Installation instructions

Buoyancy control with geogrid

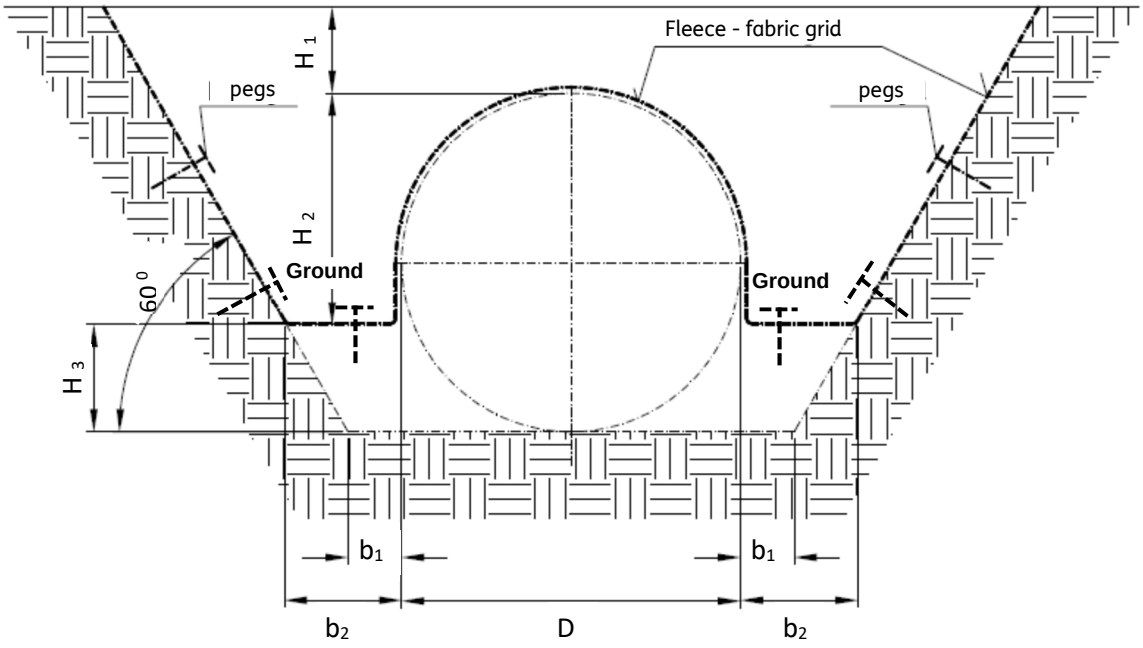
To be agreed before installation:

- If the chamber manifold is installed in pressing groundwater, stratum water or slack water, this must be taken into account in the design.
- The traffic load and maximum groundwater level must be specified.
  Use the FRANK questionnaire for chamber manifolds for this (see the geothermal section at www.frank-gmbh.de).
- If groundwater level has not been considered during the static design, a sufficient drainage of seepage water must be used for soils that are impermeable to water.
- A buoyancy control system must be provided even for temporary standing water (e.g. trench during the construction period).

Groundwater / buoyancy control

Chamber manifolds made of FRANK spiral pipe must be secured against floatation in the case of groundwater or stratum water.

The chamber manifold may be secured on site using a fabric mesh or a fleece fabric mesh, depending on the soil structure.
For example, you can use the Armatex G40/40 PVA woven geogrid or the Armatex MRS combigrid 40/40-150.
The grid must be secured against slipping using ground spikes.



The final mounting dimensions H 1 to 3 and b2 are defined according to the maximum groundwater level and the buoyancy calculation.

The following must be noted when laying the chamber manifold and backfilling the working area:

- The subsoil of the trench bottom must have sufficient load capacity.
- The casing is placed on a bed of sand.
- The trench must be backfilled with non-cohesive material.
- The material used for filling must be compressible, permeable, shearing resistant, frost-proof and free of sharp items (soil group G1 in accordance with ATV A 127).
- **The installation instructions for FRANK chamber manifolds must be observed.**

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