



877.917.4463

Questions?
Contact us for
guidance regarding
our recommendations.

Best Practices

Concrete Finishing For Polished Flooring

The final look and function of a polished concrete floor finish relies on a correctly poured, placed, and finished concrete slab. **How well proper best practices are followed, and how the slab is finished by the placement contractor directly affects the finished product.**

It is imperative for concrete finishers and polishers to work in partnership to create a functional, to-specification finished concrete floor.

Concrete placement & finishing companies quite literally lay the foundation for the polishing company's finished product.

Polished concrete involves removing the paste cap of the slab and sometimes grinding further to expose aggregate as specified. What is seen on the surface of a finished concrete slab prior to grinding is not what the finished polished floor will look like.

Deficiencies in placement and finishing will result in issues that cannot be mitigated by grinding and polishing the concrete.

How does improper finishing affect the final product?

Consolidation

Poor consolidation results in multiple aesthetic and function issues in the completed polished floor.

- Honeycombing
- Popouts and holes due to voids under the cap
- Sand streaks
- Weak and crumbling joints
- Delamination
- Inconsistencies in appearance
- Placement lines
- Subsidence cracks

Flatness

Deficiencies in flatness and levelness from placement result in visible inconsistencies and can also create safety issues for the end-customer.

- Visual elevation matching is not a reliable measurement for flatness or levelness
- Bowl effect from low spots
- Safety and function problems from uneven, unlevel slabs
- Ff & Fl also affect the correct placement of carpet, tile, and other floor coverings

Edge Finishing & Joints

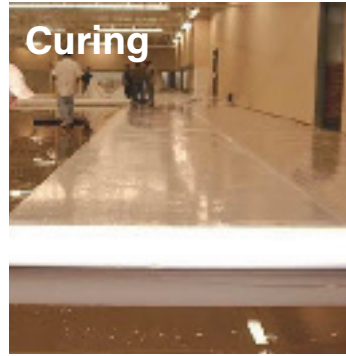
Poorly consolidated and finished edges and joints also cause visible inconsistencies and floor defects are potential safety hazards.

- Finishing should extend all the way to the edges of the surface to ensure uniformity
- Poor edge finishing also impacts the Ff and Fl of the slab
- Use machines on the edges and cold joints to ensure proper consolidation

Placement & Finishing Recommendations

Polished concrete improves the overall aesthetic and function of concrete slabs. While it is possible to mitigate some issues through polishing, finishing issues generally cannot be remedied with grinding or polishing.

Using proper finishing procedures with the right equipment will result in the best possible polished finish for the end customer.



Best Practices for an Optimal Final Product



Use of laser screeds are recommended for optimal slab uniformity. A laser controlled screed ensures slab uniformity and flatness, and enables accurate leveling and vibrating of the slab.

- Vibratory screeds should be used with screed poles to assist in achieving a level result. Attempting to visually match elevations to forms or previous passes will result in poor Ff readings and inconsistencies in the finished floor surface.
- After screeding, it is highly recommended to bull float the surface to ensure uniformity of the paste cap, and proper consolidation. Take care when bull floating to avoid drag marks and divots that can result from the process.
- Be sure only white non-marking tires are used in construction.



Floating and finishing are key components of a well-prepped floor. Ensuring aggregate is properly embedded for polishing, as well as the removal of imperfections and voids are key to properly preparing a slab for future polishing.

- Avoid drag marks and divots by taking special care when floating
- Finishers and polishers should communicate during placement to minimize grinding steps during the polish process
- Avoid hand-troweling during finishing, as this process is much less precise than utilizing equipment for finishing and does not leave a consistent finish
- Use teflon blades when troweling, as metal blades can mark the floor, requiring additional grinding, additional cost, and a less-than-desirable final product
- Be sure to begin troweling at the appropriate point during curing to ensure floor uniformity

Curing

Curing procedures impact the final polished finish.

- When using a cure & seal product, the sealer should be dissipating, applied lightly and consistently, without any puddling
- Cure and seal should be applied exactly to manufacturer specifications, immediately upon final finishing
- If polish is the final result desired, consult your polisher for recommendations for the best cure & seal product.
- Proper curing procedures for concrete prepare the slab for polishing, and help to produce a superior result
- When wet curing, use water-cured, synthetic blankets
- These are organic & dumpster-friendly

Damage Prevention

Protect the slab throughout construction. Unprotected concrete slabs suffer major damage from construction, which will negatively impact the final finish.

- Floor should be void of metal debris, including nails, screws, and other construction materials. Metal will leave rust stains that penetrate further than grinding can reach
- Diaper all equipment to prevent oil and hydraulic fluid leaks. These will stain the floor and are nearly impossible to remove
- Prevent damage from screws, nails, and other construction materials
- If fluids are spilled, clean up immediately
- Do not perform any sawing, cutting, or related tasks on the concrete slab to prevent damage
- Slab should be swept of materials that can abrade the surface
- Do not store any materials on slabs that are less than 28 days after pour. Permanent shadowing will be left in the shape of materials on the surface

Visual Examples

Take a look below to see the result of poor finishing processes & quality issues that cannot be remedied with grinding & polishing.

Poor Consolidation Causing Delamination



Delamination and voids after grinding due to poor consolidation



Flatness Deficiencies

Poor leveling and consolidation results in wavy appearance



Trowel Marks

Improper troweling, and using metal blades can burn permanent marks

Poorly Finished Joints



Poorly finished joints resulting in crazing, cracks, and delamination



Poor Floating

Incorrect placement and floating of aggregate leads to inconsistency

Poor Slab Protection



Lack of protection after placement can leave permanent damage



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