

# Fixing Uneven Gaps Between a Door and Frame (Improper Clearance)



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This manual provides instructions on how to troubleshoot door clearance issues immediately after installation.

A video demonstration of these procedures can be viewed at [www.steeldoor.org](http://www.steeldoor.org).

## Inspect the Opening



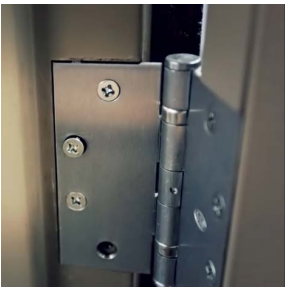
1. Inspect the general condition of the opening.
2. Determine if the frame opening width is consistent from top to bottom.

### NOTES:

√ If it is not, then the inconsistent gap is caused by an incorrect frame installation. Improperly set frames will cause severe door and hardware problems. These types of situations could require extensive field repair and may result in having to remove frames from walls to gain access to the frame anchoring. *This manual does not address improper frame installation.*

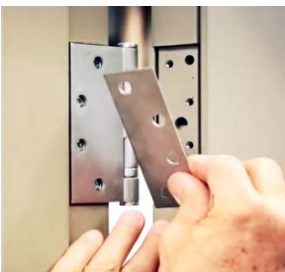


3. Assess the opening to determine where the incorrect clearance is occurring.
4. Sometimes, clearance issues can be caused by loose or missing screws. Open the door to ensure it has all of the screws and that they are properly tightened. If the screws are loose and cannot be tightened, a thread lock material can be used to secure them.
5. Check that all of the hinges are the same size and that a heavy weight hinge is not mixed in with the standard weight hinges.
6. For heavy weight hinge applications, ensure that the reinforcements have been modified to accept the heavy weight hinge correctly.



See the SDI manual on door installation or consult with the door manufacturer for more information on converting standard weight hinge reinforcements to heavy weight hinge reinforcements.

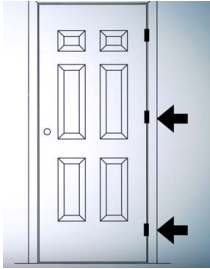
## Clearance Corrections



The following issues can be corrected by placing metal shims in specific locations.

1. Door clearance is too tight at the top lock side of the opening.
2. Door clearance is too tight at the bottom lock side of the opening.
3. Entire door shifted too far towards the hinge side of the opening.
4. Entire door shifted too far towards the lock side of the opening.

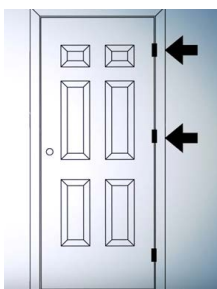
### Door clearance is too tight at the top lock side of the opening



Place the shims between the hinge leaf and the door at the bottom and middle hinges. This will shift the top half of the door upward.

#### Shim Steps:

1. Open the door and place a support or a wooden wedge under the door to relieve tension.
2. Starting with the bottom hinge, remove the hinge screws on the door first and insert the shim between the hinge leaf and the door.
3. Reattach the hinge leaf to the door with screws.
4. Repeat the shimming at the middle hinge location. This will shift the top half of the door upwards, adjusting the clearances around the perimeter.
5. Remove the support or wooden wedge from under the door, close the door, and check to see if the clearance issue has been resolved. If not, add additional shims as necessary to the same locations, making sure you maintain hinge screw thread engagement.

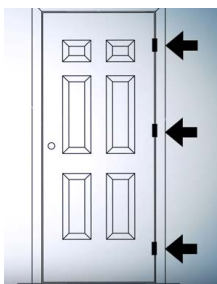


### Door clearance is too tight at the bottom lock side of the opening

Place the shims between the hinge leaf and the door at the top and middle hinges. This will shift the lower half of the door downward.

### Entire door shifted too far towards the hinge side of the opening

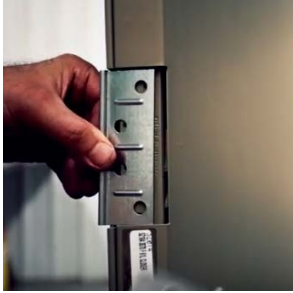
Place the shims between the hinge leaf and door at all hinge locations. This will shift the door towards the lock side.



## Entire door shifted too far towards the lock side of the opening



The following issue can be corrected by recessing the hinge leaf further into the door or frame causing the door to shift closer to the hinge side.



1. Open the door and place a support or wooden wedge under the door to relieve tension.
2. Remove the hinge screws from the door. Start with the top hinge.
3. If there are filler plates, shims, or wire spacers you can remove or modify these to recess the hinge leaf further into the door. Check with the manufacturer on how to adjust hinge reinforcements to recess into the door.
4. Reattach the hinge leaf to the door with screws.
5. Repeat this process for the middle and bottom hinge locations.
6. Remove the support or wooden wedge from under the door.
7. Close the door and check to see if the clearance issue has been resolved.

The procedures in the manual are only guidelines. Please follow all applicable building codes, standards, and accepted practices specific to your geographic location. For more information or to watch the video, visit [steeldoor.org](http://steeldoor.org).



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