

PCGA-XR2 3000 Series Aluminum Honeycomb

PCGA-XR1 3000 Series Mechanical Properties									
PLASCORE® Honeycomb Description			Bare Compressive			Plate Shear			
Core Type	Cell Size	Density	Strength PSI	Modulus KSI	Strength PSI	Modulus KSI	Strength PSI	Modulus KSI	Modulus KSI
					"L"	"W"	"L"	"W"	"W"
PCGA-XR1	1/8"	5.2	300	142	345	215	33	31	31
PCGA-XR1	3/8"	3.6	325	92	210	130	40	20	20
PCGA-XR1	1/2"	2.5	195	49	130	80	25	15	15
PCGA-XR1	3/4"	1.8	110	24	85	55	16	9	9
PCGA-XR1	1"	1.4	75	15	55	40	12	7	7

How to specify Plascore Honeycomb:

PCGA-XR1 3000 Series commercial grade aluminum honeycomb is specified as follows:
 Material - Density - Cell Size - Perforated - Alloy

Example:
 PCGA-XR1-1.8-3/4-P-3000 Series

Where:
 PCGA - designates aluminum commercial grade
 XR1 - designates XR1 corrosion coating
 1.8 - is the nominal density in pounds per cubic foot
 3/4 - is the cell size in inches
 P - indicates cell walls are perforated
 3000 Series - designates the alloy of the foil

Description:

PCGA-XR2 3000 Series commercial grade aluminum honeycomb is a lightweight core material offering excellent strength and good corrosion resistance for industrial applications at low cost. PCGA-XR2 3000 Series honeycomb is made from 3000 Series aluminum alloy foil.

Applications:

PCGA-XR2 3000 Series honeycomb uses include air/light directionalization, energy absorption, tooling, ceiling and floor panels, counter tops and other applications for which elevated physical and mechanical properties are not required.

Features:

- High thermal conductivity
- Flame resistant
- Good moisture and corrosion resistance
- Fungi resistant
- Low weight / High strength

Availability:

PCGA-XR2 3000 Series honeycomb is available in four forms: unexpanded blocks, unexpanded slices, untrimmed expanded sheets and cut to size expanded sheets. It is also available with or without cell perforations to facilitate cell venting for certain applications.

Cell Sizes:	1/4" - 1.0"
Densities:	1.2 pcf - 5.2 pcf
Sheet "Ribbon" (L):	48" typical - 72" max
Sheet "Transverse" (W):	96" typical - 200" max
Sheet Thickness (T):	35" max
Tolerances:	Length: + 6", - 0" Width: + 6", - 0" Thickness: ± 0.008" (under 4" thick) ± 0.062" (over 4" thick) Density: ± 15% Cell Size: ± 15%

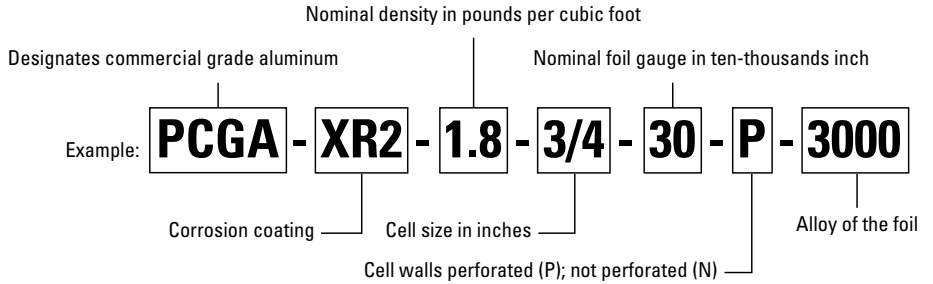
NOTE: Special dimensions, sizes, tolerances, CNC machining and die cut to size can be provided upon request.

Corrosion Resistance:

The XR2 corrosion coating offers a chrome-free clear protective film, providing good corrosion resistance.

PCGA-XR2 3000 Series commercial grade aluminum honeycomb is specified as follows:

Trade Name - Corrosion Coating - Density - Cell Size - Foil Gauge - Perforation - Alloy



PCGA-XR2 3000 Series Mechanical Properties

CELL SIZE		NOMINAL DENSITY		COMPRESSIVE STRENGTH (BARE)		PLATE SHEAR STRENGTH "L" DIRECTION		PLATE SHEAR MODULUS "L" DIRECTION		PLATE SHEAR STRENGTH "W" DIRECTION		PLATE SHEAR MODULUS "W" DIRECTION	
in	mm	lb/Ft ³	Kg/m ³	psi	Mpa	psi	Mpa	ksi	Gpa	psi	Mpa	ksi	Gpa
1/4	6.4	5.2	83	680	4.69	330	2.28	67	0.46	195	1.34	37	0.26
3/8	9.6	3.6	58	340	2.34	227	1.56	55	0.38	135	0.93	25	0.17
1/2	12.7	2.5	40	205	1.41	140	0.97	38	0.26	77	0.53	15	0.10
3/4	19.0	1.8	29	125	0.86	105	0.72	23	0.16	61	0.42	13	0.09
1.0	24.4	1.2	19	85	0.59	70	0.48	14	0.10	50	0.34	7	0.05

Note: Additional densities and configurations available upon request.

Tested at 0.625" T per AMS STD 401 at room temperature.

Certificates of conformance are not provided. Values stated are for reference only.



Plascore, Inc., employs a quality management system that is Nadcap, AS9100, ISO 9001 and ISO 14001 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 constitutes 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
 615 N. Fairview St.
 Zeeland, MI 49464-0170
 Phone (616) 772-1220
 Toll Free (800) 630-9257
 Fax (616) 772-1289
 Email sales@plascore.com
 Web www.plascore.com

Europe

Plascore GmbH&CoKG
 Feldborn 6
 D-55444 Waldlaubersheim
 Germany
 Phone +49(0) 6707-9143 0
 Fax +49(0) 6707-9143 40
 Email sales.europe@plascore.de
 Web www.plascore.de