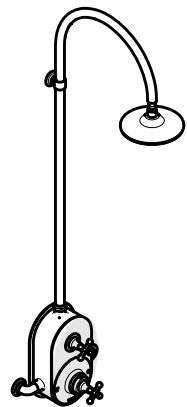


INSTALLATION GUIDELINES

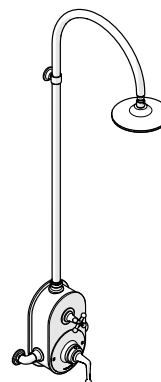
STYLE No. DSXS20, DSXS30, DSXS40, DSXS50, DSXS60, DSXS70

Dash Exposed Thermostatic Shower System



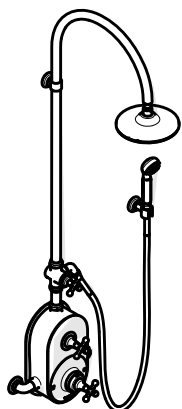
STYLE No. DSXS20
Dash Exposed Thermostatic Shower System with 8" Shower Head and Metal Cross Handles

- **STYLE No.** DSXS2C
Dash Exposed Thermostatic Shower System with Metal Cross Handles
- **STYLE No.** UNSH18
Universal 8" Shower Rose



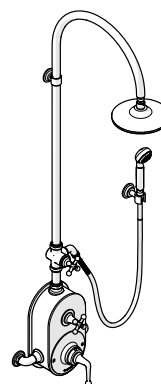
STYLE No. DSXS30
Dash Exposed Thermostatic Shower System with 8" Shower Head, Metal Lever and Cross Handle

- **STYLE No.** DSXS3C
Dash Exposed Thermostatic Shower System with Metal Lever Handle
- **STYLE No.** UNSH18
Universal 8" Shower Rose



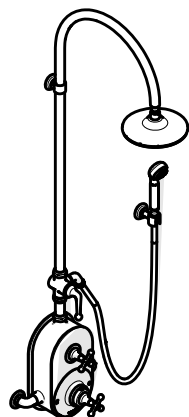
STYLE No. DSXS40
Dash Exposed Thermostatic Shower System with 8" Shower Head, Handshower, Metal Cross Diverter Handle and Metal Cross Handles

- **STYLE No.** DSXS2C
Dash Exposed Thermostatic Shower System with Metal Cross Handles
- **STYLE No.** DSHS20
Dash Handshower on Hook with Diverter and Metal Cross Handle
- **STYLE No.** UNSH18
Universal 8" Shower Rose



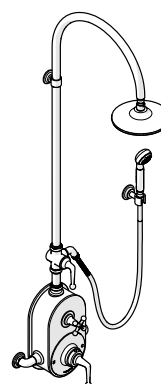
STYLE No. DSXS60
Dash Exposed Thermostatic Shower System with 8" Shower Head, Handshower, Metal Cross Diverter Handle, Metal Lever and Cross Handle

- **STYLE No.** DSXS3C
Dash Exposed Thermostatic Shower System with Metal Lever Handle
- **STYLE No.** DSHS20
Dash Handshower on Hook with Diverter and Metal Cross Handle
- **STYLE No.** UNSH18
Universal 8" Shower Rose



STYLE No. DSXS50
Dash Exposed Thermostatic Shower System with 8" Shower Head, Handshower, Metal Lever Diverter Handle and Metal Cross Handles

- **STYLE No.** DSXS2C
Dash Exposed Thermostatic Shower System with Metal Cross Handles
- **STYLE No.** DSHS30
Dash Handshower on Hook with Diverter and Metal Lever Handle
- **STYLE No.** UNSH18
Universal 8" Shower Rose



STYLE No. DSXS70
Dash Exposed Thermostatic Shower System with 8" Shower Head, Handshower, Metal Lever Diverter Handle, Metal Lever and Cross Handle

- **STYLE No.** DSXS3C
Dash Exposed Thermostatic Shower System with Metal Lever Handle
- **STYLE No.** DSHS30
Dash Handshower on Hook with Diverter and Metal Lever Handle
- **STYLE No.** UNSH18
Universal 8" Shower Rose

INSTALLATION GUIDELINES

Dash Exposed Thermostatic Shower System

IMPORTANT:

- **WARNING:** This product is large and extremely heavy. It is **STRONGLY** recommended that 2 or more persons install this product.
- To ensure this product is installed properly, you must read and follow these guidelines.
- The owner/user of this product must keep this information for future reference.
- This product must be installed by a professional licensed contractor and must be onsite prior to rough-in. This allows the installer to visualize the installation and verify the center inlet supply spread.
- Install accessible hot and cold service stop valves (not supplied) to facilitate servicing.
- This product is supplied with a THERMOSTATIC VALVE which features anti-scald protection. The risk of scalding exists until the installer has properly calibrated/adjusted the temperature setting during final trim installation.
- Adequate blocking in the wall is recommended for mounting the THERMOSTATIC VALVE and the SUPPORT POST using the 1-1/2" length WOOD SCREWS PROVIDED.
 - ❖ DRYWALL ANCHORS, intended for use in a typical 1/2" drywall installation, are provided for situations where blocking is not installed.
- 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.
- Inspect this product to ensure you have all the parts required for proper installation. Product is sold partially assembled but shown fully disassembled for illustrative and service purposes only.
- Use only a strap wrench or protected/smooth-jaw wrench on any finished surface.
- The use of certain plumber's putty may stain stone or tile surfaces.
- 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:

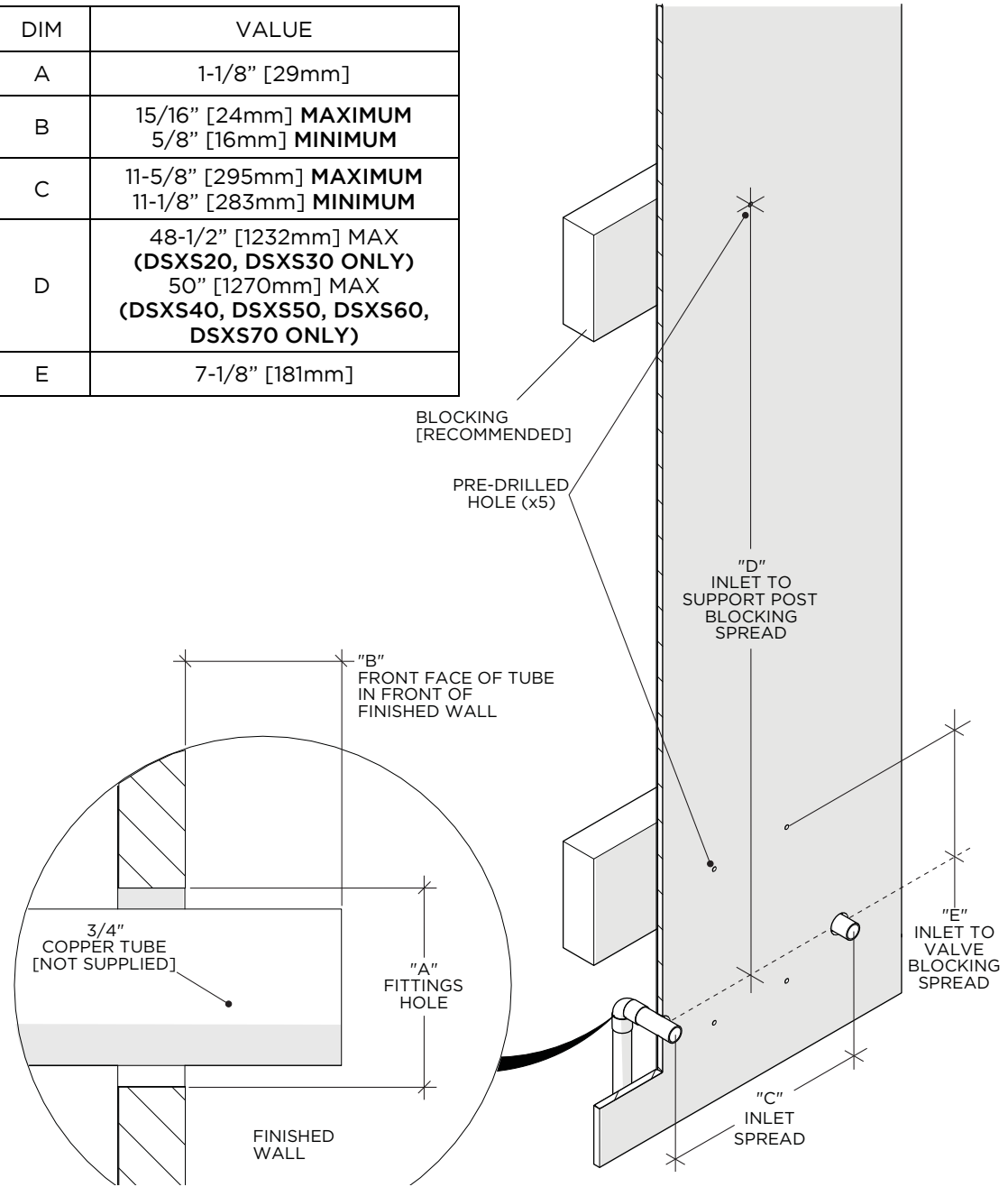
DETAIL	SPECIFICATION
ADJUSTABLE VERSUS FIXED SPRAY	FIXED
DIAMETER OF SHOWER HEAD	7-3/4" [197mm]
DIAMETER OF HANDSHOWER HEAD (DSXS40, DSXS50, DSXS60, DSXS70 ONLY)	2-3/8" [60mm]
DIAMETER OF TUBES	1-1/8" [28mm]
THERMOSTATIC HANDLE TURN ANGLE	ONE AND A HALF TURNS
SHUTOFF HANDLE TURN ANGLE	QUARTER TURN
DIVERTER HANDLE TURN ANGLE (DSXS40, DSXS50, DSXS60, DSXS70 ONLY)	QUARTER TURN
HANDSHOWER HOSE LENGTH (DSXS40, DSXS50, DSXS60, DSXS70 ONLY)	59" [1.5m]
INLET CONNECTION	3/4" COPPER COMPRESSION
INTEGRATED DIVERTER (DSXS40, DSXS50, DSXS60, DSXS70 ONLY)	YES
NUMBER OF HOLES	TWO
PIVOT (SHOWER HEAD ONLY)	YES
THERMOSTATIC VALVE MATERIAL	WAX ELEMENT
WATER PRESSURE RANGE	20psi [1.5 bar] MIN 85psi [6.0 bar] MAX
WATER PRESSURE RECOMMENDED	45psi [3.0 bar]

INSTALLATION GUIDELINES

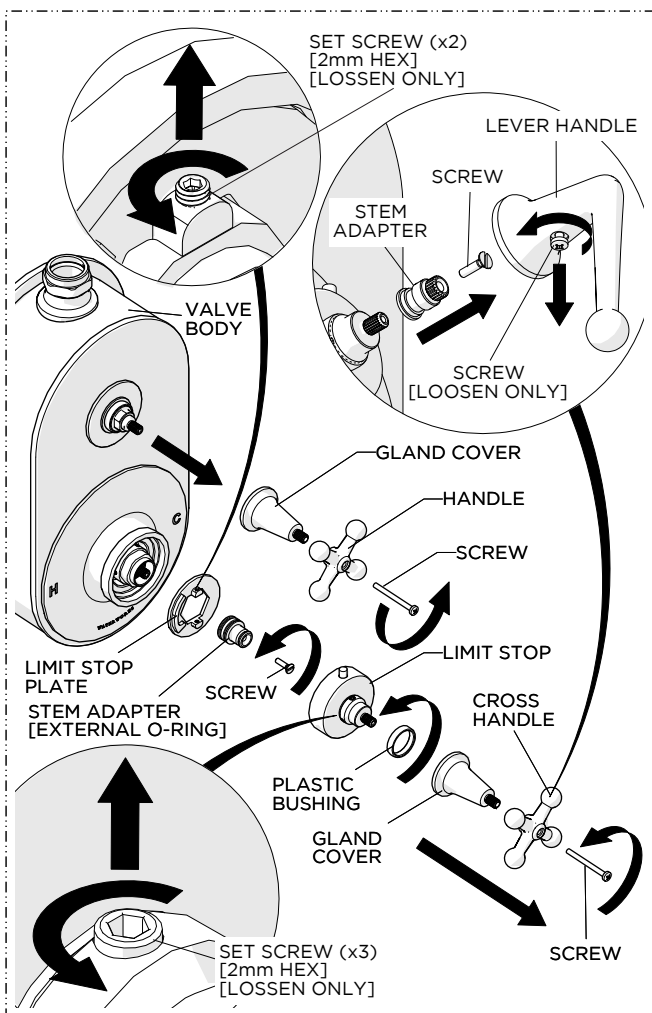
ROUGH-IN:

- Determine the ideal location for the VALVE and INLET ELBOWS based on user preference then, with the HOT supply on the left and the COLD supply on the right, run well supported 3/4" copper supply lines for maximum water flow.
- **WARNING:** The inlet supply spread **MUST** be between 11-1/8" [283mm] MINIMUM and 11-5/8" [295mm] MAXIMUM. Verify the supply lines are secure, level, perpendicular to the finished wall, parallel to each other at the proper spread and at equal depths. The installation will be difficult or impossible if the rough-in is not accurate.
- Adequate blocking in the wall is recommended for mounting the THERMOSTATIC VALVE and the SUPPORT POST using the 1-1/2" length WOOD SCREWS PROVIDED.
 - ❖ DRYWALL ANCHORS, intended for use in a typical 1/2" drywall installation, are provided for situations where blocking is not installed.
- Cap off the supply lines and check for leaks.
- **CAUTION:** Make sure when supply lines are cut, the cuts are straight and the edges are free of any burrs.

DIM	VALUE
A	1-1/8" [29mm]
B	15/16" [24mm] MAXIMUM 5/8" [16mm] MINIMUM
C	11-5/8" [295mm] MAXIMUM 11-1/8" [283mm] MINIMUM
D	48-1/2" [1232mm] MAX (DSXS20, DSXS30 ONLY) 50" [1270mm] MAX (DSXS40, DSXS50, DSXS60, DSXS70 ONLY)
E	7-1/8" [181mm]



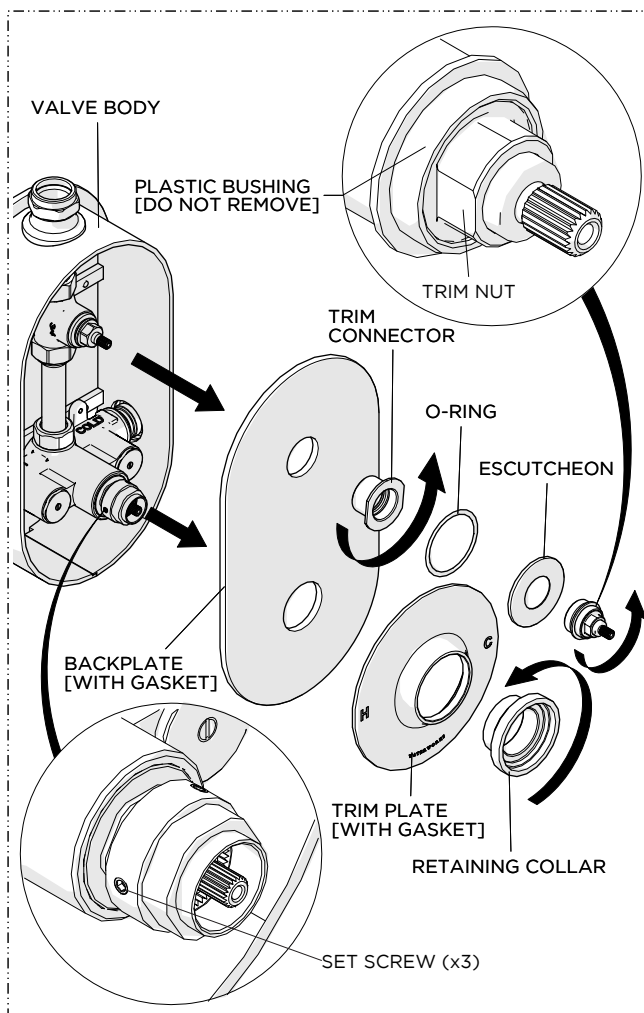
INSTALLATION GUIDELINES



1. THERMOSTATIC HANDLE:

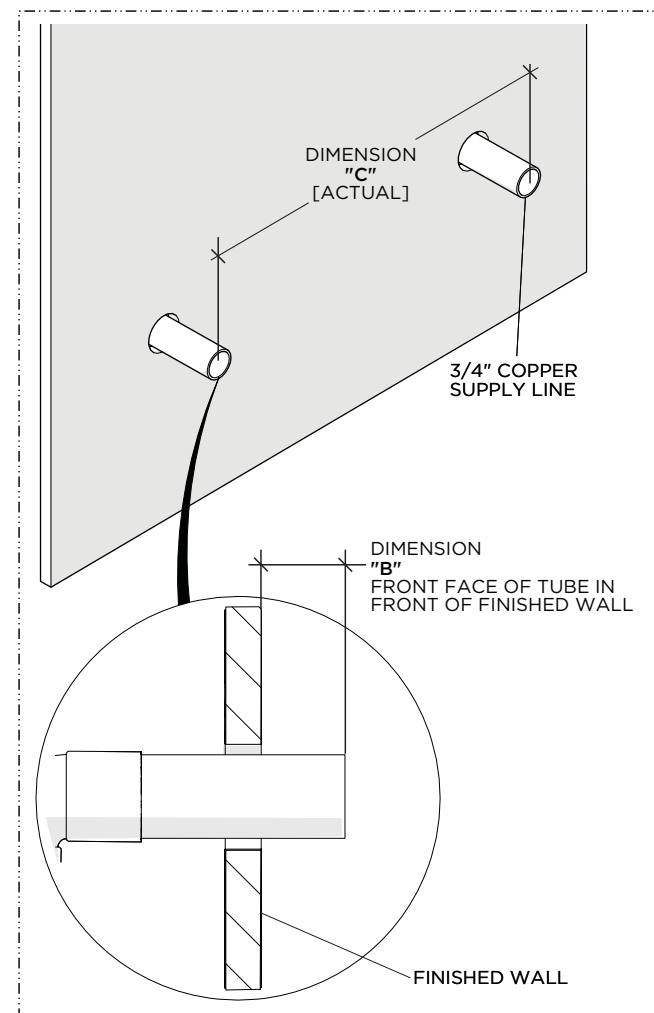
- a. **CROSS:** Unthread and remove the SCREW then remove the HANDLE and GLAND COVER or,
- b. **LEVER:** Unthread the SCREW and remove the HANDLE then unthread the SCREW and remove the STEM ADAPTER,
- c. **LIMIT STOP:** Unthread and remove the PLASTIC BUSHING, loosen, but do **NOT** remove, the SET SCREWS, pull off the LIMIT STOP, unthread the SCREW, remove the STEM ADAPTER, loosen, but do **NOT** remove, the SET SCREW then remove the LIMIT STOP PLATE.

SHUTOFF HANDLE: Unthread the SCREW then remove the HANDLE and GLAND COVER.



2. THERMOSTATIC HANDLE: Unthread and remove the RETAINING COLLAR then remove the TRIM PLATE.

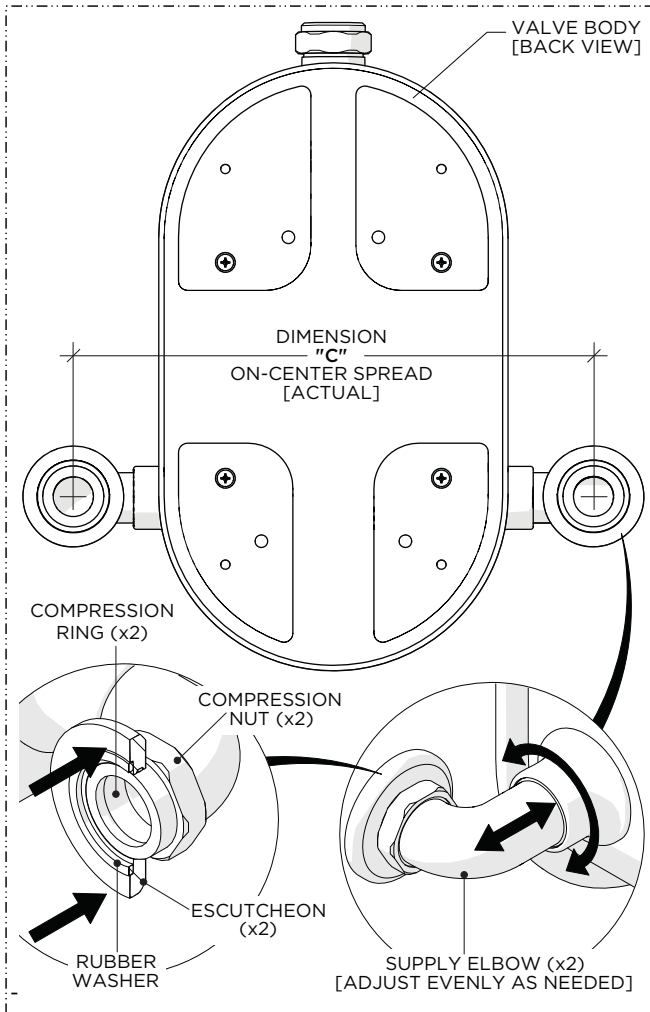
SHUTOFF HANDLE: Unthread and remove the TRIM NUT, remove the ESCUTCHEON and O-RING, unthread and remove the TRIM CONNECTOR, and remove the BACKPLATE.



3. Measure the **actual** on-center spread (DIMENSION C) of the SUPPLY LINES, which **MUST** be between 11-1/8" [283mm] and 11-5/8" [295mm], and ensure the SUPPLY LINES project (DIMENSION B) between 5/8" [16mm] and 15/16" [24mm] from the surface of the finished wall.

DIMENSION C [ACTUAL]: _____

INSTALLATION GUIDELINES

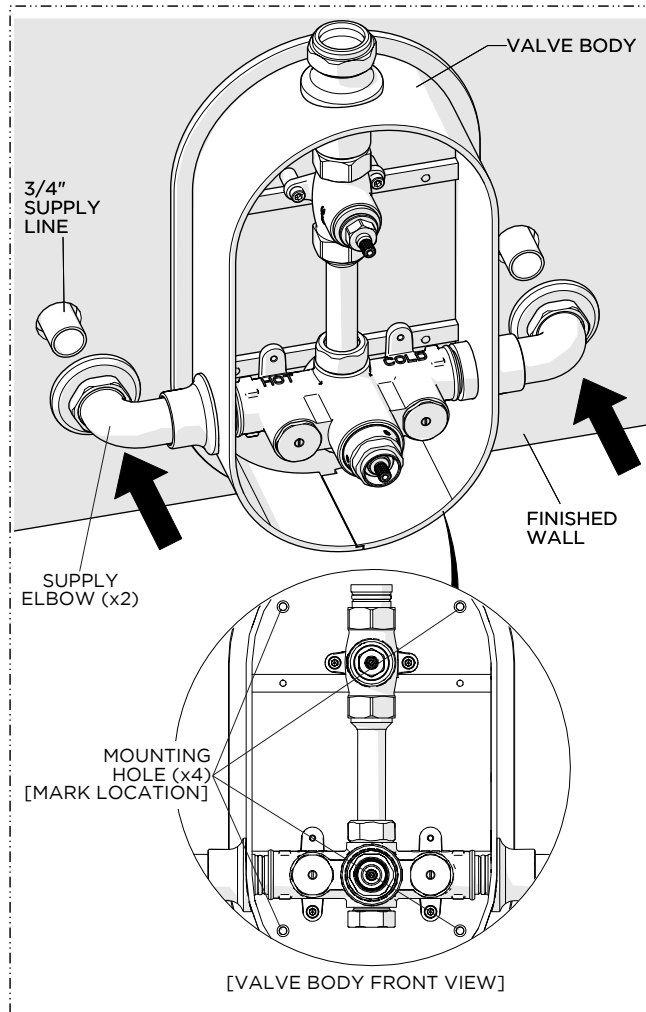


4. Push the ESCUTCHEONS against the COMPRESSION NUTS then measure the on-center spread of the SUPPLY ELBOWS (DIMENSION C).

DIMENSION C [ACTUAL]: _____

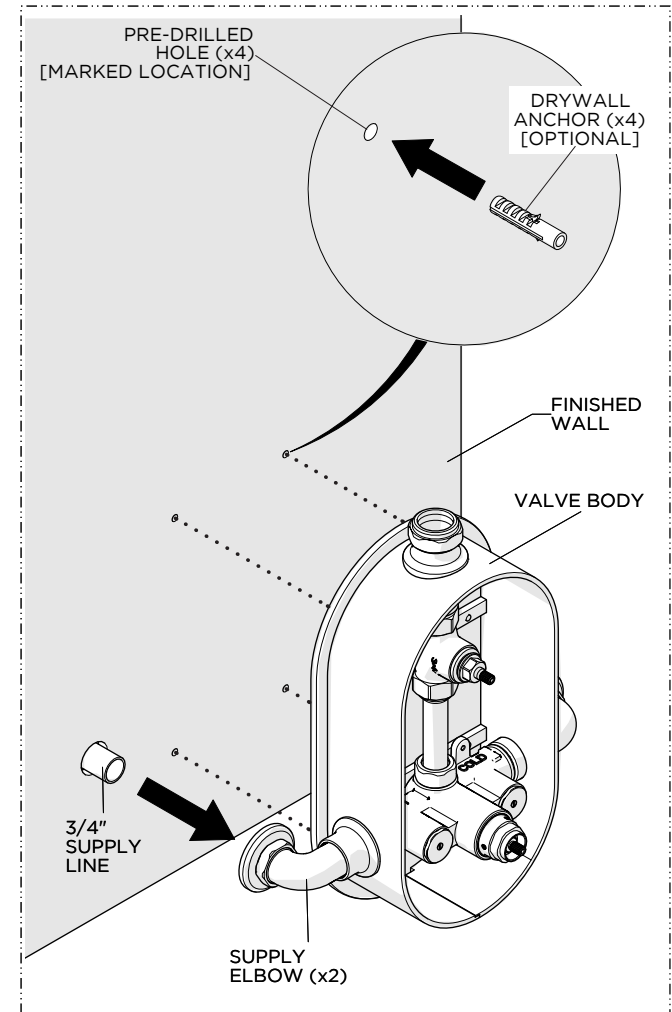
IMPORTANT: Verify the ELBOW spread is the **same** as the SUPPLY LINE spread and, **if necessary**, adjust the spread by threading and unthreading the ELBOWS from the VALVE BODY.

CAUTION: Do **NOT** thread or unthread one ELBOW more than the other. Adjust the ELBOWS evenly and do **NOT** exceed the MINIMUM or MAXIMUM spread dimensions.



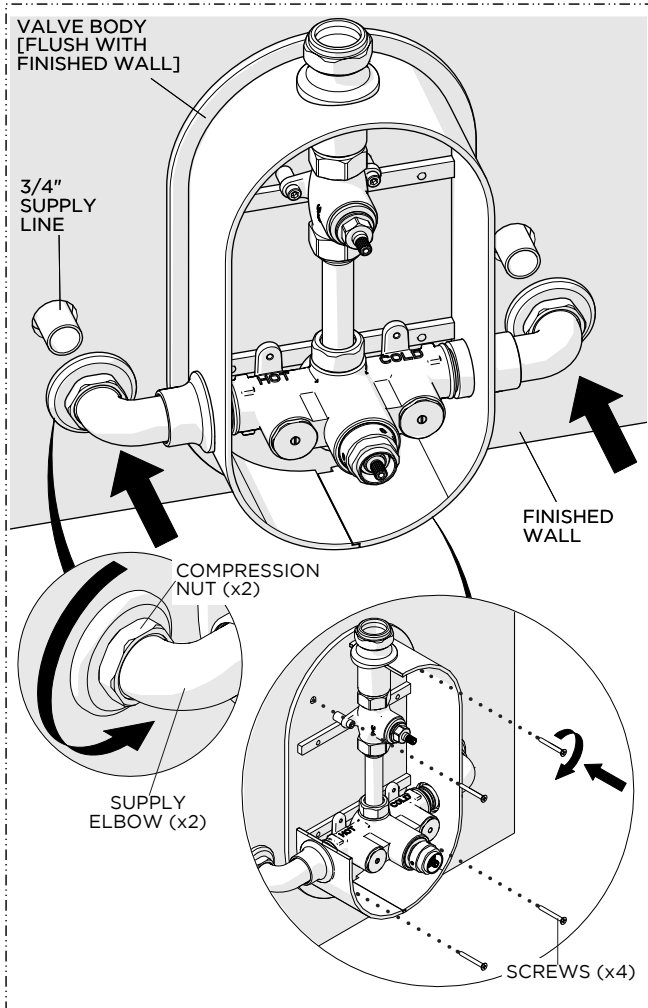
5. Fit the SUPPLY ELBOWS onto the SUPPLY LINES making sure the VALVE BODY sits flush against the finished wall then mark the location of the MOUNTING HOLES (x4).

NOTE: Do **NOT** tighten the COMPRESSION NUTS,

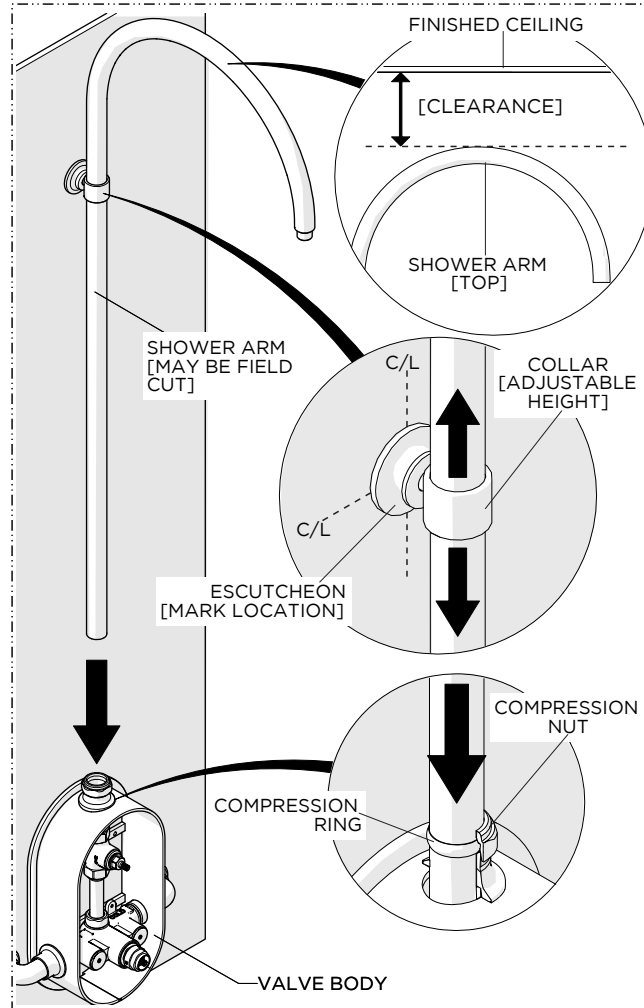


6. Remove the VALVE and, using the previous marks, pre-drill holes (pilot holes) to accommodate the MOUNTING SCREWS and, if necessary, install the DRYWALL ANCHORS provided where blocking is not installed.

INSTALLATION GUIDELINES



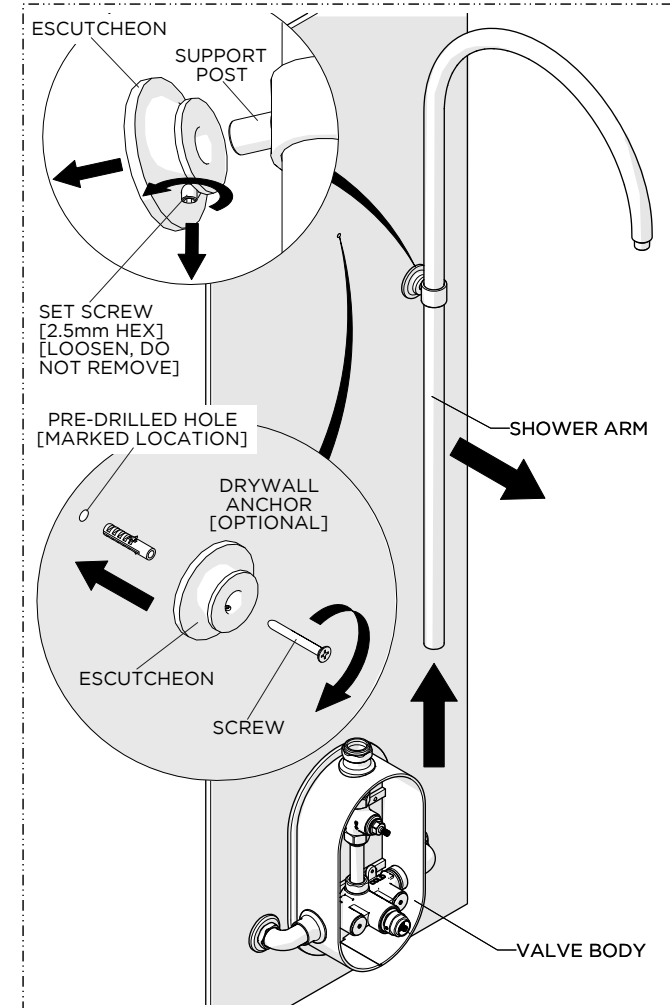
7. Fit the SUPPLY ELBOWS onto the SUPPLY LINES making sure the VALVE BODY sits **flush** against the finished wall and secure the VALVE BODY to the wall using the SCREWS (x4) provided then thread and securely tighten the COMPRESSION NUTS onto the ELBOWS.



8. Fully insert the SHOWER ARM into the top of the VALVE BODY making sure the ESCUTCHEON for the SUPPORT POST sits flush against the finished wall and there is enough **clearance** between the top of the ARM and the finished ceiling.

Adjust the height, as needed, of the SUPPORT POST COLLAR then mark the location of the ESCUTCHEON.

NOTE: If necessary, the SHOWER ARM may be cut to a desired height, based on the user preference or to ensure enough ceiling **clearance**.



9. Remove the SHOWER ARM and loosen, but do **NOT** remove, the SET SCREW on the bottom of the SUPPORT POST ESCUTCHEON then, using the previous marks, pre-drill a hole (pilot hole) to accommodate the MOUNTING SCREW and, if blocking is not installed, install the DRYWALL ANCHOR provided.

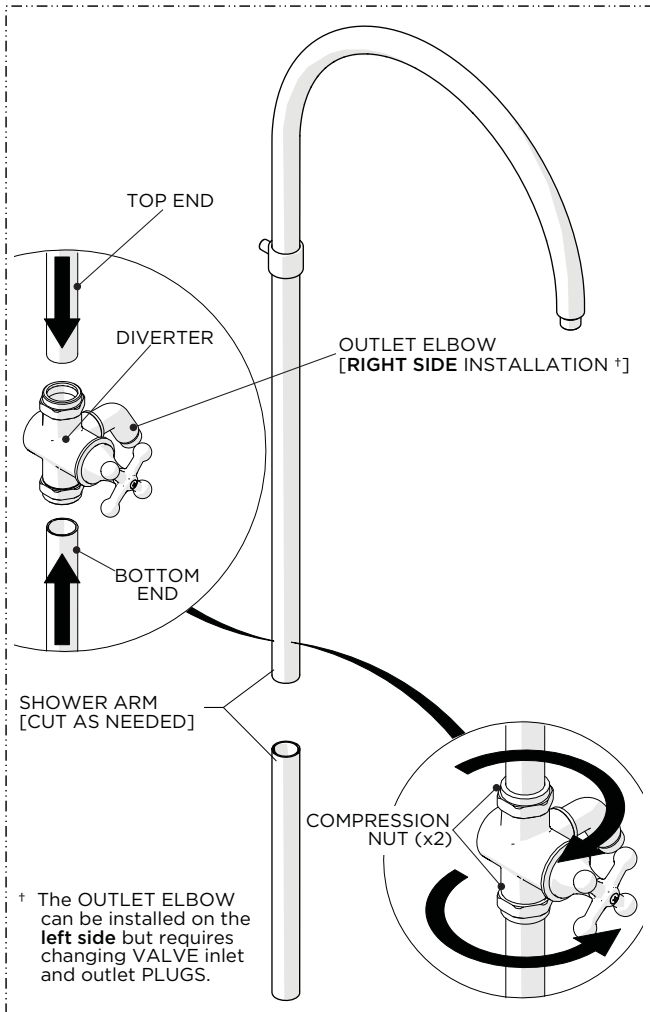
Mount the ESCUTCHEON to the finished wall using the SCREW provided.

NOTE: The ESCUTCHEON should be installed with the SET SCREW towards the bottom but the orientation may be changed to accommodate difficult installations.

**INSTALLATION GUIDELINES:
OPTIONAL DSHS20 AND DSHS30**

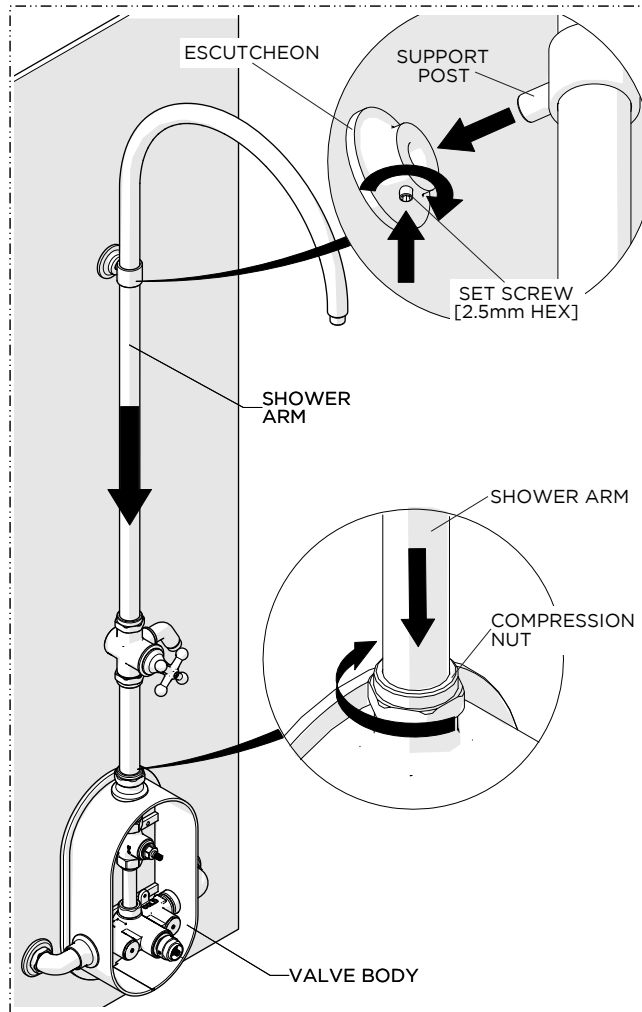
STYLE No. DSXS20, DSXS30, DSXS40,
DSXS50, DSXS60, DSXS70

Dash Exposed Thermostatic Shower System

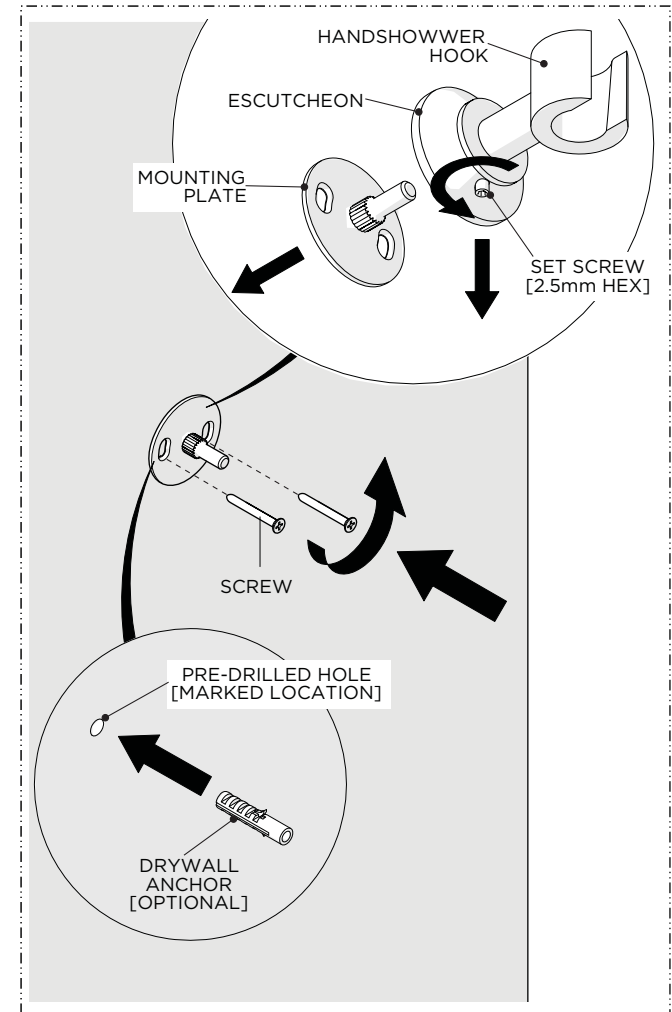


➤ **STEPS 10 - 14 OPTIONAL: DIVERTER VALVE WITH HANDSHOWER (PACKAGED SEPARATELY)**

10. Determine the ideal and/or desired location for the DIVERTER VALVE and cut the SHOWER ARM making sure the cuts are straight and the edges are free of any burrs then fully insert the ENDS into the VALVE and securely tighten the COMPRESSION NUTS.



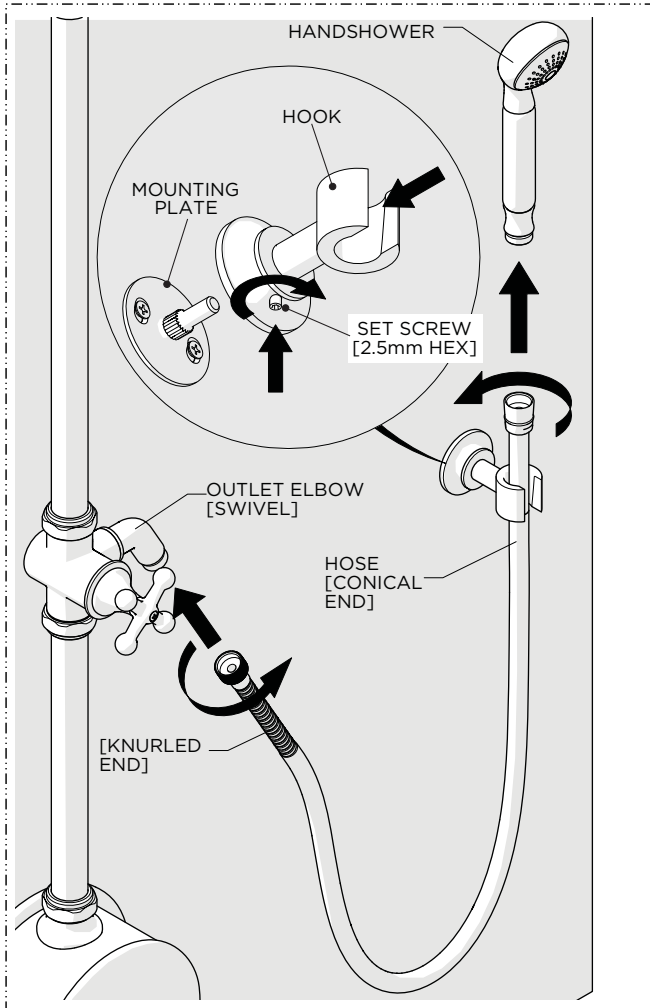
11. Fully insert the SHOWER ARM into the top of the VALVE BODY making sure the SUPPORT POST is fully inserted into the ESCUTCHEON, thread and securely tighten the SET SCREW. Thread and securely tighten the COMPRESSION NUT on the SHOWER ARM to the VALVE.



12. Loosen, but do **NOT** remove, the SET SCREW on the HANDSHOWER HOOK to remove the MOUNTING PLATE then determine the ideal and/or desired location for the HOOK and secure the MOUNTING PLATE using the SCREWS provided. If blocking is not installed, install the DRYWALL ANCHOR provided.

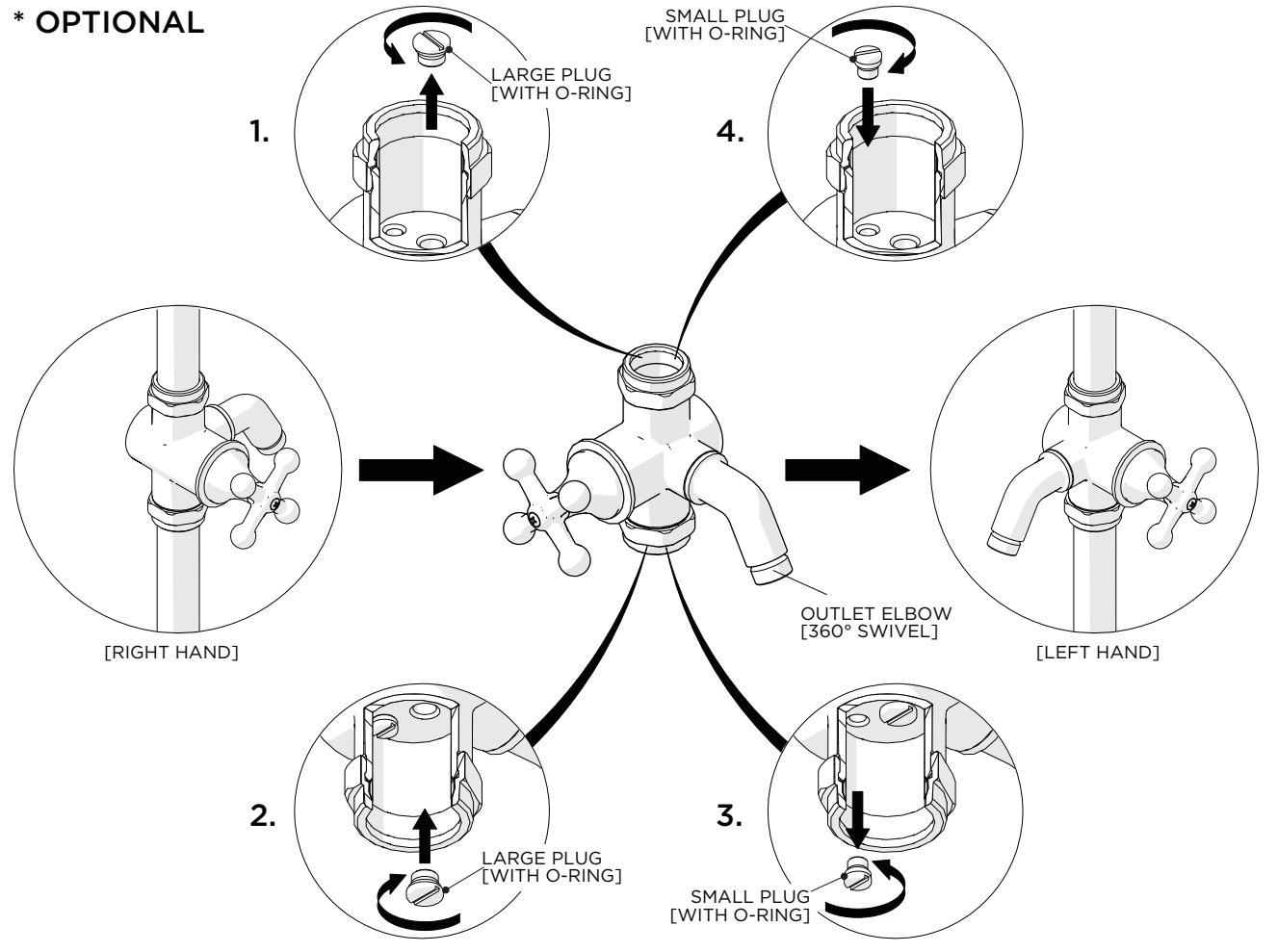
INSTALLATION GUIDELINES:
OPTIONAL DSHS20 AND DSHS30

Dash Exposed Thermostatic Shower System



13. Place the HOOK onto the MOUNTING PLATE and securely tighten the SET SCREW then connect the HOSE to the HANDSHOWER and DIVERTER VALVE and place the HANSHOWER on the HOOK.

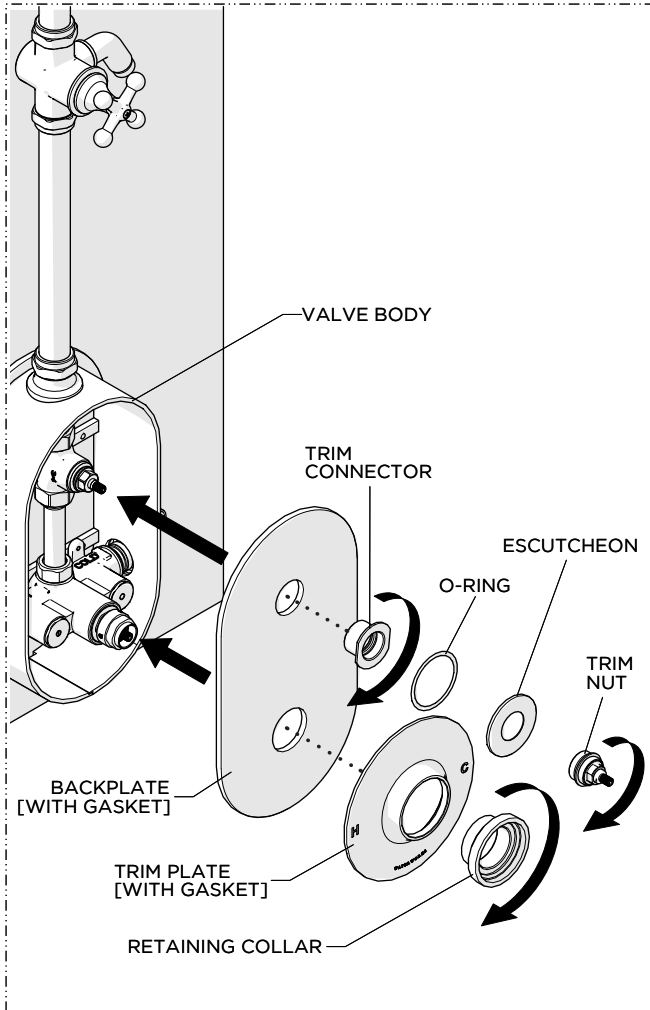
* OPTIONAL



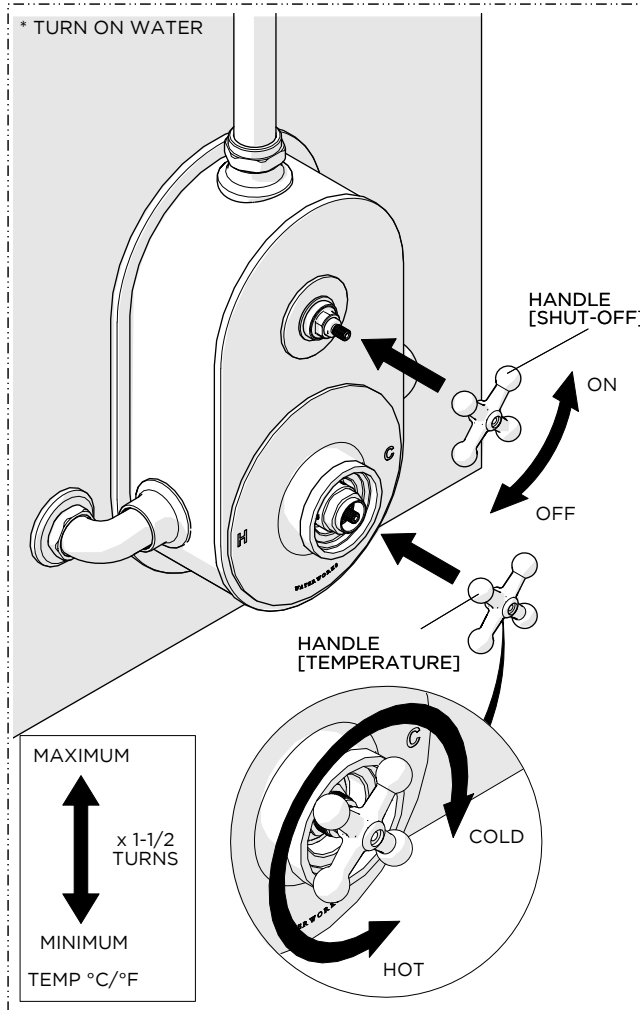
NOTE: The DIVERTER VALVE is set for a RIGHT HAND installation of the OUTLET ELBOW. If a LEFT HAND INSTALLATION is desired, the LARGE and SMALL PLUGS must be swapped.

14. Unthread and remove the LARGE PLUG then thread and securely tighten it into the OPPOSITE side of the VALVE. Unthread and remove the SMALL PLUG then thread and securely tighten it into the OPPOSITE side of the VALVE. Ensure both PLUGS are securely tightened to prevent leaks then rotate the OUTLET ELBOW to the correct position.

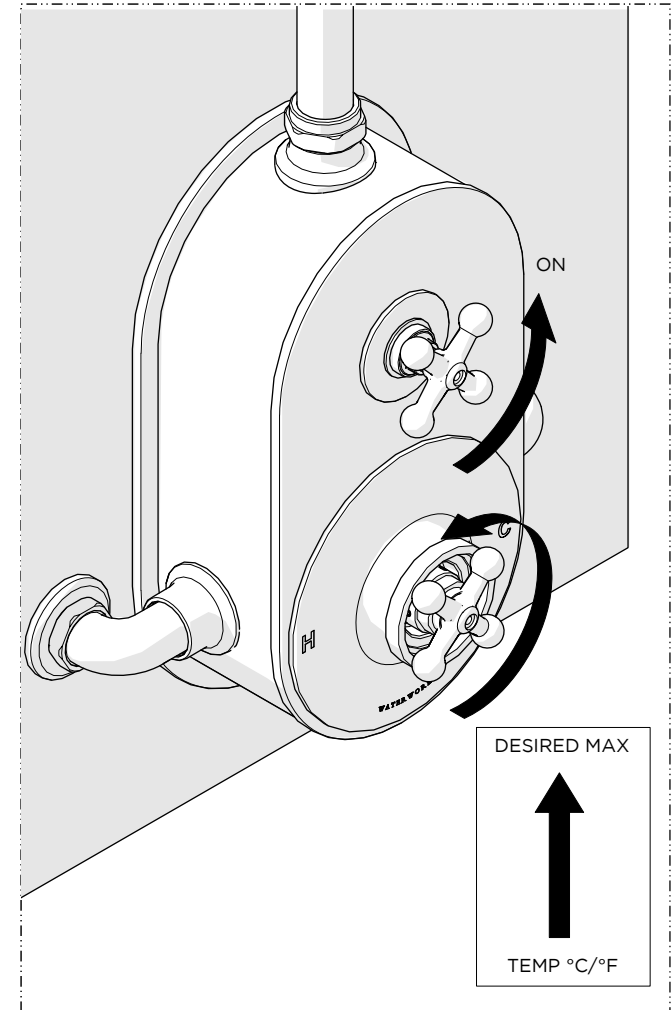
INSTALLATION GUIDELINES



15. Slide the BACKPLATE with its RUBBER GASKET over the VALVE with the larger hole towards the bottom then:
- Thread and hand-tighten the TRIM CONNECTOR onto the VALVE.
 - Hold the TRIM PLATE against the BACKPLATE then thread and securely tighten the RETAINING COLLAR onto the VALVE.
 - Securely tighten the TRIM CONNECTOR and place the ESCUTCHEON and O-RING over the CONNECTOR then thread and securely tighten the TRIM NUT into the CONNECTOR.



16. Turn on the water supply and open the SHUTOFF VALVE to run water through the THERMOSTATIC VALVE, flush out any debris in the SUPPLY LINES, and check for leaks.
- Slowly rotate the CARTRIDGE STEM on the THERMOSTATIC VALVE clockwise to attain full cold then counterclockwise to attain full hot. It's approximately 1-1/2 rotations. Verify a full range of temperatures exists.
- MAXIMUM TEMPERATURE:** _____
- MINIMUM TEMPERATURE:** _____



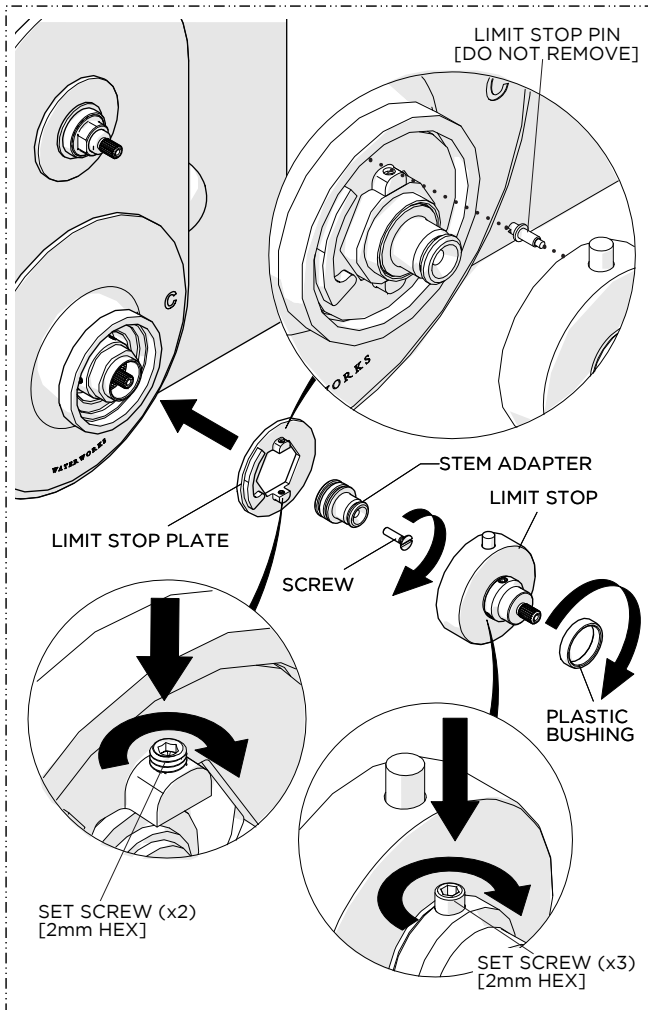
17. With water running, rotate the CARTRIDGE STEM on the THERMOSTATIC VALVE to adjust the temperature to the maximum desired bathing temperature, verified with a thermometer. Turn the water off and make sure not to change this setting.
- DESIRED MAXIMUM TEMPERATURE:** _____

WATERWORKS

INSTALLATION GUIDELINES

STYLE No. DSXS20, DSXS30, DSXS40,
DSXS50, DSXS60, DSXS70

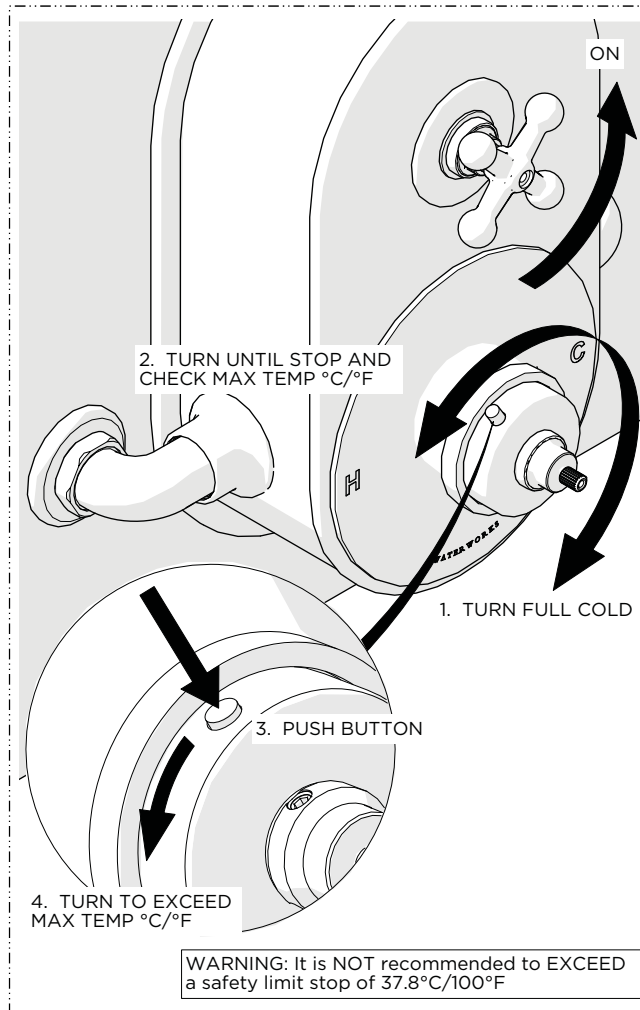
Dash Exposed Thermostatic Shower System



18. Place the LIMIT STOP PLATE onto the THERMOSTATIC VALVE in the desired orientation, securely tighten the SET SCREW (x2), place the STEM ADAPTER onto the CARTRIDGE then secure it using the SCREW provided.

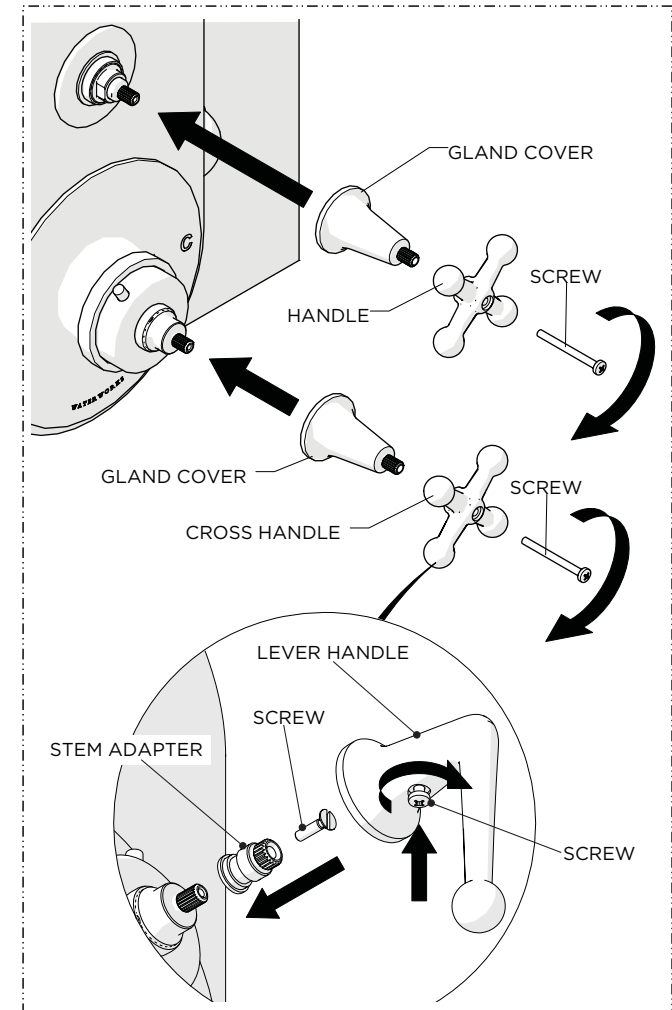
Place the LIMIT STOP over the ADAPTER making sure the LIMIT STOP PIN makes contact with the LIMIT STOP PLATE then securely tighten the SET SCREWS and thread the PLASTIC BUSHING onto the LIMIT STOP.

NOTE: Adjust the position of the LIMIT STOP PLATE to achieve the desired orientation of the LIMIT STOP BUTTON.



19. Turn the LIMIT STOP to cold then hot and confirm it is functioning properly. Verify the maximum desired bathing temperature. To get a hotter temperature, press and hold the LIMIT STOP BUTTON and turn the LIMIT STOP further.

WARNING: It is NOT recommended to exceed a safety limit stop of 37.8°C/100°F.



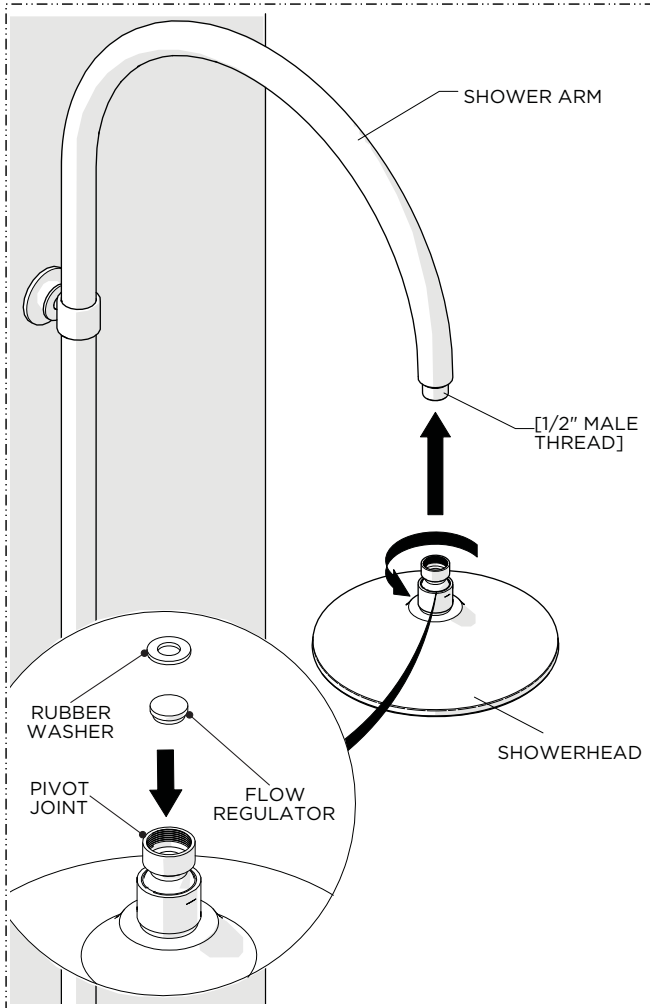
20. **THERMOSTATIC HANDLE:**

a. **CROSS:** Place the GLAND COVER onto the LIMIT STOP making sure it is fully seated and place the HANDLE onto the GLAND COVER in the desired orientation then thread and securely tighten the SCREW.

b. **LEVER:** Place the STEM ADAPTER onto the LIMIT STOP and secure it using the SCREW provided then place the HANDLE over the ADAPTER in the desired orientation and thread and securely tighten the SCREW.

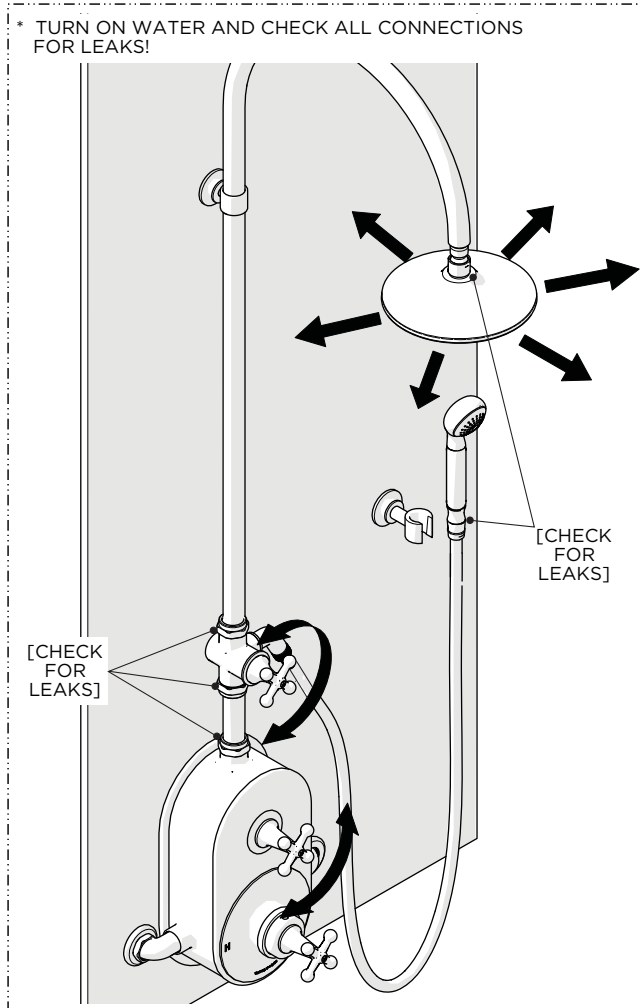
SHUTOFF HANDLE: Place the GLAND COVER onto the TRIM NUT making sure it is fully seated and place the HANDLE onto the GLAND COVER in the desired orientation then thread and securely tighten the SCREW.

INSTALLATION GUIDELINES



21. Insert the RUBBER WASHER into the PIVOT JOINT on the SHOWER HEAD (packaged separately) then thread and securely tighten the PIVOT JOINT onto the SHOWER ARM.

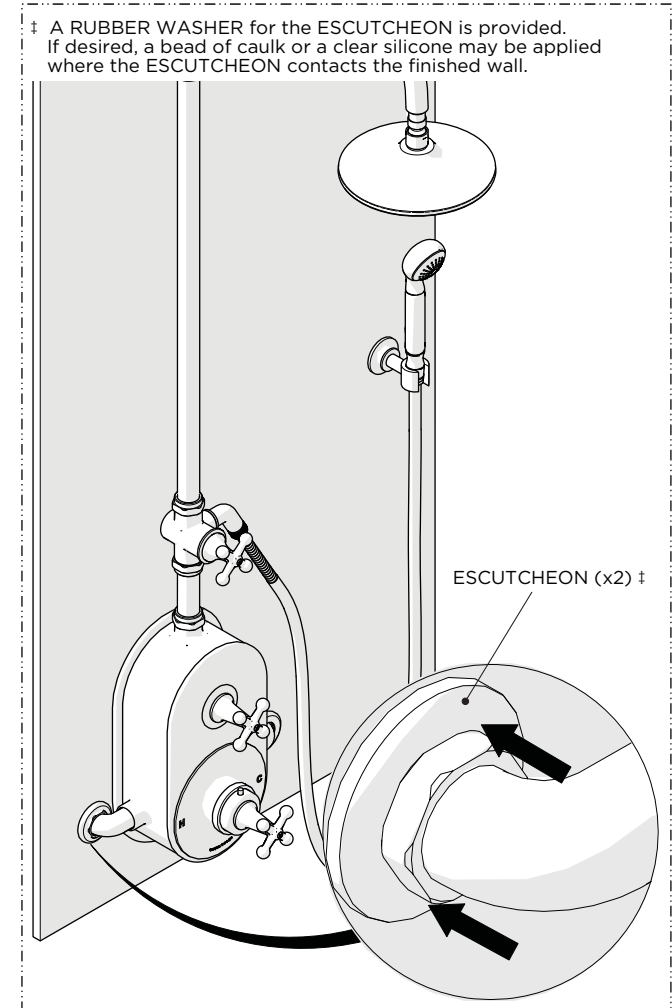
NOTE: A FLOW REGULATOR is located in the PIVOT JOINT.



22. Turn on the water and operate the SHOWER HEAD to ensure it pivots and functions properly.

OPTIONAL: Operate the DIVERTER VALVE HANDLE to ensure it diverts and functions properly.

Inspect all connections for leaks then turn the water off.



23. Slide the ESCUTCHEONS on the INLET ELBOWS against the finished wall.