

EQUIPMENT ENCLOSURES AND CONCRETE BUILDING SYSTEMS







EQUIPMENT ENCLOSURES

Built to Last

ROHN offers four product lines of shelters, all built to last, and to meet your specific needs. The four product lines are High Strength Concrete Shelters, Lightweight Equipment Shelters, and Fiberglass Equipment Shelters. ROHN Equipment Enclosures are designed first and foremost for security with professionally engineered protection. They're also designed to be attractive and easily blend in with the environment.







All ROHN Equipment Enclosures are produced at ROHN's state of the art, 280,000 square foot facility in Bessemer, Alabama, and a 250,000 square foot facility in Casa Grande, Arizona. These facilites have the largest capacity in the industry, and are dedicated exclusively to the design, manufacture and outfitting of equipment shelters and cabinets. There, engineers, electricians, and other skilled professionals work together to insure that each ROHN product incorporates only the highest grade workmanship and materials. And from there, ROHN will deliver your shelter safely, easily and on time.







HIGH STRENGTH Concrete Equipment Shelters

A SHELTER OF SUPERIOR QUALITY

With a ROHN Concrete Shelter, you can depend on the knowledge your shelter will be secure, virtually maintenance-free, versatile, strong and attractive. Seasoned engineers, along with the best computer aided design technology, have created a shelter sure to meet your most challenging expectations.

THE STRENGTH OF CONCRETE

ROHN Concrete Shelters are solid, high strength lightweight concrete with steel reinforcement giving you the highest degree of security. They are bullet resistant and earthquake resistant to Zone 4 conditions (the most critical earthquake condition). All wall, roof and floor panels are cast in one continuous piece, eliminating additional joints. The design of our concrete shelters also eliminates the need for external caulking. Ordinary caulking tends to release due to sun and weathering which allows water intrusion.

Shelters are produced with precision steel forms to produce exacting tolerances required for our watertight design and superior quality. The concrete is an homogenous mix with aggregate that is exposed as part of the mix. The aggregate will not fall off or get loosened by freeze and thaw cycles, and will give the shelter exterior a more even finish than seeding rock.

Installation is made easier with permanent lifting devices cast in. Crane companies simply shackle all cables to built-in lifting devices; this eliminates missing parts at the site and at staging yards. The ROHN Concrete Shelter can be lifted at any time without additional parts.











CONSTRUCTED TO MEET YOUR SPECIFICATIONS

ROHN can install specialized equipment including fiber optic, digital line carrier, SONET, two way radio, cellular telephone, PoPs, telephone switching, uninterrupted power supply, generators, D.C. equipment, television broadcast structures. Electrical and mechanical systems are installed to meet customer specifications and to comply with the National Electric Code.

ROHN offers a huge variety of options to customize electrical, generator, grounding, cabling, heating and cooling, and other features of your shelter without custom prices.

ROHN can provide you with structural and construction data on any ROHN Shelter, which makes it easier for you to obtain permits and insurance. Basic shelter construction includes bullet resistant high strength concrete walls with steel reinforcement. Standard insulation is one inch thick rigid foam with an R-11 value in walls and R-19 in the ceiling. Higher value insulation is also available. Steel doors are galvanized, primed and painted, and are available in bullet resistant models.

Additional Features of ROHN High Strength Concrete Equipment Shelters:

- Basic exterior dimensions include 8', 10' or 11' 8" widths and lengths from 8' to 36'
- Basic interior heights are 8', 9', 9' 8", or 10'
- Roof panel is a hip type sloping 4 directions to the edges
- Bullet resistant to a 30.06 rifle fired from 15 feet per UL 752
- Earthquake resistant to Zone 4 conditions
- Walls overhang floor 7½ " to within ½" of ground
- External caulking not required all seals are internal butyl rubber
- Drain channel provides permanent escape to ground, should any water or condensation appear
- Solid concrete roof fits down over the walls for a highly efficient seal and attractive finish
- Permanent lifting devices are cast in shelter can be lifted at any time without additional parts
- Homogenous mix aggregate that is exposed is part of the concrete mix. Rock is not seeded.
- All openings for cable entry, air conditioning, doors and other purposes are cast in at time of manufacturing - using precise steel fixtures







ROHN CONCRETE BUILDING SYSTEMS

SAFE SECURE ENVIRONMENT

ROHN Concrete Building systems provide a safe and secure environment for telecommunications, and many other applications. Designed to your specifications, they are fire resistant, seismic rated, and storm proof. The unique design and solid concrete construction are built to withstand institutional use and vandalism.

Factory-manufactured modules speed construction time and minimize disruption on your site or campus. ROHN's fast-track construction process can provide a building up to 10,000 square feet ready for occupancy in as little as 3 months.



ROHN Concrete Building Systems can provide a costeffective alternative to traditional site-built structures. They surpass site-built construction in strength, durability, and thermal efficiency. ROHN's Concrete Buildings offer longterm value and flexibility since they can be disassembled and relocated if necessary. Regen AMP sites, PoP facilities, swtich sites, and co-location facilities are proven ROHN telecommunication solutions. These total turnkey solutions offer unsurpassed speed to market . . . including complete DC and telecommunication infrastructure installation as well as site designed construction.

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Rohn Concrete Building Systems provide the ultimate for a complete solution to all your building needs.







LIGHTWEIGHT STEEL FRAME EQUIPMENT SHELTERS

VERSATILITY, FOR A VARIETY OF SITES

With the ROHN Lightweight Steel Frame Equipment Shelter you get the benefits and features you specifically need without paying for unnecessary features. The Shelter comes in two versions: The Noncombustible Version and the Standard Version.

Noncombustible and Standard Versions Available

The Noncombustible Version of the shelter is specifically designed for rooftop applications where fire codes may require a noncombustible installation. The Noncombustible shelter is 2-N type acceptable for rooftop sites, and is available in one or two hour fire ratings. The shelter features structural steel rafter and floor frame details, and steel wall studs, along with noncombustible insulation, sheathing and accessories.

The Standard Version features the same basic design as the Noncombustible Version but avoids the cost of using noncombustible materials when that feature is not necessary. Both versions feature lightweight construction to allow convenient shipping and installation. The lightweight design also protects weight sensitive sites such as rooftops, from damage and permits easy off-loading and placement, sometimes with just a forklift, yet doesn't sacrifice any structural strength.

Designed with the User in Mind

The ROHN Steel Frame Shelter was designed with the user in mind. In addition to designing a structure to meet the growing demand for rooftop installations, ROHN has also paid close attention to exterior appearance and basic construction for ground level use.

Basic exterior dimensions include 8' to 12' widths, with lengths up to 40'. Even custom odd sizing in increments down to fractions of an inch are available for special needs. The interior heights are 8', 9', or 10'.







CUSTOMIZED TO FIT YOUR NEEDS

ROHN can install specialized equipment including fiber optic, wireless, uninterrupted power supply, television repeaters, two way radio, digital line carrier, cellular telephone, radio broadcast transmitters, telephone switching, D.C. power generators, and SONET.

Electrical and mechanical systems are installed to meet customer specifications and to comply with the National Electric Code. ROHN offers a huge variety of options to customize electrical, generator, grounding, cabling, automatic fire suppression systems, heating and cooling, and other features for your shelter.

Additional Features of ROHN Lightweight Steel Frame Equipment Shelters:

- Steel components cannot rot, become water damaged or be damaged by insects
- High strength steel floor frame provides an extremely rigid floor and high floor loading capabilities
- Steel wall studs ensure straight, plumb walls without the eccentricities of lumber or other materials
- Optional Steel Roof Panels provide built in water runoff and a unique ice shield
- A variety of finishes are available to help blend the shelter into the surrounding environment
- Standard insulation is R11 for side walls and floor, and R19 for the roof
- Roomy interiors allow for various basic equipment options
- Floor frame is structural steel with built in lifting eyes
- Flooring allows the attachment of floor mounted equipment or inset channels



ROHN STEEL Shelter Features:

- Modular configurations available
- High security and durability
- Corrosion resistant exterior finish
- Grounding systems
- Completely insulated
- Electrical packages for 50HZ and 60HZ
- Available in 8'6" or 9'6" heights



CONSTRUCTION DETAILS

Typical ROHN Lightweight Steel Frame Equipment Shelter Shown in non-combustible version



- 2 R19 foam insulation.
- 3 Steel rafters 16" O.C. sloping towards side opposite door.
- 4 Structural sheathing.
- 5 Various interior ceiling finishes.
- 6 Sheetrock.

- 7 Structural Sheathing.
- 8 Steel studs 16" O.C.
- 9 R11 fiberglass insulation.
- 10 Non-combustible exterior finish.
- 11 3' x 7' steel door.
- 12 Structural steel channel perimeter rails and cross members 2' 0.C.

- 13 Galvanized steel bottom cover.
- 14 R11 fiberglass insulation.
- 15 Pressure treated plywood and floor decking
- 16 Fiberboard underlayment.
- 17 12" x 12" x 1/2" vinyl floor tile.
- 18 Non-combustible interior wall finish. Building design copyright 1995 ROHN



FIBERGLASS EQUIPMENT SHELTERS

Secure and Portable Protection

With a ROHN Fiberglass Shelter, you can depend on the knowledge that your shelter will be lightweight, highly portable, strong and secure. Fiberglass composite is virtually maintenance free, extremely versatile, and attractive. A professional, user-oriented design, and the most stringent quality standards in the industry, combine to provide you with numerous benefits when you purchase a ROHN Fiberglass Shelter.

THE BENEFITS OF A ROHN FIBERGLASS SHELTER

The walls of ROHN Fiberglass Shelters are significantly stronger because they are wood box frames with 2" X 4" studs spaced 16" on center, as opposed to studs spaced 24", like some manufacturers do. Openings to the interior are fiberglass to prevent water leaks. The sandwich floor greatly increases shelter strength as does the roof. And because the shelters are lightweight fiberglass, they are highly portable. Several shelters can be transported on one truck.

Designs to meet Your Needs

Seasoned engineers, with the assistance of the best computer aided design technology, have created a shelter sure to meet your most challenging needs. ROHN is one of the few fiberglass shelter manufacturers who has available a

Stress Analysis and most state engineering seals, along with many state approvals and other structural and construction data. ROHN Shelters are built in precision steel framing tables to produce precise components required to meet ROHN's rigid quality standards.

ROHN can install specialized equipment including fiber optic, uninterrupted power supply, television repeaters, two way radio, digital line carrier, cellular telephone, radio broadcast transmitters, telephone switching, D.C. power generators and SONET.

Electrical and mechanical systems are installed to meet customer specification and to comply with the National Electric Code. ROHN offers a huge variety of options to customize electrical, generator, grounding, cabling, automatic halon systems, heating and cooling, and other features for your shelter.

Additional Features of ROHN Fiberglass Equipment Shelters:

- Basic shelter includes tan finish with protective ultraviolet stabilizers
- Standard insulation is 3 $\frac{1}{2}''$ thick fiberglass batting with an R11 Rating in walls and floor
- Roof insulation is 6" thick fiberglass batting with an R19 Rating
- Doors are 3' X 7' galvanized and painted, insulated steel with a stainless steel mortise lock set with integral dead bolt
- Basic exterior width dimensions include: 8', 10', or 12' with modular size available
- Basic exterior lengths are from 8' to 40'
- Interior heights are 8', 9', or 10'

- Steel skid is Hot Dip Galvanized adding to ruggedness for transport
- Options on external finish available including brick
- Shelter is covered with $\frac{1}{8}''$ chopped fiberglass composite ($\frac{1}{4}''$ on roof)
- Sandwich floor consists of 4" X 4" joists every 16" on center with joists every 8" on center for areas needing extra reinforcement
- Optional concrete floor without skid is available
- Roof is constructed of 2" X 6" rafters for 8' wide shelters, and 2" X 8" rafters for 10' and 12' wide shelters
- A wide variety of generator rooms and generator options available
- ROHN can provide and/or install a variety of specialized equipment







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