

MODEL 7040

The Geotechnical Systems Australia Pty Ltd [Inclinometer Casing](#) is used as access tubing for the traversing biaxial inclinometer probe. The readings from this probe can be used to measure displacements relating to landslides, dam-walls, pilings and other large-scale excavations.

FEATURES

- Compatible with all standard inclinometer probes
- Self aligning and self coupling
- Detachable and reusable
- Flexible, impact resistant and corrosion resistant ABS plastic
- Accurately machined grooves
- Quick and simple assembly
- Flush coupled
- Highly visible yellow colour



DESCRIPTION

The Geotechnical Systems Inclinometer Casing functions primarily as an accurate guide for the inclinometer probe. The Inclinometer casing consists of four equally spaced precision-machined internal grooves, which guide the inclinometer probe along the length of the borehole.

When ground movement occurs, the casing is also displaced. Traversing the probe along its length reveals changes in its profile. The rate, depth and extent of these changes are calculated by comparing current readings to initial readings.

Inclinometer Casing

SPECIFICATION	INCLINOMETER CASING	Model 7040
Outer Diameter		70mm
Inner Dimension		58.50mm
Wall Thickness		5.75mm
Length		3000mm
Weight (per length)		3kg
Pack Size		3080 x 400 x 200 mm (12 Lengths)
Material		ABS (Acrylonitrile Butadiene Styrene)
Weight of Pack		45kg
Colour		Yellow
Modulus (at 20 deg C)		2000 Mpa

ASSEMBLY

The assembly of Geotechnical Systems inclinometer Casing is quick and simple. Each length of casing has a male and female end fitting which eliminates the need for couplings.

As shown in the diagram each casing length snaps tightly onto the next. The key located on the male end fitting ensures that each casing length accurately aligns with the next, and the connection between adjacent lengths is flush coupled. Each connection is sealed with a watertight O-Ring seal.

Once the adjacent lengths are snapped together a thin plastic strip is fed through a hole into a machined groove within the connection. The thin plastic strip locks the connection with respect to the tensile force associated with the placement of long and consequently heavy lengths.

A significant feature of the connection is that the plastic strip can be easily removed. This means that the casing can be detached,

removed and then reused, should an obstruction be encountered during installation. Flush coupled caps are fitted to the bottom of the casing.

The Inclinometer casing is preferably assembled just above the collar and then fed into the borehole. During assembly the casing is suspended above the hole by a chain and clamp. A steel cable connected to the bottom of the casing is also recommended for deep installations.

