**SECTION [13120]**

**PREASSEMBLED BUILDING**

**SECTION 1 GENERAL**

**1.01 SECTION INCLUDES**

1. This Section specifies all requirements necessary to furnish and install a prefabricated portable aluminum building(s) including, but not limited to the following:
2. Frameworks.
3. Windows.
4. Door.
5. Roof.
6. Hold down clips.

**1.02 RELATED SECTIONS**

1. This Section shall be used in conjunction with the following other specifications and related Contract Documents to establish to establish the total requirements for the referenced prefabricated building
2. The Subcontract.
3. Electrical service supply and connection.
4. Site/Foundation work.
5. Unloading, placement, installation and anchoring.
6. Plumbing and piping (when required).
7. In the event of conflict regarding requirements for prefabricated buildings between this Section and any other sections, the provisions of this Section shall govern.

**1.03 REFERENCES**

1. Refer to *Porta-FabPreassembled Building Website* for technical data, design requirements and additional information.

**1.04 SUBMITTALS**

1. Submit the following in addition to the standard requirements.
2. Upon award of order, manufacturer shall prepare and submit copies of shop drawings as required for each different building required for this project. Drawings shall include elevations, section, floor plan, and anchor clip detail.
3. Color charts illustrating available colors and patterns for specified finishes shall be submitted to owner for prompt selections.

**1.05 QUALITY ASSURANCE**

**13120**

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1. Manufacturer:
2. Structures shall be the product of a manufacturer with a minimum of 25 years-documented experience in the design and fabrication of portable aluminum buildings.
3. Prefabricated buildings by manufacturers other than the one approved shall submit sufficient data to enable approval to be given. As a minimum: Design drawings and /or calculations, applicable certifications, catalog information, and color samples showing equal range of variety.
4. Electrical devices factory installed within the prefabricated building shall be UL listed. Factory installed wiring system shall bear UL Classification insignia certifying compliance with the National Electrical Code, 2000 edition.
5. Adherence to applicable portions of state and local building codes is the responsibility of the owner. Building manufacturer shall not be responsible for permits, special engineering calculations or architectural type drawings unless otherwise notified in writing 3-weeks prior to release of bid document.
6. Design Loads: 30 lbs/ft2 live load, 20 lbs/ft2 wind load, 40 lbs/ft2 floor load.

**1.06 WARRANTY**

1. Porta-Fab Preassembled Buildings are warranted against defects and workmanship for a period of one (1) year from date of original shipment. Porta-Fab is not responsible for or liable for modifications, alterations, misapplication or repairs made to the products in the field.

**1.07 TECHNICAL SERVICES**

 A. Porta-Fab Corporation offers technical service support. For services regarding layout, design and product selection, as well as suggested specifications, contact the main office (Section 2.02).

**SECTION 2 PRODUCTS**

**2.01 PRODUCT NAME**

1. Preassembled Buildings

**2.02 MANUFACTURER**

 A. Porta-Fab Corporation

 18080 Chesterfield Airport Road

 Chesterfield, MO 63005 U.S.A.

 Phone: (636) 537-5555

 Fax: (636) 537-2955

1. The use of a manufacturer's name, model or catalog number is for the purpose of establishing the standard of quality and general configuration.

**2.03 PRODUCT DESCRIPTION**

**Basic Uses:** Provide a pre-assembled for the following typical uses:

 Equipment enclosure, gate house, gas station booth, guard booth, observation tower,

 operator booth, parking booth, press box, security booth, ticket booth, toll booth, and valet booth.

1. Structural members to be extruded aluminum angles, channels, and tee sections of structural alloy 6063-T5 alloy. Base to be 4” x 3 x 3/16” angle (4” structural channel used on buildings larger than 8’ x 12’, and two piece buildings); corner posts to be 3” x 3” x 3/8” grooved angle; grooved intermediate tees to be 3” x 2 1/8” x 3/8”; top angle to be 2 ½” x 2 ½” x 3/16”.
2. All structural components to be certified welded at all intersections to create a unitized framework. No rivets, bolts or other fasteners shall be used in joining structural components.
3. Finish – Framework:
4. Mill-finished aluminum
5. (Option) Provide painted exterior framework.
6. Wall and Ceiling Panels:
7. Wall panels shall be ½” Medex™ laminated on both sides with .030” FRP (fiberglass reinforced plastic). Panels shall be attached to the structural members with fasteners not exposed on the building exterior. Ceiling panels shall be minimum 5/8” 0.035 Smooth White Fiberglass reinforced Plastic faced plywood panels.
8. (Option) Provide R-10 wall and ceiling insulation.
9. Flooring:
10. Floor structure to consist of one layer of 5/8” particle board and one layer of 5/8” plywood underlayment as the core with a vapor barrier on the exterior surface. Interior surface shall be aluminum tread plate, 0.10” thick, Tread Brite model #3003 on buildings up to and including 48” wide.
11. Buildings over 4’ wide shall have, Gray ½” low skid HDPE laminated OSB Panels and one layer of 5/8” plywood underlayment as the core with a vapor barrier on the exterior surface.
12. (Option) Provide R-10 floor insulation.
13. Doors:
14. Swing doors to be of 3068 20-gauge steel, 1 ¾” thick with threshold and 2’ x 2’ window with minimum ¼” clear tempered safety glass. Hardware to include: 1 ½ pair of 4 ½” x 4 ½”butt hinges; commercial quality, lever lockset; spring closer and continuous vinyl gasket on door frame.
15. Sliding Doors to be aluminum, painted white, fully weather-stripped and lockable. Upper portion to be glazed with minimum 3/16” clear tempered safety glass and lower portion to have a solid panel with matching interior and exterior surfaces.
16. Windows and Glazing:
	1. Windows shall have aluminum frames and inserts and to be industrial quality with active window panel to slide horizontally. Windows to include inside positive locking device. Exterior window sill height to be 50” (inside sill height 44” from finished floor).
	2. (Option) Fixed windows to be ¼” tinted tempered safety glass.
		1. Windows to be glazed with minimum 1/8” clear tempered safety glass.
		2. (Option) Windows to be ¼” tinted tempered safety glass.
		3. (Option) Windows to be ½” clear insulated tempered safety glass.
		4. (Option) Windows to be ½” tinted insulated tempered safety glass.
17. Shelf:
	* + 1. Furnish 16” deep, full-width shelf, per plans, 42” a.f.f. and finished with a HPL high pressure laminate) on all buildings up to 48” in width.
				1. (Option) Provide a lockable Indiana R-1 cash drawer, with trays.
18. Electrical:
19. Electrical service to include a single-phase 100-amp capacity load center, with 70-amp main and three circuit breakers; fluorescent lighting; 110-volt 20-amp duplex outlets; 220-volt 20-amp single outlet and 20 amp switches as shown on drawings. All conduit and wiring shall be surface mounted and installed in compliance with the National Electrical Code. Conduit is ½” emt cable and wire is #14. All electrical components shall bear the UL label.
20. Furnish ( ) 115v duplex outlet, and one 230v single outlet.
21. Lights to be fluorescent type fixture with acrylic lens.
22. (Option) Include HVAC unit (230v, 12,000c / 10,700h BTU) Field Install required.
23. (Option) Include air conditioner (120V, 8,250c BTU) Field Install required.
24. (Option) Include one heater unit (230v, 4000w). Field Install required
25. (Option) Include ( ) additional duplex 115v outlets.
26. (Option) Include ( ) empty conduit runs with pull wire to run communication lines.
27. Exterior Roof
28. Factory installed integral roof to consist of 5/8” plywood with vapor barrier on the exterior surface. Buildings larger than 4’ x 8’ to receive two layers of 5/8” plywood. Roofs to include aluminum gutters around the entire perimeter.
29. (Option) “K-D” exterior waterproof roof shipped for assembly and installation on site by others. Decking to be standing seam formed, pre-finished white aluminum, nominal 12” wide panel, .028” thick. Roofs with overhangs larger than 12” to have reinforcing angles included. Perimeter to be extruded aluminum fascia and gutter trim.

**SECTION 3 EXECUTION**

**3.01 INSTALLATION**

1. General: All preparatory work and installation work shall be performed by site-contractor and shall be performed in accordance with local and/or state codes.
2. Pour concrete island minimum 4” deep. The island should be a minimum of 12” wider than the roofline dimensions to allow a 6” concrete border on each side of the building roofline. Level the pad and install a bollard at each corner of the building to further protect the building from damage caused by traffic.
3. Provide 3-wire 240v/110v single-phase service to the concrete island. Coordinate stub-up location with prefabricated building layout plans.
4. Building to arrive via flatbed truck or closed van. The carrier must contact end-user 24-hours prior to delivery to arrange for off-loading. Use either a forklift or overhead crane to off-load the building from the flatbed. If an overhead crane is used, be sure to use “spreader bars” to prevent the building fascia/roof from being damaged by the sling/straps. Square the building on the pad and anchor.
5. Recommended concrete anchor is ½” x 4” galvanized or stainless steel, or comply with local codes – whichever is most stringent. Anchors are provided by site-contractor.
6. Make final electrical connections and clean the work area.

End of Section