


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

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Reference Documentation:

CSA A123.21-2014 Report No: 20-06-B0113-4
Supplementary Report No.: 19-06-B0042-M RV2

Manufacturer:	IKO Industries Ltd.		IKO System Identification:
	40 Hansen Road South		
	Brampton, Ontario, Canada		PARS020
	L6W 3H4		

SECTION 1.0: Roof System Summary:

"IKO INNOVI™ TPO OVER MA GYPSUM COVER BOARD" – Partially Attached Roofing System	
Roof Membrane – Cap Sheet:	IKO Innovi TPO
Cover Board:	GP 12.7 mm (1/2") DensDeck Prime®
Insulation:	IKO IKOTherm™
Insulation:	IKO IKOTherm™
Vapour Retarder:	IKO Armourgard Vapour Retarder
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)
December 29, 2020	7.2 (150)	4.9 (100)

Dynamic Wind Uplift Resistance Rating (DUR): 4.9 kPa (100 psf)

SECTION 3.0: Tested Product and Substitutable Products:

Roof Membrane (Cap Sheet)	
Tested Product	IKO Innovi TPO – 45 mil
Product Size	Roll Thickness: 1.14 mm (0.045"), Roll Width: 2.4 m (8'), Roll Length 30.5 m (100')
Attachment Method	Fully adhered with IKO InnoviBond™ Membrane Adhesive SPR – see securement section for details
Substitutable Product(s)	
Manufacturer	Product Identification
IKO Industries Ltd.	Innovi TPO - 60 mil Innovi TPO – 80 mil

Cover Board	
Tested Product	GP 12.7 mm (1/2") DensDeck Prime®
Product Size	12.7 x 1220 x 2440 mm (0.5" x 4' x 8')
Attachment Method	Mechanically attached
Fastening Rate	1 per 1.33 ft² (0.124 m²)
Substitutable Product(s)	
Manufacturer	Product Identification
n/a	n/a

Insulation (Top Layer)	
Tested Product	IKO IKOTerm
Product Size	38 x 1220 x 1220 mm (1.5" x 4' x 4')
Attachment Method	Loose laid or pre-secured
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 1220 mm (1.5" x 4' x 4')
Attachment Method	Loose laid or pre-secured
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 Armourgard Vapour Retarder	
Product Size	Roll Width: 2.4 m (96"), Roll Area: 186 m ² (2000 ft ²), Roll Thickness: 1.4 mm (0.053")	
Attachment Method	Loose laid or self-adhered to substrate	
Fastening Rate	n/a	
Substitutable Product(s)		
Manufacturer	Product Identification	
IKO Industries Ltd.	MVP	MVP Sand
	Armourbond Flash Sand	Armourgard Ice and Water Protector Commercial
Generic	Any IKO approved generic Kraft Paper or polyethylene vapour retarder	

Thermal Barrier		
Tested Product	Optional layer	
Product Thickness	12.7 x 1220 x 2440 mm (1/2" x 4' x 8')	
Attachment Method	Loose laid or pre-secured	
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 IKO approved Gypsum Board meeting the requirements of ASTM C1177 or ASTM C1278	

Membrane Adhesive Securement	
Tested Product	InnoviBond Membrane Adhesive SPR
Fastening Rate	Fully adhered (2 sided dry)
Substitutable Product(s)	
Manufacturer	Product Identification
IKO Industries Ltd.	InnoviBond Membrane Adhesive

Cover Board Mechanical Securement	
Tested Product	#14 IKO InnovFast™ All Purpose (AP) Fastener with InnovFast 76 mm (3") Round Insulation Plate
Fastening Rate	1 per 1.33 ft ² (0.124 m ²), Twenty-four (24) per 12.7 x 1220 x 2440 mm (1/2" x 4' x 8') board
Substitutable Product(s)	
Manufacturer	Product Identification
SFS - DekFast™	#14 (DF-#14-PH3) Fastener with 3" (76 mm) Round Metal Insulation Plate (PLT-R-3)
Trufast®	#14 HD Roofing Fastener with 76 mm (3") Round Metal Insulation Plate (MP-3000)
OMG®	#14 Heavy Duty Roofing Fastener with 3" (76 mm) Galvalume Plate (SPGA3C)

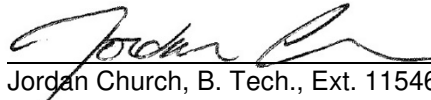
Note: This is not a comprehensive report but a summary of the performance results produced for the roof assembly documented herein tested in accordance to CSA A123.21-2014. Please refer to the reference documents stated on page 1, or consult the manufacturer, for detailed information pertaining to the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

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