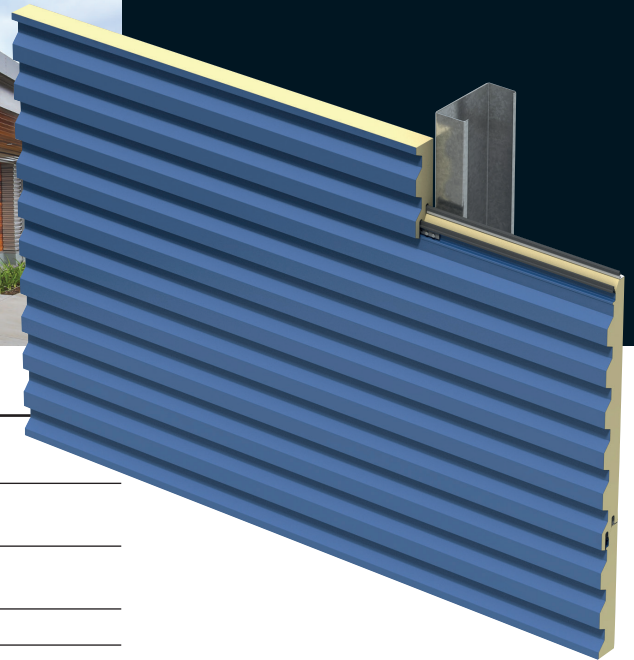


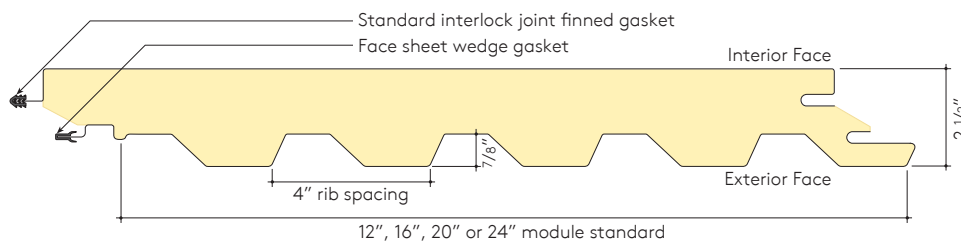
Designwall R Series Data Sheet

Insulated Wall Panel System



Product Specification

| | |
|---------------------|--|
| Profile: | Exterior: Ribbed Interior: Flat |
| Embossing: | Exterior: Stucco or non-embossed Interior: Stucco or non-embossed |
| Gauge: | Exterior: 22 ga Interior: 24, 22 ga |
| Width: | 12", 16", 20", 24" |
| Thickness: | 2.5", 3", 4" |
| Length: | 4" - 24' |
| Reveal option: | N/A |
| Orientation: | Vertical or horizontal |
| Post fabrication: | Transverse bends, end caps |
| R-value: | ≈ 7 per inch based on low cell thickness per ASTM C1363 |
| Fabrication method: | Structurally bonded |



Designwall R Series, a profiled, accent version of BENCHMARK Designwall 2000 with ribs at 7/8" deep. The asymmetrical profile is designed for horizontal or vertical application. The R Series panel adds a bold, profiled look to commercial construction. Designwall R Series interfaces and engages with other Designwall horizontal panel profiles.

All panel thickness options engage with BENCHMARK Flushglaze 4500 and 7500 integral window system as well as BENCHMARK integrated louver system.

Various profile options are available. Please consult your Regional Sales Manager.

Designwall R Series Data Sheet

Insulated Wall Panel System

| Test | Procedure | Results | |
|----------------------|---|---|----------------|
| Flammability | FM-4880 | Passed: Class 1 Fire Rating of Insulated Wall or Wall and Roof / Ceiling Panels, Interior Finish Materials or Coatings, and Exterior Wall Systems 2" thru 6" | |
| | ASTM E84 | Flame spread <25, smoke developed <450 | |
| | CAN /ULC-S102 | Flame spread: 20, Smoke developed: 145 for panel with facings | |
| | CAN /ULC-S127 | Flame spread: 435 for foam core | |
| | CAN /ULC-S134 | Passed: standard method of test for fire of exterior wall assemblies | |
| | UL 263 | Classified as component of 1 hr, 2 hr, or 3 hr fire-rated wall assembly | |
| | NFPA 285 | Passed: standard fire test method for evaluation of fire propagation characteristics of exterior non-load-bearing wall assemblies containing combustible components in multi-story applications | |
| | NFPA 268 | Passed: standard test method for determining ignitability of exterior wall assemblies using a radiant heat energy source | |
| | NFPA 259 | Tested for potential heat of building materials 12,448 BTU/lb | |
| Structural | FM-4881 | Passed: Class +65 / -91 Zone TC | |
| | ASTM E72 | Vacuum chamber tested. Panel load / span and deflection tables are available | |
| | TAS 201,202,203 | Testing to +/- 80 psf on 36" wide panels | |
| Blast Loading | ASTM F1642 or GSA-TS01 | Panels installed on metal stud system shall be tested to withstand a minimum shock load of 6 psi peak pressure and 42 psi-msec impulse pressure | |
| Thermal Transmission | ASTM C518 or ASTM C1363 | Thermal Performance at 75° | |
| | | Thickness | R-Value |
| | | 2.5 | 11 |
| | | 3 | 14 |
| 4 | 22 | | |
| Air Infiltration | ASTM E283 | 0.01 CFM/ft ² of panel area at 20 psf | |
| Water Penetration | ASTM E331 | No uncontrolled water penetration at 70 psf differential pressure. No water penetration at 6.24 psf pressure differential for a two (2) hour duration | |
| | AAMA 501.1 | Dynamic water pressure testing – no sign of water leakage at 15 psf | |
| Water Absorption | ASTM C209 | No more than 0.127 percent water absorption by volume under 24-hour full water submersion | |
| Fatigue | Cyclic test to positive and negative wind loading to ± 20 psf | The panels exceeded 2 million alternate cycles without failure or damage | |
| Bond Strength | Autoclave | Sample placed in an autoclave device and pressurized to 2 PSI at 217°F for 2 1/2 hrs | |
| | Humid aging | No metal primer interface corrosion and/or delamination shall occur after 1000 hours at 135°F and 100 percent relative humidity | |
| Regional Approvals | Miami-Dade Listing | N.O.A. # 16-0329.09 (expires 05/18/2022) | |
| | City of Lost Angeles | LARR #26046 | |
| | UL Canada Listing | File # R19992 | |
| | Intertek Listing | CCRR Report #1037 | |
| | Florida Product Approval | FL 20453.1-R1 | |

BENCHMARK by Kingspan

Columbus, OH: (614) 444-0110 Modesto, CA (209) 531-9091

www.kingspanpanels.com

For the product offering in other markets please contact your local sales representative or visit www.kingspanpanels.com

Care has been taken to ensure that the contents of this publication are accurate, but Kingspan Limited and its subsidiary companies do not accept responsibility for errors or for information that is found to be misleading. Suggestions for, or description of, the end use or application of products or methods of working are for information only and Kingspan Limited and its subsidiaries accept no liability in respect thereof.