

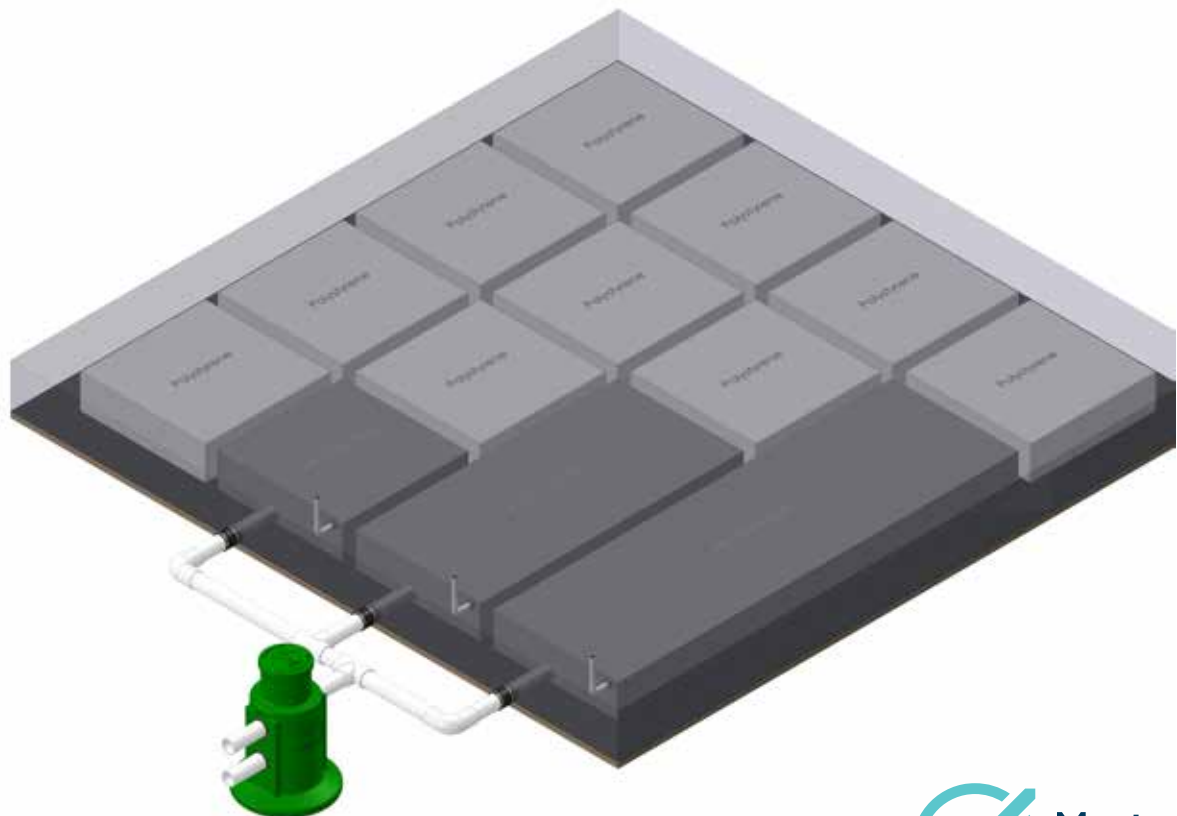


Doing Good From The Ground Up



Underfloor Peace of Mind.

# STORMSLAB INSTALLATION & MAINTENANCE GUIDE



**WINNER**  
NZ Plumbing Awards 2022  
**PRODUCT OF THE YEAR**



Doing Good From The Ground Up

## **DRAWING NOTES**

Refer to structural specification sheet for concrete reinforcing and other notes.

Contractor to confirm all levels and dimensions and locate and mark all services and drains on site before commencing work.

Contractor to notify a chartered professional engineer if any of the design requirements outlined in this drawing package are not achievable.

## **TANK LOCATION – PROXIMITY TO NEARBY STRUCTURES**

The location of the tank excavation is the responsibility of the contractor and the tank owner. The contractor is to follow the limitations of the diagrams shown or notify a chartered professional engineer for a site-specific consultation.

## **SOIL CONDITIONS**

This design assumes site soils will meet the requirements of NZS3604.2011.

Classification of 'Good Ground'. Contractor to confirm site exhibits these properties or notify chartered professional engineer for consultation.

## **BACKFILL AND BASECOURSE**

1. Clear all topsoil and organic material to form clean and level building platform.
2. Confirm that the ground conditions meet NZS 3604:2011 good ground with 300kPa ultimate bearing capacity with soil expansiveness no greater than class H1,  $Y_s = 60\text{mm}$  max.
3. Import hardfill if required to raise ground level. Compacted in 150 loose layers.
4. Cover building platform with 25mm (min) sand blinding.
5. Cover blinding with DPM, lapped and taped, in accordance with NZS 3604.

## **STEEL WORK**

All steel work to be in accordance with the detail provided in the Consent drawings.

## **TANK PLACEMENT**

All tanks to be placed with the spigot outlet/inlet aligned to the outside of the slab. This then allows connection to the manifold using flexible couplers. The inlet/outlet pipe spigot should be aligned under the footing allowing for connection outside of the slab/floor area. Tanks may be placed alongside the footing only if the footing is reinforced with piles.

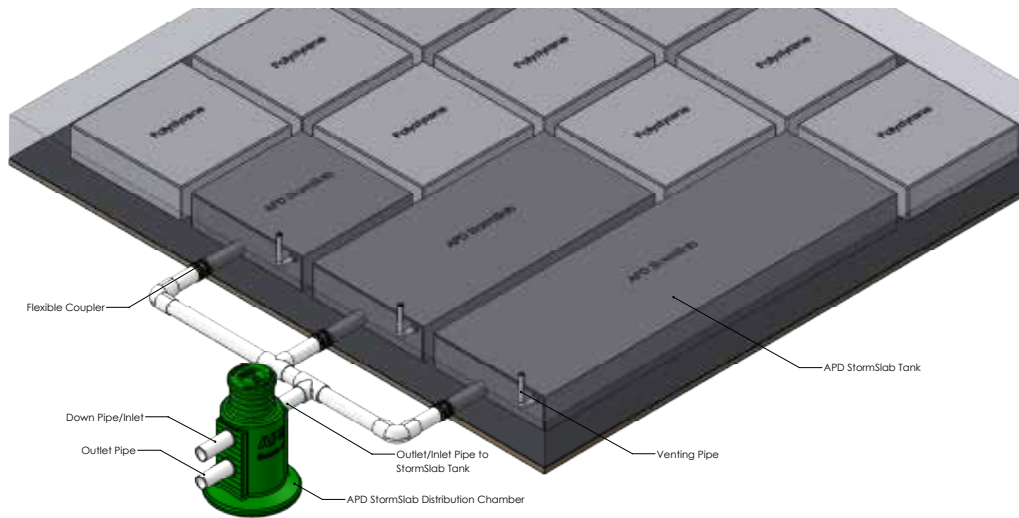
Note: The StormSlabs are delivered with the spigot sealed. This will need to be cut off before connecting up to the manifold.

APD recommend filling the tanks with water via the vent prior to pouring concrete to eliminate the risk of the tank floating.

Please see detailed drawings and PS1 documentation in the Members section of our website.  
[www.apd.co.nz](http://www.apd.co.nz)

## TANK PRESSURE TESTING

All tanks are pressure tested in the factory before dispatch.



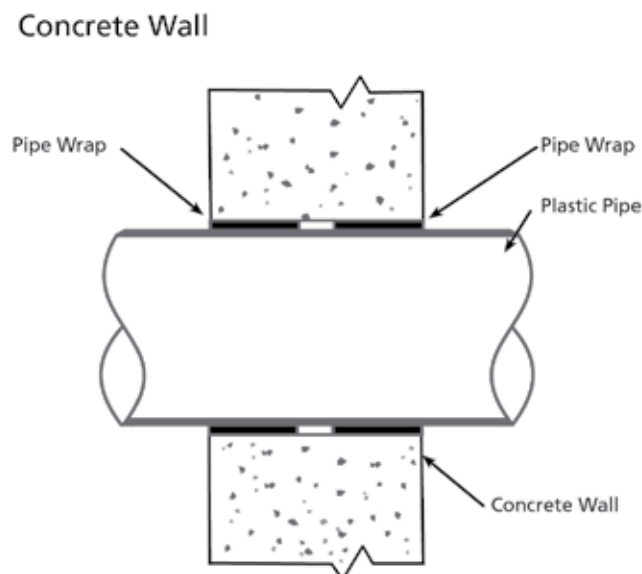
Vent pipe is to be passed through the concrete slab and up into the wall space through the bottom plate. It can then be vented out through the cladding as per the building code for DWV pipe passing through the waterproof membrane.

Vents may be manifolded together.

This will allow the tank to completely fill up.

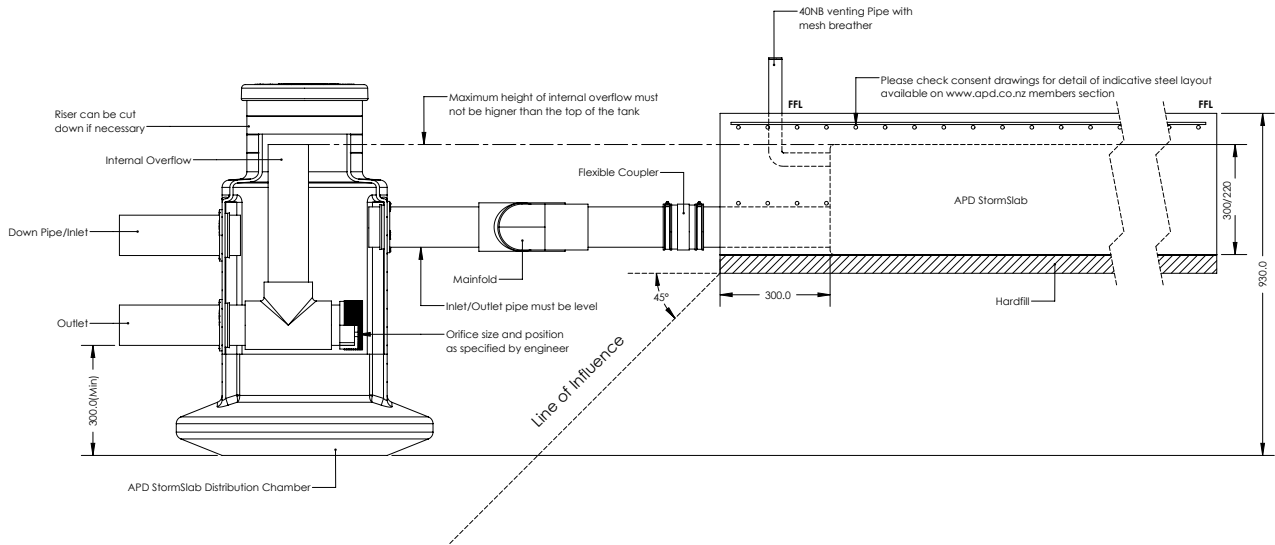
Please ensure that the overflow level in the Distribution Chamber allows for this.

Vent pipe to be wrapped to allow for ground movement.





Doing Good From The Ground Up



StormSlab Connection Cross Section

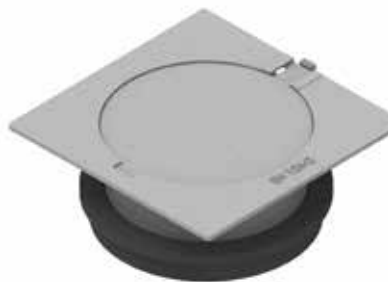
### SLAB STANDARD ENGINEERING DETAIL

Please see detailed drawings and PS1 documentation in the Members section of our website. [www.apd.co.nz](http://www.apd.co.nz)

### STORMSLAB DISTRIBUTION CHAMBER LAYOUT

All down pipes are to be emptied directly into the Distribution Chamber. They can also be placed through the neck of the Distribution Chamber.

Garden & pavement (Ductile Iron) lids available for the Distribution Chamber.



Ductile Iron Square Frame



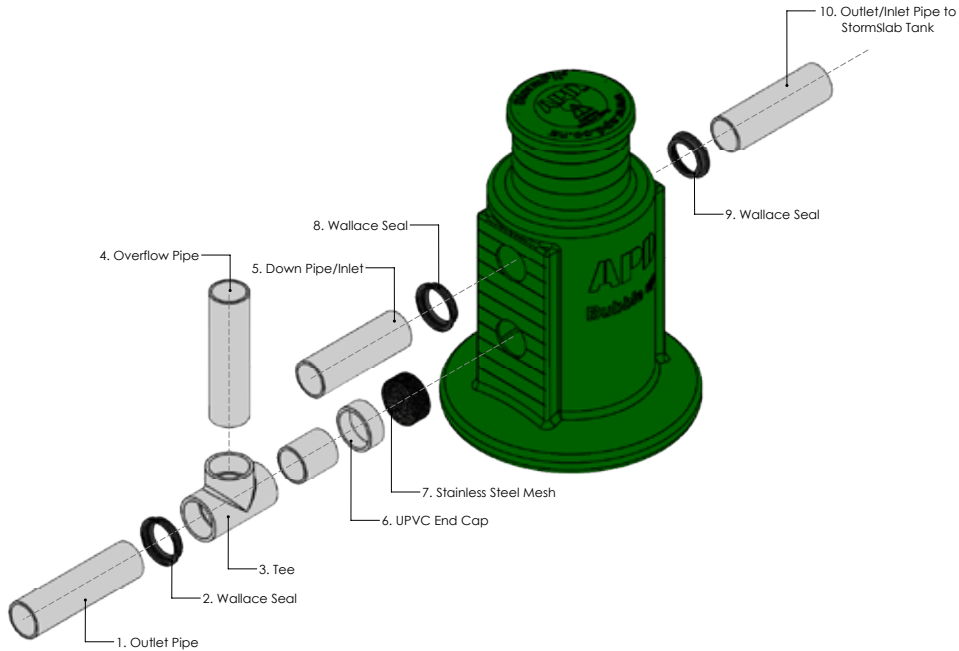
Ductile Iron Round Frame



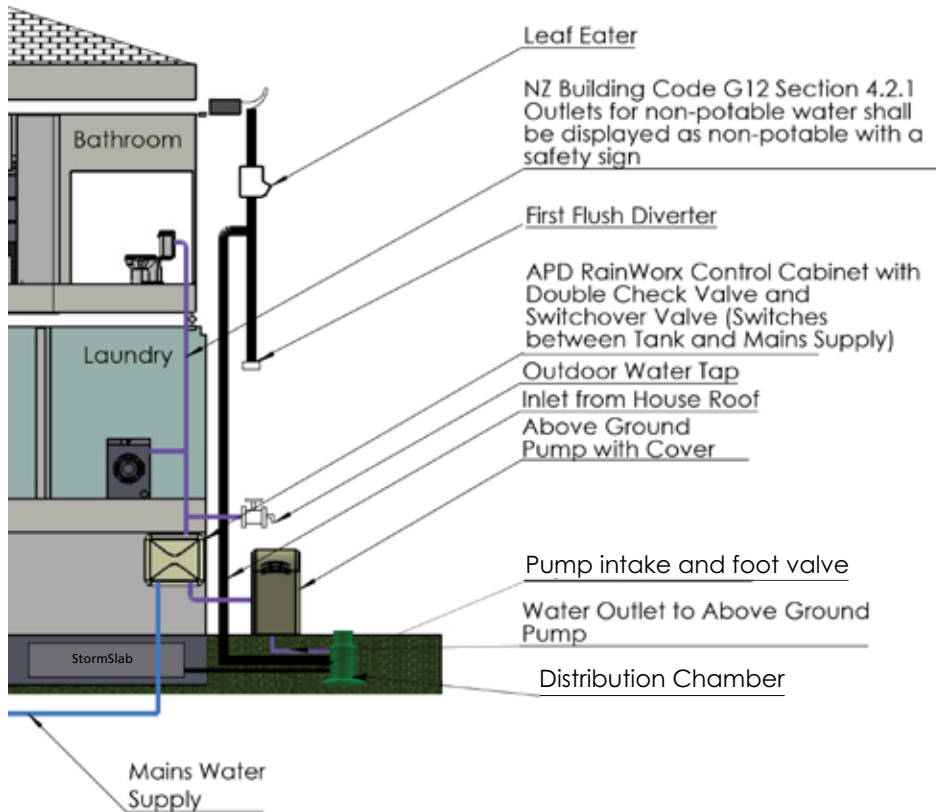
Garden Lid



Doing Good From The Ground Up



Other configurations are available for full retention and combined retention/detention. Drawings can be found by logging into our website [www.apd.co.nz](http://www.apd.co.nz) under Brochures, StormSlab.





Doing Good From The Ground Up

## INSPECTION AND MAINTENANCE PROCEDURE

- Remove the screws holding the green lid on the Distribution Chamber if it is located in the lawn area. If a concrete Distribution Chamber has been installed in a driveway then remove the lid. Be careful with cast iron lids as they are heavy and you may require assistance and the correct tool to lift.
- Using a torch if necessary, inspect the mesh covering the outlet orifice(s) – see item 7 on the previous page, the orifice outlet and the level of silt build up in the base of the Distribution Chamber.

## OUTLET MESH SCREEN AND ORIFICE

- Ensure the mesh is not blocked with debris as this may affect the rate at which water can exit the Distribution Chamber. Ensure both are still firmly fixed to the outlet pipe. If the mesh and orifice are clear, and firmly fixed, no further action is required for these items.
- If the mesh has debris covering it and depending upon the nature of the debris, it may be possible to remove by hosing off, or with a suction device or a long stick and clamp.
- Clear debris from the mesh and inspect the orifice(s) for any obstructions. If the orifice is obstructed, it may be necessary to remove the mesh.
- To remove the mesh, remove the screws and pull the mesh from the orifice endcap. Clean and remove all debris and other obstructions from the orifice(s).
- Dispose of all debris and obstructive materials outside of the Distribution Chamber as leaving them in the Distribution Chamber may lead to a fresh blockage. Refit the mesh and secure with screws.

## BASE OF DISTRIBUTION CHAMBER

- Check the level of silt build up in the Distribution Chamber. If the silt level is more than 50mm from the bottom of the Distribution Chamber, it is recommended that it be removed. If you are unable to remove it manually APD recommends that professionals with a vacuum suction truck or similar be used to perform this task.

**Please ensure the Distribution Chamber lid is correctly fastened down upon completion of inspection and maintenance.**