



**LC196  
Phenolic Prepreg**

LC196 is an advanced, **snap curing** phenolic prepreg system that is self-adhesive to aramid/phenolic and aluminum honeycomb core. LC196 offers very good and consistent adhesion property values (climbing drum peel strength) over a wide range of cure/laminating conditions. LC196 is self-extinguishing, and meets flammability requirements for use in aircraft interiors.

**Properties of LC196 7781 Glass Fabric**

Flexural Strength, psi	90,000
Flexural Modulus, psi	3,200,000
Tensile Strength, psi	73,000
Tensile Modulus, psi	3,400,000
Compressive Strength, psi	70,000
Compressive Modulus, psi	4,600,000
Short Beam Shear Strength, psi	4,500
Climbing Drum Peel, in-lbs/inch width	12 – 16
OSU, Peak Heat Release Rate, kW/m	30 - 38
OSU, Total Heat Release Rate, kW/m	15 - 30
Specific Optical Density, D <sub>s</sub> , (ASTM E662-96)	4 – 11

Climbing Drum Peel and OSU specimens tested with two plies per side on aramid honeycomb, 0.5" thick, 3.0 pcf, 1/8" cell

Specific Optical Density tested with two plies per side on aramid honeycomb, 0.25" thick, 3.0 pcf, 1/8" cell

**Properties of Single ply LC196 7781 on 1/8" thick, 3.0 pcf, 1/8" cell aramid honeycomb**

**Bare Panel**

OSU, Peak Heat Release Rate, kW/m	39
OSU, Total Heat Release Rate, kW/m	37
Specific Optical Density, Ds, (ASTM E662-96)	1

**With Decorative**

OSU, Peak Heat Release Rate, kW/m	54
OSU, Total Heat Release Rate, kW/m	58
Specific Optical Density, Ds, (ASTM E662-96)	79

**Climbing Drum Peel**

Crushed, 265°F, 15 minutes	13 in lbs/in width
Molded at 60 psi, 265°F, 15 minutes	12 in lbs/in width

**Process Information**

**Press Molding Lay-up**

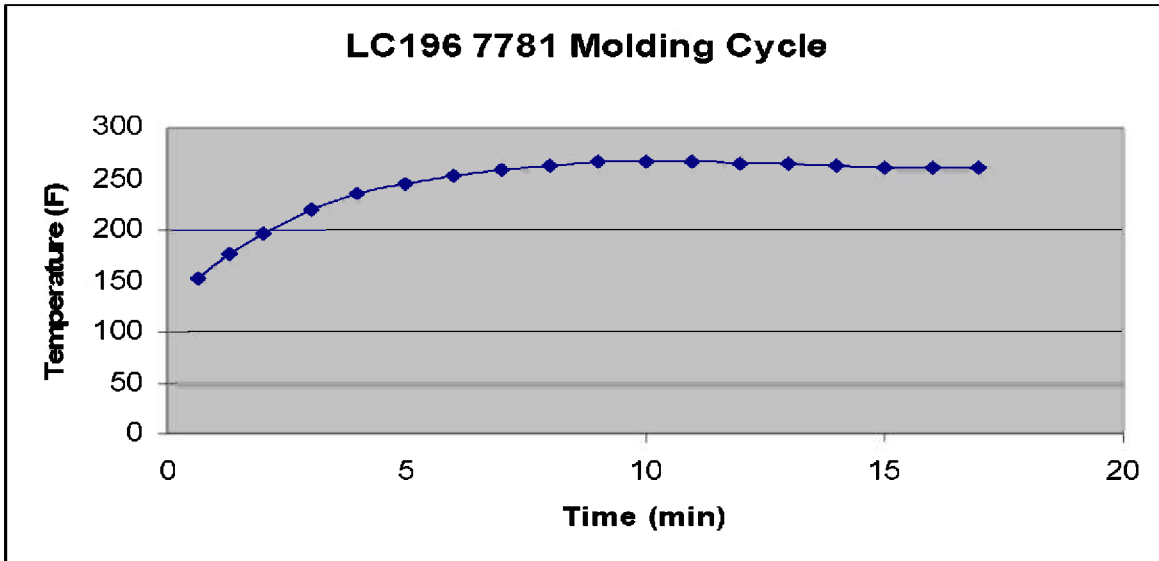
- 5 plies of Kraft paper
- 1/8" thick steel caul plate
- Release film
- 2 plies of LC196-7781
- Nomex honeycomb
- 2 plies of LC196-7781
- Release film
- 1/8" thick steel caul plate
- 5 plies Kraft paper

**Press Molding Process**

- |  |                        |
|--|------------------------|
| • Press Temperature  | 265°F                  |
| • Press Pressure   | 45 psi                 |
| • Bumps (flat panel)   | 40, 80 and 120 seconds |
| • Bumps (crushed core)   | 20, 40, 60 seconds     |
| • Time in press  | 15 – 17 minutes        |
| • In hot/out hot   |                        |
| • For flat panels allow the assembly to cool to less than 150°F before breakdown |                        |

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Temperatures Measured via implanted thermocouple

The above manufacturing conditions are recommended starting points. Actual conditions may vary depending upon the manufacturing environment and part configuration.

**Recommended Storage**

Room Temperature (77°F)	2 weeks
0°F	6 months

**NOTE:** LC196 Prepreg is wound with a polyethylene film liner for easy release. The rolls are sealed in polyethylene film bags to protect prepreg from moisture and other contaminants. The bags should remain sealed while the prepreg is under refrigeration and only removed when the prepreg has had sufficient time to warm to room temperature. When not in use, the prepreg should be returned to refrigerated storage. Care should be exercised to limit out-time of the prepreg in order to insure maximum shelf life. Torn bags should be replaced. The data presented herein has been developed under controlled manufacturing and test conditions and is considered accurate. No warranty is expressed or implied regarding the accuracy or use of this data or the use of this product. It is the responsibility of the end user to determine suitability for use.

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