

## PART 1 – GENERAL

**1.1** Provide all labor, equipment and materials to furnish prefabricated Panel Built Inc. 3" (insert here) <modular wall system> or <modular room> or <modular enclosure>, as indicated on drawing.

## 1.2 RELATED SECTIONS

Installation
Electrical
Fire Suppression (If Applicable)
Mechanical / HVAC
Plumbing (If Applicable)

#### 1.3 QUALITY ASSURANCE

Modular system shall be the product of a manufacturer with a minimum of 20 years documented experience in the design and fabrication of modular wall systems, rooms and enclosures.

## 1.4 REFERENCES

Upon request, the manufacturer shall provide the locations and points of contact for five (5) similar installations with comparable application criteria that have been in service for a minimum of five (5) years. This will allow the architect / owner to evaluate the quality of materials and workmanship.

#### 1.5 SUBMITTALS

Upon award of an order, manufacturer shall prepare and submit copies of shop drawings as required. Drawings shall include elevations, section details and floor plan. Samples of panel finishes shall be submitted for owner's approval.



### **PART 2 - PRODUCTS**

## 2.1 ACCEPTABLE MANUFACTURERS

# 1.1 MANUFACTURERS

A. Acceptable Manufacturer: Panel Built, Inc., 906 Beasley Street, Blairsville, GA 30512

Toll Free Tel: 800-636-3873, Fax: 800-594-3245,

Email: salesgroup@panelbuilt.com, Web: http://www.panelbuilt.com

B. Modular system(s) by manufacturers other that those pre-approved shall submit sufficient product data for review prior to granting approved status. As a minimum: Design drawings and / or engineering calculations, applicable code compliance, product catalog(s) and samples of wall panel construction.

#### 2.2 SYSTEM COMPONENTS

A. Panel Built Inc. modular system shall be constructed from pre-finished materials supplied by Panel Built Inc. Building Systems consisting of the following specific components:

- B. Wall Panels: Laminated design consisting of solid core with a pre-finished interior and exterior surface.
  - 1. Wall panels are to be nominal 3" thick by 48" wide by (insert height). Standard panel height is 8'-0" up to a maximum height of 15'-0".
  - 2. Core: Expanded polystyrene ASTM E84 Class A fire-resistant, 1 pound PSF density.
  - 3. Panel finish: Interior finish (insert finish), exterior finish (insert finish)
    - a. <Champagne> <Off White> <Gray> ½" vinyl-covered drywall with Class A fire rating in accordance with ASTM E84. b<Saddle Tan> <Off White> <Gray> 26 gauge painted steel. c. <White> fiberglass reinforced plastic (FRP).



- C. Structural Framework: Extruded aluminum alloy 6063-T5 with a painted finished surface.
  - 1.Standard Panel Connecting Post: Consist of a 3-piece design which serves as the connecting device for holding all panels together. These posts also serve as a vertical chase to conceal electrical and data service. A full height Snap-On cover plate is included to allow for easy access during initial installation and to enable future modification without disassembly of wall system. Standard connecting posts are also loadbearing and can be used to create load-bearing and two-story modular buildings.
- 2. Corner Post: Consist of a 1-piece design which serves as both a structural member and as the connecting device for wall panels at 90-degree angles.
- 3. Wall Starts: Consist of an aluminum U-shaped channel to fit flush against existing structure or where two modular panels meet on a perpendicular line. The U-shaped channel is sized to enable standard panel connectors or corner post to positively connect while enabling panel installation on the adjacent side.
- 4. Ceiling Cap: Extruded aluminum alloy 6063-T5 provided in 10' lengths to fit snugly around the top of all perimeter wall sections eliminating onsite fabrication. Integral vertical fascia is included to create a neat, finished appearance.
- 5. Partition Cap: Extruded U-shaped aluminum alloy 6063-T5 provided in 10' lengths to fit snugly around the top of all partition wall sections.
  - 6. Base Plate: Extruded U-shaped aluminum alloy 6063-T5 provided in 10' lengths to serve as a leveling surface and guide for installation of wall panels and connecting posts.
- **2.3 DOOR ASSEMBLIES**: Full flush doors include lock set shipped separately. Doors include an integral threshold and stationary door sweep.
  - A. Door Leaf: Provide (insert here)
    - 1. 3'0" x 7'0" single swing door, hollow metal steel door consisting of 20-gauge sheet steel.



- B. Door Frame: Steel with a <white>, <champagne>, <Dove Gray> or <br/>finish with integral stop.
  - C. Door Hardware: Provide as specified in section 08710 Door Hardware.
  - 1. Hinges: Fully mortised, plain bearing 4 ½" x 4" butt hinge with a brushed aluminum finish.
    - 2. Locksets: Industrial grade, lever type as specified by architect.
- 3. Door Sweep: Aluminum extrusion with black vinyl sweep, surface mounted to the bottom of the door leaf.
  - D. Vision Lite: Provide factory installed 24" wide by 36" high vision lite with <1/4" tempered safety glass> or <1/2" insulated, dual paned, tempered safety glass> or <1/4" laminated safety glass> or <1/4" Plexiglas>
- **2.4 WINDOW ASSEMBLIES:** Consist of a three-piece system which includes the window frame and wall panel sections to fit above and below to create a full height panel assembly.
- A. Frame: <Fixed> or <Horizontal Sliding> type, constructed of extruded aluminum alloy 6063-T5 with color match wall color finish for fixed windows. And <white> <br/> <br/> sliding window frames. Window frames will be preassembled, including specified factory glazing. Frames will positively lock into adjoining connecting posts. Fixed window frames will include removable stops to enable easy replacement of glazing. Header and sill panels will be installed in conjunction with frame to create a complete full-height wall panel.
- B. Glazing: <1/4" tempered safety glass> or <1/2" insulated, dual paned, tempered safety glass> or <1/4" laminated safety glass> or <1/4" Plexiglas> Factory installed in frame with full perimeter rubber bulb gasket.

## 2.5 ROOF SYSTEMS

A. Steel Deck: Corrugated B-deck serves as roof cover and span support for acoustical grid ceiling system & lights. Utilize <22 gauge for clear spans up to 12' wide.



B. <1/12><1/4-12> Pitch Panelized Shed Roof W/ <"> Overhang Polystyrene Roof -3", 3-PLY:

The roof shall be 3" thick composite sandwich panels. Both sides shall be stucco-embossed aluminum pre-painted white. The core shall be of 1 lb. density polystyrene foam. The entire panel shall be laminated together using a solvent free two-part polyurethane adhesive and pressure. The panels shall have formed edge connectors that are capable of being friction locked without mechanical fasteners using a full-length joint without through metal connectors. The joint shall allow lateral expansion and contraction

- C. For spans of considerable length, structural I-beams may be required to reduce clear span conditions. I-beams will be mechanically fastened to the top of panel connectors on centerlines as required for different span conditions.
- D. Acoustical Ceiling System: Suspended metal grid with lay-in acoustical tile.
- 1. Ceiling grid: Double webbed, commercial grade, non-rated, galvanized steel with white baked enamel paint finish.
  - 2. Acoustical ceiling tile: 2'x4' / 5/8" non-directional fissured and perforated wet-felted lay-in panels and tile. Armstrong "Minatex" Model #775 24" X 48" X 5/8" Lay-in or equal.
  - 3. Fiberglass insulation: Rolls of R-19 Kraft faced Fiberglass insulation batts are also included. The rolls are 23" wide x 6" thick x 75 square feet.

# 2.6 ELECTRICAL COMPONENTS

- A. Electrical Outlets: Provide as specified on drawing. Outlets are to be installed inside the chase of the panel connecting post.
- 1. Duplex outlets: 115volt, 3 wire, 20-amp capacity installed 18" above finished floor.
- 2. Single Outlets: 230volt, 3 wire, 20-amp capacity installed 18" above finished floor.
  - B. Data / Telecommunications Jacks:
- 1. Single port for <telecommunications> or <data> service provided by others. To be installed 18" above the finished floor.
- 2. Dual port for <telecommunications> or <data> service provided by others. To be installed 18" above the finished floor.



- C. Lighting: Provide as indicated on drawing or design to provide (insert here) foot-candles
  - 1. Fixtures:
- a. Provide 120 volt, 2'x4' grid lay-in, 128 watts, with four 32-watt T8 tubes (supplied by others).
- b. Provide 120 volt, 2'x4' surface mounted, 128 watts, with four 32-watt T8 tubes (supplied by others).
  - c. Provide 120 volt, 2'x4' grid lay-in, LED Troffer light fixture
- 2. Light Switch: Provide <single> or <double> or <3-way> as specified on drawing. To installed 46" above the finished floor.
- D. Load Center: Main < lug > < breaker > , single phase, < > amp capacity, () circuits with 20-amp circuit breakers.

## 2.7 AIR CONDITIONING:

- A. Through-wall H.V.A.C. unit(s), to be installed in factory framed wall panel cutout as indicated on drawing.
- 1. <230-volt, 9,300 BTU Cooling / 11,000 BTU Heating> or <230-volt, 12,000/11,100 BTU AC with Electric Heat> or < 18,000/11,100 w/Electric Heat>
- 2. Framed Cutout: Provided factory installed frame, constructed of extruded aluminum alloy 6063-T5 to match panel color.
- C. Central heating, ventilating and air conditioning system in accordance to specifications outlined in Division 15.



# **PART 3 – EXECUTION**

# 3.1 PREPARATION

A. Coordinate on-site delivery and off-loading of modular system to ensure a secure staging area with sufficient floor space to store modular construction material. Confirm access way is free and clear of obstructions to enable delivery of modular system to the construction site. Confirm lighting and electrical provisions are adequate and easily accessible.

# 3.2 ERECTION

A. Install modular system on a flat and level surface in accordance with the manufacturer's installation instructions and drawings. For technical assistance call 1-800-636-3873.