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## Dynamic Wind Uplift Resistance CSA A123.21-2014 – Summary Document

Document No.: 19-06-B0127-PARS016-A RV1

Document Date: November 11, 2019

Reference Documentation:

CSA A123.21-2014 Report No: 18-06-B0192-2 Supplementary Report No.: 19-06-B0042-M

Manufacturer:	IKO Industries Ltd.	R	IKO System Identification:
	40 Hansen Road South		iko System identinication.
	Brampton, Ontario, Canada		PARS016
	L6W 3H4		PARSUIO

## **SECTION 1.0: Roof System Summary:**

"IKO MOD-BIT – MA ASPHALTIC COVER BOARD TORCHED ROOF SYSTEM" – Partially Attached Roofing System		
Roof Membrane - Cap Sheet:	IKO Torchflex TP-180-Cap	
Roof Membrane – Base Sheet	IKO Torchflex TF-95-FF-Base	
Cover Board:	IKO Protectoboard	
Insulation:	IKO IKOTherm	
Insulation:	IKO IKOTherm	
Vapour Retarder:	IKO Armourgard Vapour Retarder	
Thermal Barrier:	None	
Deck:	Steel Deck, 22 ga, RD938, 230 MPa (33.4 ksi)	

## SECTION 2.0: System Dynamic Wind Uplift Resistance (DUR) Testing Details:

Test Date	Dynamic Wind Uplift Resistance (DUR) of tested specimen kPa (psf)	Dynamic Wind Uplift Resistance (DUR)* Rating (with 1.5X safety factor) kPa (psf)
November 09, 2018	2.9 (60)	1.9 (40)

Dynamic Wind Uplift Resistance Rating (DUR): 1.9 kPa (40 psf)

## **SECTION 3.0: Tested Product and Substitutable Products:**

Roof Membrane (Cap Sheet)				
Tested Product	IKO Torchflex TP-180-Cap	IKO Torchflex TP-180-Cap		
Product Size	Roll Width: 1 m (39.6"), roll Len	gth 8 m (26.2')		
Attachment Method	Heat Welded	Heat Welded		
Substitutable Product(s)				
Manufacturer		Product Identification		
IKO Industries Ltd.	Torchflex TP-HD-Cap	Torchflex TP-250-Cap	Torchflex TP-250-Cap (5 mm)	
	PrevENt TP-250-Cap	PrevENt TP-HD-Cap	PrevENt Premium TP-250-Cap	
	ArmourCool Granular TP-HD	PrevENt ArmourCool Granular TP	PrevENt ArmourCool HD Cap	
	Carrara ArmourCool HD			
IKO Industries Ltd.	Modiflex MP-180-cap	Modiflex MP-250-cap	Modiflex MP-HD-cap	
	PrevENt MP-250-cap	PrevENt MP-HD-cap		

Roof Membrane (Base Sheet)				
Tested Product	IKO Torchflex TF-95-FF-Bas	IKO Torchflex TF-95-FF-Base		
Product Size	Roll Width: 1 m (39.6"), roll L	ength 15 m (49')		
Attachment Method	Heat Welded	Heat Welded		
Substitutable Product(s)				
Manufacturer		Product Identification		
IKO Industries Ltd.	Torchflex TF-95-SF-Base	Torchflex TP-180-FF-Base	Torchflex TP-180-SF-Base	
IKO industries Ltd.	Torchflex HD-FF-Base			
	Modiflex MF-95-FS-Base	Modiflex MF-95-SS-Base	Modiflex MP-180-FS-Base	
IKO Industries Ltd.	Modiflex MP-180-SS-Base	Modiflex MP-180-FS-Base 3mm	Modiflex MP-HD-FS-Base	
	Modiflex MP-HD-SS-Base			

Cover Board			
Tested Product	IKO Protectoboard		
Product Size	3 x 1220 x 2440 mm (1/8" x 4' x 8')		
Attachment Method	Mechanically attached		
Fastening Rate	1 per 2.00 ft² (0.019 m²)		
	Substitutable Product(s)		
Manufacturer	Product Identification		
IKO Industries Ltd.	Protectobase 180		



Insulation (Top Layer)				
Tested Product	IKO IKOTherm			
Product Size	38 x 1220 x 1220 mm (1.5")	38 x 1220 x 1220 mm (1.5" x 4' x 4')		
Attachment Method	Loose laid, pre-secured or adhered			
Fastening Rate	n/a			
Substitutable Product(s)				
Manufacturer	Product Identification			
IKO Industries Ltd.	IKOTherm III	IKOTherm 25 psi	IKOTherm III 25 psi	
	IKOTherm Tapered	IKOTherm III Tapered	IKOTherm 25 psi Tapered	

Insulation (Bottom Layer)				
Tested Product	IKO IKOTherm	IKO IKOTherm		
Product Size	38 x 1220 x 1220 mm (1.5	38 x 1220 x 1220 mm (1.5" x 4' x 4')		
Attachment Method	Loose laid, pre-secured o	Loose laid, pre-secured or adhered		
Fastening Rate	n/a	n/a		
Substitutable Product(s)				
Manufacturer		Product Identification		
IKO Industries Ltd.	IKOTherm III	IKOTherm 25 psi	IKOTherm III 25 psi	
	IKOTherm Tapered	IKOTherm III Tapered	IKOTherm 25 psi Tapered	

Vapour Retarder			
Tested Product	IKO Armourgard Vapour Retarder		
Product Size	Roll Width: 0.9 m (36"), Roll Len	Roll Width: 0.9 m (36"), Roll Length 20 m (65'), 1.4 mm (0.053"), 50.8 mm (2") Overlap	
Attachment Method	Loose laid or adhered to substrate primed with IKO S.A.M. adhesive		
Fastening Rate	n/a		
Substitutable Product(s)			
Manufacturer	Product Identification		
IKO Industries Ltd.	MVP Vapour Retarder	MVP Sand	
	Armourbond Flash Sand	Armourgard Ice and Water Protector Commercial	
Generic	Any approved generic Kraft Paper or polyethylene vapour retarder		

Thermal Barrier				
Tested Product	Optional layer			
Product Thickness	n/a			
Attachment Method	Loose laid, pre-secured or adhered	Loose laid, pre-secured or adhered		
Fastening Rate	n/a	n/a		
Substitutable Product(s)				
Manufacturer	Manufacturer Product Identification			
Georgia-Pacific®	DensDeck <sup>®</sup>	DensDeck Prime®		
USG®/CGC	Securock® Glass-Mat	Securock® Gypsum-Fiber		
Generic	Any approved Gypsum Board meeting the requirements of ASTM C1177 or ASTM C1278			



Cover Board Securement		
Tested Product	SFS #14 Dekfast™ Fastener with 73 mm (21/8") hex (PLT-H-2-7/8) Hex Stress Plate	
Fastening Rate	1 per 2.00 ft² (0.019 m²) - Sixteen (16) per x 1220 x 2440 mm (1/8" x 4' x 8') board	
Substitutional Product(s)		
Manufacturer	Product Identification	
Trufast <sup>®</sup>	#14 HD Roofing Fastener with 76 mm (3") round (MP-3000) Metal Insulation Plate	
SFS	#14 Dekfast Fastener with 3" (76 mm) round (PLT-R-3) Metal Insulation Plate	
OMG <sup>®</sup>	Heavy Duty #14 Roofing Fastener with 3" (76 mm) Galvalume Plate (SPGA3C)	

Note: This is not a comprehensive report but a <u>summary</u> of the performance results produced for the roof assembly documented herein tested in accordance to CSA A123.21-2014. Please refer to the reference documents stated on page 1, or consult the manufacturer, for detailed information pertaining to the test specimen configuration and construction.

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**Accreditation**: Element is an ISO 17025 accredited test lab under International Accreditation Service "TL-407". In addition, CSA A123.21 can be found under our scope of accreditation listing.

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