



QuickPanel®
Systems

SUBMITTAL PACKAGE

STREAMLINE & REVEAL SERIES

February 2026

ENGAGE
BUILDING PRODUCTS

QuickPanel® System – Pressure-Equalized Rainscreen System

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3. SYSTEM OVERVIEW & PRODUCT IDENTIFICATION

QuickPanel® System – Pressure-Equalized Rainscreen System

SYSTEM OVERVIEW

The QuickPanel® Aluminum Panel System is a factory-fabricated exterior wall cladding solution engineered for commercial, institutional, and residential construction. The system combines aluminum composite or solid aluminum panels with concealed attachment components, coordinated trims, and accessories to deliver a complete, pressure-equalized rainscreen assembly.

QuickPanel® systems are designed for installation over approved wall assemblies and continuous air/water barriers. An integrated drained and ventilated cavity supports moisture management, pressure equalization, and long-term durability of the building envelope while maintaining clean lines and precise panel alignment.

The system accommodates thermal movement and building tolerances without exposed fasteners, preserving a refined exterior appearance across a wide range of building types.

QuickPanel® is available in two distinct architectural expressions within a single system family:

Reveal Series

Features a defined joint condition that emphasizes panel rhythm and depth through expressed reveals.

Streamline Series

Provides a flush, minimal joint aesthetic with a continuous, monolithic appearance.

Both series utilize common panel materials, performance characteristics, and accessories, while employing series-specific profiles and trims to achieve the desired joint expression.

SYSTEM COMPONENTS (SUMMARY)

Aluminum Composite Material (ACM) Panels or Solid Aluminum Plates
Series-Specific Aluminum Extrusions and Trims
Concealed Attachment Components
Coordinated Flashings and Terminations
System Accessories and Fasteners

SUBMITTAL PACKAGE INCLUDES

System overview and product identification
Series-specific profile legends
Typical installation details
Performance data and testing documentation

ARCHITECTURAL NOTE

QuickPanel® systems are designed to provide flexibility in joint expression while maintaining consistent performance and constructability across both series.

3.1 PANEL SYSTEM INFORMATION

QuickPanel® System – Pressure-Equalized Rainscreen System



5'X16' 4MM PANEL TYPE

Aluminum Composite Material panel consisting of two aluminum skins bonded to a polyethylene or fire-rated core. Lightweight with excellent flatness and finish consistency.

Commercial facades, feature walls, soffits, architectural cladding.

Advantages:

Lightweight
Excellent flatness
Easy fabrication
Cost-effective
Available in numerous colors and finishes

Nominal Thickness: 4 mm (0.157")

Applicable Standards:

- ASTM E330
- ASTM E331
- ASTM E84
- ASTM E119
- ASTM D1781
- ASTM D1929
- ASTM D635
- CAN/ULC-S102
- CAN/ULC-S134
- NFPA 285
- AAMA 508-21
- AAMA 2604 / 2605



5'X16' 3MM PANEL TYPE

Single-piece solid aluminum plate offering enhanced durability, impact resistance, and non-combustible construction.

High-rise construction, institutional buildings, areas requiring.

Advantages:

Non-combustible
High impact resistance
Excellent durability
Superior rigidity
Suitable for demanding applications

Nominal Thickness: 3 mm (0.118")

Applicable Standards:

- CAN/ULC-S114
- ASTM E330
- ASTM E331
- ASTM D1781
- ASTM D1929
- ASTM D6578
- AAMA 508-21
- AAMA 2604 / 2605

4. SUBMITTAL FORM



QuickPanel® System – Pressure-Equalized Rainscreen System

Date	Date Due	Project Name
To	From	Subcontractor

Key #	Description:

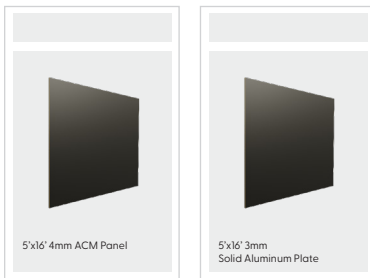
Notes:

Submitted by	Signature
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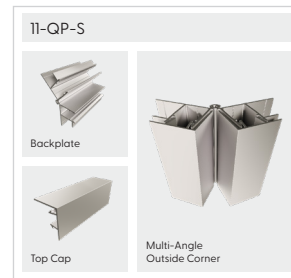
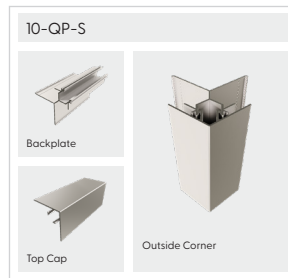
5. STREAMLINE PROFILE LEGEND

QuickPanel® System – Pressure-Equalized Rainscreen System

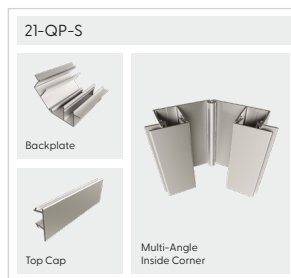
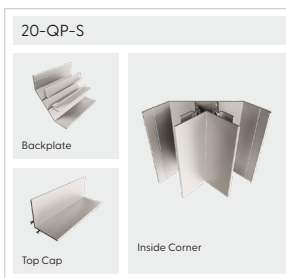
Panels



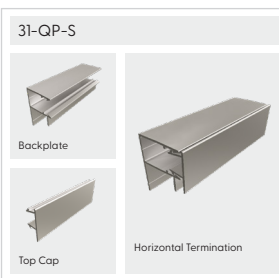
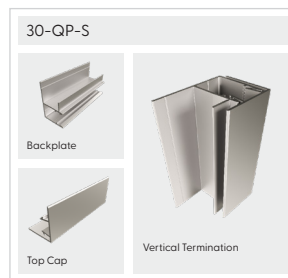
10 Series - Outside Corners



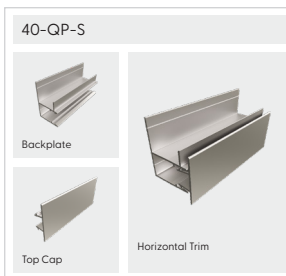
20 Series - Inside Corners



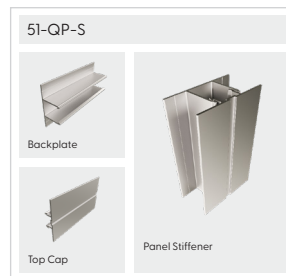
30 Series - Terminations



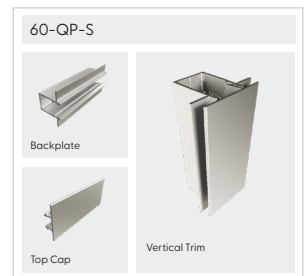
40 Series - Horizontal Trims



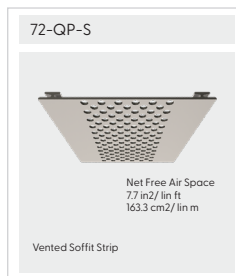
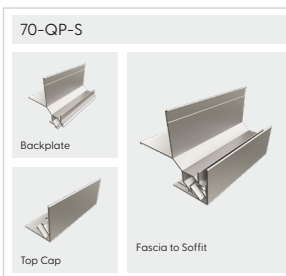
50 Series - Panel Spacer & Stiffener



60 Series - Vertical Trims



70 Series - Fascia & Soffit Trims

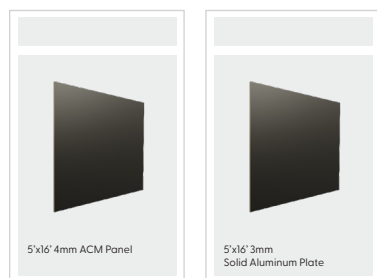


Profiles shown are representative. Verify final selection per approved shop drawings.
*Special order, lead times may vary.

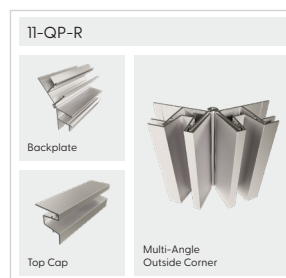
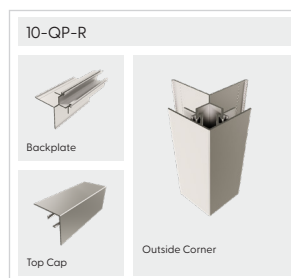
5.1 REVEAL PROFILE LEGEND

QuickPanel® System – Pressure-Equalized Rainscreen System

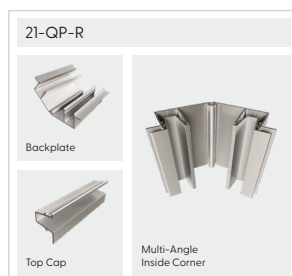
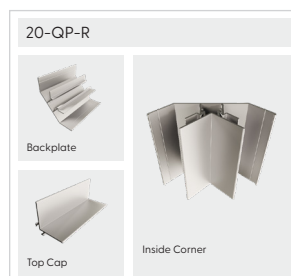
Panels



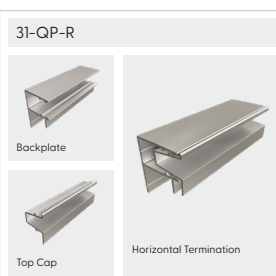
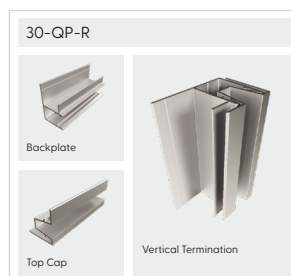
10 Series - Outside Corners



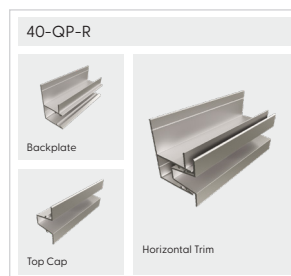
20 Series - Inside Corners



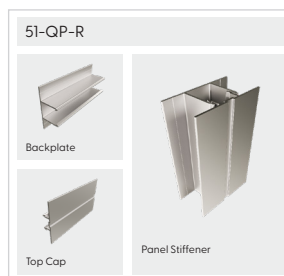
30 Series - Terminations



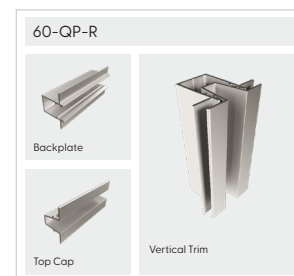
40 Series - Horizontal Trims



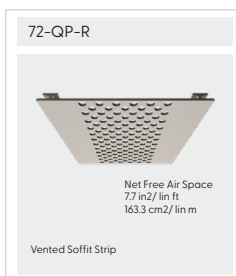
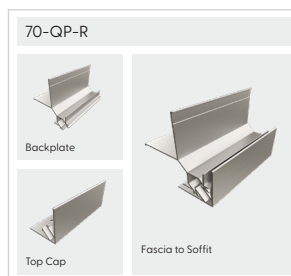
50 Series - Panel Spacer & Stiffener



60 Series - Vertical Trims



70 Series - Fascia & Soffit Trims



Profiles shown are representative. Verify final selection per approved shop drawings.
*Special order, lead times may vary.

6. QUICKPANEL REVEAL CUT SHEET

QuickPanel® System – Pressure-Equalized Rainscreen System

QuickPanel® Reveal Series™ is a factory-fabricated aluminum panel rainscreen system featuring expressed panel joints for a crisp, articulated façade. The system consists of aluminum composite material (ACM) or solid aluminum panels, extruded aluminum backplates and top caps, concealed attachment components, and coordinated trims designed to manage thermal movement and moisture drainage.

FINISH OPTIONS

STANDARD FINISHES



POWDER PERFECT SERIES

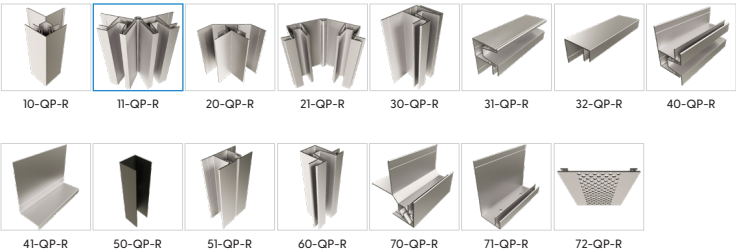


CUSTOM COLOR WITH COLORMATCH®



Special Order and Custom Colors: lead time varies depending on project specifics and needs.

QUICKPANEL® REVEAL SERIES TRIM SYSTEM PROFILES



PANEL OPTIONS



ACM Panels
Size: 5' x 16'
Thickness: 4 mm
Fire-resistant mineral core



Solid Aluminum Panels
Size: 5' x 16'
Thickness: 3 mm

FASTENERS



3/4" Metal Screw



2" Metal Screw



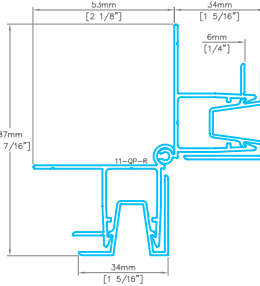
2" Wood Screw

Refer to individual profile cut sheets for detailed dimensions and tolerances.

INSTALLATION



For additional technical specifications, detailed profiles, and expanded system information, scan the QR code. Installation guidance is provided in the QuickPanel® Installation Guide. DWG files are available at www.engagebp.com

PRODUCT	DOCUMENT	CATEGORY
QuickPanel® Reveals	Spec Sheet	Reveal Trim
 11-QP-A: MULTI-ANGLE OUTSIDE CORNER		
TECHNICAL SPECIFICATIONS		
PHYSICAL DATA		
System Type	Pressure-equalized, back-ventilated aluminum rainscreen cladding system	
Attachment Platform	6063-T6 extruded aluminum back-plate and perimeter framing system	
Extrusion Gauge	16–15 ga (as required by design load and configuration)	
Panel Materials	· 4 mm Aluminum Composite Material · 3 mm Solid Aluminum Plate	
Panel Thickness	4 mm (0.157 in) ACM	
Warranty	· 30-Year Product Warranty (ACM) · 20-Year Product Warranty (Solid Plate) · 20–30 Year Finish Warranty per AAMA 2604/2605	
Finish Options	High-performance PVDF or FEVE fluoropolymer coatings (AAMA 2605)	
Length	Custom fabricated to project requirements	
Weight (lbs/sqft)	Approx. 1.6 lb/ft² (7.8 kg/m²)	
Alloy Standard	ASTM B209 / B221 – Aluminum 6063-T6	
Manufacture	Fabricated, assembled, and finished under factory-controlled conditions	
TESTING		
Structural Performance	ASTM E330 – Uniform Static Air Pressure Difference	
Air Infiltration	ASTM E283	
Water Penetration	ASTM E331 – Static Pressure Water Test	
Pressure-Equalized Rainscreen	AAMA 508 – Voluntary Test Method	
Bond Integrity (ACM)	ASTM D1781 – Climbing Drum Peel	
Ignition Temperature	ASTM D1929	
Graffiti Resistance	ASTM D6578	
Fire Resistance (ACM Assemblies)	NFPA 285	
Non-Combustibility (Solid Plate)	CAN-ULC S114 – Determination of Non-Combustibility	
Surface Burning Characteristics	ASTM E84 / CAN-ULC S102 – Flame Spread ≤ 25	
Finish Performance	AAMA 2604 / 2605 – Organic Coatings on Aluminum Panels	
Impact Resistance	ASTM D4226 / TAS 201 – Impact Test (where applicable)	
Building-Code Compliance	2024 IBC / IRC	

6.1 QUICKPANEL STREAMLINE CUT SHEET



QuickPanel® System – Pressure-Equalized Rainscreen System

QuickPanel® Streamline Series™ is a factory-fabricated aluminum panel rainscreen system designed to deliver a smooth, flush panel appearance with minimal visual interruption. Precision extruded aluminum trims and concealed attachment components create a refined, monolithic façade while accommodating thermal movement and moisture management.

FINISH OPTIONS

STANDARD FINISHES



POWDER PERFECT SERIES

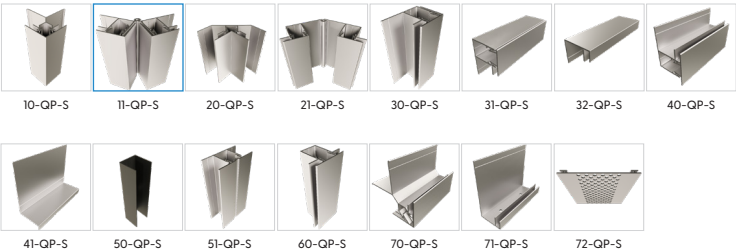


CUSTOM COLOR WITH COLORMATCH®



Special Order and Custom Colors: lead time varies depending on project specifics and needs.

QUICKPANEL® STREAMLINE SERIES TRIM SYSTEM PROFILES



PANEL OPTIONS



ACM Panels
Size: 5' × 16'
Thickness: 4 mm
Fire-resistant mineral core



Solid Aluminum Panels
Size: 5' × 16'
Thickness: 3 mm

FASTENERS



Refer to individual profile cut sheets for detailed dimensions and tolerances.

INSTALLATION



For additional technical specifications, detailed profiles, and expanded system information, scan the QR code. Installation guidance is provided in the QuickPanel® Installation Guide. DWG files are available at www.engagebp.com.

PRODUCT

QuickPanel® Streamline

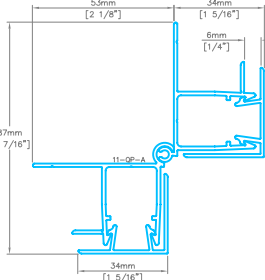
DOCUMENT

Spec Sheet

CATEGORY

Streamline Trim





11-QP-A: MULTI-ANGLE OUTSIDE CORNER

TECHNICAL SPECIFICATIONS

PHYSICAL DATA

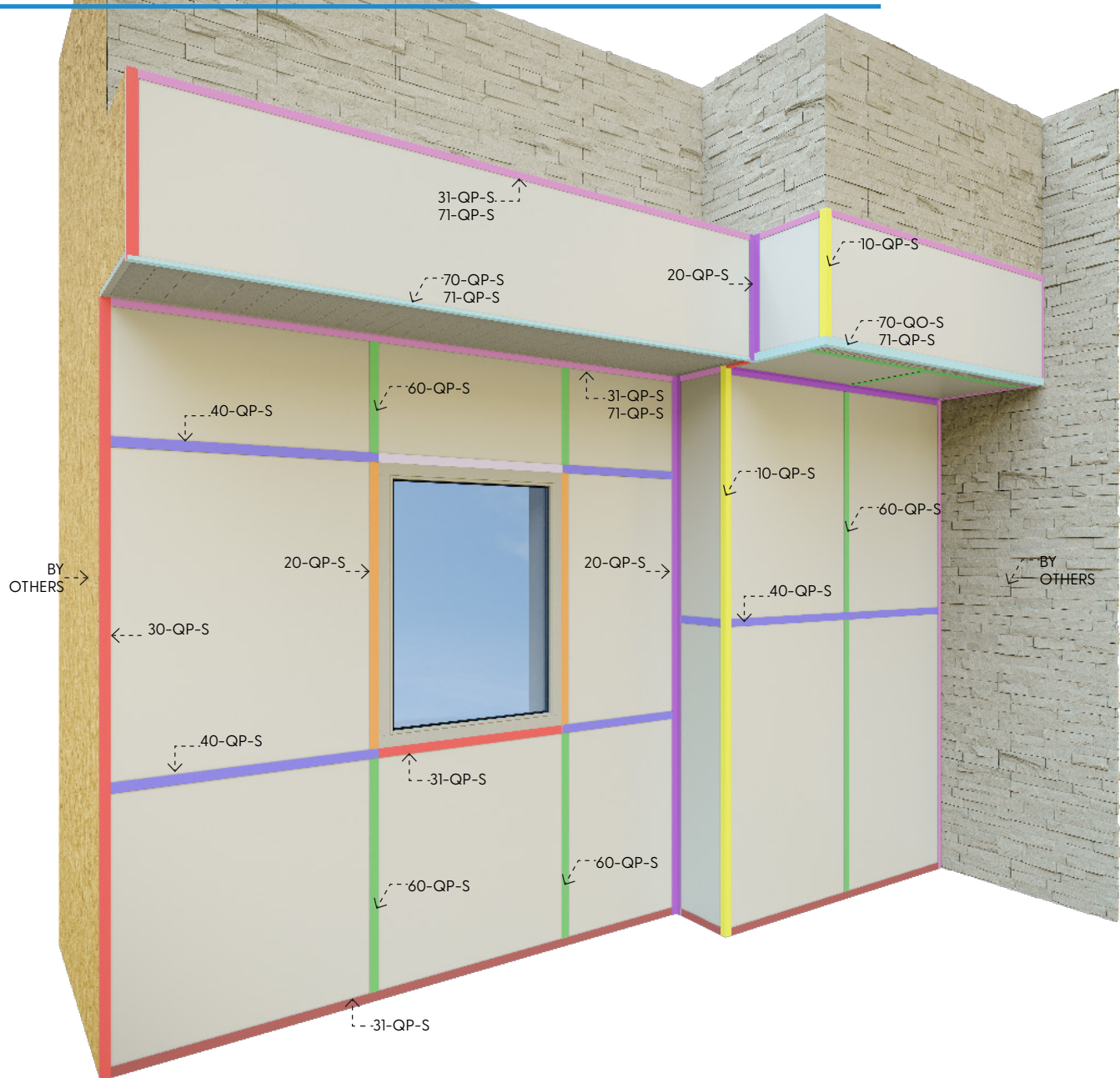
System Type	Pressure-equalized, back-ventilated aluminum rainscreen cladding system
Attachment Platform	6063-T6 extruded aluminum back-plate and perimeter framing system
Extrusion Gauge	16–15 ga (as required by design load and configuration)
Panel Materials	· 4 mm Aluminum Composite Material · 3 mm Solid Aluminum Plate
Panel Thickness	4 mm (0.157 in) ACM
Warranty	· 30-Year Product Warranty (ACM) · 20-Year Product Warranty (Solid Plate) · 20–30 Year Finish Warranty per AAMA 2604/2605
Finish Options	High-performance PVDF or FEVE fluoropolymer coatings (AAMA 2605)
Length	Custom fabricated to project requirements
Weight (lbs/sqft)	Approx. 1.6 lb/ft² (7.8 kg/m²)
Alloy Standard	ASTM B209 / B221 – Aluminum 6063-T6
Manufacture	Fabricated, assembled, and finished under factory-controlled conditions

TESTING

Structural Performance	ASTM E330 – Uniform Static Air Pressure Difference
Air Infiltration	ASTM E283
Water Penetration	ASTM E331 – Static Pressure Water Test
Pressure-Equalized Rainscreen	AAMA 508 – Voluntary Test Method
Bond Integrity (ACM)	ASTM D1781 – Climbing Drum Peel
Ignition Temperature	ASTM D1929
Graffiti Resistance	ASTM D6578
Fire Resistance (ACM Assemblies)	NFPA 285 / CAN-ULC S134 – Exterior Wall Propagation
Non-Combustibility (Solid Plate)	CAN-ULC S114 – Determination of Non-Combustibility
Surface Burning Characteristics	ASTM E84 / CAN-ULC S102 – Flame Spread ≤ 25
Finish Performance	AAMA 2604 / 2605 – Organic Coatings on Aluminum Panels
Impact Resistance	ASTM D4226 / TAS 201 – Impact Test (where applicable)
Building-Code Compliance	2024 IBC / IRC

7. TYPICAL TRIM SYSTEM APPLICATION DIAGRAM

QuickPanel® System – Pressure-Equalized Rainscreen System



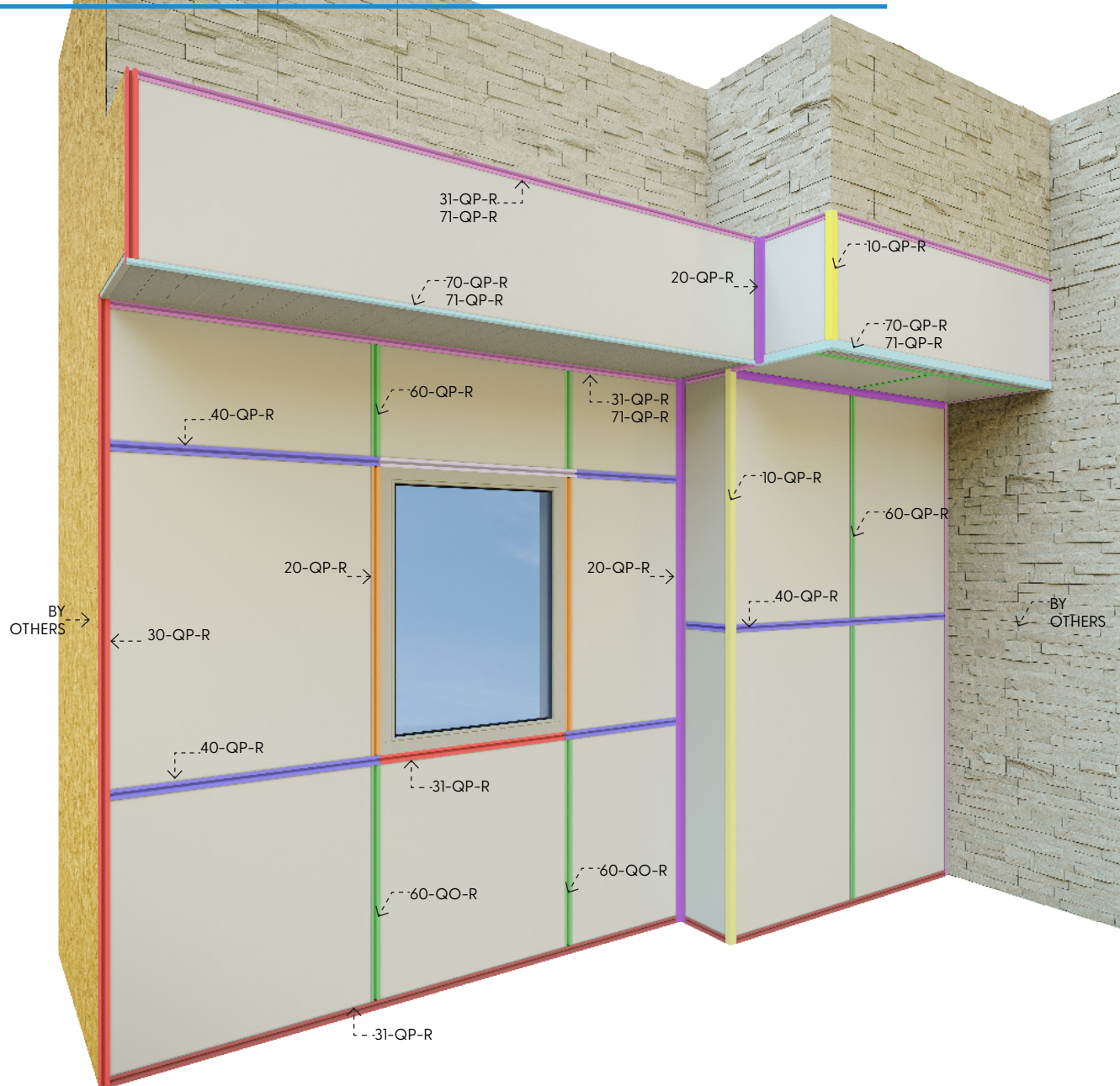
Profiles shown are representative; verify final selection per project conditions.



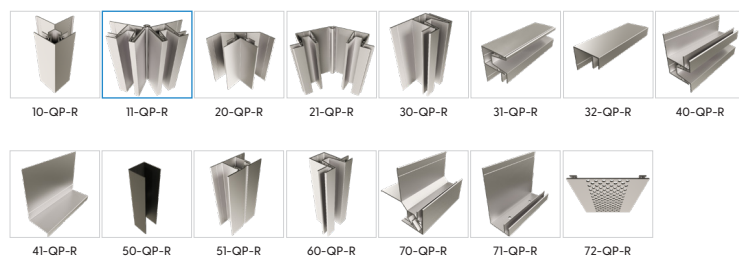
Profiles shown are representative; refer to profile legend, cut sheets, and QR linked details for full system information.

7. TYPICAL TRIM SYSTEM APPLICATION DIAGRAM

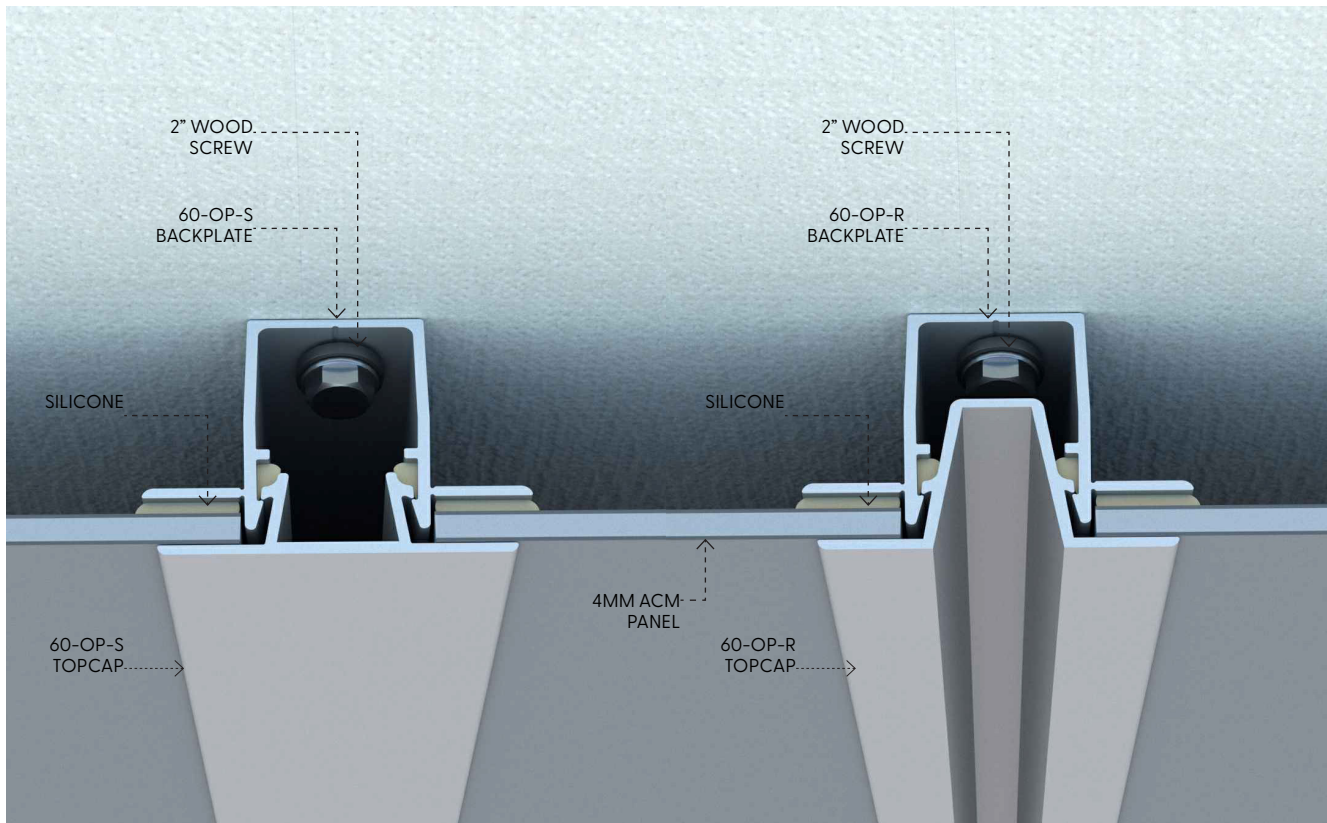
QuickPanel® System – Pressure-Equalized Rainscreen System



Profiles shown are representative; verify final selection per project conditions.



Profiles shown are representative; refer to profile legend, cut sheets, and QR linked details for full system information.



QuickPanel® Streamline Series™

QuickPanel® Reveal Series™

8. TYPICAL DETAILS

QuickPanel® System – Pressure-Equalized Rainscreen System

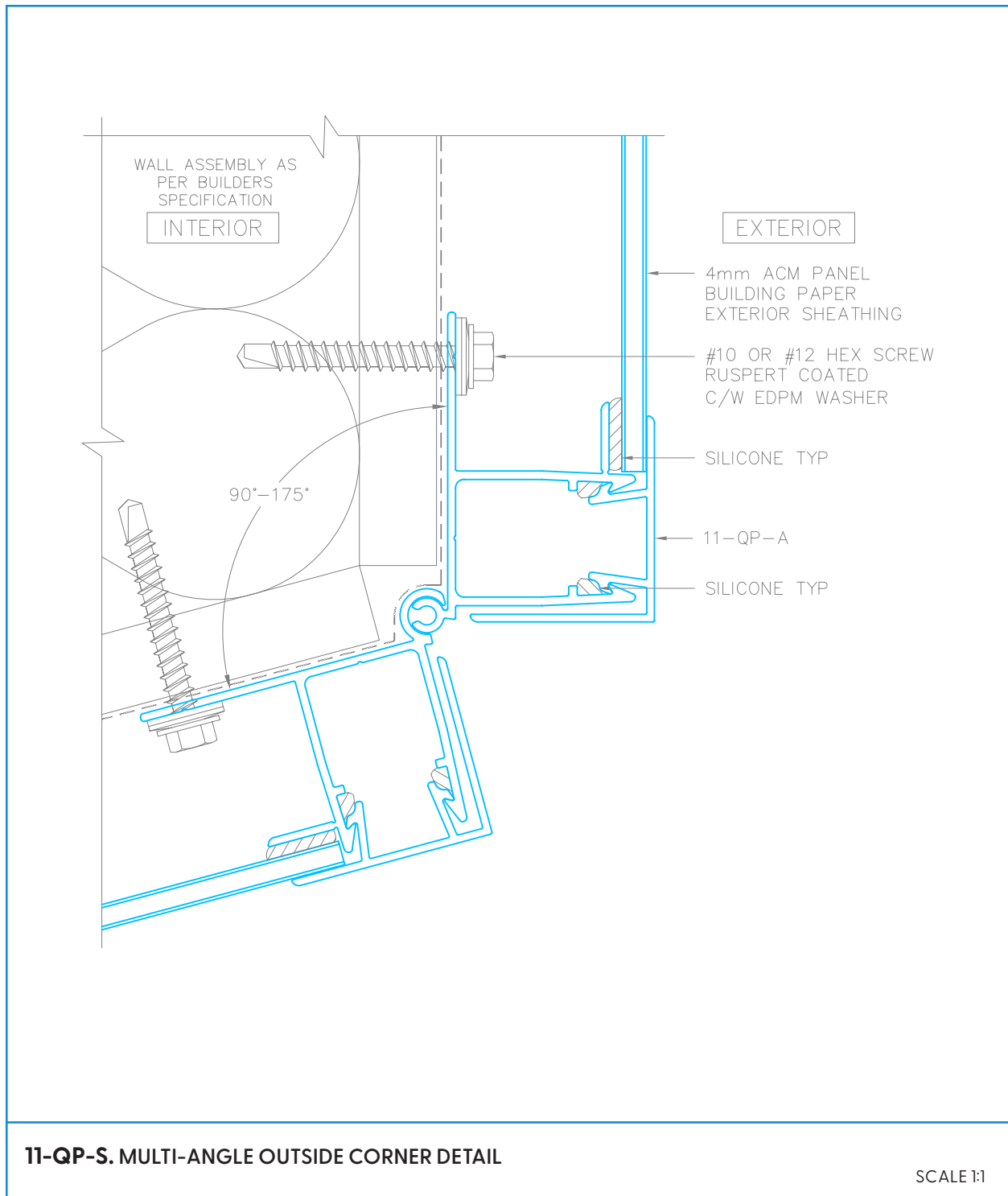
The following details illustrate representative installation conditions for the QuickPanel® Reveal and Streamline Series. Details demonstrate typical trim profiles,

interface conditions, and installation intent only. Actual configurations may vary based on project-specific requirements, substrates, and applicable codes.



Profiles shown are representative; refer to profile legend, cut sheets, and QR linked details for full system information.

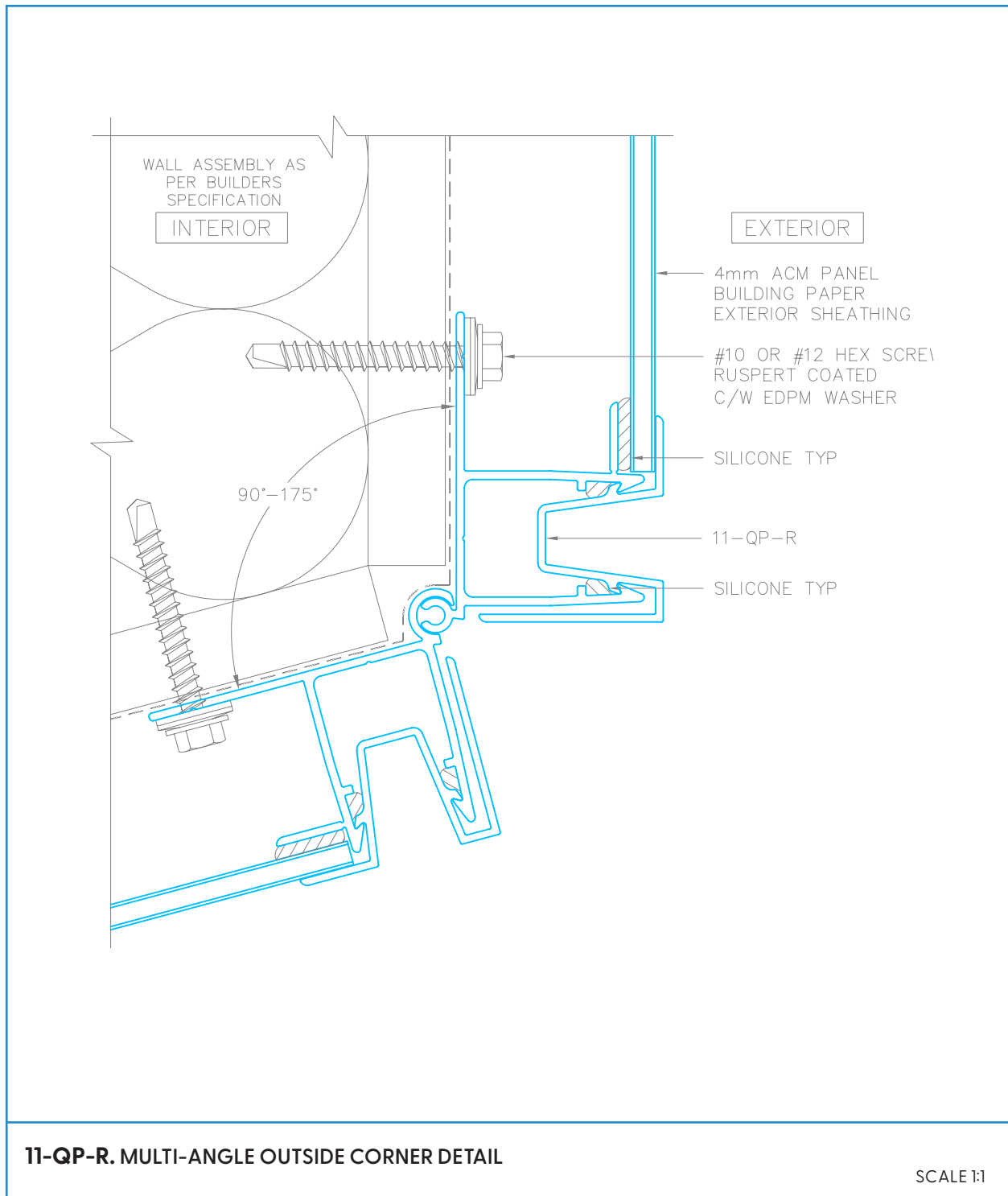
8.1 STREAMLINE TYPICAL DETAILS



Details illustrate typical trim profiles and interface conditions. Verify project-specific requirements.
All fastener spacing and structural attachment subject to project-specific engineering review.

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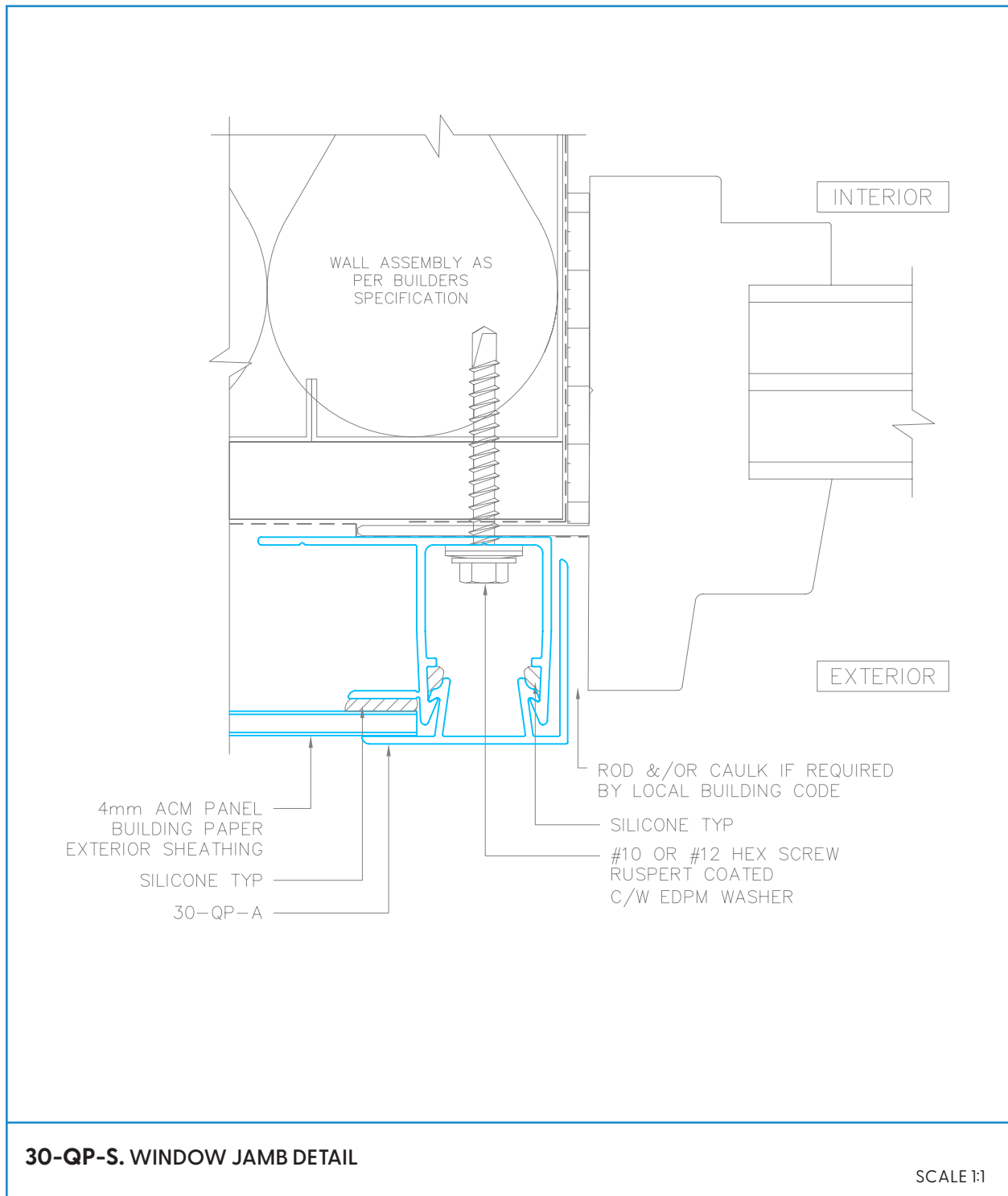
8.2 REVEAL TYPICAL DETAILS



Details illustrate typical trim profiles and interface conditions. Verify project-specific requirements.
All fastener spacing and structural attachment subject to project-specific engineering review.

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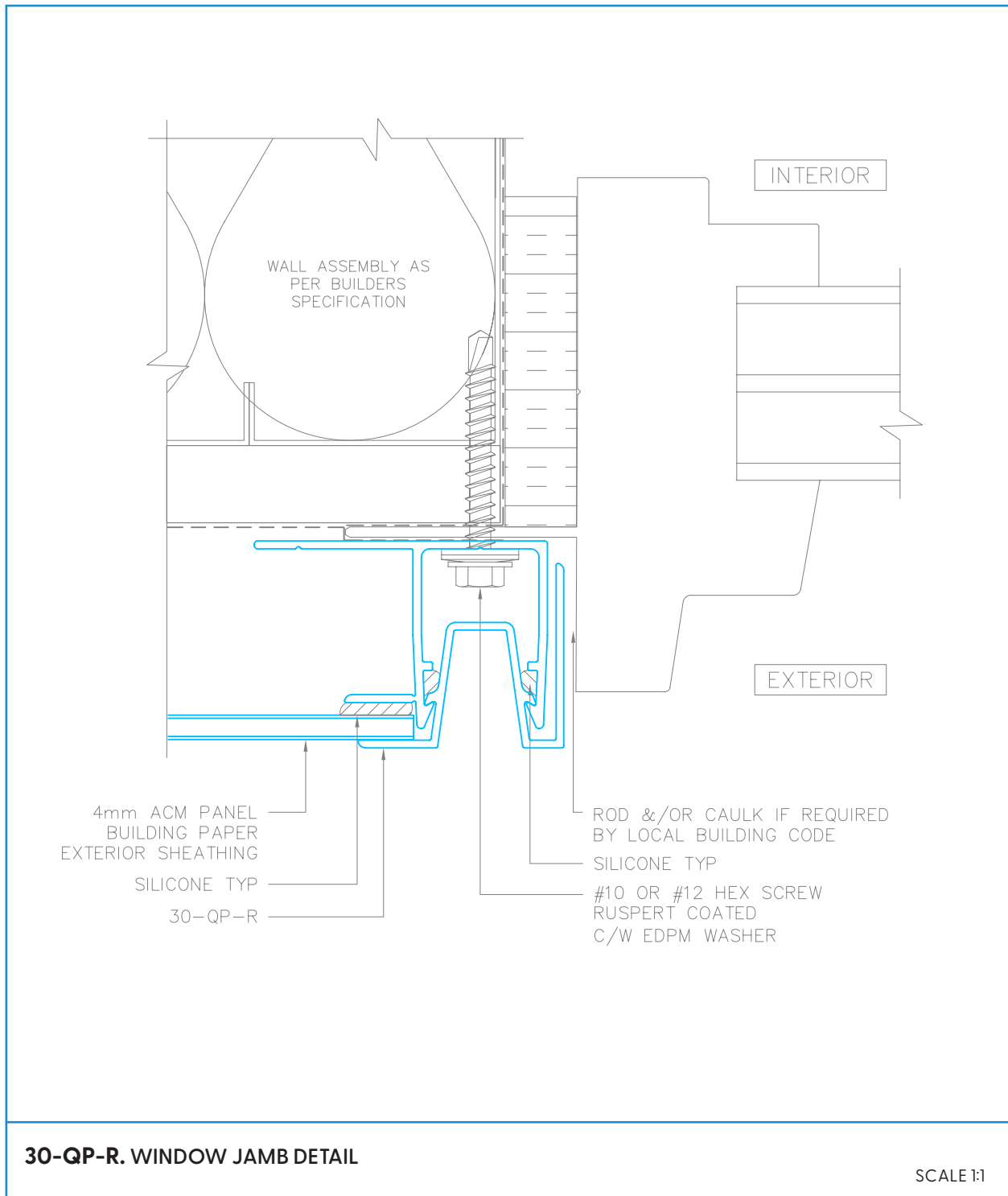
8.3 STREAMLINE TYPICAL DETAILS



Details illustrate typical trim profiles and interface conditions. Verify project-specific requirements.
All fastener spacing and structural attachment subject to project-specific engineering review.

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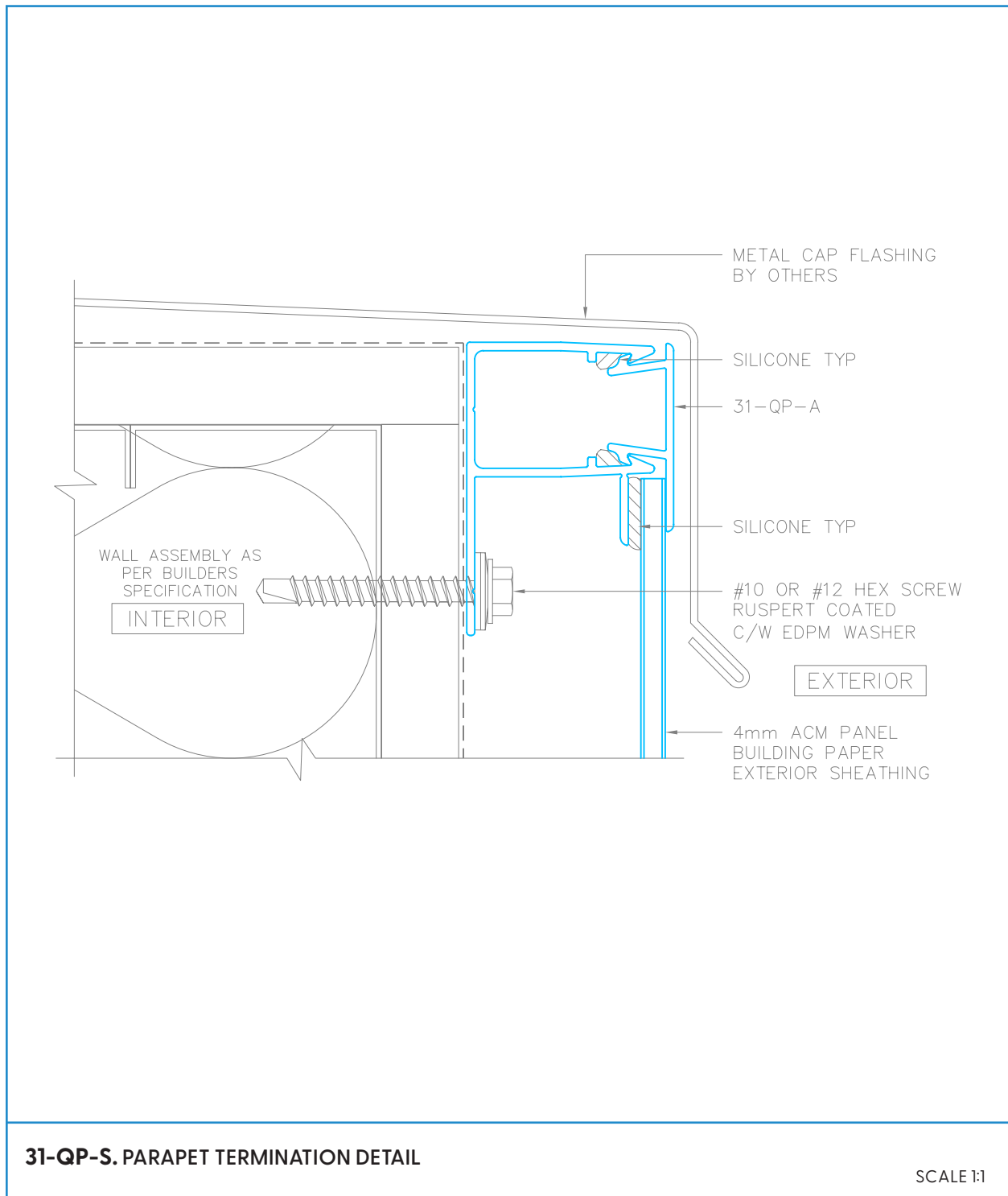
8.4 REVEAL TYPICAL DETAILS



Details illustrate typical trim profiles and interface conditions. Verify project-specific requirements.
All fastener spacing and structural attachment subject to project-specific engineering review.

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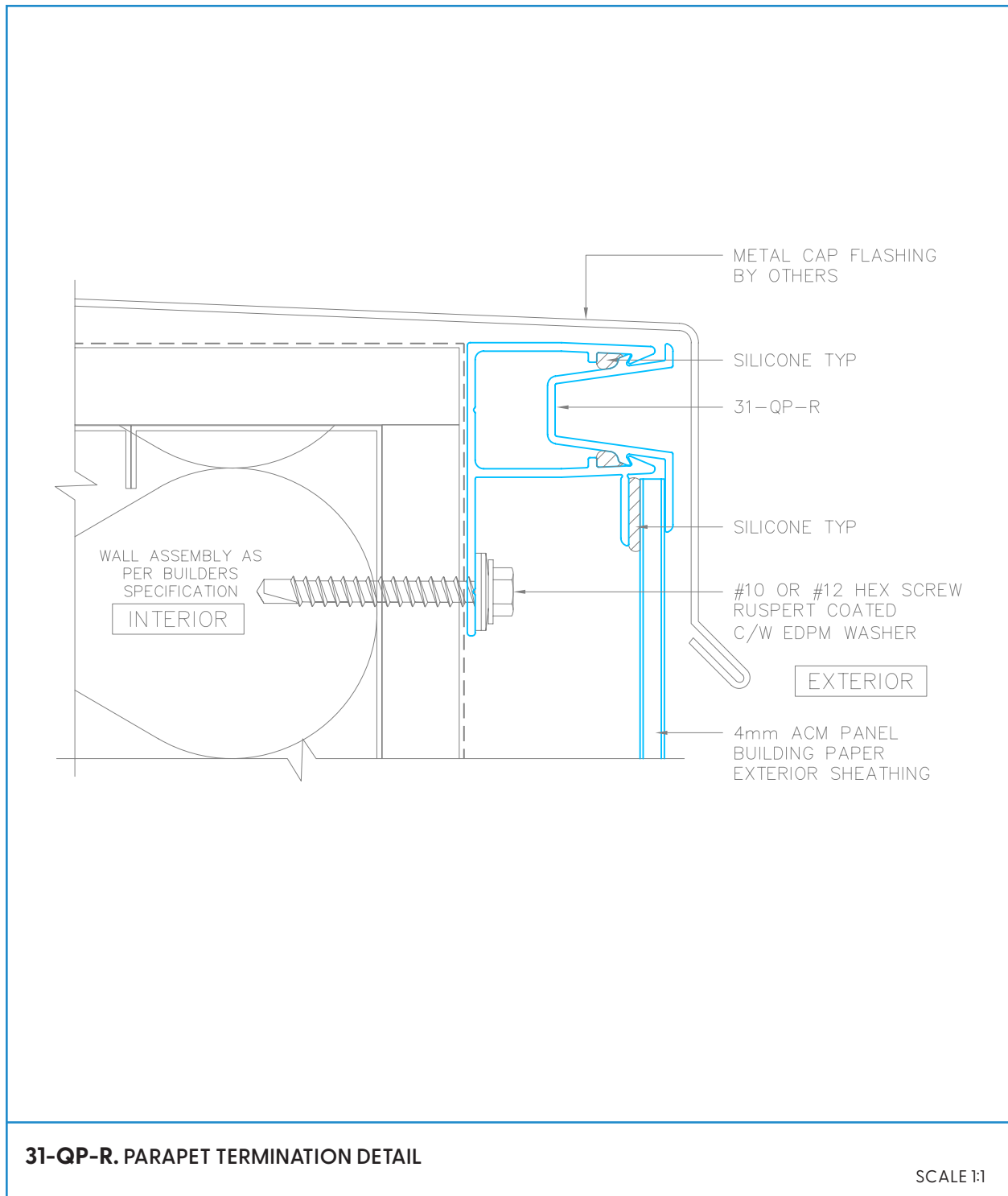
8.5 STREAMLINE TYPICAL DETAILS



Details illustrate typical trim profiles and interface conditions. Verify project-specific requirements.
All fastener spacing and structural attachment subject to project-specific engineering review.

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8.6 REVEAL TYPICAL DETAILS



Details illustrate typical trim profiles and interface conditions. Verify project-specific requirements. All fastener spacing and structural attachment subject to project-specific engineering review.

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ENGAGE BP SPEC NOTE: The purpose of this guide specification is to assist the specifier in correctly specifying aluminum siding products and their installation. The specifier needs to edit the guide specifications to fit the needs of specific projects. Contact Engage Building Products to assist in appropriate product selections and for detailing assistance. Red text in brackets indicates a selection needs to be made.

PART 1 – GENERAL

1.1 GENERAL PROVISIONS

- A. Attention is directed to the CONTRACT AND GENERAL CONDITIONS and all Sections within DIVISION 01 - GENERAL REQUIREMENTS which are hereby made a part of this Section of the Specifications.

1.2 DESCRIPTION OF WORK

- A. Provide design and engineering, labor, material, equipment, related services, and supervision required, including, but not limited to, manufacturing, fabrication, erection, and installation for the Work of this section, including but not limited to the following:
1. Aluminum-faced composite wall panels.
 2. Attachment Systems: For rain screen type panel system according to custom design indicated on the Drawings.
 - a. Aluminum extrusions, supports, anchors, fasteners, and sealants required.

1.3 REFERENCES

- A. General: The publications listed below form a part of this Specification to the extent referenced. The publications are referred to in the text by the basic designation only. The edition/revision of the referenced publications shall be the latest date as of the date of the Contract Documents, unless otherwise specified.
- B. American Architectural Manufacturers Association (AAMA):
1. AAMA 2605, Voluntary Specification, Performance Requirements, and Test Procedures for Superior Performing Organic Coatings on Aluminum Extrusions and Panels.
- C. ASTM (ASTM):
1. ASTM B209/B209M, Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate. 2. ASTM B221/B221M, Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Shapes, and Tubes.
 1. ASTM D1781, Standard Test Method for Climbing Drum Peel for Adhesives.
 2. ASTM E84, Standard Test Method for Surface Burning Characteristics of Building Materials.
 3. ASTM E330, Standard Test Method for Structural Performance of Exterior Windows, Curtain Walls, and Doors by Uniform Static Air Pressure Difference.
- D. National Association of Architectural Metal Manufacturers (NAAMM):
1. NAAMM MFM, Metal Finishes Manual.
- E. South Coast Air Quality Management District (SCAQMD):
1. SCAQMD Rule #1168, Adhesive and Sealant Applications, including most recent amendments.

- F. US Green Building Council LEED v4.1
- G. Preinstallation Conference: Prior to installation commencing at a date and time acceptable to the Owner [and the Consultant],
 - 1. Location: Project site, at date and time acceptable to the Owner and the Consultant.
 - 1. Attendees: At minimum, the Contractor, Installer, and trades requiring coordination with the work.
 - 2. Agenda: Review the following.
 - a. Material selections, installation procedures, and coordination with other trades.
 - b. Finalize construction schedule, availability of materials, Installer's personnel, equipment, and facilities needed to make progress and avoid delays.
 - c. Methods and procedures related to installation, including manufacturer's written instructions.
 - d. Support Conditions: Verify compliance, alignment, and attachment to structural members.
 - e. Flashings: For wall penetrations, openings.
 - f. Governing regulations and requirements for insurance, and authorities having jurisdiction.
 - g. Temporary protection; during and after installation.
 - h. Procedures for damaged panel repair after installation.

1.4 SUBMITTALS

- A. Submit under provisions of Section 01 30 00 – Administrative Requirements.
- B. Product Data: Sufficient information to determine compliance with the Drawings and Specifications.
 - 1. Manufacturer's information sheets marked to include products proposed for use.
 - 1. Includes, but is not limited to, construction details, material descriptions, dimensions of individual components and profiles, and finishes for each type of metal-faced composite wall panel and accessory.
 - 2. Storage and handling recommendations.
- C. Shop Drawings: For each product and accessory required.
 - 1. Include information not fully detailed in manufacturer's standard product data, including, but not limited to:
 - a. Installation Layouts: For metal-faced composite wall panels
 - b. Details: Edge conditions, joints, panel profiles, corners, anchorages, attachment system, trim, flashings, closures, and accessories; and special details.
 - c. Accessories: Include details of the flashing, trim, and anchorage, at a scale of not less than 1-1/2 inches per 12 inches [38.1 mm per 304.8 mm].
 - d. Distinguish between factory- and field-assembled work.
- D. Samples:
 - 1. For initial color selection.
 - 1. For metal-faced composite wall panels with factory-applied color finishes.
 - 2. Manufacturer's color charts showing the full range of colors and finishes available.
 - 3. Finishes Involving Normal Color Variations: Include samples showing the full range of variations expected.
 - 4. Exposed Sealants: Each type and color required. Install joint sealants in 1/2-inch [12.7 mm] wide joints formed between two 6-inch [152.4mm] long strips of material matching the appearance of metal panels adjacent to joint sealants.
- E. Delegated-Design Submittal: For metal panel assembly indicated to comply with performance requirements and design criteria, including analysis data signed and sealed by the qualified professional engineer responsible for their preparation.
- F. Exterior Wall Certification: Submit manufacturer's certification that exterior wall panels, as designed in the assemblies indicated on the Drawings, has been tested to meet the requirements of NFPA 285 and passed.

- G. Field quality-control reports.

ENGAGE BP SPEC NOTE: When project is pursuing a sustainable rating system, retain Sustainable Design Submittal paragraph and edit to correspond to the specific Project requirements. Modify based on rating system being pursued.

- H. LEED Submittals: Provide documentation of how the requirements of Credit will be met:

1. Product Data for Credit MR 2.1 and 2.2: For products being recycled, documentation of total weight of project waste diverted from landfill.
1. Product Data for Credit MR 4.1 and MR 4.2: For products that have recycled content, documentation including percentages by weight of post-consumer and pre-consumer recycled content.
2. Include statement indicating costs for each product having recycled content.
3. Product Data for Credit MR 5.1 and Credit MR 5.2: Submit data, including location and distance from Project of Material: manufacturer and point of extraction, harvest, or recovery for main raw material.
4. Include statement indicating cost for each regional Material: and the fraction by weight that is considered regional.

1.5 QUALITY ASSURANCE

- A. Qualifications:

1. Installer Qualifications: An employer of workers trained and approved by manufacturer.
 - a. A minimum of 5 years of experience, and has completed systems similar in material, design, and extent to that indicated for the Project and with record of successful performance.
 - b. Installer's Responsibilities: Include fabricating and installing metal panel assemblies and providing professional engineering services needed to assume engineering responsibility.

- B. Regulatory Requirements: Comply with applicable requirements of the laws, codes, ordinances, and regulations of Federal, State, and local authorities having jurisdiction.

1. Obtain necessary approvals from such authorities.

- C. Source Limitations: Obtain each type of metal panel through one source from a single manufacturer.

- D. Fire Test Performance for Exterior Wall Assemblies: NFPA 285 testing applies to complete exterior wall assemblies incorporating QuickPanel® Systems as indicated on the Drawings. Architectural aluminum trims, reveals, and accessories are non-structural components and are not evaluated independently under NFPA 285.

- E. Preconstruction Compatibility and Adhesion Testing: Submit to joint-sealant manufacturers, for testing indicated below, samples of materials that will contact or affect joint sealants.

1. Use manufacturer's standard test methods to determine whether priming and other specific joint preparation techniques are required to obtain rapid, optimum adhesion of joint sealants to joint substrates.

- F. Mock-Ups: Build mockups to verify selections made and to demonstrate aesthetic effects and to set quality standards for fabrication and installation.

1. Demonstrate prepared substrate, support/attachment framing, panel façade, exterior finishes, and aesthetic appearance.
1. Confirm mock-up conforms with manufacturer's instructions and provisions of contract documents.
2. To be accepted in writing by the architect or general contractor before commencement of work.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials to the project site in Supplier's or Manufacturer's original wrappings and containers, labeled with Supplier's or Manufacturer's name, material or product brand name, and lot number, if any.
 - 1. Handle components, sheets, aluminum composite wall panels, and other manufactured items according to Manufacturer's instruction so as not to be damaged or deformed.
 - 2. Package all materials for protection during transportation and handling.
- B. Materials Storage: Store in original, undamaged packages and containers, inside a well-ventilated area protected from weather, moisture, soiling, extreme temperatures, and humidity.
 - 1. Unload, and store metal-faced composite wall panels in a manner to prevent bending, warping, twisting, and surface damage.
 - 2. Metal-faced composite wall panels:
 - a. Cover with suitable weathertight and ventilated covering.
 - b. Ensure dryness, with positive slope for drainage of water.
 - c. Do not store in contact with other materials that might cause staining, denting, or other surface damage.
 - d. Storage space is not to exceed 120 degrees F (67 degrees C).
 - e. Handling: Prevent damage to surfaces, edges, and ends of wall panels. Reject and remove damaged Material: from site.
- C. Retain strippable protective covering on composite wall panel for period of panel installation.

1.7 PROJECT CONDITIONS

- A. Weather Limitations: Proceed with installation only when existing and forecasted weather conditions permit assembly of metal composite material panels to be performed according to manufacturers' written instructions and warranty requirements.
- B. Field Measurements: Verify locations of structural members and wall opening dimensions by field measurements before metal panel fabrication and indicate measurements on Shop Drawings.
 - 1. Established Dimensions: Where field measurements cannot be made without delaying the Work, either establish framing and opening dimensions and proceed with fabricating metal panels without field measurements or allow for field trimming of panels. Coordinate wall construction to ensure that actual building dimensions, locations of structural members, and openings correspond to established dimensions.

1.8 COORDINATION

- A. Coordination: Coordinate composite panel systems with rain drainage work, flashing, trim, and construction of walls and other adjoining work to provide a leak proof, secure, and non-corrosive installation.

1.9 WARRANTY

- A. Panel System: 15-Year Limited Product Warranty against faults and defects in materials and workmanship attributed to the manufacturer. The panel system warranty shall be countersigned by the manufacturer and the Installer.
 - 1. Failures include, but are not limited to, the following: a. Structural failures, including rupturing, cracking, or puncturing. b. Deterioration of metals and other materials beyond normal weathering.
- B. Finish Warranty: Submit a written warranty, signed by manufacturer, covering failure of the factory-applied exterior finish within the specified warranty period. Deterioration of finish includes, but shall not be limited to, color fade, chalking, cracking, peeling, and loss of film integrity.
 - 1. Warranty Period for PVdF Finish: 20 years from date of Substantial Completion.

- C. Additional Owner Rights: The warranty shall not deprive the Owner of other rights the Owner may have under other provisions of the Contract Documents and shall be in addition to and run concurrent with other warranties made by the Contractor under requirements of the Contract Documents.

PART 2 – PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturer: Engage Building Products Phone: 1-877-973-8746 URL: www.engagebp.com; Email: info@engagebp.com

1. Basis of Design: ACM QuickPanel® System as Manufactured by Engage Building Products.

ENGAGE BP SPEC NOTE: Select one of the following options and delete options not required on the Project.

- a. Substitutions: [Approved equals.] [Not permitted.] [Submit as specified in accordance with appropriate sections in Division 01.] [In accordance with Section 01 60 00.]

2.2 COMPOSITE MATERIAL WALL PANELS

- A. General: Aluminum-faced composite wall panels fabricated from two metal facings bonded to solid, extruded fire-retardant core.

1. Aluminum Face Sheets:

- a. Thickness: 0.020 inch (0.508 mm).
b. Aluminum Alloy: 3000 Series or equivalent.

- B. Aluminum Composite Material (ACM) Panels

1. Size: 5 feet x 16 feet
2. Thickness: 4 mm
3. Construction: Two aluminum face sheets bonded to a fire-resistant mineral-filled core
4. Application: Exterior wall cladding panels
5. Finish: Factory-applied PVDF or FEVE coating, color as selected

- C. Solid Aluminum Panels

1. Size: 5 feet x 16 feet
2. Thickness: 3 mm
3. Material: Solid aluminum, non-combustible
4. Finish: Factory-applied architectural coating, color as selected

- D. Flat Stock Aluminum

1. Size: 4 feet x 10 feet
2. Thickness: 0.040 inch
3. Application: Brake-formed flashings, trims, and accessories
4. Finish: Factory-applied architectural coating to match panel system

- E. Overall Panel Thickness: 0.157 inch (4 mm).

- F. Fire Resistant (FR) Core: Tested in accordance with ASTM E84, Class A building material rating. System components are intended for use in exterior wall assemblies tested in accordance with NFPA 285, where required by code.

1. With Center Panel Joint: Flame Spread: 15. Smoke Developed Rating: 30.
2. No Center Panel Joint: Flame Spread: 0. Smoke Developed Rating: 0.
3. Bond Integrity: Tested in accordance with ASTM D1781.

- a. When simulating resistance to panel delamination, there is to be no adhesive failure of the bond between the core and the skin, or cohesive failure of the core itself below the following values:

1) Peel Strength: FR Core:

- a) As Manufactured: 22.5 inch-lbs per inch¹ (0.100 N-per mm).
- b) After 21 Days Soaking in Water at 70 degrees F (21 degrees C)
- c) 22.5 inch-lbs per inch¹ (0.100 N-per mm).

- G. Tolerances:

1. Width: ± 0.08 inch (± 2.03 mm).
2. Length: ± 0.16 inch (± 4.06 mm).
3. Panel Bow: Maximum 0.8 percent of any 72 inch (1829 mm) panel dimension.
4. Squareness: Maximum 0.20 inch (5.08 mm).
5. Flatness: Maximum deviation from panel flatness shall be 1/8 inch (3 mm) in 5 feet (1524 mm) on panel in any direction for assembled units (non-accumulative, no oil-canning).

- H. Attachment Assembly Components: Formed from extruded aluminum.

1. Include manufacturer's standard perimeter extrusions, panel stiffeners, panel clips and anchor channels.

- I. Attachment Assembly: Manufacturer's standard rainscreen system.

2.3 TRIMS AND EXTRUSIONS

- A. Performance Scope: Trims and extrusions are non-structural architectural accessories. Structural, air, water, and fire propagation performance testing applies to the complete exterior wall assembly and not to individual trim components.

1. Corner Trims

- a. 10-QP-R – Outside Corner (Backplate + Top Cap) Fixed outside corner trim providing clean panel edge alignment.
- b. 11-QP-R – Multi-Angle Outside Corner (Backplate + Top Cap) Adjustable outside corner trim for non-orthogonal conditions.
- c. 20-QP-R – Inside Corner (Backplate + Top Cap) Fixed inside corner trim with concealed fastening.
- d. 21-QP-R – Multi-Angle Inside Corner (Backplate + Top Cap) Adjustable inside corner trim for variable angles.

2. Terminations and Transitions

- a. 30-QP-R – Vertical Termination (Backplate + Top Cap) Vertical edge termination at panel ends
- b. 31-QP-R – Horizontal Termination (Backplate + Top Cap) Horizontal termination at parapets or transitions.
- c. 32-QP-R – One-Piece J Termination Single-piece trim for compact panel edge termination.

3. Intermediate and Vertical Trims

- a. 40-QP-R – Horizontal Trim (Backplate + Top Cap) Horizontal joint trim for panel alignment and expression.

- b. 60-QP-R – Vertical Trim (Backplate + Top Cap) Vertical joint trim allowing independent panel movement.

4. Flashings and Support Components

- a. 41-QP-R – Flashing Water-shedding flashing compatible with panel system.
- b. 50-QP-R – Rainscreen Furring Spacer Creates drainage and ventilation cavity behind panels.
- c. 51-QP-R – Panel Stiffener (Backplate + Top Cap) Increases panel rigidity and wind-load resistance.

5. Fascia and Soffit Components

- a. 70-QP-R – Fascia-to-Soffit Transition (Backplate + Top Cap) Transition trim between wall panels and soffits.
- b. 71-QP-R – Perforated One-Piece Fascia Ventilated fascia providing airflow and finished edge.
- c. 72-QP-R – Vented Soffit Strip Continuous soffit ventilation strip with defined net free area.

B. Trim Finishes:

- 1. Anodized aluminum trim finishes shall comply with AAMA 611.
- 2. Painted aluminum trim finishes shall comply with AAMA 2604 or AAMA 2605 as applicable.

2.4 MATERIALS AND ACCESSORIES

- A. Aluminum: Aluminum Extrusions: ASTM B221/B221M, Alloy 6063-T6.
- B. Rain Screen Furring Spacers: UV resistant and ROHS compliant rigid PVC compound.
- C. Perforated Vented & Non-Vented Through-Wall Flashing: Provide 0.013 inch (.33 mm) painted 2 sides galvanized steel.
- D. Exposed flashings and trims shall be aluminum; concealed through-wall flashings may be galvanized steel.
- E. Flashing and trim formed from same material as metal composite material panels as required to seal against weather and to provide finished appearance. Locations include, but are not limited to, bases, drips, sills, jambs, corners, end walls, framed openings, rakes, fasciae, parapet caps, soffits, reveals, and fillers.
 - 1. Match material, finish, and color as facings of adjacent panels, unless otherwise indicated.
- F. Fasteners: Manufacturer-approved corrosion-resistant self-drilling metal screws and wood screws as required by substrate conditions. Fastener types include B1-QP (3/4" metal screw), B2-QP (2" metal screw), and B3-QP (2" wood screw).
- G. Panel Fasteners: Self-tapping screws designed to withstand design loads. Provide exposed fasteners with heads matching color of metal composite material panels by means of plastic caps or factory-applied coating. Provide EPDM or PVC sealing washers for exposed fasteners.
- H. Panel Sealants: ASTM C920; elastomeric silicone sealant; of type, grade, class, and use classifications required to seal joints in metal composite material panels and remain weathertight; and as recommended in writing by metal composite material panel manufacturer.
 - 1. Sealants Within Panel System: ASTM C920 compliant silicone sealants as recommended by manufacturer. Acceptable products include Tremco Spectrem I or Dowsil 995
 - 2. Comply with requirements of Section 079200 – JOINT SEALANTS. H. Panel Accessories: Components for a complete, weathertight panel system including trim, copings, fasciae, mullions, sills, corner units, clips, flashings, sealants, gaskets, fillers, closure strips, and similar items. Match material and finish of metal composite material panels unless otherwise indicated.

ENGAGE BP SPEC NOTE: QuickPanel has many color and texture options available. Refer to the QuickPanel Website www.engagebp.com for a current listing of color and texture options. Enter color selection below.

2.5 FINISHES

- A. Comply with NAAMM MFM for architectural metal products for recommendations for applying and designating finishes.
 - 1. Aluminum Finishes: Finish designations prefixed by AA comply with the system established by the Aluminum Association for designating aluminum finishes.
- B. PVDF Fluoropolymer: AAMA 2605. Fluoropolymer finish containing not less than 70 percent PVDF resin by weight in color coat. Prepare, pretreat, and apply coating to exposed metal surfaces to comply with coating and resin manufacturers' written instructions.
- C. FEVE Fluoropolymer: AAMA 2605. One-coat fluoropolymer finish containing 100 percent fluorinated ethylene vinyl ether resin in color coat. Prepare, pretreat, and apply coating to exposed metal surfaces to comply with coating and resin manufacturers' written instructions.
- D. Color: [As selected by Owner from manufacturer's standard finish guide] [Custom color matched].

2.6 WALL PANEL SYSTEM DESCRIPTION

- A. Panels: FR (fire-rated mineral core) panels with high performance PVdF or FEVE coatings.
 - 1. Panel Platform: 6063-T6 extruded aluminum.

ENGAGE BP SPEC NOTE: Select one of the following options and delete options not required on the Project.

- a. Back Plate Profiles: [vertical,] [horizontal,] [outside corner,] [inside corner,] [multi-angle inside corner,] [multi-angle outside corner,] [vertical material transition,] [outside corner material transition,] [soffit,] [alternate soffit,] [horizontal wall penetration,] [vertical wall penetration,] [base section,] [window jamb,] [and] [window sill].
- b. Inside corner.
- c. Top Caps: With high performance PVdF PPG Duranar coatings.
- d. Rainscreen Furring Spacers.
- e. Brake Metal Flashings.
- f. Perforated Vented Through-Wall Flashing.
- g. Concealed Sealant.
- h. Concealed Weather Sealed Fasteners.
- i. Adhesive tape used for temporary positioning only; not structural.

PART 3 – EXECUTION

3.1 EXAMINATION

- A. Verification of Conditions: Examine areas and conditions under which the work is to be installed, and notify the Contractor in writing, with a copy to the Owner and the Architect, of any conditions detrimental to the proper and timely completion of the work.
- B. Do not proceed with the work until unsatisfactory conditions have been corrected.
 - 1. Examine substrates, areas, and conditions, with the Installer present, for compliance with requirements for installation tolerances, metal-faced composite wall panel supports, and other conditions affecting performance of the work.
 - 2. Examine wall framing to verify that girts, angles, channels, studs, and other structural panel support members and anchorage have been installed within alignment tolerances required by metal-faced composite wall panel manufacturer.
 - 3. Examine wall sheathing to verify that sheathing joints are supported by framing or blocking, and that installation is within flatness

- tolerances required by metal-faced composite wall panel manufacturer.
4. Verify that weather-resistant sheathing paper has been installed over sheathing or backing substrate to prevent air infiltration or water penetration.
5. Examine roughing-in for components and systems penetrating metal-faced composite wall panels to verify actual locations of penetrations relative to seam locations of panels before panel installation.
6. The beginning of the work shall indicate acceptance of the areas and conditions as satisfactory by the Installer.

3.2 PREPARATION

- A. Coordination: Coordinate setting drawings, diagrams, templates, instructions, and directions for installation of anchorages that are to be embedded in concrete or masonry construction. Coordinate delivery of such items to the Project Site.
- B. Miscellaneous Supports: Install sub framing, furring, and other miscellaneous panel support members and anchorages according to ASTM C754 and metal composite material panel manufacturer's written recommendations.

3.3 INSTALLATION OF COMPOSITE WALL PANEL

- A. General: Install metal-faced composite wall panels in accordance with manufacturer's written instructions in orientation (note Metallic and Mica finished panels are directional), sizes, and locations indicated on the Drawings. Install panels perpendicular to girts and sub-girts unless otherwise indicated.
 1. Install panel system in accordance with manufacturer's installation instructions and drawings.
 2. Ensure continuity of building envelope air barrier and vapor.
 3. Shim or otherwise plumb substrates receiving metal-faced composite wall panels.
 4. Anchor panels securely in accordance with reviewed shop drawings to allow for necessary thermal movement and structural support.
 5. Conform to panel fabricator's instructions for installation of concealed fasteners.
 6. Do not install component parts that are observed to be defective, including, but not limited to, warped, bowed, dented, scraped, and broken members.
 7. Do not cut, trim, weld, or braze component parts during erection in manner which would damage finish, decrease strength, or result in visual imperfection or failure in performance. Return component parts, which require alteration to shop for re-fabrication, if possible, or for replacement with new parts.
- B. Fasteners, Aluminum Panels: Use aluminum or stainless-steel fasteners for surfaces exposed to the exterior; use aluminum or galvanized steel fasteners for surfaces exposed to the interior.
- C. Metal Protection: Where dissimilar metals contact each other or corrosive substrates, protect against galvanic action as recommended in writing by metal composite material panel manufacturer.
- D. Attachment Assembly, General: Install attachment assembly required to support metal composite material wall panels and to provide a complete weathertight wall system, including subgirts, perimeter extrusions, tracks, drainage channels, panel clips, and anchor channels.
 1. Include attachment to supports, panel-to-panel joinery, panel-to-dissimilar-material joinery, and panel-system joint seals.
 2. Do not begin installation until the weather barrier and flashings that will be concealed by metal panels are installed.
- E. Rainscreen Installation: Install using manufacturer's standard assembly with vertical channel that provides support and secondary drainage assembly, draining at base of wall. Notch vertical channel to receive support pins. Install vertical channels supported by channel brackets or adjuster angles and at locations, spacings, and with fasteners recommended by manufacturers. Attach metal composite material wall panels by inserting horizontal support pins into notches in vertical channels and into flanges of panels. Leave horizontal and vertical joints with open reveal.
 1. Install wall panels to allow individual panels to be installed and removed without disturbing adjacent panels.
 2. Do not apply sealants to joints unless otherwise indicated.

3.4 ACCESSORY INSTALLATION

- A. Accessories, General: Install accessories with positive anchorage to building and weathertight mounting and provide for thermal expansion. Coordinate installation with flashings and other components.
 - 1. Install components required for a complete metal composite material panel assembly including trim, copings, corners, seam covers, flashings, sealants, gaskets, fillers, closure strips, and similar items. Provide types indicated by metal composite material panel manufacturer; or, if not indicated, provide types recommended in writing by metal composite material panel manufacturer.
- B. Flashing and Trim: Comply with performance requirements, manufacturer's written installation instructions, and SMACNA's "Architectural Sheet Metal Manual." Provide concealed fasteners where possible and set units true to line and level as indicated. Install work with laps, joints, and seams that will be permanently watertight and weather resistant.
 - 1. Install exposed flashing and trim that is without excessive oil canning, buckling, and tool marks and that is true to line and levels indicated, with exposed edges folded back to form hems. Install sheet metal flashing and trim to fit substrates and to result in waterproof and weather-resistant performance.
 - 2. Expansion Provisions: Provide for thermal expansion of exposed flashing and trim. Space movement joints at a maximum of 10 feet (3 m) with no joints allowed within 24 inches (605 mm) of corner or intersection. Where lapped expansion provisions cannot be used or would not be sufficiently waterproof, form expansion joints of intermeshing hooked flanges, not less than 1 inch (25 mm) deep, filled with mastic sealant (concealed within joints).

3.5 ERECTION TOLERANCES

- A. Maximum variation from plane or location shown on shop drawings shall be .5 inch (13 mm) in 30 feet (9.14 m) of length and up to .75 inch (19 mm) in 300 feet (91.44 m).
- B. Maximum deviation for vertical member shall be 0.10 inch (2.54 mm) in 25 feet (7.62 m) run.
- C. Maximum deviation for a horizontal member shall be 0.10 inch (2.54 mm) in 25 feet (7.62 m) run. D. The maximum offset from true alignment between two adjacent members abutting end to end, in line shall be 0.03 inch (0.76 mm).

3.6 FIELD QUALITY CONTROL

- A. Testing Agency: Engage a qualified independent testing and inspecting agency to perform field tests and inspections and to prepare test reports.
- B. Water-Spray Test: After installation, test area of assembly as directed by Architect for water penetration according to AAMA 501.2.
- C. Manufacturer's Field Service: Engage a factory-authorized service representative inspect completed metal panel installation, including accessories.
- D. Remove and replace metal panels where tests and inspections indicate that they do not comply with specified requirements.
- E. Additional testing and inspecting, at Contractor's expense, will be performed to determine compliance of replaced or additional work with specified requirements.
- F. Prepare test and inspection reports.

3.7 ADJUSTING AND CLEANING

- A. Remove temporary protective coverings and strippable films, if any, as metal-faced composite wall panels are installed unless otherwise indicated in manufacturer's written installation instructions.

- B. On completion of metal-faced composite wall panel installation, clean finished surfaces as recommended by panel manufacturer. Maintain in a clean condition during construction.
- C. After metal-faced composite wall panel installation, clear base drainage channels of obstructions, dirt, and sealant.
- D. Replace metal-faced composite wall panels that have been damaged or have deteriorated beyond successful repair by finish touch-up or similar minor repair procedures.
- E. Any additional protection, after installation, shall be the responsibility of the general contractor to remove.
- F. Final cleaning shall not be part of the work of this Section.

3.8 PROTECTION

- A. Protect installed products and components from damage during construction.
- B. Repair damage to adjacent materials caused by composite metal building panel installation.

END OF SECTION



10.8 TYPICAL QUICKPANEL INSTALLATION PROCESS

QuickPanel® System – Pressure-Equalized Rainscreen System

The following pages illustrate the typical installation sequence for the QuickPanel® System, including trim coordination, fastening intent, and panel interface conditions. Installation shall comply with project

drawings, applicable codes, and the QuickPanel® Installation Guide.



Profiles shown are representative; refer to profile legend, cut sheets, and QR linked details for full system information.

QuickPanel[®] System – Pressure-Equalized Rainscreen System

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10.2 Features	33
10.3 Preparation, Maintenance & Product Storage	34
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10.8 Typical Panel Installation Process	39-47

QuickPanel® System – Pressure-Equalized Rainscreen System

IMPORTANT NOTICE – QUICKPANEL® REVEAL & STREAMLINE ALUMINUM TRIM SYSTEM

Installation of the QuickPanel® Aluminum Panel Rainscreen System shall be performed by qualified installers experienced in exterior cladding systems of similar scope and complexity.

Installation shall comply with:

- Project drawings and specifications
- Applicable building codes and regulations
- Manufacturer's written installation instructions
- Approved shop drawings, where applicable

The installer is responsible for verifying field conditions prior to commencement of work.

KEY INSTALLATION REQUIREMENTS

Before installation begins, the following conditions shall be verified:

- Substrate is structurally sound, properly aligned, and within allowable tolerances
- Weather-resistive barrier (WRB) is installed and properly integrated with adjacent systems
- Flashings and penetrations are properly coordinated
- Substrate moisture content is within acceptable limits
- Framing is adequately supported and fastened

The QuickPanel® system shall be installed in accordance with manufacturer-recommended sequencing, ensuring:

- Proper alignment of trims and backplates
- Correct engagement of panels into attachment components
- Adequate spacing for thermal expansion and contraction
- Continuous drained and ventilated cavity behind panels
- Proper fastening type and spacing per project requirements

Final fastener selection and spacing shall be subject to project-specific structural review.

MATERIAL RECEIVING AND INSPECTION

Upon delivery, inspect all QuickPanel® System components, including panels, trim extrusions, and accessories, to verify materials are undamaged and match the approved order and shop drawings.

Record any shipping damage on the delivery documentation and notify the distributor immediately. The receiving party is responsible for submitting freight claims to the carrier in accordance with carrier requirements.

Do not install damaged or non-conforming materials. Report discrepancies prior to installation.

Installation of damaged or non-conforming materials constitutes acceptance by the installer.

QuickPanel® System – Pressure-Equalized Rainscreen System

1. Engineered Drainage Profile

The QuickPanel® system incorporates extruded aluminum trim components designed to facilitate controlled water drainage and ventilation within the rainscreen cavity.

Trim geometry is configured to:

- Promote gravity-assisted moisture drainage
- Support ventilation behind panel assemblies
- Reduce moisture accumulation at horizontal interfaces

Final performance is dependent on proper integration with the project-specific wall assembly.

2. Concealed Attachment System

QuickPanel® utilizes concealed mechanical attachment components to secure panels while maintaining a clean exterior appearance.

The system:

Allows individual panel engagement

- Accommodates thermal expansion and contraction
- Maintains panel alignment under normal service conditions
- Fastener type and spacing shall be determined by project-specific structural requirements.

3. Panel Movement Accommodation

The system is designed to accommodate aluminum thermal movement.

Clearances at panel joints and trim interfaces allow for expansion and contraction within manufacturer-recommended tolerances.

Final movement allowance shall be confirmed based on:

- Project climate zone
- Panel dimensions
- Structural design loads

4. Inter-Panel Interface

- Panel-to-panel interfaces are designed to maintain consistent joint geometry and alignment.
- Reveal Series™ provides expressed joint articulation.
- Streamline Series provides a flush, minimal joint configuration.
- Joint selection is aesthetic and project-dependent.

5. Material Composition

System components consist of:

- Aluminum composite material (ACM) panels with fire-resistant mineral core
- Solid aluminum plate panels
- Extruded aluminum trims (ASTM B221, Alloy 6063-T6)
- Corrosion-resistant fasteners
- Material performance is subject to applicable ASTM standards and project conditions.

6. Finish Systems

Panels and trims are available with:

- PVDF or FEVE coatings (AAMA 2605 compliant)
- Anodized finishes (AAMA 611)
- Finish selection shall be confirmed per approved color schedule.

7. Maintenance Considerations

The aluminum panel system requires routine cleaning consistent with standard architectural aluminum façade maintenance practices.

Maintenance procedures shall follow manufacturer guidelines.

8. Environmental Considerations

QuickPanel® components may contribute to sustainable design objectives depending on project requirements, including:

- Recyclable aluminum content
- Potential LEED credit contribution
- HPD documentation availability
- Project-specific sustainability performance shall be confirmed independently.

QuickPanel® System – Pressure-Equalized Rainscreen System

PREPARATION

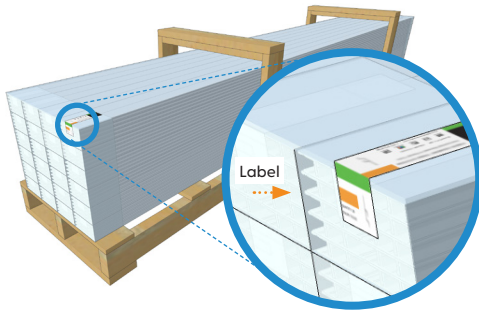


Figure 4.1

- Comply with all applicable local building codes, project specifications, and approved shop drawings prior to commencing work.
- Ensure a safe work environment is maintained at all times in accordance with applicable safety regulations and site-specific requirements, including the use of appropriate personal protective equipment (PPE).
- Materials are delivered on pallets (see Figure 4.1). Pallet size may vary depending on order quantity and profile type. All products are individually packaged and labeled by profile type and finish.
- Upon delivery, inspect all materials for damage, defects, finish quality, color accuracy, color consistency, and conformance with the approved trim specifications. Any discrepancies shall be reported prior to installation.
- Verify product labels to confirm that all required components have been received. Each package is labeled for identification.
- One-piece profiles are wrapped and labeled with profile type and finish.
- Two-piece profiles (top caps and back plates) are packaged separately and bundled together. Joint identification labels indicate the corresponding components; contents shall be verified prior to installation.
- Confirm that all required tools and equipment are available, in proper working condition, and suitable for aluminum trim installation.
- All aluminum trim profiles are supplied in standard 10 ft [3048 mm] lengths and are manufactured from solid extruded aluminum.

CLEANING & MAINTENANCE

QuickPanel® Reveals Trim Systems are designed for low maintenance performance. Following installation, trims shall be cleaned as required and receive a basic wash-down on an annual basis to remove surface dirt, airborne contaminants, and environmental residue. Cleaning shall be performed using mild detergent and clean water in accordance with manufacturer recommendations. Abrasive cleaners, harsh chemicals, or tools that may damage the finish shall not be used.

STORAGE & HANDLING

Storage

Aluminum trim profiles may be stored outdoors prior to installation; exposure to normal moisture and temperature conditions will not adversely affect the aluminum material.

Store trims in a manner that prevents distortion, surface damage, or finish abrasion.

Do not stack other materials on top of trim profiles.

Handling

Handle trim profiles carefully to prevent bending, scratching, or finish damage.

Do not slide or drag trims across the ground or against abrasive surfaces.

Lift and carry trims as required to maintain edge integrity and surface finish.



REMINDER

To ensure product performance, follow all installation instructions as well as all applicable building codes. Failure to do so may void the product warranty.

QuickPanel® System – Pressure-Equalized Rainscreen System

PERSONAL PROTECTION EQUIPMENT (PPE)

We recommend the appropriate use and application of the following PPE during installation.

- | | |
|-------------------------|--------------------|
| 1. Steel Toe Boots | 6. Safety Vest |
| 2. Cut Resistant Gloves | 7. Fall Protection |
| 3. Safety Glasses | 8. Dust Mask |
| 4. Hard Hat | 9. First Aid Kit |
| 5. Ear Protection | |



TOOLS & ACCESSORIES

The following general tools will also be required for installation:

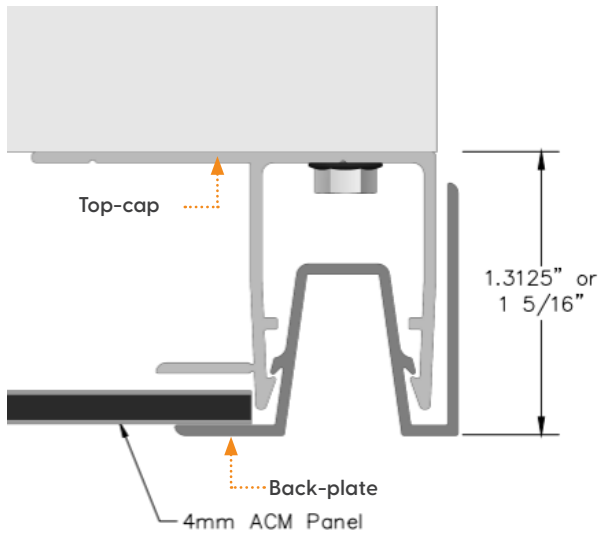
- | | |
|---|----------------------------|
| 1. Sawhorses / worktables | 8. HammerBlock |
| 2. Mitre saw with non-ferrous metal cutting blade | 9. Rubber dead blow hammer |
| 3. Impact driver / drill, with appropriate bits | 10. Tape measure |
| 4. Drill bit set | 11. Utility knife |
| 5. Carpenter's pencil | 12. Needle nose pliers |
| 6. Chalk line | 13. Tin snips |
| 7. Level | |



WARNING
Consult your local safety codes and regulations.

QuickPanel® System – Pressure-Equalized Rainscreen System

Most trims are a two piece design. Each will have a back plate that is installed prior panel installation and a top-cap that is clipped into the backplate after the panels have been installed. (Figure 8.1)



There are two design options to choose from. Our 2-piece trim technology ensures a quick and easy installation with either option.

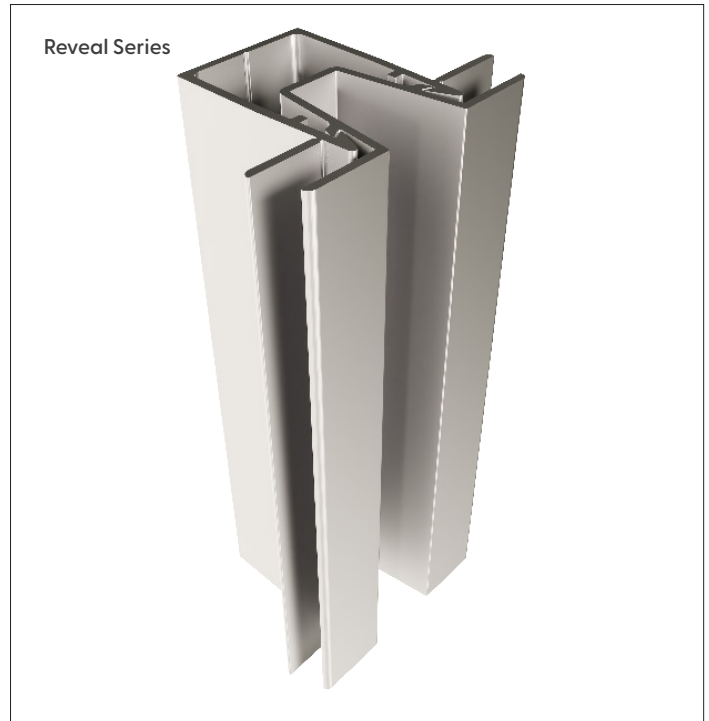
AESTHETIC CHOICE

QuickPanel Systems® supply two top cap design options for the same application:

- Reveal Series™ (Figure 5.1).
- Streamline Series™ (Figure 5.2).

IDENTICAL PERFORMANCE

Trim selection will achieve different aesthetics for your project (i.e. outside corners, jambs and material transitions, horizontal trims etc.). Aesthetic choices will not impact performance, installation time and cost.



10.6 WALL PREPARATION

QuickPanel® System – Pressure-Equalized Rainscreen System

Follow local building codes for all primary flashing details before commencing QuickPanel install.

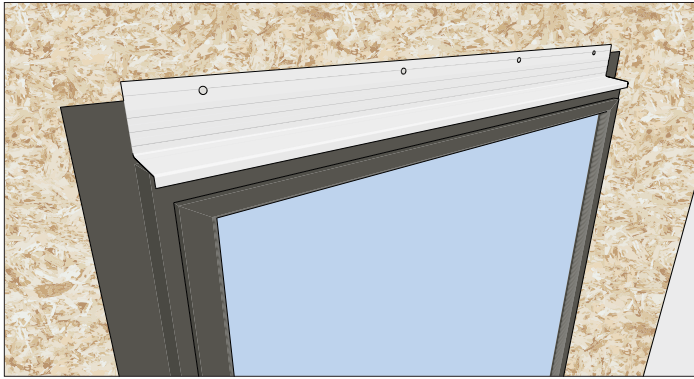


Figure 10.1

Ensure the proper air & water barrier (AWB) has been installed as per your local building code and project specifications (pic from ET fig 10.2)

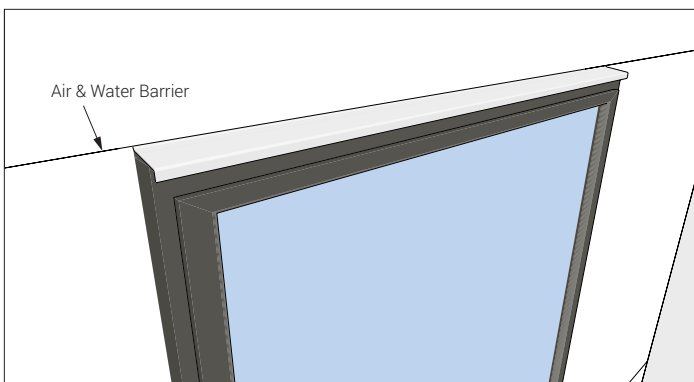


Figure 10.2

Identify your substrate material:

- Wood substrate
- Wood furring
- Metal substrate
- Metal furring (hat track / girts)
- Plastic furring strips

Note: If you have questions about your substrate material or alternative substrate fastening scenario – please contact installation support at 1-877-973-8746

Using Furring Strips

When installing two-piece trim profile assemblies on top of furring strips, a continuous furring strip is required to ensure proper engagement of the trims. (Figure 10.3)

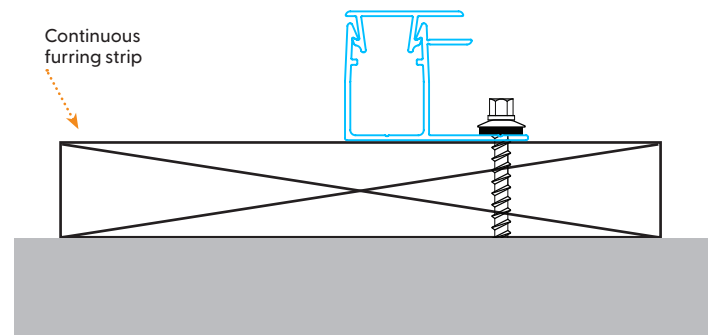


Figure 10.3



ATTENTION

Refer to your local building codes and project specifications for AWB and primary flashing details.

QuickPanel® System – Pressure-Equalized Rainscreen System

Substrate Type

Wood

Use 1.5" or greater, self-piercing galvanized/stainless steel pan head/pancake head (low profile)

Metal

Use 3/4" or greater, self-tapping galvanized/stainless steel pan head/pancake head (low profile head)



Do Not use an impact drill to fasten to steel studs.
This can strip the screws causing them to no longer hold the backplate in place.

How / Where to place fasteners

- Each profile has a fastening guide called the EZ.Line® – located on the center of backplates, or on the fastening flange (Figure 12.1).
- Fasteners should be installed 16" on center.
- On any corner profile (profile with two fastening flanges), alternate the fastening patterns from one flange to the next (Figure 13.2). Avoid aligning fasteners to prevent pillowing or buckling of the profile.

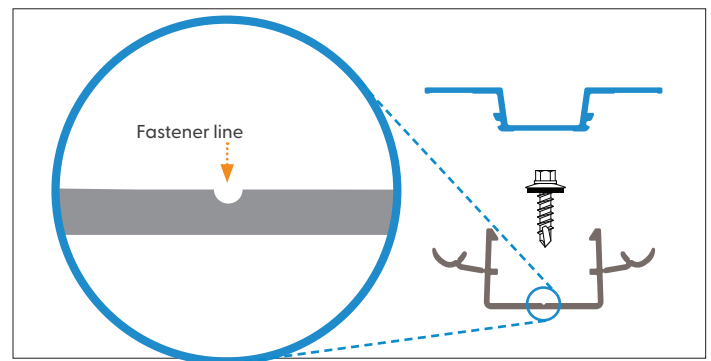


Figure 11.1

10.9 QUICKPANEL INSTALLATION PROCESS 1

QuickPanel® System – Pressure-Equalized Rainscreen System

1. Confirm grid line layout as per final project (approved) drawing.
(Figure 16.1)

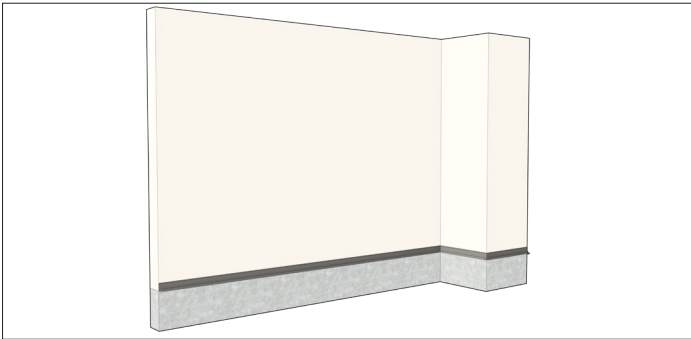


Figure 16.1

2. After completing the air water barrier and primary flashings, install the Q04F Perforated Starter Flashing on top of the Air Water Barrier. Level and align the top edge of the flashing 3-1/2" above the cladding start point.
(Figure 16.2)

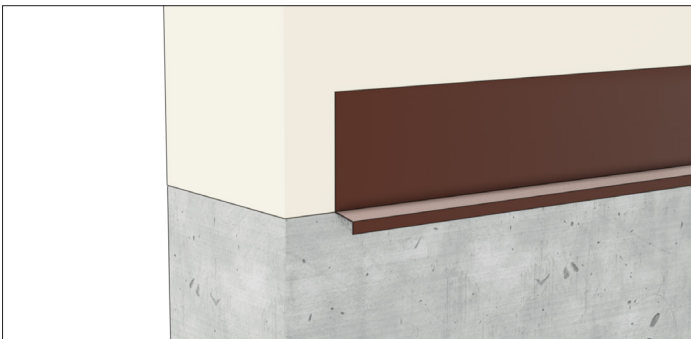


Figure 16.2

3. Align the Flashing ends flush to outside corners and 1-1/2" back from inside corners and 2 piece Perimeter trims. (Figure 16.3 a, b & c)

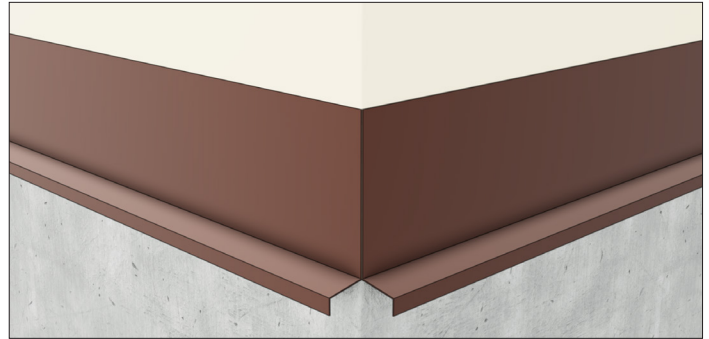


Figure 16.3



Figure 16.3 a

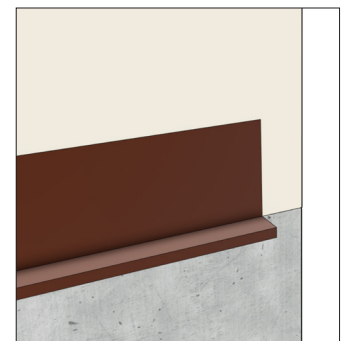


Figure 16.3 b

4. Overlap the flashings by 6" when the distance exceeds the length of the flashing. Tack in place approximately every 4'. The flashing will be secured once the Q03B general back plate is installed later in the process.
(Figure 16.4 a & b)

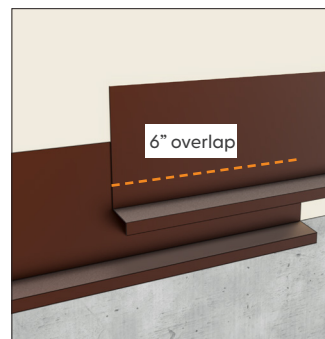


Figure 16.4 a

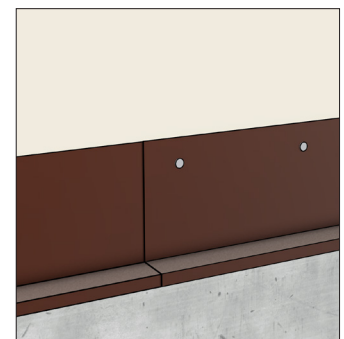


Figure 16.4 b

QuickPanel® System – Pressure-Equalized Rainscreen System

5. Install the Q01B Outside Corner and Q02B Inside Corner back plates by placing the bottom over the Perforated Starter Flashing and setting it at the first bend. At the top of the wall leave 2" back from the claddings end point. Fasten at 16" on center and no further than 2" from ends. (Figure 17.1 a, b, c, & d)

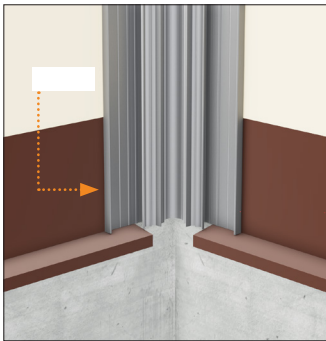


Figure 17.1 a

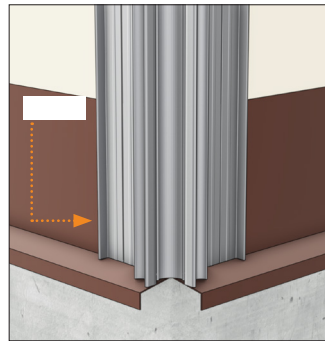


Figure 17.1 b

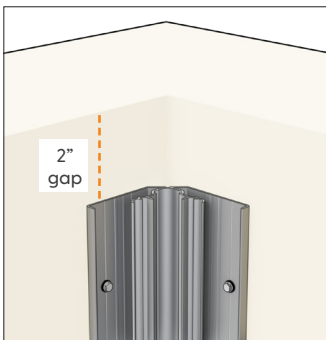


Figure 17.1 c

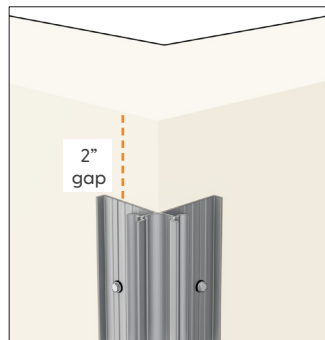


Figure 17.1 d

6. On any corner profile or profile with two fastening flanges, alternate the fastening patterns from one flange to the next. Avoid aligning fasteners to prevent pillowing or buckling, except at ends. At any end of a trim having two flanges fasten each flange no further than 2". Fasten all vertical and horizontal trims to studs when possible. (Figure 17.2)

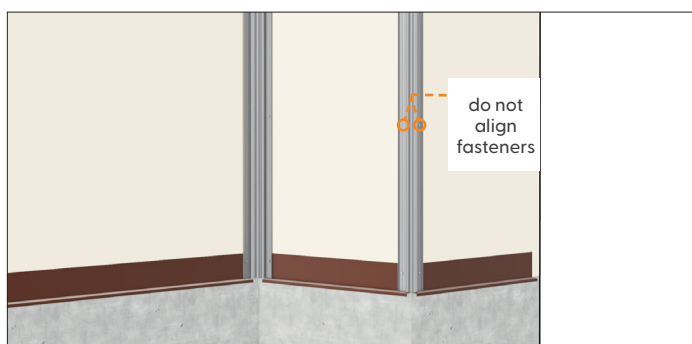


Figure 17.2

7. At a vertical perimeter edge Install the Q03B back plate by setting the bottom over the Perforated Starter Flashing and set it 2" from the first bend. At the top of the wall leave 2" back from the claddings end point. Fasten down the center of the back plates engagement channel at 16" on center and no further than 2" from ends. (Figure 17.3 a & b)

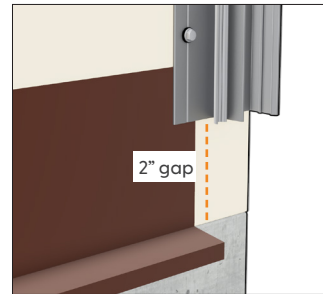


Figure 17.3 a

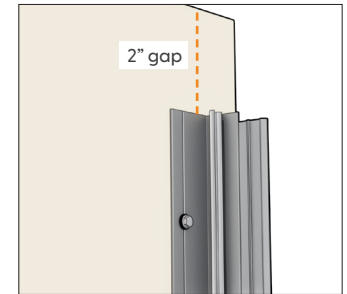


Figure 17.3 b

Note: The Q03B backplate has an extended fastening flange outside of the engagement channel that can be used as an alternate fastening location depending on substrate conditions.

Fasten all vertical and horizontal trims to studs when possible.

8. Place a Q03B back plate onto the Q04F Flashing and set the bottom edge into the first bend. Keep it back 2" from any corners fastening flange, and 2" from the center of any mid-field vertical. Fasten the center of the backplates engagement channel at 16" on center and no further than 2" from ends. (Figure 17.4 a & b)

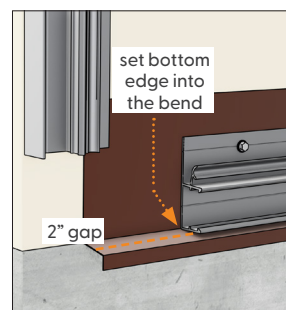


Figure 17.4 a

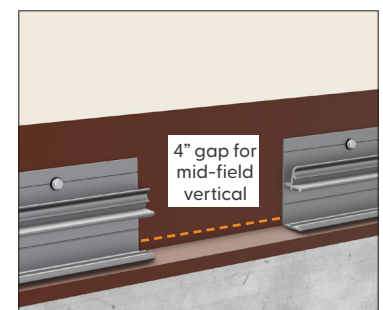


Figure 17.4 b

QuickPanel® System – Pressure-Equalized Rainscreen System

9. At the top of the wall run a Q03B back plate horizontally keeping it back 2" from any corner or vertical termination fastening flange. Fasten 16" o.c. and no further than 2" from the ends. (Figure 18.1 a & b)

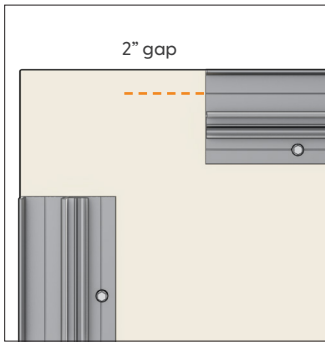


Figure 18.1 a

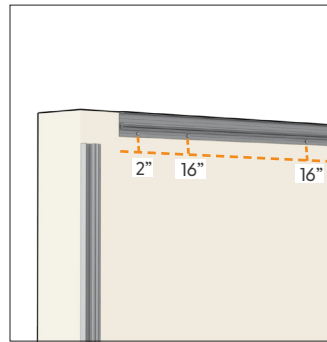


Figure 18.1 b

11. Install rainscreen Q06S Rainscreen Furring Spacers every 24" vertically and 16" horizontally. Install a furring spacer at the horizontal panel gridline to stop deflection in the Q07F Horizontal Flashing which will be installed later in the process. (Figure 18.3 a & b)

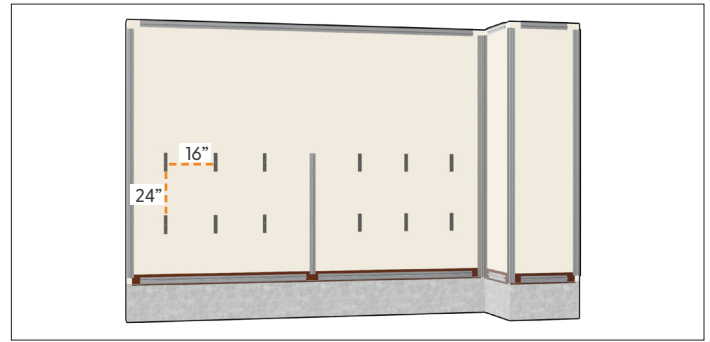


Figure 18.3 a



Figure 18.3 b

10. To install a main wall vertical, set the Q03B back plate over the starter flashing so that the bottom is 2" above the first bend and the top aligns with the top of panel location panel horizontal gridline. Plumb and fasten in place 16" o.c. and no further than 2" from ends. (Figure 18.2 a & b) (see Fastening Info)

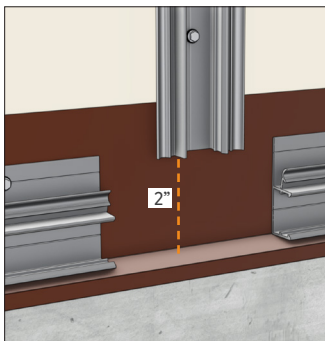


Figure 18.2 a

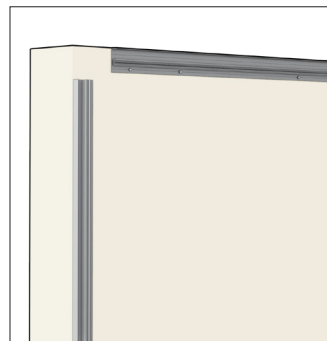


Figure 18.2 b



ATTENTION

A vertical main wall trim is used to accommodate varied panel lengths. Use is based on Estimation best practices for efficient use of cladding, as well as design aesthetics

QuickPanel® System – Pressure-Equalized Rainscreen System

Note: The arrows on the protective film indicate the paint direction. Have all arrows facing the same direction when installing the panels. It's especially important to orientate these panels in the same direction with mica and metallic colours. Refer to the Trim and Panel Allocations booklet for the panel orientation. (See Trim & Panel Allocations)

If using a circular saw to cut the panels, make sure to cut on the backside of the panel – this is the side **WITHOUT** the protective film. Failure to do this may result in scratching the panel from contact with the base plate of the saw.

If using a track saw to cut the panels, you can cut on either side.

12. To cut a panel, measure horizontally between the vertical back plates and cut 1/8" less at either end to allow for expansion. Measure vertically from Q03B back plate to the horizontal panel gridline. Follow mentioned cutting instructions. (Figure 19.1 a, b & c)

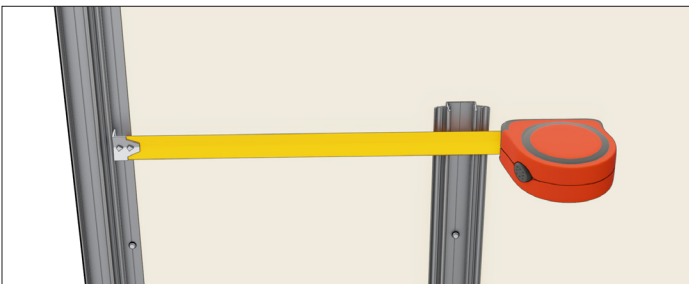


Figure 19.1a

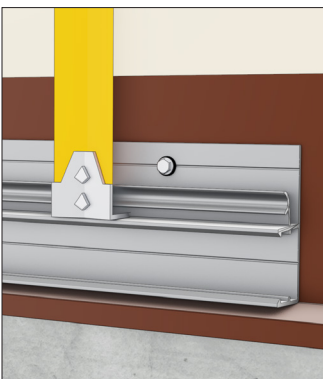


Figure 19.1b



Figure 19.1c

13. Peel back the panel protective film 1 1/2" around the perimeter of the panels to accommodate EZ Lock® Top Cap installation later in the process. This applies to all panels. (Figure 19.2)

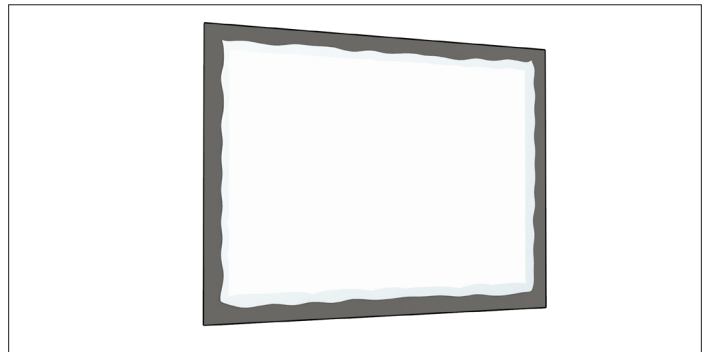


Figure 19.2

14. Install a small dot of the supplied external silicone into the panel platforms of the back plates at 16" intervals. (Figure 19.3)

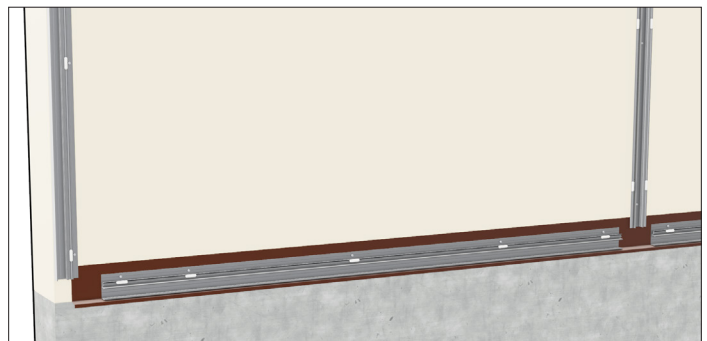


Figure 19.3

Note: Apply small dots of the supplied external silicone to the panel platform of the back plates at 16" intervals. This applies to all 2-piece trims.

10.9 QUICKPANEL INSTALLATION PROCESS

QuickPanel® System – Pressure-Equalized Rainscreen System

15. Set the panel onto the panel platforms using the provided suction cups to assist. Temporarily hold panel in place using QuickPanel® QuickClips™. Repeat along the same course. (Figure 20.1)

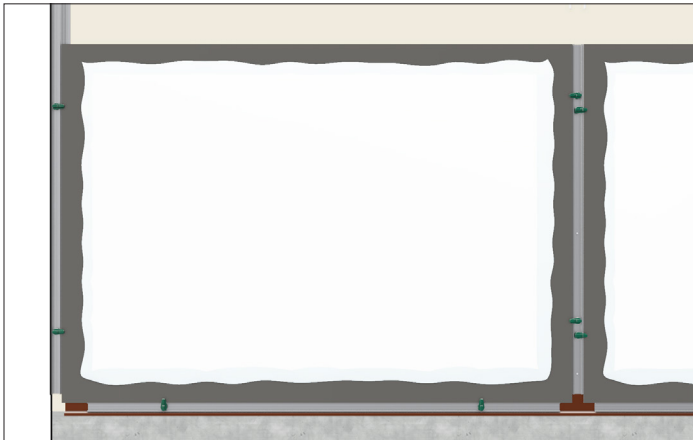


Figure 20.1

Note: QuickClips™ are for temporary use only. Do not use QuickClips™ for an extended period.

16. Cut the length of the Q08T top cap by measuring vertically from Q03B back plate's panel platform up to the chalk line grid height. (Figure 20.2 a & b)

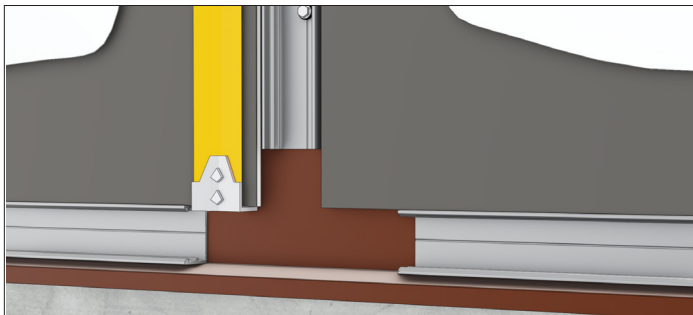


Figure 20.2 a

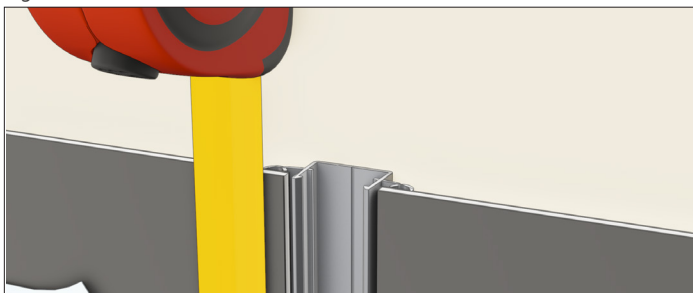


Figure 20.2 b

Note: The arrows on the protective film indicate the paint direction. Have all arrows facing the same direction when installing the panels. It's especially important to orientate these panels in the same direction with mica and metallic colours.

17. Install the Q08T top cap by measuring from the outer edge of the Q01B Outside Corner panel platform to the outer edge of the Q02B Inside Corner panel platform. (Figure 20.3 a & b)

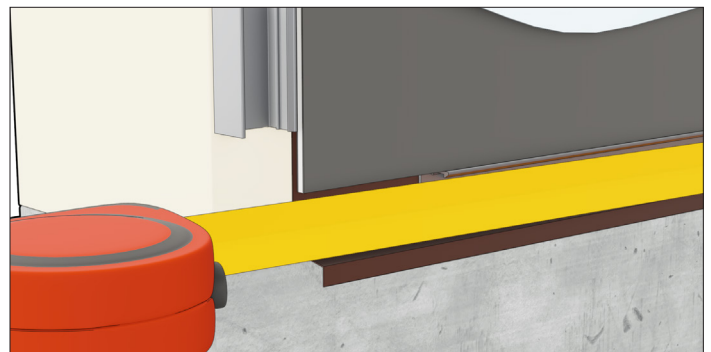
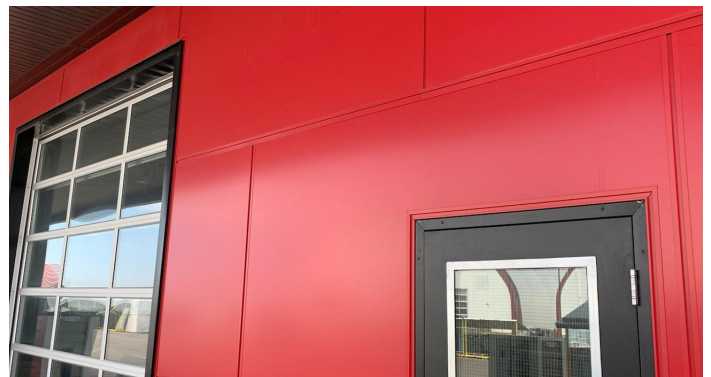


Figure 20.3 a



Figure 20.3 b



10.9 QUICKPANEL INSTALLATION PROCESS

QuickPanel® System – Pressure-Equalized Rainscreen System

Note: Use the QuickPanel® HammerBlock® to avoid damaging the trims and the 30-year Kynar® paint finish.

18. Apply dots of external silicone into the EZ.Lock® engagement channel before you engage the top cap to the back plate by setting the top cap into one side of the back plate's EZ Lock® engagement mechanism, then using the QuickPanel® HammerBlock™ and a deadblow / mallet, hammering along the whole top cap length. This applies to all 2-piece trims. (Figure 21.1)

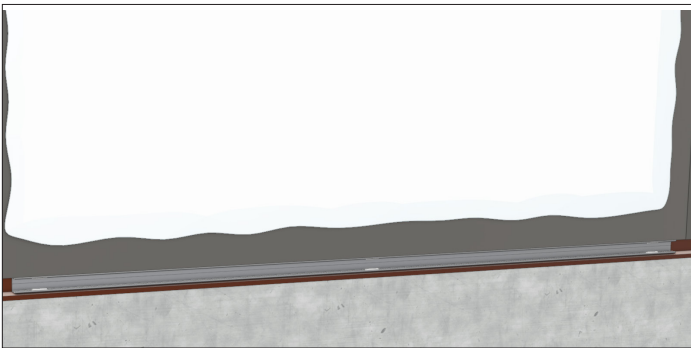


Figure 21.1 a

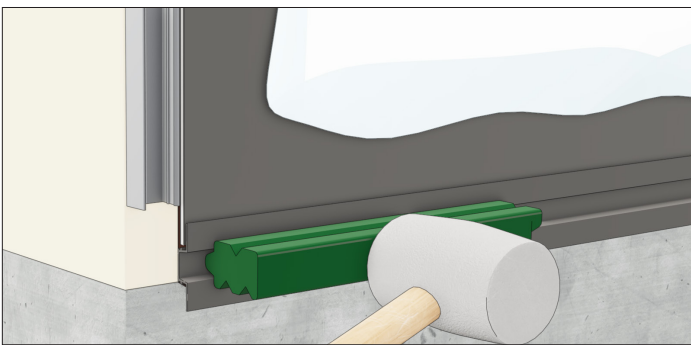


Figure 21.1 b

19. Install the Q08T top cap by applying dots of external silicone into the EZ.Lock® Engagement channel before you engage the top cap. QuickPanel® HammerBlock™ and a deadblow/mallet to secure top cap in place. (Figure 21.2)

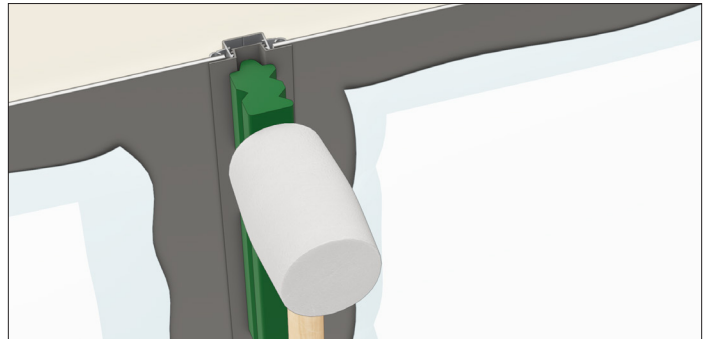


Figure 21.2

20. Measure horizontally from the nailing flange of the Q03B back plate to the Q02B Inside Corner and cut the Q04F Flashing to length. (Figure 21.3 a & b)



Figure 21.3 a

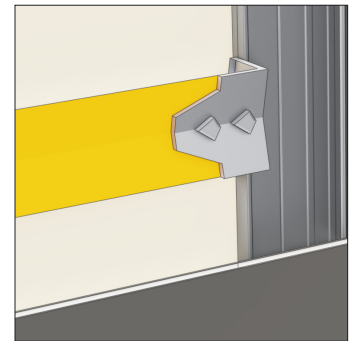


Figure 21.3 b

21. Place the Q04F Flashing so that it covers the top edge of panels, Q08T Top Cap, and the Q06S Rainscreen Furring Spacers. (Figure 21.4)

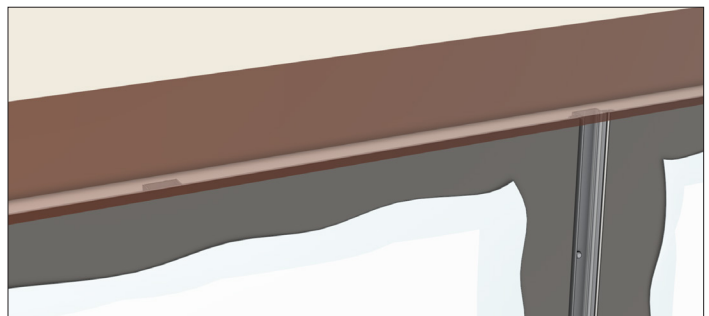


Figure 21.4

10.9 QUICKPANEL INSTALLATION PROCESS

QuickPanel® System – Pressure-Equalized Rainscreen System

22. Tack the Q04F Flashing level in place. Be sure to overlap joints by 6".

23. Measure 2" from the the Q03B Fastening Flange and 2" from the vertical gridline. Cut the Q03B back plate to this length and fasten with screws through the Q04F Flashing. Ensure that the horizontal center lines located on the flashing and the trim line up. (Figure 22.2 a & b)



Figure 22.2 a



Figure 22.2 b

24. Cut 2" notches in the panel platforms of the Q03B Vertical back plate where the Q03B Horizontal Trims meet at 90 degrees. The notch is needed to accommodate greater overlap of top cap tabs for maximum Fit&Finish™. (Figure 23.1)

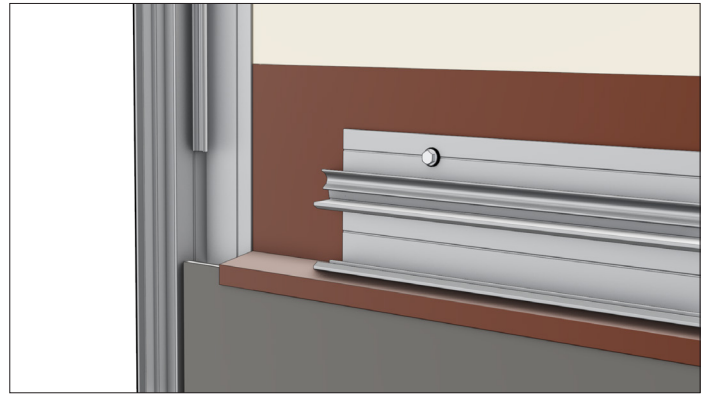


Figure 23.1

QuickPanel® System – Pressure-Equalized Rainscreen System

25. As seen in Step 10, set the Q03B Vertical back plate over the Horizontal Flashing so that the bottom is 2" above the first bend and the top aligns with the panel horizontal gridline. Level and fasten in place 16" o.c. and no further than 2" from ends. (Figure 23.2 a & b) (see Fastening Info)

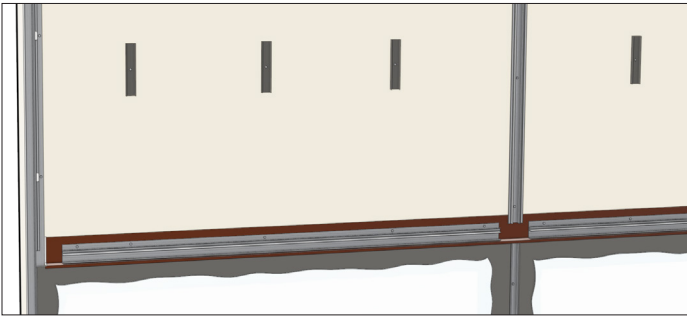


Figure 23.2 a

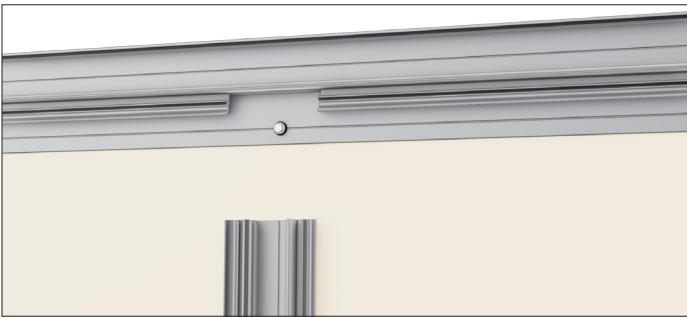


Figure 23.2 b

26. Follow steps shown in Step 11 to install Rainscreen Furring Spacers. (see Figure 18.3 a in Step 11)

Note: Rainscreen Furring Spacers are not needed where the panel's top horizontal edge meets the Q03B Soffit Termination back plate.

27. Repeat previous steps for the remaining panels, working your way up the wall.

28. Install Q09T top caps at the top of the wall by measuring horizontally from the outer edges vertical panel platforms. If the length of the wall is greater than 10' butt the top caps against each other to ensure coverage.

Note: Apply dots of external silicone in the EZ.Lock® engagement channel for all 2-piece trims.

29. Remove protective film from the panels after the wall is complete. (Figure 23.3)

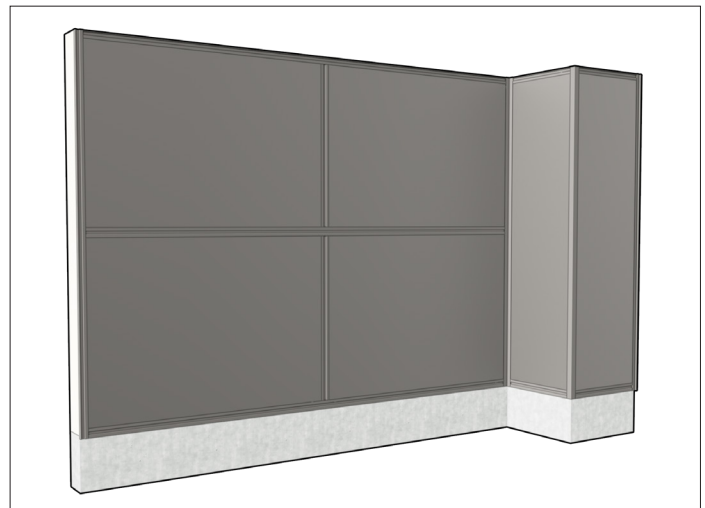


Figure 23.3

QuickPanel® System – Pressure-Equalized Rainscreen System

QuickPanel Systems® Aluminum Reveal Wall System 15 Year Limited Warranty is extended to original purchasers of QuickPanel Systems® Aluminum Reveal Wall Systems.

This Warranty is for the benefit of the original property owner who purchased the product and is not transferable. QuickPanel Systems® warrants that our Aluminum Reveal profiles, when installed properly, shall be free of manufacturing defects in workmanship and materials and will not split, crack, peel, blister, flake, rust nor be subject to abnormal weathering. With proper substrate, QuickPanel Reveals® will not buckle or split.

If the aluminum reveal profiles fail to perform as warranted, QuickPanel Systems® will provide, at its option, replacement parts or components to the dealer specified by the original purchaser at no cost. QuickPanel Systems® will not be responsible for installation or labor costs.

GENERAL CONDITIONS & EXCLUSIONS

The QuickPanel Systems® Warranty is not transferable and is subject to the general conditions and exclusions. There are certain conditions or applications over which QuickPanel Systems® has no control. The QuickPanel Systems® Warranty does not cover defects or problems as a result of such conditions or applications.

What is not covered:

- Damage caused by improper installation, use, application or maintenance;
- Damage to the finished metal caused by handling, shipping, processing; storage, installation and/or improper cleaning;
- Damage from contact with harmful chemicals, fumes, or vapours
- Normal weathering, chalking, fading, atmospheric pollutants or mildew build-up;
- Damage from settlement, shrinkage, or distortion of the structure;
- Pre-finished or field applied coatings;
- Acts of God, fire and casualty; and
- Installation or labor costs.

The limited warranties set forth are the only warranties (whether written or oral) applicable to QuickPanel Systems® wall system profiles.

QUICKPANEL SYSTEMS® MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED AND MAKES NO IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. THE REMEDIES STATED WITHIN ARE YOUR SOLE AND EXCLUSIVE REMEDY AND WILL NOT BE RESPONSIBLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES RELATING TO YOUR PURCHASE OR USE OF EASYTRIM REVEALS PRODUCTS. QuickPanel SYSTEMS® INC. LIABILITY IN ALL INSTANCES WILL BE LIMITED TO REPLACEMENT OF MATERIAL BASED ON PURCHASE DATE AND WARRANTY CLAIM DATE.

This warranty is applicable in Canada, the United States and Australia. Some states do not allow for the exclusion of incidental or consequential damages, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights and you may also have other rights, which vary from state to state, and from country to country.

HOW TO GET HELP IF YOU HAVE A WARRANTY CLAIM

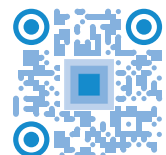
To obtain help with a warranty claim, contact the dealer, distributor or building products supplier where the QuickPanel Systems® were purchased originally. If, after thirty (30) days you have received no response to your concerns, then contact QuickPanel Reveals® Inc. via email sending your email to warranty@quickpanels.com.

1-877-973-8746 | warranty@quickpanels.com

Please include the following documentation:

1. Identify the QuickPanel Systems® wall system profile(s), date and place of purchase, and purchase price (proof of purchase required).
2. Describe the problem (photographs are required).
3. Describe any action you have taken, or those persons contacted to correct the problem.
4. Give your name, phone number and address where the product can be inspected.

1-877-973-8746 | warranty@quickpanels.com



12. ENVIRONMENTAL & HEALTH DOCUMENTATION

QuickPanel® System – Pressure-Equalized Rainscreen System

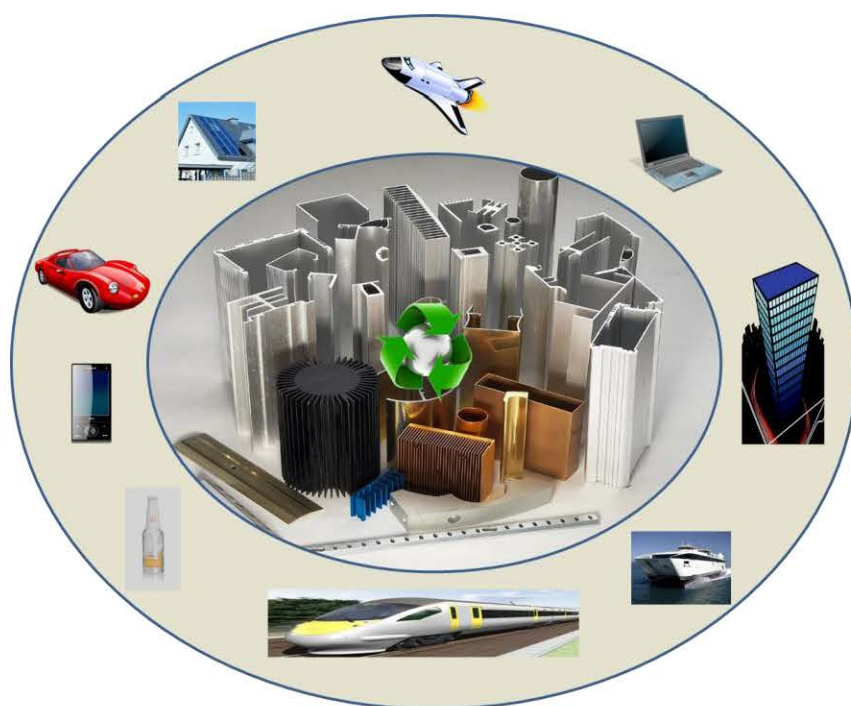
The following Environmental Product Declaration (EPD) and Health Product Declaration (HPD) documentation is provided for reference and sustainability evaluation purposes.

Documentation applicable to aluminum extrusion material only; trim profiles are non-emissive and recyclable.

ENVIRONMENTAL PRODUCT DECLARATION

EXTRUDED ALUMINUM

INDUSTRY-AVERAGE EXTRUDED ALUMINUM
MANUFACTURED IN NORTH AMERICA



The Aluminum Association and the aluminum industry are committed to responsible environmental stewardship. Aluminum is one of the most sustainable materials in use today:

- Strong and lightweight: Aluminum's favorable strength-to-weight ratio means it can be substituted for heavier materials, driving energy efficiency.
- Infinitely recyclable: Aluminum can be recycled over and over again without losing any of its fundamental properties.
- Efficiency Improvements: Through voluntary industry efforts, the North American aluminum industry has reduced the carbon footprint of primary aluminum production by 37 percent since 1995.
- Corrosion-resistant: Durable aluminum lasts longer than many competing materials, limiting the need for replacement.
- Highly recycled: Aluminum is one of the most recycled materials on the market today. And producing recycled aluminum takes just 8 percent of the energy needed to make primary aluminum.



ENVIRONMENTAL PRODUCT DECLARATION

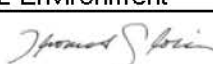


Extruded Aluminum Semi-Fabrication
Products of Aluminum and Aluminum Alloys

According to ISO 14025 and EN 15804

This declaration is an environmental product declaration (EPD) in accordance with ISO 14025. EPDs rely on Life Cycle Assessment (LCA) to provide information on a number of environmental impacts of products over their life cycle. Exclusions: EPDs do not indicate that any environmental or social performance benchmarks are met, and there may be impacts that they do not encompass. LCAs do not typically address the site-specific environmental impacts of raw material extraction, nor are they meant to assess human health toxicity. EPDs can complement but cannot replace tools and certifications that are designed to address these impacts and/or set performance thresholds – e.g. Type 1 certifications, health assessments and declarations, environmental impact assessments, etc. Accuracy of Results: EPDs regularly rely on estimations of impacts, and the level of accuracy in estimation of effect differs for any particular product line and reported impact. Comparability: EPDs are not comparative assertions and are either not comparable or have limited comparability when they cover different life cycle stages, are based on different product category rules or are missing relevant environmental impacts. EPDs from different programs may not be comparable.



PROGRAM OPERATOR	UL Environment
DECLARATION HOLDER	The Aluminum Association
DECLARATION NUMBER	4786092064.102.1
DECLARED PRODUCT	Extruded Aluminum
REFERENCE PCR	Products of Aluminum and Aluminum Alloys (IBU, July 2012)
DATE OF ISSUE	October 16, 2014
PERIOD OF VALIDITY	5 years
EXTENSION PERIOD	August 16, 2022
CONTENTS OF THE DECLARATION	Product definition and information about building physics Information about basic material and the material's origin Description of the product's manufacture Indication of product processing Information about the in-use conditions Life cycle assessment results Testing results and verifications
The PCR review was conducted by:	The Independent Expert Committee
This declaration was independently verified in accordance with ISO 14025 by Underwriters Laboratories ☐ INTERNAL ☒ EXTERNAL	 Wade Stout, UL Environment
This life cycle assessment was independently verified in accordance with ISO 14044 and the reference PCR by:	 Thomas Gloria, Industrial Ecology Consultants

This EPD conforms with EN 15804

ENVIRONMENTAL PRODUCT DECLARATION



Extruded Aluminum
Products of Aluminum and Aluminum Alloys

According to ISO 14025

Product

Product Description

This EPD covers the production of semi-fabricated and surface-finished aluminum extrusion products. The results represent an average across all extruded aluminum products manufactured in North America (United States and Canada). Averages are obtained through aggregating production-weighted data from the participating data.

Applications

Extruded aluminum is used in a variety of market sectors, including the following:

- Transportation: automobile structures and components, truck and trailer structures and components, train structure and components, aircraft structure and components, etc.
- Building, construction and infrastructure: building windows, doors, curtain walls, facades, skylights, green houses, roof structures, furniture and decorations, solar device frames and structures, structure and components of bridges and stadiums, etc.
- Consumer durables: components of consumer durable goods, such as computers, home appliances, and recreation devices and utilities.

Technical Data

Name	Value	Unit
Density	2.66-2.84	(kg/m ³) x 10 ³
Melting point (Typical)	475-655	°C
Electrical conductivity (Typical) at 20°C/at 68°F	Equal Volume: 16-36	MS/m (0.58*%IACS)
Thermal conductivity (Typical) at 25°C/at 77°F	113-234	W/(m.K)
Average Coefficient of thermal expansion (Typical) 20° to 100°C /68° to 212°F	22.3-23.9	per °C
Modulus of elasticity (Typical)	69-73	MPa x 10 ³
Hardness (Typical)	19-150	HB
Yield strength (min)	15-490	MPa
Ultimate tensile strength (min)	60-560	MPa
Breaking elongation (min) (50mm & 4D)	>4	%
Chemical composition	Varying alloy by alloy, Al 87.17-99.6	% by mass



ENVIRONMENTAL PRODUCT DECLARATION



Extruded Aluminum
Products of Aluminum and Aluminum Alloys

According to ISO 14025

Application Rules

ASTM B221-13/B221M-13 Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes

ASTM B241/B241M-12e1 Standard Specification for Aluminum and Aluminum-Alloy Seamless Pipe and Seamless Extruded Tube

ASTM B317/B317M-07 Standard Specification for Aluminum-Alloy Extruded Bar, Rod, Tube, Pipe, Structural Profiles, and Profiles for Electrical Purposes (Bus Conductor)

ASTM B345/B345M-11 Standard Specification for Aluminum and Aluminum-Alloy Seamless Pipe and Seamless Extruded Tube for Gas and Oil Transmission and Distribution Piping Systems

ASTM B429/B429M-10e1 Standard Specification for Aluminum-Alloy Extruded Structural Pipe and Tube

ASTM B491/B491M-06 Standard Specification for Aluminum and Aluminum-Alloy Extruded Round Tubes for General-Purpose Applications

Delivery Status

The output of the extrusion process is a semi-fabricated and surface finished extrusion product transported to a component or final product manufacturer.

Base and Ancillary Materials

Extruded aluminum products made in North America contain a considerable proportion of metal recycled from aluminum scrap. The metal composition of products, based on metal feedstock information collected at the melting furnaces for extrusion billet making, is shown below. Products shipped to different market sectors may vary significantly on its metal compositions. Recovered aluminum from internal process (run-around) scrap is considered as a repeated closed-loop manufacturing process and therefore is excluded from metal composition declaration. Definitions of Internal Process (Run-Around) Scrap, Post-Industrial Scrap and Post-Consumer Scrap are consistent with ISO 14021/25 (2006) on environmental labels and declarations, and the related interpretations by UL Environment.

Extruded aluminum products may include various types of coatings, including anodized, painted, and laquered finishes. All coating materials are included in inventory, based on averages across the industry.

Category of Metal Source	Percentage (by mass)
Primary Aluminum (including alloy agents)	49
Recovered Aluminum from Other Post-Industrial Scrap	20
Recovered Metal from Post-Consumer Scrap	31



ENVIRONMENTAL PRODUCT DECLARATION



Extruded Aluminum
Products of Aluminum and Aluminum Alloys

According to ISO 14025

Manufacture

The extrusion process takes cast extrusion billet (round bar stock produced from direct chill molds) and produces extruded shapes. The process begins with an inline preheat that takes the temperature of the billet to a predetermined level depending on the alloy. The billet is then sheared if not already cut to length and deposited into a hydraulic press. The press squeezes the semi-plastic billet through a heated steel die that forms the shape. The shape is extruded into lengths defined by the take-off tables and is either water quenched or air cooled. The shape is then clamped and stretched to form a solid straightened length.

The straighten lengths are cut to final length multiples and may be placed in an aging furnace to achieve a desired temper. Lengths are then finished (drilled and shaped) and placed into a coating process. The types of coatings include anodized, painted, and lacquered finishes.

Environment and Health during Manufacturing

Air: Hazardous air emission releases comply with regulatory thresholds.

Water/soil: Pollutants in wastewater discharge comply with regulatory thresholds.

Noise: Due to adequate acoustical absorption and mitigation devices, measurements of sound levels have shown that all values inside and outside the production plant comply with regulatory thresholds.

Product Processing and Installation

Further processing and installation of extruded aluminum product depends on the final application of the product and is outside the scope of this EPD.

Packaging

Product delivery packaging includes wood, steel, paper board, and sometimes plastic wraps. Packaging is included in the scope of this EPD.

Condition of Use

No special conditions of use are relevant for this product under the scope of this EPD.

ENVIRONMENTAL PRODUCT DECLARATION



Extruded Aluminum
Products of Aluminum and Aluminum Alloys

According to ISO 14025

Environment and Health During Use

The environmental and health effects during use are dependent on the ultimate use of the extruded aluminum and are outside the scope of this EPD. The following general statements are relevant for all aluminum products:

- Aluminum products are often made from both primary and recycled ingots
- There is no relevant chemical composition difference between primary and secondary ingots if both are governed by the same alloy designation and chemical composition limit standards
- The service life of the final product depends on its application, but is typically long due to aluminum's excellent corrosion resistance
- For that same reason, maintenance needs during use are usually low.

Reference Service Life

Service lives for aluminum extrusions vary based on the application. This EPD does not cover the product use phase and therefore makes no specific claim as to a typical reference service life.

Extraordinary Effects

Fire: Aluminum products comply with all local and federal laws with respect to fire hazards and control.

Water: There is no evidence to suggest water runoff or exposure under normal and intended operation will violate general water quality standards.

Mechanical destruction: Not relevant for aluminum extrusions.

Recycling Phase

Aluminum is a highly recyclable material. During manufacturing, most process and new scrap are fed back into the production process. At the end of life, aluminum scrap is collected and sold to both secondary smelting and semi-fabrication companies. The recycling rate for aluminum scrap is assumed to be 95%. Recycling over 95% is typical for aluminum products in high volume automotive and construction market sectors (IAI 2013).

Post-industrial scrap is highly utilized within the aluminum industry. Most process and new scrap materials that occur in the manufacture and processing of extruded aluminum are fed back into the production process.

Disposal

It is assumed that 5% of the extruded aluminum products are sent to the landfill for disposal at the end of life. The European Waste Code for aluminum is 17 04 02.

ENVIRONMENTAL PRODUCT DECLARATION



Extruded Aluminum
Products of Aluminum and Aluminum Alloys

According to ISO 14025

Further Information

For further information on aluminum and aluminum products, please visit the Aluminum Association website:
www.aluminum.org.

The life cycle assessment was conducted by PE INTERNATIONAL using GaBi data.



ENVIRONMENTAL PRODUCT DECLARATION



Extruded Aluminum
Products of Aluminum and Aluminum Alloys

According to ISO 14025

Life Cycle Assessment

Declared Unit

The declared unit is the production and end-of-life treatment of one metric ton of extruded aluminum product. The results can be converted to one kilogram by dividing by 1000.

System Boundary

This is a “cradle-to-gate – with options” EPD. The following processes are considered in the product stages A1–A3 of the aluminum extrusion production:

- The provision of resources, additives and energy
- Transport of resources and additives to the production site
- Production process of extruded aluminum on site, including energy, production of additives, disposal of production residues, consideration of related emissions, and recycling of production scrap (“closed loop”).

Product stages C4 and D are also included, with 95% of the extruded product assumed to be recycled at the end-of-life, and 5% disposed of by landfilling. End-of-life recycling is accounted for using the avoided burden recycling methodology.

DESCRIPTION OF THE SYSTEM BOUNDARY (X = INCLUDED IN LCA; MND = MODULE NOT DECLARED)																
PRODUCT STAGE			CONSTRUCTION PROCESS STAGE		USE STAGE							END OF LIFE STAGE				BENEFITS AND LOADS BEYOND THE SYSTEM BOUNDARIES
Raw material supply	Transport	Manufacturing	Transport	Construction-installation process	Use	Maintenance	Repair	Replacement ¹	Refurbishment ¹	Operational energy use	Operational water use	De-construction demolition	Transport	Waste processing	Disposal	Reuse-Recovery-Recycling-potential
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
X	X	X	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	X	X



ENVIRONMENTAL PRODUCT DECLARATION



Extruded Aluminum
Products of Aluminum and Aluminum Alloys

According to ISO 14025

Estimates and Assumptions

The LCA required only limited use of estimates and assumptions. The most relevant estimation/assumption is the end-of-life recycling rate of 95%, which is discussed in the *Recycling Phase* section. Averages and best-estimates were used to fill in minor data gaps, such as the source of ingots for some facilities. Other estimates and assumptions are discussed in detail in the LCA background report.

Cut-off Criteria

Input: All material flows that enter the system and are over 1% of the product mass or contribute more than 1% to the primary energy consumption are included.

Output: All material flows that exit the system and whose environmental impact makes up more than 1% of the total impact in an impact category considered are included.

Background Data

In order to model the life cycle for the production of the extruded aluminum, the GaBi 6 software system developed by PE INTERNATIONAL was used. All relevant background data necessary for the production of cold-rolled aluminum were taken from the GaBi 2012 databases or were made available by the Aluminum Association through industry survey results. Companies participating in the project, either with AA or AIA, are provided in the *Participating Companies* section.

Data Quality

The data is considered of high quality. Inventory data quality is judged by its precision (measured, calculated or estimated), completeness (e.g., unreported emissions), consistency (degree of uniformity of the methodology applied on a study serving as a data source) and representativeness (geographical, temporal, and technological). To cover these requirements and to ensure reliable results, first-hand industry data in combination with consistent background life cycle inventories from the GaBi 2012 database were used.

The LCI data sets from the GaBi database are widely distributed and used with the GaBi 6 Software. The datasets have been used in LCA models worldwide in industrial and scientific applications in internal as well as in many critically reviewed and published studies. In the process of providing these datasets, they are cross-checked with other databases and values from industry and science.

ENVIRONMENTAL PRODUCT DECLARATION



Extruded Aluminum
Products of Aluminum and Aluminum Alloys

According to ISO 14025

Period under Review

Primary data collected from the participating companies and from their operational activities is representative for the year of 2010. Additional data necessary to model raw material production and energy generation, etc. were adopted from the GaBi 6.0 software system database.

During the survey, however, a small group of semi-fabrication facilities reported operational data for 2008, 2009, or 2011, depending on the time when they started to respond to the survey and the convenience of their data availability. This deviation from the defined reference year has been taken into account as it is being assumed that there are no radical changes in the technology and operational practice for semi-fabrications from the year 2008 to 2011. Additional data necessary to model raw material production, energy generation, etc. were adopted from the GaBi 2012 database with typical reference years between 2006 and 2010.

Allocation

Allocation is used to address recycled content, post-production scrap, and waste at end-of-life. The avoided burden allocation approach was applied. Under this approach, end-of-life scrap is first balanced out with any open scrap inputs into production. Only the remaining *net scrap* is then modeled as being sent to material recycling in order to avoid double-counting the benefits of using recycled content. If more scrap is recovered at product end-of-life than is required in the manufacturing stage, the product system receives a credit equal to the burden of primary material production minus the burden of recycling scrap into secondary material based on the mass of secondary material produced. This credit represents the avoided burden of primary material production.

Comparability

A comparison or an evaluation of EPD data is only possible if all the data sets to be compared were created according to EN 15804 and the building context, respectively the product-specific characteristics of performance are taken into account.

ENVIRONMENTAL PRODUCT DECLARATION



Extruded Aluminum
Products of Aluminum and Aluminum Alloys

According to ISO 14025

Life Cycle Assessment: Results

Results given per one metric ton of extruded aluminum.

ENVIRONMENTAL IMPACTS

CML 2001 (Nov 2010)

Parameter	Unit	Manufacturing A1-A3	End-of-Life C4	Credits D
GWP	kg CO ₂ eq	6.57E+03	2.17E+00	-4.13E+03
ODP	kg CFC-11 eq	4.14E-07	2.50E-10	-1.74E-07
AP	kg SO ₂ eq	4.01E+01	8.86E-03	-2.95E+01
EP	kg PO ₄ ³⁻ eq	1.90E+00	8.03E-04	-1.22E+00
POCP	kg C ₂ H ₄ eq	2.21E+00	1.00E-03	-1.48E+00
ADPE	kg Sb eq	3.97E-03	8.03E-07	-2.20E-03
ADPF	MJ	7.13E+04	3.43E+01	-3.89E+04

TRACI 2.1

Parameter	Unit	Manufacturing A1-A3	End-of-Life C4	Credits D
GWP	kg CO ₂ eq	6.57E+03	2.17E+00	-4.13E+03
ODP	kg CFC-11 eq	4.41E-07	2.66E-10	-1.85E-07
AP Air	kg SO ₂ eq	3.75E+01	8.99E-03	-2.72E+01
AP Water	kg SO ₂ eq	6.13E-02	9.08E-06	-2.23E-03
EP Air	kg N eq	6.62E-01	1.30E-03	-3.88E-01
EP Water	kg N eq	1.12E-01	7.69E-05	-6.22E-02
SP	kg O ₃ eq	3.27E+02	1.40E-01	-2.10E+02
FF	MJ	5.91E+03	4.30E+00	-2.49E+03

RESOURCE USE

Parameter	Unit	Manufacturing A1-A3	End-of-Life C4	Credits D
PERE	[MJ]	3.12E+04	1.59E+00	-2.45E+04
PERM	[MJ]	0.00E+00	0.00E+00	0.00E+00
PERT	[MJ]	3.12E+04	1.59E+00	-2.45E+04
PENRE	[MJ]	7.13E+04	3.43E+01	-3.89E+04
PENRM	[MJ]	0.00E+00	0.00E+00	0.00E+00
PENRT	[MJ]	7.13E+04	3.43E+01	-3.89E+04
SM	[kg]	4.26E+02	0.00E+00	0.00E+00
RSF	[MJ]	0.00E+00	0.00E+00	0.00E+00
NRSF	[MJ]	0.00E+00	0.00E+00	0.00E+00
FV	[m ³]	1.37E+05	-8.20E+01	-1.07E+05

OUTPUT FLOWS AND WASTE CATEGORIES

Parameter	Unit	Manufacturing A1-A3	End-of-Life C4	Credits D
HWD	[kg]	1.69E+03	0.00E+00	-1.57E+03
NHWD	[kg]	7.82E+01	5.00E+01	-6.24E+01
RWD	[kg]	4.19E+00	4.42E-04	-2.35E+00
CRU	[kg]	0.00E+00	0.00E+00	0.00E+00
MFR	[kg]	8.47E+00	9.50E+02	0.00E+00
MER	[kg]	0.00E+00	0.00E+00	0.00E+00
EEE	[MJ]	0.00E+00	0.00E+00	0.00E+00
EET	[MJ]	0.00E+00	0.00E+00	0.00E+00

Glossary

Environmental Impacts

GWP	Global warming potential
ODP	Depletion potential of the stratospheric ozone layer
AP	Acidification potential
EP	Eutrophication potential
POCP	Photochemical oxidant formation potential
SFP	Smog formation potential
ADPE	Abiotic depletion potential for non-fossil resources
ADPF	Abiotic depletion potential for fossil resources
FF	Fossil fuel consumption

Resource Use

PERE	Renewable primary energy as energy carrier
PERM	Renewable primary energy resources as material utilization
PERT	Total use of renewable primary energy resources
PENRE	Non-renewable primary energy as energy carrier
PENRM	Non-renewable primary energy as material utilization
PENRT	Total use of non-renewable primary energy resources
SM	Use of secondary material
RSF	Use of renewable secondary fuels
NRSF	Use of non-renewable secondary fuels
FW	Use of net fresh water

Output Flows and Waste Categories

HWD	Hazardous waste disposed
NHWD	Non-hazardous waste disposed
RWD	Radioactive waste disposed
CRU	Components for re-use
MFR	Materials for recycling
MER	Materials for energy recovery
EEE	Exported electrical energy
EET	Exported thermal energy



ENVIRONMENTAL PRODUCT DECLARATION



Extruded Aluminum
Products of Aluminum and Aluminum Alloys

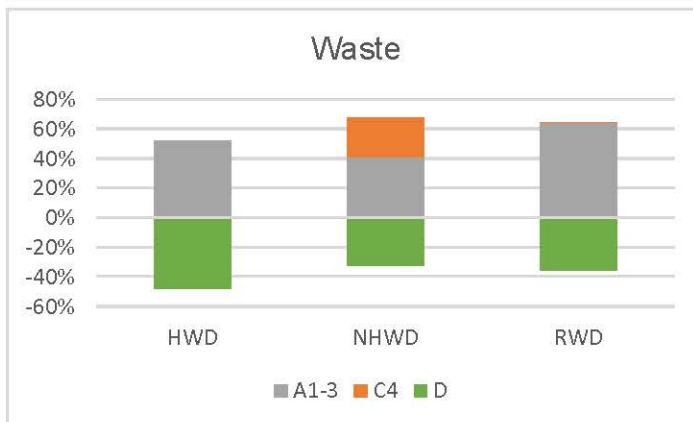
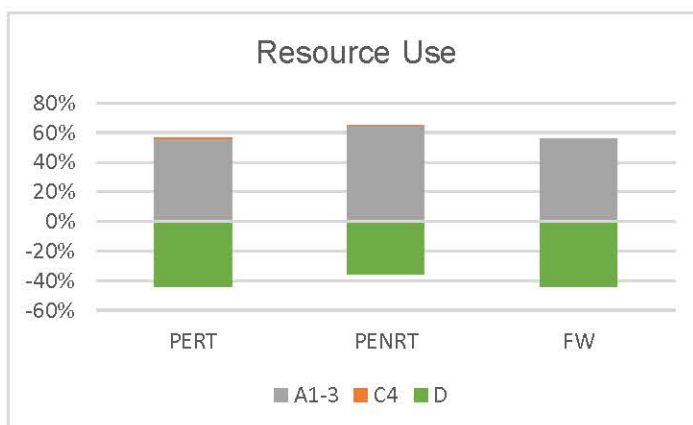
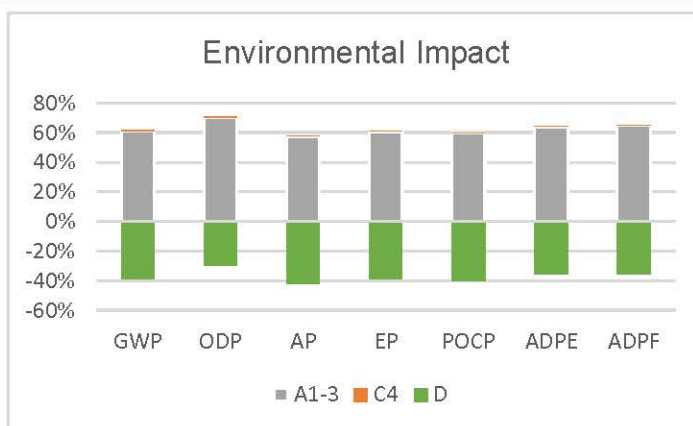
According to ISO 14025

Life Cycle Assessment: Interpretation

The results represent the cradle-to-gate and end-of-life environmental performance of a metric ton of extruded aluminum. The majority of the environmental impacts are from the production of the aluminum, however the credits from recycling the aluminum at end-of-life help to offset the initial burden.

As with any metal, the recycling rate has a significant impact on the life cycle environmental performance of extruded aluminum. A 95% recycling rate is assumed. Aluminum is an ideal material for recycling because the metal can be recycled over and over again without any loss in quality (AIA 2013).

Finally, it is interesting to note that the landfilling of extruded aluminum in C4 has a negative use of net fresh water (FW). This is due to the landfill collecting rain water and introducing it into the watershed as landfill leachate, following the blue water calculation methodology.



ENVIRONMENTAL PRODUCT DECLARATION



Extruded Aluminum
Products of Aluminum and Aluminum Alloys

According to ISO 14025

Participating Companies

Company	Data Category	Note
Alcoa Inc.	Bauxite, Alumina, Primary Aluminum, Recycled Aluminum, Hot and Cold Rolling, Extrusion	Includes Kawneer and Traco
Aleris International Inc.	Recycled Aluminum, Hot and Cold Rolling	
Alexandria Extrusion Company	Extrusion	
Century Aluminum Company	Primary Aluminum	
Constellium	Hot and Cold Rolling	At the time of data survey, it was owned by Rio Tinto Alcan
Grupo Cuprum	Recycled Aluminum, Extrusion	
Hydro Aluminum North America	Bauxite, Alumina, Recycled Aluminum, Extrusion	
Jupiter Aluminum Corporation	Recycled Aluminum, Hot and Cold Rolling	
Kaiser Aluminum	Recycled Aluminum, Hot and Cold Rolling, Extrusion	
KB Alloy	Recycled Aluminum	
Logan Aluminum	Recycled Aluminum, Hot and Cold Rolling	
Metal Exchange Corporation	Recycled Aluminum, Extrusion	
Minalex Corporation	Extrusion	
Nichols Aluminum	Recycled Aluminum, Hot and Cold Rolling	
Noranda Aluminum Inc.	Alumina, Primary Aluminum	
Novelis Inc.	Recycled Aluminum, Hot and Cold Rolling	
Ormet Corporation	Alumina, Primary Aluminum	
Peerless of America	Extrusion	
Penn Aluminum International LLC	Extrusion	
Rio Tinto Alcan	Bauxite, Alumina, Primary Aluminum	
Sapa Extrusions Inc.	Recycled Aluminum, Extrusion	
Scepter Inc.	Recycled Aluminum	
Sherwin Alumina	Alumina	
Smelter Service Corporation	Recycled Aluminum	
Tri-Arrows Aluminum Inc.	Recycled Aluminum, Hot and Cold Rolling	



ENVIRONMENTAL PRODUCT DECLARATION



Extruded Aluminum
Products of Aluminum and Aluminum Alloys

According to ISO 14025

References

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EasyTrim Systems
by Engage Building Products

Health Product
Declaration v2.3
created via: HPDC Online Builder

HPD UNIQUE IDENTIFIER: 30546

CLASSIFICATION: 07 42 00 Wall Panels

PRODUCT DESCRIPTION: The complete aluminum trim system for fiber cement, engineered wood, and vinyl siding on single-family homes, multi-family developments, and commercial buildings. EasyTrim is compatible with almost every panel or lap product of all sizes and thicknesses, including: 5/16", 7/16", 3/4", 1", 1-1/4".

Section 1: Summary

Basic Method / Product Threshold

CONTENT INVENTORY

Inventory Reporting Format	Threshold Level	Residuals/Impurities Evaluation	For all contents above the threshold, the manufacturer has:
☒ Nested Materials Method	☒ 100 ppm	☒ Completed	Characterized ☒ Yes ☐ No
☒ Basic Method	☐ 1,000 ppm	☐ Partially Completed	<i>Provided weight and role.</i>
Threshold Disclosed Per	☐ Per GHS SDS	☐ Not Completed	Screened ☒ Yes ☐ No
☐ Material	☐ Other	Explanation(s) provided :	<i>Provided screening results using HPDC-approved methods.</i>
☒ Product		☒ Yes ☐ No	Identified ☒ Yes ☐ No
			<i>Provided name and CAS RN or other identifier.</i>

CONTENT IN DESCENDING ORDER OF QUANTITY

Summary of product contents and results from screening individual chemical substances against HPD Priority Hazard Lists and the GreenScreen for Safer Chemicals®. The HPD does not assess whether using or handling this product will expose individuals to its chemical substances or any health risk. Refer to Section 2 for further details.

PRODUCT | MATERIAL OR SUBSTANCE | RESIDUAL OR IMPURITY GREENSCREEN SCORE | HAZARD TYPE EASYTRIM SYSTEMS [ALUMINUM BM-1 | END | MAM | PHY MANGANESE LT-P1 | END | MUL | REP | MAM | AQU MAGNESIUM LT-UNK | PHY | SKI CHROMIUM LT-P1 | END | SKI | GEN | REP | MAM]

Number of Greenscreen BM-4/BM3 contents ... 0

Contents highest-concern GreenScreen score(s) (BM-1, LT-1, LT-P1) ... BM-1, LT-P1

Nanomaterial ... No

INVENTORY AND SCREENING NOTES:

Residuals/impurities in select raw materials are quantitatively measured, and are displayed in the HPD when greater than 100ppm.

VOLATILE ORGANIC COMPOUND (VOC) CONTENT

VOC Content data is not applicable for this product category.

CERTIFICATIONS AND COMPLIANCE See Section 3 for additional listings.

VOC emissions: Inherently non-emitting source per LEED LCA: Environmental Product Declaration (EPD) by UL

CONSISTENCY WITH OTHER PROGRAMS

Pre-checked for LEED v4 Option 1.

Pre-checked for LEED v4.1 Option 1.

Third Party Verified?

☐ Yes

☒ No

PREPARER: Self-Prepared

VERIFIER:

VERIFICATION #:

SCREENING DATE: 2022-10-17

PUBLISHED DATE: 2022-11-03

EXPIRY DATE: 2025-10-17

Section 2: Content in Descending Order of Quantity

This section lists contents in a product based on specific threshold(s) and reports detailed health information including hazards. This HPD uses the inventory method indicated above, which is one of three possible methods:

- Basic Inventory method with Product-level threshold.
- Nested Material Inventory method with Product-level threshold
- Nested Material Inventory method with individual Material-level thresholds

Definitions and requirements for the three inventory methods and requirements for each data field can be found in the HPD Open Standard version 2.3, available on the HPDC website at: www.hpd-collaborative.org/hpd-2-3-standard

EASYTRIM SYSTEMS

PRODUCT THRESHOLD: 100 ppm

RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes

RESIDUALS AND IMPURITIES NOTES: Residuals/Impurities in raw materials are quantitatively measured and are displayed in the HPD when greater than or equal to 100 ppm.

OTHER PRODUCT NOTES: For more information on EasyTrim Systems visit: <https://easytrimreveals.com/>

ALUMINUM

ID: 7429-90-5

HAZARD DATA SOURCE: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2022-10-17 10:22:58

%: 95.0000 - 100.0000

GreenScreen: BM-1

RC: PostC

NANO: No

SUBSTANCE ROLE: Alloy element

Hazard Type	Agency and List Titles	Warnings
END	TEDX - Potential Endocrine Disrupters	Potential Endocrine Disrupter
MAM	GHS - Japan	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organs/systemic toxicity following repeated exposure - Category 1]
PHY	GHS - New Zealand	Flammable solids category 1
MAM	GHS - Japan	H370 - Causes damage to organs [Specific target organs/systemic toxicity following single exposure - Category 1]
PHY	GHS - Japan	H261 - In contact with water releases flammable gas [Substances and mixtures, which in contact with water, emit flammable gases - Category 2]
PHY	GHS - Malaysia	H250 - Catches fire spontaneously if exposed to air [Pyrophoric liquids; Pyrophoric solids - Category 1]
PHY	GHS - Australia	H250 - Catches fire spontaneously if exposed to air [Pyrophoric liquids; Pyrophoric solids - Category 1]
PHY	GHS - New Zealand	Pyrophoric solids category 1

Additional Listings	Agency	Notification
Restricted List	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Biological and Environmentally Released Materials
Restricted List	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Children's Products

SUBSTANCE NOTES: Category of Metal Source Percentage (by mass)

Primary Metal (including alloying agents) 45.8%

Recovered Aluminum from Post-Industrial (Pre-Consumer) Scrap 40.6%

Recovered Aluminum from Post-Consumer Scrap 13.6%

MANGANESE

ID: 7439-96-5

HAZARD DATA SOURCE: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2022-10-17 10:22:59

%: 0.0000 - 1.6000

GreenScreen: LT-P1

RC: None

NANO: No

SUBSTANCE ROLE: Alloy element

Hazard Type	Agency and List Titles	Warnings
END	TEDX - Potential Endocrine Disrupters	Potential Endocrine Disrupter
MUL	German FEA - Substances Hazardous to Waters	Class 2 - Hazardous to Waters
REP	GHS - Japan	H360 - May damage fertility or the unborn child [Toxic to reproduction - Category 1B]
MAM	GHS - Japan	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organs/systemic toxicity following repeated exposure - Category 1]
MAM	GHS - Australia	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organ toxicity -repeated exposure - Category 1]
MAM	GHS - Japan	H370 - Causes damage to organs [Specific target organs/systemic toxicity following single exposure - Category 1]
AQU	GHS - New Zealand	Hazardous to the aquatic environment - chronic category 3

Additional Listings	Agency	Notification
Restricted List	Cradle to Cradle Products Innovation Institute (C2CPH)	C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Biological and Environmentally Released Materials
Restricted List	Cradle to Cradle Products Innovation Institute (C2CPH)	C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Children's Products

SUBSTANCE NOTES:

MAGNESIUM

ID: 7439-95-4

HAZARD DATA SOURCE: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2022-10-17 10:22:59

%: 0.0000 - 1.2000

GreenScreen: LT-UNK

RC: None

NANO: No

SUBSTANCE ROLE: Alloy element

Hazard Type	Agency and List Titles	Warnings
PHY	EU - GHS (H-Statements) Annex 6 Table 3-1	H260 - In contact with water releases flammable gases which may ignite spontaneously [Substances and mixtures which, in contact with water, emit flammable gases - Category 1]
PHY	EU - GHS (H-Statements) Annex 6 Table 3-1	H250 - Catches fire spontaneously if exposed to air [Pyrophoric liquids; Pyrophoric solids - Category 1]
PHY	GHS - Australia	H250 - Catches fire spontaneously if exposed to air [Pyrophoric liquids; Pyrophoric solids - Category 1]
PHY	GHS - New Zealand	Self-heating substances and mixtures category 1
PHY	GHS - New Zealand	Substances and mixtures which, in contact with water, emit flammable gases category 1
SKI	GHS - Japan	H315 - Causes skin irritation [Skin corrosion / irritation -Category 2]
PHY	GHS - Australia	H260 - In contact with water releases flammable gases which may ignite spontaneously [Substances and mixtures which, in contact with water, emit flammable gases - Category 1]

Additional Listings	Agency	Notification
None found		

SUBSTANCE NOTES:**CHROMIUM**

ID: 7440-47-3

HAZARD DATA SOURCE: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2022-10-17 10:23:00

%: 0.0000 - 0.3000

GreenScreen: LT-P1

RC: None

NANO: No

SUBSTANCE ROLE: Alloy element

Hazard Type	Agency and List Titles	Warnings
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
SKI	MAK	Sensitizing Substance Sh - Danger of skin sensitization
GEN	GHS - Japan	H341 - Suspected of causing genetic defects [Germ cell mutagenicity - Category 2]
SKI	GHS - Japan	H317 - May cause an allergic skin reaction [Skin sensitizer - Category 1]
REP	GHS - New Zealand	Reproductive toxicity category 2
MAM	GHS - Japan	H371 - May cause damage to organs [Specific target organs/systemic toxicity following single exposure - Category 2]

Additional Listings	Agency	Notification
Restricted List	Cradle to Cradle Products Innovation Institute (C2CPH)	C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Biological and Environmentally Released Materials
Restricted List	Cradle to Cradle Products Innovation Institute (C2CPH)	C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Children's Products
Restricted List	Cradle to Cradle Products Innovation Institute (C2CPH)	C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Cosmetics & Personal Care Products

SUBSTANCE NOTES:

Section 3: Certifications and Compliance

This section lists applicable certification and standards compliance information for VOC emissions and VOC content. Other types of health or environmental performance testing or certifications completed for the product may be provided.

VOC EMISSIONS

Inherently non-emitting source per LEED

CERTIFYING PARTY: Self-declared
APPLICABLE FACILITIES: None
CERTIFICATE URL:

ISSUE DATE: 2022-10-17
EXPIRY DATE:

CERTIFIER OR LAB: None

CERTIFICATION AND COMPLIANCE NOTES:

LCA

Environmental Product Declaration (EPD) by ULC

CERTIFYING PARTY: Third Party
APPLICABLE FACILITIES: All
CERTIFICATE URL:
<https://cdn.ymaws.com/www.aec.org/resource/resmgr/sustainability/epd/11-2022/102.1-thermally-improved.pdf>

ISSUE DATE: 2016-10-16
EXPIRY DATE:

CERTIFIER OR LAB: UL

CERTIFICATION AND COMPLIANCE NOTES:

Section 4: Accessories

This section lists related products or materials that the manufacturer requires or recommends for installation (such as adhesives or fasteners), maintenance, cleaning, or operations. For information relating to the contents of these related products, refer to their applicable Health Product Declarations, if available.

No accessories are required for this product.

Section 5: General Notes

This HPD is provided solely for the intended recipient in connection with its assessment of products and for no other purpose. In providing information, Engage Building Products expresses no opinion and makes no representations as to the applicability, suitability, accuracy or completeness of the declaration form, or the standards, rules, classifications, warnings or criteria utilized or referenced therein. Information provided herein is qualified in the entirety by reference to the applicable product Material Safety Data Sheet (MSDS) which can be located at:

<https://easytrimreveals.com/installation-resources/>

Section 6: Reference

MANUFACTURER INFORMATION

MANUFACTURER: Engage Building Products
ADDRESS: 4441 76 Ave SE #101
Calgary Alberta T2C 2G8, Canada
WEBSITE: www.engagebp.com

CONTACT NAME: Tracy Kelley
TITLE: Architectural Support Manager
PHONE: (877) 973-8746
EMAIL: Tracy.Kelley@engagebp.com

The listed contact is responsible for the validity of this HPD and attests that it is accurate and complete to the best of his or her knowledge.

KEY

Hazard Types

AQU Aquatic toxicity	LAN Land toxicity	PHY Physical hazard (flammable or reactive)
CAN Cancer	MAM Mammalian/systemic/organ toxicity	REP Reproductive
DEV Developmental toxicity	MUL Multiple	RES Respiratory sensitization
END Endocrine activity	NEU Neurotoxicity	SKI Skin sensitization/irritation/corrosivity
EYE Eye irritation/corrosivity	NF Not found on Priority Hazard Lists	UNK Unknown
GEN Gene mutation	OZO Ozone depletion	
GLO Global warming	PBT Persistent, bioaccumulative, and toxic	

GreenScreen (GS)

BM-4 Benchmark 4 (prefer-safer chemical)	LT-1 List Translator 1 (Likely Benchmark-1)
BM-3 Benchmark 3 (use but still opportunity for improvement)	LT-UNK List Translator Benchmark Unknown
BM-2 Benchmark 2 (use but search for safer substitutes)	NoGS No GreenScreen.
BM-1 Benchmark 1 (avoid - chemical of high concern)	
BM-U Benchmark Unspecified (due to insufficient data)	
LT-P1 List Translator Possible 1 (Possible Benchmark-1)	

GreenScreen Benchmark scores sometimes also carry subscripts, which provide more context for how the score was determined. These are DG (data gap), TP (transformation product), and CoHC (chemical of high concern). For more information, see 2.2.2.4 GreenScreen® for Safer Chemicals, www.greenscreenchemicals.org, and Best Practices for Hazard Screening on the HPDC website (hpd-collaborative.org).

Recycled Types

PreC Pre-consumer recycled content
PostC Post-consumer recycled content
UNK Inclusion of recycled content is unknown
None Does not include recycled content

Other Terms:

GHS SDS Globally Harmonized System of Classification and Labeling of Chemicals Safety Data Sheet

Inventory Methods:

Nested Method / Material Threshold Substances listed within each material per threshold indicated per material
Nested Method / Product Threshold Substances listed within each material per threshold indicated per product
Basic Method / Product Threshold Substances listed individually per threshold indicated per product
Nano Composed of nano scale particles or nanotechnology
Third Party Verified Verification by independent certifier approved by HPDC
Preparer Third party preparer, if not self-prepared by manufacturer
Applicable facilities Manufacturing sites to which testing applies

The Health Product Declaration (HPD) Open Standard provides for the disclosure of product contents and potential associated human and environmental health hazards. Hazard associations are based on the HPD Priority Hazard Lists, the GreenScreen List Translator™, and when available, full GreenScreen® assessments. The HPD Open Standard v2.1 is not:

- a method for the assessment of exposure or risk associated with product handling or use,
- a method for assessing potential health impacts of: (i) substances used or created during the manufacturing process or (ii) substances created after the product is delivered for end use.

Information about life cycle, exposure and/or risk assessments performed on the product may be reported by the manufacturer in appropriate Notes sections, and/or, where applicable, in the Certifications section.

The HPD Open Standard was created and is supported by the Health Product Declaration Collaborative (the HPD Collaborative), a customer-led organization composed of stakeholders throughout the building industry that is committed to the continuous improvement of building products through transparency, openness, and innovation throughout the product supply chain.

The product manufacturer and any applicable independent verifier are solely responsible for the accuracy of statements and claims made in this HPD and for compliance with the HPD standard noted.



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