

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

Document No.: 20-06-B0138-PARS0022-A  
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Reference Documentation:

CSA A123.21-2014 Report No: 20-06-B0138-1  
Supplementary Report No.: 19-06-B0042-M RV2

<b>Manufacturer:</b>	IKO Industries Ltd.		<b>IKO System Identification:</b>
	40 Hansen Road South		
	Brampton, Ontario, Canada		PARS022
	L6W 3H4		

### SECTION 1.0: Roof System Summary:

<b>"IKO INNOVI™ TPO OVER MA THERMAL BARRIER" – Partially Attached Roofing System</b>	
Roof Membrane – Cap Sheet:	IKO Innovati TPO
Insulation:	IKO IKOTerm™
Insulation:	IKO IKOTerm™
Vapour Retarder:	IKO MVP Sand Vapour Retarder
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:

<b>Test Date</b>	<b>Dynamic Wind Uplift Resistance (DUR) of tested specimen kPa (psf)</b>	<b>Dynamic Wind Uplift Resistance (DUR)* Rating (with 1.5X safety factor) kPa (psf)</b>
December 30, 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	Optional layer
Product Size	12.7 x 1220 x 1220 mm (0.5" 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 CoverShield

Insulation (Top Layer)			
Tested Product	IKO IKOTherm		
Product Size	38 x 1220 x 1220 mm (1.5" 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
	IKOTherm Tapered	IKOTherm III Tapered	IKOTherm 25 psi Tapered

Insulation (Bottom Layer)			
Tested Product	IKO IKOTherm		
Product Size	38 x 1220 x 1220 mm (1.5" 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
	IKOTherm Tapered	IKOTherm III Tapered	IKOTherm 25 psi Tapered

<b>Vapour Retarder</b>	
Tested Product	IKO MVP Sand Vapour Retarder
Product Size	Roll Width: 0.9 m (36"), roll Length 24.4 m (80')
Attachment Method	Self-adhered to substrate primed with IKO S.A.M. Adhesive or InnoviBond Membrane Adhesive SPR
Fastening Rate	n/a
<b>Substitutable Product(s)</b>	
<b>Manufacturer</b>	<b>Product Identification</b>
IKO Industries Ltd.	ArmourGard Ice and Water Protector Commercial

<b>Thermal Barrier</b>	
Tested Product	GP DensDeck Prime®
Product Size	12.7 x 1220 x 2440 mm (1/2" x 4' x 8')
Attachment Method	Mechanically attached
Fastening Rate	1 per 1.33 ft <sup>2</sup> (0.124 m <sup>2</sup> )
<b>Substitutable Product(s)</b>	
<b>Manufacturer</b>	<b>Product Identification</b>
n/a	n/a

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

<b>Cover Board/Insulation Adhesive Securement</b>	
Tested Product	IKO Millennium Adhesive – ribbon adhered
Fastening Rate	305 mm (12") o.c.
<b>Substitutable Product(s)</b>	
<b>Manufacturer</b>	<b>Product Identification</b>
n/a	n/a

Thermal Barrier Mechanical Securement	
Tested Product	#14 IKO InnoviFast All Purpose (AP) Fastener with InnoviFast 76 mm (3") Round Insulation Plate
Fastening Rate	1 per 1.33 ft <sup>2</sup> (0.124 m <sup>2</sup> ), Twenty-four (24) per 12.7 x 1220 x 2440 mm (1/2" x 4' x 8') board
Substitutional 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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**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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