

DESCRIPTION Through testing and the experience of thousands of concealment sites constructed, STEALTH® Concealment Solutions, Inc. has determined that the type and placement of materials used for concealing antennas play a vital role in their performance. All STEALTH® concealment products allow for superior antenna signal transmission. STEALTH® products are engineered and manufactured to become part of the existing structure and withstand extreme weather conditions while maintaining their original appearance.

APPLICATIONS STEALTH® FRP panels can be used to manufacture a variety of concealment products including boxes, screenwalls, chimneys, and more. The FRP panels can be factory painted/textured to customer specified color and texture requirements.

RECOMMENDED FREQUENCIES STEALTH® generally recommends the FRP panel for frequencies up to 2GHz. Test results for specific applications is available upon request.

SIZES AND STYLES AVAILABLE STEALTH® FRP panels are available in the following thicknesses: 1/8", 3/16", 1/4", 3/8" and 1".

PHYSICAL PROPERTIES Physical properties are listed in the charts to the right.

FABRICATION/INSTALLATION STEALTH® FRP panels can be fabricated into various sizes to meet the demands of many concealment designs. Due to the critical design aspects of many applications, STEALTH® recommends that qualified designers or consultants design a total concealment system to support the panels.

AVAILABILITY STEALTH® maintains inventory of some sizes of the FRP panel.

TECHNICAL SERVICES STEALTH® can provide technical information and support to address questions when using STEALTH® FRP panels. Technical personnel are available via telephone at 843-207-8000.

PHYSICAL PERFORMANCE PROPERTIES OF SHEETS USED TO FORM FRP PANELS					
			THICKNESS (METRIC) RESULTS		
PROPERTY	UNITS	TEST METHOD	1/8"	3/16"-1/4"	3/8"-1"
Tensile Stress, LW	psi-MPa	D-638	24,000 – 165.5	24,000 – 165.5	24,000 – 165.5
Tensile Stress, CW	psi-MPa	D-638	7,500 – 51.7	10,000 – 68.9	10,000 – 68.9
Tensile Modulus, LW	10 ⁶ psi – GPa	D-638	2.0 – 13.8	2.0 – 13.8	2.0 – 13.8
Tensile Modulus, CW	10 ⁶ psi – GPa	D-638	1.0 – 6.9	1.1 – 7.6	1.4 – 9.6
Compressive Stress, LW	psi-MPa	D-695	24,000 – 165.5	24,000 – 165.5	24,000 – 165.5
Compressive Stress, CW	psi-MPa	D-695	15,500 – 106.9	16,500 – 113.8	16,500 – 113.8
Compressive Modulus, LW	10 ⁶ psi – GPa	D-695	1.8 – 12.4	1.8 – 12.4	1.8 – 12.4
Compressive Modulus, CW	10 ⁶ psi – GPa	D-695	1.0 – 6.9	1.0 – 6.9	1.0 – 6.9
Flexural Stress, LW	psi-MPa	D-790	35,000 – 241.3	35,000 – 241.3	30,000 – 206.8
Flexural Stress, CW	psi-MPa	D-790	15,000 – 103.4	15,000 – 103.4	18,000 – 124.1
Flexural Modulus, LW	10 ⁶ psi – GPa	D-790	1.6 – 11.0	2.0 – 13.8	2.0 – 13.8
Flexural Modulus, CW	10 ⁶ psi – GPa	D-790	0.9 – 6.2	1.1 – 7.6	1.4 – 9.6
Perpendicular Shear Stress, LW	psi-MPa	D-3846	6,000 – 41.3	6,000 – 41.3	6,000 – 41.3
Perpendicular Shear Stress, CW	psi-MPa	D-3846	6,000 – 41.3	6,000 – 41.3	6,000 – 41.3
Bearing Stress, LW	psi-MPa	D-953	32,000 – 220.6	32,000 – 220.6	32,000 – 220.6
Notched Izod Impact, LW	ft-lbs/in-J/mm	D-256	18.5 0.99	20 – 1.1	20 – 1.1
Notched Izod Impact, CW	ft-lbs/in-J/mm	D-256	5 – 0.27	5 – 0.3	5 – 0.3