

AeroRigid™ 291B

Composites Panel for Aircraft Interiors

The AeroRigid™291B is a sandwich panel made with aluminum facings and high density 5.7 lbs/ft³ 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 to 1.000 inch
 Facing: 0.020 inch
 Width: Standard 48 inch (Max 60 inch)
 Length: Standard 96 inch (Max 144 inch)

Construction

Facing : 2024-T3 CLAD
 Honeycomb Core: 5052 AL 3/16" Cell, 5.7 lbs/ft³
 Adhesive: Epoxy

Typical Performance Properties

Part Number	Panel Thickness (inch)	Panel Wight (lbs/sf)	Long Beam Flexural Load at Failure (lbs)		Long Beam Flexural Facing Stress (psi)		Short Beam Core Shear (psi)		Climbing Drum Peel (in-lbs/in)	Stabilized Core Compression (psi)	耐火性 x1
			L	W	L	W	L	W			
AR291B-A0125	0.125	0.69	63 ^{x2}	61 ^{x2}	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

x1 Meet FAA allowable per FAR 25.853 Appendix F, Part I - 60 second vertical ; Part IV - Heat Release; Part V - Smoke Emission

x2 Maximum values without failure

Note: The above figures reflect typical values and should not be used in design.

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