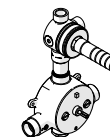


# INSTALLATION GUIDELINES



STYLE No. GUTH49, GU49TH

Universal Thermostatic Valve with Integrated Two Way Diverter Valve

## IMPORTANT:

- To ensure this VALVE is installed properly, you must read and follow these guidelines.
- The owner/user of this VALVE must keep this information for future reference.
- This VALVE and associated TRIM (SOLD SEPARATELY) must be installed by a professional licensed contractor and must be on-site prior to rough-in, this allows the installer to visualize the installation. The VALVE rough-in depth is measured from the center of the inlets to the surface of the finished wall and **VARIES** depending on the TRIM being used.
- This VALVE is intended to work with a Thermostatic with Two Way Diverter Trim and **MUST BE** installed vertically as shown. This VALVE, and it's TRIM, **CANNOT BE** installed horizontally.
- Inspect this VALVE to ensure you have all the parts required for proper installation. This VALVE is sold partially assembled but shown fully disassembled for illustrative and service purposes only.
- **WARNING:** This VALVE features anti-scald protection. The risk of scalding exists until the installer has properly calibrated/adjusted the temperature setting during final trim installation.
- Be sure your installation conforms to federal, state, and local codes. In the State of Massachusetts, all installations must comply with the rules and regulations set forth within 248 CMR.
- Supply fittings are designed in accordance with the pressure and temperature ratings specified in ASME A112.18.1/B125.
- If this VALVE will remain unused for an extended period of time (over 3 months), then the water to the VALVE should be shut off (via service stops or system control valve) and the DIVERTER VALVE should be opened to allow the water in the THERMOSTATIC VALVE to evaporate. This is to keep the CARTRIDGES from being exposed to stagnant or hard water, which can cause the VALVE to malfunction.
- If further assistance is required, please contact Product Support at 1-800-927-2120 Monday through Friday, 8am - 6pm EST.
- Refer to the separate Service Parts Documents for available replacement parts.

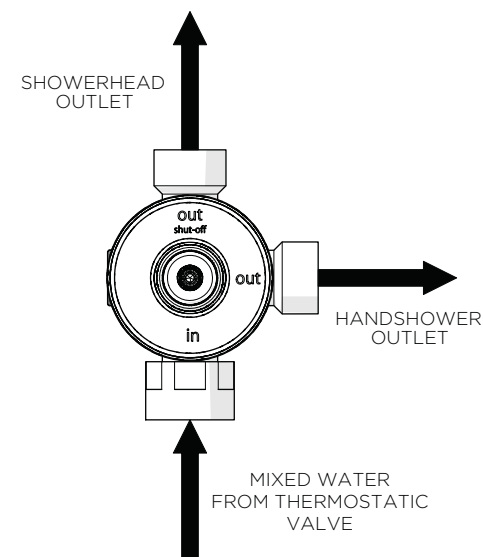
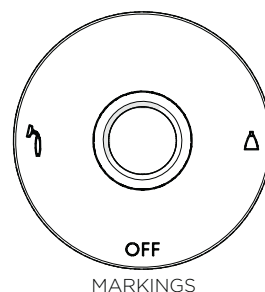
## TECHNICAL DETAILS:

INLET CONNECTION	3/4" FEMALE NPT <sup>†</sup>
OUTLET CONNECTION	1/2" FEMALE NPT <sup>†</sup>
UNRESTRICTED MAXIMUM FLOW RATE	15gpm @ 45 psi [56 L/min @ 3 bar]
THERMOSTATIC VALVE MATERIAL	BI-METALLIC STRIP
WATER PRESSURE	20psi [1.5 bar] MIN - 85psi [6.0 bar] MAX
	45psi [3.0 bar] RECOMMENDED

<sup>†</sup> UK Style No. **GU49TH** supplied with 4 **BSP** ADAPTERS, assembly required.

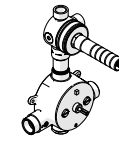
## VALVE FUNCTION:

- The THERMOSTATIC VALVE only mixes hot and cold water, it does not have an on/off or volume control function. Mixed water flows out at a fixed volume to the DIVERTER VALVE which has 3 positions:
  - 2 that can direct water flow to a maximum of 2 devices. Water **CANNOT** flow out of the devices simultaneously (i.e. out of the shower head AND handshower together).
  - 1 position that shuts the water off to all devices.
- When the VALVE is paired with a TRIM that has device markings (i.e. shower head and handshower as shown below), it is crucial that the outlet ports of the DIVERTER VALVE are plumbed to the specific devices being used.



[EXAMPLE]

# INSTALLATION GUIDELINES



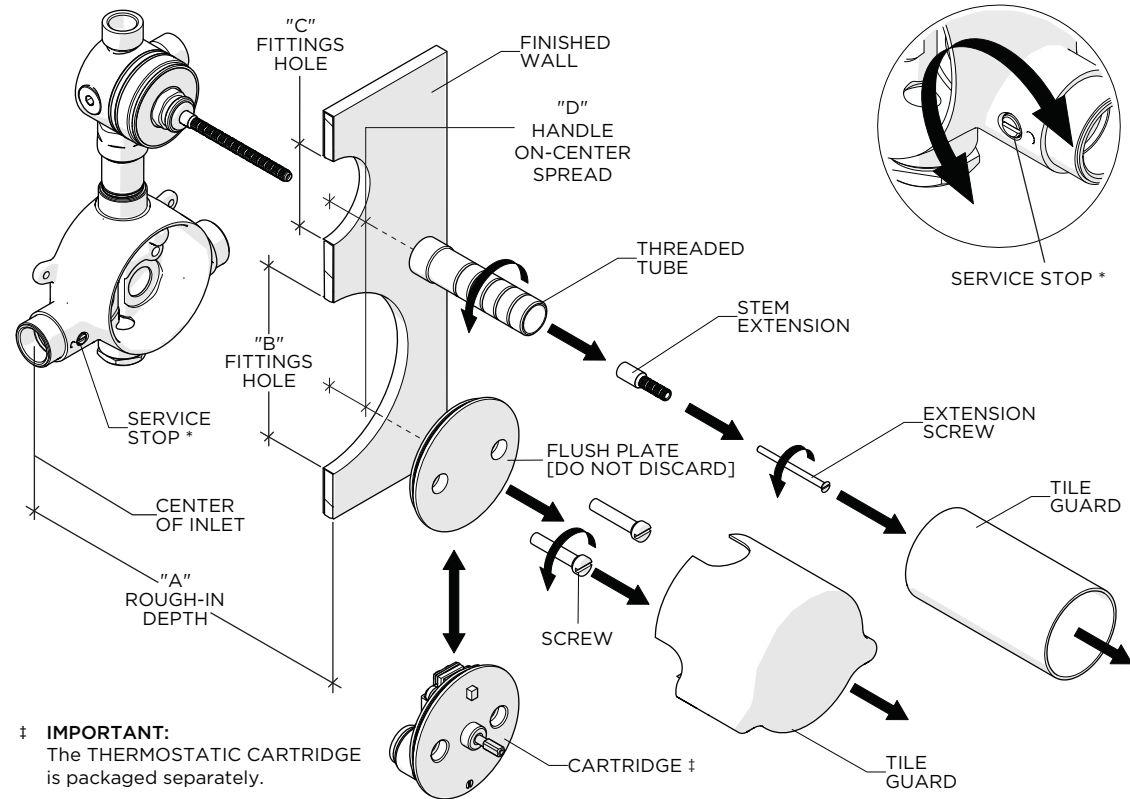
STYLE No. GUTH49, GU49TH

Universal Thermostatic Valve with Integrated Two Way Diverter Valve

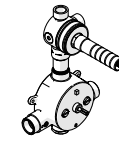
## ROUGH-IN AND VALVE PREPARATION:

- **CAUTION:** Refer to the Installation Guidelines of the specific TRIM being used for the MAXIMUM and MINIMUM rough-in depth dimensions.
- **IMPORTANT:** The rough-in depth is measured from the centerline of the inlets to the surface of the finished wall and VARIES depending on the TRIM being used.
- **CAUTION:** If soldering any connections, ensure the CARTRIDGES are removed to prevent damage to SEALS and internal components.
- **CAUTION:** This VALVE is shipped with a pre-installed FLUSH PLATE and is ready for flushing the lines. Before installing the THERMOSTATIC CARTRIDGE, the supply lines MUST BE flushed out to prevent clogging of the FILTER SCREENS. Failure to flush the lines will permanently damage the CARTRIDGE and VOID the warranty. Repeat the flushing process as needed prior to final TRIM installation.
- **CAUTION:** This VALVE includes integrated SERVICE STOPS \*. Make sure the TILE GUARDS are in place prior to finished wall installation to ensure future access for servicing.

DIM	SPECIFICATION	VALUE
A	ROUGH-IN DEPTH	*VARIES DEPENDING ON TRIM USED*
B	FITTINGS HOLE	Ø5-1/4" [133mm]
C	FITTINGS HOLE	Ø2-1/2" [64mm]
D	HANDLE ON-CENTER SPREAD	5-11/16" [144mm]

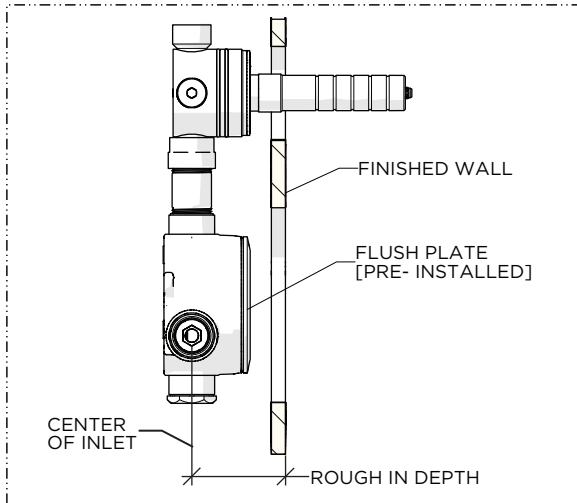


# INSTALLATION GUIDELINES



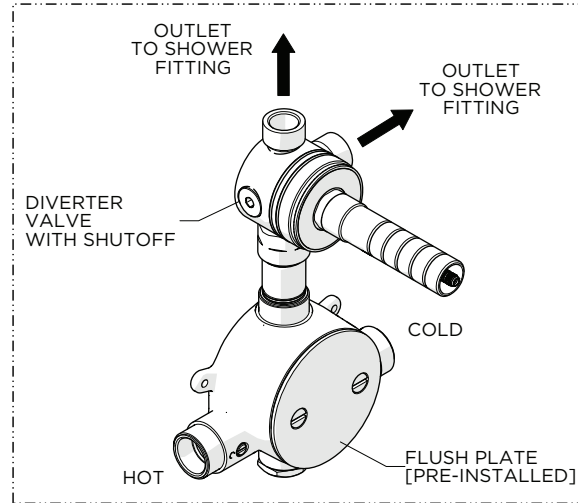
STYLE No. GUTH49, GU49TH

Universal Thermostatic Valve with Integrated Two Way Diverter Valve

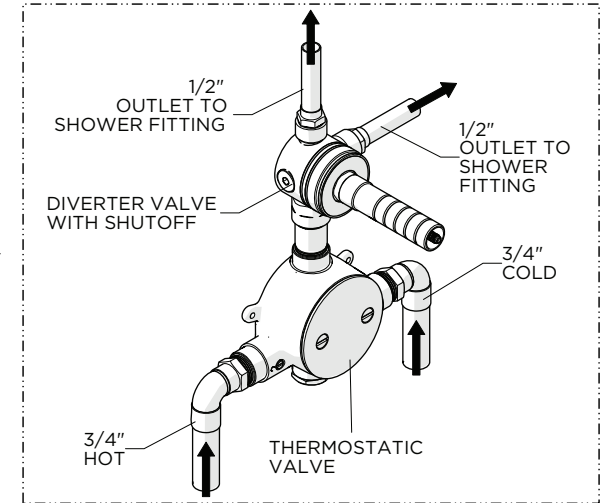


1. The VALVE rough-in depth is measured from the center of the inlets to the surface of the finished wall and **VARIES** depending on the trim being used.

**NOTE:** See Installation Guidelines of the TRIM being used for **MAX** and **MIN** rough-in depth dimensions.

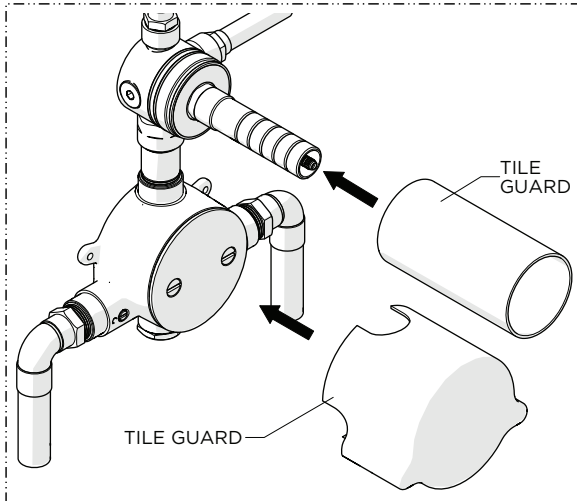


2. Make sure the VALVE is positioned according to the **markings** so that the inlets are situated with hot piped on the left and cold piped on the right.

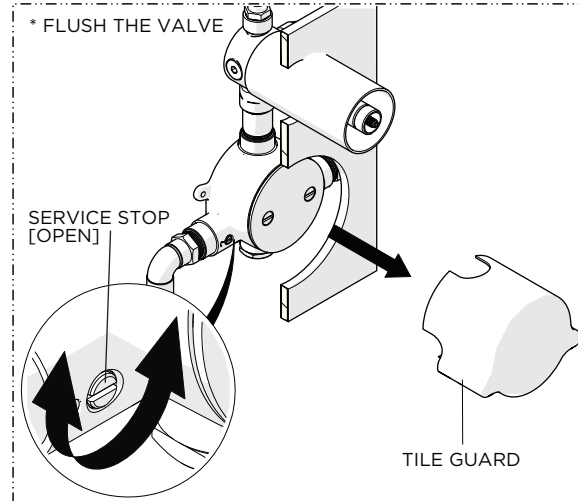


3. Run 3/4" [22mm] COPPER SUPPLY lines to the proper height of the VALVE INLETS and be sure to secure all piping and fittings.

**CAUTION:** If soldering any connections, remove the CARTRIDGES to prevent damage.

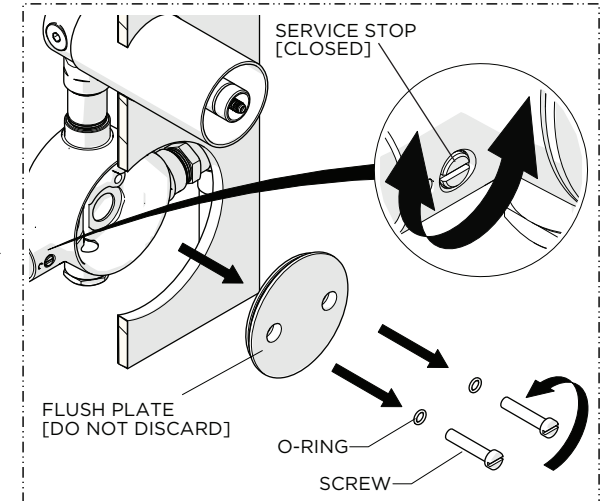


4. Install the TILE GUARDS to protect the VALVE during the completion of the finished wall and to create the exact opening to ensure access for future servicing including the integrated SERVICE STOPS.



5. Remove the TILE GUARD and turn on the water supply then open the SERVICE STOPS to flush out the lines and inspect all connections for leaks.

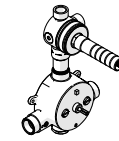
**CAUTION:** Failure to flush out the supply lines before installing the THERMOSTATIC CARTRIDGE will clog the FILTER SCREENS, permanently damage the CARTRIDGE, and **VOID** the warranty. Repeat the flushing process as needed.



6. After flushing, turn off the water supply, close the SERVICE STOPS, unthread the SCREWS, and remove the FLUSH PLATE.

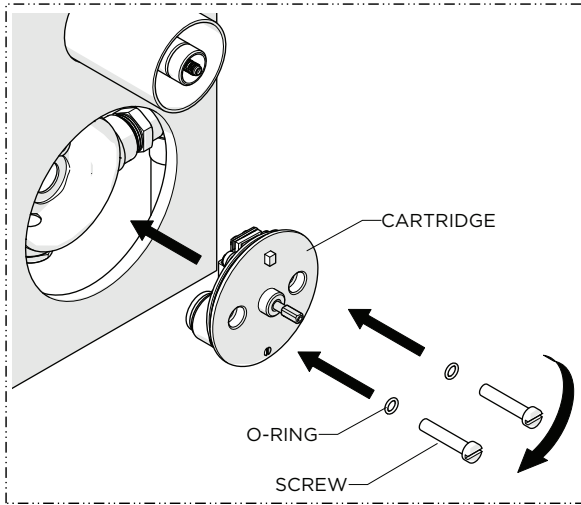
**NOTE:** Do **NOT** discard the FLUSH PLATE.

INSTALLATION GUIDELINES

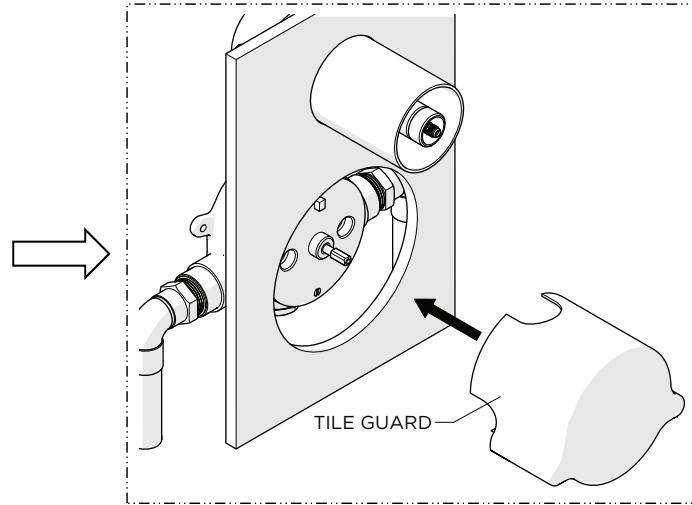


STYLE No. GUTH49, GU49TH

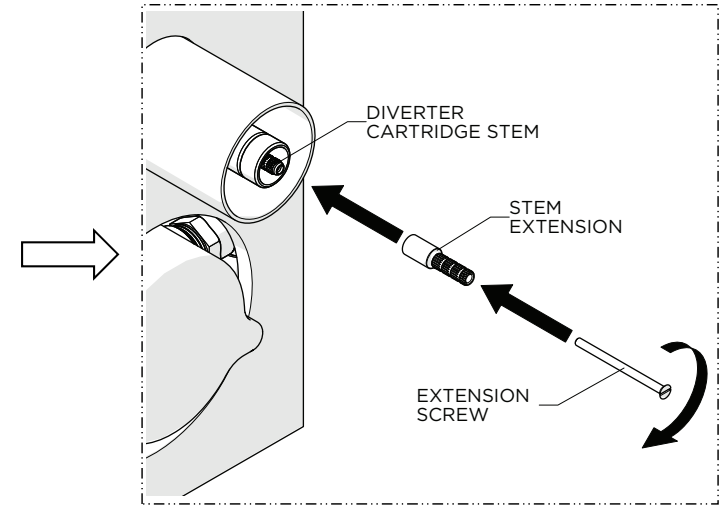
Universal Thermostatic Valve with Integrated Two Way Diverter Valve



7. Install the CARTRIDGE using the SCREWS provided, making sure the O-RINGS are in place.



8. Re-attach the TILE GUARD to protect the CARTRIDGE until construction is completed.



9. Place the STEM EXTENSION onto the DIVERTER CARTRIDGE STEM then thread the EXTENSION SCREW into the STEM.