



BEHAVIORAL
SAFETY

INNOVATION NEVER RESTS

LIGATURE RESISTANT TOILET and FLUSH VALVE COVER

#LT700

Our ligature resistant solid surface LT700 Toilet and Flush Valve Cover includes unique features that make it ideal for new and existing patient bathrooms or public facilities in behavioral settings that necessitate ligature resistant fixtures. The LT700 is particularly suited for existing locations with fixed plumbing drainage.

The patented design limits the potential ligature attachment that other commercially available toilets and flush covers might have. Specifically, this unit eliminates any space between the toilet and the back wall found in floor mount toilets, and thereby removes the ligature risk associated with typical facility toilets. The rear cover is adjustable to accommodate existing toilet installations at different floor rough-ins between 9.25" and 13" centerline from the back wall. This feature prevents having to demo an existing floor rough-in to install the toilet, which is especially helpful in facilities with concrete flooring.

The LT700 also offers a safe solution for managing access to plumbing and for easy maintenance. The removeable top of the flush valve cover allows full access to the plumbing valve for adjustment/maintenance. Because of interaction between the toilet and cover, the flush valve is always contained within the flush valve cover. Flange bolts are accessible through holes in the side of the toilet and covers are provided to secure access to the bolts.

The cover is supported by an aluminum frame screwed to the wall behind the toilet. The cover frame is a welded assembly and is mounted to the wall with stainless steel screws and screw-in wall fasteners.

A stainless steel hardware package is provided with all screws and mounting fasteners to assemble the cover and attach the frame to the wall.

Behavioral Safety's products are thoughtfully designed and engineered in accordance with the highest quality materials and performance standards for the behavioral industry.



Specifications

- Ligature resistant design.
- Engineering grade, impact-resistant heavy gage PVC flush valve cover with removable top for easy access to plumbing.
- Custom “European” solid surface body /stainless steel bowl hybrid design toilet with fully enclosed trap.
- Rough-in from 9.25” to 13” on center (as measured from the wall) for different existing rough-in applications.
- Aluminum frame and mounting hardware secures the flush cover to the wall.
- Includes mounting hardware.
- Installs in either new or existing buildings.
- Designed to use Sloan 9603 flush valve and Sloan HY 108A flush actuator. **(not included)**

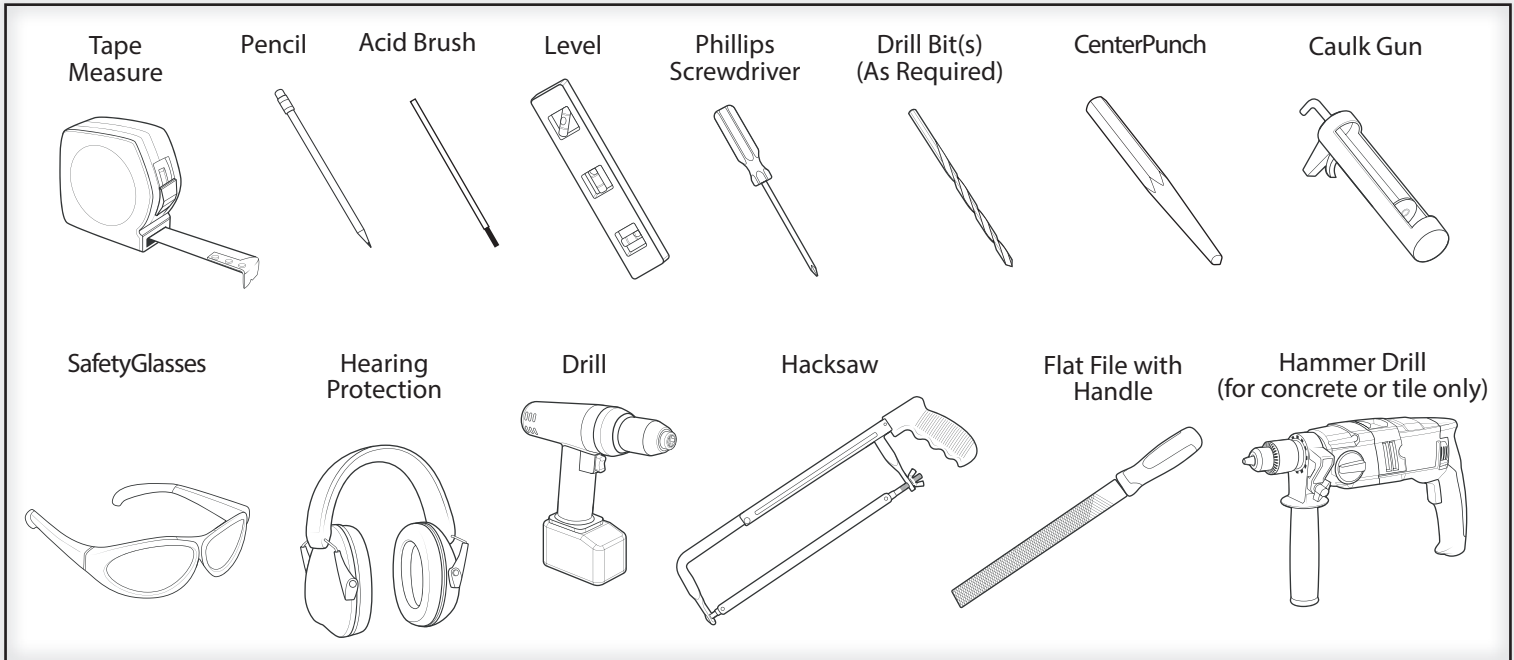
Installation, Maintenance & Operation Instructions

IMPORTANT:

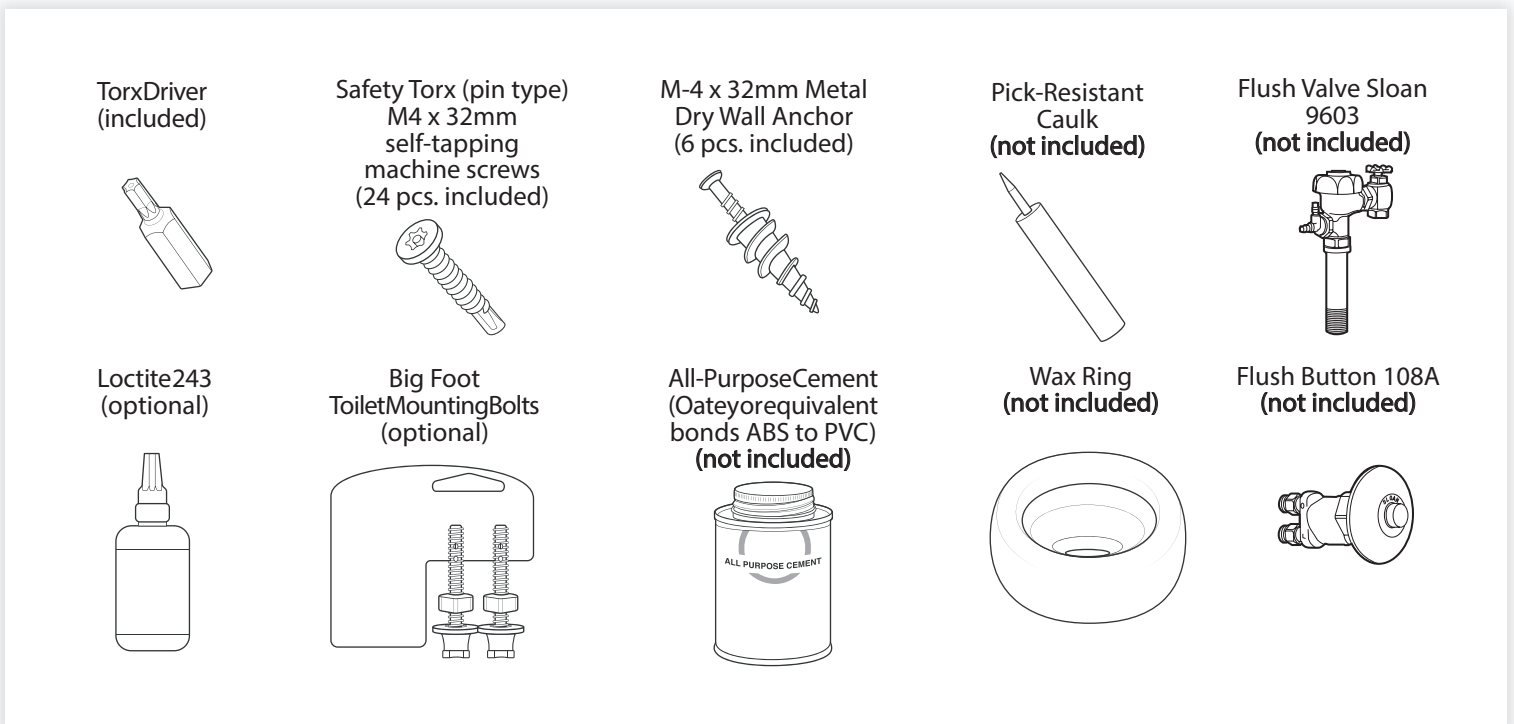
- The flush valve cover is not considered safe if the back surface is not directly flush with the wall surface and secured with pick free caulk.
- Review the instructions thoroughly before beginning installation.
- Check and clearly mark the location of possible electrical wires or plumbing lines inside of the wall for clearance and disconnect all power before installation.
- Do not overtighten any connections or damage may occur.
- BSP does not recommend the use of impact / driver type drills in order to prevent stripping the hardware.

Tools:

Important: BSP does not recommend use of impact drivers with any of its products due to possible damage to the product.



Supplies:



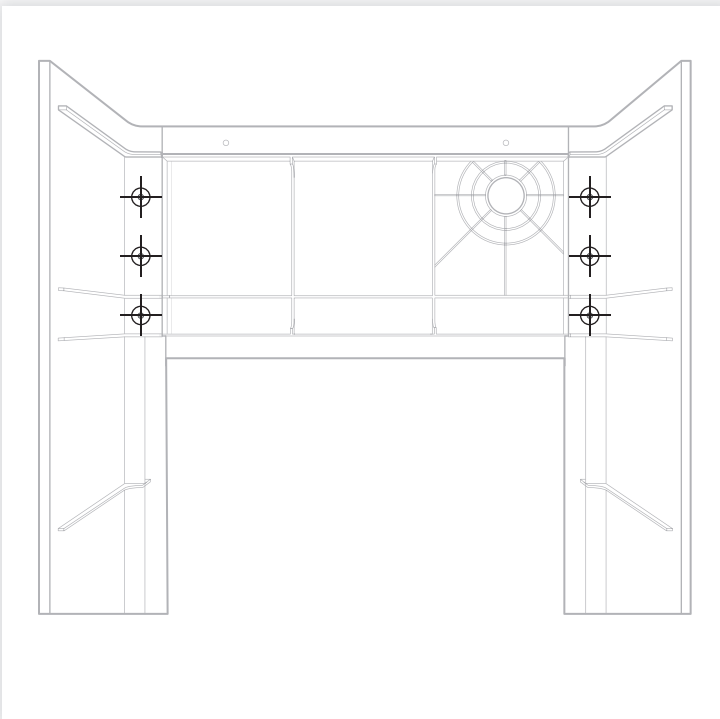
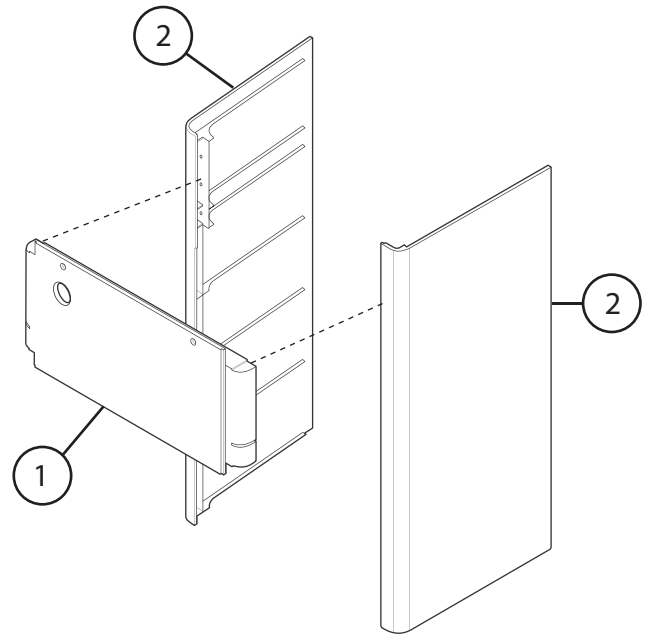
Installation:

IMPORTANT: Check the location of all electrical wires and plumbing inside the wall where the flush valve cover will be installed. Clearly mark their location to ensure clearance during installation. Disconnect power before beginning installation.

1. Assemble the flush valve cover bottom housing by sliding the front section ① into the sides ②. Install the attachment screws supplied inside each side of the cover. Do not install the gasket at this time.

Important: Do not over-torque the screws or the plastic will be damaged.

Note: Gluing the front to side joint with all-purpose cement will add strength to the final assembly.



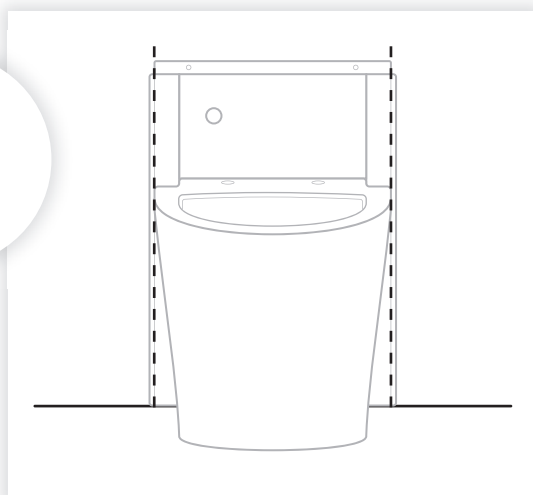
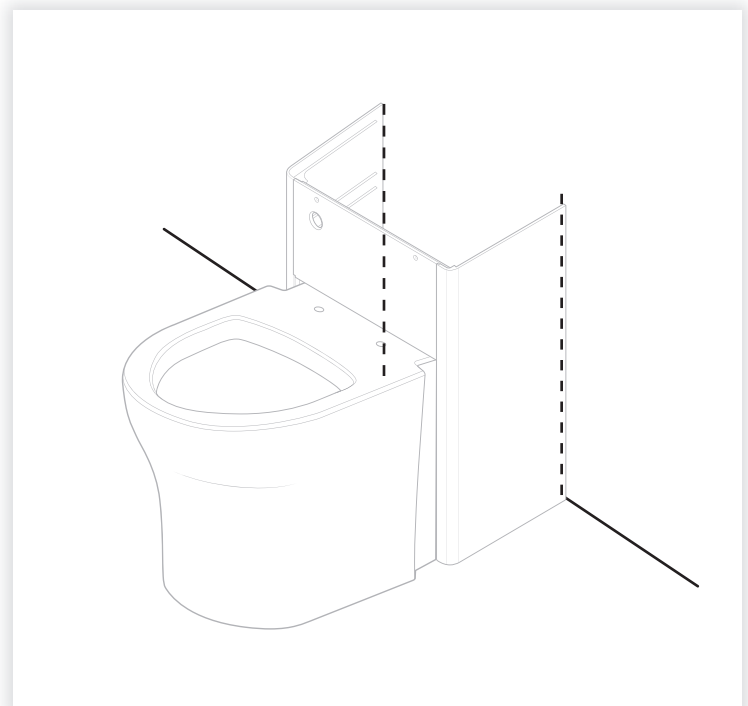
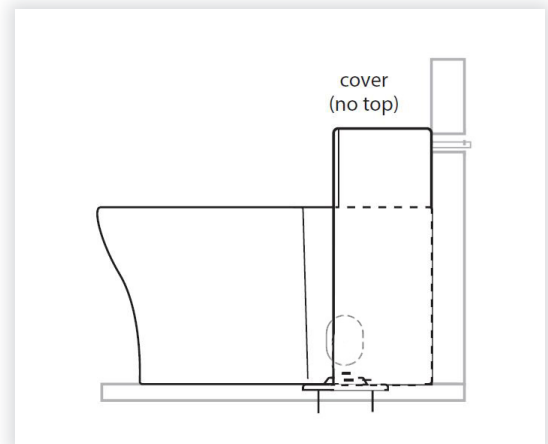
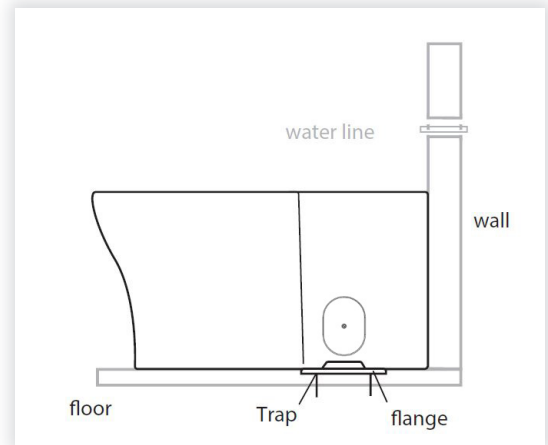
Note: Do not use impact driver.



2. Temporarily set the toilet in the correct location over the flange with the back of the toilet square to the wall. Check to be sure the trap is level with the floor. If not reset the trap level with the floor for proper installation.
3. Install the assembled flush valve cover bottom housing over the back of the toilet and slide it against the wall. Be sure the cover is flat against the wall and flush to the floor. Remove any trim or obstructions that prevent the cover from resting flat on the floor or flush with the wall surface and center the toilet in the cover opening.

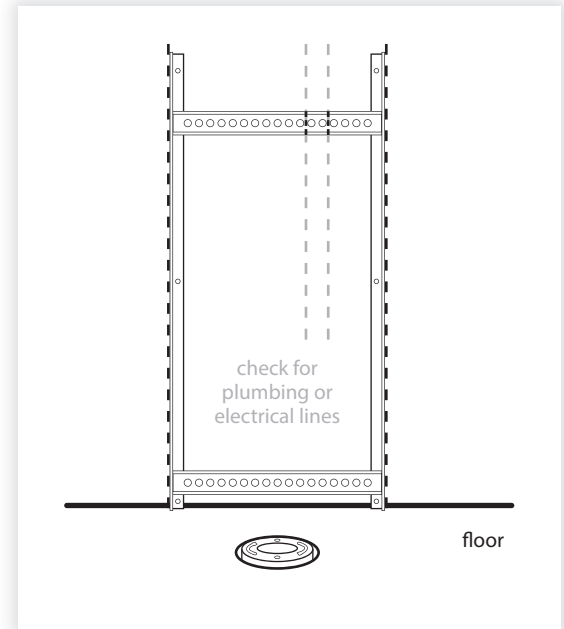
Note: If needed, the cover may be trimmed at the back, sides, or bottom with an accurate saw, such as a saber saw. Make the cuts as accurately as possible to keep the surface smooth and flat.

4. Once the cover is in the desired location and flush with the floor and wall, mark the INSIDE vertical edges of the cover onto the wall with a pencil.

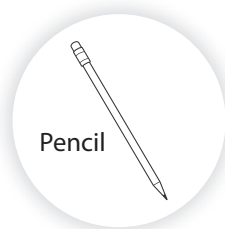


5. Remove the cover from the toilet and the toilet from the flange.

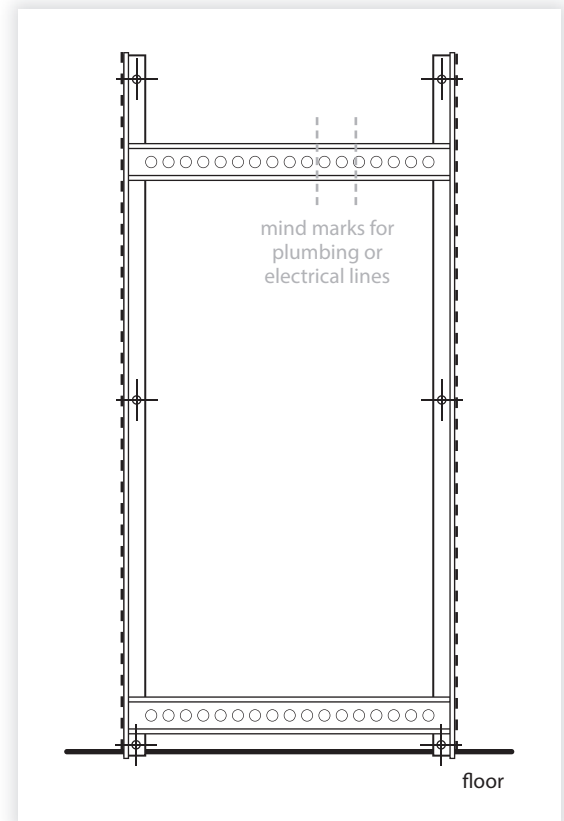
6. Install the frame between the marks drawn on the wall, with the flat sections of aluminum against the wall. Be sure the bottom of the frame is flush with the floor surface.



7. Using the frame as a template, mark the 6 pre-drilled mounting holes on the wall surface.



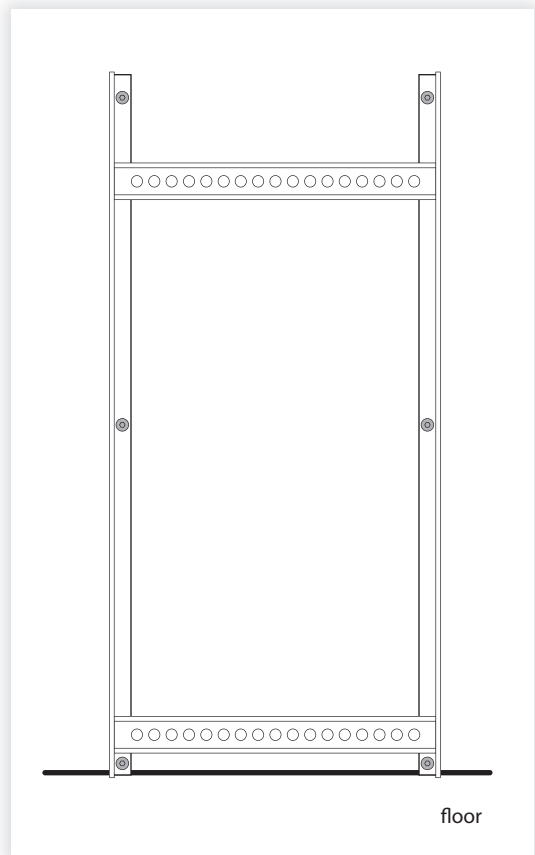
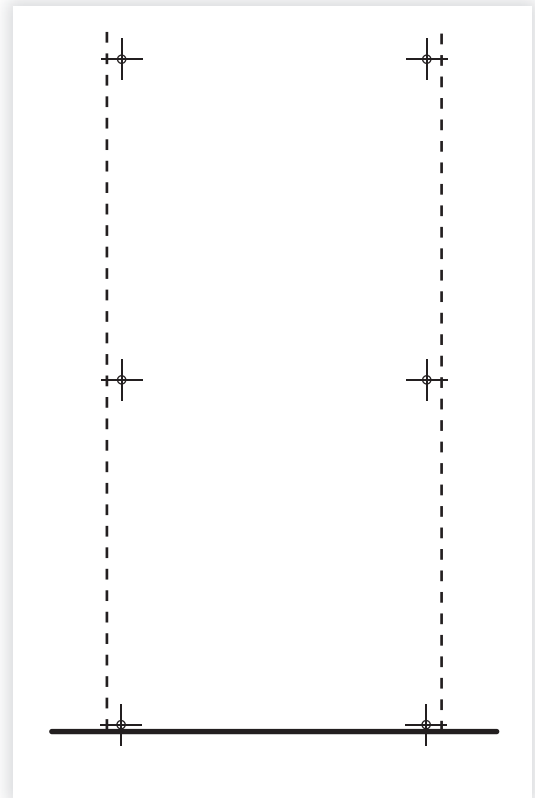
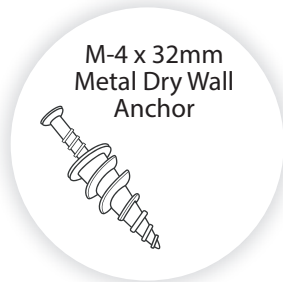
8. Mark and re-drill any holes which might interfere with any plumbing or electrical lines in the wall.



9. Remove the frame from the wall and drill the mounting holes for the frame using a suitable drill for your wall surface (tile, wallboard, concrete block etc.).

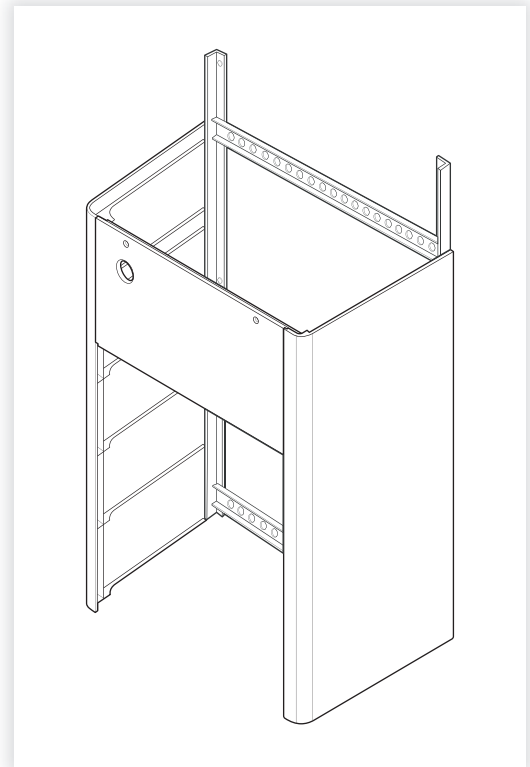


10. Install the supplied metal wall anchors, for use with 5/8" impact resistant dry wall, in the holes and install the frame to the wall with the screws supplied. **Fasteners for concrete block are not supplied. Tapcons are recommended.**



11. Test-fit the cover over the frame to be sure it is still flush with the floor and wall surface. Adjust and trim the cover as needed.

Note: The top of the frame should protrude above the sides of the cover by approximately 6" when flush to the floor at the bottom. Do not trim this excess material; it will be used to secure the top cover later in the installation process!



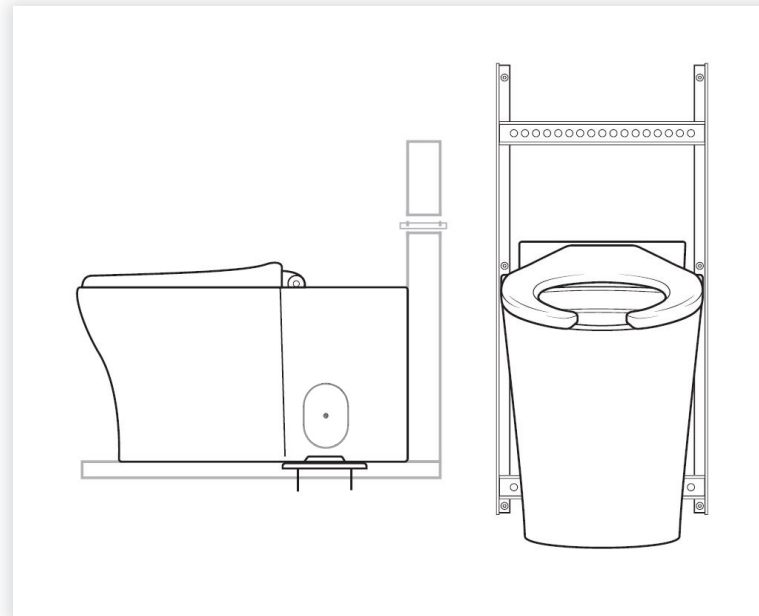
12. Install the seat to the toilet using the supplied hardware. Be sure the seat is securely fastened before proceeding further, as the bolts will be inaccessible after the flush valve cover is installed.

Note: We recommend using Loctite 243 blue thread locker on the threads during installation of the seat to prevent the bolts from loosening over time.

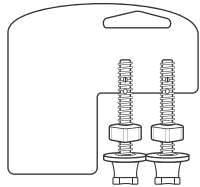


13. Securely bolt the toilet down to the flange using a new wax ring. Be sure the toilet is parallel with the wall at the back.

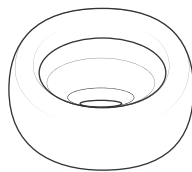
Note: Behavioral Safety recommends “Big Foot” no-spin toilet flange bolts for secure toilet mounting.



Big Foot
toilet mounting bolts
(optional)



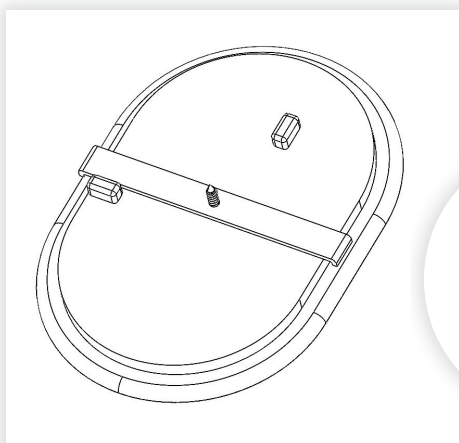
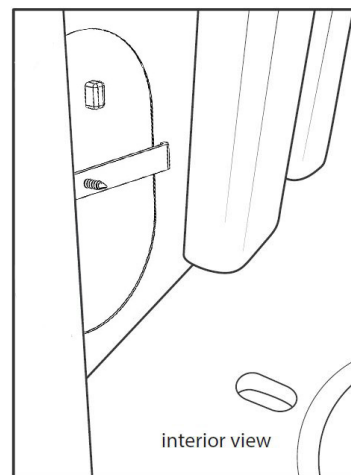
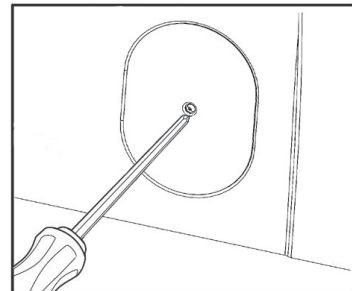
Wax Ring



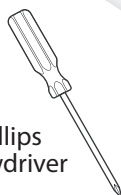
Because of the critical nature of the alignment between the cover and the toilet and to prevent movement of the toilet by a patient the toilet must be caulked around its base to the floor, with pick free caulk.

14. Using a Phillips head screwdriver, attach the bolt access hole cover to the toilet.

Note: Put the screw through the cover, then start the screw through the center of the metal part. The assembly can then be slid sideways into the access hole and tightened in place.



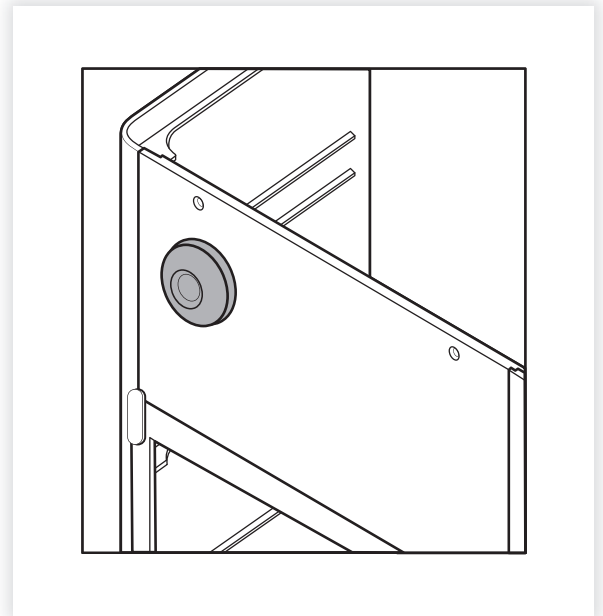
Phillips
Screwdriver



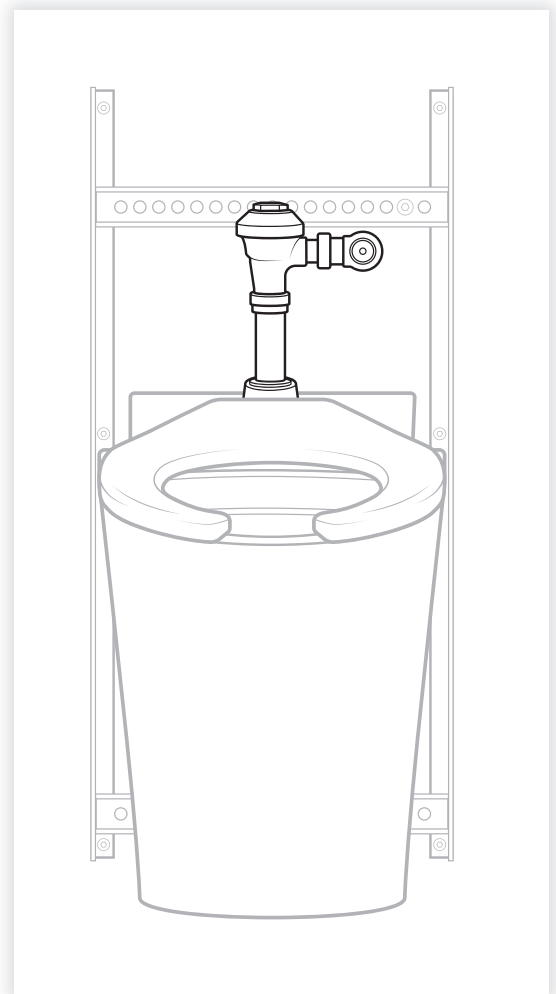
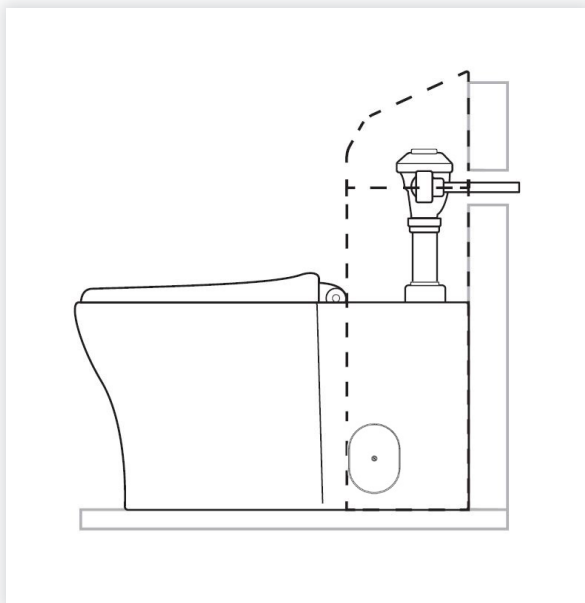


15. Install the Sloan HY 108A flush button on the lower flush valve cover per the manufacturer's instructions. Leave the button loose in the cover so it can be rotated if needed to clear the flush valve. Do not install the plastic tubing to the flush button at this time.

Note: The flush button tubes will be added later in step 19.

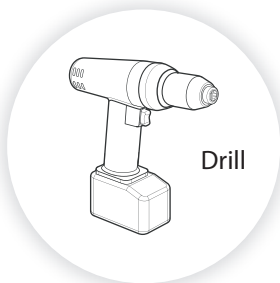
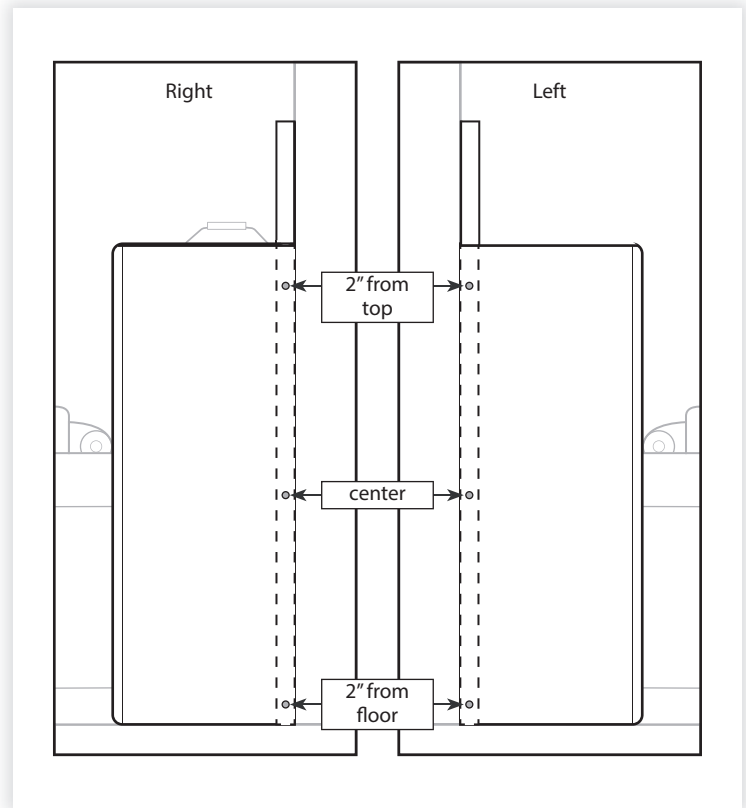


16. Install the Sloan 9603 flush valve on the toilet per the manufacturer's instructions. Adjust the plumbing and trim the stand pipe as needed to be sure the valve is in the correct location to be covered by the flush valve cover. Trial fit everything using the top and bottom cover as a guide before securing the flush valve installation.

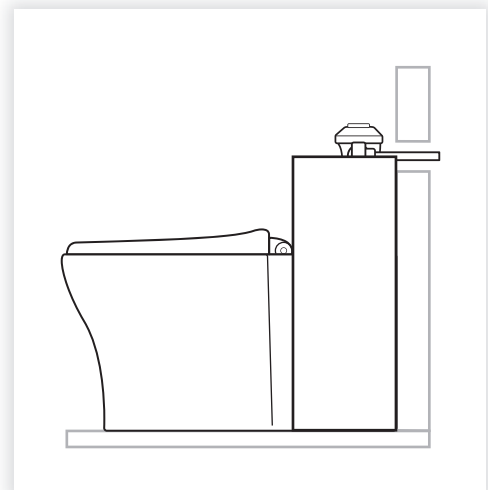


17. Once you are complete with the valve installation, install the flush valve cover and secure the sides of the flush valve cover to the frame using 3 screws along each side: the first approximately 2" from the floor, the second approximately 2" below the top edge of the bottom cover, and the third centered between the first and second marks.

Note: A small pilot hole drilled first will help guide the self-tapping screws and make installation easier.



Remove the screws to prepare for installing the toilet trim.



18. Install the top toilet trim piece first, fitting it onto the bottom edge of the front cover.

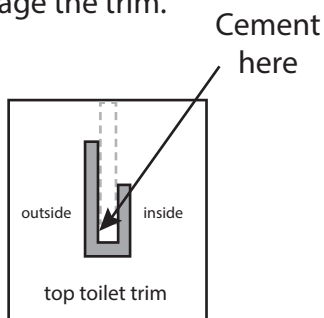
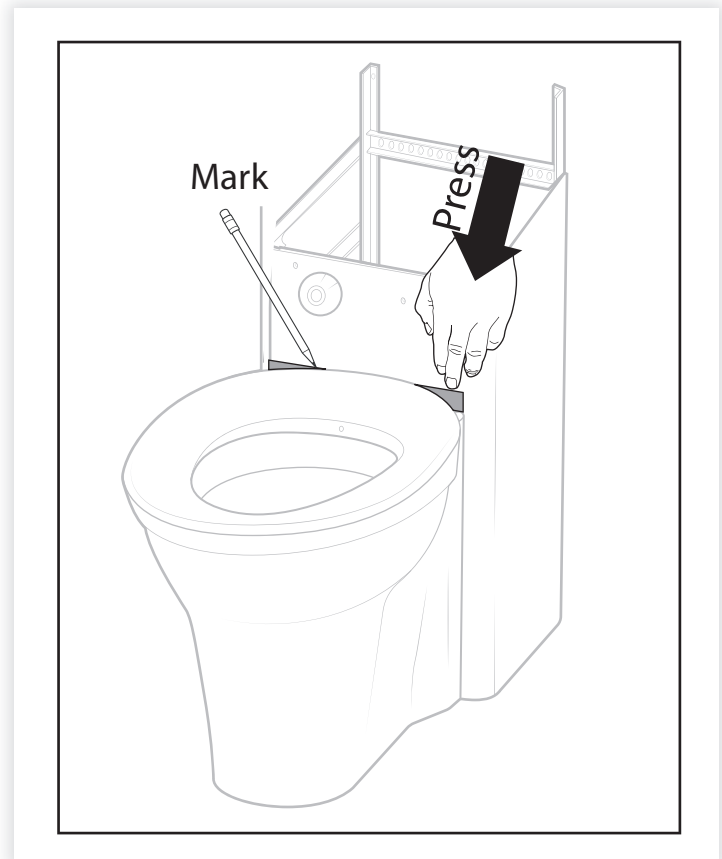
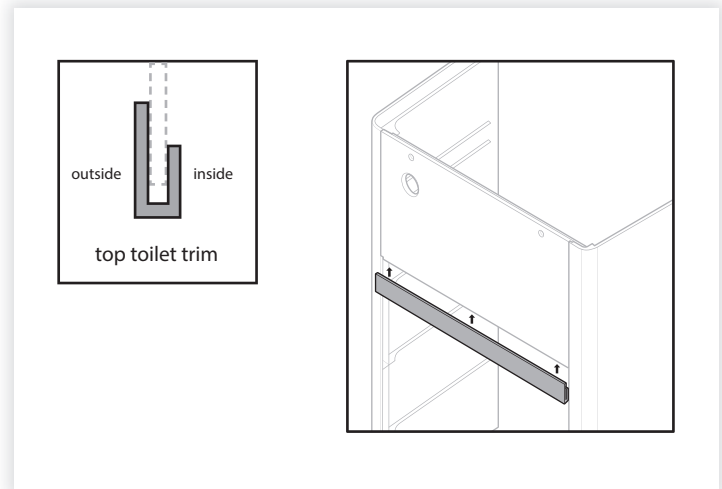
Note: The **longer** edge of the top trim piece should be on the **outside**, and the shorter on the inside of the cover.

Test fit cover and top toilet trim to the toilet. Press the trim all the way down until it touches the top of the toilet. Mark a line on the the cover at the top of the trim with a pencil. Remove the trim from the cover and use an acid brush to apply cement to the inside of the trim channel.

Using the pencil line as a guide, glue the trim in place on the front cover. Don't forget the **longer** edge of the top trim piece should be on the **outside**.

Reinstall the cover to the toilet and press the trim all the way down until it touches the top of the toilet. Let the cement dry before progressing to the next step.

Note: Do not use the applicator provided with the cement as it will apply too much cement and may damage the trim.

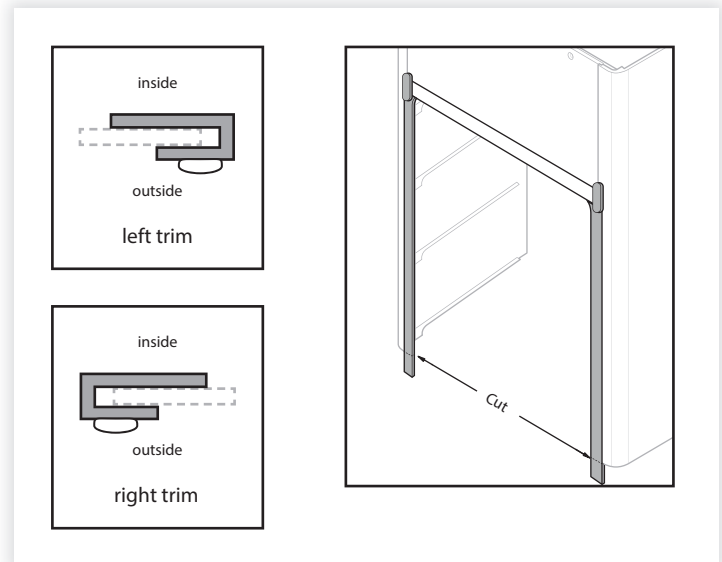


Next, remove the cover from the toilet and fit the side trim pieces onto the inside edges of the front cover, ensuring they are snug against the top piece.

Note: The *longer* edge of the side trim pieces should be on the *inside*, and the shorter on the outside of the cover.

(opposite of the installation on the top trim)

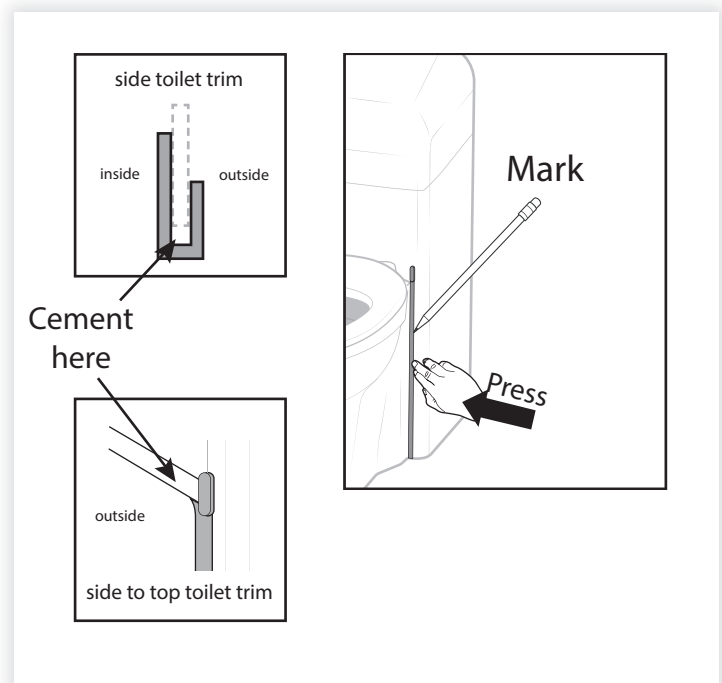
Cut any excess trim at the bottom of the gasket with metal shears, trim wheel, or a hacksaw.



Once ensured of a proper trim length, reinstall the cover to the toilet with the trim in place. Mark the side trim piece location on the cover with a pencil, while pressing against the sides of the toilet to close any gaps between the trim and the toilet. After marking, remove the cover from the toilet, and the trim from the cover.

Using an acid brush, apply cement to the inside of the trim channel. Then using the pencil line as a guide glue the trim in place on the front cover. Also, carefully glue the side trim to the top trim to lock them together.

Don't forget the *longer* edge of the side trim pieces should be on the *inside*, and the shorter on the outside of the cover



Note: Do not use the applicator provided with the cement as it will apply too much cement and may damage the trim.

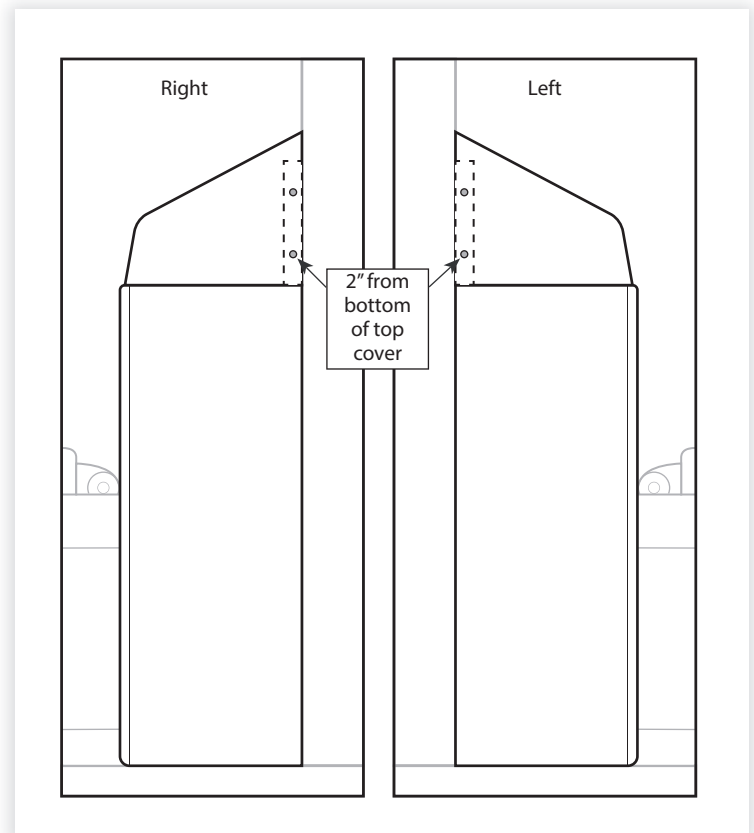
After trim is installed and the cement has dried a bit, install the cover to the toilet and push the trim against the toilet to close any gaps.

Secure the cover to the frame using the screws from step 17.

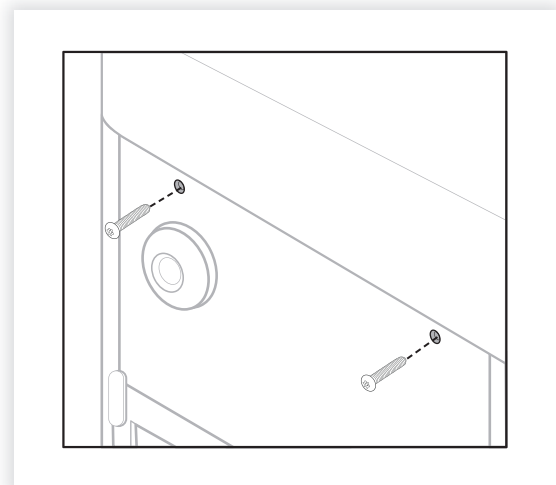




19. Tighten the flush button on the front cover, and install the plastic lines to the flush valve.
20. Turn on the water to check for leaks and to verify the toilet flushes correctly.
21. Place the top cover on the bottom cover and secure the sides of the top cover through the plastic in 2 places to the aluminum frame extending over the bottom housing on each side. The bottom screw should be at least 2" above the bottom of the top cover.



22. Install the screws to the front of the cover (**do not** over tighten or damage to the cover will result).





23. IMPORTANT: After installation, caulk along all edges, including the toilet base to the floor, the cover trim to the cover, the cover trim to the toilet, the cover to the wall and the flush button housing to the cover using pick resistant caulk!



2 Installation is complete!

CARE & CLEANING:

- Your Toilet and Flush Valve Cover have been designed and engineered in accordance with the highest quality and performance standards. With proper care, it will provide years of trouble-free service.
- NEVER use abrasive cleaners, chemicals, alcohol or other solvents as they may damage the finish.
- Periodically clean the surfaces using mild soap and warm water.
- Dry immediately with a soft, clean cloth for best results.

WAIVER AND DISCLAIMER:

This waiver-disclaimer is attached to and made a part of the written contract to purchase these products for use in psychiatric and correctional facilities. Such fixtures and products are purchased to reduce the risk of self-imposed death or injury to patients or clients in such facilities, but are NOT represented as able to prevent such death or injury.

Behavioral Safety Products, LLC ("BSP") as the seller of these products have not, and will not represent or warrant to the purchaser shown in this contract ("Purchaser") that its fixtures and products will prevent death or injury in any case whatsoever.

BSP makes no express or implied warranty with respect to the preventative quality of its products, but merely represents that the use of such products tends to reduce deaths and injuries by patients or clients who are subject to meticulous screening processes and diligent supervision on the part of the facility housing them.

Purchaser acknowledges the foregoing disclaimer and waives any and all claims against BSP as to expressed or implied warranties of fitness for any purpose whatsoever.