



Applications by Media Type

Application Spotlight

When trying to evaluate the best media type for your next project, there are a lot of factors to consider. From how the product will handle heat to how it will cut, each property and each film will perform differently. Understanding what your application needs are, your machinery capabilities, and the properties of the materials will ensure you have optimal results. To help you begin your research, below are the film types we offer in our line of coated products, what their features and limitations may be by plastic type, and what applications they are typically recommended for.

Film Benefits and Limitations

Polycarbonate (PC)

Benefits: Multiple finishes available. Available in thick gauges (up to 30 mils), easily formed, embossed and diecut.

Limitation: Not chemical resistant.

Polyester (PET)

Benefits: Heat tolerance of 350°F, high tensile strength, available in optically clear options. Available in heat stabilized option, good chemical resistance.

Limitations: Not recommended for die-cut applications. Not available above 10 mils thick in clear versions, available up to 14 mil thick in white.

Rigid Vinyl (RPVC)

Benefits: Affordable option. Printable across all print methods. Available in multiple colors and finishes. High opacity.

Limitations: Low threshold for heat.

Polystyrene (HIPS)

Benefits: Easily die-cut. Affordable option for temporary applications.

Limitations: Brittle material.



APPLICATIONS BY MEDIA TYPE

Application Spotlight

Polypropylene (BOPP)

Benefits: Cost-effective material, high flexural strength, high impact strength, naturally moisture and chemical resistant.

Limitations: Low temperature resistance. Degrades quickly in UV light and is highly flammable.

If your application requires chemical, scratch or abrasion resistance, we can supply many of the films above with a [hard coating](#) that will offer the protection your product may need. Our coatings can also provide weather resistance, dry-erase-ability, and many other features. Likewise, if you will be printing on film with a digital print method, we offer films specially primed and optimized for a [wide array of digital print platforms](#). Taking these factors into consideration, we've created a chart that may help you narrow down the best choices for your specific application.

You can download the full Media Application PDF chart pictured below [HERE](#).

| PRINT METHOD | MEDIA TYPE | APPLICATION | | | | | | | NOTES |
|-------------------------|--|---|---|------------------------------|--|---|--|---|--|
| | | INDOOR SIGNAGE | BACKLIT SIGNAGE | GENERAL GRAPHICS | PROMOTIONAL | CARDS | INDUSTRIAL | OUTDOOR | |
| TRADITIONALLY PRINTABLE | POLYCARBONATE (PC) | X | X | X | | | X | X | INCLUDES SCREEN, OFFSET, AND LITHOGRAPHIC PRINT METHODS. |
| | RIGID VINYL (RPVC) | X | | X | X | X | X | | |
| | POLYESTER (PET) | X | | X | | X | X | | |
| | POLYSTYRENE (HIPS) | X | X | X | X | X | X | | |
| | POLYPROPYLENE (BOPP) | | | X | X | | X | | |
| | HARDCOATED PET/PC | X | | X | | | X | X | |
| HP INDIGO PRINTABLE | POLYCARBONATE (PC) | X | X | X | | | X | X | HP INDIGO INKS ALWAYS REQUIRE TOPCOAT OR OVER-LAMINATE DUE TO THE SOFT NATURE OF THE INK. |
| | RIGID VINYL (RPVC) | X | | X | X | X | | | |
| | POLYESTER (PET) | X | | X | | X | X | | |
| | POLYSTYRENE (HIPS) | X | X | X | X | | | | |
| | POLYPROPYLENE (BOPP) | | | X | X | | X | | |
| | HARDCOATED PET/PC | X | | X | | | X | | |
| TONER PRINTABLE | POLYCARBONATE (PC) | | | | | | | | HIGHER TEMPERATURES OF TONER PRINTERS LEND THEMSELVES BETTER TO PET BASED FILMS. 10 & 15 MIL PVC'S ARE ACCEPTABLE IN SOME PRINTER TYPES. |
| | RIGID VINYL (RPVC) | X | | X | X | X | | | |
| | POLYESTER (PET) | X | | X | X | X | X | | |
| | POLYSTYRENE (HIPS) | | | | | | | | |
| | POLYPROPYLENE (BOPP) | | | | | | | | |
| | HARDCOATED PET/PC | | | | | | | | |
| UV INKJET PRINTABLE | POLYCARBONATE (PC) | X | X | X | | | X | X | PRINT RECEPTIVE COATING IS RECOMMENDED FOR MANY APPLICATIONS, ESPECIALLY POLYCARBONATES OR APPLICATIONS WITH ADHESIVE APPLIED TO THE INK POST-PRINT. |
| | RIGID VINYL (RPVC) | X | | | X | X | | | |
| | POLYESTER (PET) | X | X | X | X | X | X | | |
| | POLYSTYRENE (HIPS) | X | X | X | X | | | | |
| | POLYPROPYLENE (BOPP) | X | | | | | | | |
| | HARDCOATED PET/PC | X | | | | | X | X | |
| LATEX INKJET PRINTABLE | POLYCARBONATE (PC) | X | X | X | | | X | X | NOT ALL PLASTICS LISTED WILL PRINT WELL ON EVERY LATEX PRINTER MODEL. TESTING IS ALWAYS RECOMMENDED. |
| | RIGID VINYL (RPVC) | X | | X | X | | | | |
| | POLYESTER (PET) | X | X | X | | | | X | |
| | POLYSTYRENE (HIPS) | | | | | | | | |
| | POLYPROPYLENE (BOPP) | | | | | | | | |
| | HARDCOATED PET/PC | | | | | | | | |
| TYPICAL APPLICATIONS | POP SIGNAGE GRAPHIC SIGNS BLOCKOUT SIGNS MENU BOARDS POP-UP BANNERS TRADESHOW SIGNS RETAIL SIGNS | BACKLIT SIGNS SCROLLING SIGNS TRANSPORTATION- GRAPHICS | FINE ART NAMPLEATS OVERLAYS MAPS TAGS FACEPLATES | TABLE TOP TENTS CALENDARS | GIFT CARDS MEMBERSHIP- CARDS GIFT CARDS | MEMBRANE- SWITCH OVERLAY SERVICE BOOKS BUMPERSTICKERS DURABLE LABELS PRODUCT LABELS PROTOTYPES DISPLAYS ELECTRONIC LABELS | OUTDOOR SIGNAGE GAS PUMPS DURABLE LABELS |  A DIVISION OF ES, INC. | |

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By Application

You'll notice the chart is broken out into application categories. For more specific applications, the items listed below are examples of typical applications included within each of these categories.

Indoor Signage: Point-of-purchase (POP) graphics, blackout signs, indoor menu boards, shelf danglers, pop-up banners, tradeshow graphics, retail store graphics

Backlit Signage: Backlit signs, scrolling signs, airport graphics, transportation graphics

General Graphics: Fine art, nameplates, overlays, maps, tags, faceplates

Promotional: Table top tents, promotional items, calendars

Cards: Gift cards, membership cards

Industrial: Membrane switch panels, membrane switch overlays, service books/ instructions, bumper sticker facestock, durable label facestock, industrial label facestock, product label facestock, durable graphics, prototypes, industrial displays, electronic labels.

Outdoor: Outdoor signage applications, gas pumps, labels.

For more detailed information about each of these, watch for our '[Application Spotlight](#)' series of articles: 'Applications by Media Type' for Digitally Printed and Hardcoated Films over the next few months.

