

Shallow Composite Floor Decks

Design information

Headed studs

When deck profile ribs are running perpendicular to the steel beam – that is compositely connected to the composite slab – you should take the capacity of headed studs as capacity in a solid slab but multiplied by the reduction factor “k”. The calculation method for “k” differs between BS5950 Part 3 and Eurocode 4.

Deck suitability

You cannot place shear studs on profile stiffeners. However, with MetFloor® 60 and MetFloor® 80 the position of the stiffeners and side lap lets you place the studs centrally.

Non-welded shear connectors

You can use Hilti shear connectors. For further information refer to www.hilti.com

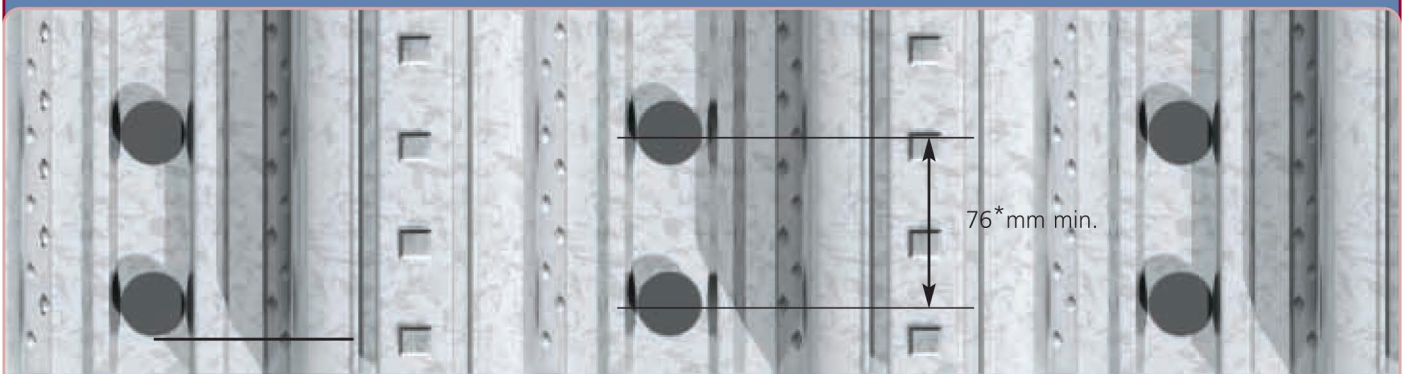
Design notes

For further reference please see The Steel Construction Institute/Metal Cladding and Roofing Manufacturers Association P300 “Composite Slabs and Beams using Steel Decking: Best Practice for Design and Construction”.



Central Studs

*76mm = 4d for 19mm studs



↑ 25mm min, edge of stud to edge of beam

76* mm min.