SECTION 07 46 43 (07 46 43)

COMPOSITE SIDING

Display hidden notes to specifier. (Don't know how? [Click Here](https://www.arcat.com/sd/display_hidden_notes.shtml))

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\*\* NOTE TO SPECIFIER \*\* Trex Company Incorporated; composite cladding.
This section is based on the products of Trex Company Incorporated, which is located at:
160 Exeter Dr.
Winchester, VA 22603-8605
Toll Free Tel: 800-BUY-TREX
Tel: 540-542-6300
Fax: 540-542-6890
Email: [request info (marketing@trex.com)](https://admin.arcat.com/users.pl?action=UserEmail&company=Trex+Company+Incorporated&coid=36113&rep=&fax=540-542-6890&message=RE:%20Spec%20Question%20(07460trx):%20%20&mf=)
Web: <https://www.trex.com>
 [ [Click Here](https://www.arcat.com/arcatcos/cos36/arc36113.html) ] for additional information.
Since 1996 Trex has invented, defined and perfected the composite deck category, becoming the world's largest manufacturer of wood-alternative decking products. Never content to settle, we continue to make strides in outdoor engineering, melding innovation with environmental responsibility and beautiful form with powerful function.
Formed in 1996 through the buyout of a division of Mobil Corporation, our company went public in 1999. Today we offer the industry's widest array of high-performance composite products, which are available in more than 42 countries around the world. With the largest market share of composite decking in North America, a growing international footprint and more than $740,000,000 in annual sales, we lead the industry on a global scale.

1. GENERAL
	1. SECTION INCLUDES
		1. Composite cladding. (Trex Transcend).
	2. RELATED SECTIONS

\*\* NOTE TO SPECIFIER \*\* Delete sections below not relevant to this project; add others as required.

* + 1. Section 05 40 00 - Cold-Formed Metal Framing.
		2. Section 06 10 00 - Rough Carpentry.
		3. Section 06 16 36 - Wood Panel Product Sheathing.
	1. REFERENCES

\*\* NOTE TO SPECIFIER \*\* Delete references from list below that are not actually required by the text of the edited section.

* + 1. 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.
			6. 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.
		2. American Iron and Steel Institute (AISI):
			1. AISI S100 -NDS North American Specification for the Design of Cold Formed Steel Structural Members
		3. American Wood Protection Association (AWPA):
			1. AWPA E1 - Laboratory Methods for Evaluating the Termite Resistance of Wood-based Materials: Choice and No-choice Tests.
		4. Florida Building Code (FBC).
		5. International Building Code (IBC).
		6. Intertek - Nationally Recognized Testing Facility.
			1. Code compliance Research Report: CCRR-0325
	1. SUBMITTALS
		1. Submit under provisions of Section 01 30 00 - Administrative Requirements.
		2. 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.
		3. Shop Drawings: Plans and details include layout, spacing, and sizes of cladding.

\*\* NOTE TO SPECIFIER \*\* Delete selection samples if colors have already been selected.

* + 1. Selection Samples: For each product specified, two complete sets of color chips representing manufacturer's full range of available colors and patterns.
		2. Verification Samples: For each product specified, two samples, representing actual product color, size, and finish.
	1. QUALITY ASSURANCE
		1. Manufacturer Qualifications: Minimum 5 years' experience manufacturing similar products.
		2. Installer Qualifications: Minimum 2 years' experience installing similar products.

\*\* NOTE TO SPECIFIER \*\* Include a mock-up if the project size and/or quality warrant taking such a precaution. The following is one example of how a mock-up on a large project might be specified. When deciding on the extent of the mock-up, consider all the major different types of work on the project.

* + 1. 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 is approved by Architect.
			3. Refinish mock-up area as required to produce acceptable work.
	1. PRE-INSTALLATION MEETINGS
		1. Convene minimum two weeks prior to starting work of this section.
	2. DELIVERY, STORAGE, AND HANDLING
		1. Deliver and store products in manufacturer's unopened packaging bearing the brand name and manufacturer's identification until ready for installation.
		2. Store products on a flat and level surface. Adjust support blocks accordingly.
		3. Support bundles on supplied dunnage.
		4. When stacking bundles, supports should start approximately 8 inches (203 mm) from each end and be spaced approximately 2 feet (610 mm) on center. Supports shall line up vertically/perpendicular to the decking product.
		5. Do not stack cladding more than 14 bundles.
		6. Keep material covered using the provided bundle cover until time of installation.
		7. Handle materials to avoid damage.
	3. PROJECT CONDITIONS
		1. 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.
	4. SEQUENCING
		1. Ensure that products of this section are supplied to affected trades in time to prevent interruption of construction progress.
	5. WARRANTY
		1. Residential and Commercial Applications: Warranty Period: 25 years.
			1. Transcend Product used as Outdoor Cladding: Manufacturer warrants against rot, decay, splitting, checking, splintering, fungal damage, and termite damage.
			2. Trex Fade and Stain Warranty: Manufacturer warrants against food staining and fading beyond 5 Delta E (CIE units) for residential and commercial applications.
1. PRODUCTS
	1. MANUFACTURERS
		1. Acceptable Manufacturer: Trex Company Incorporated, which is located at: 160 Exeter Dr.; Winchester, VA 22603-8605; Toll Free Tel: 800-BUY-TREX; Tel: 540-542-6300; Fax: 540-542-6890; Email: [request info (marketing@trex.com)](https://admin.arcat.com/users.pl?action=UserEmail&company=Trex+Company+Incorporated&coid=36113&rep=&fax=540-542-6890&message=RE:%20Spec%20Question%20(07460trx):%20%20&mf=); Web: <https://www.trex.com>

\*\* NOTE TO SPECIFIER \*\* Delete one of the following two paragraphs; coordinate with requirements of Division 1 section on product options and substitutions.

* + 1. Substitutions: Not permitted.
		2. Requests for substitutions will be considered in accordance with provisions of Section 01 60 00 - Product Requirements.
	1. COMPOSITE CLADDING

\*\* NOTE TO SPECIFIER \*\* A perfect combination of durability and beauty without the hassle. With contemporary-yet-enduring Trex Transcend Open-Joint Cladding, you'll never sacrifice aesthetics for performance. The cladding comes in a wide range of colors and premium lengths to easily bring any design to life. The deep wood-grain pattern and luxury colors create a premium, ageless look that leave other composites in the dust. No sanding. No staining. No painting. No kidding. Not to mention simple soap-and-water cleanup. Transcend cladding maintains its vibrant color and luxurious finish come scorching sun or red-wine spill thanks to its unyielding, three-side shell protection and our 25-Year Limited Residential Fade and Stain Warranty.

* + 1. Design and Performance Requirements:
			1. Fire-Surface Burning Characteristics per ASTM E84.
			2. Code Compliance:
				1. International Building Code (IBC) - 2015 and 2018.
				2. Florida Building Code (FBC) - 2017. Excluding high velocity hurricane zone, HVHZ.
				3. Intertek Research Report: No. CCRR-0325. Proof of code compliance.

Tested to ASTM D7032-14.

Tested to ASTM E330-14.

Tested to ASTM E84-16.

Tested to NDS-2018.

Tested to AISI S100-16

* + 1. Wood-Plastic Composite Lumber (WPC):
			1. Basis of Design: Trex Transcend Open-Joint Cladding as manufactured by Trex Company, Incorporated.
			2. Features:
				1. Polymer Shellstock: covers 3 sides of the board and is embossed with a wood-like natural finish.
				2. Impact, scratch, and fade resistant.
				3. Needs no Seasonal Treating:

Low-maintenance means lower life-cycle costs.

No sanding or sealing required.

Less hassle; cleans easily.

* + - * 1. Stands up Against the Elements:

Tested to withstand hurricane-force winds, sun, sleet and snow.

Won't rot, fade or stain.

Count on the same board color over the life of the product.

Insect-proof.

* + - * 1. Eco-Friendly:

No trees have ever been cut down to make Trex decking

Saves 500 million plus pounds of plastic film and wood from landfills annually.

Earn LEED points.

* + - 1. Material Description: Composite cladding of 95 percent recycled extruded linear low density polyethylene (LLDPE) and recycled wood. Nominal dimensions as follows:
				1. Profile (DxW): 1 x 5.5 inches (25 x 140 mm).
				2. Length: 12 feet (3658 mm).
				3. Length: 16 feet (4877 mm).
				4. Length: 20 feet (6096 mm).
			2. Physical and Mechanical Properties:
				1. Flame Spread per ASTM E84:70.
				2. Thermal Expansion per ASTM D1037: 0.000019 inch/inch/degree F.
				3. Moisture Absorption per ASTM D1037: Less than 1 percent.
				4. Screw Withdrawal per ASTM D1761: 588 lbs/in.
				5. Fungus Resistance per ASTM D1413: Rating - no decay.
				6. Termite Resistance, AWPA E1-72: Rating = 9.6.
				7. Compression Parallel per ASTM D198: 1588 psi ultimate, 540 psi design.
				8. Compression Perpendicular per ASTM D143: 1437 psi ultimate, 540 psi design.
				9. Bending Strength per ASTM D198: 3280 psi ultimate, 500 psi design.
				10. Shear Strength per ASTM D143: 1761 psi ultimate, 360 psi design.
				11. Modulus of Elasticity per ASTM D4761: 412,000 psi ultimate, 200,000 psi design.
				12. Modulus of Rupture per ASTM D4761: 3280 psi ultimate, 500 psi design.
				13. Ultimate strength values are not meant for design analysis. Design values are for temperatures up to 125 degree F (52 degree C).
		1. Composite Decking (Transcend)Color:
			1. Color: Gravel Path; Earth Tones.
			2. Color: Rope Swing; Earth Tones.
			3. Color: Vintage Lantern; Earth Tones.
			4. Color: Havana Gold; Tropicals.
			5. Color: Island Mist; Tropicals.
			6. Color: Lava Rock; Tropicals.
			7. Color: Spiced Rum; Tropicals.
			8. Color: Tiki Torch; Tropicals.
		2. Hardware:
			1. Screws: Manufactured and sold by Starborn Industries, Inc.
				1. Cladding Attachment to Wood Furring Strips:

Starborn Cap-Tor xd Epoxy Coated and Headcote 305 Stainless, 2 inch (51 mm) long.

Starborn Deckfast Fascia System - Epoxy Coated and Headcote 305 Stainless.

Starborn Pro Plug System for PVC and Composite; Epoxy Coated and 305 or 316 Stainless, 2 inch (51 mm long.

* + - * 1. Cladding Attachment to Steel Furring Strips:

Starborn Pro Plug System for PVC and Composite for Metal Framing; 410SS, self-drilling.

Starborn Deckfast Metal 410SS with Epoxy Coating.

1. EXECUTION
	1. EXAMINATION
		1. Do not begin installation until substrates have been properly prepared.
		2. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.
	2. PREPARATION
		1. Clean surfaces thoroughly prior to installation.
		2. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.
		3. A copy of the manufacturer's instructions must be available to installers on the jobsite during installation.
	3. INSTALLATION
		1. 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.
		2. Cut, drill, and rout using carbide tipped blades.
		3. Do not use composite wood material for structural applications
	4. Cleaning
		1. Cleaning as required by manufacturer for warranty compliance.
	5. PROTECTION
		1. Protect installed products until completion of project.
		2. Touch-up, repair or replace damaged products before Substantial Completion.

END OF SECTION

\*\* NOTES TO SPECIFIER \*\* DISCLAIMER:
Trex Company, Inc. Guide Specifications have been written as an aid to the professionally qualified Specifier and Design Professional. The use of this Guideline Specification requires the sole professional judgment and expertise of the qualified Specifier and Design Professional to adapt the information to the specific needs for the Building Owner and the Project, to coordinate with their Construction Document Process, and to meet all the applicable building codes, regulations and laws.