

PAHD-XR1 5052 Aluminum Honeycomb







Description:

PAHD-XR1 5052 corrugated aerospace grade aluminum honeycomb is a high density core material which offers superior strength over expanded aluminum honeycomb. PAHD-XR1 5052 honeycomb is made from 5052 aluminum alloy foil and can be tested in accordance with customer requirements.

Applications:

PAHD-XR1 5052 honeycomb uses include engine nacelles, roll formed applications, energy absorption, anchor points, reinforcements, and other applications where light weight high strength materials are required. PAHD-XR1 5052 honeycomb is suitable for applications where materials with high compression and shear values are required.

Cell Configurations:

- STD Standard Hexagonal
- R2 Bisected Hexagonal
- R2S[DG] Bisected Staggered [Different Gauge]
- 2R2S Reinforced Bisected Staggered
- R2S-Cross Alternating Cell Axis for multi-axis strength (limited block size)

Features:

- Elevated use temperatures
- High thermal conductivity
- Flame resistant
- Excellent moisture and corrosion resistance
- Fungi resistant
- High strength
- Machinable
- Roll formable

Availability:

PAHD-XR1 5052 honeycomb is available in three forms: untrimmed sheets, cut to size sheets, and machined components. Density is dependant on cell size and configuration.

Cell Sizes:	1/8" - 3/16"			
Densities:	14.5 pcf - 55.0 pcf			
Sheet "Ribbon" (L):	36" typical - 96" max			
Sheet "Transverse" (W):	30" typical			
Tolerances:	Length: Width: Thickness:	+ 6", - 0" + 6", - 0" ± .010" (under 4" thick)		

NOTE: Special dimensions, sizes, tolerances, and CNC machining can be provided upon request.

Corrosion Resistance:

The chromated XR1 coating offers excellent protection for honeycomb cores exposed to corrosive environments, meeting the requirements of AMS C7438 Rev A, CL2.

PAHD-XR1 5052 aluminum honeycomb is specified as follows:

Trade Name - Corrosion Coating - Density - Cell Size - Alloy - Cell Configuration



			PAHD-XR1 5052 Typical Mechanical Properties*					
			Compressive Strength (PSI)		Shear Strength (PSI)			
CELL SIZE inch	NOMINAL DENSITY PCF	CONFIGURATION	BARE	STABILIZED	"L"	"W"	Crush Strength (PSI)	
1/8	14.5	STD	2900	3000	1700	800	2000	
3/16	15.7	STD	3200	3300	1700	800	2000	
1/8	22.1	STD	5200	5200	2500	1500	4050	
3/16	22	R2SDG	5200	5200	2500	1500	2600	
3/16	25	R2S	5500	5600	3000	1500	2800	
1/8	30	R2S-Cross	_	_	_	_	2900	
1/8	35	R2	7500	7700	4000	2000	6200	
1/8	55	2R2S	8500	10000	4500	2250	8000	

NOTE: Custom densities and configurations available upon request

Tested at 0.625" per the methods defined in AMS C7438 Rev A at room temperature.

*Minimum values may be up to 25% lower than typical values.

Plascore, Inc., employs a quality management system that is AS/EN/JISQ 9100, ISO 9001:2008 and ISO 14001:2004 certified.

IMPORTANT NOTICE: The information contained in these materials regarding Plascore's products, processes, or equipment, is intended to be up to date, accurate, and complete. However, Plascore cannot warrant that this is always the case. Accordingly, it is a purchaser's or user's responsibility to perform sufficient testing and evaluation to determine the suitability of Plascore's products for a particular purpose. Information in these materials and product specifications does not constitute an offer to sell. Your submission of an order to Plascore cannot titutes an offer to purchase which, if accepted by Plascore, shall be subject to Plascore's terms and conditions of sale. PLASCORE MAKES NO WARRANTIES OF ANY KIND REGARDING THESE MATERIALS OR INFORMATION, EITHER EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Plascore owns and shall retain all worldwide rights in its intellectual property, and any other trademarks used in these materials are the property of their respective owners. The information in these materials shall not be construed as an inducement, permission, or recommendation to infringe any patent or other intellectual property rights of any third parties.



Corporate Headquarters

Plascore Incorporated		Plascore GmbH&CoKG		
615 N. Fairview St.		Feldborn 6		
Zeeland, MI 49464-0170		D-55444 Waldlaubersheim		
Phone	(616) 772-1220	Germany	+49(0) 6707-9143 0	
Toll Free	(800) 630-9257	Phone		
Fax	(616) 772-1289	Fax	+49(0) 6707-9143 40	
Email	sales@plascore.com	Email	sales.europe@plascore.com	
Web	www.plascore.com	Web	www.plascore.de	

Europe