



Roof System Assessment Report of Wind Uplift Resistance (ISO 17025)

Document Number:	PUB-DRU281261
Publication Date:	2013-08-21
Revised:	2015-07-22
Revaluation Date:	2016-08-21

Supplier:



Mod-bit SBS Torch 10 fasteners partially adhered System, Partially Adhered Roof System (PARS)

Roofing System Summary :

- Cap sheet membrane: SBS membrane or allowable products
- Base Sheet membrane: SBS membrane or allowable products
- Cover board: Polyisocyanurate board or allowable products
- Insulation: Polyisocyanurate or allowable products
- Vapour barrier: Membrane or allowable products
- Thermal barrier: Optional
- Decking: Steel Deck

- Dynamic Uplift Resistance (DUR) as per CSA A123.21:

Description	Test observation reading	With SF of 1.5
System A	-3.2 kPa (-67 psf)	-2.1 kPa (-45 psf)

Notes :

Allow products:

Only equivalent products included into the roofing system's report are admissible.

Optional components:

Components of the roofing system designated as optional may be included or excluded from the roofing system which will not change the published dynamic uplift resistance (DUR).

Safety factor:

As required by in the CSA A123.21 Standard, the published dynamic uplift resistance (DUR) are reduced by a safety factor of 1.5 (SF of 1.5)

Admissible wind uplift load calculation:

An online calculator is available at www.sigders.ca. The user will have to provide the following information:

- building location;
- building geometry;
- building exposure;
- building openings;
- building importance factor.

The calculator will display the allowable design load of the roof's field surface, edges and corners as well as the dimensions of the edge and corner zones.

Technical Advisories:

Assessment reports must be read in conjunction with technical advisories issued by **exp** Services Inc.

Values

For this document, the metric values are the standard and values in parentheses are for information only.

Notice

Exp Services inc. reserve their right to withdraw, without prior notice, the test report performed as per CSA A123.21 Standard.

Roof System Assessment Report of Wind Uplift Resistance (ISO 17025)

Document Number:	PUB-DRU281261
Publication Date:	2013-08-21
Revised:	2015-07-22
Revaluation Date:	2016-08-21

Roofing System's Specific Data:

Cap sheet Membrane:

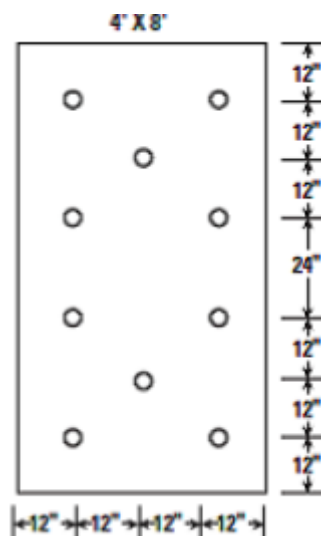
- Allowable product:	Firestone		
	SBS Torch	SBS FR Torch	SBS Premium Torch
	SBS Premium FR Torch	SBS Glass FR Torch	
- Attachment mode:	Heat welded		

Base sheet Membrane:

- Allowable product:	Firestone		
	BaseGard SA	MB Base SA	SBS Base
	SBS Poly Base	SBS Premium Base	
- Attachment mode:	Adhered		
- Attachment type:	Self-adhering membrane		

Cover board:

- Allowable product:	Firestone		
	ISOGard HD	ISOGard HD Composite	HailGard
	CGC / USG		
	Securock Gypsum Fiber Roof Board		
- Allowable thickness:	Between 6 mm (¼ in.) to 15.9 mm (5/8 in.)		
Mechanically attached Pattern	Row spacing	Fasteners spacing	
for System A result	10 fasteners per 32 ft²	As fastener drawing pattern	
- Attachment type:	Fasteners #14 and plates, Pre-assembled Heavy Duty (W56RAC4007)		
- Pullout fastener resistance:	Minimal reference resistance base on test: 749,4 lbf or 340 Kg		
- Attachment supplier:	Firestone		



Fastener Drawing Pattern

Roof System Assessment Report of Wind Uplift Resistance (ISO 17025)

Document Number:	PUB-DRU281261
Publication Date:	2013-08-21
Revised:	2015-07-22
Revaluation Date:	2016-08-21

Insulation second row:

- Allowable products:	Firestone
	ISO 95+ Resista
- Allowable thickness:	Between 25 mm (1 in.) to 203 mm (8 in.)
- Attachment mode:	Loose laid or adhered or mechanically attached

Insulation first row:

- Allowable products:	Firestone
	ISO 95+ Resista
- Allowable thickness:	Between 25 mm (1 in.) to 203 mm (8 in.)
- Attachment mode:	Loose laid or adhered or mechanically attached

Vapour Barrier:

- Allowable products:	Firestone
	V-Force Basegard SA
	Generic
	Polyethylene Kraft paper
- Attachment mode:	Adhered or loose laid
- Attachment type:	Self-adhering membrane or loose laid or adhered

Thermal Barrier (optional): *See optional products table*

Decking:

- Type:	Galvanized construction steel or coated with an aluminum/zinc alloy or PVC in accordance with ASTM A653, ASTM A792, ASTM A1008 or CSSBI 10M Standards.
- Supplier:	Generic
- Thickness:	0.76 mm (0.03 in.) minimum, with a yield strength of 230 MPa (33 ksi) and a tensile strength of 310 MPa (45 ksi) commonly defined as being of a 22 gauge minimum thickness.
- Attachment method:	The deck's fastening to the supporting structure must be strong enough to resist wind uplift loads (adjusted as per NBC requirements).
- Fastening uplift resistance (CSA S136.F04):	2.09 kN (470 pf)
- -Equivalence:	Steel deck thickness of 18 to 22 gauges or wood deck or concrete deck with pullout resistance equal or higher than the Fastening uplift resistance specified above.

Optional Products Table:

Thermal barrier:

- Allowable product:	Georgia Pacific
	DensDeck DensDeck Prime
	CGC / USG
	Securock Gypsum Fiber Roof Board
- Allowable thickness:	Between 6 mm (¼ in.) to 15.9 mm (5/8 in.)
- Attachment mode:	Loose laid or adhered or mechanically attached