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

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Reference Documentation:

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

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

## **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 kPa (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 Length 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)
	PrevENt TP-250-Cap	PrevENt TP-HD-Cap	PrevENt Premium TP-250-Cap
IKO Industries Ltd.	ArmourCool Granular TP-HD	PrevENt ArmourCool Granular TP  PrevENt ArmourCo	D 51/4 0 11/D 0
	Carrara ArmourCool HD		Prevent ArmourCool HD Cap
IVO Industrias I to	Modiflex MP-180-cap	Modiflex MP-250-cap	Modiflex MP-HD-cap
IKO Industries Ltd.	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' 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
INO mausines Lia.	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	38 x 1220 x 1220 mm (1.5" x 4' x 4')		
Attachment Method	Ribbon adhered with IKO	Ribbon adhered with IKO Millennium adhesive		
Fastening Rate	305 mm (12") o.c.	305 mm (12") o.c.		
	Substitutable Product(s)			
Manufacturer	Product Identification			
IKO Industries Ltd.	IKOTherm III	IKOTherm 25 psi	IKOTherm III 25 psi	
INO mausines Lia.	IKOTherm Tapered	IKOTherm III Tapered	IKOTherm 25 psi Tapered	

Vapour Retarder				
Tested Product	IKO Torchflex TF-95-SF	IKO Torchflex TF-95-SF		
Product Size	Roll Width: 1 m (39.4"), roll Leng	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.

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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.