

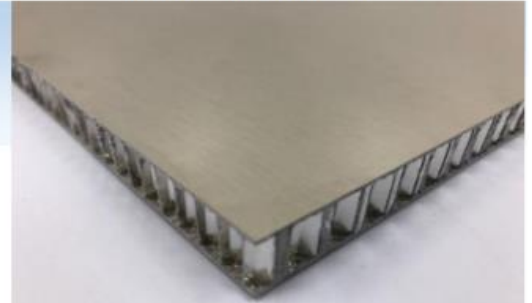


PROFESSIONAL PLASTICS

Showa Aircraft Industry Co., Ltd.
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AeroRigid™ 291A

Aluminum Panel for Aircraft Interiors



The AeroRigid™291A is a sandwich panel made with aluminum facings and 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™ 291A 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 1/4" Cell, 3.4 lbs/ft³ (AMS-C-7438)
 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 Modulus ksi [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			
AR291A-A0125	0.125	0.66	63 ^{*2}	60 ^{*2}	1103	1117	346	271	8	549	Good
AR291A-A0250	0.250	0.70	143	138	1093	1066	293	181	9	395	Good
AR291A-A0375	0.375	0.73	224	210	1115	1088	266	162	7	372	Good
AR291A-A0500	0.500	0.77	305	296	1133	1111	247	151	7	365	Good
AR291A-A0750	0.750	0.84	474	439	1149	1101	172	137	8	364	Good
AR291A-A1000	1.000	0.90	627	576	1180	1117	130	128	7	362	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.

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