

L-311

Foaming Film Adhesive, Core Splice



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Product Data Sheet

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Description

L-311 is an intumescent film adhesive formulated to splice honeycomb core to adjacent close-out members or splice individual sections of honeycomb together in the manufacture of sandwich structures. L-311 is compatible with most 250°F (121°C) and 350°F (176°C) curing adhesive systems. L-311 will not sag or slump during the curing process. The expansion of L-311 is approximately 2.5-3.0 times the original thickness.

Advantages of L-311

- ❖ L-311 allows the designer to use various core densities within a single sandwich to meet specific local load conditions.
- ❖ L-311 acts to stabilize honeycomb core materials when interfacing with adjacent structural members in the transfer of shear loads.

Physical Properties

- *Form:* Pliable Film
- *Standard Weight:* 0.300 lbs/ft² (1460 g/m²) (other weights are available)
- *Standard Thickness:* 0.050" (1.27 mm)
- *Volatile Content:* Less than 0.5%
- *Color:* Tan

Availability

- Sheets 1' x 2' (30 cm x 61 cm)

Shelf Life

- 4 days at Room Temperature (75°F or 24°C)
- 3 months at 40°F (4°C)
- 6 months at 0°F (-18°C)

Cure Cycles

- 15 minutes at 350°F (176°C), or
- 40 minutes at 275°F (135°C), or
- 60 minutes at 250°F (121°C), or
- 90 minutes at 235°F (113°C).

Average Mechanical Properties

Core Shear Strength using 0.500" Thickness, 1/8" cell (1.27 cm, 3.18 mm) 5052 Al per Mil-C-7438

- -67°F (-55°C) 780 PSI (5.4 MPa)
- RT 810 PSI (5.6 MPa)
- 180°F (82°C) 780 PSI (5.4 MPa)

Tube Shear Strength using 5052 Aluminum, 1.0" (2.54 cm) outer diameter, 0.5" (1.27 cm) inner diameter, 0.049" (1.25 mm) thickness Aluminum tubing.

- RT 1310 PSI (9.0 MPa)

Note: L-311 should be allowed to reach room temperature before removing from protective packaging to avoid moisture condensation on the film surface.

NOTICE:

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