

Foil Prelam Material Specifications

DEFINITION

Foil Prelam is a patented pre laminate product manufactured by CompoSecure, LLC which utilizes Crown Roll Leaf's foil polyester (PET) material. Through CompoSecure's materials science technology, this foil prelam enhances standard financial transaction cards so that they serve as an attractive, consistently durable marketing message for your clients.

AVAILABLE OPTIONS

Foil Prelam is a clear PET composite material which is available in sheet form, .010" thick (250 microns). The following foil options are offered:

- » Plain Silver/Plain Silver or Plain Gold/Plain Silver
- » Silver Rainbow/Silver Rainbow or Gold Rainbow/Silver Rainbow or Gold Rainbow/Gold Rainbow Holographic
- » A Variety of Crown Roll Leaf Patterns (please refer to Crown's Pattern book)
- » HRI Transparent Patterns
- » Registered Silver or Gold Holograms, stepped up to your specifications (the tolerance for these sheets is +/- 1/32")

Performance:

One sheet of .010" (250 microns) Foil Prelam is placed in the center of a standard .030" (750 microns) buildup. Clear PVC is printed (.008" [200 microns] with overlay, or .010" (250 microns) clear PVC) and laminated on both sides of the Foil Prelam. Generally, clear PVC is used for the front of the sheet and clear or white PVC is used for the back of the sheet. Due to the fact that the metalized PET layer is in the center of the build-up, there are no PET "potato chipping" flatness problems.

Applications:

Foil Prelam is ideally suited to create unique financial transaction and gift cards. Since Foil Prelams are placed in the center of a .030" (750 microns) sheet, unique graphic and security effects can be achieved for identification products such as driver's licenses and national ID cards when clear material is utilized on both sides.

Economics/Pricing:

While the purchase price of Foil Prelam is comparable to other foil based polyesters, the real savings occur with its ease of use. Printing can be done on top of lower cost PVC material rather than directly onto the Foil Prelam, reducing total waste dollars significantly. The application of the Foil Prelam is not implemented until the lamination step, and so no Prelam is wasted during the printing process.

Registered Hologram Prelams:

This should be coordinated with CompoSecure during the product planning period.

Please note that additional one-time origination fees apply.

More Information/Contact:

Minimum foil runs of 10,000 linear feet apply for special foil patterns. Custom Foil Prelam thicknesses and compositions are available - please contact CompoSecure to discuss these options.

Foil Prelam Specification Sheet (Holograms and Diffraction Foil):

Material Usage Intent:

To create premium quality, highly durable plastic cards (primarily used for financial, gift and I.D. applications) that will surpass all other commercially available products in high humidity and stress crack environmental testing.

Composition:

Metalized oriented Polyester with special coatings and adhesive designed to platen laminate to PVC. This product must be substituted for the PVC center layer of the final card construction. It is designed to withstand embossing and ATM use, and the foil is located inside the lamination in order to shield it from abrasion.

Thickness:

Currently .010" (250 microns) + or - 10% is available, but custom thicknesses are available on request.

Form Factor:

Sheets are available. Sheet tolerances are + or - 1/16" (1.59 MM) on diagonals. Register of sheet edge to the holographic image is + or - 1/32" (.8 MM).

Lamination/Platen Temperature:

Optimally laminates at the same temperature as standard PVC.

Diecutting:

Cuts on a very close tolerance (one ten thousandth clearance [.03 MM]) PVC dies. Some angel-hairing may occur.

Storage Recommendations:

Store in original containers in a cool, dry warehouse.

Specific Gravity:

1.45 ± 5%

Please contact CompoSecure for further information and availability at (908) 518-0500, extension 115.

PRELAM PRODUCTS

(Patent #: 6,644,552)

Metalized, Holographic Foil, and OVD Prelam

Product/Description	Features	Benefits
<p>PL10-FF: Unregistered full face foil</p>	<p>A .010" (250 microns) Prelam with an embedded unregistered holographic foil pattern that is protected under the laminate on the full face of the sheet. Please note that there is NO additional hologram origination fee associated with this product. This product is available in sheet or roll form.</p>	<ul style="list-style-type: none"> » This product allows for dye diffusion thermal transfer imaging when a full-face holographic foil is required due to the holographic foil being sub-surface. » Current configurations include: <ul style="list-style-type: none"> - Plain Silver/Plain Silver - Plain Gold/Plain Silver - Silver Rainbow/Silver Rainbow - Gold Rainbow/Silver Rainbow - Gold Rainbow/Gold Rainbow » This sub-assembly is used as the center .010" (250 microns) sheet in the .030" (750 microns) card structure. » Please see the Foil Prelam Product information sheet for more information.
<p>PL10-FFR: Registered full face foil Hologram</p>	<p>A .010" (250 microns) Prelam with an embedded registered holographic foil pattern that is protected under the laminate on the full face of the sheet. A combination of images may be used. Please note that there is an additional hologram origination fee associated with this product. This product is available in sheet form only.</p>	<ul style="list-style-type: none"> » This product allows for dye diffusion thermal transfer imaging when a full-face holographic image is required due to the holographic image being sub-surface. » A full face holographic image is stepped up to any plastic card manufacturer's step and repeat. » This sub-assembly is used as the center .010" (250 microns) sheet in the .030" (750 microns) card structure. » Please see the Foil Prelam Product information sheet for more information.
<p>PL5C-HR/PL5CL-HR: Embedded Registered Spot Hologram</p>	<p>A .005" (125 microns) Prelam with an embedded registered hologram that is protected under the laminate. Please note that there is an additional hologram origination fee associated with this product, unless a stock hologram is chosen. This product is available in sheet or roll form.</p>	<p>This product allows for dye diffusion thermal transfer imaging when a spot hologram is required due to the hologram being sub-surface. Additionally, the hologram is protected so that it will last through the entire 7 or 8 year card life. Surface holograms tend to "wear off" over time.</p>

PRELAM PRODUCTS

(Patent #: 6,644,552)

Metalized, Holographic Foil, and OVD Prelam Continued

Product/Description	Features	Benefits
<p>PL6C-HR/PL6CL-HR: Embedded Registered Spot Hologram</p>	<p>A .006" (150 microns) Prelam with an embedded registered hologram that is protected under the laminate. Please note that there is an additional hologram origination fee associated with this product, unless a stock hologram is chosen. This product is available in sheet or roll form.</p>	<p>This product allows for dye diffusion thermal transfer imaging when a spot hologram is required due to the hologram being sub-surface. Additionally, the hologram is protected so that it will last through the entire 9 or 10 year card life. Surface holograms tend to "wear off" over time.</p>
<p>PL5C-F/PL5CL-F: Embedded foil stripe, 3/8" or 1/2" wide</p>	<p>A .005" (125 microns) Prelam with an embedded registered holographic foil stripe that is protected under the laminate. Please note that there is an additional hologram origination fee associated with this product, unless a stock item is chosen. This product is available in sheet or roll form.</p>	<p>This product allows for dye diffusion thermal transfer imaging when a unique spot hologram is required due to the holographic stripe being sub-surface. Holographic stripes are fairly unique, as most manufacturers choose to hot stamp a spot hologram, or have a full-face holographic foil background.</p>
<p>PL6C-F/PL6CL-F: Embedded foil stripe, 3/8" or 1/2" wide</p>	<p>A .006" (150 microns) Prelam with an embedded registered holographic foil stripe that is protected under the laminate. Please note that there is an additional hologram origination fee associated with this product, unless a stock item is chosen. This product is available in sheet or roll form.</p>	<p>This product allows for dye diffusion thermal transfer imaging when a unique spot hologram is required due to the holographic stripe being sub-surface. Holographic stripes are fairly unique, as most manufacturers choose to hot stamp a spot hologram, or have a full-face holographic foil background.</p>