

Lamination Enhancement Products

RELEASE PRODUCTS



PACOTHANE HT 1500 is a two-sided Release Film engineered for Printed Circuit Board Lamination. It consistently contains resin squeeze out and acts as a buffer to protect the copper surface from induced surface related imperfections during lamination. Release characteristics are quick and easy between multilayers.

PACOTHANE HT 1500 SMOOTH is a two-sided Release Film engineered for Printed Circuit Board Lamination. This film is the preferred choice for those applications where the laminated surface requires a minimal matte finish. The film is designed with a lower Rz value to minimize image transfer on to the surface while consistently containing resin squeeze out. The film acts as a buffer to protect the laminated panel from induced surface related imperfections during lamination. Release characteristics are quick and easy between multilayers.

PACOTHANE LE 1500 is a two-sided Release Film engineered for Printed Circuit Board Lamination. Designed for sensitive lamination surfaces that may see secondary process operations such as sequential laminations or legend ink printing it is the preferred choice for Unclad, Stiffener and Kapton type applications where a low extraction residue free surface is critical. The film acts as a buffer to protect the laminated surface from induced surface related imperfections during lamination. Release characteristics are quick and easy between multilayers. LE 1500 is available in a thickness of .0015".

PACOTHANE LE 2000 is a two-sided Release Film engineered for Printed Circuit Board Lamination. Designed for sensitive lamination surfaces that may see secondary process operations such as sequential laminations or legend ink printing it is the preferred choice for Unclad, Stiffener and Kapton type applications where a low extraction residue free surface is critical. The film acts as a buffer to protect the laminated surface from induced surface related imperfections during lamination. Release characteristics are quick and easy between multilayers. LE 2000 is available in a thickness of .002" where easier handling may be required in larger sheet formats.



PACOLON is a line of ultra-high performance two-sided Release Films that withstand operating temperatures in excess of 500°F/260°C. PACOLON films are engineered to provide excellent, contamination-free release during the process of laminating Rigid Polyimide PCBs, all Flexible Circuit Boards, Teflon and other demanding applications. These films provide a super smooth surface for adhesive and resin flow control (Flex Circuits), have low deformation under pressure (controlled, repeatable shrinkage) and provide a residue free extraction on to laminated surfaces.



PACO•VIA 3000 is a two-sided release film engineered to provide an easy and reliable technique for laminating multilayer Printed Circuit Boards which incorporate buried and blind via hole technology. PACO•VIA prevents blind via resin overflow by offering discreet conformability around "Via" holes to minimize resin bleed on the surface of the Circuit.

PACO•VIA 3200 is a two-sided release film engineered to provide an easy and reliable technique for laminating multilayer Printed Circuit Boards which incorporate buried and blind via hole technology. PACO•VIA 3200 utilizes different release characteristics to optimize the degree of resin bleed on the surface where typical post lamination cleaning processes may not be sufficient.

A Division of Multilayer Worldwide Enterprises LLC



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*Protected under U.S. Patent No. 4,753,847 and foreign patents.

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PRESS PADS

Pressure/Temperature
Diffusers

PACOPADS are true pressure equalization press pads engineered to improve the process of laminating rigid multi-layer and flexible printed circuit boards. They provide a soft make-up to replace typical hard make-ups such as Kraft Paper, Reinforced Rubber or other Polymer re-useable products which offer limited pressure equalization benefits. Pacopads offer two functions; help control heat rise with consistent thermal conductivity and insure maximum "Z" axis pressure distribution with greater than 40% compression values consistently under pressures greater than 200PSI. They are easily matched to previous lamination lay-up profiles and are available in thicknesses of .035" and .055".

Multi-Use
Heat Lag Pad

PACOTHERM is a PACOTHANE – clad releasable press pad with the exact same attributes of Pacopads. They are engineered to provide the same benefits in lamination as a single component offering cleaner handling and single stage lay-up for operators to increase productivity while reducing cleanroom inventory. With the possibility of re-use they deliver economically consistent and repeatable controls and easily matched to various lamination profiles as they are available in thicknesses of .035" and .055".

Pressure Testing Kit

PRESSPROBE is a unique Analytical Tool for viewing the effect of pressure within a press. Used to graphically demonstrate, in color, the amount and distribution of pressure across the panel surface and to confirm pressure equalization benefits of PACOPADS.

CONFORMALS

Conformable
Release Film

PACOTHANE PLUS is a two-sided conformable release film (three ply composite construction) specifically engineered for use as a component of The Pacothane Plus System. It brings reliability and consistency to the lamination process of conforming Cover lays and producing Rigid Flex Circuits. Used in conjunction with PACOPADS, the "PACOPLUS SYSTEM" replaces all previous pad make-up materials used in the Flex lamination process.

Conformable
Release Film

PACOFLEX • ULTRA is specifically engineered for the Lamination of Cover-Layers to Flexible Printed Circuit Boards. This product is a robust highly conformable single-sided release film which, when exposed to heat and pressure, becomes extremely soft and pliable for superior conformance to intricate flex part topographies. The soft heat-activated hydraulic center is application-designed to consistently reduce excessive "squeeze-out" and effectively blocks adhesive or resin flow into unwanted areas. The matte finish side easily identifies as the "Release" side placed adjacent to the circuit while the glossy finish is the "Non-Release" side placed adjacent to Pacopads.

Conformable
Release Film

PACOFLEX • 10000 is a single layer two-sided conformable release film that is available in .0105"/267μ thickness. For cover-layer and flex circuit applications that require more hydraulic drive this film must be used with a buffer release film positioned between the circuit and Pacoflex 10000. The other side has a suitable release coating that allows it to be easily removed from separator plates or press pads. Pacoflex 10000 consistently reduces excessive "squeeze-out" of adhesive into pad areas and effectively block adhesive or resin flow into any other unwanted areas. PACOFLEX® 10000 is engineered to provide an easy and reliable technique for the laminating of cover layers and flexible circuits.

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Lamination Enhancement Products

CONTAMINATION CONTROL



Inner Layer
Separator Film

PACOGARD is a special polymer-coated, interleaving slip sheet engineered to provide complete protection to copper inner layers during their movement through the various processing steps within a multilayer printed circuit facility.

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