

**HOW  
TO  
WIDEN  
DOOR  
OPENINGS  
WITHOUT  
WRECKING  
WALLS**



# CREATE MORE USABLE SPACE WITH 100% FULL ACCESS FOLDING DOOR HARDWARE

**J**ohnson's Series 1601, 100% full access system is a uniquely functioning set of hinged folding door hardware that provides complete jamb-to-jamb access of door openings.

Doors fold out of the opening and lay flat against the wall.

Each 1601 set contains 180° control arm, surface mount door and jamb hinges plus mounting hardware. Can be used with mortise type butt hinges (not included) to match swinging doors.

Standard set fits door openings from 24 in. (2 doors) to 72 in. (4 doors). Use 1 set for 2 doors, 2 sets for 4 doors. Other sets available for openings as small as 18 in. (2 doors) or as large as 96 in. (4 doors).



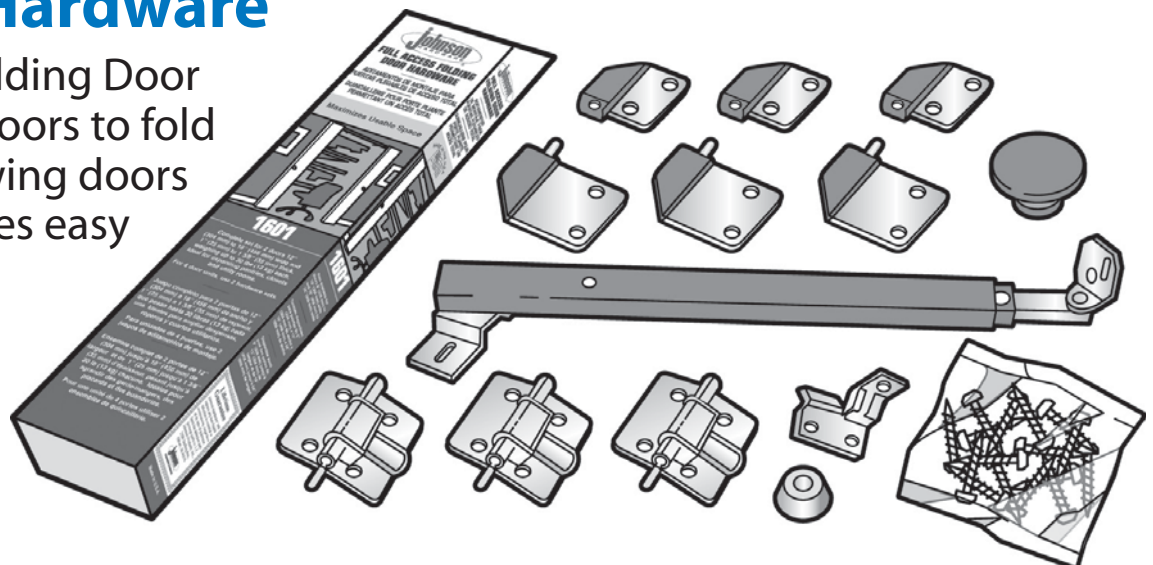
- Perfect for food pantries, utility rooms, home offices, laundry rooms, clothes closets, beverage bars, any place where folding doors must swing out completely to allow full access to the opening.

- Trims out like a swinging door. No track, no unsightly gaps, matches other openings.

- Manufactured of strong brass finished steel. Control arm has attractive woodtone aluminum adjustable sleeve.

## Series 1601 Hardware

100% Full Access Folding Door Hardware enables doors to fold out of the way, allowing doors to open fully. Provides easy access for shelves, drawers, appliances, cabinets, etc.

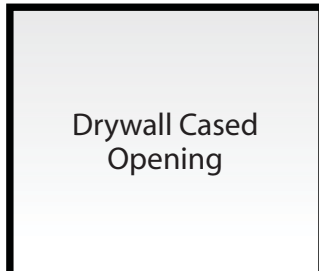


# 1. Determine type of casing.

Check to see if you have a wood or a drywall opening.

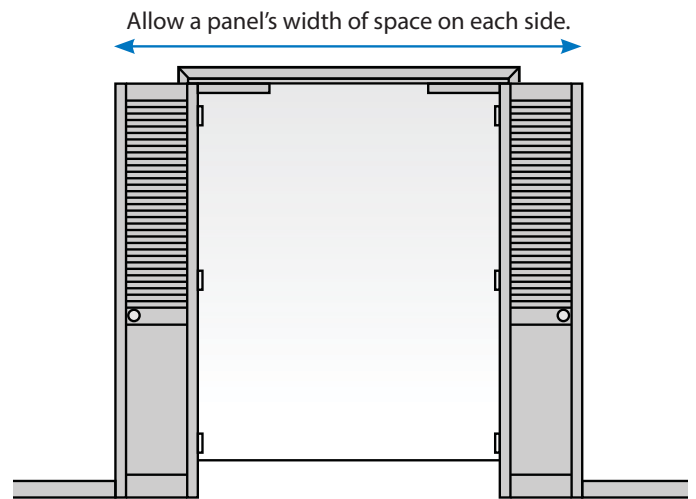
- A. If you have wood, proceed to step 2.
- B. If you have drywall, check that the jamb hinges can be securely mounted on the jamb. Drywall by itself is not strong enough to support the weight of the door. For the most secure installation with drywall encased openings, follow professional tip 4B1 or 2.

Note: 1601 is ideal for wood doors. Metal doors may require special treatment. Write factory for details.



# 2. Measuring wall space.

Make sure you have at least 1 panel width of wall space next to the door opening to accommodate the door which folds out of the opening and up against the wall.



# 3. Squareness—the crucial factor.

Take a square and carpenter's level and make sure the opening is square and the frame is plumb. Squareness is essential for smooth door operation and correct closure. If opening is not straight, rework as necessary.

If you must reduce the opening size, the doors may also have to be trimmed.

Single door width for 2-door is: opening size less 5/16 in., divided by 2.  
For 4-door: opening size less 7/16 in., divided by 4.  
If gaps exceed these recommendations, see step 4B.

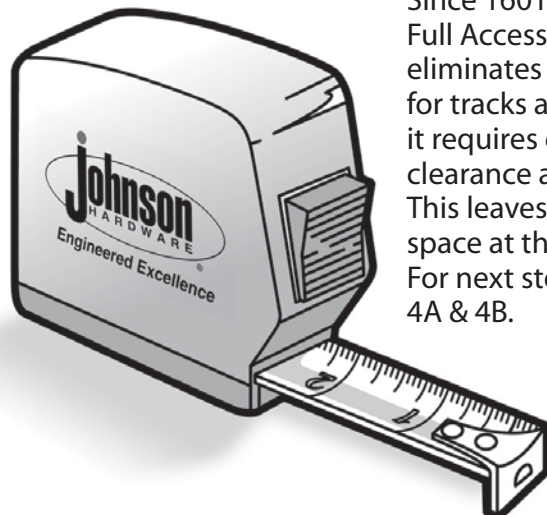
If trimming is necessary, measure carefully and trim all door edges equally.



# 4. Check door height and width.

Standard door height for most folding doors is 6 ft. 7 in., to fit into a normal 6 ft. 9 in. high opening. This allows a 1 in. space at the top and bottom for tracks, brackets and other hardware.

Since 1601, 100% Full Access Hardware eliminates the need for tracks and brackets, it requires only 1/8 in. clearance at the top. This leaves 1 7/8 in. of space at the bottom. For next steps refer to 4A & 4B.



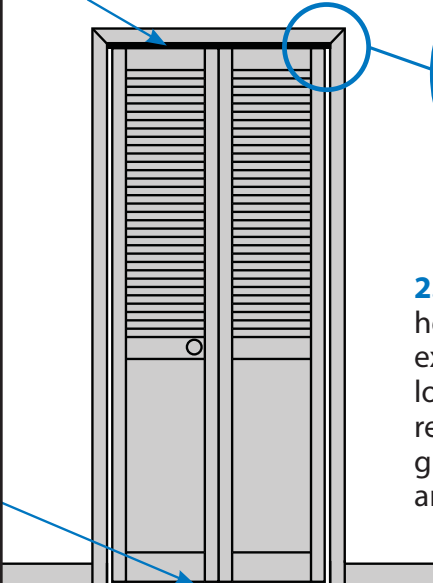
## 4A.

### Retrofitting the door height –

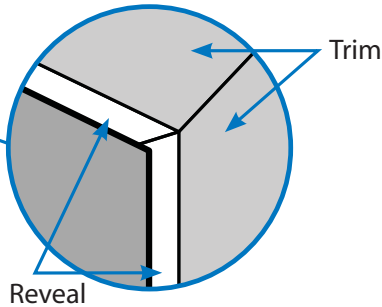
Check these options for easy installation:

**1.** Install new 1601, 100% Full Access Hardware and rehang door  $7/8$  in. higher, leaving  $1\ 7/8$  in. space at bottom for carpet, clearance and air flow.

Filler Strip



**2.** Rehang door at same height. Add filler strip to existing header to make it lower. You may wish to retrim entire opening to give equal reveal at top and sides.

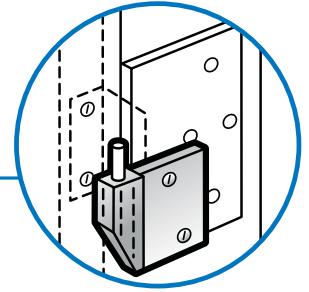


## 4B.

### Retrofitting the door width –

Check these options for easy installation:

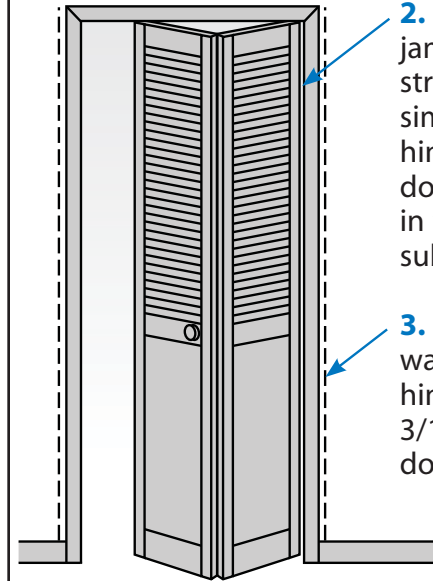
Normally, there is a  $1/4$  in. space between the bi-fold doors and jambs for turning clearance. Using our jamb mounted hinges, you need only  $1/16$  in. This creates  $3/16$  in. extra space at the other jamb for 2-panel doors or  $3/8$  in. in the center of 4-panel door installations.



**1.** The easiest solution is to add  $3/16$  in. x 3 in. x  $4\ 1/2$  in. wood shims to the sides of each jamb hinge location. Then rehang doors, leaving casing trim in place. Paint or stain wood shims to match.

**2.** Add a full-length sub-jamb – a  $3/16$  in. thick strip of plywood or similar material – to hinged side. Rehang doors, leaving side trim in place. Paint or stain sub-jambs to match.

**3.** The most attractive way is to move each hinged jamb inward  $3/16$  in., then rehang doors and retrim.



**Look for this display  
in fine home centers,  
hardware stores and  
building supply outlets.**



Sold by:



L.E. Johnson Products, Inc.  
2100 Sterling Avenue  
Elkhart, IN 46516  
Phone: 574/293-5664  
Fax: 574/294-4697

[www.johnsonhardware.com](http://www.johnsonhardware.com)