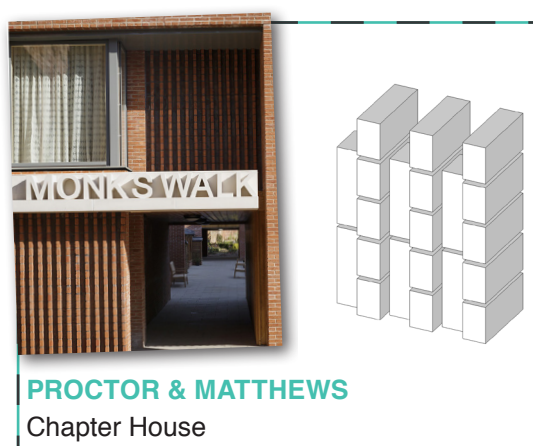
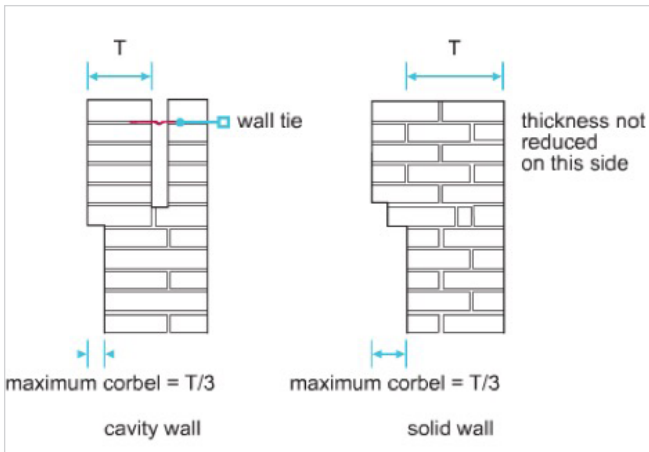


## BDA Design Note 01

### BDA TOP TIPS

1. Consult with a structural engineer when bricks are projecting or laid in an unconventional bond.
2. Consult with the manufacturer to confirm that the specification is suitable for the intended design and will not reduce the brick warranty.
3. Perforated or frogged bricks should be avoided where the perforations or frogs may become exposed, unless approved by the manufacturer.
4. Avoid locating projecting bricks where it may be possible for the general public to climb them.
5. A site reference panel should be constructed, prior to starting, to agree product quality, design details and workmanship.





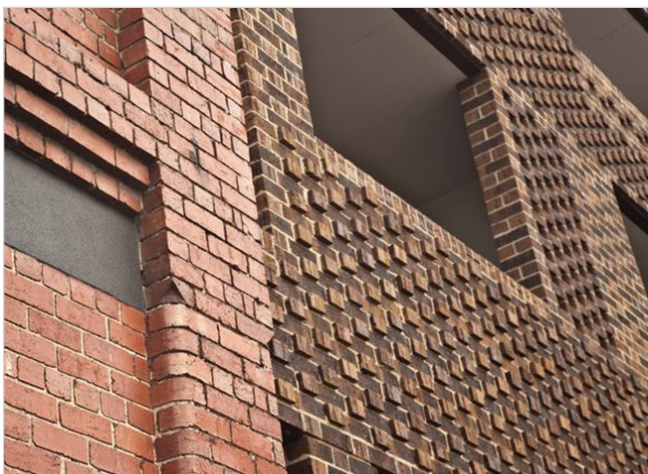
Extract from PD 6697

Textured brickwork can be used for both non-loadbearing and loadbearing wall systems providing that they comply with the structural design requirements set out in BS 8103-2 or BS EN 1996-1-1.

### DETAILING CONSIDERATIONS

The extent of the projection should not be more than 1/3 of the wall thickness. For cavity walls the thickness only includes the external leaf.

For common clay units of 215 x 102.5 x 65mm, laid in a flemish bond the maximum allowable projection would be 1/3 of the unit thickness (102.5mm) or 34mm. This assumes the brick is cut so that the cavity face of the external skin is flush.



Projecting headers in Flemish bond

The design must allow for sufficient wall ties at 2.5/m<sup>2</sup> for buildings within the scope of Approved Document A, or by calculation as described by BS EN 1996-1-1

Minimum cavity widths should be maintained to ensure that the detail provides the necessary level of resistance to water penetration.



Alternate courses of stretcher bond angles at 30° from the direction of the brickwork.

### DESIGN CONSIDERATIONS

Where the textured brickwork design results in the requirement for cutting bricks, consideration should be given for any intumescent cavity fire barriers, which may need to compress against the cavity face of the external skin. Typically, these products can expand by up to 25mm, which may mean that standard flush brickwork will be required at the fire compartmentation line.

Sticking to a single brickwork bond will reduce the amount of cut bricks required and ensure that the transition from non-textured to textured areas of brickwork does not result in a continuous vertical joint. Consideration should also be given to the need to widen foundations if the extent of the corbelling results in excentric loading for the wall design.

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