# UltraPly™ TPO Roof Systems

# Tested Assembly Guide

## Canadian Standards Association

## July 2025

**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 Elevate 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

**UltraPly TPO Adhered Membrane** ..... 4

**UltraPly TPO Adhered Membrane – Adhered Insulation and Cover Board** ..... 6

**UltraPly TPO Attached Membrane** ..... 7

# 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 Elevate 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

## UltraPly TPO Adhered Membrane

| ULTRAPLY TPO SINGLE-PLY MEMBRANE - DYNAMIC UPLIFT RESISTANCE (DUR) AS PER CSA A123.21 | | | | |
|---|---|---|---|---|
| **Deck Type & Uplift with SF of 1.5** | **Vapor Barrier/ Thermal Barrier** | **Insulation and Attachment** | **Cover Board and Attachment** | **Membrane and Attachment** |
| Steel<br>22 ga<br>Y: 33 ksi<br>T: 45 ksi<br><br>3.2 kPa<br>(-67 psf)<br><br>Project No.:<br>EXP/FBPS-211230-06 | Vapor Barrier:<br>V-Force<br>BaseGard SA<br>Polyethylene<br>Kraft paper<br><br>*Thermal Barrier (Optional):*<br>*6 mm – 15.9 mm*<br>*(¼" - ⅝") thick,*<br>*DensDeck*<br>*DensDeck Prime*<br>*Securock*<br><br>*Attachment:*<br>*Loose Laid* | Insulation (Top):<br>38 mm – 102 mm<br>(1.5" – 4") thick,<br>ISOGARD GL/ISOGARD CG<br><br>Insulation (Bottom):<br>38 mm – 102 mm<br>(1.5" – 4") thick,<br>ISOGARD GL/ISOGARD CG<br><br>Attachment:<br>(Top):<br>10 HD Fasteners<br>per 4'x8' board<br><br>(Bottom):<br>Loose Laid | Cover Board:<br>6mm – 15.9mm (¼" - ⅝")<br>thick<br>ISOGARD HD<br>ISOGARD HD Composite<br>-or-<br>6 mm (¼") min.<br>Securock<br><br>Attachment:<br>12 HD Fasteners/Plates<br>per 4'x8' board | Membrane:<br>UltraPly TPO<br>Platinum TPO<br><br>Attachment:<br>Full Coverage<br>UltraPly Bonding Adhesive |
| Steel<br>22 ga<br>Y: 33 ksi<br>T: 45 ksi<br><br>2.7 kPa<br>(-56 psf)<br><br>Project No.:<br>348T0017<br>Assembly No. 2 | Vapor Barrier:<br>Polyethylene | Insulation:<br>Min. 38 mm (1.5") thick<br>ISOGARD GL/ISOGARD CG<br><br>Attachment:<br>Loose Laid | Cover Board:<br>12.7 mm – 15.9mm<br>½thick<br>ISOGARD HD<br><br>Attachment:<br>18 HD Fasteners/Plates<br>per 4'x8' board | Membrane:<br>UltraPly TPO SA<br>UltraPly TPO<br><br>Attachment:<br>Full Coverage<br>Single-Ply LVOC Bonding<br>UltraPly Bonding Adhesive |
| Steel<br>22 ga<br>Y: 33 ksi<br>T: 45 ksi<br><br>-2.4 kPa<br>(-50 psf)<br><br>Project No.:<br>EXP/FBPS-225611-04 | Vapor Barrier:<br>V-Force<br>BaseGard SA<br><br>*Thermal Barrier (Optional):*<br>*6 mm – 15.9 mm*<br>*(¼" - ⅝") thick,*<br>*Securock*<br><br>*Attachment:*<br>*152.4 mm (6") o.c. beads,*<br>*Twin Pack Adhesive*<br>*-or-*<br>*16 HD Fasteners*<br>*per 4'x8' board* | Insulation (Top):<br>38 mm – 102 mm<br>(1.5" – 4") thick,<br>ISOGARD GL/ISOGARD CG<br><br>Insulation (Bottom):<br>38.1 mm – 101.6 mm<br>(1.5" – 4") thick,<br>ISOGARD GL/ISOGARD CG<br><br>Attachment (Top):<br>305 mm (12") o.c. beads,<br>Twin Pack Adhesive<br><br>Attachment (Bottom):<br>305 mm (12") o.c. beads,<br>Twin Pack Adhesive | Cover Board:<br>6 mm (¼") min.<br>Securock<br>-or-<br>12mm (½" min.)<br>ISOGARD HD<br><br>Attachment:<br>305 mm (12") o.c. beads,<br>Twin Pack Adhesive | Membrane:<br>UltraPly TPO<br>Platinum TPO<br>UltraPly TPO XR*<br><br>Attachment:<br>Full Coverage<br>UltraPly Bonding Adhesive |
| Steel<br>18-22 ga<br>Y: 33 ksi<br>T: 45 ksi<br><br>2.9 kPa<br>(-60 psf)<br><br>Project No.:<br>EXP/FBPS-211230-04 | Vapor Barrier:<br>V-Force<br>BaseGard SA<br>Polyethylene<br>Kraft paper<br><br>*Thermal Barrier (Optional):*<br>*6 mm – 15.9 mm*<br>*(¼" - ⅝") thick,*<br>*DensDeck*<br>*DensDeck Prime*<br>*Securock*<br><br>*Attachment:*<br>*Loose Laid* | Insulation (Top):<br>38.1 mm – 101.6 mm<br>(1.5" – 4") thick,<br>ISO 95+ GL<br>Resista<br><br>Insulation (Bottom):<br>38.1 mm – 101.6 mm<br>(1.5" – 4") thick,<br>ISOGARD GL/ISOGARD CG<br><br>Attachment (Top):<br>12 HD Fasteners/Plates<br>Per 4'x8' board<br><br>Attachment (Bottom):<br>Loose Laid | Cover Board:<br>6 mm – 15.9 mm (¼" -<br>⅝") thick<br>ISOGARD HD<br>Securock<br><br>Attachment:<br>152.4 mm (6") o.c. beads,<br>19.05 mm (¾") beads,<br>Twin Pack Adhesive | Membrane:<br>UltraPly TPO<br>Platinum TPO<br><br>Attachment:<br>Full Coverage<br>UltraPly Bonding Adhesive |

UltraPly TPO Adhered Membrane (Continued)

| | | | | |
|---|---|---|---|---|
| Steel<br>18-22 ga<br>Y: 33 ksi<br>T: 45 ksi<br><br>3.19 kPa<br>(66.7 psf)<br><br>Project No.:<br>FBP-393-02-01<br>Assembly No. 1 | Vapor Barrier:<br>V-Force<br><br>Thermal Barrier:<br>½" thick<br>DensDeck Prime<br><br>Attachment:<br>16 HD Fasteners/Plates<br>Per 4′x8′ board | Insulation:<br>Min. 50.8 mm (2") thick<br>ISOGARD GL/ISOGARD CG<br><br>Attachment:<br>152.4 mm (6") o.c. beads,<br>19.05 mm (¾") beads,<br>Twin Pack<br>ISO Stick<br>ISO Spray R<br>or<br>152.4 mm (6") o.c. beads,<br>25.4 mm (1") beads,<br>Twin Jet | Cover Board:<br>Min. 6 mm (¼") thick<br>DensDeck Prime<br>Securock<br><br>Attachment:<br>152.4 mm (6") o.c. beads,<br>19.05 mm (¾") beads,<br>Twin Pack<br>ISO Stick<br>ISO Spray R<br>or<br>152.4 mm (6") o.c. beads,<br>25.4 mm (1") beads,<br>Twin Jet | Membrane:<br>UltraPly TPO SA<br>UltraPly TPO<br>Platinum TPO<br>UltraPly TPO XR*<br><br>Attachment:<br>Full Coverage<br>Single-Ply LVOC BA 1168<br>Single-Ply LVOC Bonding Adhesive<br>UltraPly Bonding Adhesive<br>Hot Asphalt* |
| Steel<br>18-22 ga<br>Y: 33 ksi<br>T: 45 ksi<br><br>3.19 kPa<br>(66.7 psf)<br><br>Project No.:<br>FBP-393-02-01<br>Assembly No. 2 | Vapor Barrier:<br>V-Force<br><br>Thermal Barrier:<br>½" thick<br>DensDeck Prime<br><br>Attachment:<br>16 HD Fasteners/Plates<br>Per 4′x8′ board | Insulation:<br>Min. 2" thick<br>ISOGARD GL/ISOGARD CG<br><br>Attachment:<br>152.4 mm (6") o.c. beads,<br>19.05 mm (¾") beads,<br>Twin Pack<br>ISO Stick<br>ISO Spray R<br>or<br>152.4 mm (6") o.c. beads,<br>25.4 mm (1") beads,<br>Twin Jet | N/A | Membrane:<br>UltraPly TPO SA<br>UltraPly TPO<br>Platinum TPO<br>UltraPly TPO XR*<br><br>Attachment:<br>Full Coverage<br>Single-Ply LVOC BA 1168<br>Single-Ply LVOC Bonding Adhesive<br>UltraPly Bonding Adhesive<br>Hot Asphalt* |
| Steel<br>18-22 ga<br>Y: 33 ksi<br>T: 45 ksi<br><br>2.4 kPa<br>(50 psf)<br><br>Project No.:<br>FBP-393-02-01<br>Assembly No. 3 | Vapor Barrier:<br>V-Force | Insulation:<br>Min. 2" thick,<br>4′x8′ board,<br>ISOGARD GL/ISOGARD CG<br><br>Attachment:<br>Loose laid | Cover Board:<br>Min. 6 mm (¼") thick<br>DensDeck Prime<br><br>Attachment:<br>8 HD Fasteners/Plates<br>per 4′x8′ board<br>DensDeck Prime | Membrane:<br>UltraPly TPO SA<br>UltraPly TPO<br>Platinum TPO<br>UltraPly TPO XR*<br><br>Attachment:<br>Full Coverage<br>Single-Ply LVOC BA 1168<br>Single-Ply LVOC Bonding Adhesive<br>UltraPly Bonding Adhesive<br>Hot Asphalt* |
| Steel<br>18-22 ga<br>Y: 33 ksi<br>T: 45 ksi<br><br>2.4 kPa<br>(50 psf)<br><br>Project No.:<br>FBP-393-02-01<br>Assembly No. 4 | Vapor Barrier:<br>V-Force | Insulation (bottom):<br>Min. 2" thick,<br>4′x8′ board,<br>ISOGARD GL/ISOGARD CG<br><br>Attachment (bottom):<br>8 HD Fasteners/Plates<br>per 4′x8′ board<br><br>*Insulation (top) (Optional):*<br>*Min. 2" thick,*<br>*4′x8′ board,*<br>ISOGARD GL/ISOGARD CG<br><br>*Attachment (top):*<br>*152.4 mm (6") o.c. beads,*<br>*19.05 mm (¾") beads,*<br>*Twin Pack, ISO Stick*<br>*ISO Spray R*<br>*or*<br>*152.4 mm (6") o.c. beads,*<br>*25.4 mm (1") beads,*<br>*Twin Jet* | *Cover Board (Optional)*:*<br>*Min. 6 mm (¼") thick*<br>*DensDeck Prime*<br>*Securock*<br><br>*Attachment (top):*<br>*152.4 mm (6") o.c. beads,*<br>*19.05 mm (¾") beads,*<br>*Twin Pack*<br>*ISO Stick*<br>*ISO Spray R*<br>*or*<br>*152.4 mm (6") o.c. beads,*<br>*25.4 mm (1") beads,*<br>*Twin Jet*<br>**Cover Board required when used.* | Membrane:<br>UltraPly TPO SA<br>UltraPly TPO<br>Platinum TPO<br>UltraPly TPO XR*<br><br>Attachment:<br>Full Coverage<br>Single-Ply LVOC BA 1168<br>Single-Ply LVOC Bonding Adhesive<br>UltraPly Bonding Adhesive<br>Hot Asphalt*<br><br>*Cover Board required when used. |

UltraPly TPO Adhered Membrane (Continued)

| | | | | |
|---|---|---|---|---|
| Steel<br>22 ga<br>Y: 33 ksi<br><br>3.2 kPa<br>(-67 psf)<br><br>Project No.<br>348T0017<br>Assembly No. 3 | Air Barrier:<br>6 mil Polyethylene | Insulation:<br>Min. 2.5" (63.5 mm) thick,<br>4′x8′ boards<br>ISOGARD GL/ISOGARD CG<br><br>Attachment:<br>16 AP Fasteners<br>per 4′x8′ board | Not Applicable | Membrane:<br>UltraPly TPO SA<br>-or-<br>Ultraply TPO<br>-or-<br>UltraPly TPO XR<br><br>Attachment:<br>Self Adhered<br>-<br>UltraPly BA<br>Single-Ply BA<br>Single-Ply BA 1168<br>-<br>Twin Jet<br>I.S.O. Spray R<br>XR Stick |

## UltraPly TPO Adhered Membrane – Adhered Insulation and Cover Board

| ULTRAPLY TPO SINGLE-PLY MEMBRANE - DYNAMIC UPLIFT RESISTANCE (DUR) AS PER CSA A123.21 | | | | |
|---|---|---|---|---|
| **Deck Type & Uplift with SF of 1.5** | **Vapor Barrier/ Thermal Barrier** | **Insulation and Attachment** | **Cover Board and Attachment** | **Membrane and Attachment** |
| Steel<br>22 ga<br>Y: 33 ksi<br><br>3.6 kPa<br>(-75 psf)<br><br>Project No:<br>FBP-415-02-01<br>Assembly 1 | Vapor Barrier:<br>V-Force<br><br>VB Attachment:<br>Self-Adhered | Insulation (top):<br>38.1 mm (1.5") thick,<br>ISOGARD GL/ISOGARD CG<br><br>Attachment (top):<br>304.8 mm (12") o.c. beads,<br>19.05 mm (¾") beads,<br>Twin Pack, I.S.O. Stick, Twin Jet<br>-or-<br>152.4 mm (6") o.c. beads,<br>I.S.O. Spray R Adhesive<br><br>Insulation (bottom):<br>38.1 mm (1.5") thick,<br>ISOGARD GL/ISOGARD CG<br><br>Attachment (bottom):<br>152.4 mm (6") o.c. beads,<br>19.05 mm (¾") beads,<br>Twin Pack, I.S.O. Stick, I.S.O.<br>Spray R, Twin Jet Adhesive | Cover Board:<br>12.7 mm (½") thick<br>ISOGard HD<br><br>Attachment:<br>305 mm (12") o.c. beads,<br>19.0 5mm (¾") beads,<br>Twin Pack,<br>I.S.O. Stick,<br>Twin Jet Adhesive<br>-or-<br>152.4 mm (6") o.c. beads,<br>I.S.O. Spray R Adhesive | Membrane:<br>UltraPly TPO SA<br>UltraPly TPO<br><br>Attachment:<br>Self Adhered<br>-or-<br>Fully Coverage<br>UltraPly Bonding Adhesive,<br>Single-Ply LVOC,<br>Single-Ply LVOC 1168 |
| Steel<br>22 ga<br>Y: 33 ksi<br><br>3.8 kPa<br>(-80 psf)<br><br>Project No:<br>348T0017<br>Assembly 1 | Vapor Barrier:<br>V-Force<br><br>VB Attachment:<br>Self-Adhered | Insulation (top):<br>38.1 mm (1.5") thick,<br>ISOGARD GL/ISOGARD CG<br><br>Attachment (top):<br>152.4 mm (6") o.c. beads,<br>19.05 mm (¾") beads,<br>Twin Pack, I.S.O. Stick, Twin Jet,<br>I.S.O. Spray R Adhesive<br><br>Insulation (bottom):<br>38.1 mm (1.5") thick,<br>ISOGARD GL/ISOGARD CG<br><br>Attachment (bottom):<br>152.4 mm (6") o.c. beads,<br>19.05 mm (¾") beads,<br>Twin Pack Adhesive<br>I.S.O. Stick Adhesive<br>I.S.O. Spray R Adhesive<br>Twin Jet Adhesive | Not Applicable | Membrane:<br>UltraPly TPO SA<br>UltraPly TPO<br><br>Attachment:<br>Self Adhered<br>-or-<br>Fully Coverage<br>UltraPly Bonding Adhesive,<br>Single-Ply LVOC,<br>Single-Ply LVOC 1168,<br>-or-<br>TPO XR Adhered with:<br>304.8 mm (12") o.c. beads,<br>Twin Jet<br>I.S.O. Spray R<br>XR Stick |

# UltraPly TPO Attached Membrane

| ULTRAPLY TPO SINGLE-PLY MEMBRANE - DYNAMIC UPLIFT RESISTANCE (DUR) AS PER CSA A123.21 | | | | |
|---|---|---|---|---|
| **Deck Type & Uplift with SF of 1.5** | **Vapor Barrier/ Thermal Barrier** | **Insulation and Attachment** | **Cover Board and Attachment** | **Membrane and Attachment** |
| Steel<br>22 ga<br>Y : 33 ksi<br>T : 45 ksi<br><br>3.0 kPa<br>(-63 psf)<br><br>Project No.:<br>EXP/FBPS-002-059 | Vapor Barrier:<br>V-Force<br>BaseGard SA<br>Polyethylene<br>Kraft paper<br><br>*Thermal Barrier (Optional):*<br>*6mm – 15.9 mm*<br>*(¼" - ⅝") thick*<br>*DensDeck /DensDeck Prime*<br>*Securock*<br><br>*Attachment:*<br>*Loose Laid* | Insulation:<br>38 mm – 102 mm<br>(1.5" – 4") thick,<br>ISOGARD GL/ISOGARD CG<br><br>Attachment:<br>InvisiWeld | *Cover Board (Optional):*<br>*6.4 mm – 16 mm (¼" – ⅝") thick*<br>*ISOGard HD*<br>ISOGARD HG<br>*DensDeck*<br>*DensDeck Prime*<br>*Securock*<br><br>*Attachment:*<br>*InvisiWeld* | Membrane:<br>UltraPly TPO<br>Platinum TPO<br><br>Attachment:<br>8 HD Fasteners &<br>Invisiweld Plates<br>per 4′x8′ board<br>Rows: 610mm (24") o.c.<br>Fasteners: 610mm (24") o.c. |
| Steel<br>22 ga.<br>Type B<br>40 ksi<br><br>4.3 kPa<br>(-90psf)<br><br>Report:<br>11800.11.16-2 | Vapor Barrier:<br>V-Force | Insulation:<br>38 mm (1.5") thick<br>ISOGARD GL/ISOGARD CG<br><br>Attachment:<br>InvisiWeld | *Cover Board (Optional):*<br>*6 mm (¼") min.*<br>*DensDeck Prime*<br>*Securock*<br>*-or-*<br>*12mm (½" min.)*<br>*ISOGARD HD*<br><br>*Attachment:*<br>*InvisiWeld* | Membrane:<br>Min. 45 mil.<br>UltraPly TPO<br><br>Attachment:<br>8 HD Fasteners &<br>Invisiweld Plates<br>per 4′x8′ board<br>Rows: 610 mm (24") o.c.<br>Fasteners: 610 mm (24") o.c. |
| Steel<br>22 ga<br>RD938<br>230 MPa<br>(33.4 ksi)<br><br>2.394 kPa<br>(-50 psf)<br><br>Project No:<br>20-06-B0122-3 | Vapor Barrier:<br>V-Force<br>BaseGard SA<br>Polyethylene<br>Kraft paper<br><br>*Thermal Barrier (Optional):*<br>*6mm – 15.9 mm*<br>*(¼" - ⅝") thick*<br>*DensDeck*<br>*DensDeck Prime*<br>*Securock*<br><br>*Attachment:*<br>*Loose Laid* | Insulation:<br>Cover Board Used:<br>Min. 1.5"<br>ISOGARD GL/ISOGARD CG,<br>ISOGARD HG,<br>ISOGARD HD Composite<br><br>No Cover Board:<br>50.8 mm (2") thick,<br>ISOGARD GL/ISOGARD CG,<br>ISOGARD HG<br>ISOGARD HD Composite<br><br>Attachment:<br>6 HD Fasteners and<br>InvisiWeld Plates per 1219 mm x 2438 mm (4′x8′) board | *Cover Board (Optional):*<br>*Min. 6.4 mm (¼")*<br>*Securock, DensDeck or DensDeck Prime*<br>*-or-*<br>*12.7 mm (½") thick*<br>*ISOGARD HD*<br>*-or-*<br>*Min. 11.1 mm (7/16")*<br>*APA rated OSB*<br><br>*Attachment:*<br>*6 InvisiWeld Plates and Heavy Duty Fasteners per 1219 mm x 2438 mm (4′x8′) board* | Membrane:<br>UltraPly TPO<br>Platinum TPO<br><br>Attachment:<br>Welded to InvisiWeld or InvisiWeld-S Plates used to secure insulation. |
| Steel<br>22 ga<br>Y : 33 ksi<br>T : 45 ksi<br><br>3.8 kPa<br>(-80 psf)<br><br>Project No.:<br>EXP/FBPS-211230-01 | Vapor Barrier:<br>V-Force<br>BaseGard SA<br>Polyethylene<br>Kraft paper<br><br>*Thermal Barrier (Optional):*<br>*6 mm – 15.9 mm*<br>*(¼" - ⅝") thick*<br>*DensDeck*<br>*DensDeck Prime*<br>*Securock*<br><br>*Attachment:*<br>*Loose Laid* | Insulation (Top):<br>38 mm – 102 mm<br>(1.5" – 4") thick,<br>ISOGARD GL/ISOGARD CG<br><br>Attachment:<br>(Top):<br>Loose Laid<br><br>Insulation (Bottom):<br>38 mm – 102 mm<br>(1.5" – 4") thick,<br>ISOGARD GL/ISOGARD CG<br><br>(Bottom):<br>Loose Laid | Cover Board:<br>12.7 mm (½") thick<br>ISOGard HD<br>-or-<br>6 mm (¼") min.<br>Securock<br>DensDeck<br>DensDeck Prime<br><br>Attachment:<br>10 HD Fasteners and Plates<br>per 4′x8′ board | Membrane:<br>Min. 60 mil.<br>UltraPly TPO<br>Platinum TPO<br><br>Attachment:<br>3048 mm (10′) row spacing,<br>304.8 mm (12" o.c.)<br>HD Fasteners and Plates |

UltraPly TPO Attached Membrane (Continued)

| | | | | |
|---|---|---|---|---|
| Steel<br>22 ga<br>Y : 33 ksi<br>T : 45 ksi<br><br>4.2 kPa<br>(-87 psf)<br><br>Project No.:<br>EXP/FBPS-001-059 | Vapor Barrier:<br>V-Force<br>BaseGard SA<br>Polyethylene<br>Kraft paper<br><br>*Thermal Barrier (Optional):*<br>*6 mm – 15.9 mm*<br>*(¼" - ⅝") thick,*<br>*DensDeck/DensDeck Prime*<br>*Securock*<br><br>*Attachment:*<br>*Loose Laid* | Insulation (Top):<br>38 mm – 203 mm<br>(1.5" – 4") thick,<br>ISOGARD GL/ISOGARD CG<br><br>Insulation (Bottom):<br>38 mm – 203 mm<br>(1.5" – 4") thick,<br>ISOGARD GL/ISOGARD CG<br><br>Attachment:<br>(Top):<br>8 HD Fasteners<br>per 4'x8' board<br><br>(Bottom):<br>Loose Laid | *Cover Board (Optional):*<br>*12.7 mm (½") thick*<br>*ISOGard HD*<br>*-or-*<br>*6 mm (¼") min.*<br>*Securock*<br>*DensDeck*<br>*DensDeck Prime*<br><br>*Attachment:*<br>*10 HD Fasteners and Plates*<br>*per 4'x8' board* | Membrane:<br>Min. 60 mil.<br>UltraPly TPO<br>Platinum TPO<br><br>Attachment:<br>3048 mm (10') row spacing,<br>152.4 mm (6" o.c.)<br>HD Fasteners and Plates |
| Steel<br>18-22 ga<br>Y: 33 ksi<br>T: 45 ksi<br><br>3.2 kPa<br>(-67 psf)<br><br>Document Numbers: PUB-DRUXXXXXX | Vapor Barrier:<br>V-Force<br>BaseGard SA<br>Polyethylene<br>Kraft paper<br><br>*Thermal Barrier (Optional):*<br>*6 mm – 15.9 mm*<br>*(¼" - ⅝") thick,*<br>*DensDeck/DensDeck Prime*<br>*Securock*<br><br>*Attachment:*<br>*Loose Laid* | Insulation (Top):<br>25 mm – 203 mm<br>(1" – 8") thick,<br>ISOGARD GL/ISOGARD CG<br><br>Attachment (Bottom):<br>Loose Laid<br>Common Fastened | Cover Board:<br>6mm – 15.9mm (¼" - ⅝")<br>thick<br>ISOGARD HD<br>ISOGARD HG<br>Securock<br><br>Attachment:<br>12 HD Fasteners and Plates<br>per 4'x8' boards | Membrane:<br>UltraPly TPO<br>Platinum TPO<br><br>Attachment:<br>UltraPly QuickSeam R.M.A. Strip<br>HD Fasteners and Plates<br>Rows: 72" o.c. (1828 mm)<br>Fasteners: 12" o.c. (305 mm) |
| Steel<br>22 ga<br>Y : 33 ksi<br>T : 45 ksi<br><br>3.8 kPa<br>(-80 psf)<br><br>Project No.:<br>EXP/FBPS-211230-05 | Vapor Barrier:<br>V-Force<br>BaseGard SA<br>Polyethylene<br>Kraft paper<br><br>*Thermal Barrier (Optional):*<br>*6 mm – 15.9 mm*<br>*(¼" - ⅝") thick,*<br>*DensDeck/DensDeck Prime*<br>*Securock*<br><br>*Attachment:*<br>*Loose Laid* | Insulation (Top):<br>38 mm – 102 mm<br>(1.5" – 4") thick,<br>ISOGARD GL/ISOGARD CG<br><br>Insulation (Bottom):<br>38 mm – 102 mm<br>(1.5" – 4") thick,<br>ISOGARD GL/ISOGARD CG<br><br>Attachment:<br>(Top):<br>12 HD Fasteners<br>per 4'x8' board<br><br>(Bottom):<br>Loose Laid | Cover Board:<br>12.7 mm (½") thick<br>ISOGard HD<br>ISOGARD HD Composite<br>-or-<br>6 mm (¼") min.<br>Securock<br>DensDeck<br>DensDeck Prime<br><br>Cover Board Attachment:<br>152.4 mm (6") o.c. beads,<br>Twin Pack Adhesive | Membrane:<br>Min. 60 mil.<br>UltraPly TPO<br>Platinum TPO<br><br>Attachment:<br>3048 mm (10') row spacing,<br>305 mm (12" o.c.)<br>HD Fasteners and Plates |
| Steel<br>22 ga<br>Y : 33 ksi<br>T : 40 ksi<br><br>3.2 kPa<br>(-67 psf)<br><br>Project No.:<br>11800.11.16-1 | Vapor Barrier:<br>V-Force | Insulation:<br>38 mm min. (1.5") thick,<br>ISOGARD GL/ISOGARD CG<br><br>Cover Board Attachment:<br>5 AP Fasteners and Plates<br>per 4'x8' boards | *Cover Board (Optional):*<br>*6 mm (¼") min.*<br>*Securock*<br>*DensDeck Prime*<br><br>*Cover Board Attachment (Optional):*<br>*5 AP Fasteners and Plates*<br>*per 4'x8' boards* | Membrane:<br>Min. 45 mil.<br>UltraPly TPO<br>Platinum TPO<br><br>Attachment:<br>3048 mm (10') row spacing,<br>305 mm (12" o.c.)<br>HD Fasteners and Plates |

| | | | | |
|---|---|---|---|---|
| Steel<br>22 ga<br>T : 40 ksi<br><br>3.1 kPa<br>(-65 psf)<br><br>Document No.:<br>HSP-MARS-4 | Vapor Barrier:<br>V-Force<br>BaseGard SA<br>Polyethylene (Taped)<br>Kraft paper<br><br>*Thermal Barrier (Optional):*<br>*6 mm – 15.9 mm*<br>*(¼" - ⅝") thick,*<br>*DensDeck/DensDeck Prime*<br>*Securock*<br><br>*Attachment:*<br>*Loose Laid* | Insulation:<br>Cover Board Used:<br>Min. 38mm (1.5")<br>ISOGARD GL/ISOGARD CG,<br>ISOGARD HG,<br>ISOGARD HD Composite<br><br>No Cover Board:<br>50.8 mm (2") thick,<br>ISOGARD GL/ISOGARD CG,<br>ISOGARD HG<br>ISOGARD HD Composite<br><br>Attachment:<br>No Cover Board:<br>8 AP Fasteners & Plates<br>per 4′x8′ board | *Cover Board (Optional):*<br>*Min. 6.4 mm (¼")*<br>*Securock, DensDeck or*<br>*DensDeck Prime*<br>*-or-*<br>*12.7 mm (½") thick*<br>*ISOGARD HD*<br>*-or-*<br>*Min. 11.1 mm (7/16")*<br>*APA rated OSB*<br><br>Cover Board Attachment<br>(Optional):<br>8 AP Fasteners and<br>Plates<br>per 4′x8′ boards | Membrane:<br>Min. 45 mil.<br>UltraPly TPO<br>Platinum TPO<br><br>Attachment:<br>1371.6 mm (54″) row<br>spacing,<br>305 mm (12" o.c.)<br>HD Fasteners and Plates |
| Steel<br>22 ga<br>T : 40 ksi<br><br>2.07 kPa<br>(-43.3 psf)<br><br>Document No.:<br>FBP-MARS-3 | Vapor Barrier:<br>V-Force<br>BaseGard SA<br>Polyethylene (Taped)<br>Kraft paper<br><br>*Thermal Barrier (Optional):*<br>*6 mm – 15.9 mm*<br>*(¼" - ⅝") thick,*<br>*DensDeck/DensDeck Prime*<br>*Securock*<br><br>*Attachment:*<br>*Loose Laid* | Insulation:<br>Cover Board Used:<br>Min. 38mm (1.5")<br>ISOGARD GL/ISOGARD CG,<br>ISOGARD HG,<br>ISOGARD HD Composite<br><br>No Cover Board:<br>50.8 mm (2") thick,<br>ISOGARD GL/ISOGARD CG,<br>ISOGARD HG<br>ISOGARD HD Composite<br><br>Attachment:<br>No Cover Board:<br>8 AP Fasteners & Plates<br>per 4′x8′ board | *Cover Board (Optional):*<br>*Min. 6.4 mm (¼")*<br>*Securock, DensDeck or*<br>*DensDeck Prime*<br>*-or-*<br>*12.7 mm (½") thick*<br>*ISOGARD HD*<br>*-or-*<br>*Min. 11.1 mm (7/16")*<br>*APA rated OSB*<br><br>Cover Board Attachment<br>(Optional):<br>8 AP Fasteners and<br>Plates<br>per 4′x8′ boards | Membrane:<br>Min. 45 mil.<br>UltraPly TPO<br>Platinum TPO<br><br>Attachment:<br>2895.6 mm (114″) row<br>spacing,<br>305 mm (12" o.c.)<br>HD Fasteners and Plates |
| **Deck Type & Uplift** | **Vapor Barrier/ Thermal Barrier** | **Insulation and Attachment** | **Cover Board and Attachment** | **Membrane and Attachment** |
| Steel<br>22 ga<br>Type B<br>Yield Strength:<br>275 MPa (40 ksi)<br><br>**Passing Pressure:**<br>135 psf (6.5 kPa)<br><br>**Wind Uplift Resistance (Resistance Factor 0.65):**<br>90 psf (4.3 kPa)<br><br>**Document Number:**<br>HSP-MARS-5<br>**Test Panel Number:**<br>HSP-D2 | Vapor Barrier:<br>V-Force (Self-Adhered)<br>BaseGard SA (Self-Adhered)<br>6-mil Polyethylene<br>Kraft paper<br><br>*Thermal Barrier (Optional):*<br>*6 mm – 15.9 mm*<br>*(¼" - ⅝") thick,*<br>*DensDeck*<br>*DensDeck Prime*<br>*Securock*<br><br>*Attachment:*<br>*Loose Laid*<br>*Adhered*<br>*Mechanically Attached* | Insulation:<br>Top Layer min. 38.1 mm<br>(1.5") thick,<br>4′x 8′ boards<br>ISOGARD GL/ISOGARD CG;<br>ISOGARD HG;<br>ISOGARD HD Composite<br><br>*Attachment with optional*<br>*Cover Board:*<br>*Loose Laid*<br><br>Attachment:<br>12 HD Fasteners and<br>InvisiWeld Plates<br>per 4′x8′ board | *Cover Board (Optional):*<br>*Min. 6.35 mm (¼") thick,*<br>*4′x4′ boards*<br>*DensDeck Prime*<br>*Securock*<br>*OR*<br>*1/2" ISOGARD HD*<br>*OR*<br>*7/16" APA Rated OSB*<br><br>*Attachment:*<br>*12 HD Fasteners and*<br>*InvisiWeld Plates*<br>*per 4′x8′ board* | Membrane:<br>Min. 45 mil.<br>UltraPly TPO<br>Platinum TPO |

UltraPly TPO Attached Membrane (Continued)

| | | | | |
|---|---|---|---|---|
| Steel<br>22 ga<br>Type B<br>Yield Strength:<br>275 MPa (40 ksi)<br><br>**Passing Pressure:**<br>188 psf (9.0 kPa)<br><br>**Wind Uplift Resistance (Resistance Factor 0.65):**<br>125 psf (5.9 kPa)<br><br>**Document Number:**<br>HSP-MARS-6<br>**Test Panel Number:**<br>HSP-D3 | Vapor Barrier:<br>V-Force (Self-Adhered)<br>BaseGard SA (Self-Adhered)<br>6-mil Polyethylene<br>Kraft paper<br><br>*Thermal Barrier (Optional):*<br>*6 mm – 15.9 mm*<br>*(¼" - ⅝") thick,*<br>*DensDeck*<br>*DensDeck Prime*<br>*Securock*<br><br>*Attachment:*<br>*Loose Laid*<br>*Adhered*<br>*Mechanically Attached* | Insulation:<br>Top Layer min. 38.1 mm<br>(1.5") thick,<br>4′x 8′ boards<br>ISOGARD GL/ISOGARD CG;<br>ISOGARD HG;<br>ISOGARD HD Composite<br><br>*Attachment with optional Cover Board:*<br>*Loose Laid*<br><br>Attachment:<br>20 HD Fasteners and<br>InvisiWeld Plates<br>per 4′x8′ board | *Cover Board (Optional):*<br>*Min. 6.35 mm (¼") thick,*<br>*4′x4′ boards*<br>*DensDeck Prime*<br>*Securock*<br>*OR*<br>*1/2" ISOGARD HD*<br>*OR*<br>*7/16" APA Rated OSB*<br><br>*Attachment:*<br>*20 HD Fasteners and InvisiWeld Plates per 4′x8′ board* | Membrane:<br>Min. 45 mil.<br>UltraPly TPO<br>Platinum TPO |

This guide is meant to highlight Elevate products and specifications provided by Amrize Building Envelope Canada, a division of Amrize Canada, Inc. (Amrize) and is subject to change without notice. Amrize takes responsibility for furnishing quality materials which meet published Elevate product specifications or other technical documents, subject to normal roof manufacturing tolerances. Neither Amrize nor its representatives practice architecture. Amrize offers no opinion on and expressly disclaims any responsibility for the soundness of any structure. Amrize 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 Amrize representative is authorized to vary this disclaimer.