

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

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Reference Documentation:

CSA A123.21-2014 Report No: 16-06-M0239-3
Supplementary Report No.: 19-06-B0042-M

Manufacturer:	IKO Industries Ltd.		IKO System Identification:
	40 Hansen Road South		
	Brampton, Ontario, Canada		
	L6W 3H4		PARS006

SECTION 1.0: Roof System Summary:

"IKO MOD-BIT – SA VENTED BASE SHEET WITH MA ISO INSULATION" – Partially Attached Roofing System	
Roof Membrane - Cap Sheet:	IKO Torchflex TP-180-Cap
Roof Membrane – Base Sheet	IKO Armourvent Base
Cover Board:	IKO IKOTerm CoverShield
Insulation:	IKO IKOTerm
Insulation:	IKO IKOTerm
Vapour Retarder:	IKO MVP Vapour Barrier
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)
August 18, 2016	3.6 (75)	2.4 (50)

Dynamic Wind Uplift Resistance Rating (DUR): 2.4 kPa (50 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 (39.6"), roll Length 8 m (26.2')		
Attachment Method	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	Armourvent Base	
Product Size	Roll Width: 1 m (39.4"), roll Length 12 m (39.4')	
Attachment Method	Self-adhered to primed cover board	
Substitutable Product(s)		
Manufacturer	Product Identification	
IKO Industries Ltd.	Armourbond 180	Armourbond Flash

Cover Board	
Tested Product	IKOTherm CoverShield
Product Size	12.7 x 1220 x 1220 mm (1/2" 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
n/a	None

Insulation (Top Layer)			
Tested Product	IKO IKOTherm		
Product Size	51 x 1220 x 2440 mm (2" x 4' x 8')		
Attachment Method	Mechanically attached		
Fastening Rate	1 per 4.0 ft ² (0.037 m ²)		
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 IKOTerm		
Product Size	51 x 1220 x 2440 mm (2" x 4' x 8')		
Attachment Method	Loose laid, pre-secured or adhered		
Fastening Rate	n/a		
Substitutable Product(s)			
Manufacturer	Product Identification		
IKO Industries Ltd.	IKOTerm III	IKOTerm 25 psi	IKOTerm III 25 psi
	IKOTerm Tapered	IKOTerm III Tapered	IKOTerm 25 psi Tapered

Vapour Retarder		
Tested Product	IKO MVP Vapour Retarder	
Product Size	0.3 mm (0.0118"), 82.5 mm (3-1/4") Overlap	
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.	MVP Sand	
	Armourbond Flash Sand	Armourgard Ice and Water Protector Commercial

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

Insulation (Top layer) Securement	
Tested Product	Trufast® #14 HD Roofing Fastener with 76 mm (3") round (MP-3000) Metal Insulation Plate
Fastening Rate	1 per 4.0 ft ² (0.037 m ²) - Eight (8) per 51 x 1220 x 2440 mm (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)

Note: This is not a comprehensive report but a summary 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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