



Uniformity of Aggregate exposure

Aggregate exposed when grinding a slab will be random in size and location, varying with placement techniques, curling and flatness. Random exposure is beyond the control of your contractor and it is inherent and unique to the concrete. Attempts to achieve uniformity by grinding deep, where aggregates are ground below their equators can cause slab damage due to aggregate pop outs. Acceptable aggregate exposure is up to 0.5 times the diameter of the mid-size aggregate in the mixture. (ref ACI 310R-13)

Existing or Old Concrete Options

Polished concrete can be achieved on most existing concrete slabs. Proper evaluation is necessary to determine what considerations will affect the polishing process and outcome for the intended use of the floor. Concrete is often polished in renovation projects. Over the years, concrete is exposed to many elements that can leave long lasting scars. When walls are moved, floor coverings are placed and removed, or the concrete surface abused, there may be areas that need to be addressed during the polishing process.

Some common considerations include:

- floor use history to consider possible contaminants
- existing floor covering removal including coatings, curing compounds, adhesives
- floor moisture levels
- penetrations or bolts
- cracks
- slab porosity and hardness
- slab curl
- flatness and levelness
- joint treatments
- artifacts/contaminants on the floor like oil or rust marks.
- presence of walls, corners and fixtures such as doors and cabinetry.

Based on these considerations your contractor will recommend the best type of polished concrete. If the floor is not flat then full exposure is most likely needed, if not there maybe sections of the floor that isn't polished. If there is lots of staining this may not be able to be removed. If the floor is not hard or has high porosity it may need to be sealed with a topical sealer rather than diamond polished.



Polished Concrete Council of Australia

