



EVALUATION REPORT

FLORIDA BUILDING CODE, 8TH EDITION (2023)

Manufacturer: AMRIZE BUILDING ENVELOPE LLC
 (dba Duro-Last Roofing, Inc.)
 525 Morley Drive
 Saginaw, MI 48601
 989-737-3043
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Issued July 24, 2025

Manufacturing Plants: Tuscumbia, AL
 Welford, SC

Quality Assurance: UL LLC (QUA9625)

SCOPE

Category: Roofing
Subcategory: Single Ply Roof System
Code Edition: Florida Building Code, 8th Edition (2023) including High-Velocity Hurricane Zones (HVHZ)
Code Sections: 1504.3.1, 1504.6, 1504.7, 1507.12, 1515.1.1 , 1515.1.4, 1515.2.4, 1523.1.1, 1523.6.2
Properties: Wind Resistance, Impact Resistance, Physical Properties

PRODUCT DESCRIPTION

Products	Specification	Description
Duro-TECH TPO (Tuscumbia, AL or Wellford, SC)	ASTM D 6878 TAS 110	45-mil, 60-mil, or 80-mil thick thermoplastic polyolefin, heat-weldable, single-ply roof membrane with polyester weft-inserted reinforcement
Duro-TECH TPO Fleece (Tuscumbia, AL)	ASTM D 6878 TAS 110	45-mil, 60-mil, or 80-mil thick thermoplastic polyolefin, heat-weldable, single-ply roof membrane with polyester weft-inserted reinforcement and 8 oz. non-woven polyester fleece backing

REFERENCES

<u>Entity</u>	<u>Report No.</u>	<u>Standard (Year)</u>
Atlantic & Caribbean Roof Consulting (TST4671)	ACRC 02-002	TAS 114(J) (2011 ¹)
Atlantic & Caribbean Roof Consulting (TST4671)	ACRC 05-002	TAS 114(J) (2011 ¹)
FM Approvals (TST1867)	3001925	FM 4470 (2016)
FM Approvals (TST1867)	3004249	FM 4470 (2016)
FM Approvals (TST1867)	3017120	FM 4470 (2016)
FM Approvals (TST1867)	3030650	FM 4470 (2016)
FM Approvals (TST1867)	3033218	FM 4470 (2016)
FM Approvals (TST1867)	3035560	FM 4470 (2016)
FM Approvals (TST1867)	3036747	FM 4470 (2016)
FM Approvals (TST1867)	3041949	FM 4474 (2011); FM 4470 (2016)
FM Approvals (TST1867)	3042666	FM 4470 (2016)
FM Approvals (TST1867)	3044047	FM 4470 (2016)
FM Approvals (TST1867)	3047398	FM 4474 (2011)
FM Approvals (TST1867)	3047700	FM 4470 (2016)
FM Approvals (TST1867)	3046870	FM 4474 (2011); FM 4470 (2016)
FM Approvals (TST1867)	797-08937-267	FM 4470 (2016)
FM Approvals (TST1867)	3050535	FM 4470 (2016)
FM Approvals (TST1867)	3051380	FM 4474 (2011); FM 4470 (2016)
FM Approvals (TST1867)	3052525	FM 4474 (2011); FM 4470 (2016)
FM Approvals (TST1867)	3053933	FM 4470 (2016)
FM Approvals (TST1867)	3054114	FM 4470 (2016)
FM Approvals (TST1867)	3055167	FM 4470 (2016)
FM Approvals (TST1867)	3055227	FM 4470 (2016)
FM Approvals (TST1867)	3055491	FM 4470 (2016)
FM Approvals (TST1867)	3060274	FM 4470 (2016)
FM Approvals (TST1867)	3060621	FM 4470 (2016)
FM Approvals (TST1867)	3061218	FM 4470 (2016)
FM Approvals (TST1867)	3062305	FM 4470 (2016)
FM Approvals (TST1867)	797-07749-267	FM 4470 (2016)
FM Approvals (TST1867)	PR452965	FM 4470 (2016)
FM Approvals (TST1867)	PR457741	FM 4470 (2016)
FM Approvals (TST1867)	RR205572	FM 4470 (2016)
FM Approvals (TST1867)	RR207314	FM 4470 (2016)
FM Approvals (TST1867)	RR207553	FM 4470 (2016)
FM Approvals (TST1867)	3061875	FM 4470 (2016)
FM Approvals (TST1867)	3061602	FM 4470 (2016)
Nemo Etc LLC (TST6049)	4S-FBP-18001.09.18	ASTM D 6878 (2021)
Nemo Etc LLC (TST6049)	4r-FBP-20-SSTHP-01.A	ASTM D 6878 (2021)
PRI Construction Materials Technologies (TST5878)	FBP-044-02-01.10	TAS 114(D& J) (2011); TAS 114(H) (1995); TAS 117(B) (1995)
PRI Construction Materials Technologies (TST5878)	FBP-044-02-01.14	FM 4474 (2011); TAS 114(D& J) (2011); TAS 114(C&H) (1995);TAS 117(A&B) (1995); ASTM D 1876 (2008(2015)e1)
PRI Construction Materials Technologies (TST5878)	FBP-054-02-02	FM 4474 (2011)
PRI Construction Materials Technologies (TST5878)	FBP-054-02-04	FM 4474 (2011)
PRI Construction Materials Technologies (TST5878)	FBP-054-02-05	FM 4474 (2011)
PRI Construction Materials Technologies (TST5878)	FBP-065-02-01	TAS 114(J) (2011); FM 4474 (2011)
PRI Construction Materials Technologies (TST5878)	FBP-066-02-01	TAS 114(J) (2011); FM 4474 (2011)
PRI Construction Materials Technologies (TST5878)	FBP-069-02-01	FM 4474 (2011)
PRI Construction Materials Technologies (TST5878)	FBP-070-02-01	FM 4474 (2011)
PRI Construction Materials Technologies (TST5878)	FBP-085-02-01	FM 4474 (2011); TAS 114(J) (2011)
PRI Construction Materials Technologies (TST5878)	FBP-086-02-01	FM 4474 (2011); TAS 114(J) (2011)
PRI Construction Materials Technologies (TST5878)	FBP-094-02-01	TAS 110 (2000)
PRI Construction Materials Technologies (TST5878)	FBP-119-02-01	FM 4474(B) (2011); TAS 114(D) (2011)
PRI Construction Materials Technologies (TST5878)	FBP-120-02-01	FM 4474(D) (2011); TAS 114(J) (2011)
PRI Construction Materials Technologies (TST5878)	FBP-122-02-01	FM 4474(D) (2011); TAS 114(J) (2011)
PRI Construction Materials Technologies (TST5878)	FBP-125-02-01	FM 4474(C) (2011); TAS 114(C) (1995)
PRI Construction Materials Technologies (TST5878)	FBP-128-02-01	FM 4470 (2016)
PRI Construction Materials Technologies (TST5878)	FBP-131-02-01	FM 4474(C) (2011); TAS 114(C) (1995)
PRI Construction Materials Technologies (TST5878)	FBP-134-02-01	FM 4474(C) (2011); TAS 114(C) (1995)
PRI Construction Materials Technologies (TST5878)	FBP-145-02-01	ASTM D 6878 (2021); TAS 110 (2000)
PRI Construction Materials Technologies (TST5878)	FBP-148-02-01	FM 4474(D) (2011); TAS 114(J) (2011)
PRI Construction Materials Technologies (TST5878)	FBP-149-02-01	FM 4474(D) (2011); TAS 114(J) (2011)
PRI Construction Materials Technologies (TST5878)	FBP-150-02-01	FM 4474(C) (2011)
DLRI24001.1	FL47206-R1	

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 (Year)</u>
PRI Construction Materials Technologies (TST5878)	FBP-153-02-01	FM 4474(D) (2011); TAS 114(J) (2011)
PRI Construction Materials Technologies (TST5878)	FBP-154-02-01	FM 4474(D) (2011); TAS 114(J) (2011)
PRI Construction Materials Technologies (TST5878)	FBP-158-02-01	FM 4474(D) (2011); TAS 114(J) (2011)
PRI Construction Materials Technologies (TST5878)	FBP-160-02-01	FM 4474(B) (2011); TAS 114(D) (2011)
PRI Construction Materials Technologies (TST5878)	FBP-160-02-02	FM 4474(C) (2011)
PRI Construction Materials Technologies (TST5878)	FBP-162-02-01	ASTM D 1970 (2017a)
PRI Construction Materials Technologies (TST5878)	FBP-165-02-01	FM 4474(D) (2011); TAS 114(J) (2011)
PRI Construction Materials Technologies (TST5878)	FBP-165-02-01A	FM 4474(D) (2011); TAS 114(J) (2011)
PRI Construction Materials Technologies (TST5878)	FBP-165-02-02	FM 4474(B) (2011); TAS 114(D) (2011)
PRI Construction Materials Technologies (TST5878)	FBP-172-02-01	FM 4474(D) (2011); TAS 114(J) (2011)
PRI Construction Materials Technologies (TST5878)	FBP-174-02-01	ASTM D 3746 [1985(2015)e1]
PRI Construction Materials Technologies (TST5878)	FBP-175-02-01	FM 4474(D) (2011); TAS 114(J) (2011)
PRI Construction Materials Technologies (TST5878)	FBP-175-02-02	FM 4474(C) (2011)
PRI Construction Materials Technologies (TST5878)	FBP-177-02-01	FM 4474(D) (2011); TAS 114(J) (2011)
PRI Construction Materials Technologies (TST5878)	FBP-177-02-01C	FM 4474(D) (2011); TAS 114(J) (2011)
PRI Construction Materials Technologies (TST5878)	FBP-177-02-02	FM 4474(B) (2011); TAS 114(D) (2011)
PRI Construction Materials Technologies (TST5878)	FBP-178-02-01	FM 4474(D) (2011); TAS 114(J) (2011)
PRI Construction Materials Technologies (TST5878)	FBP-178-02-02	FM 4474(C) (2011)
PRI Construction Materials Technologies (TST5878)	FBP-178-02-06	FM 4474(B) (2011); TAS 114(D) (2011)
PRI Construction Materials Technologies (TST5878)	FBP-180-02-01A	FM 4474(C) (2011)
PRI Construction Materials Technologies (TST5878)	FBP-181-02-01A	FM 4474(C) (2011)
PRI Construction Materials Technologies (TST5878)	FBP-182-02-01	FM 4474(D) (2011); TAS 114(J) (2011)
PRI Construction Materials Technologies (TST5878)	FBP-184-02-01	FM 4474(D) (2011); TAS 114(J) (2011)
PRI Construction Materials Technologies (TST5878)	FBP-185-02-01	FM 4474(C) (2011)
PRI Construction Materials Technologies (TST5878)	FBP-185-02-02	FM 4474(B) (2011); TAS 114(D) (2011)
PRI Construction Materials Technologies (TST5878)	FBP-186-02-01	FM 4474(C) (2011)
PRI Construction Materials Technologies (TST5878)	FBP-190-02-01	FM 4474(B) (2011); TAS 114(D) (2011)
PRI Construction Materials Technologies (TST5878)	FBP-191-02-01	UL 1897 (2015)
PRI Construction Materials Technologies (TST5878)	FBP-191-02-02	FM 4474(B) (2011)
PRI Construction Materials Technologies (TST5878)	FBP-191-02-02A	FM 4474(C) (2011)
PRI Construction Materials Technologies (TST5878)	FBP-193-02-02	FM 4474(D) (2011); TAS 114(J) (2011)
PRI Construction Materials Technologies (TST5878)	FBP-194-02-01	FM 4474(C); (2011)
PRI Construction Materials Technologies (TST5878)	FBP-194-02-02	FM 4474(C); (2011)
PRI Construction Materials Technologies (TST5878)	FBP-194-02-03	FM 4474(B) (2011); TAS 114(D) (2011)
PRI Construction Materials Technologies (TST5878)	FBP-196-02-01	FM 4474(C) (2011)
PRI Construction Materials Technologies (TST5878)	FBP-196-02-02	UL 1897 (2015)
PRI Construction Materials Technologies (TST5878)	FBP-196-02-04	FM 4474(D) (2011); TAS 114(J) (2011)
PRI Construction Materials Technologies (TST5878)	FBP-206-02-01	FM 4474(D) (2011); TAS 114(J) (2011)
PRI Construction Materials Technologies (TST5878)	FBP-206-02-02	UL 1897 (2015)
PRI Construction Materials Technologies (TST5878)	FBP-208-02-01	TAS 110 (2000)
PRI Construction Materials Technologies (TST5878)	FBP-213-02-01	FM 4474(D) (2011); TAS 114(J) (2011)
PRI Construction Materials Technologies (TST5878)	FBP-213-02-03	FM 4474(C) (2011)
PRI Construction Materials Technologies (TST5878)	FBP-216-02-01	FM 4474(C) (2011)
PRI Construction Materials Technologies (TST5878)	FBP-220-02-01	FM 4474(D) (2011); TAS 114(J) (2011); UL 1897 (2015)
PRI Construction Materials Technologies (TST5878)	FBP-220-02-02	FM 4474(C) (2011)
PRI Construction Materials Technologies (TST5878)	FBP-222-02-01	FM 4474(C) (2011)
PRI Construction Materials Technologies (TST5878)	FBP-225-02-01	FM 4474(D) (2011); TAS 114(J) (2011); UL 1897 (2015)
PRI Construction Materials Technologies (TST5878)	FBP-230-02-01	FM 4474(D) (2011); TAS 114(J) (2011); UL 1897 (2015)
PRI Construction Materials Technologies (TST5878)	FBP-233-02-01	FM 4474(D) (2011); TAS 114(J) (2011); UL 1897 (2015)
PRI Construction Materials Technologies (TST5878)	FBP-233-02-02	TAS 114(C) (1995)
PRI Construction Materials Technologies (TST5878)	FBP-233-02-03	FM 4474(D) (2011); TAS 114(J) (2011); UL 1897 (2015)
PRI Construction Materials Technologies (TST5878)	FBP-235-02-01	FM 4474(D) (2011); TAS 114(J) (2011); UL 1897 (2015)
PRI Construction Materials Technologies (TST5878)	FBP-235-02-02	FM 4474(D) (2011); TAS 114(J) (2011); UL 1897 (2015)
PRI Construction Materials Technologies (TST5878)	FBP-238-02-01	FM 4474(D) (2011); TAS 114(J) (2011); UL 1897 (2015)
PRI Construction Materials Technologies (TST5878)	FBP-238-02-03	FM 4474(D) (2011); TAS 114(J) (2011); UL 1897 (2015)
PRI Construction Materials Technologies (TST5878)	FBP-239-02-01	FM 4474(D) (2011); TAS 114(J) (2011); UL 1897 (2015)

<u>Entity</u>	<u>Report No.</u>	<u>Standard (Year)</u>
PRI Construction Materials Technologies (TST5878)	FBP-240-02-01	FM 4474(D) (2011); TAS 114(J) (2011); UL 1897 (2015)
PRI Construction Materials Technologies (TST5878)	FBP-241-02-01	FM 4474(D) (2011); TAS 114(J) (2011); UL 1897 (2015)
PRI Construction Materials Technologies (TST5878)	FBP-242-02-01	FM 4474(D) (2011); TAS 114(J) (2011); UL 1897 (2015)
PRI Construction Materials Technologies (TST5878)	FBP-243-02-01	FM 4474(B) (2011); TAS 114(D) (2011)
PRI Construction Materials Technologies (TST5878)	FBP-254-02-02	FM 4474(C) (2011)
PRI Construction Materials Technologies (TST5878)	FBP-258-02-02B	FM 4474(D) (2011); TAS 114(J) (2011); UL 1897 (2015)
PRI Construction Materials Technologies (TST5878)	FBP-258-02-02C	FM 4474(C) (2011)
PRI Construction Materials Technologies (TST5878)	FBP-260-02-01	FM 4474(C) (2011)
PRI Construction Materials Technologies (TST5878)	FBP-260-02-02	FM 4474(B) (2011); TAS 114(D) (2011)
PRI Construction Materials Technologies (TST5878)	FBP-265-02-02	FM 4474(C) (2011)
PRI Construction Materials Technologies (TST5878)	FBP-271-02-02	FM 4474(D) (2011); TAS 114(J) (2011); UL 1897 (2015)
PRI Construction Materials Technologies (TST5878)	FBP-276-02-01	FM 4474(D) (2011); TAS 114(J) (2011); UL 1897 (2015)
PRI Construction Materials Technologies (TST5878)	FBP-277-02-01	FM 4474(D) (2011); TAS 114(J) (2011); UL 1897 (2015)
PRI Construction Materials Technologies (TST5878)	FBP-279-02-01	FM 4474(D) (2011); TAS 114(J) (2011); UL 1897 (2015)
PRI Construction Materials Technologies (TST5878)	FBP-282-02-01	FM 4474(B) (2011); TAS 114(D) (2011)
PRI Construction Materials Technologies (TST5878)	FBP-283-02-02B	FM 4474(D) (2011); TAS 114(J) (2011); UL 1897 (2015)
PRI Construction Materials Technologies (TST5878)	FBP-283-02-03	FM 4474(D) (2011); TAS 114(J) (2011); UL 1897 (2015)
PRI Construction Materials Technologies (TST5878)	FBP-291-02-01	FM 4474(D) (2011); TAS 114(J) (2011); UL 1897 (2015)
PRI Construction Materials Technologies (TST5878)	FBP-298-02-01	FM 4474(D) (2011); TAS 114(J) (2011); UL 1897 (2015)
PRI Construction Materials Technologies (TST5878)	FBP-304-02-01	FM 4474(D) (2011); TAS 114(J) (2011); UL 1897 (2015)
PRI Construction Materials Technologies (TST5878)	FBP-313-02-01	FM 4474(D) (2011); TAS 114(J) (2011); UL 1897 (2015)
PRI Construction Materials Technologies (TST5878)	FBP-313-02-02	FM 4474(B) (2011); TAS 114(D) (2011)
PRI Construction Materials Technologies (TST5878)	FBP-317-02-01	FM 4474(D) (2011); TAS 114(J) (2011); UL 1897 (2015)
PRI Construction Materials Technologies (TST5878)	FBP-317-02-02	FM 4474(D) (2011); TAS 114(J) (2011); UL 1897 (2015)
PRI Construction Materials Technologies (TST5878)	FBP-318-02-01	FM 4474(B) (2011); TAS 114(D) (2011)
PRI Construction Materials Technologies (TST5878)	FBP-322-02-02	FM 4474(D) (2011); TAS 114(J) (2011); UL 1897 (2015)
PRI Construction Materials Technologies (TST5878)	FBP-324-02-02	FM 4474(D) (2011); TAS 114(J) (2011); UL 1897 (2015)
PRI Construction Materials Technologies (TST5878)	FBP-331-02-01	FM 4474(D) (2011); TAS 114(J) (2011); UL 1897 (2015)
PRI Construction Materials Technologies (TST5878)	FBP-334-02-01	FM 4474(D) (2011); TAS 114(J) (2011); UL 1897 (2015)
PRI Construction Materials Technologies (TST5878)	FBP-334-02-02	FM 4474(D) (2011); TAS 114(J) (2011); UL 1897 (2015)
PRI Construction Materials Technologies (TST5878)	FBP-336-02-01	FM 4474(B) (2011); TAS 114(D) (2011)
PRI Construction Materials Technologies (TST5878)	FBP-338-02-01	FM 4474(D) (2011); TAS 114(J) (2011); UL 1897 (2015)
PRI Construction Materials Technologies (TST5878)	FBP-339-02-02A	FM 4474(D) (2011); TAS 114(J) (2011); UL 1897 (2015)
PRI Construction Materials Technologies (TST5878)	FBP-339-02-02B	FM 4474(D) (2011); TAS 114(J) (2011); UL 1897 (2015)
PRI Construction Materials Technologies (TST5878)	FBP-340-02-01A.1	UL 1897 (2015)
PRI Construction Materials Technologies (TST5878)	FBP-341-02-01	FM 4474(C) (2011)
PRI Construction Materials Technologies (TST5878)	FBP-345-02-01	FM 4474(D) (2011); TAS 114(J) (2011); UL 1897 (2015)
PRI Construction Materials Technologies (TST5878)	FBP-352-02-01.1	TAS 114(D) (2011)
PRI Construction Materials Technologies (TST5878)	FBP-353-02-01	FM 4474(D) (2011); TAS 114(J) (2011); UL 1897 (2015)

<u>Entity</u>	<u>Report No.</u>	<u>Standard (Year)</u>
PRI Construction Materials Technologies (TST5878)	FBP-355-02-01	FM 4474(D) (2011); TAS 114(J) (2011); UL 1897 (2015)
PRI Construction Materials Technologies (TST5878)	FBP-356-02-01	UL 1897 (2015)
PRI Construction Materials Technologies (TST5878)	FBP-357-02-01	TAS 114(D) (2011)
PRI Construction Materials Technologies (TST5878)	FBP-358-02-01	FM 4474(D) (2011); TAS 114(J) (2011); UL 1897 (2015)
PRI Construction Materials Technologies (TST5878)	FBP-359-02-01	FM 4474(D) (2011); TAS 114(J) (2011); UL 1897 (2015)
PRI Construction Materials Technologies (TST5878)	FBP-362-02-01	FM 4474(D) (2011); TAS 114(J) (2011); UL 1897 (2015)
PRI Construction Materials Technologies (TST5878)	FBP-363-02-01	FM 4474(D) (2011); TAS 114(J) (2011); UL 1897 (2015)
PRI Construction Materials Technologies (TST5878)	FBP-367-02-01	FM 4474(D) (2011); TAS 114(J) (2011); UL 1897 (2015)
PRI Construction Materials Technologies (TST5878)	FBP-368-02-01	ASTM D 6878 (2021); TAS 110 (2000)
PRI Construction Materials Technologies (TST5878)	FBP-373-02-01A	TAS 110 (2000)
PRI Construction Materials Technologies (TST5878)	FBP-373-02-01B	ASTM D 6878 (2021)
PRI Construction Materials Technologies (TST5878)	FBP-373-02-01C	TAS 110 (2000)
PRI Construction Materials Technologies (TST5878)	FBP-375-02-01	ASTM D 1876 (2008(2015)e1)
PRI Construction Materials Technologies (TST5878)	FBP-389-02-01	FM 4474(C) (2011)
PRI Construction Materials Technologies (TST5878)	FBP-389-02-02	FM 4474(D) (2011); TAS 114(J) (2011); UL 1897 (2015)
PRI Construction Materials Technologies (TST5878)	348T0047	FM 4474(D) (2011); UL 1897 (2015)
PRI Construction Materials Technologies (TST5878)	348T0088	TAS 110 (2000)
PRI Construction Materials Technologies (TST5878)	348T0089	TAS 110 (2000)
PRI Construction Materials Technologies (TST5878)	348T0090	TAS 110 (2000)
PRI Construction Materials Technologies (TST5878)	348T0111	FM 4474(B) (2011); TAS 114(D) (2011)
PRI Construction Materials Technologies (TST5878)	348T0117	FM 4474(B) (2011); TAS 114(D) (2011)
PRI Construction Materials Technologies (TST5878)	348T0131	ASTM D 3746 [1985(2015)e1]; TAS 110 (2000); ASTM D 6878 (2021)
PRI Construction Materials Technologies (TST5878)	348T0131A	ASTM D 6878 (2021)
PRI Construction Materials Technologies (TST5878)	348T0132	FM 4474(D) (2011); TAS 114(J) (2011); UL 1897 (2015)
PRI Construction Materials Technologies (TST5878)	348T0140	FM 4474(D) (2011); UL 1897 (2015)
PRI Construction Materials Technologies (TST5878)	280T0052	FM 4470 (2012); ASTM D413 (2017)
Trinity ERD (TST6049)	F11080.09.08	TAS 114(J) (2011) ¹
Trinity ERD (TST6049)	SFS-SC10010.02.16	FM 4474(D) (2011); TAS 114(J) (2011); UL 1897 (2015)
Trinity ERD (TST6049)	F38200.04.15-R1	ASTM D 6878 (2021)

¹ Standard test method has been found equivalent to FM 4474 (2011) referenced by the FBC.



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 substrate 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 (July 2022).
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.
13. Fasteners applied in rows may impart concentrated loads to structural components of the building. Designers should consider the fastener spacing of the roof system in relation to the spacing of structural supports when selecting a roof system.

COMPLIANCE STATEMENT

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



This item has been digitally signed and sealed by Zachary R. Priest, PE, on 7/24/2025.

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

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

CERTIFICATION OF INDEPENDENCE

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

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

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

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

APPENDICES

- 1) APPENDIX A – Installation (9 pages)
- 2) APPENDIX B – Nomenclature and Approved Assemblies (66 pages)

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, & QuickSeam R.M.A. Strip	Elevate All-Purpose Fasteners	Min.0.75-inch penetration through the top rib of the steel deck or wood deck
	Elevate All-Purpose S Fasteners	
	Trufast #12 DP Fasteners	
	Elevate Concrete Drive	Min. 1.25" embedment into min. 3" thick structural concrete
	Elevate HD Seam Plate or TPO HD Seam Plate	2 3/8-inch diameter; 0.036-inch Galvalume steel plate with eyehooks
	Elevate HD Plus Seam Plate	2.75-inch diameter; 0.037-inch Galvalume steel plate with eyehooks
	Elevate Heavy Duty Fastener	Min. 0.75-inch penetration through the top rib of the steel deck or wood deck; Min. penetration 1-inch into concrete deck (Heavy Duty Plus shall not be used in concrete deck)
	Elevate Heavy Duty Plus Fastener or Duro-Last #15 Extra Heavy Duty Drill Point Fastener	
	SFS Intec Dekfast #14	
	SFS Intec Dekfast #15 HS	
	Elevate Insulation Fastening Plate	
	Trufast 3" Metal Seam Plates	3-inch diameter; Galvalume steel plate
	Elevate 1.7" LWC Base Ply Fastener	Full embedment of shank into substrate
	Elevate Metal Batten Bar	1-inch wide steel batten bar
	Coiled Metal Batten Bar	
	Elevate Polymer Batten Strip	0.75-inch wide plastic batten strip
	Elevate Purlin Fastener	Min. 0.75-inch penetration through purlin
	SFS Intec SFS Purlin Fastener	
	Elevate UltraPly QuickSeam R.M.A Strip	Prime at a rate of 200-250 ft ² /gal with Elevate Single-Ply QuickPrime Primer or QuickPrime Plus Primer prior to adhering strip
	Elevate UltraPly TPO InvisiWeld Plate or Duro-Bond TPO Plate	Min. 3-inch diameter; Induction welded in the field of membrane with RhinoBond® welding tool; welds not permitted at lap seams
Trufast VERSA-FAST Plate	3-inch diameter; 0.017-inch thick Galvalume steel plate with one (1) center hole and eight (8) equally spaced perimeter holes for multiple fastening	
Trufast VERSA-FAST Fastener	Min. 2-inch embedment into LWIC or Gypsum decks; Min. 3/4-inch penetration through wood decks	
Vapor Barrier	Elevate V-Force Vapor Barrier Membrane	Self-adhered; Min. 3-inch side laps; Min. 6-inch end laps; All substrates except metal decks must be primed with vapor barrier primer.
	Elevate APP 80 Glass Base	Min. 3-inch lap; Torch adhered
	Elevate SBS Glass Base Torch	
	Elevate SBS Glass FR Torch	
Elevate SBS Poly Torch Base		
Vapor Barrier Primer	Elevate SA-LVOC Primer	Applied at a rate of 0.5 gal/sq.
	Elevate SA-Solvent Based (SB) Primer	
	Elevate SA-Water Based (WB) Primer	Applied at a rate of 150-200 ft ² /gal
Insulation Adhesives	Elevate I.S.O. Stick	Partially adhered in 0.75 to 1-inch wide ribbons
	Elevate I.S.O. Fix II	Partially adhered in 0.75 to 1-inch wide ribbons
	Elevate I.S.O. Twin Pack Insulation Adhesive or Duro-Grip WeatherTite One Step	Partially adhered in 0.5 to 0.75-inch wide ribbons
	Elevate I.S.O. Spray R	Partially adhered in 0.75 to 1-inch wide ribbons
	Elevate Twin Jet or Duro-Grip Low-Rise Foam 500 currently OlyBond 500	Partially adhered in 1 to 1.25-inch wide ribbons

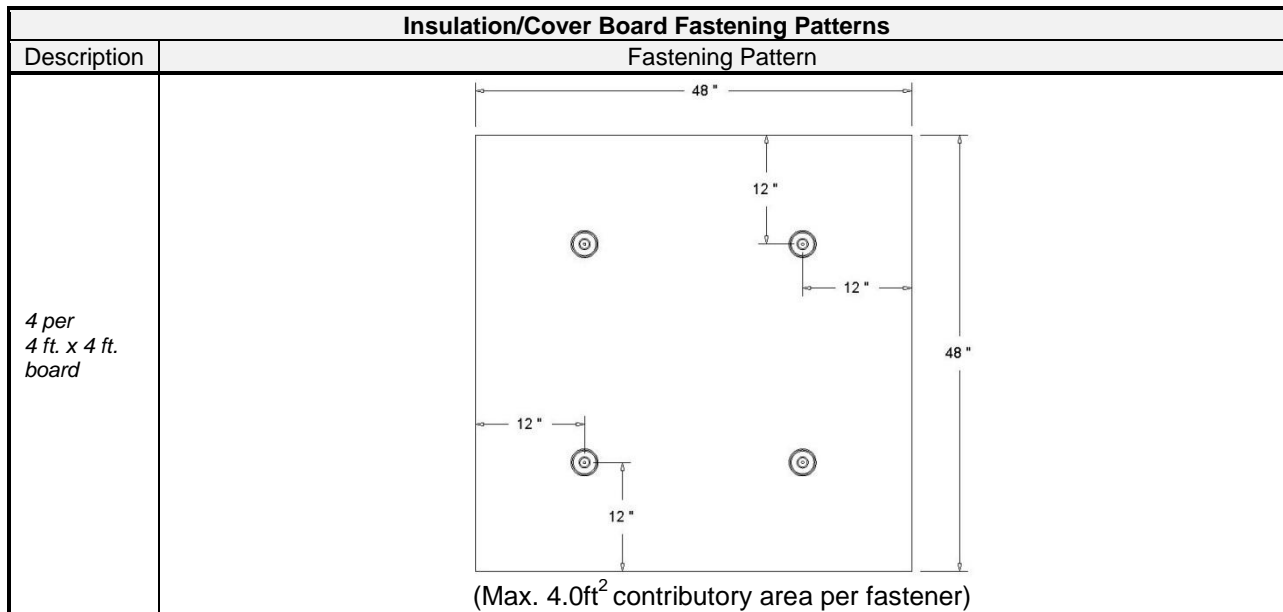


Appendix A

Component	Product	Installation Detail
Insulation/Cover Boards	Georgia-Pacific DensDeck or DensDeck Prime	Min. 0.25-inch thick
	Elevate ISO 95+ GL	Min. 0.5-inch thick; Min. 20 psi; Adhered boards shall be a maximum 4 ft. x 4 ft.
	Elevate ISOGARD GL or Duro-Guard ISO II-E ²	
	GenFlex ISO Insulation	
	Elevate ISOGARD CG or Duro-Guard ISO III-E ²	
	Elevate RESISTA	
	GenFlex Coated Glass Facer	
	Elevate ISO 95+ GL (Tapered)	0.5-inch to start with 0.25-inch per ft taper; Adhered boards shall be a maximum 4 ft x 4 ft
	Elevate ISOGARD GL (Tapered) or Duro-Guard ISO II-E ² (Tapered)	
	Elevate ISOGARD CG (Tapered) or Duro-Guard ISO III-E ² (Tapered)	
	Elevate RESISTA (Tapered)	
	GenFlex Coated Glass Facer (Tapered)	
	GenFlex ISO Insulation (Tapered)	Min. 0.5-inch thick; Adhered boards shall be a maximum 4 ft. x 4 ft.
	Elevate ISOGARD HD	
	Duro-Guard ISO HD-E ²	
	GenFlex HD ISO	Min. 1.5-inch thick; Adhered boards shall be a maximum 4 ft. x 4 ft.
Elevate ISOGARD HD Composite		
Duro-Guard ISO HD Composite-E ²		
GenFlex HD Composite ISO	Min. 0.25-inch thick	
USG SECUROCK Glass-Mat Roof Board		
USG SECUROCK Gypsum-Fiber Roof Board	Min. 0.25-inch thick	
Membrane Adhesives	ASTM D 312, Type IV Asphalt	Fully adhered within the EVT range at a rate of 25-40 lbs/100 ft ²
	Elevate I.S.O. Spray R	Partially adhered in 0.75 to 1-inch wide ribbons
	Elevate Jet Bond Spray Adhesive or TECH-Bond™ TPO Spray Adhesive	Applied to both the bottom surface of the roof cover and the top surface of the substrate; Applied with 2 in. overlap at a rate of 1.75-2.2 lbs/100ft ² to each surface with bareback membranes; Applied with 6 in. overlap at a rate of 2.5-2.7 lbs/100ft ² to each surface with fleeceback membranes
	Elevate Single-Ply LVOC Bonding Adhesive or TECH-Bond™ TPO LVOC Bonding Adhesive	Fully adhered at rate of 45-60 ft ² /gal; Applied simultaneously to underside of membrane and substrate
	Elevate Single-Ply LVOC 1168 Bonding Adhesive	
	Elevate UltraPly Bonding Adhesive or TECH-Bond™ TPO Bonding Adhesive	
	Elevate Twin Jet or Duro-Grip Low-Rise Foam 500 currently OlyBond 500	Adhered in spatter at a rate of 5.8 lbs/sq.
	Elevate Water Based Bonding Adhesive P or TECH-Bond™ TPO Water Base Bonding Adhesive	Fully adhered at a rate of 100-120 ft ² /gal.
	Elevate XR Stick	Partially adhered in 0.75 to 1-inch wide ribbons
	Elevate XR Bonding Adhesive	Fully adhered at rate of 70-90 ft ² /gal; Applied to substrate only
	Owens Corning PermaMop Asphalt	Fully adhered within the EVT range at a rate of 25-40 lbs/100 ft ²
Base Sheets	Elevate MB Base	Min. 2-inch wide side-laps; Side-laps shall be installed perpendicular to the direction of the steel deck ribs for mechanically attached systems
	Elevate Channel Venting Base	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 for mechanically attached systems
	BASEGARD SA	
	Elevate Ply IV (4)	

Appendix A

Component	Product	Installation Detail
Base Sheets (Continued)	Elevate Ply VI (6)	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 for mechanically attached systems
	Elevate SBS Base	
	Elevate SBS Base-P	
	Elevate SBS Glass Torch Base	
	Elevate SBS Glass Torch Base 1.5	
	Elevate SBS PolyBase	
	Elevate SBS Poly Torch Base	
	Elevate SBS Premium Base	
	Elevate SBS Premium Poly Base	
Elevate SBS Smooth		
Single-Ply Membrane	Duro-TECH TPO	Min. 2-inch wide side-laps with min. 1.5-inch wide heat weld; 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 for mechanically attached systems
	Duro-TECH TPO Fleece	
Cellular Lightweight Insulating Concrete	Min. 300 psi Celcore MF with HS Rheology Admixture	Slurry coat min. 0.25-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
	Celcore S-1	Deck is treated by applying a continuous film with a broom prior to placement of the Celcore lightweight concrete
	Celcore Sanded Bonding Surface (SBS)	Applied at a rate of 100 ft ² /gal
	Min. 300 psi Mearlcrete	Slurry coat min. 0.25-inch thick; 1" thick EPS board (1 lbs/ft ³); Min. 2-inch thick top coat
	Min. 300 psi Elastizell	
	Min. 300 psi Concrecel	
Min. 200 psi Cellular Lightweight Concrete		





Insulation/Cover Board Fastening Patterns	
Description	Fastening Pattern
4 per 4 ft. x 8 ft. board	<p>(Max. 8ft² contributory area per fastener)</p>
5 per 4 ft. x 8 ft. board	<p>(Max. 6.4ft² contributory area per fastener)</p>
6 per 4 ft. x 8 ft. board	<p>(Max. 5.33ft² contributory area per fastener)</p>

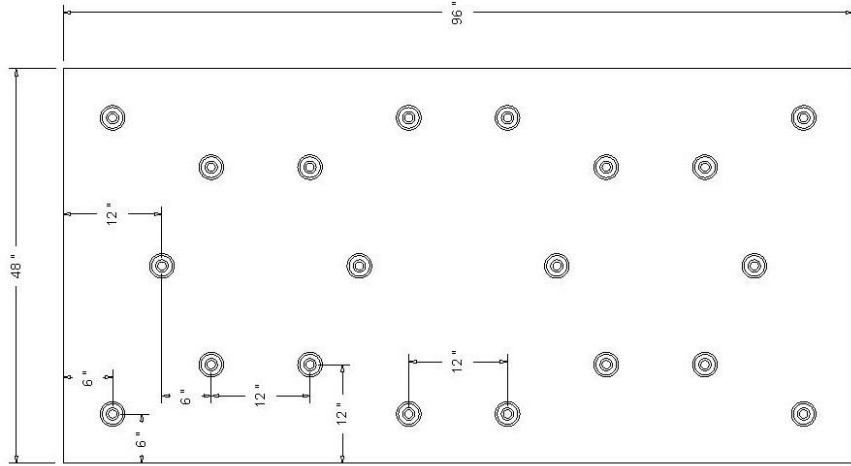
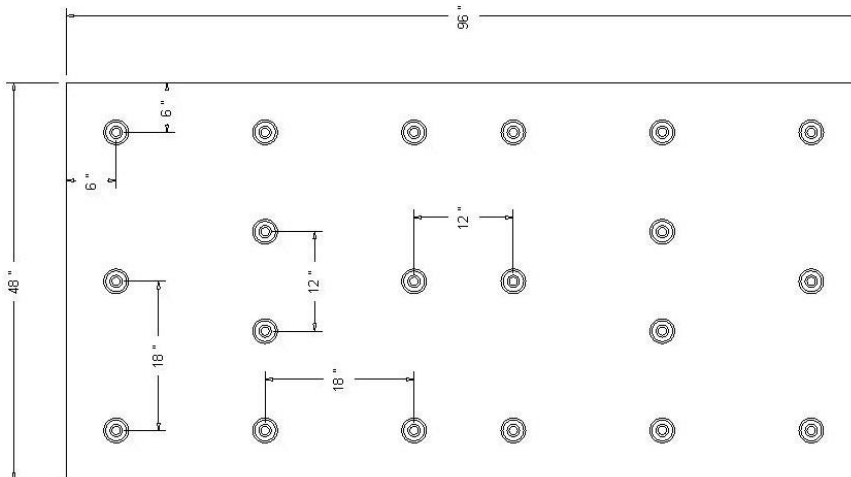
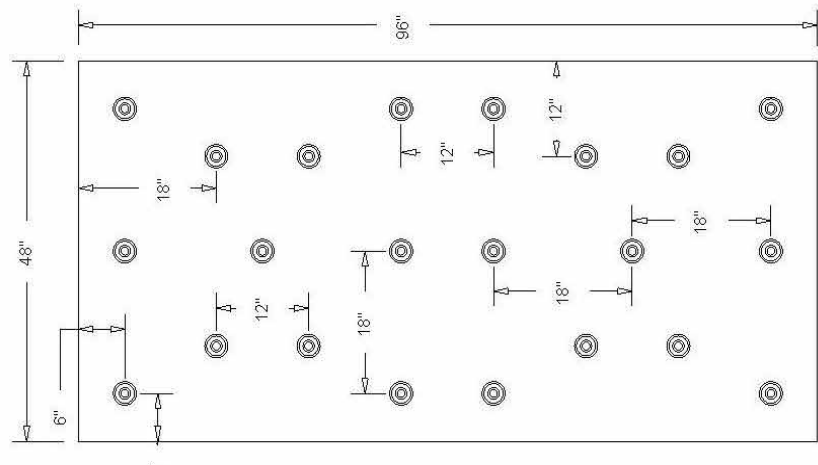
Insulation/Cover Board Fastening Patterns	
Description	Fastening Pattern
8 per 4 ft. x 8 ft. board	<p>(Max. 4.00ft² contributory area per fastener)</p>
10 per 4 ft. x 8 ft. board	<p>(Max. 3.2ft² contributory area per fastener)</p>
10 per 4 ft. x 8 ft. board (Alt. Pattern)	<p>(Max. 3.2ft² contributory area per fastener)</p>

Insulation/Cover Board Fastening Patterns	
Description	Fastening Pattern
12 per 4 ft. x 8 ft. board	<p>(Max. 2.67ft² contributory area per fastener)</p>
12 per 4 ft. x 8 ft. Board (Alt. Pattern)	<p>(Max. 2.67ft² contributory area per fastener)</p>
12 per 4 ft. x 8 ft. Board (Alt. Pattern 2)	<p>(Max. 2.67ft² contributory area per fastener)</p>



Insulation/Cover Board Fastening Patterns	
Description	Fastening Pattern
15 per 4 ft. x 8 ft. Board	<p>(Max. 2.13ft² contributory area per fastener)</p>
16 per 4 ft. x 8 ft. board	<p>(Max. 2.00ft² contributory area per fastener)</p>
18 per 4 ft. x 8 ft. board	<p>(Max. 1.78ft² contributory area per fastener)</p>



Insulation/Cover Board Fastening Patterns	
Description	Fastening Pattern
20 per 4 ft. x 8 ft. board	 <p>(Max. 1.60ft² contributory area per fastener)</p>
20 per 4 ft. x 8 ft. board (Alt. Pattern)	 <p>(Max. 1.60ft² contributory area per fastener)</p>
22 per 4 ft. x 8 ft. board	 <p>(Max. 1.45ft² contributory area per fastener)</p>

Insulation/Cover Board Fastening Patterns	
Description	Fastening Pattern
24 per 4 ft. x 8 ft. board	<p>(Max. 1.33ft² contributory area per fastener)</p>

VERSA-FAST Metal plate Fastening Pattern	
Description	Fastening Pattern
1 fastener per plate	
2 fasteners per plate	

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		
500-S	Elevate Twin Jet or DuroGrip® Low-Rise Foam 500 currently OlyBond 500 applied in spatter		
500-R	Elevate Twin Jet or DuroGrip® Low-Rise Foam 500 currently OlyBond 500 applied in ribbons		
AP Fasteners & Plates	Elevate All-Purpose Fasteners or All-Purpose S Fasteners and Insulation Fastening Plates		
As Tested	Information provided to the report user based on the as tested condition of the roof system		
BASEGARD	One ply of BASEGARD SA. Shall only be used with membranes applied in hot asphalt.		
CD Fasteners & Insulation Plates	Elevate Concrete Drive and Insulation Fastening Plates		
CD Fasteners & Plates	Elevate Concrete Drive and Elevate HD Seam Plates or TPO HD Seam Plates		
Cover Board	One layer of any of the following products: -Georgia-Pacific DensDeck -Georgia-Pacific DensDeck Prime -Duro-Guard ISO HD-E ² -Elevate ISOGARD HD -GenFlex HD ISO -USG SECUROCK Glass-Mat Roof Board -USG SECUROCK Gypsum-Fiber Roof Board		
Deck Detail	As Tested deck construction details are described as follows:		
	Concrete Deck	Min. $f'_c = 2,500$ psi at 28 days	
	CWF Deck	Min. 2.5-inch thick Tectum I cementitious wood fiber panels	
	Steel Deck	Min. 22 ga, Wide Rib Deck (Type WR) conforming to ANSI/SDI-RD1.0 & FBC; 0.5% Vented and ASTM A653 G90 for LWIC applications only. The following nomenclature is used to further describe the As Tested condition.	
		F<#>	<#> #12-24 HWH self-drilling screws or equivalent fastener at each flute used to secure the deck to the structural supports; Min. 0.25-inch penetration
		G<#>	Min. Grade <#> of Steel Deck
		HS<#>	Hilti S-SLC 01 M HWH screws or equivalent fastener secured <#>-inch o.c. along the panel side laps
		HXE<#>	<#> Hilti X-ENP 19 L 15 powder-driven fasteners or equivalent at each flute used to secure the deck to the structural supports; Min. 0.25-inch penetration
		HXH<#>	<#> Hilti X-HSN 24 powder-driven fasteners or equivalent at each flute used to secure the deck to the structural supports; Min. 0.25-inch penetration
		L<#>	Max. span of <#> ft.
		P	Min. 5/8-inch diameter puddle welds at each flute used to secure the deck to the structural supports
		PW	Min. 5/8-inch diameter puddle welds with weld washers at each flute used to secure the deck to the structural supports
S<#>		1/4 " -14 HWH x7/8" self-drilling screws or equivalent fastener secured <#>-inch o.c. along the panel side laps	
W	0.75-inch O.D. flat washer used with indicated fastener		

APPENDIX B

Name	Definition
<i>Deck Detail (Cont'd)</i>	Solid or closely fitted span rated sheathing at max. 24 in. span; The following nomenclature is used to further describe the <i>As Tested</i> condition.
	<i>T<#>P</i> Min. <#>-inch thickness of the plywood
	<i>T<#>O</i> Min. <#>-inch thickness of the OSB
	<i>L<#></i> Max. span of <#> inches
	<i>N<#1>/<#2></i> Min. 0.113-inch diameter x 2-3/8-inch ring shank nails spaced <#1>-inch o.c. at all intermediate supports and spaced <#2> at the perimeter of each board
	<i>WS<#1>/<#2></i> Min. #8 x 2-inch wood screw spaced <#1>-inch o.c. at all intermediate supports and spaced <#2> at the perimeter of each board
<i>DensDeck</i>	Min. 0.25-inch Georgia-Pacific DensDeck
<i>DensDeck Prime</i>	Min. 0.25-inch Georgia-Pacific DensDeck Prime
<i>DuroBond</i>	Elevate UltraPly TPO InvisiWeld Plate or DuroBond TPO Plate with Heavy Duty Fasteners or Concrete Drive fasteners (concrete decks only)
<i>HA</i>	ASTM D 312, Type IV asphalt
<i>HD Fasteners & Insulation Plates</i>	Elevate Heavy Duty Fasteners and Insulation Fastening Plates
<i>HD Fasteners & Plates</i>	Elevate Heavy Duty Fasteners and Elevate HD Seam Plates or TPO HD Seam Plates
<i>HD Plus Fasteners & Plates</i>	Elevate Heavy Duty Plus Fasteners and Elevate HD Plus Seam Plates
<i>Insulation</i>	One of more layers in any combination of the following products: <ul style="list-style-type: none"> -Georgia-Pacific DensDeck -Georgia-Pacific DensDeck Prime -GenFlex ISO Insulation -GenFlex HD ISO -GenFlex HD Composite ISO -GenFlex Coated Glass Facer -Duro-Guard ISO II-E² -Duro-Guard ISO III-E² -Duro-Guard ISO HD Composite-E²-Elevate ISO 95+ GL or ISOGARD GL -Elevate ISOGARD HD -Elevate ISOGARD HD Composite -Elevate RESISTA or ISOGARD CG -USG SECUROCK Glass-Mat Roof Board -USG SECUROCK Gypsum-Fiber Roof Board
<i>Insulation Adhesive</i>	Adhered in accordance with one of the following options per INSTALLATION section: <ul style="list-style-type: none"> -Elevate I.S.O. Fix II -Elevate I.S.O. Stick -Elevate I.S.O. Twin Pack Insulation Adhesive or or Duro-Grip WeatherTite One Step
<i>Insulation Adhesive II</i>	Adhered in accordance with one of the following options per INSTALLATION section: <ul style="list-style-type: none"> -Elevate I.S.O. Fix II -Elevate I.S.O. Stick -Elevate I.S.O. Twin Pack Insulation Adhesive or Duro-Grip WeatherTite One Step -Elevate I.S.O. Spray R

APPENDIX B

Name	Definition
<i>Insulation Adhesive III</i>	Adhered in accordance with one of the following options per INSTALLATION section: -Elevate I.S.O. Fix II -Elevate I.S.O. Stick -Elevate I.S.O. Spray R
<i>Insulation Adhesive IV</i>	Adhered in accordance with one of the following options per INSTALLATION section: -Elevate I.S.O. Twin Pack Insulation Adhesive or Duro-Grip WeatherTite One Step -Elevate I.S.O. Spray R -Elevate Twin Jet or Duro-Grip Low-Rise Foam 500 currently OlyBond 500
<i>Insulation Adhesive VI</i>	Adhered in accordance with one of the following options per INSTALLATION section: -Elevate I.S.O. Fix II -Elevate I.S.O. Stick -Elevate I.S.O. Twin Pack Insulation Adhesive or Duro-Grip WeatherTite One Step -Elevate I.S.O. Spray R -Elevate Twin Jet or Duro-Grip Low-Rise Foam 500 currently OlyBond 500
<i>Insulation Adhesive VII</i>	Adhered in accordance with one of the following options per INSTALLATION section: -Elevate I.S.O. Stick -Elevate I.S.O. Spray R -Elevate Twin Jet or Duro-Grip Low-Rise Foam 500 currently OlyBond 500
<i>Insulation Adhesive VIII</i>	Adhered in accordance with one of the following options per INSTALLATION section: -Elevate I.S.O. Fix II -Elevate I.S.O. Stick -Elevate I.S.O. Spray R -Elevate Twin Jet or Duro-Grip Low-Rise Foam 500 currently OlyBond 500
<i>Insulation Adhesive IX</i>	Adhered in accordance with one of the following options per INSTALLATION section: -Elevate I.S.O. Fix II -Elevate I.S.O. Spray R -Elevate Twin Jet or Duro-Grip Low-Rise Foam 500 currently OlyBond 500
<i>Insulation Adhesive X</i>	Adhered in accordance with one of the following options per INSTALLATION section: -Elevate I.S.O. Stick -Elevate I.S.O. Twin Pack Insulation Adhesive or Duro-Grip WeatherTite One Step -Elevate I.S.O. Spray R -Elevate Twin Jet or Duro-Grip Low-Rise Foam 500 currently OlyBond 500
<i>ISO</i>	One or more layers of GenFlex ISO Insulation, Elevate ISO 95+ GL, Duro-Guard ISO II-E ² , or Elevate ISOGARD GL; Duro-Guard ISO II-E ² and Elevate ISOGARD GL shall be minimum 2.0-inch thickness when mechanically fastened in roof assemblies with adhered membranes
<i>ISO HD</i>	One or more layers of GenFlex HD ISO, Elevate ISOGARD HD, or Duro-Guard ISO HD-E ²
<i>ISO HD-C</i>	One or more layers of GenFlex HD Composite ISO, Elevate ISOGARD HD Composite, or Duro-Guard ISO HD Composite-E ²
<i>ISO CG</i>	One or more layers of GenFlex Coated Glass Facer, Elevate RESISTA, Duro-Guard ISO III-E ² or Elevate ISOGARD CG; Duro-Guard ISO III-E ² and Elevate ISOGARD CG shall be minimum 2.0-inch thickness when mechanically fastened in roof assemblies with adhered membranes
<i>LWIC</i>	Poured-in-place Cellular Lightweight Insulating Concrete with encapsulated insulation board
<i>MA Base</i>	One ply of Channel Venting Base, MB Base, SBS Base, SBS Base-P, SBS Glass Torch Base, SBS Glass Torch Base 1.5, SBS Premium Base, SBS Poly Base, SBS Premium Poly Base, SBS Poly Torch Base, or SBS Smooth mechanically attached as prescribed per the approved assembly

APPENDIX B

Name	Definition
<i>Membrane Adhesive I</i>	Fully adhered in accordance with one of the following options per INSTALLATION section: -Elevate UltraPly Bonding Adhesive or TECH-Bond TPO Bonding Adhesive -Elevate Single-Ply LVOC Bonding Adhesive or TECH-Bond TPO LVOC Bonding Adhesive -Elevate Single-Ply LVOC 1168 Bonding Adhesive
<i>Membrane Adhesive II</i>	Fully adhered in accordance with one of the following options per INSTALLATION section: -Elevate UltraPly Bonding Adhesive or TECH-Bond TPO Bonding Adhesive -Elevate Single-Ply LVOC Bonding Adhesive or TECH-Bond TPO LVOC Bonding Adhesive -Elevate Single-Ply LVOC 1168 Bonding Adhesive -Elevate Water Based Bonding Adhesive P or TECH-Bond TPO Water Base Bonding Adhesive
<i>Membrane Adhesive III</i>	Fully adhered in accordance with one of the following options per INSTALLATION section: -Elevate Single-Ply LVOC Bonding Adhesive or TECH-Bond TPO Bonding Adhesive -Elevate Single-Ply LVOC 1168 Bonding Adhesive -Elevate Water Based Bonding Adhesive P or TECH-Bond TPO Water Base Bonding Adhesive
<i>Membrane Adhesive IV</i>	Fully adhered in accordance with one of the following options per INSTALLATION section: -Elevate UltraPly Bonding Adhesive or TECH-Bond TPO Bonding Adhesive -Elevate Jet Bond Spray Adhesive or TECH-Bond TPO Spray Adhesive -Elevate Single-Ply LVOC Bonding Adhesive or TECH-Bond TPO LVOC Bonding Adhesive -Elevate Single-Ply LVOC 1168 Bonding Adhesive
<i>Membrane Adhesive V</i>	Fully adhered in accordance with one of the following options per INSTALLATION section: -Elevate UltraPly Bonding Adhesive or TECH-Bond TPO Bonding Adhesive -Elevate Jet Bond Spray Adhesive or TECH-Bond TPO Spray Adhesive -Elevate Single-Ply LVOC Bonding Adhesive or TECH-Bond TPO LVOC Bonding Adhesive -Elevate Single-Ply LVOC 1168 Bonding Adhesive -Elevate Water Based Bonding Adhesive P or TECH-Bond TPO Water Base 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>PermaMop</i>	Owens Corning PermaMop Asphalt
<i>Preliminarily Secured</i>	Fastened at minimum rate of 5 per 4 ft. x 8 ft. board or 4 per 4 ft. x 4 ft. board.
<i>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, the existing roof insulation thickness may be contributory in meeting the minimum insulation thickness requirements for a given assembly.
<i>SBS TA</i>	SBS Glass Torch Base fully bonded by torch adhering.
<i>SECUROCK</i>	Min. 0.25-inch USG SECUROCK Gypsum-Fiber Roof Board
<i>TBSA</i>	Elevate Jet Bond Spray Adhesive or TECH-Bond TPO Spray Adhesive
<i>TPO</i>	One ply of any one of the following products: 45-mil thick, 60-mil thick, or 80-mil thick Duro-TECH TPO
<i>TPO Fleece</i>	One ply of any one of the following products: 45-mil thick, 60-mil thick, or 80-mil thick Duro-TECH TPO Fleece
<i>XR-BA</i>	XR Bonding Adhesive
<i>XR-S</i>	XR Stick Membrane Adhesive

APPENDIX B

Name	Definition
<i>VB</i>	One or more plies of the following applied as a vapor barrier: - Elevate Ply IV (4) - Elevate Ply VI (6) - Elevate MB Base - Elevate SBS Base - Elevate SBS PolyBase - Elevate SBS Premium Base
<i>VERSA-FAST</i>	Trufast VERSA-FAST Plates and VERSA-FAST Fasteners
<i>V-Force</i>	One ply of Elevate V-Force Vapor Barrier Membrane self-adhered fully over deck. Non-metal substrates must be primed with Elevate SA-Solvent Based (SB) Primer or Elevate SA-LVOC Primer
<i>WB V-Force</i>	One ply of Elevate V-Force Vapor Barrier Membrane self-adhered fully over deck primed with V-Force WB Primer

APPROVED ASSEMBLIES

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 and 1523.4. *MDP* shall be minimum -45 psf for use in the HVHZ.
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. *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.
6. A vapor barrier may be installed direct to deck prior to installing the roof assembly components for following assembly types: C-M-#, C-W-#, G-M-#, LC-M-#, LS-M-#, S-M-#, S-W-#, W-M-#, and W-W-#.
7. Steel deck utilized in System Nos. S-A-# 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.



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

Assemblies with All Layers Adhered over Concrete Deck (New or Existing)						
System No.	Vapor Barrier	Base Insulation	Top Insulation	Membrane	Membrane Attachment	MDP (psf)
C-A-1	WB V-Force	Min. 1.5-inch ISO Adhered in I.S.O. Stick Ribbons spaced 12-inch o.c.	-	TPO	Membrane Adhesive V	-57.5 (Lim. 9)
				TPO Fleece	XR-S, 500-R, or I.S.O. Spray R ribbon adhered 12-inch o.c.; 500-S or TBSA	
C-A-2	WB V-Force	Min. 1.5-inch ISO Adhered in <i>Insulation Adhesive IV</i> ribbon adhered 12-inch o.c.	-	TPO	Membrane Adhesive V	-97.5 (Lim. 9)
				TPO Fleece	XR-S, 500-R, or I.S.O. Spray R ribbon adhered 12-inch o.c.; 500-S or TBSA	
C-A-3	APP 80 Glass Base torched adhered	Min. 0.5-inch ISO or Min. 1-inch ISO CG installed with I.S.O. Twin Pack applied in ribbons spaced 12-inch o.c	SECUROCK installed with I.S.O. Twin Pack applied in ribbons spaced 12-inch o.c	TPO	Membrane Adhesive V	-112.5 (Lim. 9)
				TPO Fleece	XR-S, 500-R, or I.S.O. Spray R ribbon adhered 12-inch o.c.; HA, PermaMop, XR-BA, 500-S, or TBSA	
C-A-4	-	Min. 0.5-inch ISO or Min. 1-inch ISO CG installed with I.S.O. Stick applied in ribbons spaced 12-inch o.c	SECUROCK installed with I.S.O. Stick applied in ribbons spaced 12-inch o.c	TPO	Membrane Adhesive V	-112.5 (Lim. 9)
				TPO Fleece	XR-S, 500-R, or I.S.O. Spray R ribbon adhered 12-inch o.c.; HA, PermaMop, XR-BA, 500-S, or TBSA	
C-A-5	OPTIONAL APP 80 Glass Base torched adhered	Min. 0.5-inch ISO or Min. 1-inch ISO CG installed with I.S.O. Twin Pack applied in ribbons spaced 12-inch o.c	DensDeck installed with I.S.O. Twin Pack applied in ribbons spaced 12-inch o.c	TPO	TECH-Bond TPO Bonding Adhesive	-112.5 (Lim. 9)
C-A-6	-	Min. 0.5-inch ISO or Min. 1-inch ISO CG installed with I.S.O. Stick applied in ribbons spaced 12-inch o.c	DensDeck installed with I.S.O. Stick applied in ribbons spaced 12-inch o.c	TPO	TECH-Bond TPO Bonding Adhesive	-112.5 (Lim. 9)
C-A-7	APP 80 Glass Base torched adhered	Min. 0.5-inch ISO or Min. 1-inch ISO CG installed with I.S.O. Twin Pack applied in ribbons spaced 12-inch o.c	Min 0.5-inch ISO HD installed with I.S.O. Twin Pack applied in ribbons spaced 12-inch o.c	TPO	Membrane Adhesive V	-135 (Lim. 9)
C-A-8	APP 80 Glass Base torched adhered	Min. 1.5-inch ISO or ISO CG; I.S.O. Twin Pack ribbon adhered 12-inch o.c.	OPTIONAL Min. 1.5-inch ISO or ISO CG with Taper ISO or ISO CG I.S.O. Twin Pack or I.S.O. Spray R ribbon adhered 12-inch o.c.	TPO Fleece	TBSA; XR-S ribbon adhered 12-inch o.c.; or 500-S over ISO CG only	-142.5 (Lim. 9)

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Assemblies with All Layers Adhered over Concrete Deck (New or Existing)						
System No.	Vapor Barrier	Base Insulation	Top Insulation	Membrane	Membrane Attachment	MDP (psf)
C-A-9	WB V-Force	ISO 500-R adhered 12-inch o.c..	DensDeck Prime 500-R adhered 12-inch o.c.	TPO	Membrane Adhesive V	-150 (Lim. 9)
				TPO Fleece	XR-S, 500-R, or I.S.O. Spray R ribbon adhered 12- inch o.c.; HA, PermaMop, XR-BA, 500-S, or TBSA	
C-A-10	-	ISO Insulation Adhesive VI ribbon adhered 12-inch o.c.	-	TPO Fleece	XR-S or I.S.O. Spray R ribbon adhered 12-inch o.c.; or TBSA	-155.5 (Lim. 9)
C-A-11	-	OPTIONAL ISO Insulation Adhesive VI ribbon adhered 12-inch o.c.	DensDeck Prime Insulation Adhesive VI ribbon adhered 12-inch o.c.	TPO	Membrane Adhesive V	-163.5 (Lim. 9)
				TPO Fleece	XR-S, 500-R, or I.S.O. Spray R ribbon adhered 12- inch o.c.; HA, PermaMop, XR-BA, 500-S, or TBSA	
C-A-12	WB V-Force	ISO I.S.O. Spray R ribbon adhered 12-inch o.c.	DensDeck Prime I.S.O. Spray R ribbon adhered 12-inch o.c.	TPO	Membrane Adhesive V	-163.5 (Lim. 9)
				TPO Fleece	XR-S, 500-R, or I.S.O. Spray R ribbon adhered 12- inch o.c.; HA, PermaMop, XR-BA, 500-S, or TBSA	
C-A-13	-	ISO Insulation Adhesive VI ribbon adhered 12-inch o.c.	SECUROCK Insulation Adhesive VII ribbon adhered 12-inch o.c.	TPO	Membrane Adhesive V	-175 (Lim. 9)
				TPO Fleece	XR-S, 500-R, or I.S.O. Spray R ribbon adhered 12- inch o.c.; HA, PermaMop, XR-BA, 500-S, or TBSA	
C-A-14	-	ISO Insulation Adhesive VI ribbon adhered 12-inch o.c.	ISO HD Insulation Adhesive VIII ribbon adhered 12-inch o.c.	TPO	Membrane Adhesive II	-180 (Lim. 9)
				TPO Fleece	XR-S, 500-R, or I.S.O. Spray R ribbon adhered 12- inch o.c.; 500-S or TBSA	
C-A-15	-	Min. 1.5-inch ISO or ISO CG installed with 500-R or I.S.O. Stick applied in ribbons spaced 12-inch o.c	-	TPO	Membrane Adhesive V	-187.5 (Lim. 9)
				TPO Fleece	XR-S or I.S.O. Spray R ribbon adhered 12-inch o.c.; TBSA	
C-A-16	-	Min. 0.5-inch ISO or Min. 1-inch ISO CG installed with I.S.O. Stick applied in ribbons spaced 12-inch o.c	DensDeck installed with I.S.O. Stick applied in ribbons spaced 12-inch o.c	TPO	TECH-Bond TPO Bonding Adhesive or TBSA	-187.5 (Lim. 9)
C-A-17	-	Min. 0.5-inch ISO or Min. 1-inch ISO CG installed with I.S.O. Stick applied in ribbons spaced 12-inch o.c	OPTIONAL ISO HD installed with I.S.O. Stick applied in ribbons spaced 12-inch o.c	TPO	Membrane Adhesive II	-187.5 (Lim. 9)
				TPO Fleece	XR-S or I.S.O. Spray R ribbon adhered 12-inch o.c.; TBSA	

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Assemblies with All Layers Adhered over Concrete Deck (New or Existing)						
System No.	Vapor Barrier	Base Insulation	Top Insulation	Membrane	Membrane Attachment	MDP (psf)
C-A-18	-	Min. 0.5-inch ISO or Min. 1-inch ISO CG installed with I.S.O. Stick applied in ribbons spaced 12-inch o.c.	Min. 7/16-inch OSB installed with I.S.O. Stick applied in ribbons spaced 12-inch o.c.	TPO	Membrane Adhesive II	-187.5 (Lim. 9; Non-HVHZ)
C-A-19	-	ISO Insulation Adhesive VI ribbon adhered 12-inch o.c.	ISO HD Insulation Adhesive III ribbon adhered 12-inch o.c.	TPO TPO Fleece	Membrane Adhesive II XR-S or I.S.O. Spray R ribbon adhered 12-inch o.c.; TBSA	-195 (Lim. 9)
C-A-20	-	Min. 0.5-inch ISO installed with 500-R spaced 12-inch o.c.	SECUROCK installed with 500-R spaced 12-inch o.c.	TPO TPO Fleece	Membrane Adhesive V XR-S ribbon adhered 12-inch o.c.; PermaMop; TBSA or 500-S	-195 (Lim. 9)
C-A-21	-	Min. 1.5-inch ISO; 500-R adhered 12-inch o.c.	DensDeck Prime; 500-R adhered 12-inch o.c.	TPO TPO Fleece	Membrane Adhesive V XR-S or I.S.O. Spray R ribbon adhered 12-inch o.c.; HA; PermaMop; XR-BA; TBSA, or 500-S	-195 (Lim. 9)
C-A-22	-	-	-	TPO	Membrane Adhesive I	-205 (Lim. 9)
C-A-23	-	Min. 1.5-inch ISO; I.S.O. Spray R ribbon adhered 12-inch o.c.	DensDeck Prime; I.S.O. Spray R ribbon adhered 12-inch o.c.	TPO TPO Fleece	Membrane Adhesive V XR-S or I.S.O. Spray R ribbon adhered 12-inch o.c.; HA; PermaMop; XR-BA	-205 (Lim. 9)
C-A-24	V-Force	Tapered ISO installed with I.S.O. Stick applied in ribbons spaced 12-inch o.c.	DensDeck Prime installed with I.S.O. Stick applied in ribbons spaced 12-inch o.c.	TPO TPO Fleece	Membrane Adhesive V XR-S or I.S.O. Spray R ribbon adhered 12-inch o.c.	-205 (Lim. 9)
C-A-25	APP 80 Glass Base torched adhered	Min. 0.5-inch ISO or Min. 1-inch ISO CG installed with I.S.O. Twin Pack applied in ribbons spaced 12-inch o.c.	Min 0.5-inch ISO HD installed with I.S.O. Twin Pack applied in ribbons spaced 12-inch o.c.	TPO	Membrane Adhesive I	-225 (Lim. 9)
C-A-26	OPTIONAL APP 80 Glass Base torched adhered	Min. 0.5-inch ISO or Min. 1-inch ISO CG installed with I.S.O. Twin Pack applied in ribbons spaced 12-inch o.c.	DensDeck installed with I.S.O. Twin Pack applied in ribbons spaced 12-inch o.c.	TPO	TECH-Bond TPO Bonding Adhesive or TBSA	-247.5 (Lim. 9)
C-A-27	OPTIONAL APP 80 Glass Base torched adhered	Min. 0.5-inch ISO or Min. 1-inch ISO CG installed with I.S.O. Twin Pack applied in ribbons spaced 12-inch o.c.	OPTIONAL DensDeck Prime installed with I.S.O. Twin Pack applied in ribbons spaced 12-inch o.c.	TPO	Membrane Adhesive V	-247.5 (Lim. 9)

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Assemblies with All Layers Adhered over Concrete Deck (New or Existing)						
System No.	Vapor Barrier	Base Insulation	Top Insulation	Membrane	Membrane Attachment	MDP (psf)
C-A-28	-	Min. 0.5-inch ISO or Min. 1-inch ISO CG installed with I.S.O. Twin Pack applied in ribbons spaced 12-inch o.c	OPTIONAL Min. 7/16-inch OSB installed with I.S.O. Twin Pack applied in ribbons spaced 12-inch o.c	TPO	Membrane Adhesive II	-247.5 (Lim. 9; Non-HVHZ)
C-A-29	OPTIONAL V-Force or 1-2 ply of Ply IV or VI in hot asphalt or APP 80 Glass Base, SBS Glass FR Torch, or SBS Poly Torch Base torch adhered	Min. 0.5-inch ISO installed with I.S.O. Twin Pack or I.S.O. Spray R applied in ribbons spaced 12-inch o.c.	-	TPO	Membrane Adhesive V	align="center"> -255 (Lim. 9)
				TPO Fleece	XR-S or I.S.O. Spray R ribbon adhered 12-inch o.c. or TBSA	
C-A-30	OPTIONAL V-Force	Min. 1.5-inch ISO; I.S.O. Twin Pack Insulation Adhesive, Duro-Grip WeatherTite One Step, or I.S.O. Stick applied in ribbons spaced 12-inch o.c.	OPTIONAL Min. 1-inch ISO; I.S.O. Stick adhered 12-inch o.c.	TPO	Membrane Adhesive V	align="center"> -255 (Lim. 9)
				TPO Fleece	XR-S or I.S.O. Spray R ribbon adhered 12-inch o.c.; or TBSA	
C-A-31	V-Force	Tapered ISO installed with I.S.O. Stick applied in ribbons spaced 12-inch o.c.	ISO HD installed with I.S.O. Stick applied in ribbons spaced 12-inch o.c.	TPO	Membrane Adhesive II	align="center"> -262.5 (Lim. 9)
				TPO Fleece	XR-S or I.S.O. Spray R ribbon adhered 12-inch o.c. or TBSA	
C-A-32	OPTIONAL V-Force or 1-2 ply of Ply IV or VI in hot asphalt or APP 80 Glass Base, SBS Glass FR Torch, or SBS Poly Torch Base torch adhered	Min. 0.5-inch ISO installed with I.S.O. Twin Pack or I.S.O. Spray R applied in ribbons spaced 12-inch o.c.	ISO HD or DensDeck Prime installed with I.S.O. Twin Pack or I.S.O. Spray R applied in ribbons spaced 12-inch o.c	TPO	Membrane Adhesive II	align="center"> -262.5 (Lim. 9)
				TPO Fleece	XR-S or I.S.O. Spray R ribbon adhered 12-inch o.c.	
C-A-33	APP 80 Glass Base torched adhered	Min. 0.5-inch ISO installed with I.S.O. Twin Pack applied in ribbons spaced 12-inch o.c	Min 0.5-inch ISO HD installed with I.S.O. Twin Pack applied in ribbons spaced 12-inch o.c	TPO	Membrane Adhesive II	-277.5 (Lim. 9)
C-A-34	APP 80 Glass Base torched adhered	Min. 1-inch ISO CG installed with I.S.O. Twin Pack applied in ribbons spaced 12-inch o.c	OPTIONAL Min 0.5-inch ISO HD installed with I.S.O. Twin Pack applied in ribbons spaced 12-inch o.c	TPO	TECH-Bond TPO LVOC Bonding Adhesive or TECH-Bond TPO y Bonding Adhesive	-277.5 (Lim. 9)
C-A-35	-	-	ISO HD Insulation Adhesive II ribbon adhered 12-inch o.c.	TPO Fleece	XR-S or I.S.O. Spray R ribbon adhered 12-inch o.c. or TBSA	-285 (Lim. 9)

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Assemblies with All Layers Adhered over Concrete Deck (New or Existing)						
System No.	Vapor Barrier	Base Insulation	Top Insulation	Membrane	Membrane Attachment	MDP (psf)
C-A-36	-	<i>ISO Insulation Adhesive</i> ribbon adhered 6-inch o.c.	<i>SECUROCK</i> I.S.O. Stick or I.S.O. Spray R ribbon adhered 6-inch o.c.	<i>TPO</i> <i>TPO Fleece</i>	<i>Membrane Adhesive V</i> <i>XR-S ribbon adhered 12-inch o.c.; XR-BA; PermaMop; HA</i>	-347.5 (Lim. 9)
C-A-37	OPTIONAL <i>V-Force</i> or 1-2 ply of Ply IV or VI in hot asphalt or APP 80 Glass Base, SBS Glass FR Torch, or SBS Poly Torch Base torch adhered	Min. 0.5-inch <i>ISO</i> installed with I.S.O. Twin Pack or I.S.O. Spray R applied in ribbons spaced 12-inch o.c.	<i>SECUROCK</i> installed with I.S.O. Twin Pack or I.S.O. Spray R applied in ribbons spaced 12-inch o.c.	<i>TPO</i> <i>TPO Fleece</i>	TECH-Bond TPO Bonding Adhesive or <i>TBSA</i> <i>XR-S ribbon adhered 12-inch o.c.; PermaMop</i>	-347.5 (Lim. 9)
C-A-38	OPTIONAL <i>VB</i>	OPTIONAL Min. 1-inch <i>ISO</i> ; I.S.O. Spray R ribbon adhered 12-inch o.c.	<i>DensDeck Prime</i> ; I.S.O. Spray R ribbon adhered 12-inch o.c.	<i>TPO Fleece</i>	I.S.O. Spray R ribbon adhered 4-inch o.c.	-360 (Lim. 9)
C-A-39	-	Min. 0.5-inch <i>ISO</i> or Min. 1-inch <i>ISO CG</i> installed with I.S.O. Twin Pack applied in ribbons spaced 12-inch o.c.	Min 0.5-inch <i>ISO HD</i> installed with I.S.O. Twin Pack applied in ribbons spaced 12-inch o.c.	<i>TPO</i>	<i>Membrane Adhesive II</i>	-360 (Lim. 9)
C-A-40	-	Min. 1-inch <i>ISO CG</i> installed with I.S.O. Twin Pack applied in ribbons spaced 12-inch o.c.	-	<i>TPO</i>	TECH-Bond TPO Bonding Adhesive, TECH-Bond TPO LVOC Bonding Adhesive, or <i>TBSA</i>	-360 (Lim. 9)
C-A-41	<i>V-Force</i> or 1-2 ply of Ply IV or VI in hot asphalt or APP 80 Glass Base, SBS Glass FR Torch, or SBS Poly Torch Base torch adhered	Min. 0.5-inch <i>ISO</i> installed with I.S.O. Twin Pack or I.S.O. Spray R applied in ribbons spaced 12-inch o.c.	<i>SECUROCK</i> installed with I.S.O. Twin Pack or I.S.O. Spray R applied in ribbons spaced 12-inch o.c.	<i>TPO</i> <i>TPO Fleece</i>	TECH-Bond TPO Bonding Adhesive <i>XR-S ribbon adhered 12-inch o.c.; PermaMop</i>	-400 (Lim. 9)
C-A-42	-	<i>SECUROCK</i> I.S.O. Spray R ribbon adhered 12-inch o.c.	-	<i>TPO</i> <i>TPO Fleece</i>	TECH-Bond TPO Bonding Adhesive <i>XR-S ribbon adhered 12-inch o.c.; PermaMop</i>	-435 (Lim. 9)
C-A-43	-	<i>SECUROCK Insulation Adhesive</i> ribbon adhered 12-inch o.c.	-	<i>TPO Fleece</i>	<i>XR-S ribbon adhered 12-inch o.c.; PermaMop</i>	-445 (Lim. 9)
C-A-44	-	-	<i>ISO HD Insulation Adhesive II</i> ribbon adhered 12-inch o.c.	<i>TPO</i>	<i>Membrane Adhesive II</i>	-445 (Lim. 9)

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Assemblies with All Layers Adhered over Concrete Deck (New or Existing)						
System No.	Vapor Barrier	Base Insulation	Top Insulation	Membrane	Membrane Attachment	MDP (psf)
C-A-45	V-Force or 1-2 ply of Ply IV or VI in hot asphalt or APP 80 Glass Base, SBS Glass FR Torch, or SBS Poly Torch Base torch adhered	Min. 0.5-inch ISO installed with I.S.O. Twin Pack or I.S.O. Spray R applied in ribbons spaced 12-inch o.c.	SECUROCK installed with I.S.O. Twin Pack or I.S.O. Spray R applied in ribbons spaced 12-inch o.c.	TPO	TECH-Bond TPO Bonding Adhesive	-495 (Lim. 9)
C-A-46	-	SECUROCK Insulation Adhesive ribbon adhered 12-inch o.c.	-	TPO	TECH-Bond TPO Bonding Adhesive	-495 (Lim. 9)
C-A-47	-	-	-	TPO Fleece	500-S	-502.5 (Lim. 9)

Assemblies with Adhered Membranes over Insulated Concrete Deck (New, Existing or Recover)							
System No.	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 Insulation	Preliminarily Secured or secured with top layer	0.5-inch DensDeck Prime	CD Fasteners & Insulation Plates or HD Fasteners & Insulation Plates secured 10 per 4 ft. x 8 ft. board	TPO	Membrane Adhesive V	-30 (Lim. 7; Non-HVHZ)
C-AM-2	Min. 0.5-inch Insulation	Preliminarily Secured or secured with top layer	0.5-inch DensDeck Prime	CD Fasteners & Insulation Plates or HD Fasteners & Insulation Plates secured 10 per 4 ft. x 8 ft. board	TPO Fleece	XR-S or I.S.O. Spray R ribbon adhered 12-inch o.c.; HA; PermaMop; XR-BA; TBSA or 500-S	-30 (Lim. 7; Non-HVHZ)
C-AM-3	Min. 0.5-inch ISO	Preliminarily Secured or secured with top layer	SBS PolyBase	HD Fasteners & Plates or CD Fasteners & Plates secured 12-inch o.c. within the 3-3/8" welded lap	TPO Fleece	I.S.O. Spray R ribbon adhered 12-inch o.c.	-37.5 (Lim. 7; Non-HVHZ)
C-AM-4	OPTIONAL Insulation	Preliminarily Secured or secured with top layer	Min. 2-inch ISO, ISO HD-C or ISO CG	HD Fasteners & Plates or CD Fasteners & Plates secured 12 per 4 ft. x 8 ft. board (Alt. Pattern 2)	TPO	Membrane Adhesive I	-37.5 (Lim. 7; Non-HVHZ)
C-AM-5	Min. 0.5-inch Insulation	Preliminarily Secured or Secured with Top Layer	MB Base, SBS Base or Channel Venting Base	CD Fasteners & Insulation Plates or HD Fasteners & Insulation Plates secured 12-inch o.c. at the lap and 12-inch o.c. in two staggered, intermediate rows	TPO Fleece	HA or PermaMop	-45 (Lim. 7; Non-HVHZ)

APPENDIX B

Assemblies with Adhered Membranes over Insulated Concrete Deck (New, Existing or Recover)							
System No.	Base Insulation	Base Insulation Attachment	Top Insulation or Base Sheet	Top Insulation or Base Sheet Attachment	Membrane	Membrane Attachment	MDP (psf)
C-AM-6	Min. 0.5-inch Insulation	Preliminarily Secured or Secured with Top Layer	SBS Base 3.4-inch side laps	CD Fasteners & Insulation Plates or HD Fasteners & Insulation Plates secured 12-inch o.c. at the lap and 12-inch o.c. in two staggered, intermediate rows	TPO Fleece	XR-S or I.S.O. Spray R Ribbons spaced 12" o.c. and located directly over the base sheet fastener rows	-45 (Lim. 7; Non-HVHZ)
C-AM-7	OPTIONAL Insulation	Preliminarily Secured or Secured with Top Layer	SECUROCK	CD Fasteners & Insulation Plates or HD Fasteners & Insulation Plates secured 18 per 4 ft. x 8 ft. board	TPO TPO Fleece	Membrane Adhesive V XR-S, 500-R, or I.S.O. Spray R ribbon adhered 12-inch o.c.; HA; PermaMop; XR-BA; TBSA or 500-S	-45 (Lim. 7)
C-AM-8	OPTIONAL Insulation	Preliminarily Secured or secured with top layer	Min. 0.5-inch DensDeck Prime	CD Fasteners & Insulation Plates or HD Fasteners & Insulation Plates secured 12 per 4 ft. x 8 ft. board	TPO TPO Fleece	Membrane Adhesive V XR-S, 500-R, or I.S.O. Spray R ribbon adhered 12-inch o.c.; HA; PermaMop; XR-BA; TBSA or 500-S	-45 (Lim. 7; Non-HVHZ)
C-AM-9	OPTIONAL Insulation	Preliminarily Secured or secured with top layer	Min. 0.5-inch SECUROCK	CD Fasteners & Insulation Plates or HD Fasteners & Insulation Plates secured 8 per 4 ft. x 8 ft. board	TPO TPO Fleece	Membrane Adhesive V XR-S, 500-R, or I.S.O. Spray R ribbon adhered 12-inch o.c.; HA; PermaMop; XR-BA; TBSA or 500-S	-45 (Lim. 7; Non-HVHZ)
C-AM-10	OPTIONAL Insulation	Preliminarily Secured or Secured with Top Layer	Min. 2-inch ISO	CD Fasteners & Insulation Plates or HD Fasteners & Insulation Plates secured 12 per 4 ft. x 8 ft. board	TPO	Membrane Adhesive V	-45 (Lim. 7)
C-AM-11	DensDeck Prime	CD Fasteners & Plates or HD Fasteners & Insulation Plates secured 8 per 4 ft x 8 ft board followed by V-Force	Min. 1.5-inch ISO or Tapered ISO with ISO HD or DensDeck Prime	I.S.O. Stick or 500-R applied in ribbons spaced 12-inch o.c.	TPO TPO Fleece	Membrane Adhesive V XR-S, 500-R, or I.S.O. Spray R ribbon adhered 12-inch o.c.; TBSA or 500-S	-45 (Lim. 7; Non-HVHZ)
C-AM-12	OPTIONAL Insulation	Preliminarily Secured or Secured with Top Layer	Min. 1-inch ISO CG	CD Fasteners & Insulation Plates or HD Fasteners & Insulation Plates secured 20 per 4 ft. x 8 ft. board (Alt. Pattern)	TPO	TECH-Bond TPO Bonding Adhesive or TBSA	-52.5 (Lim. 7)
C-AM-13	OPTIONAL Insulation	Preliminarily Secured or secured with top layer	DensDeck Prime	CD Fasteners & Insulation Plates or HD Fasteners & Insulation Plates secured 18 per 4 ft. x 8 ft. board	TPO TPO Fleece	Membrane Adhesive V XR-BA, PermaMop; HA; or 500-S	-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 or Base Sheet	Top Insulation or Base Sheet Attachment	Membrane	Membrane Attachment	MDP (psf)
C-AM-14	OPTIONAL Insulation	Preliminarily Secured or Secured with Top Layer	Min. 1.5-inch ISO	CD Fasteners & Insulation Plates or HD Fasteners & Insulation Plates secured 18 per 4 ft. x 8 ft. board	TPO	Membrane Adhesive IV	-60 (Lim. 7)
C-AM-15	OPTIONAL Insulation	Preliminarily Secured or Secured with Top Layer	Min. 0.5-inch SECUROCK	CD Fasteners & Insulation Plates or HD Fasteners & Insulation Plates secured 18 per 4 ft. x 8 ft. board	TPO TPO Fleece	Membrane Adhesive IV XR-BA, PermaMop; HA; or 500-S	-60 (Lim. 7)
C-AM-16	Min. 1.5-inch ISO	CD Fasteners & Insulation Plates or HD Fasteners & Insulation Plates secured 18 per 4 ft. x 8 ft. board	Min. 1.5-inch ISO HD-C	Insulation Adhesive VII Ribbons spaced 12-inch o.c.	TPO	TECH-Bond TPO Bonding Adhesive or TBSA	-60 (Lim. 7)
C-AM-17	OPTIONAL Insulation	Preliminarily Secured or secured with top layer	Min. 0.5-inch SECUROCK	CD Fasteners & Insulation Plates or HD Fasteners & Insulation Plates secured 15 per 4 ft. x 8 ft. board	TPO TPO Fleece	Membrane Adhesive IV XR-BA, PermaMop; HA; or 500-S	-60 (Lim. 7)
C-AM-18	Min. 2-inch ISO or ISO CG	CD Fasteners & Insulation Plates or HD Fasteners & Insulation Plates secured 18 per 4 ft. x 8 ft. board	Min. 0.5-inch ISO or ISO CG followed by ISO HD	Insulation Adhesive VI Ribbons spaced 6-inch o.c.	TPO TPO Fleece	Membrane Adhesive V XR-S, 500-R, or I.S.O. Spray R ribbon adhered 12-inch o.c.; TBSA or 500-S	-60 (Lim. 7)
C-AM-19	OPTIONAL Insulation	Preliminarily Secured or secured with top layer	Min. 0.5-inch SECUROCK	CD Fasteners & Insulation Plates or HD Fasteners & Insulation Plates secured 8 per 4 ft. x 8 ft. board	TPO TPO Fleece	Membrane Adhesive IV XR-BA, PermaMop; HA; or 500-S	-62.5 (Lim. 9)
C-AM-20	Min. 2-inch ISO or ISO CG	CD Fasteners & Insulation Plates or HD Fasteners & Insulation Plates secured 18 per 4 ft. x 8 ft. board	ISO HD	Insulation Adhesive VI Ribbons spaced 6-inch o.c.	TPO TPO Fleece	Membrane Adhesive V XR-S, 500-R, or I.S.O. Spray R ribbon adhered 12-inch o.c.; TBSA or 500-S	-67.5 (Lim. 7)
C-AM-21	Min. 2-inch ISO	CD Fasteners & Insulation Plates or HD Fasteners & Insulation Plates secured 18 per 4 ft. x 8 ft. board	SECUROCK	Insulation Adhesive VII Ribbons spaced 6-inch o.c.	TPO TPO Fleece	Membrane Adhesive IV XR-BA, PermaMop; HA; or 500-S	-67.5 (Lim. 7)

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Assemblies with Adhered Membranes over Insulated Concrete Deck (New, Existing or Recover)							
System No.	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 <i>Insulation</i>	<i>Preliminarily Secured or secured with top layer</i>	Min. 0.5-inch SECUROCK	<i>CD Fasteners & Insulation Plates or HD Fasteners & Insulation Plates secured 20 per 4 ft. x 8 ft. board</i>	TPO	<i>Membrane Adhesive IV</i>	-67.5 (Lim. 7)
					TPO Fleece	<i>XR-BA, PermaMop; HA; or 500-S</i>	
C-AM-23	OPTIONAL <i>Insulation</i>	<i>Preliminarily Secured or secured with top layer</i>	Min. 1.5-inch ISO HD-C	<i>CD Fasteners & Insulation Plates or HD Fasteners & Insulation Plates secured 15 per 4 ft. x 8 ft. board</i>	TPO	TECH-Bond TPO Bonding Adhesive or TBSA	-67.5 (Lim. 7)
C-AM-24	OPTIONAL <i>Insulation</i>	<i>Preliminarily Secured or secured with top layer</i>	Min. 0.5-inch <i>DensDeck Prime</i>	<i>CD Fasteners & Insulation Plates or HD Fasteners & Insulation Plates secured 18 per 4 ft. x 8 ft. board</i>	TPO	<i>Membrane Adhesive III</i>	-67.5 (Lim. 7)
					TPO Fleece	<i>XR-S, 500-R, ribbon adhered 4-inch o.c.; TBSA or 500-S</i>	
C-AM-25	OPTIONAL <i>Insulation</i>	<i>Preliminarily Secured or secured with top layer</i>	Min. 1.5-inch ISO HD-C	<i>CD Fasteners & Insulation Plates or HD Fasteners & Insulation Plates secured 18 per 4 ft. x 8 ft. board</i>	TPO	TECH-Bond TPO Bonding Adhesive or TBSA	-75 (Lim. 7)
C-AM-26	OPTIONAL <i>Insulation</i>	<i>Preliminarily Secured or Secured with Top Layer</i>	Min. 2-inch ISO	<i>CD Fasteners & Insulation Plates or HD Fasteners & Insulation Plates secured 20 per 4 ft. x 8 ft. board</i>	TPO	<i>Membrane Adhesive IV</i>	-75 (Lim. 7)
C-AM-27	OPTIONAL <i>Insulation</i>	<i>Preliminarily Secured or secured with top layer</i>	Min. 0.5-inch <i>DensDeck Prime</i>	<i>CD Fasteners & Insulation Plates or HD Fasteners & Insulation Plates secured 20 per 4 ft. x 8 ft. board</i>	TPO	<i>Membrane Adhesive III</i>	-75 (Lim. 7)
					TPO Fleece	<i>XR-S, 500-R, ribbon adhered 4-inch o.c.; or 500-S</i>	
C-AM-28	Min. 2-inch ISO	<i>CD Fasteners & Insulation Plates or HD Fasteners & Insulation Plates secured 20 per 4 ft. x 8 ft. board</i>	ISO HD	I.S.O. Stick, I.S.O. Spray R, I.S.O. Twin Pack, or 500-R adhered 6-inch o.c.	TPO Fleece	<i>XR-S, 500-R, ribbon adhered 6-inch o.c.; or 500-S</i>	-82.5 (Lim. 7)
C-AM-29	OPTIONAL <i>Insulation</i>	<i>Preliminarily Secured or Secured with Top Layer</i>	Min. 0.5-inch SECUROCK	<i>CD Fasteners & Insulation Plates or HD Fasteners & Insulation Plates secured 18 per 4 ft. x 8 ft. board</i>	TPO	<i>Membrane Adhesive IV</i>	-82.5 (Lim. 7)
C-AM-30	OPTIONAL <i>Insulation</i>	<i>Preliminarily Secured or Secured with Top Layer</i>	Min. 1.5-inch ISO	<i>CD Fasteners & Insulation Plates or HD Fasteners & Insulation Plates secured 24 per 4 ft. x 8 ft. board</i>	TPO	<i>Membrane Adhesive I</i>	-90 (Lim. 7)

APPENDIX B

Mechanically Fastened Assemblies over Concrete Deck (New or Existing)								
System No.	Vapor Barrier	Base Insulation	Base Insulation Attachment	Top Insulation	Top Insulation Attachment	Membrane	Membrane Attachment	MDP (psf)
C-M-1	-	OPTIONAL Insulation	<i>Preliminarily Secured</i> or Secured with Top Layer	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	TPO (120-inch wide)	Attached in-lap 12-inch o.c. with <i>HD Fasteners & Plates</i> ; Side laps spaced 114-inch o.c.	-30 (Lim. 7; Non-HVHZ)
C-M-2	-	Min. 1.5-inch Insulation	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	Min. 60 mil Duro-TECH TPO (120-inch wide)	Attached in-lap 12-inch o.c. with <i>HD Fasteners & Plates</i> or <i>CD Fasteners & Plates</i> ; Side laps spaced 114-inch o.c.	-37.5 (Lim. 7; Non-HVHZ)
C-M-3	-	Min. 1.5-inch Insulation	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	TPO	UltraPly QuickSeam R.M.A Strip attached 72-inch o.c. and secured with Polymer Batten Strip and Heavy-Duty fasteners spaced 12-inch o.c. along the batten	-37.5 (Lim. 7; Non-HVHZ)
C-M-4	-	Min. 1.5-inch Insulation	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	TPO	UltraPly QuickSeam R.M.A Strip attached 114-inch o.c. and secured with <i>HD Fasteners & Plates</i> or <i>CD Fasteners & Plates</i> spaced 12-inch o.c.	-37.5 (Lim. 7; Non-HVHZ)
C-M-5	-	Min. 1.5-inch Insulation	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	TPO (48-inch wide)	Attached in-lap 24-inch o.c. with <i>HD Fasteners & Plates</i> or <i>CD Fasteners & Plates</i> ; Fastener rows 42-inch o.c.	-45 (Lim. 7; Non-HVHZ)
C-M-6	-	Min. 1.5-inch Insulation	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	TPO	UltraPly QuickSeam R.M.A Strip attached 48-inch o.c. and secured with <i>HD Fasteners & Plates</i> or <i>CD Fasteners & Plates</i> spaced 24-inch o.c.	-45 (Lim. 7; Non-HVHZ)
C-M-7	-	Min. 1.5-inch Insulation	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	TPO	UltraPly QuickSeam R.M.A Strip attached 48-inch o.c. and secured with Polymer Batten Strip and Heavy-Duty fasteners spaced 24-inch o.c. along the batten	-45 (Lim. 7; Non-HVHZ)

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Mechanically Fastened Assemblies over Concrete Deck (New or Existing)								
System No.	Vapor Barrier	Base Insulation	Base Insulation Attachment	Top Insulation	Top Insulation Attachment	Membrane	Membrane Attachment	MDP (psf)
C-M-8	-	Min. 1.5-inch Insulation	<i>Preliminarily Secured or secured with top layer</i>	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	TPO (120-inch wide)	Attached in-lap 12-inch o.c. with <i>HD Fasteners & Plates</i> or <i>CD Fasteners & Plates</i> ; Fastener rows spaced 114-inch o.c.; UltraPly QuickSeam R.M.A Strip attached evenly spaced between side laps and secured with Polymer Batten Strip and Heavy-Duty fasteners spaced 12-inch o.c. along the batten	-45 (Lim. 7)
C-M-9	-	Min. 1.5-inch Insulation	<i>Preliminarily Secured or secured with top layer</i>	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	TPO	UltraPly QuickSeam R.M.A Strip attached 72-inch o.c. and secured with <i>HD Fasteners & Plates</i> or <i>CD Fasteners & Plates</i> spaced 12-inch o.c.	-45 (Lim. 7)
C-M-10	-	Min. 1.5-inch Insulation	<i>Preliminarily Secured or Secured with Top Layer</i>	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	TPO (148-inch wide)	Attached in-lap 6-inch o.c. with <i>HD Fasteners & Plates</i> ; Fastener rows 142-inch o.c.	-52.5 (Lim. 7)
C-M-11	-	Insulation	<i>Preliminarily Secured or secured with top layer</i>	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	TPO (96-inch wide)	Attached in-lap 6-inch o.c. with <i>HD Fasteners & Plates</i> ; Fastener rows 90-inch o.c.	-52.5 (Lim. 7)
C-M-12	-	Min. 0.5-inch Insulation	<i>Preliminarily Secured or secured with top layer</i>	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	TPO (120-inch wide)	Attached in-lap 6-inch o.c. with <i>HD Fasteners & Plates</i> or <i>CD Fasteners & Plates</i> ; Fastener rows 114-inch o.c.	-52.5 (Lim. 7)
C-M-13	-	Min. 1.5-inch Insulation	<i>Preliminarily Secured or secured with top layer</i>	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	Min. 60 mil Duro-TECH TPO (60-inch wide)	Attached in-lap 12-inch o.c. with <i>HD Fasteners & Plates</i> or <i>CD Fasteners & Plates</i> ; Fastener rows 54-inch o.c.	-52.5 (Lim. 7)
C-M-14	-	Min. 0.5-inch Insulation	<i>Preliminarily Secured or secured with top layer</i>	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	TPO (96-inch wide)	Attached in-lap 6-inch o.c. with <i>HD Fasteners & Plates</i> or <i>CD Fasteners & Plates</i> ; Fastener rows 89-inch o.c.; 7-inch wide side laps	-60 (Lim. 7)

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Mechanically Fastened Assemblies over Concrete Deck (New or Existing)								
System No.	Vapor Barrier	Base Insulation	Base Insulation Attachment	Top Insulation	Top Insulation Attachment	Membrane	Membrane Attachment	MDP (psf)
C-M-15	-	Min. 0.5-inch Insulation	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	Min. 60 mil Duro-TECH TPO (120-inch wide)	Attached in-lap 6-inch o.c. with <i>HD Fasteners & Plates</i> or <i>CD Fasteners & Plates</i> ; Fastener rows 114-inch o.c.	-60 (Lim. 7)
C-M-16	6 mil polyethylene sheet; 6-inch wide laps sealed with duct tape	Min. 2-inch Insulation	<i>CD Fasteners & Insulation Plates</i> or <i>HD Fasteners & Insulation Plates</i> secured 8 per 4 ft. x 8 ft. board	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	TPO (96-inch wide)	Attached in-lap 6-inch o.c. <i>HD Fasteners & Plates</i> or <i>CD Fasteners & Plates</i> ; Fastener rows 89-inch o.c.	-67.5 (Lim. 7)
C-M-17	-	Min. 0.5-inch Insulation	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	TPO (120-inch wide)	Attached in-lap 6-inch o.c. with Heavy-Duty Fasteners and Coiled Metal Batten Bar; Fastener rows 114-inch o.c.; Min. 5-inch wide heat weld encapsulating batten and fasteners	-75 (Lim. 7)
C-M-18	-	Min. 1.5-inch Insulation	<i>Preliminarily Secured</i> or Secured with Top Layer	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	TPO (74-inch wide)	Heavy Duty Fasteners and 0.75" Polymer Batten Strips centered in-lap and fastened 6-inch o.c.; Fastener rows 68-inch o.c.; Min. 5-inch wide heat weld encapsulating plates and fasteners	-82.5 (Lim. 7)

Induction Welded Assemblies over Concrete Deck (New or Existing)								
System No.	Vapor Barrier	Base Insulation	Base Insulation Attachment	Top Insulation	Top Insulation Attachment	Membrane	Membrane Attachment	MDP (psf)
C-W-1	-	Min. 1.5-inch Insulation	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>DuroBond</i> fastened at a rate of 6 per 4 ft. x 8 ft. board; Plate pattern offset 12-inches from each adjacent row of insulation boards	TPO	Induction welded	-45 (Lim. 7; Non-HVHZ)

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Induction Welded Assemblies over <i>Concrete Deck</i> (New or Existing)								
System No.	Vapor Barrier	Base Insulation	Base Insulation Attachment	Top Insulation	Top Insulation Attachment	Membrane	Membrane Attachment	MDP (psf)
C-W-2	-	<i>Insulation</i>	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL <i>Cover Board</i>	<i>DuroBond</i> fastened at a rate of 8 per 4 ft. x 8 ft. board	<i>TPO</i>	Induction welded	-45 (Lim. 7)
C-W-3	-	Min. 1.5-inch <i>Insulation</i>	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL <i>Cover Board</i>	<i>DuroBond</i> fastened at a rate of 8 per 4 ft. x 8 ft. board; Plate pattern offset 12-inches from each adjacent row of insulation boards	<i>TPO</i>	Induction welded	-60 (Lim. 7)
C-W-4	-	Min. 1-inch <i>Insulation</i>	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL <i>Cover Board</i>	<i>DuroBond</i> fastened 6-inch o.c. in rows 144-inch o.c.	<i>TPO</i>	Induction welded	-60 (Lim. 7)
C-W-5	-	Min. 1.5-inch <i>Insulation</i>	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL <i>Cover Board</i>	<i>DuroBond</i> fastened at a rate of 12 per 4 ft. x 8 ft. board; Plate pattern offset 12-inches from each adjacent row of insulation boards	<i>TPO</i>	Induction welded	-75 (Lim. 7)
C-W-6	-	Min. 0.5-inch <i>Insulation</i>	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL <i>Cover Board</i>	<i>DuroBond</i> fastened at a rate of 12 per 4 ft. x 8 ft. board <i>(Alt. Pattern)</i>	<i>TPO</i>	Induction welded	-75 (Lim. 7)
C-W-7	-	Min. 1-inch <i>Insulation</i>	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL <i>Cover Board</i>	<i>DuroBond</i> fastened 6-inch o.c. in rows 72-inch o.c.	<i>TPO</i>	Induction welded	-60 (Lim. 7)
C-W-8	-	Min. 1.5-inch <i>Insulation</i>	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL <i>Cover Board</i>	<i>DuroBond</i> fastened at a rate of 16 per 4 ft. x 8 ft. board; Plate pattern offset 12-inches from each adjacent row of insulation boards	<i>TPO</i>	Induction welded	-105 (Lim. 7)

APPENDIX B

Assemblies with All Layers Adhered over Cementitious Wood Fiber Deck (New or Existing)							
System No.	Base Insulation	Base Insulation Attachment	Top Insulation	Top Insulation Attachment	Membrane	Membrane Attachment	MDP (psf)
CW-A-1	Min. 1-inch ISO	Insulation Adhesive IV ribbon adhered 12-inch o.c.	-	-	TPO	Membrane Adhesive V	-75 (Lim. 9)
					TPO Fleece	XR-S, 500-R, or I.S.O. Spray R ribbon adhered 12-inch o.c.; TBSA or 500-S	
CW-A-2	Min. 0.5-inch ISO	Insulation Adhesive IV ribbon adhered 12-inch o.c.	Min. 0.5-inch ISO	Insulation Adhesive IV ribbon adhered 12-inch o.c.	TPO	Membrane Adhesive V	-92.5 (Lim. 9)
					TPO Fleece	XR-S, 500-R, or I.S.O. Spray R ribbon adhered 12-inch o.c.; TBSA or 500-S	
CW-A-3	Min. 0.5-inch ISO	Insulation Adhesive IX ribbon adhered 6-inch o.c.	-	-	TPO	Membrane Adhesive V	-142.5 (Lim. 9)
					TPO Fleece	XR-S, 500-R ribbon adhered 6-inch o.c. or I.S.O. Spray R ribbon adhered 12-inch o.c. or TBSA	
CW-A-4	Min. 300 psi Celcore MF with HS Rheology Admixture; Min. ¼-inch slurry coat	Poured in place	-	-	TPO	TECH-Bond TPO Bonding Adhesive	-155 (Lim. 9)
CW-A-5	Min. 300 psi Celcore MF with HS Rheology Admixture; Min. ¼-inch slurry coat	Poured in place	-	-	TPO Fleece	XR-S, 500-R, or I.S.O. Spray R ribbon adhered 12-inch o.c.; HA; PermaMop; XR-BA; or 500-S	-160 (Lim. 9)
CW-A-6	Min. 0.5-inch ISO	Insulation Adhesive IX ribbon adhered 6-inch o.c.	DensDeck Prime	Insulation Adhesive IX ribbon adhered 6-inch o.c.	TPO	Membrane Adhesive V	-160 (Lim. 9)
					TPO Fleece	XR-S, 500-R, ribbon adhered 6-inch o.c.; I.S.O. Spray R ribbon adhered 12-inch o.c.; HA PermaMop; or XR-BA; TBSA or 500-S	

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Assemblies Adhered Membranes over Cementitious Wood Fiber Deck (New, Existing, or Recover)							
System No.	Base Insulation/ Base Sheet	Base Insulation/ Base Sheet Attachment	Top Insulation	Top Insulation Attachment	Membrane	Membrane Attachment	MDP (psf)
CW-AM-1	SBS PolyBase Min. 3.4-inch laps	1.8" Two Piece Impact Nail attached 12-inch o.c. at the lap and 12-inch o.c. in two equally spaced, staggered rows in the field of the roll	-	-	<i>TPO Fleece</i>	I.S.O. Spray R ribbon adhered 12-inch o.c.	-52.5 (Lim. 7)
CW-AM-2	SBS PolyBase Min. 3.4-inch laps	1.8" Two Piece Impact Nail attached 9-inch o.c. at the lap and 9-inch o.c. in two equally spaced, staggered rows in the field of the roll	-	-	<i>TPO Fleece</i>	I.S.O. Spray R ribbon adhered 12-inch o.c.	-67.5 (Lim. 7)
CW-AM-3	SBS PolyBase Min. 3.4-inch laps	1.8" Two Piece Impact Nail attached 7-inch o.c. at the lap and 7-inch o.c. in two equally spaced, staggered rows in the field of the roll	-	-	<i>TPO Fleece</i>	I.S.O. Spray R ribbon adhered 12-inch o.c.	-90 (Lim. 7)

Assemblies with All Layers Adhered over 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-inch ISO 95+ GL or ISO CG	I.S.O. Spray R Insulation Adhesive ribbon adhered 12-inch o.c.	-	-	<i>TPO</i>	<i>Membrane Adhesive V</i>	align="right"> -135 (Lim. 9)
					<i>TPO Fleece</i>	<i>XR-S, 500-R, ribbon adhered 6-inch o.c., I.S.O. Spray R ribbon adhered 12-inch o.c., or TBSA</i>	
G-A-2	<i>ISO HD</i>	I.S.O. Twin Pack or I.S.O. Spray R Insulation Adhesive ribbon adhered 12-inch o.c.	-	-	<i>TPO</i>	TECH-Bond TPO Bonding Adhesive	align="right"> -230 (Lim. 9)
					<i>TPO Fleece</i>	<i>XR-S, 500-R, or I.S.O. Spray R ribbon adhered 6-inch o.c.; TBSA or 500-S</i>	
G-A-3	-	-	-	-	<i>TPO Fleece</i>	<i>500-S</i>	-272.5 (Lim. 9)

APPENDIX B

Gypsum Deck Assemblies with Adhered Membranes (New or Existing)							
System No.	Base Sheet or Insulation	Base Sheet or Insulation Attachment	Coverboard	Coverboard Attachment	Membrane	Membrane Attachment	MDP (psf)
G-AM-1	SBS Poly Torch Base; 6-inch wide torch adhered side laps	1.8" Trufast Twin Loc-Nail Batten Fastener and Trufast Twin Loc Coiled Batten Bar fastened 6-inch o.c. along the batten bar within the 33.4-inch o.c. spaced, torched side laps	-	-	<i>TPO Fleece</i>	I.S.O. Spray R ribbon adhered 33.4-inch o.c. over base sheet torched side laps; <i>HA; PermaMop</i>	-30 (Lim. 7; Non-HVHZ)
G-AM-2	SBS Base; Min. 3.4-inch wide side laps	1.8" LWC Two-Piece Impact Nail attached 9-inch o.c. at the lap and 12-inch o.c. in two equally spaced, staggered rows in the field of the roll	Min. 1-inch <i>ISO</i> or <i>ISO CG</i>	I.S.O. Spray R ribbon adhered 12-inch o.c.	<i>TPO</i>	<i>Membrane Adhesive V</i>	-37.5 (Lim. 7; Non-HVHZ)
					<i>TPO Fleece</i>	I.S.O. Spray R ribbon adhered 12-inch o.c.	

Lightweight Concrete Assemblies with All Layers Adhered over Concrete Deck (New or Existing)							
System No.	Vapor Barrier	LWIC	Insulation/Cover Board	Insulation/Cover Board Attachment	Membrane	Membrane Attachment	MDP (psf)
LC-A-1	-	Min. 350 psi Celcore MF with HS Rheology Admixture	-	-	<i>TPO Fleece</i>	<i>XR-BA</i> or <i>500-S</i>	-75 (Lim. 9)
LC-A-2	-	Min. 200 psi Cellular Lightweight Concrete (MCRF ≥ 80 lbf using 1.7" LWC Base-Ply Fastener)	-	-	<i>TPO</i>	TECH-Bond TPO Bonding Adhesive	-106.5 (Lim. 9)
LC-A-3	-	Min. 200 psi Elastizell with Zell-Crete Fibers	-	-	<i>TPO</i>	TECH-Bond TPO Bonding Adhesive	-115 (Lim. 9)
LC-A-4	-	Min. 200 psi Elastizell with Zell-Crete Fibers	-	-	<i>TPO Fleece</i>	<i>XR-S, 500-R</i> , or I.S.O. Spray R ribbon adhered 12-inch o.c.; <i>HA; PermaMop; XR-BA; or 500-S</i>	-122.5 (Lim. 9)
LC-A-5	-	Min. 200 psi Cellular Lightweight Concrete (MCRF ≥ 80 lbf using 1.7" LWC Base-Ply Fastener)	-	-	<i>TPO Fleece</i>	<i>XR-S, 500-R</i> , or I.S.O. Spray R ribbon adhered 12-inch o.c.; <i>HA; PermaMop; XR-BA; or 500-S</i>	-128 (Lim. 9)
LC-A-6	OPTIONAL <i>SBS TA</i>	Min. 300 psi Celcore MF with HS Rheology Admixture	-	-	<i>TPO</i>	TECH-Bond TPO Bonding Adhesive	-133.5 (Lim. 9)

APPENDIX B

Lightweight Concrete Assemblies with All Layers Adhered over Concrete Deck (New or Existing)							
System No.	Vapor Barrier	LWIC	Insulation/Cover Board	Insulation/Cover Board Attachment	Membrane	Membrane Attachment	MDP (psf)
LC-A-7	OPTIONAL SBS TA	Min. 300 psi Celcore MF with HS Rheology Admixture	ISO HD	Insulation Adhesive IV ribbon adhered 12-inch o.c.	TPO	Membrane Adhesive V	-133.5 (Lim. 9)
					TPO Fleece	XR-S, 500-R, or I.S.O. Spray R ribbon adhered 12-inch o.c.; TBSA or 500-S	
LC-A-8	-	Min. 300 psi Celcore MF with HS Rheology Admixture	DensDeck Prime	Insulation Adhesive VII ribbon adhered 12-inch o.c.	TPO	Membrane Adhesive V	-133.5 (Lim. 9)
					TPO Fleece	XR-S, 500-R, or I.S.O. Spray R ribbon adhered 12-inch o.c.; HA; PermaMop; XR-BA; TBSA or 500-S	
LC-A-9	-	Min. 350 psi Celcore MF with HS Rheology Admixture	Optional layer of Tapered ISO or ISO CG with Min. 2-inch ISO HD-C	I.S.O. Twin Pack Insulation Adhesive, Duro-Grip WeatherTite One Step, I.S.O. Spray R, I.S.O. Stick, or 500-R ribbon adhered 12-inch o.c.	TPO	TPO Water Based Bonding Adhesive	-135 (Lim. 9)
LC-A-10	-	Min. 350 psi Celcore MF with HS Rheology Admixture	Min. 1.5-inch ISO or ISO CG followed by optional layer of Tapered ISO or ISO CG with ISO HD or DensDeck Prime	I.S.O. Twin Pack Insulation Adhesive, Duro-Grip WeatherTite One Step, I.S.O. Spray R, I.S.O. Stick, or 500-R ribbon adhered 12-inch o.c.	TPO	TPO Water Based Bonding Adhesive	-135 (Lim. 9)
LC-A-11	-	Min. 300 psi Elastizell with Zell-Crete Fibers	-	-	TPO Fleece	XR-S, 500-R, or I.S.O. Spray R ribbon adhered 12-inch o.c.; HA; PermaMop; XR-BA; or 500-S	-136 (Lim. 9)
LC-A-12	-	Min. 300 psi Celcore MF with HS Rheology Admixture	-	-	TPO Fleece	XR-S, 500-R, or I.S.O. Spray R ribbon adhered 12-inch o.c.; HA; PermaMop; XR-BA; or 500-S	-144.5 (Lim. 9)
LC-A-13	-	Min. 200 psi Cellular Lightweight Concrete (MCRF ≥ 80 lbf using 1.7" LWC Base-Ply Fastener)	ISO HD	Insulation Adhesive IV ribbon adhered 12-inch o.c.	TPO	Membrane Adhesive V	-150 (Lim. 9)
					TPO Fleece	XR-S, 500-R, or I.S.O. Spray R ribbon adhered 12-inch o.c.; TBSA or 500-S	

Lightweight Concrete Assemblies with All Layers Adhered over Concrete Deck (New or Existing)							
System No.	Vapor Barrier	LWIC	Insulation/Cover Board	Insulation/Cover Board Attachment	Membrane	Membrane Attachment	MDP (psf)
LC-A-14	-	Min. 200 psi Cellular Lightweight Concrete (MCRF ≥ 80 lbf using 1.7" LWC Base-Ply Fastener)	DensDeck Prime	Insulation Adhesive VII ribbon adhered 12-inch o.c.	TPO	Membrane Adhesive V XR-S, 500-R, or I.S.O. Spray R ribbon adhered 12-inch o.c.; HA; PermaMop; XR-BA; TBSA or 500-S	-150 (Lim. 9)
					TPO Fleece		
LC-A-15	-	Min. 200 psi Elastizell with Zell-Crete Fibers	-	-	TPO	TECH-Bond TPOLVOC Bonding Adhesive	-157.5 (Lim. 9)
LC-A-16	-	Min. 300 psi Elastizell with Zell-Crete Fibers	ISO HD	Insulation Adhesive IV ribbon adhered 12-inch o.c.	TPO	Membrane Adhesive V XR-S, 500-R, or I.S.O. Spray R ribbon adhered 12-inch o.c.; TBSA or 500-S	-157.5 (Lim. 9)
					TPO Fleece		
LC-A-17	-	Min. 300 psi Elastizell with Zell-Crete Fibers	DensDeck Prime	Insulation Adhesive VII ribbon adhered 12-inch o.c.	TPO	Membrane Adhesive V XR-S, 500-R, or I.S.O. Spray R ribbon adhered 12-inch o.c.; HA; PermaMop; XR-BA; TBSA or 500-S	-157.5 (Lim. 9)
					TPO Fleece		
LC-A-18	-	Min. 350 psi Celcore MF with HS Rheology Admixture	Min. 1-inch ISO with optional layer of Tapered ISO	I.S.O. Stick or 500-R ribbon adhered 12-inch o.c.	TPO	Membrane Adhesive IV	-187.5 (Lim. 9)
LC-A-19	-	Min. 350 psi Celcore MF with HS Rheology Admixture	Min. 1.5-inch ISO CG with optional layer of Tapered ISO CG	I.S.O. Stick or 500-R ribbon adhered 12-inch o.c.	TPO	Membrane Adhesive V	-187.5 (Lim. 9)
LC-A-20	-	Min. 350 psi Celcore MF with HS Rheology Admixture	Optional layer of Tapered ISO or ISO CG with Min. 2-inch ISO HD-C	I.S.O. Stick or 500-R ribbon adhered 12-inch o.c.	TPO	Membrane Adhesive I	-187.5 (Lim. 9)
LC-A-21	-	Min. 350 psi Celcore MF with HS Rheology Admixture	Min. 1.5-inch ISO or ISO CG followed by optional layer of Tapered ISO or ISO CG with ISO HD or DensDeck Prime	I.S.O. Stick or 500-R ribbon adhered 12-inch o.c.	TPO	Membrane Adhesive I	-187.5 (Lim. 9)
LC-A-22	-	Min. 350 psi Celcore MF with HS Rheology Admixture	DensDeck Prime	I.S.O. Stick or 500-R ribbon adhered 12-inch o.c.	TPO Fleece	XR-BA or 500-S	-187.5 (Lim. 9)

Lightweight Concrete Assemblies with All Layers Adhered over Concrete Deck (New or Existing)							
System No.	Vapor Barrier	LWIC	Insulation/Cover Board	Insulation/Cover Board Attachment	Membrane	Membrane Attachment	MDP (psf)
LC-A-23	-	Min. 350 psi Celcore MF with HS Rheology Admixture	Min. 1-inch ISO with optional layer of Tapered ISO	I.S.O. Twin Pack Insulation Adhesive or Duro-Grip WeatherTite One Step ribbon adhered 12-inch o.c.	TPO	Membrane Adhesive IV	-217.5 (Lim. 9)
LC-A-24	-	Min. 350 psi Celcore MF with HS Rheology Admixture	Optional layer of Tapered ISO or ISO CG with Min. 2-inch ISO HD-C	I.S.O. Twin Pack Insulation Adhesive or Duro-Grip WeatherTite One Step ribbon adhered 12-inch o.c.	TPO	Membrane Adhesive I	-217.5 (Lim. 9)
LC-A-25	-	Min. 350 psi Celcore MF with HS Rheology Admixture	Min. 1.5-inch ISO or ISO CG followed by optional layer of Tapered ISO or ISO CG with ISO HD or DensDeck Prime	I.S.O. Twin Pack Insulation Adhesive or Duro-Grip WeatherTite One Step ribbon adhered 12-inch o.c.	TPO	Membrane Adhesive I	-217.5 (Lim. 9)
LC-A-26	-	Min. 350 psi Celcore MF with HS Rheology Admixture	DensDeck Prime	I.S.O. Twin Pack Insulation Adhesive or Duro-Grip WeatherTite One Step ribbon adhered 12-inch o.c.	TPO Fleece	XR-BA	-217.5 (Lim. 9)
LC-A-27	-	Min. 350 psi Celcore MF with HS Rheology Admixture	Min. 1-inch ISO CG with optional layer of Tapered ISO CG	I.S.O. Twin Pack Insulation Adhesive or Duro-Grip WeatherTite One Step ribbon adhered 12-inch o.c.	TPO	Membrane Adhesive V	-217.5 (Lim. 9)
LC-A-28	-	Min. 150 psi Cellular Lightweight Concrete (MCRF ≥ 123 lbf using 1.7" LWC Base-Ply Fastener)	-	-	TPO	TECH-Bond TPO Bonding Adhesive	-222.5 (Lim. 9; HVHZ Only)
LC-A-29	-	Min. 350 psi Celcore MF with HS Rheology Admixture	-	-	TPO	TECH-Bond TPO Bonding Adhesive	-247.5 (Lim. 9)
LC-A-30	-	Min. 280 psi Celcore MF with HS Rheology Admixture	-	-	TPO Fleece	XR-S or I.S.O. Spray R ribbon adhered 6-inch o.c.; HA; PermaMop; XR-BA	-320 (Lim. 9 HVHZ Only)

APPENDIX B

Lightweight Concrete Assemblies with All Layers Adhered over Concrete Deck (New or Existing)							
System No.	Vapor Barrier	LWIC	Insulation/Cover Board	Insulation/Cover Board Attachment	Membrane	Membrane Attachment	MDP (psf)
LC-A-31	-	Min. 280 psi Celcore MF with HS Rheology Admixture	-	-	TPO	TECH-Bond TPO Bonding Adhesive	-322.5 (Lim. 9 HVHZ Only)
LC-A-32	-	Min. 360 psi Celcore MF with HS Rheology Admixture and Celcore S-1	-	-	TPO	TECH-Bond TPO Bonding Adhesive	-335 (Lim. 9)
LC-A-33	SBS TA	Min. 300 psi Celcore MF with HS Rheology Admixture; Min. 0.25-inch slurry coat	-	-	TPO Fleece	XR-S or I.S.O. Spray R ribbon adhered 12-inch o.c.; HA; PermaMop; XR-BA; or 500-S	-350 (Lim. 9)
LC-A-34	-	Min. 350 psi Celcore MF with HS Rheology Admixture	-	-	TPO Fleece	XR-S or I.S.O. Spray R ribbon adhered 12-inch o.c.; HA; PermaMop; XR-BA; or 500-S	-397.5 (Lim. 9)
LC-A-35	SBS TA	Min. 300 psi Celcore MF with HS Rheology Admixture; Min. 0.25-inch slurry coat	-	-	TPO	TECH-Bond TPO Bonding Adhesive	-455 (Lim. 9)

Lightweight Concrete Assemblies with All Layers Adhered 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, F1, L6, S12	Min. 300 psi Celcore MF with HS Rheology	-	-	TPO Fleece	XR-S, 500-R, or I.S.O. Spray R ribbon adhered 12-inch o.c.; HA; PermaMop; XR-BA; or 500-S	-45 (Lim. 9)
LS-A-2	G33, F1, L6, S12	Min. 300 psi Celcore MF with HS Rheology	ISO HD	Insulation Adhesive IV ribbon adhered 12-inch o.c.	TPO	Membrane Adhesive V	-45 (Lim. 9)
					TPO Fleece	XR-S, 500-R or I.S.O. Spray R ribbon adhered 12-inch o.c.; TBSA or 500-S	

APPENDIX B

Lightweight Concrete Assemblies with All Layers Adhered 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-3	G33, F1, L6, S12	Min. 300 psi Celcore MF with HS Rheology	DensDeck Prime	Insulation Adhesive VII ribbon adhered 12-inch o.c.	TPO	Membrane Adhesive V	-45 (Lim. 9)
					TPO Fleece	XR-S, 500-R, or I.S.O. Spray R ribbon adhered 12-inch o.c.; HA; PermaMop; XR-BA; TBSA or 500-S	
LS-A-4	G33, F1, L6	Min. 300 psi Celcore MF with HS Rheology	-	-	TPO	TECH-Bond TPO Bonding Adhesive or TECH-Bond TPOLVOC Bonding Adhesive	-45 (Lim. 9)
LS-A-5	G33, P, L6, S18	Min. 310 psi Celcore MF with HS Rheology over deck treated with Celcore S-1	-	-	TPO Fleece	XR-BA; XR-S, 500-R, I.S.O. Spray R; or 500-S	-45 (Lim. 9)
LS-A-6	G33, F1W, L6, S12	Min. 360 psi LWIC (MCRF ≥ 176 lbf with 1.7" LWC Base Ply Fastener); Polymer Batten Strip spaced 18-inch o.c. through fastened to Steel Deck 12-inch o.c. with Heavy Duty Fasteners	-	-	TPO Fleece	XR-S, 500-R, or I.S.O. Spray R ribbon adhered 6-inch o.c.; HA; PermaMop; XR-BA; or 500-S	-60 (Lim. 9)
LS-A-7	G33, P, L5, S12	Min. 350 psi Elastizell with Zell-Crete Fibers	-	-	TPO Fleece	XR-S, 500-R, or I.S.O. Spray R ribbon adhered 6-inch o.c.; HA; PermaMop; XR-BA; or 500-S	-60 (Lim. 9)
LS-A-8	G33, P, L6, S18	Min. 360 psi Celcore MF with HS Rheology and Celcore S-1	-	-	TPO Fleece	XR-S, 500-R, or I.S.O. Spray R ribbons adhered 12-inch o.c.; HA; PermaMop; XR-BA; or 500-S	-60 (Lim. 9)
LS-A-9	G33, F1, L5	Min. 300 psi Elastizell with Zell-Crete Fibers	-	-	TPO	TECH-Bond TPO Bonding Adhesive or TECH-Bond TPOLVOC Bonding Adhesive	-67.5 (Lim. 9)
LS-A-10	G33, F1, L5, S6	Min. 300 psi Elastizell with Zell-Crete Fibers	-	-	TPO Fleece	XR-S, 500-R, or I.S.O. Spray R ribbon adhered 12-inch o.c.; HA; PermaMop; XR-BA; or 500-S	-67.5 (Lim. 9)

APPENDIX B

Lightweight Concrete Assemblies with All Layers Adhered 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-11	G33, F1, L5, S6	Min. 300 psi Elastizell with Zell-Crete Fibers	ISO HD	Insulation Adhesive IV ribbon adhered 12-inch o.c.	TPO	Membrane Adhesive V	-67.5 (Lim. 9)
					TPO Fleece	XR-S, 500-R, or I.S.O. Spray R ribbon adhered 12-inch o.c.; or TBSA	
LS-A-12	G33, F1, L5, S6	Min. 300 psi Elastizell with Zell-Crete Fibers	DensDeck Prime	Insulation Adhesive VII ribbon adhered 12-inch o.c.	TPO	Membrane Adhesive V	-67.5 (Lim. 9)
					TPO Fleece	XR-S, 500-R, or I.S.O. Spray R ribbon adhered 12-inch o.c.; HA; PermaMop; XR-BA; TBSA or 500-S	
LS-A-13	G33, P, L5, S18	Min. 300 psi Celcore MF with HS Rheology and Celcore S-1	-	-	TPO	TECH-Bond TPO Bonding Adhesive	-67.5 (Lim. 9)
					TPO Fleece	I.S.O. Spray R or 500-R ribbon adhered 12-inch o.c.; or 500-S	
LS-A-14	G33, F1W, L6, S12	Min. 300 psi Celcore MF with HS Rheology Admixture; Polymer Batten Strip spaced 18-inch o.c. through fastened to Steel Deck 12-inch o.c. with Heavy Duty Fasteners	-	-	TPO Fleece	XR-S, 500-R, or I.S.O. Spray R ribbon adhered 4-inch o.c.; HA; PermaMop; XR-BA; or 500-S	-75 (Lim. 9)
LS-A-15	G33, PW, L6, S18	Min. 360 psi Celcore MF with HS Rheology over deck treated with Celcore S-1	-	-	TPO	TECH-Bond TPO Bonding Adhesive	-82.5 (Lim. 9)
LS-A-16	G33, F1, L6, S12	Min. 300 psi Celcore MF with HS Rheology Admixture HD Fasteners & Plates through-fastened to Steel Deck at a rate of one per 2 ft ²	-	-	TPO Fleece	XR-S, 500-R, or I.S.O. Spray R ribbon adhered 12-inch o.c.; HA; PermaMop; XR-BA; or 500-S	-90 (Lim. 9)
LS-A-17	G33, F1, L6, S12	Min. 300 psi Celcore MF with HS Rheology HD Fasteners & Plates through-fastened to Steel Deck at a rate of one per 2 ft ²	ISO HD	Insulation Adhesive IV ribbon adhered 12-inch o.c.	TPO	Membrane Adhesive V	-90 (Lim. 9)
					TPO Fleece	XR-S, 500-R, or I.S.O. Spray R ribbon adhered 12-inch o.c.; TBSA or 500-S	
LS-A-18	G33, F1, L6, S12	Min. 300 psi Celcore MF with HS Rheology HD Fasteners & Plates through-fastened to Steel Deck at a rate of one per 2 ft ²	DensDeck Prime	Insulation Adhesive VII ribbon adhered 12-inch o.c.	TPO	Membrane Adhesive V	-90 (Lim. 9)
					TPO Fleece	XR-S, 500-R, or I.S.O. Spray R ribbon adhered 12-inch o.c.; HA; PermaMop; XR-BA; TBSA or 500-S	

APPENDIX B

Lightweight Concrete Assemblies with All Layers Adhered 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-19	G33, P, L6, S18	Min. 380 psi Celcore MF with HS Rheology and Celcore S-1	-	-	TPO Fleece	XR-S, 500-R, or I.S.O. Spray R ribbons spaced 4-inch o.c.; or 500-S	-90 (Lim. 9)
LS-A-20	G33, F1, L6	Min. 300 psi Celcore MF with HS Rheology Admixture <i>HD Fasteners & Plates</i> through-fastened to <i>Steel Deck</i> at a rate of one per 2 ft ²	-	-	TPO	TECH-Bond TPO Bonding Adhesive or TECH-Bond TPOLVOC Bonding Adhesive	-90 (Lim. 9)
LS-A-21	G33, P, L6, S18	Min. 380 psi Celcore MF with HS Rheology over deck treated with Celcore S-1; Celcore SBS applied over top coat	-	-	TPO Fleece	I.S.O. Spray R ribbons spaced 4-inch o.c.; or 500-S	-90 (Lim. 9)
LS-A-22	G33, F1, L6	Min. 300 psi Elastizell <i>HD Fasteners & Plates</i> through-fastened to <i>Steel Deck</i> at a rate of one per 2 ft ²	-	-	TPO	TECH-Bond TPO Bonding Adhesive	-115 (Lim. 9)
LS-A-23	G33, F1, L6	Min. 300 psi Elastizell <i>HD Fasteners & Plates</i> through-fastened to <i>Steel Deck</i> at a rate of one per 2 ft ²	-	-	TPO	TECH-Bond TPOLVOC Bonding Adhesive	-135 (Lim. 9)
LS-A-24	G33, F1, L6, S12	Min. 300 psi Elastizell <i>HD Fasteners & Plates</i> through-fastened to <i>Steel Deck</i> at a rate of one per 2 ft ²	-	-	TPO Fleece	XR-S, 500-R, or I.S.O. Spray R ribbon adhered 12-inch o.c.; HA; PermaMop; XR-BA; or 500-S	-135 (Lim. 9)
LS-A-25	G33, F1, L6, S12	Min. 300 psi Elastizell <i>HD Fasteners & Plates</i> through-fastened to <i>Steel Deck</i> at a rate of one per 2 ft ²	ISO HD	Insulation Adhesive IV ribbon adhered 12-inch o.c.	TPO	Membrane Adhesive V	-135 (Lim. 9)
					TPO Fleece	XR-S, 500-R, or I.S.O. Spray R ribbon adhered 12-inch o.c.; TBSA or 500-S	
LS-A-26	G33, F1, L6, S12	Min. 300 psi Elastizell <i>HD Fasteners & Plates</i> through-fastened to <i>Steel Deck</i> at a rate of one per 2 ft ²	DensDeck Prime	Insulation Adhesive VII ribbon adhered 12-inch o.c.	TPO	Membrane Adhesive V	-135 (Lim. 9)
					TPO Fleece	XR-S, 500-R, or I.S.O. Spray R ribbon adhered 12-inch o.c.; HA; PermaMop; XR-BA; TBSA or 500-S	
LS-A-27	G33, L5	Min. 390 psi Celcore MF with HS Rheology over deck treated with Celcore S-1	-	-	TPO Fleece	XR-S, 500-R, or I.S.O. Spray R ribbon adhered 12-inch o.c.; XR-BA; or 500-S	-135 (Lim. 9; HVHZ Only)

APPENDIX B

Lightweight Concrete Assemblies with All Layers Adhered 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-28	G33, L5	Min. 390 psi Celcore MF with HS Rheology over deck treated with Celcore S-1	-	-	TPO	TECH-Bond TPO Bonding Adhesive	-140 (Lim. 9; HVHZ Only)
LS-A-29	G33, L5	Min. 150 psi Cellular Lightweight Concrete (MCRF ≥ 123 lbf using 1.7" LWC Base-Ply Fastener)	-	-	TPO	TECH-Bond TPO Bonding Adhesive	-225 (Lim. 9; HVHZ Only)
LS-A-30	G33, L5	Min. 150 psi Cellular Lightweight Concrete (MCRF ≥ 123 lbf using 1.7" LWC Base-Ply Fastener)	-	-	TPO Fleece	I.S.O. Spray R ribbon adhered 6-inch o.c.; or 500-S	-265 (Lim. 9; HVHZ Only)
LS-A-31	G33, L5	Min. 280 psi Celcore MF with HS Rheology Admixture	-	-	TPO	TECH-Bond TPO Bonding Adhesive	-272.5 (Lim. 9 HVHZ Only)
LS-A-32	G33, L5	Min. 280 psi Celcore MF with HS Rheology Admixture	-	-	TPO Fleece	I.S.O. Spray R ribbon adhered 6-inch o.c.; or 500-S	-460 (Lim. 9 HVHZ Only)

Lightweight Concrete Assemblies with Adhered Membranes (New or Existing)									
System No.	Deck Detail	LWIC	Base Sheet or Insulation	Base Sheet or Insulation Attachment	Coverboard	Coverboard Attachment	Membrane	Membrane Attachment	MDP (psf)
L-AM-1	Steel Deck (G33, PW, L6, S18) Or Concrete Deck	Min. 420 psi Celcore MF with HS Rheology (over deck treated with Celcore S-1 on steel deck only)	Channel Venting Base or SBS Base; Min. 3.5-inch wide side laps	1.8" LWC Two-Piece Impact Nail attached 9- inch o.c. at the lap and 9- inch o.c. in two equally spaced, staggered rows in the field of the roll	Min. 1-inch ISO or ISO CG	I.S.O. Spray R ribbon adhered 12-inch o.c.	TPO	Membrane Adhesive V	align="right"> -37.5 (Lim. 7; Non- HVHZ)
							TPO Fleece	I.S.O. Spray R ribbon adhered 12-inch o.c.;	

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Lightweight Concrete Assemblies with Adhered Membranes (New or Existing)									
System No.	Deck Detail	LWIC	Base Sheet or Insulation	Base Sheet or Insulation Attachment	Coverboard	Coverboard Attachment	Membrane	Membrane Attachment	MDP (psf)
L-AM-2	Steel Deck (G33) or Concrete Deck	Mearlcrete, Celcore, or Celcore MF with HS Rheology Admixture	MA Base	1.8-inch Two-Piece Impact Nail installed 7-inch o.c. in the 4-inch wide laps, 7-inch o.c. in two (2) staggered rows in the field	Min. 1-inch ISO or ISO CG installed followed by OPTIONAL Tapered ISO or Tapered ISO CG followed by OPTIONAL ISO HD or DensDeck Prime	Insulation Adhesive applied in ribbons spaced 12-inch o.c.	TPO	Membrane Adhesive V	-45 (Lim. 7)
L-AM-3	Steel Deck (G33, P, L5, S12W) or Concrete Deck	Min. 220 psi Elastzell with Zell-Crete Fibers	SBS Base or SBS Poly Base with Min. 3.5-inch wide side laps	1.7" LWC Base Ply Fastener attached 9-inch o.c. at the lap and 9-inch o.c. in two equally spaced, staggered rows in the field of the roll	-	-	TPO Fleece	ASTM D 312, Type IV Asphalt	-45 (Lim. 7)
L-AM-4	Steel Deck (G33, P, L6, S18) or Concrete Deck	Min. 310 psi Celcore MF with HS Rheology (over deck treated with Celcore S-1 on steel deck only)	SBS Base Min. 3.4-inch wide side laps	1.8" Two Piece Impact Nail attached 12-inch o.c. at the lap and 12-inch o.c. in two equally spaced, staggered rows in the field of the roll	0.5-inch ISO	I.S.O. Spray R ribbons spaced 12-inch o.c.	TPO	Membrane Adhesive V	-45 (Lim. 7)
							TPO Fleece	XR-S, 500-R, or I.S.O. Spray R ribbons spaced 12-inch o.c.; or TBSA	
L-AM-5	Steel Deck (G33, P, L5, S18) or Concrete Deck	Min. 300 psi Celcore MF with HS Rheology (over deck treated with Celcore S-1 on steel deck only)	SBS Base Min. 3.4-inch wide side laps	1.7" LWC Base Ply Fastener attached 9-inch o.c. at the lap and 9-inch o.c. in two equally spaced, staggered rows in the field of the roll	-	-	TPO Fleece	I.S.O. Spray R ribbon adhered 12-inch o.c.; HA; or PermaMop	-52.5 (Lim. 7)
L-AM-6	Steel Deck (G33, PW, L6, S18) Or Concrete Deck	Min. 420 psi Celcore MF with HS Rheology (over deck treated with Celcore S-1 on steel deck only)	MA Base; Min. 4-inch wide side laps	1.7" LWC Base Ply Fastener attached 7-inch o.c. at the lap and 7-inch o.c. in two equally spaced, staggered rows in the field of the roll	-	-	TPO Fleece	I.S.O. Spray R ribbon adhered 12-inch o.c.; HA; PermaMop	-52.5 (Lim. 7)

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Lightweight Concrete Assemblies with Adhered Membranes (New or Existing)									
System No.	Deck Detail	LWIC	Base Sheet or Insulation	Base Sheet or Insulation Attachment	Coverboard	Coverboard Attachment	Membrane	Membrane Attachment	MDP (psf)
L-AM-7	Steel Deck (G33, P, L5, S18) or Concrete Deck	Min. 300 psi Celcore MF with HS Rheology (over deck treated with Celcore S-1 on steel deck only)	SBS PolyBase Min. 3.4-inch wide side laps	1.8" Two Piece Impact Nail attached 9-inch o.c. at the lap and 9-inch o.c. in two equally spaced, staggered rows in the field of the roll	-	-	TPO Fleece	I.S.O. Spray R ribbon adhered 12-inch o.c.; HA; or PermaMop	-60 (Lim. 7)
L-AM-8	Steel Deck (G33, P, L6, S18) or Concrete Deck	Min. 380 psi Celcore MF with HS Rheology (over deck treated with Celcore S-1 on steel deck only)	SBS Base Min. 3.4-inch wide side laps	1.8" Two Piece Impact Nail attached 7-inch o.c. at the lap and 7-inch o.c. in two equally spaced, staggered rows in the field of the roll	SECUROCK	I.S.O. Spray R ribbons spaced 12-inch o.c.	TPO	Membrane Adhesive V	-67.5 (Lim. 7)
							TPO Fleece	I.S.O. Spray R ribbon adhered 12-inch o.c.; HA; PermaMop; XR-BA	
L-AM-9	Steel Deck (G33, P, L6, S18) or Concrete Deck	Min. 400 psi Celcore MF with HS Rheology (over deck treated with Celcore S-1 on steel deck only)	SBS Base Min. 3.4-inch wide side laps	1.7" LWC Base Ply Fastener attached 7-inch o.c. at the lap and 7-inch o.c. in two equally spaced, staggered rows in the field of the roll	-	-	TPO Fleece	I.S.O. Spray R ribbon adhered 12-inch o.c.; HA; PermaMop	-67.5 (Lim. 7)
L-AM-10	Steel Deck (G33, P, L6, S18) or Concrete Deck	Min. 360 psi Celcore MF with HS Rheology	Channel Venting Base Min. 3.4-inch wide side laps	1.8" Two Piece Impact Nail attached 7-inch o.c. at the lap and 7-inch o.c. in two equally spaced, staggered rows in the field of the roll	-	-	TPO Fleece	I.S.O. Spray R ribbon adhered 12-inch o.c.; HA; PermaMop	-75 (Lim. 7)

Mechanically Fastened Lightweight Concrete Assemblies (New, Existing, or Recover)							
System No.	Deck Detail	LWIC	Base Sheet or Insulation	Base Sheet or Insulation Attachment	Membrane	Membrane Attachment	MDP (psf)
L-M-1	Steel Deck (G33, HXE1, L6, HS12)	Min. 200 psi Celcore MF with HS Rheology	OPTIONAL Insulation	-	TPO Fleece (120-inch wide)	Attached in-lap 12-inch o.c. with HD Fasteners & Plates; Fastener rows 114-inch o.c.	-30 (Lim. 7; Non-HVHZ)
L-M-2	Steel Deck (G33, HXE1, L6, HS12)	Min. 200 psi Celcore MF with HS Rheology	OPTIONAL Insulation	-	TPO Fleece (120-inch wide)	Attached in-lap 6-inch o.c. with HD Fasteners & Plates; Fastener rows 114-inch o.c.	-45 (Lim. 7)

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Mechanically Fastened Lightweight Concrete Assemblies (New, Existing, or Recover)							
System No.	<i>Deck Detail</i>	<i>LWIC</i>	Base Sheet or Insulation	Base Sheet or Insulation Attachment	Membrane	Membrane Attachment	<i>MDP (psf)</i>
L-M-3	<i>Steel Deck (G33, P, L6, S18) or Concrete Deck</i>	Min. 350 psi <i>LWIC</i>	OPTIONAL <i>Insulation</i>	-	Min. 60 mil Duro-TECH TPO (120-inch wide)	Attached in-lap 12-inch o.c. with <i>HD Fasteners & Plates</i> ; Fastener rows 114-inch o.c.	-45 (Lim. 7)
L-M-4	<i>Steel Deck (G33, P, L6, S24) or Concrete Deck</i>	Min. 430 psi Celcore MF with HS Rheology over deck treated with Celcore S-1	Min. 0.5-inch <i>ISO</i>	-	<i>TPO</i>	Backside of membrane primed with QuickPrime Plus Primer and adhered to UltraPly QuickSeam R.M.A Strip attached 72-inch o.c. and secured with <i>VERSA-FAST</i> spaced 6-inch o.c. with min. 3.25- inch fasteners at a rate of <i>2 fasteners per plate</i>	-45 (Lim. 7)
L-M-5	<i>Steel Deck (G33, F1, L5, S12) or Concrete Deck</i>	Min. 300 psi <i>LWIC</i>	OPTIONAL <i>Insulation</i>	-	<i>TPO</i> (120-inch wide)	Attached in-lap 6-inch o.c. with <i>HD Fasteners & Plates</i> ; Fastener rows 114-inch o.c.	-52.5 (Lim. 7)
L-M-6	<i>Steel Deck (G33, P, L6, S18) or Concrete Deck</i>	Min. 350 psi <i>LWIC</i>	OPTIONAL <i>Insulation</i>	-	Min. 60 mil Duro-TECH TPO (148-inch wide)	Attached in-lap 6-inch o.c. with <i>HD Fasteners & Plates</i> ; Fastener rows 142-inch o.c.	-52.5 (Lim. 7)
L-M-7	<i>Steel Deck (G33, P, L6, S18) or Concrete Deck</i>	Min. 350 psi <i>LWIC</i>	OPTIONAL <i>Insulation</i>	-	Min. 60 mil Duro-TECH TPO (120-inch wide)	Attached in-lap 6-inch o.c. with <i>HD Fasteners & Plates</i> ; Fastener rows 114-inch o.c.	-67.5 (Lim. 7)
L-M-8	<i>Steel Deck (G33, HXE1, L6, HS12)</i>	Min. 200 psi Celcore MF with HS Rheology	OPTIONAL <i>Insulation</i>	-	<i>TPO</i> (96-inch wide)	Heavy Duty fasteners installed 6-inch through Polymer Batten Strip spaced 90- inch o.c. within the side laps; Side laps sealed with min. 5-inch weld that encapsulates the batten and fasteners	-67.5 (Lim. 7)
L-M-9	<i>Steel Deck (G33, HXE1, L6, HS12)</i>	Min. 200 psi Celcore MF with HS Rheology	OPTIONAL <i>Insulation</i>	-	Min. 60 mil <i>TPO Fleece</i> (120-inch wide)	Attached in-lap 6-inch o.c. with <i>HD Plus Fasteners & Plates</i> ; Fastener rows 114- inch o.c.	-67.5 (Lim. 7)
L-M-10	<i>Steel Deck (G33, P, L6, S18) or Concrete Deck</i>	Min. 380 psi Celcore MF with HS Rheology over deck treated with Celcore S-1 (steel deck only)	-	-	<i>TPO</i>	Heavy Duty Fasteners and Coiled Metal Batten Bar secured in the lap 6-inch o.c. along the batten bar in rows spaced 142- inch o.c.; 5.5-inch wide heat weld at the 6- inch wide lap	-67.5 (Lim. 7)
L-M-11	<i>Steel Deck (G33, HXE1, L6, HS12)</i>	Min. 200 psi Celcore MF with HS Rheology	OPTIONAL <i>Insulation</i>	-	<i>TPO</i> (96-inch wide)	Heavy Duty Plus fasteners installed 6-inch through Metal Batten Bar spaced 90-inch o.c. within the side laps; Side laps sealed with min. 5-inch weld that encapsulates the batten and fasteners	-82.5 (Lim. 7)

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Mechanically Fastened Lightweight Concrete Assemblies (New, Existing, or Recover)							
System No.	Deck Detail	LWIC	Base Sheet or Insulation	Base Sheet or Insulation Attachment	Membrane	Membrane Attachment	MDP (psf)
L-M-12	Steel Deck (G33, F1, L6, S12W) or Concrete Deck	Min. 200 psi LWIC	-	-	TPO	Polymer Batten Strip spaced 4-ft o.c. through fastened to Steel Deck 6-inch o.c. with Heavy Duty Fasteners; 6-inch wide TPO cover strip heat welded min. 1.5-inch wide on either side of battens	-97.5 (Lim. 7)
L-M-13	Steel Deck (G33, F1, L6, S12W) or Concrete Deck	Min. 200 psi LWIC	-	-	TPO Fleece	Polymer Batten Strip spaced 4-ft o.c. through fastened to Steel Deck 6-inch o.c. with Heavy Duty Fasteners; 6-inch wide TPO cover strip heat welded min. 1.5-inch wide on either side of battens	-112.5 (Lim. 7)

Induction Welded Assemblies over Lightweight Concrete (New or Existing)									
System No.	Deck Detail	LWIC	Base Sheet or Insulation	Base Sheet or Insulation Attachment	Coverboard	Coverboard Attachment	Membrane	Membrane Attachment	MDP (psf)
L-W-1	Steel Deck (G33, HXE1, L6, HS12)	Min. 200 psi Celcore MF with HS Rheology	-	-	-	-	TPO	Induction Welded to DuroBond installed 18-inch o.c. in rows spaced 60-inch o.c.	-30 (Lim. 7; Non-HVHZ)
L-W-2	Steel Deck (G33, HXE1, L6, HS12)	Min. 200 psi Celcore MF with HS Rheology	-	-	-	-	TPO	Induction Welded to DuroBond installed at a rate of 1 fastener per 5.33-ft ²	-45 (Lim. 7; Non-HVHZ)
L-W-3	Steel Deck (G33, HXE1, L6, HS12)	Min. 200 psi Celcore MF with HS Rheology	-	-	-	-	TPO	Induction Welded to DuroBond installed at a rate of 1 fastener per 4-ft ²	-60 (Lim. 7)
L-W-4	Steel Deck (G33, HXE1, L6, HS12)	Min. 200 psi Celcore MF with HS Rheology	-	-	-	-	TPO	Induction Welded to DuroBond installed at a rate of 1 fastener per 2.7-ft ²	-75 (Lim. 7)
L-W-5	Steel Deck (G33, HXE1, L6, HS12)	Min. 200 psi Celcore MF with HS Rheology	-	-	-	-	TPO	In Induction Welded to DuroBond installed 6-inch o.c. in rows spaced 60-inch o.c.	-75 (Lim. 7)

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Recover Assemblies with All Layers Adhered						
System No.	Existing Roof	Base Insulation	Top Insulation	Membrane	Membrane Attachment	MDP (psf)
R-A-1	Built-Up Roofing over <i>Concrete Deck</i>	-	-	Min. 60mil Duro-TECH TPO Fleece	XR-S ribbon adhered 12-inch o.c.	-112.5 (Lim. 9)
R-A-2	Smooth or Mineral Surfaced BUR over <i>Concrete Deck</i>	Min. 0.5-inch ISO or Min. 1-inch ISO CG installed with I.S.O. Twin Pack applied in ribbons spaced 12-inch o.c	SECUROCK installed with I.S.O. Twin Pack applied in ribbons spaced 12-inch o.c	TPO	<i>Membrane Adhesive V</i>	-112.5 (Lim. 9)
R-A-3	Smooth or Mineral Surfaced BUR over <i>Concrete Deck</i>	Min. 0.5-inch ISO or Min. 1-inch ISO CG installed with I.S.O. Stick applied in ribbons spaced 12-inch o.c	SECUROCK installed with I.S.O. Stick applied in ribbons spaced 12-inch o.c	TPO	<i>Membrane Adhesive V</i>	-112.5 (Lim. 9)
R-A-4	Granule Surfaced SBS Modified Roofing over <i>Concrete Deck</i>	-	-	TPO Fleece	XR-S ribbon adhered 12-inch o.c.	-125.5 (Lim. 9)
R-A-5	Smooth Surfaced BUR over <i>Concrete Deck</i>	Min. 0.5-inch ISO or Min. 1-inch ISO CG installed with I.S.O. Twin Pack applied in ribbons spaced 12-inch o.c	DensDeck Prime installed with I.S.O. Twin Pack applied in ribbons spaced 12-inch o.c	TPO	<i>Membrane Adhesive V</i>	-135 (Lim. 9)
R-A-6	Smooth Surfaced BUR over <i>Concrete Deck</i>	Min. 0.5-inch ISO or Min. 1-inch ISO CG installed with I.S.O. Stick applied in ribbons spaced 12-inch o.c	DensDeck Prime installed with I.S.O. Stick applied in ribbons spaced 12-inch o.c	TPO	<i>Membrane Adhesive V</i>	-135 (Lim. 9)
R-A-7	Smooth or Mineral Surfaced BUR over <i>Concrete Deck</i>	Min. 0.5-inch ISO or Min. 1-inch ISO CG installed with I.S.O. Twin Pack applied in ribbons spaced 12-inch o.c	Min 0.5-inch ISO HD installed with I.S.O. Twin Pack applied in ribbons spaced 12-inch o.c	TPO	<i>Membrane Adhesive V</i>	-135 (Lim. 9)
R-A-8	Smooth or Mineral Surfaced BUR over <i>Concrete Deck</i>	Min. 0.5-inch ISO or Min. 1-inch ISO CG installed with I.S.O. Stick applied in ribbons spaced 12-inch o.c	Min 0.5-inch ISO HD installed with I.S.O. Stick applied in ribbons spaced 12-inch o.c	TPO	<i>Membrane Adhesive V</i>	-135 (Lim. 9)
R-A-9	Smooth Surfaced BUR over <i>Concrete Deck</i>	Min. 1-inch ISO CG installed with I.S.O. Twin Pack applied in ribbons spaced 12-inch o.c	-	TPO	<i>Membrane Adhesive V</i>	-202.5 (Lim. 9)
R-A-10	Smooth Surfaced BUR over <i>Concrete Deck</i>	Min. 0.5-inch ISO or Min. 1-inch ISO CG installed with I.S.O. Twin Pack applied in ribbons spaced 12-inch o.c	OPTIONAL Min 0.5-inch ISO HD installed with I.S.O. Twin Pack applied in ribbons spaced 12-inch o.c	TPO	<i>Membrane Adhesive I</i>	-202.5 (Lim. 9)
R-A-11	Smooth Surfaced BUR over <i>Concrete Deck</i>	Min. 0.5-inch ISO or Min. 1-inch ISO CG installed with I.S.O. Twin Pack applied in ribbons spaced 12-inch o.c	DensDeck Prime installed with I.S.O. Twin Pack applied in ribbons spaced 12-inch o.c	TPO	<i>Membrane Adhesive IV</i>	-202.5 (Lim. 9)
R-A-12	Smooth Surfaced BUR over <i>Concrete Deck</i>	Min. 0.5-inch ISO or Min. 1-inch ISO CG installed with I.S.O. Twin Pack applied in ribbons spaced 12-inch o.c	Min. 7/16-inch OSB installed with I.S.O. Twin Pack applied in ribbons spaced 12-inch o.c	TPO	<i>Membrane Adhesive II</i>	-202.5 (Lim. 9; Non-HVHZ)

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Recover Assemblies with All Layers Adhered						
System No.	Existing Roof	Base Insulation	Top Insulation	Membrane	Membrane Attachment	MDP (psf)
R-A-13	Smooth or Mineral Surfaced BUR over Concrete Deck	Min. 0.5-inch ISO or Min. 1-inch ISO CG installed with I.S.O. Stick applied in ribbons spaced 12-inch o.c	Min 0.5-inch ISO HD installed with I.S.O. Stick applied in ribbons spaced 12-inch o.c	TPO	Membrane Adhesive I	-225 (Lim. 9)
R-A-14	Mineral Surfaced BUR over Concrete Deck	Min. 0.5-inch ISO or Min. 1-inch ISO CG installed with I.S.O. Twin Pack applied in ribbons spaced 12-inch o.c	Min 0.5-inch ISO HD installed with I.S.O. Twin Pack applied in ribbons spaced 12-inch o.c	TPO	Membrane Adhesive I	-225 (Lim. 9)
R-A-15	Smooth Surfaced BUR over Concrete Deck	Min. 1-inch ISO CG installed with I.S.O. Stick applied in ribbons spaced 12-inch o.c	-	TPO	Membrane Adhesive V	-247.5 (Lim. 9)
R-A-16	Smooth Surfaced BUR over Concrete Deck	Min. 1-inch ISO installed with I.S.O. Stick applied in ribbons spaced 12-inch o.c	-	TPO	Membrane Adhesive IV	-247.5 (Lim. 9)
R-A-17	Mineral Surfaced BUR over Concrete Deck	Min. 1-inch ISO CG installed with I.S.O. Twin Pack or I.S.O. Stick applied in ribbons spaced 12-inch o.c	-	TPO	Membrane Adhesive V	-247.5 (Lim. 9)
R-A-18	Mineral Surfaced BUR over Concrete Deck	Min. 0.5-inch ISO or Min. 1-inch ISO CG installed with I.S.O. Twin Pack applied in ribbons spaced 12-inch o.c	DensDeck Prime installed with I.S.O. Twin Pack applied in ribbons spaced 12-inch o.c	TPO	Fully adhered in TECH-Bond TPO Bonding Adhesive, TECH-Bond TPO LVOC Bonding Adhesive, or TBSA	-247.5 (Lim. 9)
R-A-19	Mineral Surfaced BUR over Concrete Deck	Min. 0.5-inch ISO or Min. 1-inch ISO CG installed with I.S.O. Stick applied in ribbons spaced 12-inch o.c	DensDeck Prime installed with I.S.O. Stick applied in ribbons spaced 12-inch o.c	TPO	TECH-Bond TPO Bonding Adhesive, TECH-Bond TPO LVOC Bonding Adhesive, or TBSA	-247.5 (Lim. 9)
R-A-20	Smooth Surfaced BUR over Concrete Deck	Min. 0.5-inch ISO or Min. 1-inch ISO CG installed with I.S.O. Stick applied in ribbons spaced 12-inch o.c	DensDeck Prime installed with I.S.O. Stick applied in ribbons spaced 12-inch o.c	TPO	Membrane Adhesive IV	-247.5 (Lim. 9)
R-A-21	Smooth Surfaced BUR over Concrete Deck	Min. 0.5-inch ISO or Min. 1-inch ISO CG installed with I.S.O. Stick applied in ribbons spaced 12-inch o.c	Min 0.5-inch ISO HD installed with I.S.O. Stick applied in ribbons spaced 12-inch o.c	TPO	TECH-Bond TPO Bonding Adhesive or TECH-Bond TPOLVOC Bonding Adhesive	-247.5 (Lim. 9)
R-A-22	Mineral Surfaced BUR over Concrete Deck	Min. 0.5-inch ISO or Min. 1-inch ISO CG installed with I.S.O. Twin Pack applied in ribbons spaced 12-inch o.c	Min. 7/16-inch OSB installed with I.S.O. Twin Pack applied in ribbons spaced 12-inch o.c	TPO	Membrane Adhesive II	-247.5 (Lim. 9; Non-HVHZ)
R-A-23	Mineral Surfaced BUR over Concrete Deck	Min. 0.5-inch ISO or Min. 1-inch ISO CG installed with I.S.O. Stick applied in ribbons spaced 12-inch o.c	Min. 7/16-inch OSB installed with I.S.O. Stick applied in ribbons spaced 12-inch o.c	TPO	Membrane Adhesive II	-247.5 (Lim. 9; Non-HVHZ)

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Recover Assemblies with All Layers Adhered						
System No.	Existing Roof	Base Insulation	Top Insulation	Membrane	Membrane Attachment	MDP (psf)
R-A-24	Mineral Surfaced BUR over Concrete Deck	Min. 1.0-inch ISO CG installed with I.S.O. Twin Pack or I.S.O. Stick applied in ribbons spaced 12-inch o.c	-	TPO	Membrane Adhesive IV	-255 (Lim. 9)
R-A-25	Mineral Surfaced BUR over Concrete Deck	Min. 1.0-inch ISO installed with I.S.O. Twin Pack applied in ribbons spaced 12-inch o.c	-	TPO	Membrane Adhesive IV	-255 (Lim. 9)
R-A-26	Mineral Surfaced BUR over Concrete Deck	Min. 0.5-inch ISO installed with I.S.O. Stick applied in ribbons spaced 12-inch o.c	-	TPO	Membrane Adhesive IV	-255 (Lim. 9)
R-A-27	Mineral Surfaced BUR over Concrete Deck	Min. 1-inch ISO CG installed with I.S.O. Twin Pack applied in ribbons spaced 12-inch o.c	OPTIONAL Min 0.5-inch ISO HD installed with I.S.O. Twin Pack applied in ribbons spaced 12-inch o.c	TPO	TECH-Bond TPOLVOC Bonding Adhesive or TECH-Bond TPO Bonding Adhesive	-262.5 (Lim. 9)
R-A-28	Mineral Surfaced BUR over Concrete Deck	Min. 0.5-inch ISO or Min. 1-inch ISO CG installed with I.S.O. Stick applied in ribbons spaced 12-inch o.c	DensDeck Prime installed with I.S.O. Stick applied in ribbons spaced 12-inch o.c	TPO	Single Ply LVOC Bonding Adhesive 1168	-262.5 (Lim. 9)
R-A-29	Mineral Surfaced BUR over Concrete Deck	Min. 0.5-inch ISO or Min. 1-inch ISO CG installed with I.S.O. Twin Pack applied in ribbons spaced 12-inch o.c	DensDeck Prime installed with I.S.O. Twin Pack applied in ribbons spaced 12-inch o.c	TPO	Single Ply LVOC Bonding Adhesive 1168	-262.5 (Lim. 9)
R-A-30	Mineral Surfaced BUR over Concrete Deck	Min. 0.5-inch ISO or Min. 1-inch ISO CG installed with I.S.O. Twin Pack applied in ribbons spaced 12-inch o.c	Min 0.5-inch ISO HD installed with I.S.O. Twin Pack applied in ribbons spaced 12-inch o.c	TPO	TECH-Bond TPO Bonding Adhesive or TECH-Bond TPOLVOC Bonding Adhesive	-262.5 (Lim. 9)
R-A-31	Mineral Surfaced BUR over Concrete Deck	Min. 0.5-inch ISO or Min. 1-inch ISO CG installed with I.S.O. Stick applied in ribbons spaced 12-inch o.c	Min 0.5-inch ISO HD installed with I.S.O. Stick applied in ribbons spaced 12-inch o.c	TPO	TECH-Bond TPO Bonding Adhesive	-300 (Lim. 9)
R-A-32	Built-Up Roofing over Concrete Deck	-	-	TPO Fleece	I.S.O. Spray R ribbon adhered 4-inch o.c.	-360 (Lim. 9)
R-A-33	Mineral Surfaced BUR over Concrete Deck	Min. 1-inch ISO CG installed with I.S.O. Stick applied in ribbons spaced 12-inch o.c	OPTIONAL Min 0.5-inch ISO HD installed with I.S.O. Stick applied in ribbons spaced 12-inch o.c	TPO	TECH-Bond TPOLVOC Bonding Adhesive or TECH-Bond TPO Bonding Adhesive	-352.5 (Lim. 9)
R-A-34	Mineral Surfaced BUR over Concrete Deck	Min. 0.5-inch ISO installed with I.S.O. Stick applied in ribbons spaced 12-inch o.c	Min 0.5-inch ISO HD installed with I.S.O. Stick applied in ribbons spaced 12-inch o.c	TPO	TECH-Bond TPOLVOC Bonding Adhesive or TECH-Bond TPO Bonding Adhesive	-352.5 (Lim. 9)
R-A-35	Granule Surfaced SBS Modified Roofing over Concrete Deck	-	-	Min. 60mil Duro-TECH TPO Fleece	XR-S ribbon adhered 12-inch o.c.	-392.5 (Lim. 9)

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Recover Assemblies with All Layers Adhered						
System No.	Existing Roof	Base Insulation	Top Insulation	Membrane	Membrane Attachment	MDP (psf)
R-A-36	Granule Surfaced APP Modified Roofing over Concrete Deck	-	-	Min. 60mil Duro-TECH TPO Fleece	XR-S ribbon adhered 12-inch o.c.	-422.5 (Lim. 9)

Recover Assemblies with Adhered Membranes								
System No.	Deck Detail	Insulation or Base	Insulation or Base Attachment	Coverboard	Coverboard Attachment	Membrane	Membrane Attachment	MDP (psf)
R-AM-1	Gypsum Deck	SBS Poly Torch Base; 6-inch wide torch adhered side laps	Trufast Twin Loc-Nail Batten Fastener with min. 1.8" penetration into gypsum deck and Trufast Twin Loc Coiled Batten Bar fastened 6-inch o.c. along the batten bar within the 33.4-inch o.c. spaced, torched side laps	-	-	TPO Fleece	I.S.O. Spray R ribbon adhered 33.4-inch o.c. over base sheet torched side laps; HA; PermaMop	-30 (Lim. 7; Non-HVHZ)
R-AM-2	Min. 420 psi Celcore MF with HS Rheology LWIC over Steel Deck (G33, PW, L6, S18) or Concrete Deck	Channel Venting Base or SBS Base; Min. 3.5-inch wide side laps	Two Piece Impact Nail with min. 1.8" penetration into LWIC attached 9-inch o.c. at the lap and 9-inch o.c. in two equally spaced, staggered rows in the field of the roll	Min. 1-inch ISO or ISO CG	I.S.O. Spray R ribbon adhered 12-inch o.c.	TPO	Membrane Adhesive V	-37.5 (Lim. 7; Non-HVHZ)
						TPO Fleece	I.S.O. Spray R ribbon adhered 12-inch o.c.	
R-AM-3	Min. 310 psi Celcore MF with HS Rheology LWIC over Steel Deck (G33, P, L6, S18) or Concrete Deck	SBS Base Min. 3.4-inch wide side laps	Two Piece Impact Nail with min. 1.8" penetration into LWIC attached 12-inch o.c. at the lap and 12-inch o.c. in two equally spaced, staggered rows in the field of the roll	0.5-inch ISO	I.S.O. Spray R ribbons spaced 12-inch o.c.	TPO Fleece	XR-S, 500-R, or I.S.O. Spray R ribbons spaced 12-inch o.c.; TBSA or 500-S	-45 (Lim. 7)

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Recover Assemblies with Adhered Membranes								
System No.	Deck Detail	Insulation or Base	Insulation or Base Attachment	Coverboard	Coverboard Attachment	Membrane	Membrane Attachment	MDP (psf)
R-AM-4	Min. 3-inch CWF Deck	SBS PolyBase Min. 3.4-inch wide side laps	Two Piece Impact Nail with min. 1.8" penetration into CWF attached 12-inch o.c. at the lap and 12-inch o.c. in two equally spaced, staggered rows in the field of the roll	-	-	TPO Fleece	I.S.O. Spray R ribbon adhered 12-inch o.c.; HA; or PermaMop	-52.5 (Lim. 7)
R-AM-5	Min. 382 psi Celcore MF with HS Rheology LWIC over Steel Deck (G33, P, L6, S18) or Concrete Deck	SBS Base Min. 3.4-inch wide side laps	Two Piece Impact Nail with min. 1.8" penetration into LWIC attached 7-inch o.c. at the lap and 7-inch o.c. in two equally spaced, staggered rows in the field of the roll	SECUROCK	I.S.O. Spray R ribbons spaced 12-inch o.c.	TPO Fleece	I.S.O. Spray R or 500-R ribbon adhered 12-inch o.c.; HA; PermaMop; XR-BA; TBSA or 500-S	-67.5 (Lim. 7)
R-AM-6	Min. 360 psi Celcore MF with HS Rheology LWIC over Steel Deck (G33, P, L6, S18) or Concrete Deck	Channel Venting Base Min. 3.4-inch wide side laps	Two Piece Impact Nail with min. 1.8" penetration into attached 7-inch o.c. at the lap and 7-inch o.c. in two equally spaced, staggered rows in the field of the roll	-	-	TPO Fleece	I.S.O. Spray R ribbon adhered 12-inch o.c.; HA; or PermaMop	-75 (Lim. 7)

Mechanically Fastened Recover Assemblies								
System No.	Deck Detail	Insulation or Base	Insulation or Base Attachment	Coverboard	Coverboard Attachment	Membrane	Membrane Attachment	MDP (psf)
R-M-1	Wood Deck (T15/32, L24, N6)	Min. 0.5-inch Insulation	Preliminarily Secured	-	-	TPO	UltraPly QuickSeam R.M.A Strip attached 8-ft o.c. and secured with All Purpose Fasteners 6-inch o.c. through the Polymer Batten Strip	-30 (Lim. 7; Non-HVHZ)
R-M-2	Steel Deck (G33, L6, S24) or Concrete Deck	OPTIONAL Insulation	Preliminarily Secured	-	-	TPO (120-inch wide)	Attached in-lap 12-inch o.c. with HD Fasteners & Plates; Side laps spaced 114-inch o.c.	-30 (Lim. 7; Non-HVHZ)

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Mechanically Fastened Recover Assemblies								
System No.	Deck Detail	Insulation or Base	Insulation or Base Attachment	Coverboard	Coverboard Attachment	Membrane	Membrane Attachment	MDP (psf)
R-M-3	Steel Deck (G33, P, L6)	OPTIONAL Insulation	Preliminarily Secured	-	-	Min. 60 mil TPO (96-inch wide)	Attached in-lap 12-inch o.c. with HD Plus Fasteners & Plates; Fastener rows 90-inch o.c.	-45 (Lim. 7)
R-M-4	Steel Deck (G80, F1, L6, S24)	OPTIONAL Insulation	Preliminarily Secured	-	-	Min. 60 mil TPO (120-inch wide)	Attached in-lap 12-inch o.c. with HD Plus Fasteners & Plates; Fastener rows 114-inch o.c.	-45 (Lim. 7)
R-M-5	Steel Deck (G80, F1, L6, S24)	OPTIONAL Insulation	Preliminarily Secured	-	-	TPO (96-inch wide)	Attached in-lap 12-inch o.c. with HD Fasteners & Plates; Fastener rows 90-inch o.c.	-45 (Lim. 7)
R-M-6	Wood Deck (T19/32, L24, N6)	DensDeck or SECUROCK	Preliminarily Secured	-	-	Min. 60 mil Duro-TECH TPO (120-inch wide)	Attached in-lap 5-inch o.c. with HD Fasteners & Plates; Fastener rows 114-inch o.c.	-45 (Lim. 7)
R-M-7	Min. 200 psi LWIC over Steel Deck (G33, P, L5, S12)	Insulation	Preliminarily Secured	-	-	TPO (120-inch wide)	Attached in-lap 6-inch o.c. with HD Fasteners & Plates; Fastener rows 114-inch o.c.	-45 (Lim. 7)
R-M-8	Min. 300 psi LWIC over Steel Deck (G33, F1, L5, S12)	Insulation	Preliminarily Secured	-	-	TPO (120-inch wide)	Attached in-lap 6-inch o.c. with HD Fasteners & Plates; Fastener rows 114-inch o.c.	-52.5 (Lim. 7)
R-M-9	Steel Deck (G80, F1, L6, S24) or Concrete Deck	OPTIONAL Insulation	Preliminarily Secured	-	-	TPO (148-inch wide)	Attached in-lap 6-inch o.c. with HD Fasteners & Plates; Fastener rows 142-inch o.c.	-52.5 (Lim. 7)
R-M-10	Steel Deck (G33, F1, L6, S24)	OPTIONAL Insulation	Preliminarily Secured	-	-	Min. 60 mil TPO (148-inch wide)	Attached in-lap 6-inch o.c. with HD Plus Fasteners & Plates; Fastener rows 142-inch o.c.	-60 (Lim. 7)
R-M-11	Steel Deck (G33, P, L6, S24) or Concrete Deck	OPTIONAL Insulation	Preliminarily Secured	-	-	TPO (96-inch wide)	Attached in-lap 6-inch o.c. with HD Fasteners & Plates; Fastener rows 89-inch o.c.; 7-inch wide side laps	-60 (Lim. 7)
R-M-12	Steel Deck (G33, P, L6, S12W) or Concrete Deck	OPTIONAL Insulation	Preliminarily Secured	-	-	Min. 60 mil Duro-TECH TPO (120-inch wide)	Attached in-lap 6-inch o.c. with HD Fasteners & Plates; Fastener rows 114-inch o.c.	-60 (Lim. 7)
R-M-13	Steel Deck (G33, F1, L6, S24) or Concrete Deck	OPTIONAL Insulation	Preliminarily Secured	-	-	Min. 60 mil TPO (120-inch wide)	Attached in-lap 6-inch o.c. with HD Plus Fasteners & Plates; Fastener rows 114-inch o.c.	-67.5 (Lim. 7)
R-M-14	Steel Deck (G33, P, L6) or Concrete Deck	OPTIONAL Insulation	Preliminarily Secured	-	-	Min. 60 mil TPO (120-inch wide)	Attached in-lap 6-inch o.c. with HD Plus Fasteners & Plates; Fastener rows 114-inch o.c.	-67.5 (Lim. 7)
R-M-15	Steel Deck (G80, F2, L6, S24) or Concrete Deck	OPTIONAL Insulation	Preliminarily Secured	-	-	TPO (74-inch wide)	Heavy Duty Fasteners and 0.75" Polymer Batten Strips centered in-lap and fastened 6-inch o.c.; Fastener rows 68-inch o.c.; Min. 5-inch wide heat weld encapsulating plates and fasteners	-82.5 (Lim. 7)

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Mechanically Fastened Recover Assemblies								
System No.	Deck Detail	Insulation or Base	Insulation or Base Attachment	Coverboard	Coverboard Attachment	Membrane	Membrane Attachment	MDP (psf)
R-M-16	Min. 300 psi LWIC over Steel Deck (G33, P, L5, S18) or Concrete Deck	OPTIONAL Insulation	Preliminarily Secured	-	-	TPO Fleece	HD Fasteners & Plates through-fastened 6-inches o.c. in 5-inch wide inverted strips of TPO XR spaced 6-ft o.c.; I.S.O. Spray R ribbon adhered to each base strip	-90 (Lim. 7)
R-M-17	Steel Deck (G80, F2, L6, S24) or Concrete Deck	OPTIONAL Insulation	Preliminarily Secured	-	-	TPO (148-inch wide)	Heavy Duty Plus Fasteners and 0.75" Polymer Batten Strips centered in-lap and fastened 6-inch o.c.; Intermediate row in field of sheet with fasteners 6-inch o.c.; Fastener rows spaced 71-inch o.c.; Min. 5-inch wide heat weld encapsulating plates and fasteners in-lap; 5-inch wide TPO cover strip heat welded 1.5-inch wide on either side of battens in field row	-135 (Lim. 7)

Induction Welded Recover Assemblies						
System No.	Existing Roof	Insulation	Insulation Attachment	Membrane	Membrane Attachment	MDP (psf)
R-W-1	Wood Deck (T19/32, L24)	DensDeck or SECUROCK	DuroBond fastened at a rate of 6 per 4 ft. x 8 ft. board	TPO	Induction welded	-30 (Lim. 7; Non-HVHZ)
R-W-2	Steel Deck or Concrete Deck	Max. 1-inch Insulation (length shall be perpendicular to deck ribs)	DuroBond fastened at a rate of 6 per 4 ft. x 8 ft. board; Plate pattern offset 12-inches from each adjacent row of insulation boards	TPO	Induction welded	-45 (Lim. 7; Non-HVHZ)
R-W-3	Steel Deck (G33, P, L6, S24) or Concrete Deck	Insulation	DuroBond fastened at a rate of 8 per 4 ft. x 8 ft. board	TPO	Induction welded	-45 (Lim. 7)
R-W-4	Existing metal roof having 0.25 to 3/16-inch thick steel purlins at max. 10 ft. o.c.	Min. 1-inch ISO fill layer with Min. 0.25-inch Insulation over fill	Secured to purlins with UltraPly TPO InvisiWeld Plates or Duro-Bond TPO Plates and Purlin Fasteners spaced max. 6-inch o.c. in max. 10 ft. fastener rows	TPO	Induction welded	-52.5 (Lim. 7)
R-W-5	Wood Deck (T19/32, L24)	DensDeck or SECUROCK	DuroBond fastened at a rate of 8 per 4 ft. x 8 ft. board	TPO	Induction welded	-52.5 (Lim. 9)
R-W-6	Wood Deck (T19/32, L24, N6)	DensDeck or SECUROCK	DuroBond fastened at a rate of 12 per 4 ft. x 8 ft. board	TPO	Induction welded	-52.5 (Lim. 7)

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Induction Welded Recover Assemblies						
System No.	Existing Roof	Insulation	Insulation Attachment	Membrane	Membrane Attachment	MDP (psf)
R-W-7	<i>Steel Deck (G33, F1, L6, S30) or Concrete Deck</i>	Max. 1-inch <i>Insulation</i> (length shall be perpendicular to deck ribs)	<i>DuroBond</i> fastened at a rate of 8 per 4 ft. x 8 ft. board; Plate pattern offset 12-inches from each adjacent row of insulation boards	TPO	Induction welded	-60 (Lim. 7)
R-W-8	<i>Steel Deck (G33, F1, L6, S30) or Concrete Deck</i>	Max. 1-inch <i>Insulation</i> (length shall be perpendicular to deck ribs)	<i>DuroBond</i> fastened at a rate of 12 per 4 ft. x 8 ft. board; Plate pattern offset 12-inches from each adjacent row of insulation boards	TPO	Induction welded	-75 (Lim. 7)
R-W-9	<i>Steel Deck (G33, P, L6, S24) or Concrete Deck</i>	Min. 0.5-inch <i>Insulation</i>	<i>DuroBond</i> fastened at a rate of 12 per 4 ft. x 8 ft. board (Alt. Pattern)	TPO	Induction welded	-75 (Lim. 7)
R-W-10	<i>Wood Deck (T7/16, L24, N6) (OSB or plywood for existing construction and new construction in Non-HVHZ)</i>	<i>DensDeck</i>	<i>DuroBond</i> secured fastened 6-inch o.c. in rows max. 96-inch o.c. through deck into wood rafters/trusses a min. of 2-inch	TPO	Induction welded	-75 (Lim. 7)
R-W-11	<i>Steel Deck (G33, F2, L6, S30) or Concrete Deck</i>	Max. 1-inch <i>Insulation</i> (length shall be perpendicular to deck ribs)	<i>DuroBond</i> fastened at a rate of 16 per 4 ft. x 8 ft. board; Plate pattern offset 12-inches from each adjacent row of insulation boards	TPO	Induction welded	-105 (Lim. 7)

Assemblies with All Layers Adhered over Steel Deck (New or Existing)									
System No.	Deck Detail	Vapor Barrier	Base Insulation	Base Insulation	Top Insulation	Top Attachment	Membrane	Membrane Attachment	MDP (psf)
S-A-1	G33, L6	V-Force Vapor Barrier Membrane	Min. 1.5-inch ISO	<i>Insulation Adhesive X</i> ; Ribbons spaced 12-inch o.c.	-	-	TPO	<i>Membrane Adhesive V</i>	-37.5 (Lim. 9; Non-HVHZ)
S-A-2	G33, L5	V-Force Vapor Barrier Membrane	Min. 1.5-inch ISO	<i>Insulation Adhesive X</i> ; Ribbons spaced 12-inch o.c.	-	-	TPO	<i>Membrane Adhesive IV</i>	-45 (Lim. 9; Non-HVHZ)

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Assemblies with All Layers Adhered over Steel Deck (New or Existing)									
System No.	Deck Detail	Vapor Barrier	Base Insulation	Base Insulation	Top Insulation	Top Attachment	Membrane	Membrane Attachment	MDP (psf)
S-A-3	G33, L5	BASEGARD over Min. 0.5-inch DensDeck Prime attached with I.S.O. Stick Ribbons spaced 12-inch o.c.	Min. 0.5-inch ISO	ASTM D 312 Type IV Asphalt	-	-	TPO	Membrane Adhesive IV	-45 (Lim. 9; Non-HVHZ)
S-A-4	G33, L5	-	Min. 1.5-inch ISO	Insulation Adhesive X; Ribbons spaced 12-inch o.c.	-	-	TPO	Membrane Adhesive IV	-45 (Lim. 9; Non-HVHZ)
S-A-5	G33, L5	V-Force Vapor Barrier Membrane over 0.5-inch DensDeck Prime secured with AP Fasteners & Plates at 8 per 4 ft. x 8 ft. board	Min. 0.5-inch ISO	I.S.O. Spray R or 500-R ribbons spaced 12-inch o.c.	DensDeck Prime	I.S.O. Spray R or 500-R ribbons spaced 12-inch o.c.	TPO	Membrane Adhesive V	-45 (Lim. 9; Non-HVHZ)
							TPO Fleece	XR-S, 500-R, or I.S.O. Spray R ribbon adhered 12-inch o.c.; HA; PermaMop; XR-BA; TBSA or 500-S	
S-A-6	G33, L6, P, S24	V-Force Vapor Barrier Membrane	Min. 2-inch ISO	I.S.O. Twin Pack Insulation Adhesive or 500-R; Ribbons spaced 6-inch o.c.	-	-	TPO	Membrane Adhesive IV	-60 (Lim. 9)
S-A-7	G33, L6, P, S24	-	Min. 2-inch ISO	Insulation Adhesive IV; Ribbons spaced 6-inch o.c.	-	-	TPO	Membrane Adhesive IV	-75 (Lim. 9)

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Assemblies with Adhered Membranes over Insulated Steel Deck (New, Existing or Recover)								
System No.	Deck Detail	Base Insulation	Base Insulation Attachment	Top Insulation or Base Sheet	Top Insulation or Base Sheet Attachment	Membrane	Membrane Attachment	MDP (psf)
S-AM-1	G33	Min. 0.5-inch Insulation	Preliminarily Secured or secured with top layer	0.5-inch DensDeck Prime	AP Fasteners & Plates secured 10 per 4 ft. x 8 ft. board	TPO	Membrane Adhesive IV	-30 (Lim. 7; Non-HVHZ)
						TPO Fleece	XR-S, 500-R, or I.S.O. Spray R ribbon adhered 12-inch o.c.; HA; PermaMop; XR-BA; TBSA or 500-S	
S-AM-2	G33	Min. 0.5-inch Insulation	Preliminarily Secured or secured with top layer	3/8-inch SECUROCK	HD Fasteners & Plates secured 8 per 4 ft x 8 ft board	TPO	Membrane Adhesive V	-30 (Lim. 7; Non-HVHZ)
						TPO Fleece	HA; PermaMop; XR-BA; TBSA or 500-S	
S-AM-3	G33, P, L6, S24	Min. 0.5-inch ISO	Preliminarily Secured or secured with top layer	SBS PolyBase	HD Fasteners & Plates secured 12-inch o.c. in the 3-3/8" welded lap	TPO Fleece	I.S.O. Spray R ribbon adhered 12-inch o.c.	-37.5 (Lim. 7; Non-HVHZ)
S-AM-4	G33	Min. 0.5-inch DensDeck Prime primed with SA-WB Primer	AP Fasteners & Plates secured 12 per 4 ft. x 8 ft. board	V-Force Vapor Barrier Membrane self-adhered under Min. 1.5-inch ISO	I.S.O. Twin Pack Insulation Adhesive, Duro-Grip WeatherTite One Step, or 500-R; Ribbons spaced 12-inch o.c.	TPO	Membrane Adhesive IV	-37.5 (Lim. 7; Non-HVHZ)
S-AM-5	G33, L6, F2, S24	OPTIONAL Insulation	Preliminarily Secured or secured with top layer	Min. 2-inch ISO, ISO HD-C or ISO CG	AP Fasteners & Plates secured 12 per 4 ft. x 8 ft. board (Alt. Pattern 2)	TPO	Membrane Adhesive I	-37.5 (Lim. 7; Non-HVHZ)
S-AM-5	G33	Min. 0.5-inch DensDeck Prime primed with SA-WB Primer	AP Fasteners & Plates secured 12 per 4 ft. x 8 ft. board	V-Force Vapor Barrier Membrane self-adhered under Min. 1.5-inch ISO	I.S.O. Stick or 500-R; Ribbons spaced 12-inch o.c.	TPO	Membrane Adhesive IV	-45 (Lim. 7; Non-HVHZ)
S-AM-6	G33	Min 1-inch Insulation	Preliminarily Secured or secured with top layer	Min. 0.5-inch SECUROCK	AP Fasteners & Plates secured 8 per 4 ft. x 8 ft. board	TPO	Membrane Adhesive IV	-45 (Lim. 7; Non-HVHZ)

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Assemblies with Adhered Membranes over Insulated Steel Deck (New, Existing or Recover)								
System No.	Deck Detail	Base Insulation	Base Insulation Attachment	Top Insulation or Base Sheet	Top Insulation or Base Sheet Attachment	Membrane	Membrane Attachment	MDP (psf)
S-AM-7	G33, L5	Min. 0.5-inch Insulation	Preliminarily Secured or secured with top layer	MB Base, SBS Base, or Channel Venting Base	AP Fasteners & Plates secured 12-inch o.c. at the lap and 12-inch o.c. in two staggered, intermediate rows	TPO Fleece	HA or PermaMop	-45 (Lim. 7; Non-HVHZ)
S-AM-8	G33, L5	Min. 0.5-inch Insulation	Preliminarily Secured or secured with top layer	SBS Base 3.4-inch side laps	AP Fasteners & Plates secured 12-inch o.c. at the lap and 12-inch o.c. in two staggered, intermediate rows	TPO Fleece	XR-S or I.S.O. Spray R Ribbons spaced 12" o.c. and located directly over the base sheet fastener rows	-45 (Lim. 7; Non-HVHZ)
S-AM-9	G33, P, L6, S24	OPTIONAL Insulation	Preliminarily Secured or secured with top layer	SECUROCK	AP Fasteners & Plates secured 18 per 4 ft. x 8 ft. board	TPO	Membrane Adhesive V	-45 (Lim. 7)
S-AM-10	G33	Min. 0.5-inch Insulation	Preliminarily Secured or secured with top layer	Min. 0.5-inch DensDeck Prime	AP Fasteners & Plates secured 12 per 4 ft. x 8 ft. board	TPO	Membrane Adhesive V	-45 (Lim. 7; Non-HVHZ)
						TPO Fleece	XR-S or 500-R ribbon adhered 6-inch o.c.; TBSA or 500-S	
S-AM-11	G33	Min. 0.5-inch Insulation	Preliminarily Secured or secured with top layer	Min. 0.375-inch SECUROCK	AP Fasteners & Plates secured 8 per 4 ft. x 8 ft. board	TPO	Membrane Adhesive V	-45 (Lim. 7; Non-HVHZ)
						TPO Fleece	XR-S, 500-R, or I.S.O. Spray R ribbon adhered 12-inch o.c.; HA; PermaMop; XR-BA; TBSA or 500-S	
S-AM-12	G33	Min. 0.5-inch Insulation	Preliminarily Secured or secured with top layer	Min. 0.5-inch SECUROCK	AP Fasteners & Plates secured 8 per 4 ft. x 8 ft. board	TPO Fleece	XR-S, 500-R, or I.S.O. Spray R ribbon adhered 12-inch o.c.; HA; PermaMop; XR-BA; TBSA or 500-S	-45 (Lim. 7; Non-HVHZ)
S-AM-13	G33	Min. 0.5-inch Insulation	Preliminarily Secured or secured with top layer	SECUROCK	HD Fasteners & Plates secured 10 per 4 ft. x 8 ft. board (Alt. Pattern)	TPO	Membrane Adhesive V	-45 (Lim. 7; Non-HVHZ)
						TPO Fleece	XR-BA, PermaMop; HA; or 500-S	
S-AM-14	G33	Min. 1.5-inch Insulation	Preliminarily Secured or secured with top layer	Min. 0.5-inch DensDeck Prime	AP Fasteners & Plates secured 8 per 4 ft. x 8 ft. board	TPO	Membrane Adhesive III	-45 (Lim. 7; Non-HVHZ)
						TPO Fleece	XR-S or 500-R ribbon adhered 4-inch o.c.; TBSA or 500-S	

APPENDIX B

Assemblies with Adhered Membranes over Insulated Steel Deck (New, Existing or Recover)								
System No.	Deck Detail	Base Insulation	Base Insulation Attachment	Top Insulation or Base Sheet	Top Insulation or Base Sheet Attachment	Membrane	Membrane Attachment	MDP (psf)
S-AM-15	G33	Min. 2-inch ISO	Trufast #12 DP Fasteners and Trufast 3" Metal Seam Plates secured 8 per 4 ft x 8 ft. board	DensDeck Prime	I.S.O Twin Pack or 500-R ribbon adhered 12-inch o.c.	TPO	Membrane Adhesive III	-45 (Lim. 7; Non-HVHZ)
						TPO Fleece	XR-S or 500-R ribbon adhered 6-inch o.c.; TBSA or 500-S	
S-AM-16	G33	DensDeck Prime	AP Fasteners & Insulation Plates secured 8 per 4 ft x 8 ft board followed by V-Force	Min. 1.5-inch ISO or Tapered ISO with ISO HD or DensDeck Prime	I.S.O. Stick or 500-R applied in ribbons spaced 12-inch o.c.	TPO	Membrane Adhesive V	-45 (Lim. 7; Non-HVHZ)
						TPO Fleece	XR-S, 500-R, or I.S.O. Spray R ribbon adhered 12-inch o.c.; TBSA or 500-S	
S-AM-17	Min. 24 ga. form deck	OPTIONAL Insulation	Preliminarily Secured or secured with top layer	Min. 2-inch ISO or ISO CG	AP Fasteners & Plates secured 15 per 4 ft. x 8 ft. board	TPO	Membrane Adhesive V	-45 (Lim. 7; Non-HVHZ)
S-AM-18	G33, P, L6, S24	OPTIONAL Insulation	Preliminarily Secured or secured with top layer	Min. 2-inch ISO	AP Fasteners & Plates secured 12 per 4 ft. x 8 ft. board	TPO	Membrane Adhesive V	-45 (Lim.7)
S-AM-19	G33, F1, L6, S24	OPTIONAL Insulation	Preliminarily Secured or secured with top layer	Min. 1-inch ISO CG	AP Fasteners & Plates secured 20 per 4 ft. x 8 ft. board (Alt. Pattern)	TPO	TECH-Bond TPO Bonding Adhesive or TBSA	-52.5 (Lim. 7)
S-AM-20	G33, P or F1, L6, S12	OPTIONAL Insulation	Preliminarily Secured or secured with top layer	DensDeck Prime	AP Fasteners & Plates secured 18 per 4 ft. x 8 ft. board	TPO	Membrane Adhesive V	-52.5 (Lim. 7)
						TPO Fleece	XR-BA, PermaMop; HA; TBSA or 500-S	
S-AM-21	G33, P, L6, S12W	OPTIONAL Insulation	Preliminarily Secured or secured with top layer	Min. 1.5-inch ISO	AP Fasteners & Plates secured 18 per 4 ft. x 8 ft. board	TPO	Membrane Adhesive IV	-60 (Lim. 7)
S-AM-22	G33, P, L6, S24	OPTIONAL Insulation	Preliminarily Secured or secured with top layer	Min. 0.5-inch SECUROCK	AP Fasteners & Plates secured 15 per 4 ft. x 8 ft. board	TPO	Membrane Adhesive IV	-60 (Lim. 7)
						TPO Fleece	XR-BA, PermaMop; HA; or 500-S	
S-AM-23	G33, P, L6, S24	Min. 2-inch ISO or ISO CG	AP Fasteners & Plates secured 18 per 4 ft. x 8 ft. board	Min. 0.5-inch ISO or ISO CG followed by ISO HD	Insulation Adhesive VI Ribbons spaced 6-inch o.c.	TPO	Membrane Adhesive V	-60 (Lim. 7)
						TPO Fleece	XR-S, 500-R, or I.S.O. Spray R ribbon adhered 12-inch o.c.; TBSA or 500-S	

APPENDIX B

Assemblies with Adhered Membranes over Insulated Steel Deck (New, Existing or Recover)								
System No.	Deck Detail	Base Insulation	Base Insulation Attachment	Top Insulation or Base Sheet	Top Insulation or Base Sheet Attachment	Membrane	Membrane Attachment	MDP (psf)
S-AM-24	G33, F1, L6, S24	OPTIONAL Insulation	Preliminarily Secured or secured with top layer	Min. 0.5-inch SECUROCK	AP Fasteners & Plates secured 18 per 4 ft. x 8 ft. board	TPO	Membrane Adhesive IV	-60 (Lim. 7)
						TPO Fleece	XR-BA, PermaMop; HA; or 500-S	
S-AM-25	G33, F1, L6, S24	Min. 1.5-inch ISO	AP Fasteners & Plates secured 18 per 4 ft. x 8 ft. board	Min. 1.5-inch ISO HD-C	Insulation Adhesive VII ribbons spaced 12-inch o.c.	TPO	TECH-Bond TPO Bonding Adhesive or TBSA	-60 (Lim. 7)
S-AM-26	G33, L5	Min 1-inch Insulation	Preliminarily Secured or secured with top layer	Min. 0.5-inch SECUROCK	AP Fasteners & Plates secured 8 per 4 ft. x 8 ft. board	TPO	Membrane Adhesive IV	-62.5 (Lim. 9)
S-AM-27	G33, P, L6, S24	Min. 2-inch ISO or ISO CG	AP Fasteners & Plates secured 18 per 4 ft. x 8 ft. board	ISO HD	Insulation Adhesive VI Ribbons spaced 6-inch o.c.	TPO	Membrane Adhesive V	-67.5 (Lim. 7)
						TPO Fleece	XR-S, 500-R, or I.S.O. Spray R ribbon adhered 12-inch o.c.; TBSA or 500-S	
S-AM-28	G33, P, L6, S24	Min. 2-inch ISO	AP Fasteners & Plates secured 18 per 4 ft. x 8 ft. board	SECUROCK	Insulation Adhesive VII ribbons spaced 6-inch o.c.	TPO	Membrane Adhesive IV	-67.5 (Lim. 7)
						TPO Fleece	XR-BA, PermaMop; HA; or 500-S	
S-AM-29	G33, F1, L6, S24	OPTIONAL Insulation	Preliminarily Secured or secured with top layer	Min. 1.5-inch ISO HD-C	AP Fasteners & Plates secured 15 per 4 ft. x 8 ft. board	TPO	TECH-Bond TPO Bonding Adhesive or TBSA	-67.5 (Lim. 7)
S-AM-30	G33, P, L6, S24	OPTIONAL Insulation	Preliminarily Secured or secured with top layer	Min. 0.5-inch SECUROCK	AP Fasteners & Plates secured 20 per 4 ft. x 8 ft. board	TPO	Membrane Adhesive IV	-67.5 (Lim. 7)
						TPO Fleece	XR-BA, PermaMop; HA; or 500-S	
S-AM-31	G33, F1, L6, S12	OPTIONAL Insulation	Preliminarily Secured or secured with top layer	Min. 0.5-inch DensDeck Prime	AP Fasteners & Plates secured 18 per 4 ft. x 8 ft. board	TPO	Membrane Adhesive III	-67.5 (Lim. 7)
						TPO Fleece	XR-S, 500-R, ribbon adhered 4-inch o.c.; TBSA or 500-S	
S-AM-32	G33, F1, L6, S24	OPTIONAL Insulation	Preliminarily Secured or secured with top layer	Min. 1.5-inch ISO HD-C	AP Fasteners & Plates secured 18 per 4 ft. x 8 ft. board	TPO	TECH-Bond TPO Bonding Adhesive or TBSA	-75 (Lim. 7)
S-AM-33	G33, F1, L6, S24	OPTIONAL Insulation	Preliminarily Secured or secured with top layer	Min. 2-inch ISO	AP Fasteners & Plates secured 20 per 4 ft. x 8 ft. board	TPO	TECH-Bond TPO Bonding Adhesive or TBSA	-75 (Lim. 7)
S-AM-34	G33, F1, L6, S12	OPTIONAL Insulation	Preliminarily Secured or secured with top layer	Min. 0.5-inch DensDeck Prime	AP Fasteners & Plates secured 20 per 4 ft. x 8 ft. board	TPO	Membrane Adhesive III	-75 (Lim. 7)
						TPO Fleece	XR-S, 500-R, ribbon adhered 4-inch o.c.; or 500-S	

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Assemblies with Adhered Membranes over Insulated Steel Deck (New, Existing or Recover)								
System No.	Deck Detail	Base Insulation	Base Insulation Attachment	Top Insulation or Base Sheet	Top Insulation or Base Sheet Attachment	Membrane	Membrane Attachment	MDP (psf)
S-AM-35	G33, F1, L6, S24	Min. 2-inch ISO	HD Fasteners & Plates secured 20 per 4 ft. x 8 ft. board	ISO HD	I.S.O. Stick, I.S.O. Spray R or I.S.O. Twin Pack ribbon adhered 6-inch o.c.	TPO Fleece	XR-S, 500-R, ribbon adhered 6-inch o.c.; or 500-S	-82.5 (Lim. 7)
S-AM-36	G33, P, L6, S24	OPTIONAL Insulation	Preliminarily Secured or secured with top layer	Min. 0.5-inch SECUROCK	AP Fasteners & Plates secured 18 per 4 ft. x 8 ft. board	TPO	TECH-Bond TPO Bonding Adhesive or TBSA	-82.5 (Lim. 7)
S-AM-37	G33, F1, L6, S24	Min. 2-inch ISO or ISO CG	AP Fasteners & Plates secured 32 per 4 ft x 8 ft board	Min. 0.5-inch DensDeck Prime	I.S.O. Spray R or 500-R ribbon adhered 12-inch o.c.	TPO Fleece	I.S.O. Spray R or 500-R ribbon adhered 12-inch o.c.; or 500-S	-82.5 (Lim. 7)
S-AM-38	G33, F2, L6, S12	Min. 1.5-inch Insulation	Preliminarily Secured or secured with top layer	Min. 0.5-inch DensDeck Prime	AP Fasteners & Plates secured 32 per 4 ft. x 8 ft. board	TPO	Membrane Adhesive III	-82.5 (Lim. 7)
						TPO Fleece	XR-S, 500-R, ribbon adhered 4-inch o.c.; or 500-S	
S-AM-39	G33, F1, L6, S24	OPTIONAL Insulation	Preliminarily Secured or secured with top layer	Min. 1.5-inch ISO	AP Fasteners & Plates secured 24 per 4 ft. x 8 ft. board	TPO	TECH-Bond TPO Bonding Adhesive at a rate 60 ft ² /gal	-90 (Lim. 7)
S-AM-40	G80, F1, L6, S24	Min. 2-inch ISO or ISO CG	AP Fasteners & Plates secured 32 per 4 ft x 8 ft board	Min. 0.5-inch DensDeck Prime	I.S.O. Spray R ribbon adhered 12-inch o.c.	TPO Fleece	I.S.O. Spray R ribbon adhered 12-inch o.c.; or 500-S	-97.5 (Lim. 7)
S-AM-41	G80, F2, L6, S12	Min. 1.5-inch Insulation	Preliminarily Secured or secured with top layer	Min. 0.5-inch DensDeck Prime	AP Fasteners & Plates secured 32 per 4 ft. x 8 ft. board	TPO	Membrane Adhesive III	-127.5 (Lim. 7)
						TPO Fleece	XR-S, 500-R, ribbon adhered 4-inch o.c.; or 500-S	
S-AM-42	G80, F2, L6, S12	OPTIONAL Insulation	Preliminarily Secured or secured with top layer	Min. 2-inch ISO 95+ GL	AP Fasteners & Plates secured 32 per 4 ft x 8 ft board	TPO	TECH-Bond TPO Bonding Adhesive	-142.5 (Lim. 7)

Mechanically Fastened Assemblies over Steel Deck (New or Existing)									
System No.	Deck Detail	Air/Vapor Barrier	Base Insulation	Base Insulation Attachment	Top Insulation	Top Insulation Attachment	Membrane	Membrane Attachment	MDP (psf)
S-M-1	G33, L6	-	OPTIONAL Insulation	Preliminarily Secured or Secured with Top Layer	OPTIONAL Cover Board	Preliminarily Secured	TPO (120-inch wide)	Attached in-lap 12-inch o.c. with HD Fasteners & Plates; Side laps spaced 114-inch o.c.	-30 (Lim. 7; Non-HVHZ)

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Mechanically Fastened Assemblies over Steel Deck (New or Existing)									
System No.	Deck Detail	Air/Vapor Barrier	Base Insulation	Base Insulation Attachment	Top Insulation	Top Insulation Attachment	Membrane	Membrane Attachment	MDP (psf)
S-M-2	G33, F1, L6, S24	-	Min. 1.5-inch Insulation	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	TPO	UltraPly QuickSeam R.M.A Strip attached 72-inch o.c. and secured with Polymer Batten Strip and Heavy-Duty fasteners spaced 12-inch o.c. along the batten	-37.5 (Lim. 7; Non-HVHZ)
S-M-3	G80, F1, L6, S24	-	Min. 1.5-inch Insulation	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	Min. 60 mil Duro-TECH TPO (120-inch wide)	Attached in-lap 12-inch o.c. with <i>HD Fasteners & Plates</i> ; Side laps spaced 114-inch o.c.	-37.5 (Lim. 7; Non-HVHZ)
S-M-4	G80, F1, L6, S24	-	Min. 1.5-inch Insulation	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	TPO	UltraPly QuickSeam R.M.A Strip attached 114-inch o.c. and secured with <i>HD Fasteners & Plates</i> spaced 12-inch o.c.	-37.5 (Lim. 7; Non-HVHZ)
S-M-5	G33	-	Min. 1.5-inch Insulation	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	TPO (48-inch wide)	Attached in-lap 24-inch o.c. with <i>HD Fasteners & Plates</i> ; Fastener rows 42-inch o.c.	-45 (Lim. 7; Non-HVHZ)
S-M-6	G33	-	Min. 1.5-inch Insulation	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	TPO	UltraPly QuickSeam R.M.A Strip attached 48-inch o.c. and secured with <i>HD Fasteners & Plates</i> spaced 24-inch o.c.	-45 (Lim. 7; Non-HVHZ)
S-M-7	G33	-	Min. 1.5-inch Insulation	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	TPO	UltraPly QuickSeam R.M.A Strip attached 48-inch o.c. and secured with Polymer Batten Strip and Heavy-Duty fasteners spaced 24-inch o.c. along the batten	-45 (Lim. 7; Non-HVHZ)

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Mechanically Fastened Assemblies over <i>Steel Deck</i> (New or Existing)									
System No.	Deck Detail	Air/Vapor Barrier	Base Insulation	Base Insulation Attachment	Top Insulation	Top Insulation Attachment	Membrane	Membrane Attachment	MDP (psf)
S-M-8	G33, F1, L6, S24	-	Min. 1.5-inch Insulation	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	TPO (120-inch wide)	Attached in-lap 12-inch o.c. with <i>HD Fasteners & Plates</i> ; Fastener rows spaced 114-inch o.c.; UltraPly QuickSeam R.M.A Strip attached evenly spaced between side laps and secured with Polymer Batten Strip and Heavy-Duty fasteners spaced 12-inch o.c. along the batten	-45 (Lim. 7)
S-M-9	G33, P, L6	-	Min. 0.5-inch Insulation	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	Min. 60 mil TPO (96-inch wide)	Attached in-lap 12-inch o.c. with <i>HD Plus Fasteners & Plates</i> ; Fastener rows 90-inch o.c.	-45 (Lim. 7)
S-M-10	G80, F1, L6, S24	-	Min. 1.5-inch Insulation	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	Min. 60 mil TPO (120-inch wide)	Attached in-lap 12-inch o.c. with <i>HD Plus Fasteners & Plates</i> ; Fastener rows 114-inch o.c.	-45 (Lim. 7)
S-M-11	G80, F1, L6, S24	-	Min. 1.5-inch Insulation	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	TPO (96-inch wide)	Attached in-lap 12-inch o.c. with <i>HD Fasteners & Plates</i> ; Fastener rows 90-inch o.c.	-45 (Lim. 7)
S-M-12	G33, F1, L6, S24	-	Min. 0.5-inch Insulation	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	TPO (96-inch wide)	Attached in-lap 6-inch o.c. with <i>HD Fasteners & Plates</i> ; Fastener rows 90-inch o.c.	-45 (Lim. 7)
S-M-13	G33, F1 or P, L6, S24	-	Min. 1-inch Insulation	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	Duro-TECH TPO (148-inch wide)	Attached in-lap 6-inch o.c. with <i>HD Fasteners & Plates</i> ; Fastener rows 142-inch o.c.	-45 (Lim. 7)
S-M-14	G33, F1, L6, S24	-	Min. 1.5-inch Insulation	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	TPO	UltraPly QuickSeam R.M.A Strip attached 72-inch o.c. and secured with <i>HD Fasteners & Plates</i> spaced 12-inch o.c.	-45 (Lim. 7)

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Mechanically Fastened Assemblies over <i>Steel Deck</i> (New or Existing)									
System No.	Deck Detail	Air/Vapor Barrier	Base Insulation	Base Insulation Attachment	Top Insulation	Top Insulation Attachment	Membrane	Membrane Attachment	MDP (psf)
S-M-15	G80, F1, L6, S24	-	Min. 1.5-inch Insulation	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	Min. 60 mil TPO	UltraPly QuickSeam R.M.A Strip attached 114-inch o.c. and secured with <i>HD Plus Fasteners & Plates</i> spaced 12-inch o.c.	-45 (Lim. 7)
S-M-16	G80, F1, L6, S24	-	Min. 1.5-inch Insulation	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	TPO (148-inch wide)	Attached in-lap 6-inch o.c. with <i>HD Fasteners & Plates</i> ; Fastener rows 142-inch o.c.	-52.5 (Lim. 7)
S-M-17	G33, P, L6, S24	-	Insulation	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	TPO (96-inch wide)	Attached in-lap 6-inch o.c. with <i>HD Fasteners & Plates</i> ; Fastener rows 90-inch o.c.	-52.5 (Lim. 7)
S-M-18	G33, P, L6, S24	-	Min. 1-inch Insulation	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	Min. 60 mil TPO (148-inch wide)	Attached in-lap 6-inch o.c. with <i>HD Fasteners & Plates</i> ; Fastener rows 142-inch o.c.	-52.5 (Lim. 7)
S-M-19	G33, L6, HXH1, HS24	-	Min. 0.5-inch Insulation	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	Min. 60 mil TPO (148-inch wide)	Attached in-lap 6-inch o.c. with <i>HD Fasteners & Plates</i> ; Fastener rows 142-inch o.c.	-52.2 (Lim. 7)
S-M-20	G33, P, L6, S24	-	Min. 0.5-inch Insulation	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	TPO (120-inch wide)	Attached in-lap 6-inch o.c. with <i>HD Fasteners & Plates</i> ; Fastener rows 114-inch o.c.	-52.5 (Lim. 7)
S-M-21	G33, F1, L6, S24	-	Min. 1.5-inch Insulation	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	Min. 60 mil TPO (60-inch wide)	Attached in-lap 12-inch o.c. with <i>HD Fasteners & Plates</i> ; Fastener rows 54-inch o.c.	-52.5 (Lim. 7)
S-M-22	G33, P, L6, S24	-	Min. 0.5-inch Insulation	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	Min. 60 mil TPO (120-inch wide)	Attached in-lap 6-inch o.c. with <i>HD Fasteners & Plates</i> ; Fastener rows 114-inch o.c.	-60 (Lim. 7)
S-M-23	G33, L6, HXH1, HS24	-	Min. 0.5-inch Insulation	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	Min. 60 mil Duro-TECH TPO (120-inch wide)	Attached in-lap 6-inch o.c. with <i>HD Fasteners & Plates</i> ; Fastener rows 114-inch o.c.	-60 (Lim. 7)

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Mechanically Fastened Assemblies over Steel Deck (New or Existing)									
System No.	Deck Detail	Air/Vapor Barrier	Base Insulation	Base Insulation Attachment	Top Insulation	Top Insulation Attachment	Membrane	Membrane Attachment	MDP (psf)
S-M-24	G33, F1, L6, S24	-	Min. 1.5-inch Insulation	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	Min. 60 mil TPO (148-inch wide)	Attached in-lap 6-inch o.c. with <i>HD Plus Fasteners & Plates</i> ; Fastener rows 142-inch o.c.	-60 (Lim. 7)
S-M-25	G33, P, L6, S24	-	Min. 0.5-inch Insulation	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	TPO (96-inch wide)	Attached in-lap 6-inch o.c. with <i>HD Fasteners & Plates</i> ; Fastener rows 89-inch o.c.; 7-inch wide side lap	-60 (Lim. 7)
S-M-26	G33, F1, L6, S12	-	Min. 0.5-inch Insulation	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	Min. 60 mil Duro-TECH TPO (120-inch wide)	Attached in-lap 6-inch o.c. with <i>HD Fasteners & Plates</i> ; Fastener rows 114-inch o.c.	-60 (Lim. 7)
S-M-27	G33, P, L6, S24	-	Min. 0.5-inch Insulation	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	Min. 60 mil TPO (96-inch wide)	Attached in-lap 6-inch o.c. with <i>HD Fasteners & Plates</i> ; Fastener rows 89-inch o.c.	-60 (Lim. 7)
S-M-28	G33, F, L6, S24	-	Min. 2-inch Insulation	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	Min. 60 mil TPO (60-inch wide)	Attached in-lap 12-inch o.c. with <i>HD Plus Fasteners & Plates</i> ; Fastener rows 54-inch o.c.	-60 (Lim. 7)
S-M-29	G33, F1, L6, S24	-	Min. 1.5-inch Insulation	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	Min. 60 mil TPO (120-inch wide)	Attached in-lap 6-inch o.c. with <i>HD Plus Fasteners & Plates</i> ; Fastener rows 114-inch o.c.	-67.5 (Lim. 7)
S-M-30	G33, P, L6, S24	6 mil polyethylene sheet; 6-inch wide laps sealed with duct tape	Min. 2-inch Insulation	<i>AP Fasteners & Plates</i> secured 8 per 4 ft. x 8 ft. board	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	TPO (96-inch wide)	Attached in-lap 6-inch o.c. with <i>HD Fasteners & Plates</i> ; Fastener rows 89-inch o.c.	-67.5 (Lim. 7)
S-M-31	G33, P, L6	-	Min. 0.5-inch Insulation	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	Min. 60 mil TPO (120-inch wide)	Attached in-lap 6-inch o.c. with <i>HD Plus Fasteners & Plates</i> ; Fastener rows 114-inch o.c.	-67.5 (Lim. 7)

APPENDIX B

Mechanically Fastened Assemblies over Steel Deck (New or Existing)									
System No.	Deck Detail	Air/Vapor Barrier	Base Insulation	Base Insulation Attachment	Top Insulation	Top Insulation Attachment	Membrane	Membrane Attachment	MDP (psf)
S-M-32	G33, F1, L6, S24	-	Min. 0.5-inch Insulation	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	TPO (120-inch wide)	Attached in-lap 6-inch o.c. with Heavy-Duty Plus Fasteners and Polymer Batten Strips; Fastener rows 114-inch o.c.; Min. 5-inch wide heat weld encapsulating batten and fasteners	-75 (Lim. 7)
S-M-33	G80, F1, L6, S24	-	Min. 0.5-inch Insulation	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	TPO (120-inch wide)	Attached in-lap 6-inch o.c. with Heavy-Duty Fasteners and Coiled Metal Batten Bar; Fastener rows 114-inch o.c.; Min. 5-inch wide heat weld encapsulating batten and fasteners	-75 (Lim. 7)
S-M-34	G80, F2, L6, S24	-	Min. 1.5-inch Insulation	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	TPO (74-inch wide)	Heavy Duty Fasteners and 0.75" Polymer Batten Strips centered in-lap and fastened 6-inch o.c.; Fastener rows 68-inch o.c.; Min. 5-inch wide heat weld encapsulating plates and fasteners	-82.5 (Lim. 7)
S-M-35	G80, F1, L6, S24	-	Min. 0.5-inch Insulation	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	Min. 60 mil TPO (96-inch wide)	Attached in-lap 6-inch o.c. with <i>HD Plus Fasteners & Plates</i> ; Fastener rows 90-inch o.c.; Min. 5-inch wide heat weld encapsulating plates and fasteners	-82.5 (Lim. 7)
S-M-36	G80, F1, L6, S24	-	Min. 0.5-inch Insulation	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	TPO (96-inch wide)	Attached in-lap 6-inch o.c. with Heavy-Duty Plus Fasteners and Coiled Metal Batten Bar;; Fastener rows 90-inch o.c.; Min. 5-inch wide heat weld encapsulating batten and fasteners	-97.5 (Lim. 7)

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Mechanically Fastened Assemblies over <i>Steel Deck</i> (New or Existing)									
System No.	Deck Detail	Air/Vapor Barrier	Base Insulation	Base Insulation Attachment	Top Insulation	Top Insulation Attachment	Membrane	Membrane Attachment	MDP (psf)
S-M-37	G33, F1, L6, S24	-	Min. 0.5-inch Insulation	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	Min. 60 mil Duro-TECH TPO (96-inch wide)	Attached in-lap 6-inch o.c. with <i>HD Plus Fasteners & Plates</i> ; Fastener rows 90-inch o.c.; Min. 5-inch wide heat weld encapsulating plates and fasteners	-112.5 (Lim. 7)
S-M-38	G80, F2, L6, S24	-	Min. 1.5-inch Insulation	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>Preliminarily Secured</i>	TPO (148-inch wide)	Heavy Duty Plus Fasteners and 0.75" Polymer Batten Strips centered in-lap and fastened 6-inch o.c.; Intermediate row in field of sheet with fasteners 6-inch o.c.; Fastener rows spaced 71-inch o.c.; Min. 5-inch wide heat weld encapsulating plates and fasteners in-lap; 5-inch wide TPO cover strip heat welded 1.5-inch wide on either side of battens in field row	-135 (Lim. 7)

Induction Welded Assemblies over <i>Steel Deck</i> (New or Existing)									
System No.	Deck Detail	Vapor Barrier	Base Insulation	Base Insulation Attachment	Top Insulation	Top Insulation Attachment	Membrane	Membrane Attachment	MDP (psf)
S-W-1	G33, L6,P, S24	-	Min. 1-inch Insulation	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>DuroBond</i> fastened 6-inch o.c. in rows spaced 144-inch o.c.	TPO	Induction welded	-37.5 (Lim. 7; Non-HVHZ)
S-W-2	G33, L5	-	Min. 1.5-inch Insulation	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>DuroBond</i> fastened at a rate of 6 per 4 ft. x 8 ft. board; Plate pattern offset 12-inches from each adjacent row of insulation boards; Boards set with length perpendicular to deck ribs	TPO	Induction welded	-45 (Lim. 7; Non-HVHZ)

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Induction Welded Assemblies over Steel Deck (New or Existing)									
System No.	Deck Detail	Vapor Barrier	Base Insulation	Base Insulation Attachment	Top Insulation	Top Insulation Attachment	Membrane	Membrane Attachment	MDP (psf)
S-W-3	G33, P, L6, S24	-	Min. 1-inch Insulation	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>DuroBond</i> fastened at a rate of 8 per 4 ft. x 8 ft. board	TPO	Induction welded	-45 (Lim. 7)
S-W-4	G80, F2, L7, S24	-	Min. 1-inch Insulation	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>DuroBond</i> fastened 12" o.c. in rows 6-ft o.c. over <i>Preliminarily Secured</i> board	Min. 60 mil Duro-TECH TPO	Induction welded	-45 (Lim. 7)
S-W-5	G33, F1, L6, S30	-	Min. 1.5-inch Insulation	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>DuroBond</i> fastened at a rate of 8 per 4 ft. x 8 ft. board; Plate pattern offset 12-inches from each adjacent row of insulation boards; Boards set with length perpendicular to deck ribs	TPO	Induction welded	-60 (Lim. 7)
S-W-6	G80, F2, L7, S24	-	Min. 1-inch Insulation	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>DuroBond</i> fastened at a rate of 8 per 4 ft. x 8 ft. board	Min. 60 mil Duro-TECH TPO	Induction welded	-60 (Lim. 7)
S-W-7	G33, L6, HXE1, HS24	-	Min. 1-inch Insulation	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>DuroBond</i> fastened 6-inch o.c. in rows spaced 144-inch o.c.	TPO	Induction welded	-60 (Lim. 7)
S-W-8	G33, F1, L6, S30	-	Min. 1.5-inch Insulation	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>DuroBond</i> fastened at a rate of 12 per 4 ft. x 8 ft. board; Plate pattern offset 12-inches from each adjacent row of insulation boards; Boards set with length perpendicular to deck ribs	TPO	Induction welded	-75 (Lim. 7)
S-W-9	G33, P, L6, S24	-	Min. 0.5-inch Insulation	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>DuroBond</i> fastened at a rate of 12 per 4 ft. x 8 ft. board (Alt. Pattern)	TPO	Induction welded	-75 (Lim. 7)
S-W-10	G33, L6, HXE1, HS24	-	Min. 1-inch Insulation	<i>Preliminarily Secured</i> or secured with top layer	OPTIONAL Cover Board	<i>DuroBond</i> fastened 6-inch o.c. in rows spaced 72-inch o.c.	TPO	Induction welded	-82.5 (Lim. 7)

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Induction Welded Assemblies over <i>Steel Deck</i> (New or Existing)									
System No.	Deck Detail	Vapor Barrier	Base Insulation	Base Insulation Attachment	Top Insulation	Top Insulation Attachment	Membrane	Membrane Attachment	MDP (psf)
S-W-11	G3, F2, L6, S12	-	Min. 1.5-inch Insulation	Preliminarily Secured or secured with top layer	OPTIONAL Cover Board	DuroBond fastened at a rate of 16 per 4 ft. x 8 ft. board; Plate pattern offset 12-inches from each adjacent row of insulation boards; Boards set with length perpendicular to deck ribs	TPO	Induction welded	-105 (Lim. 7)

Assemblies with All Layers Adhered over <i>Wood Deck</i> (New or Existing)								
System No.	Deck Detail	Base Insulation	Base Insulation Attachment	Top Insulation	Top Insulation Attachment	Membrane	Membrane Attachment	MDP (psf)
W-A-1	T15/32P	OPTIONAL DensDeck Prime	I.S.O. Stick; ribbons 12-inch o.c.	Min. 1-inch ISO CG or ISO	I.S.O. Stick; ribbons 12-inch o.c.	TPO	Membrane Adhesive IV	-45 (Lim. 9; Non-HVHZ)
W-A-2	T7/160 or T15/32P, L24	DensDeck Prime	I.S.O. Twin Pack; ribbons 12-inch o.c.	-	-	TPO TPO Fleece	Membrane Adhesive IV XR-BA, PermaMop; HA; or 500-S	-45 (Lim. 9; Non-HVHZ)
W-A-3	T19/320, L24, N6/6	DensDeck Prime or SECUROCK	I.S.O. Fix II; ribbons 6-inch o.c.	-	-	TPO TPO Fleece	Membrane Adhesive V PermaMop; HA	-67.5 (Lim. 9; Non-HVHZ)
W-A-4	T7/160, L24, N6/6	DensDeck Prime	I.S.O. Spray R ribbons spaced 12-inch o.c.	-	-	TPO Fleece	I.S.O. Spray R or 500-R ribbons spaced 12-inch o.c.; or 500-S	-75 (Lim. 9; Non-HVHZ)
W-A-5	T15/32P, L24, N6/6	0.5-inch DensDeck Prime	I.S.O. Fix II; ribbons 6-inch o.c.	-	-	TPO TPO Fleece	Membrane Adhesive V XR-BA, PermaMop; HA; or 500-S	-75 (Lim. 9; Non-HVHZ)
W-A-6	T15/32P, L24, N6/6	0.5-inch DensDeck Prime	I.S.O. Spray R ribbons spaced 6-inch o.c.	-	-	TPO TPO Fleece	Membrane Adhesive II XR-BA, PermaMop; HA; or 500-S	-90 (Lim. 9; Non-HVHZ)

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Assemblies with All Layers Adhered over <i>Wood Deck (New or Existing)</i>								
System No.	Deck Detail	Base Insulation	Base Insulation Attachment	Top Insulation	Top Insulation Attachment	Membrane	Membrane Attachment	MDP (psf)
W-A-7	T7/160, L24, N6/6	SECUROCK	I.S.O. Spray R ribbons spaced 6-inch o.c.	-	-	TPO Fleece	I.S.O. Spray R or 500-R ribbons spaced 6-inch o.c.; or 500-S	-90 (Lim. 9; Non-HVHZ)

Assemblies with Adhered Membranes over Insulated <i>Wood Deck (New, Existing or Recover)</i>								
System No.	Deck Detail	Base Insulation or Base Sheet	Base Insulation or Base Sheet Attachment	Top Insulation	Top Insulation Attachment	Membrane	Membrane Attachment	MDP (psf)
W-AM-1	T7/160	OPTIONAL Insulation	Preliminarily Secured or secured with top layer	SECUROCK	HD Fasteners & Plates secured at a rate of 10 per 4-ft x 8-ft board (Alt. Pattern)	TPO	Membrane Adhesive V	-30 (Lim. 7; Non-HVHZ)
						TPO Fleece	XR-BA, PermaMop; HA; or 500-S	
W-AM-2	T15/32P, L24	OPTIONAL Insulation	Preliminarily Secured or secured with top layer	Min. 0.5-inch SECUROCK	AP Fasteners & Plates secured at a rate of 8 per 4-ft x 8-ft board	TPO	Membrane Adhesive V	-37.5 (Lim. 7; Non-HVHZ)
						TPO Fleece	XR-BA, PermaMop; HA; or 500-S	
W-AM-3	T7/160 or T15/32P, L24	OPTIONAL Insulation	Preliminarily Secured or secured with top layer	DensDeck	AP Fasteners & Plates secured at a rate of 12 per 4-ft x 8-ft board	TPO Fleece	XR-S, 500-R, or I.S.O. Spray R ribbon adhered 12-inch o.c.; HA; PermaMop; XR-BA; TBSA or 500-S	-37.5 (Lim. 7; Non-HVHZ)
W-AM-4	T7/160 or T15/32P, L24	SBS Base	32 ga. x 1-5/8" tin tabs and 12 ga. x 1.25" ring shank nails 6-inch o.c. in 3-inch lap and 6-inch o.c. in three (3) staggered rows equally spaced between laps	-	-	TPO Fleece	XR-S or I.S.O. Spray R; ribbons spaced 12-inch o.c.; or 500-S	-37.5 (Lim. 7; Non-HVHZ)
W-AM-5	T19/32P, L24	OPTIONAL Insulation	Preliminarily Secured or secured with top layer	ISO HD	AP Fasteners & Plates secured at a rate of 12 per 4-ft x 8-ft board	Min. 60 mil Duro-TECH TPO	Membrane Adhesive V	-37.5 (Lim. 7; Non-HVHZ)

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Assemblies with Adhered Membranes over Insulated Wood Deck (New, Existing or Recover)								
System No.	Deck Detail	Base Insulation or Base Sheet	Base Insulation or Base Sheet Attachment	Top Insulation	Top Insulation Attachment	Membrane	Membrane Attachment	MDP (psf)
W-AM-6	T7/160, L24, N6/6	OPTIONAL Insulation	Preliminarily Secured or secured with top layer	Min. 1-inch ISO CG	AP Fasteners & Plates secured at a rate of 18 per 4-ft x 8-ft board	TPO	Membrane Adhesive V	-37.5 (Lim. 7; Non-HVHZ)
						TPO Fleece	XR-S, 500-R, ribbon adhered 6-inch o.c. or I.S.O. Spray R ribbon adhered 12-inch o.c.; TBSA or 500-S	
W-AM-7	T19/32P, L24	OPTIONAL Insulation	Preliminarily Secured or secured with top layer	2-inch ISO CG	AP Fasteners & Plates secured at a rate of 8 per 4-ft x 8-ft board	Min. 60 mil Duro-TECH TPO	Membrane Adhesive V	-42.5 (Lim. 7; Non-HVHZ)
W-AM-8	T15/32P, L24, N12/6	OPTIONAL Insulation	Preliminarily Secured or secured with top layer	SECUROCK	AP Fasteners & Plates secured at a rate of 20 per 4-ft x 8-ft board	TPO	Membrane Adhesive V	-45 (Lim. 7)
						TPO Fleece	XR-S, 500-R, or I.S.O. Spray R ribbon adhered 12-inch o.c.; HA; PermaMop; XR-BA; TBSA or 500-S	
W-AM-9	T7/160 or T15/32P, L24	OPTIONAL Insulation	Preliminarily Secured or secured with top layer	DensDeck Prime or SECUROCK	AP Fasteners & Plates secured at a rate of 12 per 4-ft x 8-ft board	TPO	Membrane Adhesive V	-45 (Lim. 7; Non-HVHZ)
						TPO Fleece	XR-S, 500-R, or I.S.O. Spray R ribbon adhered 12-inch o.c.; HA; PermaMop; XR-BA; TBSA or 500-S	
W-AM-10	T15/32P, L24	OPTIONAL Insulation	Preliminarily Secured or secured with top layer	Min. 0.5-inch SECUROCK	AP Fasteners & Plates secured at a rate of 8 per 4 ft. x 8 ft. board	TPO	Membrane Adhesive V	-45 (Lim. 7; Non-HVHZ)
						TPO Fleece	XR-S, 500-R, or I.S.O. Spray R ribbon adhered 12-inch o.c.; HA; PermaMop; XR-BA; TBSA or 500-S	
W-AM-11	T15/32P, L24, N6/6	OPTIONAL Insulation	Preliminarily Secured or secured with top layer	Min. 1-inch ISO CG	AP Fasteners & Plates secured at a rate of 20 per 4-ft x 8-ft board	TPO	TECH-Bond TPO Bonding adhesive or TBSA	-45 (Lim. 7)
W-AM-12	T15/32, L24, N6/6	OPTIONAL Insulation	Preliminarily Secured or secured with top layer	DensDeck Prime	AP Fasteners & Plates secured at a rate of 18 per 4-ft x 8-ft board	TPO	Membrane Adhesive V	-45 (Lim. 7)
						TPO Fleece	XR-S, 500-R, or I.S.O. Spray R ribbon adhered 12-inch o.c.; HA; PermaMop; XR-BA; TBSA or 500-S	

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Assemblies with Adhered Membranes over Insulated Wood Deck (New, Existing or Recover)								
System No.	Deck Detail	Base Insulation or Base Sheet	Base Insulation or Base Sheet Attachment	Top Insulation	Top Insulation Attachment	Membrane	Membrane Attachment	MDP (psf)
W-AM-13	T15/32P, L24, N6/6	OPTIONAL Insulation	Preliminarily Secured or secured with top layer	SBS Base-P	AP Fasteners & Plates 12-inch o.c. in 3-3/8" lap and 12-inch o.c. in two (2) evenly spaced staggered rows	TPO Fleece	I.S.O. Spray R ribbon adhered 12-inch o.c	-45 (Lim. 7)
W-AM-14	T15/32P, L24, N6/6	OPTIONAL Insulation	Preliminarily Secured or secured with top layer	Min. 1.5-inch ISOGARD HD Composite	AP Fasteners & Plates secured at a rate of 12 per 4-ft x 8-ft board	TPO	Membrane Adhesive V	-45 (Lim. 7)
						TPO Fleece	XR-S, 500-R, or I.S.O. Spray R ribbon adhered 12-inch o.c.; TBSA or 500-S	
W-AM-15	T7/160, L24, N6/6	OPTIONAL Insulation	Preliminarily Secured or secured with top layer	SECUROCK, DensDeck Prime	AP Fasteners & Plates secured at a rate of 20 per 4-ft x 8-ft board	TPO Fleece	HA; PermaMop; XR-BA; or 500-S	-45 (Lim. 7; Non-HVHZ)
W-AM-16	T7/160, L24, N6/6	OPTIONAL Insulation	Preliminarily Secured or secured with top layer	DensDeck Prime, SECUROCK, Min. 1-inch ISO CG or Min. 1.5-inch ISOGARD HD Composite	AP Fasteners & Plates secured at a rate of 20 per 4-ft x 8-ft board	TPO	Membrane Adhesive V	-45 (Lim. 7; Non-HVHZ)
						TPO Fleece	XR-S, 500-R, ribbon adhered 6-inch o.c. or I.S.O. Spray R ribbon adhered 12-inch o.c.; or 500-S	
W-AM-17	T7/160, L24, N6/6	OPTIONAL Insulation	Preliminarily Secured or secured with top layer	Min. 0.5-inch DensDeck Prime or Min. 0.5-inch SECUROCK	AP Fasteners & Plates secured at a rate of 18 per 4-ft x 8-ft board	TPO Fleece	HA; PermaMop; XR-BA; or 500-S	-45 (Lim. 7; Non-HVHZ)
W-AM-18	T7/160, L24, N6/6	OPTIONAL Insulation	Preliminarily Secured or secured with top layer	Min. 0.5-inch DensDeck Prime, Min. 0.5-inch SECUROCK, Min. 2-inch ISO CG or Min. 1.5-inch ISOGARD HD Composite	AP Fasteners & Plates secured at a rate of 18 per 4-ft x 8-ft board	TPO	Membrane Adhesive V	-45 (Lim. 7; Non-HVHZ)
						TPO Fleece	XR-S, 500-R, ribbon adhered 6-inch o.c. or I.S.O. Spray R ribbon adhered 12-inch o.c.; TBSA or 500-S	

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Assemblies with Adhered Membranes over Insulated Wood Deck (New, Existing or Recover)								
System No.	Deck Detail	Base Insulation or Base Sheet	Base Insulation or Base Sheet Attachment	Top Insulation	Top Insulation Attachment	Membrane	Membrane Attachment	MDP (psf)
W-AM-19	T15/32P, L24	OPTIONAL Insulation	Preliminarily Secured or secured with top layer	Min. 2-inch ISO CG or ISO	HD Fasteners and Plates secured at a rate of 8 per 4-ft x 8-ft board	TPO	Membrane Adhesive V	-45 (Lim. 7; Non-HVHZ)
						TPO Fleece	XR-S, 500-R, or I.S.O. Spray R ribbon adhered 12-inch o.c.; TBSA or 500-S	
W-AM-20	T15/32P, L24	OPTIONAL Insulation	Preliminarily Secured or secured with top layer	Min. 1.5-inch ISO CG or ISO	HD Fasteners and Plates secured at a rate of 12 per 4-ft x 8-ft board	TPO	Membrane Adhesive V	-45 (Lim. 7; Non-HVHZ)
						TPO Fleece	XR-S, 500-R, or I.S.O. Spray R ribbon adhered 12-inch o.c.; TBSA or 500-S	
W-AM-21	T7/160, L24, N6/6	OPTIONAL Insulation	Preliminarily Secured or secured with top layer	Min. 0.5-inch DenDeck or SECUROCK	AP Fasteners & Plates secured at a rate of 24 per 4-ft x 8-ft board per 4-ft x 8-ft board	TPO	Membrane Adhesive V	-45 (Lim. 7; Non-HVHZ)
						TPO Fleece	XR-S, 500-R, or I.S.O. Spray R ribbon adhered 12-inch o.c.; HA; PermaMop; XR-BA; TBSA or 500-S	
W-AM-22	T15/32P, L24, N6/6	OPTIONAL Insulation	Preliminarily Secured or secured with top layer	Min. 0.5-inch DensDeck Prime	AP Fasteners & Plates secured at a rate of 18 per 4-ft x 8-ft board	TPO	Membrane Adhesive V	-52.5 (Lim. 7)
						TPO Fleece	XR-S, 500-R, or I.S.O. Spray R ribbon adhered 12-inch o.c.; HA; PermaMop; XR-BA; TBSA or 500-S	
W-AM-23	T19/32P, L24	OPTIONAL Insulation	Preliminarily Secured or secured with top layer	Min. 0.5-inch DensDeck Prime	AP Fasteners & Plates secured at a rate of 12 per 4-ft x 8-ft board	Min. 60 mil Duro-TECH TPO	Membrane Adhesive V	-52.5 (Lim. 9)
W-AM-24	T15/32P, L24, N12/6	OPTIONAL Insulation	Preliminarily Secured or secured with top layer	Min. 0.5-inch SECUROCK	AP Fasteners & Plates secured at a rate of 15 per 4-ft x 8-ft board	TPO	Membrane Adhesive IV	-52.5 (Lim. 7)
						TPO Fleece	XR-BA, PermaMop; HA; or 500-S	
W-AM-25	T7/160, L24, N6/6	OPTIONAL Insulation	Preliminarily Secured or secured with top layer	Min. 1-inch ISO CG	AP Fasteners & Plates secured at a rate of 24 per 4-ft x 8-ft board	TPO	Membrane Adhesive V	-52.5 (Lim. 7; Non-HVHZ)
						TPO Fleece	XR-S, 500-R, ribbon adhered 6-inch o.c. or I.S.O. Spray R ribbon adhered 12-inch o.c.; TBSA or 500-S	
W-AM-26	T7/160, L24, N6/6	Min. 1.5-inch ISO or ISO CG	AP Fasteners & Plates secured at a rate of 24 per 4-ft x 8-ft board	SECUROCK, DensDeck Prime, or ISO HD	Insulation Adhesive VI	TPO	Membrane Adhesive II	-52.5 (Lim. 7; Non-HVHZ)

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Assemblies with Adhered Membranes over Insulated Wood Deck (New, Existing or Recover)								
System No.	Deck Detail	Base Insulation or Base Sheet	Base Insulation or Base Sheet Attachment	Top Insulation	Top Insulation Attachment	Membrane	Membrane Attachment	MDP (psf)
W-AM-27	T7/160, L24, N6/6	Min. 1.5-inch ISO or ISO CG	AP Fasteners & Plates secured at a rate of 24 per 4-ft x 8-ft board	SECUROCK or DensDeck Prime	Insulation Adhesive VI	TPO Fleece	XR-BA, PermaMop; HA; or 500-S	-52.5 (Lim. 7; Non-HVHZ)
W-AM-28	T7/160, L24, N6/6	OPTIONAL Insulation	Preliminarily Secured or secured with top layer	Min. 0.5-inch SECUROCK	All-Purpose S Fasteners and Insulation Fastening Plates secured at a rate of 22 per 4-ft x 8-ft board	TPO Fleece	XR-S, 500-R, ribbon adhered 6-inch o.c. or I.S.O. Spray R ribbon adhered 12-inch o.c.; XR-BA, PermaMop or HA; TBSA or 500-S	-52.5 (Lim. 7; Non-HVHZ)
W-AM-29	T7/160, L24, N6/6	OPTIONAL Insulation	Preliminarily Secured or secured with top layer	Min. 1.5-inch ISO HD-C	All-Purpose S Fasteners and Insulation Fastening Plates secured at a rate of 22 per 4-ft x 8-ft board	TPO Fleece	XR-S, 500-R, ribbon adhered 6-inch o.c. or I.S.O. Spray R ribbon adhered 12-inch o.c.; TBSA or 500-S	-52.5 (Lim. 7; Non-HVHZ)
W-AM-30	T7/160, L24, N6/6	OPTIONAL Insulation	Preliminarily Secured or secured with top layer	Min. 0.5-inch SECUROCK or Min. 1.5-inch ISO HD-C	All-Purpose S Fasteners and Insulation Fastening Plates secured at a rate of 22 per 4-ft x 8-ft board	TPO	Membrane Adhesive V	-52.5 (Lim. 7; Non-HVHZ)
W-AM-31	T19/32P, L24	OPTIONAL Insulation	Preliminarily Secured or secured with top layer	ISO HD	AP Fasteners & Plates secured at a rate of 15 per 4-ft x 8-ft board	Min. 60 mil Duro-TECH TPO	Membrane Adhesive V	-55.0 (Lim. 9)
W-AM-32	T15/32P, L24, N6/6	OPTIONAL Insulation	Preliminarily Secured or secured with top layer	Min. 1.5-inch ISO CG	AP Fasteners & Plates secured at a rate of 18 per 4-ft x 8-ft board	TPO	Membrane Adhesive V	-60 (Lim. 7)
						TPO Fleece	XR-S, 500-R, or I.S.O. Spray R ribbon adhered 12-inch o.c.; TBSA or 500-S	
W-AM-33	T7/160, L24, N6/6	OPTIONAL Insulation	Preliminarily Secured or secured with top layer	Min. 0.5-inch SECUROCK	All-Purpose Fasteners and Insulation Fastening Plates secured at a rate of 22 per 4-ft x 8-ft board	TPO Fleece	XR-S, 500-R, ribbon adhered 6-inch o.c. or I.S.O. Spray R ribbon adhered 12-inch o.c.; XR-BA, PermaMop or HA; TBSA or 500-S	-60 (Lim. 7; Non-HVHZ)

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Assemblies with Adhered Membranes over Insulated Wood Deck (New, Existing or Recover)								
System No.	Deck Detail	Base Insulation or Base Sheet	Base Insulation or Base Sheet Attachment	Top Insulation	Top Insulation Attachment	Membrane	Membrane Attachment	MDP (psf)
W-AM-34	T7/160, L24, N6/6	OPTIONAL Insulation	Preliminarily Secured or secured with top layer	Min. 1.5-inch ISO HD-C	All-Purpose Fasteners and Insulation Fastening Plates secured at a rate of 22 per 4-ft x 8-ft board	TPO Fleece	XR-S, 500-R, ribbon adhered 6-inch o.c. or I.S.O. Spray R ribbon adhered 12-inch o.c.; TBSA or 500-S	-60 (Lim. 7; Non-HVHZ)
W-AM-35	T7/160, L24, N6/6	OPTIONAL Insulation	Preliminarily Secured or secured with top layer	Min. 0.5-inch SECUROCK or Min. 1.5-inch ISO HD-C	All-Purpose Fasteners and Insulation Fastening Plates secured at a rate of 22 per 4-ft x 8-ft board	TPO	Membrane Adhesive V	-60 (Lim. 7; Non-HVHZ)
W-AM-36	T15/32P, L24, N6/6	OPTIONAL Insulation	Preliminarily Secured or secured with top layer	Min. 0.5-inch SECUROCK	AP Fasteners & Plates secured at a rate of 18 per 4-ft x 8-ft board	TPO	Membrane Adhesive IV	-67.5 (Lim. 7)
						TPO Fleece	XR-BA, PermaMop; HA; or 500-S	
W-AM-37	T15/32P, L24, N6/6	OPTIONAL Insulation	Preliminarily Secured or secured with top layer	Min. 0.5-inch DenDeck Prime	AP Fasteners & Plates secured at a rate of 24 per 4-ft x 8-ft board	Min. 60 mil Duro-TECH TPO	Membrane Adhesive V	-75 (Lim. 7)
						TPO Fleece	XR-S, 500-R, adhered 4-inch o.c.; XR-BA, PermaMop; HA; or 500-S	
W-AM-38	T15/32P, L24, N6/6	OPTIONAL Insulation	Preliminarily Secured or secured with top layer	Min. 2-inch ISO CG, min. 1.5-inch ISO HD-C	AP Fasteners & Plates secured at a rate of 24 per 4-ft x 8-ft board	Min. 60 mil Duro-TECH TPO	TECH-Bond TPO Bonding Adhesive or TBSA	-75 (Lim. 7)
W-AM-39	T15/32P, L24, N6/6	Min. 1.5-inch ISO or ISO CG	AP Fasteners & Plates secured at a rate of 24 per 4-ft x 8-ft board	SECUROCK, DenDeck Prime, or ISO HD	Insulation Adhesive VI	TPO	Membrane Adhesive V	-75 (Lim. 7)
W-AM-40	T15/32P, L24, N6/6	Min. 1.5-inch ISO or ISO CG	AP Fasteners & Plates secured at a rate of 24 per 4-ft x 8-ft board	SECUROCK or DenDeck Prime	Insulation Adhesive VI	TPO Fleece	XR-BA, PermaMop; HA; or 500-S	-75 (Lim. 7)
W-AM-41	T15/32P, L24, N6/6	OPTIONAL Insulation	Preliminarily Secured or secured with top layer	Min. 0.5-inch SECUROCK	AP Fasteners & Plates secured at a rate of 24 per 4-ft x 8-ft board	TPO	Membrane Adhesive V	-82.5 (Lim. 7)
						TPO Fleece	XR-BA, PermaMop; HA; or 500-S	
W-AM-42	T15/32P, L24, N6/6	OPTIONAL Insulation	Preliminarily Secured or secured with top layer	Min. 0.5-inch SECUROCK	All-Purpose S Fasteners and Insulation Fastening Plates secured at a rate of 24 per 4-ft x 8-ft board	TPO	TECH-Bond TPO Bonding Adhesive or TECH-Bond TPOLVOC Bonding Adhesive 1168	-90 (Lim. 7)
						TPO Fleece	XR-BA, PermaMop; HA; or 500-S	

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Mechanically Fastened Assemblies over <i>Wood Deck</i> (New or Existing)									
System No.	Deck Detail	Thermal Barrier or Vapor Barrier	Base Insulation	Base Insulation Attachment	Top Insulation	Top Insulation Attachment	Membrane	Membrane Attachment	MDP (psf)
W-M-1	T15/32P, L24	As required	OPTIONAL Insulation	Preliminarily Secured or secured with top layer	Min. 0.5-inch Insulation	Preliminarily Secured	TPO	UltraPly QuickSeam R.M.A Strip attached 8-ft o.c. and secured with All Purpose Fasteners 6-inch o.c. through the Polymer Batten Strip	-30 (Lim. 7; Non-HVHZ)
W-M-2	T7/160 or T15/32P, L24, N6	As required	OPTIONAL Insulation	Preliminarily Secured or secured with top layer	Min. 0.25-inch Insulation	Preliminarily Secured	TPO	UltraPly QuickSeam R.M.A Strip attached 5-ft o.c. and secured with HD Fasteners and Plates 6-inch o.c.	-30 (Lim. 7; Non-HVHZ)
W-M-3	T7/160 or T15/32P, L24, N6/6	OPTIONAL V-Force Vapor Barrier Membrane	OPTIONAL Insulation	Preliminarily Secured or secured with top layer	DensDeck or SECUROCK	Preliminarily Secured	TPO (60-inch wide)	Attached in-lap 6-inch o.c. with HD Fasteners & Plates; Fastener rows 54-inch o.c.	-30 (Lim. 7; Non-HVHZ)
W-M-4	T7/160 or T15/32P, L24	As required	OPTIONAL Insulation	Preliminarily Secured	-	-	TPO	UltraPly QuickSeam R.M.A Strip attached 4-ft o.c. and secured with All-Purpose Fasteners and TPO HD Seam Plates 12-inch o.c.	-30 (Lim. 7; Non-HVHZ)
W-M-5	T19/320, L24, N6/6	As required	OPTIONAL Insulation	Preliminarily Secured	-	-	Min. 60 mil Duro-TECH TPO (96-inch wide)	Attached in-lap 9-inch o.c. with HD Fasteners & Plates; Fastener rows 90-inch o.c.	-30 (Lim. 7; Non-HVHZ)
W-M-6	T7/160 or T15/32P, L24, N6/6	As required	OPTIONAL Insulation	Preliminarily Secured or secured with top layer	DensDeck or SECUROCK	Preliminarily Secured	TPO (48-inch wide)	Attached in-lap 18-inch o.c. with HD Fasteners & Plates; Fastener rows 42-inch o.c.	-37.5 (Lim. 7; Non-HVHZ)
W-M-7	T19/320, L24, N6/6	As required	OPTIONAL Insulation	Preliminarily Secured or secured with top layer	OPTIONAL Insulation	Preliminarily Secured	Min. 60 mil Duro-TECH TPO (120-inch wide)	Attached in-lap 6-inch o.c. with HD Fasteners & Plates; Fastener rows 114-inch o.c.	-37.5 (Lim. 7; Non-HVHZ)
W-M-8	T7/160 or T15/32P, L24,	As required	OPTIONAL Insulation	Preliminarily Secured	-	-	TPO	UltraPly QuickSeam R.M.A Strip attached 4-ft o.c. and secured with All-Purpose Fasteners and TPO HD Seam Plates 6-inch o.c.	-45 (Lim. 7; Non-HVHZ)

APPENDIX B

Mechanically Fastened Assemblies over <i>Wood Deck</i> (New or Existing)									
System No.	Deck Detail	Thermal Barrier or Vapor Barrier	Base Insulation	Base Insulation Attachment	Top Insulation	Top Insulation Attachment	Membrane	Membrane Attachment	MDP (psf)
W-M-9	T19/32P, L24	As required	OPTIONAL Insulation	Preliminarily Secured or secured with top layer	DensDeck or SECUROCK	Preliminarily Secured	TPO (48-inch wide)	Attached in-lap 12-inch o.c. with HD Fasteners & Plates; Fastener rows 42-inch o.c.	-45 (Lim. 7; Non-HVHZ)
W-M-10	T7/160 or T15/32P, L24	As required	OPTIONAL Insulation	Preliminarily Secured or secured with top layer	DensDeck or SECUROCK	Preliminarily Secured	TPO (48-inch wide)	Attached in-lap 6-inch o.c. with HD Fasteners & Plates; Fastener rows 42-inch o.c.	-45 (Lim. 7; Non-HVHZ)
W-M-11	T19/32O, L24	As required	OPTIONAL Insulation	Preliminarily Secured or secured with top layer	DensDeck, SECUROCK	Preliminarily Secured	TPO (48-inch wide)	Attached in-lap 24-inch o.c. with HD Fasteners & Plates; Fastener rows 42-inch o.c.	-45 (Lim. 7; Non-HVHZ)
W-M-12	T19/32P, L24, N6/6	As required	OPTIONAL Insulation	Preliminarily Secured or secured with top layer	DensDeck or SECUROCK	Preliminarily Secured	Min. 60 mil Duro-TECH TPO (120-inch wide)	Attached in-lap 5-inch o.c. with HD Fasteners & Plates; Fastener rows 114-inch o.c.	-45 (Lim. 7)
W-M-13	T19/32O, L24, N6/6	As required	OPTIONAL Insulation	Preliminarily Secured or secured with top layer	OPTIONAL Insulation	Preliminarily Secured	Min. 60 mil Duro-TECH TPO (120-inch wide)	Attached in-lap 4-inch o.c. with HD Fasteners & Plates; Fastener rows 114-inch o.c.	-45 (Lim. 7; Non-HVHZ)
W-M-14	T19/32O, L24, N6/6	As required	OPTIONAL Insulation	Preliminarily Secured or secured with top layer	OPTIONAL Insulation	Preliminarily Secured	Min. 60 mil Duro-TECH TPO (96-inch wide)	Attached in-lap 5-inch o.c. with HD Fasteners & Plates; Fastener rows 90-inch o.c.	-52.5 (Lim. 7; Non-HVHZ)

Induction Welded Assemblies over <i>Wood Deck</i> (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	T15/32P, L24	As required	OPTIONAL Insulation	Preliminarily Secured or secured with top layer	DensDeck or SECUROCK	DuroBond fastened at a rate of 6 per 4 ft. x 8 ft. board	TPO	Induction welded	-30 (Lim. 7; Non-HVHZ)

APPENDIX B

Induction Welded Assemblies over <i>Wood Deck (New or Existing)</i>									
System No.	Deck Detail	Thermal Barrier	Base Insulation	Base Insulation Attachment	Top Insulation	Top Insulation Attachment	Membrane	Membrane Attachment	MDP (psf)
W-W-2	T19/32O, L24	As required	OPTIONAL Insulation	<i>Preliminarily Secured</i> or secured with top layer	DensDeck or SECUROCK	DuroBond fastened at a rate of 6 per 4 ft. x 8 ft. board	TPO	Induction welded	-45 (Lim. 7; Non-HVHZ)
W-W-3	T7/16O or T15/32P, L24	As required	OPTIONAL Insulation	<i>Preliminarily Secured</i> or secured with top layer	DensDeck or SECUROCK	DuroBond fastened 24-inch o.c. through deck into wood rafters/trusses in rows spaced 48-inch o.c.;	TPO	Induction welded	-45 (Lim. 7; Non-HVHZ)
W-W-4	T15/32P, L24	As required	OPTIONAL Insulation	<i>Preliminarily Secured</i> or secured with top layer	DensDeck or SECUROCK	DuroBond fastened at a rate of 8 per 4 ft. x 8 ft. board	TPO	Induction welded	-52.5 (Lim. 7)
W-W-5	T19/32P, L24, N6/6	As required	OPTIONAL Insulation	<i>Preliminarily Secured</i> or secured with top layer	DensDeck or SECUROCK	DuroBond fastened at a rate of 12 per 4 ft. x 8 ft. board	TPO	Induction welded	-52.5 (Lim. 7)
W-W-6	T15/32P, L24, N6/6	As required	OPTIONAL Insulation	<i>Preliminarily Secured</i> or secured with top layer	Min. 1-inch ISO, ISOGF, or ISO HD-C; DensDeck or SECUROCK	DuroBond fastened at a rate of 16 per 4 ft. x 8 ft. board	TPO	Induction welded	-67.5 (Lim. 7; Non-HVHZ)
W-W-7	T7/16O or T15/32P, L24, N6/6	As required	OPTIONAL Insulation	<i>Preliminarily Secured</i> or secured with top layer	DensDeck	DuroBond fastened 6-inch o.c. in rows max. 96-inch o.c. through deck into wood rafters/trusses a min. of 2-inch	TPO	Induction welded	-75 (Lim. 7)

END OF REPORT