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

Document No.: 19-06-B0127-PARS017-A RV2

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Reference Documentation:

CSA A123.21-2014 Report No: 19-06-B0053-1 Supplementary Report No.: 19-06-B0042-M

Manufacturer:	IKO Industries Ltd.	®	IKO System Identification:
	40 Hansen Road South		iko System identinication.
	Brampton, Ontario, Canada		PARS017
	L6W 3H4	•	PANSUI/

SECTION 1.0: Roof System Summary:

"IKO MOD-BIT – MA BASE SHEET/COVER BOARD TORCHED ROOF SYSTEM" – Partially Attached Roofing System		
Roof Membrane - Cap Sheet:	IKO Torchflex TP-180-Cap	
Roof Membrane/Cover Board:	IKO Protectobase 180	
Insulation:	IKO IKOTherm	
Insulation:	IKO IKOTherm	
Vapour Retarder:	IKO MVP Sand	
Thermal Barrier:	GP 12.7 mm (1/2") DensDeck Prime®	
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)
April 08, 2018	10 (210)	6.7 (140)

Dynamic Wind Uplift Resistance Rating (DUR): 6.7 kPa (140 psf)

SECTION 3.0: Tested Product and Substitutable Products:

Roof Membrane (Cap Sheet)			
Tested Product	IKO Torchflex TP-180-Cap		
Product Size	Roll Width: 1 m (36.9"), roll Length 8 m (26')		
Attachment Method	Heat Welded		
Substitutable Product(s)			
Manufacturer	Product Identification		
	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
IKO Industries Ltd.	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	
	Torchflex TP-HD-Cap	Torchflex TP-250-Cap	Torchflex TP-250-Cap (5 mm)

Roof Membrane Base Sheet/Cover Board			
Tested Product	IKO Protectobase 180		
Product Size	5.4 x 914 x 2440 mm (1/8" x 3' x 8')		
Attachment Method	Mechanically attached		
Fastening Rate	305 mm (12") o.c. fastener spacing row spacing in-seam and two mid-seam rows 102 (4") either side of centre		
	Substitutable Product(s)		
Manufacturer	ufacturer Product Identification		
IKO Industries Ltd	Shieldbase 180		
	Protectoboard with Torchflex TP-180-FF-Base		

Insulation (Top Layer)				
Tested Product	IKO IKOTherm	IKO IKOTherm		
Product Size	38 x 1220 x 2440 mm (1.5	38 x 1220 x 2440 mm (1.5" x 4' x 8')		
Attachment Method	Loose laid, pre-secured o	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			
Product Size	38 x 1220 x 2440 mm (1.5")	38 x 1220 x 2440 mm (1.5" x 4' x 8')		
Attachment Method	Loose laid, pre-secured or a	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	

Vapour Retarder				
Tested Product	IKO MVP Sand Vapour Retarder			
Product Size	Roll Width: 1 m (39.4"), roll Length 32 m (105	Roll Width: 1 m (39.4"), roll Length 32 m (105')		
Attachment Method	Self-adhered to substrate primed with IKO S.A.M. adhesive			
Fastening Rate	n/a			
	Substitutable Product(s)			
Manufacturer	Product Identification			
IKO Industries Ltd.	IKO MVP	Armourbond Flash Sand		
	Armourgard Ice and Water Protector Commer	cial		

Thermal Barrier			
Tested Product	GP DensDeck Prime®		
Product Size	12.7 x 1220 x 2440 mm (1/2" x 4' x 8')		
Attachment Method	Loose laid, pre-secured or adhered		
Fastening Rate	n/a		
	Substitutable Product(s)		
Manufacturer	cturer Product Identification		
Georgia-Pacific®	DensDeck [®]		
USG®/CGC	Securock® Glass-Mat	Securock® Gypsum-Fiber	
Generic	Any approved Gypsum Board meeting the requirements of ASTM C1177 or ASTM C1278		

Base Sheet/Cover Board Securement			
Tested Product	Trufast® #14 HD Roofing Fastener with 2.4" (60 mm) round (MP-2400) Barbed Metal Seam Plate		
Fastening Rate	1 per 1.00 ft² (0.009 m²) – Twenty-four (24) per 914 x 2440 mm (1/8" x 3' x 8') sheet located within the side lap plus two mid-sheet rows		
Fastening Spacing	305 mm (12") o.c. (in seam)		
Row Spacing	One row in-seam and. two mid-sheet rows located 102 mm (4") either side of centre		
	Substitutional Product(s)		
Manufacturer	Product Identification		
SFS	#14 Dekfast™ Fastener with 2.4" (60 mm) round (PLT-R-2-3/8-6B) Barbed Stress Plate		
OMG [®]	#14 Heavy Duty Roofing Fastener with 2.4" (60 mm) round (PGA238) Barbed Seam Plate		

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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