



SECTION 07 40 00

CLADDING SUPPORT SYSTEMS

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Cladding support system for ventilated rain screen construction with continuous insulation of the following types:
 - 1. Masonry cladding.
 - 2. Fiber cement facades.
 - 3. Metal panels.
 - 4. Terracotta tiles.
 - 5. Phenolic panels.

1.2 RELATED SECTIONS

- A. Section 04 20 00 - Unit Masonry.
- B. Section 05 40 00 - Cold-Formed Metal Framing.
- C. Section 07 21 26 - Blown Insulation.
- D. Section 07 42 13 - Metal Wall Panels.
- E. Section 07 44 56 - Mineral-Fiber-Reinforced Cementitious Panels.

1.3 SUBMITTALS

- A. Submit under provisions of Section 01 30 00 - Administrative Requirements.
- B. Product Data: Manufacturer's data sheets on each product to be used, including:
 - 1. Preparation instructions and recommendations.
 - 2. Storage and handling requirements and recommendations.
 - 3. Installation methods.
- C. Shop Drawings:
 - 1. Provide engineered design for attachment and back-up framing to support exterior cladding.
 - 2. Provide static calculations verifying sizing of members, attachment devices and fasteners to support the exterior cladding with a safety factor required by Authority Having Jurisdiction (AHJ).
 - 3. Provide Installation drawings and details.
- D. Verification Samples: For each product specified, two samples representing actual product.

1.4 QUALITY ASSURANCE

- A. Manufacturer: minimum of 2 years experience manufacturing similar products and with engineering capabilities required to provide the attachment system engineered

drawings.

- B. Installer Qualifications: Minimum of 2 years experience with installation of similar products.
- C. Mock-Up: Provide a mock-up for evaluation of surface preparation techniques and application workmanship.
 - 1. Finish areas designated by Architect.
 - 2. Do not proceed with remaining work until workmanship, color, and sheen are approved by Architect.
 - 3. Remodel mock-up area as required to produce acceptable work.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Store products in manufacturer's unopened packaging until ready for installation in accordance with manufacturer's recommended guidelines.

1.6 PROJECT CONDITIONS

- A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's recommended limits.

1.7 WARRANTY

- A. Warranty: Manufacturer warrants that its products are manufactured in accordance with its applicable material specifications and are free from defects in materials and workmanship.
 - 1. Only products that are installed and used in accordance with applicable manufacturer's instructions and specifications are warranted.
 - 2. The warranty is applicable only to claims made in writing and received by the manufacturer within thirty days after the defect was discovered and within ten years after the date of the shipment of the product by the manufacturer.

PART 2 PRODUCTS

2.1 MANUFACTURER

- A. Basis of Design: R-TEC CI System by American Fiber Cement Corp.; 6901 S. Pierce St. Suite 180, Littleton, CO 80128. ASD. Toll Free Tel: (800) 688-8677 ext. 102. Tel: (303) 978-1199. Fax: (303) 978-0308. Email: danglada@afcccladding.com. Web: <http://www.americanfibercement.com>.
- B. Substitutions: Not permitted.
- C. Requests for substitutions will be considered in accordance with provisions of Section 01 60 00 - Product Requirements.

2.2 CLADDING SUPPORT SYSTEM

- A. Cladding Support System: R-TEC CI System by American Fiber Cement Corporation, an aluminum substructure composed of R-TEC brackets and either a single layer or double layer of aluminum profiles. Brackets and profiles shall be applied with fasteners through the external insulation and into the substrate.
 - 1. Configuration Based on Panel Size and Joint Locations: Single layer vertical only, single layer horizontal only, double layer starting with horizontal profile and then a vertical profile.
 - 2. Components:

- a. R-TEC CI Bracket.
 - b. Aluminum "L," "T," "Hat" or "Z" profiles as indicated on engineered design submittal.
 - c. Fixing: Stainless steel rivets and screws selected and engineered by attachment manufacturer to conform with the specified cladding and the exterior insulation in both thickness and type.
3. UV Protective Membrane: As supplied by American Fiber Cement Corp.
- a. For open joint ventilated rain screen systems.
 - b. For exterior insulation requiring UV protection.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Do not begin installation until substrates have been properly prepared.
- B. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

3.2 PREPARATION

- A. Clean surfaces thoroughly prior to installation.
- B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

3.3 INSTALLATION

- A. Install in accordance with manufacturer's instructions and approved submittals, and in proper relationship with adjacent construction.
 - 1. Metal Stud Back-Up: Mark reference points identifying the center line of studs in exterior wall locations at the roof and base of walls prior to installation of sheathing or exterior insulation to allow for proper location of the brackets.

3.4 PROTECTION

- A. Protect installed products until completion of project.
- B. Touch-up, repair or replace damaged products before Substantial Completion.

END OF SECTION