# TECHNICAL SPECIFICATIONS



## **DELNORTH 3MM PLASTIC GUIDE POSTS**

Part Number PP314D2

#### **DIMENSIONS AND SPECIFICATIONS**

Material	Delnorth Plastic Guideposts are manufactured from specially formulated high impact UV stabilised premium quality rigid PVC and can be re-cycled.
Length	1400mm
Overall Width (facing traffic)	105mm
Curvature	20mm
Thickness	3mm
Recommended exposed length above ground	1000mm
Shape	"C" channel - 10mm depth. Radius 125mm

#### **DEFINITION**

The 3mm Delnorth Plastic Guidepost is a unique Australian made flexible delineated guidepost which is installed using a posthole borer or Delnorth Installation Driving Kit. It is capable of withstanding repeated impacts by vehicles in both directions with minimal damage to the post or vehicle.

The 3mm Delnorth Flexible Plastic Post complies with all requirements of Transport SA Master Road Works Specification Section 240 – 2.3, 2.5, 2.6, 2.7, 3.1 and 3.2.

#### **DURABILITY**

Delnorth Plastic Guideposts are capable of retaining 85% of their colour, appearance and physical properties for at least 5 years when exposed to the wide range of extreme Australian weather conditions.

#### **COLD RESISTANCE**

The Delnorth 3mm Plastic Posts were conditioned overnight in ambient conditions not exceeding 2°C and proved capable of straightening themselves instantly when bent for each of the 4 bends carried out at ambient temperature of 1°C. The posts then passed the 1kg Steel Ball drop test at ambient temperature

of 1°C. This test consists of a 1kg steel ball being dropped from a distance of 1500mm through a vertical frictionless guide to impact the middle of the post which was in a horizontal position beneath the guide. This test was repeated 5 times and passed each one.

#### **HEAT RESISTANCE**

The Delnorth 3mm Flexible Plastic posts were then conditioned in an oven for 2 hours at 62°C and proved capable of straightening themselves within 30 seconds when bent at 90° for each of the 4 bends. The tests were completed within 2 minutes of removal from the oven.

#### **FINISH & COLOUR**

All surfaces of Delnorth Plastic posts have a smooth opaque white finish that can be cleaned as required.

#### FIELD RIGIDITY TESTING

The following tests were conducted:

- Dynamic: The Delnorth 3mm Flexible Plastic Posts were observed not to deflect more than 75mm from upright nor oscillate unduly under a gusty wind load at 50kph.
- Static: A 1kg load was applied at right angles and centrally to the top of the post in its weakest direction.

The post did not deflect more than 75mm from its rest position.

#### **GROUND WATER RESISTANCE**

The Delnorth Plastic Posts are totally impervious to water regardless of ph. Value, or duration of immersion.

# **IMPACT RESISTANCE**

The posts remained capable of selferecting to vertical and remained serviceable after the following tests:

- 10 head on impacts to traffic at speeds of 100kph.
- 5 side impacts at an angle of  $70^{\circ}$  to traffic at 90kph.

## **HYDROCARBON RESISTANCE**

The Delnorth Plastic Posts were totally immersed in commercial grade petrol for periods of one hour with no change in appearance or properties.

#### FIRE RESISTANCE

The posts were tested for 2000 seconds (33 mins), supported 60mm below a 2000 watt silica rod element. The posts did not ignite nor show any trace of discoloration.

#### **DELINEATORS**

Delnorth 3mm Flexible Plastic Posts can be fitted with delineators complying with AS1906.1 and all relevant Australian Standards.