

Wall plates – bedding, lengths and joints

(December 2008) (First issue)



Question

- 1 Do wall plates need to be bedded on mortar in every situation?
- 2 Are wall plates which are less than 3m in length acceptable?
- 3 Are butt joints in wall plates acceptable and do they need strapping?

Considerations

- Bedding the wall plate helps to distribute the roof load onto the masonry: if the wall plate is not bedded, the wall plate or blockwork may be crushed locally.
- NHBC Standards clause 7.2.6 says:
 - Wall plates should be in lengths not less than 3m long and joined using half-lapped joints at corners and in running lengths.
 - In Scotland, 100mm x 25mm wall plates should be used, in long lengths, butt jointed.
- BS 8000: part 5 'Workmanship on building sites' says wall plate lengths less than 3m should be in one piece and of sufficient length to support at least three joists or trusses where required.

Answer

- 1 Wall plates should be bedded on mortar. If inspection reveals this has not been done, the blockwork should be inspected for signs of damage and made good as required. Dry mortar should be carefully packed under the full width of the wall plate.
- 2 Whenever practicable wall plates should be in lengths not less than 3m. Where this is not practicable (e.g. if the length of the wall is 5m) wall plates may be shorter lengths. Each length should support at least three joists or trusses.
- 3 In England, Wales and Northern Ireland wall plates should be jointed with half-lapped joints. Butt joints should not be used but if found should be jointed with metal or timber strapping across the joint. Where used (in Scotland only) 25mm deep wall plates may be butt jointed and fixed to the top of the wall with a nail either side of the butt joint. Strapping across the joint is not essential but would assist load transfer. Wall plates deeper than 25mm should be jointed with half-lapped joints.