

Product Guide Specification

Specifier Notes: This product guide specification is written according to the Construction Specifications Institute (CSI) 3-Part Format, including *MasterFormat*, *SectionFormat*, and *PageFormat*, as described in *The CSI Construction Specifications Practice Guide*.

This section must be carefully reviewed and edited by the Architect to meet the requirements of the project and local building code. Coordinate this section with other specification sections and the Drawings. Delete all "Specifier Notes" after editing this section.

Section numbers and titles are based on *MasterFormat 2014 Update*.

SECTION 07 46 49

POLY-ASH SIDING

Specifier Notes: This section covers DURATION Moulding and Millwork "DURATION" siding. The exterior, poly-ash siding is made from a proprietary polymeric blend, fly ash, and glass fibers. Use of "DURATION" siding may contribute toward LEED credits. Consult DURATION Moulding & Millwork for assistance in editing this section for the specific application.

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Poly-ash siding.

1.2 RELATED REQUIREMENTS

Specifier Notes: Edit the following list of related sections as necessary. Limit the list to sections with specific information that the reader might expect to find in this section, but is specified elsewhere.

- A. Section [09 91 13] [] – Exterior Painting: Field painting poly-ash siding with topcoat.

1.3 REFERENCE STANDARDS

Specifier Notes: List reference standards used elsewhere in this section, complete with designations and titles.

- A. American Wood Protection Association (AWPA) (www.awpa.com):
 - 1. AWPA E1 – Standard Method for Laboratory Evaluation to Determine Resistance to Subterranean Termites.
 - 2. AWPA E10 – Standard Method of Testing Wood Preservatives by Laboratory Soil-Block Cultures.

- B. ASTM International (ASTM) (www.astm.org):
 - 1. ASTM D 570 – Standard Test Method for Water Absorption of Plastics.
 - 2. ASTM D 1037 – Standard Test Methods for Evaluating Properties of Wood-Base Fiber and Particle Panel Materials.
 - 3. ASTM D 1622 – Standard Test Method for Apparent Density of Rigid Cellular Plastics.
 - 4. ASTM D 6109 – Standard Test Methods for Flexural Properties of Unreinforced and Reinforced Plastic Lumber and Related Products.
 - 5. ASTM D 6341 – Standard Test Method for Determination of the Linear Coefficient of Thermal Expansion of Plastic Lumber and Plastic Lumber Shapes Between –30 and 140°F (–34.4 and 60°C).
 - 6. ASTM E 84 – Standard Test Method for Surface Burning Characteristics of Building Materials.

- C. California Department of Forestry and Fire Protection (CAL FIRE) (www.fire.ca.gov):
 - 1. Wildland-Urban Interface (WUI) CA SFM 12.7A-1 – Exterior Wall Siding and Sheathing.

- D. Progressive Engineering Inc. (PEI) (www.p-e-i.com):
 - 1. Pei Evaluation Service – Report PER-13069.

1.4 SUBMITTALS

Specifier Notes: Edit submittal requirements as necessary. Delete submittals not required.

- A. Comply with Section 01 33 00 – Submittal Procedures.
- B. Product Data: Submit manufacturer's product data, including installation instructions.
- C. Samples: Submit manufacturer's sample of poly-ash siding.
 - 1. Sample Size: Minimum 6 inches by 6 inches.
- D. Manufacturer's Certification: Submit manufacturer's certification that materials comply with specified requirements and are suitable for intended application.
- E. Test Reports: Submit manufacturer's test reports from testing performed by qualified, independent testing laboratories.

- F. Product Evaluation Reports: Submit manufacturer's product evaluation reports from accredited, evaluation service.
- G. Warranty Documentation: Submit manufacturer's standard warranty.

1.5 STORAGE AND HANDLING

- A. Storage and Handling Requirements:
 1. Store and handle materials in accordance with manufacturer's instructions.
 2. Store poly-ash siding on flat, level surface, raised above floor or ground, with adequate support to prevent sagging.
 3. Keep poly-ash siding covered with water-proof cover and free of dirt and debris until installation.
 4. Protect materials and finish during storage, handling, and installation to prevent damage.

1.6 WARRANTY

- A. Warranty Period for Poly-Ash Siding: 20 years.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Manufacturer: DURATION Moulding and Millwork, 65 Klockner Road, Hamilton, New Jersey 08619. Toll Free 888-388-7852. Website www.DURATIONMillwork.com. E-mail info@DURATIONMillwork.com.

Specifier Notes: Specify if substitutions will be permitted.

- B. Substitutions: [Not permitted] [In accordance with Division 1].

2.2 POLY-ASH SIDING

- A. Poly-Ash Siding: "DURATION" siding.
 1. Siding used as exterior wall covering over sheathing on wood stud framing.
 2. Material: Polymeric blend, fly ash, and glass fibers.
 3. Formed in continuous process, cut to 16-foot lengths, and milled to give a surface profile.

Specifier Notes: Specify siding width.

4. Width: [5-1/2 inches] [7-1/2 inches] [9-1/2 inches] [11-1/4 inches] [Custom as Specified]
5. Nominal Thickness: [1/2 inch] [5/8 inch] [3/4 inch] [Custom as Specified].

Specifier Notes: "DURATION" siding can be installed with either side exposed to meet the designed aesthetic. The siding is intended to be installed with the finished/profiled side as the exposed surface.

6. Exposed Texture: [Smooth] [Woodgrain]
7. Nonstructural material.

B. Listings and Reports:

1. Cal Fire (WUI), CA SFM 12.7A-1: Listing No. 8140-2134:0103.
2. Product Evaluation Report: Pei Evaluation Service, Report PER-13069.

C. Recycled Content:

1. Post-Industrial Recycled Content: Minimum 70 percent, by weight.
2. Post-Consumer Recycled Content: Minimum 2 percent, by weight.

D. Properties:

1. Density, ASTM D 1622: 40 to 50 pcf.
2. Flexural Strength, ASTM D 6109: Greater than 1,600 psi.
3. Coefficient of Linear Expansion, ASTM D 6341: Less than 1.40 E-05 in/in/degree F.
4. Impact Resistance, ASTM D 1037: Greater than 50 inches.

E. Performance:

1. Fungi Rot, AWWA E10:
 - a. Brown Rot: Negligible loss.
 - b. White Rot: Negligible loss.
2. Termite Resistance, AWWA E1: Greater than 9.0 (10 being best).
3. Water Absorption, ASTM D 570: Less than 1.5 percent.
4. Surface Burning Characteristics, ASTM E 84:
 - a. Flame Spread Index: Less than 35.
 - b. Smoke Developed Index: Less than 450.

2.3 FABRICATION

A. Manufacturing Tolerances:

1. Width: Plus or minus 1/16 inch.
2. Thickness: Plus or minus 1/16 inch.
3. Length: Plus 2 inches, minus 0 inch.

2.4 FINISHES

1. Unfinished

2.5 ACCESSORIES

A. Fasteners:

1. Minimum 8d by 2-1/2-inch-long stainless steel ring-shank nails.

2. In accordance with local building code.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Examine wood framing members to receive poly-ash siding.
- B. Notify Architect of conditions that would adversely affect installation.
- C. Do not begin installation until unacceptable conditions are corrected.

3.2 INSTALLATION

- A. Install poly-ash siding in accordance with manufacturer's instructions at locations indicated on the Drawings.
- B. Do not install poly-ash siding in structural or load-bearing applications.
- C. Install poly-ash siding plumb, level, square, and true to line.
- D. Fastening: Install fasteners in accordance with local building code.
- E. Ensure siding is completely dry prior to installation

Specifier Notes: "DURATION" siding must be field painted with a topcoat of exterior paint. Failure to field paint the siding will void the warranty. Include the section number for the section that specifies exterior painting.

- F. Painting:
 1. Apply topcoat of exterior paint over unfinished surface or any factory-applied primer:
 - a. Within 150 days of installing poly-ash siding.
 - b. As specified in Section [09 91 13] [_____].
 2. Ensure poly-ash siding is clean and dry before painting.

3.3 ADJUSTING

- A. Repair minor damages to poly-ash siding in accordance with manufacturer's instructions and as approved by Architect.
- B. Remove and replace with new material, damaged poly-ash siding that cannot be successfully repaired, as determined by Architect.

3.4 PROTECTION

- A. Protect installed poly-ash siding to ensure that, except for normal weathering, siding will be without damage or deterioration at time of Substantial Completion.

END OF SECTION