

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

Document No.: 21-06-B0047-2-TS  
Document Date: September 15, 2022

Reference Test Report No: 21-06-B0047-2

<b>Manufacturer:</b>	Siplast		<b>Siplast System Identification:</b>
	201 Bewicke Ave., Suite 208		
	N. Vancouver, BC, Canada		
	V7M 3M7		<b>SIP AARS-004</b>

### SECTION 1.0: Roof System Summary:

"Siplast P20/30 TG Hot Asphalt System" – Adhesively Attached Roofing System	
Roof Membrane – Cap Sheet:	Paradiene 30 FR TG
Roof Membrane – Base Sheet:	Paradiene 20
Cover Board:	DensDeck® Prime
Insulation:	Paratherm
Insulation:	Paratherm
Vapour Retarder:	Parabase
Thermal Barrier	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 FR TG		
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	Torched		
Substitutable Product(s)			
Manufacturer	Product Identification		
Siplast	Paradiene 30 FR TG BW	Paradiene 30 HT FR TG	
	Paradiene 30 HT FR TG BW	Paradiene 40 FR TG	Paradiene 40 FR TG BW
	Parafor 30 TG	Parafor 50 TG	Parafor 50 TG BW
	Paratech Glass Cap TG	Paratech Glass Cap FR TG	Paratech 180 Cap TG
	Paratech 180 Cap FR TG	Paratech 250 Cap TG	Paratech 250 Cap FR TG

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 – full coverage		
Substitutable Product(s)			
Manufacturer	Product Identification		
Siplast	Paradiene 20 HV	Paradiene 20 EG	Paradiene 20 HT
	Paradiene 20 PR	Paradiene 20	Paratech Glass Base
	Paratech Glass Base 3.0	Paratech 180 Base	IREX HT
	IREX 40		

Cover Board	
Tested Product	Fiberboard
Product Size	12.7 x 1220 x 1220 mm (1/2" x 4' x 4')
Attachment Method	Hot Asphalt – full coverage
Substitutable Product(s)	
Manufacturer	Product Identification
n/a	n/a

Insulation (Top Layer)		
Tested Product	Paratherm	
Product Size	38 x 1220 x 1220 mm (1.5" x 4' x 4')	
Attachment Method	Hot Asphalt – full coverage	
Substitutable Product(s)		
Manufacturer	Product Identification	
Siplast.	Paratherm W	Paratherm H

Insulation (Bottom Layer)		
Tested Product	Paratherm	
Product Size	38 x 1220 x 1220 mm (1.5" x 4' x 4')	
Attachment Method	Hot Asphalt – full coverage	
Substitutable Product(s)		
Manufacturer	Product Identification	
Siplast.	Paratherm W	Paratherm H

Vapour Retarder	
Tested Product	Parabase
Product Size	Roll width 1.14 m (45"), roll length 40.84 m (134'), 0.81 mm (32 mils) thick, Selvage Width 76 mm (3")
Attachment Method	Hot Asphalt – full coverage
Substitutable Product(s)	
Manufacturer	Product Identification
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	Parafast Insulation Adhesive C
Fastening Rate	Ribbon adhered at 152 mm (6" o.c.)
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 Adhesive C
Fastening Rate	Ribbon adhered every 152 mm (6" o.c.)
Substitutable Product(s)	
Manufacturer	Product Identification
Siplast	Parafast Adhesive

*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. In addition, Element has included additional substitutable products based on Element Document 22-06-B0096.*

**Approved by:**



Joe DeRose, P. Eng. Ext. 10221  
Technical Manager  
Building Science Division

**Reported by:**



Jordan Church, B. Tech., Ext. 11546  
Operations Manager  
Building Science Division

**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.*

*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](http://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.*