

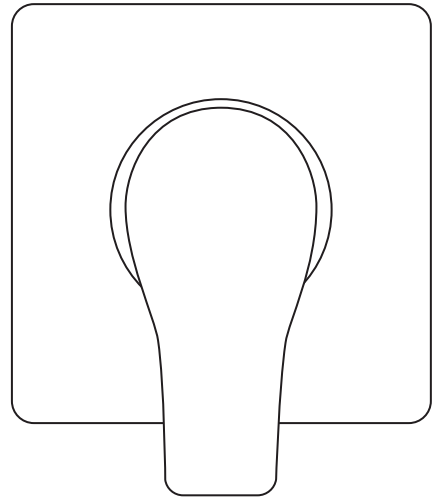
# FORENO.

TAPWARE MADE FOR NEW ZEALAND since 1969

## NORTH

## VORTEX Shower Mixer

### NRT40



Congratulations on your purchase of this high quality product from Foreno Tapware.  
Please read the following before installation and retain (along with your receipt) for future reference.

### TECHNICAL SPECIFICATIONS

#### Suitable for All Pressures

Minimum Pressure = 17kPa\*

Maximum operating Pressure = 500kPa\* (As per NZ Building Code AS/NZ 3500.1)

Minimum operating Temperature = 5 deg. Celcius

Maximum operating Temperature = 65 deg. Celsius

\*Unequal pressure (Hot) = Minimum 17kPa (recommended 35kPa)

Unequal pressure (Cold) = Minimum 300kPa

\*Equal pressure = Minimum 17kPa (recommended 35kPa)

Note: On very low pressures, a full flow and unrestricted single function handpiece or shower rose is recommended.

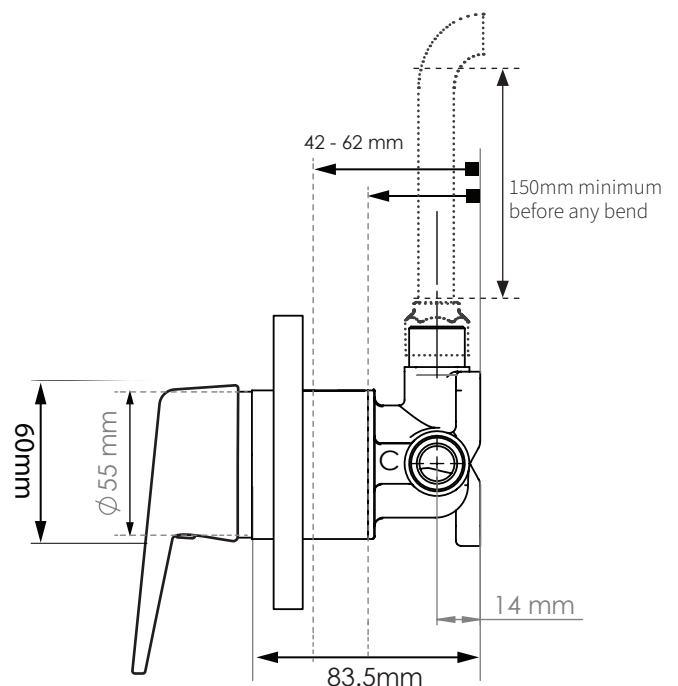
For domestic use only.

### FEATURES

- Superior flow on Unequal Low water pressure
- All connections (inlet and outlet) are standard ½" BSP
- 47mm European ceramic cartridge
- DR brass body with Vortex technology

### CONTENTS

- Shower mixer body
- Metal faceplate
- Coloured jets (2)
- Mixer lever / handle



## INSTALLATION OVERVIEW

If supply pressure exceeds 500kPa, a Pressure Limiting Valve (PLV) must be installed as per the NZBC. **The maximum pressure for Hydrostatic testing is 1500kPa; Do not pressure test in the closed position when outlet is plugged.**

Installation is to comply with Section 5.4 of AS/NZS 3500 Standard with regard to Isolating stop cock use and as per AS/NZS 3500.1:2300 clause 3.3.4, the maximum operating pressure at any outlet, other than a fire service outlet, within a building does not exceed 500kPa.

### Important Plumber's Message: Please read all of the instructions prior to installation.

- All pipe work must be flushed prior to the installation of this mixer.
- Accessible inline filters must be installed on both the hot and cold inlet supply to prevent particles from damaging the ceramic cartridge. Note the inline filters do not need to be right next to the shower mixer.
- Do not exceed 1500kPa when hydrostatically testing the installation with this mixer installed, as damage to the ceramic cartridge may occur.
- Do not pressure test in the closed position when outlet is plugged.
- Avoid restrictive piping, fittings or sharp angled bends when plumbing for this mixer on both inlets and outlets.
- As the Vortex shower mixer is of a Venturi type, on the outlet the piping should be straight for at least 150mm<sup>#</sup> before any bend in the pipe. This is to ensure you get the main benefit from using this Vortex Shower mixer of superior flow and temperature control. **#If using a header tank arrangement 450mm is recommended.**
- It is the responsibility of the Installer to ensure a water proof seal is achieved between the faceplate and the wall surface. Do not block the drain hole at the bottom of the faceplate.

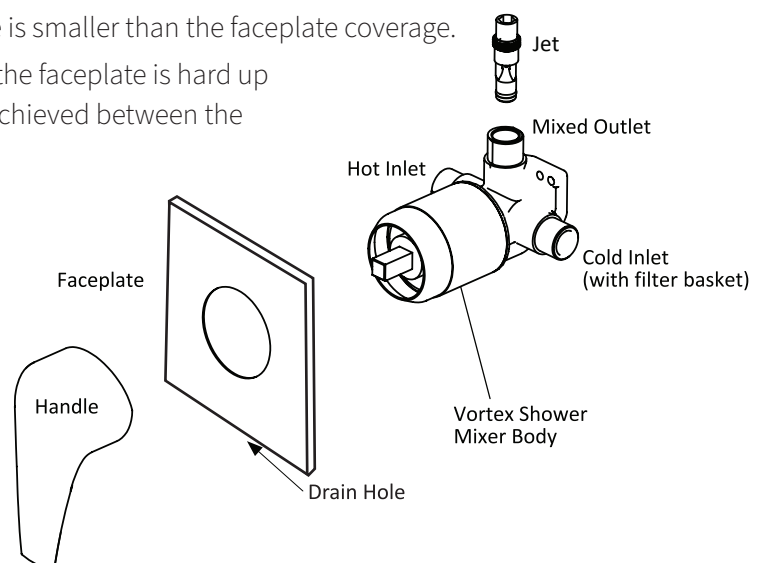
## INSTALLATION - SHOWER MIXER

1. Determine depth that the shower mixer valve recesses into the wall, i.e ensure you know the total thickness of the wall linings/tiles etc that is being used.
2. Check that the correct Vortex jet (if required) is installed into the outlet of the mixer body (see Jet selection guide on next page).
3. Connect the hot and cold supply piping to the mixer inlets marked H (Hot) and C (Cold).
4. Connect the outlet piping with at least 150mm<sup>^</sup> of straight pipe before any bend to the mixer outlet.  
<sup>^</sup>If using a header tank arrangement 450mm is recommended.
5. Check all connections for leaks.

6. Cut a hole in the wall linings, make sure to check hole is smaller than the faceplate coverage.

7. Slide the faceplate cover over the shower mixer until the faceplate is hard up against the wall. Ensure there is a waterproof seal is achieved between the faceplate and the wall.

8. Fit the handle to the square stem of the ceramic cartridge.  
Use the grub screw provided to tighten against the cartridge stem.  
Insert the handle indicator provided into the grub screw hole in the handle with the red markings to the left, and blue to the right.



ATTACH PROOF OF PURCHASE HERE

## JET SELECTION GUIDE

### UNEQUAL PRESSURE SYSTEMS:

**If the cold pressure is above 400kPa** install the shower mixer as is without modification, i.e. with the yellow jet fitted.

**If the cold pressure is below 400kPa** replace the yellow jet with the orange jet supplied.

**To remove the jet** from the shower mixer body: Fit an 8mm Allen key in to the hexagon outlet of the jet and turn anti-clockwise until the jet is free of the body.

**To install a jet** in the shower body: Use an 8mm Allen key and fit the jet into the body. Do not use excessive force when fitting the jet. When the jet is fully inserted, about 8-9mm below the end of the body, unscrew the jet about quarter to half a turn and check that the notch in the jet outlet is facing upwards. This ensures the hot water has little restriction when entering the Vortex jet chamber.

If the cold water supply is fed by a pressure pump, ensure that the pump can maintain 300kPa at the cold outlet. If not, install a low pressure cold water feed system and install the mixers as if for a low pressure equal system.

### EQUAL PRESSURE SYSTEMS:

For Equal High pressure or Equal Low pressure **REMOVE THE JET** from the mixer before installing.

## WARRANTY

### PLEASE CALL US BEFORE REMOVING OR UNDERTAKING ANY REPAIR WORK.

Please refer to our website for warranty information: [www.foreno.co.nz/warranty](http://www.foreno.co.nz/warranty)

In the unlikely event that this product fails during its warranty period, phone our Customer Service team immediately on 0508 FORENO (0508 367 366) – as unauthorised removal of the product may void the warranty.

## CARE AND MAINTENANCE

### SHOULD NOT BE CLEANED WITH ACIDIC, CAUSTIC/ALKALINE, ABRASIVE OR CITRIC CLEANERS.

A soft, damp cloth is recommended for cleaning (Not a Micro fibre cloth). Mild soap solutions can also be used on occasion. See website for full care instructions: [www.foreno.co.nz/tapware-care-instructions/](http://www.foreno.co.nz/tapware-care-instructions/)

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