

Dynamic Wind Uplift Resistance CSA A123.21-2020 – Summary Document

Document No.: 22-06-B0092-2 (AARS2)
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Reference Documentation:

CSA A123.21-2014 Report No: 22-06-B0092-2

Manufacturer:	Plasti-Fab EPS Product Solutions		Plasti-Fab System Identification:
	#300, 2891 Sunridge Way NE		
	Calgary, Alberta, Canada		AARS2
	T1Y 7K7		

SECTION 1.0: Roof System Summary:

“SBS OVER ADHERED VAPOUR BARRIER” – Adhesive Applied Roofing System	
Roof Membrane – Cap Sheet:	Sopralene Flam 250 GR
Roof Membrane – Base Sheet	Sopralene Flam 180
Insulation:	Sopra-ISO
Insulation:	PlastiSpan® HD Type 2 EPS
Vapour Retarder:	Sopravap'r
Deck:	Steel Deck, 22 ga, RD938, 230 MPa (33.4 ksi)

SECTION 2.0: System Dynamic Wind Uplift Resistance (DUR) Testing Details:

Test Date	Measured Dynamic Wind Uplift Resistance of tested specimen, as per CSA A123.21-20 kPa (psf)	Dynamic Wind Uplift Resistance Rating, DUR (with 1.5X safety factor) as per CSA A123.21-14 kPa (psf)
2022-09-14	3.59 (75.0)	2.39 (50.0)

Measured Dynamic Wind Uplift Resistance: 3.59 kPa (75.0 psf)*

* Value does not include resistance factor. Applicable resistance factor shall be applied.

SECTION 3.0: Tested Product and Substitutable Products:

Roof Membrane (Cap Sheet)	
Tested Product	Sopralene FLAM 250 GR
Product Size	Roll Thickness: 4.0 mm (0.157"), Roll Width: 1.0 m (39.4"), Roll Length 10 m (33')
Attachment Method	Heat welded
Substitutable Product(s)	
Manufacturer	Product Identification
n/a	n/a

Roof Membrane (Base Sheet)	
Tested Product	Sopralene FLAM 180
Product Size	Roll Thickness: 3.0 mm (0.118"), Roll Width: 1.0 m (3.3'), Roll Length 10 m (33')
Attachment Method	Ribbon adhered with Soprema Duotack 365 Adhesive
Fastening Rate	305 mm (12") o.c.
Substitutable Product(s)	
Manufacturer	Product Identification
Soprema	Sopralene FLAM 250

Insulation (Top Layer)	
Tested Product	Sopra-ISO
Product Size	50 x 2440 x 2440 mm (2.0" x 8' x 8')
Attachment Method	Ribbon adhered with Soprema Duotack 365 Adhesive
Fastening Rate	305 mm (12") o.c.
Substitutable Product(s)	
Manufacturer	Product Identification
n/a	n/a

Insulation (Bottom Layer)	
Tested Product	PlastiSpan® HD Type 2 EPS
Product Size	50 x 2440 x 2440 mm (2.0" x 8' x 8')
Attachment Method	Ribbon adhered with Soprema Duotack 365 Adhesive
Fastening Rate	305 mm (12") o.c.
Substitutable Product(s)	
Manufacturer	Product Identification
Plasti-Fab	CAN/ULC-S701 Type 2 insulation board: PlastiSpan 20, EnerSpan® Type 2 CAN/ULC-S701 Type 3 insulation board: PlastiSpan 25, PlastiSpan 30, PlastiSpan 40, EnerSpan® Type 3

Vapour Retarder	
Tested Product	Sopravap'r
Product Size	Thickness 0.8 mm (0.031"), Roll Width 1.1 m (45"), Roll Length 41 m (134')
Attachment Method	Self-adhered
Substitutable Product(s)	
Manufacturer	Product Identification
n/a	n/a

Cover Board/Insulation/Thermal Barrier Adhesive Securement	
Tested Product	Soprema Duotack 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 A123.21-2020. 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.

The Substitutable Products referenced in this Element Summary Report have been established for Plasti-Fab EPS Product Solutions as per Element Document 22-06-B0092 SR.

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Accreditation: Element is an ISO 17025 accredited test lab under A2LA. In addition, CSA A123.21 can be found under our scope of accreditation listing.

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