

# SECTION 074200 GENERAL

#### Part 1

#### 1.1 SECTION INCLUDES

A. CompactWood® Panels: Solid wood veneer phenolic panels for exterior wall cladding of commercial and institutional buildings.

### 1.2 RELATED SECTIONS

A. Section 05: "Aluminum Framing"

B. Section 07: "Thermal Insulation"

C. Section 09: "Exterior Sheathing"

#### 1.3 REFERENCES

- A. ASTM E84 12 Standard Test Method for Surface Burning Characteristics of Building Materials.
- B. NEMA Standards Publication LD3-2005. High pressure decorative laminates.
- C. 2012 International Building Code, Chapter 14 Exterior Walls.

### 1.4 SUBMITTALS

- A. Comply with Section 01330 (01 33 00) Submittal Procedures.
- B. Product Data: Submit manufacturer's printed product literature and specifications including fabrication and assembly.
- C. Samples: Submit manufacturer's standard 3"x3" samples of panel cladding materials representative of colors, species and texture.
- D. Manufacturer's Certification: Submit manufacturer's certification that materials comply with specified requirements and are suitable for intended application.
- E. Warranty: Submit manufacturer's standard warranty.
- F. Installation Instructions (descriptive manual)
- G. Shop Drawings: Submit complete sets of fabrication/installation drawings including panel dimensions, thickness, location of joints, method of anchorage, number of anchors, supports, accessories, etc.

### 1.5 QUALITY ASSURANCE

## A. Manufacturer's Qualifications:

- 1. Sufficient plant facilities to provide quality and quantity of materials as required without delaying progress of the work.
- 2. Minimum of 20 years of experience in paper saturation of phenolic resin, and producing phenolic paper laminate.

#### B. Fabricator

- 1. Fabricated by the manufacturer, and/or
- 2. Contracted by the customer, minimum 5 years of experience in fabrication work of exterior cladding system for the size and complexity of the projects.
- 3. Approved by the manufacturer.

### C. Installer

- 1. Proven professional cladding system installer with a minimum of 5 years of documented experience.
- 2. Approved by the manufacturer.

## 1.6 DELIVERY, STORAGE, AND HANDLING

A. Delivery: Deliver materials in manufacturer's original unopened containers/packages, with labels clearly identifying product name, manufacturer, color/texture, and weight.

## B. Storage:

- 1. Store materials in clean, dry area in accordance with manufacturer's instructions.
- 2. Keep package sealed until ready for use.

# C. Handling:

- 1. Handle materials in accordance with manufacturer's instructions.
- 2. Protect materials during handling to prevent damage.

### 1.7. WARRANTY

A. Limited warranty: Compact Wood LLC warrants that CompactWood® Architectural Panels shall be free from material defects for a period of 10 years.

#### **PART 2 PRODUCTS**

## 2.1 MANUFACTURER

A. CompactWood LLC, 2825 Commerce Parkway, North Port, FL 34289. Web Site: www.compactwood.com Email: pwest@ambientaglobal.com

### **DISTRIBUTOR**

B. National Wallcovering, 10020 Maumelle Blvd., North Little Rock, AR. 72113. Phone: (501) 378-0039

Web Site: http://www.nationalwallcovering.com/ Email: keith.hudgins@nationalwallcovering.com

# 2.2 COMPACTWOOD® EXTERIOR ARCHITECTURAL PANELS

- A. Material: Solid phenolic laminate panel with UV protection
- B. Specie: ENTER SPECIES HERE. MUST BE PRODUCED FROM FLITCH RESERVE #2876523 also specified elsewhere in divisions 6, 8 and 10.
- C. Finish: SG
- D. Standard Size: 48"x120"
- E. Panel Thickness: 5/16", 8 mm, 3/8", 10 mm, 1/2", 13 mm
- F. Panel Core: Standard natural (brown)

### 2.2 COMPACTWOOD® EXTERIOR ARCHITECTURAL PANELS

A. Material: Solid phenolic laminate panel with UV protection

B. Specie: ENTER SPECIES HERE. MUST BE PRODUCED FROM FLITCH RESERVE #2876523 also specified elsewhere in divisions 6, 8 and 10.

C. Finish: SG

D. Standard Size: 48"x120"

E. Panel Thickness: 5/16", 8 mm, 3/8", 10 mm, 1/2", 13 mm

F. Panel Core: Standard natural (brown)

# 2.3 MINIMUM MATERIAL PROPERTIES

# A. NEMA Requirements

Description Test NEMA Requirements

		- 1			
Thickness			0.156"	0.250"	0.500"
Resistance to	3.6				
High Temperature		Slight Effect	No Effect	No Effect	No Effect
Ball Impact Resistance:	3.8				
Inches Drop		75"	90"+	96"+	96"+
Dimensional Change:					
Length (Machine Direction)	3.11	0.3% Maximum	0.25%	0.25%	0.25%
Width (Cross Direction)		0.7% Maximum	0.50%	0.50%	0.50%

Weight Per Unit			
Area			
Lbs/ft2	1.07	1.71	3.42
Kg/m2	5.2	8.35	16.7
Density (PCF)	82	82	82

# B. Mechanical Properties

Property	NEMA Requirements	0.156"	0.250"	0.500"
Flexural				
Strength				
ASTM D-790				
MD (psi)	18,000	20,000	20,000	20,000
CD (psi)	12,000	16,000	16,000	16,000
Flexural				
Modulus				
ASTM D-790				
MD (psi)	1.6x106	2.0 x 106	2.0 x 106	2.0 x 106
CD (psi)	1.4x106	1.5 x 106	1.5 x 106	1.5 x 106
Tensile Modulus				
ASTM D-638				
MD (psi)	18,000	18,000	18,000	18,000
CD (psi)	12,000	13,000	13,000	13,000

# Product Type

	Class A	Class B
Thickness	0.250"	0.250"
Flame Spread Index - ASTM E-84 (BLDG)*	15	30
Smoke Developed Values - ASTM E-84 (BLDG)*	15	105
Fire Rating* (Standard Product is Class B)	A	B*

<sup>\*</sup> Test Method: ASTM E84-13a - Standard Test Method for Surface Burning Characteristics of Building Materials. Also known as NFPA 255, UL 723, and UBC 8-1.

# D. Manufacturing Tolerance

Thickness (.156 to .375)	+/020
Thickness (above .375 to 1.000)	+/030
CNC Shaped size (Length -Width)	+/020
Drill Diameter	+/003
Drill Depth	+/020
CNC Hole to Hole	+/020
CNC Hole to Edge (1 Oper)	+/020
CNC Hole to Edge (2 Oper)	+/030
Routing - (Slots Width and Length)	+/015
Routing - (Slots Depth)	+/020

### 2.4. ACCESSORIES (FASTENERS)

- A. Manufactured by approved supplier.
- B. Provide exterior wall cladding system designed to withstand the effects of dead load, live load, and accommodate hygrothermal expansion/contraction of the panel.

#### PART 3 EXECUTION

#### 3.1 MANUFACTURER'S INSTRUCTIONS

A. Compliance: Comply with manufacturer's/fabricator's/supplier's product data, handling and installation instruction/manual, shop drawings, shipping container/package ticket identification, etc.

## 3.2. EXAMINATION

- A. Verify correct panels received, including dimension, tolerance, color/texture.
- B. Verify correct attachment system received for the specific project/job.
- C. Verify all the documents, including shop drawings and installation guidelines.
- D. Verify installation conditions are satisfactory to receive work of this Section before the commencement.
- E. Verify substrate installation is complete, flat, and true to plane.

### 3.3. PREPARATION

- A. Field Measurements: Verify prior to fabrication and installation of the cladding panel.
- B. Protect surrounding areas and surfaces to preclude damage during work of this Section.
- C. Lay out work before beginning installation as necessary for true, plumb, and aligned panel installations.
- D. Verify locations of joints and panel lengths.

#### 3.4. INSTALLATION

- A. Conform to manufacturer's instructions and provisions of shop drawings.
- B. Conform to fastener's instructions for installation of fasteners.
- C. Install to allow hygrothermal expansion/contraction.
- D. Use appropriate techniques/tools to work with the panel.
- E. Do not force to fit, bend, or stretch/compress.
- F. Make cutting and fitting neat, square, and true. Where required, cut, de-burr edges, and clean filings from adjacent surfaces.
- G. Do not install damaged or questionable panels.

### 3.5. FIELD QUALITY CONTROL

A. Manufacturer's Field Service: Provide field services to ensure product installation is in accordance with manufacturer's/fabricator's/supplier's instructions and installation manuals, shop drawings, etc.

### 3.6. ADJUSTING

- A. Correct identified defects and irregularities.
- B. Replace damaged, soiled, and discolored work.

## 3.7. CLEANING

A. Leave installation clean and free from residue and debris from work of this Section.

**END OF SECTION**