

# STEALTH Concealment Solutions

## MW02 Concealment 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 Raycap concealment panels allow for superior antenna signal transmission compared to fiberglass without the durability problems of fiber blooming or cracking over time. Raycap panels are engineered and manufactured to become part of the existing structure and withstand extreme weather conditions while maintaining their original appearance.

**APPLICATION** MW02 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 and custom applications.

**RECOMMENDED FREQUENCIES** Raycap generally recommends MW02 panels for customers using high frequency microwave backhaul systems that require a wide range of potential frequencies to be used on a single cell site. Please contact us for assistance with the best panel selection for microwave or backhaul applications.

**SIZES AND STYLES AVAILABLE** MW02 panels are available in 4' x 8', 4' x 10', and 4' x 12' standard sizes. Custom sizes are available upon request. Nominal panel thickness is 1.75". Panel weight is 2.3 lb/sf for a smooth/painted texture.

**PHYSICAL PROPERTIES** MW02 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 to the right.

**FABRICATION/INSTALLATION** MW02 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 inventory of MW02 panels and has custom manufacturing capabilities in its facility in South Carolina. Please contact us at 843-207-8000 for sales information.

**TECHNICAL SERVICES** We can provide technical information and support to address questions when using the MW02 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 (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	psi	ASTM D-790	297,000
Flexural Strength	psi	ASTM D-790	9,570
Flammability Rating	-	UL94	HB

PHYSICAL PERFORMANCE PROPERTIES OF EXTRUDED POLYSTYRENE CORE			
PROPERTY	UNITS	TEST METHOD	RESULTS
Density	lb/in <sup>3</sup>	ASTM D1622	1.5
Compressive Strength	lb/in <sup>3</sup>	ASTM D1623 (vertical)	20
Tensile Strength	lb/in <sup>3</sup>	ASTM C273	50
Sheer Strength	lb/in <sup>3</sup>	ASTM C273	25
Sheer Modulus	lb/in <sup>3</sup>	ASTM C273	330
Flexural Strength	lb/in <sup>3</sup>	ASTM C203	50
Flexural Modulus	lb/in <sup>3</sup>	ASTM C203	1600
Water Absorption	% by vol.	ASTM C272	.5
R-Value per Inch	F-ft-h/Btu	ASTM C518	5.0
Surface Burning Characteristics (Flame Spread/Smoke Developed)	-	ASTM E84	15/165