

## Dynamic Wind Uplift Resistance CSA A123.21-2020 – Summary Document

Document No.: 22-06-B0130-1 (MARS020)  
Document Date: April 13, 2023

Reference Documentation:

CSA A123.21-2014 Report No: 22-06-B0130-1  
Supplementary Report No.: 22-06-B0109 (March 6, 2023)

<b>Manufacturer:</b>	IKO Industries Ltd.		<b>IKO System Identification:</b>
	40 Hansen Road South		
	Brampton, Ontario, Canada		
	L6W 3H4		<b>MARS020</b>

### SECTION 1.0: Roof System Summary:

<b>IKO INNOVI™ TPO ISOWELD @ 5.33 ft² / fastener. OPTIONAL TB &amp; CB – Mechanically Attached Roofing System</b>	
Roof Membrane – Cap Sheet:	IKO Innovi™ TPO
Insulation:	IKO IKOTherm™
Insulation:	IKO IKOTherm™
Vapour Retarder:	6 mil Poly
Thermal Barrier:	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>Measured Dynamic Wind Uplift Resistance of tested specimen, as per CSA A123.21-20 kPa (psf)</b>	<b>Dynamic Wind Uplift Resistance Rating, DUR (with 1.5X safety factor) as per CSA A123.21-14 kPa (psf)</b>
December 22, 2022	3.41 (71.3)	2.28 (47.5)

**Measured Dynamic Wind Uplift Resistance: 3.41 kPa (71.3 psf)\***

\* Value does not include resistance factor. Applicable resistance factor shall be applied.

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

Roof Membrane (Cap Sheet)		
Tested Product	IKO Innovati™ TPO – 60 mil	
Product Size	Roll Thickness: 1.52 mm (0.060”), Roll Width: 3.0 m (10’), Roll Length 30.5 m (100’)	
Attachment Method	Induction welded using SFS Isoweld 3000 or OMG RhinoBond Induction Welder.	
Substitutable Product(s)		
Manufacturer	Product Identification	
IKO Industries Ltd.	IKO Innovati™ TPO – 60 mil (minimum 5’ width)	IKO Innovati™ TPO – 80 mil (minimum 5’ width)

Cover Board		
Tested Product	Optional Layer	
Product Size	12.7 x 1220 x 2440 mm (0.5" x 4' x 8')	
Attachment Method	Pre-secured – see pre-securement section for details	
Fastening Rate	n/a	
Substitutable Product(s)		
Manufacturer	Product Identification	
IKO Industries Ltd.	IKOTherm CoverShield	
Georgia-Pacific	DensDeck Prime®	DensDeck®
USG®/CGC	Securock® Glass-Mat	Securock® Gypsum-Fiber

Insulation (Top Layer)			
Tested Product	IKO IKOTherm™		
Product Size	38 x 1220 x 2440 mm (1.5" x 4' x 8')		
Attachment Method	Pre-secured or loose laid with Cover Board – see pre-securement section for details		
Fastening Rate	n/a		
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 2440 mm (1.5" x 4' x 8')		
Attachment Method	Loose laid or pre-secured		
Fastening Rate	n/a		
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

Vapour Retarder			
Tested Product	6 mil Poly		
Product Size	n/a		
Attachment Method	Loose laid or *self-adhered to substrate with IKO SAM Adhesive		
Fastening Rate	n/a		
Substitutable Product(s)			
Manufacturer	Product Identification		
IKO Industries Ltd.	*MVP	*MVP Sand	*Amourbond Flash Sand
	*Armourgard Ice and Water Protector Commercial	Armourgard Vapour Retarder	AcrylicStick SA (primerless)
Generic	Any IKO approved Kraft Paper or polyethylene vapor retarder		

Thermal Barrier			
Tested Product	Optional Layer		
Product Size	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		

Insulation/Cover Board Pre-securement			
Tested Product	Proprietary to IKO		
Fastening Rate	5.33 ft <sup>2</sup> /fastener (6 fasteners/ 4' x 8' board)		
Substitutional Product(s)			
Manufacturer	Product Identification		
IKO Industries Ltd.	InnoviFast™ #15 HD	InnoviWeld Plate	
Altenloh, Brinck & Co.	Trufast #15 EHD	Trufast TPO IW Plate	
SFS	Dekfast™ DF-#15-PH3	Isoweld F1-P-6.8-TPO 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 A123.21-2020. 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.*

*The Substitutable Products referenced in this Element Summary Report have been established for IKO Industries as per Element Document 22-06-B0109 (March 6, 2023).*

**Reported by:**

**Reviewed by:**

A handwritten signature in black ink, appearing to read "Joe DeRose", written over a horizontal line.

Joe DeRose, P. Eng., Ext. 10221  
Technical Manager, Building Science  
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Jordan Church, B. Tech., Ext. 11546  
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**Accreditation:** *Element is an ISO 17025 accredited test lab under A2LA. In addition, CSA A123.21 can be found under our scope of accreditation listing.*

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