

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

Document Number:	PUB-DRU220544
Publication Date:	2012-06-18
Revised:	2015-04-28
Revaluation Date:	2018-04-28

Supplier:



#### Mod-Bit Soprarock DD+ Duotack adhered System, Adhesive Applied Roofing System (AARS)

#### **Roofing System Summary :**

Cap sheet membrane: Modified Bituminous membrane or allowable products

Steel Deck

- Base Sheet Membrane: Modified Bituminous membrane or allowable products Mineral wool board insulation
- Cover board:
  - Insulation:

Mineral wool board insulation

- Vapour barrier: Membrane or allowable products
- Decking:

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

Description	Test observation reading	With SF of 1.5
System A	-3.6 kPa(-75 psf)	-2.4 kPa(-50 psf)
System B	-5.9 kPa (-125 psf)	-3.9 kPa (-83 psf)
System C	-6.9 kPa (-144 psf)	-4.6 kPa (-96 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.



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# Roofing System's Specific Data:

### Cap Sheet Membrane:

- Allowable products:	Soprema		
	Sopralene Flam 180 GR	Sopralene Flam 250 GR	Soprastar Flam HD GR
	Sopralene Flam 180 FR	Sopralene Flam 250 FR	Soprastar Flam HD FR
	GR	GR	GR
	Sopralene Mammouth GR	Sopraply Traffic Cap 560	Sopraply Traffic Cap FR 561
- Attachment mode:	Heat welded		

#### Base sheet membrane:

	Soprema		
<ul> <li>Allowable product:</li> </ul>	Sopralene Flam 180	Elastophene Flam	Sopraply Base 520
_	Sopralene Flam 250		
- Attachment mode:	Heat welded		

## Cover board:

- Allowable products:	Soprema		
-	Soprarock DD Plus		
<ul> <li>Allowable thickness:</li> </ul>	Between 50 mm (2 in.) to 203 i	mm (8 in.)	
Adhered Attached Pattern	Adhesion mode	Ad	hesive spacing
For System A result	Ribbons	305	mm (12 in.) o.c.
<ul> <li>Attachment type:</li> </ul>	Duotack		
<ul> <li>Attachment supplier:</li> </ul>	Soprema		
Adhered Attached Pattern	Adhesion mode	Ad	hesive spacing
For System A result	Ribbons	152	mm (6 in.) o.c.
<ul> <li>Attachment type:</li> </ul>	Duotack		
<ul> <li>Attachment supplier:</li> </ul>	Soprema		
Adhered Attached Pattern	Adhesion mode	Ad	hesive spacing
For System A result	Ribbons	102	mm (4 in.) o.c.
<ul> <li>Attachment type:</li> </ul>	Duotack		
<ul> <li>Attachment supplier:</li> </ul>	Soprema		

### Insulation:

<ul> <li>Allowable products:</li> </ul>	Soprema		
	Sopra-Iso	Sopra-Iso +	
	Atlas Roofing Corp.		·
	ACFoam II	ACFoam III	ACFoam IV
	Johns Manville		
	ENRGY 3	ENRGY 3 CG	F
	Hunter Panels		
	H-Shield	H-Shield CG	
- Allowable thickness:	Between 25 mm (1 in.)	to 203 mm (8 in.)	
Adhered Attached Pattern	Adhesion	mode	Adhesive spacing
For System A result	Ribbo	ns	305 mm (12 in.) o.c.
<ul> <li>Attachment type:</li> </ul>	Duotack		
<ul> <li>Attachment supplier:</li> </ul>	Soprema		
Adhered Attached Pattern	Adhesion	mode	Adhesive spacing
For System B result	Ribbo	ns	152 mm (6 in.) o.c.
- Attachment type:	Duotack	·	
- Attachment supplier:	Soprema		
Adhered Attached Pattern	Adhesion	mode	Adhesive spacing



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	For System C result	Ribbons	152 mm (6 in.) o.c.
-	Attachment type:	Duotack	
-	Attachment supplier:	Soprema	

## Vapour Barrier:

-	Allowable products:	Soprema	
		Sopravap'R	Sopralene Stick Adhesive
-	Attachment mode:	Adhered (Primer required on allowable thermal barrier or wood deck or concrete deck	
		with Elastocol stick or Elastocol Stick Zero)	
-	Attachment type:	Self-adhering membrane	

#### Or Vapour Barrier optional:

- Allowable products:	Soprema		
	Elastophene PS 2.2 mm	Sopralene 180 PS 3.5 mm	
- Attachment mode:	Heat welded (Required a primer on allowable thermal barrier or concrete deck with Elastocol 500)		

# Thermal Barrier (optional):

See optional products table

#### Decking:

- Туре:	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 gauges 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).
<ul> <li>Fastening uplift resistance (CSA S136.F04):</li> </ul>	2.09 kN (470 pf)
Equivalence:	Steel deck thickness of 18 to 22 gauges or wood deck or concrete deck with pull-out resistance equivalent to the Fastening uplift resistance specified above.

### **Optional Products Table:**

#### Thermal barrier:

-	Allowable products	CGC / USG				
		Securock Gypsum Fiber boa	rd			
		Unifix				
		PermaBase Dek				
-	Allowable thickness: Between 6.3 mm (¼ in.) to 15.9 mm (5/8 in.)					
Ad	hered Attached Pattern	Adhesion mode		Adhesive spacing		
	For System A result	Ribbons		305 mm (12 in.) o.c.		
-	Attachment type:	Duotack				
-	Attachment supplier: Soprema					
-	Allowable thermal barrier and decks have to be primed(Optional for steel deck):	Elastocol Stick	Elastocol Sticl	< Zero		