

NER-FMI-001.R3 Report No.: Revision 3: 2025-05-14

Page 1 of 25

**Flex Membrane International Corp** 

FL1587-R15

**EVALUATE** 

353 Christian Street, Unit 12b Oxford, CT 06478 (475) 888-CERT (2378)

**VALIDATE** 

www.nemocert.com

QUALIFY

**NEMO EVALUATION REPORT (NER)** 

Flex.

INSPECT

**Flex Membrane International Corp** 

5103 A Pottsville Pike Reading, PA 19605 (610) 916-9500

CERTIFY

**SUBJECT:** Flex MF/R PVC, Flex MF/R PVC FB, Flex Tripolymer MF/R Elvaloy KEE and Flex Tripolymer FB Elvaloy

**KEE Roof Systems** 

This NEMO Evaluation Report (henceforth 'NER') is issued under F.A.C. Rule 61G20-3 and the applicable rules SCOPE:

> and regulations governing Product Approval of construction materials in the State of Florida and ISO/IEC 17065 via NEMO cert. NEMO Evaluations has evaluated the product described herein for compliance with the Code

sections noted herein.

2018 International Building Code TDI Third-Party Evaluation Report acceptance CODES:

2023 Florida Building Code, 8th Edition

Non-HVHZ and HVHZ **JURISDICTION:** 

**CATEGORY:** FBC: Roofing NEMO: Single Ply

SUB-CATEGORY: FBC: Single Ply Roof Systems

**CSI DIVISION:** 07 00 00 Thermal and Moisture Protection

> 07 54 00 Thermoplastic Membrane Roofing

07 54 19 Polyvinyl-Chloride Roofing

METHOD: Method 1, Option C – Codified Material, Evaluation by Evaluation Entity

Flex MF/R PVC, Flex MF/R PVC FB, Flex Tripolymer MF/R Elvaloy KEE and Flex Tripolymer FB Elvaloy KEE COMPLIANCE

**STATEMENT:** Roof Systems, as produced by Flex Membrane International Corp, have demonstrated compliance with the Code sections noted herein through testing in accordance with the referenced Standards, rational analysis and

an ongoing quality assurance program. Compliance is subject to the Installation Requirements and Limitations

of Use set forth herein.

**QUALITY** Evidence of current quality assurance shall be listing and labeling in accordance with the requirements of

**ASSURANCE:** Nemo cert.

CONTINUED This NER is valid until such time the named product(s) change, the referenced Quality Assurance changes, or

the evaluated Code provisions change. NEMO Evaluations requires, at minimum, a complete review of this NER **COMPLIANCE:** 

with each 3-year Code Cycle.

BUILDING PERMIT As required by the Building Official or Authority Having Jurisdiction to evaluate the installation of this product.

**REQUIREMENTS:** 

**INDEPENDENCE:** 

ADVERTISEMENT: "NEMO Evaluated" may be displayed in advertising literature. If any portion of the NER is displayed, it shall be

displayed in its entirety.

CERTIFICATION OF V NEMO CERT, LLC has not, nor does it intend to acquire or will it acquire, a financial interest in any company

manufacturing or distributing products it evaluates.

✓ NEMO CERT, LLC is not owned, operated or controlled by any company manufacturing or distributing products it evaluates.

√ This is a building code evaluation. NEMO CERT, LLC is not, in any way, the Designer of Record for any project. on which this NER, or previous versions thereof, is/was used for permitting or design guidance.

NEMO CERT, LLC www.nemocert.com







# **Nemo Evaluations Report**



NER-FMI-001.R3 2025-05-14

Flex Membrane International Corp

FL1587-R15



### **CODES, PROPERTIES AND STANDARDS: SECTION PROPERTY STANDARD** 2018 International Building Code 1504.3.1 Wind resistance FM 4474 or UL1897 1504.6 **Physical properties** ASTM G154 1504.7 FM 4470 Impact resistance 1505.1 Fire classification UL 790 Material standard 1507.11.2 **ASTM D6163** 1507.13.2 Material standard **ASTM D4434** 2023 Florida Building Code, 8th Edition 1504.3.1 Wind resistance FM 4474 or UL1897 1504.6 Physical properties ASTM G154 1504.7 Impact resistance FM 4470 **ASTM D6163** 1507.11.2, TAS 110 Material standard **ASTM D4434** 1507.12.2, TAS 110 Material standard **TAS 110** Resistance to Foot Traffic TAS 114, Section 8.9 **TAS 110** Wind resistance TAS 114, Appendix C, D or J **TAS 110** Susceptibility Hail Damage TAS 114, Appendix F **TAS 110** Susceptibility to Leakage TAS 114, Appendix G

PRODUCTS:						
TABLE 1: EVALUATED MEMBRANES						
	(NEMO Certified. Consult Directory of	Certified Products for production lo	ocation(s))			
PRODUCT MATERIAL STANDARD						
Түре	Name	THICKNESS	REFERENCE	Түре		
Roof Cover	Flex MF/R PVC	50, 60, 80-mil	ASTM D4434	Ш		
KOOF COVER	Flex Tripolymer MF/R Elvaloy KEE	45, 50, 60, 120-mil	ASTM D4434	Ш		
ROOF COVER OR CAP PLY	Flex MF/R PVC FB	50, 60, 80-mil	ASTM D4434	Ш		
NOOF COVER OR CAP PLY	Flex Tripolymer FB Elvaloy KEE	45, 50, 60, 120-mil	ASTM D4434	Ш		

	TABLE 2: COMPONENTS BY OTHERS (4.1.4)		
Түре	Product	<u>FBC</u>	<u>NOA</u> ¹
	Dekfast DF-#12-PH3	FL20311	22-0913.02
	Dekfast DF-#12-PC-SQ3	FL20311	22-0913.02
	Dekfast DF-#14-PH3	FL20311	22-0913.02
	Dekfast DF-#15-PH3	FL20311	22-0913.02
	Dekfast BS-6.1	FL20311	N/A
	Dekfast PLT-R-3	FL20311	22-0913.02
ROOFING FASTENERS:	Dekfast PLT-R-2-3/8-6B-B	FL20311	22-0913.02
	Dekfast PLT-O-2-3/4-12B	FL20311	22-0913.02
	isoweld F1-P-6.8-PVC Plate	FL20311	22-0913.02
	OMG #12 Standard	FL699	24-0627.03
	OMG Heavy Duty	FL699	24-0627.03
	OMG XHD	FL699	24-0627.03
	OMG Super XHD	FL699	24-0627.03

<sup>&</sup>lt;sup>1</sup> Refer to NOA if listed version was superseded to ensure use of latest version.

Report No.: NER-FMI-001.R3 Revision 3: EMO cert.® Page 3 of 25

2025-05-14

Flex Membrane International Corp

FL1587-R15



	TABLE 2: COMPONENTS BY OTHERS (4.1.4)		
Түре	PRODUCT	FBC	NOA <sup>1</sup>
	OMG RetroDriller	FL699	24-0627.03
	OMG 2 in. Barbed Plate	FL699	24-0627.03
D	OMG 2-3/8 XHD Barbed Stress Plates	FL699	24-0627.03
	OMG 2 3/4 Super XHD Barbed Stress Plate	FL699	24-0627.03
ROOFING FASTENERS:	OMG 3 in. Galvalume Steel Plate	FL699	24-0627.03
	RHINOBOND Insulation Plate (PVC)	FL699	24-0627.03
	Trufast #14 HD	FL4500	25-0129.08
	Trufast 3" Metal Insulation Plate	FL4500	25-0129.08
	ACFoam-II	FL17989	24-1120.02
	ACFoam-III	FL17989	24-1120.02
	ACFoam-HD Coverboard	FL17989	24-1120.02
	ENRGY 3	FL4205	24-0610.04
	Styrofoam Brand Roofmate	FL38732	23-1121.01
Insulations:	Styrofoam Brand Highload 60	FL38732	23-1121.01
	DensDeck	FL1250	22-1223.04
	DensDeck Prime	FL1250	22-1223.04
	SECUROCK Gypsum-Fiber Roof Board	FL4264	21-0923.05
	Celcore Cellular Concrete	FL2037	24-0906.02
	Elastizell Lightweight Insulating Concrete	FL4994	23-0817.05
	Millennium One Step Foamable Adhesive	FL1800	21-1018.06
	Millennium PG-1 Pump Grade Adhesive	FL1800	21-1018.06
	OlyBond 500	FL1608	24-0422.18
ADHESIVES:	Polyset Board-Max	FL22256	22-0614.11
	Polyset Commercial Roof Adhesive	FL1365	23-0718.11
	FA636 Water Borne Adhesive	None	24-0711.01
	LA432M Bonding Adhesive	None	24-0711.01
DDIMEDC	Elastocol Stick	FL9779	22-0706.01
PRIMERS:	Elastocol Stick Zero	FL9779	22-0706.01
Dou Coops	GAFGLAS Ply 4	FL11946	24-0808.04
ROLL GOODS:	SOPRAVAP'R	None	24-0610.08

## **INSTALLATION:**

- Flex MF/R PVC, Flex MF/R PVC FB, Flex Tripolymer MF/R Elvaloy KEE and Flex Tripolymer FB Elvaloy KEE Roof Systems shall 3.1 be installed in accordance with Flex Membrane International Corp published installation instructions, subject to the Limitations of Use noted herein.
- <u>Fasteners</u>: Fasteners shall be of sufficient length for the following engagements. 3.1.1

	TABLE 3: FASTENER REFERENCES						
ROOF DECK	PARTS	FASTENER ENGAGEMENT					
WOOD, ENGINEERED	Trufast #14 HD with Trufast 3" Metal Insulation Plate	Min. 0.75-inch penetration					
SHEATHING OR PLANK	OMG #12 Standard, OMG Heavy Duty, OMG XHD with OMG 3 in. Galvalume Steel Plate  Dekfast DF-#12-PH3, Dekfast DF-#14-PH3, Dekfast DF-#15-PH3 with PLT-R-3	(engineered sheathing) or min. 1-inch embedment (plank)					
STEEL	Trufast #14 HD with Trufast 3" Metal Insulation Plate OMG #12 Standard, OMG Heavy Duty, OMG XHD with OMG 3 in. Galvalume Steel Plate Dekfast DF-#12-PH3, Dekfast DF-#14-PH3, Dekfast DF-#15-PH3 with PLT-R-3	Min. 0.75-inch penetration					
STRUCTURAL CONCRETE	Trufast #14 HD with Trufast 3" Metal Insulation Plate OMG Heavy Duty with OMG 3 in. Galvalume Steel Plate	Non-HVHZ: Min. 1-inch embedment					
	Dekfast DF-#14-PH3 with PLT-R-3	HVHZ: Min. 1.25-inch embedment					



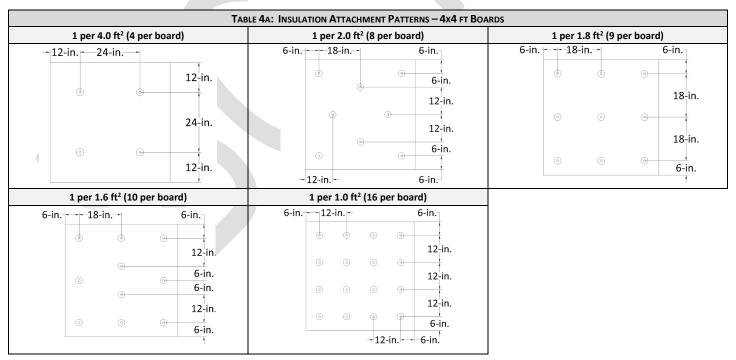
NER-FMI-001.R3 2025-05-14

Flex Membrane International Corp FL1587-R15



## 3.1.2 Insulation:

- (a) Unless otherwise noted, insulation may be any one layer or combination of Approved board(s) that meet IBC, FBC 1505 or FBC HVHZ 1516 and, for foam plastic, IBC or FBC Chapter 26, when installed with the roof cover.
- (b) For Structural Concrete Deck or Recover Applications using System Type C-1 the base insulation layer is optional and using System Type C-2, D-1 or D-2, the insulation is optional. Alternatively, an Approved insulation board or coverboard may be used as a separation layer. Board products shall be preliminarily attached prior to roof cover installation. The separator component shall be documented as meeting IBC, FBC 1505 or FBC HVHZ 1516 and, for foam plastic, IBC, FBC Chapter 26, when installed with the roof cover in Recover applications.
- (c) Minimum 200 psi, minimum 2-inch thick Approved lightweight insulating concrete may be substituted for, or installed below, rigid insulation board for System Types B-1, C-1, C-2, D-1 or D-2, whereby fasteners are installed through the lightweight insulating concrete to engage the structural deck. The structural deck shall be of equal or greater type, thickness and strength to the steel and structural concrete deck listings. Roof decks and structural members shall be in accordance with applicable Code requirements to the satisfaction of the Authority Having Jurisdiction. This is a wind uplift resistance allowance and does not purport to address non-wind-uplift-related issues, such as deck venting or moisture levels within the LWIC and the potential effect on overlying components.
- (d) Florida Specific: Lightweight insulating concrete (LWIC) shall be cast in accordance with FBC Section 1917 to the satisfaction of the Authority Having Jurisdiction. For systems where specific LWIC is referenced, refer to current LWIC Florida Product Approval or NOA for specific deck construction and limitations. Unless otherwise noted, for systems where specific LWIC is not referenced, the minimum design mix shall be 300 psi. In all cases, the minimum top-coat thickness is 2-inches. For LWIC over structural concrete, reference is made to FBC Section 1917.4.1, Point 1. For "pre-existent" LWIC references, listings were established through testing over lightweight concrete cast using only foaming agent (ASTM C896), water and Portland cement (ASTM C150), with no proprietary additives, in accordance with procedures adopted by Miami-Dade BCCO (FBC CER1592). Use of these listings in new construction or re-roof (tear-off) applications is at the discretion of the Designer or Record and Authority Having Jurisdiction.
- (e) Unless otherwise noted, rigid board insulation or coverboard attachment patterns for Type B-1, B-2 and C-1 systems are as outlined below.



## **Nemo Evaluations Report**



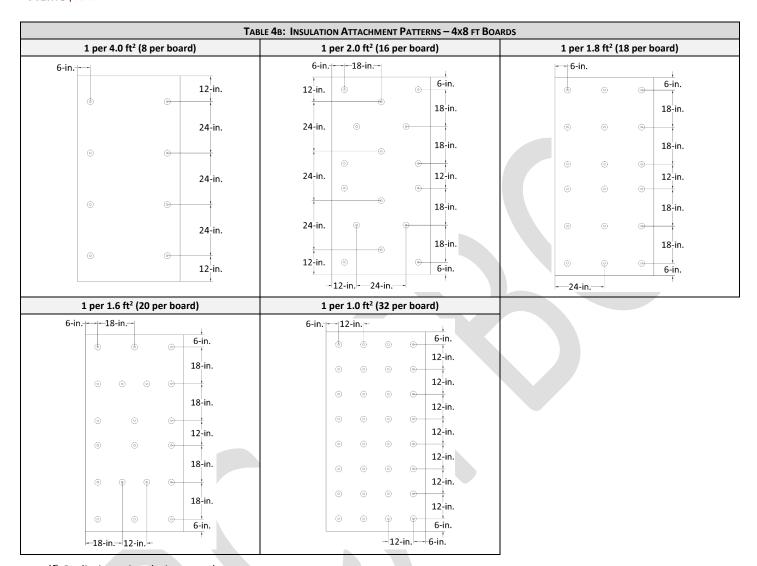
NER-FMI-001.R3 2025-05-14

Flex Membrane International Corp

FL1587-R15







- (f) Preliminary insulation attachment:
  - Non-HVHZ: Unless otherwise noted, use FBC Approved (Local or Statewide) roofing fasteners and plates and refer to Section 2.2.10.1.3 of FM Loss Prevention Data Sheet 1-29.
  - > HVHZ: Unless otherwise noted, use FBC HVHZ Approved roofing fasteners and plates minimum four fasteners per 4 x 8 ft board or minimum two fasteners per 4 x 4 ft board.

### 3.1.3 Insulation Adhesives:

(a) Unless otherwise noted, insulation adhesive application rate is continuous ribbons, maximum 12-inch o.c. Ribbons shall be applied, and insulation boards shall be set in accordance with the manufacturer's published instructions. When multiple layers(s) of insulation and/or coverboard are installed in ribbon-applied adhesive, boards shall be staggered from layer-tolayer. The maximum edge distance from the adhesive ribbon to the edge of the insulation board shall be not less than onehalf the specified ribbons spacing. Concrete deck shall be primed with ASTM D41 primer prior to asphalt-application.

	Table 5: Insulation Adhesive References							
Вү	ADHESIVE	REFERENCE	RATE					
U.D. F. II C	Millennium One Step Foamable Adhesive	M-OSFA	Continuous ribbons, max. 12-inch o.c.					
H.B. Fuller Company	Millennium PG-1 Pump Grade Adhesive	M-PG1	Continuous ribbons, max. 12-inch o.c.					
OMG	OlyBond 500	OB500	Continuous ribbons, max. 12-inch o.c.					
ICD Construction	Polyset Board-Max	Board-Max	Continuous ribbons, max. 12-inch o.c.					
ICP Construction	Polyset Commercial Roof Adhesive	CRA	Continuous ribbons, max. 12-inch o.c.					
Generic	ASTM D312, Type IV asphalt	hot asphalt	Full-coverage at 25-30 lbs/square					



NER-FMI-001.R3 2025-05-14

Flex Membrane International Corp





FL1587-R15

(b) Unless otherwise noted, all adhered insulations are flat-stock or taper board of the minimum thickness noted. Tapered polyisocyanurate at the following thickness limitations may be substituted with the following Maximum Design Pressure (MDP) limitations. In no case shall these values be used to 'increase' the MDP listings in the tables; rather if MDP listing below meets or exceeds that listed for a particular system in the tables, then the thinner board listed below may be used as a drop-in for the equivalent thicker material listed in the selected assembly.

TABLE 6: MDP LIMITATIONS FOR TAPERED POLYISOCYANURATE INSULATIONS						
ADHESIVE	MIN. TAPERED THICKNESS (IN)	MDP (PSF)				
M-OFSA or M-PG1	Any listed polyisocyanurate herein	0.5	-157.5			
OB500	Johns Manville "ENRGY 3"	0.5	-315.0			
OB500	Atlas Roofing "ACFoam-II"	0.5	-487.5			
Board-Max or CRA	Any listed polyisocyanurate herein	1.0	-117.5			

- (c) Adhered Insulation, Board Size:
  - ➢ IBC, FBC Non-HVHZ: Unless otherwise noted, refer to Section 2.2.10.6.2 of FM Loss Prevention Data Sheet 1-29.
  - FBC HVHZ: Bonded polyisocyanurate insulation boards shall be maximum 4 x 4 ft.

## 3.1.4 Roof Covers:

(a) For bonded membrane applications, unless otherwise noted, refer to the following.

	Table 7: Membrane / Adhesive Combinations							
Membrane	Adhesive	APPLICATION	RATE					
Flex MF/R PVC	Flex Plus Bonding Adhesive	Contact	combined rate of 60 ft²/gal					
Flex MF/R PVC	Flex Plus Single Ply Adhesive	Contact	combined rate of 50 ft²/gal					
Flex MF/R PVC	Flex Plus WB Substrate Adhesive	Wet lay	130 ft²/gal					
Flex MF/R PVC or Flex Tripolymer MF/R Elvaloy KEE	Flex Substrate 2375	Contact	combined rate of 55-70 ft <sup>2</sup> /gal					
Flex MF/R PVC or Flex Tripolymer MF/R Elvaloy KEE	LA432M Bonding Adhesive	Contact	combined rate of 120 ft²/gal					
Flex MF/R PVC FB	Flex 7008 Laminating Adhesive	Wet lay	100 ft²/gal					
Flex MF/R PVC FB or Flex Tripolymer FB Elvaloy KEE	Flex FB Low Rise Adhesive	Wet lay	FULL: 60 to 83 ft²/gal RIBBONS: Spaced as noted herein					
Flex Tripolymer FB Elvaloy KEE	Flex Rubber Emulsion Adhesive	Wet lay	60 ft²/gal					
Flex MF/R PVC FB or Flex Tripolymer FB Elvaloy KEE	Millennium One Step Foamable Adhesive	Wet lay	Continuous ribbons, max. 4-inch o.c.					
Flex MF/R PVC FB or Flex Tripolymer FB Elvaloy KEE	Millennium PG-1 Pump Grade Adhesive	Wet lay	"Spatter pattern" at 0.55-0.75 gal/sq.					
Flex MF/R PVC FB or Flex Tripolymer FB Elvaloy KEE	OlyBond 500 Canister	Wet lay	"Spatter pattern" at 0.32 gal/square.					
Flex MF/R PVC FB or Flex Tripolymer FB Elvaloy KEE	Polyset CRA	Wet lay	"Spatter pattern" at 3.75 lbs/sq.					
Flex MF/R PVC FB or Flex Tripolymer FB Elvaloy KEE	FA636 Water Borne Adhesive	Wet lay	100 ft²/gal					
Flex Tripolymer FB Elvaloy KEE	hot asphalt	Wet lay	25 lbs/sq					
Flex SBS 80s/s Base	hot asphalt	Wet lay	25 lbs/sq					
Flex SBS 80s/s Base	Flex MOD-BIT Adhesive	Wet lay	1.5-2.0 gal./sq.					

- (b) For single-ply membranes in System Type D-1 steel deck applications, the roof membrane shall be run with its length perpendicular to the steel deck flutes.
- (c) For System Type C-2 (induction weld), care shall be taken to ensure that the plates do not line-up with membrane seams. This condition may preclude proper induction welding of the membrane to the plates.

NER-FMI-001.R3 2025-05-14

Flex Membrane International Corp

FL1587-R15



## 4. LIMITATIONS OF USE:

## 4.1 General:

4.1.1 This is a building code evaluation. NEMO CERT, LLC is not, in any way, the Designer of Record for any project on which this NER, or previous versions thereof, is/was used for permitting or design guidance. NERs are not to be construed as representing any attributes not specifically listed, nor are NERs to be construed as an endorsement of the subject of the report or a recommendation for its use. There is no warranty by NEMO CERT, LLC, express or implied, as to any finding or other matter in this report, or as to any product covered by the report.

## 4.1.2 Roof Decks:

- (a) This NER pertains to above-deck roof components. Roof decks and structural members shall be in accordance with FBC requirements to the satisfaction of the Authority Having Jurisdiction.
- (b) OSB sheathing is not permitted in FBC HVHZ jurisdictions.
- (c) Unless otherwise noted, reference to 'structural concrete' pertains to min. 2,500 psi structural concrete, and excludes 'structural lightweight concrete'.
- (d) <u>FBC HVHZ Specific</u>: The table below lists various 'as-tested' deck conditions in accordance with <u>Testing Application Standard</u> TAS 114(J). In no case shall these values be used to 'increase' the MDP listings for the selected systems; the lesser MDP applies.

TABLE 8: AS-TESTED DECK ATTACHMENT DETAILS (TAS 114, APPENDIX J)						
B		As Tested Sub-Assembly				
Туре	SPAN (INCH O.C.)	FASTENER	Spacing (inch o.c.)	MDP (psf)		
	24	8d ring shank nails	6	-60		
15/32-inch APA rated CDX plywood	Span: 24 Blocking: 48	8d ring shank nails	6	-142.5		
23/32-inch APA rated CDX plywood	24	8d ring shank nails	6	-82.5		
22 co. Tuno D. Crado 22 ctaal	72	#12 HWH Teks 5	6	-97.5		
22 ga., Type B, Grade 33 steel	72	SFS SD5-#12-HW5/16 with ¾-inch steel washers	6	-82.5		
22 co. Turo D. Crodo 40 ctool	72	#12 HWH Teks 5	6	-90.0		
22 ga., Type B, Grade 40 steel	72	5/8" puddle welds	6	-90.0		
22 Time D. Crede 90 etcel	72	#12 HWH Teks 5	6	-90.0		
22 ga., Type B, Grade 80 steel	72	5/8" puddle welds	6	-90.0		
Note: Steel deck stress analysis is the responsibility of others to the satisfaction of the Authority Having Jurisdiction						

## 4.1.3 Fire Classification:

- (a) Refer to IBC, FBC 1505, FBC HVHZ 1516, UL TGFU.R9228 and the fire classification certificate for the roof cover manufacturer for requirements and limitations regarding roof assembly fire classification.
- (b) Refer to IBC or FBC 2603 for requirements and limitations concerning the use of foam plastic insulation.

## 4.1.4 Quality Assurance:

All components in the roof assembly shall have quality assurance surveillance. For Florida Product Approval, this shall be in accordance with **F.A.C.** Rule 61G20-3. For components listed herein that are produced by a manufacturer other than the report holder on Page 1 of this NER, refer to the supporting evidence held by the component manufacturer.



NFR-FMI-001.R3 2025-05-14

Flex Membrane International Corp

FL1587-R15



### 4.2 **Jurisdiction Specific:**

**IBC, FBC Non-HVHZ HVHZ** 

- 4.2.1 This NER does not include evaluation of roof edge This NER does not include evaluation of roof edge termination. termination. Refer to IBC 1504.6 or FBC 1504.5 for requirements and limitations regarding edge securement for edge securement for low-slope roofs. low-slope roofs.
- 4.2.2 Refer to IBC 1512 or FBC 1511 for requirements and Refer to FBC HVHZ 1521 for requirements and limitations limitations regarding recover installations.
  - (a) For mechanical attachment to existing roof decks, fasteners shall be tested for withdrawal resistance. A qualified design professional shall review the data for comparison to the minimum requirements for the system. Testing shall be in accordance with ANSI/SPRI FX-1 or TAS 105.
  - (b) For adhered re-roof (tear off) installation, the existing substrate shall be examined for compatibility with the adhesive. If any surface conditions exist that bring system performance into question, field uplift testing in accordance with ANSI/SPRI IA-1, FM Loss Prevention Data Sheet 1-52 or TAS 124 shall be conducted on mock-ups of the proposed interface.
  - (c) For adhered recover installation, the existing roof system shall meet project design pressure requirements on its own merit to the satisfaction of the Authority Having Jurisdiction, as documented through field uplift testing in accordance with FM Loss Prevention Data Sheet 1-52 or TAS 124.

Refer to **RAS** 111 for requirements and limitations regarding

regarding recover installations.

For mechanical attachment to existing roof decks, fasteners shall be tested for withdrawal resistance. A qualified design professional shall review the data for comparison to the minimum requirements for the system. Testing shall be in accordance with TAS 105.

For adhered re-roof (tear off) installation, the existing substrate shall be examined for compatibility with the adhesive to be installed. If any surface conditions exist that bring system performance into question, field uplift testing in accordance with TAS 124 shall be conducted on mock-ups of the proposed interface.

For adhered recover installation, the existing roof system shall meet project design pressure requirements on its own merit to the satisfaction of the Authority Having Jurisdiction, as documented through field uplift testing in accordance with **TAS** 124.

## 4.2.3 Wind Load Resistance:

- (a) Refer to Section 4.3 for a tabulated summary of assembly listings and maximum allowable design pressures.
- (b) "MDP" = Maximum Design Pressure is the result of testing for wind load resistance based on allowable wind loads, and reflects the ultimate passing pressure divided by 2 (the 2 to 1 margin of safety per **FBC 1504.9** has already been applied). Refer to FBC 1609 for determination of design wind loads.
- least the Zone 1 PRIME design pressure determined in accordance with **FBC Chapter 16**. Elevated pressure zones shall employ an attachment density designed by a qualified design professional to resist the elevated pressure criteria. Commonly used methods are ANSI/SPRI WD1, FM Loss Prevention Data Sheet 1-29, RAS 117 and RAS 137. or RAS 137. Assemblies marked with an asterisk\* carry the limitations set forth in Section 2.2.10.1 of FM Loss Prevention Data Sheet 1-29 for Zone 2/3 enhancements.
- (d) For fully-adhered installations, the maximum design pressure For assemblies marked with an asterisk\*, the maximum design for the selected assembly shall meet or exceed the critical design pressure. Rational analysis is not permitted.

"MDP" = Maximum Design Pressure is the result of testing for wind load resistance based on allowable wind loads, and reflects the ultimate passing pressure divided by 2 (the 2 to 1 margin of safety per TAS 114 has already been applied). Refer to FBC HVHZ 1620 or RAS 128 for determination of design

(c) The MDP for the selected assembly shall meet or exceed at The MDP for the selected assembly shall meet or exceed at least the Zone 1 PRIME design pressure determined in accordance with FBC HVHZ 1620 or RAS 128. Elevated pressure zones shall employ an attachment density designed by a qualified design professional to resist the elevated pressure criteria. Analysis shall be in accordance with RAS 117

> pressure (MDP) limitation shall be applicable to all roof pressure zones. Rational analysis is not permitted.

Flex Membrane International Corp FL1587-R15

Report No.: NER-FMI-001.R3 Revision 3: 2025-05-14

Page 9 of 25





PCA-145

ISO/IEC 17065

### 4.3 **System Listings and Allowable Design Pressures:** See <u>Section 4.2.3</u>

ATTACHMENT REQUIREMENTS FOR WIND UPLIFT RESISTANCE						
TABLE	DECK	APPLICATION	Түре	DESCRIPTION	Page	
<u>9a</u>	Wood	New, Reroof (Tear-Off), Recover	C-1	Mechanically Attached Insulation, Bonded Roof Cover	10	
<u>9B</u>	Wood	New, Reroof (Tear-Off), Recover	C-2	Induction Welded Roof Cover	11	
<u>9c</u>	Wood	New, Reroof (Tear-Off), Recover	D-1	Insulated, Mechanically Attached Roof Cover	11	
<u>9</u> D	Wood	New or Reroof (Tear-Off)	G	Optional Insulation, Loose-Laid Roof Cover, Pressure Equalizing Vent	12	
<u>10</u> A	Steel or Structural concrete	New, Reroof (Tear-Off) or Recover	B-1	Mech. Attached Base Insulation, Bonded Top Insulation, Bonded Roof Cover	12	
<u>10</u> B	Steel	New, Reroof (Tear-Off)	B-2	Mech. Attached Thermal Barrier, Bonded Temp Roof, Bonded Insulation, Bonded Roof Cover	12	
<u>10c</u>	Steel or Structural concrete	New, Reroof (Tear-Off), Recover	C-1	Mechanically Attached Insulation, Bonded Roof Cover	13	
<u>10</u> D	Steel	New, Reroof (Tear-Off) or Recover	C-2	Induction Welded Roof Cover	14	
<u>10e</u>	Steel or Structural concrete	New, Reroof (Tear-Off), Recover	D-1	Insulated, Mechanically Attached Roof Cover	16	
<u>11A</u>	Structural concrete	New, Reroof (Tear-Off)	A-1	Bonded Insulation, Bonded Roof Cover	17	
<u>11</u> B	Structural concrete	New, Reroof (Tear-Off)	A-1	Bonded Temp Roof, Bonded Insulation, Bonded Roof Cover	18	
<u>11c</u>	Structural concrete	New, Reroof (Tear-Off) or Recover	C-2	Induction Welded Roof Cover	19	
<u>11</u> D	Structural concrete	New, Reroof (Tear Off)	F	Non-Insulated, Bonded Roof Cover	20	
<u>11</u> E	Structural concrete	New or Reroof (Tear-Off)	G	Optional Insulation, Loose-Laid Roof Cover, Pressure Equalizing Vent	20	
<u>12A</u>	Lightweight concrete	New or Reroof (Tear-Off)	A-1	LWC to Deck, Bonded Insulation, Bonded Roof Cover	20	
<u>12</u> B	Lightweight concrete	New, Reroof (Tear Off)	F	Non-Insulated, Bonded Roof Cover	21	
<u>13</u> A	Various	Recover	A-1	Bonded Insulation, Bonded Roof Cover	23	
<u>13</u> B	Steel	Recover	C-2	Induction Welded Roof Cover	25	
<u>13c</u>	Various	Recover	F	Non-insulated, Bonded Roof Cover	25	

# Revision 3: 2025-05-14 Page 10 of 25

W-8

rated CDX plywood;

24-inch span

any combination, loose laid

ACFoam-II

### **NEMO EVALUATIONS REPORT**

Flex Membrane International Corp

Report No.: NER-FMI-001.R3

FL1587-R15





-60.0

(spatter) or FA636 Water

Borne Adhesive

ISO/IEC 17065

PCA-145

### TABLE 9A: WOOD DECKS - NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER SYSTEM TYPE C-1: MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER **TOP INSULATION LAYER** ROOF COVER (3.1.4) SYSTEM DECK **BASE INSULATION LAYER MDP** No. (4.1.2)(3.1.2)(PSF) TYPE FASTENER (3.1.1, 4.2.2) **A**TTACH TYPE ATTACH BARE BACK ROOF COVERS: Min. 15/32-inch APA One or more layers, min. 1.5-Min. 0.25-inch DensDeck Prime Flex MF/R PVC or OMG Heavy Duty with OMG 3 in. 1 per Flex Substrate 2375 or W-1 rated CDX plywood; or SECUROCK Gypsum-Fiber Flex Tripolymer -45.0 inch, any combination, loose Galvalume Steel Plate 1.8 ft2 LA432M Bonding Adhesive 24-inch span laid **Roof Board** MF/R Elvaloy KEE Min. 15/32-inch APA Flex MF/R PVC or OMG Heavy Duty with OMG 3 in. (Optional) One or more layers, Min. 1.5-inch Flex ISO II or 1 per Flex Substrate 2375 or W-2 rated CDX plywood; Flex Tripolymer -60.0 any combination, loose laid ACFoam-II Galvalume Steel Plate 1.6 ft<sup>2</sup> LA432M Bonding Adhesive MF/R Elvaloy KEE 24-inch span FLEECE BACK ROOF COVERS: Flex MF/R PVC -37.5 Min. 1.5-inch Flex ISO II or OMG Heavy Duty with OMG 3 in. FB or Flex Flex FB Low Rise Adhesive. Min. 15/32-inch APA (Optional) One or more layers, 1 per W-3 (NO rated CDX plywood any combination, loose laid ACFoam-II Galvalume Steel Plate 1.6 ft<sup>2</sup> Tripolymer FB ribbons max. 12" o.c. HVHZ) Elvaloy KEE Flex MF/R PVC -37.5 One or more layers, min. 1.5-Min. 0.25-inch DensDeck Prime OMG Heavy Duty with OMG 3 in. Min. 15/32-inch APA 1 per FB or Flex Flex FB Low Rise Adhesive. W-4 inch, any combination, loose or SECUROCK Gypsum-Fiber (NO rated CDX plywood Galvalume Steel Plate 1.8 ft<sup>2</sup> Tripolymer FB ribbons max. 12" o.c. **Roof Board** HVHZ) **Elvaloy KEE** Min. 15/32-inch APA One or more layers, min. 1.5-Min. 0.25-inch DensDeck Prime Polyset CRA (spatter) or OMG Heavy Duty with OMG 3 in. Flex MF/R PVC 1 per W-5 rated CDX plywood; inch, any combination, loose or SECUROCK Gypsum-Fiber FA636 Water Borne -45.0 FB Galvalume Steel Plate 1.8 ft<sup>2</sup> **Roof Board** 24-inch span laid Adhesive Flex Rubber Emulsion Min. 15/32-inch APA One or more layers, min. 1.5-Min. 0.25-inch DensDeck Prime OMG Heavy Duty with OMG 3 in. Flex Tripolymer Adhesive, Polyset CRA 1 per W-6 rated CDX plywood; inch, any combination, loose or SECUROCK Gypsum-Fiber -45.0 Galvalume Steel Plate 1.8 ft<sup>2</sup> FB Elvaloy KEE (spatter) or FA636 Water **Roof Board** 24-inch span laid Borne Adhesive Min. 15/32-inch APA Polyset CRA (spatter) or Flex MF/R PVC (Optional) One or more layers, Min. 1.5-inch Flex ISO II or OMG Heavy Duty with OMG 3 in. 1 per W-7 rated CDX plywood; FA636 Water Borne -60.0 Galvalume Steel Plate FB any combination, loose laid ACFoam-II 1.6 ft<sup>2</sup> 24-inch span Adhesive Flex Rubber Emulsion Min. 15/32-inch APA (Optional) One or more layers, Min. 1.5-inch Flex ISO II or OMG Heavy Duty with OMG 3 in. Flex Tripolymer Adhesive, Polyset CRA 1 per

Galvalume Steel Plate

1.6 ft<sup>2</sup>

FB Elvaloy KEE

Flex Membrane International Corp FL1587-R15

Report No.: NER-FMI-001.R3 Revision 3: 2025-05-14

Page 11 of 25



ISO/IEC 17065 PCA-145

	TABLE 9B: WOOD DECKS - NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER										
			SYSTEM TYPE C-2: INDUCTIO	N WELDED MEMBRANE							
SYSTEM	DECK	Insulation Layer (3.1.2)		ATTACHMENT	ROOF COVER (3.1.4)	MDP					
No.	(4.1.2)	INSOLATION EATEN (S.I.E)	FASTENER (3.1.1, 4.2.2)	DENSITY / PATTERN	NOOF COVER (5.1.4)	(PSF)					
W-9	Min. 15/32-inch APA rated CDX plywood	One or more layers, any combination	OMG Heavy Duty with RHINOBOND Insulation Plate (PVC) or Dekfast DF-#14-PH3 with SFS isoweld® F1-P-6.8-PVC Plate	1 per 2.7 ft <sup>2</sup> 0 0 0  1.5 Typ  0.5 Typ  0.5 Typ  0.5 Typ  0.5 Typ  0.5 Typ  0.5 Typ  0.7 Ty	Flex MF/R PVC or Flex Tripolymer MF/R Elvaloy KEE induction welded to PVC RHINOBOND Plate with RHINOBOND tool or to SFS isoweld® F1-P-6.8-PVC Plate with SFS isoweld® tool.	-22.5 (NO HVHZ)					
W-10	Min. 15/32-inch APA rated CDX plywood, 24-inch span, blocked 48-inch o.c.	One or more layers, any combination	OMG Heavy Duty with RHINOBOND Insulation Plate (PVC)	36-inch o.c. to engage wood supports, 24-inch o.c.	Min. 60-mil Flex MF/R PVC induction welded with RHINOBOND tool	-52.5					
W-11	Min. 15/32-inch APA rated CDX plywood, 24-inch span, blocked 48-inch o.c.	One or more layers, any combination	OMG Heavy Duty with RHINOBOND Insulation Plate (PVC)	18-inch o.c. to engage wood supports, 24-inch o.c.	Min. 60-mil Flex MF/R PVC induction welded with RHINOBOND tool	-105.0					
W-12	Min. 15/32-inch APA rated CDX plywood, 24-inch span, blocked 48-inch o.c.	One or more layers, any combination	OMG Heavy Duty with RHINOBOND Insulation Plate (PVC)	9-inch o.c. to engage wood supports, 24-inch o.c.	Min. 60-mil Flex MF/R PVC induction welded with RHINOBOND tool	-142.5					

	TABLE 9c: WOOD DECKS – NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER									
	SYSTEM TYPE D-1: INSULATED, MECHANICALLY ATTACHED ROOF COVER									
System	<b>D</b> ECK	Insulation Layer	3.1.2)		Roof Cover	R <u>(3.1.4)</u>				MDD
No.	(4.1.2)	Түре	Аттасн	MEMBRANE	FASTENER (3.1.1, 4.2.2)	FASTENER SPACING	LAP WIDTH	Row Spacing	SEAM WELD	MDP (PSF)
W-13	Min. 15/32-inch APA rated CDX plywood	One or more layers, any combination	Preliminarily attached	Flex MF/R PVC or Flex Tripolymer MF/R Elvaloy KEE	Dekfast DF-#14-PH3 with Dekfast PLT-R-2-3/8-6B-B	6-inch o.c.	5-inch	76-inch o.c.	1.5-inch	-22.5 (NO HVHZ)
W-14	Min. 23/32-inch APA rated CDX plywood; 24-inch span	One or more layers, any combination	Preliminarily attached	Flex MF/R PVC	Dekfast DF-#15-PH3 with Dekfast PLT-R-2-3/8-6B-B	6-inch o.c.	6-inch	75-inch o.c.	1.5-inch	-52.5
W-15	Min. 23/32-inch APA rated CDX plywood; 24-inch span	One or more layers, any combination	Preliminarily attached	Flex MF/R PVC	Dekfast DF-#15-PH3 with Dekfast PLT-R-2-3/8-6B-B	6-inch o.c.	5-inch	55-inch o.c.	1.5-inch	-82.5

Flex Membrane International Corp FL1587-R15

Report No.: NER-FMI-001.R3 Revision 3: 2025-05-14

Page 12 of 25



ISO/IEC 17065

PCA-145

## TABLE 9D: WOOD DECKS - NEW CONSTRUCTION OR REROOF (TEAR-OFF) SYSTEM TYPE G: OPTIONAL INSULATION, LOOSE-LAID ROOF COVER, PRESSURE EQUALIZING VENT

SYSTEM	DECK	Air Barrier	luciu azioni	Halpeni avasent	F	MDP	
No. (4.1.2) AIR BARRIER		Insulation	UNDERLAYMENT	Түре	Аттасн	(PSF)	
W-16	Min. 15/32- inch, Type B-C plywood	All joints and penetrations sealed with 0.5-inch thick bead of urethane caulk and covered with 2-inch wide duct tape or bituminous sealing tape.	(Optional) Any fire classified roof insulation and/or coverboard combination, any thickness, looselaid with staggered joints	12-inch wide strips of polypropylene, air permeable filter fabric, loose laid in a crossing pattern, connecting the V2T vents	Flex MF/R PVC or Flex Tripolymer MF/R Elvaloy KEE	Acyrlife V2T installed in accordance with Acrylife instructions, spaced maximum 50 ft o.c.	-97.5 (NO HVHZ)

	TABLE 10a: STEEL or STRUCTURAL CONCRETE DECKS - NEW CONSTRUCTION, REROOF (TEAR-OFF) or RECOVER SYSTEM TYPE B-1: MECHANICALLY ATTACHED BASE INSULATION, BONDED TOP INSULATION, BONDED ROOF COVER										
System Deck Base Insulation Layer Top Insulation Layer Roof Cover (3.1.4)											
No.	0. (4.1.2)		FASTENER (3.1.1, 4.2.2)	Аттасн	Түре	TYPE ATTACH (3.1.3) BASE P		CAP PLY	MDP (PSF)		
SC-1	Min. 22 ga., Type B, Grade 33 steel, 6 ft span	Min. two (2) layers, min. 1.5- inch Flex ISO II or ACFoam-II	Top layer attached with OMG #12 Standard RoofGrip Fastener with OMG 3 in. Ribbed Galvalume Plate	1 per 2.0 ft <sup>2</sup>	Min. 0.5-inch SECUROCK Gypsum- Fiber Roof Board	M-OSFA, M-PG1, OB500, Polyset Board-Max or Polyset CRA	Flex SBS 80s/s Base in Flex MOD-BIT Adhesive	Flex MF/R PVC FB or Flex Tripolymer FB Elvaloy KEE in Millennium PG-1, OB500 or Polyset CRA, spatter pattern	-52.5		
SC-2	Min. 22 ga., Type B, Grade 33 steel, 6 ft span or structural concrete	Min. 1.5-inch Flex ISO II, Flex ISO III, ACFoam-II, ACFoam-III or ENRGY 3	OMG #12 Standard (steel only) or OMG Heavy Duty with OMG 3 in. Galvalume Steel Plate	1 per 1.0 ft <sup>2</sup>	Min. 0.5-inch ACFoam-HD Coverboard	OB500	None	Flex Tripolymer FB Elvaloy KEE in Flex FB Low Rise Adhesive, full coverage	-97.5		

			TABLE 10 <sub>B</sub> : ST	EEL DECKS	- NEW CONSTRUCTION,	REROOF (TEAR-OFF)				
		SYSTEM TYPE B-	2: MECHANICALLY ATTACHED THE	RMAL BA	RRIER, BONDED TEMP RO	OOF, BONDED TOP INSULATI	ON, BONDED	ROOF COVER		
Sys	Deck	THERMAL BARRIER				Insulation Layer(s)		ROOF COVER (3.1.4)		MDP
No.	(4.1.2)	Түре	FASTEN ( <u>3.1.1</u> , <u>4.2.2</u> )	Аттасн	TEMP ROOF	Түре	ATTACH (3.1.3)	Түре	Аттасн	(PSF)
BARE BAG	CK ROOF COVERS:									
SC-3	Min. 22 ga., Type B, Grade 33 steel	Min. 0.5-inch DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	Dekfast DF-#14-PH3-P3 with Dekfast PLT-R-3, OMG Heavy Duty with OMG 3 in. Galvanized Steel Plate or Trufast #14 HD with Trufast 3" Metal Insulation Plate	1 per 4.0 ft <sup>2</sup>	Soprema Elastocol Stick or Elastocol Stick Zero at 0.5 gal/sq. followed by Soprema Sopravap'r, self-adhering	Min. 2-inch Styrofoam Brand Roofmate or Highload 60 followed by Min. 0.25-inch DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	M-OSFA, M-PG1 or OB500	Flex MF/R PVC or Flex Tripolymer MF/R Elvaloy KEE	Flex Substrate 2375 or LA432M Bonding Adhesive	-45.0*
SC-4	Min. 22 ga., Type B, Grade 33 steel, 6 ft span	Min. 0.5-inch DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	Dekfast DF-#14-PH3-P3 with Dekfast PLT-R-3, OMG Heavy Duty with OMG 3 in. Galvanized Steel Plate or Trufast #14 HD with Trufast 3" Metal Insulation Plate	1 per 2.0 ft <sup>2</sup>	Soprema Elastocol Stick or Elastocol Stick Zero at 0.5 gal/sq. followed by Soprema Sopravap'r, self-adhering	Min. 1.5-inch Flex ISO II or ACFoam-II followed by Min. 0.25-inch DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	M-OSFA, M-PG1 or OB500	Flex MF/R PVC or Flex Tripolymer MF/R Elvaloy KEE	Flex Substrate 2375 or LA432M Bonding Adhesive	-45.0

Flex Membrane International Corp



Page 13 of 25



ISO/IEC 17065 PCA-145

## Report No.: NER-FMI-001.R3 FL1587-R15 Revision 3: 2025-05-14

					- NEW CONSTRUCTION,					
		SYSTEM TYPE B-	2: MECHANICALLY ATTACHED THE	RMAL BA	RRIER, BONDED TEMP RO	· ·	•			ı
Sys	DECK		THERMAL BARRIER	I	True Door	Insulation Layer(	<u> </u>	Roof Co	VER (3.1.4)	MDP
No.	(4.1.2)	Түре	FASTEN (3.1.1, 4.2.2)	Аттасн	TEMP ROOF	Түре	ATTACH ( <u>3.1.3</u> )	Түре	Аттасн	(PSF)
FLEECE BA	ACK ROOF COVERS:									
SC-5	Min. 22 ga., Type B, Grade 33 steel	Min. 0.5-inch DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	Dekfast DF-#14-PH3-P3 with Dekfast PLT-R-3, OMG Heavy Duty with OMG 3 in. Galvanized Steel Plate or Trufast #14 HD with Trufast 3" Metal Insulation Plate	1 per 4.0 ft²	Soprema Elastocol Stick or Elastocol Stick Zero at 0.5 gal/sq. followed by Soprema Sopravap'r, self-adhering	Min. 2-inch Styrofoam Brand Roofmate or Highload 60 followed by Min. 0.25-inch DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	M-OSFA, M-PG1 or OB500	Flex MF/R PVC FB or Flex Tripolymer FB Elvaloy KEE	FA636 Water Borne Adhesive	-45.0*
SC-6	Min. 22 ga., Type B, Grade 33 steel, 6 ft span	Min. 0.5-inch DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	Dekfast DF-#14-PH3-P3 with Dekfast PLT-R-3, OMG Heavy Duty with OMG 3 in. Galvanized Steel Plate or Trufast #14 HD with Trufast 3" Metal Insulation Plate	1 per 2.0 ft²	Soprema Elastocol Stick or Elastocol Stick Zero at 0.5 gal/sq. followed by Soprema Sopravap'r, self-adhering	Min. 1.5-inch Flex ISO II or ACFoam-II followed by Min. 0.25-inch DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	M-OSFA, M-PG1 or OB500	Flex MF/R PVC FB or Flex Tripolymer FB Elvaloy KEE	FA636 Water Borne Adhesive	-45.0
SC-7	Min. 22 ga., Type B, Grade 33 steel, 6 ft span	Min. 0.5-inch DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	Dekfast DF-#14-PH3-P3 with Dekfast PLT-R-3, OMG Heavy Duty with OMG 3 in. Galvanized Steel Plate or Trufast #14 HD with Trufast 3" Metal Insulation Plate	1 per 4.0 ft <sup>2</sup>	Soprema Elastocol Stick or Elastocol Stick Zero at 0.5 gal/sq. followed by Soprema Sopravap'r, self-adhering	Min. 2-inch Styrofoam Brand Roofmate or Highload 60 followed by Min. 0.25-inch DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	M-OSFA, M-PG1 or OB500	Flex Tripolymer FB Elvaloy KEE	Flex Rubber Emulsion Adhesive or Polyset CRA (spatter)	-45.0*
SC-8	Min. 22 ga., Type B, Grade 33 steel, 6 ft span	Min. 0.5-inch DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	Dekfast DF-#14-PH3-P3 with Dekfast PLT-R-3, OMG Heavy Duty with OMG 3 in. Galvanized Steel Plate or Trufast #14 HD with Trufast 3" Metal Insulation Plate	1 per 2.0 ft²	Soprema Elastocol Stick or Elastocol Stick Zero at 0.5 gal/sq. followed by Soprema Sopravap'r, self-adhering	Min. 1.5-inch Flex ISO II or ACFoam-II followed by Min. 0.25-inch DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	M-OSFA, M-PG1 or OB500	Flex Tripolymer FB Elvaloy KEE	Flex Rubber Emulsion Adhesive or Polyset CRA (spatter)	-45.0

	TABLE 10c: STEEL or STRUCTURAL CONCRETE DECKS - NEW CONSTRUCTION, REROOF (TEAR-OFF) or RECOVER  SYSTEM TYPE C-1: MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER										
System Deck Base Insulation Layer Top Insulation Layer Roof Cover (3.1.4) MDP											
No.	(4.1.2)	(3.1.2)	Түре	FASTENER (3.1.1, 4.2.2)	Аттасн	BASE PLY	CAP PLY	(PSF)			
BARE BACK R	ROOF COVERS:										
SC-9	Min. 22 ga., type B, Grade 33 steel or structural concrete	(Optional) One or more layers, any combination, loose laid	Min. 0.5-inch DensDeck	Dekfast DF-#12-PH3 or DF-#14-PH3 fasteners and Dekfast PLT-R-3	1 per 2.0 ft <sup>2</sup>	None	Flex Tripolymer MF/R Elvaloy KEE in Flex Substrate 2375	-45.0*			
SC-10	Min. 22 ga., type B, Grade 33 steel or structural concrete	(Optional) One or more layers, any combination, loose laid	Min. 1.5-inch Flex ISO II, Flex ISO III, ACFoam-II or ACFoam-III	OMG #12 Standard (steel only) or OMG Heavy Duty with OMG 3 in. Galvalume Steel Plate	1 per 2.0 ft²	None	Flex MF/R PVC in Flex Plus Single Ply Adhesive, Flex Plus Bonding Adhesive or Flex Plus WB Substrate Adhesive	-45.0*			

Flex Membrane International Corp FL1587-R15

Report No.: NER-FMI-001.R3 Revision 3: 2025-05-14

Page 14 of 25



ISO/IEC 17065 PCA-145

ert.	
	TABLE 10c: STEEL or STRUCTURAL CONCRETE DECKS - NEW CONSTRUCTION, REROOF (TEAR-O

	TABLE 10c: STEEL or STRUCTURAL CONCRETE DECKS - NEW CONSTRUCTION, REROOF (TEAR-OFF) or RECOVER  SYSTEM TYPE C-1: MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER										
System	DECK	Base Insulation Layer		TOP INSULATION LAYER		Roo	F COVER (3.1.4)	MDP			
No.	<u>(4.1.2)</u>	(3.1.2)	Түре	FASTENER (3.1.1, 4.2.2)	Аттасн	BASE PLY	CAP PLY	(PSF)			
FLEECE BACK	ROOF COVERS:										
SC-11	Min. 22 ga., type B, Grade 33 steel, 6 ft span or structural concrete	(Optional) One or more layers, any combination, loose laid	Min. 1.5-inch Flex ISO II, Flex ISO III, ACFoam-II, ACFoam-III or ENRGY 3	OMG #12 Standard (steel only) or OMG Heavy Duty with OMG 3 in. Galvalume Steel Plate	1 per 1.0 ft²	None	Flex MF/R PVC FB in Flex 7008 Laminating Adhesive	-82.5			
SC-12	Min. 22 ga., type B, Grade 33 steel, 6 ft span	One or more layers, any combination, min. 1.5-inch thick loose laid	Min. 0.5-inch SECUROCK Gypsum-Fiber Roof Board	OMG XHD with OMG 3 in. Galvalume Steel Plate	1 per 1.6 ft²	None	Flex Tripolymer FB Elvaloy KEE in Flex Rubber Emulsion Adhesive	-90.0			
SC-13	Min. 22 ga., type B, Grade 33 steel, 6 ft span	One or more layers, any combination, min. 1.5-inch thick loose laid	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	OMG #12 Standard with OMG 3 in. Galvalume Steel Plate	1 per 1.0 ft²	Flex SBS 80s/s Base in hot asphalt	Flex Tripolymer FB Elvaloy KEE in hot asphalt	-90.0			

		TABLE :	10d: STEEL DECKS - NEW CONSTRUCTION	N, REROOF (TEAR-OFF) OR RECOVER		
			SYSTEM TYPE C-2: INDUCTION W	ELDED MEMBRANE		
System	DECK	Insulation Layer (3.1.2)	ATTA	CHMENT	ROOF COVER (3.1.4)	MDP
No.	<u>(4.1.2)</u>	INSULATION LAYER (3.1.2)	FASTENER ( <u>3.1.1</u> , <u>4.2.2</u> )	DENSITY	ROOF COVER (5.1.4)	(PSF)
OMG RHIN	OBOND:					
SC-14	Min. 22 ga., type B, Grade 33 steel, 6 ft span	One or more layers, any combination	OMG Super XHD with RHINOBOND Insulation Plate (PVC)	1 per 6.0 ft² 2 x 3-ft grid	Flex MF/R PVC or Flex Tripolymer MF/R Elvaloy KEE induction welded with RHINOBOND tool	-45.0*
SC-15	span preliminarily attached		OMG XHD with RHINOBOND Insulation Plate (PVC)	Max. 12-inch o.c. in rows max. 60-inch o.c.	Min. 50-mil Flex MF/R PVC or min. 60- mil Flex Tripolymer MF/R Elvaloy KEE induction welded with RHINOBOND tool	-45.0
SC-16	Min. 22 ga., type B, Grade 33 steel, 6 ft span	One or more layers, any combination	OMG Super XHD with RHINOBOND Insulation Plate (PVC)	1 per 4.0 ft² 2 x 2-ft grid	Flex MF/R PVC or Flex Tripolymer MF/R Elvaloy KEE induction welded with RHINOBOND tool	-75.0
SFS ISOWELL	):					
SC-17	Min. 22 ga., type B, Grade 33 steel	One or more layers, any combination, min. 1.5-inch, preliminarily attached	Dekfast DF-#15-PH3 with SFS isoweld® F1-P-6.8-PVC Plate	1 per 8 ft² 2 x 4-ft grid	Flex MF/R PVC or Flex Tripolymer MF/R Elvaloy KEE induction welded with SFS isoweld tool	-30.0* (NO HVHZ)
SC-18	Min. 22 ga., type B, Grade 80 steel	One or more layers, any combination, min. 1.5-inch, preliminarily attached	Dekfast DF-#15-PH3 with SFS isoweld® F1-P-6.8-PVC Plate	1 per 8 ft² 2 x 4-ft grid	Flex MF/R PVC or Flex Tripolymer MF/R Elvaloy KEE induction welded with SFS isoweld tool	-37.5* (NO HVHZ)
SC-19	Min. 22 ga., type B, Grade 80 steel	One or more layers, any combination, min. 1.5-inch, preliminarily attached	Dekfast DF-#12-PH3 or DF-#15-PH3 with SFS isoweld® F1-P-6.8-PVC Plate	1 per 5.3 ft <sup>2</sup>	Flex MF/R PVC or Flex Tripolymer MF/R Elvaloy KEE induction welded with SFS isoweld tool	-37.5* (NO HVHZ)

Flex Membrane International Corp FL1587-R15

Report No.: NER-FMI-001.R3 Revision 3: 2025-05-14

Page 15 of 25



ISO/IEC 17065 PCA-145

### TABLE 10d: STEEL DECKS - NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER SYSTEM TYPE C-2: INDUCTION WELDED MEMBRANE **ATTACHMENT** SYSTEM DECK **MDP** INSULATION LAYER (3.1.2) ROOF COVER (3.1.4) No. (4.1.2)(PSF) FASTENER (3.1.1, 4.2.2) DENSITY Flex MF/R PVC or Flex Tripolymer MF/R One or more layers, any -37.5 Dekfast DF-#15-PH3 with SFS isoweld® Min. 22 ga., type B, SC-20 12-inch o.c. in rows 60-inch o.c. Elvaloy KEE induction welded with SFS combination, min. 1.5-inch, (NO Grade 33 steel F1-P-6.8-PVC Plate isoweld tool HVHZ) preliminarily attached Flex MF/R PVC or Flex Tripolymer MF/R -37.5 Min. 22 ga., type B, One or more layers, any Dekfast DF-#15-PH3 with SFS isoweld® 1 per 6 ft<sup>2</sup> SC-21 Elvalov KEE induction welded with SFS (NO Grade 40 steel F1-P-6.8-PVC Plate combination, min. 1.5-inch 2x3-ft grid, staggered isoweld tool HVHZ) Dekfast DF-#12-PH3, DF-#15-PH3 or BS Flex MF/R PVC or Flex Tripolymer MF/R -37.5 One or more layers, any Min. 22 ga., type B, 1 per 6 ft<sup>2</sup> 6.1 Fastener with SFS isoweld® F1-P-6.8-Elvaloy KEE induction welded with SFS SC-22 (NO Grade 80 steel combination, min. 1.5-inch 2x3-ft grid, staggered **PVC Plate** HVHZ) isoweld tool One or more layers, any Flex MF/R PVC or Flex Tripolymer MF/R Min. 22 ga., type B, Dekfast DF-#15-PH3 with SFS isoweld® SC-23 combination, min. 1.5-inch, 1 per 5.3 ft<sup>2</sup> Elvalov KEE induction welded with SFS -45.0\* Grade 33 steel F1-P-6.8-PVC Plate preliminarily attached isoweld tool Min. 22 ga., type B, One or more layers, any Flex MF/R PVC or Flex Tripolymer MF/R Dekfast DF-#15-PH3 with SFS isoweld® 2 x 2-ft grid pattern with first row of SC-24 Grade 33 steel; 6 ft Elvaloy KEE induction welded with SFS -45.0\* combination, min. 1.5-inch, F1-P-6.8-PVC Plate fasteners spaced 1-ft from corner edges preliminarily attached isoweld tool span Min. 22 ga., type B, One or more layers, any Flex MF/R PVC or Flex Tripolymer MF/R Dekfast DF-#15-PH3 with SFS isoweld® SC-25 Grade 40 steel, 6 ft combination, min. 1.5-inch, Elvalov KEE induction welded with SFS -45.0 Max. 12-inch o.c. in rows max. 60-inch o.c. F1-P-6.8-PVC Plate preliminarily attached isoweld tool span Min. 22 ga., type B, One or more layers, any Dekfast DF-#12-PH3, DF-#15-PH3 or BS Flex MF/R PVC or Flex Tripolymer MF/R SC-26 Grade 80 steel, 6 ft combination, min. 1.5-inch. 6.1 Fastener with SFS isoweld® F1-P-6.8-Max. 12-inch o.c. in rows max. 60-inch o.c. Elvalov KEE induction welded with SFS -45.0 **PVC Plate** preliminarily attached isoweld tool Min. 22 ga., type B, Flex MF/R PVC or Flex Tripolymer MF/R 1 per 4.0 ft<sup>2</sup> One or more layers, any Dekfast DF-#15-PH3 with SFS isoweld® SC-27 Grade 40 steel; 6 ft Elvaloy KEE induction welded with SFS -52.5 combination, min. 1.5-inch F1-P-6.8-PVC Plate 2x2-ft grid, staggered isoweld tool Min. 22 ga., type B, Dekfast DF-#12-PH3. DF-#15-PH3 or BS Flex MF/R PVC or Flex Tripolymer MF/R 1 per 4.0 ft<sup>2</sup> One or more layers, any SC-28 Grade 80 steel: 6 ft 6.1 Fastener with SFS isoweld® F1-P-6.8-Elvalov KEE induction welded with SFS -52.5 combination, min. 1.5-inch 2x2-ft grid, staggered **PVC Plate** isoweld tool Flex MF/R PVC or Flex Tripolymer MF/R Min. 22 ga., type B, One or more layers, any Dekfast DF-#15-PH3 with SFS isoweld® 1 per 6.0 ft<sup>2</sup> SC-29 Grade 40 steel, 6 ft Elvaloy KEE induction welded with SFS -52.5 combination, min. 1.5-inch F1-P-6.8-PVC Plate 2 x 3-ft grid, staggered isoweld tool span Min. 22 ga., type B, Flex MF/R PVC or Flex Tripolymer MF/R 1 per 6.0 ft<sup>2</sup> One or more layers, any Dekfast DF-#12-PH3 or DF-#15-PH3 with SC-30 Grade 80 steel, 6 ft Elvaloy KEE induction welded with SFS -52.5 combination, min. 1.5-inch SFS isoweld® F1-P-6.8-PVC Plate 2 x 3-ft grid, staggered span isoweld tool Flex MF/R PVC or Flex Tripolymer MF/R Min. 22 ga., type B, One or more layers, any Dekfast DF-#15-PH3 with SFS isoweld® SC-31 Grade 33 steel; 6 ft combination, min. 1.5-inch, 6-inch o.c. in rows 60-inch o.c. Elvaloy KEE induction welded with SFS -60.0 F1-P-6.8-PVC Plate preliminarily attached isoweld tool Min. 22 ga., type B, One or more layers, any 1.5 x 2-ft grid pattern with first row of Flex MF/R PVC or Flex Tripolymer MF/R Dekfast DF-#15-PH3 with SFS isoweld®

SC-32

Grade 33 steel; 6 ft

span

combination, min. 1.5-inch,

preliminarily attached

F1-P-6.8-PVC Plate

fasteners spaced 0.5-ft from the long edge

and 1-ft from the short edge

-67.5

Elvaloy KEE induction welded with SFS

isoweld tool

span

## **N**EMO **EVALUATIONS REPORT**

Flex Membrane International Corp FL1587-R15

Report No.: NER-FMI-001.R3 Revision 3: 2025-05-14

preliminarily attached

**PVC Plate** 

Page 16 of 25



PCA-145

isoweld tool

ISO/IEC 17065

	TABLE 10d: STEEL DECKS - NEW CONSTRUCTION, REROOF (TEAR-OFF) or RECOVER  SYSTEM TYPE C-2: INDUCTION WELDED MEMBRANE										
System	DECK			ACHMENT		MDP					
No.	(4.1.2)	INSULATION LAYER (3.1.2)	FASTENER (3.1.1, 4.2.2)	ROOF COVER (3.1.4)	(PSF)						
SC-33	Min. 22 ga., type B, Grade 33 steel; 6 ft span	One or more layers, any combination, min. 1.5-inch, preliminarily attached	Dekfast DF-#15-PH3 with SFS isoweld® F1-P-6.8-PVC Plate	1.5 x 1.5-ft grid pattern with first row of fasteners spaced 0.5-ft from the long edge and 1-ft from the short edge	Flex MF/R PVC or Flex Tripolymer MF/R Elvaloy KEE induction welded with SFS isoweld tool	-82.5					
SC-34	Min. 22 ga., type B, Grade 40 steel, 6 ft span	One or more layers, any combination, min. 1.5-inch	Dekfast DF-#15-PH3 with SFS isoweld® F1-P-6.8-PVC Plate	1 per 3.0 ft <sup>2</sup> 1.5 x 2-ft grid, staggered	Flex MF/R PVC or Flex Tripolymer MF/R Elvaloy KEE induction welded with SFS isoweld tool	-82.5					
SC-35	Min. 22 ga., type B, Grade 80 steel, 6 ft span	One or more layers, any combination, min. 1.5-inch	Dekfast DF-#12-PH3 or DF-#15-PH3 with SFS isoweld® F1-P-6.8-PVC Plate	1 per 3.0 ft <sup>2</sup> 1.5 x 2-ft grid, staggered	Flex MF/R PVC or Flex Tripolymer MF/R Elvaloy KEE induction welded with SFS isoweld tool	-82.5					
SC-36	Min. 22 ga., type B, Grade 40 steel, 6 ft span	One or more layers, any combination, min. 1.5-inch, preliminarily attached	Dekfast DF-#15-PH3 with SFS isoweld® F1-P-6.8-PVC Plate	Max. 6-inch o.c. in rows max. 60-inch o.c.	Flex MF/R PVC or Flex Tripolymer MF/R Elvaloy KEE induction welded with SFS isoweld tool	-90.0					
SC-37	Min. 22 ga., type B, Grade 80 steel, 6 ft	One or more layers, any combination, min. 1.5-inch,	Dekfast DF-#12-PH3, DF-#15-PH3 or BS 6.1 Fastener with SFS isoweld® F1-P-6.8-	Max. 6-inch o.c. in rows max. 60-inch o.c.	Flex MF/R PVC or Flex Tripolymer MF/R Elvaloy KEE induction welded with SFS	-90.0					

				CONCRETE DECKS – NEW CON 1: INSULATED, MECHANICALI			OVER			
Cuerra	Deen	Insulation Layer	(3.1.2)	ROOF COVER (3.1.4)						
System No.	DECK (4.1.2)	Түре	Аттасн	MEMBRANE	FASTENER (3.1.1, 4.2.2)	FASTENER SPACING	LAP WIDTH	Row Spacing	SEAM WELD	MDP (PSF)
SC-38	Min. 22 ga., type B, Grade 80 steel	One or more layers, any combination	Preliminarily attached	Flex MF/R PVC or Flex Tripolymer MF/R Elvaloy KEE	OMG XHD with OMG 2- 3/8 XHD Barbed Stress Plates	6-inch o.c.	5.5-inch	114.5-inch o.c.	2-inch	-37.5 (NO HVHZ)
SC-39	Min. 22 ga., type B, Grade 80 steel	One or more layers, any combination	Preliminarily attached	Flex MF/R PVC or Flex Tripolymer MF/R Elvaloy KEE	OMG Super XHD with OMG 2 3/4 Super XHD Barbed Stress Plates	12-inch o.c.	6-inch	114-inch o.c.	2-inch	-37.5 (NO HVHZ)
SC-40	Min. 22 ga., type B, Grade 33 steel, 6 ft span or structural concrete	One or more layers, any combination	Preliminarily attached	Flex MF/R PVC or Flex Tripolymer MF/R Elvaloy KEE	OMG Heavy Duty screws with OMG 2 in. Barbed Plate	6-inch o.c.	4-inch	55-inch o.c.	2-inch	-45.0
SC-41	Min. 22 ga., type B, Grade 80 steel, 6 ft span	One or more layers, any combination	Preliminarily attached	Flex MF/R PVC or Flex Tripolymer MF/R Elvaloy KEE	OMG XHD with OMG 2- 3/8 XHD Barbed Stress Plates	6-inch o.c.	5.5-inch	75.5-inch o.c.	2-inch	-45.0
SC-42	Min. 22 ga., type B, Grade 80 steel, 6 ft span	One or more layers, any combination	Preliminarily attached	Flex MF/R PVC or Flex Tripolymer MF/R Elvaloy KEE	OMG Super XHD with OMG 2 3/4 Super XHD Barbed Stress Plates	12-inch o.c.	6-inch	75-inch o.c.	2-inch	-45.0

# Page 17 of 25

## **N**EMO **EVALUATIONS REPORT**

Flex Membrane International Corp

Report No.: NER-FMI-001.R3 Revision 3: 2025-05-14

FL1587-R15



ISO/IE

EC	17065	PCA-145

TABLE 10e: STEEL or STRUCTURAL CONCRETE DECKS – NEW CONSTRUCTION, REROOF (TEAR-OFF) or RECOVER  SYSTEM TYPE D-1: INSULATED, MECHANICALLY ATTACHED ROOF COVER										
System Deck Insulation Layer (3.1.2) Roof Cover (3.1.4)										
No.	(4.1.2)	Type Attach Membr		MEMBRANE	FASTENER (3.1.1, 4.2.2)	FASTENER SPACING	LAP WIDTH	Row Spacing	SEAM WELD	MDP (PSF)
SC-43	Min. 22 ga., type B, Grade 80 steel, 6 ft span	One or more layers, any combination	Preliminarily attached	Flex MF/R PVC or min. 50-mil Flex Tripolymer MF/R Elvaloy KEE	OMG XHD with OMG 2- 3/8 XHD Barbed Stress Plates or SFS Dekfast DF- #15-PH3 with Dekfast PLT-O-2-3/4-12B.	6-inch o.c.	5-inch	115-inch o.c.	1.5-inch	-45.0

					RETE DECKS – NEW C		N OR REROOF (TEAR-OF DOF COVER	F)		
System	DECK		BASE INSULATION LAY	/ER	ER TOP INSULATION LAYER			ROOF COVER (3.1.4)		MDD
No.	(4.1.2)	PRIMER	Түре	ATTACH ( <u>3.1.3</u> )	Түре	Аттасн ( <u>3.1.3</u> )	BASE PLY	CAP PLY	APPLICATION	MDP (PSF)
BARE BACK	ROOF COVERS:									
C-1	Structural concrete	ASTM D41	One or more layers Flex ISO II, ACFoam-II, ENRGY 3	hot asphalt	(Optional) Additional layer(s) base insulation	hot asphalt	None	Flex MF/R PVC	Flex Plus Single Ply Adhesive, Flex Plus Bonding Adhesive or Flex Plus WB Substrate Adhesive	-45.0
FLEECE BAC	K ROOF COVERS:									
C-2	Structural concrete	ASTM D41	ENRGY 3	hot asphalt	(Optional) Additional layer(s) base insulation	hot asphalt	None	Flex Tripolymer FB Elvaloy KEE	Flex Rubber Emulsion Adhesive	-45.0
C-3	Structural concrete	None	Min. 2-inch Styrofoam Brand Roofmate or Highload 60	OB500	Min. 0.5-inch DensDeck	OB500	None	Flex Tripolymer FB Elvaloy KEE	Flex Rubber Emulsion Adhesive	-150.0
C-4	Structural concrete	ASTM D41	One or more min. 1.5-inch Flex ISO II or ACFoam-II	hot asphalt	Min. 0.25-inch SECUROCK Gypsum- Fiber Roof Board	hot asphalt	Two (2) plies GAFGLAS Ply 4 or one ply Flex SBS 80s/s Base in hot asphalt	Flex Tripolymer FB Elvaloy KEE	hot asphalt	-225.0

Flex Membrane International Corp FL1587-R15

Report No.: NER-FMI-001.R3 Revision 3: 2025-05-14

Page 18 of 25



ISO/IEC 17065

PCA-145

			TABLE 1	11в: STRUCTURAL CC	NCRETE DECI	KS - NEW CONSTRUCTION OF	R REROOF (TEAR-C	OFF)		
			SYSTEI	M TYPE A-1: BONDED	TEMP ROOF,	BONDED INSULATION, BON	NDED ROOF COVE	ER		
Cuarra	Draw		VAPOR BARRIER /	BASE INSULATION	N LAYER(S) TOP INSULATION		LAYER		OOF COVER (3.1.4)	MADD
System No.	DECK (4.1.2)	PRIMER	TEMPORARY ROOF	Түре	Аттасн ( <u>3.1.3</u> )	Түре	Аттасн ( <u>3.1.3</u> )	BASE PLY	CAP PLY	MDP (PSF)
BARE BAC	K ROOF COVERS:									
C-5	Structural concrete	Soprema Elastocol Stick or Elastocol Stick Zero	Soprema Sopravap'r, self-adhering	Min. 1.5-inch Flex ISO II or ACFoam-II	M-OSFA, M-PG1 or OB500	Min. 0.25-inch DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	M-OSFA, M- PG1 or OB500	None	Flex MF/R PVC or Flex Tripolymer MF/R Elvaloy KEE in Flex Substrate 2375 or LA432M Bonding Adhesive	-67.5
C-6	Structural concrete	Soprema Elastocol Stick or Elastocol Stick Zero	Soprema Sopravap'r, self-adhering	Min. 2-inch Styrofoam Brand Roofmate or Highload 60	M-OSFA, M-PG1 or OB500	Min. 0.25-inch DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	M-OSFA, M- PG1 or OB500	None	Flex MF/R PVC or Flex Tripolymer MF/R Elvaloy KEE in Flex Substrate 2375 or LA432M Bonding Adhesive	-75.0
C-7	Structural concrete	Soprema Elastocol 600c	Soprema Sopralene Stick, self-adhering	2-inch Flex ISO II or ACFoam-II	OB500, 6- inch o.c.	2-inch Flex ISO II or ACFoam-II	OB500, 6-inch o.c.	None	Flex Tripolymer MF/R Elvaloy KEE in Flex 7008 Laminating Adhesive	-217.5
FLEECE BA	CK ROOF COVERS:									
C-8	Structural concrete	Soprema Elastocol Stick or Elastocol Stick Zero	Soprema Sopravap'r, self-adhering	Min. 1.5-inch Flex ISO II or ACFoam-II or min. 2-inch Styrofoam Brand Roofmate or Highload 60	M-OSFA, M-PG1 or OB500	Min. 0.25-inch DensDeck Prime	M-OSFA, M- PG1 or OB500	None	Flex MF/R PVC FB in FA636 Water Borne Adhesive	-45.0
C-9	Structural concrete	Soprema Elastocol Stick or Elastocol Stick Zero	Soprema Sopravap'r, self-adhering	Min. 1.5-inch Flex ISO II or ACFoam-II	M-OSFA, M-PG1 or OB500	Min. 0.25-inch DensDeck Prime	M-OSFA, M- PG1 or OB500	None	Flex Tripolymer FB Elvaloy KEE in Flex Rubber Emulsion Adhesive or FA636 Water Borne Adhesive	-67.5
C-10	Structural concrete	Soprema Elastocol Stick or Elastocol Stick Zero	Soprema Sopravap'r, self-adhering	Min. 1.5-inch Flex ISO II or ACFoam-II	M-OSFA, M-PG1 or OB500	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	M-OSFA, M- PG1 or OB500	None	Flex Tripolymer FB Elvaloy KEE in Flex Rubber Emulsion Adhesive, Polyset CRA (spatter) or FA636 Water Borne Adhesive	-67.5
C-11	Structural concrete	Soprema Elastocol Stick or Elastocol Stick Zero	Soprema Sopravap'r, self-adhering	Min. 1.5-inch Flex ISO II or ACFoam-II	M-OSFA, M-PG1 or OB500	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	M-OSFA, M- PG1 or OB500	None	Flex MF/R PVC FB in FA636 Water Borne Adhesive	-67.5
C-12	Structural concrete	Soprema Elastocol Stick or Elastocol Stick Zero	Soprema Sopravap'r, self-adhering	Min. 2-inch Styrofoam Brand Roofmate or Highload 60	M-OSFA, M-PG1 or OB500	Min. 0.25-inch DensDeck Prime	M-OSFA, M- PG1 or OB500	None	Flex Tripolymer FB Elvaloy KEE in Flex Rubber Emulsion Adhesive or FA636 Water Borne Adhesive	-75.0

concrete

C-16

NEMO cert.

## **N**EMO **EVALUATIONS REPORT**

Flex Membrane International Corp FL1587-R15

Report No.: NER-FMI-001.R3 Revision 3: 2025-05-14

ASTM D41

Base in hot

asphalt

1.5-inch Flex ISO II

or ACFoam-II

Page 19 of 25



PCA-145

-255.0

ISO/IEC 17065

						(S - NEW CONSTRUCTION OR BONDED INSULATION, BON				
System	Deer		VAPOR BARRIER /	BASE INSULATION	LAYER(S)	TOP INSULATION L	AYER	Ro	ROOF COVER (3.1.4)	
No.	<b>D</b> ЕСК (4.1.2)	PRIMER	TEMPORARY ROOF	Түре	ATTACH (3.1.3)	Түре	ATTACH ( <u>3.1.3</u> )	BASE PLY	CAP PLY	(PSF)
C-13	Structural concrete	Soprema Elastocol Stick or Elastocol Stick Zero	Soprema Sopravap'r, self-adhering	Min. 2-inch Styrofoam Brand Roofmate or Highload 60	M-OSFA, M-PG1 or OB500	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	M-OSFA, M- PG1 or OB500	None	Flex Tripolymer FB Elvaloy KEE in Flex Rubber Emulsion Adhesive, Polyset CRA (spatter) or FA636 Water Borne Adhesive	-75.0
C-14	Structural concrete	Soprema Elastocol Stick or Elastocol Stick Zero	Soprema Sopravap'r, self-adhering	Min. 2-inch Styrofoam Brand Roofmate or Highload 60	M-OSFA, M-PG1 or OB500	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	M-OSFA, M- PG1 or OB500	None	Flex MF/R PVC FB in FA636 Water Borne Adhesive	-75.0
C-15	Structural concrete	ASTM D41	GAFGLAS Ply 4 in hot asphalt	One or more min. 1.5-inch Flex ISO II or ACFoam-II	hot asphalt	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	hot asphalt	Two (2) plies GAFGLAS Ply 4, in hot asphalt	Flex Tripolymer FB Elvaloy KEE in hot asphalt	-225.0
C-16	Structural	ASTM D41	Flex SBS 80 s/s	One or more min.	hot asphalt	Min. 0.25-inch SECUROCK	hot asphalt	Flex SBS 80 s/s	Flex Tripolymer FB Elvaloy	-255.0

Gypsum-Fiber Roof Board

hot asphalt

Base in hot

asphalt

KEE in hot asphalt

	TABLE 11c: STRUCTURAL CONCRETE DECKS - NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER  SYSTEM TYPE C-2: INDUCTION WELDED MEMBRANE										
SYSTEM	DECK	Insulation Layer (3.1.2)	ATTACHMENT		ROOF COVER (3.1.4)	MDP					
No.	(4.1.2)		FASTENER (3.1.1, 4.2.2)	DENSITY		(PSF)					
C-17	Structural concrete	One or more layers, any combination, min. 1.5-inch	Dekfast DF-#14-PH3 or DF-#15-PH3 with SFS isoweld® F1-P-6.8-PVC Plate	Max. 12-inch o.c. in rows max. 60-inch o.c.	Flex MF/R PVC or Flex Tripolymer MF/R Elvaloy KEE induction welded with SFS isoweld tool	-45.0					
C-18	Structural concrete	One or more layers, any combination, min. 1.5-inch	Dekfast DF-#14-PH3 or DF-#15-PH3 with SFS isoweld® F1-P-6.8-PVC Plate	1 per 6 ft <sup>2</sup> 2 x 3-ft grid, staggered	Flex MF/R PVC or Flex Tripolymer MF/R Elvaloy KEE induction welded with SFS isoweld tool	-52.5					
C-19	Structural concrete	One or more layers, any combination, min. 1.5-inch	Dekfast DF-#14-PH3 or DF-#15-PH3 with SFS isoweld® F1-P-6.8-PVC Plate	1 per 3 ft <sup>2</sup> 1.5 x 2-ft grid, staggered	Flex MF/R PVC or Flex Tripolymer MF/R Elvaloy KEE induction welded with SFS isoweld tool	-82.5					
C-20	Structural concrete	One or more layers, any combination, min. 1.5-inch	Dekfast DF-#14-PH3 or DF-#15-PH3 with SFS <i>isoweld®</i> F1-P-6.8-PVC Plate	Max. 6-inch o.c. in rows max. 60-inch o.c.	Flex MF/R PVC or Flex Tripolymer MF/R Elvaloy KEE induction welded with SFS isoweld tool	-90.0					

hot asphalt

Flex Membrane International Corp FL1587-R15

Report No.: NER-FMI-001.R3 Revision 3: 2025-05-14

Page 20 of 25





ISO/IEC 17065 PCA-145

TABLE 11d: STRUCTURAL CONCRETE DECKS - NEW CONSTRUCTION OR REROOF (TEAR-OFF)  SYSTEM TYPE F: NON-INSULATED, BONDED ROOF COVER								
SYSTEM DECK (4.1.2) PRIMER ROOF COVER (3.1.4)								
No.	<u> </u>	· ·····	Туре	ATTACH	(PSF)			
C-21	Structural concrete	Flex Asphalt Cutback Primer	Flex Tripolymer FB Elvaloy KEE	hot asphalt	-307.5			
C-22	Structural concrete	None	Flex Tripolymer FB Elvaloy KEE	Flex FB Low Rise Adhesive, full coverage	-382.5			

	TABLE 11E: STRUCTURAL CONCRETE DECKS - NEW CONSTRUCTION OR REROOF (TEAR-OFF)  SYSTEM TYPE G: OPTIONAL INSULATION, LOOSE-LAID ROOF COVER, PRESSURE EQUALIZING VENT  Not for use in FBC HVHZ jurisdictions								
SYSTEM No.	<b>D</b> ЕСК (4.1.2)	Air Barrier	Underlayment	Туре	ROOF COVER ATTACH	MDP (PSF)			
C-23	Structural concrete	One or two plies, ASTM D4601 base sheet, applied in full mopping of hot asphalt	(Optional) Any fire classified roof insulation and/or coverboard combination, any thickness, loose-laid with staggered joints	12-inch wide strips of polypropylene, air permeable filter fabric, loose laid in a crossing pattern, connecting the V2T vents	Flex MF/R PVC or Flex Tripolymer MF/R Elvaloy KEE	Acyrlife V2T installed in accordance with Acrylife instructions, spaced maximum 50 ft o.c.	-97.5 (NO HVHZ)		

					TE DECKS - NEW CONSTRUCTION, BOI				
SYSTEM	DECK	LIGHTWEIGHT	BASE IN	SULATION LAYER	COVERBOA	ARD	ROOF COVER (3.1.4)		MDP
No.	(4.1.2)	<b>C</b> ONCRETE (3.1.2)	Түре	ATTACH (3.1.3)	Туре	ATTACH (3.1.3)	Түре	Аттасн	<u>(PSF)</u>
BARE BACK	Roof Covers:								
LWC-1	Structural concrete	Min. 350 psi Celcore Cellular Concrete	Min. 1.5-inch Flex ISO II or ACFoam-II	M-OSFA, M-PG1, OB500, Polyset CRA or Polyset Board-Max	(Optional) Additional layers base insulation	M-OSFA, M-PG1, OB500, Polyset CRA or Polyset Board-Max	Flex MF/R PVC	FA636 Water Borne Adhesive	-165.0
LWC-2	Structural concrete	Min. 350 psi Celcore Cellular Concrete	Min. 1.5-inch Flex ISO II or ACFoam-II	M-OSFA, M-PG1, OB500, Polyset CRA or Polyset Board-Max	Min. 0.25-inch DensDeck Prime or SECUROCK Gypsum- Fiber Roof Board or 0.5-inch ACFoam-HD Coverboard	M-OSFA, M-PG1, OB500, Polyset CRA or Polyset Board-Max	Flex MF/R PVC	FA636 Water Borne Adhesive	-210.0
LWC-3	Structural concrete	Min. 350 psi Celcore Cellular Concrete	0.5-inch ACFoam-HD Coverboard	M-OSFA, M-PG1, OB500, Polyset CRA or Polyset Board-Max	None	N/A	Flex MF/R PVC	FA636 Water Borne Adhesive	-240.0
FLEECE BAG	CK ROOF COVERS:								
LWC-4	Structural concrete	Min. 350 psi Celcore Cellular Concrete	Min. 1.5-inch Flex ISO II or ACFoam-II	M-OSFA, M-PG1, OB500, Polyset CRA or Polyset Board-Max	(Optional) Additional layers base insulation	M-OSFA, M-PG1, OB500, Polyset CRA or Polyset Board-Max	Flex MF/R PVC FB or Flex Tripolymer FB Elvaloy KEE	Millennium One Step Foamable Adhesive, ribbons 4" o.c. or FA636 Water Borne Adhesive	-165.0

# NEWOleart

## **N**EMO **EVALUATIONS REPORT**

Flex Membrane International Corp

FL1587-R15



ACCREDITED Product Certification Agency

PCA-145

ISO/IEC 17065

Report No.: NER-FMI-001.R3
Revision 3: 2025-05-14
Page 21 of 25

	TABLE 12a: LIGHTWEIGHT CONCRETE DECKS - NEW CONSTRUCTION OR REROOF (TEAR-OFF)  SYSTEM TYPE A-1: LWC TO DECK, BONDED INSULATION, BONDED ROOF COVER									
								MDP		
No.	(4.1.2)	CONCRETE (3.1.2)	Түре	ATTACH (3.1.3)	Туре	ATTACH (3.1.3)	Түре	Аттасн	(PSF)	
LWC-5	Structural concrete	Min. 350 psi Celcore Cellular Concrete	Min. 1.5-inch Flex ISO II or ACFoam-II	M-OSFA, M-PG1, OB500, Polyset CRA or Polyset Board-Max	Min. 0.25-inch DensDeck Prime or SECUROCK Gypsum- Fiber Roof Board or 0.5-inch ACFoam-HD Coverboard	M-OSFA, M-PG1, OB500, Polyset CRA or Polyset Board-Max	Flex MF/R PVC FB or Flex Tripolymer FB Elvaloy KEE	Millennium One Step Foamable Adhesive, ribbons 4" o.c. or FA636 Water Borne Adhesive	-210.0	
LWC-6	Structural concrete	Min. 350 psi Celcore Cellular Concrete	0.5-inch ACFoam-HD Coverboard	M-OSFA, M-PG1, OB500, Polyset CRA or Polyset Board-Max	None	N/A	Flex MF/R PVC FB or Flex Tripolymer FB Elvaloy KEE	Millennium One Step Foamable Adhesive, ribbons 4" o.c. or FA636 Water Borne Adhesive	-240.0	

		TABLE 12B: LIGHTWEIGHT CONCRETE DECKS - NEW	CONSTRUCTION OR RI	EROOF (TEAR-OFF)		
		SYSTEM TYPE F: LWC-TO-DECK, E	ONDED ROOF COVER			
System	DECK (4.1.2)	LIGHTWEIGHT CONCRETE (3.1.2)	PRIMER		ROOF COVER (3.1.4)	MDP
No.	DECK <u>[4.1.2]</u>	LIGHT WEIGHT CONCRETE (3.1.2)	PRIIVIER	Түре	PE ATTACH	
LWC-7	Min. 22 ga, type BV, Grade 40 steel; 6 ft span; 5/8" puddle welds, 6" o.c.	Min. 350 psi, min. 2" thick Celcore Cellular Concrete	None	Flex MF/R PVC FB or Flex Tripolymer FB Elvaloy KEE	OlyBond 500 Canister (spatter-applied) or Polyset CRA (spatter-applied)	-52.5
LWC-8	Min. 22 ga, type B, Grade 33 steel; 6 ft span; 5/8" puddle welds with washers or #12 HWH Teks 5, 6" o.c.	Min. 200 psi, min. 2" thick Celcore Cellular Concrete	None	Flex Tripolymer FB Elvaloy KEE	Flex Rubber Emulsion Adhesive	-60.0
LWC-9	Min. 22 ga, type BV, Grade 33 steel; 6 ft span; 5/8" puddle welds with washers or #12 HWH Teks 5, 6" o.c.	Min. 200 psi, min. 2" thick Celcore Cellular Concrete	ASTM D41 primer	Flex Tripolymer FB Elvaloy KEE	hot asphalt	-60.0
LWC-10	Min. 22 ga, type B, Grade 33 steel; 5 ft span; 5/8" puddle welds with washers or #12 HWH Teks 5, 6" o.c.	Min. 200 psi, min. 2" thick Celcore Cellular Concrete	None	Flex Tripolymer FB Elvaloy KEE	Flex Rubber Emulsion Adhesive	-75.0
LWC-11	Min. 22 ga, type B, Grade 33 steel; 5 ft span; 5/8" puddle welds with washers or #12 HWH Teks 5, 6" o.c.	Min. 200 psi, min. 2" thick Celcore Cellular Concrete	ASTM D41 primer	Flex Tripolymer FB Elvaloy KEE	hot asphalt	-75.0
LWC-12	Min. 22 ga, type B, Grade 33 steel; 5 ft span; #12 HWH Teks 5, 6" o.c.	Min. 200 psi, min. 2" thick Celcore Cellular Concrete	None	Flex Tripolymer FB Elvaloy KEE	Flex Rubber Emulsion Adhesive	-82.5
LWC-13	Min. 22 ga, type B, Grade 33 steel; 5 ft span; #12 HWH Teks 5, 6" o.c.	Min. 200 psi, min. 2" thick Celcore Cellular Concrete	ASTM D41 primer	Flex Tripolymer FB Elvaloy KEE	hot asphalt	-82.5
LWC-14	Min. 22 ga, type B, Grade 33 steel; 4 ft span; #12 HWH Teks 5, 6" o.c.	Min. 200 psi, min. 2" thick Celcore Cellular Concrete	None	Flex Tripolymer FB Elvaloy KEE	Flex Rubber Emulsion Adhesive	-90.0

# NEMO cert

## **N**EMO **EVALUATIONS REPORT**

Flex Membrane International Corp

FL1587-R15



ISO/IEC 17065 PCA-145

N ARRANGER AGUREUITE
Product Certificati
Agency

## Report No.: NER-FMI-001.R3 Revision 3: 2025-05-14 Page 22 of 25

		TABLE 12B: LIGHTWEIGHT CONCRETE DECKS - NEV SYSTEM TYPE F: LWC-TO-DECK,				
System	DECK (4.1.2)	LIGHTWEIGHT CONCRETE (3.1.2)	PRIMER		ROOF COVER (3.1.4)	MDP
No.	DECK (4.1.2)	LIGHT WEIGHT CONCRETE (5.1.2)	FRIIVIER	Түре	Аттасн	(PSF)
LWC-15	Min. 22 ga, type B, Grade 33 steel; 5 ft span; #12 HWH Teks 5, 6" o.c.	Min. 200 psi, min. 2" thick Celcore Cellular Concrete	ASTM D41 primer	Flex Tripolymer FB Elvaloy KEE	hot asphalt	-90.0
LWC-16	Structural concrete	Min. 200 psi, min. 2" thick Celcore Cellular Concrete	None	Flex Tripolymer FB Elvaloy KEE	Flex Rubber Emulsion Adhesive	-105.0
LWC-17	Structural concrete	Min. 200 psi, min. 2" thick Celcore Cellular Concrete	ASTM D41 primer	Flex Tripolymer FB Elvaloy KEE	hot asphalt	-135.0
LWC-18	Structural concrete	Min. 350 psi, min. 2" thick Celcore Cellular Concrete	None	Flex MF/R PVC FB or Flex Tripolymer FB Elvaloy KEE	OlyBond 500 Canister (spatter-applied) or Polyset CRA (spatter-applied)	-386.0
LWC-19	Min. 22 ga, type B, Grade 33 steel; 5 ft span; 5/8" puddle welds with washers or #12 HWH Teks 5, 6" o.c.	Min. 300 psi, min. 2" thick Elastizell Lightweight Insulating Concrete	None	Flex Tripolymer FB Elvaloy KEE	Flex Rubber Emulsion Adhesive	-97.5
LWC-20	Structural concrete	Min. 160 psi, min. 2" thick Elastizell Lightweight Insulating Concrete	None	Flex MF/R PVC FB or Flex Tripolymer FB Elvaloy KEE	FA636 Water Borne Adhesive	-245.0
LWC-21	Structural concrete	Min. 160 psi, min. 2" thick Elastizell Lightweight Insulating Concrete	None	Flex MF/R PVC FB or Flex Tripolymer FB Elvaloy KEE	OlyBond 500 Canister (spatter-applied) or Polyset CRA (spatter-applied)	-270.0
LWC-22	Structural concrete.	Min. 300 psi, min. 2" thick Elastizell Lightweight Insulating Concrete	None	Flex Tripolymer FB Elvaloy KEE	Flex Rubber Emulsion Adhesive	-465.0
LWC-23	Structural concrete	Min. 370 psi, min. 2" thick Elastizell Lightweight Insulating Concrete	None	Flex MF/R PVC FB or Flex Tripolymer FB Elvaloy KEE	FA636 Water Borne Adhesive	-582.5

# NEMOlcert

## **N**EMO **EVALUATIONS REPORT**

Flex Membrane International Corp

FL1587-R15



ISO/IEC 17065

PCA-145

## Report No.: NER-FMI-001.R3 Revision 3: 2025-05-14

Page 23 of 25

# TABLE 13A: RECOVER APPLICATIONS SYSTEM TYPE A-1: BONDED INSULATION, BONDED ROOF COVER

A The reported MDP documents the allowable maximum design pressure of the new insulation, coverboard and roof cover when adhered to the substrate, irrespective of the deck type or performance of the substrate.

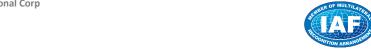
The deck and substrate shall be capable of resisting the project design pressure requirements, not to exceed the noted MDP, to the satisfaction of the Authority Having Jurisdiction.

SYSTEM	Substrate	BASE INSULAT	ION LAYER	TOP INSULATI	ION LAYER		ROOF COVER	(3.1.4)	MDP
No.	( <u>4.1.2</u> , <u>4.2.2</u> )	Туре	ATTACH (3.1.3)	Түре	ATTACH (3.1.3)	BASE PLY	CAP PLY	APPLICATION	(PSF) <sup>A</sup>
BARE BACK	ROOF COVER:								
R-1	Existing asphaltic built-up roof (BUR) or mineral surface cap sheet	One or more layers, min. 1.5-inch Flex ISO II, ACFoam-II or ENRGY 3	OB500	(Optional) Additional layer(s) base insulation	OB500	None	Flex MF/R PVC	Flex Plus Single Ply Adhesive, Flex Plus Bonding Adhesive or Flex Plus WB Substrate Adhesive	-45.0
R-2	Existing smooth-surface built-up roof (BUR), gravel-surface built-up roof (BUR) with loose gravel removed or granule-surface SBS modified bitumen	One or more layers, min. 1.5-in Flex ISO II or ACFoam-II	M-PG1, OB500, Polyset CRA or Polyset Board- Max	(Optional) Additional layers of base insulation	M-PG1, OB500, Polyset CRA or Polyset Board- Max	None	Flex MF/R PVC or Flex Tripolymer MF/R Elvaloy KEE	Flex Substrate 2375 or LA432M Bonding Adhesive	-157.5
R-3	Existing smooth-surface built-up roof (BUR), gravel-surface built-up roof (BUR) with loose gravel removed or granule-surface SBS modified bitumen	One or more layers, min. 1.5-in Flex ISO II or ACFoam-II	M-OSFA	(Optional) Additional layers of base insulation	M-OSFA	None	Flex MF/R PVC or Flex Tripolymer MF/R Elvaloy KEE	Flex Substrate 2375 or LA432M Bonding Adhesive	-195.0
R-4	Existing smooth-surface built-up roof (BUR), gravel-surface built-up roof (BUR) with loose gravel removed or granule-surface SBS modified bitumen	One or more layers, min. 1.5-in Insulfoam I (non- HVHZ) or Insulfoam IX (non-HVHZ or HVHZ)	M-OSFA, M- PG1, OB500, Polyset CRA or Polyset Board- Max	Min. 0.25 in. DensDeck Prime or SECUROCK Gypsum- Fiber Roof Board	M-OSFA, M-PG1, OB500, Polyset CRA or Polyset Board-Max	None	Flex MF/R PVC or Flex Tripolymer MF/R Elvaloy KEE	Flex Substrate 2375 or LA432M Bonding Adhesive	-237.5
R-5	Existing smooth-surface built-up roof (BUR), gravel-surface built-up roof (BUR) with loose gravel removed or granule-surface SBS modified bitumen	One or more layers, min. 1.5-in Flex ISO II or ACFoam-II	M-PG1	Min. 0.25 in. DensDeck Prime or SECUROCK Gypsum- Fiber Roof Board	M-OSFA, M-PG1, OB500, Polyset CRA or Polyset Board-Max	None	Flex MF/R PVC or Flex Tripolymer MF/R Elvaloy KEE	Flex Substrate 2375 or LA432M Bonding Adhesive	-237.5
FLEECE BAG	CK ROOF COVERS:								
R-6	Existing smooth-surface built-up roof (BUR), gravel-surface built-up roof (BUR) with loose gravel removed or granule-surface SBS modified bitumen	One or more layers, min. 1.5-in Flex ISO II or ACFoam-II	M-OSFA, M- PG1, OB500, Polyset CRA or Polyset Board- Max	(Optional) Min. 0.25- inch DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	M-OSFA, M-PG1, OB500, Polyset CRA or Polyset Board-Max	None	Flex MF/R PVC FB	Flex FB Low Rise Adhesive, ribbons max. 12" o.c., Polyset CRA (spatter) or FA636 Water Borne Adhesive	-45.0
R-7	Existing smooth-surface built-up roof (BUR), gravel-surface built-up roof (BUR) with loose gravel removed or granule-surface SBS modified bitumen	One or more layers, min. 1.5-in Flex ISO II or ACFoam-II	M-OSFA, M- PG1, OB500, Polyset CRA or Polyset Board- Max	(Optional) Min. 0.25- inch DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	M-OSFA, M-PG1, OB500, Polyset CRA or Polyset Board-Max	None	Flex Tripolymer FB Elvaloy KEE	Flex FB Low Rise Adhesive, ribbons max. 12" o.c., Flex Rubber Emulsion Adhesive, Polyset CRA (spatter) or FA636 Water Borne Adhesive	-45.0

Flex Membrane International Corp FL1587-R15

Report No.: NER-FMI-001.R3 Revision 3: 2025-05-14

Page 24 of 25



ISO/IEC 17065

PCA-145

## **TABLE 13**A: RECOVER APPLICATIONS SYSTEM TYPE A-1: BONDED INSULATION, BONDED ROOF COVER

A The reported MDP documents the allowable maximum design pressure of the new insulation, coverboard and roof cover when adhered to the substrate, irrespective of the deck type or performance of the substrate. The deck and substrate shall be capable of resisting the project design pressure requirements, not to exceed the noted MDP, to the satisfaction of the Authority Having Jurisdiction.

System	Substrate	BASE INSULAT	ION LAYER	TOP INSULATI	ON LAYER		ROOF COVER	(3.1.4)	MDP
No.	( <u>4.1.2</u> , <u>4.2.2</u> )	Түре	ATTACH (3.1.3)	Туре	ATTACH (3.1.3)	BASE PLY	CAP PLY	APPLICATION	(PSF)A
R-8	Existing smooth-surface built-up roof (BUR), gravel-surface built-up roof (BUR) with loose gravel removed or granule-surface SBS modified bitumen	One or more layers, min. 1.5-in Flex ISO II or ACFoam-II	M-PG1, OB500, Polyset CRA or Polyset Board- Max	(Optional) Additional layers of base insulation	M-PG1, OB500, Polyset CRA or Polyset Board- Max	None	Flex MF/R PVC FB	Polyset CRA (spatter) or FA636 Water Borne Adhesive	-157.5
R-9	Existing smooth-surface built-up roof (BUR), gravel-surface built-up roof (BUR) with loose gravel removed or granule-surface SBS modified bitumen	One or more layers, min. 1.5-in Flex ISO II or ACFoam-II	M-PG1, OB500, Polyset CRA or Polyset Board- Max	(Optional) Additional layers of base insulation	M-PG1, OB500, Polyset CRA or Polyset Board- Max	None	Flex Tripolymer FB Elvaloy KEE	Flex Rubber Emulsion Adhesive, Polyset CRA (spatter) or FA636 Water Borne Adhesive	-157.5
R-10	Existing smooth-surface built-up roof (BUR), gravel-surface built-up roof (BUR) with loose gravel removed or granule-surface SBS modified bitumen	One or more layers, min. 1.5-in Flex ISO II or ACFoam-II	M-OSFA	(Optional) Additional layers of base insulation	M-OSFA	None	Flex MF/R PVC FB	Polyset CRA (spatter) or FA636 Water Borne Adhesive	-195.0
R-11	Existing smooth-surface built-up roof (BUR), gravel-surface built-up roof (BUR) with loose gravel removed or granule-surface SBS modified bitumen	One or more layers, min. 1.5-in Flex ISO II or ACFoam-II	M-OSFA	(Optional) Additional layers of base insulation	M-OSFA	None	Flex Tripolymer FB Elvaloy KEE	Flex Rubber Emulsion Adhesive, Polyset CRA (spatter) or FA636 Water Borne Adhesive	-195.0
R-12	Existing smooth-surface asphalt built- up roof (BUR)	One or more min. 1.5-inch Flex ISO II or ACFoam-II	hot asphalt	Min. 0.25-inch SECUROCK Gypsum- Fiber Roof Board	hot asphalt	Two (2) plies GAFGLAS Ply 4 in hot asphalt	Flex Tripolymer FB Elvaloy KEE	hot asphalt	-225.0
R-13	Existing smooth-surface built-up roof (BUR), gravel-surface built-up roof (BUR) with loose gravel removed or granule-surface SBS modified bitumen	One or more layers, min. 1.5-in Insulfoam I (non- HVHZ) or Insulfoam IX (non-HVHZ or HVHZ)	M-OSFA, M- PG1, OB500, Polyset CRA or Polyset Board- Max	Min. 0.25 in. DensDeck Prime or SECUROCK Gypsum- Fiber Roof Board	M-OSFA, M-PG1, OB500, Polyset CRA or Polyset Board-Max	None	Flex MF/R PVC FB	Polyset CRA (spatter) or FA636 Water Borne Adhesive	-237.5
R-14	Existing smooth-surface built-up roof (BUR), gravel-surface built-up roof (BUR) with loose gravel removed or granule-surface SBS modified bitumen	One or more layers, min. 1.5-in Flex ISO II or ACFoam-II	M-PG1	Min. 0.25 in. DensDeck Prime or SECUROCK Gypsum- Fiber Roof Board	M-OSFA, M-PG1, OB500, Polyset CRA or Polyset Board-Max	None	Flex MF/R PVC FB	Polyset CRA (spatter) or FA636 Water Borne Adhesive	-237.5
R-15	Existing smooth-surface built-up roof (BUR), gravel-surface built-up roof (BUR) with loose gravel removed or granule-surface SBS modified bitumen	One or more layers, min. 1.5-in Insulfoam I (non- HVHZ) or Insulfoam IX (non-HVHZ or HVHZ)	M-OSFA, M- PG1, OB500, Polyset CRA or Polyset Board- Max	Min. 0.25 in. DensDeck Prime or SECUROCK Gypsum- Fiber Roof Board	M-OSFA, M-PG1, OB500, Polyset CRA or Polyset Board-Max	None	Flex Tripolymer FB Elvaloy KEE	Flex Rubber Emulsion Adhesive, Polyset CRA (spatter) or FA636 Water Borne Adhesive	-237.5

Flex Membrane International Corp FL1587-R15

Report No.: NER-FMI-001.R3 Revision 3: 2025-05-14

Page 25 of 25



ISO/IEC 17065

PCA-145

## **TABLE 13**A: RECOVER APPLICATIONS SYSTEM TYPE A-1: BONDED INSULATION, BONDED ROOF COVER

A The reported MDP documents the allowable maximum design pressure of the new insulation, coverboard and roof cover when adhered to the substrate, irrespective of the deck type or performance of the substrate. The deck and substrate shall be capable of resisting the project design pressure requirements, not to exceed the noted MDP, to the satisfaction of the Authority Having Jurisdiction.

SYSTEM	Substrate	BASE INSULATION LAYER		TOP INSULATI	ON LAYER		ROOF COVER (3.1.4)		
No.	(4.1.2, <u>4.2.2</u> )	Түре	ATTACH (3.1.3)	Туре	ATTACH (3.1.3)	BASE PLY	CAP PLY	APPLICATION	(PSF) <sup>A</sup>
R-16	Existing smooth-surface built-up roof (BUR), gravel-surface built-up roof (BUR) with loose gravel removed or granule-surface SBS modified bitumen	One or more layers, min. 1.5-in Flex ISO II or ACFoam-II	M-PG1	Min. 0.25 in. DensDeck Prime or SECUROCK Gypsum- Fiber Roof Board	M-OSFA, M-PG1, OB500, Polyset CRA or Polyset Board-Max	None	Flex Tripolymer FB Elvaloy KEE	Flex Rubber Emulsion Adhesive, Polyset CRA (spatter) or FA636 Water Borne Adhesive	-237.5
R-17	Existing smooth-surface SBS modified bitumen	One or more min. 1.5-inch Flex ISO II or ACFoam-II	hot asphalt	Min. 0.25-inch SECUROCK Gypsum- Fiber Roof Board	hot asphalt	Flex SBS 80 s/s Base in hot asphalt	Flex Tripolymer FB Elvaloy KEE	hot asphalt	-255.0

	TABLE 13B: STEEL - RECOVER  SYSTEM TYPE C-2: INDUCTION WELDED ROOF COVER  (All areas where the existing metal panels do not lay flush on the underlying purlin shall have a 0.25-inch diameter pilot hole pre-drilled into the panel prior to driving the Purlin Fastener into the purlin.)										
SYSTEM	Substrate	INSULATION LAYER (3.1.2)	ATTACHMENT		ROOF COVER (3.1.4)	MDP					
No.	<u>(4.1.2)</u>		FASTENER ( <u>3.1.1</u> , <u>4.2.2</u> )	Spacing	ROOF COVER (5.1.4)	<u>(PSF)</u>					
OMG RHINOBOND:											
R-18	Existing standing seam or lap seam metal roof covers having min. 16 gauge (0.0598 inch), 50 ksi steel purlins spaced max. 60-inch o.c.	One or more layers, any combination, preliminarily fastened	OMG RetroDriller with RHINOBOND Insulation Plate (PVC)	12-inch o.c. along purlins	Min. 50-mil Flex MF/R PVC or min. 60-mil Flex Tripolymer MF/R Elvaloy KEE, induction welded with RHINOBOND tool	-45.0					
SFS ISOWI	ELD:										
R-19	Existing standing seam or lap seam metal roof covers having min. 16 gauge (0.0598 inch), 50 ksi steel purlins spaced max. 60-inch o.c.	One or more layers, any combination, preliminarily fastened	Dekfast DF-#12-PC-SQ3 with SFS isoweld® F1- P-6.8-PVC Plate are fastened through to purlins	12-inch o.c. along purlins	Flex MF/R PVC or Flex Tripolymer MF/R Elvaloy KEE, induction welded with SFS isoweld tool	-45.0					
R-20	Existing standing seam or lap seam metal roof covers having min. 16 gauge (0.0598 inch), 50 ksi steel purlins spaced max. 60-inch o.c.	One or more layers, any combination, preliminarily fastened	Dekfast DF-#12-PC-SQ3 with SFS isoweld® F1- P-6.8-PVC Plate are fastened through to purlins	6-inch o.c. along purlins	Flex MF/R PVC or Flex Tripolymer MF/R Elvaloy KEE, induction welded with SFS isoweld tool	-90.0					

TABLE 13c: RECOVER APPLICATIONS
SYSTEM TYPE F: NON-INSULATED, BONDED ROOF COVER

A The reported MDP documents the allowable maximum design pressure of the new roof cover when adhered to the substrate, irrespective of the deck type or performance of the substrate). The deck and substrate shall be capable of resisting the project design pressure requirements, not to exceed the noted MDP, to the satisfaction of the Authority Having Jurisdiction

	The deck and substitute sharibe capable of resisting the project design pressure requirements, not to exceed the noted with 1, to the substitute sharibe capable of resisting the project design pressure requirements, not to exceed the noted with 1, to the substitute sharibe capable of resisting the project design pressure requirements, not to exceed the noted with 1, to the substitute sharibe capable of resisting the project design pressure requirements, not to exceed the noted with 1, to the substitute sharibe capable of resisting the project design pressure requirements.									
SYSTEM	Substrate	PRIMER	ROOF COVER (3.1.4)		MDP					
No.	( <u>4.1.2</u> , <u>4.2.2</u> )	FRIIVIEK	Түре	ATTACH	(PSF) <sup>A</sup>					
R-21	Existing smooth-surface built-up roof (BUR) or granule-surface SBS modified bitumen	None	Flex MF/R PVC FB or Flex Tripolymer FB Elvaloy KEE	Flex FB Low Rise Adhesive, ribbons max. 6" o.c. or Polyset CRA (spatter)	-60.0					