UNDERGROUND VERTICAL TANK INSTALLATIONS

GUIDANCE NOTES FOR NON-TRAFFICABLE POLYETHYLENE UNDERGROUND TANKS; 800, 1100, 1400 1700 AND 2,000 LITRE

MADE IN BRITAIN

www.enduramaxx.co.uk
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FLUID MANAGEMENT INNOVATION

INSTALLATION INSTRUCTIONS

CHECKLIST BEFORE INSTALLATION

Congratulations on purchasing this quality underground tank product from Enduramaxx. This tank is made from 100% polyethylene which has a high durability and resistance to environmental influences. If the tank is filled with a medium other than water, this must be approved by the manufacturer. The manufacturer assumes no liability for misuse of any kind if this has not been approved in advance.

Having selected the site for the underground tank check with all available maps and plans to ensure there are no concealed obstructions, existing pipes, cables, trunking, etc. that cross or impinge on the site. Under all circumstances, a physical survey should also be carried out for the suitability of the ground, maximum groundwater levels which occur and drainage capability of the subsoil and types of load which occur prior to installation.

Ask your Local Authority if in doubt.

A pre-survey of the site will also reveal any potential difficulties with flooding caused by the water table itself, run-off drainage from surrounding areas, ground saturation in storm conditions, or tidal conditions (if appropriate).

WARRANTY

Where it is necessary to install the underground tank in ground where there are potential flooding problems, care should be taken to ensure that the tank cannot be forced out of the ground by the upward pressure of any ground water in the excavation. It should be noted that an underground tank will, when empty, float on as little as 50mm (2") of water, and the upward thrust of that tank fully immersed in water can be surprisingly high. For sites where the water table is above the bottom of the tank, the use of cement slurry as a bed will prevent the base of the tank from buckling. In any case, always ensure that:

- There is no damage to the tank. Inspect carefully for any damage from contact with sharp objects or by mishandling during transport to site or off-loading.
- The tank is surrounded in concrete to the top.

IMPORTANT NOTE
Installation of this tank must be undertaken only by suitably qualified and experienced personnel.

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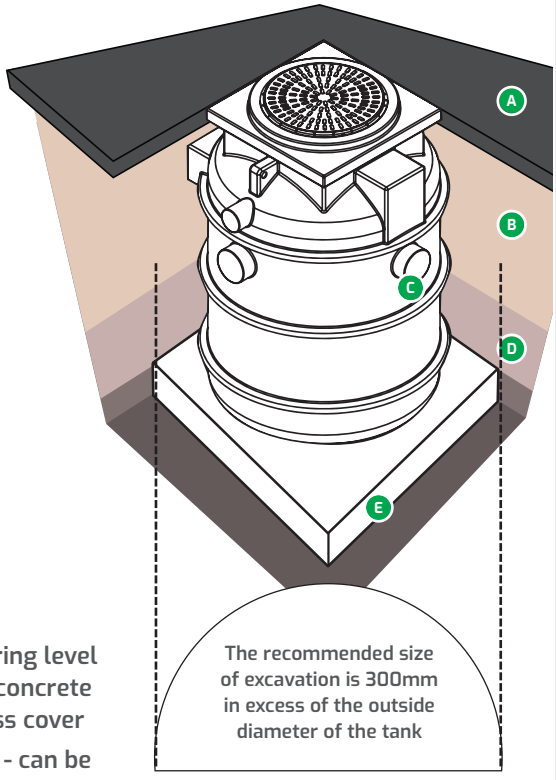
NON-TRAFFICABLE INSTALLATIONS WITH GROUNDWATER PRESENT

1. Check the depth (invert) of the inlet pipe as this will determine the excavation depth – see tank inlet specification.
2. The recommended size of the excavation hole should be 500mm on each side more than that of the tank. The excavation hole must be horizontal and guarantee sufficient load-bearing capacity.
3. Ensure any water is pumped from the installation hole during installation, we recommend lining the walls with a heavy-duty sheeting to act as a waterproof membrane.
4. Lay a minimum of 200mm (8") of 20mpa concrete in the bottom of the excavation hole and level.
5. When the base is hard, using suitable lifting equipment - lower the underground tank gently onto the base, ensuring that no stones or other sharp objects are allowed to fall in at the same time, or damage to the tank may result. Fill the tank at least 1/4 with water to act as a ballast.
6. Once the tank is in place, check for level and position, and backfill the tank with at least 250mm of concrete allowing for 200mm overlap at the top of the tank. Concrete must be tampered in around the tank (mechanical compaction machines must not be used). Damage to the tank must be avoided during compaction.
7. You must progressively fill the tank with water to the level of the backfill to stabilise pressures on the tank. This water should remain in the tank until the concrete has fully hardened.

Typical installation for tank with galvanised lid



- **A** Depending on the load, bring level of compacted backfill or concrete up to flush with the access cover
- **B** Suitable backfill material - can be concrete al the way up if required
- **C** Cut off spigot(s) to suit inlet flow direction
- **D** Concrete to a minimum level of lower locking ribs on tank
- **E** 20mpa concrete base

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NON-TRAFFICABLE INSTALLATIONS WITH NO GROUNDWATER PRESENT

1. Check the depth (invert) of the inlet pipe as this will determine the excavation depth – see tank inlet specification. In any case the minimum height from the bottom of the tank to the underside of the inlet pipe must be 600mm (24").
2. The recommended size of the excavation hole should be 300mm (12") more than that of the tank.
3. Lay a minimum of 100mm (4") of 20mpa concrete in the bottom of the excavation hole if there is no potential water ingress or flooding problem.
4. Whilst the base cement or concrete is still slurry – and using suitable lifting equipment - lower the underground tank gently onto the base, ensuring that no stones or other sharp objects are allowed to fall in at the same time, or damage to the tank may result.
5. Once the tank is in place, check for level and position, and adjust / prop as necessary before leaving it for the slurry to set, ensuring that the top of the excavation is covered with a tarpaulin or suitable PE sheeting to protect it from rain or wildlife.
6. Fill the tank with water up to and over the first rib - or in any case, at least300 - 400mm (12 – 16") in depth.
7. Ensuring the tank is secure on its base – and will not move laterally – pour concrete up to at least the level of the first reinforcing rib on the tank.

Please note

a. Local regulations and site conditions will determine whether concrete should be used further up than the first rib, or simply a suitable backfill material (e.g., sand or pea-shingle which will compact easily). It is recommended that no backfilling is undertaken until formal approval of the installation has been obtained from the Building Inspector

8. Finish around the tank top at ground level, ensuring the area is adequately protected from access by vehicles or wildlife (e.g., secure fencing) – see specification sheet for details of cover (lid) used and its load rating.

9. If the tank is sited in a driveway, it must be surrounded in concrete, and a reinforced concrete slab (min. 200mm thick) must be used to spread the load away from the tank on to a firm surround.

Damage to the tank must be avoided during compaction.

- Any covering must be constructed in such a way as to avoid any weight transference to the tank.

  Enduramaxx Underground Tanks are not load bearing.

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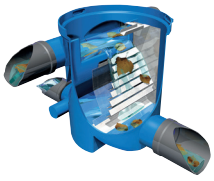

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