Technical Article

Written by Don Waterworth BSc (Hons) FCABE MEWI Chartered Building Engineer / Building Surveyor, Expert Witness, Accredited Mediator – Tel: 0800 1954922 If you need to install a lintel above a window aperture (especially on a pre-1950 property), the support could be compromised, warns our Technical Author, Don Waterworth.

Angle Iron Lintels – Hazards Await The Unwary



There would be occasions when you need to install a lintel above a window aperture, normally on a property built before 1950 where soldier courses exist and the mullions of the existing window provide support.

However by changing the style of the window or indeed simply removing the window, the support could be compromised, warns our Technical Author, Don Waterworth. It is important that in choosing the type of lintel, you do not allow your builder (subcontractor) to simply install an angle iron lintel. This type of lintel, especially on an exposed elevation, does not do the job correctly and can lead to prob-

lems some years later and indeed water ingress caused by lintel expansion. You are far better specifying a Catnic CN7 or an IG lintel.

Catnic CN7 or an IG lintel

These type of lintels (Catnic & IG) are not only thermally insulated but also have built-in cavity trays – and on that subject, it is also important that 'weep holes' are set in the perpends above the lintel to ensure that any water bypassing the outside skin of brick can be decanted back outwards. Expansion

The main problem with angle iron lintels is once they have been fitted for some years, they can start to expand. This is par-

ticularly troublesome on South or West facing elevations and/or where the bricks are porous. Trouble could occur where the angle iron lintel, which of course is mild steel, starts to expand due to the rainwater moisture penetrating through the outer skin brick and mortar and comes into contact with the mild steel. This expansion can cause 'jacking up' of the brickwork and therefore you should be aware of this when you are installing windows and the householder should be informed ideally.

Replace

Any angle iron lintels in situ should be replaced for a Catnic CN7 or an IG lintel and certainly where angle iron lintels have started to expand. Make sure that you cover yourself by taking photographs and by advising the householder if a lintel is defective, that the expansion will more than likely continue - thus you cover against any liability for future repairs.

Don't do the job

I am not a fan of angle iron lintels and this type of lintel should never be specified or used above any residential aperture in my experience, they are troublesome and do not 'do the job' to put it bluntly.