

Green Dome Odour Filters

Installation Procedures

June 11



ARMATEC

THANK YOU

... for purchasing the Green Dome Odour Filter. Check that all the parts have arrived undamaged - contact ARMATEC if there are any problems. The carbon is transported within the unit ... remove the carbon and store in a dry place until ready to install the unit.

HOW IT WORKS

Odourous air enters the base unit of the Green Dome Odour Filter, and passes up through a bed of the carbon where the various nuisance odours are removed. The cleaned air is then vented to atmosphere through the holes in the top module. The Green Dome Odour Filter uses proven carbon adsorption technology; with a typical carbon life of between 2 and 5 years.

Green Dome Odour Filters are designed to be partially buried for lowest visual impact. The unit can be installed up to 10 metres away from the pump station as required. There are no moving parts to service or maintain. The Green Dome Odour Filters are constructed in corrosion resistant fibreglass, and are robust withstanding occasional knocks without cracking,

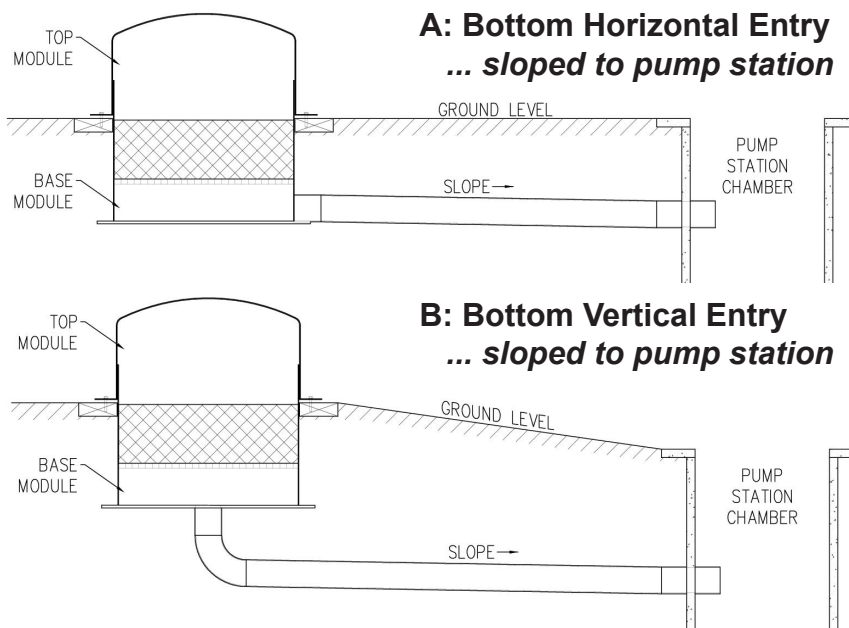
GENERAL LAYOUT - PUMP STATIONS

The base module can be either side entry or bottom entry - choose the one best suited for your topography. Two key points that must be achieved are:

- Slope connecting duct back to the pump station to drain away condensation - the air from the pump station is warm and 100% RH and moisture will condense.
- Top of base module must be above any possible local water level so that it does not flood.
- Choose location for Green Dome to minimise visual impact, and that is out of the way of vehicles, workmen etc.



Green Dome Odour Filters for pump stations and air relief valves ... low profile and green for minimum visual impact.



Green Dome Odour Filters arrive packaged with the carbon inside. Check for damage, and store until ready to install. The anti-floatation flange on the bottom of the base module can be seen above.

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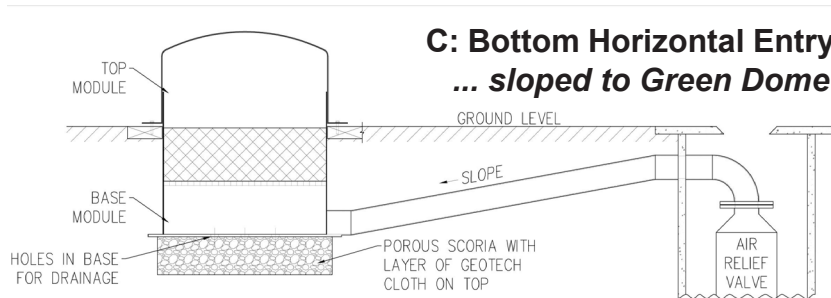
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GENERAL LAYOUT - AIR RELIEF VALVES

The same layout options "A" and "B" can be used for air relief valves. Also a third option "C" can be used, because the amount of condensation from air relief valves is relatively small. In "C", the connecting duct is sloped towards the Green Dome and any condensation can drain from the base of the unit - the ground must be well draining. This layout is often preferred when the top of the air relief valve is close to ground level. It cannot be used in areas of high water table.



HOW TO INSTALL

1. Choose the preferred layout, and check ground levels. Choose the location for the Green Dome ... up to 10 metres away ... for minimum visual impact and out of way of workers and vehicles.
2. Locate the base module in the hole, and check the final height of the top module. There is a maximum depth that the top module will seat down to - it can sit higher, but should sit down onto the base module by at least 100mm.
3. Ensure the top of the base module is at a height above ground level that precludes ground water from entering the unit, even in storms or floods.
4. Orientate the base module to suit the position of the inlet duct.
5. Install the inlet duct. For options "A" and "B", ensure the duct is sloped back to the pump station to be self-draining. Seal the duct penetration at the pump station or chamber.
6. For option "C", make sure the ground under the base unit is porous to allow any condensation to drain away.
7. Backfill the base module, ensuring that the sides of the base module remain vertical. The anti-flotation flange on the base module will ensure that it is firmly held in position.
8. Install or pour a concrete support ring (or other) to which the top module will be bolted. Hold down bolts (4 x M16) can be located in the concrete during the pour.
9. Verify that the perforated plate, nylon mesh and layer of foam packing used to support the carbon are in position and haven't moved during transit.
10. Carbon from ARMATEC comes either loose in bags (up to 25kg in weight), or in one or more mesh bags. With mesh bags, place into the base module ensuring a complete coverage of the base area and an even depth.
11. Load the carbon into the base module. If more than one type of carbon has been specified, ensure that the correct order for charging is followed. Optimum Green Dome Odour Filter performance will only be achieved if the unit is filled with the specified layers of carbon. The carbon bed should be levelled between different carbon types and also when the loading operation is complete.
12. Place the top module in position over the base module and fix in place.
13. Observe safety requirements at all times; wear gloves and a dust mask when handling carbon, and wash hands when finished.

CHANGING THE CARBON

New carbon is available from ARMATEC. We recommend you keep spare carbon in store ready for installation. When a sewage odour breaks through, and can be detected coming from the Green Dome, it is time to change the carbon. Remove the old carbon by plastic shovel or vacuum system, and dispose of to landfill. Load the new carbon in as described above, and put the domed lid back in place. The unit is back in operation again.



Place base module in place, connect duct and check final height of top module.



Backfill base module and prepare to pour concrete pad for top module bolting.



Pour concrete pad with hold-down bolts.



Place carbon in unit and level. Note the top of the base module must be well above any possible local water level.

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