INSTALL GUTTERING

**SKILL LEVEL**

Care is needed in setting out the guttering accurately, but actually fitting it is relatively easy.

**SAFETY FIRST**

Before you climb a ladder, make sure it is stable and fixed securely to the structure of the house. Don’t allow children to play under ladders or scaffold towers.

**INTRODUCTION**

Changing your own guttering can be a simple and straightforward exercise when you have the right products and you know how to select the few simple tools required.

Two sizes of guttering cover most domestic situations:

- 75mm half-round gutters and 50mm circular downpipes for sheds, greenhouses and small detached garages.
- 112mm half-round gutters and 68mm circular downpipe for houses and large detached garages.

If you live in a large house or in an area of high rainfall, you may need a gutter which has a greater capacity - either 116 x 60mm 'square' guttering (used with 65mm square downpipe) or 120 x 75mm 'ogee' guttering (used with square or round downpipe).

2 - Planning the work

Whether you are planning to replace the entire guttering on a house, or just one side of a garden shed, following these few simple tips will make the job much easier.

Make a sketch plan of the house or outbuilding, and write down all the relevant dimensions. Work in metric units as this is how guttering is sold.

If you have difficulty measuring the height of a house, simply count the number of brick courses from the ground to the eaves and divide the answer by 13 to get the length of downpipe you need in metres.

Work out the lengths of guttering and downpipe you need (different standard lengths of both are available), and fill in a checklist for the necessary components (1).
Some gutter fittings (for example, union clips) need to be fitted with a separate strap to make the joint between the fitting and the gutter (these should be fitted before you start); other types have integral straps.

Fascia brackets should be placed no more than 1m apart; stopend outlets, running outlets, union clips, angles and stopends need a supporting fascia bracket within 150mm of the fitting. Some running outlets, union clips and stopend outlets are designed to be screwed directly to the fascia, but also require support brackets within 150mm.

Some 'ogee' guttering fittings are 'handed' - for internal or external corners or to fit on to the left- or right-hand end of the gutter.

Always over-estimate when ordering. It is better to have too
much rather than too little.

3 - Remove the old guttering

Unless you are fitting guttering to a new building, you will need to remove the old guttering. Old plastic guttering is simple to remove, but you should take great care with cast-iron guttering as it is extremely heavy, and can have sharp edges. Wear stout gloves to handle it and lower it to the ground with a rope.

If the screws holding the old gutter or gutter brackets to the fascia have rusted in place, saw through them with a padsaw fitted with a thin metal-cutting blade. To remove brackets secured to the rafters, you may need to lift the edge of the roof covering.

If the bolts holding cast iron guttering together are rusted in place, saw them off with a hacksaw (2).

Take the opportunity to refurbish the existing fascia board, filling all screw holes, stripping off flaking paint and re-painting or re-staining as required.

4 - Fitting the outlet and brackets

Start by fitting the outlet (running outlet in the middle of a gutter run, stopend outlet at the end of a run) directly over the drain position - use a plumbline to check this (3).

Using 25mm x 5mm (1in x No. 10) screws, fix the outlet to the fascia, allowing for the fact that the far end of the gutter must be higher than the outlet by 10mm for every 5m of gutter (a fall of 1:600).

Now fit the end fascia bracket furthest away from the outlet, allowing for the required 1:600 fall. Check that the fascia board itself is level (it should be) and then use this as a reference line to position the bracket. Repeat with the other end fascia bracket if the outlet is in the middle of the gutter.
Tie a string line tightly from the end fascia bracket(s) to the outlet and use this as a guide for installing the remaining fascia brackets, which should be placed no more than 1m apart, working outwards from the outlet. Screw each bracket to the fascia with two or three screws (4).

5 - Installing the gutter

Once all the brackets are in place, you can install the main guttering.

Push the first gutter length into the outlet and then clip it into its fascia brackets. This is done most easily by tilting the gutter to fit under the back clip and then straightening it under the front clip. To allow for expansion in hot weather, care should be taken to ensure the gutter end is in line with the insertion depth mark (5).

All fittings provide for expansion and contraction of the gutter. When installing the gutter, make sure it does not go past the insertion depth mark in the fitting.

Use a union clip to join the first and second lengths. The joint is made by clipping the two ends into the union clip, which is also secured to the fascia with a single screw (5).

At a corner, hold a 90° angle (or 45° angle for a bay) in place to mark where the gutter is to be cut before you fit the angle (6).

Cut the last length of gutter to the correct size. At the end of the gutter run, fit an external stopend, clipped in place in the same way as outlets, angles and unions. If the new guttering has to join up with an existing gutter, fit the appropriate ogee or half-round adaptor.
6 - Fitting the downpipe

The distance between the gutter and the wall is bridged by an offset. This consists of two 67.5° offset bends and an appropriate offcut of downpipe cut to size (7), (with 65mm square downpipe, a ready-made 50mm offset is available). The offset bends can be push-fit or solvent-weld; if push-fit, ensure a pipe clip is fitted under the socket on the pipe immediately below the offset. When using solvent cement, follow the safety instructions on the tube.

To keep the cut square, wrap a piece of plain paper round the downpipe at the place to be cut, and use this as a guide for a hacksaw. Clean up the cut edges with a file.

Fit the first length of downpipe with its socket uppermost, securing it to the wall with a socket pipe clip at the top (8) and one-piece barrel clips (where available) for holding the pipe to the wall. For masonry walls, use an electric drill fitted with an appropriate bit to make holes to take wallplugs for the securing screws. The maximum spacing of pipe clips is 1.8m (6ft).

Continue to fit the remainder of the pipe in the same way, fitting the open end of one pipe into the socket of the pipe below, allowing a 10mm gap between the end of the pipe and the bottom of the socket for expansion in warm weather.

Some downpipes are fitted with a hopper head to receive waste from another pipe. Secure the hopper head to the wall. Adaptors are available for square downpipes.

If necessary, the downpipe can be run at an angle across the wall, using pairs of 45°, 67.5° or 87.5° bends. On angled or near-horizontal runs, fit pipe clips every 1m (3ft).

Where the downpipe from a second gutter (around a bay, for example) joins the main downpipe, use a 67.5° branch pipe. If you need to cut both ends of a pipe, fit a loose pipe socket
(available with wall-fixing lugs for 65mm square pipe) to the end of the pipe.

With 65mm square and 68mm circular downpipe, you can fit an access branch into the downpipe. This makes future downpipe cleaning easier.

At the bottom of the downpipe, fit a downpipe shoe if the water is to discharge onto a flat surface or into an open gully (9). Downpipe shoes on round pipe need supporting with pipe clips.

For direct connection to the underground drainage, ensure that you have the correct connector (or adaptor for 65mm square pipe); to connect to a back inlet gully, remove the old mortar and replace with fresh mortar with the pipe in place.

7 - Fitting extras
There are extras you can buy for your guttering system, available through B&Q

A gutter guard comes in 10m lengths and is fitted to the top of a gutter to keep leaves out. It simply clips into place once you have cut it to the required width and length.

Similarly, a leaf guard fits into the top of a 68mm circular downpipe and will keep leaves out of the downpipe. It also prevents birds making nests there.

A drain cover keeps leaves out of an open gully. You need to cut a hole in the cover to allow the downpipe to pass through.

A rain diverter allows rainwater to be collected in a water butt - the cunning design allows surplus water to flow down the remainder of the downpipe once the water butt is full. Instructions are supplied: the rain diverter simply fits into a 68mm circular or 65mm square downpipe at an appropriate point, and is connected to the water butt by the flexible pipe supplied. A second water butt can be connected to the first, using a water-butt connector.