

# Movement joints in masonry – timber framed external walls

(March 2024) (Third issue – supersedes March 2021)

The Technical Guidance Notes are produced by NHBC as guidance solely for our builder customers as to how to interpret the technical requirements in relation to the warranty cover provided by NHBC under its Buildmark, Buildmark Choice, Buildmark Link, Buildmark Solo, Buildmark Connect or any similar product from time to time. It has not been created or intended for distribution or use outside of that purpose. The information contained in this Technical Guidance Note does not constitute advice and is not to be relied upon by any third party. Nothing in this Technical Guidance Note is intended to, nor should it be taken to, create any legal or contractual relationship. Any third party who chooses to rely upon the information contained in the Technical Guidance Notes shall do so entirely at their own risk and NHBC accepts no duty of care or liability, however caused, in connection with its use or reliance by any third party.

## Question

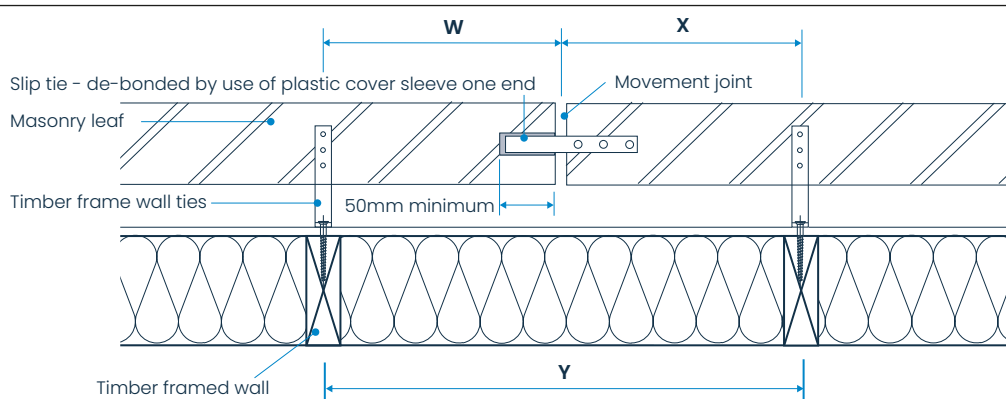
Are slip ties required across movement joints in masonry cladding to timber frame walls?

## Considerations

1. NHBC Standards clause 6.1.18 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.
2. 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.
3. 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.
4. The principles and answer given in this guidance is not only limited to use on timber frame construction but also applies to other studded structures such as Light Steel Frame (LSF).

## 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.



NHBC, NHBC House, Davy Avenue, Knowlhill, Milton Keynes, Bucks MK5 8FP  
Tel: 0344 633 1000 Web: nhbc.co.uk

National House-Building Council (NHBC) is authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority for carrying on insurance business and insurance distribution activities.

NHBC is registered in England and Wales under company number 00320784. NHBC's registered address is NHBC House, Davy Avenue, Knowlhill, Milton Keynes, Buckinghamshire, MK5 8FP. Note that only certain parts of our products and services are within the scope of UK financial services regulations. For more information on our products and services, please see our website nhbc.co.uk or your NHBC product documentation.