoPlates with High Load Fasteners placed max. 6" o.c. in rows max. 60" o.c.	-90 (Lim. 7)
S-W-16	G33, F2W, L6	OPTIONAL INSULATION under min. 1-inch E3	Preliminarily Secured or secured with top layer	OPTIONAL Cover Board	High Load Fasteners and JM PVC RhinoPlates at a rate of 15 per 4-ft x 8-ft board (1 fastener per 2.13-ft ²)	JM PVC (Min. 60 mil)	Induction welded to JM PVC RhinoPlates	-90 (Lim. 7)
S-W-17	G33, F1, L5, S30	INSULATION	Preliminarily Secured or secured with top layer	OPTIONAL Cover Board	Attached with ISOWELD-#15 spaced 6" o.c. in rows 60" o.c.	JM PVC JM PVC SD Plus (Min. 60 mil)	Induction welded to Isoweld plates	-90 (Lim. 7)

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	T19/320, L24	OPTIONAL INSULATION	Preliminarily Secured or secured with top layer	DEXcell FA	AP Fasteners & Plates (Square) at a rate of 6 per 4-ft x 4-ft board (1 fastener per 2.67-ft ²)	JM PVC or JM PVC SD Plus	PVC MA (LowVOC) or PVC ASSBA	-37.5 (Lim. 7; Non-HVHZ)
W-AM-2	T7/160, L24, N6	OPTIONAL INSULATION under min. 1.5-inch E3	Preliminarily Secured or secured with top layer	ProtectoR HD	UltraFast Fasteners & Plates (Square) at a rate of 1 fastener per 2-ft ²	JM PVC	PVC MA (LowVOC) or PVC ASSBA	-37.5 (Lim. 7; Non-HVHZ)
W-AM-3	T7/160, L24, N6	OPTIONAL INSULATION under min. 1.5-inch E3	Preliminarily Secured or secured with top layer	ProtectoR HD	UltraFast Fasteners & Plates (Square) at a rate of 1 fastener per 2-ft ²	JM PVC SD Plus	PVC MA (LowVOC) or PVC ASSBA	-37.5 (Lim. 7; Non-HVHZ)
W-AM-4	T7/160, L24, N6	OPTIONAL INSULATION under min. 1.5-inch E3	Preliminarily Secured or secured with top layer	ProtectoR HD	UltraFast Fasteners & Plates (Square) at a rate of 1 fastener per 2-ft ²	JM PVC FB	RSUA applied 12-inch o.c. or 2-Part UIA-C(S)	-37.5 (Lim. 7; Non-HVHZ)
W-AM-5	T7/160 or T15/32P, L24	OPTIONAL INSULATION	Preliminarily Secured or secured with top layer	Min. 1.5-inch ENRGY 3 or ProtectoR Foam	AP Fasteners & Plates (Square) at a rate of 16 per 4-ft x 8-ft board (1 fastener per 2-ft ²)	JM PVC or JM PVC SD Plus	PVC MA (LowVOC) or PVC ASSBA	-45 (Lim. 7; Non-HVHZ)

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

Mechanically Fastened Assemblies over Wood Deck (New or Existing)									
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, L25	As required	Min. 0.25-inch INSULATION	Preliminarily Secured or secured with top layer	OPTIONAL Cover Board	Preliminarily Secured	JM PVC	Attached in-lap 6-inch o.c. with HL Fasteners & Plates; Fastener rows max. 72-inch o.c.	-37.5 (Lim. 7; Non-HVHZ)
W-M-2	T15/32P, L24, N6	As required	Min. 0.25-inch INSULATION	Preliminarily Secured or secured with top layer	OPTIONAL Cover Board	Preliminarily Secured	JM PVC	Attached in-lap 12-inch o.c. with All Purpose Fasteners and High Load Plates through deck into wood supports; Fastener shall have sufficient length to penetrate min. 1.5-inch into wood supports; Fastener rows max. 72-inch o.c.	-45 (Lim. 7)

Induction Welded Assemblies over Wood Deck (New or Existing)									
System No.	Deck Detail	Thermal Barrier	Base Insulation	Base Insulation Attachment	Top Insulation	Top Insulation Attachment	Membrane	Membrane Attachment	MDP (psf)
W-W-1	T7/16O or T15/32P, L24	As required	Min. 1-inch E3 or E3 C1	Loose laid	OPTIONAL Cover Board	JM All Purpose Fasteners (min. 1.5-inch embedment into wood supports) and JM PVC RhinoPlates secured max. 48-inch o.c. through sheathing into wood structural supports in rows max. 24" o.c.	JM PVC (Min. 60 mil)	Induction welded to JM PVC RhinoPlates	-37.5 (Lim. 7; Non-HVHZ)
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 PVC RhinoPlates secured max. 24-inch o.c. through sheathing into wood structural supports in rows max. 24" o.c.	JM PVC (Min. 60 mil)	Induction welded to JM PVC RhinoPlates	-52.5 (Lim. 7)

END OF REPORT