

BONDS

A pattern in which brick is laid.

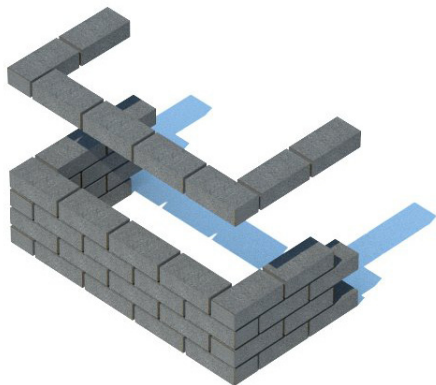
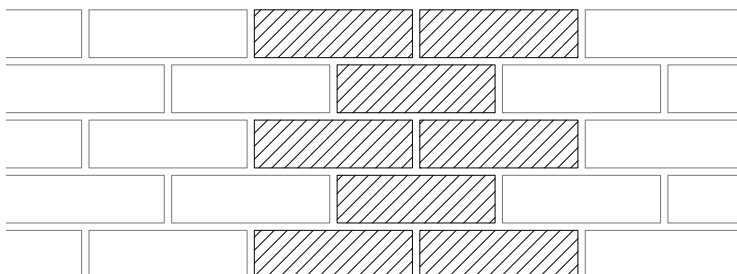


Figure 2.1 Stretcher Bond



Originally used for single brick walls, it became the obvious choice for cavity walls with the least amount of cutting required. It is therefore the most economical bond pattern and is extensively used in modern building.

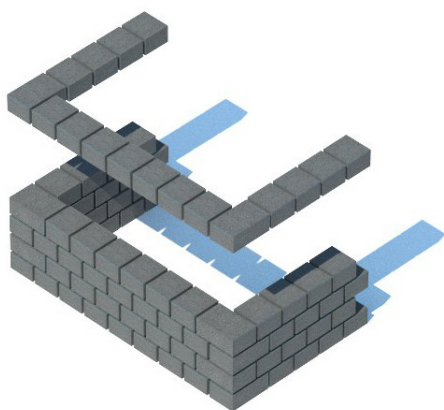
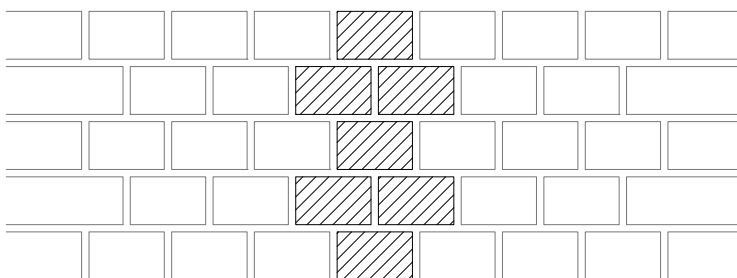


Figure 2.2 Header Bond



A brick course laid flat with the short end of the brick exposed. This method is particularly strong as the width of the wall is the whole length of a brick. Historically it was used for buildings of high quality, often used for curved brickwork.

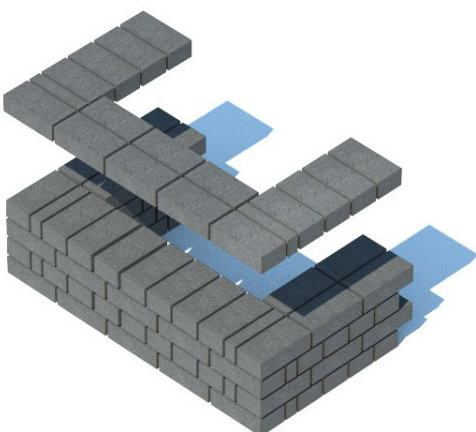
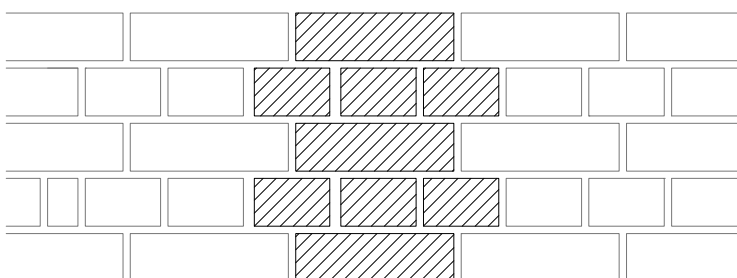


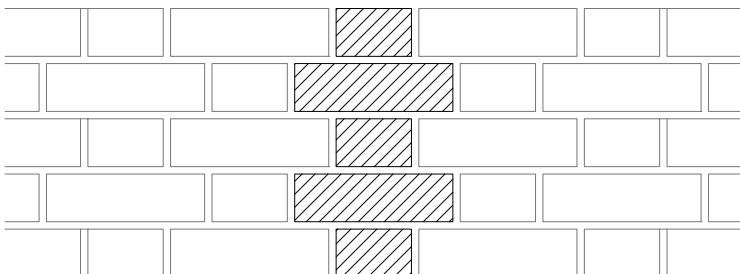
Figure 2.3 English Bond



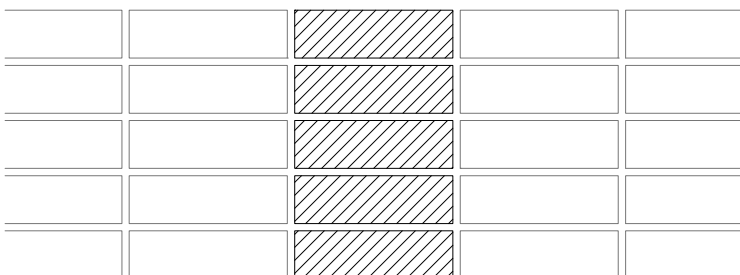
It comprises of alternative courses of headers and stretchers. It provides a strong bond when the wall is one brick thick. It is the preferred bonding pattern for bridges, viaducts, embankment walls and other civil engineering architectures.

BONDS

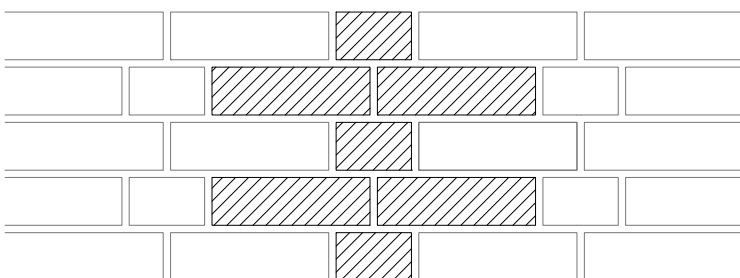
A pattern in which brick is laid.



Flemish bonds can be replicated in the half-brick outer leaf of a cavity wall by using whole bricks as stretchers, while the headers are created by half bricks called bats or snap-headers. It is not as strong as English bond at one brick thick.



In stack bond the bricks do not overlap and therefore the arrangement is inherently weak. To compensate for the lack of bonding, typically stainless steel ladder reinforcement is built into every third bed-joint.



With two stretchers between the headers in each row, and the headers centred over the joint between the two stretchers in the row below. It was commonly used in the region around the Baltic Sea until turn of 13th and 14th centuries, then it was gradually replaced by Flemish bond.

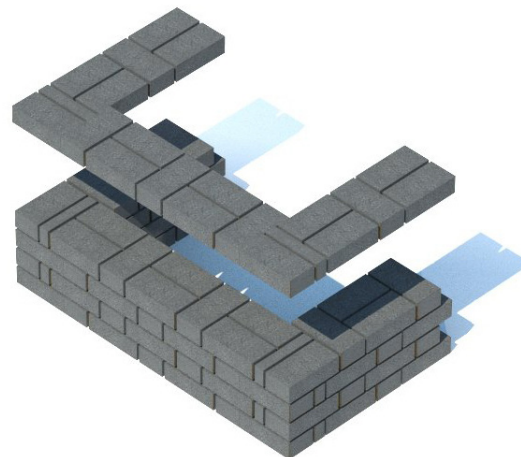


Figure 2.4 Flemish Bond

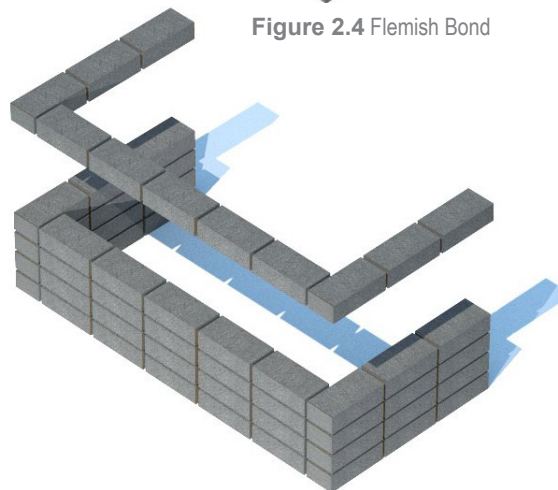


Figure 2.5 Stack Bond

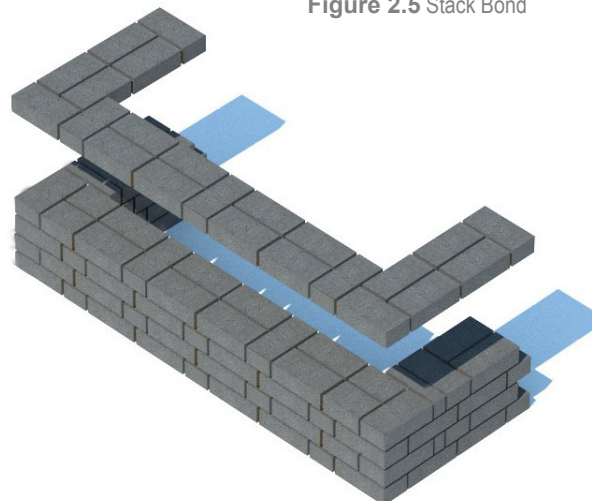


Figure 2.6 Monk Bond