



## Sample Substrate Guide

## 1) PETG (Polyethylene Terephthalate, Glycol Modified)

### What it is

- It is a form of polyester (PET)

### Application

- Interior or exterior signage
- Displays
- Food, cosmetic, pharmaceutical, and blister packaging

### Benefits

- Excellent clarity
- Excellent resistance to abrasion or impact
- Easily printable surface
- Vacform process
- Can be perfed and bent without heat
- Durability to temperatures as low as -28 Celsius
- Lower cost than polycarbonate

### Thicknesses

- Available in a variety of thicknesses (20 pt, 30 pt, 40 pt)

## 2) Bristol

### What it is

- It is a form of heavyweight paper or lightweight card
- Made by layering or laminating papers together to get the desired thickness

### Application

- Paperback or catalog covers, file folders, and tickets
- Back lit application
- Interior or exterior light boxes
- Displays
- Transit shelters

### Benefits

- Smooth finish allows for high quality print receptive surface

### Thicknesses

- Available in a variety of thicknesses (7 pt)

### Colours

- Available in a variety of colours

### 3) Paper Board

#### What it is

- A type of paper

#### Application

- Interior signage
- Limited exterior signage

#### Benefits

- Can be printed two sided
- Can be laminated to endure outside dew
- Can be overvarnished with UV curable inks for outdoor exposure for shorter periods of time
- Thick, strong, rigid paper

#### Thicknesses

- Available in a variety of thicknesses (10 pt, 16 pt, 24 pt, 40 pt)

### 4) ABS (Acrylonitrile Butadiene Styrene)

#### What it is

- It is a strong, durable production grade thermoplastic
- Cannot be used in food safe applications

#### Application

- Interior or exterior signage
- Most commonly used for gas station signage

#### Benefits

- Can be thermal formed
- Excellent durability
- Handles extreme heat and cold well

#### Thicknesses

- Available in a variety of thicknesses (12 pt, 20 pt, 30 pt)

## 5) Polyethylene

### What it is

- It is a polymerized ethylene resin or thermoplastic

### Application

- Interior or exterior signage
- Displays
- Clip strips
- Unbreakable bottles, binders, sheets for packaging
- Vehicle mud flaps

### Benefits

- Excellent flexibility
- Excellent durability with a pretreatment to enable positive ink bonding
- Excellent resistance to abrasion or impact
- Light weight
- Resistant to water

### Thicknesses

- Available in a variety of thicknesses (20 pt, 23 pt, 30 pt, 35 pt, 55 pt)

### Colours

- Available in a variety of colours

### Textures

- Available in a smooth top or matte bottom or sand grain texture

## 6) Polypropylene

### What it is

- Also known as polypropene
- It is a thermoplastic polymer

### Application

- Interior or exterior signage
- Displays
- Clip strips

### Benefits

- Excellent flexibility
- Excellent durability with a pretreatment to enable ink bonding
- Excellent ability to endure moisture

### Thicknesses

- Available in a variety of thicknesses (20 pt, 30 pt)

### Colours

- Available in a variety of colours

## 7) Trans Styrene

### What it is

- Translucent (white) grade of polystyrene
- Good combination of light transmission and diffusion suitable to give the appearance of an even illumination when backlit

### Application

- Back lit application - menu displays, interior public transit vehicle advertising, etc.

### Benefits

- Appearance of even illumination when backlit
- Satisfactory appearance when viewed by reflected light alone (with backlighting turned off)
- Application of an anti static compound after decoration ensures dust particles do not stick to it
- Excellent flexibility

### Thicknesses

- Available in a variety of thicknesses (17.5 point most commonly specified)

### Colours

- Available in a variety of colours

## 8) Styrene

### What it is

- An organic compound
- Also commonly referred to as H.I.P.S. (High Impact Polystyrene)

### Application

- Interior or exterior signage
- Can be purchased translucent for backlit application
- Most commonly used for interior use
- Can be used in food safe applications if virgin resins (not recycled)

### Benefits

- Easily printable surface
- Cost effective
- Can add rubber for flexibility in cold temperatures
- Traditionally not good in extreme cold or heat

### Thicknesses

- Available in a variety of thicknesses (20 pt, 30 pt, 40 pt, 60 pt)

### Colours

- Available in a variety of colours

## 9) MXM™

### What it is

- It is synthetic paper
- Clay filled polyolefin (mix of polypropylene and polyethylene)

### Application

- Interior signage
- Displays
- Especially suited for beverage label applications, brochure covers

### Benefits

- Can be scored and bent
- Excellent durability
- Excellent resistance to handling
- Excellent resistance to moisture and humidity
- Easily printable surface

### Thicknesses

- Available in a variety of thicknesses (10 pt)

### Colours

- Available in a variety of colours

## 10) TransPaque™

### What it is

- Combination of clays and calcined mica give it a pearlescence

### Application

- Interior or exterior signage
- High end banners

### Benefits

- Can be printed two sided
- Can be sewn and grommeted
- Excellent lay flat characteristics
- Excellent durability
- Excellent resistance to handling

### Thicknesses

- Available in a variety of thicknesses

## 11) Scrim Reinforced Vinyl Sheet

### What it is

- It is fiber reinforced PVC

### Application

- Interior or exterior banner
- Tradeshow displays
- Most commonly used for exterior use

### Benefits

- 100% opacity
- Excellent image quality
- Can be sewn and grommeted
- Excellent durability especially against tear and weather conditions
- Excellent resistance to handling
- Water-resistant for outdoor applications

### Weights

- Available in a variety of weights

### Colours

- Available in a variety of colours

## 12) Matte Calendered Vinyl

### What it is

- Smooth, matte finish poly vinyl chloride

### Application

- Interior or exterior

### Benefits

- Easily printable surface
- Excellent durability

### Weights

- Available in a variety of weights

### Colours

- Available in a variety of colours

## 13) Foamcore

### What it is

- Paper outerface
- Foam polystyrene interior

### Application

- Interior signage and displays
- Short-term displays

### Benefits

- Water-resistant for outdoor applications when printed with a protective clear
- Strong but lightweight (rigid)

### Thicknesses

- Available in a variety of thicknesses

## 14) Coroplast™®

### What it is

- It is a plastic imitation of corrugated cardboard

### Application

- Interior or exterior signage
- Most commonly used for gas station signage

### Benefits

- Best suited for decoration with solid colours and coarse detail
- Excellent durability
- Water-resistant
- Strong but lightweight
- Cost effective

### Thicknesses

- Available in a variety of thicknesses

### Colours

- Available in a variety of colours

## 15) Expanded PVC Sintra™

### What it is

- It is expanded plastic with strength similar to medium hard wood but with a much lighter weight

### Application

- Semi-permanent material
- Primarily used indoor or short term outdoor signage
- Displays
- Kiosks
- Hang signs
- Decorating fixtures

### Benefits

- Can be heat bent
- High rigidity
- Excellent durability

### Thicknesses

- Available in a variety of thicknesses  
(1mm, 2mm, 3mm, 4mm, 5mm, 6mm, 13mm)

### Colours

- Available in a variety of colours

## 16) E-Flute Corrugated

### What it is

- It is a paper based board consisting of "crinkled" paper sheet (the flute) glued in-between two sheets of paper liner
- Flexible packaging material

### Application

- Temporary displays
- POP boxes
- Packaging

### Benefits

- Highly biodegradable
- Strong alternative to paper board
- Thin stock has closer fluting for a smoother finish than B-flute
- Light weight
- Superior printing surface

## 17) B-Flute Corrugated

### What it is

- It is a paper based board consisting of "crinkled" paper sheet (the flute) glued in-between two sheets of paper liner
- Flexible packaging material

### Application

- Temporary displays
- Signage
- Packaging

### Benefits

- Highly biodegradable
- Excellent crush resistant properties

## 18) BC-Flute Corrugated

### What it is

- Flexible packaging material
- Double walled board: B flute on top of a C flute, chip centre liner separates the two flutes in the double wall construction

### Application

- Temporary displays

### Benefits

- Highly biodegradable

## 19) Cling Vinyl

### What it is

- It is a PVC film that clings to smooth gloss surfaces such as glass, smooth plastic and shiny metal surfaces
- Surfaces must be clean and free of dust at time of mounting

### Application

- Signs
- Door coverings
- Window decorations
- Mirror decorations

### Benefits

- Decorates smooth surfaces without messy adhesives
- Removable with no residue left behind
- Easy to work with
- Will not lose its shape, colour or cling

### Colours

- Available in a variety of colours

## 20) Low Tac Vinyl

### What it is

- It is a PVC film designed for smooth surfaces
- Surfaces must be clean and free of dust at time of mounting

### Application

- Interior
- Exterior use seldom occurs; usually only if easy removal after short-term period needed
- Window decoration
- Door decoration

### Benefits

- Removable with no residue left behind
- Scratch resistant
- Smudge resistant

## 21) Clear Vinyl

### What it is

- Polyvinyl chloride material, which can be both rigid or flexible
- Most ink colors like red, green, blue, etc. are not opaque enough for clear vinyl. They print transparent on clear vinyl and most likely will either need an additional white ink base printed underneath.

### Application

- Window frames
- Interior
- Exterior

### Benefits

- Transparency lets light shine through

### Thicknesses

- Available in a variety of thicknesses (10 pt)