



# Technical Guidance

## Movement joints in clay brick masonry

### Question

The NHBC Standards clause 6.1 – D3(g) says that the spacing of movement joints in clay brickwork should be 12m (15m maximum). In what circumstances can 15m spacing be accepted?

### Considerations

- BS 5628 : Part 3 'Code of practice for use of masonry' refers to movement joints at 12m spacing for unrestrained or lightly restrained walls e.g. parapets and non-loaded spandrel panels built off membrane type dpcs and 15m maximum spacing for normal storey height walls.
- The orientation of a wall in relation to the sun will influence the degree of thermal movement.
- Window and door openings in the brickwork can induce local stress points leading to cracking around the openings.
- The brick manufacturer's recommendations should be taken into account.

### Answer

It is the designer's responsibility to ensure movement joints are designed to suit the actual layout and design of the structure. The following should be taken into consideration:

- Where brickwork is in large panels with no significant openings movement joints may be provided at 15m maximum spacing.
- Where brickwork is lightly restrained and/or contains a number of window and door openings movement joints should be provided at 12m maximum spacing.
- Additional movement joints may be required where the aspect ratio of the wall (length : height) is high, e.g. more than 3:1.