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

Document No.: 19-06-B0127-PARS014-A RV2

Document Date: November 24, 2021

Reference Documentation:

CSA A123.21-2014 Report No: 18-06-B0192-3 Supplementary Report No.: 19-06-B0042-M RV2

Manufacturer:	IKO Industries Ltd.	R	IKO System Identification:
	40 Hansen Road South		iko system identification.
	Brampton, Ontario, Canada		PARS014
	L6W 3H4		PAR5014

SECTION 1.0: Roof System Summary:

"IKO MOD-BIT – ASPHALTIC COVER BOARD & MA THERMAL BARRIER" – Partially Attached Roofing System		
Roof Membrane – Cap Sheet:	IKO Torchflex TP-180-Cap	
Roof Membrane/Cover Board:	IKO Protectobase 180	
Insulation:	IKO IKOTherm	
Insulation:	Truefoam Type 1 EPS Insulation	
Vapour Retarder:	IKO Torchflex TF-95-SF	
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)
November 21, 2018	6.3 (131)	4.2 (88)

Dynamic Wind Uplift Resistance Rating (DUR): 4.2 kPa (88 psf)

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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 (36.9"), roll Leng	yth 8 m (26.2')	
Attachment Method	Heat Welded		
Substitutable Product(s)			
Manufacturer	Product Identification		
	Torchflex TP-HD-Cap	Torchflex TP-250-Cap	Torchflex TP-250-Cap (5 mm)
IKO Industries Ltd.	Torchflex Ultra TP-HD-Cap	PrevENt TP-250-Cap	PrevENt TP-HD-Cap
IKO industries Ltd.	PrevENt Premium TP-250-Cap	ArmourCool Granular TP-HD	PrevENt ArmourCool Granular TP
	PrevENt ArmourCool HD Cap	Carrara ArmourCool HD	
	Modiflex MP-180-cap	Modiflex MP-250-cap	Modiflex MP-HD-cap
IKO Industries Ltd.	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	Ribbon adhered with IKO Millennium adhesive
Fastening Rate	305 mm (12") o.c.
Substitutable Product(s)	
Manufacturer	Product Identification
IKO Industries Ltd.	Protectoboard with Torchflex TP-180-FF-Base

Insulation (Top Layer)			
Tested Product	IKO IKOTherm		
Product Size	51 x 1220 x 1220 mm (2" x 4' x 4	51 x 1220 x 1220 mm (2" x 4' x 4')	
Attachment Method	Ribbon adhered with IKO Millennium adhesive		
Fastening Rate	305 mm (12") o.c.		
	Substitutable Product(s)		
Manufacturer	Product Identification		
IKO Industries Ltd.	IKOTherm III	IKOTherm 25 psi	IKOTherm III 25 psi
INO industries Ltd.	IKOTherm Tapered	IKOTherm III Tapered	IKOTherm 25 psi Tapered



Insulation (Bottom Layer)			
Tested Product	Truefoam Type 1 EPS Insulation		
Product Size	51 x 1220 x 1220 mm (2" x 4' x 4	')	
Attachment Method	Ribbon adhered with IKO Millennium adhesive		
Fastening Rate	305 mm (12") o.c.		
	Substitutable Product(s)		
Manufacturer	Product Identification		
IKO Industries Ltd.	IKOTherm III	IKOTherm 25 psi	IKOTherm III 25 psi
INO maustries Lta.	IKOTherm Tapered	IKOTherm III Tapered	IKOTherm 25 psi Tapered
Generic	Any IKO approved Type 1, 2, 3 or 4 EPS meeting requirements of CAN/ULC S-701 and ASTM C578		

Vapour Retarder			
Tested Product	IKO Torchflex TF-95-SF		
Product Size	Roll Width: 1 m (39.4"), roll Length 8 m (26.2'), (2.2 mm / 0.087") with 76 mm (3") Overlap		
Attachment Method	Heat Welded		
Fastening Rate	n/a		
	Substitutable Product(s)		
Manufacturer	Product Identification		
IKO Industries Ltd.	Torchflex TP-180-SF		
IKO Industries Ltd.	Modiflex MF-95-SS	Modiflex MP-180-SS	

Thermal Barrier			
Tested Product	GP 12.7 mm (1/2") DensDeck Prime®		
Product Size	12.7 x 1220 x 2440 mm (1/2" x 4' x 8')	12.7 x 1220 x 2440 mm (1/2" x 4' x 8')	
Attachment Method	Mechanically attached		
Fastening Rate	1 per 2.00 ft² (0.18 m²)		
	Substitutable Product(s)		
Manufacturer	Product Identification		
Georgia-Pacific®	DensDeck®		
USG®/CGC	Securock® Glass-Mat	Securock® Gypsum-Fiber	

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Thermal Barrier Securement		
Tested Product	Trufast® #14 HD Roofing Fastener with 76 mm (3") round (MP-3000) Metal Insulation Plate	
Fastening Rate	1 per 2.0 ft² (0.18 m²) - Sixteen (16) per 12.7 x 1220 x 2440 mm (1/2" x 4' x 8') board	
Substitutional Product(s)		
Manufacturer	Product Identification	
SFS	#14 Dekfast Fastener with 3" (76 mm) round (PLT-R-3) Metal Insulation Plate	
OMG [®]	Heavy Duty #14 Roofing Fastener with 3" (76 mm) Galvalume Plate (SPGA3C)	
IKO Industries Ltd.	IKO InnoviFast [™] #14 All Purpose (AP) Fastener with InnoviFast 76 mm (3") Round Insulation 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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