### Thermo Set Adhesive

<table>
<thead>
<tr>
<th>3D Thick*</th>
<th>Crystal Clear</th>
<th>2</th>
<th>4</th>
<th>24</th>
<th>152</th>
<th>2047SA</th>
<th>34HTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thickness</td>
<td>.030&quot; - .035&quot;</td>
<td>.006&quot;</td>
<td>.010&quot;</td>
<td>.005&quot;</td>
<td>.006&quot;</td>
<td>.005&quot;</td>
<td>.008&quot;</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Minimum Glue Line Temp Under Full Temp &amp; Pressure</th>
<th>220°F</th>
<th>270°F-+</th>
<th>250-290°F+</th>
<th>250°F</th>
<th>290°F</th>
<th>225°F</th>
<th>275°F - 300°F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum Time In Minutes</td>
<td>10 Seconds</td>
<td>15 Minutes</td>
<td>3 Minutes</td>
<td>5 - 6 Minutes</td>
<td>5 - 6 Minutes</td>
<td>1 Minute</td>
<td>6 Minutes</td>
</tr>
<tr>
<td>Minimum Pressure - PSI</td>
<td>50 PSI</td>
<td>0</td>
<td>85 PSI</td>
<td>70 PSI ±</td>
<td>70 PSI ±</td>
<td>215 PSI</td>
<td>150 PSI</td>
</tr>
</tbody>
</table>

#### Color
- White/Pea/Gray
- Crystal Clear
- Transparent
- Light Tan
- Brown
- Acrylic/Translucent
- Tan
- White/Clear

#### Fire Retardant
- Blended/Recycled
- Urethane
- Melamine
- Phenolic (Modified)
- Acrylic/Poly
- Phenolic
- Acrylic/Melamine

#### Flexibility
- Variable
- Good
- Yes
- No
- Yes
- Medium
- No

#### Surfaces To Be Bonded
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<tr>
<th>S81TS</th>
<th>710TS</th>
<th>831DS</th>
<th>S3E</th>
<th>Epoxy Film**</th>
<th>Powder</th>
<th>Liquid</th>
<th>Metal Bond</th>
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<tbody>
<tr>
<td>Thickness</td>
<td>.005&quot;</td>
<td>.005&quot;</td>
<td>Varied</td>
<td>Any</td>
<td>.001&quot; - .005&quot;</td>
<td>Any</td>
<td>.001&quot; - .010&quot;</td>
</tr>
<tr>
<td>Minimum Glue Line Temp Under Full Temp &amp; Pressure</td>
<td>225°F</td>
<td>275°F</td>
<td>Varied</td>
<td>225°F</td>
<td>225°F</td>
<td>275°F</td>
<td>275°F</td>
</tr>
<tr>
<td>Minimum Time In Minutes</td>
<td>3 Minutes</td>
<td>4 Minutes</td>
<td>30 Seconds</td>
<td>4 Minutes</td>
<td>2 Minutes</td>
<td>10 Seconds</td>
<td>15 - 60 Minutes</td>
</tr>
<tr>
<td>Minimum Pressure - PSI</td>
<td>175 PSI</td>
<td>150 PSI</td>
<td>24 PSI ±</td>
<td>16 PSI</td>
<td>50 PSI</td>
<td>14 PSI</td>
<td>14 PSI</td>
</tr>
</tbody>
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#### Carrier
- Tissue
- Translucent
- Spun Web
- Tissue/Translucent

#### Fire Retardant
- Yes
- No
- Available
- Available
- Available
- Available
- Available

#### Flexibility
- Medium
- Fair
- Excellent
- Medium
- Good
- Varies

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#### *3D Forming Modified Thermo-Set

- Amazing thicker emulsion or backer, cold forms to perfect long lasting 3D shapes, low cost, low pressure tooling
- Self leveling, clear UV extra bond
- Extra light weight, translucent, easy to handle, no bleed, bonding, 3D shape
- 3D Shapes, Can be colored, Low cost
- Low cost, low PSI, Exterior, Best for outdoor
- Used for joint, splices, backer for perforating, backer for translucent microwood
- Low cost, work horse
- Light color for ash and maple, bonds balancing backer, 2ply inlay faces. Easy to handle

#### **Epoxy Certified

In most cases above, the bonding strengths are a function of the following 5 components:

1. **TEMPERATURE** The temperature at the glue line should be checked with a "K" Thermo Couple Thermometer from Cole Palmer (Catalog #91100-10) at www.colepalmer.com or call (800) 323-4340. In addition, you will need "K" type adapter plugs (Catalog #93840-52) and a spool of very fine teflon coated wire (Catalog #08541-02). Lenderink Technologies, Inc. will be happy to supply you with all of the above materials together for approximately $250.00.

2. **PRESSURE**

   \[
   \text{Hydraulic Line Pressure (lbs)} \times \text{Surface Area of Cylinders (in^2)}
   \]

   *Stacks or multiple pieces can be pressed at one time.

3. **TIME** When the glue line is at full temperature and pressure. Pressing time is often related to temperature and pressure. Higher temperature/pressure settings often allow for a shorter cycle time.

4. **SURFACES** Surfacing being bonded must be compatible with particular dry film adhesive being used. Surfacing must also have compatible energy and texture.

5. **VAPOR/OFF GASSING** Pre-press at full temperature and low pressure before adding Lenderink Dry Film Adhesive, i.e. vapors vacated from surfaces. Vapors cause bubbles and /or poor bonds. Moisture contents of wood should be below 8%, press breathing may be needed.

The above 5 components can be varied and still provide good bonds, i.e. Temperature increase can often allow for pressure decrease and vice-versa. Extremely slick surfaces may have improved bonds if Corrorna Treated and sanded. Start as close to our recommendations as possible. Vary from the recommendations only one variable at a time. If any questions, please feel free to contact us.

Please send samples to our lab for adhesive recommendations so that we may test the material.

**LENDERINK TECHNOLOGIES, INC.** 1267 HOUSE STREET NE BELMONT, MI 49306

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