



Ejectors



How are Fiberglass Basins Installed?

The depth of an excavated hole required to install a fiberglass basin is determined by depth of the basin. Manufacturers recommend the excavation be 6 inches (15 Centimeters) deeper than the basin depth, below the finish grade. The diameter of the excavation should be large enough to allow access for piping connections with a minimum diameter of 12 inches larger than the basin diameter.

If the excavation is flooded, then water must be removed to a depth of 3 inches before preparing the bed of compacted material. The water level must be maintained to avoid uplift of the basin due to displacement during installation.

It is desirable to provide a 4 to 6 inches deep bed of compacted round or angled crushed rock below the basin. The crushed rock should provide diameters between .125 to .750 inches. The bedding should be compacted by hand or vibratory tamper.

When handling the basin, provide the support necessary to avoid fracture or structural damage. **Do not place a chain around the basin.** Use nylon strapping or similar arrangement around the basin. The alternative would be a spreader bar above the basin with chain hoist to lifting brackets or a ballast support flange provided at the bottom of the basin.

Level the basin within half a bubble as measured on the cover. **Do not attempt to level the basin by pushing down from the top.** Level the basin by lifting the basin from the hole and removing material from the bed.

Backfilling around the basin should be done with materials and methods to prevent leaks, cracks or failures. Approved materials include angular or crushed stone, crushed gravel, broken coral, which contain little or no fines per ASTM D2321. Backfill must be free of lumps, boulders, frozen material or debris.

The initial back fill should be a 6 inch layer of material to establish a level grade and affix the basin in position. Compact backfill to a modulus of 700 pounds per square foot. Continue to backfill in 12 inch layers around the basin to the desired depth below grade.

The basin can be encased in concrete using the same method, however concrete must be poured in 6 inch layers to insure level stable grade and avoid damaging the basin.

Finally bolt the cover in place using an approved gasket material to effect a gastight seal.



Figure 1 – Fiberglass Ejector Basin

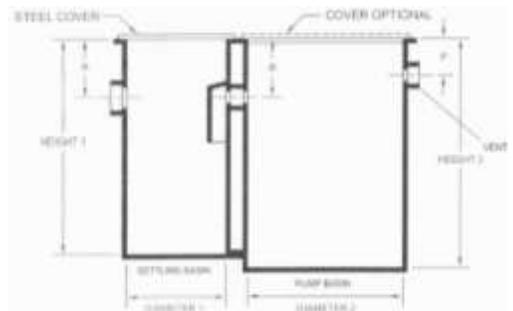


Figure 2 – Fiberglass Sump and Settling Basin

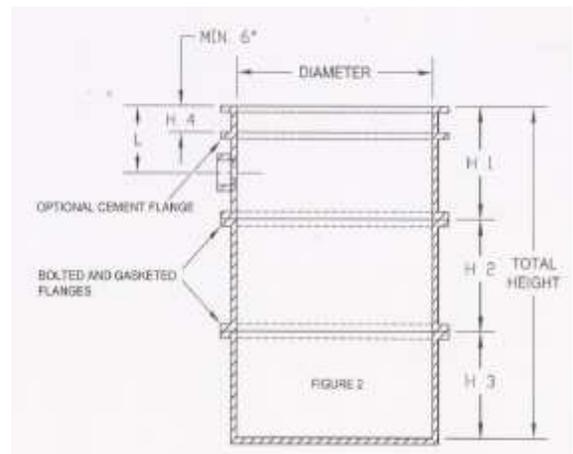


Figure 3 – Sectioned Fiberglass Basin with Cement Flange