

Full exposure polished concrete casting requirements

Full exposure- exposure of the medium/large aggregates. The final finish will significantly depend on the placement and any artefacts in the concrete. The floor needs to be greater than a F_F 25 finish. Ideally the class C finish has 80%-90% large aggregate with 10%-20% cement fines and fine aggregate.

For a successful full exposure polished concrete slab;

- The surface should be power floated. (To achieve a surface as pore-free and level as possible, thorough power floating is required).
- The surface should be power troweled moderately.
- Normally, the concrete surface should be water hardened under plastic sheeting for 5-7 days after casting, before it is time to start grinding and polishing after 10-14 days.
- The surface must not be waterlogged when impregnating. (This is to enable the lithium silicate impregnation to penetrate and react with the concrete.)
- It is important that special care is taken to minimise contamination of the concrete such as dirt/building products being walked in or cigarette butts.
- All boot holes must be filled with fresh concrete and not just filled in with slurry as this will leave footprints in the surface which cannot be ground out.
- The screed should also never rest or be excessively pushed into the surface as this will also cause the aggregate to be pushed down and this cannot be fixed later.

Important Note:

The more the concrete surface is worked the further down the aggregate will be pushed. It is important that the floor is level as this will affect the amount of stone that is exposed. A very poorly leveled floor will require significant grinding, even with significant grinding all artifacts may not be able to ground out.



PCCA Position Statement #9

Full Exposure Polished Concrete - Class C



Polished Concrete Council of Australia

CASTING

For the floor to have a uniform appearance, the casting is of the greatest importance. (A poorly cast floor will be costly to grind, and even if the function of a polished floor can be achieved, the finish will be affected by uneven aggregate, cracks, etc.) The appearance of the finish is totally dependent on the concrete's appearance. Colour differences in the surface are to be expected. It is important to protect the slab during the building process from spills and staining as these cannot be removed.

www.pccaaustralia.com.au