

# HOW TO BUILD YOUR OWN TIMBER GATES

**STEP  
BY STEP  
GUIDE**  
No. **11**

# HOW TO BUILD YOUR OWN TIMBER GATES

## MATERIALS CHECK LIST

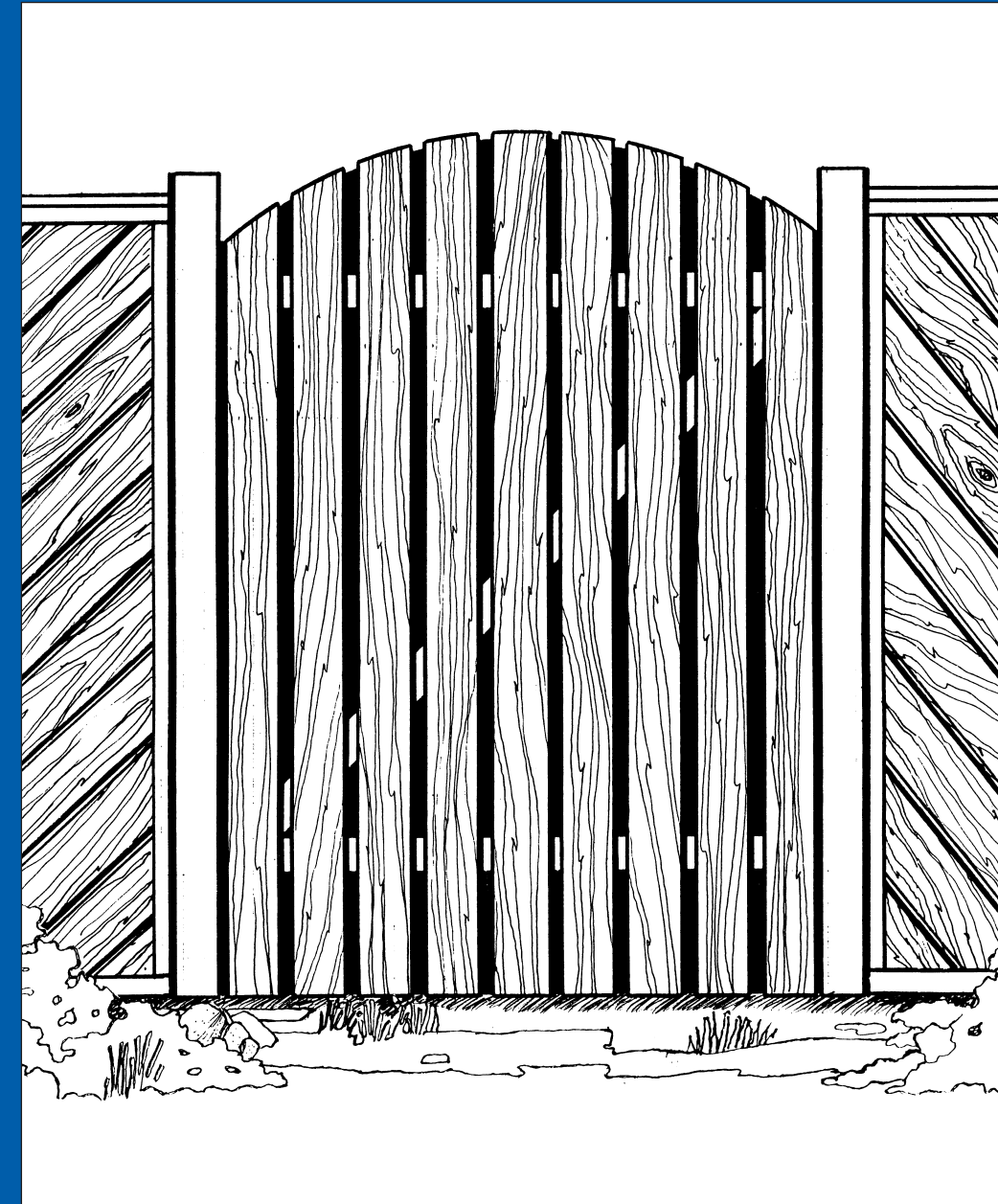
■ POSTS	90 x 90 mm H4 Treated Pine 125 x 75 mm Cypress Pine
■ (Double Gate)	125 x 125 mm Cypress Pine
■ TOP RAILS	70 x 35 mm Seasoned Treated Pine
■ BOTTOM RAILS	70 x 35 mm Seasoned Treated Pine
■ 'Z' BRACE	70 x 35 mm Seasoned Treated Pine
■ FACE BOARDS	70 x 22 mm Treated Pine Decking
■ COACH SCREWS To Ball Bearing Hinges	1½" x ¼" Galvanised Coach Screws
■ NAILS	Galvanised Bullet Head Nails
■ HINGES	Single Gate – Scotch Tee Hinges Double Gates – Galvanised Ball Bearing Hinges

SIZES  
QUOTED  
TO BE USED  
AS A GUIDE  
ONLY

## TOOLS REQUIRED

- Handsaw
- Circular saw
- Power drill and bits
- Tape measure
- Carpenters Pencil
- Wood Chisel
- Hammer
- Spanner
- Carpenters Square
- Paintbrush
- Sandpaper
- Shovel
- Crowbar
- Screwdriver

**FOR SAFETY USE GOGGLES,  
GLOVES AND DUST MASK.**



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11

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PLEASE SEND ME THE INFORMATION I HAVE MARKED HERE

- |   |   |
|---|---|
| <input type="checkbox"/> 1 Timber Deck  | <input type="checkbox"/> 8 Work Bench       |
| <input type="checkbox"/> 2 Pergola      | <input type="checkbox"/> 9 Timber Steps     |
| <input type="checkbox"/> 3 Timber Fence | <input type="checkbox"/> 10 Timber Shelving |
| <input type="checkbox"/> 4 Feature Wall | <input type="checkbox"/> 11 Timber Gates    |
| <input type="checkbox"/> 5 Carport      | <input type="checkbox"/> 12 Handrail        |
| <input type="checkbox"/> 6 Gazebo       | <input type="checkbox"/> 13 Privacy Fence   |
| <input type="checkbox"/> 7 Cubby House  | <input type="checkbox"/> 14 Retaining Wall  |

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# Bowens

THE BUILDERS CHOICE



EASY  
TO FOLLOW  
STEP BY STEP  
GUIDE

COMPLETE  
MATERIALS  
CHECK  
LIST

LIST  
OF ALL  
TOOLS  
REQUIRED



REFER TO COUPON  
ON BACK PAGE FOR  
MORE INFORMATION  
REGARDING THIS  
AND OTHER  
BOWENS PROJECTS

HELPING YOU BUILD IT BETTER!

HELPING YOU BUILD IT BETTER!

IMPORTANT: This project sheet has been produced to give basic information and our helpful staff are available to answer any questions you may have. However, the use of this information is on the understanding that Bowens (including its author, servants and owners) disclaim all and any liability for any damages or other amounts found to be recoverable in relation to such information, even when given negligently or attributable directly or consequentially upon any act or omission by or on behalf of Bowens. The user is advised to contact a qualified tradesman, when expert information or services are required.  
WARNING: Always check with your council authority regarding by-laws or regulations which may be applicable to this project.

# STEP BY STEP GUIDE TO BUILDING YOUR OWN TIMBER GATES

Timber gates can provide an inviting entry to your property and often give visitors their first impression of your home.

You can build it to dimensions to suit your own requirements and in a style that compliments your property.

If you have children or animals, you will want to keep them safely in the grounds of your home. In this case, a solid design will be best with a latch set up high to stop little, inquisitive fingers from opening the gate.

Timber gates are so versatile. They will go with just about any style of fence – brick or timber. A gate will be heavier use than the rest of the fence, so it must be strong.

A gate's strength is created by having good materials, good bracing and good hardware.

Posts must be set at least 600 mm into the ground – preferably in concrete.

Overhang of pickets or boards over bottom rail should be 100 mm (Fig. 7 and 10).

Single gates can be made to swing in either direction, double gates are hinged one to each side.

## PLAN BEFORE YOU START

Before you start, we recommend that you read this brochure fully so that you have a good understanding of the whole project.

First, select the design of your choice and determine the type of timber you will use and draw a plan. Then, using this plan and the 'Materials Check List' on rear page calculate the sizes and lengths of timber you require plus the necessary hardware and place your order with the nearest Bowens store.

## STYLE DESIGN

This instruction guide features the three most popular types of gates which are relatively easy to build.

1. A STURDY, SINGLE GATE.
2. A PICKET GATE.
3. A DOUBLE GATE GATE (FOR DRIVEWAYS).

Striking variations can be obtained by attaching face timbers to rails at an angle (see illustrations).

These illustrations of alternate designs may help you to select the type that suits your property.

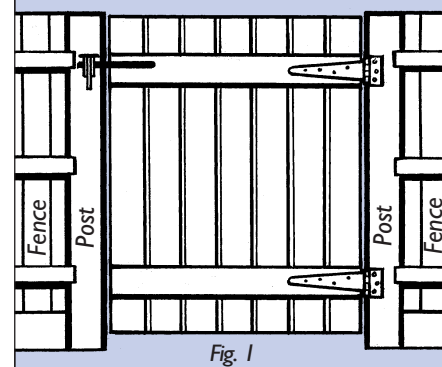


Fig. 1

### • STURDY RECTANGULAR DESIGN.

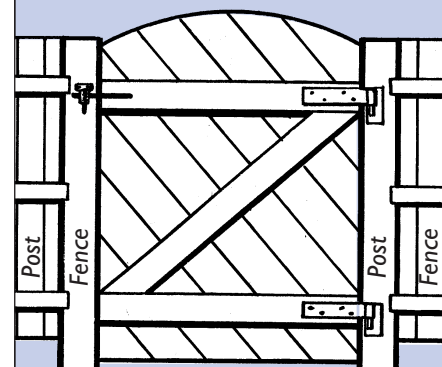


Fig. 2

### • CURVED TOP GATE (with diagonal face boards).

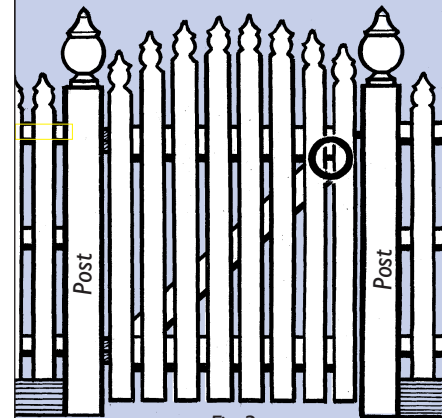


Fig. 3

### • PICKET GATE.

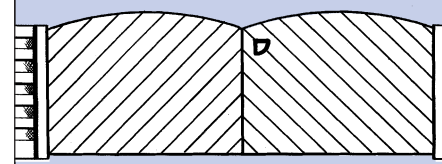


Fig. 4

### • HEAVY FRAME DOUBLE GATE.

## 1. GATE POSTS

For smaller gates use 90 x 90 mm treated pine or 125 x 175 mm cypress pine. For heavy double gates use 125 x 125 mm cypress pine set 700 mm in ground. Mark out the position of the posts with a stake. Holes do not need to be very wide as

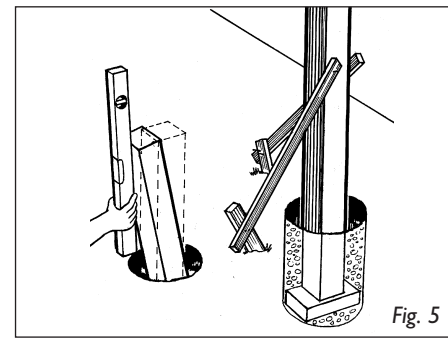


Fig. 5

you will only have more to fill once the posts are in position. Dig 400 mm deep holes. Make sure the bottom of the hole is 'rammed' solid and place a soleplate 225 x 150 x 50 mm in bottom of hole. Set post in position on top of sole plate and mark correct length. Take the post out and cut to required size, then put the post back into correct position and attach temporary timber braces to post so that it stays upright and straight (Fig. 5). Fill with premixed concrete.

NOTE: For double gates we recommend post depth of 700 mm (125 x 125 mm posts). Finish top of mixture with dome shape to allow for water run-off (Fig. 6). Allow concrete to set for 3-4 days and remove braces.

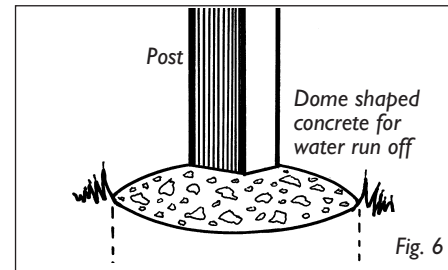


Fig. 6

## 2. SINGLE GATE (Fig. 1 & Fig. 2)

A good sturdy framework is required. Suggested framing size is 70 x 35 mm. For top and bottom rails 'A' and 'B' as well as 'Z' brace (D).

Measure the width between the posts where you want the gate. Allow 10 mm for swing. If at all possible allow for full width boards i.e. 13 x 70 mm wide boards = 910 mm. We recommend 70 x 22 mm treated pine decking.

Measure the height and width of the gate to determine the lengths that you will require and cut rails (A and B) and face boards (C) to suit (Fig. 7). Place rails on flat surface parallel at required distances and single nail two extreme outside boards to rails allowing for 100 mm overhang over bottom rail (Fig. 7).

Turn gate over and square the rails (diagonal measurements must be equal for a square set-out) and fix securely (Fig. 7). Cut and fix 'Z' brace into place using skew nail method or nail plate brace to rail (Fig. 9). Check that frame remains square as you continue, since this will ensure the finished gate is square (Fig. 8).

Turn gate over again and with the rails resting on level surface, nail all boards securely onto frame (at least two galvanised bullet head nails per board at each fixing point). Pre-drill all holes to prevent splitting ends. We also recommend you use PVA wood glue for extra strength.

If you plan a curved top, now is the time to mark the boards with your template, then cut with a jigsaw.

Mark the position of the hinges on the rails and screw hinges to rails with galvanised screws. Use either Scotch 'T' strap hinges (Fig. 1) or ball bearing type (Fig. 15).

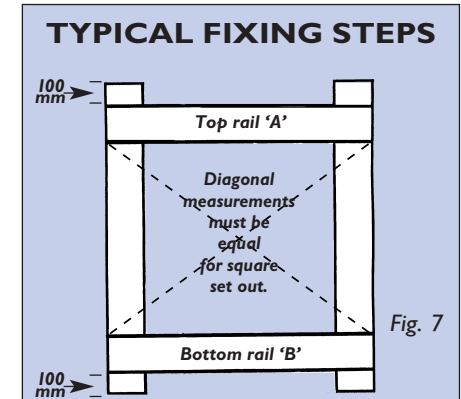


Fig. 7

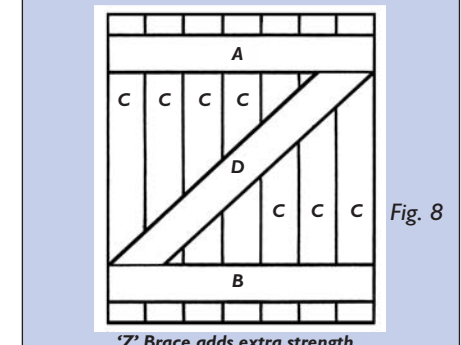


Fig. 8

'Z' Brace adds extra strength.

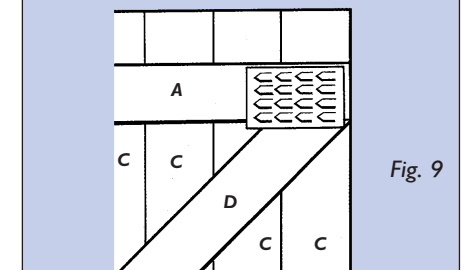


Fig. 9

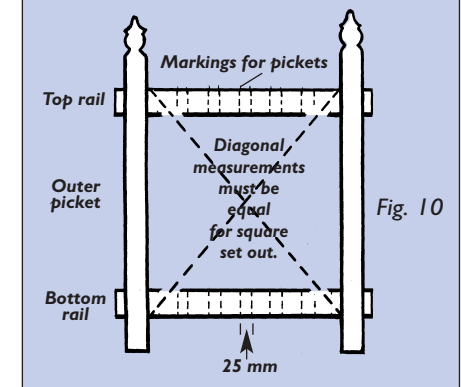


Fig. 10

Prop gate into position to post on block of wood. Mark holes for the hinges on post. Pre drill holes and screw the hinges onto the post. Finally, fix latch of your choice into place.

## 3. PICKET GATE

A charming picket gate will add character to your home and is usually part of a picket fence (see also Bowens Timber Fence brochure).

For construction follow the 'single gate' guide. If you have a picket fence, match the picket style and rail spacings of your fence, otherwise space pickets 25-30 mm apart and space rails as per single gate instructions.

Attach outer pickets 10 mm from outer edge of gate and mark position of the other pickets on rails when you lay rails down the first time (Fig. 10).

'Z' brace is optional but helps keep gate rigid. Pre-drill all nail holes to prevent splitting. Use only galvanised bullet head nails – two at each fixing point.

## 4. DOUBLE GATE

Used mainly for driveways.

A double gate may seem a formidable task but can be tackled by the average handyman.

For extra strength use double bracing and end rails (Fig. 11) all 90 x 35 mm size. First make the frame. Measure the width of the gap between the posts. Divide in half and allow 10 mm each side for swing. Butt joint all rails (see Fig. 12) and temporarily single nail them together on flat surface. Measure corners diagonally. These measurements must be equal for square set out.

Measure, mark and cut braces. Check-out where these overlap in centre (Fig. 13), fasten braces to rails using nail plates (Fig. 12) continuously checking that set out is square.

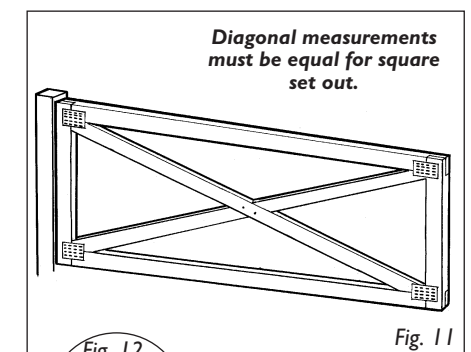


Fig. 11

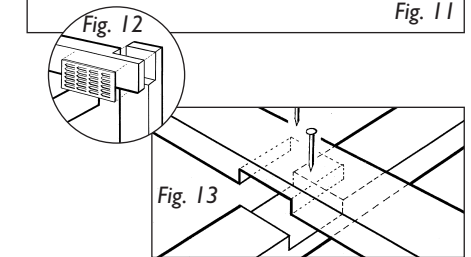


Fig. 12

Attach vertical boards or pickets using two nails at each fixing point. For alternate designs attach boards at 45° or similar. For extra strength attach boards with coach bolts to top and bottom rails. Nail securely at all other fixing points.

## HINGES

Use galvanised ball bearing hinges for these heavy gates (Fig. 14). Make sure gates are well clear of ground when swinging.

Pre drill holes in rails and fasten gate section with coach screws. Prop gates in position using block of wood or similar, mark holes in posts, drill holes and fasten pivot sections of hinges to post with coach screws, and lift gates into position on hinges. Finish with DROP BOLT and LATCH of your choice.

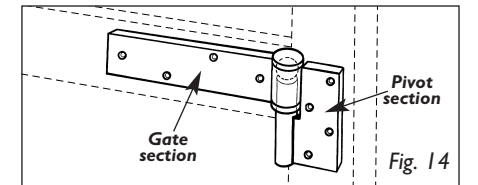


Fig. 14

## DO-IT-YOURSELF STEEL GATE FRAMES

25 x 25 mm square galvanised 'Fortress' gate frame sections are available from all Bowens stores allowing you to build your own easy-to-assemble steel frame to which you can fasten your upright pickets or boards (Fig. 15 and Fig. 16).

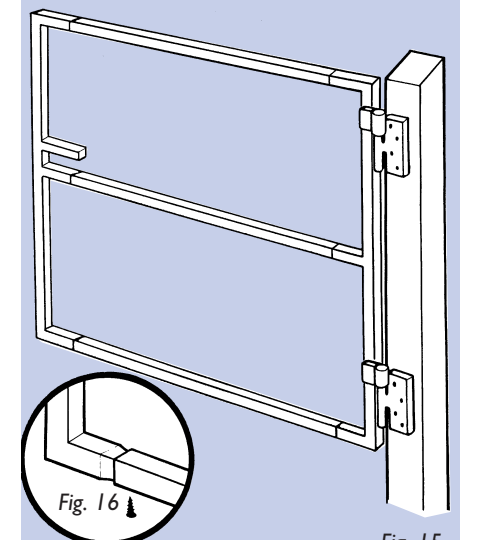


Fig. 15

Select from a range including rails, 'H' sections of various sizes, heavy duty bracing sections as well as hinges to suit. Inspect the display at your nearest Bowens store.

## CHOOSING YOUR TIMBER

Remember that gates are exposed to the elements. For best results we recommend:  
**Posts:** Timber durability Class 2 or better.  
**Gates:** Seasoned treated pine or seasoned kiln dried hardwood.  
 See the 'Materials Check List' on rear page for further details.

## FINISHING

Bowens stock a large range of paints and finishes to enhance and preserve your timber gate. It is advisable to seal all cut ends with a suitable sealer compound before you fasten the components together. This applies especially if you use treated pine.