

TOPFLOOR FINISHES & SCREEDING PROCEDURES

Finishes to Topfloor

Electrical conduits should be placed on top of the Topfloor slab and finished with a 40mm river sand and cement leveling screed.

The underside or soffit of the slab is smooth and does not require plastering.

To finish, rake the underside of the joint clean soon after grouting.

Trowel a small quantity of Rhinolite or similar into the underside of the joints.

Finish to a smooth rounded shape by running a piece of plastic conduit along the joint.

N.B. It is not recommended that the joints are plastered closed. (Should you wish to do so, ask Topfloor for a recommended specification).

Apply a bonding liquid to the soffit before applying a textured paint.



"V" joints on the soffit are a feature of Topfloor Hollow-Core slabs and should not be plastered closed.



Mesh required in screed of all tiled areas.



*Plumbing and electrical conduits placed prior to screeding.
Conduits should be run over the top of the Topfloor slab.*

Screeding Procedures for Topfloor Slabs

On contracts where Topfloor slabs are used indoors a simple 40mm levelling screed is all that is necessary. In buildings with a larger area, adequate movement joints should be specified by the Consulting Engineer.

APPLICATION OF SCREED

All loose material is to be removed from the tops of the slabs. The slabs should be thoroughly wetted and screed applied immediately. The levelling screed should comprise a 1:4 mix by volume of cement and clean river sand.

Water should be added to the mixture to an extent that the mixture is relatively dry but remains easy to float finish. The screed should be laid to an approximate thickness of 40mm. Note that in some areas additional screed may be necessary to level out the camber in the units. After laying the screed it should be steel floated and then wetted for 48 hours to prevent shrinkage cracks.

In certain areas, namely balconies, roofs, walkways, tiled areas, car parks and areas where the screed is to be left unfinished, the screed specifications change slightly.

On balconies, roofs, walkways etc., i.e. all areas where Topfloor slabs are exposed to the elements - a Ref. 100 mesh* must be placed in the leveling screed to counteract the transverse forces created by large temperature differences.

Where tiles are to be used on the slab, a Ref. 100 mesh* must be placed in the levelling screed as for balconies, roofs and walkways. Expansion joints should be allowed in the tiles every 3 metres and particularly where the section alters shape such as doorways. It is recommended that a flexible tile adhesive be used. TAL (Pty) Ltd. have produced a technical specification for tiling on Topfloor slabs which is available on request from Topfloor.

On car parks a Ref. 193 mesh** must be placed in a structural topping of not less than 50mm thickness to help spread the load from one panel to the next. The screed can be left rough to suit the clients requirements.

In areas with exposed screed a Ref. 100* mesh is required to control shrinkage/drying stresses. These areas would also require adequate movement joints.



PRECAST HOLLOWCORE FLOORS

Where the screed thickness is 50mm or less the mesh should be laid flat on top of the slab and the screed placed on top. Where the screed depth exceeds 50mm the mesh should be placed 20mm from the top surface of the screed.

Providing the above procedures are followed, the screed will adhere extremely well to the prepared surface of the slab. Experience has shown that it is impossible to remove the leveling screed from the top surface of the slab after a few days.

* A ref. 100 mesh is a 4,0mm wire in a square pattern at 200mm centres.

** A ref. 193 mesh is a 5,6mm wire in a square pattern at 200mm centres.

Specifications for the following are available from Topfloor on request:

The tiling of Topfloor slabs

Grouting between joints (generally undertaken by Topfloor)

Structural toppings to enhance the slab capacity

Methods of finishing Topfloor slabs

The Cement and Concrete Institute (Tel: 011 315 0300) have produced a standard specification for sand/cement screeds and concrete toppings for all types of floors. Request a copy from Topfloor.