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

Document No.: 19-06-B0127-PARS009-A RV1

Document Date: November 11, 2019

Reference Documentation:

CSA A123.21-2014 Report No: 17-06-M0013 Supplementary Report No.: 19-06-B0042-M

Manufacturer:	IKO Industries Ltd.	R	IKO System Identification:
	40 Hansen Road South		iko System identinication.
	Brampton, Ontario, Canada		PARS009
	L6W 3H4	•	PANSUUS

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

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"IKO BUR – MA THERMAL BARRIER HOT MOPPED SYSTEM" – Partially Attached Roofing System		
Roof Membrane: IKO No. 15 Perforated Felt , 4-Ply Organic BUR		
Cover Board: MSL Louiseville Fiberboard		
Insulation:	IKO IKOTherm	
Insulation:	IKO IKOTherm	
Vapour Retarder: 2 plys IKO No.15 Perforated Felt Vapour Retarder		
Thermal Barrier: 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)
January 31, 2017	5.4 (112)	3.6 (75)

Dynamic Wind Uplift Resistance Rating (DUR): 3.6 kPa (75 psf)

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

Roof Membrane			
Tested Product	IKO No. 15 Perforated Felt, 4-Ply Organic BUR with Glaze Coat, 203 mm (8.0") Overlap		
Product Size	Roll Width: 0.914 m (36"), roll Length 43.9 m (144')		
Attachment Method	Hot Mopped with CSA A123.4 Type 2 Hot Asphalt Adhesive		
	Substitutable Product(s)		
Manufacturer	Product Identification		
IKO Industries Ltd.	Type IV Glass Type 6 glass		

Cover Board			
Tested Product	MSL Louiseville Fiberboard		
Product Size	12.7 x 1220 x 1220 mm (1/2" x 4' x 4')		
Attachment Method	Hot Mopped with CSA A123.4 Type 2 Hot Asphalt		
Fastening Rate	Full coverage		
	Substitutable Product(s)		
Manufacturer	Product Identification		
Generic	Any approved wood fiberboard meeting the requirements of CAN/ULC S-706 and ASTM C208		

Insulation (Top Layer)			
Tested Product	IKO IKOTherm		
Product Size	51 x 1220 x 1220 mm (2" x 4' x 4')		
Attachment Method	Hot Mopped with CSA A123.4 Type 2 Hot Asphalt		
Fastening Rate	Full coverage		
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	IKO IKOTherm		
Product Size	51 x 1220 x 1220 mm (2"	51 x 1220 x 1220 mm (2" x 4' x 4')		
Attachment Method	Hot Mopped with CSA A1	Hot Mopped with CSA A123.4 Type 2 Hot Asphalt		
Fastening Rate	Full coverage	Full coverage		
	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	2 plys IKO No.15 Perforated Organic Felt Vapour Retarder		
Attachment Method	Hot Mopped with CSA A123.4 Type 2 Hot Asp	Hot Mopped with CSA A123.4 Type 2 Hot Asphalt	
Fastening Rate	Full coverage		
Substitutable Product(s)			
Manufacturer	Product Identification		
IKO Industries Ltd.	Type IV Glass	Type 6 Glass	
	Any approved Mod-Bit membrane or built up felt in asphalt serving as a vapour retarder		

Thermal Barrier			
Tested Product	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 2.67 ft² (0.025 m²)		
	Substitutable Product(s)		
Manufacturer	Product Identification		
Georgia-Pacific®	DensDeck <sup>®</sup>	DensDeck Prime®	
USG®/CGC	Securock® Glass-Mat	Securock® Gypsum-Fiber	
Generic	Any approved Gypsum Board meeting the requirements of ASTM C1177 or ASTM C1278		

	Thermal Barrier Securement		
Tested Product	Trufast® #14 HD Roofing Fastener with 76 mm (3") round (MP-3000) Metal Insulation Plate		
Fastening Rate	1 per 2.67 ft² (0.025 m²) - Twelve (12) per 12.7 x 1220 x 2440 mm (1/2" x 4' x 8') board		
	Substitutional Product(s)		
Manufacturer	Product Identification		
SFS	#14 Dekfast Fastener with 3" (76 mm) round (PLT-R-3) Metal Insulation Plate		
OMG <sup>®</sup>	Heavy Duty #14 Roofing Fastener with 3" (76 mm) Galvalume Plate (SPGA3C)		

Note: This is not a comprehensive report but a <u>summary</u> 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.