



RIB & BLOCK FLOOR SLAB MANUFACTURERS

DESIGN SUPPLY ERECT CAST CERTIFY

INSTALLATION PROCEDURES FOR RIB & BLOCK SLAB

Placing

Place **Royal Concrete** ribs at approximate centres and space accurately by one hollow block at each end of the span.

Erect suitable temporary propping at not more than:

1200 mm centres of **Royal Concrete Prestressed rib** length, and make it level to specified camber. Place balance of hollow blocks as detailed not forgetting transverse cross-ribs. **If using Polystyrene block system, first place 6 concrete trays, thereafter place polystyrene block, then place cross ribs.**

Place reinforcement in transverse cross-ribs and place mesh reinforcement sheets over slab area. Place electrical conduit pipes and/or plumbing services. Clear all rubble on ribs and blocks and wet slab thoroughly.



1. Place ribs 1 block apart. Place props 6 blocks/trays apart and under every lintel



2. place balance of blocks/trays/polystyrene and set cross ribs.



3. Place props under every lintel and level



4. Place electrical work and mesh reinforcement



5. Cast Concrete after engineers consent. Only remove props after 3 weeks

Inspection Before placing in-situ concrete, layout of Slab components should be inspected by the appointed Engineer. Particular attention must be given to the temporary propping and the correct locating of multiple ribs.

Concreting When pouring never heap in-situ concrete during placing. Work well into ribs and transverse cross-ribs.

Curing Keep the slab wet continuously for at least 4 days after concreting, taking care during cold weather not to cause icing.

Striking Temporary propping may be removed when the in-situ concrete has reached a crushing strength of 17MPa, after 21 days or as per engineers instructions..

Design Recommended calculations be based simply on supported spans. Point loads should be distributed by transverse cross-ribs suitably Located and reinforced to suit the nature of the imposed loading.



Typical/good rib & block propping



Bad/dangerous propping

ERECTION TIPS

- ✓ On delivery it is the contractor's responsibility to inspect the blocks and beams for any breakages. Material should be off-loaded in a safe place and on level ground. The blocks are not to be placed on top of the beams during storing. Do not stack the blocks more than two pallets high.
Note: No heaping of building materials on slab during construction.
- ✓ All concrete to be 25 MPa (70/30).
- ✓ **When using Polystyrene block system, be careful not to walk on concrete trays. Place 6 trays first, then install polystyrene block, thereafter it is safe to step on.**
- ✓ Casting must be continuous to create monolithic slab.
- ✓ Heaping of concrete must be avoided. Concrete is to be mechanically vibrated.
- ✓ Point loads should be distributed by transverse cross-ribs suitably located and reinforced to suit the nature of the imposed loading.
- ✓ All outside slabs to be waterproofed by experts with a minimum guarantee of 5 years on all waterproofing work and materials.
- ✓ Max/Min stripping of props is 21 days, and the engineer in-charge should be notified for a final inspection.
- ✓ No brickwork, which will be supported by the slab only, to be built before on the slab before all the props have been removed.
Non load-bearing brickwork must never be allowed to help support this slab. Build these walls up only after the props have been removed.
- ✓ If tiles are to be laid on a slab, please check with the tile supplier for tile expansion joint detail in order for the tiles to cope with normal elastic slab deflections.
- ✓ If a slab is to be used as a roof slab, place a 50cm crushed stone layer over the entire roof area (on top of the waterproofing) as a heat shield.
- ✓ Where the slabs end against existing slabs or brickwork allow a 10mm construction joint between old and new work and fill this up with poli-sulphice.
- ✓ If the slab soffit should be plastered, please note that small shrinkage cracks will appear in the plaster after a while. These cracks are non-structural and can be successfully covered with normal maintenance painting.

TYPICAL SLAB LAYOUT



