

# BOLTARON® 4205

## FAR-Rated High Temperature Resistant Sheet

Boltaron® 4205 extruded proprietary thermoplastic alloy sheet was developed for higher in-service temperature interior aircraft applications. It meets FAR 25.853(a) test criteria, and its heat deflection temperature exceeds 200 °F at 264 psi load (93 °C at 1.8 MPa).

The material also offers a solid balance of overall performance on impact strength and rigidity, and resists abrasion, staining, chemicals and cleaners. In thermoforming, Boltaron® 4205 exhibits exceptionally high consistency, with uniform surface appearance and wall thickness integrity even in deep draws and sharp corners.

Boltaron's unique custom production capabilities also afford designers a comprehensive range of colors and the industry's widest range of textures for aircraft interior components.

### PROPERTIES/FAR RATINGS

PROPERTY	TEST METHOD	TYPICAL VALUES	
Specific Gravity	ASTM D792	1.470	
Tensile Strength	ASTM D638	7,200 psi	49.6 MPa
Flexural Strength	ASTM D790	11,000 psi	75.8 MPa
Flexural Modulus	ASTM D790	380,000 psi	2,620 MPa
Izod Impact (notched) @ 73 °F (23 °C)	ASTM D256	2 ft-lb/in.	107 J/m
Hardness Rockwell	ASTM D785	119	
Heat Deflection (annealed)	ASTM D648	200 - 205 °F @ 264 psi	93 - 96 °C @ 1.8 MPa
Flammability - UL	UL 94	V-0, 5VA <sup>1</sup>	
	UL 94	V-0, 5VB <sup>2</sup>	
FAR RATINGS			
Flammability			
Vertical burn, 60 sec	FAR 25.853(a)(i)	PASS	
Vertical burn, 12 sec	FAR 25.853(a)(ii)	PASS	

<sup>1</sup>Values based on minimum thickness of 0.118 in. (3.0 mm), UL File #E54688

<sup>2</sup>Values based on minimum thickness of 0.047 in. (1.2 mm), UL File #E54688

\*Independent lab tests. All tests at 73 °F (22.8 °C) in dry conditions unless otherwise noted.

### Advantages

- Heat distortion temperature ≥ 200 °F (93.3 °C)
- Impact resistance, rigidity
- Maintains wall thickness in deep draw forming
- Custom colors, textures at low minimums

### Proven Applications

- Interior components
- Instrument housings
- Passenger Service Units (PSUs)
- Light housings
- Galley components
- Air ducting

### Configurations

- Sheet sizes
  - Lengths to 120 in. (3,048 mm)
  - Widths to 60 in. (1,524 mm)
  - Gauges from 0.028 in. to 0.250 in. (0.71 to 6.35 mm)
  - Custom sizes, gauges on request
- Colors, textures
  - Full range of colors
  - Industry's widest range of textures
  - 500 lb minimum

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