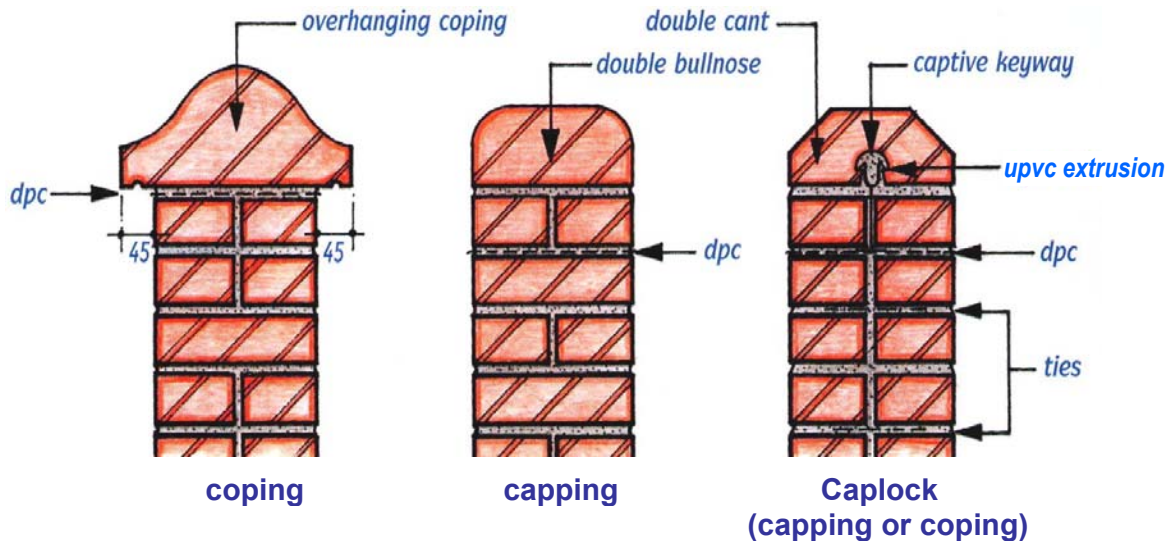


# GET IT RIGHT

## 4. Copings and Cappings in Clay Brickwork

The top of the wall is, in most instances, the most exposed element of the structure and therefore the area most vulnerable to the effects of weathering.

This 'Get It Right' gives guidance on the correct selection of materials, profiles, fittings and fixings to protect the wall.



In general, and especially in the North West of England and in Scotland, copings should always be used in preference to cappings where possible. Clay brick copings and cappings must always be of F2 (frost resistant) grade, preferably with an overhang and drip groove (throating) and have the ability to shed water.

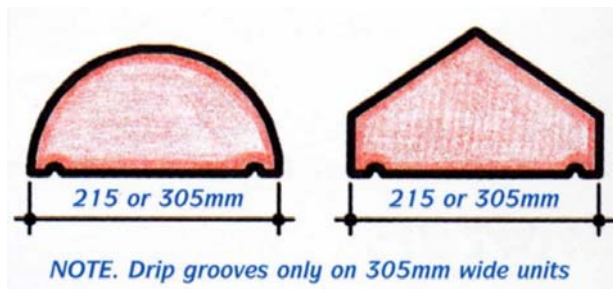
A flexible (roll type) high bond dpc should always be provided and be sandwiched in the mortar.

The Ibstock patented 'Caplock' system will provide additional security, particularly in areas where vandalism is prevalent.

### 1. Shapes.

It is always preferable to provide a good slope to the top surface to shed rainwater. There are many different profiles of copings and cappings. Some are standard shapes. Other shapes, however, can be manufactured on request.

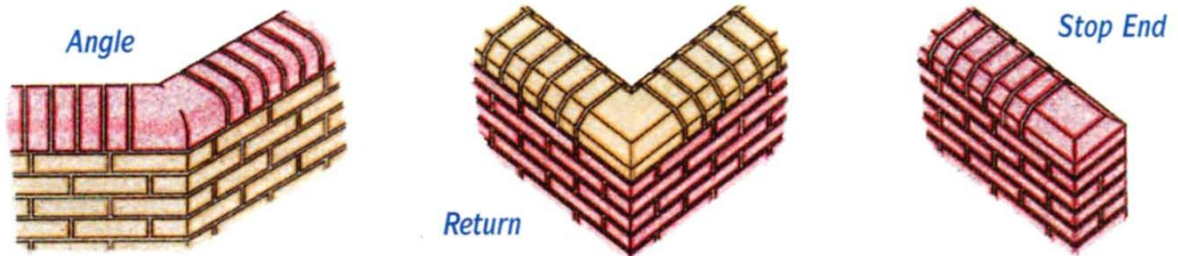
All of these profiles can incorporate the 'Caplock' keyway if required.



## 2. Angles, Returns & Stop Ends.

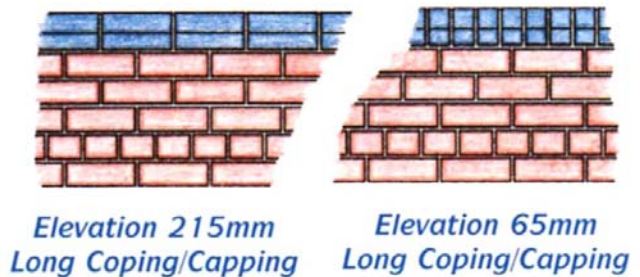
Larger units are recommended as copings and cappings at the corners and ends of walls.

One-piece units, which may be cut and bonded, are preferred at these locations to give greater stability and bond strength.



## 3. Setting Out.

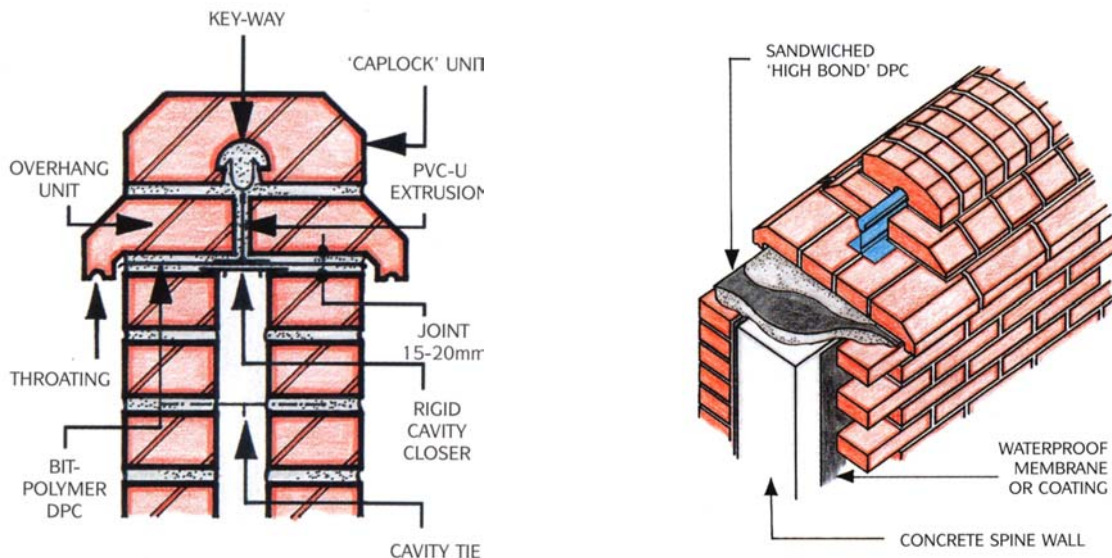
The bonding pattern of the wall needs to be considered when setting out. Staggered cross joints are preferable.



## 4. Multiple Units.

Combinations of different special shapes bricks can be used to cover the tops of walls.

Where widths of walls exceed the standard width of coping and capping, a number of different shaped units can be used.



## 5. Mortars.

The mortar is exposed just as much as the brick.  
 The high durability mortar mix shown in mix 1 is normally recommended for copings and cappings but mix 2 may be suitable for softer stock type bricks.

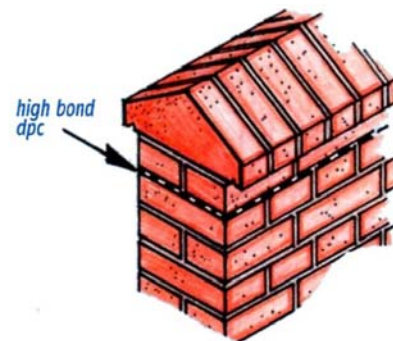
Mix 1	Mix 2
1 part Portland Cement	1 part Portland Cement
$\frac{1}{4}$ part Lime	$\frac{1}{2}$ part Lime
3 parts Sand	$4\frac{1}{2}$ parts Sand

Fully fill all bed and cross joints and use only flush or bucket handle tooled joint profiles.

### 6. Damp Proof Courses (dpc).

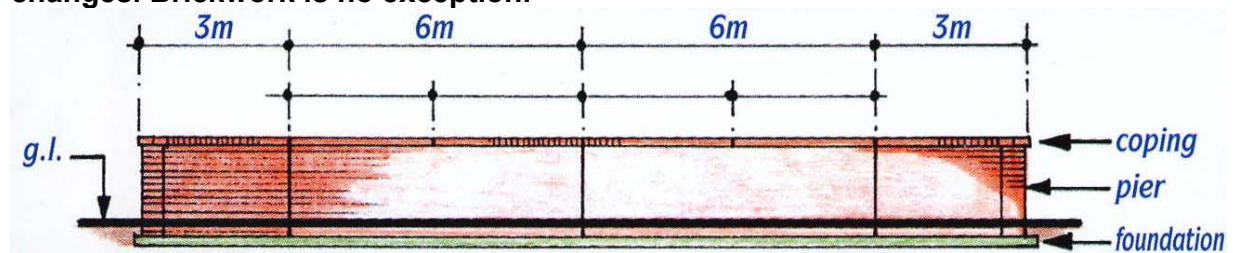
Dpc's are barriers to the passage of water and moisture.

Always use a dpc beneath coping and capping courses, which must be at least the width of the wall, (recommended to project by 5mm from the face), sandwiched within the mortar and have the ability to adhere to the mortar (high bond polymer types).

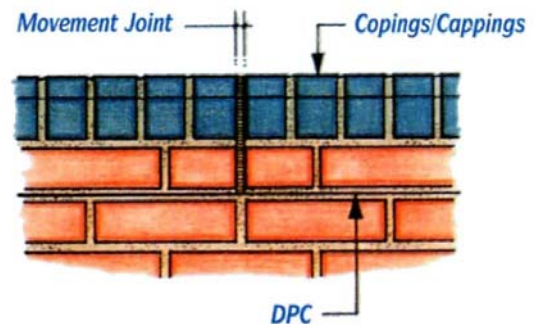


### 7. Movement Joints.

All building materials move when subjected to temperature and moisture changes. Brickwork is no exception.

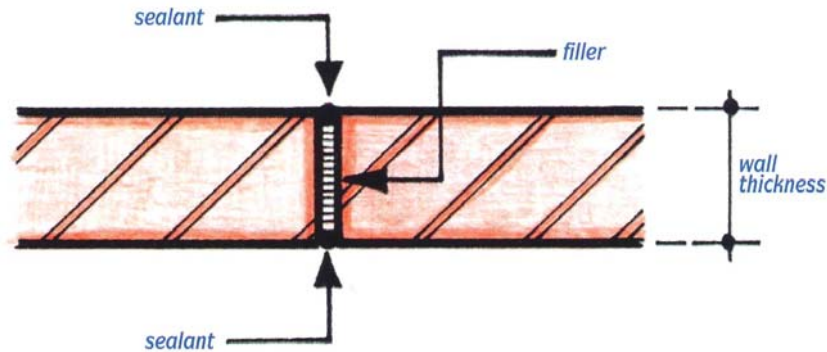


Movement joints (often referred to as expansion joints) should be provided at maximum three metre centres to all copings and cappings and must coincide with the movement joints in the wall below where appropriate. (These will be a maximum of 6 metre centres for free-standing walls and parapets).



### 8. Fillers and Sealants.

Filler materials should be compressible by easy pressure between finger and thumb and should recoil back to original thickness when released. Cellular polyethylene and cellular polyurethane are ideal. Impregnated fibre boards should not be used as they do not compress easily and will restrict expansion.

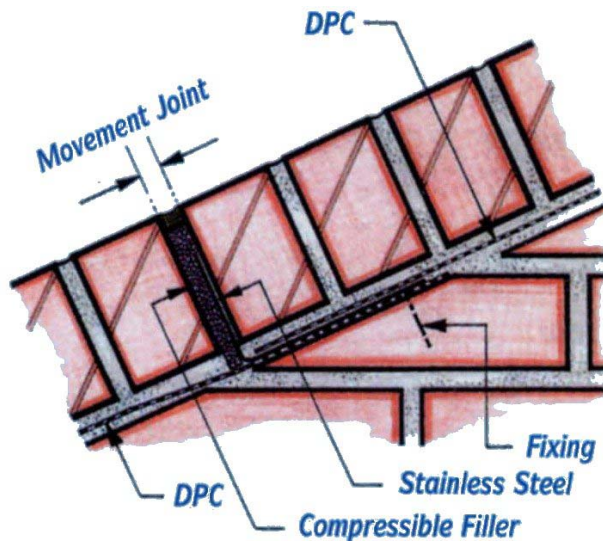


The sealant should be a polysulfide or low modulus silicone.

## 9. Movement Allowance in Sloping Brickwork.

Where sloping brickwork incorporates coping and capping courses, movement joints will be necessary in the normal coping/capping manner.

Stainless steel restraints will be necessary to control the tendency for the coping/capping to slide down the slope. The number and frequency of such restraints will depend on the angle of inclination and the sliding weight being restrained. Some of these restraints will, of necessity, be located at movement joint positions.



For further information refer to the Ibstock Brick Design Guide 'Copings & Cappings in clay brickwork and cast stone'.