

SHOWER

The ensuite SHOWER Door System provides a ligature resistant solution for private washrooms that preserves patient privacy and dignity while reducing risk.

Installation with New Frame or into Existing Frame:

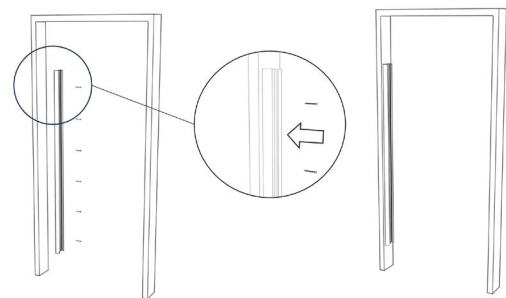


Installation Instructions

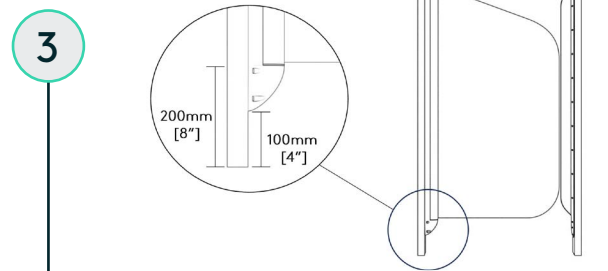
1 **New Frame:** Install the Kingsway Welded Frame assembly as per installation instructions on page 7. Once installed, the frame can be painted per architectural spec.

Existing Frame: Remove any existing hardware attached and prepare frame by filling any hinge mortises if present. Fill seams if desired with Bondo or other filler, then prime and paint as required.

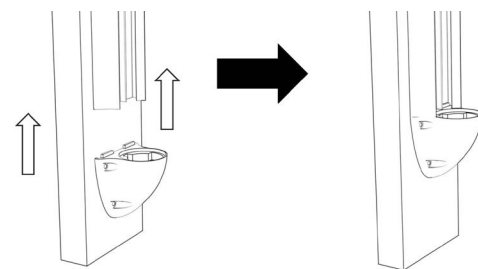
2 Take backplate and mount to frame using suitable fasteners.



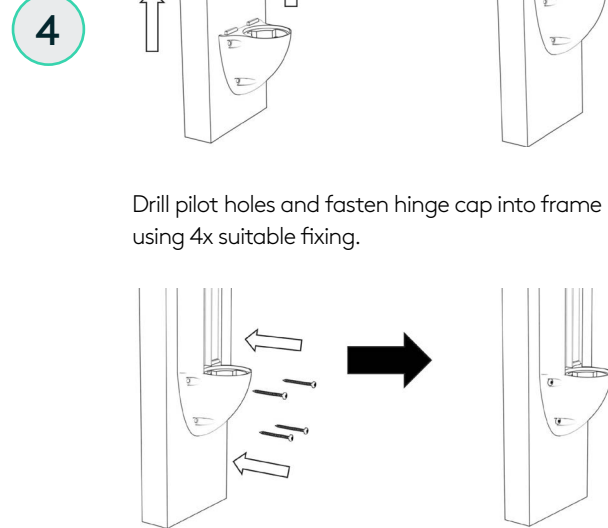
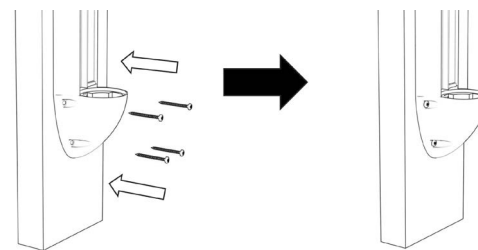
! **Important:** Ensure back plate is vertical. Please ensure when installing the backplate extrusion that the 200mm clearance from bottom of frame is accounted for.



Take hinge cap and locate into end of mounting plate extrusion.

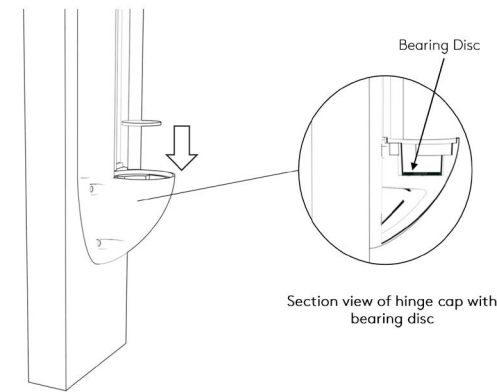


Drill pilot holes and fasten hinge cap into frame using 4x suitable fixing.

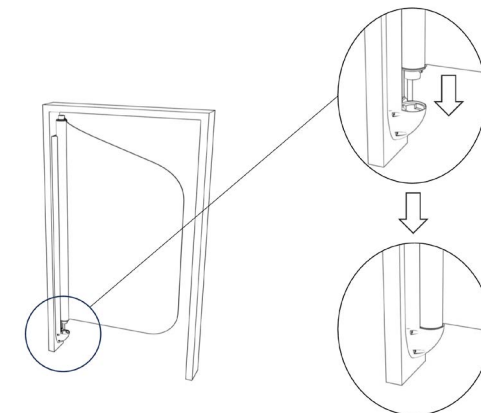


Installation Instructions

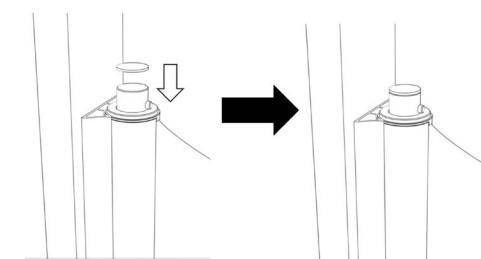
5 Place bearing disc into the recess of the hinge cap.



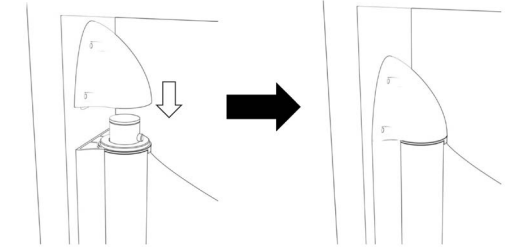
6 Take door assembly and insert into bottom hinge. Ensure door is perpendicular to frame when inserted.



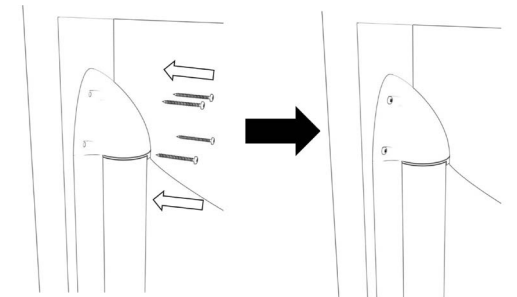
7 Hold door assembly in place and place second bearing disc on top of hinge rod.



8 Take second hinge cap and insert over door hinge until flush with mounting plate extrusion.

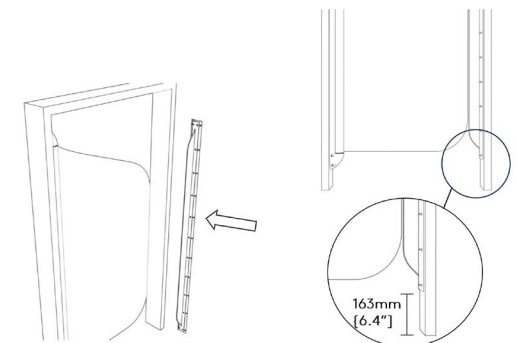


9 Drill pilot holes and fasten hinge cap into frame using 4x suitable fixing.

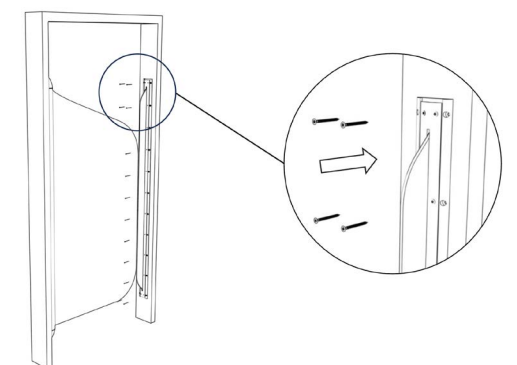


10 Take fin assembly and locate onto frame.

Important: Please ensure when installing the fin assembly that the 8" (200mm) clearance from bottom of frame is accounted for.



11 Secure fin assembly to frame using 22x suitable fixing screws.

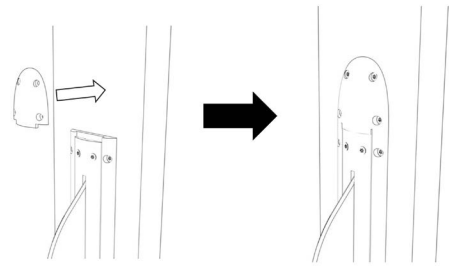


For further assistance with installation, please call (800) 783-7980 or email us at: sales@kingswaygroupusa.com

Installation Instructions

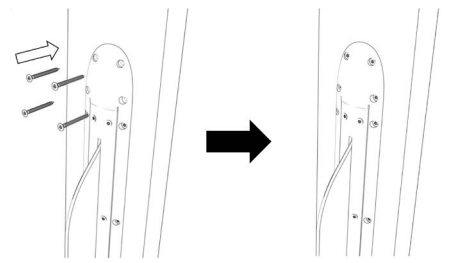
12

Take end cap and locate into fin assembly.



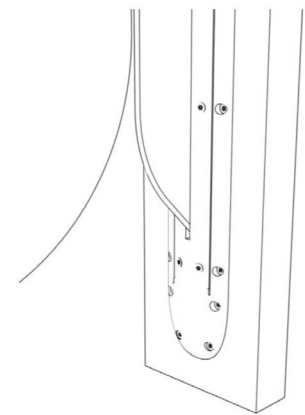
13

Drill pilot holes and secure end cap to frame using suitable fixing screws.



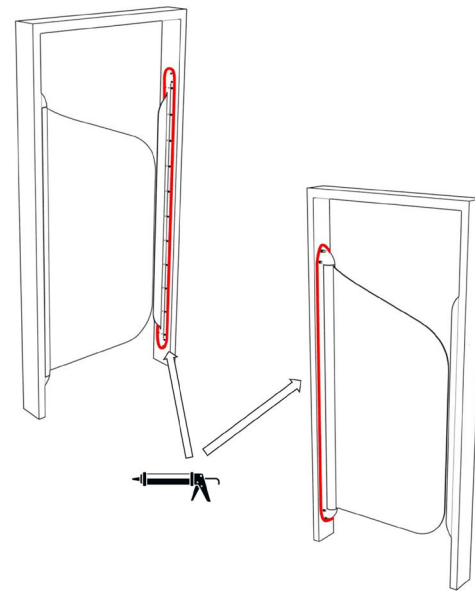
14

Repeat process for the bottom end cap.



15

Apply pick-resistant caulk around where the fin assembly meets the frame, and where the leaf assembly meets the frame. This is indicated via the red line shown below.



✓

Door Assembly Complete.



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Installation Checklist

Door Leaf	Ensure gaps from leaf to frame are within specified tolerance
	Check the free movement of the door in both directions where applicable to ensure it doesn't catch on the floor
	Free from damage
	Fitting plumb, level and square in the frame
	Consistent gap between the door and frame as specified
Door Frame	Free from damage
	Correct number, type, size and location of wall fixings
	All fixings correctly plugged and finished
	Correct packing materials used between the wall and frame
Fire & Smoke Seals	Compatible with the doorset based on the instructions
	Fitted flush in the grooves and without gaps
	Smoke seals fill the gap between the door and frame on all sides
	Free from damage
Latch or Lock	Engages securely within the keep when closed
	Operates without undue friction
	Free from damage
Hinges	Functioning correctly without undue friction
	Free from damage
	If the hinge has been taken off at some point check that it has been refitted correctly and all fixings are secure
Anti-Barricade items	Swing Stops can open outwards fully without hinderance or friction
	Switch hinges are operating correctly without friction
	Door opens in both directions without binding on the floor
	Free from damage
Vision Panels	Functioning vision panels operate smoothly
	Frames and glass free from damage
Other hardware	Free from damage and correctly functioning
	Door closers functioning correctly and fully closing the door
	Electrical products correctly wired and functioning
Trim	Free from damage
	Fitted correctly without gaps
	All fixings either plugged or finished with wax

Inspection & Maintenance

All doors should be inspected regularly for damage that prevents the door performing in the event of a fire or an emergency situation, such as a barricade scenario. The following has been drawn up as a guide:

Area	Type of check	Frequency
Door Leaf	Free from damage	1 month
	Consistent gap between the door and frame as specified	6 months
Door Frame	Free from damage	6 months
Fire & Smoke Seals	All present and free from damage	3 months
Latch or Lock	Engages securely within the keep when closed	1 month
	Operates without undue friction	1 month
	Free from damage and all fixings are present and secure	1 month
Hinges	Functioning correctly without undue friction	weekly
	Free from damage and all fixings are present and secure	weekly
Anti-Barricade items	Swing Stops are functioning correctly without friction or damage and all fixings are present and secure	weekly
	Switch hinges are operating correctly without friction or damage and all fixings are present and secure	Weekly
	Door opens in both directions without binding on the floor	Weekly
Vision Panels	Functioning vision panels operate smoothly	Weekly
	Free from damage and all fixings are present and secure	Weekly
Other hardware	Free from damage, functioning correctly and all fixings are present and secure	Weekly
	Door locks and unlocks correctly without hinderance	Weekly
	Door closers are continuing to function correctly and close the door	Weekly
	Electrical products working correctly	Weekly
Trim	Free from damage	6 months
	Fitted correctly without gaps	6 months

Have a technical issue, or a query? Call (800) 783-7980 or email us at: sales@kingswaygroupusa.com

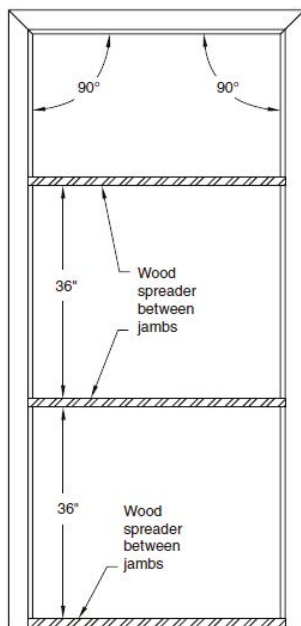
Welded Frames

NOTE: PLEASE READ BEFORE INSTALL OF ANY KINGSWAY FRAMES

Due to the environment Kingsway frames are installed in and the potential abuse that can be sustained, we recommend the following:

- 1) Fully welded frames with Minimum 5 anchors per side
- 2) The use of wood spreaders at the bottom of frames AND at 36" intervals between the top and bottom as indicated in Figure 1.

Fig. 1



New Frame Installation Instructions

- 1) Prior to installation, jobsite personnel shall ensure correct swing, size and labeling.
- 2) Installation tolerance must be followed as opening will not function properly if the frame is not installed within recognized tolerances.
- 3) For examples of the accuracy to be maintained while setting frames, see Figure 2-5.

Fig. 2

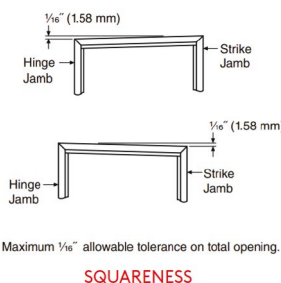


Fig. 3

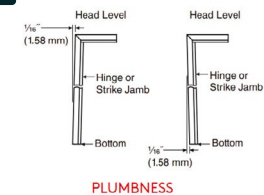


Fig. 4

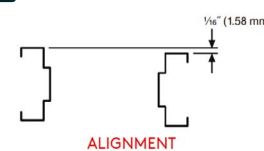
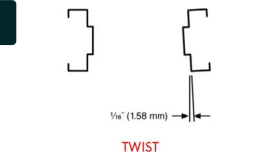


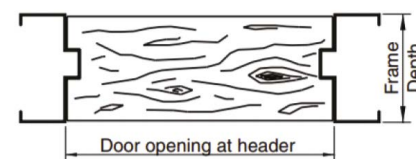
Fig. 5



Plumbing & Bracing:

- 1) Wood Spreaders (see Figure 6) The Contractor(s) responsible for installation shall have available a sufficient supply of wood spreaders for bracing frames. Spreader bars for shipping purposes shall not be used as installation spreaders.
- 2) Wood spreaders shall be square and fabricated from lumber no less than 1" (25.4mm) thick. The correct length is the door opening width between the jambs at the header (i.e., Single Door 3'-0" = 36" = 915 mm). Length tolerance is +1/16", -0" (+1.6 mm, -0). Cut clearance notches for frame stops. Spreader shall be nearly as wide as frame jamb depth for proper installation.

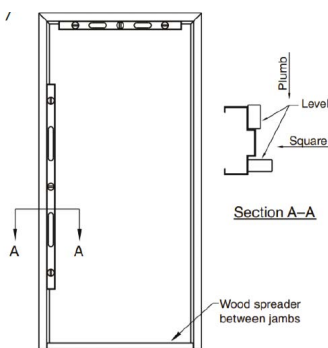
Fig. 6



- 3) Where welded frames are provided with spreader bars for shipping, they shall be removed with a suitable saw or chisel and filed flush before setting frames.

- 4) Figure 7 shows an example of proper frame plumbing & equipment used.

Fig. 7



Bracing the Frame:

- 1) Frame bracing shall be as shown in Figure 8, or shore to a structure above. It should be perpendicular to the intended wall.

Fig. 8



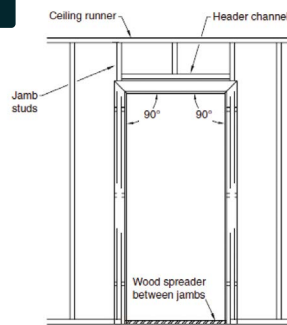
Positioning the Frame:

- 1) Set the frame in the desired location and level the header. Square jambs to header. Shim under jambs if necessary. With frame properly aligned, insert wood spreaders at bottom and mid-height and fasten jambs to floor through floor anchors.
- 2) Plumb and square jambs.

For Steel Stud wall construction - studs erected with frame:

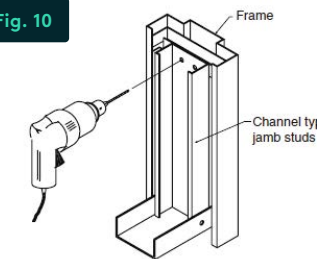
- 1) Attach jambs to floor through floor anchors.
- 2) Install jamb studs to floor, header channels, and ceiling runners butted tightly against frame anchors and properly positioned in frame throat for wallboard. See Figure 9.

Fig. 9



- 3) Nesting or overlapping stud joints or other wall construction practices that will increase the overall wall thickness beyond the intended finished thickness are to be avoided.
- 4) Attach jamb studs to anchors with screws or weld. If using screws, drill from the back side of the stud, through both the stud and anchor, then attach with (2) screws per anchor location (see Figure 10). Screws shall be #6 x 3/8" minimum steel sheet metal or self tapping type.

Fig. 10

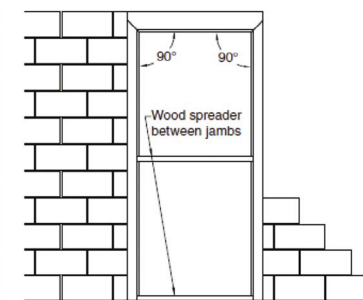


- 5) When attaching header stud to jamb studs, be sure the stud is above frame header. This will assure ample room for attaching plaster lath or drywall and will not interfere with installation of hardware attached to frame header.

For New Masonry Construction:

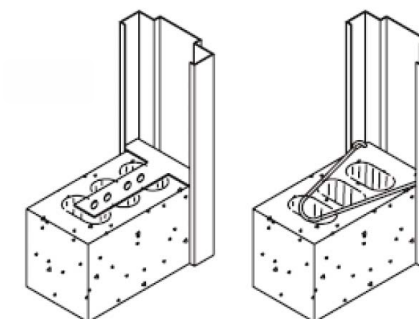
- 1) Erect, brace, square and plumb frame.
- 2) Fasten frame to floor through base anchors.
- 3) Set second spreader at the mid-height of the door opening to maintain the door opening size. See Figure 11:

Fig. 11



- 4) Install anchors (see Figure 12). Grout frame in the area of the anchors as block courses are laid up.
- 5) Continually check plumb and square as wall progresses.

Fig. 12



Welded Frames

For Existing Masonry Construction

- 1 Rough openings for existing wall, structural steel framing, or retrofit installations utilizing a butted to wall application shall be no less than 3/16" (4.8 mm) larger the frame on all three sides.
- 2 The installer is responsible for any shimming or aligning required. Gaps are normally sealed as part of the installation or caulking/painting process.
- 3 Refer to Architectural specifications for the appropriate sealant material to be used at fire or smoke control doors.
- 4 Slide frame into wall opening; install wood spreaders. Where possible, one jamb should be butted tightly to the wall.
- 5 Use tapered shims between anchors and wall and spreaders to maintain squareness and alignment of frame, and to maintain door opening sizes.
- 6 Drill appropriate size hole (per fastener manufacturer's instructions) for one-piece anchor bolts. Leave holes "rough" for added grip.
- 7 Backer rod or caulking shall be used where gaps occur between frame and wall.
- 8 Insert anchor bolts and tighten securely, checking for frame alignment periodically.
- 9 Install plugs to cover bolt heads (if so equipped). See Figures 13-15

Fig. 13

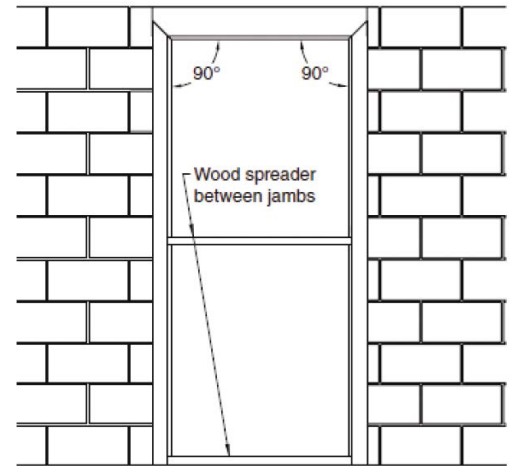


Fig. 14

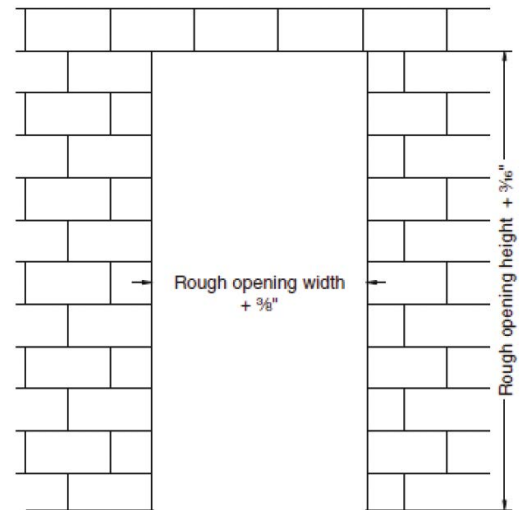


Fig. 15

