

Dynamic Wind Uplift Resistance Summary Report CSA A123.21-2014



Document No.: 14-06-M0115-4, Revision 1 (S)
Date: 2016-07-09

Original Report Number: 14-06-M0115-4, Revision 3

Testing, calibrating, advising

Manufacturer: **Henry Company**
15 Wallsend Drive
Toronto, Ontario
M1E 3X6

Roof System Construction Details: "FASTENED COVERBOARD ROOFING SYSTEM"

Cap Sheet: NP250gT (torched)

Base Sheet: NP180 Tack Sheet (SA) adhered with:
930-38 Tack Sheet Adhesive

Support Panel: 12.5mm (1/2") USG Securock Gypsum Board, fastened with:
5" (127mm) OMG #12 Standard RoofGrip Fastener with 3" Galvalume Ribbed
Metal Plate 24 fasteners per 4'x 8' board

Insulation: Layer 1: 50mm (2") Atlas ACFoam II (loose laid)
Layer 2: 50mm (2") Atlas ACFoam II (loose laid)

Vapour Barrier: Blueskin Adhesive (Optional), Vapor-Bloc SA (Optional)

Thermal Barrier: Optional

Decking: Steel Deck, 22 ga, RD938, 230 MPa (33.4 ksi)

System Dynamic Uplift Resistance (DUR)*: 4.67 kPa (97.5 psf)

* As outlined in CSA A123.21-14, Section 10.1 the dynamic uplift resistance has been reduced by a safety factor of 1.5. As per CSA A123.21-2014, Section 4.1: "*The wind-induced forces on a roof and the responses of the system are time- and space-dependent, and thus are dynamic in nature. Design wind pressure varies with building location, height, roof slope, and other parameters. Using the local building code or wind standard or internet-based tool, Wind-Rci (found at www.sigders.ca), the design pressure of a roof assembly can be calculated.*"

Optional Components: Components of the roofing system designated as "optional" may be included or excluded from the roofing system under the published dynamic uplift resistance (DUR) value stated in this report.

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Substitutable Products:

- Cap Sheet:**
- a) NP180gT (torched)
 - b) NP250gM or NP180gM, adhered with:
CSA A123.4 Type 2 Hot Asphalt Adhesive or MBA Gold
- Base Sheet:**
- a) NP180p/p or G100p/p (torched)
 - b) G100p/s or G100s/s, adhered with CSA A123.4 Type Type 2 Hot Asphalt Adhesive or MBA Gold
 - c) G100 Tack Sheet (SA), adhered with 930-38 Tack Sheet Adhesive
- Support Panel:** No Substitutable Products
- Insulation:** Layer 1: 50mm (2") Atlas ACFoam III or Atlas ACFoam IV (loose laid)
Layer 2: 50mm (2") Atlas ACFoam III or Atlas ACFoam IV (loose laid)
- Vapour Barrier:** Optional / If required use Vapor-Bloc SA with Blueskin Adhesive
- Thermal Barrier:** Optional
- Decking:** Steel Deck, 22 ga, RD938, 230 MPa (33.4 ksi) or equivalent. Please insure that the roof deck and attachment method used meets or exceeds the system Dynamic Uplift Resistance load as outlined in this document using all applicable safety factors.
- Substitutable Products:** Products as stated in this report are based on roof section sandwich construction tensile properties and failure mode analysis as outlined in Exova Report No.: 15-06-M0273 (dated: 2015-12-04).

Note: This document is a summary of the test results outlined in Exova Report Numbers: 14-06-M0115-4, Revision 3 and 15-06-M0273 and is not a comprehensive report. Please refer to these documents for detailed information pertaining to the test specimen configuration and construction details.

Tested by:

Authorized by:

Sunny Ling, CET, Ext 11412
Supervisor, Building Systems
Products Testing Division

Jordan M. Church, B.Tech, Ext. 11546
Operations/Technical Manager, Products Division
Product Testing Division

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