# PART 1 - GENERAL

## 1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 and 01 Specification Sections, apply to this Section.

## 1.2 SUMMARY

A. Section includes:
   1. Fiber-reinforced board system at exterior soffits and seating.

B. Related Requirements:
   1. Section 018113 “Sustainable Design Requirements.”
   2. Section 079200 “Joint Sealants.”

## 1.3 REFERENCE STANDARDS

A. ASTM D696 - Standard Test Method for Coefficient of Linear Thermal Expansion of Plastics Between -30 degrees C and 30 Degrees C With a Vitreous Silica Dilatometer.

B. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials.

## 1.4 SUBMITTALS

A. Product Data: Provide data indicating materials, component profiles, fastening methods, jointing details, finishes, and accessories.
   1. Preparation instructions and recommendations.
   2. Storage and handling requirements and recommendations.
   3. Installation methods.

B. LEED Submittals: Credits MRc4 and EQc4.2. Refer to Division 01 Section 018113 “Sustainable Design Requirements” for additional submittal requirements.

C. Samples: Submit two samples 12 by 12 inch in size illustrating surface texture.

## 1.5 QUALITY ASSURANCE

A. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section, with not less than three years of documented experience.

B. Mockups: Build mockups to verify selections made under Sample submittals and to demonstrate aesthetic effects and set quality standards for fabrication and installation.
   1. Build mockup of typical fiber reinforced hybrid siding assembly as shown on Drawings for integrated exterior mockup, including corner, soffits (if applicable), supports, attachments, and accessories.
   2. Approval of mockups does not constitute approval of deviations from the Contract Documents contained in mockups unless Architect specifically approves such deviations in writing.
   3. Subject to compliance with requirements, approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

1.6 DELIVERY, STORAGE, AND HANDLING

A. Store products in manufacturer's unopened packaging until ready for installation.

B. Store in ventilated areas with constant minimum temperature of 60 degrees F and maximum relative humidity of 55 percent.

C. Store and dispose of solvent-based materials, and materials used with solvent-based materials, in accordance with requirements of local authorities having jurisdiction.

1.7 WARRANTY

A. Special Warranty: Manufacturer agrees to repair or replace components of fiber reinforced hybrid boards that do not comply with requirements or that fail in materials or workmanship within specified warranty period.
   1. Warranty Period: 15 years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

A. Surface-Burning Characteristics: As follows when tested by a qualified testing agency according to ASTM E 84. Identify products with appropriate markings of applicable testing agency.
   1. Flame-Spread Index: 25 or less.
   2. Smoke-Developed Index: 450 or less.

2.2 MANUFACTURERS (WH1 and WH2)

A. Manufacturers: Subject to compliance with requirements, provide products by the following:
   1. Fiber Reinforced Façade Siding and Decking Systems by Resysta North America, Inc. (No Known Equal)
   2. Or equal.

B. Profiles: As indicated on Drawings.

2.3 TRIM

A. Fiber reinforced hybrid boards shall be an extruded composite consisting of a proprietary blend of approximately 60-percent rice husks, 22-percent common salt and 18-percent mineral oil.

B. Fiber reinforced hybrid boards shall be workable, sandable and stainable similar to normal wood products.

C. Install miscellaneous trims, end caps, and shapes as required to provide a complete assembly.

2.4 FINISHES

A. Stains: Architect shall select from manufacturer's standard, custom and premium colors.
   1. Stain Color: Custom color as selected by Architect to match Architect’s sample.
   2. Sealer: 2K Protection Varnish.

B. Use of non-manufacturer water borne or oil-based stain is not allowed.

2.5 ACCESSORIES

A. Nails and Screws: Corrosion resistant type; non-staining, of size and strength to securely and rigidly retain the work; prefinished to match board finish.

B. Flashing: Refer to Section 076200 “Sheet Metal Flashing and Trim.”

C. Accessory Components: Fascias, Starter strips, and Trim of same material and finish as boards.

D. Prime Paint: Latex base primer enamel.

PART 3 - EXECUTION

3.1 PREPARATION

A. Prime paint surfaces in contact with cementitious materials.

3.2 EXAMINATION

A. Examine substrate conditions before beginning installation; verify dimensions and acceptability of substrate.

B. Do not proceed with installation until unacceptable conditions have been corrected.

3.3 PREPARATION

A. Prime surfaces in contact with cementitious materials as required by manufacturer.

3.4 INSTALLATION

A. Install boards in accordance with manufacturer's instructions.
   1. Preplan cuts to allow for expansion gaps.
   2. Provide joint gaps as indicated on Drawings.
      a. Typical joint width is approximately 3/8 inch.

B. Apply finish stain to individual planks, panels and trim prior to installation.

C. Fasten boards in place, level and plumb.
   1. Arrange for orderly nailing pattern. Blind nail except on overlapping trim.
   2. Position cut ends over bearing surfaces. Sand cut edges smooth and clean.

D. Install joint sealers between boards and adjacent construction, using procedures specified in Section 079200 “Joint Sealants.”

E. Touch-up prefinished paint surfaces that are disfigured. Unsightly touch-up will require removal and replacement of affected boards.

F. Sand work smooth and set exposed nails and screws. Ease sharp edges with 80-100 grit sandpaper for color uniformity prior to staining.

3.5 TOLERANCES

A. Maximum Variation from Plumb and Level: 1/4 inch per 10 feet.

B. Maximum Offset From Joint Alignment: 1/16 inch.

3.6 PROTECTION

A. Protect installed products until completion of project.

B. Touch-up, repair or replace damaged products before Substantial Completion.

END OF SECTION