



Mobile, Collapsible, three (3) Room Building and Supporting Trailer

Specifications

Brief Description

Tennessee Department of Health Emergency Preparedness has been approved by the Center for Disease Control with federal funding to purchase a quantity of nine (9) mobile, collapsible three (3) room buildings.

The bid must provide the following or equivalent:

Mobile Collapsible 3 Room Building Specifications

- 1.) The three (3) room mobile, collapsible building must be able to be full setup and functioning without the use of tools with three personnel in under fifteen (15) minutes.
- 2.) The mobile collapsible building must be designed to be setup without the need for electricity (non-motorized).
- 3.) The building must have three (3) rooms consisting of the following dimensions (listed below) and not exceed an exterior length of 19'9" long. When not in use, the building must not exceed 45" wide. Each room must include a window with flush-mount blinds.

Room 1: 15'10 ½" X 8' 6"

Room 2: 8'2 ½" X 8' 6"

Room 3: 7'5" X 8' 6"

- 4.) The four (4) sidewalls must be able open and close after the deployable building is erected, in addition, the sidewalls must:
 - a. able to bring in equipment larger than the width of the door opening
 - b. have built-in handles to assist in opening and closing for use as a potential emergency.

Structure

1. Core shall have the below or equivalent:
 - a. Center core structure comprising of a rectangular box structure of heavy-duty extruded aluminum 0.156-inch-thick alloy 6063 T 6 Components are bolted and welded connections creating a box beam configuration.

- b. Four 4 built-in bevel geared leveling jacks at the base with eight-inch 8 by eight inch 8 welded plates.

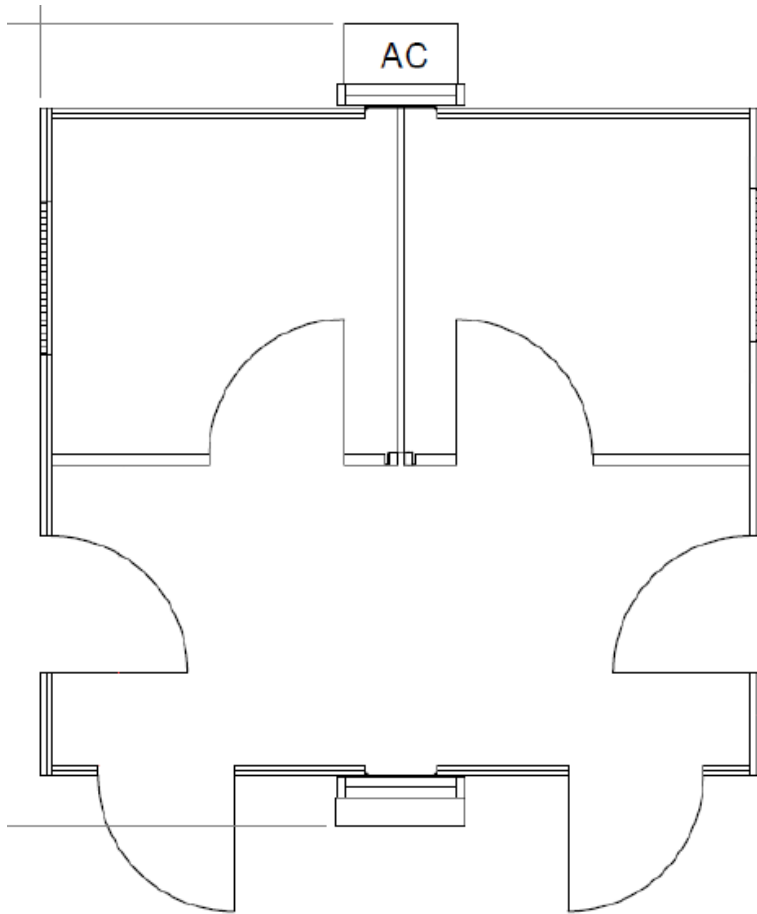
Panels:

- a. Roof, wall, and floor, consisting of composite aluminum panels, with an expanded polystyrene core, pressure laminated Roof panels, three-inch (3) depth facings 0.024 aluminum, core one (1) pound density expanded polystyrene
- b. Thermoplastic Roof Finish (TPO)“ R-value 15.00 Wall panels, three (3) Inch in-depth facings 0 024 aluminum, core one (1) pound density expanded polystyrene;“ value 13.90
- c. Floor panel, four (4) inch in depth, facings 0.024 aluminum, core two (2) pound density expanded polystyrene, with ¼” AC grade substrate;“ value 18 56
- d. Six (6) doors must be in the following areas:
 - i. 2 ADA compliant exterior access door located at the front wall on far left side near corner and far right side near corner.
 - ii. 2 ADA complaint exterior access door located to the left side and right side walls adjacent to the front wall doors (shown in diagram below
 - iii. 2 ADA compliant interior doors each located on interior wall giving access to each clinic room.
- e. Two (2) windows must be in the following areas:
 - i. 1 window each located in each small room.
 - ii. Each window must be able to open and must have a removable window screen.

Framing/Extrusions/Sheet/Fasteners:

- a. Panels must be framed with aluminum extrusions
- b. All extrusions shall be alloy 6063 T 6 aluminum only, with a minimum thickness of 0.09 to 0.18 inches as required
- c. Extrusion framing must be configured to interlock between the roof and exterior wall panels to create a water and wind barrier at the interconnection and further to create a unified structure for strength

**Example shown below of what is expected minus the furnishings.



Lighting

Each room must have LED lighting like overhead office type lighting. Sizing should be at least 4' by 2' panels or equivalent with led bulbs all controlled by rocker switches located in each room.

Mobilizer Trailer

- a. Buildings must be transportable via a custom-made mobilizer trailer system designed to safely unload the deployable building onto the ground without the use of a forklift.
- b. The trailer shall be able to be towed via pickup truck.
- c. The trailer must have a GVWR of 10,000 lbs.
- d. The trailer must also have 6 storage cabinets: (4 cabinets) at least 51" W x 42" H x 22" D, (2 cabinets) at least 84" W x 33" H x 22" D.
 - a. These storage cabinets will be used to store necessary mission-oriented equipment.
- e. The hitch shall be 2 5/16ths inch hitch or equivalent.

Frame:

- a. Welded steel.
- b. Container Positioning: Forward stop crossmember to index in contact with wide building forward jacks. Indexed laterally by 2 pairs of 5k jacks.

- c. Axles: Tandem 5,200 lb. axle-less suspension.
- d. Hubs: 6 on 5.5" bolt circle.
- e. Suspension: axle-less; steel brackets, urethane bushings, rebound springs for constant tension.
- f. Brakes, Service: 12" x 2" electric drum, automatic adjusting. all wheels.
- g. Brakes, Emergency: Automatic breakaway battery with charger.
- h. Tires: Five, ST225/7515 LR-E, 2,830 lb. capacity each @80 PSI.
- i. Wheels: Five, 15" steel, Mod style painted. 6 on 5.5" bolt circle.
- j. Spare Tire: Mount with matching tire and wheel.
- k. Hitch, Draw Bar: Lunette Eye (3" ID x 1.62" section), Adjustable height, 13-1/2" to 21-1/2".
- l. Hitch Ball: 2-5/16" diameter ball coupler. Adjustable height 15-1/2" to 23-1/2".
- m. Safety Chains: Two with safety snap hooks.
- n. Lateral Indexing Jacks: Four 5,000 lb. welded to crossmember receivers.
- o. Tongue Jack: 5,000 lb. drop leg with sand shoe. Side wind.
- p. Finish: Sand blasted substrate, epoxy primer, urethane topcoat.
- q. Lighting: All LED (light emitting diode) with heat splice wiring connections. Groundless.
- r. Electrical Plug: 7-blade RV.
- s. Deck, Forward: Aluminum tread plate.
- t. Conspicuity Tape: Reflective 2" red/white conspicuity tape.
- u. Compliance: This vehicle will conform to all applicable US Federal Motor Vehicle Safety Standards in effect on date of manufacture.

The trailer and equipment must meet the Air Transportability Test Loading Activity (ATTLA) military certification for flight

Ramp/landing

- a. Ramp and landing must be provided for handicap access to exterior door.
- b. Storage for ramp/landing must be located on trailer.

Network Panel

- a. The internal data system must comprise of a series of Cat5/Cat6 cables from a central RJ45 patch panel.
- b. The origin of the data connections must be from the exterior located in a metal weather proof cabinet.
- c. All wires and connection boxes must be recessed into the walls.

Heating Ventilation and Cooling (HVAC)

The building must come standard with an HVAC. The HVAC system must have an internal wall-mounted digital thermostat and be built to the following or equivalent characteristics:

- a. Electric Strip Heat: Heaters shall have an automatic limit and thermal cut-off safety control. The heat strip must be 8KW.
- b. High-Efficiency Cooling: Scroll compressors for quiet, efficient cooling. Designed with R-410A (HFC) non-ozone depleting refrigerant in compliance with the Montreal protocol and 2010 EPA requirements. A liquid line filter-drier to protect the system from moisture is standard on all units. The AC portion of the HVAC system must be a minimum of 24,000 BTUs.

On-board Generator

The trailer must come with a loading ramp constructed from aluminum to mount the on-board generator. The generator must meet the following specifications or equivalent and include an all-weather cover.

- a. Parallel ports for connecting two 9500-watt generators together for double the power
- b. Puresine wave inverter technology safely powers sensitive electronics
- c. Quiet enclosure that significantly reduces generator noise levels, operating at only 67 dBA @ 25% load
- d. Complies with ANSI/PGMA G300-2018 standard
- e. Runtime up to 17.5 hours @ 27% load
- f. Includes: 120V/240V, 30 amp twistlock outlet, 120V, 30 amp twistlock outlet, 12V 8 amp DC, (2) USB-A ports, (2) 120V, 20 amp GFCI protected duplex outlets

When:

- a. All trailers shall be delivered by no later than June 30th, 2024.

Where:

- a. Deliver all nine (9) deployable buildings and trailers at the manufacturers expense to:
Upper Cumberland Regional Health Office
1100 England Dr.
Cookeville, TN 38501
- b. Contact Barry Weber upon arrival to this address. Contact info supplied later.
- c. In person training to understand mobile building deployment shall take place at the same location listed in #1 directly above within one (1) month of delivery for approximately twenty (20) people.