

Arcwall[™] Advanced

Pressure-Equalized Rainscreen Wall System

Arcwall Advanced is a high-performance pressure-equalized rainscreen wall system made from formed aluminum or stainless plate that provides highly advanced water management capabilities.

The system achieves tested and certified AAMA 508-07 performance for nearly instantaneous pressure equalization between the exterior and interior of the wall cladding, significantly dampening capillary action created by negative pressure and vapor drive from exterior to interior. Additionally, where required, the system compartmentalizes the drained and back-ventilated wall cavity to baffle lateral air flow, a key principle of pressure-equalized rainscreen design.

Arcwall Advanced features a dry-joint design and may be installed in horizontal orientation over continuous masonry, concrete, studs/sheathing, or as the outer cladding in a wall assembly that incorporates continuous insulation and a suitable air and water barrier to achieve AAMA 508-07 performance.



DETAILS

- AAMA 508-07 certified
- Manufactured from solid aluminum or stainless plate with integral panel returns formed from a single piece of metal
- Solid aluminum and stainless steel: high resistance to denting and puncturing, ideal for high-traffic or abusive areas
- Fully mitered and welded corners ground smooth for seamless appearance
- 0.625" (15.88 mm) standard horizontal and vertical joint with variable options
- Adjustable furring to address variable construction tolerances and ensuring vertical sealing to air and water barrier
- Non-Combustible: minimal smoke or fuel contribution
- Avoids NFPA 285 complications by avoiding thermo-plastic cores
- All panel systems are reinforced/stiffened to resist deflection limits
- Vertical gasketed gutter extrusions and integrated horizontal gutters to drain moisture to the exterior
- · Panels install horizontally
- · Cavity compartmentalization option
- Concealed fastened using corrosion-resistant self-tapping screws

- · Aluminum: post-applied finishing for long-term performance and uniform aesthetic
- As rainscreen systems rely on gravity to drain water, all skyward facing surfaces, copings, sloped conditions and all perimeters must be sealed
- 100% recyclable with high percentage of post-consumer and industrial content, which may contribute to LEED credits

DESIGN OPTIONS

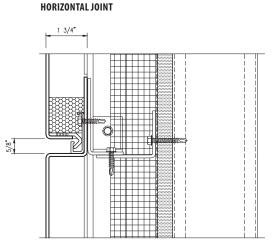
- Panels may be flat, curved, or custom 3D profiles
- Unlimited color options for aluminum plate
- Options for #4, #6, #8, and non-directional finishes for stainless plate
- Matching perforated and louvered panels
- Available shop-applied appliqués for accents
- May also be used for column, beam and pilaster cladding
- Optional back-cuts on formed panel edges for a sharper bend and crisper appearance

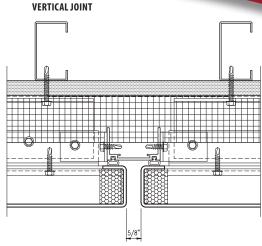


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METAL SUBSTRATE AND FINISH OPTIONS

ALUMINUM

3003-H14 aluminum alloy-temper

Thickness: 0.125" (3.18 mm) standard and 0.188" (4.78 mm) option **Finishes:** Kynar®, architectural TGIC polyester powder coating or anodized

STAINLESS STEEL

T304 or T316

Thickness: 14 gauge (0.078") (1.98 mm) standard and

12 gauge (0.109") (2.78 mm) option

Finishes: #4, #6, #8, and non-directional satin in smooth or

custom embossed patterns

PANEL SIZES

Widths: 12" (305 mm) to 65" (1,651 mm)* **Lengths:** 12" (305 mm) to 160" (4,064 mm)*

Depth: 3.75" (95.25 mm) minimum

PANEL WEIGHT RANGE

(dependent upon gauge and geometry)

Aluminum: 2.62 - 3.52 lbs./ft² **Stainless Steel:** 4.64 - 5.913 lbs./ft²

Ranges provided for clarification. Consult with Metalwerks for further options.

ACCESSORIES

Flashing: 0.040" (1.02 mm) to 0.063" (1.60 mm) aluminum

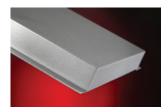
Coping: May be produced with the same material as the wall panel system

Furring Channels: As required for proper mounting of panels

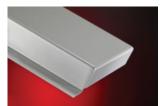
Fasteners: Type 304 stainless steel or cadmium-plated as recommended

Shims: High impact thermally-broken plastic shims to maintain co-planar surfaces

SHARP CORNER



STANDARD CORNER



TESTING

AAMA 508-07 Voluntary Test Method and Specification for Pressure Equalized Rainscreen Wall Cladding Systems, including:

Air Infiltration - ASTM E 283-04

Testing conducted at 1.57 psf positive static air pressure difference Passed at 0.12 cfm/ft. (0.13 allowed)

Cyclic Static Air Pressure - ASTM 1233-06

Testing conducted at 25.0 psf in 100 three-second cycles

Passed at < .08 seconds

Static Pressure Water Resistance - ASTM E331-00

Testing conducted at 15.05 psf positive static air pressure difference Passed at 0.31 ft² (3.2 ft² allowed)

Dynamic Pressure Water Resistance - AAMA 501.1-05

Testing conducted with dynamic pressure equivalent of 15.05 psf for a 15 minute duration

Passed at 0.73 ft² (3.2 ft² allowed)

Structural - ASTM E 330

Used for applying loads between tests

WARRANTY

Material & Workmanship: 1-year standard, with 2- or 5-year options **Finish Integrity:** 10-year standard and up to 20-year for coated aluminum

^{*} Maximum panel size depends upon plate material, gauge, finish, and geometry