

2395 Speakman Dr. Mississauga, ON Canada L5K 1B3

P: 1 905 822 4111 F: 1 905 823 1446 info.toronto.industrials@element.com element.com

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

Document No.:	19-06-B0127-AARS012-A RV1
Document Date:	November 11, 2019

Reference Documentation:

CSA A123.21-2014 Report No:	18-06-B0192-5
Supplementary Report No.:	19-06-B0042-M

Manufacturer:	IKO Industries Ltd.	IKO System Identification:
	40 Hansen Road South	into System identification.
	Brampton, Ontario, Canada	AARS012
	L6W 3H4	AANS012

## SECTION 1.0: Roof System Summary:

"IKO MOD-BIT - SHIELDBASE WITH THERMAL BARRIER" – Adhesive Adhered Roofing System		
Roof Membrane – Cap Sheet:	IKO Torchflex TP-180 Cap	
Roof Membrane/Cover Board	IKO ShieldBase 180	
Insulation:	IKO IKOTherm	
Insulation:	IKO IKOTherm	
Vapour Retarder:	IKO Torchflex TF-95-SF	
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:

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 6, 2018	7.2 (150)	4.8 (100)

Dynamic Wind Uplift Resistance Rating (DUR): 4.8 Pa (100 psf)

## SECTION 3.0: Tested Product and Substitutable Products:

Roof Membrane (Cap Sheet)			
Tested Product	IKO Torchflex TP-180-Cap		
Product Size	Roll Width: 1 m (39.6"), roll Leng	gth 8 m (26')	
Attachment Method	Heat Welded		
Substitutable Product(s)			
Manufacturer	Product Identification		
	Torchflex TP-HD-Cap	Torchflex TP-250-Cap	Torchflex TP-250-Cap (5 mm)
IKO Industries I td.	PrevENt TP-250-Cap	PrevENt TP-HD-Cap	PrevENt Premium TP-250-Cap
INO Industries Ltd.	ArmourCool Granular TP-HD	PrevENt ArmourCool	
	Carrara ArmourCool HD Granular TP		PrevENt ArmourCool HD Cap
IKO Industries Ltd.	Modiflex MP-180-cap	Modiflex MP-250-cap	Modiflex MP-HD-cap
	PrevENt MP-250-cap	PrevENt MP-HD-cap	

Roof Membrane Base Sheet/Cover Board	
Tested Product	IKO ShieldBase 180
Product Size	17 x 914 x 2440 mm (0.6" x 3' x 8')
Attachment Method	Ribbon adhered with IKO Millennium adhesive
Fastening Rate	305 mm (12") o.c.
Substitutable Product(s)	
Manufacturer	Product Identification
n/a	n/a

Insulation (Top Layer)			
Tested Product	IKO IKOTherm		
Product Size	38 x 1220 x 1220 mm (1.5" x 4	1' x 4')	
Attachment Method	Ribbon adhered with IKO Millennium adhesive		
Fastening Rate	305 mm (12") o.c.		
Substitutable Product(s)			
Manufacturer	r 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	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	

	C	5
	Ē	
•	0	
(		

Vapour Retarder			
Tested Product	IKO Torchflex TF-95-SF		
Product Size	Roll Width: 1 m (39.4"), roll Length	8 m (26.2'), (2.2 mm / 0.087") with 76 mm (3") Overlap	
Attachment Method	Heat Welded to substrate primed with IKO Mod-Bit Primer adhesive		
Fastening Rate	n/a		
	Substitutable Product(s)		
Manufacturer	Product Identification		
IKO Industries Ltd.	Torchflex TP-180-SF		
IKO Industries Ltd	Modiflex MF-95-SS	Modiflex MP-180-SS	

Thermal Barrier		
Tested Product	GP DensDeck Prime®	
Product Size	12.7 x 1220 x 2440 mm (1/2" x 4' x 8')	
Attachment Method	Ribbon adhered with IKO Millennium adhesive	
Fastening Rate	305 mm (12") o.c.	
	Substitutable Product(s)	
Manufacturer	Product Identification	
n/a	n/a	

Assembly Adhesive Securement	
Tested Product	IKO Millennium adhesive – ribbon adhered
Fastening Rate	305 mm (12") o.c.
Substitutional Product(s)	
Manufacturer	Product Identification
n/a	n/a

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.

Reported by:

Allan Lawrence, Ext. 11212 Supervisor, Building Systems Industrials Division

Authorized by:

Jordan Church, B. Tech., Ext. 11546 Ops. / Tech. Manager, Bldg. Science & Fire Testing Industrials Division

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.

This document and service are covered under Element Materials Technology Canada Inc.'s. Standard Terms and Conditions of Contract which may be found on our company's website <u>www.element.com</u>, or by calling 1-866-263-9268.