

### SECTION 08 44 13: GLAZED ALUMINUM CURTAIN WALLS

This specification has been developed using the current edition of the Construction Specification Institute (CSI) "Manual of Practice", including the recommendations for the CSI three-part Section Format and the CSI Page Format. Additionally, the development concept and organizational arrangement of the American Institute of Architects (AIA) MasterSpec® Program has been followed in the preparation of this specification.

#### EDITOR NOTES:

These specifications only cover Facades USA Back Pans and should be incorporated into the projects Glazed Aluminum Curtain Wall specifications.

Instructions to the editor appear in RED and should be removed prior to incorporation into project specifications.

#### PART 1 GENERAL

##### 1.1 SUMMARY

- A. This Section covers Facades USA Back Pans.

##### 1.2 RELATED SECTIONS

##### 1.3 DEFINITIONS

- A. For fenestration industry standard terminology and definitions, refer to the Fenestration & Glazing Industry Alliance (FGIA) Glossary (AAMA AG-13).

##### 1.4 PERFORMANCE REQUIREMENTS

##### 1.5 SUBMITTALS

###### A. Product Data

1. For each type of product indicated, include:
  - a. Construction details
  - b. Material descriptions
  - c. Dimensions of individual components and profiles
  - d. Finishes
2. Recycled Content
  - a. Provide documentation that aluminum has a minimum of 50% mixed pre- and post-consumer recycled content.
  - b. Provide a sample document illustrating project-specific information that will be provided after product shipment.
  - c. After product has shipped, provide project-specific recycled content information:
    1. Indicate recycled content, including the percentage of pre- and post-consumer recycled content per unit of product.
    2. Indicate the relative dollar value of recycled content product to the total dollar value of product included in the project.
    3. Indicate the location for recovery of recycled content.
    4. Indicate the location of the manufacturing facility.

###### B. Shop Drawings

1. Plans
2. Elevations
3. Sections
4. Full-size details

5. Attachments to other work

### C. Samples

1. Samples for Initial Selection:
  - a. Provide samples for units with factory-applied color finishes.
2. Samples for Verification:
  - a. Provide a verification sample for each type of exposed finish required, in manufacturer's standard sizes.

### D. Fabrication Sample:

1. Provide a fabrication sample of the back pan 12" x 12" in size.

## 1.6 QUALITY ASSURANCE

### A. Installer Qualifications

1. Installer must have successfully installed the same or similar systems required for the project and other projects of similar size and scope.

### B. Manufacturer Qualifications

1. Manufacturer must be capable of fabricating back pans that meet or exceed the stated performance requirements.

### C. Source Limitations

1. Obtain back pans through one source from a single manufacturer.

### D. Product Options

1. Information on drawings and in specifications establishes requirements for aesthetic effects and performance characteristics of assemblies. Aesthetic effects are indicated by dimensions, arrangements, alignment, and profiles of components and assemblies as they relate to sightlines, to one another, and to adjoining construction.
2. Do not modify intended aesthetic effects, as judged solely by Architect, except with Architect's approval. If modifications are proposed, submit comprehensive explanatory data to Architect for review.

### E. Mockups

1. Build mockups to verify selections made under sample submittals and to demonstrate aesthetic effects and set quality standards for materials and execution.
2. Build mockups for the type(s) of curtain wall elevation(s) indicated, in location(s) shown on drawings.

### F. Pre-Installation Conference

1. Conduct conference at project site to comply with requirements in Division 01 Project Management and Coordination Section.

## 1.7 PROJECT CONDITIONS

### A. Field Measurements

1. Verify curtain wall opening dimensions by field measurements before installation.

## 1.8 WARRANTY

### A. Submit manufacturer's standard warranty for owner's acceptance.

### B. Warranty Period:

1. Two years from Date of Substantial Completion of the project provided however that in no event shall the Limited Warranty begin later than six months from date of shipment by manufacturer.

## PART 2 PRODUCTS

### 2.1 MANUFACTURERS

#### **Facades USA**

930 Cass St, New Castle, PA, 16101

412-820-2200

www.FacadesUSA.com

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Facades USA reserves the right to change configuration without prior notice when deemed necessary for product improvement.

Laws and building and safety codes governing the design and use of Facades USA products vary widely. Facades USA does not control the selection of product configurations, materials, or hardware and assumes no responsibility therefore.

- A. Back Pans Basis of Design Product
  - 1. Facades USA Back Pans

- B. Substitutions

- 1. The drawing and specifications have been designed to conform to Facades USA. Substitutions must be made 2 weeks in advance of the project bid date and must be requested in accordance with the substitution request format detail in the general conditions of the specification for substitutions to be considered. Without prior approval to the project bid date and an addendum issued to all bidders a substitution is not permitted.
- 2. To be considered for substitution prior to bid the product must comply with substitution request procedures and demonstrate the product meets the performance requirements listed in 1.4 Performance Requirements of this specification; in conjunction with the request the following must be submitted: Calculations that certify the product does meet the performance requirements in ASCE/SEI 7 and a full size sample for review.

## 2.2 MATERIALS

**EDITOR NOTE: Select from either aluminum or galvanized steel sheet below, galvanized steel is often required at slab edge conditions where fire and smoke brakes are installed.**

- A. Back Pan Materials Aluminum Sheet

- 1. 0.125" Thick Aluminum Sheet

- B. Back Pan Materials Galvanized Steel Sheet

- 1. [20 or 16] Gauge Thick G90 Galvanized Steel Sheet

- C. Fasteners

- 1. Aluminum, nonmagnetic stainless steel or other materials must be non-corrosive and compatible with aluminum members, trim hardware, anchors, and other components.

- D. Sealant

- 1. For sealants required within system, provide permanently elastic, non-shrinking, and non-migrating type recommended by sealant manufacturer for joint size and movement.

## 2.3 FABRICATION

- A. Fabricate aluminum shapes before finishing.

- B. Fabricate components that, when assembled, have the following characteristics:

- 1. Profiles that are sharp, straight, and free of defects or deformations
- 2. Accurately fitted joints
- 3. Fasteners, anchors, and connection devices that are concealed from view to the greatest extent possible

## 2.4 FINISHES

- A. Finishes General: Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations relative to applying and designating finishes.

- B. Aluminum Finishes:

- 1. High-Performance Organic Finish: Three-coat fluoropolymer finish complying with AAMA 2605 and 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.

**EDITOR NOTE: Insert Selected Color Below.**

- a. Color and Gloss: To Match Sherwin Williams Fluorpon [\_\_\_\_\_]

- C. Warranty: Provide written 10 year warranty against loss of film integrity, chalking, fading, non-uniformity, and corrosion.

### PART 3 EXECUTION

#### 3.1 EXAMINATION

- A. With installer present, examine areas for compliance with requirements for installation tolerances and other conditions affecting performance of the work.
- B. Proceed with installation only after correcting unsatisfactory conditions.

#### 3.2 INSTALLATION

- A. Back Pan Installation:
  - 1. Install back pans plumb, level, and true to line, within manufacturer's prescribed tolerances, and complying with installation instructions.
  - 2. Provide support and anchor in place.
  - 3. Dissimilar Materials:
    - a. Provide separation of aluminum materials from sources of corrosion or electrolytic action contact points.

#### 3.3 FIELD QUALITY CONTROL

- A. Manufacturer's Field Services:
  - 1. Upon owner's written request, provide periodic site visit by manufacturer's field service representative.

#### 3.4 ADJUSTING, CLEANING AND PROTECTION

- A. Adjusting:
  - 1. Not applicable
- B. Cleaning:
  - 1. Repair or replace damaged installed products.
  - 2. Clean installed products in accordance with manufacturer's instructions prior to owner's acceptance.
  - 3. Remove and replace glass that has been broken, chipped, cracked, abraded, or damaged during the construction period.
  - 4. Remove construction debris from project site and legally dispose of debris.
- C. Protection:
  - 1. Protect installed product's finish surfaces from damage during construction.
  - 2. Protect back pans from damage from grinding and polishing compounds, plaster, lime, acid, cement, or other harmful contaminants.

**END OF SECTION 08 44 13**