



173P | Technical Data Sheet

High Density Overlay (HDO)

173P Highway Sign HDO

Description -

Paneltech's Highway Sign HDO is a specialty overlay composed of a bleached kraft paper saturated with high levels of phenolic thermoset resin. Its high resin content gives a smooth, glossy surface ideally suited to use as highway signs. The overlay is formulated for excellent surface adhesion.

HDO 173P bonds well to an MDO cushion sheet as well as commonly used wood substrates. 173P exceeds the requirements of the PS 1-07 Voluntary Product Standard.

Features -

- ✓ Hard, abrasion resistant surface
- ✓ Smooth surface with excellent adhesion properties
- ✓ Improves weatherability over untreated panels
- ✓ Quality controlled continuously by online weight and volatile sensors, calibrated hourly
- ✓ Each sheet visually inspected
- ✓ Caul release system formulated for painability and no buildup

Specifications -

Base Paper: 50 lb/3000 sf Bleached Saturating Kraft
Resin Content: 48% ± 1.5%
Weight: 81 gsm / 166 gsm
Caliper Thickness: 0.20mm (0.008 in.) (Before pressing)
Color: Light Yellow
Opacity: Medium

**Technical Data Sheet (continued)****High Density Overlay (HDO)***173P Highway Sign HDO***Laminating Recommendations:**

For best results, 173P should be applied over substrates with an exterior type glue line and have a process moisture content of not more than 8%. Press cycles may vary dependent upon press temperature. Release cauls are required between the press platens and panel overlay. To eliminate buildup and sticking, these cauls should be used only with other compatible release systems. These release cauls should only be used on Highway Sign HDO. Some concrete form releases have compounds that may reduce the desired adhesion properties of Highway Sign HDO. A minimum temperature of 285°F (140°C) at 185 to 200 psi (13.0 to 14.1 kg/cm²) and a minimum press cycle of 9 minutes should be met. Panels require minimal cooling after pressing.

Applications:

Highway signs

Other exterior applications where a smooth, weather resistant surface is desired

Packaging -

Sheet Dimensions in (cm)	50 in (127cm) x 99 in (252cm)	50 in (127cm) x 124 in (315cm)
Options	(Sheet Length, Sheet Width Sheets per Unit Adjustable)	(Sheet Length, Sheet Width Sheets per Unit Adjustable)
Sheets Per Unit	2000	1000
Total Area Measure sf (sm)	34,375 sf (3195 sm)	27,986 sf (2601 sm)
Gross Weight lb (kg)	2437 lb (1108 kg)	1526 lb (694 kg)

Storage Recommendations -

Recommended storage conditions are 70°F (21°C) or less in a dry location with the original packaging intact. High temperature and humidity will lead to blocking. Open rolls or pallets should be repackaged in the polyethylene material provided or equivalent. Under these conditions, the expected shelf life is 6 to 12 months.