



## Designing and Constructing Brick Sills and Lintel Bars

### BRICK SILLS

Brick sills must overhang the brick work below by 30 - 50mm with a minimum slope of 15 degrees. Bricks must be evenly spread and of equal thickness across the width of the sill.

Another option is to have a header course spread evenly over the sill width. This applies to the heads of the windows as well.



### LINTEL BARS

A lintel bar is a load-bearing building component that spans across openings such as windows and doors to provide structural support.

Designers and Bricklayers should familiarise themselves with Paragraph 9.2.9 and Table 18D and Table 18E of E2/AS1. You can read this here: [E2/AS1 \(part 4\)](#).

Lintel seating – lintels shall have a minimum seating into adjacent veneer of:

- (i) 100mm for spans up to and including 2m
- (ii) 200mm for spans over 2m

There are two methods of installing a lintel bar with brick veneer:

Acceptable Solution for lintel bar – E2/AS1 provides a method where the angle spans the brick from one side to the other. The lintel should be kept either solely in the brick, or the timber framing, but not both. The angle sizes within Table 18E of E2/AS1 should be applied.

Alternative Solution for lintel bar – The second method involves sitting the lintel back 20mm from the face of the veneer, and have correct seating. With this method the angle is attached directly to the structure and kept 5mm short of the opening at each end to accommodate any movement in the frame. The following table applies to this method.

**Master Brick & Blocklayers suggest that as the sizes specified in Table 18E are the minimum requirement increasing the size (thickness) where issues could develop (eg: wider openings, heavy units, significant height to carry).**

Max.Span (mm)	Size of Angle
3000 mm	80 x 80 x 6
3500 mm	100 x 100 x 6 or 125 x 75 x 6
4500 mm	125 x 75 x 8
4800 mm	125 x 75 x 10

The durability requirements for lintel bars can be seen in Table 18D of [E2/AS1 \(part 4\)](#).

