

Most floor coverings, if laid over uneven wooden floors, will wear unevenly and look unsightly. The answer is to cover the old boards with hardboard or plywood before laying expensive coverings.

MATERIALS

- Hardboard or plywood, see 'Before You Start'
- Ring nails, 20mm for 3.5mm hardboard, 3.5mm and 6mm for plywood
- Flooring staples, 15mm for 3.5mm board and 21mm for 6mm board
- No. 6 screws, 25mm x 3.5mm countersunk zinc-plated for 12mm plywood
- No. 8 screws, 38mm x 4.0mm for fixing floorboards
- Solvent-based panel adhesive
- Wood filler, 2 parts polyester
- Red insulating tape
- Aluminium oxide abrasive discs for random orbit sander, 40-80 grit
- Abrasive paper, coarse
- Brown wrapping paper

TOOLS

- Electric drill plus HSS bits, countersink bit and flat bits OR Drillmate and flat bits
- Electric jigsaw or coping saw
- Electric planer
- Random orbit sander
- Frame gun for adhesive
- Flooring staple gun (spot nailer), which can be hired
- Nail punch
- Electric screwdriver
- Handsaw, fine tooth, hard point
- Claw hammer, 16 or 20oz
- Pincers
- Chisels, 3.5mm and 6mm
- Craft knife
- Filling knives, 25mm and 100mm
- Steel tape measure, 4m
- Steel rule, 300mm
- Combination try square
- Chalk line
- Cork sanding block
- Block surform
- Work trestles

BEFORE YOU START

HARDBOARD OR PLYWOOD?

Use hardboard in living rooms and bedrooms under carpet, carpet tiles and sheet vinyls. Lay the hardboard smooth side up for self-adhesive tiles and rough side up if using adhesive. Follow the finished floor covering manufacturer's instructions.

Use plywood under cork and vinyl tiles and always in kitchens, bathrooms and utility rooms. If the floor is reasonably flat, use 3.5mm. Use 6mm if the floor is very uneven. For ceramic tiles use 12mm plywood. Always use exterior-grade plywood.

MATERIAL SIZES FOR FLOORING

When laying floor in a confined space, smaller sizes are easier to handle. Do not mix sizes as the thicknesses may vary.

Hardboard

1220 x 610 x 3.2mm

2440 x 610 x 3.2mm

2440 x 1220 x 3.2mm

Plywood

2440 x 1220 x 3.5/4mm or 6mm or 12mm

1220 x 610 x 3.5/4mm or 6mm

1830 x 610 x 3.5/4mm or 6mm

PREPARING HARDBOARD

Hardboard must be 'conditioned' before use.

- 1 For sheets measuring 1220mm x 610mm, approximately 0.25 litres of water should be scrubbed into the rough side of each sheet.
- 2 Lay the sheets flat, rough side to rough side, in the room in which they will be used.
- 3 Leave for 24 hours before using. This will allow the boards to expand. Once nailed or stapled into position, they will contract as they dry out. This will give a rigid, flat floor without bubbles forming.

CHECK LIST

VENTILATION

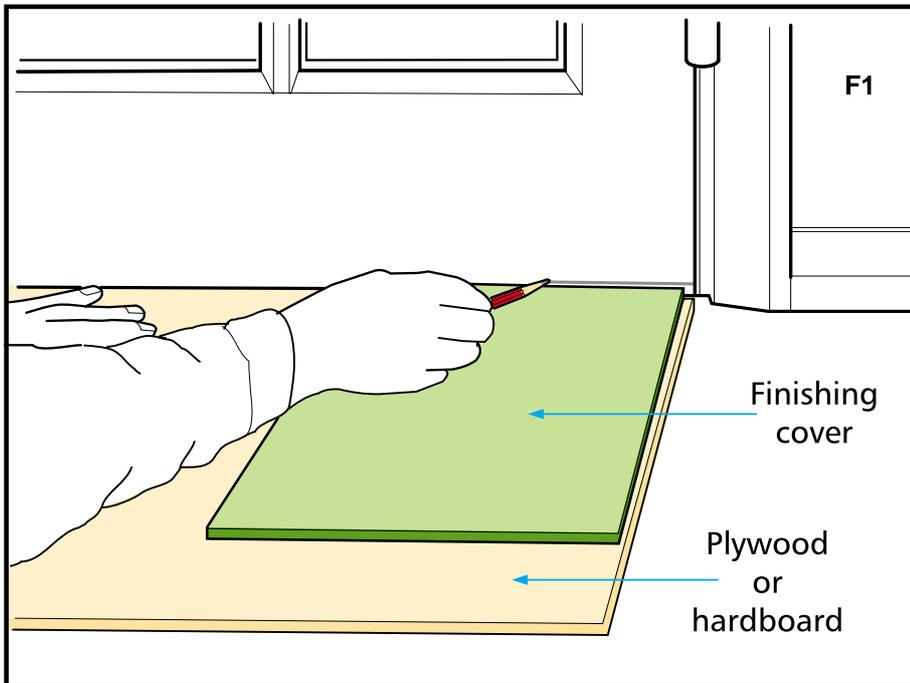
Ground level suspended floors must be well ventilated to prevent rot. Ensure airbricks are not blocked up or covered over. This must be done before the covering is laid.

IMPORTANT

If you are planning future improvements or alterations to plumbing or electrical services, this work must be done **BEFORE** laying the floor coverings.

APPLIANCES

Check the distance between the floor overlay plus covering and the underside of any worktops, to ensure there is space for appliances. If a new kitchen or bath is being fitted, lay the floor overlay first.

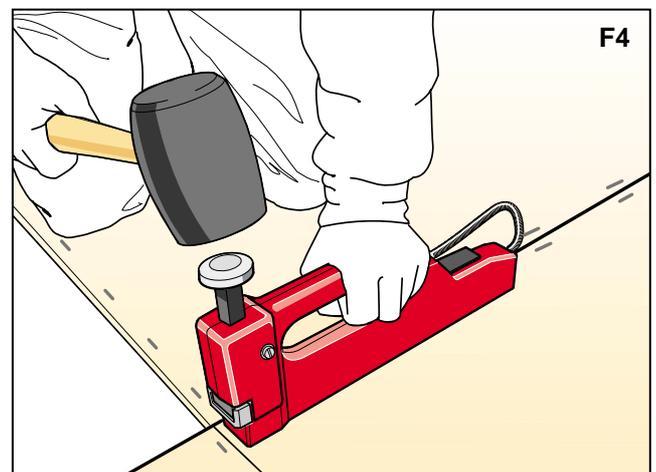
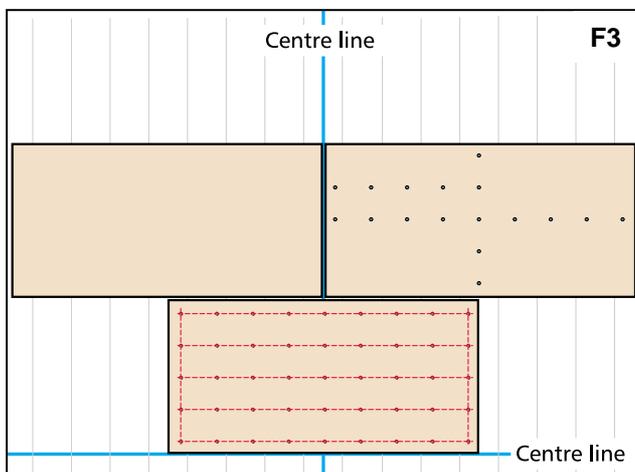
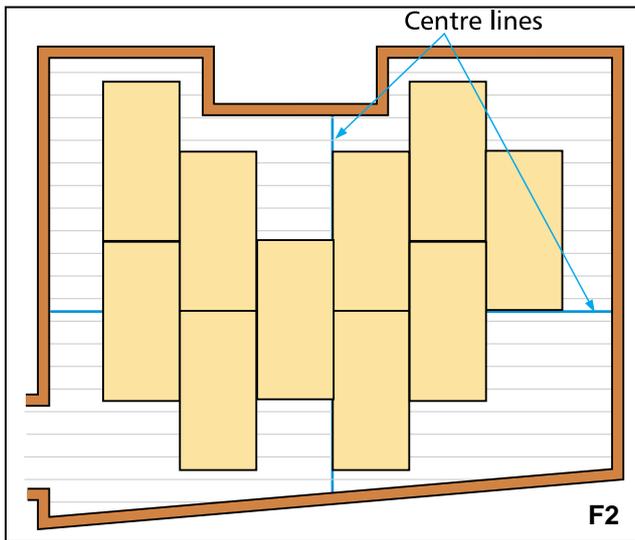


DOORS

With the door closed, place a piece of the plywood or hardboard and its planned covering against the door. If the door won't open, mark it with a pencil for a 3mm clearance (**F1**). Remove the door and take off the waste with a saw or plane. Finish off with coarse and then medium abrasive paper, wrapped round a cork block.

PREPARING THE WOODEN FLOOR

- 1 Lift and pack out any boards lower than the surrounding ones with hardboard or plywood of suitable thickness.
- 2 Replace any badly damaged boards.
- 3 Wood floors and joists should be treated for rot and woodworm before laying any sort of covering. This is best done professionally.
- 4 Screw down any loose boards. Avoid pipes and cables underneath.
- 5 Punch nail-heads below the surface.
- 6 Badly dished (concave) boards should have the edges planed or sanded. Use an electric planer or a random orbit sander fitted with 40 grit discs. Clearly mark any plumbing and electrical access traps. Use red insulating tape for this.
- 7 Any patches of concrete, such as in front of a chimney breast, should be scraped and scrubbed clean.



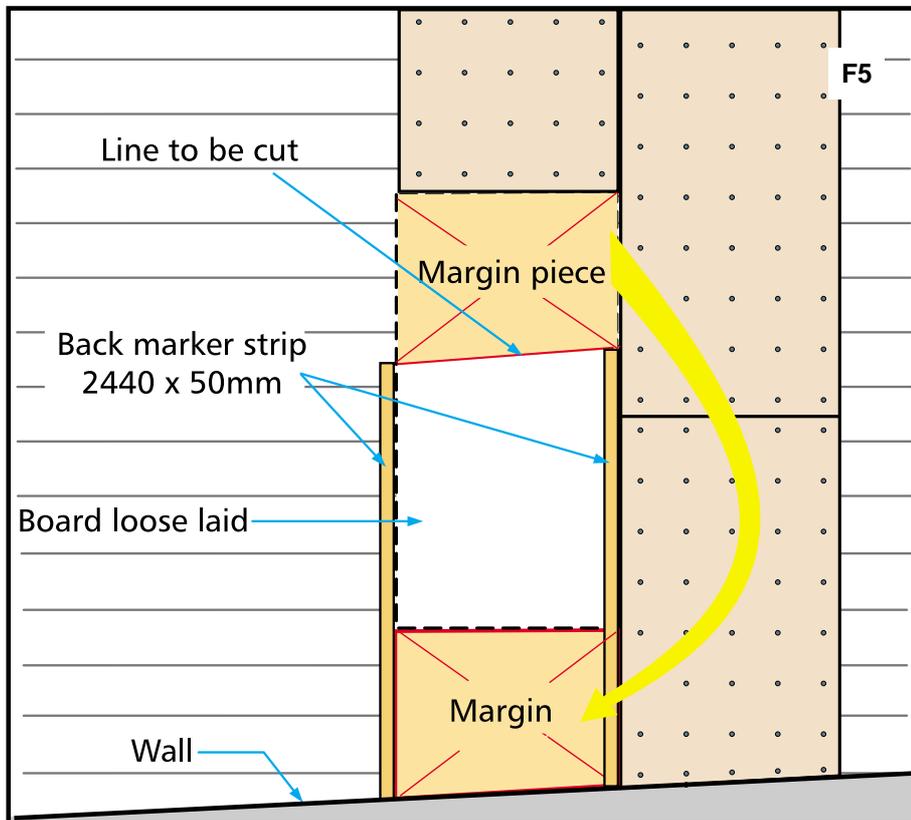
LAYING HARDBOARD AND PLYWOOD

- 1 Use a chalk line to mark two lines at 90-degree angles to each other across the centre of the room (**F2**).
- 2 Loose lay the first board over the centre with its long edges at 90 degrees to the floorboards.
- 3 Adjust it so that the edges do not correspond with the gaps between the floorboards.
- 4 Loose lay more boards up, down and across the room. If you finish with narrow margins (less than 370mm), readjust the boards.
- 5 Nail the first board. Start at the middle of the board and work out. Fix at 150mm centres (intervals) all over the board. Avoid the gaps between the floorboards. Fix at 100mm centres all round the board, 15mm from the edge (**F3**). The nail heads must be flush with the board's surface or slightly indented.

HINT

Hiring a flooring stapler (**F4**) will make fixing much easier and quicker. The staples should be just below the surface. Any protruding staples should be knocked down with a hammer. Important - never hit the stapler twice on one staple – you will jam it.

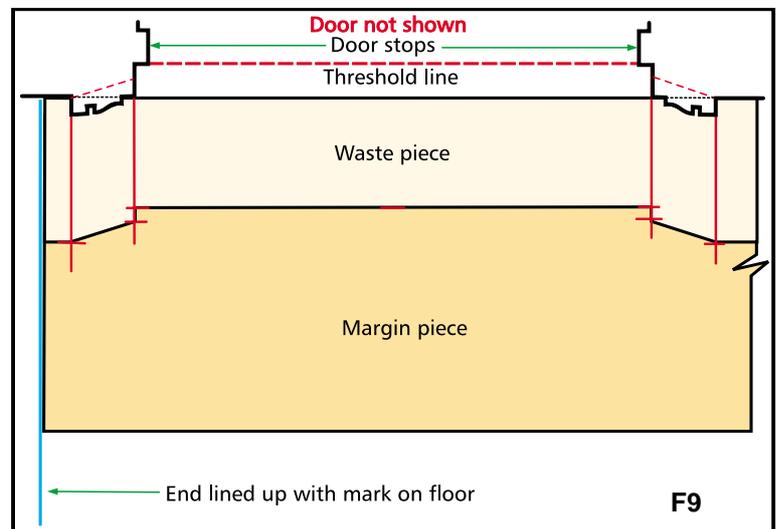
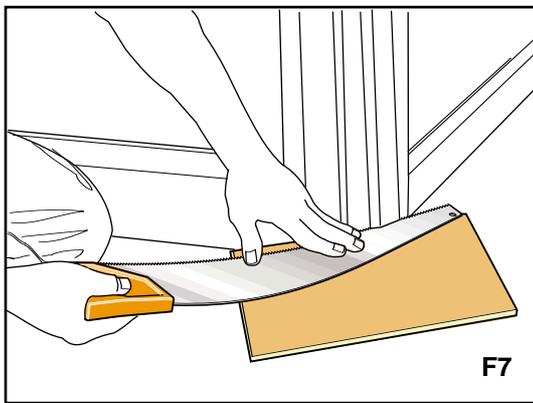
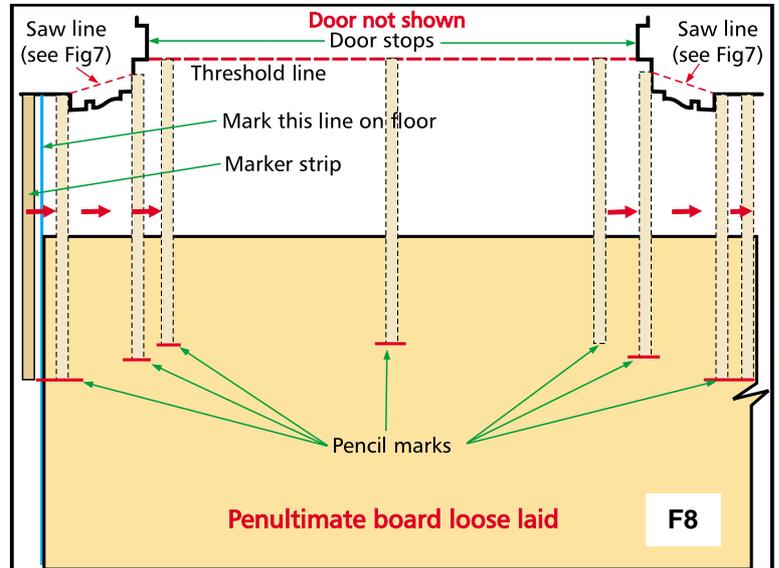
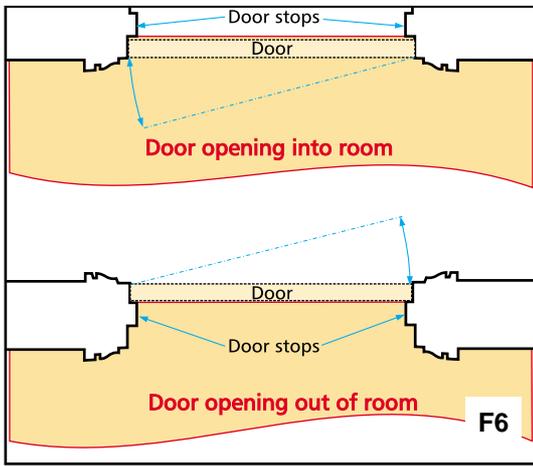
- 6 Butt the second board tightly to the first and nail as before.
- 7 Carry on laying boards across the room, making sure the boards are staggered (**F2** and **F3**). Make sure access traps are not covered over. See 'Dealing With Traps' on page 8.



MARKING THE MARGIN BOARDS

Before fixing the penultimate board in each row:

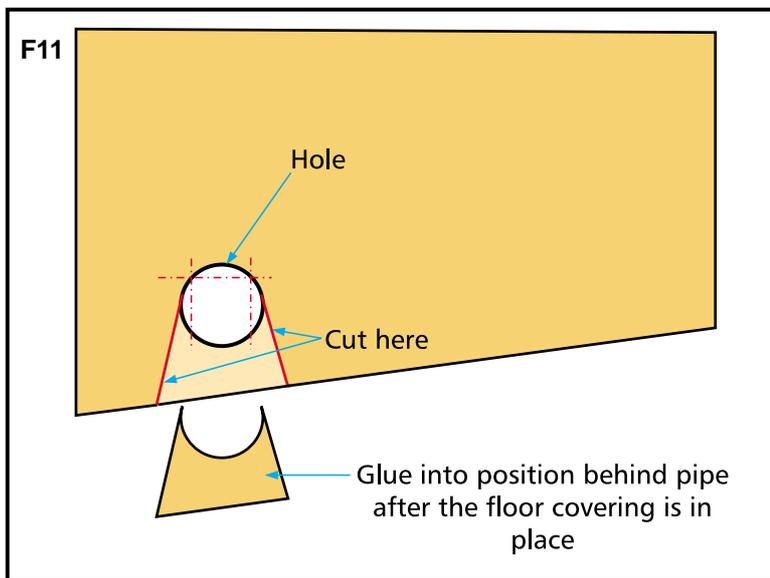
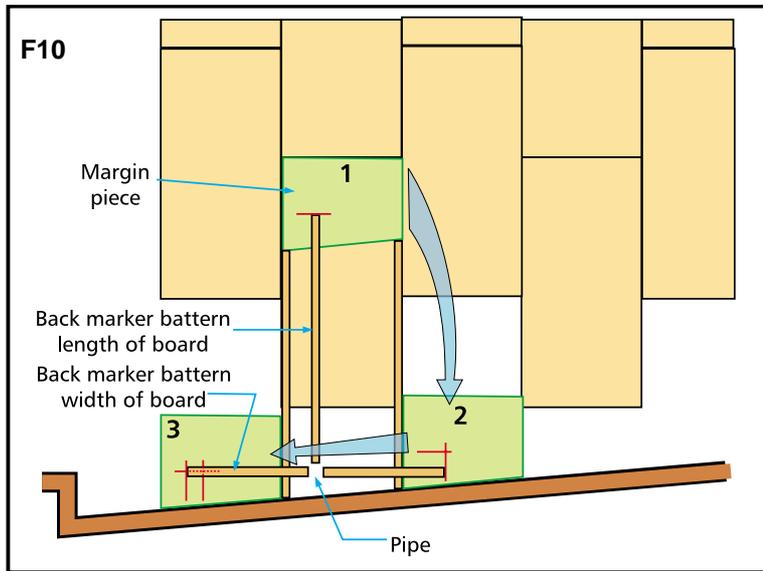
- 1 From off-cuts, cut a 50mm wide strip the length of a board (2440mm). This will be used for backmarking the length, so the boards can be cut to fit.
- 2 Cut a second 50mm strip off the end of a board (either 610mm or 1220mm long). This will be for backmarking across the width of a board.
- 3 Loose lay a board in the penultimate position.
- 4 Lay the strip along the edge, with one end touching the wall or skirting. If it will fit under the skirting, so much the better (**F5**).
- 5 Mark the board.
- 6 Move the strip to the opposite edge and mark that.
- 7 Mark a line between the two points and cut it. Smooth the edge with abrasive paper.
- 8 Nail down the penultimate board and the margin board.



MARKING AND CUTTING AROUND DOORWAYS

Where you finish the floor in a doorway depends on whether the door opens inwards or outwards (**F6**).

- 1 Lay a piece of scrap covering against the architrave (decorative moulding around the door frame). Use a handsaw to cut through the bottom of the architrave (**F7**). Remove the waste with a chisel.
- 2 Loose lay the penultimate boards. Use the marking strip to backmark from the door line, under the architrave and against skirting (**F8**).
- 3 Slide the board up to the wall and mark the opening and position of the architrave (**F9**).
- 4 Transfer these measurements along the board. Join up the marks and cut the board (**F9**).



CUTTING ROUND PIPES

- 1 Loose lay the penultimate board.
- 2 Backmark from the skirting or wall and pipe **(F10 Step 1)**.
- 3 Cut the board to fit the margin width.
- 4 Place the margin piece over the adjacent margin piece and backmark from the pipe **(F10 Step 2)**.
- 5 Repeat on the other side of the pipe **(F10 Step 3)**.
- 6 Draw diagonals marking the centre of the pipe.
- 7 Use a flat bit to drill a hole 9mm larger than the diameter of the pipe. This is to allow for the expansion and movement of the pipe.
- 8 Use a fine saw to cut the board **(F11)**.
- 9 Fix the margin piece, then fix the cut-out in place using panel adhesive.

DEALING WITH TRAPS

- 1 Backmark these onto the overlay sheets.
- 2 Use an electric jigsaw with a fine blade to cut out the trap
- 3 Fix down the surrounding board.
- 4 Fix the overlay onto the trap or hatch.
- 5 Mark the edges with red insulating tape.

FIXING OVER A CONCRETE HEARTH

- 1 Ensure the hearth is clean.
- 2 Mark and cut the board and draw on the outline of the hearth.
- 3 Apply ribbons of panel adhesive to the hearth. Lay the board and tread it down. Follow the adhesive manufacturer's instructions.
- 4 Nail or staple the rest of the board.

FINISHING OFF

- 1 Double check all over the floor for raised nails or staples.
- 2 Sand off any high spots at the meeting edges of boards.
- 3 Fill any gaps with two-part polyester wood filler. When it is hard, use a random orbit sanding machine to bring the filler flush with the board's surface.
- 4 Sweep and vacuum the surface before laying floor coverings.