

Nemo letc.

Certificate of Authorization #32455 353 Christian Street, Unit #13 Oxford, CT 06478 (203) 262-9245

Engineer Test Consult

P.E. EVALUATION REPORT (PEER)

IKO INDUSTRIES LTD

40 Hansen Road S Brampton, ON L6W 3H4 Canada (416) 529-3606

PEER-IKO-001.A.R3 FL40565-R3 (NON-HVHZ) Date of Issuance: 12/20/2021 Revision 3: 09/25/2024

SCOPE:

This P.E. Evaluation Report (henceforth 'PEER') is issued under <u>Rule 61G20-3</u> and the applicable rules and regulations governing the use of construction materials in the State of Florida, and the <u>Third-Party Evaluation Report</u> acceptance by the Texas Department of Insurance. The documentation submitted has been reviewed by Robert Nieminen, P.E. for compliance with the **8**th **Edition (2023) Florida Building Code and 2018 International Building Code** sections noted herein.

DESCRIPTION: IKO Innovi TPO Roof Systems (NON-HVHZ)

LABELING: Labeling shall be in accordance with the requirements of the Accredited Quality Assurance Agency noted herein.

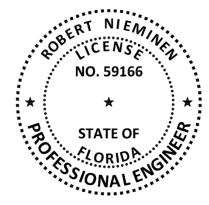
CONTINUED COMPLIANCE: This PEER is valid until such time as the named product(s) changes, the referenced Quality Assurance or production facility location(s) changes, or Code provisions that relate to the product(s) change. Acceptance of our PEERs by the named client constitutes agreement to notify NEMO ETC, LLC of any changes to the product(s), the Quality Assurance or the production facility location(s). NEMO ETC, LLC requires a complete review of its PEER relative to updated Code requirements with each Code Cycle.

ADVERTISEMENT: "NEMO P.E. Evaluated" may be displayed in advertising literature. If any portion of the PEER is displayed, then it shall be done in its entirety.

INSPECTION: Upon request, a copy of this entire PEER shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This PEER consists of pages 1 through 4, plus a 12-page Appendix.

Prepared by:



CERTIFICATION OF INDEPENDENCE:

- 1. NEMO ETC, LLC does not have, nor does it intend to acquire or will it acquire, a financial interest in any company manufacturing or distributing products it evaluates.
- 2. NEMO ETC, LLC is not owned, operated or controlled by any company manufacturing or distributing products it evaluates.
- 3. Robert Nieminen, P.E. does not have nor will acquire, a financial interest in any company manufacturing or distributing products for which the PEERs are being issued.
- 4. Robert Nieminen, P.E. does not have, nor will acquire, a financial interest in any other entity involved in the approval process of the product.
- 5. Robert Nieminen, P.E. is also Registered in the State of Texas; PE-96420.
- 6. This is a building code evaluation. Neither NEMO ETC, LLC nor Robert Nieminen, P.E. are, in any way, the Designer of Record for any project on which this PEER, or previous versions thereof, is/was used for permitting or design guidance unless retained specifically for that purpose.

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ROOFING SYSTEMS EVALUATION:

1. SCOPE:

Product Category: Roofing

Sub-Category: Single Ply Roof Systems

Product Approval Method: Method 1, Option D: Codified Material, Evaluation by Engineer

Compliance Statement: IKO Innovi TPO Roof Systems, as produced by **IKO INDUSTRIES LTD**, have demonstrated compliance with the following sections of the referenced Codes through testing in accordance with the following Standards. Compliance is subject to the <u>Installation Requirements</u> and <u>Limitations of Use</u> set forth herein.

2.	STANDARDS:			
	CODE	SECTION	PROPERTY	<u>Standard</u>
	2023 Florida Building Code	1504.3.1	Wind resistance	FM 4474
		1504.6	Physical properties	ASTM G155
		1504.7	Impact resistance	FM 4470, Section 4.6
	1507.12.2		Material standard	ASTM D6878
	2018 International Building	1504.3.1	Wind resistance	FM 4474
	Code	1504.6	Physical properties	ASTM G155
		1504.7	Impact resistance	FM 4470, Section 4.6
		1507.13.2	Material standard	ASTM D6878

REFERENCES:			
ENTITY	EXAMINATION	REFERENCE	DATE
NEMO (TST6049)	Physical properties	4q-IKO-21-SSMBB-01.A	12/10/21
NEMO (TST6049)	ASTM D6878 / G155	4r-IKO-21-SSTHP-01.A	01/18/22
FM Approvals (TST1867)	Criticality	PR454078 (data)	01/21/21
FM Approvals (TST1867)	FM 4470/4474	PR454078	04/29/21
FM Approvals (TST1867)	FM 4474	PR456625	07/12/21
NEMO (TST11294)	FM 4474	2a-IKO-20-LSWUS-01.A	06/02/21
NEMO (TST11294)	FM 4474	2a-IKO-21-LSWUS-01.A-R1	07/27/22
NEMO (TST6049)	Criticality	4i-IKO-20-SSCRT-01.A	02/24/21
NEMO (TST6049)	FM 4474	SFS-SC10010.12.20-R1	06/21/21
NEMO (TST6049)	FM 4474	4a-IKO-23-LSWUS-01.A.R1	01/12/24
NEMO	Data Release Agreement	NE-FRM-0025-PR456625	09/27/21
NEMO	Traceability	FBC-PCL-ATL	02/26/24
NEMO	Traceability	FBC-PCL-AB	02/27/24
UL LLC (QUA 9625)	Traceability	ML R16377/R20739	01/14/21
FM Approvals (QUA1840)	Traceability	PR459818	06/08/21
FM Approvals (QUA1860)	Quality Assurance	Inspection Report	02/22/2023
FM Approvals (QUA1860)	Quality Assurance	Florida BCIS	Current

4. PRODUCT DESCRIPTION:

This PEER covers **IKO Innovi TPO Roof Systems** installed in accordance with **IKO INDUSTRIES LTD** published installation instructions and the <u>Limitations of Use</u> herein.

	TABLE 1: EVALUATED MEMBRANES							
Туре	Type Product			Plant(s)				
Roof Cover	IKO Innovi TPO	45, 60, 80-mil	ASTM D6878	Hagerstown, MD				
Vapor Barrier	IKO MVP or MVP Sand		N/A	Brampton, ON				

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5. LIMITATIONS:

- 5.1 This is a building code evaluation. Neither NEMO ETC, LLC nor Robert Nieminen, P.E. are, in any way, the Designer of Record for any project on which this PEER, or previous versions thereof, is/was used for permitting or design guidance. PEERs are not to be construed as representing any attributes not specifically listed, nor are PEERs to be construed as an endorsement of the subject, or a recommendation for its use. There is no warranty by NEMO ETC, LLC or Robert Nieminen, P.E., express or implied, as to any finding or other matter in this PEER, or as to any product covered by the PEER.
- 5.2 This PEER is not for use in FBC High Velocity Hurricane Zone jurisdictions, as defined in FBC Chapter 2 (Broward and Miami-Dade Counties).
- 5.3 This PEER pertains to above-deck roof components. Roof decks and structural members shall be in accordance with requirements of the applicable Code to the satisfaction of the Authority Having Jurisdiction.
- 5.4 This PEER does not include evaluation of fire classification. Refer to **FBC or IBC 1505** for requirements and limitations regarding roof assembly fire classification. Refer to **FBC or IBC2603** for requirements and limitations concerning the use of foam plastic insulation.
- 5.5 This PEER does not include evaluation of roof edge termination. Refer to **FBC or IBC 1504.5** for requirements and limitations regarding edge securement for low-slope roofs.
- 5.6 Refer to FBC or IBC 1511 for requirements and limitations regarding recover installations.
- 5.6.1 For mechanically attached components over existing roof decks, fasteners shall be tested in the existing deck 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 Testing Application Standard TAS 105.
- 5.6.2 For bonded insulation or membrane over existing substrates in a re-roof (tear off) or recover installation, the existing deck or existing roof surface 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 ANSI/SPRI IA-1, ASTM E907, FM Loss Prevention Data Sheet 1-52 or Testing Application Standard TAS 124 shall be conducted on mock-ups of the proposed new roof assembly.
- 5.6.3 For bonded insulation or membrane over existing substrates in a recover installation, the existing roof system shall be capable of resisting project design pressures on its own merit to the satisfaction of the Authority Having Jurisdiction, as documented through field uplift testing in accordance with **ASTM E907**, **FM Loss Prevention Data**Sheet 1-52 or Testing Application Standard TAS 124.
- 5.7 Refer to Appendix 1 for system attachment requirements for wind load resistance.
- 5.7.1 "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 or IBC 1609** for determination of design wind loads.
- 5.7.2 For mechanically attached components or partially-bonded insulation, the maximum design pressure for the selected assembly shall meet or exceed at least the Zone 1 PRIME design pressure determined in accordance with FBC or IBC 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, Roofing Application Standard RAS 117 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
- 5.7.3 For assemblies with all components fully bonded in place, the maximum design pressure for the selected assembly shall meet or exceed critical design pressure determined in accordance with **FBC or IBC Chapter 16**. No rational analysis is permitted for these systems.
- 5.8 All components in the roof assembly shall have quality assurance audit in accordance with **F.A.C.** <u>Rule 61G20-3</u>. Refer to the Product Approval of the component manufacturer for components listed in Appendix 1 that are produced by a Product Manufacturer other than the report holder on <u>Page 1</u> of this PEER.



6. INSTALLATION:

IKO Innovi TPO Roof Systems shall be installed in accordance with **IKO INDUSTRIES LTD** published installation instructions, subject to the <u>Limitations of Use</u> noted herein.

7. BUILDING PERMIT REQUIREMENTS:

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

8. MANUFACTURING PLANTS:

Contact the named QA entity for manufacturing facilities covered by **F.A.C.** Rule 61G20-3 QA requirements. Refer to Section 4 herein for products and production locations having met codified material standards.

9. QUALITY ASSURANCE ENTITY:

FM Approvals, QUA1860, (781) 255-4725, Joanna.Blaney@fmglobal.com

- THE 12-PAGES THAT FOLLOW FORM PART OF THIS PEER -



APPENDIX	APPENDIX 1: ATTACHMENT REQUIREMENTS FOR WIND UPLIFT RESISTANCE									
TABLE	DECK	APPLICATION	Түре	DESCRIPTION	Page					
<u>1A</u>	Wood	New, Reroof (Tear-Off) or Recover	C-1	Mechanically Attached Insulation, Bonded Roof Cover	5					
<u>1B</u>	Wood	New, Reroof (Tear-Off), Recover	C-2	Induction-Welded Roof Cover	6					
<u>1c</u>	Wood	New, Reroof (Tear-Off), Recover	D-1	Insulated, Mechanically Attached Roof Cover	6					
<u>2A</u>	Steel	New, Reroof (Tear-Off) or Recover	B-1	Mechanically Attached Base Insulation, Bonded Top Insulation, Bonded Roof Cover	7					
<u>2B</u>	Steel	New or Reroof (Tear-Off)	B-2	Mechanically Attached Thermal Barrier, Bonded Vapor Barrier, Bonded Insulation, Bonded Roof Cover	7					
<u>2c</u>	Steel	New, Reroof (Tear-Off) or Recover	C-1	Mechanically Attached Insulation, Bonded Roof Cover	8					
<u>2D</u>	Steel	New, Reroof (Tear-Off) or Recover	C-2	Induction-Welded Roof Cover	9					
<u>2E</u>	Steel	New, Reroof (Tear-Off) or Recover	D-1	Insulated, Mechanically Attached Roof Cover	11					
<u>3A</u>	Structural concrete	New, Reroof (Tear-Off)	A-1	Bonded Insulation, Bonded Roof Cover	12					

The following notes apply to the systems outlined herein:

- 1 The roof system evaluation herein pertains to above-deck roof components. Roof decks and structural members shall be in accordance with requirements of the applicable Code to the satisfaction of the Authority Having Jurisdiction.
- 2 Unless otherwise noted, fasteners and stress plates shall be as follows. Fasteners shall be of sufficient length for the following engagements:

	FASTENER/PLATE OPTIONS						
DECK Т ҮРЕ	DECK TYPE BY PARTS						
	IKO	with InnoviFast Insulation Plate					
Wood	Altenloh, Brink & Co U.S., Inc.	penetration or minimum 1- inch wood plank					
	OMG, Inc.	OMG #12 Standard Roogrip, OMG #14 HD Fastener or OMG XHD Fastener with OMG 3-in. Galvalume Steel Plate (Flat)	embedment				
	SFS Group USA, Inc.	Dekfast DF-#12-PH3, Dekfast DF-#14-PH3 or Dekfast DF-#15-PH3 with Dekfast PLT-R-3	embeament				
	IKO	InnoviFast All Purpose (AP) Fastener (#14) or InnoviFast Heavy Duty (HD) Fastener (#15) with InnoviFast Insulation Plate					
Chaol	Altenloh, Brink & Co U.S., Inc.	Trufast #14 HD or Trufast #15 EHD Fastener with Trufast 3" Metal Insulation Plate	Minimum ¾-inch steel				
Steel	OMG, Inc.	OMG #14 HD Fastener or OMG XHD Fastener with OMG 3-in. Galvalume Steel Plate (Flat)	penetration and engage the top flute of the steel deck				
	SFS Group USA, Inc. Dekfast DF-#14-PH3 or Dekfast DF-#15-PH3 with Dekfast PLT-R-3		top nate of the steel deck				

- 3 Unless otherwise noted, insulation may be any one layer or combination of FBC Approved (Local or Statewide) board(s) that meet FBC or IBC 1505 and, for foam plastic, FBC or IBC Chapter 26, when installed with the roof cover.
- 4 Minimum 200 psi, minimum 2-inch thick FBC 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 the requirements of the applicable Code 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.
- 5 Preliminary insulation attachment: Unless otherwise noted, use FBC Approved roofing fasteners and plates and refer to Section 2.2.10.1.3 of FM Loss Prevention Data Sheet 1-29.
- 6 Unless otherwise noted, insulation adhesive application rates are as follows.
 - ✓ Ribbon or bead width is at the time of application; the ribbons/beads shall expand as noted in the manufacturer's published instructions.
 - ✓ If applying hot asphalt to concrete deck, deck shall be primed with ASTM D41 primer.
 - ✓ When multiple layers(s) of insulation and/or coverboard are installed in ribbon-applied adhesive, board joints shall be staggered.
 - ✓ The maximum edge distance from the adhesive ribbon to the edge of the insulation board shall be not less than one-half the specified ribbons spacing.

	Insulatio	N ADHESIVE REFERENCES	
Вү	ADHESIVE	FBC FILE OR NOA	MINIMUM RATE
IKO	IKO Millennium Adhesive	N/A	Continuous, max. 12-inch o.c.



- 7 Unless otherwise noted, all insulations are flat-stock or taper board of the minimum thickness noted.
- 8 For adhered roof insulation and board-size: Unless otherwise noted, refer to Section 2.2.10.6.2 of FM Loss Prevention Data Sheet 1-29.
- 9 For mechanically attached components or partially-bonded insulation, the maximum design pressure for the selected assembly shall meet or exceed at least the Zone 1 PRIME design pressure determined in accordance with FBC or IBC 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, Roofing Application Standard RAS 117 and 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.
- 10 For assemblies with all components fully bonded, the maximum design pressure for the selected assembly shall meet or exceed critical design pressure determined in accordance with FBC or IBC Chapter 16. No rational analysis is permitted for these systems.
- 11 For mechanically attached components over existing decks, fasteners shall be tested in the existing deck for withdrawal resistance. A qualified design professional shall review the data for comparison to the minimum requirements for the system. Testing and analysis shall be in accordance with ANSI/SPRI FX-1 or Testing Application Standard TAS 105.
- 12 RESERVED
- 13 Refer to FBC or IBC 1511 for requirements and limitations regarding recover installations. For Structural Concrete Deck or Recover Applications using System Type C-1 the base insulation layer is optional and for System Type C-2, D-1 or D-2, the insulation is optional. Alternatively, an FBC Approved insulation board or coverboard may be used as a separation layer. Board products shall be preliminarily attached prior to roof cover installation (Note 5). The separator component shall be documented as meeting FBC or IBC 1505 and, for foam plastic, FBC or IBC Chapter 26, when installed with the roof cover in Recover applications.
- 14 RESERVED
- 15 For bonded membrane applications, unless otherwise noted, refer to the following.

MEMBRANE / ADHESIVE COMBINATIONS									
REFERENCE MEMBRANE		ADHESIVE	APPLICATION	RATE					
BB-IBMA	IKO Innovi TPO	InnoviBond Membrane Adhesive	Contact (both sides)	0.83 to 1.0 gal/square per surface					
BB-IBMA-LVOC	IKO Innovi TPO	InnoviBond Membrane Adhesive LVOC	Contact (both sides)	0.83 to 1.0 gal/square per surface					
BB-IBMA-SPR	IKO Innovi TPO	InnoviBond Membrane Adhesive SPR	Contact (both sides)	1,000 ft ² per #45 canister					

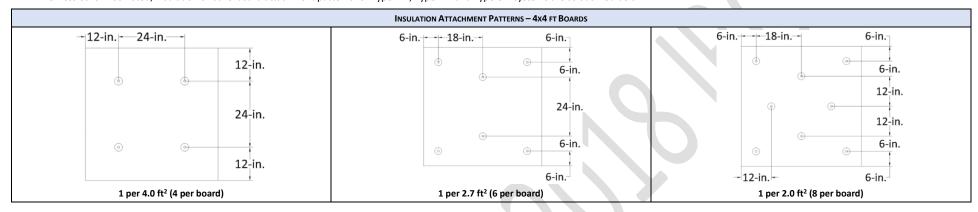
- 15A For single-ply membranes in System Type D-1 steel deck applications, the roof membrane shall be run with its length perpendicular to the steel deck flutes.
- For System Type C-2 (induction welded), the roof cover shall be induction-welded to the stress plates using the proprietary induction-welding tool of the stress plate manufacturer, in accordance with the published instructions of the stress plate manufacturer. Care shall be taken to ensure that the stress-plates do not line-up with membrane seams.
- 16 Thermal Barrier and/or Vapor Barrier Options:
- 16A Structural Concrete Decks: The lesser of the MDP listings below vs. that for the selected assembly applies.

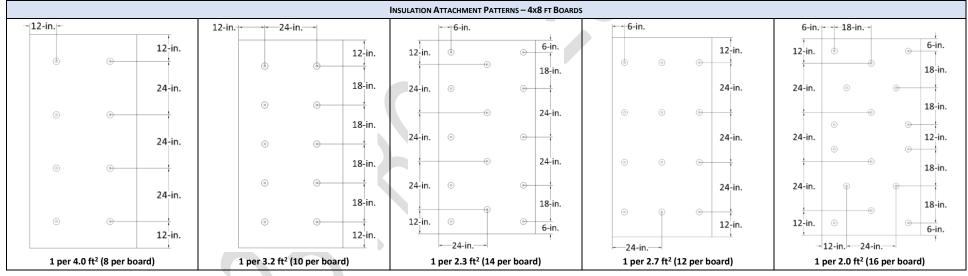
	STRUCTURAL CONCRETE DECK: VAPOR BARRIER FOLLOWED BY ADHESIVE-APPLIED INSULATION								
OPTION	TION	VAPOR BARRIER		Insulation Adhesive per Table 3A	MDD (per)				
#	PRIMER	Туре	APPLICATION	(NOTES 6,7&8)	MDP (PSF)				
C-VB-1.	InnoviBond Membrane Adhesive SPR	IKO MVP or MVP Sand	Self-adhering	IKO Millennium Adhesive, 12-inch o.c.	-252.5				
C-VB-2.	InnoviBond Membrane Adhesive SPR	IKO MVP or MVP Sand	Self-adhering	IKO Millennium Adhesive, 6-inch o.c.	-485.5				

For System Types B-1, C-1, C-2, D-1 or Type D-2, IKO MVP or IKO MVP Sand may be installed atop the roof deck, or to an FBC Approved, loose-laid gypsum-based thermal barrier, prior to installation of the insulation and roof cover. The substrate shall be primed in accordance with IKO INDUSTRIES LTD requirements. Refer to FM Loss Prevention Data Sheet 1-29 for design and installation limitations.



17 Unless otherwise noted, insulation or coverboard attachment patterns for Type B-1, Type B-2 and Type C-1 systems are as outlined below.







18 The following products are interchangeable within the scope of this PEER:

	Accept	TABLE ALTERNATES			
SUB-CATEGORY	LISTED PRODUCT HEREIN ALTERNATE BY InnoviEast HD Eastener Trufact #15 FHD Eastener		Ву	FBC FILE OR NOA	
	InnoviFast HD Fastener	Trufast #15 EHD Fastener	Altenloh, Brinck & Co US,		
	InnoviFast 2-3/8-in. HD Seam Plate	Trufast 2.4" Barbed Metal Seam Plate	Inc.	FL4500	
	InnoviWeld TPO Induction Plate	Trufast TPO IW Plate	Tille.		
	InnoviFast Insulation Fastener	Dekfast DF-#12-PH3			
Roofing Fasteners	InnoviFast All Purpose (AP) Fastener	Dekfast DF-#14-PH3			
	InnoviFast Heavy Duty (HD) Fastener	nnoviFast Heavy Duty (HD) Fastener Dekfast DF-#15-PH3		FL20311	
	InnoviFast 2-3/8" HD Seam Plate	Dekfast PLT-R-2-3/8-6B	SFS Group USA	FL20311	
	InnoviFast Insulation Plate	on Plate Dekfast PLT-R-3			
	InnoviWeld Induction Plate	isoweld F1-P-6.8-TPO Plate			
	IKOTherm-A, IKOTherm-A 25 psi	ACFoam II			
Darefina Insulation	IKOTherm-A III, IKOTherm-A III 25 psi	ACFoam III	Atlas Roofing Corp.	FL17989	
Roofing Insulation	IKOTherm-A CoverShield	ACFoam HD CoverBoard			
	DensDeck Prime	DensDeck StormX Prime Roof Board	Georgia-Pacific Gypsum	FL1250	

[&]quot;MDP" = Maximum Design Pressure is the result of testing for wind load resistance based on allowable wind loads. Refer to FBC or IBC 1609 for determination of design wind loads. (Notes 9 and 10)



	TABLE 1a: WOOD DECKS - NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER SYSTEM TYPE C-1: MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER										
System	Deck	Base Insulation Layer	Top Insula	ation Layer			MDD				
No.	(Note 1)			Fastener (<u>Note 2</u> , <u>Note 11</u>)			MDP (psf)				
W-1.	Min. 15/32-inch CDX plywood or wood plank; 2 ft span	(Optional) One or more layers, min. 0.5-inch, any combination	Min. 1.5-inch IKOTherm, IKOTherm III, IKOTherm 25 psi, IKOTherm III 25 psi, IKOTherm-A, IKOTherm-A 25 psi, IKOTherm-A III or IKOTherm-A III 25 psi	Note 2	1 per 4.0 ft²	BB-IBMA, BB-IBMA- LVOC or BB-IBMA-SPR	-22.5				
W-2.	Min. 15/32-inch CDX plywood or wood plank; 2 ft span	One or more layers, min. 1.5-inch, any combination	Min. 0.5-inch DensDeck Prime or SECUROCK Gypsum- Fiber Roof Board.	Note 2	1 per 4.0 ft²	BB-IBMA, BB-IBMA- LVOC or BB-IBMA-SPR	-22.5				
W-3.	Min. 15/32-inch CDX plywood or wood plank; 2 ft span	One or more layers, min. 1.5-inch, any combination	Min. 0.5-inch DensDeck Prime or SECUROCK Gypsum- Fiber Roof Board.	Note 2	1 per 3.2 ft²	BB-IBMA, BB-IBMA- LVOC or BB-IBMA-SPR	-30.0				
W-4.	Min. 15/32-inch CDX plywood or wood plank; 2 ft span	One or more layers, min. 1.5-inch, any combination	Min. 1.5-inch IKOTherm, IKOTherm III, IKOTherm 25 psi, IKOTherm III 25 psi, IKOTherm-A, IKOTherm-A 25 psi, IKOTherm-A III or IKOTherm-A III 25 psi or min. 0.5-inch IKOTherm CoverShield, IKOTherm-A CoverShield, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board.	2-in. 6-in. 6-in. 7-in. 6-in.	24-in. © 36-in. 0 0 0 12-in. 0 0 0 0 12-in. 0 0 0 12-in. 0 0 0 12 parts per 4x8-ft. Board	BB-IBMA, BB-IBMA- LVOC or BB-IBMA-SPR	-30.0				

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	TABLE 1B: WOOD DECKS - NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER SYSTEM TYPE C-2: PLATE-BONDED ROOF COVER										
System Deck		Insulation Layer	Attach		Roof Cover (Note 15B)	MDP					
No.	(Note 1)	(<u>Note 3</u> , <u>Note 13</u>)	Fastener (Note 11)	Density		(psf)					
W-5.	Min. 15/32-inch CDX plywood or wood plank; 2 ft span	Insulation: One or more layer(s), min. 1.5-inch IKOTherm, IKOTherm III, IKOTherm 25 psi, IKOTherm III 25 psi, IKOTherm-A, IKOTherm-A 25 psi, IKOTherm-A III or IKOTherm-A III 25 psi Coverboard: (Optional) Min. 0.5-inch IKOTherm CoverShield, IKOTherm-A CoverShield, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	InnoviFast Heavy Duty (HD) Fastener (#15) with InnoviWeld TPO Induction Plates or InnoviFast HD Fastener with InnoviWeld TPO Induction Plate	1 per 3.2 ft ² (10 parts per 4x8 ft board) (Note 17)	IKO Innovi TPO, min. 60-mil induction welded	-45.0					

	TABLE 1c: WOOD DECKS – NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER SYSTEM TYPE D-1: INSULATED, MECHANICALLY ATTACHED ROOF COVER									
System	Deck (Note 1)	Thermal	Vapor	Insulation Layer (<u>Not</u>	e 3, <u>Note 13</u>)			Roof Cover (Note 15)		MDP
No.	Deck (Note 1)	Barrier	Barrier	Туре	Fastener	Attach	Membrane	Fastener (Note 11)	Attach	(psf)
W-6.	Min. 15/32- inch CDX plywood or wood plank; 2 ft span	Optional, Note 16B	Optional, Note 16B	One or more layers, min. 1.5-inch, any combination	Note 2	Note 5	IKO Innovi TPO	InnoviFast Heavy Duty (HD) Fastener (#15) with InnoviFast 2-3/8" HD Seam Plate, InnoviFast HD Fastener with InnoviFast 2-3/8-in. HD Seam Plate or OMG #15 Roofgrip with OMG 2-3/8 in. Round Barbed Seam Plate	6-inch o.c. within min. 6-inch side laps spaced max. 114-inch o.c. Laps sealed with 1.5- inch heat weld.	-45.0
W-7.	Min. 15/32- inch CDX plywood or wood plank; 2 ft span	Min. 0.5-inch DensDeck Prime or SECUROCK Gypsum- Fiber Roof Board	IKO MVP or MVP Sand, self- adhering	Insulation: One or more layer(s), min. 1.5-inch IKOTherm, IKOTherm III, IKOTherm 25 psi, IKOTherm III 25 psi, IKOTherm-A, IKOTherm-A 25 psi, IKOTherm-A III or IKOTherm-A III 25 psi Coverboard: (Optional) Min. 0.5-inch IKOTherm CoverShield, IKOTherm-A CoverShield, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	Note 2	1 per 4.0 ft ² (Note 17)	IKO Innovi TPO	InnoviFast Heavy Duty (HD) Fastener (#15) with InnoviFast 2-3/8" HD Seam Plate, InnoviFast HD Fastener with InnoviFast 2-3/8-in. HD Seam Plate or OMG #15 Roofgrip with OMG 2-3/8 in. Round Barbed Seam Plate	6-inch o.c. within min. 6-inch side laps spaced max. 114-inch o.c. Laps sealed with 1.5-inch heat weld.	-75.0



	TABLE 2A: STEEL DECKS – NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER SYSTEM TYPE B-1: MECHANICALLY ATTACHED BASE INSULATION, BONDED TOP INSULATION, BONDED ROOF COVER											
System	BI	Base Insulati	ion Layer		Top Insulation Layer		Roof Cover	MDD				
No.	Deck (Note 1)	Туре	Fasteners (Note 11)	Attach (Note 17)	Туре	Attach (Notes 6,7,8)	(Note 15)	MDP (psf)				
S-1.	Min. 22 ga., Type B, Grade 40 steel	Min. 2.5-inch IKOTherm, IKOTherm III, IKOTherm 25 psi or IKOTherm III 25 psi	Note 2	1 per 2.7 ft ²	Insulation: One or more layer(s), min. 1.5-inch IKOTherm, IKOTherm III, IKOTherm 25 psi, IKOTherm III 25 psi Coverboard: (Optional) Min. 0.5-inch IKOTherm CoverShield, IKOTherm-A CoverShield, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	IKO Millennium Adhesive	BB-IBMA-SPR	-45.0*				
S-2.	Min. 22 ga., Type B, Grade 40 steel	Min. 2-inch IKOTherm, IKOTherm III, IKOTherm 25 psi or IKOTherm III 25 psi	Note 2	1 per 2.3 ft ²	Insulation: One or more layer(s), min. 1.5-inch IKOTherm, IKOTherm III, IKOTherm 25 psi, IKOTherm III 25 psi Coverboard: (Optional) Min. 0.5-inch IKOTherm CoverShield, IKOTherm-A CoverShield, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	IKO Millennium Adhesive	BB-IBMA-SPR	-45.0*				
S-3.	Min. 22 ga., Type B, Grade 40 steel	Min. 2-inch IKOTherm, IKOTherm III, IKOTherm 25 psi or IKOTherm III 25 psi	Note 2	1 per 2.3 ft ²	Min. 1.5-inch IKOTherm III or IKOTherm III 25 psi	IKO Millennium Adhesive	BB-IBMA	-45.0*				
S-4.	Min. 22 ga., Type B, Grade 40 steel	Min. 2-inch IKOTherm, IKOTherm III, IKOTherm 25 psi or IKOTherm III 25 psi	Note 2	1 per 2.3 ft ²	Additional Insulation: (Optional) Min. 1.5-inch IKOTherm, IKOTherm III, IKOTherm 25 psi or IKOTherm III 25 psi Coverboard: 0.5-inch IKOTherm CoverShield	IKO Millennium Adhesive	BB-IBMA	-45.0*				

	TABLE 2B: STEEL DECKS - NEW CONSTRUCTION, REROOF (TEAR-OFF) SYSTEM TYPE B-2: MECHANICALLY ATTACHED THERMAL BARRIER, BONDED VAPOR BARRIER, BONDED INSULATION, BONDED ROOF COVER												
Custom	Deck (Note 1)	Thermal Barrier				Vapor	Base Insulation Layer		Top Insulat	ion Layer	Roof Cover	MDD	
System No.		Туре	Fasteners (Note 11)	Attach (Note 17)	Primer	Barrier	Туре	Attach (Notes 6,7,8)	Туре	Attach (Notes 6,7,8)	(Note 15)	MDP (psf)	
S-5.	Min. 22 ga., Type B, Grade 40 steel	Min. 0.5-inch DensDeck Prime or SECUROCK Gypsum- Fiber Roof Board	Note 2	1 per 2.7 ft ²	InnoviBond Membrane Adhesive SPR	IKO MVP, self- adhering	Min. 1.5-inch IKOTherm, IKOTherm III, IKOTherm 25 psi or IKOTherm III 25 psi	IKO Millennium Adhesive	(Optional) Additional layer(s) base insulation	IKO Millennium Adhesive	BB-IBMA-SPR	-45.0*	
S-6.	Min. 22 ga., Type B, Grade 40 steel	Min. 0.5-inch DensDeck Prime or SECUROCK Gypsum- Fiber Roof Board	Note 2	1 per 2.7 ft ²	InnoviBond Membrane Adhesive SPR	IKO MVP, self- adhering	Min. 1.5-inch IKOTherm III or IKOTherm III 25 psi	IKO Millennium Adhesive	(Optional) Additional layer(s) base insulation	IKO Millennium Adhesive	BB-IBMA	-45.0*	
S-7.	Min. 22 ga., Type B, Grade 40 steel	Min. 0.5-inch DensDeck Prime or SECUROCK Gypsum- Fiber Roof Board	Note 2	1 per 2.7 ft ²	InnoviBond Membrane Adhesive SPR	IKO MVP, self- adhering	Min. 1.5-inch IKOTherm, IKOTherm III, IKOTherm 25 psi or IKOTherm III 25 psi	IKO Millennium Adhesive	0.5-inch IKOTherm CoverShield	IKO Millennium Adhesive	BB-IBMA or BB-IBMA-SPR	-45.0*	



		TABLE 2c: STEEL DE	ECKS - NEW CONSTRUCTION, REROC	OF (TEAR-OFF) OR RECOVER		INLINIO	
		SYSTEM TYPE C-1: I	MECHANICALLY ATTACHED INSULAT	<u> </u>			I
System No.	Deck (Note 1)	Base Insulation Layer (Note 3, Note 13)	Туре	Top Insulation Layer Fasten (Note 11)	Attach (Note 17)	Roof Cover (Note 15)	MDP (psf)
S-8.	Min. 22 ga., Type B, Grade 40 steel	One or more layer(s), min. 1.5-inch thick, min. 16-psi, FBC Approved roof insulation	Min. 0.5-inch IKOTherm CoverShield	Note 2	1 per 2.7 ft ²	BB-IBMA or BB- IBMA-SPR	-30.0*
S-9.	Min. 22 ga., Type B, Grade 40 steel, 6 ft span	One or more layer(s), min. 1.5-inch thick, min. 16-psi, FBC Approved roof insulation	Min. 0.5-inch IKOTherm CoverShield or IKOTherm-A CoverShield	21 22 in. 6	4-in.—6	BB-IBMA, BB- IBMA-LVOC or BB-IBMA-SPR	-30.0
S-10.	Min. 22 ga., Type B, Grade 40 steel	One or more layer(s), min. 1.5-inch thick, min. 16-psi, FBC Approved roof insulation	Min. 0.25-inch DensDeck Prime	Note 2	1 per 2.7 ft²	BB-IBMA or BB- IBMA-SPR	-37.5*
S-11.	Min. 22 ga., Type B, Grade 40 steel	One or more layer(s), min. 1.5-inch thick, min. 16-psi, FBC Approved roof insulation	Min. 0.25-inch SECUROCK Gypsum- Fiber Roof Board	Note 2	1 per 2.7 ft²	BB-IBMA, BB- IBMA-LVOC or BB-IBMA-SPR	-37.5*
S-12.	Min. 22 ga., Type B, Grade 40 steel	One or more layer(s), min. 1.5-inch thick, min. 16- psi, FBC Approved roof insulation	Min. 2-inch IKOTherm, IKOTherm III, IKOTherm 25 psi or IKOTherm III 25 psi	Note 2	1 per 2.7 ft²	BB-IBMA-SPR	-37.5*
S-13.	Min. 22 ga., Type B, Grade 40 steel	One or more layer(s), min. 1.5-inch thick, min. 16-psi, FBC Approved roof insulation	Min. 2-inch IKOTherm III or IKOTherm III 25 psi	Note 2	1 per 2.7 ft²	BB-IBMA	-37.5*
S-14.	Min. 22 ga., Type B, Grade 40 steel, 6 ft span	(Optional) One or more layer(s), min. 1.5-inch thick, min. 16-psi, FBC Approved roof insulation	Min. 1.5-inch IKOTherm, IKOTherm III, IKOTherm 25 psi, IKOTherm III 25 psi, IKOTherm-A, IKOTherm-A 25 psi, IKOTherm-A III or IKOTherm-A III 25 psi	24-in. © 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	4-in.—6	BB-IBMA, BB- IBMA-LVOC or BB-IBMA-SPR	-37.5



	TABLE 2c: STEEL DECKS - NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER SYSTEM TYPE C-1: MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER											
System		Base Insulation Layer		Top Insulation Layer		Roof Cover	MDP					
No.	Deck (Note 1)	(<u>Note 3</u> , <u>Note 13</u>)	Туре	Fasten (Note 11)	Attach (<u>Note 17)</u>	(Note 15)	(psf)					
S-15.	Min. 22 ga., Type B, Grade 40 steel, 6 ft span	One or more layer(s), min. 1.5-inch thick, min. 16-psi, FBC Approved roof insulation	Min. 0.5-inch DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board.	6-in.	24-in. © © 0 36-in. 12-in. © 0 6-in. 12 parts per 4x8-ft. Board	BB-IBMA, BB- IBMA-LVOC or BB-IBMA-SPR	-37.5					
S-16.	Min. 22 ga., Type B, Grade 40 steel, 6 ft span	One or more layer(s), min. 1.5-inch thick, min. 16-psi, FBC Approved roof insulation	Min. 0.5-inch DensDeck Prime	Note 2	1 per 2.0 ft ²	BB-IBMA or BB- IBMA-SPR	-60.0					
S-17.	Min. 22 ga., Type B, Grade 40 steel, 6 ft span	One or more layer(s), min. 1.5-inch thick, min. 16- psi, FBC Approved roof insulation	Min. 0.5-inch SECUROCK Gypsum- Fiber Roof Board	Note 2	1 per 2.0 ft ²	BB-IBMA, BB- IBMA-LVOC or BB-IBMA-SPR	-60.0					

	TABLE 2D: STEEL DECKS - NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER SYSTEM TYPE C-2: MECHANICALLY ATTACHED INSULATION, INDUCTION-WELDED ROOF COVER											
System	Deck	Inculation (Nat. 2, Nat. 42)	Attachm	Roof Cover	MDP							
No.	(Note 1)	Insulation (Note 3, Note 13)	Fasteners (Note 11)	Spacing	(Note 15B)	(psf)						
INNOVIFAST	r HEAVY DUTY (HD) FAST	ENER (#15) WITH INNOVIWELD TPO INDUCTION PLATES:										
S-18. Min. 22 ga., Type B, Grade 40 steel, 6 ft span Insulation: One or more layer(s), min. 1.5-inch IKOTherm, IKOTherm-A III or IKOTherm-A CoverShield, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board Insulation: One or more layer(s), min. 1.5-inch IKOTherm III, IKOTherm III, IKOTherm 25 psi, IKOTherm-A III or IKOTherm-A III 25 psi (HD) Fastener (#15) with InnoviWeld TPO (staggered) induction Plates												
INNOVIFAST	r HD Fastener with Inn	OVIWELD TPO INDUCTION PLATE:										
S-19.	Min. 22 ga., Type B, Grade 33 steel	Insulation: One or more layer(s), min. 1.5-inch IKOTherm, IKOTherm III, IKOTherm 25 psi, IKOTherm III 25 psi, IKOTherm-A, IKOTherm-A 25 psi, IKOTherm-A III or IKOTherm-A III 25 psi Coverboard: (Optional) Min. 0.5-inch IKOTherm CoverShield, IKOTherm-A CoverShield, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board Topmost boards shall be staggered 12-inch along either dimension.	InnoviFast HD Fastener with InnoviWeld TPO Induction Plate	1 per 5.3 ft ² (6 parts per 4x8 ft board on a 24x36- inch pattern)	IKO Innovi TPO, min. 60-mil, induction welded	-45.0*						

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		TABLE 2D: STEEL DECKS - NEW CONSTRUCTION, REROOF (TEAR SYSTEM TYPE C-2: MECHANICALLY ATTACHED INSULATION, INDUCTION				
System Deck		Insulation (Note 3, Note 13)	Attachm	Roof Cover	MDP	
No.	(Note 1)		Fasteners (Note 11)	Spacing	(Note 15B)	(psf)
S-20.	Min. 22 ga., Type B, Grade 33 steel, 6 ft span	Insulation: One or more layer(s), min. 1.5-inch IKOTherm, IKOTherm III, IKOTherm 25 psi, IKOTherm III 25 psi, IKOTherm-A, IKOTherm-A 25 psi, IKOTherm-A III 25 psi Coverboard: (Optional) Min. 0.5-inch IKOTherm CoverShield, IKOTherm-A CoverShield, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board Topmost boards shall be staggered 12-inch along the 8 ft dimension.	InnoviFast HD Fastener with InnoviWeld TPO Induction Plate	1 per 4.0 ft ² (8 parts per 4x8 ft board on a 24x24- inch pattern)	IKO Innovi TPO, min. 60-mil, induction welded	-52.5
S-21.	Min. 22 ga., Type B, Grade 33 steel, 6 ft span	Insulation: One or more layer(s), min. 1.5-inch IKOTherm, IKOTherm III, IKOTherm 25 psi, IKOTherm III 25 psi, IKOTherm-A, IKOTherm-A 25 psi, IKOTherm-A III 25 psi Coverboard: (Optional) Min. 0.5-inch IKOTherm CoverShield, IKOTherm-A CoverShield, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board Topmost boards shall be staggered 12-inch along the 8 ft dimension.	IKO Innovi TPO, min. 60-mil, induction welded	-82.5		
S-22.	Min. 22 ga., Type B, Grade 80 steel, 6 ft span	Insulation: One or more layer(s), min. 1.5-inch IKOTherm, IKOTherm III, IKOTherm 25 psi, IKOTherm III 25 psi, IKOTherm-A, IKOTherm-A 25 psi, IKOTherm-A III or IKOTherm-A III 25 psi Coverboard: (Optional) Min. 0.5-inch IKOTherm CoverShield, IKOTherm-A CoverShield, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board Topmost boards shall be staggered 12-inch along the 8 ft dimension.	IKO Innovi TPO, min. 60-mil, induction welded	-105.0		
S-23.	Min. 22 ga., Type B, Grade 33 steel, 6 ft span	Insulation: One or more layer(s), min. 1.5-inch IKOTherm, IKOTherm III, IKOTherm 25 psi, IKOTherm-III 25 psi, IKOTherm-A, IKOTherm-A 25 psi, IKOTherm-A III or IKOTherm-A III 25 psi Coverboard: (Optional) Min. 0.5-inch IKOTherm CoverShield, IKOTherm-A CoverShield, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board, preliminarily attached (Note 5).	InnoviFast HD Fastener with InnoviWeld TPO Induction Plate	6-inch o.c. in rows spaced 60-inch o.c.	IKO Innovi TPO, min. 60-mil, induction welded	-60.0
S-24.	Min. 20 ga., Type B, Grade 33 steel, 6 ft span	Insulation: One or more layer(s), min. 1.5-inch IKOTherm, IKOTherm III, IKOTherm 25 psi, IKOTherm-III 25 psi, IKOTherm-A, IKOTherm-A 25 psi, IKOTherm-A III or IKOTherm-A III 25 psi Coverboard: (Optional) Min. 0.5-inch IKOTherm CoverShield, IKOTherm-A CoverShield, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board, preliminarily attached (Note 5).	InnoviFast HD Fastener with InnoviWeld TPO Induction Plate	6-inch o.c. in rows spaced 60-inch o.c.	IKO Innovi TPO, min. 60-mil, induction welded	-75.0
S-25.	Min. 22 ga., Type B, Grade 33 steel, 4 ft span	Insulation: One or more layer(s), min. 1.5-inch IKOTherm, IKOTherm III, IKOTherm 25 psi, IKOTherm-III 25 psi, IKOTherm-A, IKOTherm-A 25 psi, IKOTherm-A III or IKOTherm-A III 25 psi Coverboard: (Optional) Min. 0.5-inch IKOTherm CoverShield, IKOTherm-A CoverShield, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board, preliminarily attached (Note 5).	InnoviFast HD Fastener with InnoviWeld TPO Induction Plate	6-inch o.c. in rows spaced 60-inch o.c.	IKO Innovi TPO, min. 60-mil, induction welded	-82.5
S-26.	Min. 20 ga., Type B, Grade 33 steel, 5.5 ft span	Insulation: One or more layer(s), min. 1.5-inch IKOTherm, IKOTherm III, IKOTherm 25 psi, IKOTherm-III 25 psi, IKOTherm-A, IKOTherm-A 25 psi, IKOTherm-A III or IKOTherm-A III 25 psi Coverboard: (Optional) Min. 0.5-inch IKOTherm CoverShield, IKOTherm-A CoverShield, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board, preliminarily attached (Note 5).	InnoviFast HD Fastener with InnoviWeld TPO Induction Plate	6-inch o.c. in rows spaced 60-inch o.c.	IKO Innovi TPO, min. 60-mil, induction welded	-82.5
S-27.	Min. 22 ga., Type B, Grade 80 steel, 6 ft span	Insulation: One or more layer(s), min. 1.5-inch IKOTherm, IKOTherm III, IKOTherm 25 psi, IKOTherm-III 25 psi, IKOTherm-A, IKOTherm-A 25 psi, IKOTherm-A III or IKOTherm-A III 25 psi Coverboard: (Optional) Min. 0.5-inch IKOTherm CoverShield, IKOTherm-A CoverShield, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board, preliminarily attached (Note 5).	InnoviFast HD Fastener with InnoviWeld TPO Induction Plate	6-inch o.c. in rows spaced 60-inch o.c.	IKO Innovi TPO, min. 60-mil, induction welded	-90.0
S-28.	Min. 20 ga., Type B, Grade 33 steel, 5 ft span	Insulation: One or more layer(s), min. 1.5-inch IKOTherm, IKOTherm III, IKOTherm 25 psi, IKOTherm III 25 psi, IKOTherm-A, IKOTherm-A 25 psi, IKOTherm-A III or IKOTherm-A III 25 psi Coverboard: (Optional) Min. 0.5-inch IKOTherm CoverShield, IKOTherm-A CoverShield, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board, preliminarily attached (Note 5).	InnoviFast HD Fastener with InnoviWeld TPO Induction Plate	6-inch o.c. in rows spaced 60-inch o.c.	IKO Innovi TPO, min. 60-mil, induction welded	-90.0



	TABLE 2D: STEEL DECKS - NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER SYSTEM TYPE C-2: MECHANICALLY ATTACHED INSULATION, INDUCTION-WELDED ROOF COVER										
System	Deck	Insulation (Note 3, Note 13)	Attachm	Roof Cover	MDP						
No.	(Note 1)	ilisulation (<u>Note 3</u> , <u>Note 13</u>)	Fasteners (Note 11)	Spacing	(Note 15B)	(psf)					
S-29.	Min. 18 ga., Type B, Grade 33 steel, 6 ft span	Insulation: One or more layer(s), min. 1.5-inch IKOTherm, IKOTherm III, IKOTherm 25 psi, IKOTherm-III 25 psi, IKOTherm-A, IKOTherm-A 25 psi, IKOTherm-A III 25 psi Coverboard: (Optional) Min. 0.5-inch IKOTherm CoverShield, IKOTherm-A CoverShield, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board, preliminarily attached (Note 5).	InnoviFast HD Fastener with InnoviWeld TPO Induction Plate	6-inch o.c. in rows spaced 60-inch o.c.	IKO Innovi TPO, min. 60-mil, induction welded	-90.0					

			TABLE 2E:	STEEL OR STRUCTURAL CONCRETE DECKS - SYSTEM TYPE D-1: MECHANI				AR-OFF) OR RECOVER		
System	Deck	Thermal	Vapor	Insulation (Note 3, Note 13)			Roof Cover (Note 15A)			
No.	(Note 1)	Barrier	Barrier	Туре	Fastener	Attach (Note 5)		Fasteners (Note 11)	Attach	MDP (psf)
S-30.	Min. 22 ga., Type B, Grade 33 steel, 6 ft span	Optional, <u>Note</u> <u>16B</u>	Optional, Note 16B	Min. 1.5-inch IKOTherm, IKOTherm III, IKOTherm 25 psi, IKOTherm III 25 psi, IKOTherm-A, IKOTherm-A 25 psi, IKOTherm-A III or IKOTherm-A III 25 psi. (Optional) Min. 0.5-inch IKOTherm CoverShield, IKOTherm-A CoverShield, DensDeck, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	Note 2	1 per 4.0 ft ²	IKO Innovi TPO	InnoviFast Heavy Duty (HD) Fastener (#15) with InnoviFast 2- 3/8" HD Seam Plate, InnoviFast HD Fastener with InnoviFast 2- 3/8-in. HD Seam Plate or OMG #15 Roofgrip with OMG 2-3/8 in. Round Barbed Seam Plate	12-inch o.c. within min. 6-inch side laps spaced max. 114-inch o.c. Laps sealed with 1.5- inch heat weld.	-30.0
S-31.	Min. 22 ga., Type B, Grade 33 steel, 6 ft span	Optional, <u>Note</u> <u>16B</u>	Optional, Note 16B	Min. 1.5-inch IKOTherm, IKOTherm III, IKOTherm 25 psi, IKOTherm III 25 psi, IKOTherm-A, IKOTherm-A 25 psi, IKOTherm-A III or IKOTherm-A III 25 psi. (Optional) Min. 0.5-inch IKOTherm CoverShield, IKOTherm-A CoverShield, DensDeck, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	Note 2	1 per 4.0 ft²	IKO Innovi TPO	InnoviFast Heavy Duty (HD) Fastener (#15) with InnoviFast 2- 3/8" HD Seam Plate, InnoviFast HD Fastener with InnoviFast 2- 3/8-in. HD Seam Plate or OMG #15 Roofgrip with OMG 2-3/8 in. Round Barbed Seam Plate	6-inch o.c. within min. 6-inch side laps spaced max. 114-inch o.c. Laps sealed with 1.5- inch heat weld.	-52.5
S-32.	Min. 22 ga., Type B, Grade 33 steel, 6 ft span	Min. 0.5-inch DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	IKO MVP or MVP Sand, self- adhering	Insulation: One or more layer(s), min. 1.5-inch IKOTherm, IKOTherm III, IKOTherm 25 psi, IKOTherm 125 psi, IKOTherm-A, IKOTherm-A 25 psi, IKOTherm-A III or IKOTherm-A III 25 psi Coverboard: (Optional) Min. 0.5-inch IKOTherm CoverShield, IKOTherm-A CoverShield, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	Note 2	1 per 4.0 ft ² (Note 17)	IKO Innovi TPO	InnoviFast Heavy Duty (HD) Fastener (#15) with InnoviFast 2- 3/8" HD Seam Plate, InnoviFast HD Fastener with InnoviFast 2- 3/8-in. HD Seam Plate or OMG #15 Roofgrip with OMG 2-3/8 in. Round Barbed Seam Plate	6-inch o.c. within min. 6-inch side laps spaced max. 114-inch o.c. Laps sealed with 1.5- inch heat weld.	-75.0



	TABLE 3A: STRUCTURAL CONCRETE DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF) SYSTEM TYPE A-1: BONDED INSULATION, BONDED ROOF COVER REFER TO NOTE 15 FOR VAPOR BARRIER OPTIONS									
System	Deck	Base Insulation Layer		Top Insulation Layer(s)		Roof Cover	MDP			
No.	(Note 1)	Туре	Attach (Notes 6,7,8)	Туре	Attach (Notes 6,7,8)	(Note 15)	(psf)			
C-1.	Min. 2,500 psi structural concrete	Min. 1.5-inch IKOTherm, IKOTherm III, IKOTherm 25 psi, IKOTherm III 25 psi, IKOTherm-A, IKOTherm-A 25 psi, IKOTherm-A III or IKOTherm-A III 25 psi.	IKO Millennium Adhesive	Insulation: One or more layer(s), min. 1.5-inch IKOTherm, IKOTherm III, IKOTherm 25 psi, IKOTherm III 25 psi, IKOTherm-A, IKOTherm-A 25 psi, IKOTherm-A III or IKOTherm-A III 25 psi Coverboard: (Optional) Min. 0.5-inch IKOTherm CoverShield, IKOTherm-A CoverShield, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	IKO Millennium Adhesive	BB-IBMA, BB- IBMA-LVOC or BB-IBMA-SPR	-252.5			
C-2.	Min. 2,500 psi structural concrete	Min. 1.5-inch IKOTherm, IKOTherm III, IKOTherm 25 psi, IKOTherm III 25 psi, IKOTherm-A, IKOTherm-A 25 psi, IKOTherm-A III or IKOTherm-A III 25 psi.	IKO Millennium Adhesive, 6- inch o.c.	Insulation: One or more layer(s), min. 1.5-inch IKOTherm, IKOTherm III, IKOTherm 25 psi, IKOTherm III 25 psi, IKOTherm-A, IKOTherm-A 25 psi, IKOTherm-A III or IKOTherm-A III 25 psi Coverboard: (Optional) Min. 0.5-inch IKOTherm CoverShield, IKOTherm-A CoverShield, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	IKO Millennium Adhesive, 6- inch o.c.	BB-IBMA, BB- IBMA-LVOC or BB-IBMA-SPR	-485.5			