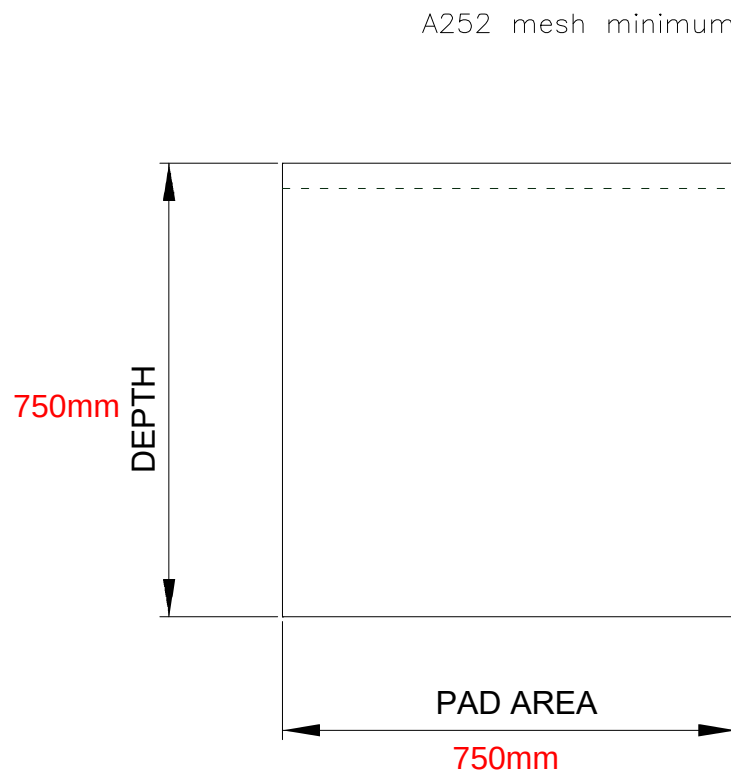




General Guidance on Slab Thickness

100mm Thick Slab

Where loads are very light the following rules of thumb can be followed:-
Minimum slab thickness for domestic situations: 100mm but 125mm preferred

150mm Thick Slab – minimum in any commercial situation

This is suitable for shelving or pallet racking with a maximum leg load of 2.1 tonnes

- a mezzanine column with a maximum leg load of 4.7 tonnes
- fork lifts with a maximum lifting capacity of 2.0 tonnes,
- or uniformly distributed loads up to 70 kN/m².

A Thicker slab may be needed where loadings are deemed greater than above. Seek advice from Capital Steel Ltd's Engineering Department or the foundation design engineer.

General Guidance on Slab Design

As no site investigation data is currently available, formation soil is assumed to be compact natural sand, or gravel or firm, low-shrinkage clay, below topsoil and fill material. Design bearing pressure is **100 kN/sq m**. Formation soil is to be free from roots and organic material, and all excavations are to be kept free from water during construction.

For foundations on medium and high shrinkage clays, loose granular soils, made ground, peaty soils and soft or very soft clay or silt, consult Capital Steel Ltd's Engineering Department for further advice.

Where trees are present or have been recently removed within 25m of the building and the underlying soil is clay, consult Capital Steel Engineering department on the risk of shrinkage and swelling due to moisture content changes in clay.

Typically, concrete shall be designated mix RC28/35 as defined by BS 8500.

Create a 150mm thick concrete slab with one layer of A252 mesh and 40mm cover of concrete

Create a 150mm thick sub-base of DoT type 1 compacted fill material

To obtain suggested slab thickness, pad depth and pad area refer to the Foundation section of the calculation pack