Technical Note
Deflection Heads – September 2026

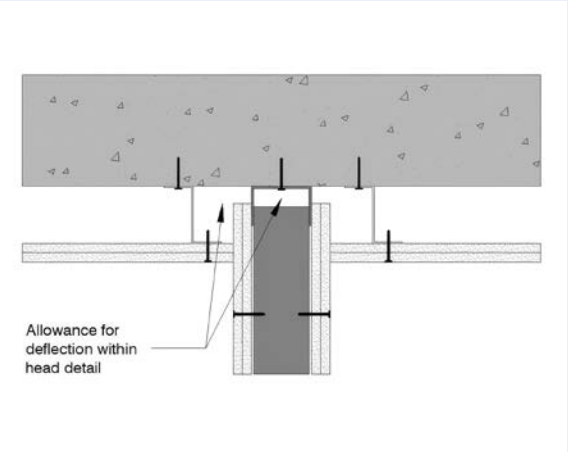


Figure 1
Metal / timber stud solution

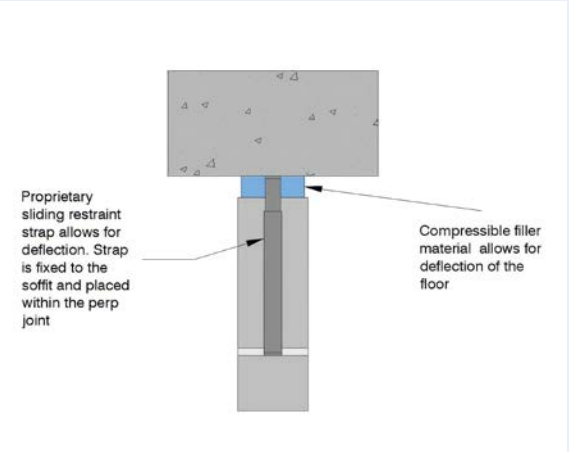


Figure 2
Masonry solution

After installation all floors will deflect due the weight of the finishes and imposed load. Where a non-load bearing wall occurs, it is important that no load is transferred to it due to the deflection of the floor above it. To ensure that this does not occur a defection head will need to be provided that allows for vertical displacement of the floor whilst still providing lateral restraint to the wall. Typical solutions are shown in figures 1 and 2.

Currently there is no set guidance as to what the limit of deflection is before a deflection head has to be adopted. For example, a 150mm deep hollowcore floor may only have movement of 0.2mm at 3.5m spans increasing to 6.2mm at 6.5m spans. Clearly there is likely to be a higher degree of movement in the timber frame due to shrinkage than there is in the movement in the hollowcore floor. When assessing the deflection of the precast concrete floor it is essential to look at the deflection of the floor after it has been installed, defined as movement, rather than the total deflection of the floor as these will yield different values. The movement is how much the slab moves after it has been installed and factors in the long-term creep of the precast concrete elements.

Published 2026 © Mineral Products Association.

MPA Precast represents the UK precast concrete manufacturers and members of the supply chain. We develop and disseminate best practice guidance to promote precast concrete in construction.

Web www.mpaprecast.org **LinkedIn** @mpaprecast

MPA Precast is a product group of the Mineral Products Association, the trade association for the aggregates, asphalt, cement, concrete, dimension stone, lime, mortar and industrial sand industries. www.mineralproducts.org