

ROHN® STEEL CONTAINERIZED COMMUNICATIONS EQUIPMENT SHELTER GENERAL SPECIFICATIONS International Standards

1.0 Scope

The specifications contained herein encompass the labor, equipment and materials for the fabrication of a transportable, prefabricated, bullet resistant, vandal resistant steel equipment shelter.

The shelter shall be designed for the explicit use of housing electronic equipment, fiberoptics equipment, measuring devices and other related components, within a controlled atmosphere required for the proper operating conditions for the equipment.

2.0 General

2.1 Shelter type

- 2.1.1 The shelter shall be preassembled steel. The shelter is manufactured to International Standards and can be shipped world wide using commercial modes of transportation
- 2.1.2 Manufacturing of the steel shelters shall occur inside an enclosed plant building in a controlled environment. Manufactured dimensionally to ISO 668 and structurally to ISO 1496/1.
- 2.1.3 Built to CSC (Convention for Safety Container) requirements. CSC approval plate will be affixed to the container and certified by the classification society.

2.2 Shelter size

2.2.1 Exterior

- 2.2.1.1 Width and length shall be to outside of finished walls. Width shall be 8'-0". Length shall be 10'-0", 20'-0", or 40'-0".
- **2.2.1.2** Heights shall be 8'6", or 9'6".

2.2.2 Interior

- 2.2.2.1 Width and length shall be to outside of finished walls. Width shall be 7'-1". Length shall be 9'-1", 19'-1", or 39'-1".
- **2.2.2.2** Heights shall be 7'-5" or 8'-5" minimum from finished floor to finished ceiling.

2.3 Operating environment

- **2.3.1** The shelter shall be sealed to resist dust infiltration and be watertight.
- 2.3.2 The optimum operating temperature of the equipment to be installed shall be assumed to be 78 degrees F (25.6 degrees C) unless otherwise specified by the Purchaser. The heating and cooling requirements for a shelter shall be based upon the outside ambient temperature and equipment operating heat output specified by the Purchaser.

3.0 Structural

Structural design and manufacturing shall conform to requirements of ISO container specifications.

3.1 Floor section

- **3.1.1** Floor section shall be a 3/4" plywood subfloor over standard ISO floor. Vinyl tile and vinyl cove base.
- 3.1.2 There shall be a continuous galvanized sheet metal belly pan.

3.2 Roof section

- 3.2.1 Roof section shall be steel.
- **3.2.2** Ceiling insulation and finish to R-12 sprayed foam insulation with 3/8" wood panel underlay and 3/8" vinyl coated board. Plastic joint or corner trim shall be installed at all panel joints.

3.3 Wall section

3.3.1 Wall section shall be R-12 rigid foam insulation, with 3/8" wood panel underlay, and 3/8" vinyl covered board. Plastic joint or corner trim shall be installed at all panel joints.

4.0 Thermal

4.1 Insulation

4.1.1 Standard wall and ceiling insulation shall be 1 1/2" sprayed foam insulation. The calculated system value is R-12.

5.0 Specifications

5.1 Construction specifications

5.1.1 Built to steel ISO container specifications providing for transportation by ship, rail, or truck. Shelters are stackable.

6.0 Sealing

6.1 Joints

6.1.1 There shall be no exposed roof to wall or wall to floor joints. All seams are continuous welds.

6.2 Exterior walls and roof

- **6.2.1** All steel work shall be shotblasted to the standard S.I.S. SA 2.5 (nearly white).
- 6.2.2 The paint shall be applied within one (1) hour after shotblasting and will be as follows:
 - 6.2.2.1 All steelwork shall be primed using an anticorrosive zinc rich primer. Total dry film thickness to be 1.5 mils.
 - **6.2.2.2** External steelwork top coated using a polyurethane enamel. Minimum total dry film thickness 3 mils.