

Concrete Modular Tanks

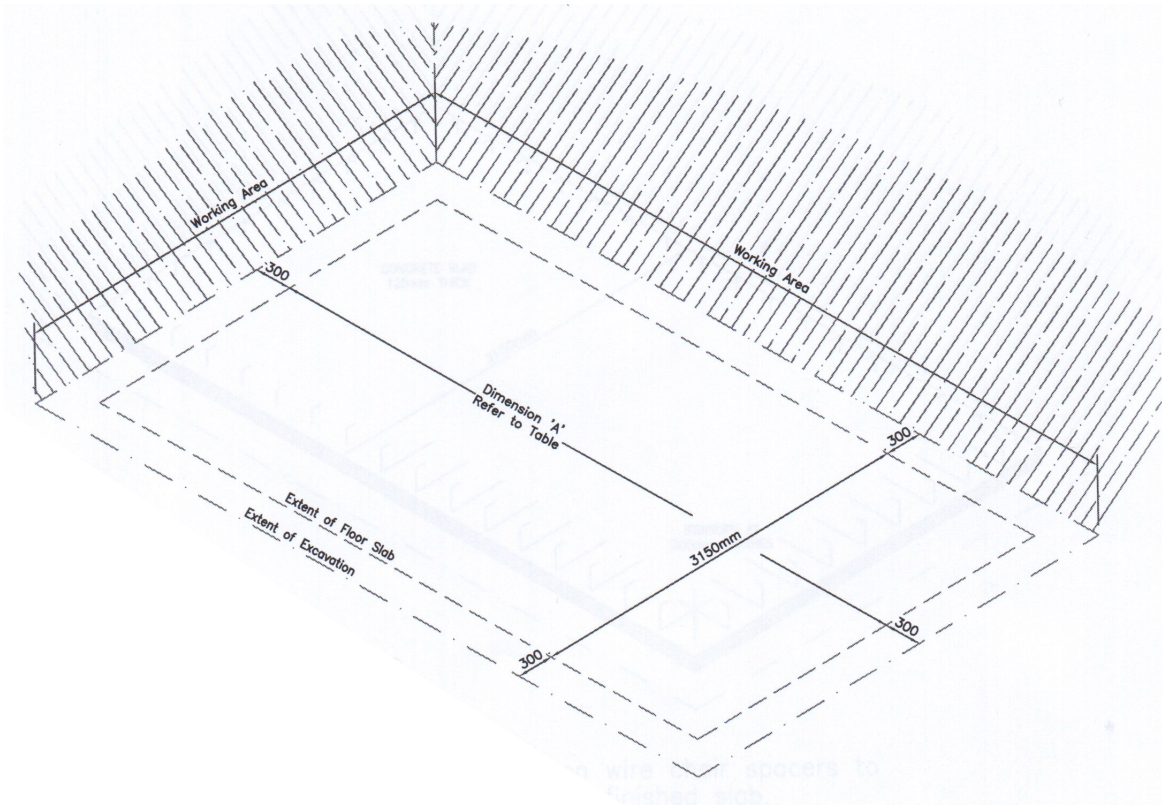
Installation Guide



Kingfisher Direct Limited - Unit 12 - Retford Enterprise Centre - Randall Way - Retford - Nottinghamshire -
DN22 7GR

Tel: 01777 858009 Fax: 01777 858010

Foundations & Hardcore



Site Excavation

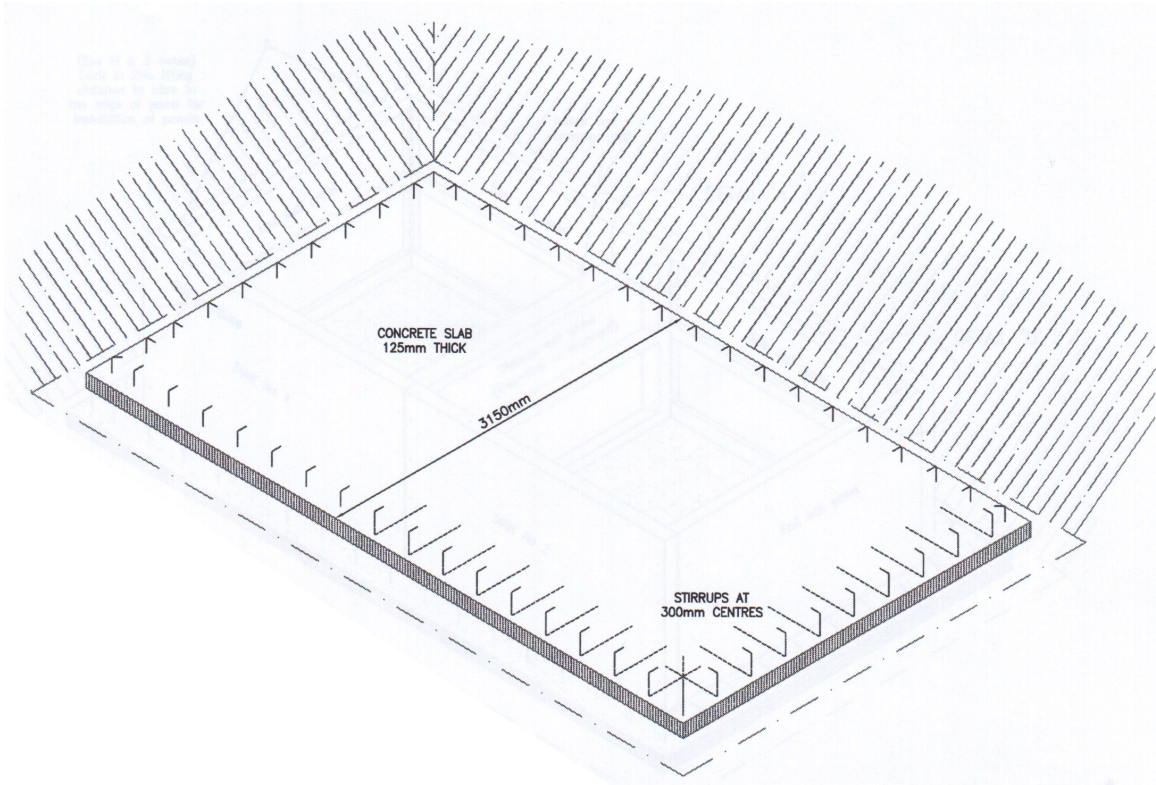
Set out working area using the above drawing as a guide.

Remove site of top soil and vegetation to leave a firm base prior to excavating for bases.

Remove any stones from site where the foundation slab will lay.

No. of Tanks	Dimension 'A'
1	3040mm
2	5480mm
3	7920mm
4	10360mm
5	12800mm
6	15240mm
7	17680mm

Construction of Floor Slab



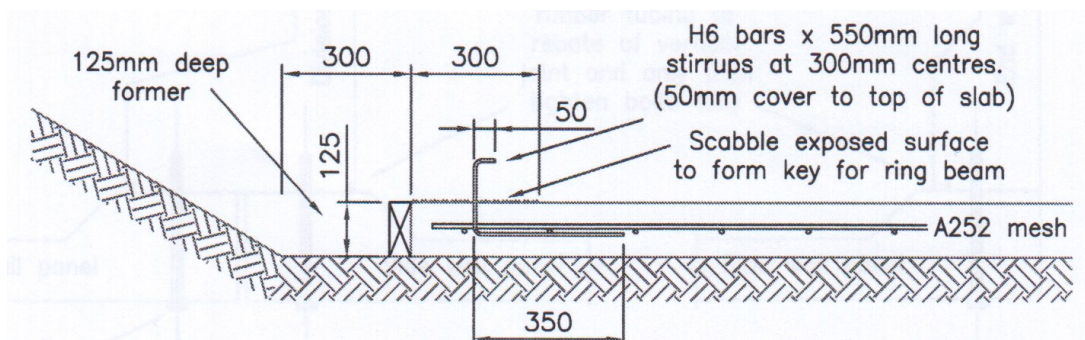
Set out floor slab formers using drawing above.

Lay one layer of A252 mesh supported on wire chair spaces to provide 50mm minimum cover to top of finished slab.

Provide H6 reinforcing bar x 550mm long stirrups to perimeter of slab at 300mm centres. Ensure stirrups provide 50mm minimum cover to top of the slab.

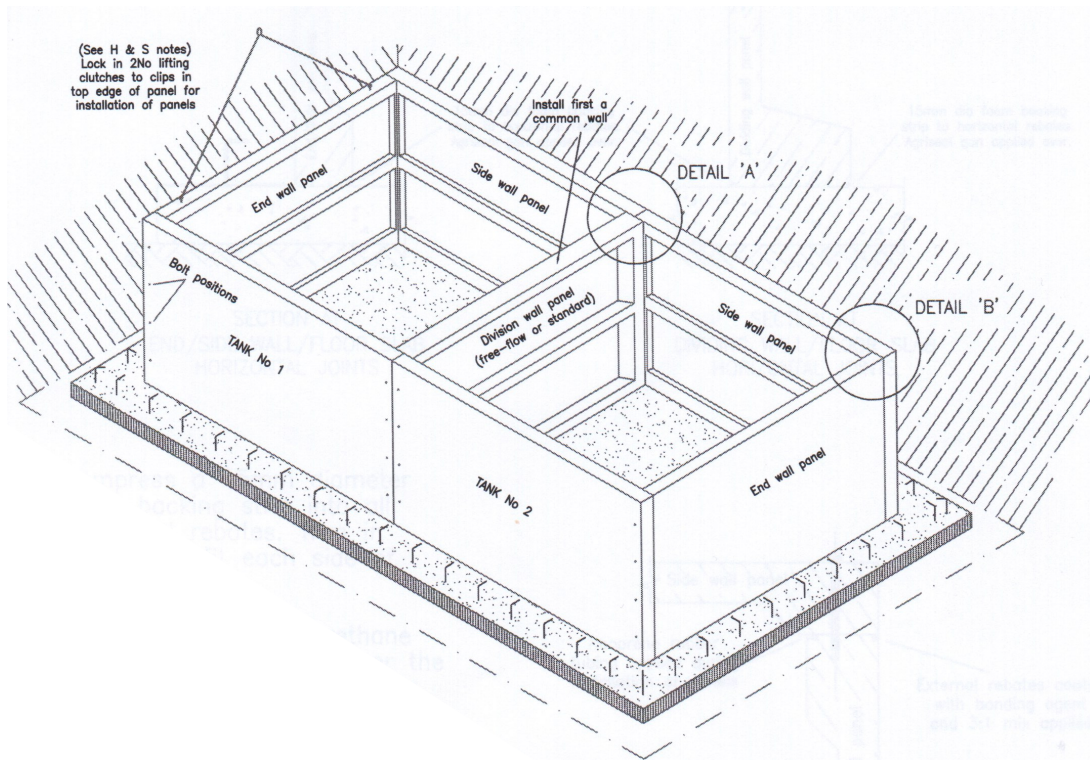
Concrete grade to be C40 or RC40 using 20mm maximum aggregate medium workability.

Scrabble or expose aggregate 300mm around perimeter in preparation for ring beam (See Image below).



Installation of Tank Walls

Tank Construction



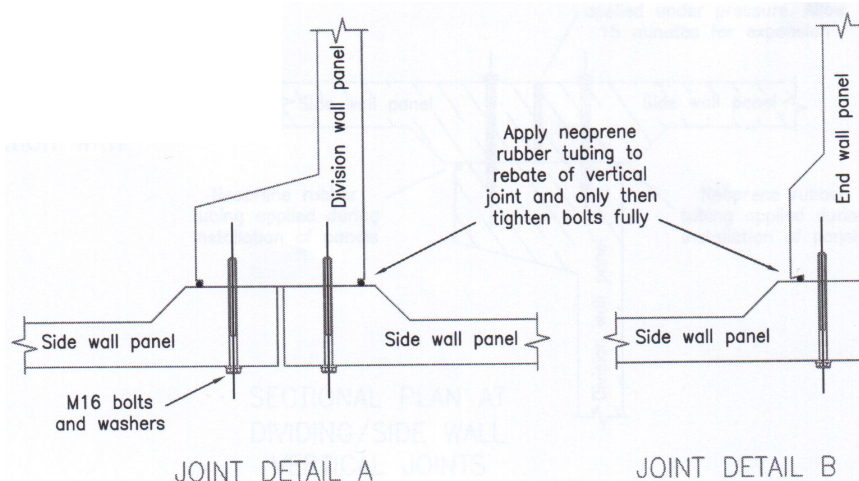
Mark setting out line on top of one side of concrete slab to guide installation of panels.

Square off from s / o line and install first common wall (end wall for single tank) and prop securely into position.

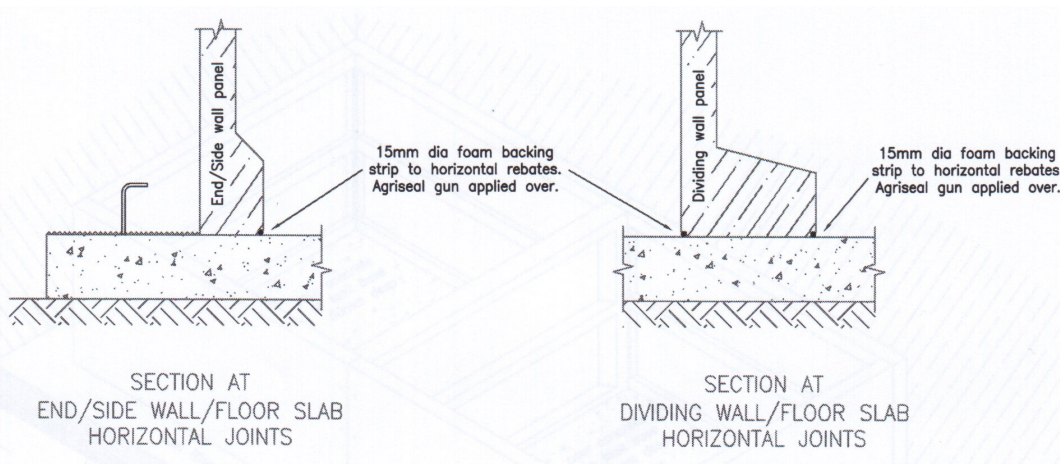
Erect adjoining side panel positioning Neoprene tubing into vertical rebate of joint. Apply bolts and loosely tighten. (Note it is not possible to position Neoprene into captive rebate after the joint has been closed).

Erect the two remaining sides of the tank following the same routine.

Repeat for each successive tank.



Sealing & Jointing of Wall Panels



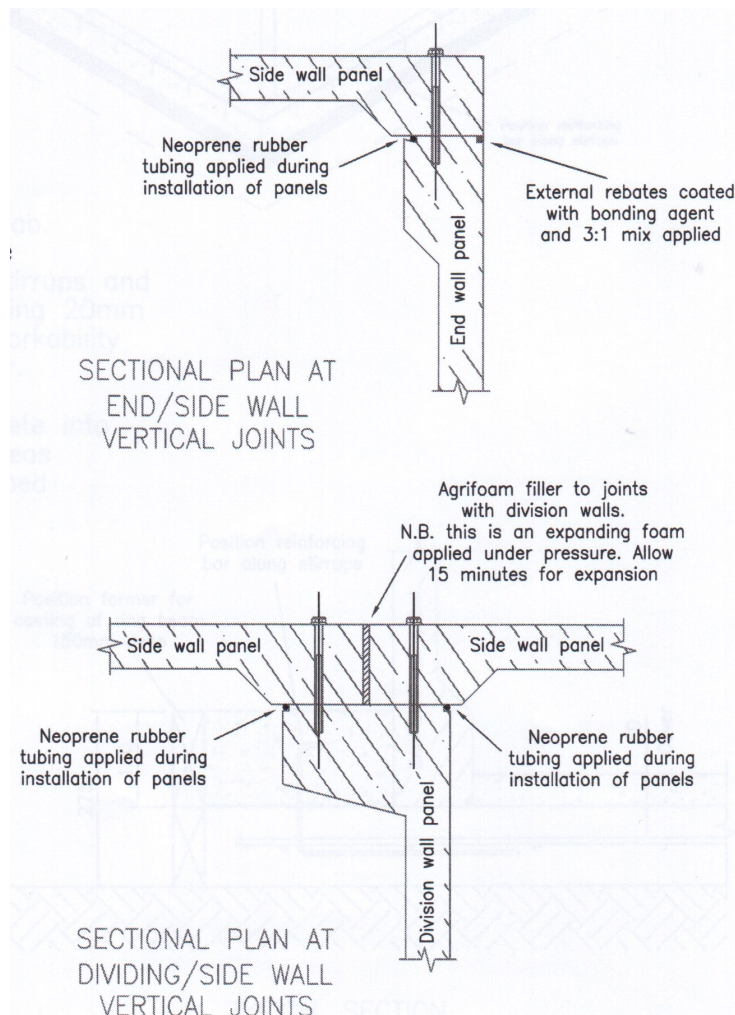
Compress a 15mm diameter foam backing strip into all horizontal rebates. Trim in corners to fit each side of vertical tubing.

Apply Soudaflex polyurethane sealer into the rebate over the foam backing strip. Tool into place as separate instructions. Note care must be taken in the corners to ensure a continuous seal over the vertical Neoprene.

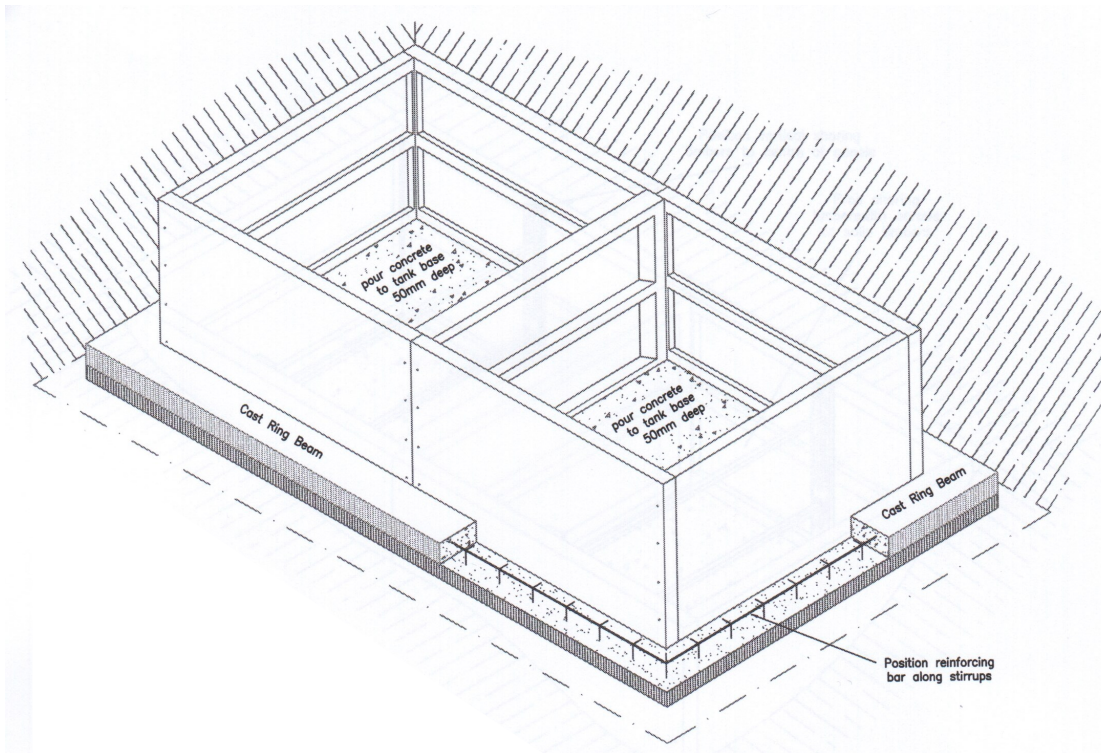
Coat all external end wall rebates with a bonding agent (Feb-bond, Uni-bond or similar approved).

Using a 3:1 sand/cement mix, trowel up each rebate to give an external seal.

Apply Soudafoam expanding foam filler to all vertical wall joints at their junction with division walls.



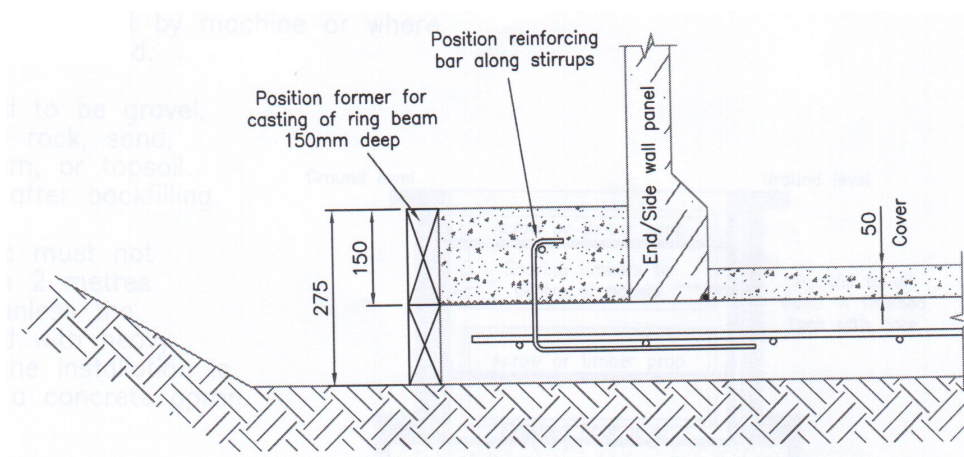
Construction of Ring Beam & Tank Base



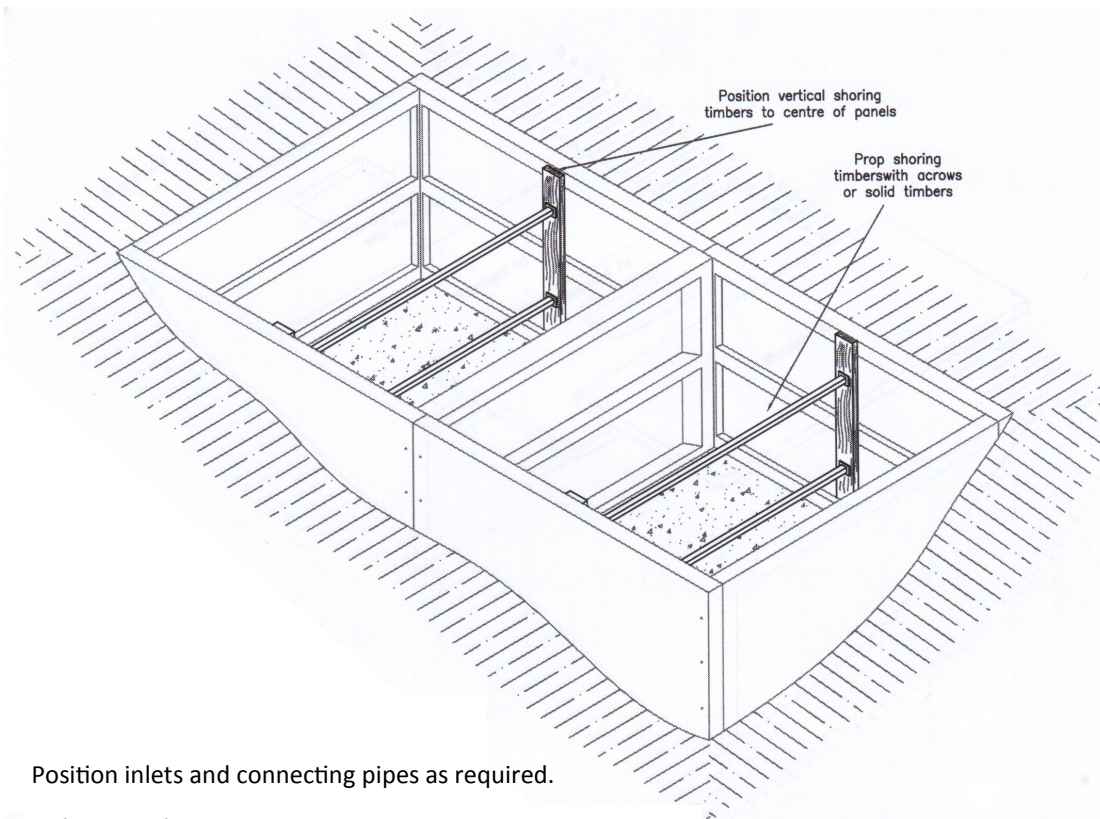
Set out ring beam formers to perimeter to form upstand 150mm above concrete floor slab.

Position reinforcing bars into stirrups and pour concrete C40 or 4C50 using 20mm maximum aggregate medium workability compacted by a vibrating poker.

Pour 50mm minimum of concrete into base of tanks ensuring that areas adjacent to walls are well tamped to give a good seal.



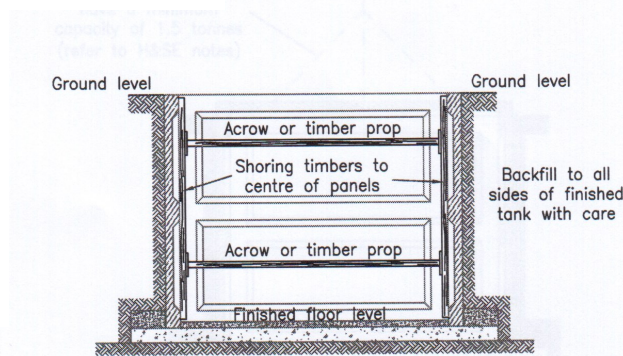
Backfilling of Excavation



Position inlets and connecting pipes as required.

Before backfilling, side and end walls are to be propped full height to avoid cracking during this overload situation.

Position vertical shoring timbers to centre of panel, prop horizontally with acrows or solid timber sections.

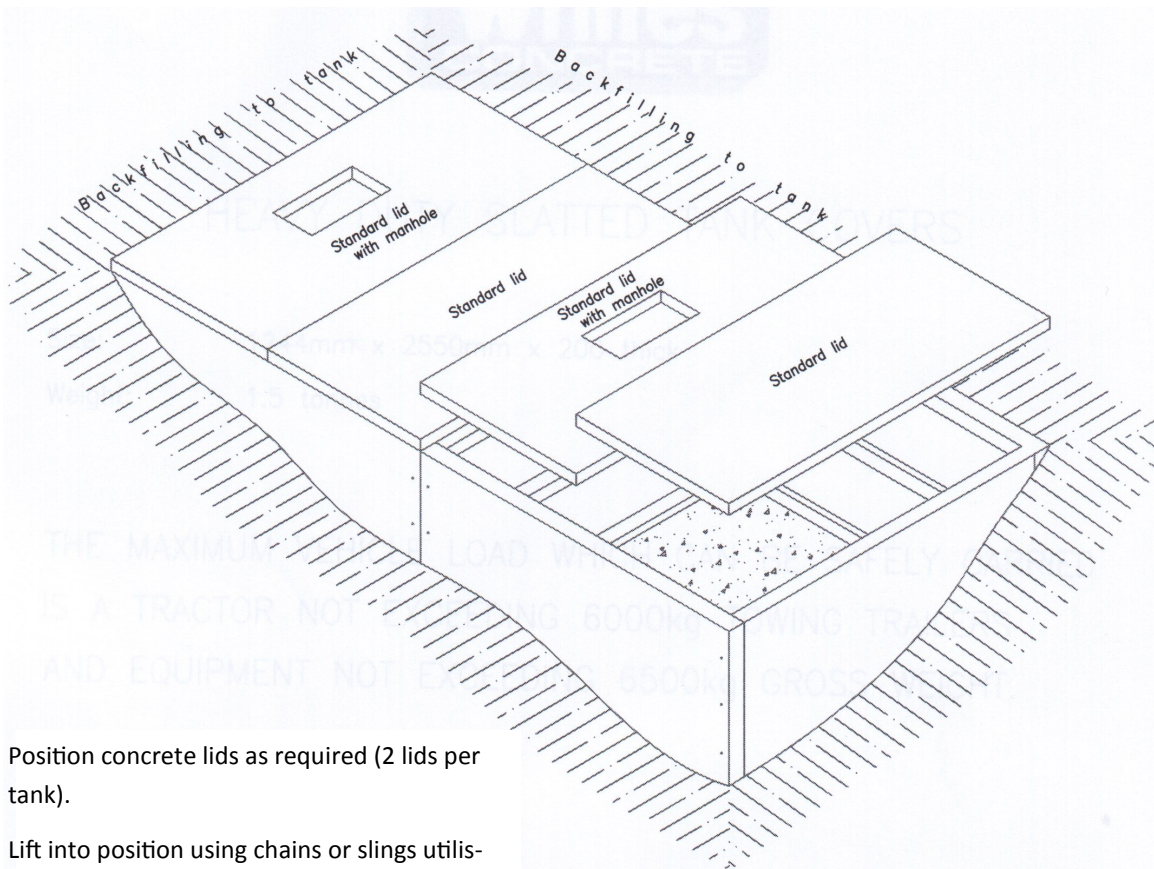


Backfill material should be gravel, rubble, crushed rock, sand, sandy clay, loam or topsoil. Remove props after backfilling.

Vehicular traffic must not approach within 2 metres of tank walls unless the tanks are fitted with heavy duty lids and the installation is surrounded by a concrete apron.

Installation of Concrete Lids

Tank Construction



Position concrete lids as required (2 lids per tank).

Lift into position using chains or slings utilising the lifting eyes which are supplied with the standard tank lids. (Retain the lifting eyes for future use)

Manholes used must be of key lifting type or lockable to comply with the Health and Safety Executives requirements.

3 point lift chains or slings used must have a minimum capacity of 1.5 tonnes (refer to H&SE notes)

