

## TECHNICAL NOTE NO. 4 - BRICK WALL BONDS

There are numerous brick wall bonds in residential and commercial properties. All of them have certain characteristics and purposes. A brick bond can be described as the jointing mechanism of brick walls, i.e. the manner or way in which bricks are joined, for the purpose in hand. The most common built today is the Stretcher Bond. It has all the nominal 220mm long face of the bricks (the stretcher) on display. This bond is used in virtually all modern cavity wall construction because of its excellent resistance to rain penetration and its heat insulation properties. Cavity walls are normally from 250mm to 300mm wide. It suits the easy formation of a 50-100mm wide cavity behind the 100mm wide facing brick but is not in my opinion particularly attractive. It is also the standard bond for a single skin or half brick thick wall. It has been in popular use since cavity wall construction started in the late 19<sup>th</sup> century.



Stretcher Bond



Flemish Bond

The other very common brick bond is Flemish Bond. In fact it should be more correctly called Double Flemish Bond. This bond is characterised by the adjacent positioning of a stretcher face and a header face in alternating layers. A header is the nominal 100mm wide x 65mm high end of a brick. It is an attractive and easy to build bond into a 225mm thick solid wall and was widely used in terraced or semi-detached houses generally from the 19<sup>th</sup> century through to the 1930's. It is still used in some solid garden or low height retaining walls. There are many other brick bonds some less common such as the very strong English Bond, the Single Flemish Bond, the English and Flemish (Sussex, Scotch or Flying) Garden Wall Bonds, English Cross Bond, Silverlock and Rat-Trap Bonds, Monk Bond, Dutch Bond, Diagonal and Herring-Bone Raking Bonds, Header Bond, Dearne's Bond, Stack Bond, Diamond Diaper and Quetta Bond. All have lovely historic names.