# **Shop Drawing Review**

Project Name:	Project Name: FMB Repurpose Project No:		TS: 241072 / CoC: 51104	
Owner/Client:	ent: City of Coquitlam Date:		April 30, 2025	
Contractor:	N/A	SDR No:	01	
RE:	AVB and Roofing Membrane Shop Drawing Review	Section No:	07 52 00 and 07 25 13	
Reviewed	Reviewed as Noted Not Review	wed	Revise and Resubmit	
	been reviewed for conformance with the design concenditions of the Contract. Review does not relieve the con			
Reviewed As Not	ed by Thinkspace Architecture.			
Refer to the com	ment below:			
We have indic	cated the approved alternative materials with	a vellow high	light.	
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	.aisianto, Technologist ace Architecture® Planning Interior Design Li	+ A		
ΠΠΙΚ5Ρ	ace Architecture * Flamming interior Design L	iu.		
Distributed to:				
Owner	City of Coquitlam	Jarett l	Hayes / Azadeh Safaie	
Contrac	·		ere to enter contact name	
Structur	cal Click here to enter company na	ame Click h	ere to enter contact name	
Mechan	click here to enter company na	ame Click h	ere to enter contact name	
Electrica	Click here to enter company na	ame Click h	ere to enter contact name	
Civil	Click here to enter company na	ame Click h	ere to enter contact name	
Landsca	pe Click here to enter company na	ame Click h	ere to enter contact name	

Click here to enter company name



**Quantity Surveyor** 

Click here to enter contact name



# COMMERCIAL

April 23rd, 2025

Thinkspace Architecture Planning Interior Design #300 – 10190 152A Street Surrey, BC

Attn: Keshia Laisianto

RE: Request for Equivalent - Austin Works Yard Fleet Maintenance Building Repurpose, Coquitlam, BC

### Dear Mrs. Laisianto:

I hope your day is going well. We have reviewed the tender specification of the Austin Works Yard Fleet Maintenance Building Repurpose project and recognized that IKO is an acceptable manufacturer for sections 07 52 00. We respectfully request that IKO Industries Ltd. be considered an acceptable manufacturer offering alternate products to those specified in sections 07 25 13. Our alternate products are indicated below. Listed in sequence to the specification is a side-by-side comparison chart, and the attached technical data sheets are included for your reference.

Item	Description	Specified Material	IKO Alternate
Section 07 25 13 2.1.2.2	Heat Welded; Sheet Applied Membrane	Soprema Sopraseal 180 HD and 180 HD FF	IKO Aquabarrier TG IKO TP-180-FF
2.1.2.2		Soprema Sopraseal 60 and	
2.1.2.2		60 FF	
		Henry Bakor Blueskin TG	
2.1.3.2.2	Self-Adhesive	Soprema Sopraseal Stick	IKO AquaBarrier AVB
2.1.3.2.3	Membranes	1100 T	IKO AcrylicStick SA
2.1.3.2.4		Soprema Sopraseal Stick 130	(Primerless)
2.1.3.2.5		and 130-S	
		Henry Bakor Blueskin SA	
		Henry Bakor Blueskin SA LT	
2.1.2.2.1	Self-Adhesive	Soprema Sopraseal Stick VP	IKO Aquabarrier VP
2.1.2.2.2	Membranes	Henry Bakor Blueskin VP160	
2.2.2.2.1	Tapes Around Wall	Soprema Sopraseal Stick	IKO AquaBarrier AVB
2.2.2.2.2	Openings and	1100 T in pre-cut rolls	Tapes
	Penetrations	Henry Bakor Blueskin SA LT	IKO AcrylicStick SA Tapes
			(Primerless)
2.2.3.2.1	Termination Sealant	Soprema Sopramastic	IKO AquaBarrier Mastics
Section 07 52 00	Cap Sheet	Soprema,Sopraply Traffic	The specified IKO TP-250-
2.3.3.8.1		Cap	Cap fulfils the 15-year
2.3.3.8.2		IKO TP-250-Cap	warranty requirement
2.3.3.8.3		Siplast Parafor 30 TG	
			IKO TP-250-Cap (5mm) or
			IKO TP-HD-Cap to fulfill
			the 20-year warranty
			requirement

IKO Industries Ltd <a href="www.iko.com">www.iko.com</a> is a Canadian-based, vertically integrated company that manufactures a full product-line of compatible roofing assembly system components and offers a single-source warranty.



# COMMERCIAL

We trust the information is satisfactory and look forward to your response.

Regards,

Sara Hagos – B.Sc., M.A.Sc., CTR, GRP Architectural Representative – British Columbia IKO Industries Ltd. C 604.355.3531 IKO.COM/COMM

# **AquaBarrier** AVB

AIR & VAPOUR BARRIER

STOCK# STANDARD: 7850053,

7850054, 7850121

LOW TEMPERATURE: 7860053

7860054, 7860121

**ROLLS PER PALLET:** 

7850053/7860053 - 914 mm (36 in) - 30

7850054/7860054 - 457 mm (18 in) - 50

7850121/7860121 - 610 mm (24 in) - 50

PALLET SIZE:

132 cm x 111 cm (52 in x 44 in)

LENGTH: 22.89 m (75 ft)

WIDTH:

7850053 - 914 mm (36 in)

7850054 - 457 mm (18 in)

7850121 - 610 mm (24 in)

THICKNESS: 1 mm (40 mils)

AREA WEIGHT: 1.17 kg/m² (0.24 lb/ft²)

Note: All reported values are nominal



- · SELF-ADHERING
- WINTER AND SUMMER GRADE





For extra protection, let IKO AquaBarrier AVB Air & Vapour Barrier go to work for your next commercial building project.

# **AquaBarrier**<sup>™</sup> **AVB**

AIR & VAPOUR BARRIER

### **Self-Adhering**

AquaBarrier AVB is a self-adhering non-permeable membrane providing superior performance in wall assemblies where an air and vapour barrier is required.

### Versatile

AquaBarrier AVB membranes are available in both standard and low temperature grades in a variety of roll sizes and can be applied to all common substrates (gypsum, OSB, concrete, CMU, plywood) for numerous applications (such as masonry cavity walls, metal cladding systems, curtain walls, and parapets).

### **Reinforced for Extra Durability**

AquaBarrier AVB is manufactured by integrally bonding SBS modified asphalt to a high density, cross-laminated woven polyethylene film. The backing surface is an easily removed silicone release paper.

### **Provides Extra Protection**

AquaBarrier AVB provides an effective barrier to moisture vapour transmission and air leakage when installed according to IKO specifications and used with S.A.M. or S.A.M. LVC Adhesive. The IKO AquaBarrier line includes tape and mastic products for specialized detail areas.

# AquaBarrier AVB





All local health and safety rules and precautions should be followed when working with IKO products. See also Material Information Sheet MIS #1201. Good building practices include ensuring the application surface is adequately prepared for the adhesion of the product prior to installation. For further details, please refer to the "IKO Installation Guidelines."

	•	•	•
CHARACTERISTICS	UNITS	NOMINAL VALUE	TEST METHOD
Tensile Strength (MD/XD)	psi	1553/1905	ASTM D412
Ultimate Elongation (MD/XD)	%	>8 / >12	ASTM D412
Ultimate Elongation Of Bitumen (MD/XD)	%	>64 / >48	ASTM D5147
Flexibility At Cold Temperature @ -30°C	—	<b>⊘</b>	ASTM D5147
Tear Resistance (MD/XD)	N (lbf)	260/240 (59/54)	ASTM D5147
Air Permeability, 75 Pa	L/s·m²	<0.02	ASTM E2178
Water Vapour Transmission Rate (WVTR)	Ng/Pa·s·m² (Perms)	<2.6 (<0.05)	ASTM E96 (Method B)
Air Leakage Resistance	_	<	ASTM E2357
Air Leakage Rate Classification	_	A1	CAN/ULC S742
Nail Sealability	_		ASTM D1970
Application Temperature: Standard Low Temperature	°C (°F)	10 to 50 (50 to 122) -10 to 10 (14 to 50)	_
Service Temperature: Standard Low Temperature	°C (°F)	-45 to 70 (-49 to 158) -45 to 70 (-49 to 158)	_
UV Exposure Time*	Days	180	_

<sup>\*</sup>This product is not designed for continuous UV exposure. It should be covered as soon as practicable within construction scheduling. The information on this product information sheet is based upon data considered to be true and accurate, based on laboratory tests and production measurements, and is offered solely for the user's consideration, investigation and verification. Nothing contained herein is representative of a warranty or guarantee for which the manufacturer can be held legally responsible. The manufacturer does not assume any responsibility for any misrepresentation or assumptions the reader may formulate.

# **AquaBarrier** VP

SELF-ADHERING VAPOUR PERMEABLE MEMBRANE

STOCK#: 7850055, 7850094

**ROLLS PER PALLET: 56** 

PALLET SIZE:

132 cm x 112 cm (52 in x 44 in)

LENGTH: 30.5 m (100 ft)

WIDTH:

7850055 - 0.95 m (37.5 in)

7850094 - 0.46 m (18 in)

THICKNESS: 0.4 mm (0.016 in)

AREA COVERAGE: 29 m² (312.5 ft²)

LINES: 76.2 mm (3 in), 800 mm (31.5 in)

AREA WEIGHT:

0.176 kg/m<sup>2</sup> (0.0360 lb/ft<sup>2</sup>)

Note: All reported values are nominal.



Diffuses vapour, allowing walls to drain and substrates to dry.

Meets or exceeds competitive market standards for commercial air and weather barriers.

 FULLY ADHERES TO SUBSTRATES





Versatile, mold resistant, primerless, and easy to install, let the IKO AquaBarrier VP Self-Adhering Vapour Permeable Membrane go to work for your next building envelope project.

# **AquaBarrier VP**

### SELF-ADHERING VAPOUR PERMEABLE MEMBRANE

### **Self-Adhering**

IKO AquaBarrier VP is a self-adhering, primerless vapour permeable membrane, providing superior performance in wall assemblies where a vapour permeable, weather resistive air barrier is required.

### **Versatile Application**

Due to the vapour permeable matrix of AquaBarrier VP, it is readily compatible and may be applied to most common substrates such as gypsum, OSB, block, concrete, CMU and plywood. The product is designed for numerous applications such as masonry cavity walls, metal cladding systems, siding applications, renovations and retrofits, curtain walls and parapets.

### **Mold Resistant**

AquaBarrier VP is a polypropylene composite with low water retention capacity and is therefore mold- and mildew-resistant.

### Easy to Install

Coated with a proprietary acrylic adhesive on the back surface, the product offers excellent performance for common wall applications and has an easily removed polyester release film. No mechanical attachments or primer is required in the application of AquaBarrier VP. The lightweight design of the membrane makes it easy to install, and it can be left exposed to UV for up to 180 days¹. For proper adhesion of the VP membrane to substrates, Pressure Rolling method must be used.

<sup>1</sup>This product is not designed for continuous UV expsoure. It should be covered as soon as practicable within construction scheduling.

# AquaBarrier VP SELF-ADHERING VAPOUR PERMEABLE MEMBRANE





The **IKO AquaBarrier** line includes a full range of accessory products designed to complete your wall system.

All local health and safety rules and precautions should be followed when working with IKO products. See also Material Safety Data Sheet (SDS) #1174. Good building practices include ensuring the application surface is adequately prepared for the adhesion of the product prior to installation.

# All components are manufactured in an ISO 9001:2015 REGISTERED FACILITY

For further details, please refer to the IKO Installation Guidelines at https://www.iko.com/comm/.

CHARACTERISTICS	UNITS	NOMINAL VALUE	TEST METHOD
Tensile Strength (MD/XD):	kN/m (lbf/in)	4.115 / 3.879 (23.5 / 22.15)	ASTM D5147
Ultimate Elongation (MD/XD):	%	137.5 / 83.3	ASTM D5147
Break Strength (MD/XD):	MPa	30 / 15	CAN/CGSB 51.32 M89
Cold Bending at -30°C (-22°F):	_	PASS	CAN/CGSB 51.32 M89
Adhesion to Stainless Steel:	N/m (lbf/in)	707.162 (4.038)	ASTM D903
Adhesion to Plywood:	N/m (lbf/in)	494.73 (2.825)	ASTM D3330-F
Nail Sealability:	_	PASS	ASTM D1970
Thermal Stability² (14 d. at 110 C (230 F)):	_	No Flow or Slippage	ASTM D1970 (Modified)
Water Vapour Permeance:	Ng/Pa·s·m² (Perms)	1362.2 (23.81) 1266.8 (22.14)	ASTM E 96 A ASTM E 96 B
Hydrostatic Pressure Resistance:	_	PASS	AATCC 127-08
Air Permeance:	L/s·m²	PASS (≤ 0.02)	ASTM E2178
Air Leakage:	_	PASS	ASTM E2357
Air Leakage Rate:	_	Al	CAN/ULC S742
Flame Spread Index (FSI):	_	Class 1	ASTM E84
Smoke Developed (SD):	_	Class 1	ASTM E84
Service Temperature:	°C (°F)	-40 to +82 (-40 to 180)	_
Application Temperature:	°C (°F)	-20 to +40 (-4 to 104) <sup>1</sup>	_
UV Exposure Time³:	days	180	ASTM G154

'Substrate must be clean and free from dirt, oils, moisture and frost for proper adhesion. 'As adhered to either glass-faced gypsum board or plywood. 'This product is not designed for continuous UV expsoure. It should be covered as soon as practicable within construction scheduling. The information on this sheet is based on data considered to be true and accurate based on periodic internal testing and production measurements at time of manufacture. The information is offered solely for the user's consideration, investigation and verification. Nothing contained herein constitutes or represents a warranty or guarantee for which the manufacturer can be held legally responsible.

# IKO AcrylicStick<sup>™</sup>SA Tapes

PRIMERLESS, SELF-ADHERING, NON-PERMEABLE FLASHING TAPES

STOCK#: **7850131**, **7850132**, **7850133**, **7850134**, **7850135** 

ROLLS PER BOX: 16 (4 in), 12 (6 in), 8 (9 in), 4 (12 in), 4 (18 in)

BOXES PER PALLET: Minimum 12

PALLET SIZE: 132 cm x 111 cm (52 in x 44 in)

LENGTH: 22.86 m (75 ft)

### **WIDTH**

7850131 - 102 mm (4 in)

7850132 - 152 mm (6 in)

7850133 - 229 mm (9 in)

7850134 - 305 mm (12 in)

7850135 - 457 mm (18 in)

THICKNESS: 0.25 mm (10 mils)

AREA WEIGHT: 0.30 kg/m² (0.06 lb/ft²)

Note: All reported values are nominal



- · PRIMERLESS
- · SELF-ADHERING
- · COST-EFFECTIVE



Specify with Confidence.



Primerless, self-adhering and nonpermeable flashing tapes. Let IKO AcrylicStick SA go to work for your next project.

# **IKO AcrylicStick SA Tapes**

PRIMERLESS, SELF-ADHERING, NON-PERMEABLE FLASHING TAPES

### Self-Adhering

IKO AcrylicStick SA Tapes are primerless, self-adhering and nonpermeable, providing superior performance in wall assemblies where an air and vapour barrier is required.

### **Versatile Application**

Durable, reinforced and designed for versatility, IKO AcrylicStick SA Tapes can be applied to all common substrates (gypsum, OSB, concrete, CMU, plywood). The tapes are available in 4 in, 6 in, 9 in, 12 in and 18 in widths. The tapes may also be used in conjunction with insulated concrete form (ICF) wall construction.

### **Extra Durability**

IKO AcrylicStick SA Tapes are HDPE material manufactured with an acrylic coating functioning as the bonding agent. The acrylic adhesive is pressure sensitive which yields high quality adhesion to various substrate types without the use of primers resulting in cost and labour savings.

### **Great for Flashing Details**

IKO AcrylicStick SA Tapes are intended for applications in specialized detail areas such as windows, doors, skylights, metal cladding systems and under siding at inside and outside corners.

# IKO AcrylicStick<sup>™</sup>SA Tapes

PRIMERLESS, SELF-ADHERING, NON-PERMEABLE FLASHING TAPES





Specify with Confidence.

For optimal performance, the tapes should be stored in original packaging at 15°C - 25°C with relative humidity at 30% - 50%.

For further details, please refer to the "IKO Installation Guidelines," at IKO.COM/COMM.

CHARACTERISTICS	UNITS	NOMINAL VALUE	TEST METHOD
Tensile Strength (MD/XD):	MPa	51/50	ASTM D412
Elongation at Max Load (MD/XD):	%	18/21	ASTM D412
Flexibility at Low Temperature (-29°C):	-	<b>⊘</b>	ASTM D1970
Thermal Stability (flow at 110°C):	-	<b>⊘</b>	ASTM D1970
Lap Peel (Back to Back):	N/mm	0.29	ASTM D1876
Peel Adhesion (CMU/Gypsum/Plywood):	N/mm	1.06/0.65/0.67	ASTM D903
Air Permeability (at 75 Pa):	L/s·m²	< 0.02	CAN/ULC S741 and ASTM E2178
Water Vapour Transmission Rate (WVTR) (Method A/B):	ng/Pa·s·m²	5/10	ASTM E96
Air Leakage Resistance:	-	<b>⊘</b>	ASTM E2357
Air Leakage Rate Classification:	-	ſΑ	CAN/ULC S742
Nail Sealability:	-	⊗	ASTM D1970, ASTM D7349
Pull Adhesion (Concrete/Gypsum/OSB/PS/Metal):	kPa	118/93/165/163/327	ASTM D7234
Ambient Application Temperature:	°C	-20 – 50	-
Service Temperature:	°C	-40 – 90	-
UV Exposure Time*:	Days	180	-
Water Resistance (Concrete/OSB/PS/Metal):	-	<b>⊘</b>	AATCC 127
Flame Spread/Smoke Developed:	-	FSR 15/SDC 50	CAN/ULC S102

<sup>&</sup>quot;This product is not designed for UV exposure beyond the stated number of days. Within this time frame, it should always be covered as soon as practicable within construction scheduling. The information on this product information sheet is based upon data considered to be true and accurate, based on laboratory tests and production measurements, and is offered solely for the user's consideration, investigation and verification. Nothing contained herein is representative of a warranty or guarantee for which the manufacturer can be held legally responsible. The manufacturer does not assume any responsibility for any misrepresentation or assumptions the reader may formulate.

# AquaBarrier<sup>™</sup> Tapes - 25 mil

**BUILDING ENVELOPE TAPES** 

STOCK# 7850034, 7850030, 7850031,

7850032, 7850033

### BOXES / ROLLS PER PALLET:

7850034 - 75 mm (3 in ) - 60 (2 layers x 30) 7850030 - 100 mm (4 in) - 60 (2 layers x 30) 7850031 - 150 mm (6 in ) - 60 (2 layers x 30) 7850032 - 225 mm (9 in) - 30 (1 layer x 30) 7850033 - 300 mm (12 in) - 30 (1 layer x 30)

PALLET SIZE: 132 cm x 111 cm (52 in x 44 in)

LENGTH: 22.86 m (75 ft)

### WIDTH:

7850034 - 75 mm (3 in) 7850030 - 100 mm (4 in)

7850031 - 150 mm (6 in) 7850032 - 225 mm (9 in)

7850032 - 223 htm (3 ht) 7850033 - 300 mm (12 in)

THICKNESS: 0.625 mm (25 mils)

AREA WEIGHT: 0.78 kg/m² (0.16 lb/ft²)

Note: All reported values are nominal





Specify with Confidence.



Durable, reinforced and designed for numerous applications, let IKO AquaBarrier Tapes go to work for your next project.

# **AquaBarrier Tapes - 25 mil**

**BUILDING ENVELOPE TAPES** 

### **Provides Extra Protection**

AquaBarrier Tapes provide an effective barrier to moisture vapour transmission and air leakage when installed according to IKO specifications. For best results, the use of IKO adhesives (S.A.M. or S.A.M. LVC) is recommended. The IKO AquaBarrier line includes mastic products for special detail use.

### **Durable and Easy to Install**

IKO AquaBarrier Tapes are made by integrally bonding high-density, cross-laminated woven polyethylene film to SBS modified rubberized asphalt.

### **Great for Flashing Details**

The products are cold-applied, self-adhering 25 mil sheet membranes that provide superior performance for critical flashing areas where protection from air, water and moisture infiltration is required.

### **Cost Effective**

When used with IKO Enerfoil and Ener-Air insulation, AquaBarrier Tapes can act as your insulation, air barrier and weather resistant barrier all in one!

- · SELF-ADHERING
- · GREAT FOR FLASHING

# AquaBarrier<sup>™</sup> Tapes - 25 mil

**BUILDING ENVELOPE TAPES** 





Specify with Confidence.

All local health and safety rules and precautions should be followed when working with IKO products. See also Material Information Sheet MIS # 1201. Good building practices include ensuring the application surface is adequately prepared for the adhesion of the product prior to installation. For further details, please refer to the "IKO Installation Guidelines."

ISO 9001 - 2008 REGISTERED FACILITY

CHARACTERISTICS	UNITS	NOMINAL VALUE	TEST METHOD
Tensile Strength (MD/XD):	kN/m (lbf/in)	2.9 (17) 2.5 (14)	ASTM D412
Ultimate Elongation (MD/XD):	%	78 / 45	ASTM D412
Flexibility at Cold Temperature @ -30°C:	—	<b>⊘</b>	ASTM D5147
Tear Resistance:	N	428	ASTM D5147
Air Permeability, 75 Pa:	L/s·m²	<0.02	ASTM E2178
Water Vapour Transmission Rate (WVTR):	Ng/Pa·s·m² (Perms)	<2.6 (<0.05)	ASTM E96 (Method B)
Air Leakage Resistance:	_	Ø	ASTM E2357
Air Leakage Rate Classification:	_	Αl	CAN/ULC S742
Nail Sealability:	_	<b>⊘</b>	ASTM D1970
Application Temperature:	°C (°F)	5 to 50 (41 to 122)	_
Service Temperature:	°C (°F)	-45 to 90 (-49 to 194)	_

Note: All rolls should be stored upright and indoors in a clean, dry area in their original unopened packaging. If stored outside, keep out of direct sunlight and extreme cold or hot temperatures, ensure original packaging is unopened.

This product is not designed for continuous UV exposure. It should be covered as soon as practicable within construction scheduling. The information on this product information sheet is based upon data considered to be true and accurate, based on laboratory tests and production measurements, and is offered solely for the user's consideration, investigation and verification. Nothing contained herein is representative of a warranty or guarantee for which the manufacturer can be held legally responsible. The manufacturer does not assume any responsibility for any misrepresentation or assumptions the reader may formulate.

# IKO AcrylicStick<sup>™</sup>SA

PRIMERLESS, SELF-ADHERING, NON-PERMEABLE AIR & VAPOUR BARRIER

STOCK#: **7850136**, **7850142** 

**ROLLS PER PALLET: 80** 

PALLET SIZE: 132 cm x 111 cm (52 in x 44 in)

LENGTH: 22.86 m (75 ft)

WIDTH: 914 mm (36 in), 1524 mm (60 in)

THICKNESS: 0.25 mm (10 mils)

AREA WEIGHT: 0.30 kg/m² (0.06 lb/ft²)

Note: All reported values are nominal.



- · PRIMERLESS
- · SELF-ADHERING
- · COST-EFFECTIVE



Specify with Confidence.



For extra protection, let IKO AcrylicStick SA Air & Vapour Barrier go to work for your next commercial building project.

# **IKO AcrylicStick SA**

PRIMERLESS, SELF-ADHERING, NON-PERMEABLE AIR & VAPOUR BARRIER

### **Self-Adhering**

IKO AcrylicStick SA is a primerless, self-adhering, non-permeable membrane providing superior performance in wall and roof assemblies where an air and vapour barrier is required.

### **Reinforced for Extra Durability**

IKO AcrylicStick SA is HDPE material manufactured with an acrylic coating functioning as the bonding agent. The acrylic adhesive is pressure sensitive which yields high quality adhesion to various substrate types without the use of primers for cost and labour savings. An additional benefit is that the acrylic formulation can be used effectively in cold weather temperature applications.

### Versatile

IKO AcrylicStick SA membranes can be applied to various common substrates (gypsum, OSB, concrete, CMU, plywood and Steel) for both wall and roof assembly applications (such as masonry cavity walls, metal cladding systems and a vapour retarder within a roofing system). The membrane may also be used in conjunction with insulated concrete form (ICF) wall construction.

### **Provides Extra Protection**

IKO AcrylicStick SA provides an effective barrier to moisture, vapour transmission and air leakage when installed according to IKO specifications. The IKO AquaBarrier line includes full roll membranes as well as tapes for specialized detailing areas.

# IKO AcrylicStick<sup>™</sup>SA

PRIMERLESS, SELF-ADHERING, NON-PERMEABLE AIR & VAPOUR BARRIER





**Specify** with Confidence.

For optimal performance, the membrane should be stored in original wrapping at  $15^{\circ}\text{C}$  -  $25^{\circ}\text{C}$  with relative humidity at 30% - 50%.

For further details, please refer to the IKO Installation Guidelines, at IKO.COM/COMM.

CHARACTERISTICS	UNITS	NOMINAL VALUE	TEST METHOD
Tensile Strength (MD/XD):	MPa	51/50	ASTM D412
Elongation at Max Load (MD/XD):	%	18/21	ASTM D412
Flexibility at Low Temperature (-29°C):	-	<b>⊘</b>	ASTM D1970
Thermal Stability (flow at 110°C):	-	<b>⊘</b>	ASTM D1970
Lap Peel (Back to Back):	N/mm	0.29	ASTM D1876
Peel Adhesion (CMU/Gypsum/Plywood):	N/mm	1.06/0.65/0.67	ASTM D903
Air Permeability (at 75 Pa):	L/s·m²	< 0.02	CAN/ULC S741 and ASTM E2178
Air Leakage Resistance:	-	<b>©</b>	ASTM E2357
Air Leakage Rate Classification:	-	ΑΊ	CAN/ULC S742
Nail Sealability:	-	<b>©</b>	ASTM D1970, ASTM D7349
Pull Adhesion (Concrete/Gypsum/OSB/EPS/Metal):	kPa	118/93/165/163/327	ASTM D7234
Ambient Application Temperature:	°C	-20 – 50	-
Service Temperature:	°C	-40 – 90	-
UV Exposure Time*:	Days	180	-
Water Resistance (Concrete/OSB/PS/Metal):	-	⊗	AATCC 127
Flame Spread/Smoke Developed:	-	FSR 15/SDC 50	CAN/ULC S102

<sup>&</sup>quot;This product is not designed for UV exposure beyond the stated number of days. Within this time frame, it should always be covered as soon as practicable within construction scheduling. The information on this product information sheet is based upon data considered to be true and accurate, based on laboratory tests and production measurements, and is offered solely for the user's consideration, investigation and verification. Nothing contained herein is representative of a warranty or guarantee for which the manufacturer can be held legally responsible. The manufacturer does not assume any responsibility for any misrepresentation or assumptions the reader may formulate.

MAR, 2023

# Torchflex TP-180-FF-Base

Torchflex TP-180-FF-Base is constructed using a tough non-woven reinforced polyester mat strengthened with select glass fiber strands and coated top and bottom with select SBS polymers and premium asphalt. Covered with a micro-perforated film on both surfaces, the top film of Torchflex TP-180-FF-Base will melt during the application of the heat welded cap sheet while the bottom film dissolves during heat welding to the substrate. This product meets the requirements of CSA A123.23 Type B Grade 3.

CHARACTERISTICS	UNITS	SPECIFICATION	TEST METHOD	TYPICAL TEST PERFORMANCE
Rolls per Pallet:	-	-	-	32
Length:	m (ft)	-	-	10 (32.8)
Width:	mm (in)	-	-	1005 (39.6)
Thickness:	mm (mils)	-	•	3.0 (118)
Selvage Width:	mm (in)	-	-	90 (3.5)
Selvage Thickness:	mm (mils)	CSA A123.23	ASTM D5147	3.10 (123)
Mass Per Unit Area:	kg/m <sup>2</sup> (lb/100ft <sup>2</sup> )	CSA A123.23	ASTM D5147	3.98 (81.5)
Back Surface Coating Thickness:	mm (mils)	CSA A123.23	ASTM D5147	1.24 (48.8)
Strain Energy, @ 23 °C MD/XD: Before heat conditioning After heat conditioning	kN/m (lbf/in)	CSA A123.23	ASTM D5147	34.5/18.6 (197/106) 17.0/14.4 (97.1/82.2)
Strain Energy, @ -18 °C MD/XD: Before heat conditioning After heat conditioning	kN/m (lbf/in)	CSA A123.23	ASTM D5147	14.5/11.6 (82.8/66.2) 8.81/10.2 (50.3/58.2)
Peak Load, @ 23 °C MD/XD: Before heat conditioning After heat conditioning	kN/m (lbf/in)	CSA A123.23	ASTM D5147	19.8/11.3 (113/64.7) 16.6/10.8 (94.8/61.9)
Peak Load, @ -18 °C MD/XD: Before heat conditioning After heat conditioning	kN/m (lbf/in)	CSA A123.23	ASTM D5147	15.6/12.8 (89.0/73.1) 19.3/10.2 (110/58.1)
Elongation @ Peak Load @ 23 °C MD/XD: Before heat conditioning After heat conditioning	%	CSA A123.23	ASTM D5147	74.0/69.3 7.33/53.3
Elongation @ Peak Load @ -18 °C MD/XD: Before heat conditioning After heat conditioning	%	CSA A123.23	ASTM D5147	22.7/51.5 8.50/34.5
Ultimate Elongation @ 23 °C MD/XD: Before heat conditioning After heat conditioning	%	CSA A123.23	ASTM D5147	34.5/18.6 41.3/55.3
Low Temperature Flexibility @ -18 °C MD/XD: Before heat conditioning After heat conditioning	°C	CSA A123.23	ASTM D5147	-18/-18 -18/-18
Dimensional Stability MD/XD:	%	CSA A123.23	ASTM D5147	-0.29/-0.27
Compound Stability:	°C	CSA A123.23	ASTM D5147	102
Resistance to puncture:	-	CSA A123.23	CSA A123.23	Pass

IKO's products adhere to the industry standards of the jurisdiction in which they are sold by IKO. Numerical testing scores listed herein, if any, relate only to the samples tested and the standards & procedures listed herein. IKO does not guaranteethat every IKO product will, upon similar testing, reveal an identical score to those set forth herein. IKO does not accept responsibility for any matters arising or consequences from the use of numerical testing scores.

JUN, 2023

# Torchflex TP-250-Cap (5.0)

Torchflex TP-250-Cap (5.0) is a thick heat-welded cap sheet (5.0 mm/197 mils), constructed with a tough non-woven reinforced polyester mat, strengthened with select glass fiber strands. Torchflex TP-250-Cap (5.0) is coated top and bottom with select SBS polymers and premium asphalt. Ceramic coated mineral granules are embedded in the surface of the product to provide protection against ultraviolet radiation. This product meets the requirements of CSA A123.23 Type B Grade 1.

CHARACTERISTICS	UNITS	SPECIFICATION	TEST METHOD	TYPICAL TEST PERFORMANCE	
Rolls per Pallet:	-	-	-	24	
Length:	m (ft)	-	-	8 (26.2)	
Width:	mm (in)	-	-	1005 (39.6)	
Thickness:	mm (mils)	-	-	5.0 (197)	
Selvage Width:	mm (in)	-	-	90 (3.5)	
Selvage Thickness:	mm (mils)	CSA A123.23	ASTM D5147	4.0 (157)	
Mass Per Unit Area:	kg/m <sup>2</sup> (lb/100ft <sup>2</sup> )	CSA A123.23	ASTM D5147	6.08 (125)	
Back Surface Coating Thickness:	mm (mils)	CSA A123.23	ASTM D5147	1.72 (67.7)	
Strain Energy, @ 23 °C MD/XD: Before heat conditioning After heat conditioning	kN/m (lbf/in)	CSA A123.23	ASTM D5147	11.3/8.79 (64.5/50.2) 22.0/26.2 (126/150)	
Strain Energy, @ -18 °C MD/XD: Before heat conditioning After heat conditioning	kN/m (lbf/in)	CSA A123.23	ASTM D5147	14.3/13.2 (81.7/75.4) 19.8/17.5 (113/99.9)	
Peak Load, @ 23 °C MD/XD: Before heat conditioning After heat conditioning	kN/m (lbf/in)	CSA A123.23	ASTM D5147	22.2/16.7 (121/95.5) 19.3/18.9 (110/108)	
Peak Load, @ -18 °C MD/XD: Before heat conditioning After heat conditioning	kN/m (lbf/in)	CSA A123.23	ASTM D5147	28.5/24.9 (163/142) 22.1/20.7 (126/118)	
Elongation @ Peak Load @ 23 °C MD/XD: Before heat conditioning After heat conditioning	%	CSA A123.23	ASTM D5147	66.7/67.7 39.7/53.3	
Elongation @ Peak Load @ -18 °C MD/XD: Before heat conditioning After heat conditioning	%	CSA A123.23	ASTM D5147	57.1/62.5 40.5/44.5	
Ultimate Elongation @ 23 °C MD/XD: Before heat conditioning After heat conditioning	%	CSA A123.23	ASTM D5147	94.4/89.8 43.3/58.9	
Low Temperature Flexibility MD/XD: Before heat conditioning After heat conditioning	°C	CSA A12.23	ASTM D5147	-18/-18 -18/-18	
Low Temperature Flexibility after UV Weathering:	°C	CSA A123.23	ASTM D5147	-12	
Dimensional Stability MD/XD:	%	CSA A123.23	ASTM D5147	0.00/-0.03	
Compound Stability:	°C	CSA A123.23	ASTM D5147	102	
Granular Embedment	g (oz)	CSA A123.23	ASTM D4977	0.420 (0.00148)	
Resistance to puncture:		CSA A123.23	CSA A123.23	Pass	

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