

Installation Guide



Elegant design and innovative technology

Key Installation Points

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- · All pipe sizes in this guide are internal diameter (DN)
- · We recommend PE-X pipe NOT copper pipe
- Check pipes sizes For domestic installations we recommend a main feed via a DN 25mm line. Refer to Commercial pipe size guide for commercial applications
- · Check that you have a minimum water pressure of 350kpa
- If there is a Pressure Vessel involved install a line strainer and an isolating ball valve at the Pressure Vessel
- Install a Pressure Reducing Valve only if water pressure exceeds 650kpa
- Use the foam packaging provided to cover the valve for acoustic insulation
- · Lag the pipe work with acoustic lagging
- · Flush the lines thoroughly before connecting the valve
- · Ensure there is easy access to the valve for future maintenance and service
- · Use the set screw on the top of the valve to adjust the flush volume
- The Low Maintenance Flush Valve & Sensorflush touch pad MUST be installed by an experienced, licensed plumber

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General Installation Advice

Mains Pressure Flushing

The Low Maintenance Flush Valve is a sanitary flush valve which connects directly to the water mains. It is not designed to be connected to a cistern. It can be used with any standard wall-hung or wall faced pan and with most urinals.

The valve requires a Sensorflush touchpad to be installed for activation.

Correct installation of the Low Maintenance Flush Valve and *Sensorflush* touch pad will provide trouble free toilet flushing. Plumbers should pay careful attention to pipe sizing, acoustic insulation and correct fitting of any/all ancillary plumbing fittings.

The installing plumber **MUST** read and follow this guide to ensure installation meets manufacturer's requirements, all relevant Australian standards and that all National Plumbing Code requirements are met.

Incorrect installation of the Low Maintenance Flush Valve and/or Sensorflush touch pad will result in the void of warranty.



General Installation Advice

Pipe Recommendations

All pipe sizes in this guide are internal diameter (DN) sizes. Refer to the Commercial Plumbing Sizing Guide for further details of pipe sizes for commercial installations. This guide can be found on our website: www.hydaflush.com.au

In domestic installations we recommend the main supply line be a *minimum* DN 25mm. All Low Maintenance Flush Valves should be supplied by branch line using a *minimum* DN 25mm pipe.

We do not recommend copper pipes due to their poor acoustic qualities. If copper is used, care should be taken to ensure it is adequately sized and acoustically insulated.

Hydaflush recommends PE-X pipe materials. Do not use Outer Diameter measurements when sizing supply pipes. All recommended sizes are internal diameter sizes.

Up-sizing pipe work *may* impact friction losses and velocity altering the performance of the system.

Water Pressure & Flow

A pressure vessel *may* be required to assist with increase in water supply to valve.

The *minimum* flow rate required at the valve is 1.5 litres per second. This flow rate *must* be maintained regardless of the simultaneous maximum demand from subsequent Low Maintenance Flush Valves and other appliances on the line.

We recommend valves be connected using an independent line from the mains to prevent any impact on other appliances.

Pipe distance between valve and pressure vessel should be considered.

General Installation Advice

A hydraulic engineer should be consulted for all installations of *5 or more* valves or when there are complex water supply factors to consider such as multi-storey buildings, uncertain water pressure, water variances such as water quality, excessive distance from mains to the pressure, water variances such as water quality, excessive distance from mains to the valves, potential acoustic problems and heavy or uncertain demands from a system *or* other appliances. (Examples only – Other situations should also be considered).

Valve & Touchpad Location

The valve can be installed either in a *minimum* 90mm wall cavity or in the ceiling space. The valve *must* be accessible to allow for future maintenance and servicing.

An isolating ball valve *must* be installed at each Low Maintenance Flush Valve. Space required around the valve *must* be a minimum of 300mm.

The touchpad can be installed in the traditional location on the wall behind the toilet or elsewhere in the room. Access to a secure standard 240v power outlet is required.

Ancillary Plumbing Fittings

The installation *may* require the inclusion of one or more of the following:

- A line strainer
- A pressure vessel
- A pressure reducing valve (If pressure exceeds 650kpa).

Plumber Instructions & Guidelines

Australian Standards

The valve **MUST** be installed by a licensed qualified plumber. All Australian Standards for the installation of flush valves must be met (AS/NZS 3500.2).

Refer to the Warranty section of this guide for details of installation obligations.

Low Maintenance Flush Valve

Using the mounting screws provided, install the valve vertically in either the wall space (*minimum* 90mm cavity) or ceiling and with loose coupling connections on both the inlet and outlet of valve. Ensure the valve is securely fastened to a suitable stable structural support.

Allow for easy access to the valve for servicing. Front or rear access panels for an in-wall installation should be a *minimum* of $300 \text{mm} \times 300 \text{mm}$.

A *minimum* clearance of 300mm is required above the valve to allow access to the set screw on the top of the valve for flow adjustment and to remove the bonnet of the valve for servicing.

All plumbing connection points to the valve **MUST** be accessible.

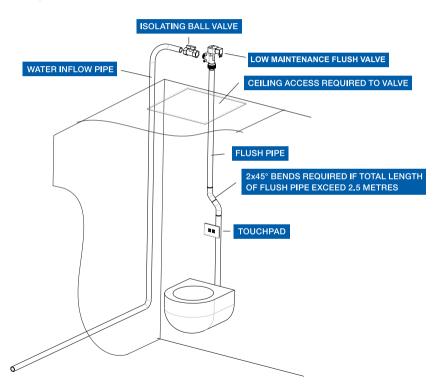
When servicing valve piston, plumber should use Rocol Sapphire Grease.

The polystyrene packaging material supplied should be placed around the valve and taped into place to provide acoustic insulation. Additional acoustic insulation around the valve is recommended in residential applications.

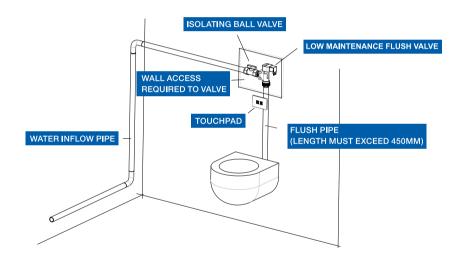
Plumber Instructions & Guidelines

Plumber Instructions & Guidelines

Ceiling Mounted Valve

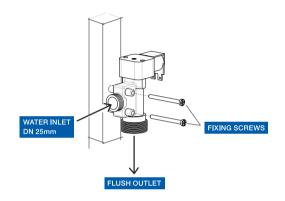


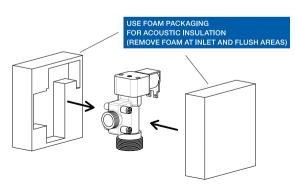
Wall Mounted Valve



Plumber Instructions & Guidelines

Attaching the Valve





Plumber Instructions & Guidelines

Water Supply

We recommend that all Low Maintenance Flush Valves be supplied using a *minimum* DN 25mm pipe. We recommend that in domestic installations the main supply line should be DN 25mm

Refer to the Commercial Plumbing Sizing Guide for further details of pipe sizes for commercial installations. This quide can be found on our website: www.hydaflush.com.au.

The Low Maintenance Flush Valve should be run off an independent line. Failure to do so may impact on other water appliances within the premises or may cause unsatisfactory operation of the valve.

Limit the number of direction changes in pipe work.

Supply lines to valves should be PE-X pipe.

Acoustic insulation must be used for all pipework which may affect habitable rooms

Water Pressure & Flow

All installations require water flow of 1.5lts per second at each at each Low Maintenance Flush Valve and water pressure of between 350kpa and 650kpa. Insufficient water flow rates or water pressure outside this range may lead to malfunction of the valve.

Pressure Vessels

If installed correctly, a pressure vessel *may* assist performance in maintaining a constant supply of water to the valve. If a pressure vessel is required ensure that it is installed in compliance with the manufacturer's instructions.

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