Plascore CrushLite™ is a lightweight aluminum honeycomb core material which is certified to specific crush strengths for energy absorption applications. CrushLite™ yields at a constant force providing reliable and consistent energy absorption in almost any environment.

Available with or without precrush in a wide range of sheet sizes, cut to size, or machined to complex shapes. CrushLite™ can be used as-is, or easily integrated into many applications requiring uni-axial deformable energy absorption.

**Features**

- Predictable energy absorption properties
- High crush strength-to-weight ratio
- Efficient constant force crush curve
- Wide range of strengths available
- Crush stroke in excess of 70%
- Excellent moisture and corrosion resistance
- Elevated use temperatures

**Applications**

**Aerospace** – Improves crashworthiness protection in seating, or acts as a single event shock absorber for impact protection without adding significant weight.

**Calibration** – Drives the deceleration pulse required to calibrate crash test dummies. Certified for consistent test results.

**Defense** – Serves as both a structural and a crushable member providing dual benefits for support and blast mitigation in areas such as doors, floors, seats, and storage areas for tactical vehicles.

**Dynamic Testing** – Configure sled test decelerators quickly by varying the cross section of the crushable impact area to change the G load of the shock pulse.

**Industrial Safety** – Provides reliable drop protection that doesn’t require service or maintenance. Limits loads to prevent equipment failure or injury.

**Shipping Protection** – Protects sensitive shipping contents such as nuclear materials or delicate equipment. Precise crush strength and high service temperatures facilitate use in many environments with minimal impact on the shipping weight.

**Transportation** – Attenuates impact in Automotive and Rail applications where lightweight, high-performance energy absorption is critical for safety.
CrushLite™ aluminum honeycomb is available in untrimmed sheets, cut to size, machined, or die cut. Precrushing, load certification, and other operations are available upon request.

**Cell Sizes:**
- 1/8" - 1"  

**Densities:**
- 0.6 pcf – 8.1 pcf

**Sheet “Ribbon” (L):**
- 48" typical maximum

**Sheet “Transverse” (W):**
- 96" typical maximum

**Sheet “Thickness” (T):**
- up to 32" maximum

**NOTE:** Maximum sheet size, thickness, and precrush may be limited on certain core types. Contact a Plascore Representative to determine availability.

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### Plascore Honeycomb Designation

<table>
<thead>
<tr>
<th>Nominal Density lbs/ft²</th>
<th>Cell Size (Inch)</th>
<th>Foil Gauge (mm)</th>
<th>Available in Perforated</th>
<th>Foil Alloy</th>
<th>Crush Strength* (kPa)</th>
<th>Standard Crush Tolerance (+/- kPa)</th>
<th>Minimum Stroke² (%)</th>
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</tbody>
</table>

* Crush Strength² Minimum Stroke²  
  Tested per ASTM D7336

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**Plascore Honeycomb Designation**

CrushProperties

**Nominal density in pounds per cubic foot**

**Nominal foil gauge in ten-thousands inch**

**Designates aluminum CrushLite™**

**XR1 corrosion coating**

**Cell size in inches**

**Cell walls perforated (P); not perforated (N)**

**Alloy of the foil**

Example:

**PACL - XR1 - 3.0 - 3/8 - 20 - P - 5052**

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

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**CrushLite™** is specified as follows:

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

Plascore, Inc., employs a quality management system that is Nadcap, AS9100, ISO 9001 and ISO 14001 certified.

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