

ADVANCED CONTAINMENT SYSTEMS, INC

GENERAL SPECIFICATIONS

20' x 8' Mass Casualty Decontamination Trailer

MCDTS208

1. DIMENSIONS

- | | |
|-------------------------------|----------|
| 1.1 Length of decon/work area | 20' 0" |
| 1.2 Width of body | 8' - 0" |
| 1.3 Overall height | 12' - 0" |
| 1.4 Ceiling height | 7' - 0" |

2. CHASSIS

- 2.1 Main beams – 8"W x 13 x 16 lb structural steel wide flange main beam
- 2.3 Floor joists – 2 x 2 galvanized steel tubing 16" o.c.
- 2.5 Two (2) 6,000# capacity high speed tandem axles with electric brakes and break away.
- 2.6 Tires – Five (5) LT235-85R-16 'E' range mounted on 16" silver mod steel wheels.
- 2.7 Tongue Jack - 10,000# capacity, drop leg type.
- 2.8 Hitch – 2 5/16" dia. Ball coupler with safety chains.
- 2.9 Rear side steps.
 - 2.9.1 Heavy duty fabricated 12 gauge steel
 - 2.9.2 One (1) set at each rear entry door.- 2 – step assembly
 - 2.9.3 Fold out type.

2.9.4 Three (3) point attachment for steps.

2.9.5 All step surfaces coated with non-slip safety grip paint

2.10 Front side steps.

2.10.1 Heavy duty fabricated 12ga. steel telescopic.

2.10.2 Fold-out. Three (3) step assembly attached to main beam..

2.10.3 Each stair tread is 36”L x 9”D.

2.10.4 All step surfaces coated with non-slip safety grip paint.

2.10.5 Includes fabricated fold out aluminum hand rails with three point attachment.

3 BODY STRUCTURE

3.1 Floor system designed to eliminate wheel boxes.

3.2 2 x 4 wood stud construction (16” o.c.)

3.3 2 x 6 wood ceiling roof rafters (16” o.c.)

3.4 ¾” CDX tongue and groove plywood flooring.

3.5 Heavy duty “SEALSKIN” rubberized coating covered 1 ½” up the walls to provide a non-slip, very durable, seamless, chemical resistant, water proof floor.

3.5.1 Color: GRAY

3.6 Exterior siding – aluminum, smooth .040 **WHITE baked enamel finish.**

3.6.1 Aluminum sheets to be 49” wide for a 1” overlap.

3.6.2 All seams are silicone sealed for waterproof interior.

3.7 Seamless Fiberglass Reinforced Plastic (FRP) .060” thick.

3.7.1 Laminated to 3/8” plywood on interior walls and ceiling with corner joints vinyl trimmed and sealed with a high quality silicone sealant to provide a waterproof air tight interior.

3.9 R11 insulation installed in all walls, floor and ceiling.

- 3.10 “Seamless” aluminum roof fastened to the perimeter aluminum top rail.
 - 3.10.1 All fasteners are located outside the trailer body.
- 3.11 Five (5), heavy duty, aluminum framed doors
 - 3.11.1 Two (2) 26” wide x 78” for the entry at the rear.
 - 3.11.1.1 The two rear doors will be labeled as follows: 4” letters: curbside door will read ENTRANCE and street side door will read ENTRANCE.
 - 3.11.2 Two (2) 30” x 78” for the exits.
 - 3.11.2.1 Exit doors will be labeled with 4” letters will read EXIT.
 - 3.11.3 One (1) 22” x 72” for the rear compartment.
 - 3.11.4 Constructed with fabricated galvanized steel panel inner cores.
 - 3.44.5 Aluminum exterior skins, FRP interior skins, continuous hinges, full perimeter neoprene bulb seal and stainless steel door handles with dead bolts keyed alike with interior thumb latches.
 - 3.11.5 Hydraulic hold open door closers to restrain doors and to close automatically to aid in the positive pressure process.
 - 3.11.6 Custom built low profile aluminum drip rail installed over each door.

4. BODY INTERIOR

- 4.1 Trailer includes two (2) longitudinal decon compartments, separated by a full length and full height vinyl wall partition.
 - 4.1.1 The partition will be suspended from the ceiling with a heavy duty aluminum track and secured to the end walls with cinch straps..
 - 4.1.1.1 The wall can be opened up for a “rehab” unit.
 - 4.1.2 The side curtains shall be hung from a bar and will be secured to the walls with footman loops and cinch straps.
- 4.2 Each decon compartment consists of a contaminated area, a decon solution application area, rinse area, and a clean area.

- 4.3 The rear of the unit consists of two (2) contaminated areas.
- 4.4 The area ahead of the contaminated (dirty) is the decon solution application area.
 - 4.4.1 Each side shall consist of a vertical manifold that has three (3) shower nozzles @ 1.0 GPM each.
 - 4.4.2 One (1) shower head nozzle @1.0 GPM in the center of the ceiling spraying straight down.
 - 4.4.3 Privacy curtain and a stainless steel trough drain is included.
 - 4.4.4 A 2” epoxy coated dam will separate the gray water into two (2) respective decon areas.
 - 4.4.5 One (1) 36” vertical stainless handrail in each side
- 4.5 The area ahead of the decon solution application is the rinse area.
 - 4.5.1 Each side shall consist of a vertical manifold that have three (3) shower nozzles @ 1.0 GPM each.
 - 4.5.2 One (1) shower head nozzle @1.0 GPM in the center of the ceiling spraying straight down.
 - 4.5.3 Privacy curtain and a stainless steel trough drain is included.
 - 4.5.4 A 2” epoxy coated dam will separate the gray water into two (2) respective decon areas.
 - 4.5.5 One (1) 36” vertical stainless handrail in each side
- 4.6 The area in front of the rinse area is the clean area, for drying off and dressing into clean clothing before leaving the site.
- 4.7 Two (2) storage areas, approximately 42” W x 72” high x 12” D., with four (4) adjustable shelves, shall be installed, one (1) in each clean room
 - 4.7.1 Shelves are used for storage of towels and suits.
 - 4.7.2 Cargo nets cover fronts of storage area to retain stored items in place.
- 4.8 A 2” epoxy coated dam will separate the two (2) compartments.

5. 120 / 240 AC ELECTRICAL SYSTEM

- 5.1 All AC electric functions are controlled by one (1), 100 amp load center with properly sized breakers, located in the front exterior wall.
- 5.2 Six (6) wet location type, 2 bulb, 2', 40 watt fluorescent light fixtures are included.
- 5.4 Two (2) wet location type, 2 bulb, 4', 40 watt fluorescent light fixtures are included, (1 in each clean room (redress) and dirty room (undress)).
- 5.5 Two (2) GFI protected grounded duplex type wall receptacles installed as follows:
 - 5.5.1 Exterior on each rear corner
- 5.6 All wiring to be installed in strict accordance with NEC.

6. ELECTRICAL – OTHER

- 6.1 12v DC Electrical
 - 6.1.1 7 pole (Bargman) Trailer wiring circuit.
 - 6.1.2 Combination stop, tail, and rear directional LED lights installed at the rear of the trailer.
 - 6.1.3 Clearance, marker, and ID LED lights installed in roof rail.
 - 6.1.4 License plate bracket at the rear with light.
 - 6.1.5 All wiring to be of proper size for amperage rating of lights. All wiring to be automotive stranded copper.
 - 6.1.6 Main electrical cable to be 7-conductor trailer wire
 - 6.1.7 All lighting to be in compliance with FMVSS lighting standard.

7. PLUMBING

- 7.1 One (1), diesel fired tankless boiler unit to supply hot water, continuous water flow, 350,000 BTU's absorbed, will be installed in the rear compartment.
 - 7.1.1 Includes a 30 gallon fuel tank.

7.1.2 The water heater delivers 14 GPM at a 50 degree temperature rise, fuel consumption is approximately 4 GPH.

7.1.3 A water temperature controller will be installed to provide constant Tempered water throughout the unit. Includes a programmable controller with multi colored digital readout to set the required temperature. Temperature settings can be pass word protected.

7.1.4 Anti scald protection included in system.

7.2 Gray water tank located under the trailer, 200 gallon polyethylene tank

7.3 Gray water tank is equipped with a 1 ½” discharge ball valve includes a cam lock fitting and cap.

7.4 Inlet fitting to be 1 ½” NPT female inlet fitting fire hose connection.

7.5 Apex plumbing supply lines are high density, cross linked polyethylene tubing with brass swaged lock fittings.

7.5.1 All drain lines are SCH. 40 PVC pipe.

7.6 System for concentrated decon solutions with desired percentage of dilution metered into shower system. Concentrate is pumped out of 5-gallon buckets or 35-55 gallon drums not located on the trailer.

7.6.1 An adjustable metering distribution system to inject into the solution distribution heads. Decon solution metering pump will be located in the storage room on the curbside of the trailer. System should be driven by water volume not water pressure. System will be non-electric.

8. HVAC SYSTEM

8.1 One (1), roof mounted A/C unit with heat strip is included, the unit will be mounted in clean room with service to both sides. (13,500 BTU's of cooling, 5600 BTU's of heat).

9. MISCELLANEOUS

9.1 Labeling: All control switches, faucets, valves, function indicators, etc. to be labeled with engraved vinyl self-adhesive signage. All load center breaker functions to be labeled for easy identification.

9.2 A complete manual on all components that are installed.