

Power requirements

- One 460 volt, 3 phase, 10-amp connection to the main breaker located in the main controller cabinet.
- One 110 volt, 1 phase, 15-amp connection to the AC power inlet located at the bottom of the main controller cabinet.

Stub in requirements and plumbing

- 4" drain line from showers, terminating at a shut-off valve.
- 4" greywater bypass.
- 4" overflow.
- 2" potable water supply with cross connection control device.
- 2" potable water bypass equipped with shut-off valve.
- 2" greywater service line.

Site preparation

**Our standard model commercial systems use holding tanks that are designed for underground installation. Aboveground tank options are available. **

The BRAC Commercial Grey Water Recycling System's holding tank(3) must be installed underground. Care should be taken that there are no instruments or heavy machinery placed on top of the holding tank(3). It is recommended that the holding tank(3) be placed no more than eight (8) feet below ground, leaving no more than three (3) feet of backfill over top.

- Never install the holding tank(3) or filter housings(1,2) where subsurface water levels can reach their bases, otherwise, drainpipes could be required.
- Do not install system components in a low point of the grounds where surface water can collect.
- Never cover or bury the access covers to the filters housings(1,2), holding tank(3), or access boxes.
- Never enter the holding tank(3) after installation without prior authorization or safety precautions.
- Landscape over the BRAC Commercial Recycling System to prevent soil erosion. Take care when landscaping to avoid damaging system components.

Step 1 - Special requirements

- Maximum depth of backfill over the holding tank(3): 90 cm (36").
- Side clearance to the holding tank(3): 60 cm (24")
- Maximum depth of bedding: 30 cm (12")
- Note: For bedding, use gravels 0-20 mm (0-3/4") or well-compacted and leveled sand. **Fig. 3**

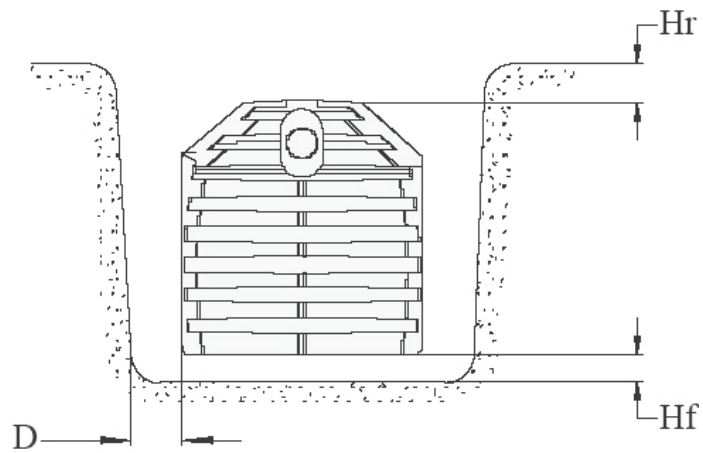


Figure 3

Step 2 - Preparing bedding and installing the holding tank

- Thoroughly grade and compact the bedding.
- Check the direction of flow marked on either end of tank. (Arrows near the inlet and outlet indicate the direction of the flow). **Fig. 4**
- Lower the holding tank into trench and check for level.
- Level as required.

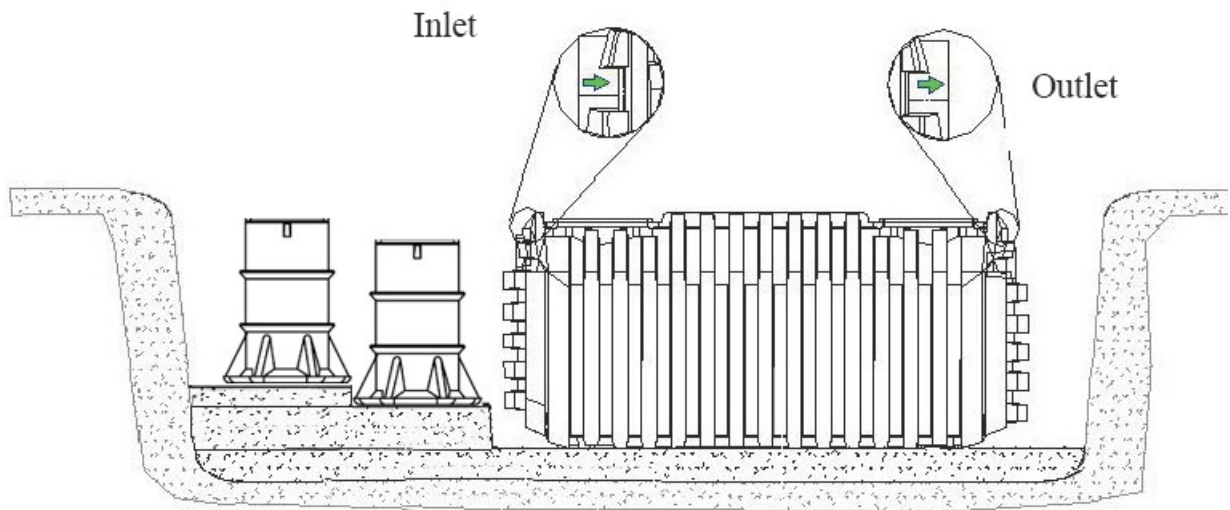


Figure 4

Step 3 – Making the system connections

- Begin filling holding tank(3) with minimum water level required for start-up procedures(until foot valve is submerged). Approximately 15% full.
- Make greywater “in” and greywater “out” connections to the holding tank(3) with approved pipe and fittings.
- To properly vent tank, install a **TEE** fitting on the greywater pipe immediately before the holding tank(3) and on the overflow pipe immediately after exiting the holding tank(3). Terminate vents according to local codes (fig.1).
- Care must be taken when backfilling so as to not damage system components.
- Backfill and tamp around holding tank until the base height of the secondary filter housing(2) is reached.
- Properly pack backfill to insure proper footing for the secondary filter housing(2).
- Connect the secondary filter housing(2) to the holding tank.
- Repeat the previous two steps for the primary filter housing(1).
- Connect the greywater outlet from the primary filter housing(1) to the greywater inlet of the secondary filter housing(2).
- Connect the incoming greywater pipe from the facility to the primary filter housing’s greywater inlet and complete the bypass overflow connections to the sewer (fig.1).
- Backfill should be carefully placed and tamped with maximum 20mm (¾) gravel to a height of 30cm (12”) over the top of all the pipes and should be free of boulders, cinders and frozen earth.
- Complete the riser assembly and final grading.



Eco-\$mart, Inc.

(888) 329-2705

info@eco-smart.com

www.eco-smart.com