

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

Document No.: 19-06-B0127-PARS017-A RV1
Document Date: November 11, 2019

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		
	Brampton, Ontario, Canada		PARS017
	L6W 3H4		

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 IKOTerm
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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)
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		
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	
	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	Product Identification
IKO Industries Ltd	Shieldbase 180
	Protectoboard with Torchflex TP-180-FF-Base

Insulation (Top Layer)			
Tested Product	IKO IKOTerm		
Product Size	38 x 1220 x 2440 mm (1.5" 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

Insulation (Bottom Layer)			
Tested Product	IKO IKOTerm		
Product Size	38 x 1220 x 2440 mm (1.5" 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	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.	MVP Sand	Armourbond Flash Sand
	Armourgard Ice and Water Protector Commercial	

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	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 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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