



Portland

HOLLOWCORE

Site Requirements

- In order to obtain a flush ceiling on brickwork, the load bearing walls and beams must be level.
- Access should be available around the building on which the slabs will be erected.
- All load bearing bricks or blocks should have a normal compressive strength of 7MPa.
- Hollow-core panels should have a minimum bearing of 90mm.
- Precast concrete lintels must be placed and additional brickwork constructed as specified. Site dimensions also need to be accurate to avoid any delays.

Service Holes

- Service holes of up to 90mm may be made in the panels on site. Any service holes larger than 90mm should be referred to the Design Engineer.

Grouting of Key Joints (V-joints)

- The grouting of v-joints along the longitudinal length of the panels should have a minimum comprehensive strength of 25MPa concrete at 28 days.
- Under NO circumstances must any form of materials (electrical conduits etc.) be placed in the v-joints with the concrete grouting.
- The joints must be free from any materials and hosed wet before placing of the grout.
- The aggregates used must not be larger than 9mm.
- No movement, loading of bricks or wheelbarrow loads may be on the slabs until the grout has hardened.

Screeding (Standard Topping)

- The grouted joints and placed hollow-core panels must be inspected by the Design Engineer before screeding commences.
- The engineer should be given 24 hours advanced notice of the inspection.
- The surface of the slab must be swept clean.
- The slab should be thoroughly wetted and the screed applied immediately.
- The screeding should have a normal thickness of 30mm unless otherwise specified.
- After laying the screed it should be steel floated and then wetted for 48 hours to prevent shrink cracks.
- On all open or exposed areas mesh ref. 100 must be placed in 50mm thick leveling screed.

Structural Topping (including mesh)

- Hollow-core panels must be back-propped before placing the 25MPa concrete topping - minimum 75mm thick with props that are able to resist the load of wet concrete topping.
- The surface of the slab must be swept clean, free from dust and any other materials.
- The slab should then be thoroughly wetted without any pounding.
- The structural topping should have a 28 day comprehensive strength of 25MPa concrete.
- The aggregates used must not be larger than 9mm.
- The structural topping must be cured by wetting for at least 4 days prior to opening to any traffic.
- The structural topping should also be vibrated into open cores and joints to ensure monolithic action with the precast elements.

Tiling

- All new concrete work or screed must be cured fully before tiling proceeds.
- Surfaces must be clean and free of all traces of curing agents, laitance, loose particles and any other surface contaminants.
- Power-floated or steel trowelled surfaces must either be scarified or keyed with slurry consisting of a cement and a "keycoat" type product. The adhesive must be applied while the slurry is still "tackey".
- Tiling should be done with a flexible adhesive.
- Tiles must have soft expansion joints.

"The obvious choice!"