

## ► Proper Design for Airport Transit and Runway Signage

### Overall

High quality long lasting airport runways signage is best achieved by second surface application of Translucent Cast film under clear polycarbonate. There are several advantages to this method over first surface film orientation or the use of acrylic faces. Furthermore, it is anticipated that first surface application for runway signage may result in premature signage failure through a variety of causes.

Arlon recommends only second surface installations for this demanding application for the following reasons:

1. The look of the signage is very sharp with high uniform gloss. Although glare may be thought to be a problem, in fact, there is no glare at all until the angle of observation is shallower than 15 degrees.
2. The chemical and impact resistance of polycarbonate is significantly higher than vinyl.
  - Jet fuel and exhaust gases are a constant environmental contaminant.
  - Blowing grit and debris is made worse by constant jet engine blasts.
3. The abrasion resistance of polycarbonate is significantly higher than vinyl.
4. Polycarbonate will provide an incidental UV shield for the vinyl.
5. Pressure washing can be more vigorous and frequent against polycarbonate than vinyl.

### Joining

- All film to film joins are to be overlapped to avoid induced light seams. The overlap must be 1mm minimum.
- It will be best to apply the darker (usually black) color first followed by the lighter color (usually yellow) so as to minimize overlap color bands.

### Application

- Polycarbonate must be oil and grease free as well as clear of dust and other contaminants. These will cause low adhesion and/or bubbles if present during application.
- Polycarbonate must be free of trapped moisture before vinyl is applied.
- Installation may be done wet or dry provided that wet applications be allowed one to two days of air drying before sign fabrication.
- Film selection may be a combination of Black HP or Translucent and Yellow Translucent (typical foreground color).

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