



# BUILDING CONSTRUCTION

## HIGH QUALITY CONSTRUCTION

Shelter Works fiberglass shelters are some of the strongest, most flexible, most cost-effective, and highest-performing equipment shelters in the industry. They are engineered to meet the rigid requirements of most industrial applications and manufactured to live up to the motto "Built for Life".

### FIBERGLASS & RESIN -

Every shelter we build is constructed of high-quality fiberglass that encapsulates an insulating foam core. Our standard resin is an unsaturated polyester resin, however different resins are available depending on the application.

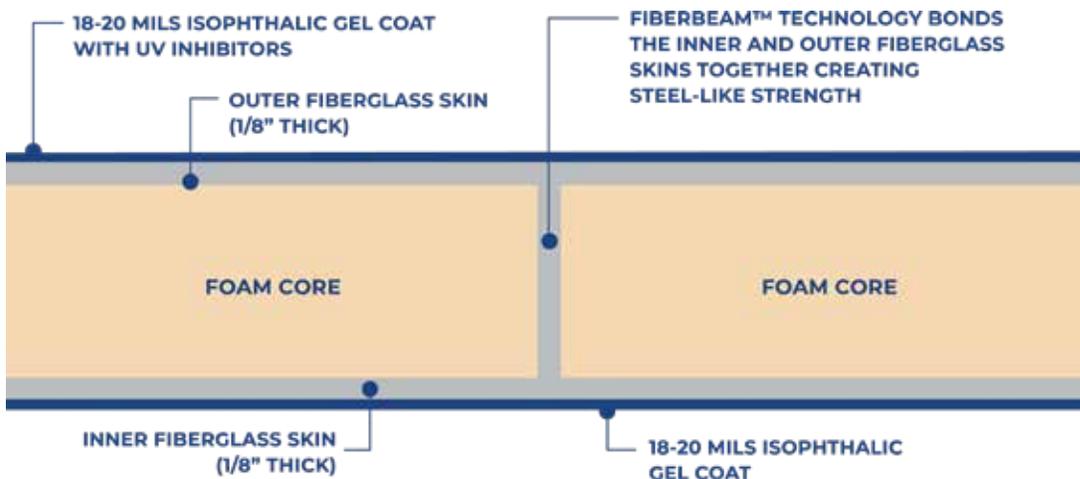
### FOAM CORE -

Our standard assembly features a 1.5" foam core insulation with an estimated R-Value of 12. The insulation can be increased in .5" increments to increase R-Value and enclosure strength.

### FIBERBEAM™ TECHNOLOGY -

FiberBeams are basically fiberglass studs, spaced not more than 12" apart, integrated into all of the walls and roofs of our shelters. They provide a solid, structural connection between the inner and outer fiberglass skins of the enclosure. The result is a lightweight composite building system, equal to the strength of steel, that will not come apart or delaminate. Shelters made with FiberBeam™ technology are more rigid and can withstand much higher stresses without any bowing or buckling.

Typical Mechanical Properties		
0.125" Cured Unfilled Castings		
Test	Test Method	
Flexural strength (psi)	ASTM D790	16,600
Flexural modulus (psi)	ASTM D790	532,000
Tensile strength (psi)	ASTM D638	7,500
Tensile modulus (psi)	ASTM D638	503,000
Tensile elongation (%)	ASTM D638	1.8
Barcol hardness (934.1)	ASTM D2583	45



Shelter Works  
[WWW.SHELTERWORKS.COM](http://WWW.SHELTERWORKS.COM)  
(800) 794-8037

BUILT  
FOR LIFE

# SHELTER WORKS WALL FEATURES

## ENERGY EFFICIENT INSULATION -

The standard Shelter Works assembly includes 1-1/2-inch foam insulation, offering an ~R-7 R-value. Insulation can be easily increased to meet the environmental and structural demands of the application.

Fiberglass's low thermal conductivity, combined with scalable insulation, helps maintain a stable interior environment, improving HVAC efficiency. This protects critical field equipment from damaging temperature swings.



## STRUCTURAL REINFORCEMENT -

Wood reinforcement can be added in walls, roofs, and doors to meet state labeling and IBC requirements. It can also be added to portions of walls where heavy equipment will be mounted.

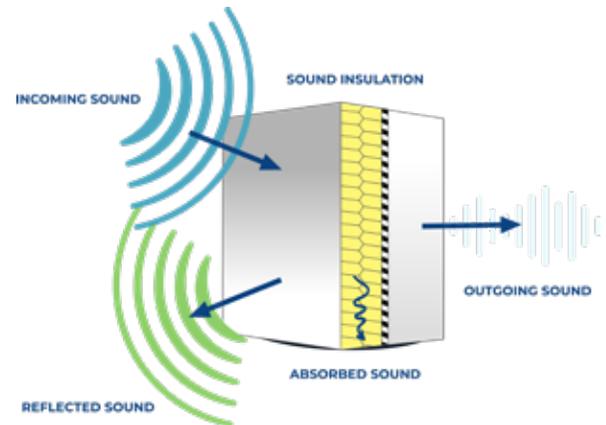


## RF TRANSPARENCY -

Fiberglass can be engineered for improved RF transparency, helping reduce attenuation and interference risks associated with some traditional building materials. This is important for applications involving sensitive radio and communications equipment.

## SOUND ATTENUATION -

The standard composite construction of a Shelter Works building includes a foam core that provides some sound attenuating properties, with a minimum STC rating of 25 decibels. Additional materials can be added to further blunt the noise from field equipment.



## ACCOMMODATIONS -

Shelter Works provides custom-engineered bulkheads, knockout panels, and formed opening that allow for penetrations for wiring, conduit, pipe, instrumentation, and more. These factory-installed modifications are determined during the submittal process to ensure proper placement and fit. They help to ensure that the shelter's 25 year warranty stays intact while allowing for infield penetrations and future expansion.





**GEL COAT** - Shelter Works fiberglass shelters feature a marine-grade gel coat—the same protective technology used in advanced marine vessels, transportation equipment, and aircraft. This gel coat forms the outermost layer of the composite structure, shielding the enclosure from moisture intrusion, chemical exposure, and UV degradation commonly found in many municipal and industrial environments.

## STANDARD COLORS



Unlike paint, which is applied after fabrication as a surface coating, Shelter Works' gel coat is a pigmented resin with integrated UV inhibitors that chemically bonds to the fiberglass substrate during manufacturing. This creates a durable, non-porous finish that will not peel, flake, or require periodic recoating.

## BENEFITS

- Superior resistance to UV deterioration and hydrolysis
- Long-term color retention and aesthetic performance
- Maintenance-free exterior finish

FRP shelters with an integrated gel coat eliminate the need for repainting, reducing lifecycle maintenance requirements compared to aluminum, wood, steel, or concrete enclosures.



## 25 YEAR WARRANTY

PEACE OF MIND

---

**A LONG TERM SOLUTION** - Shelter Works products are engineered specifically to meet the rigid requirements of municipal and industrial applications. We take great care in designing the highest-quality shelters, from engineering through to delivery. We combine top-quality components with our innovative FiberBeam™ technology to ensure the integrity of our shelters. They will last decades with minimal maintenance and offer the lowest lifetime cost of ownership.

At Shelter Works, we provide long-term solutions for protecting your critical field equipment. We believe in the quality of our products, so we back them up with an industry-leading 25-year warranty. We fully expect our shelters' service useful life to exceed that of the equipment they house, and we want you to have the peace of mind that comes with knowing your investment is protected.



*If it was built by Shelter Works, It was Built For Life*

Shelter Works  
[WWW.SHELTERWORKS.COM](http://WWW.SHELTERWORKS.COM)  
(800) 794-8037

**BUILT  
FOR LIFE**