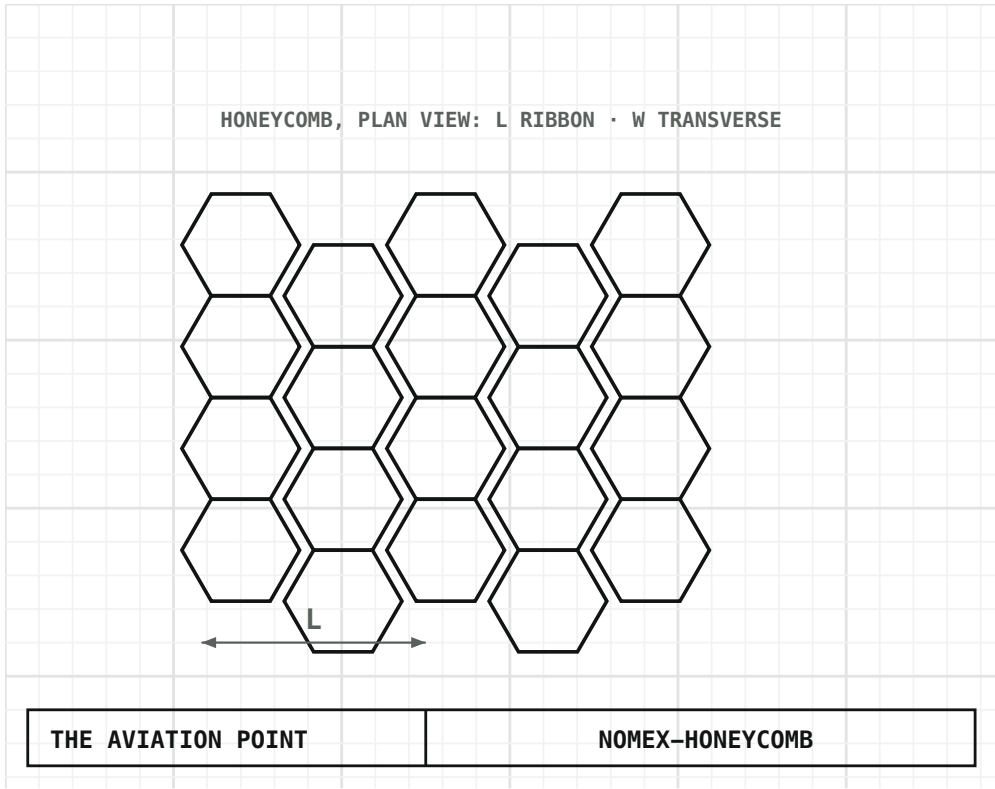
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Nomex honeycomb — aramid paper honeycomb core

Nomex honeycomb is the most common core in aircraft sandwich panels: aramid paper, flame resistant and light.



Schematic

Designation

Item	Value
Designation	Nomex honeycomb
Class	Composites
Type	aramid paper honeycomb core

HexWeb HRH-10 density classes (1/8 in cell)

Designation	Density, lb/ft³	Density, kg/m³ (converted)	Bare compressive, psi typ	Plate shear L, psi typ	Plate shear W, psi typ
HRH-10 - 1/8 - 1.8	1.8	29	105	90	50
HRH-10 - 1/8 - 3.0	3.0	48	300	175	100
HRH-10 - 1/8 - 4.0 (2.5 mil)	4.0	64	520	255	140
HRH-10 - 1/8 - 5.0	5.0	80	700	325	175
HRH-10 - 1/8 - 6.0	6.0	96	1,050	385	200
HRH-10 - 1/8 - 8.0	8.0	128	1,675	480	260
HRH-10 - 1/8 - 9.0	9.0	144	2,000	515	300

Hexcel HexWeb HRH-10 product data sheet (inch version), mechanical properties table, tested per AMS-STD-401 at 0.500 in core thickness. Designation is material, cell size in inches, nominal density in lb/ft³. Density tolerance is ±10 % measured on at least 100 in³ of core. Other cell sizes (for example 3/16) and densities are in the same table. kg/m³ converted at 16.02 per lb/ft³.

Notes

- **One family.** HRH-10 values are typical numbers from one datasheet.
- **Not a substitution table.** The SRM names the core.

SOURCES · Hexcel HexWeb HRH-10 Product Data Sheet · FAA-H-8083-31B, AMT Handbook — Airframe, Volume 1, Chapter 7 · AC 43.13-1B, Change 1, Chapter 3, Fiberglass and Plastics

SCAN · OPEN THIS DATA SHEET
theaviationpoint.com/parts/materials/nomex-honeycomb/

Reference data. The aircraft manufacturer's documentation (SRM / IPC) takes precedence.