

HYDROSTATIC SETTLEMENT CELL METHODOLOGY

MODEL 4850

MS4850-01

The Geotechnical Systems Australia Pty Ltd [Hydrostatic Settlement Cell](#) has been designed to measure the vertical displacement of a remote point.

MANUFACTURE AND SUPPLY

Geotechnical Systems manufacture the Hydrostatic Settlement Cell. Cells are held in stock in component form. Most orders can be supplied within two weeks of order. Should the order be in excess of our standard stock level then Geotechnical Systems will prepare an acceptable schedule of deliveries in consultation with the client to suit the construction program. The instrument is supplied by nominated courier or delivered to site by Geotechnical Systems staff. Geotechnical Systems is a Quality Endorsed Company conforming to AS/NZS ISO 9002:1994 and AS/NZS ISO 9001:2000.

INSTALLATION

Installation

Dig a trench for the settlement cell and tubing to lie in. This trench should be dug with a low point at the cell and a gentle even gradient towards the reservoir. At no point should the difference in elevation between the reservoir and the cell plus 150% of the expected settlement be greater than the range of the system. The flatter the initial installation the greater the available range of settlement however more time will be spent de-airing the tubing. A 100mm layer of sand should be placed in the trench and levelled off. The tubing should be unrolled and laid out flat adjacent to the trench. The tubing should be laid on the prepared sand bed and piles of sand placed on top to hold it in position. Backfill may now commence. The reservoir should be mounted in a safe location preferably away from the area of expected settlement. It should be periodically surveyed by conventional methods to establish its elevation.

Filling

The tubing should be filled with a suitable water/glycol mix from one end only. The other end should be open to the atmosphere. Filling should be slow and constant. The filling should continue until the liquid runs clear of bubbles at the other end.

Operation

Operation of the instrument is detailed in the Model 4850 Hydrostatic Profiler Operation Manual.

COMMISSIONING

Geotechnical Systems will commission instrumentation in the presence of the client's representative. Training will be given in the use of the equipment as required. A record of all installation data will be kept and provided to the client after commissioning is complete.

WARRANTY

All Geotechnical Systems products are warranted for a period of 3 months from date of supply.



**Quality
Endorsed
Company**

ISO 9002 Lic 4022
Standards Australia

GEOTECHNICAL SYSTEMS AUSTRALIA PTY. LTD.

Specialists in Geotechnical Instrumentation

ACN 006 720 887
ABN 28 006 720 887

