



# 5G APPROVED PANELS CONCEALMENT SOLUTIONS



Through research and industry testing, Allfasteners has developed material for the newest wave of small cell networks compatibility. Developed to be used with 5G equipment and mm wavelengths, **The 5G Skin** is the next wave of concealment capability.

Crafted into the canister shroud, the panel is tested up to 39 GHz – making it suitable for any 5G concealment application. The panel can be constructed into an array of concealment solutions, including:

- Raptor Radome Concealment Canister
- Monopole Concealment
- Rooftop Panel Concealment
- Chimneys
- Etc.

Allfasteners conducted tests on materials for all different concealment applications to 5G compatibility in every application – which led us to our panel. The panel is now readily available for concealment projects.

**Shroud material and thickness yield optimum performance for 39GHz band.**



## KEY BENEFITS

- Tested up to 39 GHz
- Compatible with 5G mm Waves
- Conceals 5G equipment without disrupting performance
- Easy to Install
- Can be installed on previously installed equipment or panels
- Material can be shaped in all concealment applications
- Custom sizing available
- Fabricated in the USA

## PHYSICAL PROPERTIES

Material: AF Composite Material

Property	Conditions	ASTM Method	Units	Value
<b>PHYSICAL</b>				
Density		D-1505	lb/ft <sup>3</sup>	41-44
Water Absorption	24 hr. @ 73°F	D-570	%	0.5
<b>MECHANICAL</b>				
Tensile strength at yield	0.4 in./min	D-638	psi	2300
Elongation at break	0.4 in./min	D-638	%	30
Flexural Modulus	0.05 in./min	D-790	psi	130,500
Flexural Strength at Yield	0.05 in./min	D-790	psi	4,061
Notch Impact Strength Charpy	73°F	D-256	ft lbf/in	0.54
<b>THERMAL</b>				
Long Term Service Temperature			°F	-14 to 131

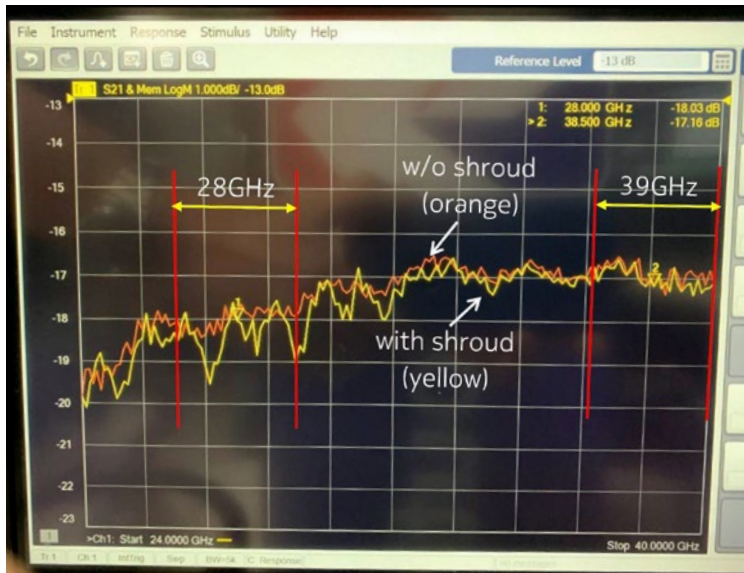
Notes: Conditions, units and values in U.S. Customary units are presented in the table within parentheses. All the results depicted in this table were obtained by following the indicated ASTM method except where another method is indicated by the appearance of this symbol (b).



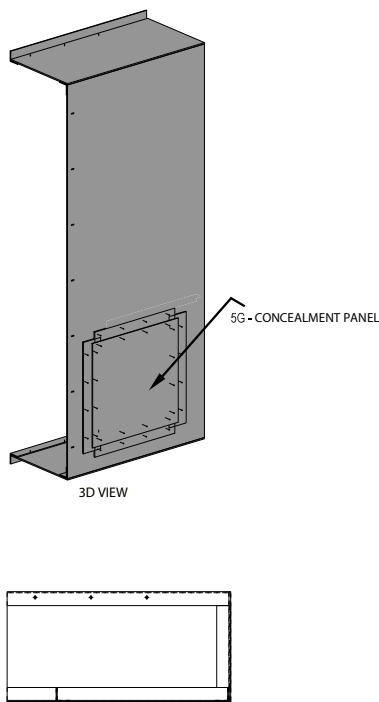
## TESTING

### Shroud Insertion Loss vs. Frequency

- Shroud material and thickness yield an optimum performance for 39GHz band.
- Shroud insertion loss within 39GHz band is  $\leq 0.25\text{dB}$ .



## JOB EXAMPLES & DRAWINGS



CONCEALMENT PANEL 14S41644-CC2

REF. SHEET NO: C-1.1,C-2.0,C-5.3