


Dynamic Wind Uplift Resistance CSA A123.21-2021 – Summary Document

Document No.: 20-06-B0138-AARS023-A RV1
Document Date: May 21, 2021

Reference Documentation:

CSA A123.21-2014 Report No: 20-06-B0138-3
Supplementary Report No.: 19-06-B0042-M RV2

Manufacturer:	IKO Industries Ltd.		IKO System Identification:
	40 Hansen Road South		
	Brampton, Ontario, Canada		AARS023
	L6W 3H4		

SECTION 1.0: Roof System Summary:

“IKO MOD-BIT – FLAMELESS COLD GOLD ADHERED” – Adhesive Adhered Roofing System	
Roof Membrane – Cap Sheet:	IKO Modiflex™ MP 180-Cap
Roof Membrane – Base Sheet	IKO Modiflex™ MP-95-SS-Base
Cover Board:	IKOTherm™ CoverShield
Insulation:	IKO IKOTherm™
Insulation:	IKO IKOTherm™
Vapour Retarder:	IKO Modiflex™ MF-95-SS-Base
Thermal Barrier:	GP 12.7 mm (1/2") DensDeck Prime®
Deck:	Steel Deck, 22 ga, RD36, 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)
May 13, 2021	8.26 (172.5)	5.5 (115)

Dynamic Wind Uplift Resistance Rating (DUR): 5.5 kPa (115 psf)

SECTION 3.0: Tested Product and Substitutable Products:

Roof Membrane (Cap Sheet)		
Tested Product	IKO Modiflex MP 180-Cap	
Product Size	Roll Width: 1 m (39.6"), roll Length 10 m (32.8'), 3.5 mm (0.14" Thick) with 90 mm (3.5") Overlap	
Attachment Method	Fully adhered with IKO Cold Gold Field Adhesive or hot mopped with Type 2 asphalt – see securement section for details	
Substitutable Product(s)		
Manufacturer	Product Identification	
IKO Industries Ltd.	Modiflex MP-250-Cap	Modiflex MP-HD-Cap
	PrevENT MP-250-Cap	PrevENT MP-HD-Cap

Roof Membrane (Base Sheet)		
Tested Product	IKO Modiflex MP-95-SS-Base	
Product Size	Roll Width: 1 m (39.6"), roll Length 15 m (49'), 2.2 mm (0.087" Thick) with 90 mm (3.5") Overlap	
Attachment Method	Fully adhered with IKO Cold Gold Field Adhesive or hot mopped with Type 2 asphalt – see securement section for details	
Substitutable Product(s)		
Manufacturer	Product Identification	
IKO Industries Ltd.	Modiflex MP-180-SS-Base	Modiflex MP-HD-SS-Base

Cover Board	
Tested Product	IKOTherm CoverShield
Product Size	12.7 x 1220 x 1524 mm (0.5" 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.	ShieldBase 180 Sanded (this option also replaces the Base Sheet in the tested system)

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
	IKOTherm Tapered	IKOTherm III Tapered	IKOTherm 25 psi Tapered

Insulation (Bottom Layer)			
Tested Product	IKO IKOTerm		
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.	IKOTerm III	IKOTerm 25 psi	IKOTerm III 25 psi
	IKOTerm Tapered	IKOTerm III Tapered	IKOTerm 25 psi Tapered

Vapour Retarder	
Tested Product	IKO Modiflex MF-95-SS-Base
Product Size	Roll Width: 1 m (39.6"), roll Length 15 m (49'), 2.2 mm (0.087" Thick) with 90 mm (3.5") Overlap
Attachment Method	Fully adhered with IKO Cold Gold Field Adhesive or hot mopped with Type 2 asphalt – see securement section for details
Substitutable Product(s)	
Manufacturer	Product Identification
IKO Industries Ltd.	Modiflex MP-180-SS-Base Modiflex MP-HD-SS-Base

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


Membrane and Vapour Retarder Adhesive Securement		
Tested Product	IKO Cold Gold Field Adhesive – full coverage	
Fastening Rate	Fully adhered	
Substitutional Product(s)		
Manufacturer	Product Identification	
IKO Industries Ltd.	Type 2 Asphalt	Type 3 Asphalt Modi-Melt SEBS
	Easy Melt Type 2 (Standard and Low Odour)	Easy Melt Type 3 (Standard and Low Odour)

Insulation 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 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:

Authorized by:



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



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 report is related only to the sample identified and shall not be reproduced, except in full, without approval and is covered under Element Materials Technology Canada Inc. Standard Terms and Conditions of Contract, which is accessible at www.element.com, or by calling 1-866-263-9268. Direct readings reported form the basis for acceptance or rejection (pass/fail) and do not take into account or incorporate uncertainty.