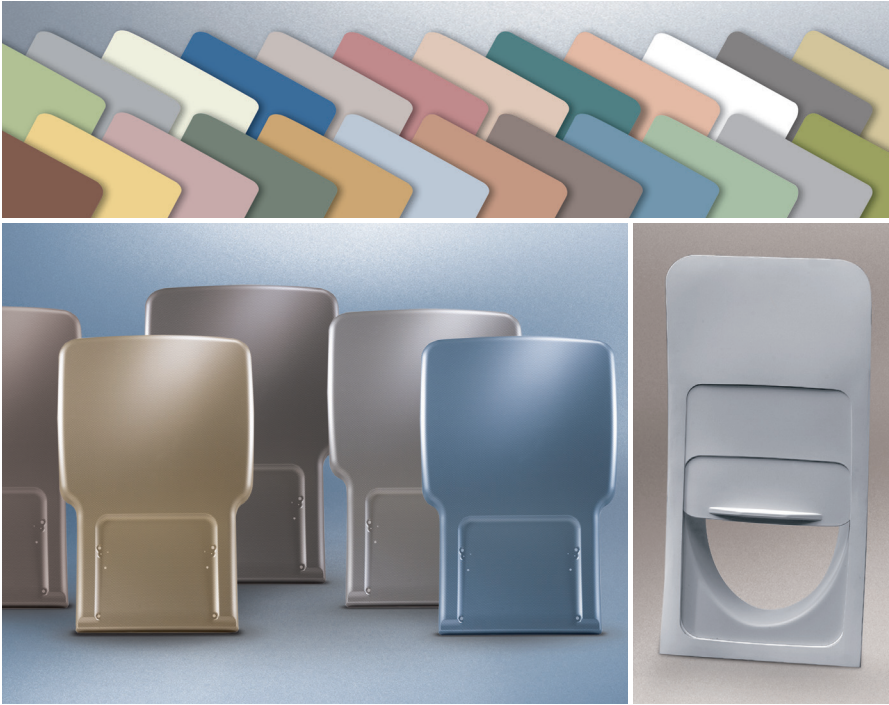


BOLTARON® 9850

FAR-Rated High Impact Resistant Sheet for Aircraft Interiors

Lower heat release and higher impact resistance than any other FAR 25.853(d) rated sheet for aircraft interiors



Boltaron® 9850 sheet for aircraft interior components meets FAA requirements for flammability and smoke generation and has the lowest heat release of any 25.853(d) rated sheet.

This proprietary extruded thermoplastic alloy sheet also offers Izod impact resistance of 5.0 ft-lb/in. (265 J/m) - 66 percent higher than other FAR 25.853(d) compliant sheets measuring 3.0 ft-lb/in. (159 J/m) - significantly improving the durability and service life of thermoformed aircraft interior components.

It also expands design freedom with a full range of colors and the widest range of textures available in thermoplastic alloy materials.

In thermoformed parts, Boltaron® 9850 maintains wall thickness integrity even in deep draws and sharp corners. Its consistently uniform quality also ensures optimum appearance in flat surfaces and complex formed parts.

The Boltaron impact resistant FAR 25.853(d) rated product family includes 9815E extruded sheet, 9815M in metallic finishes, 9815D with unlimited decorative patterns, 9815P in the widest range of textures, and 9815F film and thin-gauge sheet for two- and three-dimensional laminating, and Boltaron® 9850 with a 50/50 rate of heat release.

Advantages

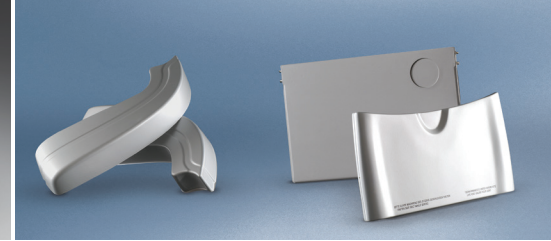
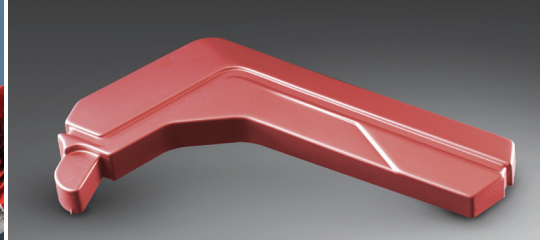
- 66% Greater impact resistance than other 25.853(d) thermoplastic sheet
- Lowest rate of heat release: 50/50
- Uniform high quality appearance
- Wall thickness integrity in deep draw forming
- Full range of colors, widest range of textures
 - Low minimums
- Lot-to-lot color consistency

Proven Applications

- Instrument panel housings
- Class dividers
- Bulkhead laminates
- Galley and lavatory components
- Bull noses, gap covers, moldings
- Sidewall and kick panels
- Window reveals
- Seat parts, backs, arm rests
- Tray tables
- Passenger Service Units (PSUs)
- Light housings
- Video monitor shrouds
- Life vest shrouds
- Air ducts

Configurations

- Sheet sizes
 - Lengths to 120 in. (3,048 mm)
 - Widths to 60 in. (1,524 mm)
 - Gauges from 0.040 to 0.250 in. (1.02 to 6.35 mm)
 - Custom sizes, gauges on request
- Colors, textures
 - Full range of colors
 - Industry's widest range of textures
 - 500 lb minimum



PROPERTIES, RATINGS

PROPERTY	TEST METHOD*	TYPICAL VALUES	
MECHANICAL			
Specific Gravity	ASTM D792	1.490	
Tensile Strength	ASTM D638	5,500 psi	38 MPa
Flexural Strength	ASTM D790	8,700 psi	60 MPa
Flexural Modulus	ASTM D790	410,00 psi	2827 MPa
Izod Impact (notched) @73°F (23°C)	ASTM D256	5.0 ft-lb/in.	265 J/m
Hardness Rockwell	ASTM D785	107	
Heat Deflection (annealed)	ASTM D648	170°F @ 264 psi	77°C @ 1.8 MPa
Thermal Expansion	ASTM D696	1.67 x 10 ⁻⁵ /°F	3 x 10 ⁻⁵ /°C
FAR RATINGS			
Flammability	FAR 25.853(a)(i) FAR 25.853(a)(ii)	PASS ALL	
OSU Heat Release Peak - HRR, kW/m 2 Min - HRR, kW/m ²	FAR 25.853(d)(Part IV)	<50 <50	
NBS Smoke Ds @ 1.5 min Ds @ 4 min	FAR 25.853(d)(Part V)	<100 <200	

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

BOLTARON® FAR RATED SHEET PRODUCTS

Impact resistant FAR 25.853(d) sheet grades - opaque

- Boltaron® 9815E: Extruded, full range of colors, textures
- Boltaron® 9815D: Decorative patterns, textures
- Boltaron® 9815M: Metallic surface finish
- Boltaron® 9815F: Film, thin-gauge sheet
- Boltaron® 9815P: Custom textures
- Boltaron® 9850: 50/50 RHR

Enhanced performance grades

- Boltaron® 4205: Superior temperature resistance
- Boltaron® 4330: Superior impact resistance
- Boltaron® 4800: FAR smoke emissions & flame rated

Translucent grades

- Boltaron® 4350: Custom routed parts
- Boltaron® 9816: Custom routed parts; FAR 25.853(a),(d)
- Boltaron® 9916: Custom routed parts, fully compliant

Window shade grades

- Boltaron® 9200/9200C
- Boltaron® 9250/9250C: Higher temperature

Additional Boltaron FAR-rated grades

- Boltaron® 6800E

THERMOFORMING GUIDELINES

Mold Shrinkage	0.5 - 0.7%	
Forming Temperature	335 - 370°F (168 - 188°C)	335 - 370°F (168 - 188°C)
Typical Heater Settings	30 - 50% Top	50 - 70% Bottom
Drying	Not required	

SIMONA offers the widest product range of PVC sheet and rod – FM 4910 rated sheet – chemical resistant materials from PVC, PP and PE to fluoropolymers – orthotics and prosthetics sheet – Boltaron aircraft sheet – plus proven products for boat building, outdoor furniture and many other industries.

DISCLAIMER AND LIMITATION OF WARRANTY:

All information contained herein is believed by SIMONA AMERICA Inc. to be reliable. Typical properties are based on laboratory tests conducted on material samples in accordance with standard test methodology. SIMONA AMERICA Inc. makes no express or implied warranty that its products will perform in accordance with the data in all conditions and circumstances. To determine suitability for use, users must test applications under actual operating conditions. As a result, ALL EXPRESS OR IMPLIED WARRANTIES IN CONNECTION WITH SIMONA AMERICA INC. and BOLTARON PRODUCTS INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY DISCLAIMED.

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