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

Document Number: PUB-DRU210983
Publication Date: 2012-02-08
Revised: 2015-05-20
Revaluation Date: 2018-05-20

Supplier:

Mod-Bit Duotack adhesive System, Adhesive Applied Roof System (AARS)

Roofing System Summary:
- Cap sheet membrane: Modified Bituminous membrane or allowable products
- Base sheet membrane: Modified Bituminous membrane or allowable products
- Cover board: Asphallic board
- Insulation: Polyisocyanurate insulation or allowable products
- Vapour barrier: Membrane or allowable products
- Thermal barrier: Optional
- Decking: Steel Deck

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

<table>
<thead>
<tr>
<th>Description</th>
<th>Test observation reading</th>
<th>With SF of 1.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>System A</td>
<td>- 3.6 kPa (-75 psf)</td>
<td>-2.4 kPa (-50 psf)</td>
</tr>
</tbody>
</table>

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](http://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
  - Colply Traffic Cap FR 461
  - Colply Traffic Cap- FR 451
  - Sopralene 250 GR
  - Colply Traffic Cap-460
  - Sopralene 180 GR
  - Sopralene 250 FR GR
  - Colply Traffic Cap-450
  - Sopralene 180 FR GR

<table>
<thead>
<tr>
<th>Adhered Attached Pattern</th>
<th>For System A result</th>
<th>Adhesion mode</th>
<th>Adhesive spacing</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Attachment type:</td>
<td>Colply, Grade Brush or Trowel</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Attachment supplier:</td>
<td>Soprema</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Base sheet membrane:
- Allowable product: Soprema
  - Elastophene 180 Sanded
  - Sopralene 180 Sanded
  - Sopralene 250 Sanded
  - Colply Base 410

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<tr>
<td>- Attachment supplier:</td>
<td>Soprema</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Cover board:
- Allowable products: Soprema
  - Sopraboard

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<tr>
<td>- Attachment type:</td>
<td>Duotack</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Attachment supplier:</td>
<td>Soprema</td>
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<td></td>
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Insulation:
- Allowable products: Soprema
  - Sopra-Iso
  - Sopra-Iso +
  - Atlas Roofing Corp.
    - ACFoam II
    - ACFoam III
    - ACFoam IV
  - Johns Manville
    - ENRGY 3
    - ENRGY 3 CGF
  - Hunter Panels
    - H-Shield
    - H-Shield CG

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<tr>
<td>- Attachment supplier:</td>
<td>Soprema</td>
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</table>

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
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Or Vapour Barrier optional:

<table>
<thead>
<tr>
<th>- Allowable products:</th>
<th>Soprema</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elastophene PS 2.2 mm</td>
<td>Sopralene 180 PS 3.5 mm</td>
</tr>
</tbody>
</table>

- 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:

- 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 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).
- 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 pull-out resistance equivalent to the Fastening uplift resistance specified above.

Optional Products Table:

Thermal barrier:

<table>
<thead>
<tr>
<th>- Allowable products</th>
<th>CGC / USG</th>
</tr>
</thead>
<tbody>
<tr>
<td>Securock Gypsum Fiber board</td>
<td></td>
</tr>
<tr>
<td>Unifix</td>
<td></td>
</tr>
<tr>
<td>PermaBase Dek</td>
<td></td>
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</tbody>
</table>

| - Allowable thickness: | Between 6.3 mm (¼ in.) to 15.9 mm (5/8 in.) |

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<tr>
<td>For System A result</td>
<td>Ribbons</td>
<td>305 mm (12 in.) o.c.</td>
</tr>
</tbody>
</table>

- Attachment type: Duotack
- Attachment supplier: Soprema