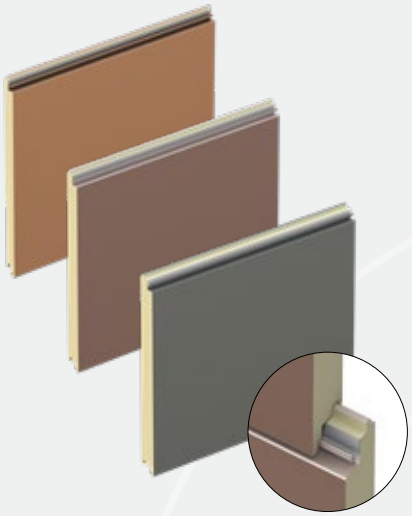
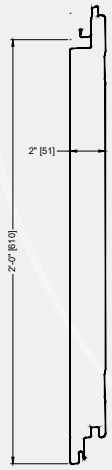
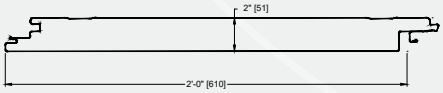
# FORMAWALL FWDS®
## TECHNICAL DATA SHEET



## DESCRIPTION

Formawall Dimension Series panels provide a modern, monolithic appearance to the building facade. This system works as a single component to provide all necessary building control layers along with an outstanding aesthetic. Formwall Dimension Series panels integrate easily with our window, louver and sunshade systems to provide a complete building envelope system. This system provides an uninterrupted appearance in horizontal and vertical applications with concealed clips, fasteners, sealants and the standard Insulated Metal Vertical (IMV) joint.




## GENERAL DESIGN OPTIONS

| | FORMAWALL DIMENSION SERIES | | |
|---|---|---|---|
| PANEL THICKNESS | 2" [51mm], 2½" [64mm], 3"-T [76mm] | | |
| PANEL MODULE | 24" [610mm], 30" [762mm], 36" [914mm]<br>Custom Modules: 10" [254mm] - 40" [1016mm] | | |
| PANEL CORE | Red List-free, Foamed-in-placed polyisocyanurate (PIR) | | |
| THERMAL VALUES * | | R Value | U Factor |
| | 2" | R- 16.0 | 0.069 |
| | 2½" | R- 20.1 | 0.056 |
| | 3"-T | R- 24.1 | 0.045 |
| END JOINT | 5/8" Insulated Metal Vertical (IMV) Joint<br>(Optional: 1", 2", 3" IMV or 5/8" Gasket) | | |
| SIDE LAP | Double tongue and groove | | |
| SIDE LAP REVEAL | ½" Horizontal<br>⅛" Vertical | | |
| | Optional Reveal: ¼", 1" to 6" in ½" increments | | |
| STANDARD PANEL LENGTHS | Embossed | Flat - 5' [1.52m] - 37' [11.3m] | |
| | | Striated - 5' [1.52m] - 37' [11.3m] | |
| | Smooth | Flat - 5' [1.52m] - 16' [4.9m] | |
| | | Striated - 5' [1.52m] - 20' [6.1m] | |
| | 304 Stainless | Flat - 5' [1.52m] - 16' [4.9m] | |
| STANDARD EXTERIOR FACE & GAUGE | 22 ga. Embossed, Flat | | |
| OPTIONAL EXTERIOR FACE & GAUGE | 20 ga. Embossed, Flat,<br>20, 22, 24 ga. Embossed, Striated,<br>20, 22 ga. Smooth, Flat or Striated | | |
| STANDARD INTERIOR LINER & GAUGE | 26 ga. Embossed, Planked | | |
| OPTIONAL INTERIOR LINER & GAUGE | 20, 22 ga. Embossed, Planked<br>20, 22 ga. Embossed, Flat<br>20, 22 ga. Smooth, Planked | | |
| WEIGHTS | 2" | 2.72-4.57 lbs./sq. ft. | |
| | 2½" | 2.88-4.81 lbs./sq. ft. | |
| | 3"-T | 3.03-5.06 lbs./sq. ft. | |

### Special Approvals

- CCRR Intertek Code Compliance Research Report (Intertek CCRR-0276)
- Florida Product Approval HVHZ (Miami-Dade NOA) (Approval No. FL20381 and FL31378)
- Florida Product Approval non-HVHZ (Approval No. FL31378)

## DESIGN FEATURES & BENEFITS

- May be installed horizontally or vertically and is available in a variety of reveals, thicknesses and profiles
- Concealed clips, fasteners and sealants, combined with Insulated Metal Vertical (IMV) Joints, provide an uninterrupted appearance in horizontal applications
- Pressure-equalized side joint to help prevent water infiltration
- Pressure-equalized end joint available with optional Seal Plate
- Unlike laminated insulated metal panels, Formawall Dimension Series is factory foamed in-place, minimizing the potential for gaps within the panel
- Can be integrated with other Formawall profiles to create unique looks

## FORMAWALL DIMENSION SERIES TESTING

| TEST | TEST METHOD | TEST TITLE | RESULTS |
|---|---|---|---|
| FIRE US | ASTM E84 | Surface Burning Characteristics of Building Materials | Flame Spread <20<br>Smoke Development <250 |
| | ASTM E119/UL 263 | Fire Tests of Building Construction and Materials | See UL Fire Resistance Directory for tested assemblies |
| | NFPA 259 | Standard Test Method for Potential Heat of Building Materials | Potential heat of foam plastic insulation contained in the assembly tested in accordance with NFPA 285 |
| | NFPA 285 | Evaluation of Fire Propagation Characteristics of Exterior Non-Load Bearing Wall Assemblies | Various tested assemblies meet the requirements of the standard |
| | NFPA 268 | Standard Test Method for Determining Ignitibility of Exterior Wall Assemblies Using a Radiant Heat Energy Source | Assembly tested meets the requirements of the standard |
| | FM 4880 | Class 1 Fire Rating of Insulated Wall, Ceiling and Roof Panels | See FM Approval Listings |
| | FM 4882 | Class 1 Interior Wall and Ceiling Materials for Smoke Sensitive Occupancies | See FM Approval Listings |
| FIRE CANADA | CAN/ULC S101 | Standard Methods of Fire Endurance Tests of Building Construction and Materials | Meets 10 minute stay-in-place requirements |
| | CAN/ULC S102 | Standard Method of Test for Surface Burning Characteristics of Building Materials and Assemblies | Flame spread rating- 30<br>Smoke developed classification- 235 |
| | CAN/ULC S134 | Standard Method of Fire Test of Exterior Wall Assemblies | Assembly tested meets the requirements of the standard |
| STRUCTURAL | ASTM E72 | Standard Test Methods of Conducting Strength Tests of Panels for Building Construction | See Span Tables |
| | FM 4881 | Class 1 Exterior Wall Structural Performance | See FM Approval Listings (VSH Rating) |
| THERMAL PERFORMANCE | ASTM C518 | Steady-State Thermal Transmission Properties by Means of the Heat-Flow Meter Apparatus* | 2" R Value = R-16.0<br>2½" R Value = R-20.1<br>3" R Value = R-24.1 |
| | ASTM C1363 | Thermal Performance of Building Materials and Envelope Assemblies | 2" U Factor = 0.069<br>2½" U Factor = 0.056<br>3" U Factor = 0.045 |
| AIR INFILTRATION | ASTM E283 | Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors | < 0.01 cfm/ft2 air infiltration rate at static pressure differential of 6.24 psf |
| WATER INFILTRATION | ASTM E331 | Water Penetration of Exterior Windows, Skylights, Doors and Curtain Walls by Uniform Static Air Pressure Difference | No uncontrolled water penetration at static pressure differential of 6.24 psf for 2 hours (IBC Section 1402) and 15 psf for 15 minutes |
| | AAMA 501.1 | Standard Test Method for Water Penetration of Exterior Walls Using Dynamic Pressure | No leakage at a dynamic pressure of 15 psf for 15 minutes |

* R-Value based upon ASTM C518 at 35 degrees and U-Factor based upon ASTM C1363 at 35 degree

## NOTES

A. For information on special applications, contact your local CENTRIA Sales Representative.
B. Maximum support spacing and panel length may be limited for medium and dark colors due to thermal stress, consult CENTRIA.
C. Length limitations may vary based on color. Contact CENTRIA for details.