CREEK
TECHNICAL SERVICES, LLC

Registry No. 29824
(813) 480-3421

EVALUATION REPORT

FLORIDA BUILDING CODE, 8TH EDITION (2023)

Issued July 29, 2024

Manufacturer:
IKO INDUSTRIES LTD
40 Hansen Rd S
Brampton, ON L6W 3H4
Canada
(905) 457-2880
www.iko.com

Manufacturing Plants: Brampton, ON

Quality Assurance: PRI Construction Materials Technologies (QUA9110)

SCOPE

Category: Roofing
Subcategory: Modified Bitumen Roof System
Code Edition: Florida Building Code, 8th Edition (2023) including High-Velocity Hurricane Zones (HVHZ)
Code Sections: 1504.3.1, 1504.5, 1507.10.2, 1507.11, 1515.1.1, 1515.1.4, 1523.1.1, 1523.6.2
Properties: Wind Resistance, Physical Properties

PRODUCT DESCRIPTION

Products	Specification	Description
Roof-Fast Base	ASTM D 4601	Base or ply sheet for mechanical attachment or self-adhered applications
Roof-Fast Cap	ASTM D 6163	Self-adhered cap sheet

REFERENCES

Entity	Report No.	Standard	Year
PRI Construction Materials Technologies (TST5878)	476T0270	UL 1897	2015
PRI Construction Materials Technologies (TST5878)	476T0271.1	FM 4474(D)	2011
		TAS 114(J)	2011
PRI Construction Materials Technologies (TST5878)	476T0292	ASTM E 108	2017
PRI Construction Materials Technologies (TST5878)	476T0293	ASTM D 4601	2004(2012)E1
PRI Construction Materials Technologies (TST5878)	476T0294A	ASTM D 6163	2016
		TAS 110	2000
PRI Construction Materials Technologies (TST5878)	476T0295	ASTM D 903	1998(2017)

LIMITATIONS

1. Fire classification is not within the scope of this evaluation.
2. The roof deck and the roof deck attachment information are provided based on testing. FBC requirements for the rational design of the roof deck, including the attachment, are not within the scope of this evaluation.
3. Foam plastic insulation shall be installed in accordance with the FBC Section 2603.4.
4. In the HVHZ, fastener spacing for insulation attachment is determined using a Minimum Characteristic Force (F') of 275 lbf as demonstrated via testing to TAS 105. If the field tested fastener value is below 275 lbf, then insulation attachment shall not be acceptable.
5. In the HVHZ, fastener spacing for base sheets or membrane attachment shall meet the minimum fastener resistance value and the *MDP* for the specified assembly. It is permissible for a qualified professional to submit a revised fastener spacing utilizing the withdrawal resistance value obtained from TAS 105 testing and calculations performed in accordance with RAS 117 and/or RAS 137, when the fastener resistance is found less than required.
6. In the HVHZ, if mechanical attachment through the lightweight insulating concrete to the structural deck is proposed, a field fastener withdrawal test shall be conducted in compliance with TAS 105 to determine equivalent or increased attachment densities. Revised fastener densities shall be submitted utilizing the withdrawal resistance value obtained from TAS 105 testing and calculations performed in accordance with RAS 117 and/or RAS 137.
7. **HVHZ:** For assemblies containing mechanical attachment, the allowable uplift pressure for the selected assembly shall meet or exceed the minimum design loads as determined in accordance with the FBC Chapter 16. The attachment density may be increased by a qualified design professional, as necessary, to meet the design pressure requirements in the periphery zones. Calculations shall be conducted in compliance with RAS 117 and/or RAS 137.
   Non-HVHZ: For assemblies containing mechanical attachment or adhered in ribbon-applied adhesive, the allowable uplift pressure for the selected assembly shall meet or exceed the minimum design loads as determined in accordance with the FBC Chapter 16. The attachment density may be increased by a qualified design professional, as necessary, to meet the design pressure requirements in the periphery zones. Calculations shall be conducted in compliance with RAS 117, RAS 137, or Section 2.2.10.1 FM LPDS 1-29 (July 2022).
8. Reroofing applications shall be examined in accordance with FBC Section 1511 outside of the HVHZ and FBC Section 1521 within the HVHZ. For mechanically fastened systems, a field withdrawal resistance test (TAS 105 in the HVHZ; ANSI/SPRI FX-1 or TAS 105 in the non-HVHZ) shall be conducted by a qualified professional to ensure the fastener meets the minimum design load requirements of the system. For adhered systems, a field uplift resistance test (TAS 124 in the HVHZ; ASTM E 907, FM LPDS 1-52, ANSI/SPRI IA-1, or TAS 124 in the non-HVHZ) shall be conducted to confirm conformance of the existing to the minimum design loads.
9. **HVHZ:** For assemblies containing fully adhered or ribbon adhered attachment, or where extrapolation of the assembly is not permitted, the MDP for the selected assembly shall meet or exceed the minimum design loads as determined in accordance with the FBC Chapter 16 without augmentation.
   Non-HVHZ: For assemblies adhered in ribbon-applied adhesive, the allowable uplift pressure for the selected assembly shall meet or exceed the minimum design loads as determined in accordance with the FBC Chapter 16. The attachment density may be increased by a qualified design professional, as necessary, to meet the design pressure requirements in the periphery zones. Calculations shall be conducted in compliance with Section 2.2.10.1 FM LPDS 1-29 (February 2020).
10. Installation of the evaluated products shall comply with this report, the FBC, and the manufacturer's published application instructions. Where discrepancies exist between these sources, the more restrictive and FBC compliant installation detail shall prevail.
11. The minimum roof slope shall be 1/4:12 for new construction.
12. All products listed in this report shall be manufactured under a quality assurance program in compliance with Rule 61G20-3.

COMPLIANCE STATEMENT

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

This item has been digitally signed and sealed by Zachary R. Priest, PE, on 7/29/2024.

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

Digitally signed by Zachary R. Priest

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Zachary R. Priest, P.E.
Florida Registration No. 74021
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CERTIFICATION OF INDEPENDENCE

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

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

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

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

APPENDICES

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

APPENDIX A

INSTALLATION

*Note - Refer to the **APPROVED ASSEMBLIES** section of this report for specific installation details of a selected assembly.*

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

Component	Product	Installation Detail
Base Ply	Roof-Fast Base	Self-Adhered; Min. 3-inch side laps; Rolled with a 75lb roller immediately following application to ensure contact
Cap Ply	Roof-Fast Cap	Self-Adhered; Min. 3-inch side laps; Rolled with a 75lb roller immediately following application to ensure contact

NOMENCLATURE

The following naming conventions are utilized to specify products in the **APPROVED ASSEMBLIES** section of this report. Refer to the nomenclature below when deciphering the allowable products for use in the selected assembly. Installation requirements shall be as noted in the **APPROVED ASSEMBLIES** and **INSTALLATION** section of this report.

Name	Definition		
As Tested	Information provided to the report user based on the as tested condition of the roof system		
Deck Detail	*As Tested* deck construction details are described as follows:		
	Wood Deck	Solid or closely fitted min. 15/32 in., 32/16 span rated, 4-ply, CDX plywood sheathing for new and existing construction at max. 24 in. span; In the HVHZ, new construction shall be min. 19/32 in., 40/20 span rated, CDX plywood at max. 24 in. span; Designed by others in accordance with FBC requirements. The following nomenclature is used to further describe the *As Tested* condition.	
		T<#>	Min. <#>-inch thickness of the plywood
		L<#>	Max. span of <#> inches
		N<#1>/<#2>	Min. 0.113-inch diameter x 2-3/8-inch ring shank nails spaced <#1>-inch o.c. at all intermediate supports and spaced <#2> at the perimeter of each board
MDP	Maximum Design Pressure		

APPROVED ASSEMBLIES

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

1. *MDP*s were calculated using a 2:1 margin of safety per FBC Section 1504.9 and 1523.4.
2. Refer to **LIMITATIONS** and **NOMENCLATURE** sections of this evaluation when using the table(s) below. Items *italicized* refer to specific nomenclature used in this report.
3. Refer to **INSTALLATION** section of this report for installation detail when the information is not explicitly stated for the selected assembly.
4. The on-center (o.c.) spacing given is the maximum allowable attachment spacing for the rated system. Fastener rows shall be equally spaced across the width of the base sheet.
5. *As Tested* information for roof deck construction is provided for information only. The addition of the *As Tested* deck information does not obviate the requirement for rational design of the roof deck and roof deck attachment in accordance with FBC requirements.
6. Plywood sheathing may be optionally primed with IKO S.A.M. Adhesive at a rate of 0.4 to 0.8 gal/100ft^2.

Assembly System Numbers and Definitions	
W-A-#	Assemblies with All Layers Adhered over *Wood Deck* (New or Existing)
W-M-#	Mechanically Fastened Assemblies over *Wood Deck* (New, Existing or *Recover*)

Assemblies with All Layers Adhered over *Wood Deck* (New or Existing)				
System No.	Deck Detail (Note 6)	Base Ply	Cap Ply	*MDP (psf)*
W-A-1	*T15/32, L24*	Roof-Fast Base	Roof-Fast Cap	**-120 (Lim. 9; Non-HVHZ)**
W-A-2	*T15/32, L24*	-	Roof-Fast Cap	**-135 (Lim. 9; Non-HVHZ)**

Mechanically Fastened Assemblies over *Wood Deck* (New or Existing)				
System No.	Deck Detail	Base Ply	Cap Ply	*MDP* (psf)
W-M-1	*T15/32, L24, N6/6*	Roof-Fast Base (with release liner intact) fastened with 12ga. x 1.25-inch ring shank roofing nails and 32ga. x 1-5/8-inch tin caps spaced 6-inch o.c. in the 3-inch wide side laps and 6-inch o.c. in three (3) staggered rows in the field of the roll	Roof-Fast Cap	**-52.5 (Lim. 7)**

END OF REPORT