

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

Document No.: 20-06-B0113-PARS021-A  
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Reference Documentation:

CSA A123.21-2014 Report No: 20-06-B0113-3  
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		PARS021
	L6W 3H4		

### **SECTION 1.0: Roof System Summary:**

<b>“IKO INNOVI™ TPO OVER MA COVERSIELD BOARD” – Partially Attached Roofing System</b>	
Roof Membrane – Cap Sheet:	IKO InnovI TPO
Cover Board:	IKO IKOTerm™ CoverShield
Insulation:	IKO IKOTerm™
Insulation:	IKO IKOTerm™
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:**

<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 23, 2020	5.0 (105)	3.4 (70)

**Dynamic Wind Uplift Resistance Rating (DUR): 3.4 kPa (70 psf)**

**SECTION 3.0: Tested Product and Substitutable Products:**

<b>Roof Membrane (Cap Sheet)</b>	
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
<b>Substitutable Product(s)</b>	
<b>Manufacturer</b>	<b>Product Identification</b>
IKO Industries Ltd.	Innovi TPO - 60 mil   Innovi TPO – 80 mil

<b>Cover Board</b>	
Tested Product	IKO IKOTerm CoverShield
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)
<b>Substitutable Product(s)</b>	
<b>Manufacturer</b>	<b>Product Identification</b>
n/a	n/a

<b>Insulation (Top Layer)</b>			
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		
<b>Substitutable Product(s)</b>			
<b>Manufacturer</b>	<b>Product Identification</b>		
IKO Industries Ltd.	IKOTerm III	IKOTerm 25 psi	IKOTerm III 25 psi
	IKOTerm Tapered	IKOTerm III Tapered	IKOTerm 25 psi Tapered

<b>Insulation (Bottom Layer)</b>			
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		
<b>Substitutable Product(s)</b>			
<b>Manufacturer</b>	<b>Product Identification</b>		
IKO Industries Ltd.	IKOTerm III	IKOTerm 25 psi	IKOTerm III 25 psi
	IKOTerm Tapered	IKOTerm III Tapered	IKOTerm 25 psi Tapered

<b>Vapour Retarder</b>		
Tested Product	IKO Armourgard Vapour Retarder	
Product Size	Roll Width: 2.4 m (96"), Roll Area: 186 m <sup>2</sup> (2000 ft <sup>2</sup> ), Roll Thickness: 1.4 mm (0.053")	
Attachment Method	Loose laid or self-adhered to substrate	
Fastening Rate	n/a	
<b>Substitutable Product(s)</b>		
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	

<b>Thermal Barrier</b>		
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	
<b>Substitutable Product(s)</b>		
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	

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

<b>Cover Board Mechanical Securement</b>	
Tested Product	#14 IKO InnovFast™ All Purpose (AP) Fastener with InnovFast 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
<b>Substitutable Product(s)</b>	
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.*

**Reported by:**

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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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