SECTION 07 46 43.20

COMPOSITE SIDING AND CLADDING - SHADOWLINE

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 \*\* NewTechWood America Inc.; composite siding.
This section is based on the products of NewTechWood America Inc., which is located at:15912 International Plaza Dr.Houston, TX 77032Toll Free Tel: 866-728-5273Tel: 281-570-6450Fax: 281-661-1167Email: [request info (inquiry@newtechwood.com)](https://arcat.com/rfi?action=email&company=NewTechWood%252BAmerica%252BInc.&message=RE%253A%2520Spec%2520Question%2520(07462ntw)%253A%2520&coid=52279&spec=07462ntw&rep=&fax=281-661-1167)
Web: <https://www.newtechwood.com>
 [ [Click Here](https://arcat.com/company/newtechwood-america-inc-52279) ] for additional information.
NewTechWood is a pioneer in the development and manufacture of composite decking, siding, deck tiles, railing, and other outdoor products. Since its beginnings in 2004, NewTechWood has been on the cutting edge in wood plastic composite technology, to develop products that bring beauty and practicality to spaces worldwide.
NewTechWood has earned a worldwide reputation for our manufacture of attractive, innovative, and dependable wood plastic composite materials in a range of great color.
NewTechWood is determined to provide its homeowners with unparalleled performance and satisfaction.

1. GENERAL
	1. SECTION INCLUDES

\*\* NOTE TO SPECIFIER \*\* Delete items below not required for project.

* + 1. Composite siding and cladding.
		2. Accessories.
	1. RELATED SECTIONS

\*\* NOTE TO SPECIFIER \*\* Delete any 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.
		4. Section - .
	1. REFERENCES

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

* + 1. ASTM International (ASTM):
			1. ASTM D2395 - Standard Test Methods for Specific Gravity of Wood and Wood-Based Materials.
			2. ASTM E136 - Standard Test Method for Assessing Combustibility of Materials Using a Vertical Tube Furnace at 750 degrees C.
			3. ASTM G154 - Standard Practice for Operating Fluorescent Ultraviolet (UV) Lamp Apparatus for Exposure of Nonmetallic Materials.
		2. American Wood Protection Association (AWPA):
			1. AWPA E1-09 - Standard Method for Laboratory Evaluation to Determine Resistance to Subterranean Termites.
			2. AWPA E10-11 - Standard Method of Testing Wood Preservatives by Laboratory Soil-Block Cultures.
		3. California Building Code (CBC):
			1. SFM Standard 7A-Materials and Construction Methods for Exterior Wildfire Exposure.
				1. Section 701A Scope, Purpose, and Application.
				2. Section 707A - Exterior Covering.

Section 707A.3 Exterior Walls.

* + 1. California Residential Code (CRC):
			1. CRC Section R337 - Materials and Construction Methods for Exterior Wildlife Exposure.
				1. CRC Section R337.7 - Exterior Covering.
				2. CRC Section R337.7.3 - Exterior Walls.
	1. SUBMITTALS
		1. Submit under provisions of Section 01 30 00 - Administrative Requirements.
		2. Product Data:
			1. Manufacturer's data sheets on each product to be used.
				1. Includes but not limited to:

Spec-Data product information sheets.

Catalog cut sheets.

Color charts.

Safety Data Sheets (SDS).

Building code evaluation reports.

Sample warranty forms.

* + - 1. Preparation instructions and recommendations.
			2. Storage and handling requirements and recommendations.
			3. Typical installation methods.
		1. LEED Submittals: Manufacturer's sustainable design information for obtaining credits toward LEED Certification of this Project by use of specified products.

\*\* NOTE TO SPECIFIER \*\* Delete if not applicable to product type.

* + 1. Verification Samples: Two representative units of each type, size, pattern, and color.
		2. Shop Drawings: Include details of materials, construction, and finish. Include relationship with adjacent construction and graphic information specifically prepared for this Project, including:
			1. Dimensioned plans, elevations, and construction details indicating full extent of composite decking work complete with substrate construction, decking patterns, attachments, accessories, conditions at adjacent materials, perimeters and penetrations.
			2. Verified field dimensions.
			3. \_\_\_\_\_\_\_\_\_.
	1. QUALITY ASSURANCE
		1. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section with a minimum five years documented experience.
		2. Installer Qualifications: Company specializing in performing Work of this section with minimum two years documented experience with projects of similar scope and complexity.
			1. Manufacturer's authorized dealer-installer.
		3. Source Limitations: Provide each type of product from a single manufacturing source to ensure uniformity.

\*\* NOTE TO SPECIFIER \*\* Include mock-up if the project size or quality warrant the expense. The following is one example of how a mock-up on 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: Construct a mock-up with actual materials in sufficient time for Architect's review and to not delay construction progress. Locate mock-up as acceptable to Architect and provide temporary foundations and support.
			1. Intent of mock-up is to demonstrate quality of workmanship and visual appearance.
			2. If mock-up is not acceptable, rebuild mock-up until satisfactory results are achieved.
			3. Retain mock-up during construction as a standard for comparison with completed work.
			4. Do not alter or remove mock-up until work is completed or removal is authorized.
	1. PRE-INSTALLATION CONFERENCE
		1. Convene a conference approximately two weeks before scheduled commencement of the Work. Attendees shall include Architect, Contractor and trades involved. Agenda shall include schedule, responsibilities, critical path items and approvals.
	2. DELIVERY, STORAGE, AND HANDLING
		1. Store and handle in strict compliance with manufacturer's written instructions and recommendations.
		2. Protect from damage due to weather, excessive temperature, and construction operations.
	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. WARRANTY
		1. Commercial Product Warranties: Manufacturer's commercial series of prorated limited warranties including; 10-years against manufacturing defects of composite siding, 10-years against manufacturing defects of metal clips, 10-years against manufacturing defects of plastic clips, and 10-years against staining and fading of composite siding.
		2. Residential Product Warranties: Manufacturer's residential series of prorated limited warranties including; 25-years against manufacturing defects of composite siding, 20-years against manufacturing defects of metal clips, 15-years against manufacturing defects of plastic clips, and 25-years against staining and fading of composite siding.
1. PRODUCTS
	1. MANUFACTURERS
		1. Acceptable Manufacturer: NewTechWood America Inc., which is located at:15912 International Plaza Dr.Houston, TX 77032Toll Free Tel: 866-728-5273Tel: 281-570-6450Fax: 281-661-1167Email: [request info (inquiry@newtechwood.com)](https://arcat.com/rfi?action=email&company=NewTechWood%252BAmerica%252BInc.&message=RE%253A%2520Spec%2520Question%2520(07462ntw)%253A%2520&coid=52279&spec=07462ntw&rep=&fax=281-661-1167);Web: <https://www.newtechwood.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. PERFORMANCE REQUIREMENTS
		1. Density (ASTM D2395): 7.2 lbs per cu ft (115.3 kg per cu m).
		2. California Wildland Urban Interface: Complies with CBC Section 707A.3 or CRC Section R337.7.3. Requires using a noncombustible exterior wall complying with one of the following:
			1. Exterior Wall Covering: ASTM E136, ignition resistant complying with SFM Standard 12-7A-5.
			2. Exterior Wall Assembly: SFM Standard 12-7A-1.
				1. CBC Section 707A.3 or 2016 CRC Section R337.7.3 allows use of one layer of 5/8-inch-thick, Type X gypsum sheathing applied behind the exterior covering or cladding on the exterior side of the framing assembly to comply with SFM Standard 12-7A-1.
	2. COMPOSITE SIDING
		1. Basis of Design: Shadowline Composite Siding and Cladding; as manufactured by NewTechWood America Incorporated.
			1. Description: Composite siding boards composed of a recycled hardwood fiber and high-density polyethylene (HDPE) core encased in 1/64 inch (0.5 mm) to 1/32 inch (0.7 mm) thick UV and stain resistant plastic shell with core to shell co-extruded under high temperature forming a single combined product.
			2. Profile Style: UH68; All-weather.
				1. Board Size: 6-11/16 inches (170 mm) wide by 1 inch (25 mm) thick by 16 feet (4877 mm) long. 1.41 lbs per ft (2.1 kg per m).
				2. Trim: Fabricated from same material as siding boards; match siding color.

\*\* NOTE TO SPECIFIER \*\* Delete the trim options not required.

Norwegian Board End Trim: No. UH50. Size: 3 x 2-1/8 inch (75.5 x 54 mm). Length: 8 ft (2438 mm). Weight: 0.91 lbs per ft (1.35 kg per m).

Norwegian Board End Trim: No. UH51. Size: 3-3/16 x 3-3/16 inch (81.5 x 81.35 mm). Length: 8 ft (2438 mm). Weight: 1.01 lbs per ft (1.50 kg per m).

L-Trim: No. US20. Size: 4 x 1-3/8 inch (100 x 35 mm). Length: 8 ft (2438 mm). Weight: 0.73 lbs per ft (1.09 kg per m).

All Purpose European Siding F-Trim: No. US73. Size: 3 x 2-5/16 inch (74 x 58 mm). Length: 8 ft (2438 mm). Weight: 0.8 lbs per ft (1.19 kg per m).

\*\* NOTE TO SPECIFIER \*\* Delete configuration and color options not required.

* + - 1. Profile: Flush, tongue and groove.
			2. Texture: Embossed wood grain one side, smooth one side.
			3. Configuration: \_\_\_\_\_.
			4. Configuration: As indicated on Drawings.
			5. Color: Argentinian Silver Gray.
			6. Color: Peruvian Teak.
			7. Color: Brazilian Ipe.
			8. Color: Hawaiian Charcoal.
			9. Color: To be selected by Architect from Manufacturer's selection.

\*\* NOTE TO SPECIFIER \*\* Manufacturer is willing to supply customer required colors.
Special Colors: Are colors we have already formulated but do not stock. Requires a 1000 sqft minimum order and 5 to 6 months lead time.
Custom Colors: Colors we create from scratch. Requires 2000 sqft minimum order and 5 to 6 months lead time from time of color approval.
Delete the following color option if not required.

* + - 1. Color: \_\_\_\_\_\_\_\_.
			2. Finish: Matte.
			3. Installation Method: Rain screen; offset 1 inch (25.4 mm) from face of substrate; installed on furring with metal clips.
	1. ACCESSORIES

\*\* NOTE TO SPECIFIER \*\* Delete options not required.

* + 1. Product: AW08. Material: Aluminum. Size: 1-1/8 x 9/16 x 13/16 inch (28 x 14.5 x 20 mm). Installs on the joists and used as the connection between each US09 board.
		2. Product: T-7. Material: Rubber. Size: Diameter: 11/16 inch (18 mm). Height: 5/16 inch (8 mm). End Plug rubber spacers providing 1 inch (25.4 mm) offset behind top course of siding board.
		3. Product: AW02. Material: Extruded aluminum. Size: 11/16 x 9/16 inch (15 x 14.5 mm). Starter strips for attachment of bottom course of siding board to substrate.

\*\* NOTE TO SPECIFIER \*\* Delete length option not required.

* + - 1. Length: 36 inches (914 mm).
			2. Length: 108 inches (2743 mm).
		1. Fasteners: Type and size furnished or recommended by manufacturer.
1. EXECUTION
	1. EXAMINATION
		1. Do not begin installation until substrates have been properly constructed and prepared.
		2. If substrate preparation is the responsibility of another installer, notify Architect in writing 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. INSTALLATION
		1. Install in accordance with manufacturer's instructions, approved submittals, and in proper relationship with adjacent construction.
	4. FIELD QUALITY CONTROL
		1. Field Inspection: Coordinate field inspection in accordance with appropriate sections in Division 01.
	5. CLEANING AND PROTECTION
		1. Clean products in accordance with the manufacturer's recommendations.
		2. Touch-up, repair or replace damaged products before Substantial Completion.

END OF SECTION