

Professional Joinery Tutorials

TIMBER STUD PARTITIONS

These are constructed entirely of timber and either 9.5 or 12.5mm plasterboard. All timber (generally 44 x 69mm finished size PSE, 47 x 75mm finished size sawn timber or 36 x 63mm stud-work timber is specified) is simply nailed together, with only the head and sole plate being screwed or nailed to the ceiling and floor. The studs (verticals) need to be accurately cut to length, and horizontal noggins need to be fitted



between studs for rigidity and for the fixing of heavy wall mounted items such as

basins or cupboards. Where services like water pipes or electric cables need to be run

inside the framework, the studs must be drilled out to accommodate them.

Nevertheless a timber frame is easy to assemble.

Note: 12.5mm Plasterboard will reduce the transmission of sound

CONSTRUCTING A TIMBER STUD PARTITION WALL

You will require sufficient 44 x 69mm finished size PSE (Planed, Square Edge), 47 x

75mm finished size sawn timber or 36 x 63mm stud work timber, for the head and

sole plates, and for the studs and noggins.

When using 12.5mm plasterboard the studs must be at maximum 600mm centres.

If using 9.5mm plasterboard the studs must be spaced at maximum 400mm centres.

Plasterboard standard sheet size is 1200 x 2400mm.

The list overleaf gives the products required for a 3.6m long wall.

Use the 'I NEED' column to make up your own list for a wall of a different length.

A plumb bob and line, plus a caulking tool (600-546) are the only special tools required.

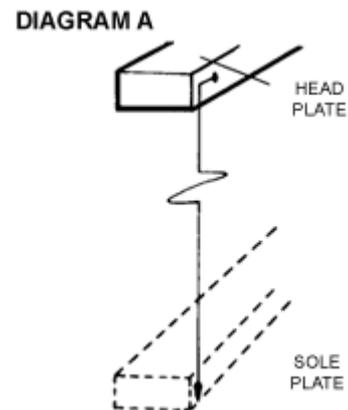
1. Secure head and sole plates.
2. Secure studs and noggins.
3. Secure plaster boarding.
4. Make good.

1. SECURE HEAD AND SOLE PLATES

Start work by locating the position of joists in the ceiling roughly where you want the partition to be. If the joists run in the opposite direction to the intended new wall you will be able to fix a head plate to each joist at approximately 405mm centres using 100mm oval nails, or screws if the ceiling is in poor condition and likely to be damaged by hammering. If the joists run in the same direction you should slightly alter the new wall position so that it is directly under a joist and the head plate can be fixed directly to it. If this is not possible, noggins will have to be fitted between the ceiling joists to enable fixings to be made.

When the head plate is fixed, drop a plumb bob and line down to floor level from one side of the head plate at each end and mark the position of the sole plate on the floor. Diagram A.

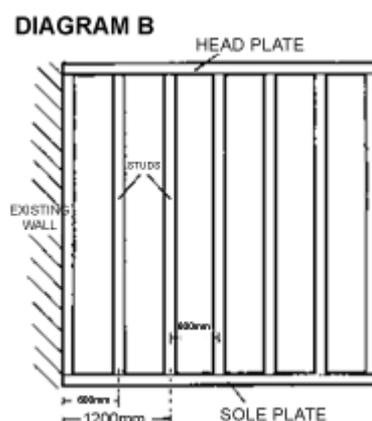
Nail the sole plate directly to a timber floor or drill, plug and screw into a concrete floor.



2. SECURE STUDS AND NOGGINS

Mark the positions of the vertical studs on the sole plate. The first will be against the end wall and screwed to the wall. It may be necessary to shape this length to fit around a skirting board. The second stud must be positioned so that its centre is 600mm from the wall, and the third stud centre is at 1200mm from the wall with 600mm centres thereafter. Diagram B. If using 9.5mm plasterboard an extra stud is required and the stud centres must be 400mm.

Measure and cut each stud individually

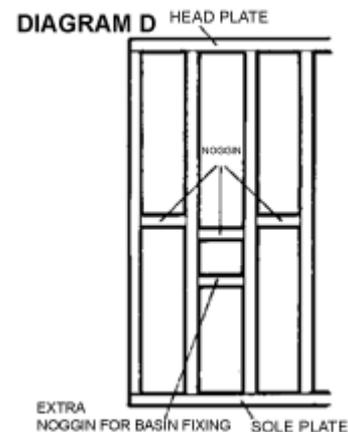


since the distance between the head and sole plates may vary across the room. The studs should be a tight fit. Secure the studs using 100mm oval nails driven in at an angle. Diagram C.

Make small pencil marks on the wall and floor at the centre of each stud on each side of the frame so that locating them when fitting the plasterboard will be easier.

NOTE: Studs must be positioned wherever sheets of plasterboard are to join and must be in the centre of the join including above a door frame.

Cut noggins to fit between the studs and nail in place roughly halfway up the frame, and where heavy items are later to be hung on the wall. Diagram D.



3. SECURE PLASTERBOARDING

Fit the plasterboard, ivory face out, ensuring that each sheet is perfectly vertical and that adjacent sheets meet at the centre of a stud. Using wedges, lift the sheets so that they touch the ceiling rather than the floor. Skirting board will be used to conceal any gap at the bottom. Secure the boards with Drywall screws at 300mm centres all round the perimeter and to intermediate studs. Reduce the centres to 200mm in the corners of the plasterboard. The screws should be driven in just below the surface.

4. MAKE GOOD

Once all boards are secured it is necessary to make good all joins and infill screw heads.

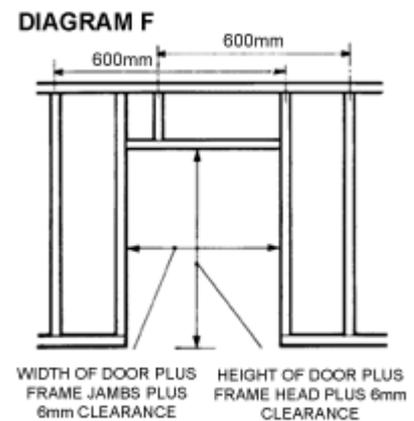
Apply a thin coat of jointing compound to the joins and bed paper jointing tape into this. Apply more compound over the surface and finish flush with the board surface using a wide bladed caulking tool. Diagram E.

This is simply a form of smoothing trowel

which spans the tapered edges of the board and gives a smooth flat finish to the filler. To avoid unnecessary rubbing down when the filler has dried do not overfill. A little rubbing down will be necessary to create a perfect flat finish. Cover nail heads also, flush with the surface of the board. Fill in joints between the new wall and the old. At ceiling level, bond coving in place and at floor level fit skirting boards. The plasterboard needs no further preparation before normal decorating takes place.

FITTING DOORS

Doors can easily be built into a partition wall. Construct the wall leaving an opening with studs on each side and a noggin across the top. The opening dimensions should be as indicated in Diagram F. Fit one of our interior door casings into the opening securing the casing directly to the studs.



For more tutorials and information