KALLISTA Exposed Thermostatic Shower Set

INSTALLATION INSTRUCTIONS

P21490

P24790
**INSTALLATION INSTRUCTIONS**

**THANK YOU FOR CHOOSING KALLISTA**

We appreciate your commitment to KALLISTA quality products. Please take a moment to review this manual before you install your KALLISTA product. If you encounter any installation or performance problems, please do not hesitate to contact us at the phone number listed at the bottom of the page.

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⚠️ **WARNING: Risk of scalding or other severe injury.** This device has been calibrated at the factory to ensure a safe maximum water temperature. Any variance in settings or water inlet conditions from those used during factory calibration may raise the discharge temperature above the safe limit, and may present a scalding hazard.

- Before completing the installation, the installer must set the maximum water temperature setting of this valve to minimize the risks associated with scalding hazards.

The installer is responsible for adjusting the maximum water temperature of this valve according to instructions.

If you do not understand any of the installation or temperature adjustment instructions in this document, in the United States please contact our Customer Service Department at 1-888-4-KALLISTA (1-888-452-5547). Outside the U.S., please contact your distributor.

**IMPORTANT NOTICE TO INSTALLERS!** Please fill in the blanks in the information box below. Retain this Guide for future reference.

- The valve is calibrated to 100°F (38°C) at the first stop position, and the maximum temperature limit stop is positioned so the outlet water temperature does not exceed 120°F (49°C).
- Factory calibrated inlet conditions are:
  - Hot and cold water pressure = 44 psi (300 kPa)
  - Hot water supply temperature = 149°F (65°C)
  - Cold water supply temperature = 59°F (15°C)
- If inlet conditions differ from those used during factory calibration, it may be necessary to re-calibrate the valve after installation. The installer must check the mixed flow temperature after installation, and adjust the valve as needed according to the instructions.

**NOTICE TO HOMEOWNERS!** This device has been preset by [Name] of [Address] to ensure a safe maximum temperature. Any change in the setting may raise the discharge temperature above the limit considered safe, and lead to scalds.

Date: __________

Questions? Problems? For additional assistance, please contact KALLISTA's Customer Service Department at 1-888-4-KALLISTA (1-888-452-5547) or FAX 1-888-272-3094.
CAUTION: Risk of personal injury. To eliminate the risk of scalding, the water temperature should never be set above 120°F (49°C).

IMPORTANT! For retrofit/remodel installations: Check the existing shower enclosure for adequate clearances before proceeding with the exposed thermostatic shower set installation. Refer to the Roughing-in.

IMPORTANT! For best results, hot and cold water pressure should be similar and between a range of 29 psi (200 kPa) - 58 psi (400 kPa). If the maximum water pressure exceeds 75 psi (500 kPa), use a pressure reducing device in the supply line.

IMPORTANT! For the valve temperature control to perform accurately, locate the hot water supply on the left-hand side.

NOTICE: Risk of product damage. Do not apply excessive weight or downward force to the exposed thermostatic shower set.

Prior to installation, unpack the new faucet and inspect it for damage. Return the faucet to its protective carton until you are ready to install it.

Inspect the existing supply piping and wall materials. Replace if necessary.

Ensure that adequate strength wall backing materials and stud bracing are properly positioned behind the finished wall.

Wood screws must be securely anchored into the stud bracing to adequately support the product. When obtaining wood screws, take into account the type of stud bracing material and thickness of the finished wall.

Wood screws must be corrosion-resistant and capable of 300 lbs (136 kg) load bearing per wood screw.

Observe all local plumbing and building codes.

Shut off the main water supply.

KALLISTA reserves the right to make revisions in the design of products without notice, as specified in the Price Book.

TOOLS AND MATERIALS

Plus:
- 1/2" Drop Ear Elbows
- 3/4" Pipe Caps
- Wood Screws
- String

2x4

2x6

Rags

100% Silicone Sealant

Adjustable Wrench

Thermometer

Sealant Tape

2.5 mm
1. PREPARE THE SITE

**NOTE:** Refer to the roughing-in section to determine the water supply, brace, and backer board locations.

**NOTE:** Eccentric nipples should protrude through the finished wall 1-3/16" (30 mm) – 1-3/8" (35 mm). For thicker wall material such as tile or marble, extending the supply pipes may be necessary.

- Using the roughing-in on the previous page, determine the exposed thermostatic shower set placement and mark the installation centerline.

**NOTE:** Standard installation height for the valve body is 48" (1219 mm).

- To support the supply pipes, install a 2x4 brace between the studs. When positioning the brace, take into account that the eccentric nipples, when installed, must extend through the finished wall 1-3/16" (30 mm) – 1-3/8" (35 mm).

- To support the shower column overhang, install a 2x6 backer board above the faucet valve [centered at 33" (902 mm) for P24790 models or 36" (914 mm) for P21490]. Ensure that the front edge of the backer board is flush with the wall studs.

- Install the supply pipes 5-7/8" (150 mm) apart.

**IMPORTANT!** For the thermostatic control to perform accurately, the hot water supply must be on the left-hand side.

- Attach either a 1/2" or G1/2" elbow (and any additional pipe extensions) to each supply pipe.

**NOTE:** Both 1/2" and G1/2" eccentric nipples are supplied with this product. Use the pair of eccentric nipples that is compatible with your supply pipes.

- Verify that the elbows are level with each other and secure the elbows and supply pipes to the 2x4 brace.

- Apply sealant tape to the small end of the eccentric nipples and then thread the small end of the eccentric nipple into the supply pipes. Tighten with a wrench.

**NOTICE:** The alignment of the eccentric nipples will affect the overall alignment of the exposed thermostatic shower set. Ensure that the eccentric nipples are level and will protrude the same distance through the planned finished wall. Maintain a 5-7/8" (150 mm) distance between the eccentric nipples.
2. CONFIRM THE ROUGHING-IN PLUMBING

- To flush the supply pipes and to check the valve alignment, temporarily attach the faucet valve to the eccentric nipples.

**Verify the Faucet Valve Alignment**
- Calculate the thickness for the planned finished wall material and verify that the eccentric nipple will protrude 1-3/16" (30 mm) – 1-3/8" (35 mm) through the finished wall.
- Verify that the faucet valve is properly aligned and level. If needed, make adjustments by repositioning the supply pipes or by adjusting the eccentric nipples.

**NOTE:** The position of the eccentric nipples can be adjusted by adding sealant tape to the small end of the eccentric nipple.

**Flush the Dirt and Debris from the Faucet Valve**
- Turn on the water supply.
- Thread the handshower hose to the faucet valve outlet and place the end of the hose in a bucket.
- Turn on both the hot and cold water and run for approximately 1 minute.
- Check for leaks.
- Turn off the water supply and remove the faucet valve.

**Site Checkout**
- Temporarily cap the eccentric nipples for protection during the finished wall installation.
- Drill 1-3/4" (44 mm) holes in the finished wall for the eccentric nipples and install the finished wall.

**IMPORTANT!** To ensure that the faucet escutcheons cover the holes, center the hole locations with the large end of the eccentric nipples.
3. MOUNT THE VALVE

- Remove the caps from the eccentric nipples.
- Slide the escutcheons and escutcheon rings (O-ring end toward the valve) over the valve body.
- Tie a string around the threaded sleeves and temporarily slide the threaded sleeves over the eccentric nipples and into the hole in the wall. Ensure that the threaded ends of the sleeves face out (toward the valve).

**NOTICE:** Do not allow the threaded sleeve to fall behind the finished wall.
- First insert the screen washer and then the washer into the valve nuts.
- Thread the valve nuts onto the eccentric nipples and tighten with a wrench.

**NOTE:** The threaded sleeves have reverse threading and thread in the opposite direction of typical threading.
- Slide both threaded sleeves over the eccentric nipples and thread the sleeves clockwise onto the valve body to cover the valve nuts.
- Apply 100% silicone sealant to the escutcheons and escutcheon rings to create a waterproof seal.
- Slide the escutcheons and the escutcheon rings against the finished wall.
- Wipe away any excess silicone sealant.
4. INSTALL THE SHOWER COLUMN OVERHANG

**IMPORTANT: Risk of product damage.** To avoid scratching the finish, cover the finish area with a cloth when using a wrench.

**IMPORTANT!** The escutcheon and mounting post must be secured to a backer board behind the finished wall. For thicker wall material such as tile or marble, use a longer wood screw, if needed.

- Mark a faint vertical centerline on the finished wall. Ensure that the vertical centerline is plumb and centered with the faucet valve.
- Measure vertically from the faucet valve centerline [P21490: 33" (838 mm), P24790: 36" (914 mm)] and mark the screw hole location on the vertical centerline.
- Drill a hole at the marked location using an appropriate drill bit for the finished wall material.
- Apply 100% silicone sealant into the drilled hole and to the back of the escutcheon to create a waterproof seal.
- Secure the mounting post and escutcheon to the wall with a wood screw.

**NOTE:** Ensure that the wood screw is long enough to secure the mounting bracket to the backer board behind the finished wall.

- Wipe away any excess sealant.
- Insert the washers into the diverter assembly and tighten the diverter assembly onto the faucet valve outlet.
- Carefully slide the mounting arm and the handshower holder onto the shower column overhang. To secure the handshower holder, tighten the setscrew using a 2.5 mm hex wrench.
- Thread the shower column overhang onto the diverter assembly.
- Slide the mounting arm up the shower column overhang until aligned with the mounting post.
- Thread the mounting arm onto the mounting post until the shower column overhang is parallel to the wall.
5. INSTALL THE HANDSHOWER AND SHOWERHEAD

Connect the Handshower
- To adjust the handshower holder location, loosen the setscrew, slide the handshower holder to the desired location, and tighten the setscrew to secure the handshower holder in place.
- Insert a washer into the handshower hose.
- Connect the O-ring end of the handshower hose to the handshower and rest the handshower in the handshower holder.
- Insert a washer into the remaining end of the handshower hose and connect the handshower hose to the diverter outlet.

Connect the Showerhead
- Apply sealant tape to the shower column overhang outlet.
- Carefully thread the showerhead onto the shower column overhang outlet.

Site Checkout
- Turn on the water supply.
- Check for leaks.
6. OPERATE THE VALVE AND THE DIVERTER

Using the Water Flow and the Temperature Controls
- Control the water flow by turning the volumetric (left-side) handle.
- Control the water temperature level by turning the thermostatic (right-side) handle.

Using the Temperature Limiting Override
- On the right-hand side of the faucet valve, turn the thermostatic handle until the desired maximum temperature is reached.
- To override the temperature stop, hold the override button down while turning the thermostatic handle.
- To prevent lime and debris building up in the internal components, rapidly turn the thermostatic handle while holding down the temperature override button. For best results, perform this cleaning function once a month.

NOTE: When the thermostatic handle is set to “38”, the temperature should be preset to approximately 100°F (38°C). See the following section on calibrating the temperature.

Using the Handshower Diverter
- To divert water flow to the handshower, pull and then turn the diverter button to lock the diverter in the ON position.
- Turn and release the diverter button to set the diverter in the OFF position.
7. CALIBRATE THE TEMPERATURE

⚠️ CAUTION: Risk of personal injury. To eliminate the risk of scalding, the water temperature should never be set above 120°F (49°C).

**NOTE:** The faucet valve temperature control is preset at the factory. Due to differences between water systems, some recalibration of the temperature control may be necessary.

- Loosen the setscrew and remove the thermostatic (right-side) handle.
- Fully open the water flow by turning the volumetric (left-side) handle.
- Place a thermometer under the running water and check the temperature.
- On the right-hand side, turn the thermostatic spindle until the water temperature reaches 100°F (38°C).
- Reposition the thermostatic handle so "38" (the detent temperature) aligns with the existing hash mark on the valve body.
- Tighten the setscrew.

**Adjusting the Maximum Water Temperature**

- Fully open the water flow by turning the volumetric (left-side) handle.
- Hold the override button down and turn the thermostatic handle to its furthest extent.
- Place a thermometer under the running water and check the temperature.
- If the temperature exceeds 120°F (49°C), remove the handle and reduce the detent temperature (38).

**NOTE:** To reduce the override temperature to a safe level, the detent temperature (38) may need to be less than 100°F (38°C).

- Retest until the override water temperature is below 120°F (49°C).