

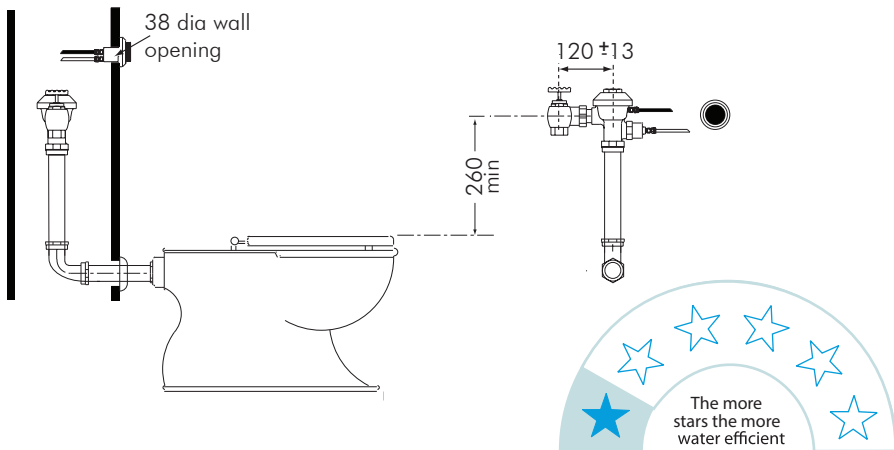
ZURN - ZH-6152L-25 (OR 40)

WC NON POTABLE FLUSH VALVES



CONTENT OF STANDARD PACK

1. 1 x rough brass ZURN Aquafush flush valve.
2. 1 x ZURN rough brass angled stop valve 1" or 1 1/2" BSP.
3. 1 x flush pipe set including.
Vertical flush pipe, rubber washer, c/p horizontal flush pipe, elbow, wall escutcheon, rubber pan connector.
4. 1 x hydraulic push button incl. 700mm hoses (clear & black)
Button may be 1" c/p ("-M") or 2" black plastic ("-P") depending on model ordered.



VALVE DESCRIPTION

ZURN ZH-6152L is a commercial quality, diaphragm operated, hydraulically actuated, recess mounted brass WC flush valve designed to be connected to a **NON POTABLE** water supply

Valve is suitable for connection to back entry 6L WCs

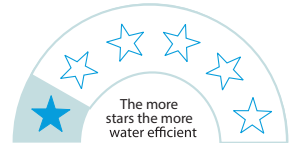
Pressing the remote push button will initiate a full 6L flush of the WC.

APPROVALS

ZURN flush valves are approved under Watermark Schedule Licence No WMK00307 for Quality Assurance



Under AS/NZS6400:2005 ZURN flush valves have WELS Registration. All dual flush valves achieve a 3 Star rating and single flush valves a 1 Star rating



PIPE SIZING AND DESIGN

Non Potable ZURN flush valves can be fed from either a dedicated supply tank or from a pressurized non potable rainwater catchment supply. Recycled water should be clean from impurities to ensure correct operation of valves. Fit a filter to the supply if necessary. Any tank.

ZURN flush valves rely on the capacity of the supply pipe to maintain the flow rate and pressure needed to evacuate the pan. A minimum of 25mm (nominal ID) supply is necessary to achieve this however much larger supply pipes may be required depending on;

- a) Supply pressure
- b) Length of pipe
- c) Number of valves installed
- d) Other fixtures using the supply pipe
- e) Coefficient of simultaneous use

All pipework must be designed by a suitably qualified person (services engineer or other) to achieve the necessary flow rate. Pressures given are static head based on a measurement from the bottom of any supply tank to the valve inlet.

Required flow rate: 90L/min

Pressure: 40 - 100kPa with 40mm isolator

100 - 150kPa with 25mm isolator

Higher Pressures - use ZH-6152XL valve

Where supply is from a header tank, pipework should be designed using the principles laid out in NZ Drainage & Plumbing Regs 1978, whereas a tank is sized according to the number of valves installed and the pipe supply feeds from that tank to enable the flow rate as shown above.

Rain catchment tank water is often "topped up" using mains water supply. The mains supply must be fitted with an approved backflow preventer to the Territorial Authorities approval to prevent possible cross connections or back siphonage.

NOTE: We recommend the use of Wilkins 1250 water hammer arrestors and 20g strainers where water quality is likely to cause problems to the Zurn valve

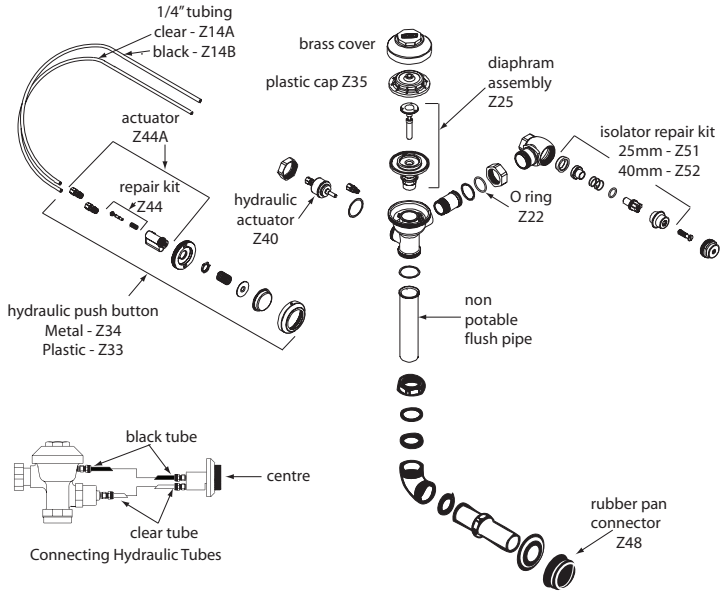
INSTALLATION

1. Fit isolator valve to 1" or 1¹/₂" BSP (depending on model ordered) threaded pipe. Refer to Page 1 for position of valve and nipple outlet position. Ensure minimum distance between water inlet and toilet is maintained to ensure correct water distribution in pipe.
2. Prior to fitting flush valve tailpiece onto stop valve, ensure O ring is properly located in the seal groove at the end of the tail and that the snap ring is properly aligned. ALWAYS wet the O ring before fitting the stop valve.
3. Insert the flush valve tailpiece into the stop valve and hand tighten the lock nut. Connect the vertical flush tube to the bottom of the valve using the rubber washer and spare elbow nut.
4. It may be necessary to cut the vertical tube to suit the pan, but minimum heights should be observed. When cutting scored vacuum breaker tubes to fit, always leave at least 32mm of scoring to insure proper engagement with the compression coupling. Fit the elbow and horizontal pipe, using the rubber pan connector to seal into the horn of the pan.
5. Hand tighten nuts only, adjust valve for plumb and then tighten all nuts.
6. Assembly of valve should be as per drawing on last page.
7. Hydraulic tubing uses either compression or quick connect fittings to the valve body or push button assemblies. On fitting tubing, pull on tubing to ensure it has been securely assembled before turning water on.
8. When all valves are installed and full water pressure is available it is necessary to flush out all lines to ensure no debris is left in the pipework.
 - a) close isolator
 - b) remove main brass cap from valve
 - c) remove plastic cover and diaphragm assembly
 - d) replace plastic cover and brass cap (less diaphragm assembly)
 - e) Open stop valve and flush out debris
 - f) Shut stop valve and reassemble valve
9. The ZURN Aquaflush valve is designed to flush 6L of water over a wide range of pressures however some adjustment of the stop valve may be necessary to ensure correct operation and to minimise pan splash, particularly at higher pressures.
10. Compliance with Watermark approvals means this valve must not be modified in any way. Warrantee may be void if valve is installed in any other way than recommended in this document.

MACDONALD INDUSTRIES LIMITED INSTALLATION INSTRUCTIONS

ASSEMBLY DIAGRAM

ZH-6152L flush valves spares are as per the diagram (right)



MAINTENANCE

It is recommended the valve is annually checked for leaks and correct performance.

Problem	Cause	Remedy
Poor/inadequate flush	Incorrect pipe sizing or inadequate pressure	Increase pipe supply, boost pressure
Short flush	Faulty diaphragm - bypass hole oversize Excessive pressure Stop valve not correctly adjusted	Replace diaphragm assembly Fit Wilkins pressure reducing valve Turn down stop valve to extend flush time
Valve won't shut off	Insufficient line pressure to repressurize valve By pass hole blocked/debris under diaphragm Trip mechanism not sealing	Increase pipe supply, boost pressure Clear debris Replace diaphragm assembly
Continuous water trickle	Hydraulic tubing is installed incorrectly Hydraulic push button has been fouled	Refer to instructions Remove button valve and clean
Valve will not flush	Water supply cut off Hydraulic Actuator jammed	Turn water on Remove and clean, if old style with O ring, replace with new actuator (Z40)



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