



## Glass Fiber Reinforced Concrete Shelters Typical Building Specifications – Standard Design

- Floor:
  - 7" thick precast concrete waffle
  - waffles created with Styrofoam implants
  - 5000 PSI concrete
  - #85 wire mesh
  - #6 rebar running the length of each concrete beam
  - Lifting points are cast into the floor; all lifting points are connected by #6 rebar
  - 6"W x ½"H drip edge on all sides
  - Weld plates (wall to floor/roof) are embedded in the finished floor at 1' intervals
  - Loading (minimum): 200 PSF live load, 500 PSF concentrated load.
- Roof:
  - 7" thick precast concrete waffle at the edges
  - Roof is pitched at approximately ¼" per foot to allow for positive drainage to side walls
  - 5000 PSI concrete
  - #85 wire mesh
  - #6 rebar running the length of each concrete beam
  - Treated 2"x 4" lumber is embedded on the underside of the concrete roof, along each concrete beam, to allow for installation of interior finish and cable ladder, if required
  - 3" overhang on all walls to prevent water penetration
  - Rooftop is sealed with white Gromast industrial coating #702-115
  - Loading (minimum): 100 PSF live load.
- Walls:
  - 6" thickness including the 2"x3"x1/8" steel tube frame (load bearing), (glass fiber reinforced concrete) panels and interior finish



Typical exterior finish is exposed aggregate – earth tone; brown – medium size river rock

- A variety of exterior finishes are available including painted concrete, brick or rock façade and stucco
- Wind loading (minimum): 150 MPH
  
- Seismic zone 4 rating is standard
  
- All joints are sealed with neoprene gasket (backer rod) and NP-1 Sonneborn exterior caulk, #31-957
  
- All Structural Steel Is connected (bonded) to lifting implants for effective grounding purposes.
  
- Interior finish is per customer specification.
  - 3/4" CDX-GP plywood as a standard
  - Plywood is attached to the tube steel frame with self tapping screws
  - Interior finish is installed on top of the plywood base, or attached directly to the steel frame if required
  - Examples of interior finish are fire retardant paint, nupoly board (FRP), sheetrock, 1/8 AWG steel and concrete board.
  
- Average insulation value is R-21 – R30 in the floor and roof; R16 in the walls.
  
- All Exterior Mounting Hardware is Corrosion Resistant
  
- Engineered Drawings
  - Drawing review approval
  - Drawing inspection insignia if required by state
  - 3<sup>rd</sup> party factory inspection if required by state
  
- Official manufacturer's manuals are provided for all building accessories
  
- Building warranty:
  - 10 Year Structural
  - 3 Year No Leak

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