

STEALTH Concealment Solutions

STEALTHSKIN V SSV Panel

DESCRIPTION Through testing and the experience of thousands of concealment sites constructed, Raycap has determined that the type and placement of materials used for screening antennas play a vital role in their performance. All our concealment panels allow for superior antenna signal transmission compared to fiberglass without the durability problems of fiber blooming or cracking over time. Panels are engineered and manufactured to become part of the existing structure and withstand extreme weather conditions while maintaining their original appearance.

APPLICATIONS SSV panels can be used to manufacture a variety of rooftop and tower type concealment products including screenwalls, wall replacements, side-mounted boxes, clock towers and bell towers. The panel can be factory textured to match most existing architectural appearances, such as brick, stucco, aggregate, split face block as well as custom applications.

RECOMMENDED FREQUENCIES Raycap generally recommends SSV panels for frequencies up to 7GHz. However, they perform well for certain application types, STEALTH has insertion loss lab testing for the SSV panels up to 100 GHz at multiple incidence angles and textures. Test results for specific application are available upon request.

SIZES AND STYLES AVAILABLE SSV panels are available in 4' x 8' and 4' x 10', 4' x 12', 5' x 8' and 5' x 10' standard sizes. Custom sizes are available upon request. Nominal panel thickness is 2.1875". Panel weight is 1.4 lb/sf for a smooth/painted texture.

PHYSICAL PROPERTIES SSV panels are manufactured with sandwich panel geometry. ABS plastic skins are laminated to an extruded polystyrene core using an ICBO approved adhesive. Physical performance properties of the skins and core are listed above.

FABRICATION/INSTALLATION SSV panels can be fabricated into various sizes and bent into corner panels and other shapes including radius applications. Due to the critical design aspects of many of its applications, Raycap recommends that qualified designers or consultants design a total concealment system to support the panels.

AVAILABILITY Raycap maintains limited inventory of SSV panels and has custom manufacturing capability in its facilities in South Carolina. Please contact us at 843-207-8000 or toll free at 800-755-0689 for sales information.

TECHNICAL SERVICES Raycap can provide technical information and support to address questions when using SSV panels.

PHYSICAL PERFORMANCE PROPERTIES OF ABS SKINS

PROPERTY	UNITS	TEST METHOD	RESULTS
Specific Gravity	-	ASTM D-792	1.03
Water Absorption (Saturated at 23°C)	%	ASTM D-570	1.03
Rockwell Hardness	-	ASTM D-785	95
Tensile Modulus (73°F)	psi	ASTM D-638	290,000
Tensile Strength, Yield (73°F)	psi	ASTM D-638	6,240
Tensile Strength, Break (73°F)	psi	ASTM D-638	4,790
Elongation, Yield (73°F)	%	ASTM D-638	3.5
Flexural Modulus (73°F)	psi	ASTM D-790	297,000
Flexural Strength (73°F)	psi	ASTM D-790	9,570
Flammability Rating	-	UL94	HB

PHYSICAL PERFORMANCE PROPERTIES OF EXTRUDED POLYSTYRENE CORE

PROPERTY	UNITS	TEST METHOD	RESULTS
Density	Lb/ft ³	ASTM D-1622	1.5
Compressive Strength	psi	ASTM D-1621	20
Tensile Strength	psi	ASTM D-1623	50
Shear Strength	psi	ASTM C-273	25
Shear Modulus	psi	ASTM C-273	330
Flexural Strength	psi	ASTM C-203	50
Flexural Modulus	psi	ASTM-203	1,600
Water Absorption	% by volume	ASTM C-272	0.5
R-Value per inch	F ft ² h/Btu	ASTM C-518	5.0
Surface Burning Characteristics (Flame Spread / Smoke Developed)	-	ASTM E84	15/165