

Fig 9 Standard straight dog-eared upstand

Sometimes known as the 'Manchester fold', this is the preferred detail for drip-steps, batten ridges and batten hips. Because access behind the upstand is needed to complete the joint, a 'drop-in' section of substrate, say 120mm wide, is required at drip-steps. Similarly, the battens for ridges and hips are post-fixed.

The upstand height is limited to 60mm maximum. This is to limit the exposure of the vertical joint which, simply being a fold, is not entirely weathertight.

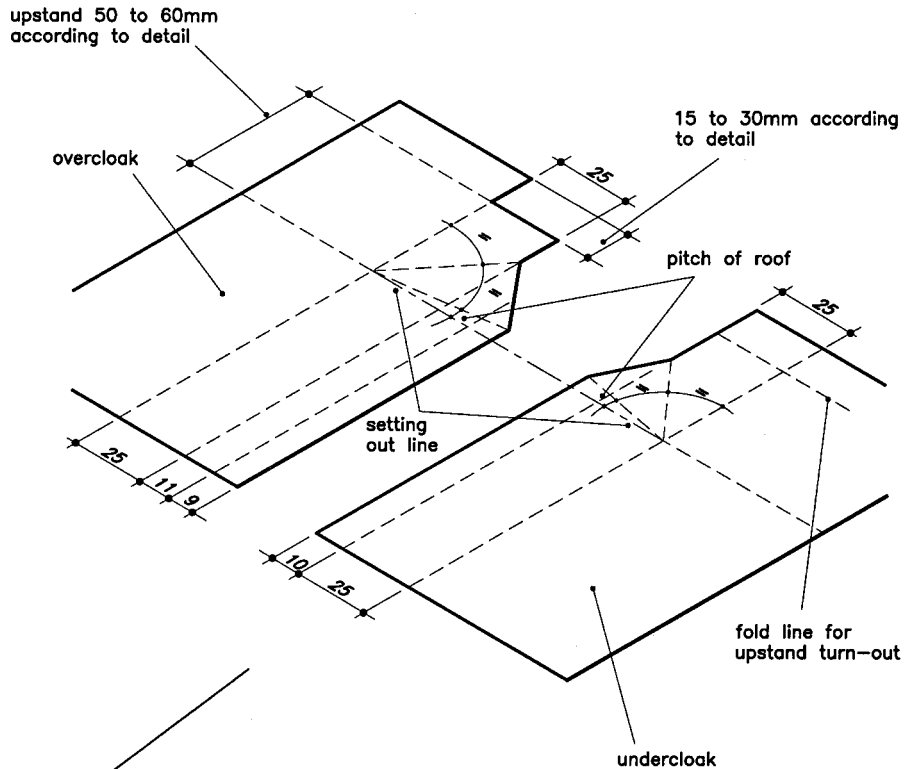
Temper: soft, quarter- or half-hard  
 Thickness: 0.6mm or 0.7mm

TRADITIONAL ✓ LONG STRIP ✓

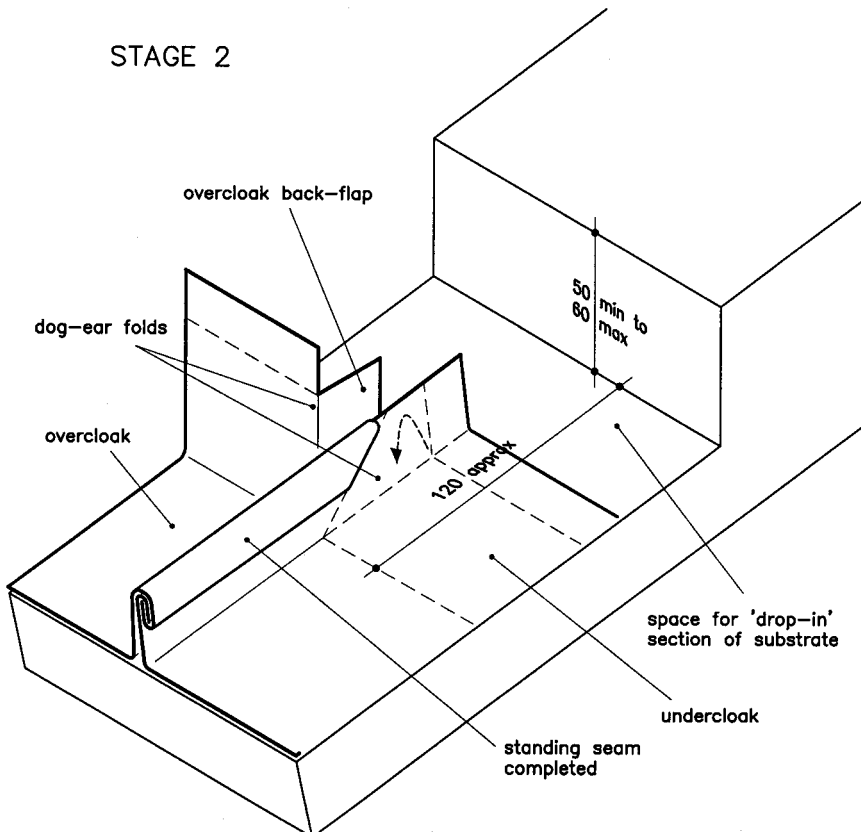
**Stage 1**  
 Mark out copper sheets and cut as shown. It is best to use a template so that each upstand is identical. This gives a consistent appearance and ensures that any cover flashing fits neatly. Note that the marking out gives the roof pitch and varies accordingly.

If profiled trays are being used the ends of the sheets will need to be flattened for marking out and cutting. Use straight snips for cutting.

STAGE 1



STAGE 2



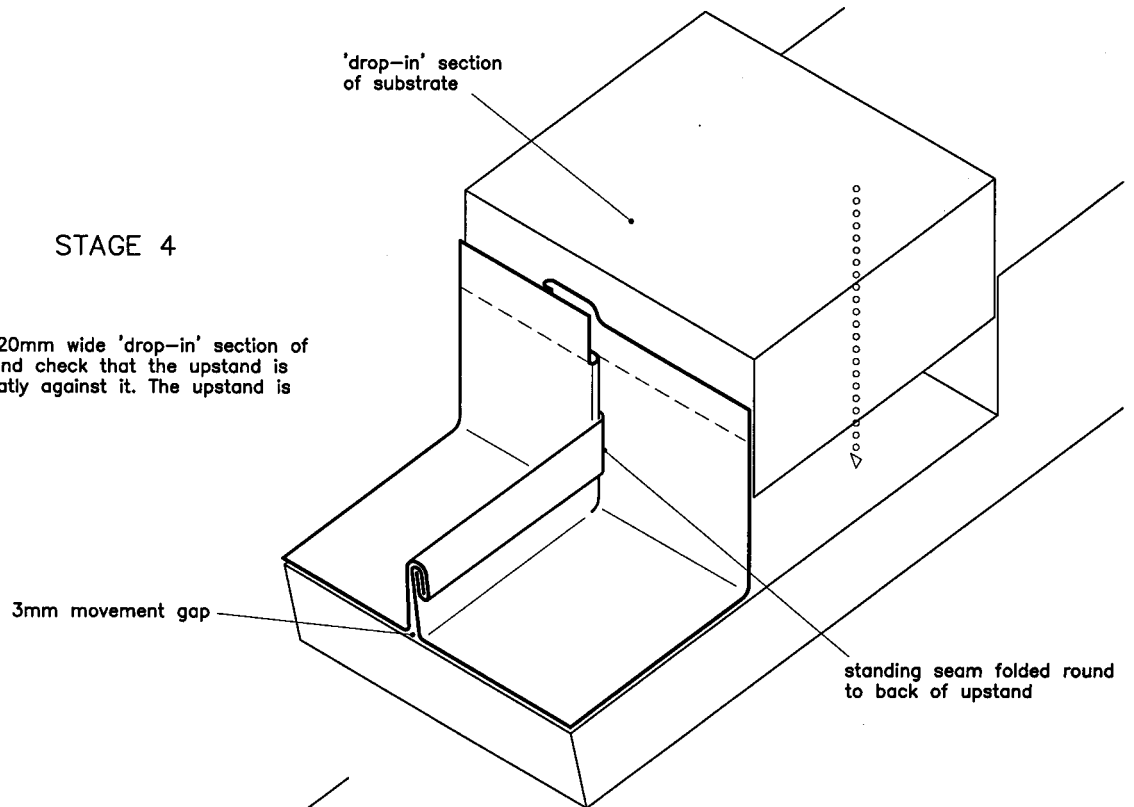
**Stage 2**  
 Because access behind the upstand is needed to complete the joint, a 'drop-in' section of substrate, say 120mm wide, is required. For this reason the copper sheets can be placed in their correct position before working.

Fold edge turn-ups of overcloak and undercloak upright. The angle at the base of the 45mm overcloak edge turn-up is greater than 90degrees to allow a 3mm gap for lateral movement. Close up roofing seam using seaming pliers or a seaming iron and a mallet.

Then bring the overcloak upstand up to the roof-pitch angle with straight flat-nosed pliers, thus forming a dog-ear fold. In doing this a slight radius should be made at the base of the upstand copper, rather than a sharp angle. The folding creates a back-flap standing in line with the seam.

STAGE 4

Stage 4  
Fix the 120mm wide 'drop-in' section of substrate and check that the upstand is dressed neatly against it. The upstand is complete.

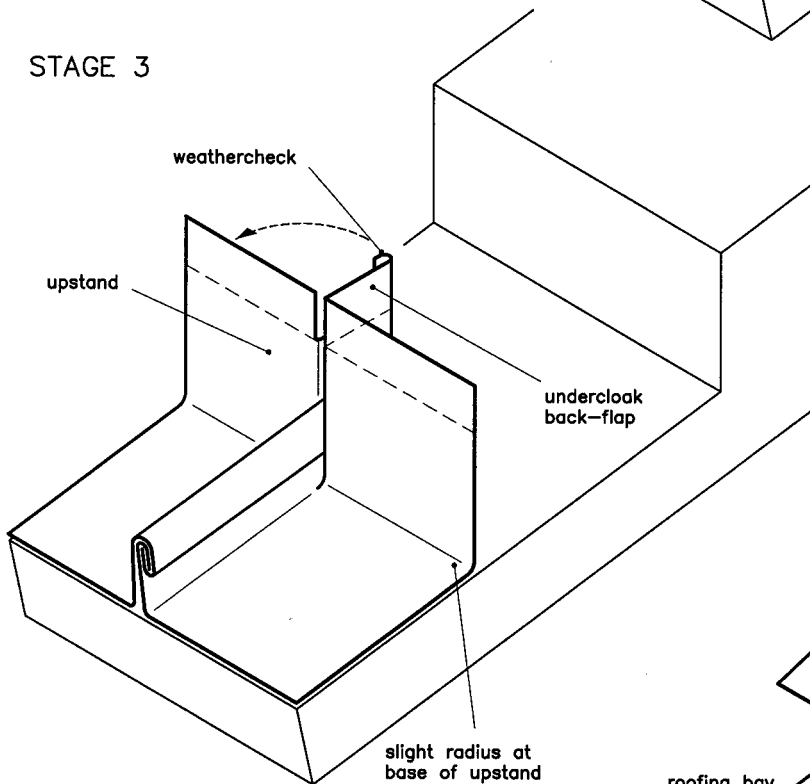


STAGE 3

Stage 3  
Now bring the undercloak upstand up to match the other, also with a dog-ear fold.

For additional weathertightness, a small weathercheck can be provided by cobbling round the back edge of the undercloak back-flap.

Both back-flaps are turned together against the back of the copper upstand, using small cranked seaming pliers. They are then dressed tight against the upstand with a mallet or hammer.



STAGE 5

Stage 5  
Form the turn-out to receive clips, lining plate, roofing copper to upper bay, capping etc, according to detail (see Figs 4e, 16, 16a, 19, 21, 23 and 23a).

