



Long-Lasting and Customized Equipment Protection for Irregular Elevations

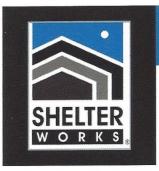
Problem

The Village of Williamsburg, OH Waste Water Treatment Plant needed two fiberglass shelters to protect a grit washer and mechanical bar screen.

The bar screen enclosure footprint had to sit on an existing concrete slab poured at two different elevations with an 18 inch difference in height. Roughly half the building would sit up on the higher portion. The grit washer enclosure was installed on a new concrete foundation with two elevations. One doorway would need to be dropped down below the bottom of the walls into a 10-inch-deep notch in the concrete because they needed access to the equipment at both the higher and lower elevations.





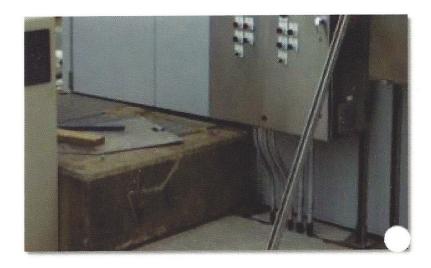


"Installation was quick, and we were done in a matter of hours."

Chuck Berry Layne Heavy Civil, Inc.

Solution

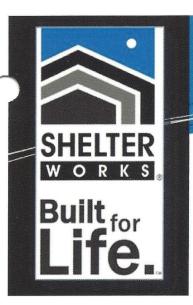
Every Shelter Works® field equipment shelter is custom-made, so we simply created a structure based on the customer's specifications with some tall walls, some shorter walls, some standard-sized doors and some custom shortened doors. We were even able to lower the doorway 10" below the bottom of the walls as requested. It fit perfectly into the notch in the concrete.



Result

The customer, Chuck Berry, (Project Manager) at Layne Heavy Civil, Inc. said, "Shelter Works was able to accommodate the Engineer's (Burgess & Niple) design and the Village's requirements. A lot of effort from all parties through the shop drawing phase made the design work. Installation was quick and we were done in a matter of hours." There was no need for messy, costly field modification to the shelter or the concrete slab. Because all the customization and electrical wiring was done at the factory, installation was done within hours using readily-available construction equipment. With both short and tall doors, the shelter had access on both sides and included an explosion-proof electrical package.





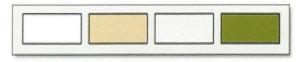


Wall Materials High Quality Construction Throughout the Construction Process

Gel Coats

Shelter Works products are engineered specifically to meet the rigid requirements of industrial applications. They want them to live up to their tagline "Built for Life." Therefore, they use Isopthalic UV protecting gel coats that maintain a nice gloss over long periods of time and in many weather situations. These high quality coatings provide a quality finish, with good chemical/water resistance, gloss retention, weatherability, and resiliency, which means that they can resist damage from impact, chemicals, water and even grafitti! These gel coats, used in combination with our unique FiberTeam construction process makes a building that truly is "Built for Life."

We Can Custom Color Match Any Color in the Rainbow!



Our standard colors of Polar White, Desert Sand, Storm Grey and Meadow Green











Building Construction

Fiberglass: Every shelter we build is constructed of high-quality fiberglass. We use a variety of resin types, depending on the application; the most commonly used is what is known as Stypol LSP Unsaturated Polyester Resin.

Test	Test Method	Laminate: 33% glass
Tensile Strength	ASTM D638	16,000 psi
Tensile Modulus	ASTM D638	1,300,000 psi
Tensile Elongation	ASTM D638	1.9%
Flexural Strength	ASTM D790	33,700 psi
Flexural Modulus	ASTM D790	1,160,000 psi
Barcol Hardness	ASTM D2583	45

Foam: Every Shelter Works building includes a foam core, using standard ridgid polyiso panel. This foam has been tested for volatile organic compounds (VOC) and formaldehyde emission to ensure it is below the maximum levels allowed and received the Greenguard Environmental Institute highest rating of 4, which means it is highly resistant to mold growth.

Shelter Works buildings are very energy efficient, with tight joints and high-quality building composite structure. This chart shows the R-Values of the foam alone; the actual R-Value of the shelter could be much higher, depending on the number of openings, vents, fans, etc.

Foam Thickness	R-Value
1 ½"	9.0
2"	12.1
2 1/2	15.3
3"	18.5





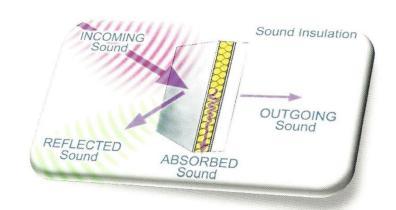
Additional Wood Materials: Oftentimes, our clients need to hang equipment or electrical apparatus on the walls. In such cases, we can reinforce the walls with OSB, Fir 5-Ply or Marine Grade plywood to enhance performance and use of our shelters.





Sound Attenuation

The standard composite construction of a Shelter Works building does a great job of sound attenuation for most applications, with a minimum STC rating of 27 decibels. If you need additional sound attenuation, we can add optional sound absorbing materials to blunt the noise of machinery even further.

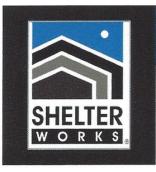


One happy Shelter Works client did his own

testing as far as how much sound was muffled and sent us his results. What you see in this chart is that the noise level inside the structure where the machinery was measured 93 decibels, but standing outside from 5 feet away, the decibel readings dropped off dramatically to 66 decibels. That's like going from standing by a jet engine to standing beside someone talking at a normal conversational level.

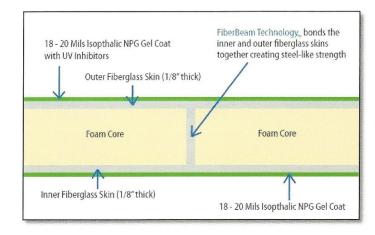
	Inside	Outside
	93	
5 ft away		66
20 ft away		63
50 ft away		58





FiberBeam™ Construction

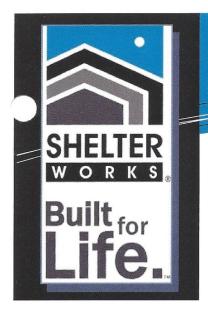
FiberBeam™ Technology is our innovative, proprietary composite lamination process that bonds inner and outer fiberglass skins with a series of integrated fiberglass I-beams, spaced every 12" throughout the walls, doors, and roof, resulting in a fiberglass composite building system that is equal to the strength of steel.



Foam is a great insulator but not a good structural material. That is why Shelter Works developed FiberBeam™ Technology. When a typical FRP panel with foam core is placed under a load the bond between the foam and the FRP is put under stress and can fail. With FiberBeams, the same panel is more rigid and can withstand much higher stresses without failing.









Fiberglass Shelters To Protect Your Critical Field Equipment

Weather Proof and Maintenance Free!

Shelter Works manufactures custom-designed fiberglass shelters that protect the country's critical field equipment. As an American-based manufacturer with over

40 years of experience in designing and manufacturing fiberglass shelters, we take pride in the quality and durability of our buildings and are dedicated to delivering the right protective solution and optimal operating environment for your critical field equipment.



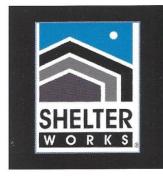
With Shelter Works, you'll get:

- Trustworthy Partner-Unparalleled customer care, 24-hour quotes, 48-hour turn around on submittals, and best in the industry warranty
- Endless Innovative Customization-All shelters made to order & built to each customer's unique specifications—any size, any color, any components, any specifications
- Engineering Excellence-Exclusive FiberBeam[™] and FiberWrap[™]
 Technology combined with premium hardware increases strength & quality



Steven Lynch, Senior Engineer Duke Energy Gas Transmission





Lowest Lifetime Cost

Shelter Works
was able to
customize the
building to meet our
exact specifications.
The Shelter Works
solution was
perfect!

Union Pacific Railroad

When considering steel, concrete, or fiberglass structures to protect your critical field equipment, you'll find that fiberglass is the strongest, most flexible, most cost-effective, highest-performing structure available to your industry. If you are looking for less hassle, less cost, and more durability and performance, you should be looking at fiberglass.

Shelter Works buildings are strong enough to withstand any temperature, any weather, any corrosive conditions and maintain their good looks virtually maintenance-free. They resist damage from impact, chemicals, water, UV rays—even graffiti! They can be installed in less than a day by just a few people using common equipment that you probably already have on your typical job sites. They are super-strong and super-light.





The durability of a Shelter Works building remains unchanged even in extreme temperatures, hurricane winds, Alaskan snow loads, coastal climates and corrosive environments

SHELTER WORKS BUILDINGS ARE:

- Flexible
- Super-Strong
- Ultra-Light
- Corrosion-Resistant
- Weatherproof
- Insulated
- Cost-Effective
- Attractive
- Maintenance-Free



Shelter Works Proprietary Technology Created a Building As Strong As Steel!

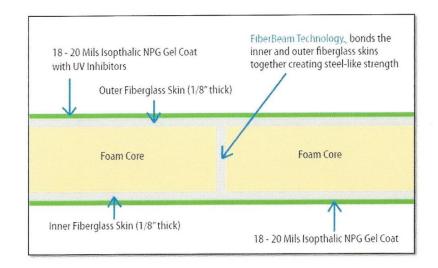
Building Construction

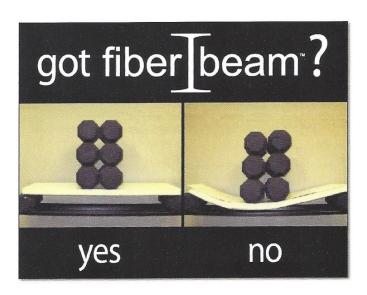
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Door Construction

Shelter Works' FiberWrap Seamless Doors™ are designed and built using our proprietary process to maximize long-term performance. We form our doors in a two-part mold under pressure and our fiberglass actually wraps seamlessly around the core, creating an incredibly tough and durable door that will withstand decades of use and exposure without failure.





To see a video about our FiberBeam Technology and the quality of our doors, visit our website at www.shelterworks.com

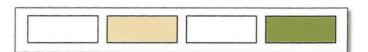




Built to Your Exact Specifications

What do you need in your building? Vents, double doors, single doors, lighting, containment floors, air conditioning (and any other detail you can think of!) can be built into your shelter. Walls can be customized to accommodate increased structural stability, hanging equipment, additional insulation needs or sound attenuation. Our on-staff Mechanical Engineer works with you to develop the right specifications for each application, giving superior service while making your job easier.

All buildings have a faux brick texture and can be colored any way you'd like. There are four standard colors-Polar White, Desert Sand, Meadow Green, and Storm Grey, but some customers want to match paint colors or designs. Whatever you need—just let them know!



NEED A STATE LABEL?



Shelter Works is approved and our production facilities have been certified by a 3rd Party Agency. We are experienced in producing International Building Code (IBC) and various State approved structures.

OPTIONS AVAILABLE:

- Custom Sizes & Colors
- Insulation Value up to R-21
- Skids, Bases & Floors
- Containment Floors
- Molded Openings
- Partition Walls & Knock Outs
- Sound Attenuation
- Mounting Reinforcements
- Single, Double, Sliding or Roll-Up Doors
- Awnings
- Panic, 2-point or 3-point Door Hardware
- Electrical Packages
- Lighting
- Vents, Windows & Skylights
- HVAC Packages

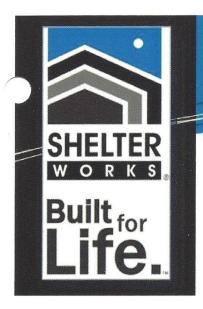
66

The end product is magnificent.

7

Dean Smith David P. Wilson Co, Inc







Need Peace of Mind? Our 25-Year Warranty Lets You Specify with Confidence

Shelter Works products are engineered specifically to meet the rigid requirements of industrial applications because they need to live up to the tagline: "Built for Life." We take a tremendous amount of care in designing the highest quality shelters, engineering each aspect, from the submittal drawings and the construction process to core materials, resin and gel coats, door construction and hardware, to final electrical wiring and installation. All of our shelters go through extensive quality checks to ensure that every shelter will perform to expectations.





We view our relationships with our clients as long-term partnerships; they rely on us to provide long-term solutions that protect for years and years. A 25-year warranty conveys that sense of partnership and gives customers peace of mind. They know they can trust the quality of our products to protect their critical field equipment.

If It's Built By Shelter Works,
It's Built for Life!

Control Equipment Sales, Inc. Phone (708)364-1200 www.ce1200.com

