

# AeroRigid™ 291B

Aluminum Panel for Aircraft Interiors

The AeroRigid™291B is a sandwich panel made with aluminum facings and high density 5.7 lbs/ft<sup>3</sup> aluminum honeycomb core, designed for use in aircraft interiors.



## Features

- High strength-to-weight ratio
- Good cost effectiveness
- Service temperature: up to 180°F

## Applications

The AeroRigid™ 291B is designed for use in aircraft interior structural and nonstructural applications such as monuments, shelving, partitions, bulkheads and galleys.

## Availability

Thickness: 0.125", 0.250", 0.375", 0.500", 0.750" and 1.000"  
Facing: 0.020"  
Width: Standard 48" (Maximum 60")  
Length: Standard 96" (Maximum 144")

## Construction

Facing : 2024-T3 CLAD  
Honeycomb Core: 5052 AL 3/16" Cell, 5.7 lbs/ft<sup>3</sup>  
Adhesive: Epoxy

## Typical Performance Properties

Part Number	Panel Thickness inch	Panel Wight lbs/sf [Mean]	Long Beam Flexural Load at Failure lbs [Mean]		Long Beam Flexural Facing Stress psi [Mean]		Short Beam Core Shear psi [Mean]		Climbing Drum Peel in-lbs/in [Mean]	Stabilized Core Compression psi [Mean]	FAA Allowables *1
			L	W	L	W	L	W			
AR291B-A0125	0.125	0.69	63 <sup>*2</sup>	61 <sup>*2</sup>	43,363	41,762	435	411	19	1148	Good
AR291B-A0250	0.250	0.75	158	162	52,251	52,130	453	362	19	944	Good
AR291B-A0375	0.375	0.81	260	246	54,500	51,454	434	331	19	931	Good
AR291B-A0500	0.500	0.87	346	330	53,589	51,081	415	323	19	901	Good
AR291B-A0750	0.750	0.98	534	506	54,514	51,674	368	301	19	866	Good
AR291B-A1000	1.000	1.10	740	687	56,389	52,359	292	283	19	849	Good

\*1 Meet FAA allowable per FAR 25.853 Appendix F, Part I - 60 second vertical ; Part IV - Heat Release; Part V - Smoke Emission

\*2 Maximum values without failure

Note: Above figures reflect typical values and should not be used as design specifications.

## CONTACT FOR MORE INFORMATION

**SHOWA AIRCRAFT INDUSTRY CO., LTD.**  
Tokyo Sales Office  
600 Tanaka-cho, Akishima-shi, Tokyo 196-8522, Japan  
Phone: +81-42-541-8883  
Fax: +81-42-541-8899  
e-mail: honeycombsales196@showa-aircraft.co.jp

**SHOWA AIRCRAFT USA INC.**  
8620 154<sup>th</sup> Ave. NE, Suite 140  
Redmond, Washington 98052, USA  
Phone: +1-425-202-7238