

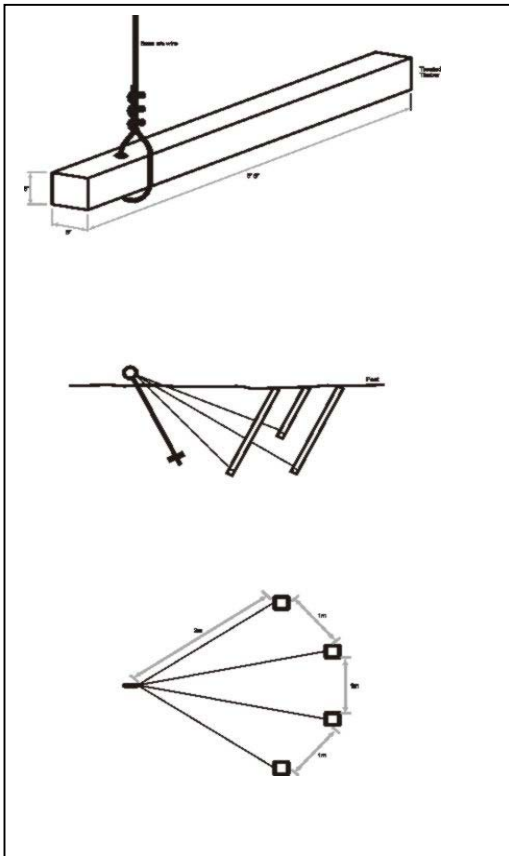
FAQSHEET8 Anchors in Peat

There are various techniques used to provide the required anchoring loads in peat. The optimum method will depend on the type of peat, the water content, the depth of peat and the underlying ground conditions. All anchors must be proof-loaded.

1. Duckbill Anchors

If there are ground conditions under the peat suitable for the duckbill-type drive-in locking anchor and the peat is 2m or less deep then this is the preferred method. Anchors are fitted with strops of adequate length that can be terminated with rope grips at a height just above peat level. The strops are stainless steel to prevent corrosion.

Anchors are locked and tested as usual and will be capable of similar performance to that in the ground conditions underlying the peat.



2. Buried Stobs

This is the most common method, suitable for most peat conditions but requiring peat depths of 2m or more. Based on techniques used in the high-tension fencing industry.

A screw-in anchor is fixed at the required radius. The stobs are driven into the peat until below surface level and then the stainless steel strops are tensioned through the screw-in eye. Each stob should be tested, by adding more as shown in the diagram the required loading can be achieved.

3. Excavation – Deadman Anchors

Where there is insufficient peat cover and the sub-soil is not adequate for duckbill-type anchors then there is no alternative but excavation and the burying of a deadman anchor. This can comprise a railway sleeper with hole drilled to permit use of a screw-in as the anchor point or use of a similar sized large fencepost drilled to permit use of a stainless steel strop as used on the stobs.

Backfilling will usually require the addition of rocks and hardcore to provide adequate deadweight.

4. Excavation – Rock Bolts

If the peat is shallow but covering bedrock then excavation can be followed by rock drilling and the fitting of rock anchor bolts. Backfilling can be with the excavated peat as the load is carried by the rock anchor.

NOTE

When mounting a mast on peat it is essential that the area of the mast baseplate is extended by the use of timbers to spread the load. If the mast sinks into the peat the guy wires will slacken and severely reduce the maximum design windspeed. All anchors must be proof-loaded.