



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 ½	15.3
3"	18.5





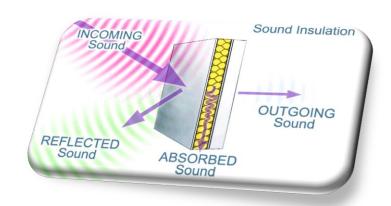
Additional Wood Materials: Oftentimes, our clients need to hang equipment or electrical apparatus on the walls. In such cases, we can reinforce the walls with OSB, Fir 5-Ply or Marine Grade plywood to enhance performance and use of our shelters.





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.

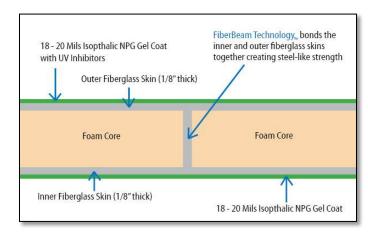
	Inside	Outside
	93	
5 ft away		66
20 ft away		63
50 ft away		58





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.



Need a creative solution for your field equipment protection needs?

Give us a call at 800-794-8037

