

Slating & Tiling

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interlocking roof tile clips 2

In part one of this subject we looked at the purpose of tile clips, and their various types, materials and constraints. In part two we will concentrate on the fixing of the tile clips.

Fitting

Fitting most tile-to-tile clips and batten hook clips is simple as they do not require any form of tool to fit them. Most are plastic or spring wire and have a push-fit spring action that locks them into place. They normally locate into the interlock first, and then are slid down the interlock until they locate against the head of the lower tile, with one leg under the lower tile or the timber batten. If the two tiles are not lying in the same plane – possibly because the fascia board height is wrong – then the clips will not fit correctly.

Batten nail clips require some form of barb or nail to be driven into the timber batten. This is easy if you are left-handed, but more awkward if you are right-handed, as the clip is always on the left hand side of the tile (looking from the eaves).

Most clip nails are unsupported between the clip and the batten; a distance that can vary from 8mm to 55mm, depending on the size and location of the nibs. Some clip designs are L-shaped and support the nail, making them act as a tile-to-tile clip, as well as a batten

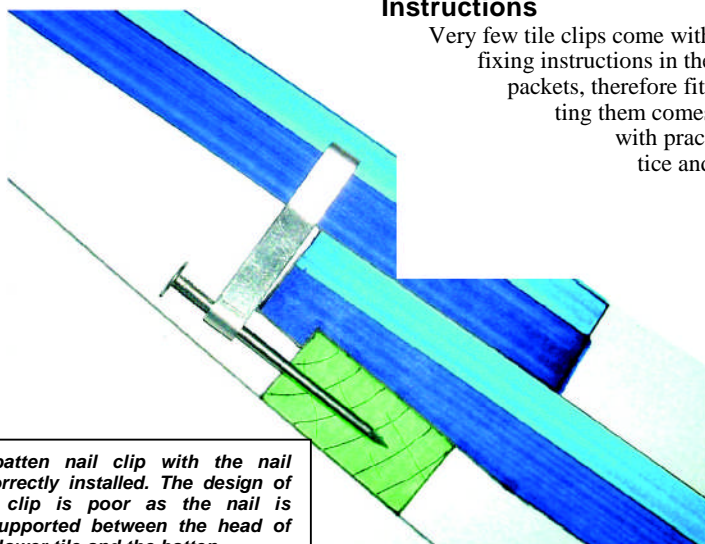
nail clip. Supporting the nail also helps to ensure the nail goes into the centre of the batten (useful when you cannot see the batten you are nailing into), and stops it bending under load, making the clip much stronger.

All clip nails should be driven in fully so that the head of the nail is hard against the clip. This is often difficult to do as the nail can bend before the head reaches the clip edge. The greater the distance the nail head is off the clip face, and the greater the length of unsupported nail, the weaker the tile clip fixing will be. Under load, the clip will be pulled up the nail and out of position. The unsupported nail will bend, allowing the clip to disengage from the side interlock.

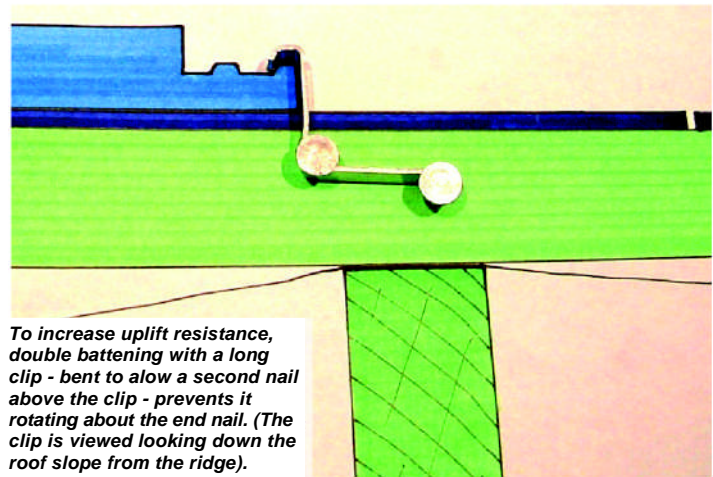
To increase the security of some clip fixings, it is possible to double batten and use two nail fixings to hold the clip. The second batten should be 38mm x 38mm and be placed against the head of the lower tile, and nailed into the rafters with 80mm-long nails. The tile should be located into position, and the clip, which should have a horizontal leg, should be nailed into position in the normal manner. A second nail is then installed above the clip and into the centre of the vertical face of the second batten to stop the clip rotating about the first nail fixing, so holding the tile down tightly. This type of clip fixing can be very effective for Redland Stonewold Mk II and Delta tiles, which normally have a plastic batten hook fixing.

Instructions

Very few tile clips come with fixing instructions in the packets, therefore fitting them comes with practice and



A batten nail clip with the nail incorrectly installed. The design of the clip is poor as the nail is unsupported between the head of the lower tile and the batten.



To increase uplift resistance, double battening with a long clip - bent to allow a second nail above the clip - prevents it rotating about the end nail. (The clip is viewed looking down the roof slope from the ridge).

experience. Identification of the clips can also be difficult. While some manufacturers mark the clips with the tile model name, others have a number or letter code, which if you are not familiar with, can make identification difficult. Some manufacturers sell the clips separate to the nails, making the risk of using the wrong nail even greater.

Maintenance

To check that a tile is nailed, the technique is to try and push the tile up the roof slope (usually with one's boot). If it does not move, then it is likely to be nailed, but may also be clipped. If when sliding a trowel under the leading edge of the tile and lifting the tile it will not lift, then the tile is clipped.

It is possible to remove a tile clip by pushing the tile below the clip up the slope (again with one's boot). This will pull the nail out of the batten. If the tiles are clipped with tile-to-tile clips, a slate ripper may be needed to push the clip off the head of the lower tile. With batten hook clips, the section that hooks into the interlock may need to be released first.

Reinstalling the clips can be impossible or at least very difficult. The best technique is to relocate the clip into the batten – or onto the lower tile – and hold the interlock hook section of the clip up with the end of a trowel, and slide the tile interlock in under the clip, before releasing the clip. The alternative is to drill through the leading edge of the tile below, above the nail hole of the tile below, and screw through into the batten below, ensuring that the hole is protected with a neoprene washer and cap.

Conclusion

In sheltered locations, interlocking tiles may not need clipping; nailing will be adequate. In most moderate locations, tiles that are clipped will resist the anticipated winds that will occur in that location. In severe locations, some clips will be inadequate and will require either a more secure fixing or an alternative tile with a better clip design.

Finding out which clips are the strongest is not easy to discover, and often requires discussions with the tile manufacturer's technical staff, as this information is rarely published. Alternatively, a full fixing specification should be obtained from the manufacturer.

Plastic clips are easy to use and easy to fit but will never last as long as the tiles, and will become brittle, with unknown consequences. Spring wire clips are easy to install but are unlikely to stop tiles chattering, unless they are very tight-fitting. Identifying clipped tiles is simple; removing and replacing them is not so easy and is best kept to a minimum.

Tips

- Always get a fixing specification from the tile manufacturer, and follow it.
- Always drive the nail down onto the clip face for batten nail clips.
- Try to drive the clip nail into the centre of the 25mm face of the batten.
- If a batten hook fixing coincides with a rafter, find an alternative clip rather than just leaving the clip out.

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