

Elevate Mod-Bit and Built-Up Tested Assembly Guide

Canadian Standards Association

April 2024

NOTE: The contents of this guide are considered accurate at the time of posting. All information contained within should be validated for accuracy as it relates to specific project conditions or requirements. Specific codes, uplifts or other factors may result in changes to the information contained within this document. Validate all specific conditions with a Holcim Regional Technical Coordinator prior to its use.

Table of Contents

Canadian Standards Association	3
Allowable Products	3
Optional Components	3
Safety Factor	3
Admissible Wind Uplift Load Calculation	3
Technical Advisories	3
Values	3
Notice	3
Decking	3
SBS Modified Bitumen – 2 Ply Mod-Bit System	4

Canadian Standards Association

Allowable 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 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 issues by Exp Services Inc.

Values

A For the listing in this section 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.

Decking

Galvanized construction steel or coated with aluminum/zinc allow or PVC in accordance with ASTM A653, ASTM A792, ASTM A1008 or CSSBI 10M Standards. Supplier is listed as Generic. The deck's fastening to the supporting structure must be strong enough to resist the wind uplift loads (adjusted as per NBC requirements). Contact a Holcim Technical Representative for additional deck availability. Alternate deck types will require the deck to have a pullout resistance equal to or higher than the fastening uplift resistance specified in the given listing.

Deck used for testing: 22 gauge, Yield Strength (Y) 33 ksi, Tensile Strength (T) 45 ksi – Type B

This guide is meant to highlight Elevate products and specifications provided by Holcim Solutions & Products US, LLC and is subject to change without notice. Holcim takes responsibility for furnishing quality materials which meet published Elevate product specifications or other technical documents, subject to normal roof manufacturing tolerances. Neither Holcim nor its representatives practice architecture. Holcim Solutions & Products US, LLC offers no opinion on and expressly disclaims any responsibility for the soundness of any structure. Holcim accepts no liability for structural failure or resultant damages. Consult a competent structural engineer prior to installation if the structural soundness or structural ability to properly support a planned installation is in question. No Holcim representative is authorized to vary this disclaimer.

SBS Modified Bitumen Membrane - Dynamic Uplift Resistance (DUR) as per CSA A123.21							
Deck Type & Uplift With SF of 1.5	Vapor Barrier, Thermal Barrier and Attachment	Insulation and Attachment	Cover Board and Attachment	Base Sheet and Attachment	Cap Sheet and Attachment		
Steel 18-22 ga Y: 33 ksi T: 45 ksi 2.1 kPa (-45 psf) File Number: FBPS-211230- 03	Vapor Barrier: V-Force/ Basegard SA Thermal Barrier (Optional): 6 mm – 15.9 mm (1/4" - 5/8") thick, DensDeck DensDeck Prime Securock Attachment: Loose Laid Adhered Mechanically Attached	Insulation (Top): 38 mm - 102 mm (1½" - 4") thick 2 Layers ISOGARD GL/ ISOGARD CG Insulation (Bottom): 38 mm - 102 mm (1½" - 4") thick 2 Layers I ISOGARD GL/ ISOGARD CG Attachment: Loose Laid	Cover Board: 13 mm (1/2") thick, ISOGARD HD; ISOGARD HD 38.1 mm (1.5"); Securock 6.35 mm (1/4") thick Attachment: 10 HD fasteners per 4' x 8' board	Base Sheet: BASEGARD SA Attachment: Adhered	Cap Sheet: SBS 250 Torch SBS 250 FR Torch SBS Torch SBS FR Torch SBS Premium Torch SBS Premium FR Torch SBS Glass FR Torch Attachment: Heat welded		
Steel 22 ga Y: 33 ksi 2.0 kPa (-42 psf) Project No.: FBP-415-02-01 Assembly No. 3	Air Barrier: 6 mil. Polyethylene	Insulation: 38.1 mm (1.5") thick ISOGARD GL/ ISOGARD CG Attachment: Loose Laid	Cover Board: 6.35 mm (1/4") thick, DensDeck Prime Attachment: 10 HD fasteners per 4' x 8' board	Optional Ply: MB Cold Adhesive or Hot Asphalt: SBS 180 Base 1.5 SBS Base, SBS Premium Base, SBS Poly Base, SBS Premium Poly Base, SBS Smooth Torched: SBS 180 Torch Base SBS Glass Torch Base, SBS Glass Torch Base SBS Poly Torch Base Base Sheet: MB Cold Adhesive or Hot Asphalt: SBS Base SBS Premium Base SBS Premium Base SBS Premium Poly Base SBS Premium Poly Base SBS Smooth Torched: SBS 180 Torch Base SBS Glass Torch Base SBS Foly Torch Base SBS Foly Torch Base	Cap Sheet: MB Cold Adhesive or Hot Asphalt SBS 250 SBS250 FR SBS Glass, SBS Glass FR, SBS Cap, SBS Premium, SBS FR Cap, SBS Premium FR Torched: SBS 250 Torch SBS 250 FR Torch, SBS Torch, SBS Premium Torch, SBS Premium FR Torch		
Value Steel 22 ga Y: 33 ksi 3.0 kPa (-63 psf) Project No.: FBP-415-02-01 Assembly No. 4	Vapor Barrier: V-Force/ Basegard SA	Insulation: 38.1 mm (1.5") thick, ISOGARD GL/ ISOGARD CG Adhesive Attachment: 152.4 mm (6") o.c. beads, 19.05 mm (3/4") beads, Twin Pack; I.S.O. Stick; I.S.O. Spray R; Twin Jet Adhesive	Cover Board: 6.35 mm (1/4") thick, DensDeck Prime Attachment: 305 mm (12") o.c. beads, 19.0 5mm (3/4") beads, Twin Pack, I.S.O. Stick, Twin Jet -or- 152.4 mm (6") o.c. beads, I.S.O. Spray R	Optional Ply: SBS 180 Torch Base SBS Glass Torch Base, SBS Glass Torch Base 1.5, SBS Poly Torch Base Base Sheet: SBS 180 Torch Base SBS Glass Torch Base SBS Glass Torch Base SBS Glass Torch Base SBS Poly Torch Base	Cap Sheet: SBS 250 Torch SBS 250 FR Torch SBS Glass FR Torch, SBS Torch, SBS Premium Torch, SBS Premium FR Torch		