1200 x 1200 CONCRETE STORMWATER PITT
INSTALLATION MANUAL

PREPARATION:

It is strongly recommended that a qualified engineer designs the stormwater collection and drainage systems for any site. Thus ensuring compliance with any specifications of the site that the local regulatory authority has decided or other project controls and also ensuring it is capable of accepting possible stormwater rates of flow.

See Australian Standard DR AS/NZS 3500.3:2020, Plumbing and drainage, Part 3: Stormwater Drainage provides dimensions, construction and installation guidelines for stormwater pits, inlet pits, and arrestors.

The following instructions are a guide only. It is the responsibility of the installer to comply with existing installation specifications and requirements.

SAFETY:

Safety boots, safety helmets and safety glasses shall be worn at all times when handling and installing Everhard Industries concrete pits. The installer is responsible for ensuring personal protective equipment (PPE) and safety measures are followed as per applicable regulations.

HANDLING INSTRUCTIONS:

Travelling on rough roads shall be avoided to prevent excess dynamic loads to Everhard Industries concrete pits.

Stacking shall be determined in accordance with site conditions and guidelines.

Everhard Industries concrete pits and risers have incorporated swift lift anchors to aid during handling and installation. The installer is responsible for ensuring approved lifting hooks and equipment are used at all times. The lifting procedure shall comply with the lifting equipment supplier's guidelines.

SITE PREPARATION:

The concrete pit shall be installed on a well-compacted surface in accordance with geotechnical expert directions. The minimum suggested compaction is a 50mm layer of bedding sand with graded aggregate.

The prepared excavation should allow the pit, with any required riser, to have the upper surface of the selected steel grate or cast iron frame at the proposed final surface level. The installer is responsible for ensuring that the excavation depth meets this guideline and required specifications.

The installer is responsible for ensuring excavations allow sufficient space around the pit for pipes to be fitted.

BACKFILLING:

The recommended backfilling material is a moderately compacted, clean, stabilised soil, sand with graded aggregate.

Place the filling material around the assembled system, ensuring the pit and risers, where applicable, are not dislodged. Continue backfilling and compacting using even layers of fill material. The installer is responsible for following the supervising authority's instructions and ensuring the backfilling complies with applicable requirements and specifications.

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GRATE AND COVER INSTALLATION RECOMMENDATIONS:

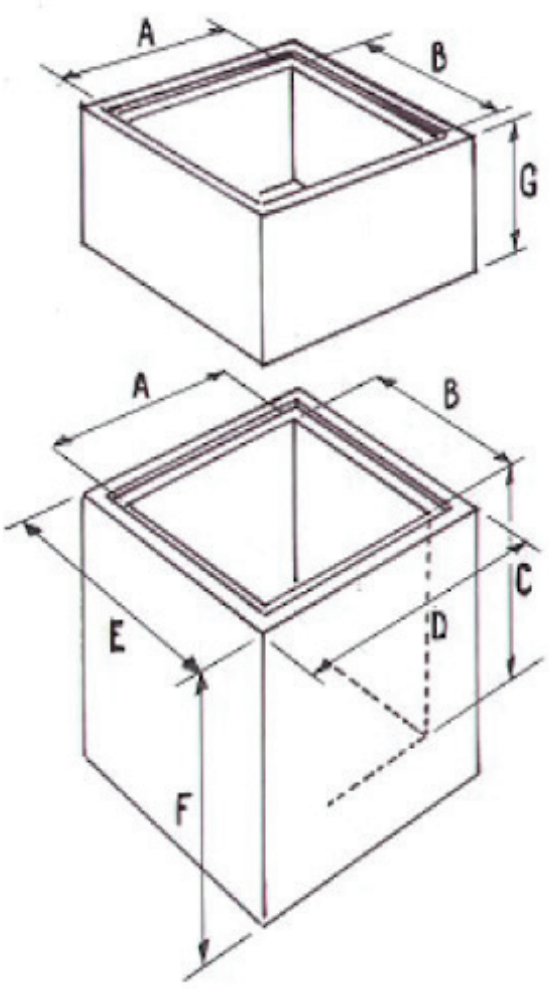
In pedestrian and light service applications (Class A / Class B), the upper surface of the steel grate or cover should be at the level of the surrounding paving, which may be applied over the backfill to form an even thickness. The opening in the reinforcing in the paving around the pit or riser should be edged with deformed steel bars.

In heavier traffic applications, it is strongly recommended that sufficient space be left above the backfill for a concrete collar minimum of 100mm deeper than the paving and 100mm wide, to be poured around the pit or riser. The collar will support the cover or grate frame and prevent pit and riser movement. The opening in the reinforcing in the paving around the pit or riser should be edged with deformed steel bars to prevent cracking. These bars should be tied or welded to the reinforcing. It may be necessary to install more than one layer of bars.

A grate or cover system shall be selected to satisfy the traffic condition to be encountered at the pit or riser location. The installer is responsible for ensuring that the selected grate or cover, as their installation, complies with applicable specifications and requirements.

INSTALLATION INSTRUCTIONS:

a) Install and position the concrete pit into the prepared area (see site preparation section for directions).
b) Using a sledgehammer, punch out the knock-outs in the pit walls to accept the connection pipes at the correct levels, taking care not to cause excessive damage or cracking to the remaining pit walls. On no account should any part of the pit rim be removed.
c) Where risers are required, clean each rim and matting surface and apply a full, even bead of mega epoxy, or an equivalent epoxy-based cementitiotus compound, or mortar, before positioning and installing the riser.
d) Pipes should be fitted through the concrete pit wall and may be sealed with a suitable silicone-based adhesive/sealant.
e) Pour mass concrete at pipe entries outside the pit walls to support pipes entering the pit walls.
f) Backfill the excavation, following the backfilling section recommendations.
g) When used in drainage situations, all surrounding bitumen, concrete or brick paving should be completed so that collected water flows towards the concrete collar and into the pit.



PIT DEPTHS:

Risers allow concrete pits to be set deeper than normal to suit the drainage piping. However, DR AS/NZS 3500.3:2020, Plumbing and Drainage, Part 3: Stormwater Drainage, limits the maximum depth of stormwater and inlet pits. The installer is responsible for ensuring these limits are applied.

Description	Service	A	B	C	D	E	F	G	Weight (kg)
1200 x 1200 Pit 150 Riser	Heavy Traffic Class C/D	1215	1215	-	1345	1345	-	155	122
1200 x 1200 Pit 300 Riser	Heavy Traffic Class C/D	1215	1215	-	1345	1345	-	305	242
1200 x 1200 x 1200 Field Gully Pit	Heavy Traffic Class C/D	1215	1215	1200	1345	1345	1270	-	1190