AdjustaPit®

The AdjustaPit® range of silt pits are designed to adjust to the height of the installation finished level by rotating the unique threaded riser. An integral external trap with a standard 100mm outlet prevents leaves and other floating debris from escaping into the stormwater system.

- Round and Square riser with 200mm of adjustment, (350mm model)
- Round and Square riser with 140mm of adjustment, (250mm standard and Basic models)
- Cast iron Grates rated to 5 tonne
- Aluminium and Cast Iron grates for 250mm models
- Removable outlet plug for ease of cleaning
- UV stabilised material
- All plastic components made in New Zealand

Material Specifications

350 and 250mm Standard AdjustaPit Body and Riser material: R.M.TGBLK – Tank Grade Black Resin 11UV Rotathene® 11UV is a hexene co-polymer based linear low density polyethylene resin (LLDPE) specifically designed for rotational moulding applications. It has high ESCR, high chemical resistance, and is intended for applications requiring an exceptional balance of stiffness and toughness. It has been formulated with a full-strength UV additive package for Australasian weather conditions and has been tested to significantly exceed the UV requirements of AS/NZS4766:2020. Suitable for storage tanks for water and chemicals.

AdjustaPit Basic body and Riser material:
- UV stabilised Polypropylene

Grate Materials:
- Cast Iron rated to 5 tonne, Aluminium for pedestrian traffic only

Plug:
- Polypropylene Co-polymer

Seal:
- Durafoam PE30 – crosslinked PE fine celled foam

Product Codes

CODE	DESCRIPTION
DA350R	AdjustaPit 350mm – Round Pit & Grate
DA350S	AdjustaPit 350mm – Square Pit & Grate
DA250R	AdjustaPit 250mm – Round Pit & Aluminium Grate
DA250S	AdjustaPit 250mm – Square Pit & Aluminium Grate
DA250RCI	AdjustaPit 250mm – Round Pit & Cast Iron Grate
DA250SCI	AdjustaPit 250mm – Square Pit & Cast Iron Grate
DAB250RA	AdjustaPit Basic 250mm – Round Pit & Aluminium Grate

CODE	DESCRIPTION
DAB250RCI	AdjustaPit Basic 250mm – Round Pit & Cast Iron Grate
DAB250SA	AdjustaPit Basic 250mm – Square Pit & Aluminium Grate
DAB250SCI	AdjustaPit Basic 250mm – Square Pit & Cast Iron Grate
DAB250ROA	AdjustaPit Basic 250mm – Round Pit with Outlet & Aluminium Grate
DAB250ROCI	AdjustaPit Basic 250mm – Round Pit with Outlet & Cast Iron Grate
DAB250SOA	AdjustaPit Basic 250mm – Square Pit with Outlet & Aluminium Grate
DAB250SOCI	AdjustaPit Basic 250mm – Square Pit with Outlet & Cast Iron Grate

Product Intended Use

The AdjustaPit range of silt pits are designed to capture rainfall around Commercial and/or Residential properties and redirect the flow to a stormwater drainage line. The range has an integral water trap that protects the stormwater drains by preventing collected debris from escaping the AdjustaPit.

Manufacturing Standards

The material used for both the 350mm and 250mm standard products, (R.M.TGBLK – Tank Grade Black Resin 11UV Rotathene® 11UV) exceeds the requirements of AS/NZS4766:2022 Rotationally moulded buried, partially buried, and non-buried storage tanks for water and chemicals.

On Product Identifiers

All products are marked with all or some of the information embossed onto the outer body:

- Product name/logo, (350mm, 250mm standard and 250mm Basic)
- Patent information, (350mm, 250mm standard)
- Design information, (350mm, 250mm standard)
- Supplier details and website, (350mm, 250mm standard and 250mm Basic)

Relevant New Zealand Building Code Clauses

NZBC E1 Surface Water – E1/AS1 Type-one Surface Water Sumps, (350mm AdjustaPit only)
NZBC B2 Durability – Marley AdjustaPit will satisfy the requirements for:

- 15 years for connections where ease of access is moderate, but difficult to replace, (e.g. typical drainage system laid adjacent to a building foundation)

Design

The 350mm AdjustaPit has been designed to meet the requirements of a Type-one sump as specified in E1/AS1 of the New Zealand Building Code. When designing a stormwater system to include one or multiple AdjustaPit units note the below calculation used to determine the m^2 area that an individual 350mm AdjustaPit can service.

The 350mm AdjustaPit has been designed to meet the requirements of E1/AS1 Type-One and therefore is suitable for an area 4500/I m^2 where I = the rainfall intensity for a storm with a 10% probability of occurring annually. Rainfall intensities can be found in E1/AS1 Appendix A.

- **Example 1:**
  Using a rainfall intensity of 100mm

  4500/100 = 45m^2

  The 350mm AdjustaPit can service an area up to 45m^2 based on this rainfall intensity.

- **Example 2:**
  According to the rainfall intensity chart Dargaville has a 10% probability of an 82mm/hr intensity so therefore a 350mm AdjustaPit can service a slightly larger area.

  4500/82 = 54.9m^2

  Knowing the rainfall intensity will determine how many AdjustaPit units will be needed for an area. The 250mm AdjustaPit while not specified in E1/AS1 is recognised as a solution for smaller areas such as patios or garden areas.

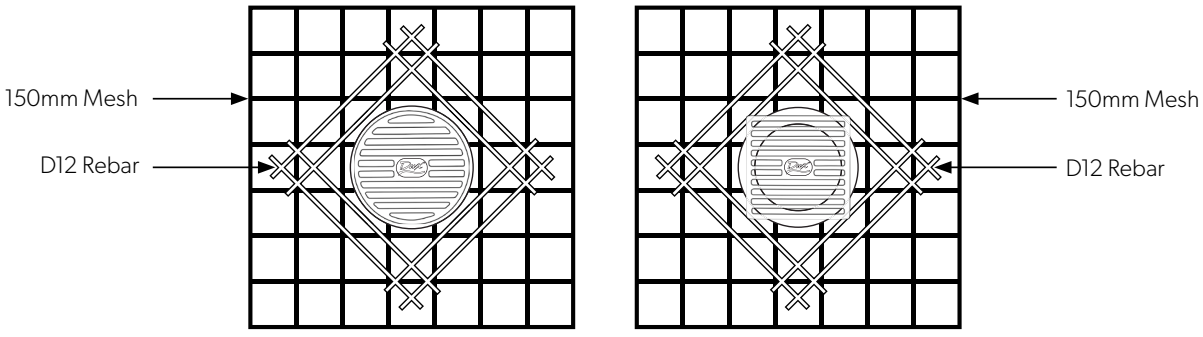
Installation

350mm AdjustaPit

1. Excavate a hole large enough to accommodate the AdjustaPit to a depth of approximately 1000mm below finished ground level. At 1000mm depth this will be at the centre of the pit's adjustment once a 100mm deep support base has been put in place. Allow at least 200mm around the outside of the trap for aggregate backfill
2. Provide a 100mm thick concrete base to support the AdjustaPit and ensure the AdjustaPit is level
3. Fill the AdjustaPit with water until outlet level to hold the AdjustaPit in place and prevent flotation during backfill. Ensure the AdjustaPit is still level as it settles into the concrete
4. Connect the downstream waste pipe to the AdjustaPit outlet using a 100mm Marley Coupling (Product Code: D156-44)
5. Carefully back fill around the AdjustaPit using the selected aggregate and compact as required
6. Adjust the height of the AdjustaPit by turning the riser up or down until the desired finished ground level is reached
7. A stainless steel screw may be placed into the side of the AdjustaPit to lock the riser into position
8. Prepare ground and install required reinforcing prior to pouring concrete Date: 27/08/2018 Version: 1 9. Ensure the grate is in place prior to the concrete pour to ensure the top is not distorted by the force of the concrete

Warning: The AdjustaPit must always have the grate installed or be suitably covered to prevent falling or serious injury.

Recommended Concrete Slab Reinforcing for 350mm AdjustaPit



Round Grate Layout **Square Grate Layout**

250mm AdjustaPit Standard & Basic

1. Excavate a hole large enough to accommodate the AdjustaPit to a depth of approximately 800mm below finished ground level. At 800mm depth this will be at the centre of the pit's adjustment once a 100mm deep support base has been put in place. Allow at least 200mm around the outside of the trap for aggregate backfill
2. Provide a 100mm thick base of sand or aggregate to support the AdjustaPit and ensure the AdjustaPit is level
3. Fill the AdjustaPit with water until outlet level to hold the AdjustaPit in place and prevent flotation during backfill. Ensure the AdjustaPit is still level as it settles into the support base
4. Connect the downstream waste pipe to the AdjustaPit outlet using a 100mm Marley Coupling (Product Code: D156-44)
5. Carefully back fill around the AdjustaPit using the selected aggregate and compact as required
6. Adjust the height of the AdjustaPit by turning the riser up or down until the desired finished ground level is reached
7. A stainless steel screw may be placed into the side of the AdjustaPit to lock the riser into position
8. Support the AdjustaPit with a concrete collar 100mm thick x 150mm wide

Warning: The AdjustaPit must always have the grate installed or be suitably covered to prevent falling or serious injury.

Maintenance

The AdjustaPit will collect silt and other settleable solids so must be cleaned out periodically.

There is no specific frequency for this as each installation is in its own unique area, but it is advisable to visually check the AdjustaPit after a significant rain event.

Manufacturer/Distributor

350 and 250mm Standard AdjustaPit

- **RX Plastics Limited**
- 15 Horotui Road, Horotui 3288
- 0800 288 558
- www.rxp.co.nz
- NZBN: 9429031867276

- **RX Plastics Limited**
- 19 Maronan Road, Tinwald, Ashburton 7778
- 03 307 9081

250mm Basic AdjustaPit

- **Marley NZ**
- 32 Mahia Road, Manurewa, Auckland 2102
- 0800 627 539
- info@marley.co.nz
- www.marley.co.nz
- NZBN: 9429038863431

Grates

- **SYI Foundry**
- Motianshi, No.51, Binhe West Road, Taiyuan, Shanxi, China 030027
- 0086 351 2027764
- www.syifoundry.com

Distributor

Marley New Zealand Limited

- 32 Mahia Road, Manurewa, Auckland 2102, New Zealand
- 0800 627 539
- info@marley.co.nz
- www.marley.co.nz
- NZBN: 9429038863431

Limitations on Use

When the 350mm AdjustaPit is used in a trafficable area slab reinforcing should be used, failure to use reinforcing will void the warranty, Marley will not be held liable for damage and/or injury,. Please see the AdjustaPit warranty for further details.

The 350mm AdjustaPit is designed to service a calculated area based on rainfall intensities found in E1/AS1 extending the area over the correct calculation will result in possible flooding, Marley cannot be held responsible for damage to property as a result.

Warnings and/or Bans

The Marley AdjustaPit range is not subject to warnings and/or bans to their installation or use from any council or local authority within New Zealand that Marley has been made aware of.

MAR5665 October 2023