

# Open wide, *HEAD OUTSIDE*

Create a smooth transition between your home and garden by replacing a window with a set of beautiful timber bi-fold doors



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**Y**ou can transform your home by connecting your living spaces to an under-used outdoor area – just knock out a window and install a set of bi-fold doors. You'll flood your interior with light and make the area feel more spacious, while the new door will make entertaining so much easier.

## EASY STEPS TO INSTALL BI-FOLD DOORS

### Gather your supplies

- Custom-made bi-fold doors and frame
- Sill 135 x 19mm spotted gum decking
- External trim 92 x 18mm H3 treated pine
- External D moulding 30 x 12mm H3 treated pine
- Architrave 92 x 18mm primed pine
- Entrance handle and lockset

### You'll also need

Measuring tape; spirit level; lump hammer; bolster; 230mm angle grinder fitted with a diamond cutting blade; utility knife; hammer; chisel; reciprocating saw; multitool; wrecking bar; 230mm aluminium flashing; plastic window packers; finishing nailer and nails; countersinking drill bit; 65mm wood screws; exterior varnish stain in teak; paintbrush; 6mm masonry drill bit; red wall plugs; 50mm decking screws; Sikaflex adhesive; PVA glue; gap filler; wood putty; fine sandpaper; undercoat; interior and exterior paint; cabin hooks

### For you to note

When using power tools, wear the safety gear required and refer to instructions. Check with your local council to see if approvals are needed.

### Here's how

**STEP 1** To order doors, you'll need to measure the opening to find the absolute minimum dimensions you have to work with. This is the width of the opening in the brickwork and the height difference between the lintel outside and the floor inside, which is often higher than the ground outside. Also use a spirit level to find out how square the



**STEP 2**



**STEP 3**

opening is. Take these measurements to your door manufacturer.

**STEP 2** Use a lump hammer and bolster to knock out sill bricks from under window.

**STEP 3** Use spirit level to continue the line of the sides of the opening down the bricks below. Use a 230mm angle grinder fitted with a diamond cutting blade to cut through bricks along these lines.

**STEP 4** Knock out bricks under window and remove. Use a bolster to cut through any remaining uncut bricks where the angle grinder didn't reach.

**STEP 5** Inside, use a utility knife to cut through paint between architraves and wall. Use a hammer and chisel to pry off architraves.

**STEP 6** Use a reciprocating saw to



**STEP 5**



**STEP 6**



**STEP 7**



**STEP 8**

cut through nails holding window in place. They should only be at the sides of the window.

**STEP 7** With a helper, remove window from opening.

**STEP 8** Use spirit level to transfer line of the sides of the opening in the plasterboard down to the floor. Cut through plasterboard and skirting with a multitool and remove from wall frame.

**STEP 9** Knock out timber frame below windows. Don't forget to flatten nails left sticking up when you remove the jack studs so you don't step on them.

**STEP 10** Use multitool to cut through bottom plate of wall. Pry up off floor using wrecking bar and remove.

**STEP 11** If the difference in width between doors and house frame is more than 50mm, pack out each side with extra timber to reduce the difference to about 15mm. Make the thickness of the packing so the reduced opening is centred on the brickwork outside.

**STEP 12** Lay aluminium flashing down on bottom of opening. Make sure the inside edge sits 20mm past the line of the doors inside and cut extra so it goes up the studs at each side by about 50mm.



**STEP 9**



**STEP 12**

**STEP 13** If needed, assemble door jamb using product instructions.

**STEP 14** Stand door jamb in place and make inside edge flush with face of plasterboard. Check the sill for level and pack under it, if required.



**STEP 14**



**STEP 15**



**STEP 17**



**STEP 18**

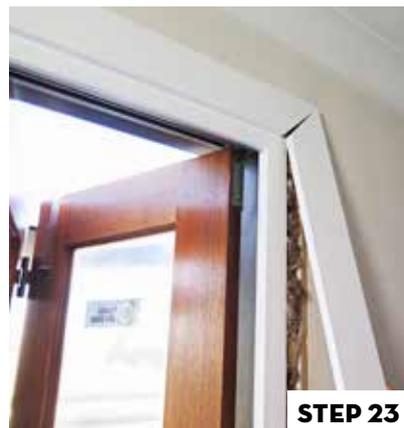
**STEP 15** On 1 side, check jamb is plumb on both the edge and face. Place plastic window packers between jamb and frame at top, middle and bottom to wedge jamb in position. Use finishing nailer to hold jamb in place. Repeat for other side of jamb.

**STEP 16** Measure diagonals of jamb to make sure it is square. Also stand back and sight along inside edge of jamb and make sure it is parallel with outside edge of jamb at other side of door. This ensures the frame is not twisted. Adjust jamb if required.

**STEP 17** At top, middle and bottom of door where packers are, predrill



**STEP 19**



**STEP 23**

through jamb with countersinking drill bit, then secure door with wood screws. Bi-fold doors also require you to screw through the head of the door and into the frame as all the weight of the doors hangs off the head.

**STEP 18** On inside of door, fold up flashing against the back of the sill and use a block to flatten it. Also fold the flashing up the sides of the door jamb.

**STEP 19** Install doors in frame in correct order as per manufacturer's instructions.

**STEP 20** To protect doors, apply selected finish. To highlight the grain, try an exterior varnish stain, here in teak. Apply 2-3 coats, allowing to dry after each coat.

**STEP 21** At bottom of door where



**STEP 25**

bricks were removed, cut a timber sill to fit under door and extend out past brickwork. At ends and every 600mm along sill, predrill for screws, making sure they will coincide with bricks below. Place sill in position and drill through pilot holes using a 6mm masonry drill bit. Insert red wall plugs then use decking screws in plugs to secure sill.

**STEP 22** To cover brickwork on outside, cut external trim to width to suit distance from door jamb to corner of bricks. Spread a generous amount of Sikaflex adhesive along the back and press against bricks. Leave Sikaflex to set. Cut D moulding to sit over corner of bricks and glue in place. Repeat for other side of door.

**STEP 23** On inside, mark where architrave will sit to cover gap between door and wall. Use multitool to cut skirting so it will butt into side of architrave. Cut architrave to length, mitring joints at corners. Place in position then nail. Use PVA glue on joins in corners. Also use moulding along bottom of door to hide the gap there.

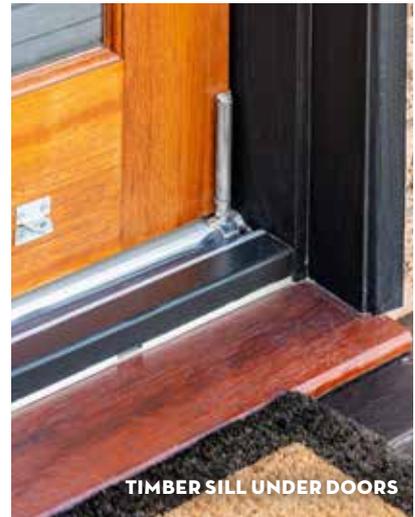
**STEP 24** Fill around trim with gap filler and fill nail holes with putty. Let dry and sand smooth. Apply undercoat to all new work, then follow with 2 coats of paint.

**STEP 25** In the single-hinged door, cut holes to suit entrance lockset and fit. Attach cabin hooks to outside wall to hold doors open.

## THE DEVIL IS IN THE DETAILS!



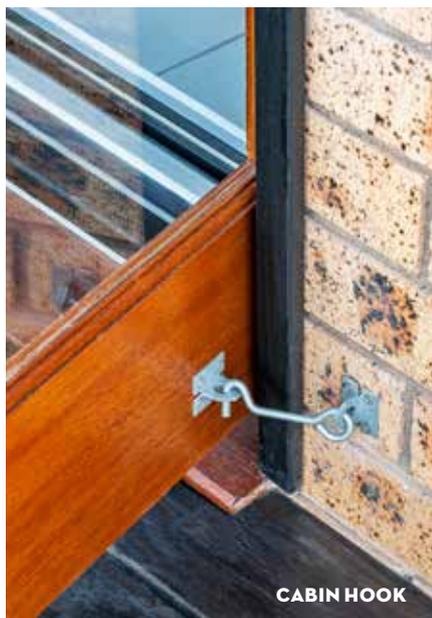
HINGE AND FLUSH BOLT



TIMBER SILL UNDER DOORS



ENTRANCE LOCKSET



CABIN HOOK



EXTERNAL TRIM TO HIDE CUT BRICKS

### Stockists

**Bunnings [bunnings.com.au](http://bunnings.com.au)**  
 135 x 19mm spotted gum decking, \$12/m. 92 x 18mm primed treated pine, \$36.02/5.4m. 30 x 12mm treated pine D moulding, \$3.33. 90 x 18mm primed pine, \$15.49/2.7m. 230mm aluminium flashing, \$23.50/10m. 65mm wood screws, \$8.80/pk50. Cabot's exterior varnish stain, \$54.90/1L. Red wall plugs, \$3.72/pk50. 50mm decking screws, \$42/pk 500. Sikaflex 11FC, \$19.26/310ml. Sikabond PVA wood glue, \$18.16/500ml. Polyfilla gap filler, \$3.75/475g. Timbermate wood filler, \$8.75/250g. Taubmans 3 in 1 undercoat, \$66.34/4L. Taubmans All Weather exterior paint, \$47.40/1L.

### Hume Doors and Timber

**[humedoors.com.au](http://humedoors.com.au)**  
 Alfresco bi-fold doors.  
**[lockwoodlockweb.com.au](http://lockwoodlockweb.com.au)**  
 Nexion Vision entrance lockset. ■