

## **SECTION 13 34 41**

### **WOOD PORTABLE BUILDINGS**

#### **PART 1 GENERAL**

##### **1.01 SECTION INCLUDES**

- A. Provide a factory made, wood framed, storage building.
- B. Building Construction Type: IBC Type V-B Wood Frame suitable for Class S (Storage Occupancy) and other occupancies as determined by Code Authorities.

##### **1.02 REFERENCE STANDARDS**

- A. Codes that shall be met by manufacturer.
  - 1. All work shall comply with the related provisions of the 2017 Uniform Code of New York State which adopts the 2020 IBC, its reference standards, and all local law regulations.
- B. ASTM E108 - Standard Test Methods for Fire Tests of Roof Coverings; 2011.

##### **1.03 ADMINISTRATIVE REQUIREMENTS**

- A. Manufacturer shall furnish a Project Manager to follow the project from order to delivery.
- B. Sequencing: Contractor shall ensure that utility connections are achieved in an orderly and correct manner for immediate connection of factory made for portable wood framed building upon delivery.

##### **1.04 SUBMITTALS**

- A. Product Data: Wood Portable Building Manufacturer shall provide the following.
  - 1. Color Chips for exterior and interior paint, describing which items get which colors. Submittals shall include the paint manufacturer's description of the different types of paint used.
  - 2. Roofing Manufacturer, profile, gauge, color and fastener system and perimeter trim.
  - 3. Siding Manufacturer, profile, material, thickness, color and fastener system.
  - 4. Trim: Interior and exterior: material, Profile size and thickness, fasteners and finish.
  - 5. Underlayment: For Roof, walls and floorings (as may be applicable).
  - 6. Light Fixtures: Submit manufacturer's catalog information, including appearance and electrical characteristics.
  - 7. Windows, Doors and Hardware: Provide catalog cuts showing materials, function and appearance.
  - 8. Interior Ceilings and Walls: substrate (material and thickness) and finish colors.
  - 9. Structural Systems: State which codes will be met and materials to be used.
- B. Shop Drawings: Standard Floor Plans, Elevations, Details, Foundation Plan and Standard Anchor Details Drawing furnished by Manufacturer.
- C. Manufacturer's Qualification Statement.
- D. Specimen Warranty: (unsigned) Manufacturer's Warranty submit with Shop Drawings.

##### **1.05 QUALITY ASSURANCE**

- A. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section, with not less than three years of documented experience and have a state license from

##### **1.06 WARRANTY**

- A. Manufacturer's Warranty (and the industry standard) is for one year from date of delivery.
- B. Manufacturer shall correct defective Work within a one year period from the date of arrival on site. This is a material and workmanship warranty for normal use. Abuse will not be included in the Warranty.

- C. (Note to the Specifier): If a longer term warranty is desired, call the manufacturer and discuss the warranty and costs that will, in turn will be built into the cost of the portable building(s). The Design Professional has the duty to communicate with the Owner and portable building manufacturer to build-in the costs of a longer term warranty or other items not normal to the modular industry.

## **PART 2 PRODUCTS**

### **2.01 MANUFACTURERS**

- A. Sheds Unlimited, LLC; 2025 Valley Rd, Morgantown, PA 19543; Tel: 717-442-3281; web: [www.shedsunlimited.net](http://www.shedsunlimited.net)
- B. Or approved equal.

### **2.02 PRE-FAB SYSTEM**

- A. Description: 12x16 Classic Shed Collection, A Frame Shed by Sheds Unlimited or approved equal.
1. Color: To be selected by Director's Representative from standard color range of wood portable building manufacturer. Unique colors must be discussed with manufacturer prior to price agreement.
- B. Design Criteria: (Site Dependent)
1. Comply with the Code requirements stated in PART 1 of this specification.
  2. Refer to S001 within drawings for design criteria requirements.
- C. Wood Construction Requirements:
1. Wood Construction Materials: Comply with the following standards.
    - a. PS1 - Construction & Industry Plywood 2009.
    - b. PS 20 - American Softwood Lumber Standards 2010.
  2. Wood Treatment where called for by in the IBC and other applicable Codes:
    - a. Treated Lumber & Plywood: Comply with Requirements of AMPA U-1 - Use Category System for Wood Treatment determined by use categories, expected service conditions, and specific applications.
      - 1) Fire-Retardant Treated Wood, if used : Mark each piece of wood with producer's stamp indicating compliance with specified requirements.
- D. "No Floor" Style Option:
1. Refer to drawings for site poured concrete slab as a floor. The portable building shall use a 4x6 #2 Douglas Fir pressure treated bottom plate under the walls to provide substantial framing member to attach the building to the slab using steel angles or plates. Steel angles, if employed, shall be continuous along the interior walls of the portable building and be lag screwed to the 4x6 member and attached to the concrete slab with concrete wedge anchors per the engineer's design. Steel plates, if employed, shall occur periodically, or 48" OC on the exterior of the building and be lag screwed to the 4x6 member and attached to the concrete slab with concrete wedge anchors or poured in place anchor bolts, per the engineers design.
- E. Wall Construction:
1. 2x4 standard & better Douglas Fir studs, 16" OC with 2x4 single bottom plate and double top plate. Approved "house wrap"water resistive barrier.
- F. Exterior Finish:
1. Smart Panel 5/8" premium Pine T-111 (303-6) siding with 100% acrylic latex low VOC paint, semi gloss.
  2. Building and window trim furnished and installed by Manufacturer. Contractor to install the exterior trim when allowed by the local building official. Trim pieces shipped loose for site installation by Contractor.

- G. Roof Construction:
  - 1. 6/12 Roof pitch, 8 inch overhang at perimeter.
  - 2. 2x4 #2 Douglas Fir rafters, 16" OC. 1/2" 3ply rated Pine plywood decking (sheathing). 1/4" gypsum drywall non-combustible deck. 15# ASTM rated roofing felt 0.024" single piece rolled aluminum roofing, painted white. Rolled roofing shall be fastened 4" OC at edges and 16" OC in two field rows with #14 x 1inch HWH tapping screws with bonded sealing washers. All field screws shall be further sealed with one part urethane caulking.
    - a. Roofing Membrane Flammability: Class A per ASTM E-108.
  - 3. 30 year Architectural Shingles with Ridge Vent and drip edge. Certaineed Landmark PRO or approved equal. Color to be chosen by Director's Representative from manufacturers standard color range.
- H. Exterior Doors:
  - 1. Manufacturer and Style: Wood Classic Doors with heavy duty hinges. Doors shall be factory painted interior and exterior. Hardware shall include passage set and single cylinder deadbolt for each door.
    - a. Hardware: Compatible with Best lock system. Coordinate keying with Director's Representative.
    - b. Door Sizes:
      - c. 1. Side Door: 3'-0"x7'-0"
      - d. 2. Double Door: 8'-0"x7'-0"
- I. Windows:
  - 1. Operable 18"x36" windows with insect screens and shutters.
- J. Light Fixtures and electrical wiring: Refer to Electrical Drawings for layout.

### **PART 3 EXECUTION**

#### **3.01 INSTALLERS**

- A. Contractor shall furnish a crane or fork-lift intended for the weight of the Portable Building.
- B. Contractor will be responsible for having all utility connections in their correct place before portable building is shipped by the manufacturer.
  - 1. Assuring that power lines or other impediments are not in the way is the Contractor's responsibility.

#### **3.02 EXAMINATION**

- A. Verification of Conditions: Verify that portable building is complete and ready for occupancy. Code officials may want to see the anchor bolts before the bottom trim is installed.

#### **3.03 PREPARATION**

- A. Protection of In-Place Conditions: Contractor's full responsibility.
- B. Surface Preparation: Manufacture shall prepare modular building at factory for over the highway transportation.
- C. Bottom Trim: Will be finished and furnished by manufacturer (and depending on the anchoring system) cut to size and installed by Contractor after anchor bolts are secured.

#### **3.04 INSTALLATION**

- A. Manufacturer shall advise the Contractor on the options for removing the Wood Portable Building off the truck and onto the place and utilities that will become the long term home location.
  - 1. The Contractor shall arrange for a fork lift or crane to move the wood portable building off the truck to it's long term location.

2. Refer to drawings for Site Plan in preparation for the arrival of the wood portable building showing power lines, fire hydrants and site access.
  3. The Contractor will install all anchor bolts, style and locations of bolts will be dictated by the manufacturer to meet the local wind and seismic code requirements.
- B. Install each item in accordance with component manufacturer's instructions.

### **3.05 FIELD QUALITY CONTROL**

- A. See Division 01 for additional requirements.

### **3.06 CLEANING**

- A. Clean wood portable building before preparing for transit.
- B. Prepare building to assure damage free transit.
- C. Lock and block (with 2x4's) all doors and windows for transit.

### **3.07 CLOSEOUT ACTIVITIES**

- A. Director's Representative shall inspect the "like new" condition of the structure and components. clean fix and re-paint as necessary for occupancy.
1. If problems arise, inform manufacturer by phone and follow up as required.
- B. Exterior (roof, walls and windows) shall be washed, as necessary (in the field) and cleaned free of dirt.
1. If problems arise, inform manufacturer by phone and follow up as required.

### **3.08 PROTECTION**

- A. Protect installed wood portable building from subsequent construction operations.
- B. Do not permit traffic over unprotected floor surface without Director's Representative's consent.

**END OF SECTION**