



## What to Know Before Getting Started

- **USE CAUTION** during handling of door assembly.
- **DO NOT** paint the neoprene seal.

The following recommendations and precautions are intended to ensure a quality installation of Krieger products. This is a general reference guide and each installation is unique. Please contact Krieger for assistance with any specific installation questions.

- Oversized hollow metal doors and frames should be installed by qualified experienced journeyman carpenters.
- Field assembly is required before installation.
- Special heavy-duty lifting equipment is required. If slings are used during installation, ensure the tension does not exceed the sling capacity.
- Acoustical frames must be filled with sound deadening material to achieve the required acoustical rating. Please consult the factory if you are considering using rock wool for your application.
- Refer to the following installation guides for more information:



### Installation Guide 160

Sound Deadening Material Into Acoustical Frames

[https://www.kriegerproducts.com/support/manuals/IG\\_160.pdf](https://www.kriegerproducts.com/support/manuals/IG_160.pdf)



### Installation Guide 172

“Pillowing” vs Surface Flatness (aka Warp or Twist)

[https://www.kriegerproducts.com/support/manuals/IG\\_172.pdf](https://www.kriegerproducts.com/support/manuals/IG_172.pdf)



### Installation Guide 321

Radio Frequency Installation Tips and Common Problems to Avoid

[https://www.kriegerproducts.com/support/manuals/IG\\_160.pdf](https://www.kriegerproducts.com/support/manuals/IG_160.pdf)



### Installation Guide 522

HC44 Heavy-Duty Hinge Installation and Maintenance

[https://www.kriegerproducts.com/support/manuals/IG\\_522.pdf](https://www.kriegerproducts.com/support/manuals/IG_522.pdf)

## Installation Instructions – Oversized Frames

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### STEP 1

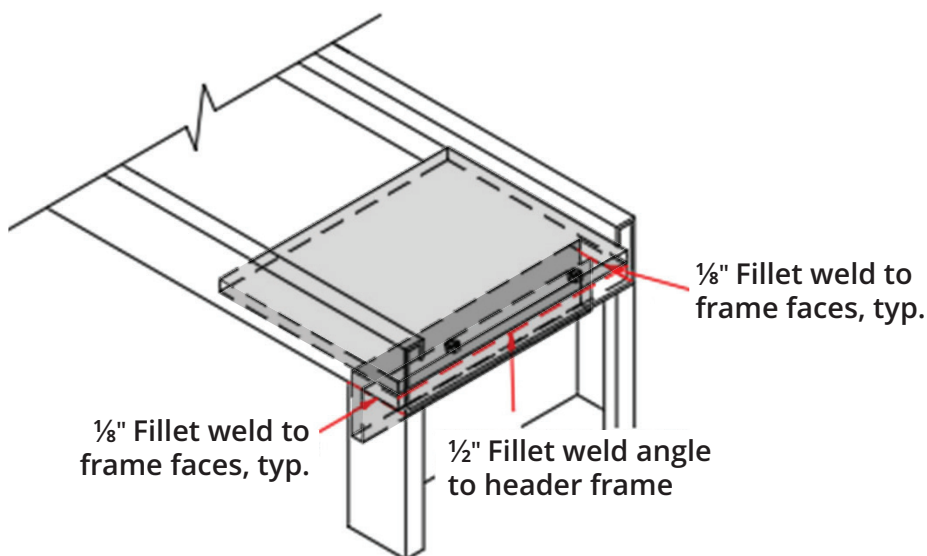
- Locate, lay out, and assemble the following 4 frame components:
    - 2 each: frame legs
    - 1 each: head section
    - 1 each sill section (if applicable)
  - Remove the seal, cap, and retainer.
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### STEP 2

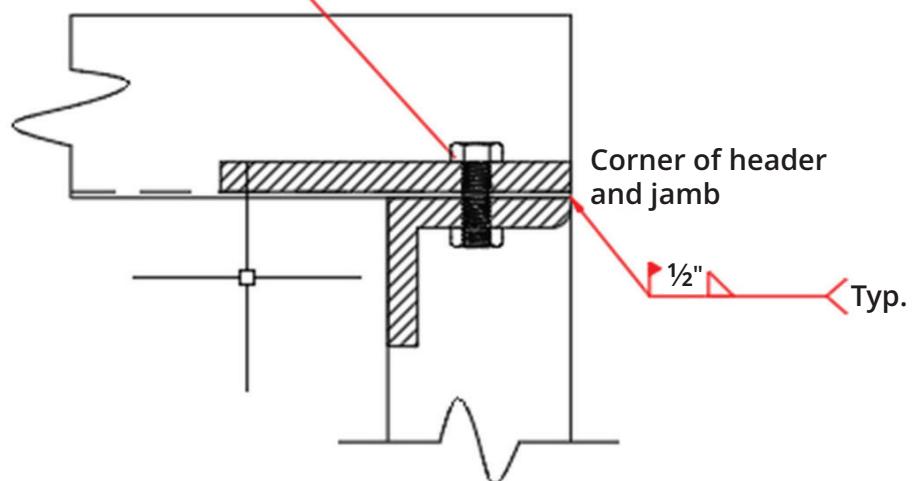
- Connect the corners by aligning the reinforcing corner plates and installing the connecting bolts, tightening to secure.
- Check the frame to make sure it is square and plumb; check the diagonal dimensions and cross measure the frame.

## STEP 3

- After the fasteners have been secured, fillet-weld the structural steel reinforcements between the jambs and the header with a continuous  $\frac{1}{2}$ " fillet weld per AWS D1.1.
- After the internal reinforcements have been welded, fillet-weld the exterior butt joint between the jamb faces and the header with a continuous  $\frac{1}{8}$ " fillet weld per AWS D1.3.
- Grind the surface smooth, filling any surface divots with bondo and primer paint.



Attach each jamb leg to frame head with bolt "G" and nut "L" (2) at each corner joint



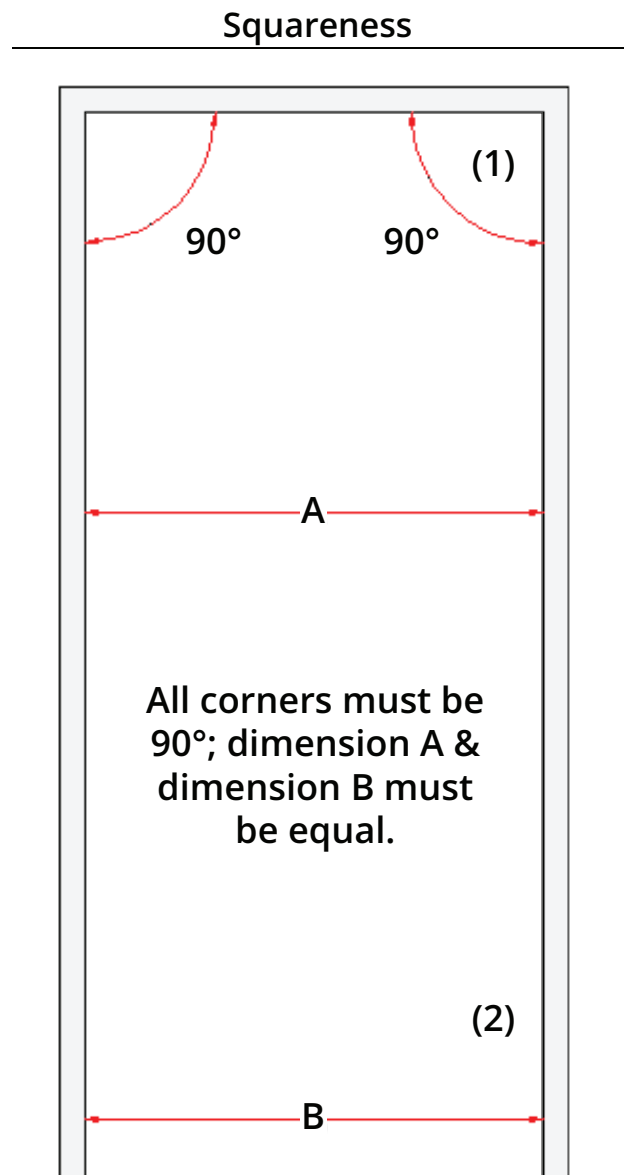
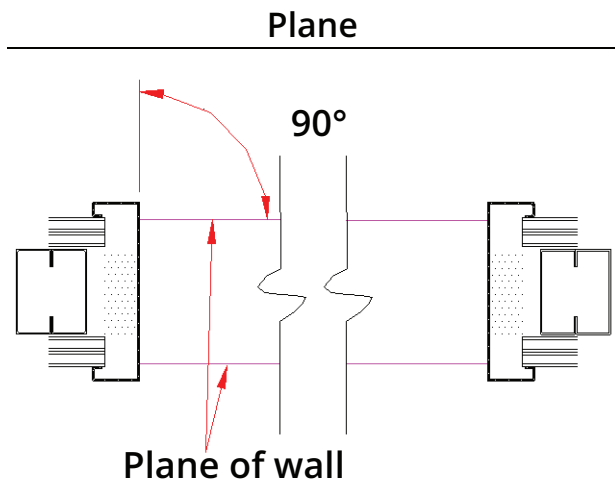
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**STEP 4**

- Fill frame with sound-deadening material.
- Apply caulking to the frame return at the wall interface to ensure a good, continuous seal.

**STEP 5**

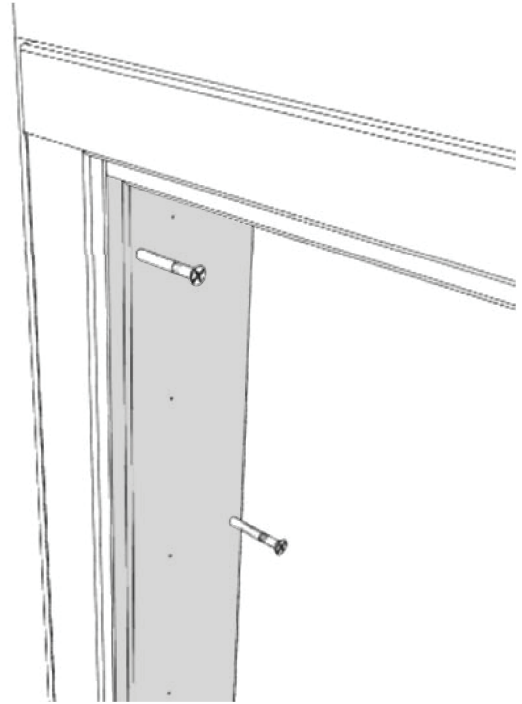
- Frame must be installed square, plumb, in plane, and not twisted to achieve proper door alignment and seal contact.
- Stand assembled frame up by installing the lifting lugs in the pre-drilled and tapped holes.
- Check the diagonal dimensions and cross-measure the framed door opening to ensure the jambs are set correctly.



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## STEP 6

- Anchor the frame securely to the wall with anchor bolts per the size and quantity listed on the shop drawings.



## STEP 7

- If your frame has an embedded sill section, the sill will require that the concrete be poured in and around the sill component.
- Re-verify that the sill component is installed level and square to the opening.
- If applicable, shim under the component where required before installation of concrete into this area.
- Confirm frames are set square, plumb, in plane, and at the correct floor height.

## Installation Instructions – Oversized Frames (Acoustical)

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### STEP 1

- Remove the dual Cam Lift door bottom by removing bolts found at the bottom of each door.
  - Mark these items with the mark number (location) to be re-installed later.
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### STEP 2

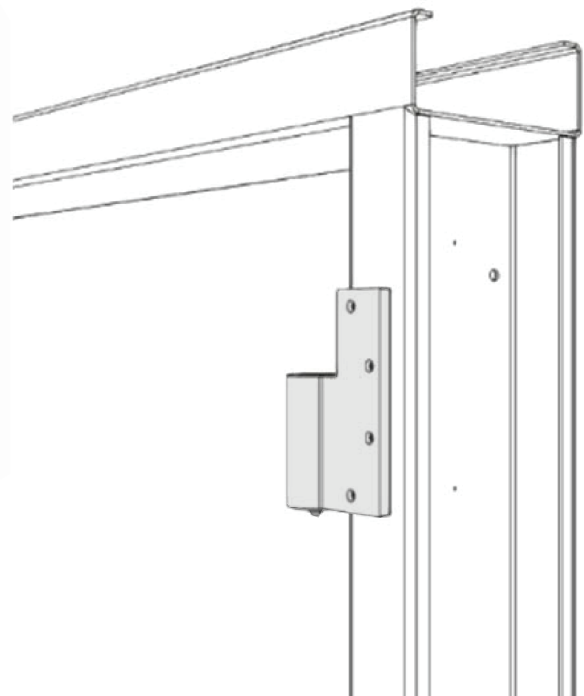
- Install the heavy-duty lifting brackets (2 each, provided) to one door and attach appropriately rated lifting cables or chains.
- When lifting these doors, it is helpful to place wooden skids (2" x 4" wooden studs) under the door.
- **DO NOT DRAG THE DOOR ON CONCRETE.** The skids will move along with the door as it is lifted vertically into the air.

### STEP 3

- Install the heavy-duty hinges onto the doors noting the grease fitting is on the bottom of the hinge.
- The intermediate hinge (center hinge is a Cam Lift type and spreads open as it is rotated) is also handed, and verification of its action should be made after its installation. The unattached side of the hinge should move upwards as it is rotated to the open position.

### STEP 4

- Lift the door into the opening at near 90 degrees (perpendicular) to the frame and begin attachment of hinges to doors.
- **DO NOT** lift the door from the bottom as this places strain on the door and can cause alignment and operational problems.
- **DO NOT** install hinges with the door parallel to the frame.

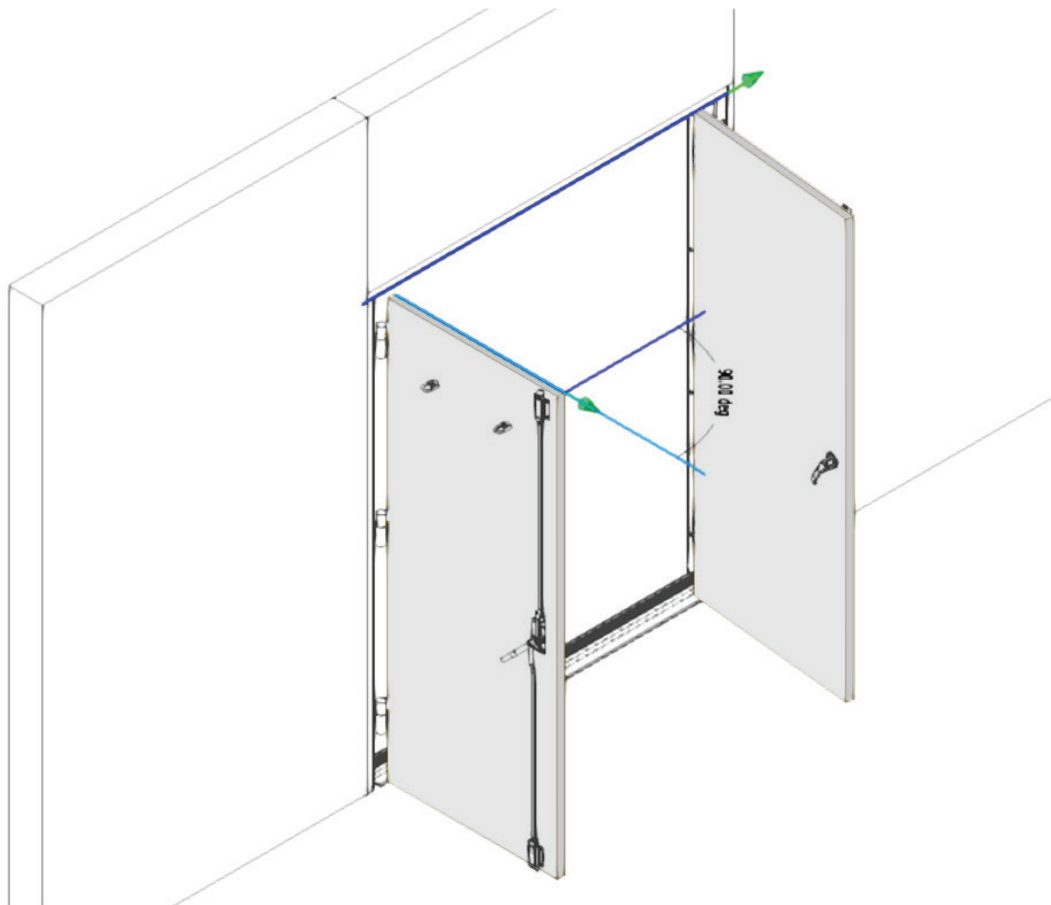


## STEP 5

- Close the door and verify clearances. Minimal adjustments can be made to clearances by loosening and adjusting the door and re-tightening the hinge.
- Adjust appropriately until proper clearances have been achieved.
- Vertical alignment adjustments for the panels at the meeting stile must be made on the depth axes moving the frame or shimming the holes. Consult factory as required.

**NOTE: DO NOT** re-install the door bottoms until all construction phases are completed, as power cords and construction debris can damage the door bottom seal.

**DO NOT** wedge or allow these doors to be wedged open unless this bottom has been removed and the wedge does not encounter the door skin bottom edge.



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## STEP 6

- Install required hardware to secure the opening.
  - Instructions for each device will be individually packaged with the device.
  - All holes are predrilled for ease of installation.
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## STEP 7

- Astragals are shipped loose.
- Tape off rubber and paint exposed metal surfaces **BEFORE** installing astragals.
- The neoprene rubber is factory installed and not removable.
- **DO NOT** paint neoprene rubber.

End Instructions