

## DryFilmAdhesives.com: Thermo Set Bonds

## Available in Sheets & Rolls

Thermo Set Adhesive	101TS	152TS	204TS	330TS	581TS	710TS	S320
Thickness	.005"	.005"	.005"	.008"	.005"	.005"	.003"
Min. Glue Line Temp Under Full Temp &							
Pressure	248 <b>℉/212℃</b>	290°F	290°F	275°F	275°F	275°F	50 °F
Bonding Temp. Under Full Temp. and Pressure	120 <b>℉/100℃</b>	140ºC	140ºC	135⁰C	135°C 135°C		60 °F
Minimum Time in Minutes	4 / 7	1	4	5	6	4	Until Dry
Estimated Large Volume Cost/Square Foot	7	\$0.11	\$0.05	\$0.13	\$0.18	\$0.06	\$0.15
Minimum Pressure - PSI	125 / 360	215 PSI	150PSI	90 PSI ±	175PSI	150PSI	16PSI
Color	Beige	Beige/Yellow	Pink	White	Dark	Light Tan	White
Carrier	No Tear	Thin Fleece	Tissue	Thick Cellulose Blend Tissue		Tissue	H20
Base Resin	Blended Melamine	Acrylic/Poly	Phenolic	Acrylic/Melamine	Phenolic	Melamine	Acrylic/Latex
Fire Retardant	Yes	No	No	No	No	Yes	Yes

Surfaces to be Bonded							
Recommended •	101TS	152TS	204TS	330TS	581TS	710TS	S320 Liquid
Good ○							
Aluminum	0	•	•		•		•
Carbon	0	•	•	0	•	•	•
Cork	•	•	•	•	•	•	•
Cotton	•	•	•	•	•	•	•
Leather	•	0	•	•	•	0	•
Melamine	•	0	0	•	•	•	•
Paper	•	•	•	•	•	•	•
Polyester	0	0	0	0	•	•	•
Phenolic	0	0	0	•	•	•	•
Wood Veneer	•	•	•	•	•	•	•
Chip Board	•	•	•	•	•	•	•
Wool	•	•	•	•	•	•	•
2-Ply Faces	•	0	•	0	•	0	•

In most cases the above 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) by visiting the website 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 will be happy to supply you with all of the above materials together for approximately \$250.00.

2. Pressure =	Hydraulic Line Pressure (lbs.)	Х	Surface Area o	f Cylinders	(in <sup>2</sup> )
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in<sup>2</sup> of Material Being Pressed

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 being bonded must be compatible with particular dry film adhesive being used. Surfaces 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 some 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 Corrona Treated or 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 either call or email us.

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

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