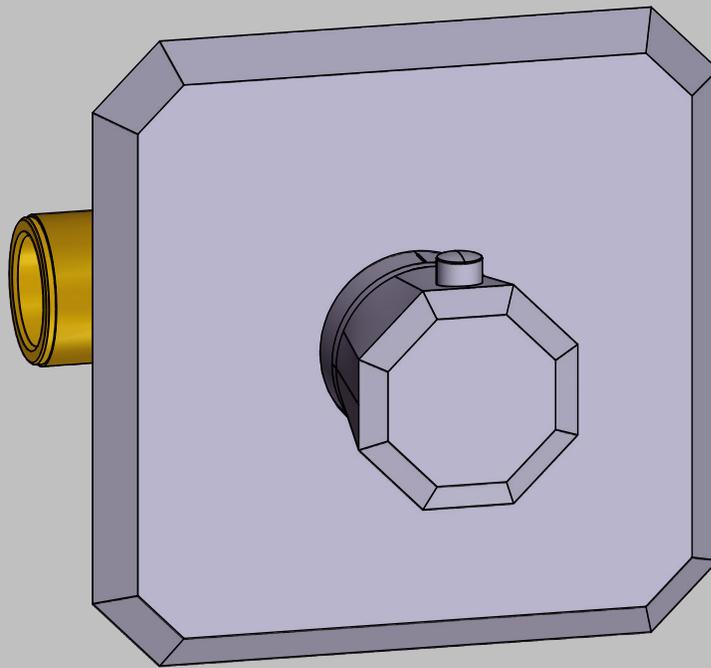




# Installation Manual - 230.4201

## 3/4" Thermostatic Valve & Trim



### **BEFORE YOU BEGIN**

- You must observe all local plumbing laws and codes.
- Do not install this valve if it does not meet local plumbing codes.
- Shut off the main water supply.

## TABLE OF CONTENTS

• Operating Specifications . . . . .	1
• Valve Installation And Tolerance	
• Cut-Out Dimensions . . . . .	1
• <b>Rough In Specification</b> . . . . .	2
• Connecting The Supply & Output Lines . . . . .	3
• Trim Markings / Water Output . . . . .	4
• Using The Supply Stops . . . . .	5
• Flushing The Valve . . . . .	5
• Installing The Trim . . . . .	6
• Replacing The Thermostatic Cartridge . . . . .	9
• Replacing Supply Stops . . . . .	9
• Installing The Extension Kit . . . . .	10
• Cartridge Maintenance . . . . .	11

## NOTICE TO HOMEOWNER

- We recommend that this product is installed by a qualified professional plumber.
- Please check this product immediately to ensure that it has not been damaged and is complete. Before installation, please make sure this product is the correct model and you have all the parts required for installation and use.
- Please flush the water system to ensure that no metal swarf, solder, and other impurities can enter the product.
- Turn off water supply before commencing work.
- Please read these instructions carefully and retain for future reference.

## OPERATING SPECIFICATIONS

### WATER TEMPERATURE



This product is to be used with water at a temperature range of 40°F - 120°F ONLY!

### WATER PRESSURE



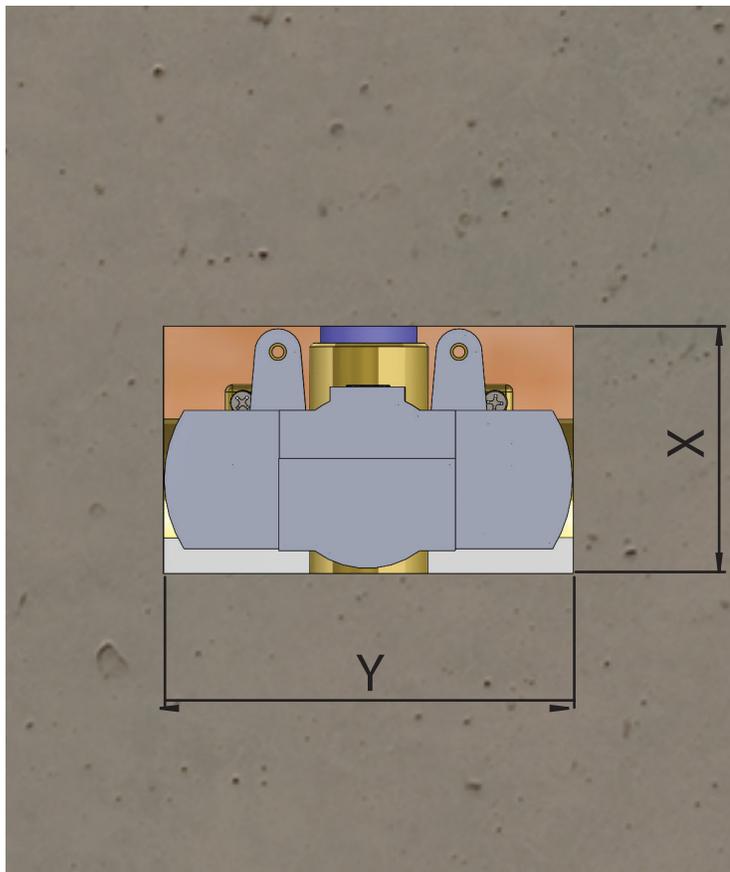
This product is to be used with a water pressure range of 15 PSI to 80 PSI ONLY

If water pressure is greater than 80 PSI install a pressure reducing valve (PRV)

This valve meets or exceeds ANSI A112.18.1 and ASSE 1016

This valve is certified by IAPMO

## CUT OUT DIMENSIONS



Isenberg's TVH Series valves comes with a black pre-attached mud-guard. This mud-guard is not to be removed or discarded. Its purpose is to guide the installation professional on the proper cut-out dimensions of the drywall.

Wall Cut Out Dimensions  
From **Center Point** of Valve:

**TVH.4201**

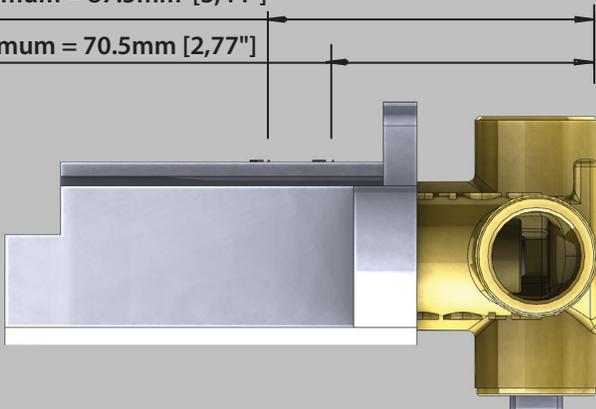
X = 68mm / 2.67"

Y = 113mm / 4.44"

**ROUGH IN SPECIFICATION**

Maximum = 87.5mm [3,44"]

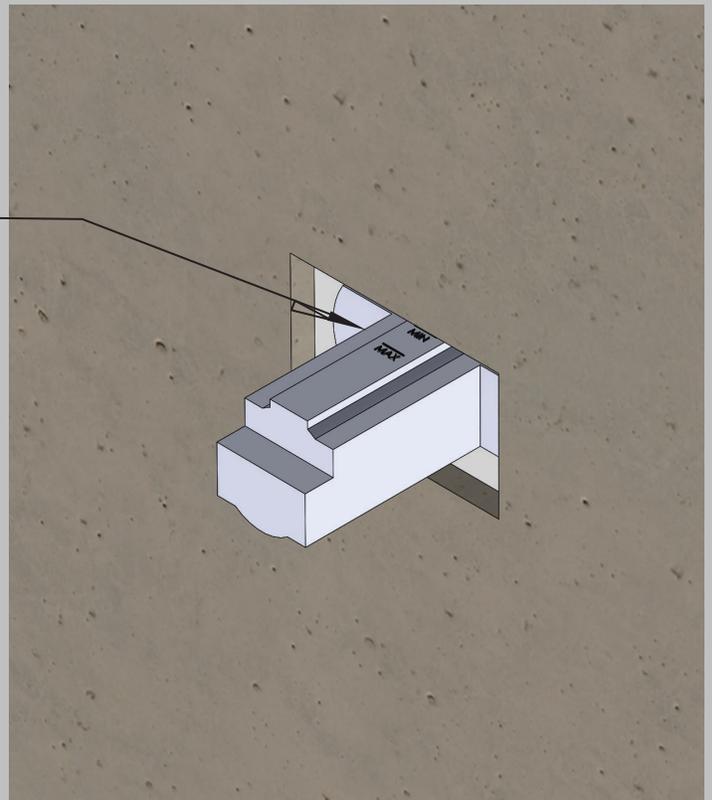
Minimum = 70.5mm [2,77"]



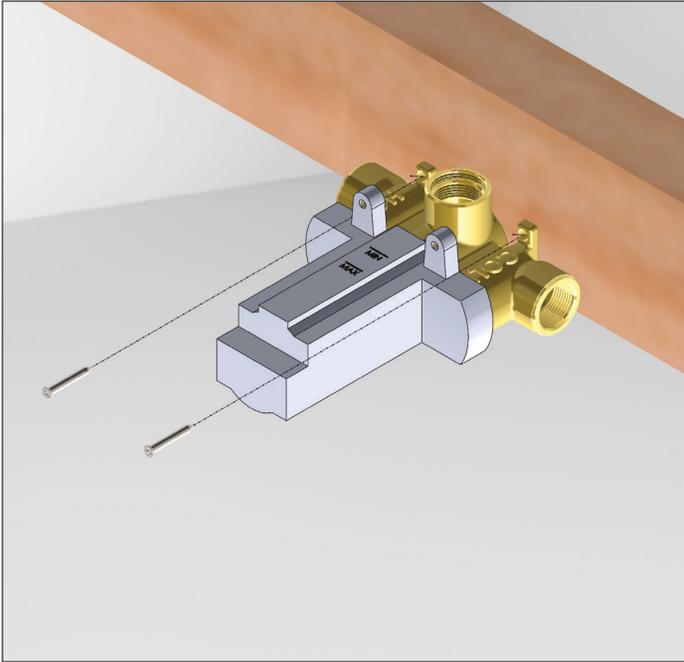
The distance between back of the valve to the finished tile surface should be between 2.77" and 3.44" inches.

Finished tile should fall between Min & Max.

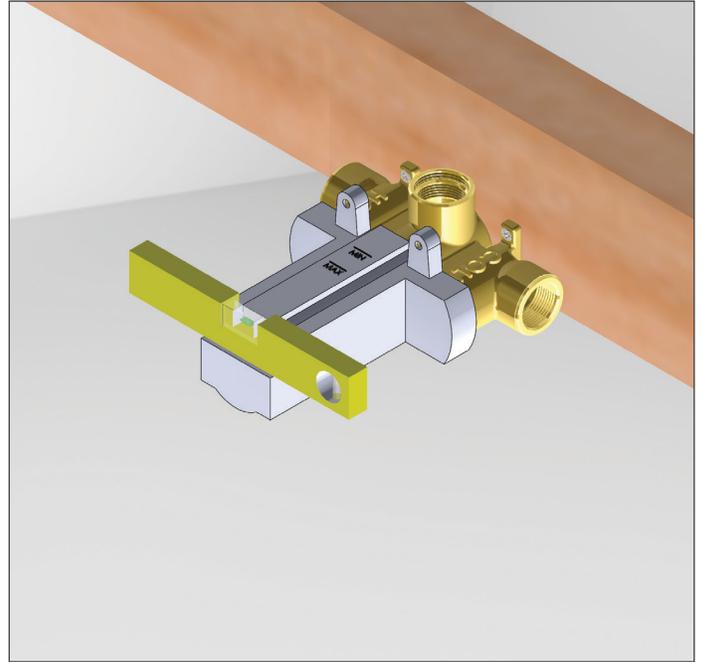
If valve is installed too deep into the wall, extensions are available.



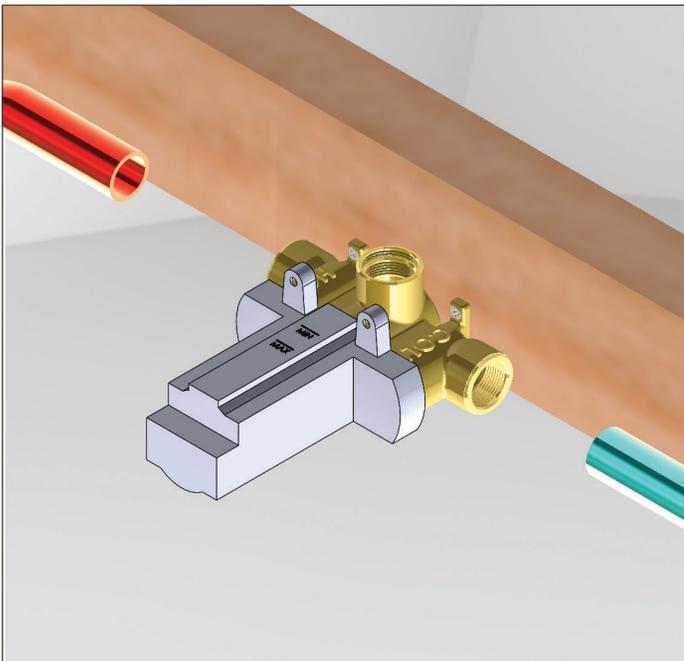
**CONNECTING THE SUPPLY & OUTPUT LINES**



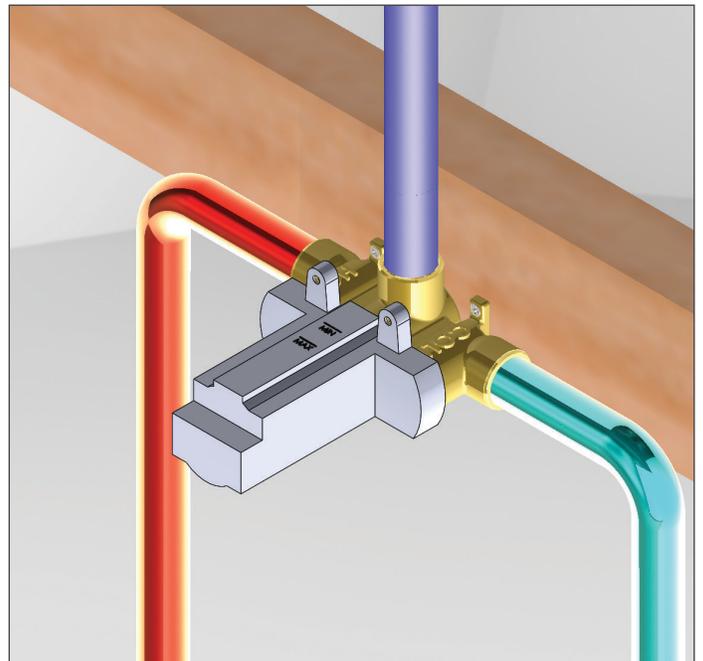
Fix Valve on wooden plank



Level Valve

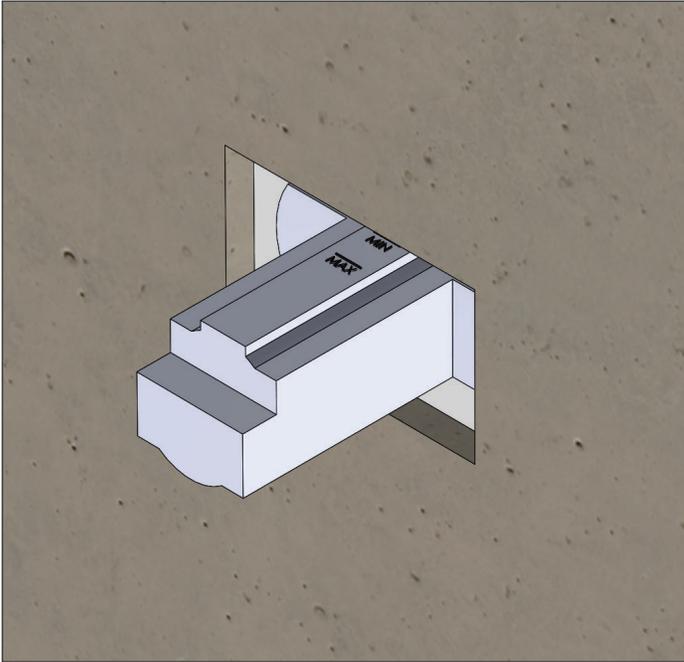


Attach Hot/Cold Lines



Attach Output Lines

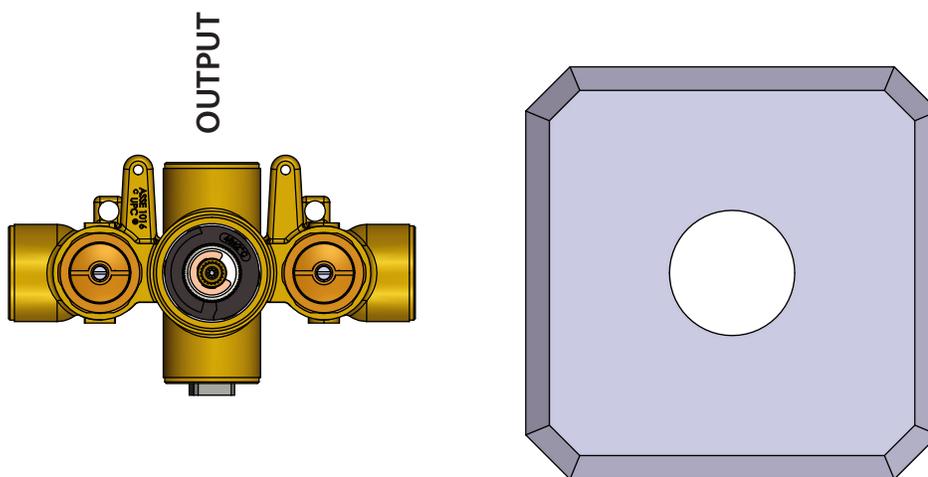
## FINISH TILE POSITION



Install Drywall and Tile. Ensure finished tile surface is between the min and max marks on the mud guards.

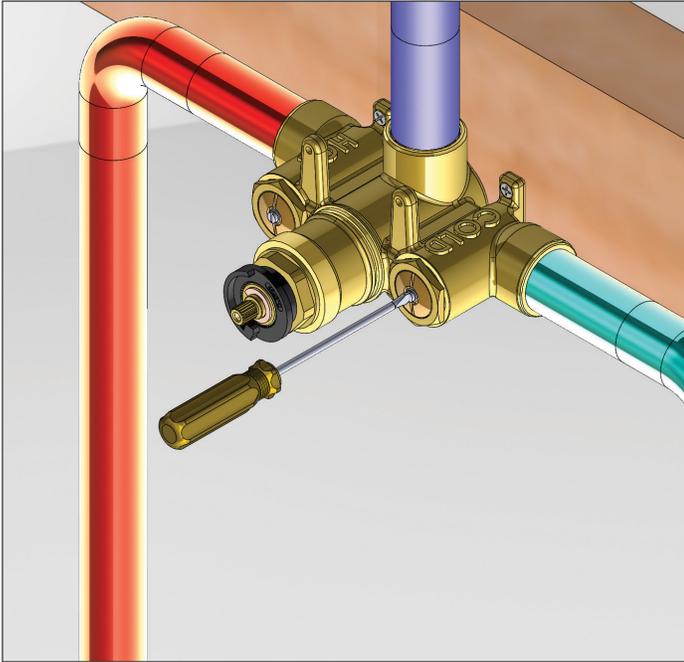
## TRIM MARKINGS / WATER OUTPUT

The below diagram shows the markings on the trim plate and the outputs on the valve. This will help the installation professional to connect the appropriate accessories to the valve output ports.



Note: The TVH.4201 valve does not have volume control capability. It must be used with a volume control valve such as the TVH.4511 or a diverter valve such as the TVH.4371

## USING THE SUPPLY STOPS

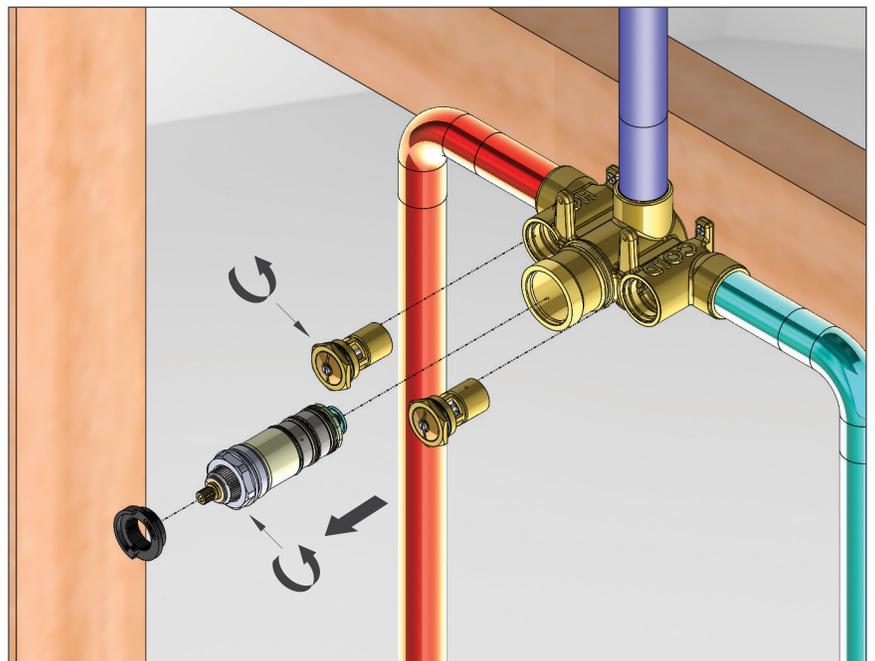


Turn Clock-wise 7 times to stop water flow.

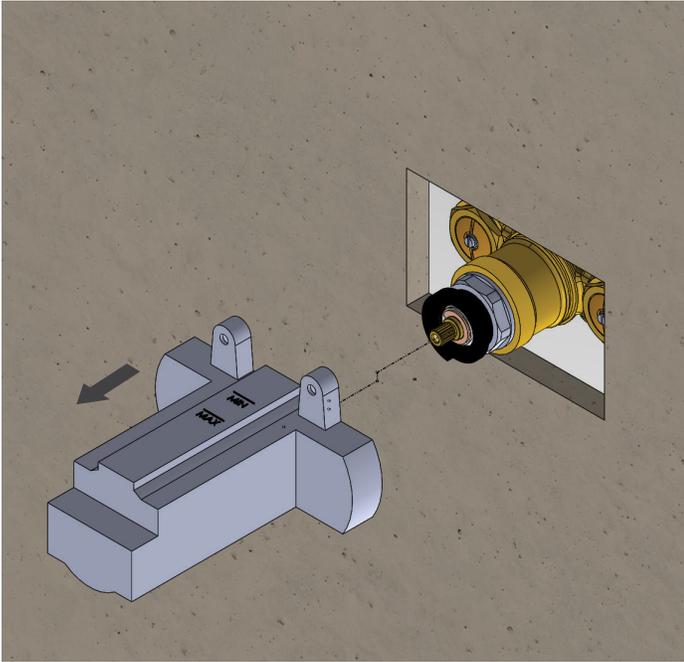
## FLUSHING THE VALVE

In order to clear dirt in the lines - you must flush the valve before the wall is closed and water is turned on for the first time.

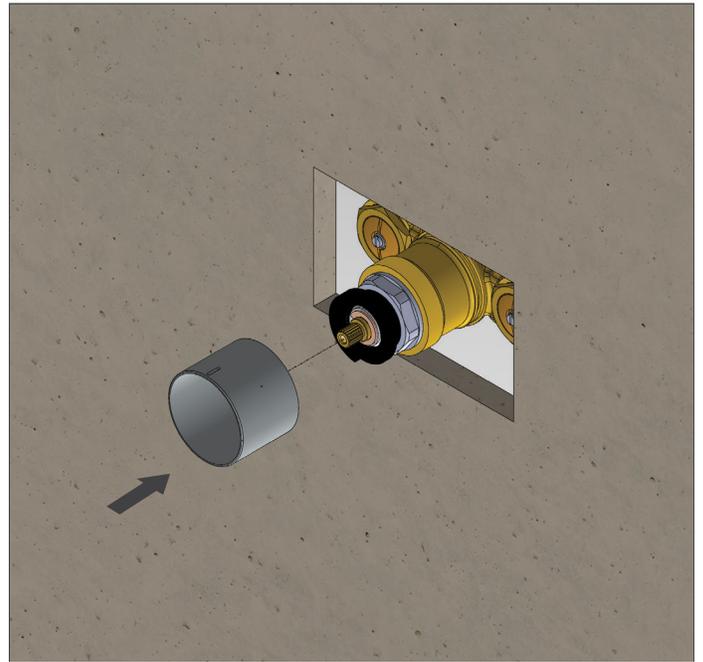
- 1) Remove the 2 supply stops by turning with a spanner
- 2) Remove thermostatic cartridge by turning with a spanner
- 3) Turn on water supply and let water flow removing any dirt in the lines.



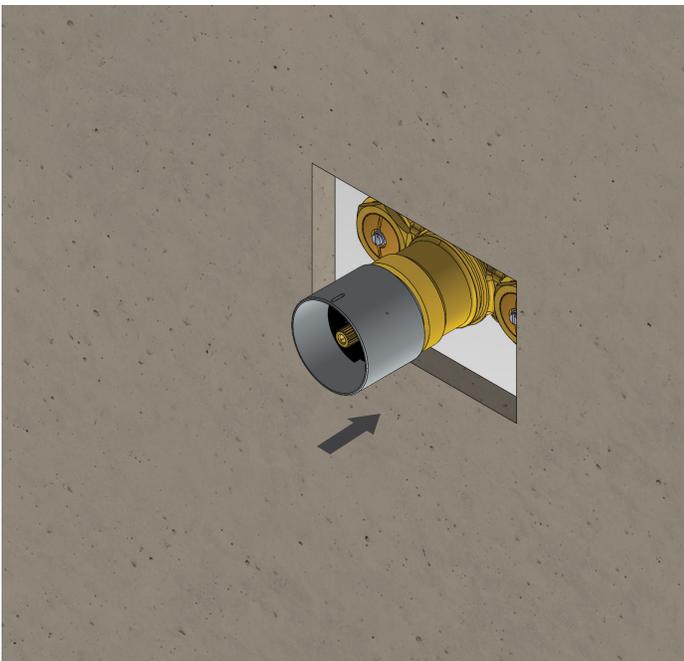
**INSTALLING THE TRIM - TRIM PLATE SIZE AND SHAPE MAY VARY - ILLUSTRATION ONLY**



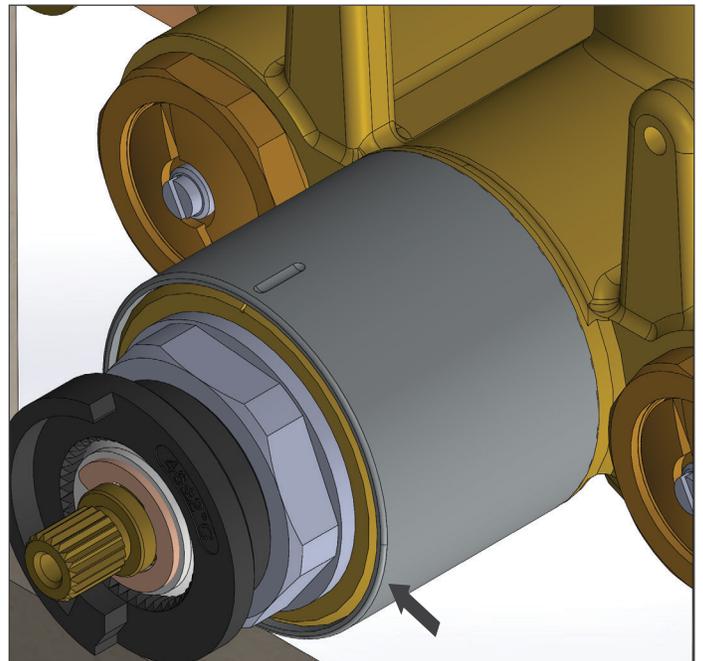
Remove mud guard



Install 42mm ring

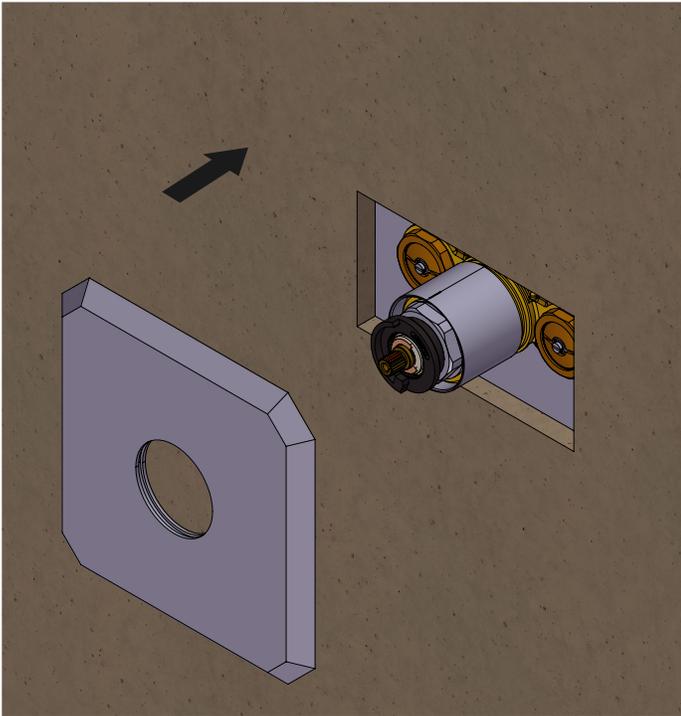


A hard push may be required

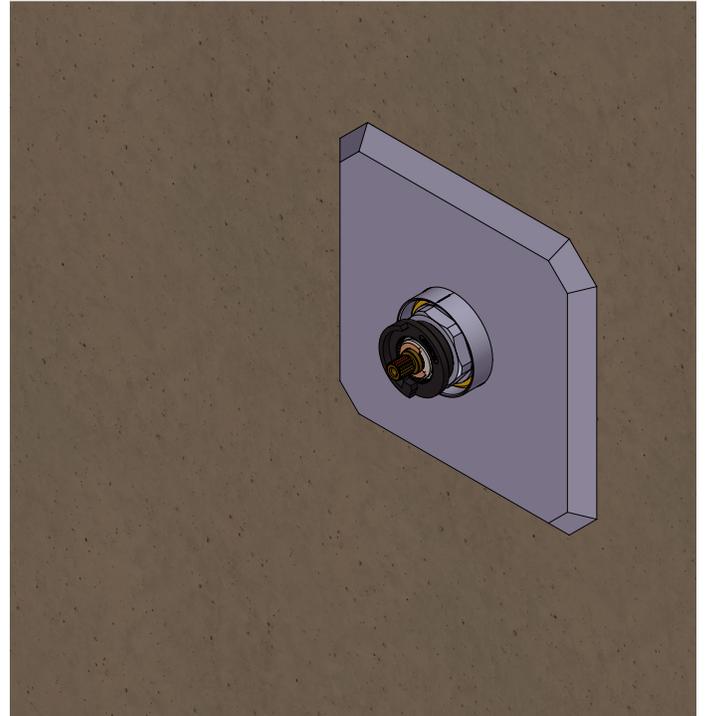


The 42mm ring must be flush. Otherwise the handle will not fit properly

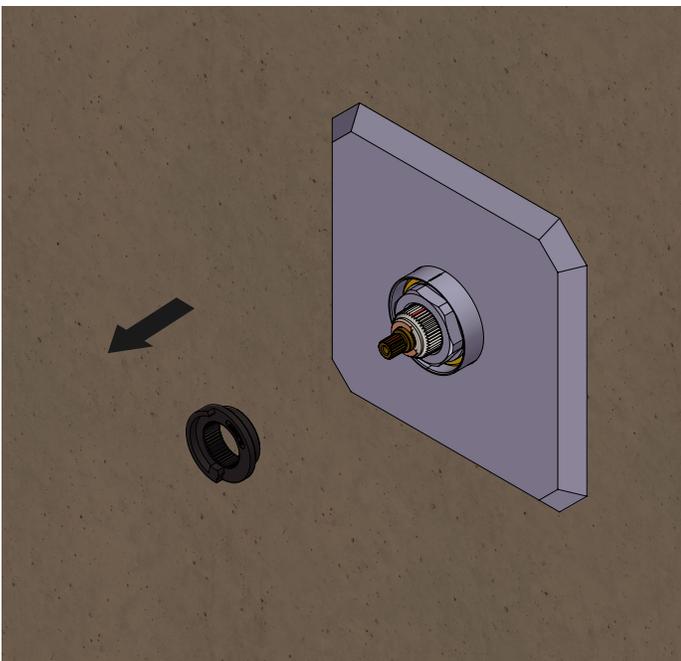
**INSTALLING THE TRIM - TRIM PLATE SIZE AND SHAPE MAY VARY - ILLUSTRATION ONLY**



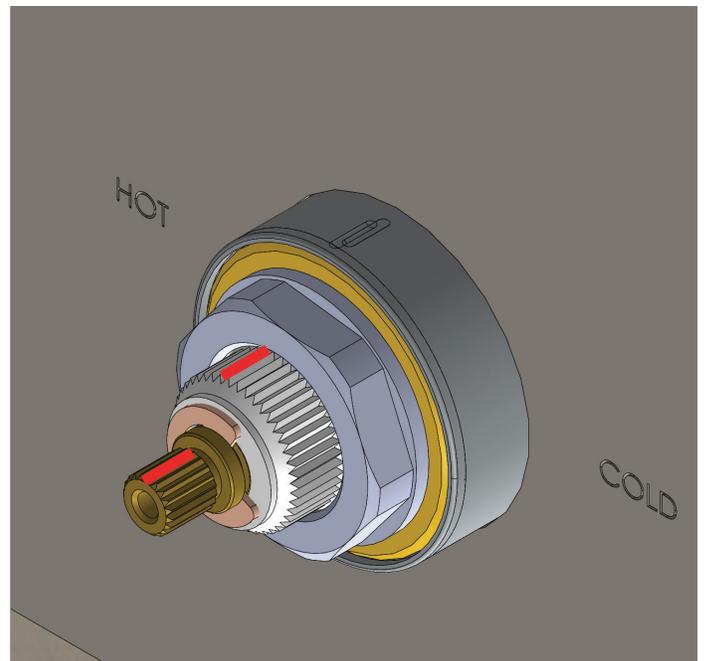
Insert trim plate



Align Trim plate till it is straight

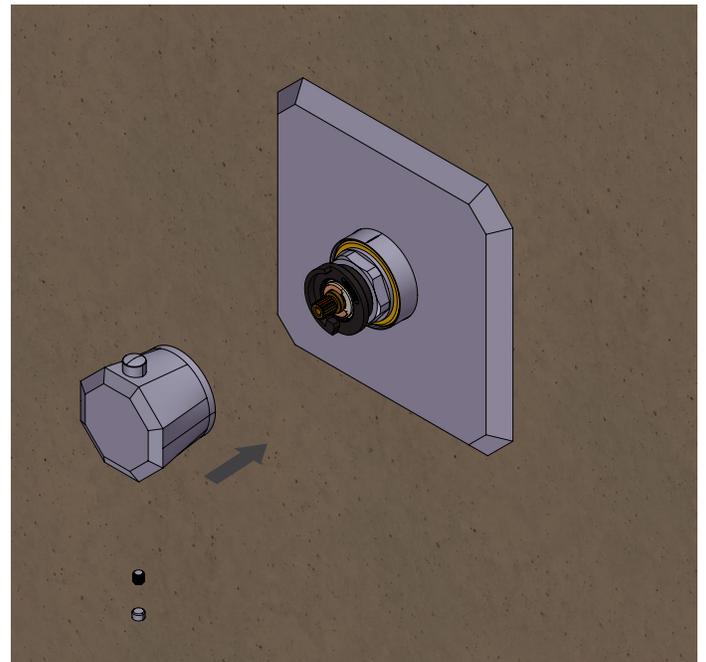


Remove anti-scald temperature ring

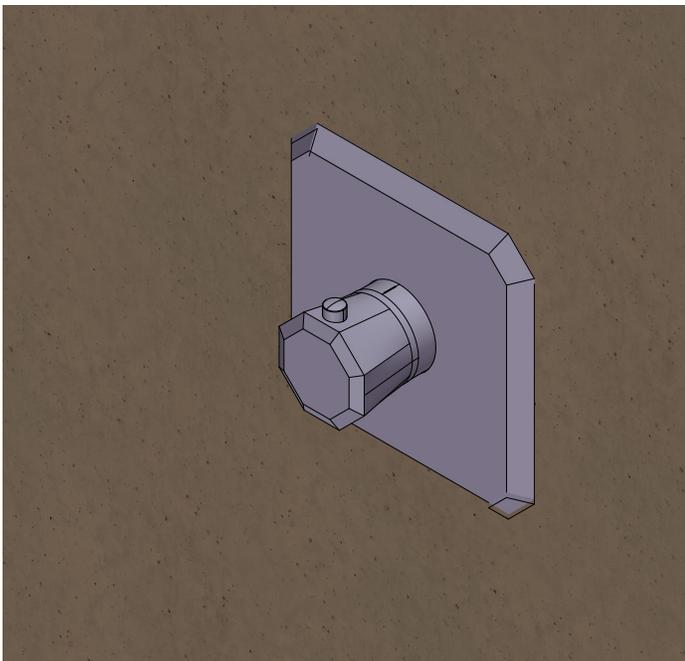


Caliberate cartridge before inserting temperature handle. Red marks must align.

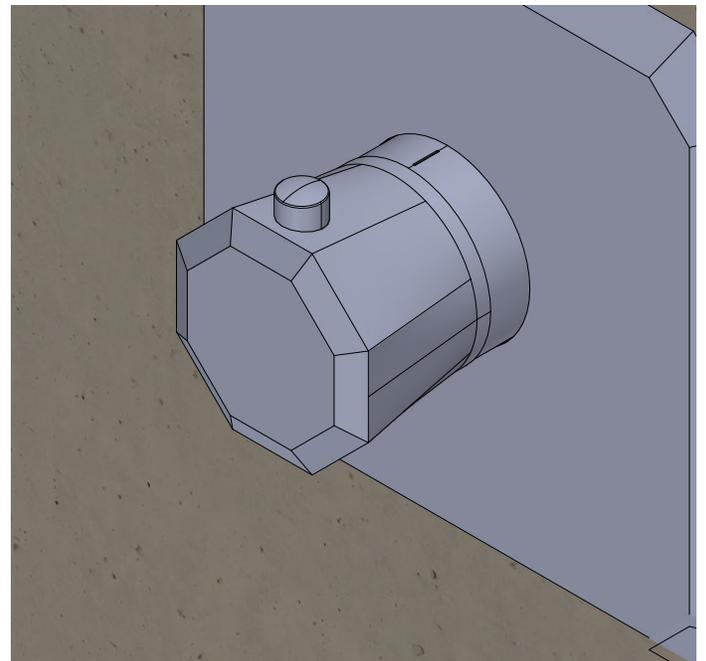
**INSTALLING THE TRIM - TRIM PLATE SIZE AND SHAPE MAY VARY - ILLUSTRATION ONLY**



Correctly re-insert anti-scald temperature ring in the right position

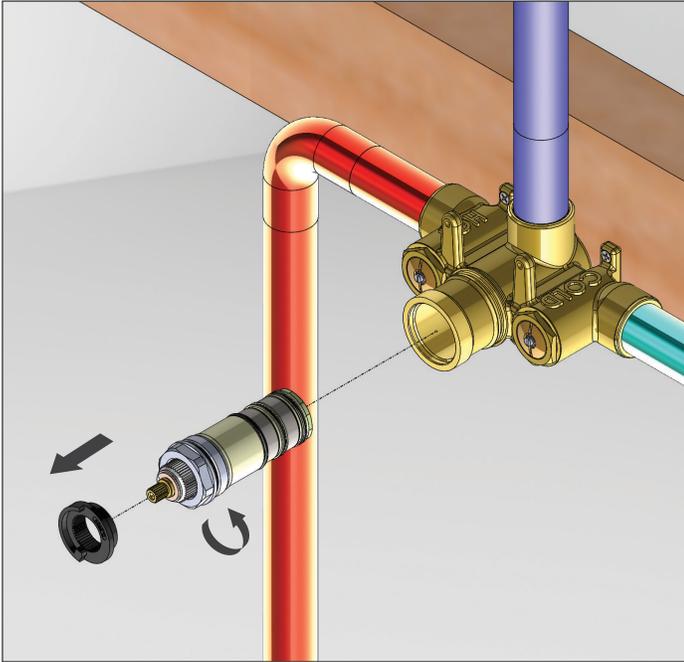


This photo shows a completely installed trim



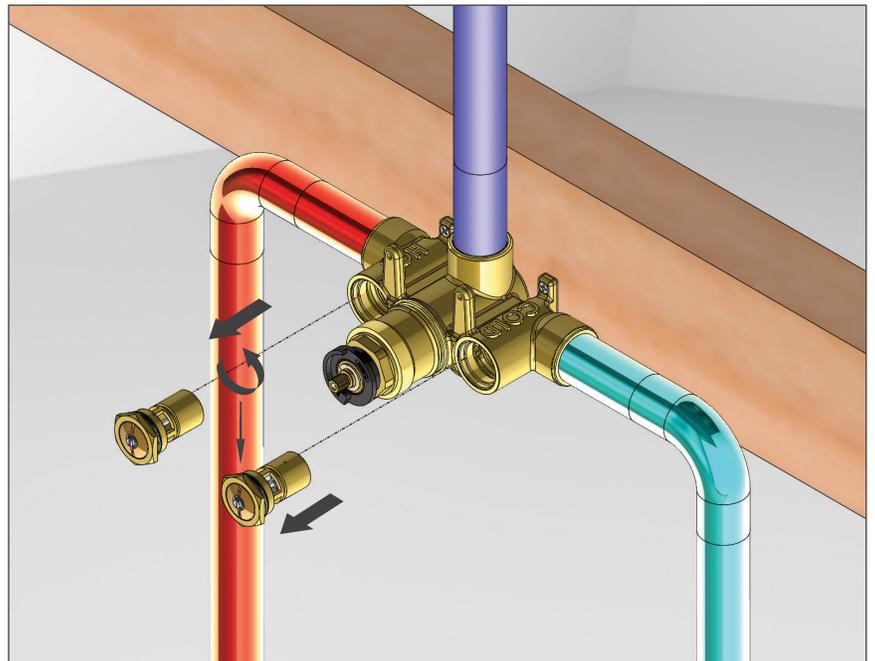
The button on the temperature handle is an anti scald feature. In order to rotate the handle further to "HOT" the button must be pressed

**REPLACING THE THERMOSTATIC CARTRIDGE**

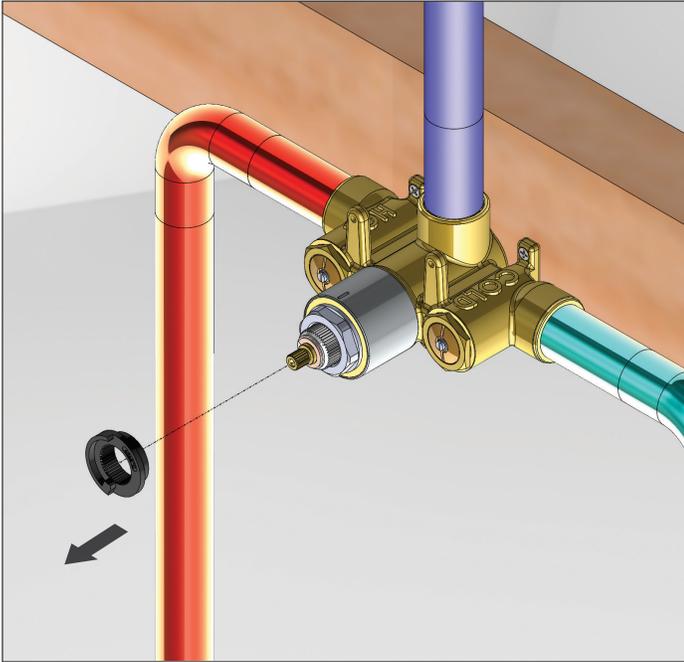


1. Remove Anti-Scald Ring
2. The temperature cartridge can be removed easily in one operation by using a spanner.

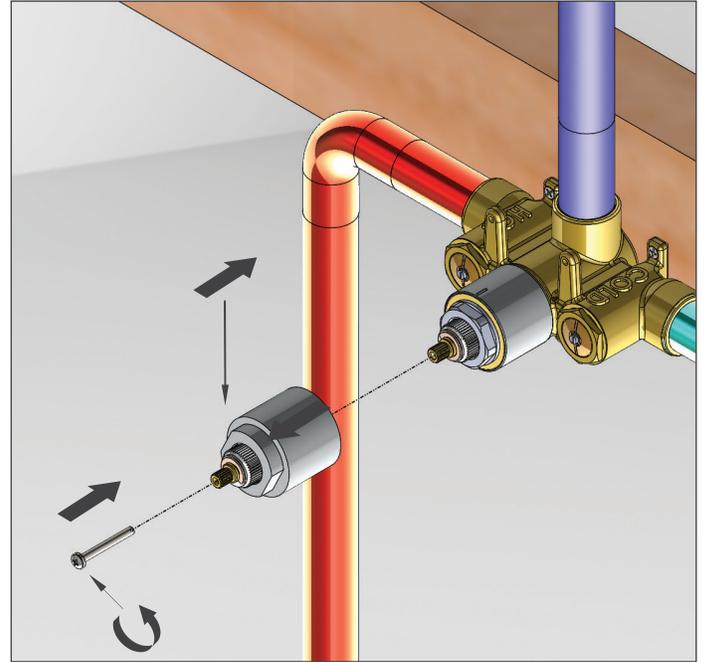
**REPLACING THE SUPPLY STOPS**



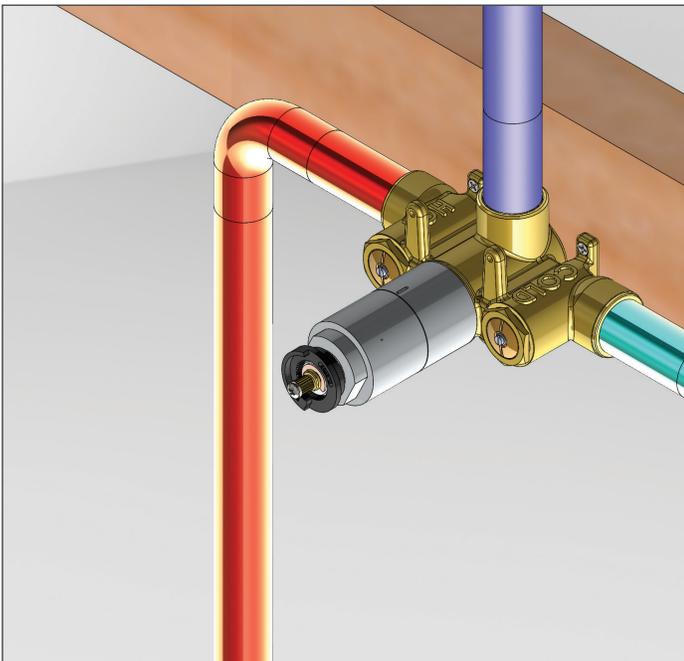
**INSTALLING EXTENSIONS TO THE VALVE - OPTIONAL**



Remove anti scald temperature ring



Install temperature extension piece as shown above. Tighten Screw



Reinsert anti scald temperature ring

**CARTRIDGE CLEANING & MAINTENANCE**

Thermostatic Cartridge:

