HONEYCOMB ALUMINUM CORRUGATED - RIGICELL

Product details

Description

Honeycomb aluminum corrugated is produced for higher density range. In this process adhesive is applied to the corrugated nodes, the corrugated sheets are stacked into blocks, the node adhesive cured, and sheets are cut from these blocks to the required core thickness.We can supply corrugated with a sheet of substrate material placed along the nodes in the ribbon direction to increase the mechanical properties.

Thickness on customer's request.

Features

- Very high resistance to compression and shear
- Corrosion resistant / recyclable material
- Excellent energy absorber

Applications

It is used in different industrial and aero sectors to abosber energy, ensuring a long life and resistance to moisture and temperature
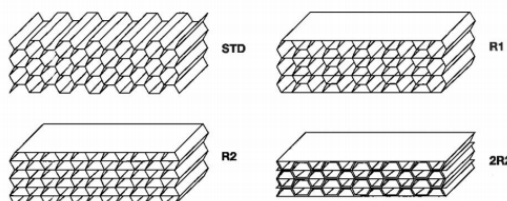
Designation

Honeycomb is designated as follows:
Alloy of aluminium 5052 = 2
Cell Size : distance between two parallel sides of the hexagon
Density : is the nominal density in pounds per cubic foot
Cell configuration:

Tolerances +/- 10%

Mechanical properties

5052 Alloy Rigicell™ Aluminum Corrugated Honeycomb
Both CR-PAA and CR III corrosion-resistant coating

Honeycomb Designation Cell Size – Alloy Foil Gauge – Configuration	Nominal Density pcf	Crush Strength psi	Compressive Strength			Beam Shear Strength			
			Bare psi	Stabilized psi	Modulus ksi	L Direction psi	Modulus ksi	W psi	Modulus ksi
		typ	typ	typ		typ		typ	
1/8 – 2 – .003-STD	12.0	1600	2300	2400	560x	1950	210x	1500	75x
1/8 – 2 – .0038-STD	14.5	2150	2900	3050	650x	2200	260x	1600	80x
1/8 – 2 – .006-STD	22.1	4000	5100	5200	970x	3000	440x	2050	100x
1/8 – 2 – .006-R2	38.0	6500	8500	8700	1650x	4300p	950x	2200p	140x
1/8 – 2 – .006-2R2	55.0	–	12500x	13000p	2400x	4900p	1370x	2610p	180x
3/16 – 2 – .006-STD	15.7	2400	3200	3300	700x	2400x	280x	1500x	85x
3/16 – 2 – .006-R2S	25.0	4400p	5700	5800p	1100x	3350p	670x	1700p	105x
1/4 – 2 – .006-STD	10.5	1350	2100	2200	980x	1300x	180x	800x	70x

The values shown are approximate and not binding x = expected values P = preliminary data

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