



Fix Out Carpentry

Carpentry - Residential Construction

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Corinthian Doors

The Other Hand

Second Edition 2012

SAMPLE

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FIX OUT CARPENTRY OVERVIEW

This text addresses internal door hanging, including special types of doors, door-frames, fitting furniture.

Timber and board type linings are covered, including methods of jointing and finishing at internal and external corners.

Interior fixing out is covered to include skirtings, architraves, cornices and other common mouldings;

Non load-bearing partitions are addressed, including steel frame and demountable types.

The text also covers calculation of timber and sheet material quantities and costs.

SAMPLE

DOOR JAMBS

MATERIALS

There are a variety of timbers commonly used for internal jambs, which are suitable for a paint or stain finish. The following table provides a list of commonly used timbers:

TABLE 1 DOOR-JAMB TIMBERS

TIMBER	FINISH
<ul style="list-style-type: none"> • Western Red Cedar; • Queensland Maple; • Silky Oak; • Meranti; • Finger-jointed Radiata pine • Medium density fibreboard (MDF) • Pre-finished or vinyl veneered MDF 	Stained or clear Stained or clear Stained or clear Stained or clear Paint Paint Coloured or wood – grained

Stiles and Heads

Single and double rebated profiles are available in the following standard nominal sizes:

- 75 x 32
- 100 x 32
- 125 x 32
- 150 x 32
- 175 x 32

Mullions and transoms are also available for these jambs to suit internal sizes and profiles. Rebates may be formed by planting stops or beads to Dressed All Round (DAR) sections.

DOOR-JAMB CONSTRUCTION

Internal door-frames are fabricated in a similar way to external frames. The joints between head and stiles are also similar, as shown below:

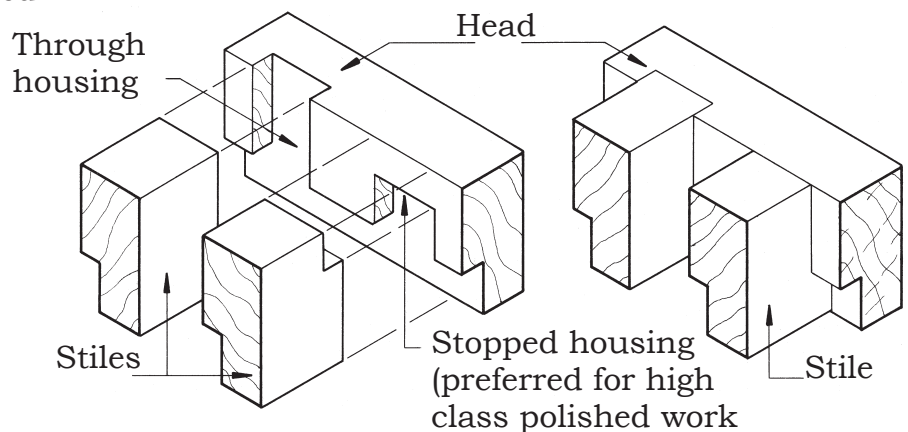


Fig. 1 Jointing jamb linings for internal door-frames

JOINTS USED FOR JAMB LINING

FINISHED JOINTS

The following steps outline the method used to set out, cut and assemble door-jamb ready to be installed into internal timber framed walls, using a stock size 2040 x 770 x 35mm door with a stained finish.

Refer to the Wall Framing Unit to determine the width and height of the wall frame opening. The width of the opening should be equal to the overall width of the door-jamb, plus 10mm either side for clearance.

STEP 1 Select a length of jamb stock material, square one end and mark the length, which should be equal to the width of the wall frame opening.

Note: Allow 2mm clearance either side for stain and 3mm either side for a paint finish.

Formula:

Length = door width + jambs + clearances

$$= 770 + (20 + 20) + (2 + 2) + (10 + 10)$$

$$\therefore \text{Minimum opening width} = 834\text{mm}$$

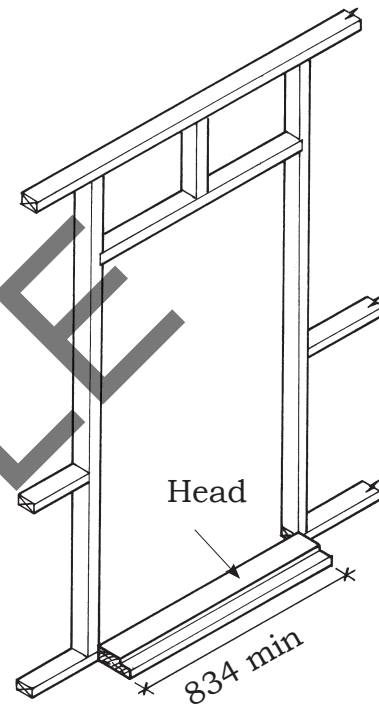


Fig. 2 Mark and cut head to length

STEP 2 Measure in 10mm from one end and square a line across the face of the head. Use an off-cut length of jamb stock material, on its end, to set out the width for the through housing, then square a parallel line across the face of the head.

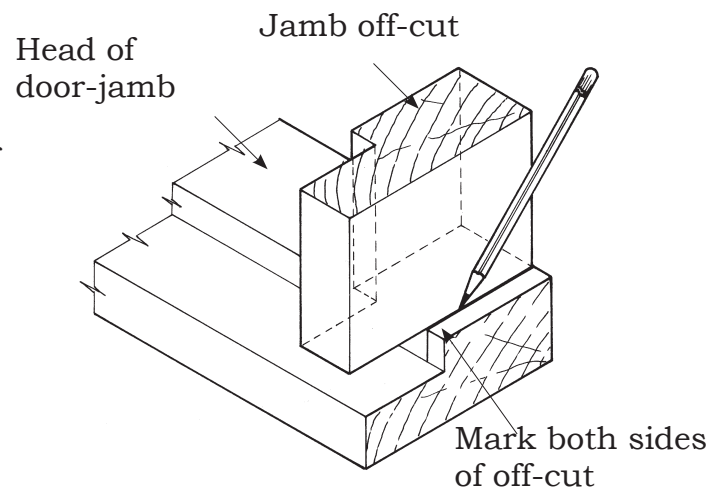


Fig. 3 Mark the thickness of the stile

STEP 3 Lay the rebated section of the off-cut over the outside edge of the head and mark the depth of the head and mark the depth of the rebate, which will also be the depth of the housing.

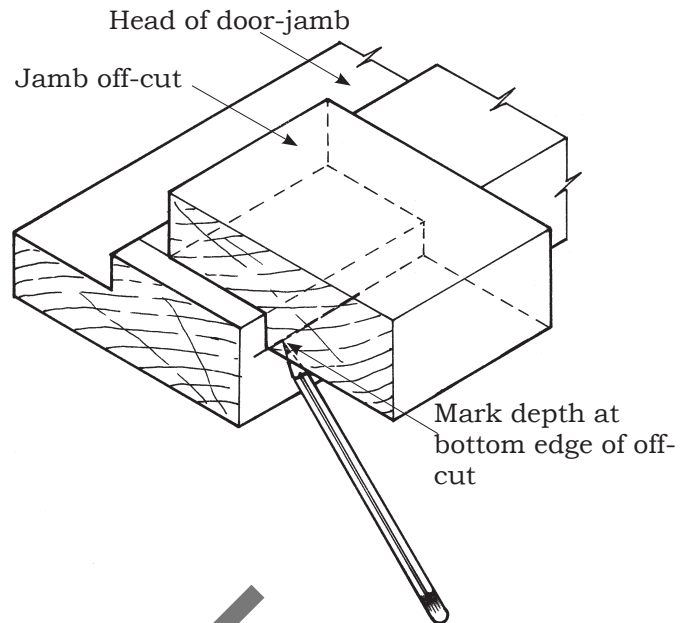


Fig. 4 Mark the depth of rebate

STEP 4 Cut out the housing, using the same method of jointing described in Step 2.

STEP 5 Stand the off-cut in the prepared housing and mark out the finished width of the door (770mm) plus two lots of 2mm clearance to allow for a stained finish (4mm).

Therefore, measure 774mm from the inside of the jamb rebate to the inside of the jamb rebate at the other end.

Square this mark across the rebate section and transfer it to the top edge. Place the inside face of the jamb off-cut rebate on this mark, then mark the inside and outside faces onto the head. Prepare the second housing as for the first and then cut out the waste.

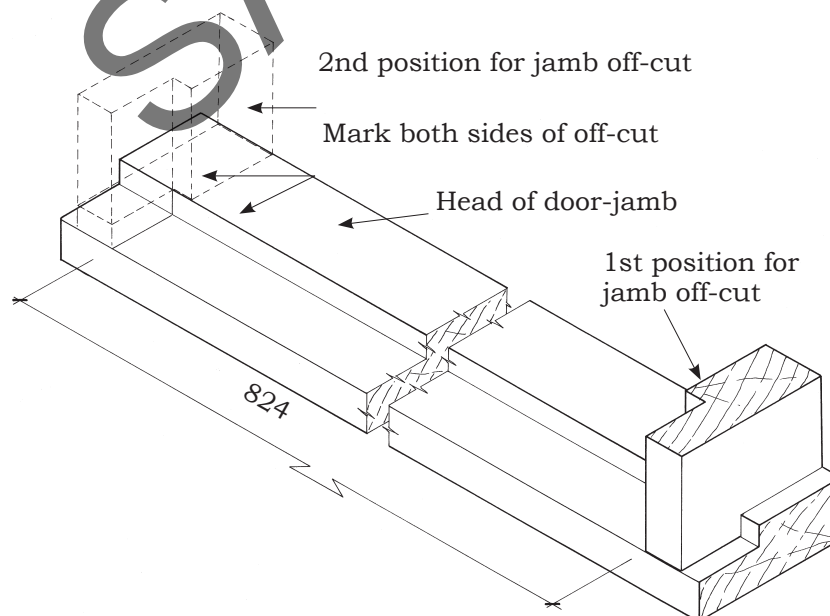


Fig. 5 Mark out and cut the second housing

STEP 6 Select two straight lengths of jamb stock material, square one end and mark the length, which should be equal to the height of the wall frame opening, less head clearance.

Note: There should be an allowance of approximately 22mm under the door to allow for floor finishes and clearance.

Formula:

$$\begin{aligned} \text{Height} &= \text{door height} + \text{jamb} + \text{clearances} \\ &= 2040 + 20 + 22 + 2 = 2084\text{mm} \end{aligned}$$

$$\therefore \text{Minimum opening height} = 2095\text{mm}$$

The cutting length of the stiles however, will be:

$$= 2040 + 22 + 2 = \underline{2064\text{mm}}$$

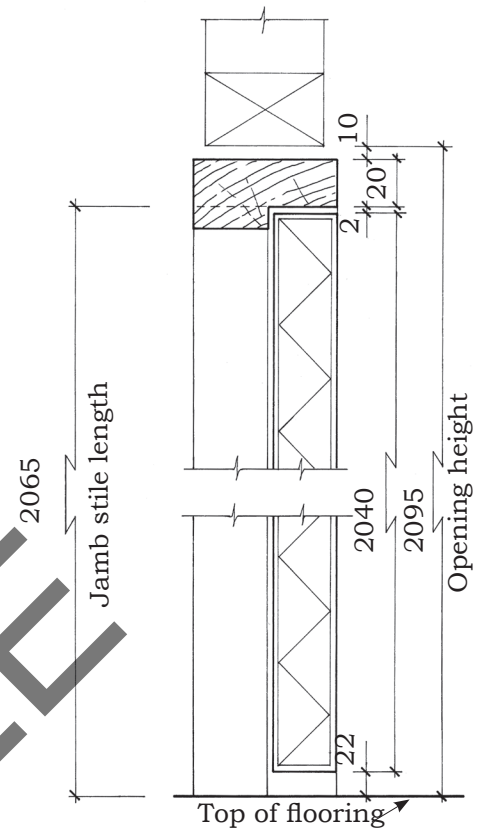


Fig 6 Mark and cut stiles to length

STEP 7 Assemble the door-jamb. Lay the two jamb stiles on a flat surface with the rebates on the top side, spaced parallel to suit the head.

Push the ends of the stiles against a solid vertical surface, apply glue to the housings on the head, fit head against ends of stiles and nail through with three flat head or bullet head nails of a suitable length. Ensure the inside edges of the rebates are aligned.

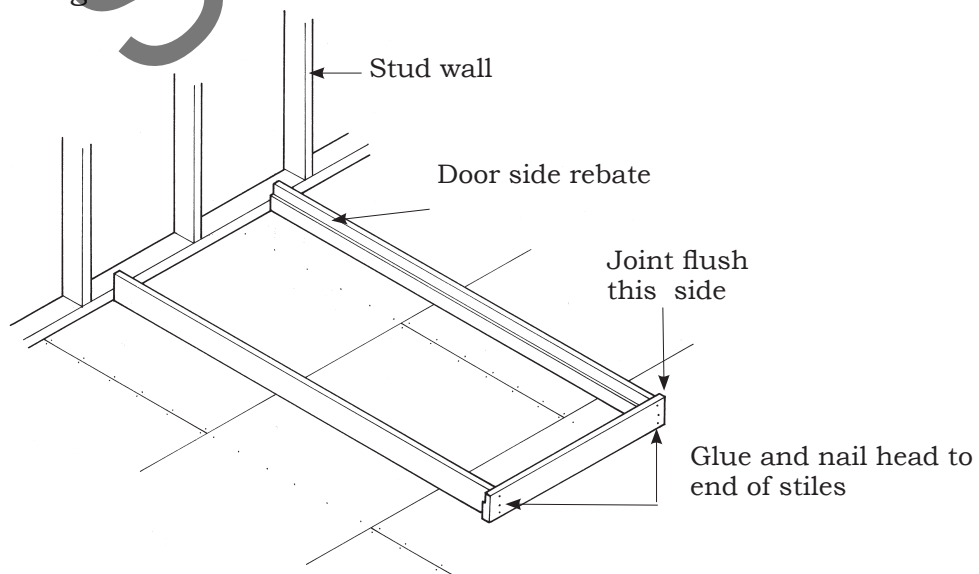


Fig. 7 Assemble stiles and head

STEP 8 Cut and fit a spreader between the rebates and tack it into place approximately 75mm up from the ends of stiles.

Square up the frame and fit temporary diagonal braces to make the frame rigid and ready for installation.

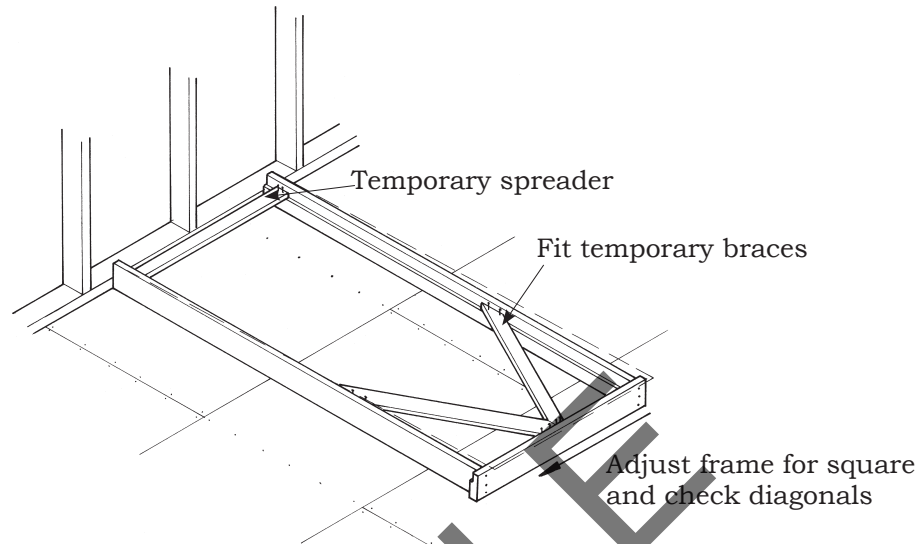


Fig. 8 Temporarily brace the door-frame ready for installation

Steel Door-jambs

These steel door-jambs are prefabricated, primed, fitted with or riveted hinges and have a strike assembly fitted to the lock stile.

Although these frames are mainly designed for external use in brick veneer masonry construction, they may also be used internally where fire or security doors are fitted.

The frames come complete with special stud fixing clips to allow for concealed fixing.

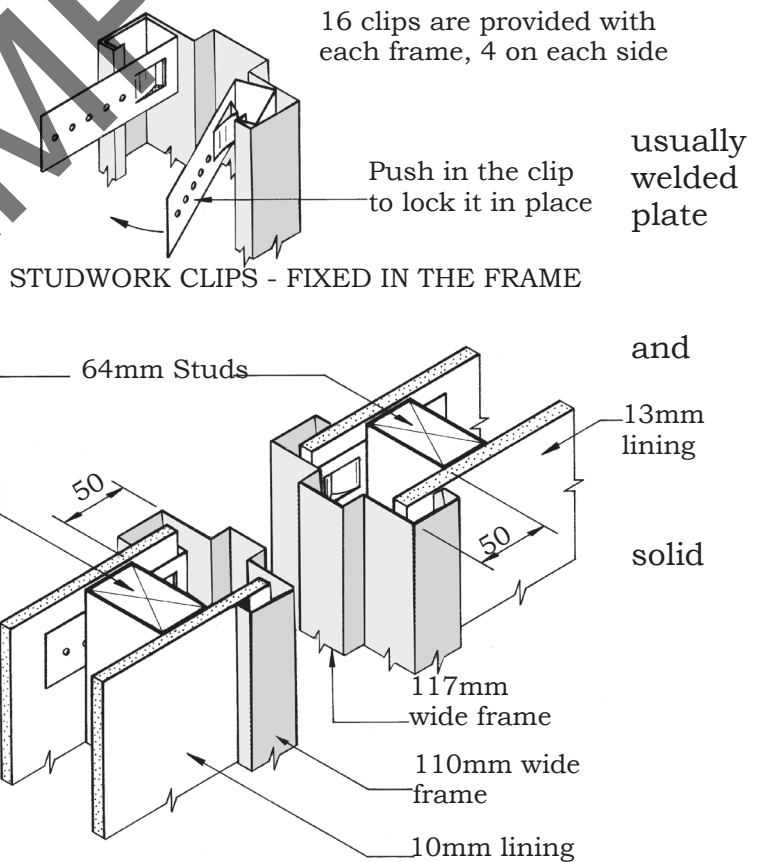


Fig. 9 Application of steel door jambs in studwork

Installation of Internal Steel Door-jambs

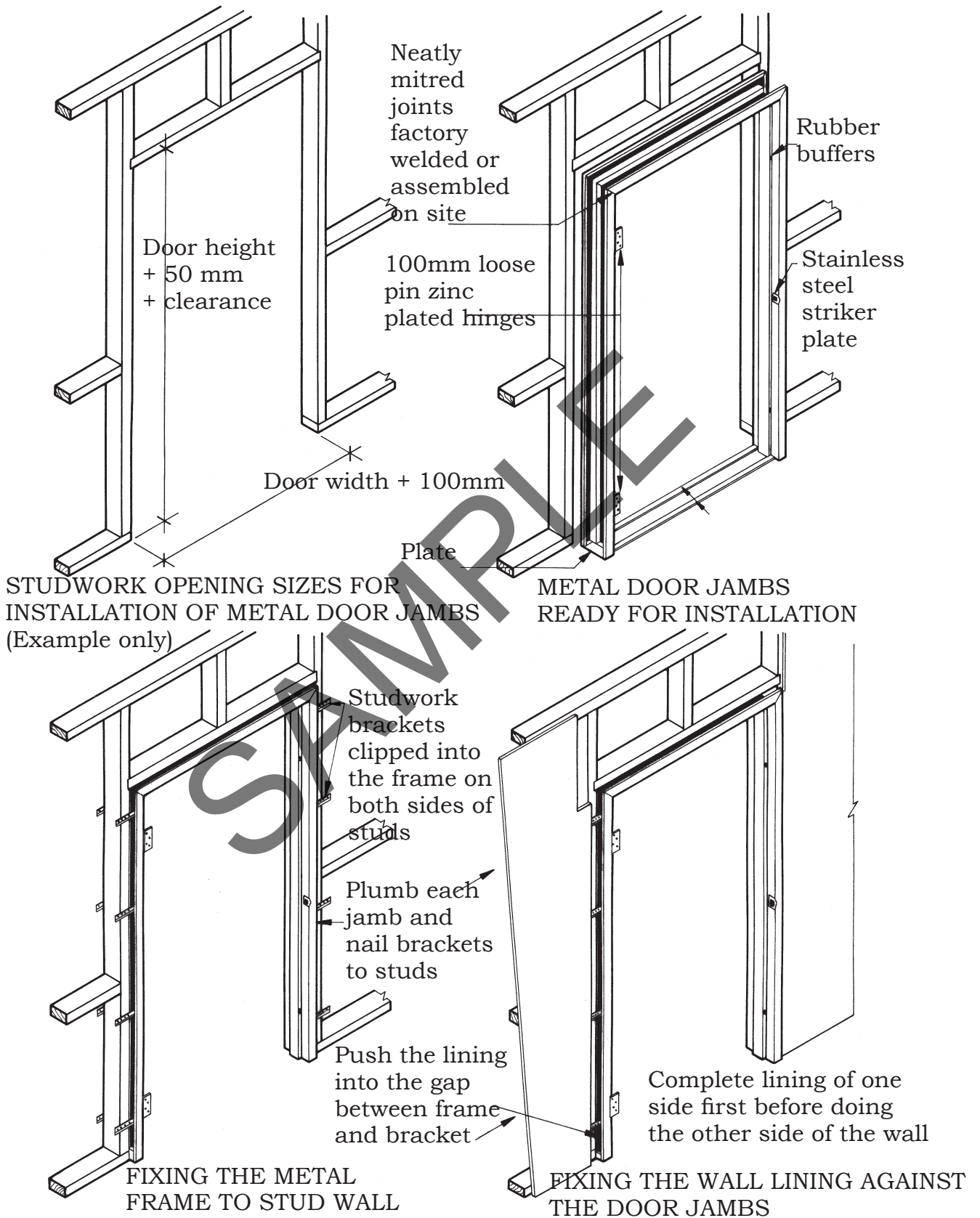


Fig. 10 Steel door-jamb installation method