

SWING

The SWING Anti-Barricade Complete Door System provides quick access for staff in emergency situations, opening outwards in under 2 seconds with no need to retract the lock bolt first.

Installation with New Frame:



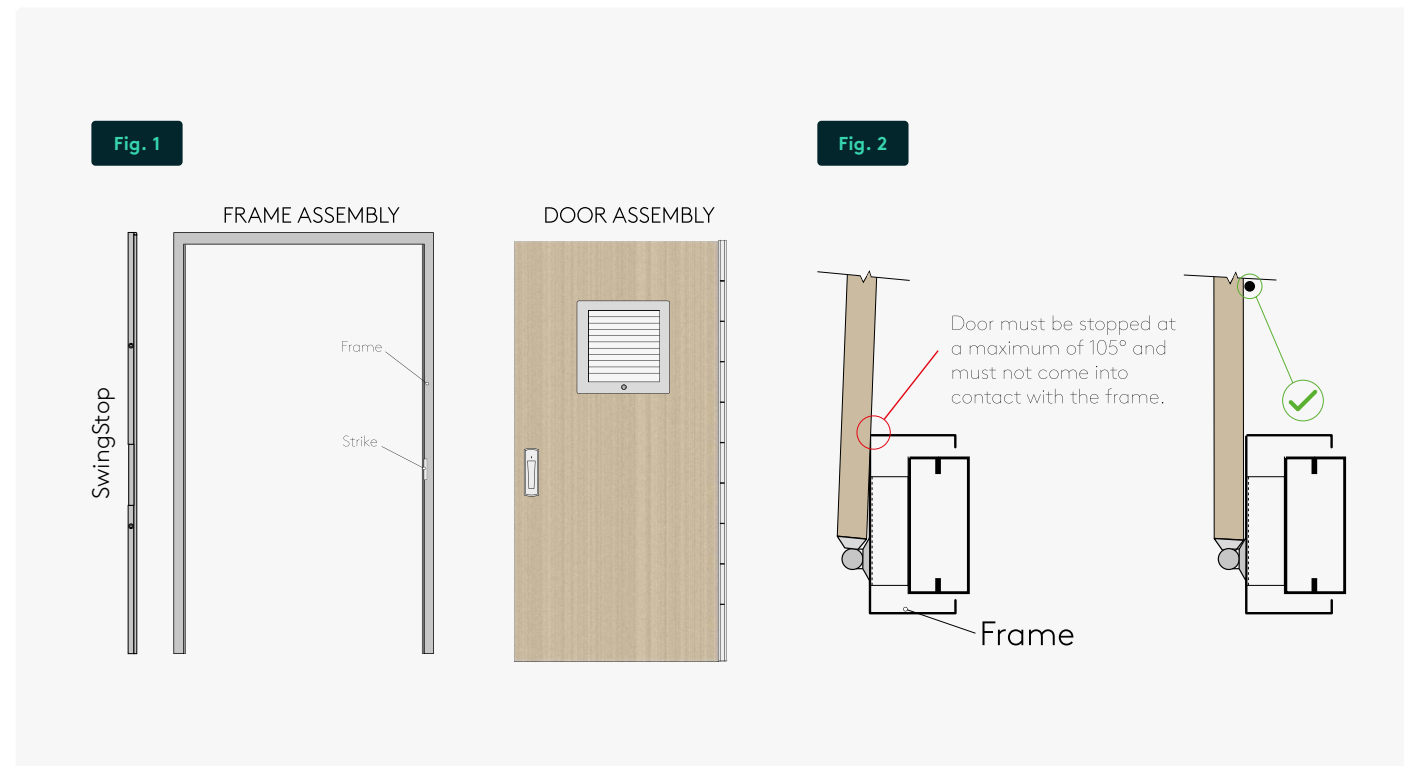
Door Assembly

The SWING Anti-Barricade System comes in three assemblies:

- 1) HM Welded Frame Assembly with the strike installed
- 2) The Door Assembly with all hardware including the hinge pre-installed
- 3) The SwingStop Assembly

IMPORTANT: Please read before continuing

The SWING Door System must be properly supported by a floor or wall mounted door stop at 105° to prevent damage. The door must stop prior to the hinge hitting the frame as shown in Figure 2. This applies to both New & Retrofit Installations.



Installation Instructions

- 1 Install the Kingsway Welded Frame assembly as per installation instructions on page 13.
- 2 After the frame is properly installed and checked, you can now paint the frame per architectural specs.
- 3 Next install the SWING Door assembly. For this step a minimum of (2) persons is required. The door assembly should be maneuvered into the opening in the closed position as shown in Figure 3 & 4.
- 4 Once in place, raise the door assembly using air-shims, wood blocks or other means until the pre-drilled holes in the frame align with the fastener holes in the hinge.

NOTE: Protect the bottom of the door to avoid damage. NEVER twist or slide the door if directly in contact with the floor - this will cause damage such as veneer splinters.

IMPORTANT: There should be no gap between the top of the SWING Hinge and the Frame Header when correctly installed, as shown in Figure 5. If there is a gap, carefully loosen the screws and then, while maintaining constant upward pressure, re-tighten the screws to close the gap.
- 5 Once the door is hung, install the SwingStop as shown below in Figure 5 & 6:

IMPORTANT: There should be a gap of roughly 1/16" between the top of the SwingStop and the Frame Header when correctly installed to avoid binding when the SwingStop is opened.
- 6 Once the SwingStop is installed with the proper clearance, ensure that it locks tightly and is not loose. If it is loose, refer to Figure 7 to adjust the locking mechanism accordingly.
- 7 Once the door is installed and all screws securely fastened, ensure the door is adequately stopped by a floor or wall mounted door stop at a maximum of 105° as shown in Figure 2. The hinge and door must not make contact with the frame.
- 8 Ensure the door latches in the strike.
- 9 Test the anti-barricade function as detailed in the SWING Operating Instructions on page 7.
- 10 Test the SWING door in both directions ensuring the bottom edge does not catch on the floor.

Fig. 3

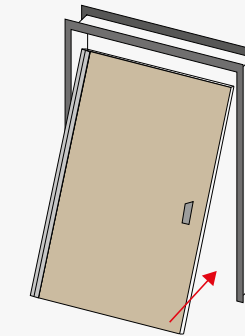


Fig. 8

Tight To Frame

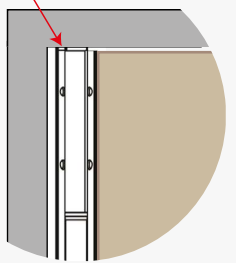


Fig. 4

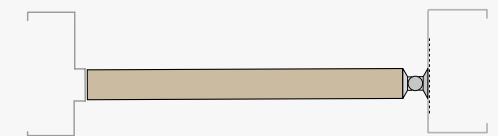
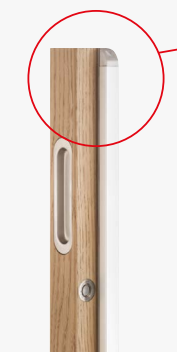


Fig. 5



SWING STOP

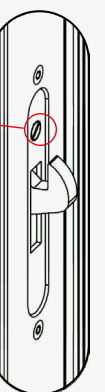
Fig. 6



Ligature resistant cap should always be at the top. If not at the top when installed, it has been incorrectly installed and will need to be replaced.

Fig. 7

Latch tension can be adjusted using this screw



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

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Installation with New Frame & KG35 Closer:



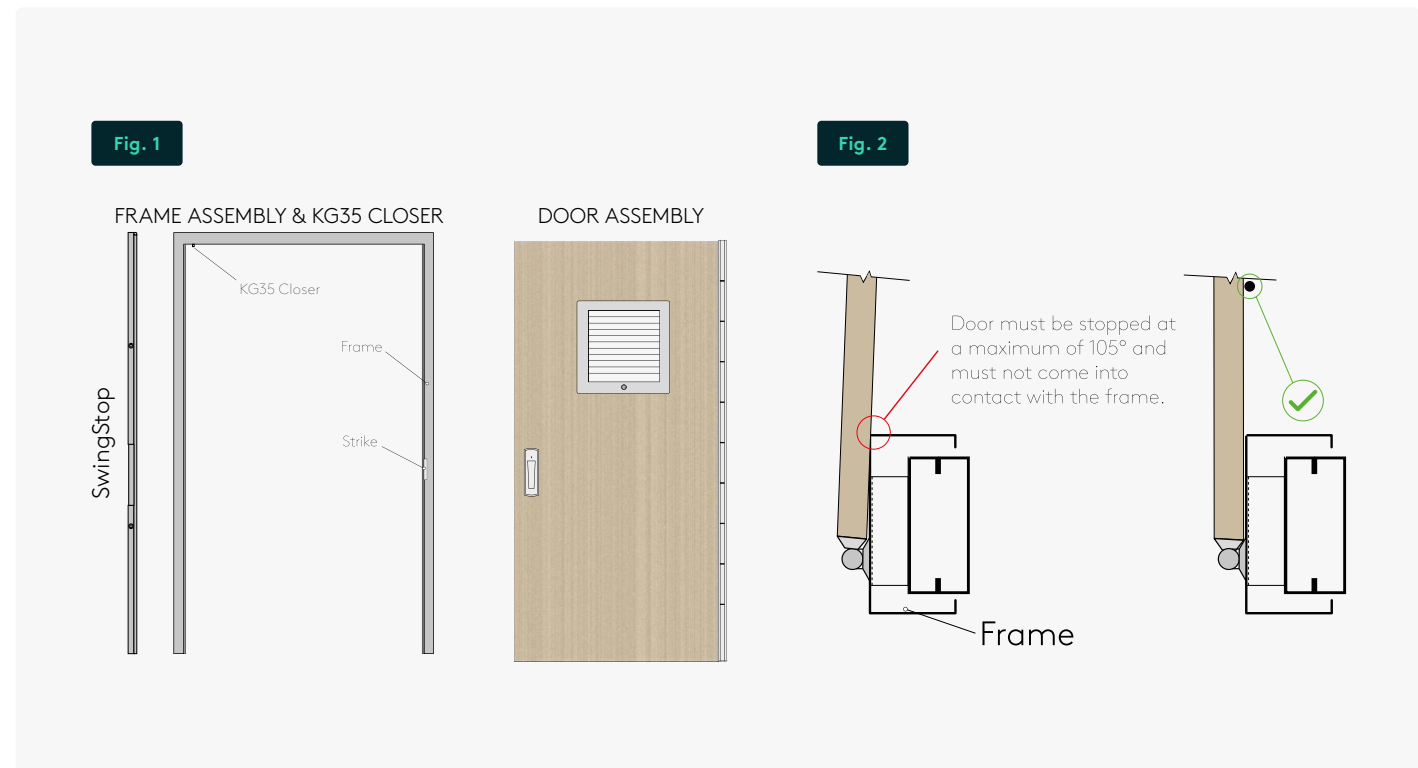
Door Assembly

The SWING Anti-Barricade System comes in three assemblies:

- 1) HM Welded Frame Assembly with the strike and KG35 Closer installed
- 2) The Door Assembly with all hardware including the hinge pre-installed as shown below in Figure 1
- 3) The SwingStop Assembly

IMPORTANT: Please read before continuing

The SWING Door System must be properly supported by a floor or wall mounted door stop at 105° to prevent damage. The door must stop prior to the hinge hitting the frame as shown in Figure 2. This applies to both New & Retrofit Installations.



Installation Instructions

- 1 Install the Kingsway Welded Frame assembly as per installation instructions on page 13.
- 2 After the frame is properly installed and checked, you can now paint the frame per architectural specs.
- 3 Once the frame is installed, the KG35 Closer must now be prepared by advancing the Closer Stud one notch so that the neutral position of the door will be beyond the centerline as shown in Figure 4.
- To do this, use a hex key in the center of the Stud with one hand while holding the Stud with the other to be sure the pin is indexed by one notch only.
- 4 Next, install the SWING Door assembly. For this step a minimum of (3) persons are recommended: one person to guide the hinge onto the Closer Stud; one to hold the strike of the door; and one to operate shims and prybar at the bottom of the hinge.
- The door assembly should be maneuvered into the opening in the closed position as shown in Figure 6.
- 5 Once in place, raise the door assembly using air-shims, wood blocks or other means, making sure the receiver on the door and the Closer Stud mate together and that the pre-drilled holes in the frame align with the fastener holes in the hinge.
- NOTE:** Protect the bottom of the door to avoid damage. NEVER twist or slide the door if directly in contact with the floor - this will cause damage such as veneer splinters.
- IMPORTANT:** There should be no gap between the top of the SWING Hinge and the Frame Header when correctly installed, as shown in Figure 7. If there is a gap, carefully loosen the screws and then, while maintaining constant upward pressure, re-tighten the screws to close the gap.
- 6 Installation instructions continued on the next page.

Fig. 3

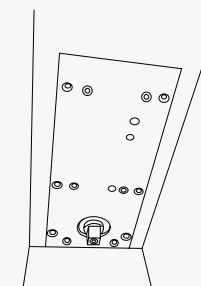


Fig. 4

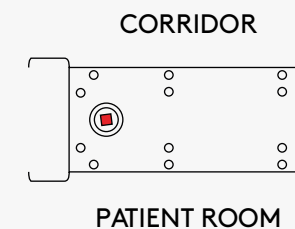
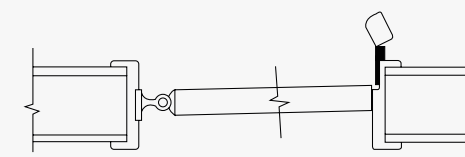


Fig. 5



NEUTRAL POSITION OF DOOR WHEN STOP IS OPEN

Fig. 6

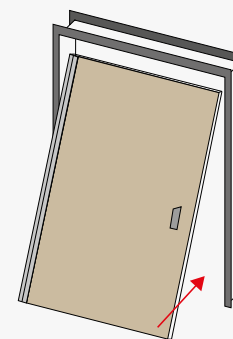


Fig. 7

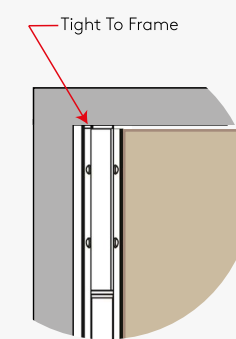
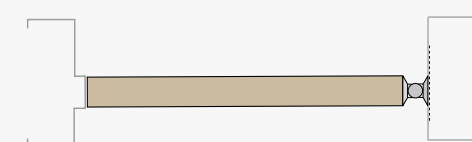


Fig. 8



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Installation Instructions

7

Once the door is hung, install the SwingStop as shown in Figure 9 & 10:

IMPORTANT: There should be a gap of roughly 1/16" between the top of the SwingStop and the Frame Header when correctly installed to avoid binding when the SwingStop is opened.

8

Once the SwingStop is installed with the proper clearance, ensure that it locks tightly and is not loose. If it is loose, refer to Figure 11 to adjust the locking mechanism accordingly.

9

Once the door is installed and all screws securely fastened, ensure the door is adequately stopped by a floor or wall mounted door stop at a maximum of 105° as shown in Figure 2. The hinge and door must not make contact with the frame.

10

Ensure the door latches in the strike.

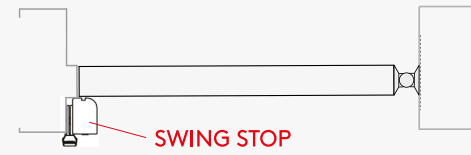
11

Test the anti-barricade function as detailed in the SWING Operating Instructions on page 7.

12

Test the SWING door in both directions ensuring the bottom edge does not catch on the floor.

Fig. 9



SWING STOP

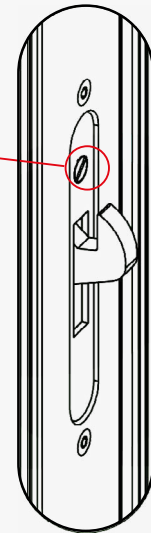
Fig. 10



Ligature resistant cap should always be at the top. If not at the top when installed, it has been incorrectly installed and will need to be replaced.

Fig. 11

Latch tension can be adjusted using this screw



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Operating Instructions

Normal Operation

In normal operation, the SWING Door System is in-swinging. In an emergency situation, SWING's anti-barricade function can be activated to allow the door to open outwards.

Components

Refer to Figure 1 for component names when interpreting instructions.

Operation

- 1 In the event of a barricade, approach the door and look through the Vision Panel (if equipped) to check the patient's location within the room.
- 2 Unlock the two locking points on the SwingStop using the Kingsway Staff Key. The SwingStop is located on the opening side of the door.
- 3 Fold back the SwingStop and open the door outwards and away from the barricade.
- 4 Once door has stopped moving, staff can safely access the room and assist the patient.

Fig. 1

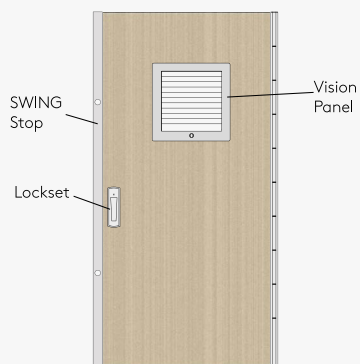


Fig. 2



Fig. 3



Fig. 4



Fig. 5



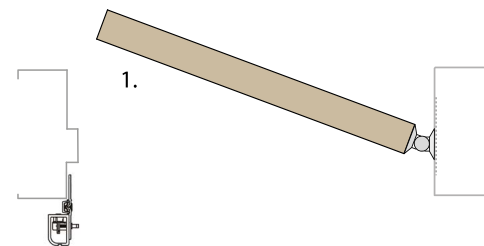
Reset Procedure

Standard Reset Procedure

Following a barricade incident, it is extremely important to follow the Reset Procedure to return the door to normal function.

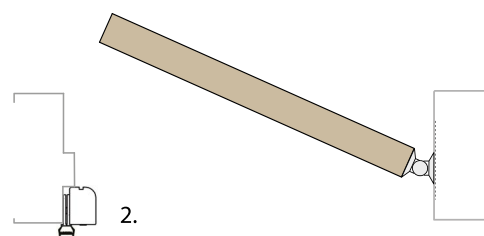
- 1 With the SwingStop still open, swing the door back into the room as shown in Figure 6.

Fig. 6



- 2 Fold the SwingStop back into its closed position.

Fig. 7



- 3 Lock the SwingStop in its closed position using the Staff Key, checking that it is securely locked. The SwingStop will now prevent the door leaf from opening outwards.

Fig. 8



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Maintenance

Maintenance of the SWING anti-barricade system involves attention to three main areas: hinge, SwingStop, and hardware to the door. Each require periodic checks and as-needed maintenance as detailed below.

Hinge

The SWING system incorporates a single barrel hinge which is designed to be largely maintenance free. It incorporates heavy-duty bushings and one-piece hinge leaves. Settling of the frame and building may sometimes apply pressure to the hinge, making a squeaking noise. If this occurs, apply clear, dry lock lubricant to the hinge bushings to improve friction as needed. See Figure 1 for recommended lubricant.

SwingStop

The anti-barricade SwingStop (See Fig. 2) uses a key to operate the locking mechanism. Periodic checks should be made to ensure the locking and hinge areas are functioning correctly every 90 days or per your maintenance schedule. If necessary, the lubricant in Fig. 1 can be used in the lock mechanism. During these checks, ensure the lock is holding the stop snug. Refer to the install instructions for adjustment if needed. Refer to operating instructions to operate and reset the anti-barricade function.

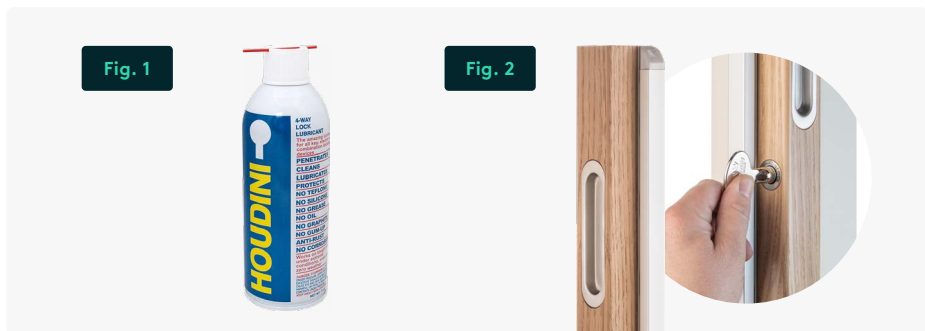
Hardware

In a behavioral health setting, doors and screws are often tampered with. It is important to periodically perform a visual inspection of hardware to ensure screws are tight and to re-tighten as needed. This will prevent patients from working screws loose and using for self-harm. It is recommended to perform this check every 90 days at the same time as checking the anti-barricade function.

Cleaning

Start with a microfiber cloth and simply dampen the cloth in warm water. As you wipe down the surface, try to move with the grain. In most cases, this will be more than enough to remove any dust and dirt. If necessary, follow up with another dry microfiber cloth to soak up any excess moisture.

If you need to do some deeper cleaning, use a mild soap and warm water mixture. Instead of using large swiping motions, really focus on scrubbing small areas. You can even try using a light spray of non-ammonia based glass cleaner to help get things clean. Avoid harsh and abrasive cleaners.



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

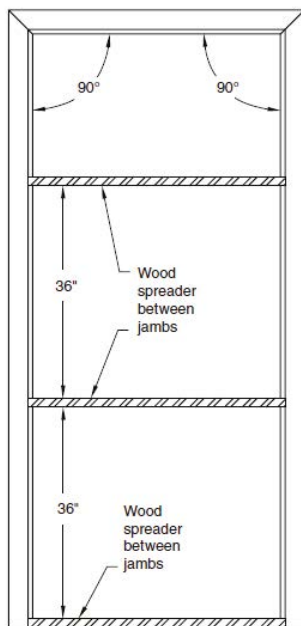
Welded Frames

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

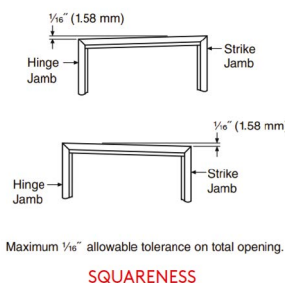


Fig. 3

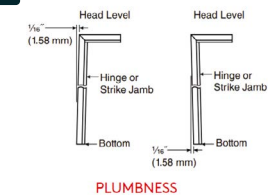


Fig. 4

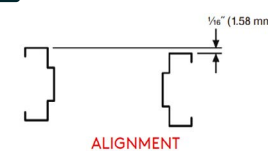
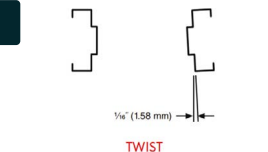


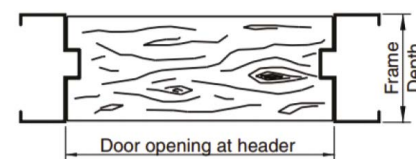
Fig. 5



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 jamba 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.

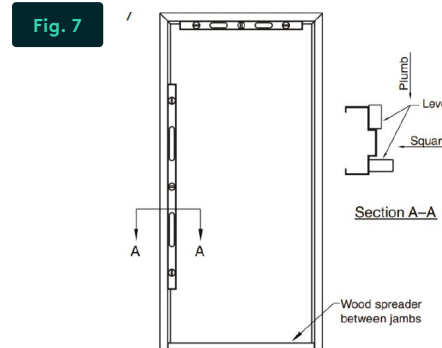
Fig. 6



- 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



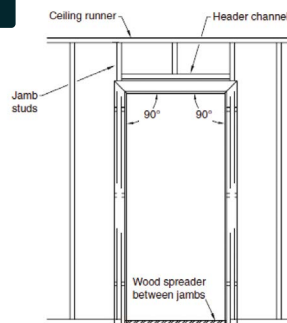
Positioning the Frame:

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

For Steel Stud wall construction - studs erected with frame:

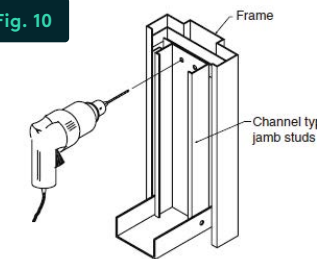
- 1) Attach jamba to floor through floor anchors.
- 2) Install jamb studs to floor, header channels, and ceiling runners butted tightly against frame anchors and properly positioned in frame throat for wallboard. See Figure 9.

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

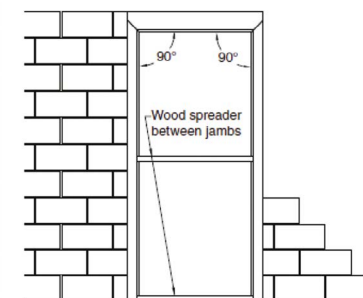


- 5) When attaching header stud to jamb studs, be sure the stud is above frame header. This will assure ample room for attaching plaster lath or drywall and will not interfere with installation of hardware attached to frame header.

For New Masonry Construction:

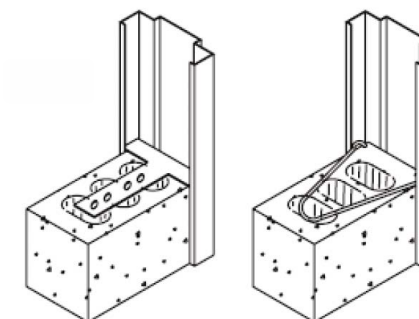
- 1) Erect, brace, square and plumb frame.
- 2) Fasten frame to floor through base anchors.
- 3) Set second spreader at the mid-height of the door opening to maintain the door opening size. See Figure 11:

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

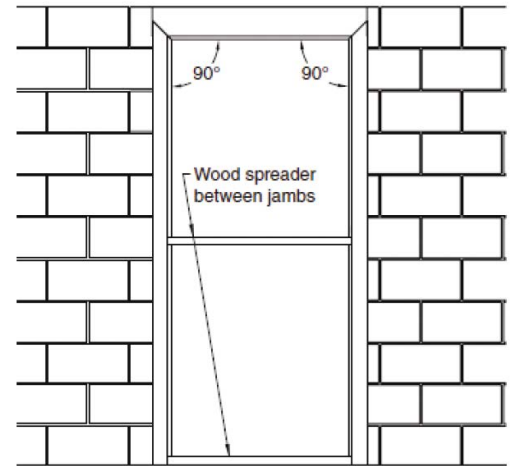


Fig. 14

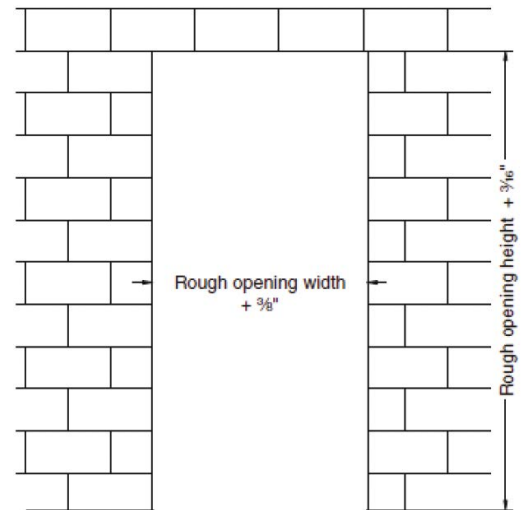


Fig. 15

