

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

Document No.: 22-06-B0026-2-TS
Document Date: September 13, 2022

Reference Test Report No: 22-06-B0026-2

Manufacturer:	Siplast		Siplast System Identification:
	201 Bewicke Ave., Suite 208		
	N. Vancouver, BC, Canada		
	V7M 3M7		SIP PARS-020

SECTION 1.0: Roof System Summary:

“Siplast P20/30 Asphalt With MA Thermal Barrier” – Partially Attached Roofing System	
Roof Membrane – Cap Sheet:	Paradiene 30
Roof Membrane – Base Sheet:	Paradiene 20
Cover Board:	Fiberboard
Insulation:	Paratherm
Vapour Retarder	Parabase
Thermal Barrier	Pacific 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	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 CA A123.21-14 kPa (psf)
March 29, 2022	5.387 (112.5)	3.591 (75)

Measured Dynamic Wind Uplift Resistance: 5.387 kPa (112.5 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	Paradiene 30
Product Size	Roll Width 1 m (39.4"), Roll Length, 10.21 m (33.5'), Thickness 3.3 mm (130 mils), Selvage Width 76 mm (3")
Attachment Method	Hot Asphalt Mopped
Substitutable Product(s)	
Manufacturer	Product Identification
n/a	n/a

Roof Membrane (Base Sheet)	
Tested Product	Paradiene 20
Product Size	Roll Width 1 m (39.4"), Roll Length, 15.24 m (50'), Thickness 2.3 mm (91 mils), Selvage Width 76 mm (3")
Attachment Method	Hot Asphalt Mopped
Substitutable Product(s)	
Manufacturer	Product Identification
n/a	n/a

Cover Board	
Tested Product	Fiberboard
Product Size	6.4 x 1220 x 1220 mm (1/4" x 4' x 4')
Attachment Method	Hot Asphalt Mopped
Substitutable Product(s)	
Manufacturer	Product Identification
n/a	n/a

Insulation (Top Layer)		
Tested Product	Paratherm	
Product Size	51 x 1220 x 1220 mm (2" x 4' x 4')	
Attachment Method	Parafast Adhesive C at 152 mm (6") o.c.	
Substitutable Product(s)		
Manufacturer	Product Identification	
Siplast.	Paratherm W	Paratherm H

Vapour Retarder		
Tested Product	Parabase	
Product Size	Roll Width 0.91 m (36"), Roll Length, 32.9 m (108'), Thickness 1.2 mm (47 mils), Selvage Width 76 mm (3")	
Attachment Method	Hot Asphalt Mopped	
Substitutable Product(s)		
Manufacturer	Product Identification	
n/a	n/a	n/a

Thermal Barrier	
Tested Product	GP DensDeck Prime®
Product Size	12.7 x 1220 x 2440 mm (1/2" x 4' x 8')
Attachment Method	Mechanically attached
Fastening Rate	1 per 2.0 ft² (0.18 m²)
Substitutable Product(s)	
Manufacturer	Product Identification
n/a	n/a

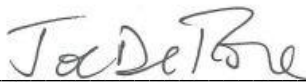
Assembly Adhesive Securement	
Tested Product	Hot Asphalt
Fastening Rate	Full Coverage, applied at rate of 25-30 gal/sq. (10 – 12 L/m²)
Substitutional Product(s)	
Manufacturer	Product Identification
n/a	n/a

Thermal Barrier Securement	
Tested Product	Parafast Fastener (#12) with Parafast 76 mm (3") round metal plate
Fastening Rate	1 per 2.0 ft² (0.18 m²) - Sixteen (16) per 12.7 x 1220 x 2440 mm (1/2" x 4' x 8') board
Substitutable Product(s)	
Manufacturer	Product Identification
n/a	n/a


Notes: 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 Siplast by PRI Construction Materials Technologies LLC engineering evaluation report "Dynamic Uplift Resistance (Dur) Evaluation of Siplast Roof Systems (Project No. 824a0005) dated April 18, 2022.

Approved by:


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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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