PRESSURE EQUALIZATION
PRESS PADS FOR LAMINATION
OF FLEXIBLE AND MULTILAYER
CIRCUIT BOARDS

OVERVIEW

PACOPADS™ are a line of press pads specifically engineered to improve the process of laminating rigid multi-layer and flexible Printed Circuit Boards. They serve two primary functions: to accurately control heat input and to equalize the pressure applied to the panel surface.

PACOPADS™ are a unique, cellulosic-based product, engineered specifically to meet the performance requirements of both Rigid Multilayer and Flexible Printed Circuit Board manufacturers. PACOPADS™ are manufactured on a highly specialized paper machine, using virgin fibers that guarantee a low density profile consistent across the entire area of the sheet. (See Press Probe Illustration)

PACOPADS™ are vastly superior to commodity grade papers which vary significantly in weight, thickness, hard spots, contaminants, and moisture.

FEATURES

- Proven worldwide performance since 1986
- Operating temperature of 475°F/246°C for six hours
- Two standard thicknesses of .035" (.89mm) and .055" (1.4mm) for custom Heat Input Control and optimal Pressure Equalization
- Extremely low moisture to reduce liquid buildup in vacuum systems minimizing heat rise variability due to volatility
- Uniform fiber formation and distribution for unmatched pressure equalization, micro Z-axis conformance and repeatable, consistent Heat Rise
- Low fiber dusting and contamination
- No resinous binders or fillers, essentially sulfur free, with no odor or solvents to pollute vacuum systems or the work environment
- Environmentally friendly – suitable for re-pulping, land fill disposal or incineration

LAMINATION PROCESS ADVANTAGES

- Control of Heat Rise - PACOPADS™ perform this function with totally predictable and reproducible results due to their uniform fiber distribution, low moisture content and tightly controlled thickness and weight specifications
- Equalization of Pressure throughout the Pressure Load - Use of PACOPADS™ eliminates air voids, inner-layer slippage and white corners or edges. PACOPADS™ also reduce dielectric thickness variations, image and glass cloth transfer, and obviate the potential of low-pressure prepreg blisters
- 3-Dimensional Conformance - PACOPADS™ eliminate X-Y-Z axis stress which cause cover-layer voids and circuit distortion. At the same time, PACOPADS™ improve cavity fill, and adhesive flow control in the manufacture of Flex, Rigid-flex, and Heat Sink Circuit Boards

RECOMMENDED LAMINATION LAY-UP

Tooling Plate
PACOTHANE® HT1500 Release Film
PACOPADS™
PACOTHANE® HT1500 Release Film
Steel Plate
PACOTHANE® HT1500 Release Film
Multilayer Rigid PCB
PACOTHANE® HT1500 Release Film
Steel Plate
PACOTHANE® HT1500 Release Film
PACOPADS™
PACOTHANE® HT1500 Release Film
Tooling Plate
PRESSURE EQUALIZATION
PRESS PADS FOR LAMINATION
OF FLEXIBLE AND MULTILAYER
CIRCUIT BOARDS

DESCRIPTION OF STANDARDS

<table>
<thead>
<tr>
<th>Physical Property</th>
<th>Test Method</th>
<th>Reported Units</th>
<th>Typical Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. Application Temp.</td>
<td>Q 1025</td>
<td>°F (°C)</td>
<td>475(246)</td>
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<tr>
<td>Guage</td>
<td>T-411</td>
<td>in</td>
<td>0.0550 ± 10%</td>
</tr>
<tr>
<td>Density</td>
<td>T-410 &amp; T-411</td>
<td>Lb/in</td>
<td>4.5</td>
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<tr>
<td>Tensile (MD)</td>
<td>T-494</td>
<td>Lb/in</td>
<td>≤ 10</td>
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<tr>
<td>Brightness</td>
<td>T-452</td>
<td>%</td>
<td>85.0</td>
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<tr>
<td>Compression</td>
<td>ASTM F806-88</td>
<td>%</td>
<td>0.94</td>
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</tbody>
</table>

AVAILABILITY

PACOPADS™ are available in custom-made sheet sizes, tooled to customer specifications. The complete line of Pacothane Technologies products is available from leading local Distributors Worldwide who offer “Just in Time” delivery from locally-available stocks.

Also from Pacothane® Technologies:

RELEASE PRODUCTS
- PACOTHANE
- PACO•VIA
- PACOLON
- PACO•CLUTCH

PRESS PADS
- PACOPADS
- PACOTHERM
- PRESSPROBE

CONFORMABLES
- PACOFLEX
- PACOFLEX ULTRA
- PACOTHANE plus

CONTAMINATION CONTROL
- PACOGARD

ULTRA HIGH TEMPERATURE
- THERMO-FILM
- THERMO PADS
- THERMOLAM

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