

### TREX COMPOSITE CLADDING

#### PART 1 General

### 1.1 Section Includes

A. Composite cladding - (Trex Transcend).

### 1.2 Related Sections

- A. Section 05 40 00 Cold-Formed Metal Framing.
- B. Section 06 10 00 Rough Carpentry.
- C. Section 06 16 36 Wood Panel Product Sheathing.

#### 1.3 References

- A. ASTM International (ASTM):
  - 1. ASTM D143 Standard Test Methods for Small Clear Specimens of Timber.
  - 2. ASTM D198 Standard Test Methods of Static Tests of Lumber in Structural Sizes.
  - 3. ASTM D1037 Standard Test Methods for Evaluating Properties of Wood-Base Fiber and Particle Panel Materials
  - 4. ASTM D1761 Standard Test Methods for Mechanical Fasteners in Wood.
  - 5. ASTM D1413 Standard Test Method for Wood Preservatives by Laboratory Soil-Block Cultures.
  - ASTM D4761 Standard Test Methods for Mechanical Properties of Lumber and Wood-Based Structural Materials.
  - 7. ASTM D7031 Standard Guide for Evaluating Mechanical and Physical Properties of Wood-Plastic Composite Products, ASTM International.
  - 8. ASTM D7032 Standard Specification for Establishing Performance Ratings for Wood-Plastic Composite Deck Boards and Guardrail Systems (Guards or Handrails).
  - 9. ASTM E84 Standard Test Method for Surface Burning Characteristics of Building Materials.
  - 10. ASTM E330 Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference.
- B. American Iron and Steel Institute (AISI):
  - 1. AISI S100 -NDS North American Specification for the Design of Cold Formed Steel Structural Members
- C. American Wood Protection Association (AWPA):
  - AWPA E1 Laboratory Methods for Evaluating the Termite Resistance of Wood-based Materials: Choice and No-choice Tests.
- D. Florida Building Code (FBC).
- E. International Building Code (IBC).
- F. Intertek Nationally Recognized Testing Facility.
  - Code compliance Research Report: CCRR-0325

### 1.4 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. Samples: For each product specified, one sample representing actual product color, size, and finish.
- 1.5 Delivery, Storage, and Handling
  - A. Deliver and store products in manufacturer's unopened packaging bearing the brand name and manufacturer's identification until ready for installation.
  - B. Store products on a flat and level surface. Adjust support blocks accordingly.
  - C. See www. Trex.com for detailed storage recommendations:

Care and Cleaning Guide for Trex Transcend, Select, and Enhance Decking

## 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. Specific terms for warranties can be found at; <u>www.Trex.com.</u>

## **PART 2 Products**

# 2.1 Manufacturers

- A. Acceptable Manufacturer: Trex Company Inc., 160 Exeter Dr., Winchester, VA 22603; www.Trex.com
- B. Substitutions: Not permitted.

# 2.2 Composite Cladding

- A. Design and Performance Requirements:
  - 1. Fire-Surface Burning Characteristics per ASTM E84.
  - 2. Code Compliance:
    - a. International Building Code (IBC) 2015 and 2018.
    - b. Florida Building Code (FBC) 2017. Excluding high velocity hurricane zone, HVHZ.
    - c. Intertek Research Report: No. CCRR-0325. Proof of code compliance.
      - 1) Tested to ASTM D7032-14.
      - 2) Tested to ASTM E330-14.
      - 3) Tested to ASTM E84-16.
      - 4) Tested to NDS-2018.
      - 5) Tested to AISI S100-16

- B. Wood-Plastic Composite Lumber (WPC):
  - a. Material Description: Composite Decking consisting of recycled Linear Low Density Polyethylene (LLDPE) and recycled wood. The product is extruded into shapes and sizes as follows:
    - i. Trex Transcend Decking Boards; 1 x 5.5".
    - ii. Lengths 12, 16, and 20 feet
    - iii. Color To be specified by owner from Trex' standard list of colors.
  - b. Physical and Mechanical Properties as follows:

Test	Test Method	Value
Flame Spread Index	ASTM E84	Class B
Thermal Expansion	ASTM D1037	1.9 x 10 <sup>-5</sup> inch/inch/degreeF
Moisture Absorption	ASTM D1037	< 1%
Screw Head Pull-Through	ASTM D1761	588 lb/in per screw
Fungus Resistance	ASTM D1413	Rating - no decay
Termite Resistance	AWPA E1-72	Rating = 9.6

### C. Fasteners:

- 1. Screws: Manufactured and sold by Starborn Industries, Inc.
  - a. Cladding Attachment to Wood Furring Strips:
    - 1) Starborn Cap-Tor xd Epoxy Coated or Stainless, 2 inch (51 mm) long.
    - 2) Starborn Deckfast Fascia System Epoxy Coated or Stainless.
    - 3) Starborn Pro Plug System for Composite; Epoxy Coated and 305 or 316 Stainless, 2 inch (51 mm long.
  - b. Cladding Attachment to Steel Furring Strips:
    - 1) Starborn Pro Plug System for Composite for Metal Framing; 410SS, self-drilling.
    - 2) Starborn Deckfast Metal 410SS with Epoxy Coating.

#### **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.
- C. A copy of the manufacturer's instructions must be available to installers on the jobsite during installation.

## 3.3 Installation

- A. Install in accordance with manufacturer's instructions, applicable codes, and Intertek Research Report No. CCRR-0325, approved submittals, and in proper relationship with adjacent construction.
- B. Cut, drill, and rout using carbide tipped blades.
- C. Do not use composite wood material for structural applications

# 3.4 Cleaning

A. Following cleaning recommendations as found in Trex installation guide at:

<u>Care and Cleaning Guide for Trex Transcend</u>, Select, and Enhance Decking