

Technical Guidance

Movement joints in masonry - timber framed external walls

Question

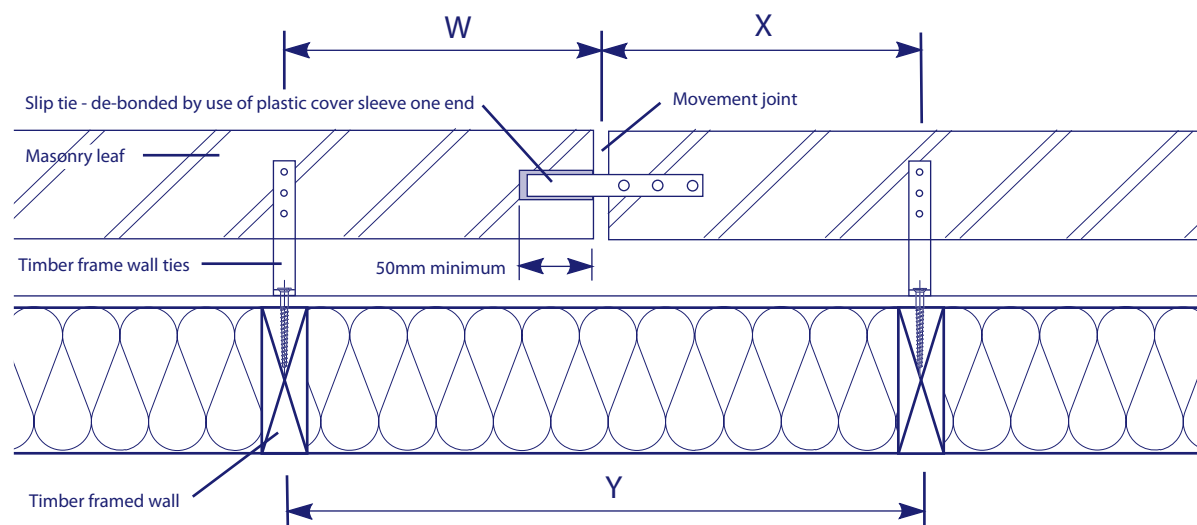
Are slip ties required across movement joints in masonry cladding to timber frame walls

Considerations

- NHBC Standards clause 6.1 - S5(c) says at movement joints, wall ties should be spaced at maximum 300mm centres vertically within 225mm of the joints on both sides of the joint. The ties provide lateral restraint to the unrestrained ends of the masonry wall
- Wall ties should be fixed over a timber stud. The spacing of the studs is often more than 225mm from the movement joint. The addition of extra studs, within 225mm of the movement joint, may be impractical
- Slip ties, inserted across the movement joint, can be used to tie the end of the wall in place of additional wall ties within 225mm of the movement joint

Answer

The need for and provision of slip ties across movement joints should be decided in accordance with the following diagram:



- Where W & X are not more than 225mm (i.e. Y = maximum 450mm centres) no slip tie is required. Wall ties both sides of the movement joint should be spaced at maximum 300mm vertical centres
- Where W or X are greater than 225mm slip ties should be built in across the movement joint at maximum 300mm vertical centres. Slip ties should be de-bonded at one end e.g. with plastic cover sleeve, with minimum 50mm embedment into masonry either side of the movement joint