



EVALUATION REPORT

FLORIDA BUILDING CODE, 8TH EDITION (2023)

Manufacturer: JOHNS MANVILLE CORPORATION
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Issued April 14, 2026

Manufacturing Plants: Southgate, CA
Oklahoma City, OK
Macon, GA

Quality Assurance: UL LLC (QUA9625)

SCOPE

Category: Roofing
Subcategory: Built-Up Roof System
Code Edition: Florida Building Code, 8th Edition (2023)
Code Sections: 1504.3.1, 1504.6, 1504.7, 1507.2.9.2, 1507.6.5, 1507.10.2, 1507.11.2
Properties: Wind Resistance, Physical Properties, Impact Resistance

PRODUCT DESCRIPTION

Products	Specification	Description
DynaBase	ASTM D 6163	A glass reinforced SBS modified bitumen base sheet.
DynaBase 3.0	ASTM D 6163	A glass reinforced SBS modified bitumen base sheet.
GlasKap	ASTM D 3909	Fiber glass-reinforced, mineral-surfaced cap sheet
GlasKap CR G	ASTM D 3909	Fiber glass-reinforced, reflective mineral-surfaced cap sheet
GlasPly IV	ASTM D 2178	Type IV asphalt impregnated glass felt for use in conventional built-up roofing
GlasPly Premier	ASTM D 2178	Type VI asphalt impregnated glass felt for use in conventional and modified bitumen built-up roofing
GlasTite Flexible	ASTM D 4601	Fiberglass and polyester-reinforced, asphalt-coated sheet for use in conventional built-up roofing
PermaPly 28	ASTM D 4601	Type II asphalt impregnated and coated glass fiber base sheet for use in conventional built-up roofing
Ventsulation Felt	ASTM D 4897	Heavy duty fiber glass base sheet impregnated and coated on both sides with asphalt with or without fine mineral stabilizer. Surfaced on the bottom side with coarse mineral granules embedded in asphaltic coating

REFERENCES

<u>Entity</u>	<u>Report No.</u>	<u>Standards (Year)</u>
Atlantic & Caribbean Roof Consulting, LLC (TST4671)	ACRC 06-003	FM 4474 (2011)
Atlantic & Caribbean Roof Consulting, LLC (TST4671)	ACRC 06-005	FM 4474 (2011)
Atlantic & Caribbean Roof Consulting, LLC (TST4671)	ACRC 06-009	FM 4474 (2011)
Atlantic & Caribbean Roof Consulting, LLC (TST4671)	ACRC 07-014	FM 4474 (2011)
Atlantic & Caribbean Roof Consulting, LLC (TST4671)	ACRC 14-035	FM 4474 (2011)
IRT-ARCON (TST5296)	02-011	FM 4474 (2011)
IRT-ARCON (TST5296)	02-026	FM 4474 (2011)
FM Approvals (TST1867)	0V7A4.AM	FM 4470 (2016)
FM Approvals (TST1867)	0W6A2.AM	FM 4470 (2016)
FM Approvals (TST1867)	0X0A9.AM	FM 4470 (2016)
FM Approvals (TST1867)	0X7A4.AM	FM 4470 (2016)
FM Approvals (TST1867)	0Z8A9.AM	FM 4470 (2016)
FM Approvals (TST1867)	107A4.AM	FM 4470 (2016)
FM Approvals (TST1867)	3000949	FM 4470 (2016)
FM Approvals (TST1867)	3001457	FM 4470 (2016)
FM Approvals (TST1867)	3001482	FM 4470 (2016)
FM Approvals (TST1867)	3001629	FM 4470 (2016)
FM Approvals (TST1867)	3006346	FM 4470 (2016)
FM Approvals (TST1867)	3007148	FM 4470 (2016)
FM Approvals (TST1867)	3009499	FM 4470 (2016)
FM Approvals (TST1867)	3011248	FM 4470 (2016)
FM Approvals (TST1867)	3012064	FM 4470 (2016)
FM Approvals (TST1867)	3012974	FM 4470 (2016)
FM Approvals (TST1867)	3014090	FM 4470 (2016)
FM Approvals (TST1867)	3015484	FM 4470 (2016)
FM Approvals (TST1867)	3020600	FM 4470 (2016)
FM Approvals (TST1867)	3020703	FM 4470 (2016)
FM Approvals (TST1867)	3025158	FM 4474 (2011)
FM Approvals (TST1867)	3026130	FM 4470 (2016)
FM Approvals (TST1867)	3026151	FM 4470 (2016)
FM Approvals (TST1867)	3031797	FM 4470 (2016)
FM Approvals (TST1867)	3036559	FM 4470 (2016)
FM Approvals (TST1867)	3037222	FM 4470 (2016)
FM Approvals (TST1867)	3037540	FM 4470 (2016)
FM Approvals (TST1867)	3039653	FM 4470 (2016)
FM Approvals (TST1867)	3040205	FM 4470 (2016)
FM Approvals (TST1867)	3040986	FM 4470 (2016)
FM Approvals (TST1867)	3043824	FM 4470 (2016)
FM Approvals (TST1867)	3046174	FM 4470 (2016)
FM Approvals (TST1867)	3053933	FM 4470 (2016)
FM Approvals (TST1867)	3054150	FM 4470 (2016)
FM Approvals (TST1867)	3055167	FM 4470 (2016)
FM Approvals (TST1867)	3061218	FM 4470 (2016)
FM Approvals (TST1867)	3061804	FM 4470 (2016)
FM Approvals (TST1867)	3060610	FM 4470 (2016)
FM Approvals (TST1867)	3D4A4.AM	FM 4470 (2016)
FM Approvals (TST1867)	PR449524	FM 4470 (2016)
FM Approvals (TST1867)	PR450753	FM 4470 (2016)
FM Approvals (TST1867)	PR450753	FM 4470 (2016)
FM Approvals (TST1867)	PR451973	FM 4470 (2016)
FM Approvals (TST1867)	PR453769	FM 4470 (2016)
FM Approvals (TST1867)	PR454134	FM 4470 (2016)
FM Approvals (TAS1867)	PR455182	FM 4470 (2016)
FM Approvals (TAS1867)	PR459758	FM 4470 (2016)
FM Approvals (TAS1867)	PR460648	FM 4470 (2016)
FM Approvals (TST1867)	PR461495	FM 4470 (2016)
FM Approvals (TAS1867)	RR229337	FM 4470 (2016)
FM Approvals (TAS1867)	RR229338	FM 4470 (2016)
FM Approvals (TAS1867)	RR229341	FM 4470 (2016)

<u>Entity</u>	<u>Report No.</u>	<u>Standards (Year)</u>
FM Approvals (TAS1867)	RR229344	FM 4470 (2016)
FM Approvals (TAS1867)	RR230185	FM 4470 (2016)
FM Approvals (TAS1867)	RR231048	FM 4470 (2016)
FM Approvals (TAS1867)	RR231335	FM 4470 (2016)
FM Approvals (TAS1867)	RR231336	FM 4470 (2016)
FM Approvals (TAS1867)	RR231338	FM 4470 (2016)
FM Approvals (TAS1867)	RR232568	FM 4470 (2016)
FM Approvals (TST1867)	RR232747	FM 4470 (2016)
FM Approvals (TST1867)	RR233717	FM 4470 (2016)
FM Approvals (TST1867)	RR234327	FM 4470 (2016)
FM Approvals (TST1867)	RR460477	FM 4470 (2016)
FM Approvals (TST1867)	RR234751	FM 4470 (2016)
Nemoj Etc LLC (TST6049)	4a-CEL-19-LSWUS-01.C	FM 4474 (2011)
Nemoj Etc LLC (TST6049)	4a-CEL-22-LSWUS-.01A	FM 4474(B) (2011)
		UL 1897 (2015)
Nemoj Etc LLC (TST6049)	4a-JM-23-LSWUS-01.A.R1	UL 1897 (2015)
Nemoj Etc LLC (TST6049)	4a-JM-23-LSWUS-02.A	UL 1897 (2015)
Nemoj Etc LLC (TST6049)	4a-JM-23-LSWUS-03.A	FM 4474(D) (2011)
PRI Construction Materials Technologies (TST5878)	GPGC-046-02-01	FM 4470 (2016)
PRI Construction Materials Technologies (TST5878)	JMC-065-02-01	ASTM D 6163 (2016)
PRI Construction Materials Technologies (TST5878)	JMC-066-02-01	ASTM D 6163 (2016)
PRI Construction Materials Technologies (TST5878)	JMC-070-02-01	ASTM D 2178 (2015a)
PRI Construction Materials Technologies (TST5878)	JMC-071-02-01	ASTM D 2178 (2015a)
PRI Construction Materials Technologies (TST5878)	JMC-072-02-01	ASTM D 4601 (2004(2012)E1)
PRI Construction Materials Technologies (TST5878)	JMC-074-02-01	ASTM D 4897 (2016a)
PRI Construction Materials Technologies (TST5878)	JMC-081-02-01.02	TAS 117 (B & C) (1995)
PRI Construction Materials Technologies (TST5878)	JMC-091-02-01	ASTM D 4601 (2004(2012)E1)
PRI Construction Materials Technologies (TST5878)	JMC-093-02-01	ASTM D 4601 (2004(2012)E1)
PRI Construction Materials Technologies (TST5878)	JMC-096-02-01	TAS 117 (A & B) (1995)
PRI Construction Materials Technologies (TST5878)	JMC-107-02-01,11	ASTM D 903 (1998(2010))
		ASTM D 1876 (2008(2015)e1)
		ASTM D 5147 (2014)
		TAS 117(A & B) (1995)
		TAS 114(C) (1995)
PRI Construction Materials Technologies (TST5878)	JMC-108-02-01	FM 4474 (D) (2011)
PRI Construction Materials Technologies (TST5878)	JMC-114-02-01	FM 4474 (D) (2011)
PRI Construction Materials Technologies (TST5878)	JMC-118-02-02	FM 4474 (C) (2011)
PRI Construction Materials Technologies (TST5878)	JMC-131-02-01	FM 4474 (B) (2011)
PRI Construction Materials Technologies (TST5878)	JMC-132-02-01	FM 4474 (B) (2011)
PRI Construction Materials Technologies (TST5878)	JMC-141-02-01	FM 4474 (D) (2011)
PRI Construction Materials Technologies (TST5878)	JMC-168-02-01	FM 4474 (D) (2011)
PRI Construction Materials Technologies (TST5878)	JMC-171-02-01	ASTM D 6163 (2016)
PRI Construction Materials Technologies (TST5878)	JMC-222-02-01	FM 4474 (D) (2011)
PRI Construction Materials Technologies (TST5878)	JMC-222-02-02A	UL 1897 (2015)
PRI Construction Materials Technologies (TST5878)	JMC-222-02-02	FM 4474 (D) (2011)
PRI Construction Materials Technologies (TST5878)	JMC-225-02-01	FM 4474 (B) (2011)
PRI Construction Materials Technologies (TST5878)	JMC-234-02-03	ASTM D 6163 (2016)
PRI Construction Materials Technologies (TST5878)	JMC-222-02-04	FM 4474 (D) (2011)
PRI Construction Materials Technologies (TST5878)	JMC-227-02-01	FM 4474 (D) (2011)
PRI Construction Materials Technologies (TST5878)	JMC-234-02-06	FM 4474 (D) (2011)
PRI Construction Materials Technologies (TST5878)	JMC-242-02-01	FM 4474 (D) (2011)
PRI Construction Materials Technologies (TST5878)	JMC-242-02-02	FM 4474 (B) (2011)
PRI Construction Materials Technologies (TST5878)	JMC-242-02-03	FM 4474 (C) (2011)
PRI Construction Materials Technologies (TST5878)	JMC-245-02-01	FM 4474 (D) (2011)
		UL 1897 (2015)
PRI Construction Materials Technologies (TST5878)	JMC-245-02-02	FM 4474 (B) (2011)
PRI Construction Materials Technologies (TST5878)	JMC-246-02-01	FM 4474 (B) (2011)
PRI Construction Materials Technologies (TST5878)	JMC-267-02-01	FM 4474 (D) (2011)
		UL 1897 (2015)
PRI Construction Materials Technologies (TST5878)	JMC-267-02-02	FM 4474 (B) (2011)
PRI Construction Materials Technologies (TST5878)	JMC-268-02-01	FM 4474 (D) (2011)
		UL 1897 (2015)

<u>Entity</u>	<u>Report No.</u>	<u>Standards (Year)</u>
PRI Construction Materials Technologies (TST5878)	JMC-272-02-01	FM 4474 (D) (2011) UL 1897 (2015)
PRI Construction Materials Technologies (TST5878)	JMC-308-02-01	FM 4474 (B) (2011)
PRI Construction Materials Technologies (TST5878)	JMC-339-02-03	ASTM C 1289 (2018) ASTM E 84 (2018b)
PRI Construction Materials Technologies (TST5878)	JMC-339-02-04	ASTM C 1289 (2018) ASTM E 84 (2018b)
PRI Construction Materials Technologies (TST5878)	507T0002	FM 4474 (D) (2011) UL 1897 (2015)
PRI Construction Materials Technologies (TST5878)	507T0003	FM 4474 (B) (2011)
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)	507T0061	FM 4474 (B) (2011) UL 1897 (2015)
PRI Construction Materials Technologies (TST5878)	507T0065	FM 4474 (B) (2011) UL 1897 (2015)
PRI Construction Materials Technologies (TST5878)	507T0105	ASTM D 6163 (2016)
PRI Construction Materials Technologies (TST5878)	507T0144B	FM 4474 (C) (2011)
PRI Construction Materials Technologies (TST5878)	507T0155	FM 4474 (B) (2011)
PRI Construction Materials Technologies (TST5878)	507T0174	FM 4474 (C) (2011)
PRI Construction Materials Technologies (TST5878)	507T0181	FM 4474 (C) (2011)
PRI Construction Materials Technologies (TST5878)	507T0187.2	TAS 117(A & B) (1995) FM 4470 (2016)
PRI Construction Materials Technologies (TST5878)	507T0218	FM 4474 (C) (2011)
PRI Construction Materials Technologies (TST5878)	507T0224	FM 4474 (D) (2011)
PRI Construction Materials Technologies (TST5878)	507T0241	FM 4474 (D) (2011)
PRI Construction Materials Technologies (TST5878)	507T0249	FM 4474 (B) (2011)
PRI Construction Materials Technologies (TST5878)	507T0250	FM 4474 (B) (2011)
PRI Construction Materials Technologies (TST5878)	507T0256A	FM 4474 (C) (2011)
PRI Construction Materials Technologies (TST5878)	507T0266	FM 4474 (D) (2011) UL 1897 (2015)
PRI Construction Materials Technologies (TST5878)	507T0267	FM 4474 (C) (2011)
PRI Construction Materials Technologies (TST5878)	507T0268	FM 4474 (B) (2011)
PRI Construction Materials Technologies (TST5878)	507T0270B	FM 4474 (D) (2011) UL 1897 (2015)
PRI Construction Materials Technologies (TST5878)	507T0271	FM 4474 (B) (2011)
PRI Construction Materials Technologies (TST5878)	507T0273	FM 4474 (C) (2011)
PRI Construction Materials Technologies (TST5878)	507T0277	FM 4474 (C) (2011)
PRI Construction Materials Technologies (TST5878)	507T0278	FM 4474 (C) (2011)
PRI Construction Materials Technologies (TST5878)	507T0293	ASTM D 4601 (2004(2012)E1)
PRI Construction Materials Technologies (TST5878)	507T0302	FM 4474 (D) (2011)
PRI Construction Materials Technologies (TST5878)	507T0303	FM 4474 (D) (2011)
PRI Construction Materials Technologies (TST5878)	507T0306.1	FM 4474 (D)(2011) TAS 114(J) (2011)
PRI Construction Materials Technologies (TST5878)	507T0320	FM 4474(C) (2011)
PRI Construction Materials Technologies (TST5878)	507T0326A	FM 4474 (B) (2011)
PRI Construction Materials Technologies (TST5878)	507T0331	FM 4474(C) (2011)
PRI Construction Materials Technologies (TST5878)	507T0336	FM 4474 (B) (2011)
PRI Construction Materials Technologies (TST5878)	507T0339	FM 4474(D) (2011)
PRI Construction Materials Technologies (TST5878)	507T0394	FM 4474(D) (2011)
PRI Construction Materials Technologies (TST5878)	507T0342	UL 1897 (2015)
PRI Construction Materials Technologies (TST5878)	507T0343	UL 1897 (2015)
PRI Construction Materials Technologies (TST5878)	507T0344	UL 1897 (2015)
PRI Construction Materials Technologies (TST5878)	507T0381	FM 4474 (B) (2011)
PRI Construction Materials Technologies (TST5878)	507T0392	FM 4474(B) (2011)
PRI Construction Materials Technologies (TST5878)	507T0394	FM 4474(D) (2011)
PRI Construction Materials Technologies (TST5878)	507T0404	UL 1897 (2015)
PRI Construction Materials Technologies (TST5878)	507T0405	UL 1897 (2015)
PRI Construction Materials Technologies (TST5878)	507T0407A	FM 4474(D) (2011)
PRI Construction Materials Technologies (TST5878)	507T0407B	UL 1897 (2015)
PRI Construction Materials Technologies (TST5878)	507T0410.1	FM 4474 (C) (2011)
PRI Construction Materials Technologies (TST5878)	507T0414	ASTM D 903 (1998)

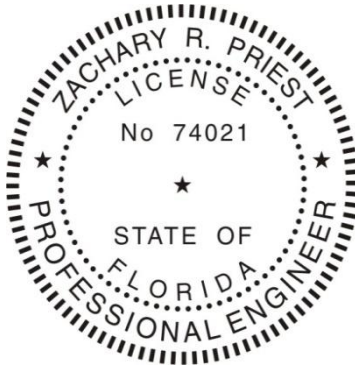
<u>Entity</u>	<u>Report No.</u>	<u>Standards (Year)</u>
PRI Construction Materials Technologies (TST5878)	507T0443	FM 4474(B) (2011)
PRI Construction Materials Technologies (TST5878)	507T0461	FM 4474(B) (2011)
PRI Construction Materials Technologies (TST5878)	507T0427	UL 1897 (2015)
PRI Construction Materials Technologies (TST5878)	507T0425	FM 4474(B) (2011)
PRI Construction Materials Technologies (TST5878)	507T0459	FM 4474(C) (2011)
PRI Construction Materials Technologies (TST5878)	507T0460	UL 1897 (2015)
PRI Construction Materials Technologies (TST5878)	507T0463A	FM 4474(B) (2011)
PRI Construction Materials Technologies (TST5878)	507T0463B	FM 4474(B) (2011)
PRI Construction Materials Technologies (TST5878)	507T0467A	UL 1897 (2015)
PRI Construction Materials Technologies (TST5878)	507T0469A	FM 4474(B) (2011)
PRI Construction Materials Technologies (TST5878)	507T0467B	FM 4474(D) (2011)
PRI Construction Materials Technologies (TST5878)	507T0469B	FM 4474(B) (2011)
PRI Construction Materials Technologies (TST5878)	507T0079	ASTM D3909/D3909M-14
PRI Construction Materials Technologies (TST5878)	507T0092	ASTM D3909/D3909M-14
PRI Construction Materials Technologies (TST5878)	507T0117	ASTM D4601/D4601M-04(2012)e1
PRI Construction Materials Technologies (TST5878)	507T0120	ASTM D2178/D2178M-15a
PRI Construction Materials Technologies (TST5878)	507T0121	ASTM D2178/D2178M-15a
PRI Construction Materials Technologies (TST5878)	507T0122	ASTM D4601/D4601M-04(2012)e1
PRI Construction Materials Technologies (TST5878)	507T0123	ASTM D4897/D4897M-16a
PRI Construction Materials Technologies (TST5878)	507T0310	ASTM D3909/D3909M-14
PRI Construction Materials Technologies (TST5878)	507T0491	FM 4474 (D) (2011)
PRI Construction Materials Technologies (TST5878)	507T0492	FM 4474 (C) (2011)
PRI Construction Materials Technologies (TST5878)	507T0613A	FM 4474(B) (2011); ASTM D 903 (2017); TAS 117(B) (1995)
PRI Construction Materials Technologies (TST5878)	507T0615	FM 4474(B) (2011)
PRI Construction Materials Technologies (TST5878)	507T0619	FM 4474(B) (2011)
PRI Construction Materials Technologies (TST5878)	507T0621	FM 4474(C) (2011)
PRI Construction Materials Technologies (TST5878)	507T0624B	FM 4474(C) (2011)
PRI Construction Materials Technologies (TST5878)	507T0623	FM 4474(B) (2011)
PRI Construction Materials Technologies (TST5878)	507T0627A	Physical properties
PRI Construction Materials Technologies (TST5878)	507T0627B	Physical properties
PRI Construction Materials Technologies (TST5878)	507T0629	UL 1897 (2015)
PRI Construction Materials Technologies (TST5878)	507T0637	FM 4474(C) (2011)
Trinity ERD (TST6049)	00257.03.05-1	ASTM D 6163 (2016)
Trinity ERD (TST6049)	02843.02.05-10	FM 4474 (2011)
Trinity ERD (TST6049)	02843.02.07	FM 4474 (2011)
Trinity ERD (TST6049)	10390A-10.97-1	FM 4474 (2011)
Trinity ERD (TST6049)	10390A-12.97-1	FM 4474 (2011)
Trinity ERD (TST6049)	10391.01.03	FM 4474 (2011)
Trinity ERD (TST6049)	4251.08.96-1	FM 4474 (2011)
Trinity ERD (TST6049)	4670.03.01-1	TAS 117 (A & B) (1995)
Trinity ERD (TST6049)	4670.07.97-1	TAS 117 (1995)
Trinity ERD (TST6049)	4670.10.95-1	TAS 117 (B) (1995)
Trinity ERD (TST6049)	4674.11.01-1-R4	TAS 117 (B) (1995)
Trinity ERD (TST6049)	A35880.04.12	TAS 117 (1995)
Trinity ERD (TST6049)	J34190.03.11	FM 4474 (2011)
Trinity ERD (TST6049)	J45020.07.13	FM 4474 (2011)
Trinity ERD (TST6049)	J5260.03.07	FM 4474 (2011)
Trinity ERD (TST6049)	J7670.06.08	ASTM D 3909 (2014)
Trinity ERD (TST6049)	JM-11190.03.16	FM 4474 (D) (2011)
Trinity ERD (TST6049)	JM-SC11320.03.16	FM 4474 (2011)

LIMITATIONS

1. This report is not for use in the HVHZ.
2. Fire classification is not within the scope of this evaluation.
3. 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.
4. 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 scope of this evaluation.
5. Foam plastic insulation shall be installed in accordance with the FBC Section 2603.4 and 2603.6.
6. The minimum roof slope shall be 1/4:12 for new construction.
7. 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 (July 2022).
8. Reroofing applications shall be examined in accordance with FBC Section 1511. For mechanically fastened systems, a field withdrawal resistance test (ANSI/SPRI FX-1 or TAS 105) shall be conducted by a qualified professional to ensure the fastener meets the minimum design load requirements of the system. For adhered systems, a field uplift resistance test (ASTM E 907, FM LPDS 1-52, ANSI/SPRI IA-1, or TAS 124) shall be conducted to confirm conformance of the existing to the minimum design loads.
9. 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 (July 2022).
10. All products listed in this report shall be manufactured under a quality assurance program in compliance with Rule 61G20-3.

COMPLIANCE STATEMENT

This report has been prepared in accordance with F.A.C. Rule 61G20-3.



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sealed by Zachary R.
Priest, PE, on 4/14/2026.

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CREEK Technical Services, LLC

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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.

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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 and Approved Assemblies (21 pages)



INSTALLATION

Note - Refer to the [APPROVED ASSEMBLIES](#) section of this report within Appendix B 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
Fastening Systems	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 High Load Fastener	#15 fastener; Min. 3/4-inch penetration through the top rib of the steel deck or wood deck
	JM Lightweight Concrete (LWC) CR Base Fastener	Min. 1.7-inch shank; Pre-Assembled with 2.7-inch galvalume coated steel plate. Full embedment of shank into substrate
	JM Polymer Auger Fastener	Min. 2-inch embedment into gypsum or cementitious wood fiber decks
	JM Polymer Auger Plate 3"	For use with Polymer Auger Fastener; 3-inch round plate
	JM Structural Concrete Deck Fasteners	Hammer-in fasteners; Min. 1-inch penetration into concrete deck
	JM UltraFast Fastener	#12 fastener; Min. 3/4-inch penetration through the top rib of the steel deck or wood deck
	JM UltraFast 3" Round Metal Plate or UltraFast Plate Metal Recessed	3-inch diameter round; Galvalume steel plate
	JM UltraFast Plastic Plate	3-inch diameter round; High Density Polyolefin plate
	JM UltraFast Square Metal Plate or UltraFast Plate Metal Flat	3-inch square; Galvalume steel plate
	JM UltraLok	Min. 1.4-inch shank; Pre-Assembled with 2.7-inch galvalume coated steel plate. Full embedment of shank into substrate
	SFS Intec Dekfast DF-#12-PH3 Fastener	#12 fasteners; Min. 3/4-inch penetration through the top rib of the steel deck or wood deck;
	SFS Intec Dekfast DF-#14-PH3 Fastener	#15 fasteners; Min. 3/4-inch penetration through the top rib of the steel deck or wood deck; Min. 1-inch penetration into concrete deck
	SFS Intec Dekfast DF-#15-PH3 Fastener	#15 fasteners; Min. 3/4-inch penetration through the top rib of the steel deck or wood deck; Min. 1-inch penetration into concrete deck
	SFS Intec Dekfast PLT-H-2-7/8	2-7/8" hexagonal galvalume steel stress plate
	SFS Intec Dekfast PLT-R-3	3-inch diameter round; Galvalume steel plate
	Trufast 3" Metal Insulation Plate	3-inch diameter round; Galvalume steel plate
	Trufast #12 DP Fastener	#12 fasteners; Min. 3/4-inch penetration through the top rib of the steel deck or wood deck;
	Trufast #14 HD Fastener	#14 fasteners; Min. 3/4-inch penetration through the top rib of the steel deck or wood deck; Min. 1-inch penetration into concrete deck
	Trufast #15 EHD Fastener	#15 fasteners; Min. 3/4-inch penetration through the top rib of the steel deck or wood deck;
	Trufast Twin-Loc Nail	Min. 1.4-inch shank; Base sheet fastener with and without integrated 2.7-inch diameter plate.
	TRUFAST VERSA-FAST Fastener	Min. 2 1/4-inch length; Min. 2 1/4-inch embedment into for LWC or Gypsum decks; Min. 3/4-inch penetration through wood deck



Component	Product	Installation Detail
Insulation Adhesives	JM One-Step Foamable Adhesive	Ribbon adhered in 3/4 to 1-inch wide beads
	JM Two Part Urethane Insulation Adhesive or JM Two-Part UIA	
	JM Two-Part Urethane Adhesive Canister or JM Two-Part UIA Canister	
	JM Roofing System Urethane Adhesive	Ribbon adhered in 3/4-inch wide beads
	ASTM D 312, Type IV Asphalt	Fully adhered within the EVT range at a rate of 20-40 lbs/100 ft ²
Roof Cover Adhesives	JM MBR Bonding Adhesive	Fully adhered at a rate of 1.5-2.0 gal/100 ft ²
	ASTM D 312, Type IV Asphalt	Fully adhered within the EVT range at a rate of 20-40 lbs/100 ft ²
Insulation/Cover Boards	EPS	Min. 0.5-inch, min. 1.5 pcf 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 DensDeck StormX Prime	Min. 5/8-inch thick
	JM DynaBoard	Min. 1/8-inch thick
	JM ENRGY 3 and tapered	Min. 1/2-inch thick; Min. 20 psi; Adhered boards shall be a maximum 4-ft x 4-ft
	JM ENRGY 3 C1 and tapered	
	JM ENRGY 3 AGF and tapered	
	JM ENRGY 3 CGF and tapered	
	JM ENRGY 3 C1 CGF and tapered	
	JM ENRGY 3 FR and tapered	Min. 1/2-inch thick; Min. 20 psi; Adhered boards shall be a maximum 4-ft x 4-ft
	JM Invinsa Roof Board	Min. 1/4-inch thick; Adhered boards shall be a maximum 4-ft x 4-ft
	JM Invinsa FR Roof Board	Min. 1/4-inch thick; 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 DuraBoard	Min. 1/2-inch thick; Adhered boards shall be a maximum 4-ft x 4-ft
	JM Retro-Fit Board	
	JM RetroPlus Roof Board	
	JM Fesco Board	Min. 3/4-inch thick
	JM SECUROCK Gypsum-Fiber Roof Board	Min. 1/4-inch thick
	JM SECUROCK Glass-Mat 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	
	JM DuraFoam	Min. 1.5-inch thick; Adhered boards shall be a maximum 4-ft x 4-ft
	JM FescoFoam	
	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	

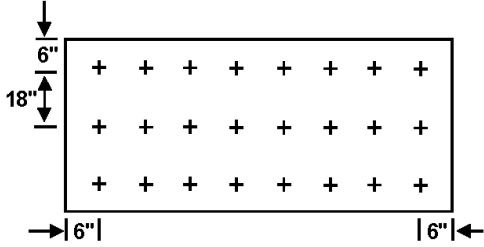
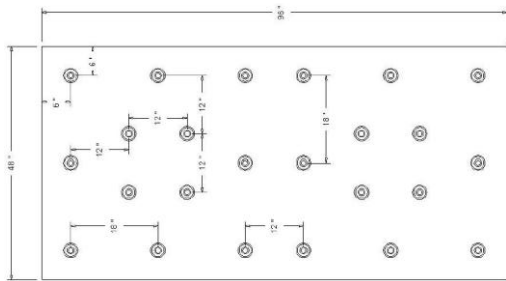
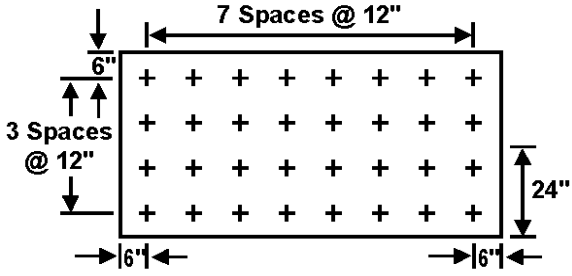


Component	Product	Installation Detail
Base/Ply Sheets	DynaBase	Min. 3-inch wide side-laps; Min. 6-inch end laps
	DynaBase 3.0	
	GlasPly IV	
	GlasPly Premier	
	PermaPly 28	
	Ventsulation Felt	
Cap Sheets	GlasKap	Min. 3-inch side-laps; Min. 6-inch end-laps
	GlasKap CR G	
Cellular Lightweight Insulating Concrete	Celcore MF	Slurry coat min. 1/8-inch thick; 1-inch thick EPS holey board (1 lbs/ft ³); Min. 2-inch thick top coat; Celcore PVA curing compound applied at rate of 300 ft ² /gal
	Celcore MF with HS Rheology Modifying Admixture	Applied in a continuous film with a broom prior to placement of the Celcore Lightweight Insulating Concrete
	Celcore S-1	Slurry coat min. 1/8-inch thick; Min. 1-inch thick EPS holey board (1 lbs/ft ³); Min. 2-inch top coat
	Mearlcrete	
	Elastizell	
	Concrecel	
	Cellular Lightweight Insulating Concrete	
Vapor Barrier	DynaBase HW	Min. 3-inch wide side-laps; Min. 6-inch end laps; Torch adhered to primed concrete deck
	DynaWeld 180 S	
	DynaWeld Cap 180 FR	
	JM DynaBase	Min. 3-inch wide side-laps; Min. 6-inch end laps; Applied with hot or cold <i>approved</i> adhesives
	JM DynaBase PR	
	JM DynaLastic 180 S	
	JM DynaLastic 250 S	
	JM DynaFast 180 S	Min. 3-inch wide side-laps; Min. 6-inch end laps; Self-adhered
	JM DynaGrip Base SD/SA	
	JM DynaGrip Base PR SD/SA	Self-adhered to wood, gypsum or concrete decks primed with JM SA Primer Low VOC for JM SA Primer at a rate of 0.5 gal/100 ft ² ; Min. 3-inch sides laps; Min. 6-inch end laps
	Vapor Barrier SA	
	Vapor Barrier SAR	
Vapor Barrier Adhesives	DynaSet 1k	Min. 4-inch side laps sealed at a rate of 1.5-2.0gal/100ft ² ; Applied to substrate in 0.75 to 1-inch wide continuous ribbons; See Membrane Adhesive instructions for base, ply, and cap sheet application instructions;
	DynaSet 2k	



Insulation/Cover Board Fastening Patterns	
3 Spaces @ 24" 12" 6" 36" 8 per 4-ft x 8-ft board (Max. 4.0-ft² contributory area per fastener)	12" 12" 12" 12" 12" 12 per 4-ft x 8-ft board (Max. 2.67-ft² contributory area per fastener)
12" 12" 12" 15 per 4-ft x 8-ft board (Max. 2.0-ft² contributory area per fastener)	6" 6" 24" 12" 16 per 4-ft x 8-ft board (Max. 2.0-ft² contributory area per fastener)
6" 6" 18 per 4-ft x 8-ft board (Max. 1.78-ft² contributory area per fastener)	6" 6" 12" 12" 20 per 4-ft x 8-ft board (Max. 1.6-ft² contributory area per fastener)
12" 12" 12" 20 per 4-ft x 8-ft board Alt. (Max. 1.6-ft² contributory area per fastener)	6" 18" 12" 12" 22 per 4-ft x 8-ft board (Max. 1.45-ft² contributory area per fastener)



Insulation/Cover Board Fastening Patterns	
 24 per 4-ft x 8-ft board (Max. 1.33-ft² contributory area per fastener)	 24 per 4-ft x 8-ft board Alt. (Max. 1.33-ft² contributory area per fastener)
 32 per 4-ft x 8-ft board (Max. 1.0-ft² contributory area per fastener)	

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](#) and [INSTALLATION](#) section of this report.

Name	Definition
<i>2UIA</i>	JM Two-Part Urethane Insulation Adhesive, JM Two-Part UIA, JM Two-Part Urethane Adhesive Canister, or JM Two-Part UIA Canister
<i>AP Fasteners & Plates</i>	All Purpose Fastener, Trufast #14 HD Fastener or Structural Concrete Deck Fastener (concrete only) and UltraFast 3" Round Metal Plate, UltraFast Plate Metal Recessed, UltraFast Plate Metal Flat, or UltraFast Square Metal Plate
<i>Celcore MF</i>	Celcore MF with HS Rheology Modifying Admixture Cellular Lightweight Insulating Concrete
<i>Cover Board</i>	One layer of any of the following products: -Georgia-Pacific DensDeck -Georgia-Pacific DensDeck Prime -Georgia-Pacific DensDeck StormX Prime -JM DynaBoard -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
<i>Deck Detail</i>	All decks shall be designed by others in accordance with FBC requirements.
	<i>Concrete Deck</i> Min. $f'_c = 2,500$ psi at 28 days
	<i>Steel Deck</i> Min. 22 ga, Wide Rib Deck (Type WR) conforming to ANSI/SDI-RD1.0 & FBC; 0.5% Vented for LWIC applications only. $G<\#>$ Min. Grade $<\#>$ of <i>Steel Deck</i>
	<i>Wood Deck</i> APA span-rated sheathing. $T<\#>O$ Min. $<\#>$ -inch thickness of the OSB sheathing complying with PS 2-18 $T<\#>P$ Min. $<\#>$ -inch thickness of the plywood sheathing complying with PS 1-19 $L<\#>$ Max. span of $<\#>$ inches
	<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 FA</i>	Min. 1/4-inch National Gypsum DEXcell FA Glass Mat Roof Board
<i>DEXcell Cement</i>	National Gypsum DEXcell Cement Roof Board
<i>DF</i>	Dekfast DF-#12-PH3 (<i>Steel Deck</i> , or <i>Wood Deck</i>), Dekfast DF-#14-PH# (<i>Concrete Deck</i> , <i>Steel Deck</i> , or <i>Wood Deck</i>), or Dekfast DF-#15-PH3 (<i>Steel Deck</i> , or <i>Wood Deck</i>) with Dekfast PLT-R-3
<i>E3</i>	JM ENRGY 3 or JM ENRGY 3 CGF
<i>E3 C1</i>	JM ENRGY 3 C1 or JM ENRGY 3 C1 CGF
<i>Elastizell</i>	Elastizell with Zell-Crete Fibers



Name	Definition			
Fasteners & Plates	Choose one of the following fastener and plate combinations for the given conditions:			
	Board or Base Sheet	Fastener	Plate	Roof Deck
	Any	JM All Purpose Fastener, JM Structural Concrete Deck Fastener, Dekfast DF-#14-PH3, or Trufast #14 HD Fastener	JM UltraFast Square Metal Plate, UltraFast Plate Metal Flat, UltraFast 3" Round Metal Plate, or UltraFast Plate Metal Recessed	Concrete
	Any	JM UltraFast Fastener, Trufast #12 DP Fastener, Trufast #14 HD Fastener, JM High Load Fastener, Dekfast DP-#15-PH3, or Trufast #15 EHD Fastener	JM UltraFast Square Metal Plate, UltraFast Plate Metal Flat, UltraFast 3" Round Metal Plate, or UltraFast Plate Metal Recessed	Steel
	Any	JM UltraFast Fastener, Trufast #12 DP Fastener, Dekfast DF-#12-PH3, JM All Purpose Fastener, Dekfast DF-#14-PH#, JM High Load Fastener, Dekfast DF-#15-PH3, or Trufast #15 EHD Fastener	JM UltraFast Square Metal Plate, UltraFast Plate Metal Flat, UltraFast 3" Round Metal Plate, or UltraFast Plate Metal Recessed	Plywood or OSB
	Any	Dekfast DF-#14-PH3	Dekfast PLT-R-3	Concrete
	Any	Dekfast DF-#12-PH3 or Dekfast DP-#15-PH3	Dekfast PLT-R-3	Steel
	Any	Dekfast DF-#12-PH3, Dekfast DF-#14-PH#, or Dekfast DF-#15-PH3	Dekfast PLT-R-3	Plywood or OSB
	Any	JM All Purpose Fastener, JM Structural Concrete Deck Fastener, or Trufast #14 HD Fastener	Trufast 3" Metal Insulation Plates	Concrete
	ENRGY 3, Separator CGF, DensDeck Prime, DEXcell FA, or SECUROCK	JM UltraFast Fastener or JM High Load Fastener	Trufast 3" Metal Insulation Plates	Steel
HA	ENRGY 3, Separator CGF, DensDeck Prime, DEXcell FA, or SECUROCK	JM UltraFast Fastener, JM All Purpose Fastener or JM High Load Fastener	Trufast 3" Metal Insulation Plates	Plywood or OSB
	Any	Trufast #12 DP Fastener, Trufast #14 HD Fastener, or Trufast #15 EHD Fastener	Trufast 3" Metal Insulation Plates	Steel or OSB
	Any	Trufast #12 DP Fastener or Trufast #15 EHD Fastener	Trufast 3" Metal Insulation Plates	Plywood
One of the following options: 1) A minimum of three (3) plies of DynaBase, DynaBase 3.0, PermaPly 28, GlasPly IV, or GlasPly Premier. All layers fully bonded in ASTM D312, Type IV asphalt. Surfaced in accordance with JM requirements and the FBC. 2) DynaBase, DynaBase 3.0, or PermaPly 28 followed by OPTIONAL one or more plies of DynaBase, DynaBase 3.0, PermaPly 28, GlasPly IV, or GlasPly Premier followed by one ply of GlasKap, or GlasKap CR G. All layers fully bonded in ASTM D312, Type IV asphalt.				
INVINSA	JM Invinsa or JM Invinsa FR Roof Board			



Name	Definition
<i>Insulation</i>	One of more layers in any combination of: DensDeck ENRGY 3 FR SeparatoR DensDeck Prime Fesco Board, FescoFoam SeparatoR CGF DEXcell Glass Mat Roof Board Invinsa Roof Board SeparatoR FR DEXcell FA Glass Mat Roof Board Invinsa FR Roof Board EPS DEXcell Cement Board ProtectoR HD MULTIFIX DuraBoard ProtectoR HD F ROXUL MONOBOARD (Unfaced) DuraFoam, ENRGY 3 Retro-Fit Board ROXUL MONOBOARD Tapered (unfaced) ENRGY 3 AGF RetroPlus Roof Board TOPROCK DD (Unfaced) ENRGY 3 C1 SECUROCK Glass-Mat Roof Board TOPROCK DD Tapered (Unfaced) ENRGY 3 C1 CGF SECUROCK Gypsum-Fiber Roof Board HARDROCK (DD) Multifix ENRGY 3 CGF SECUROCK Cement Roof Board DynaBoard
<i>LWIC</i>	Poured-in-place Cellular Lightweight Insulating Concrete with encapsulated insulation board
<i>MA</i>	One ply of DynaBase, DynaBase 3.0, PermaPly 28, or Ventsulation Felt mechanically attached as prescribed per the approved assembly
<i>MBA</i>	One of the following options: 1) A minimum of three (3) plies of DynaBase, DynaBase 3.0, or PermaPly 28. All layers fully bonded in MBR Bonding Adhesive. Surfaced in accordance with JM requirements and the FBC. 2) One or more plies of DynaBase, DynaBase 3.0, or PermaPly 28 followed by one ply of GlasKap or GlasKap CR G. All layers fully bonded in MBR Bonding Adhesive.
<i>MCRF</i>	Minimum Characteristic Resistance Force as determined by TAS 105 for the named fastener in the selected assembly
<i>MDP</i>	Maximum Design Pressure
<i>OSFA</i>	JM One-Step Foamable Adhesive
<i>Preliminarily Secured</i>	Fastened at minimum rate of five (5) fasteners per 4-ft x 8-ft board or four (4) fasteners per 4-ft x 4-ft board
<i>ProtectoR</i>	JM ProtectoR HD or JM ProtectoR HD FR Roof Board
<i>Recover</i>	Where assemblies are used to recover an existing roof, the existing roof shall consist of only one layer of roofing, i.e. recovering a previously recovered roof is not permitted. Recover roofing shall be conducted in compliance with FBC Section 1511. For mechanically fastened roof assemblies, i.e. systems x-M-#, 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>RS Nails & Tin Tags</i>	Min. 0.120-inch x 1.25-inch ring shank roofing nails and 32ga. x 1.625-inch diameter galvanized steel tin tags
<i>RSUA</i>	JM Roofing System Urethane Adhesive
<i>SBS TA VB</i>	One ply DynaBase HW torched adhered over concrete deck prepared with ASTM D 41 primer
<i>SECUROCK</i>	Min. 1/4-inch JM SECUROCK Gypsum-Fiber Roof Board
<i>Tape & Staple</i>	0.25-inch wide SENCO tape secured with min. 16ga., 7/16-inch crown x 1-inch leg SENCO staples
<i>TF</i>	Trufast #12 DP Fastener (<i>Steel Deck</i> or <i>Wood Deck</i>), Trufast #14 HD Fastener (<i>Concrete Deck</i> , <i>Steel Deck</i> , or <i>Wood Deck</i>), or Trufast #15 EHD Fasteners (<i>Concrete Deck</i> , <i>Steel Deck</i> or <i>Wood Deck</i>) with Trufast 3" Metal Insulation Plate
<i>UF</i>	JM UltraFast Fasteners (<i>Steel Deck</i> or <i>Wood Deck</i>), JM All Purpose Fasteners (<i>Concrete Deck</i> , <i>Steel Deck</i> , or <i>Wood Deck</i>), or JM High Load Fasteners (<i>Wood Deck</i> or <i>Steel Deck</i>) with JM UltraFast Square Metal Plate, UltraFast Plate Metal Flat, UltraFast 3" Round Metal Plate, or UltraFast Plate Metal Recessed
<i>UF Fasteners & Plates</i>	UltraFast Fastener or Trufast #12 DP Fasteners with UltraFast 3" Round Metal Plate, UltraFast Plate Metal Recessed, UltraFast Plate Metal Flat, or UltraFast Square Metal Plate
<i>UltraFast (Square)</i>	UltraFast Plate Metal Flat or UltraFast Square Metal Plate



Name	Definition				
VB-Concrete	One of the following options may be utilized as allowed by the <i>Approved Assembly</i> . The <i>MDP</i> shall be limited to the lesser of rating of the <i>Approved Assembly</i> and the <i>MDP</i> for the chosen vapor barrier.				
	Primer	Vapor Barrier	VB Application	Insulation Adhesive	MDP (psf)
	None	DynaBase HW	Torch adhered	OSFA 12-inch o.c.	-172.5
	None	DynaBase HW	Torch adhered	2UIA 12-inch o.c.	-135
	None	DynaBase HW	Torch adhered	RSUA 12-inch o.c.	-195
	ASTM D 41	DynaBase HW	Torch adhered	RSUA 12-inch o.c.	-375
	ASTM D 41	DynaBase HW	Torch adhered	ASTM D 312, Type IV Asphalt	-157.5
	ASTM D 41	DynaGrip Base SD/SA	Self-adhered	OSFA 12-inch o.c.	-90
	ASTM D 41	DynaGrip Base SD/SA	Self-adhered	2UIA 12-inch o.c.	-97.5
	ASTM D 41	DynaGrip Base SD/SA	Self-adhered	RSUA 12-inch o.c.	-82.5
	ASTM D 41	DynaGrip Base PR SD/SA	Self-adhered	RSUA 12-inch o.c.	-202.5
	ASTM D 41	DynaGrip Base PR SD/SA	Self-adhered	2UIA 12-inch o.c.	-262.5
	None	DynaLastic 180 S, DynaLastic 250 S, DynaFast 180 S, or DynaBase PR; Laps sealed with DynaSet 1k	DynaSet 1k 12-inch o.c.	OSFA, 2UIA, or RSUA 12-inch o.c.	-232.5
	None	DynaLastic 180 S, DynaLastic 250 S, DynaFast 180 S, or DynaBase PR; Laps sealed with DynaSet 1k	DynaSet 1k 12-inch o.c.	ASTM D 312, Type IV Asphalt	-337.5
	None	DynaLastic 180 S, DynaLastic 250 S, DynaFast 180 S, or DynaBase PR; Laps sealed with DynaSet 2k	DynaSet 2k 12-inch o.c.	OSFA, 2UIA, or RSUA 12-inch o.c.	-97.5
	None	DynaLastic 180 S, DynaLastic 250 S, DynaFast 180 S, or DynaBase PR; Laps sealed with DynaSet 2k	DynaSet 2k 12-inch o.c.	ASTM D 312, Type IV Asphalt	-75
	ASTM D 41	DynaWeld Base	Torch adhered	OSFA 12-inch o.c.	-150
	ASTM D 41	DynaWeld Base	Torch adhered	2UIA 12-inch o.c.	-120
	ASTM D 41	DynaWeld Base	Torch adhered	RSUA 12-inch o.c.	-285
	ASTM D 41	DynaBase, DynaBase PR, DynaBase XT, DynaFast 180 S, DynaLastic 180 S, or DynaLastic 250 S	ASTM D 312, Type IV Asphalt	ASTM D 312, Type IV Asphalt	-360
	ASTM D 41	DynaBase, DynaBase PR, DynaBase XT, DynaFast 180 S, DynaLastic 180 S, or DynaLastic 250 S	ASTM D 312, Type IV Asphalt	2UIA 12-inch o.c.	-382.5
	JM SA Primer Low VOC or SA Primer	JM Vapor Barrier SA or SAR	Self-adhered	OSFA or RSUA 12-inch o.c.	-135
	JM SA Primer Low VOC or SA Primer	JM Vapor Barrier SA or SAR	Self-adhered	2UIA 12-inch o.c.	-82.5
	None	JM Vapor Barrier FR Max	Self-adhered	QF(B) 12-inch o.c.	-330
	None	JM Vapor Barrier FR Max	Self-adhered	RSUA 12-inch o.c.	-262.5
	None	JM Vapor Barrier FR Max	Self-adhered	OSFA 12-inch o.c.	-270



Name	Definition						
VB-Concrete (Cont'd)	Primer	Vapor Barrier		VB Application	LWIC	MDP (psf)	
	None	JM Vapor Barrier FR Max		Self-adhered	2UIA 12-inch o.c.	-307.5	
VB-LWIC	One of the following options may be utilized as allowed by the <i>Approved Assembly</i> . The vapor barrier shall be installed over the concrete deck prior to placement of the lightweight insulating concrete. The <i>MDP</i> shall be limited to the lesser of rating of the <i>Approved Assembly</i> and the <i>MDP</i> for the chosen vapor barrier. The compressive strength for the <i>LWIC</i> shall be taken as the higher of the vapor barrier requirements below and the <i>Approved Assembly</i> .						
	Primer	Vapor Barrier	VB Application	LWIC	MDP (psf)		
	ASTM D 41	DynaBase HW	Torch adhered	Min. 310 psi <i>Celcore MF</i>	-240		
VB-Steel	One of the following options may be utilized as allowed by the <i>Approved Assembly</i> . The <i>MDP</i> shall be limited to the lesser of rating of the <i>Approved Assembly</i> and the <i>MDP</i> for the chosen vapor barrier.						
	Thermal Barrier	TB Adhesive	Primer	Vapor Barrier	VB Application	Insulation Adhesive	MDP (psf)
	None	None	None	JM Vapor Barrier SA	Self-adhered	2UIA, OSFA, or RSUA 12-inch o.c.	-45
	None	None	SA Primer Low VOC	JM Vapor Barrier SAR	Self-adhered	2UIA, OSFA, or RSUA 12-inch o.c.	-52.5

APPROVED ASSEMBLIES

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

1. *MDPs* 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. Items *italicized* refer to specific nomenclature used in this report.
3. Refer to [INSTALLATION](#) section of this report for installation detail when the information is not explicitly stated for the selected assembly.
4. The on-center (o.c.) spacing given is the maximum allowable attachment spacing for the rated system.
5. Prior to application of the approved assembly an optional vapor barrier may be installed over concrete, steel, or wood decks when the approved assembly contains insulation or the membrane fastened through to the deck.
6. ENRGY 3, ENRGY 3 CGF, ENRGY 3 C1, or ENRGY 3 C1 CGF base insulation attached by ribbon applied adhesives may be installed in one or more layers.
7. Steel deck utilized in all Lightweight Insulating Concrete and S-A-# systems shall be ASTM A653, G90 galvanized steel.
8. For systems C-AM-#, C-M-#, S-AM-#, and S-M-#, it is permissible to install over minimum 200psi, minimum 2-inch FBC approved lightweight insulating concrete applied over the concrete or steel deck. Alternately, for systems C-AM-#, C-M-#, S-AM-#, and S-M-#, it is permissible to substitute loose fill insulation (insulation that is part of the load path) with minimum 200psi, minimum 2-inch FBC approved lightweight insulating concrete applied over the concrete or steel deck. Fasteners shall be installed through the lightweight insulating concrete anchoring into the structural deck.
9. Reserved
10. Reserved.
11. As noted in the assembly tables below, FESCO Board, FESCO Foam, DuraBoard, 1/2" Retro-Fit Board, or RetroPlus Roof Board may be substituted for E3.
12. As noted in the tables below, TruGround Conductive Primer may optionally applied to the board surface, existing roof, or deck surface prior to mechanically attaching the base sheet.



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

Assemblies with All Layers Adhered over <i>Concrete Deck</i> (New or Existing)					
System No.	Vapor Barrier	Base Insulation (Note 6)	Top Insulation	Roof Cover	MDP (psf)
C-A-1	OPTIONAL VB-Concrete	Min. 1.5-inch E3 fully adhered in ASTM D 312, Type IV Asphalt	DuraBoard or Min. 1/2-inch FescoBoard fully adhered in ASTM D 312, Type IV Asphalt	MBA	-82.5 (Lim. 9)
C-A-2	OPTIONAL VB-Concrete	Min. 0.5-inch E3 secured with 2UIA, RSUA, or OSFA in ribbons spaced 12-inch o.c.	FescoBoard secured with 2UIA ribbons spaced 12-inch o.c.	MBA or HA	-112.5 (Lim. 9)
C-A-3	OPTIONAL VB-Concrete	OPTIONAL Min. 0.5-inch E3 applied in RSUA or QF(B) spaced 12-inch o.c.; or RSUA(S) or QF(S)	DEXcell CB applied in RSUA or QF(B) spaced 12-inch o.c.; or RSUA(S) or QF(S)	MBA	-135 (Lim. 9)
C-A-4	Deck primed with ASTM D 41 primer	Min. 0.5-inch ENRGY 3 in HA	Min. 0.75-inch FESCO Board in HA	HA	-135 (Lim. 9)
C-A-5	OPTIONAL VB-Concrete	Min. 0.5-inch E3 secured with MBR Bonding Adhesive or 2UIA ribbons spaced 12-inch o.c	DuraBoard secured with MBR Bonding Adhesive or 2UIA ribbons spaced 12-inch o.c	MBA or HA	-147.5 (Lim. 9)
C-A-6	-	Min. 0.5-inch E3 fully adhered in MBR Bonding Adhesive	-	MBA or HA	-147.5 (Lim. 9)
C-A-7	OPTIONAL VB-Concrete	Min. 0.5-inch E3 in 2UIA, OSFA, RSUA, or QF(B) spaced 12-inch o.c.; or RSUA(S), QF(S), or HA	Min. 1/8-inch DynaBoard in 2UIA, OSFA, RSUA, or QF(B) spaced 12-inch o.c.; or RSUA(S), QF(S), or HA	HA	-150 (Lim. 9)



Assemblies with All Layers Adhered over Concrete Deck (New or Existing)					
System No.	Vapor Barrier	Base Insulation (Note 6)	Top Insulation	Roof Cover	MDP (psf)
C-A-8	OPTIONAL HA VB-Concrete	Min. 0.5-inch E3, FescoFoam, or DuraFoam fully adhered in ASTM D 312, Type IV Asphalt	Retro-Fit Board or DuraBoard fully adhered in ASTM D 312, Type IV Asphalt	MBA or HA	-155 (Lim. 9)
C-A-9	OPTIONAL HA VB-Concrete	Min. 0.5-inch E3, FescoFoam, DuraFoam, FescoBoard, Retro-Fit Board or Min. 3/4-inch DuraBoard fully adhered in ASTM D 312, Type IV Asphalt	OPTIONAL Retro-Fit Board or Min. 3/4-inch DuraBoard fully adhered in ASTM D 312, Type IV Asphalt	HA	-167.5 (Lim. 9)
C-A-10	-	FescoBoard or Min. 3/4-inch DuraBoard fully adhered in MBR Bonding Adhesive	-	MBA or HA	-187.5 (Lim. 9)
C-A-11	OPTIONAL VB-Concrete	-	DuraBoard secured with 2UIA ribbons spaced 12-inch o.c.	MBA	-187.5 (Lim. 9)
C-A-12	OPTIONAL VB-Concrete	-	DensDeck Prime secured with OSFA, 2UIA, or RSUA ribbons spaced 12-inch o.c.	HA	-190 (Lim. 9)
C-A-13	DynaBase HW torch adhered	OPTIONAL Min. 0.5-inch E3 secured in RSUA spaced 12-inch o.c.	SECUROCK secured with RSUA ribbons spaced 12-inch o.c.	MBA or HA	-225 (Lim. 9)
C-A-14	SBS TA VB	Min. 0.5-inch E3 secured in RSUA spaced 12-inch o.c.	SECUROCK secured with RSUA ribbons spaced 12-inch o.c.	MBA or HA	-245 (Lim. 9)
C-A-15	-	-	-	HA	-275 (Lim. 9)
C-A-16	OPTIONAL VB-Concrete	FescoBoard secured in 2UIA ribbons spaced 12-inch o.c.	-	HA	-285 (Lim. 9)
C-A-17	OPTIONAL VB-Concrete	Min. 0.5-inch ENRGY 3 CGF secured with RSUA ribbons spaced 12-inch o.c.	DensDeck Prime secured with RSUA ribbons spaced 12-inch o.c.	HA	-285 (Lim. 9)
C-A-18	DynaBase HW torch adhered	Min. 0.5-inch ENRGY 3 CGF secured in RSUA spaced 12-inch o.c.	SECUROCK secured with RSUA ribbons spaced 12-inch o.c.	MBA or HA	-292.5 (Lim. 9)
C-A-19	OPTIONAL VB-Concrete	DuraBoard or Retro-Fit Board secured in 2UIA ribbons spaced 12-inch o.c.	-	HA	-305 (Lim. 9)
C-A-20	OPTIONAL VB-Concrete	Min. 1.5-inch ENERGY 3, ENRGY 3 AGF, FescoFoam or DuraFoam fully adhered in ASTM D 312, Type IV Asphalt	OPTIONAL FescoBoard, Retro-Fit Board or Min. 3/4-inch DuraBoard fully adhered in ASTM D 312, Type IV Asphalt	HA	-305 (Lim. 9)
C-A-21	OPTIONAL VB-Concrete	Min. 1.5-inch ENRGY 3 in HA	Min. 1/8-inch DynaBoard in HA	HA	-345 (Lim. 9)
C-A-22	OPTIONAL VB-Concrete	Min. 2-inch ENRGY 3 or ENRGY 3 AGF fully adhered in MBR Bonding Adhesive or secured with 2UIA ribbons spaced 12-inch o.c.	SECUROCK fully adhered in MBR Bonding Adhesive or secured with 2UIA ribbons spaced 12-inch o.c.	MBA or HA	-367.5 (Lim. 9)
C-A-23	-	Min. 2-inch ENRGY 3 or ENRGY 3 AGF fully adhered in MBR Bonding Adhesive or secured with 2UIA ribbons spaced 12-inch o.c.	-	MBA or HA	-367.5 (Lim. 9)



Assemblies with All Layers Adhered over Concrete Deck (New or Existing)					
System No.	Vapor Barrier	Base Insulation (Note 6)	Top Insulation	Roof Cover	MDP (psf)
C-A-24	-	Min. 1.5-inch ENRGY 3 or ENRGY 3 AGF fully adhered in MBR Bonding Adhesive	-	MBA	-375 (Lim. 9)
C-A-25	OPTIONAL VB-Concrete	Min. 2-inch ENRGY 3 AGF secured with 2UIA ribbons spaced 12-inch o.c. or fully adhered in ASTM D 312, Type IV Asphalt	SECUROCK secured with 2UIA ribbons spaced 12-inch o.c. or fully adhered in ASTM D 312, Type IV Asphalt	HA	-397.5 (Lim 9)
C-A-26	OPTIONAL VB-Concrete	Min. 2-inch ENRGY 3 secured with 2UIA ribbons spaced 12-inch o.c.	SECUROCK secured with 2UIA ribbons spaced 12-inch o.c.	HA	-442.5 (Lim 9)
C-A-27	OPTIONAL VB-Concrete	Min. 1.5-inch ENRGY 3 CGF secured with RSUA ribbons spaced 12-inch o.c.	DensDeck Prime secured with RSUA ribbons spaced 6-inch o.c.	HA	-492.5 (Lim 9)
C-A-28	OPTIONAL VB-Concrete	Min. 2-inch ENRGY 3 fully adhered in ASTM D 312, Type IV Asphalt	SECUROCK fully adhered in ASTM D 312, Type IV Asphalt	HA	-495 (Lim 9)

Assemblies with Adhered Membranes over Insulated Concrete Deck (New, Existing, or Recover)						
System No.	Base Insulation	Base Insulation Attachment	Top Insulation	Top Insulation Attachment	Roof Cover	MDP (psf)
C-AM-1	OPTIONAL <i>Insulation</i> under Min. 1.5-inch E3	Simultaneously fastened with Top Insulation	DEXcell Cement	Fasteners & Plates secured at a rate of 1 fastener per 5.33ft ²	MBA or HA	-45 (Lim. 7)
C-AM-2	OPTIONAL <i>Insulation</i> under Min. 1.5-inch E3	Simultaneously fastened with Top Insulation	DEXcell FA	Fasteners & Plates secured at a rate of 1 fastener per 3.2ft ²	MBA or HA	-45 (Lim. 7)
C-AM-3	OPTIONAL <i>Insulation</i> under Min. 1.5-inch E3	Simultaneously fastened with Top Insulation	Min. 1/2-inch DEXcell FA	Fasteners & Plates secured at a rate of 1 fastener per 4ft ²	MBA or HA	-45 (Lim. 7)
C-AM-4	OPTIONAL <i>Insulation</i> under Min. 1.5-inch E3	Simultaneously fastened with Top Insulation	Min. 5/8-inch DEXcell FA	Fasteners & Plates secured at a rate of 1 fastener per 5.33ft ²	MBA or HA	-45 (Lim. 7)
C-AM-5	Min. 1.5-inch E3	Simultaneously fastened with Top Insulation	Min. 1/2-inch DensDeck Prime	Fasteners & Plates secured at a rate of 1 fastener per 5.33ft ²	HA	-45 (Lim. 7)
C-AM-6	Min. 1.5-inch E3	Simultaneously fastened with Top Insulation	DensDeck Prime	Fasteners & Plates secured at a rate of 1 fastener per 4ft ²	HA	-45 (Lim. 7)
C-AM-7	OPTIONAL <i>Insulation</i> under Min 1.5-inch ENRGY 3, FescoFoam or DuraFoam; or Min. 1-inch Fesco Board or DuraBoard	AP Fasteners & Plates secured at a rate of 16 per 4-ft x 8-ft Board	FescoFoam or DuraFoam; Min. 1-inch Fesco Board; Retro-Fit, RetroPlus or DuraBoard	ASTM D 312, Type IV Asphalt	HA	-52.5 (Lim. 7)
C-AM-8	OPTIONAL <i>Insulation</i> under Min. 1-inch E3; FescoFoam, FescoBoard, DuraFoam or Min. 3/4-inch DuraBoard	Simultaneously fastened with Top Insulation	FescoFoam, FescoBoard, DuraFoam, Retro-Fit Board or Min 3/4-inch DuraBoard	AP Fasteners & Plates at a rate of 16 per 4-ft x 8-ft Board	HA	-52.5 (Lim. 7)



Assemblies with Adhered Membranes over Insulated Concrete Deck (New, Existing, or Recover)						
System No.	Base Insulation	Base Insulation Attachment	Top Insulation	Top Insulation Attachment	Roof Cover	MDP (psf)
C-AM-9	OPTIONAL <i>Insulation</i> under Min. 1.5-inch E3	Simultaneously fastened with Top Insulation	SECUROCK	<i>Fasteners & Plates</i> secured at a rate of 18 per 4-ft x 8-ft Board	MBA or HA	-60 (Lim. 7)
C-AM-10	OPTIONAL <i>Insulation</i> under Min 1.5-inch ENRGY 3, FescoFoam or DuraFoam	AP Fasteners & Plates secured at a rate of 18 per 4-ft x 8-ft Board	FescoFoam, DuraFoam, Retro-Fit, RetroPlus or DuraBoard	ASTM D 312, Type IV Asphalt	HA	-60 (Lim. 7)
C-AM-11	OPTIONAL <i>Insulation</i> under Min 1.5-inch ENRGY 3	<i>Fasteners & Plates</i> secured at a rate of 18 per 4-ft x 8-ft Board	Min. 0.5-inch SECUROCK	2UIA applied 12-inch o.c.	MBA or HA	-60 (Lim. 7)
C-AM-12	OPTIONAL <i>Insulation</i>	Simultaneously fastened with Top Insulation	SECUROCK	<i>Fasteners & Plates</i> secured at a rate of 22 per 4-ft x 8-ft Board	MBA or HA	-60 (Lim. 7)
C-AM-13	OPTIONAL <i>Insulation</i> under Min 1.5-inch ENRGY 3	<i>Fasteners & Plates</i> secured at a rate of 24 per 4-ft x 8-ft Board	Min. 1/2-inch SECUROCK	2UIA applied 12-inch o.c.	MBA or HA	-67.5 (Lim. 7)
C-AM-14	OPTIONAL <i>Insulation</i> under Min. 2-inch ENRGY 3, FescoFoam, or DuraFoam	AP Fasteners & Plates secured at a rate of 22 per 4-ft x 8-ft Board	Retro-Fit, RetroPlus, DuraBoard; or Min. 2-inch FescoFoam or DuraFoam	ASTM D 312, Type IV Asphalt	HA	-75 (Lim. 7)
C-AM-15	OPTIONAL <i>Insulation</i> under Min. 1.5-inch E3, FescoFoam or DuraFoam; FescoBoard; Min. 3/4-inch DuraBoard	Simultaneously fastened with Top Insulation	Min. 0.5-inch SECUROCK	<i>Fasteners & Plates</i> at a rate of 18 per 4-ft x 8-ft Board	MBA or HA	-75 (Lim. 7)
C-AM-16	OPTIONAL <i>Insulation</i> under Min 1.5-inch ENRGY 3	<i>Fasteners & Plates</i> secured at a rate of 32 per 4-ft x 8-ft Board	Min. 0.5-inch SECUROCK	2UIA applied 12-inch o.c.	MBA or HA	-82.5 (Lim. 7)
C-AM-17	OPTIONAL <i>Insulation</i> under Min. 1-inch E3	Simultaneously fastened with Top Insulation	Min. 0.5-inch SECUROCK	<i>Fasteners & Plates</i> secured at a rate of 22 per 4-ft x 8-ft Board	MBA or HA	-82.5 (Lim. 7)
C-AM-18	OPTIONAL <i>Insulation</i> under Min. 2-inch ENRGY 3	<i>Fasteners & Plates</i> secured at a rate of 22 per 4-ft x 8-ft Board	Min. 0.5-inch SECUROCK	2UIA applied 12-inch o.c.	MBA or HA	-90 (Lim. 7)
C-AM-19	OPTIONAL <i>Insulation</i> under Min 1.5-inch ENRGY 3	<i>Fasteners & Plates</i> or UltraFast Fasteners with UltraFast Plastic Plates at a rate of 32 per 4-ft x 8-ft Board	Min. 0.5-inch SECUROCK	2UIA applied 12-inch o.c.	MBA or HA	-90 (Lim. 7)



Mechanically Fastened Assemblies over Concrete Deck (New, Existing, or Recover)						
System No.	Base Insulation (Note 11)	Top Insulation	Base Sheet (Note 12)	Base Sheet Attachment	Roof Cover	MDP (psf)
C-M-1	OPTIONAL Insulation under Min 1-inch E3	OPTIONAL Cover Board	MA	AP Fasteners & Plates 9-inch o.c. at min. 4-inch side lap and 18-inches o.c. in two equally spaced, staggered rows in the field of the roll	MBA or HA	-60 (Lim. 9)

Assemblies with All Layers Adhered over Cementitious Wood Fiber Deck (New or Existing)							
System No.	Vapor Barrier	Base Insulation (Note 6)	Base Attachment	Top Insulation	Top Attachment	Roof Cover	MDP (psf)
CW-A-1	OPTIONAL VB-CWF	OPTIONAL Min. 0.5-inch E3	RSUA applied 12-inch o.c.	DEXcell CB	RSUA applied 12-inch o.c.	MBA	-135 (Lim. 9)
CW-A-2	-	Min. 0.5-inch E3	2UIA, RSUA or QF(B) applied 12-inch o.c.	Min. 1/8-inch DynaBoard	2UIA, RSUA or QF(B) applied 12-inch o.c.	HA	-150 (Lim. 9)
CW-A-3	-	SECUROCK	2UIA applied 12-inch o.c.	-	-	MBA or HA	-165 (Lim. 9)

Assemblies with Adhered Membranes over Insulated Cementitious Wood Fiber Deck (New, Existing or Recover)						
System No.	Anchor Sheet	Anchor Sheet Attachment	Base Insulation	Top Insulation	Roof Cover	MDP (psf)
CW-AM-1	FescoBoard or Min. 1/2-inch DuraBoard	Twin-Loc Nail secured at a rate of 1 per 2ft ²	FescoBoard, Retro-Fit, RetroPlus or Min. 3/4-inch DuraBoard applied in ASTM D 312, Type IV Asphalt	-	HA	-45 (Lim. 7)
CW-AM-2	MA	Twin-Loc Nails with integral plate spaced 9-inch o.c. at the min. 3-inch side laps and two rows (2) staggered 12-inch o.c. in the field	Min. 1.3-inch ENRGY 3, FescoFoam, DuraFoam, FescoBoard, Retro-Fit Board or Min. 3/4-inch DuraBoard applied in ASTM D 312, Type IV Asphalt	-	HA	-82.5 (Lim. 7)

Mechanically Attached Assemblies over Cementitious Wood Fiber Deck (New or Existing)					
System No.	Insulation	Base Sheet (Note 12)	Base Sheet Attachment	Roof Cover	MDP (psf)
CW-M-1	Min. 375 psi <i>Celcore MF</i>	PermaPly 28	Min. 1.7-inch JM LWC CR Base Fastener installed 6-inch o.c. in 4-inch side laps, 6-inch o.c. in three (3) equally spaced, staggered rows in the field	<i>HA</i>	-60 (Lim. 7)
CW-M-2	-	<i>MA</i>	Twin-Loc Nails with integral plate spaced 9-inch o.c. at the 3-inch side lap and two rows (2) staggered 12-inch o.c. in the field	<i>MBA or HA</i>	-82.5 (Lim. 7)



Assemblies with All Layers Adhered over Poured Gypsum Deck (New or Existing)						
System No.	Base Insulation (Note 6)	Base Insulation Attachment	Cover Board	Cover Board Attachment	Roof Cover	MDP (psf)
G-A-1	Min. 0.5-inch ENRGY 3	RSUA applied 12-inch o.c.	-	-	MBA	-105 (Lim. 9)
G-A-2	Min. 0.5-inch ENRGY 3	RSUA applied 12-inch o.c.	DensDeck Prime	RSUA applied 12-inch o.c.	HA	-105 (Lim. 9)
G-A-3	OPTIONAL Min. 0.5-inch E3	RSUA applied 12-inch o.c.	DEXcell CB	RSUA applied 12-inch o.c.	MBA	-105 (Lim. 9)
G-A-4	Min. 0.5-inch E3	RSUA applied 8-inch o.c.	Min. 1/8-inch DynaBoard	RSUA applied 8-inch o.c.	HA	-150 (Lim. 9)

Assemblies with Adhered Membranes over Insulated Poured Gypsum Deck (New, Existing or Recover)						
System No.	Anchor Sheet	Anchor Sheet Attachment	Base Insulation	Top Insulation	Roof Cover	MDP (psf)
G-AM-1	-	-	Min. 1.5-inch ENRGY scured with Polymer Auger Fasteners and Plates secured at a rate of 8 per 4-ft x 8-ft Board	FescoBoard, Retro-Fit, RetroPlus or Min. 3/4-inch DuraBoard applied in ASTM D 312, Type IV Asphalt	HA	-45 (Lim. 7)
G-AM-2	-	-	FescoBoard or Min. 3/4-inch DuraBoard secured with Polymer Auger Fasteners and Plates secured at a rate of 16 per 4-ft x 8-ft Board	FescoBoard, Retro-Fit, RetroPlus or Min. 3/4-inch DuraBoard applied in ASTM D 312, Type IV Asphalt	HA	-45 (Lim. 7)
G-AM-3	-	-	OPTIONAL Insulation	FescoBoard or Min. 3/4-inch DuraBoard secured with Polymer Auger Fasteners and Plates secured at a rate of 16 per 4-ft x 8-ft Board	HA	-45 (Lim. 7)
G-AM-4	MA	Twin-Loc Nails with integral plate spaced 9-inch o.c. at the 3-inch side lap and two rows (2) staggered 12-inch o.c. in the field	Min 1.4-inch E3, FescoFoam, DuraFoam, Fesco Board, Retro-Fit, RetroPlus or Min 3/4-inch DuraBoard applied in ASTM D 312, Type IV Asphalt	-	HA	-75 (Lim. 7)

Mechanically Attached Assemblies over Poured Gypsum Deck (New or Existing)					
System No.	Insulation	Base Sheet (Note 12)	Base Sheet Attachment	Roof Cover	MDP (psf)
G-M-1	Insulation	MA	Polymer Auger Fasteners and Plates spaced 9-inch o.c. at the side lap and two rows (2) staggered 12-inch o.c. in the field	MBA or HA	-45 (Lim. 7)
G-M-2	-	MA	Min. 1.8-inch Twin-Loc Nails with integral plate spaced 9-inch o.c. at the 3-inch side lap and two rows (2) staggered 12-inch o.c. in the field	MBA or HA	-75 (Lim. 7)



Lightweight Insulating Concrete Assemblies with All Layers Adhered over Concrete Deck (New or Existing)							
System No.	Vapor Barrier	LWIC	Anchor Sheet	Base Insulation (Note 6)	Cover Board	Roof Cover	MDP (psf)
LC-A-1	OPTIONAL VB-LWIC	Min. 340 psi <i>Celcore MF</i>	-	Min. 0.5-inch ENRGY 3 or ENRGY 3 CGF applied in <i>RSUA</i> 12-inch o.c.	<i>SECUROCK</i> applied in <i>RSUA</i> 12-inch o.c.	<i>MBA</i> or <i>HA</i>	-77.5 (Lim. 9)
LC-A-2	-	Min. 300 psi <i>LWIC</i> (<i>MCRF</i> ≥ 131 lbf with 1.7-inch LWC CR Base Sheet Fastener)	-	Min. 0.5-inch ENRGY 3 or ENRGY 3 AGF applied in <i>2UIA</i> 12-inch o.c.	<i>SECUROCK</i> applied in <i>2UIA</i> 12-inch o.c.	<i>MBA</i> or <i>HA</i>	-80 (Lim. 9)
LC-A-3	-	Min. 310 psi <i>Elastizell</i>	-	Min. 0.5-inch ENRGY 3 or ENRGY 3 AGF applied in <i>2UIA</i> 12-inch o.c.	<i>SECUROCK</i> applied in <i>2UIA</i> 12-inch o.c.	<i>MBA</i> or <i>HA</i>	-130 (Lim. 9)
LC-A-4	OPTIONAL VB-LWIC	Min. 350 psi <i>Celcore MF</i>	-	Min. 0.5-inch <i>E3</i> applied in <i>RSUA</i> 12-inch o.c.	<i>DEXcell CB</i> applied in <i>RSUA</i> 12-inch o.c.	<i>MBA</i>	-135 (Lim 9)
LC-A-5	-	Existing <i>LWIC</i> with <i>MCRF</i> ≥ 139lbf using Trufast FM-90 Base Sheet Fastener; Surfaced with <i>Celcore SBS</i>	-	Min. 0.5-inch <i>E3</i> applied in <i>RSUA</i> 12-inch o.c.	<i>DEXcell CB</i> applied in <i>RSUA</i> 12-inch o.c.	<i>MBA</i>	-135 (Lim 9)
LC-A-6	OPTIONAL VB-LWIC	Min. 400 psi <i>Celcore MF</i> or Existing <i>LWIC</i> with <i>MCRF</i> ≥ 139lbf using Trufast FM-90 Base Sheet Fastener; Surfaced with <i>Celcore SBS</i>	-	Min. 0.5-inch <i>E3</i> applied in <i>RSUA</i> 8-inch o.c.	Min. 1/8-inch DynaBoard applied in <i>RSUA</i> 8-inch o.c.	<i>HA</i>	-150 (Lim. 9)
LC-A-7	OPTIONAL VB-LWIC	Min. 350 psi <i>Celcore MF</i>	-	Min. 0.5-inch <i>E3</i> applied in <i>RSUA</i> 12-inch o.c.	Min. 1/8-inch DynaBoard applied in <i>RSUA</i> 12-inch o.c.	<i>HA</i>	-150 (Lim 9)



Lightweight Insulating Concrete Assemblies with All Layers Adhered over Concrete Deck (New or Existing)							
System No.	Vapor Barrier	LWIC	Anchor Sheet	Base Insulation (Note 6)	Cover Board	Roof Cover	MDP (psf)
LC-A-8	OPTIONAL VB-LWIC	Min. 300 psi <i>Celcore MF</i> or Existing LWIC with $MCRF \geq 138\text{lb}$ using 1.7" JM LWC Pre-Assembled Base Sheet Fastener	-	Min. 0.5-inch <i>E3</i> in <i>Q(B)</i> 12-inch o.c.; or <i>Q(S)</i>	Min. 1/8-inch DynaBoard in <i>QF(B)</i> applied 12-inch o.c. or <i>Q(S)</i>	HA	-150 (Lim. 9)
LC-A-9	-	Min. 280 psi LWIC with $MCRF \geq 141\text{lb}$ using Trufast VERSA-FAST Fastener	-	Min. 0.5-inch <i>E3</i> i in <i>Q(B)</i> 12-inch o.c.; or <i>Q(S)</i>	Min. 1/8-inch DynaBoard in <i>QF(B)</i> applied 12-inch o.c. or <i>Q(S)</i>	HA	-150 (Lim. 9)
LC-A-10	-	Min. 260 psi LWIC	-	-	SECUROCK applied in 2UIA 12-inch o.c.	MBA or HA	-210 (Lim. 9)

Lightweight Insulating Concrete Assemblies with Adhered Membranes over Concrete Deck (New or Existing)							
System No.	Vapor Barrier	LWIC	Anchor Sheet	Base Insulation	Top Insulation	Roof Cover	MDP (psf)
LC-AM-1	-	Min. 340psi <i>Celcore MF</i> ; or Existing LWIC with $MCRF = 74\text{lb}$ using 1.8-inch Trufast Twin Loc- Nail	PermaPly 28 secured with min. 1.8-inch Trufast Twin-Loc Nails secured 6-inch o.c. at the 4-inch side laps and 4-inch o.c. in two (2) equally spaced rows in the field	-	Min. 0.5-inch <i>DensDeck Prime</i> adhered in <i>RSUA</i> applied over fasteners rows (approx. 10.7-inch o.c.)	HA	-82.5 (Lim. 7)
LC-AM-2	-	Min. 340psi <i>Celcore MF</i> ; or Existing LWIC with $MCRF = 74\text{lb}$ using 1.8-inch Trufast Twin Loc- Nail	PermaPly 28 secured with min. 1.8-inch Trufast Twin-Loc Nails secured 6-inch o.c. at the 4-inch side laps and 4-inch o.c. in two (2) equally spaced rows in the field	-	Min. 0.5-inch SECUROCK adhered in <i>RSUA</i> applied over fasteners rows (approx. 10.7-inch o.c.)	MBA or HA	-82.5 (Lim. 7)



Mechanically Fastened Lightweight Insulating Concrete Assemblies over <i>Concrete Deck</i> (New or Existing)						
System No.	Vapor Barrier	LWIC	Base Sheet (Note 12)	Base Sheet Attachment	Roof Cover	MDP (psf)
LC-M-1	-	Min. 300 psi LWIC (MCRF $\geq$ 169 lbf with 1.7-inch LWC CR Base Sheet Fastener)	MA	1.4-inch JM UltraLok or 1.7-inch LWC CR Base Sheet Fastener installed 7-inch o.c. in 3-inch side laps, 7-inch o.c. in two (2) equally spaced, staggered rows in the field	HA	-30 (Lim. 7)
LC-M-2	-	Min. 210 psi LWIC (MCRF $\geq$ 169 lbf with 1.7-inch LWC CR Base Sheet Fastener)	MA	1.4-inch JM UltraLok Fastener installed 9-inch o.c. in 3-inch side laps, 12-inch o.c. in two (2) equally spaced, staggered rows in the field	HA	-30 (Lim. 7)
LC-M-3	-	Min. 300 psi LWIC (MCRF $\geq$ 131 lbf with 1.7-inch LWC CR Base Sheet Fastener)	PermaPly 28	Min. 1.7-inch JM LWC CR Base Fastener installed 7-inch o.c. in min. 3-inch side laps, 7-inch o.c. in two (2) equally spaced, staggered rows in the field	HA	-37.5 (Lim. 7)
LC-M-4	OPTIONAL SBS TA VB	Min. 310 psi <i>Elastizell</i>	PermaPly 28	Min. 1.7-inch JM LWC CR Base Fastener installed 7-inch o.c. in min. 3-inch side laps, 7-inch o.c. in two (2) equally spaced, staggered rows in the field	HA	-45 (Lim. 7)
LC-M-5	-	Min. 200 psi Mearlcrete	PermaPly 28 or Ventsulation	Min. 1.7-inch LWC Base Sheet Fastener installed 7-inch o.c. in 3-inch side laps, 7-inch o.c. in two (2) equally spaced, staggered rows in the field	HA	-60 (Lim. 7)
LC-M-6	OPTIONAL SBS TA VB	Min. 380 psi <i>Celcore MF</i>	PermaPly 28	Min. 1.7-inch JM LWC Base Fastener installed 6-inch o.c. in 4-inch side laps, 6-inch o.c. in three (3) equally spaced, staggered rows in the field	HA	-60 (Lim. 7)
LC-M-7	-	Min. 310 psi LWIC (MCRF = 106lbf with JM LWC CR Base Fasteners)	PermaPly 28	Min. 1.7-inch JM LWC CR Base Fastener installed 7-inch o.c. in min. 3-inch side laps, 7-inch o.c. in two (2) equally spaced, staggered rows in the field	HA	-67.5 (Lim. 7)
LC-M-8	OPTIONAL VB-LWIC	Min 340 psi <i>Celcore MF</i>	PermaPly 28	Min. 1.7-inch JM LWC CR Base Fastener installed 7-inch o.c. in min. 3-inch side laps, 7-inch o.c. in two (2) equally spaced, staggered rows in the field	HA	-67.5 (Lim. 7)
LC-M-9	OPTIONAL SBS TA VB	Min. 400 psi <i>Elastizell</i>	MA	Min. 1.7-inch JM LWC CR Base Fastener installed 7-inch o.c. in 4-inch side laps, 7-inch o.c. in two (2) equally spaced, staggered rows in the field	HA	-75 (Lim. 7)
LC-M-10	-	Min. 360 psi Concrecel	PermaPly 28	Min. 1.7-inch JM LWC CR Base Fastener installed 6-inch o.c. in 4-inch side laps, 6-inch o.c. in three (3) equally spaced, staggered rows in the field	HA	-120 (Lim. 7)



Lightweight Insulating Concrete Assemblies with Adhered Membranes over Steel Deck (New or Existing)							
System No.	Deck Detail	LWIC	Anchor Sheet	Base Insulation	Top Insulation	Roof Cover	MDP (psf)
LS-AM-1	G33	Min. 340psi <i>Celcore MF</i> with <i>Celcore S-1</i> ; or Existing <i>LWIC</i> with <i>MCRF</i> = 74lbf using 1.8-inch Trufast Twin Loc-Nail	PermaPly 28 secured with min. 1.8-inch Trufast Twin-Loc Nails secured 6-inch o.c. at the 4-inch side laps and 4-inch o.c. in two (2) equally spaced rows in the field	-	Min. 0.5-inch <i>DensDeck Prime</i> adhered in <i>RSUA</i> applied over fasteners rows (approx. 10.7-inch o.c.)	HA	-82.5 (Lim. 7)
LS-AM-2	G33	Min. 340psi <i>Celcore MF</i> with <i>Celcore S-1</i> ; or Existing <i>LWIC</i> with <i>MCRF</i> = 74lbf using 1.8-inch Trufast Twin Loc-Nail	PermaPly 28 secured with min. 1.8-inch Trufast Twin-Loc Nails secured 6-inch o.c. at the 4-inch side laps and 4-inch o.c. in two (2) equally spaced rows in the field	-	Min. 0.5-inch <i>SECUROCK</i> adhered in <i>RSUA</i> applied over fasteners rows (approx. 10.7-inch o.c.)	MBA or HA	-82.5 (Lim. 7)

Mechanically Fastened Lightweight Insulating Concrete Assemblies over Steel Deck (New or Existing)						
System No.	Deck Detail	LWIC	Base Sheet (Note 12)	Base Sheet Attachment	Roof Cover	MDP (psf)
LS-M-1	G33	Min. 300 psi <i>LWIC</i> (<i>MCRF</i> ≥169 lbf with 1.7-inch LWC CR Base Sheet Fastener)	MA	1.4-inch JM UltraLok or 1.7-inch LWC CR Base Sheet Fastener installed 7-inch o.c. in 3-inch side laps, 7-inch o.c. in two (2) equally spaced, staggered rows in the field	HA	-30 (Lim. 7)
LS-M-2	G33	Min. 210 psi <i>LWIC</i> (<i>MCRF</i> ≥169 lbf with 1.7-inch LWC CR Base Sheet Fastener)	MA	1.4-inch JM UltraLok Fastener installed 9-inch o.c. in 3-inch side laps, 12-inch o.c. in two (2) equally spaced, staggered rows in the field	HA	-30 (Lim. 7)
LS-M-3	G33	Min. 300 psi <i>LWIC</i> (<i>MCRF</i> ≥131 lbf with 1.7-inch LWC CR Base Sheet Fastener)	PermaPly 28	Min. 1.7-inch JM LWC CR Base Fastener installed 7-inch o.c. in min. 3-inch side laps, 7-inch o.c. in two (2) equally spaced, staggered rows in the field	HA	-37.5 (Lim. 7)
LS-M-4	G33	Min. 310 psi <i>Elastizell</i>	PermaPly 28	Min. 1.7-inch JM LWC CR Base Fastener installed 7-inch o.c. in min. 3-inch side laps, 7-inch o.c. in two (2) equally spaced, staggered rows in the field	HA	-45 (Lim. 7)
LS-M-5	G33	Min. 380 psi <i>Celcore MF</i>	PermaPly 28	Min. 1.7-inch JM LWC CR Base Fastener installed 6-inch o.c. in 4-inch side laps, 6-inch o.c. in three (3) equally spaced, staggered rows in the field	HA	-60 (Lim. 7)



Mechanically Fastened Lightweight Insulating Concrete Assemblies over Steel Deck (New or Existing)						
System No.	Deck Detail	LWIC	Base Sheet (Note 12)	Base Sheet Attachment	Roof Cover	MDP (psf)
LS-M-6	G33	Min 340 psi <i>Celcore MF</i> applied over DynaWeld Base torch adhered to 5/8-inch SECUROCK fastened with OMG 3" Galvalume Steel Plates and OMG Heavy Duty at a rate of 1 fastener per 1.6ft ²	DynaBase, DynaBase 3.0, GlasPly Premier, or Ventsulation Felt	Min. 1.7-inch JM LWC CR Base Fastener installed 7-inch o.c. in min. 3-inch side laps, 7-inch o.c. in two (2) equally spaced, staggered rows in the field	HA	-60 (Lim. 7)
LS-M-7	G33	Min. 310 psi <i>LWIC</i> (MCRF = 106lbf with JM LWC CR Base Fasteners)	PermaPly 28	Min. 1.7-inch JM LWC CR Base Fastener installed 7-inch o.c. in min. 3-inch side laps, 7-inch o.c. in two (2) equally spaced, staggered rows in the field	HA	-67.5 (Lim. 7)
LS-M-8	G33	Min 340 psi <i>Celcore MF</i> with Celcore S-1	PermaPly 28	Min. 1.7-inch JM LWC CR Base Fastener installed 7-inch o.c. in min. 3-inch side laps, 7-inch o.c. in two (2) equally spaced, staggered rows in the field	HA	-67.5 (Lim. 7)
LS-M-9	G33	Min. 400 psi <i>Elastizell</i>	PermaPly 28 or Ventsulation Felt	Min. 1.7-inch JM LWC CR Base Fastener installed 7-inch o.c. in 4-inch side laps, 7-inch o.c. in two (2) equally spaced, staggered rows in the field	HA	-75 (Lim. 7)

Adhered Steel Deck Assemblies (New and Existing)						
System No.	Deck Detail	Thermal Barrier/ Vapor Barrier	Base Insulation (Note 6)	Top Insulation	Roof Cover	MDP (psf)
S-A-1	G33	OPTIONAL VB-Steel	Min. 1.5-inch E3 applied in 2UIA or RSUA 12-inch o.c. followed by OPTIONAL Min. 1-inch E3 2UIA or RSUA 12-inch o.c.	DensDeck Prime applied in 2UIA, OSFA, or RSUA 12-inch o.c.	HA	-45 (Lim. 9)
S-A-2	G33	OPTIONAL VB-Steel	Min. 1.5-inch E3 applied in 2UIA or RSUA 12-inch o.c. followed by OPTIONAL Min. 1-inch E3 applied in 2UIA or RSUA 12-inch o.c.	DEXcell FA or SECUROCK applied in 2UIA, OSFA, or RSUA 12-inch o.c.	MBA or HA	-45 (Lim. 9)
S-A-3	G33	OPTIONAL VB-Steel	Min. 1.5-inch ENRGY 3 applied in RSUA 6-inch o.c.	SECUROCK applied in OSFA, RSUA or 2UIA 6-inch o.c.	MBA or HA	-82.5 (Lim. 9)



Assemblies with Adhered Membranes over Insulated Steel Deck (New, Existing, or Recover)							
System No.	Deck Detail	Base Insulation	Base Insulation Attachment	Top Insulation	Top Insulation Attachment	Roof Cover	MDP (psf)
S-AM-1	G33	Min. 1.5-inch E3	Simultaneously fastened with Top Insulation	1/8-inch DynaBoard	AP Fasteners & Plates secured at a rate of 1 fastener per 4ft ²	HA	-30 (Lim. 7)
S-AM-2	G33	OPTIONAL Insulation under Min. 1.5-inch E3	Simultaneously fastened with Top Insulation	DEXcell Cement	Fasteners & Plates secured at a rate of 1 fastener per 5.33ft ²	MBA or HA	-45 (Lim. 7)
S-AM-3	G33	OPTIONAL Insulation under Min. 1.5-inch E3	Simultaneously fastened with Top Insulation	DEXcell FA	Fasteners & Plates secured at a rate of 1 fastener per 3.2ft ²	MBA or HA	-45 (Lim. 7)
S-AM-4	G33	OPTIONAL Insulation under Min. 1.5-inch E3	Simultaneously fastened with Top Insulation	Min. 1/2-inch DEXcell FA	Fasteners & Plates secured at a rate of 1 fastener per 4ft ²	MBA or HA	-45 (Lim. 7)
S-AM-5	G33	OPTIONAL Insulation under Min. 1.5-inch E3	Simultaneously fastened with Top Insulation	Min. 5/8-inch DEXcell FA	Fasteners & Plates secured at a rate of 1 fastener per 5.33ft ²	MBA or HA	-45 (Lim. 7)
S-AM-6	G33	Min. 1.5-inch E3	Simultaneously fastened with Top Insulation	Min. 1/2-inch DensDeck Prime	Fasteners & Plates secured at a rate of 1 fastener per 5.33ft ²	HA	-45 (Lim. 7)
S-AM-7	G33	Min. 1.5-inch E3	Simultaneously fastened with Top Insulation	DensDeck Prime	Fasteners & Plates secured at a rate of 1 fastener per 4ft ²	HA	-45 (Lim. 7)
S-AM-8	G33	Min. 2-inch E3	AP Fasteners & Plates secured at a rate of 1 fastener per 4ft ²	Min. 1/8-inch DynaBoard	2UIA, OSFA, RSUA, or QF(B) applied 12-inch o.c.; or RSUA(S), QF(S), or HA	HA	-37.5 (Lim. 7)
S-AM-9	G80	OPTIONAL Insulation under Min 1.5-inch ENRGY 3, FescoFoam or DuraFoam; or Min. 1-inch Fesco Board or DuraBoard	UF Fasteners & Plates secured at a rate of 16 per 4-ft x 8-ft Board	FescoFoam or DuraFoam; Min. 1-inch Fesco Board; Retro-Fit, RetroPlus or DuraBoard	ASTM D 312, Type IV Asphalt	HA	-52.5 (Lim. 7)
S-AM-10	G80	OPTIONAL Insulation under Min. 1.5-inch E3; FescoBoard; Min. 3/4-inch DuraBoard	Simultaneously fastened with Top Insulation	FescoFoam or DuraFoam; Fesco Board; Retro-Fit, RetrPlus, or DuraBoard	UF Fasteners & Plates or UltraFast Fasteners with UltraFast Plastic Plates at a rate of 16 per 4-ft x 8-ft Board	HA	-52.5 (Lim. 7)
S-AM-11	G33	Min. 1.5-inch E3	Simultaneously fastened with Top Insulation	Min. 1/8-inch DynaBoard	AP Fasteners & Plates secured at a rate of 16 per 4-ft x 8-ft Board	HA	-52.5 (Lim. 7)
S-AM-12	G33	OPTIONAL Insulation under Min. 1.5-inch E3	Simultaneously fastened with Top Insulation	SECUROCK	Fasteners & Plates secured at a rate of 18 per 4-ft x 8-ft Board	MBA or HA	-60 (Lim. 7)



Assemblies with Adhered Membranes over Insulated Steel Deck (New, Existing, or Recover)							
System No.	Deck Detail	Base Insulation	Base Insulation Attachment	Top Insulation	Top Insulation Attachment	Roof Cover	MDP (psf)
S-AM-13	G33	OPTIONAL <i>Insulation</i> under Min 1.5-inch ENRGY 3, FescoFoam or DuraFoam	<i>UF Fasteners & Plates</i> secured at a rate of 18 per 4-ft x 8-ft Board	FescoFoam, DuraFoam, Retro-Fit, RetroPlus or DuraBoard	ASTM D 312, Type IV Asphalt	HA	-60 (Lim. 7)
S-AM-14	G33	OPTIONAL <i>Insulation</i> under Min 1.5-inch ENRGY 3	<i>Fasteners & Plates</i> secured at a rate of 18 per 4-ft x 8-ft Board	Min. 0.5-inch SECUROCK	2UIA 12-inch o.c.	MBA or HA	-60 (Lim. 7)
S-AM-15	G33	OPTIONAL <i>Insulation</i>	Simultaneously fastened with Top Insulation	SECUROCK	<i>Fasteners & Plates</i> secured at a rate of 22 per 4-ft x 8-ft Board	MBA or HA	-60 (Lim. 7)
S-AM-16	G80	OPTIONAL <i>Insulation</i> under Min 1.5-inch ENRGY 3	<i>Fasteners & Plates</i> secured at a rate of 24 per 4-ft x 8-ft Board	Min. 1/2-inch SECUROCK	2UIA 12-inch o.c.	MBA or HA	-67.5 (Lim. 7)
S-AM-17	G33	OPTIONAL <i>Insulation</i> under Min. 2-inch ENRGY 3, FescoFoam, or DuraFoam	<i>UF Fasteners & Plates</i> secured at a rate of 22 per 4-ft x 8-ft Board	Retro-Fit, RetroPlus or DuraBoard; or Min. 2-inch FescoFoam or DuraFoam	ASTM D 312, Type IV Asphalt	HA	-75 (Lim. 7)
S-AM-18	G80	OPTIONAL <i>Insulation</i> under Min. 1.5-inch E3, FescoFoam or DuraFoam; FescoBoard; Min. 3/4-inch DuraBoard	Simultaneously fastened with Top Insulation	Min. 0.5-inch SECUROCK	<i>Fasteners & Plates</i> or UltraFast Fasteners with UltraFast Plastic Plates at a rate of 18 per 4-ft x 8-ft Board	MBA or HA	-75 (Lim. 7)
S-AM-19	G33	OPTIONAL <i>Insulation</i> under Min 1.5-inch ENRGY 3	<i>Fasteners & Plates</i> secured at a rate of 32 per 4-ft x 8-ft Board	Min. 0.5-inch SECUROCK	2UIA 12-inch o.c.	MBA or HA	-82.5 (Lim. 7)
S-AM-20	G33	OPTIONAL <i>Insulation</i> under Min. 1.5-inch E3	Simultaneously fastened with Top Insulation	Min. 0.5-inch SECUROCK	<i>Fasteners & Plates</i> secured at a rate of 22 per 4-ft x 8-ft Board	MBA or HA	-82.5 (Lim. 7)
S-AM-21	G80	OPTIONAL <i>Insulation</i> under Min. 2-inch ENRGY 3	<i>Fasteners & Plates</i> secured at a rate of 22 per 4-ft x 8-ft Board	Min. 0.5-inch SECUROCK	2UIA 12-inch o.c.	MBA or HA	-90 (Lim. 7)
S-AM-22	G80	OPTIONAL <i>Insulation</i> under Min 1.5-inch ENRGY 3	<i>Fasteners & Plates</i> or UltraFast Fasteners with UltraFast Plastic Plates at a rate of 32 per 4-ft x 8-ft Board	Min. 0.5-inch SECUROCK	2UIA 12-inch o.c.	MBA or HA	-90 (Lim. 7)



Mechanically Fastened Assemblies over Steel Deck (New, Existing, or Recover)							
System No.	Deck Detail	Base Insulation (Note 11)	Top Insulation	Base Sheet (Note 12)	Base Sheet Attachment	Roof Cover	MDP (psf)
S-M-1	G33	OPTIONAL Insulation	Min 1.5-inch E3; or FescoFoam, DuraFoam, FescoBoard or Retro-Fit Board	MA	Fasteners & Plates 9-inch o.c. at min. 4-inch side lap and 18-inches o.c. in two equally spaced, staggered rows in the field of the roll	MBA or HA	-60 (Lim. 9)

Assemblies with All Layers Adhered over Wood Deck (New or Existing)					
System No.	Deck Detail	Base Insulation (Note 6)	Top Insulation	Roof Cover	MDP (psf)
W-A-1	7/16O, L24	Min. 1-inch ENRGY 3 applied in RSUA 6-inch o.c.	SECUROCK applied in OSFA, RSUA or 2UIA 6-inch o.c.	MBA or HA	-82.5 (Lim. 9)
W-A-2	T15/32P, L24	Min. 1-inch ENRGY 3 applied in 2UIA 6-inch o.c.	SECUROCK applied in OSFA, RSUA or 2UIA 6-inch o.c.	MBA or HA	-82.5 (Lim. 9)

Assemblies with Adhered Membranes over Insulated Wood Deck (New, Existing, or Recover)							
System No.	Deck Detail	Anchor Sheet	Anchor Attachment	Base Insulation	Top Insulation	Roof Cover	MDP (psf)
W-AM-1	T19/32P, L24	PermaPly 28 or Ventsulation	RS Nails & Tin Tags spaced 12-inch o.c. in the 3-inch side laps and 12-inch o.c. in three (3) equally spaced rows in the field of the roll	-	-	HA	-37.5 (Lim. 7)
W-AM-2	T19/32P, L24	PermaPly 28 or Ventsulation	RS Nails & Tin Tags spaced 6-inch o.c. in the 3-inch side laps and 6-inch o.c. in three (3) equally spaced rows in the field of the roll	-	-	HA	-45 (Lim. 7)
W-AM-3	T19/32P, L24	PermaPly 28 or Ventsulation	UF Fasteners & Plates secured 8-inch o.c. at 3-inch side laps and 8-inch o.c. in three (3) equally spaced, staggered rows in the field of the roll	1.5-inch E3 in ASTM D 312, Type IV Asphalt	FescoFoam, DuraFoam, Fesco Board, Retro-Fit, RetroPlus or DuraBoard in ASTM D 312, Type IV Asphalt	HA	-52.5 (Lim. 7)
W-AM-4	T19/32P, L24	-	-	Min. 1.5-inch ENRGY 3 fastened with Fasteners & Plates secured at a rate of 24 per 4-ft x 8-ft Board	DuraBoard in ASTM D 312, Type IV Asphalt	MBA or HA	-60 (Lim. 7)



Assemblies with Adhered Membranes over Insulated Wood Deck (New, Existing, or Recover)							
System No.	Deck Detail	Anchor Sheet	Anchor Attachment	Base Insulation	Top Insulation	Roof Cover	MDP (psf)
W-AM-5	T15/32P, L24	-	-	Min. 1.5-inch ENRGY 3 fastened with Fasteners & Plates secured at a rate of 24 per 4-ft x 8-ft Board	Min. 0.5-inch SECUROCK applied in RSUA 12-inch o.c.	MBA or HA	-60 (Lim. 7)

Mechanically Fastened Assemblies over Wood Deck (New, Existing, or Recover)						
System No.	Deck Detail	Insulation	Base Sheet (Note 12)	Base Sheet Attachment	Roof Cover	MDP (psf)
W-M-1	T7/16O or T15/32P, L24	-	PermaPly 28 or Ventsulation	Min. 1.25-inch x 0.120-inch ring shank nails and min. 32 ga., 1½-inch diameter tin caps 9-inch o.c. at 3-inch side lap and three rows staggered in center 9-inch o.c.	HA	-30 (Lim. 7)
W-M-2	T7/16O or T15/32P, L24	-	PermaPly 28 or Ventsulation	VERSA-FAST fasteners and UltraFast (Square) 12-inch o.c. at 3-inch side lap and two rows staggered in center 18-inch o.c.	HA	-30 (Lim. 7)
W-M-3	T7/16O or T15/32P, L24	-	PermaPly 28 or Ventsulation	Min. 1.25-inch x 0.120-inch ring shank nails and min. 32 ga., 1½-inch diameter tin caps 6-inch o.c. at 3-inch side lap and three rows staggered in center 6-inch o.c.	HA	-45 (Lim. 7)
W-M-4	T7/16O, L24	-	MA	Tape & Staple spaced 9-inch o.c. at the 2-inch side laps and 9-inch o.c. in three (3) rows in the field of the roll	HA	-45 (Lim. 7)
W-M-5	T15/32P, L24	-	MA	RS Nails & Tin Tags secured 8-inch o.c. at 4-inch side laps and 8-inch o.c. in two (2) equally spaced rows in the field of the roll	MBA or HA	-45 (Lim. 7)
W-M-6	T19/32P, L24	OPTIONAL Min. 1.3-inch Insulation	PermaPly 28 or Ventsulation	Fasteners & Plates 8-inch o.c. at side lap and three rows staggered in center of the roll 8-inch o.c.	MBA or HA	-52.5 (Lim. 7)
W-M-7	T19/32P, L24	-	Two plies PermaPly 28, DynaBase, DynaBase 3.0, or Ventsulation	Min. 12 ga. ring shank nails and min. 32 ga., 1½-inch diameter tin caps 9-inch o.c. at 3-inch side lap and two rows staggered in center 12-inch o.c.	MBA or HA	-52.5 (Lim. 7)
W-M-8	T15/32P, L24	-	PermaPly 28 or Ventsulation	RS Nails & Tin Tags 8-inch o.c. at 3-inch side laps and 8-inch o.c. in three (3) rows equally spaced in the field of the roll	MBA or HA	-52.5 (Lim. 7)
W-M-9	T19/32P, L24	-	MA	RS Nails & Tin Tags secured 8-inch o.c. at 4-inch side laps and 8-inch o.c. in three (3) equally spaced rows in the field of the roll	MBA or HA	-52.5 (Lim. 7)
W-M-10	T19/32P, L24	-	PermaPly 28 or Ventsulation	Min. 12 ga. ring shank nails and min. 32 ga., 1½-inch diameter tin caps 9-inch o.c. at 3-inch side lap and two rows staggered in center 9-inch o.c.	MBA or HA	-60 (Lim. 7)
W-M-11	T19/32P, L24	-	MA	RS Nails & Tin Tags secured 4-inch o.c. at 4-inch side laps and 4-inch o.c. in three (3) equally spaced rows in the field of the roll	MBA or HA	-90 (Lim. 7)

END OF REPORT