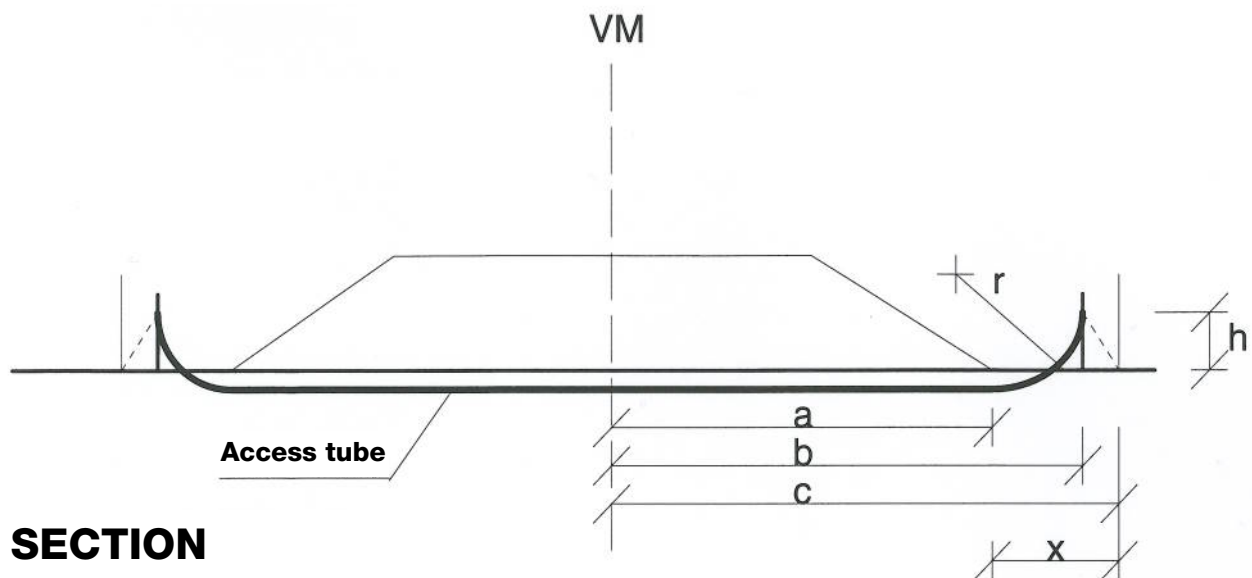


MANUAL

Installation of access tube

Settlement monitoring.



SECTION

1. Use PE tubing with OD/ID 75-60/65-50 mm aprox.
2. Install the tube in principle as above. The (A) measurement is the length from embankment centerline to the ground level. C is $A + 1-2\text{m}$ so that you get an even Meter measurement from centerline. B is $C - 0,5\text{m}$ this is where you place a steady pole (75*75mm for example). Fix the tube on the pole ($H = 0,5-1\text{m}$) cut the tube at a full meter on each side from the centerline for example Left 25m. It shall be carefully embedded in a shallow trench, at least 150 mm deep. In case of rockfill the trench have to be at least 300 mm deep and refilled with fine graded soil, not coarser than sand. Any deformation makes it impossible for the $\varnothing 25\text{ mm}$ measuring probe to pass.
3. Make sure that the minimum bending radius (r) is 2.5 m.
4. Cover the ends to prevent objects from entering and thus blocking free passage for the probe.
5. Mark the actual length from the centerline at each tube end.
6. Arrange for a reference point close to the end from which the tube is to be measured. The best is a rod to firm bottom on which the probe can be placed upon the same level at each measuring sequence. The next best is to use e.g. the top of the pole but you then have to connect it to the level system each time the settlement is monitored.