DIFFERENT TYPES OF CONCRETE SLABS

Slab on Ground – This is the simplest type of slab. It incorporates stiffening beams made from pre-poured concrete in trenches around the outside of the slab, and has a slab thickness of 100mm. This type of slab is suitable for **Class A** and **Class S** sites.

Stiffened Raft Slab - Similar to the slab on the ground, but also has pre-poured concrete beams set in channels through the middle of the slab, creating a kind of supporting grid of concrete on the base of the slab. Most slabs in Australia are stiffened raft slabs. The slabs may also need additional concrete **footing** embedded in the soil, depending on the soil type, and are generally suited to **Class M**, **Class H** and **Class E** soils.

Waffle Raft Slab (also known as a **waffle pod slab**) - These slabs are constructed entirely above the ground by pouring concrete over a grid of polystyrene blocks known as 'void forms'. Waffle raft slabs are generally suitable for sites with less reactive soil, use about 30% less concrete and 20% less steel than a stiffened raft slab, and are generally cheaper and easier to install than other types (even in bad weather). These types of slab are only suitable for very flat ground. On sloping ground or with more complex designs, a stiffened raft slab is normally the better option. Waffle raft slabs are well suited to reactive clay sites in particular, because they're not embedded in the ground like stiffened raft slabs. Waffle raft slabs are best suited for **Class A**, **Class S**, **Class M**, **Class H** and **Class E** soils (although you may wish to consult an engineer about the suitability of the slab for very reactive soils).

Pier and Slab - On sites with more reactive soils, it's common for concrete **piers** to be sunken into the soil to improve stability. This is normally done by digging holes at intervals and depths determined by an engineer, then pouring concrete into them and attaching the slab to these piers.

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