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# **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 from *MasterFormat 2012 Update*.

#### **SECTION 06 64 00**

## **PVC TILT-UP WALL PANELING**

Specifier Notes: This section covers Extrutech Plastics, Inc. "ExtruCrete CW9000" PVC wall panels for precast concrete walls. Consult Extrutech Plastics, Inc. for assistance in editing this section for the specific application.

## PART 1 GENERAL

## 1.1 SECTION INCLUDES

A. PVC wall panels for precast concrete walls.

## 1.2 RELATED SECTIONS

Specifier Notes: Edit the 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.

Include one of the following two sections.

A. Section 03 40 00 – Precast Concrete: Precast concrete wall panels.

- B. Section 03 47 13 Tilt-Up Concrete: Site-precast concrete wall panels.
- C. Section 07 92 00 Joint Sealants.

## 1.3 REFERENCE STANDARDS

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

- A. ASTM D 3273 Standard Test Method for Resistance to Growth of Mold on the Surface of Interior Coatings in an Environmental Chamber.
- B. ASTM D 3274 Standard Test Method for Evaluating Degree of Surface Disfigurement of Paint Films by Fungal or Algal Growth, or Soil and Dirt Accumulation.
- C. ASTM E 84 Standard Test Method for Surface Burning Characteristics of Building Materials.
- D. ISO 9001:2008 Quality Management Systems Requirements.

## 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. Shop Drawings: Submit manufacturer's shop drawings, including plans, elevations, sections, and details, indicating dimensions, tolerances, materials, components, fabrication, fasteners, finish, options, and accessories.
- D. Samples: Submit manufacturer's sample of wall panels.
  - 1. Size: Minimum 6 inches long by panel width.
- E. Manufacturer's Certification: Submit manufacturer's certification that materials comply with specified requirements and are suitable for intended application.
- F. Manufacturer's Project References: Submit manufacturer's list of successfully completed wall panel projects, including project name and location, name of architect, and type and quantity of wall panels furnished.
- G. Cleaning Instructions: Submit manufacturer's cleaning instructions.
- H. Warranty Documentation: Submit manufacturer's standard warranty.

## 1.5 QUALITY ASSURANCE

A. Manufacturer's Qualifications:

- 1. Manufacturer regularly engaged, for past 20 years, in manufacture of wall panels of similar type to that specified.
- ISO 9001:2008 QMS certified company.

#### B. Installer's Qualifications:

- 1. Installer regularly engaged, for past 5 years, in installation of wall panels of similar type to that specified.
- 2. Employ persons trained for installation of wall panels.

# 1.6 DELIVERY, STORAGE, AND HANDLING

- A. Delivery Requirements: Deliver materials to site in manufacturer's original, unopened containers and packaging, with labels clearly identifying product name and manufacturer.
- B. Storage and Handling Requirements:
  - 1. Store and handle materials in accordance with manufacturer's instructions.
  - 2. Keep materials in manufacturer's original, unopened containers and packaging until installation.
  - 3. Store materials in clean, dry area indoors.
  - 4. Do not store materials near sources of heat.
  - 5. Do not store materials directly on floor.
  - 6. Store materials on flat, level surface, raised above floor, with adequate support to prevent sagging.
  - 7. Protect materials and finish during storage, handling, and installation to prevent damage.

#### 1.7 AMBIENT CONDITIONS

- A. Cold Temperatures: Warm wall panels to a minimum of 60 degrees F (16 degrees C) overnight before field-cutting in ambient temperatures below 40 degrees F (4 degrees C).
- B. Warm Temperatures: Cool wall panels to a minimum of 60 degrees F (16 degrees C) overnight before installing panels in ambient temperatures above 70 degrees F (21 degrees C).

# 1.8 WARRANTY

- A. Conditional Warranty Period:
  - 1. Wall Panels: 10 years.
  - 2. Accessories: 10 years.

## PART 2 PRODUCTS

#### 2.1 MANUFACTURER

A. Manufacturer: Extrutech Plastics, Inc., 5902 West Custer Street, Manitowoc, Wisconsin 54220. Toll Free 888-818-0118. Phone 920-684-9650. Fax 920-684-4344. Website www.epiplastics.com. E-mail info@epiplastics.com.

# 2.2 PVC TILT-UP WALL PANELING

A. PVC Wall Panels for Precast Concrete Walls: "ExtruCrete CW9000".

- 1. Description: Interior, washable, rib-reinforced, rigid, wall panels over concrete.
  - a. Integral Ribs: Provide permanent locking bond with concrete and allow for varying thicknesses of concrete.
- 2. Material: 100 percent virgin, exterior-grade PVC.
  - a. Recyclable Content: 100 percent.
- 3. Outside Surface: Flat.
- Thickness:
  - a. Finish Surface Thickness: 0.070 inch.
  - b. Total Thickness With Ribs: 0.875 inch.
  - c. Rib Thickness: 0.030 inch.

Specifier Notes: Consult Extrutech Plastics, Inc. for availability of custom widths.

- 5. Panel Width: 36 inches.
- 6. Unit Weight: 0.625 psf.
- 7. Fungus Resistance, ASTM D 3273 and D 3274: No mold or mildew growth.
- 8. Surface Burning Characteristics, ASTM E 84: Class A.
  - a. Flame Spread Index: 10.
  - Smoke Developed Index: 300.
- 9. Nonporous.
- 10. Waterproof.
- 11. Corrosion proof.
- 12. Termite resistant.
- 13. Does not conduct heat or electricity.
- 14. No exposed fasteners.
- 15. Acceptance:
  - a. USDA.
  - b. Canadian Food Inspection Agency (CFIA).

Specifier Notes: Consult Extrutech Plastics, Inc. for availability of custom colors.

- 16. Color: Bright white.
- 17. Finish: Smooth, high gloss, reflective.

Specifier Notes: Provide section number.

B. Precast Concrete Wall Panels: Specified in Section [03 40 00] [03 47 13].

Specifier Notes: Specify thickness of precast concrete wall panels. Provide section number.

1. Thickness: [\_\_\_\_\_ inches] [Specified in Section [03 40 00] [03 47 13]] [Indicated on the Drawings].

## 2.3 FABRICATION

A. Shop Fabrication: Shop-cut wall panels to required lengths.

# 2.4 ACCESSORIES

- A. PVC Wall Panel Accessories:
  - 1. Splice Caps:
    - a. Material: Same as wall panels.
    - b. Face Thickness: 0.035 inch.
    - c. Width: 2 inches.
    - d. Color: Match wall panels.
    - e. Finish: Match wall panels.
  - 2. Expansion Caps:
    - a. Material: Same as wall panels.
    - b. Face Thickness: 0.035 inch.
    - c. Width: 2 inches.
    - d. Color: Match wall panels.
    - e. Finish: Match wall panels.
  - 3. 2-Inch by 2-Inch Corners:
    - a. Material: Same as wall panels.
    - b. Thickness: 0.050 inch.
    - c. Width: 2 inches.
    - d. Color: Match wall panels.
    - e. Finish: Match wall panels.

#### B. Fasteners:

- 1. In accordance with manufacturer's instructions for application type.
- 2. Use to fasten trim.
- C. Joint Sealants:
  - 1. DAP clear, 100 percent, silicone rubber sealant.
  - 2. Backer rod.
  - 3. Use to seal panel and trim joints.
  - 4. Specified in Section 07 92 00.
- D. Adhesives:
  - 1. OSI Sealants Inc. "PL400" or "Liquid Nails" heavy-duty construction adhesive.
  - 2. Use as panel and trim adhesive.

# PART 3 EXECUTION

# 3.1 **EXAMINATION**

- A. Examine surfaces to receive PVC wall panels.
- B. Notify Architect of conditions that would adversely affect installation or subsequent use.
- C. Do not begin preparation or installation until unacceptable conditions are corrected.

# 3.2 PREPARATION

A. Clean and prepare form area to receive wall panels in accordance with manufacturer's instructions.

- B. Inspect and remove dirt and debris from panel face.
- C. Ensure form area is clean, flat, and smooth with panel to be laid down with temporary, clear protective film side down.

## 3.3 INSTALLATION

- A. Install wall panels in accordance with manufacturer's instructions at locations indicated on the Drawings.
- B. Connect PVC wall panels together with splice caps before placing concrete.
  - 1. Create smooth, aligned transition between 2 panel faces.
- C. Embed PVC wall panels during placing of concrete to create interior finished walls.

Specifier Notes: Provide section number.

- D. Precast Concrete: Specified in Section [03 40 00] [03 47 13].
- E. Install wall panels plumb, level, square, flat, and in proper alignment.
- F. Install wall panels to be waterproof and washable.
- G. Install accessories in accordance with manufacturer's instructions.
- H. Install joint sealants and backer rod in joints between installed precast concrete wall panels as specified in Section 07 92 00.
- I. Install expansion caps into joint sealants at joints to create smooth, aligned transition between 2 panel faces.

## 3.4 ADJUSTING

A. Remove and replace with new material, damaged components that cannot be successfully repaired, as determined by Architect.

## 3.5 CLEANING

- A. Remove temporary, clear protective film from wall panels.
- B. Clean wall panels promptly after installation in accordance with manufacturer's instructions.
- C. Do not use harsh cleaning materials or methods that could damage finish.
- D. Do not use abrasive cleaners.

# 3.6 PROTECTION

A. Protect installed wall panels from damage during construction.

B. Remove protective film from wall panels.

**END OF SECTION**