

NEW CONCRETE POURS

The correct placement methods of the concrete slab are important for us to provide our customers with a great finished floor. The following are guidelines for pouring new concrete for a DANCER floor installation. Finishing procedures should be consistent with the information provided in this document.

THE MIX

To help control moisture migration and vapor emission problems on interior concrete floors, a proper, commercially-specified vapor barrier must be in place before the concrete is poured. This is standard for all of our warranty claims.

- An additive to remove moisture in cured concrete such as "Barrier One" or "Concure" has shown no
 adverse effects on floors that will be polished and may be recommended for slabs that will be
 epoxy-coated. Any warranties or claims resulting from moisture would be carried by the manufacturer of
 the admixture. Do not apply any curing compounds to the floor if using an additive like this.
- Fibers in concrete are not recommended for our StrongTread Modern polished concrete finish; if fibers are used, we recommend choosing our StrongTread Classic or Deep finish with an added grout coat. Read more on our blog about Fibers in Concrete.
- Pozzolans, or cement replacements, may also affect the ability to stain the concrete. Pozzolan load should be under 10% of total cement content.

POURING - PLACEMENT - FINISHING

Concrete should be placed, floated, and smoothed per ACI guidelines. The surface should be power-trowelled smooth until there are no ridges, trowel markings, or textured spots left on the surface to attain the desired finish. Some burn marks are acceptable and favored rather than ridges.

- The edges of the slab and around drains should be finished to the same flatness and standards as the rest of the slab. Finishers should be cautious not to leave any ridges or textured spots on the surface.
- For concrete that will be the finished flooring surface, form control joints using an early-entry power saw using a dry-cut blade. Attach a vacuum to the saw to remove saw-cut residue. The early-entry saw will minimize out-of-joint cracking due to delayed sawing, but the residue must be removed and not allowed to accumulate below the skid plate, or the concrete will be discolored when cured.
- Keep the water-to-cement ratio low. Overwatered concrete can "pop" the surface of the concrete over time.
- Any blemishes left in the concrete as it is being placed and through the finishing and curing process may show in the finished floor. These include boot prints, power trowel marks, blanket marks, etc.

CURING

• Acrylic curing compounds should not be used on the concrete as this will need to be removed before any of our processes – which requires more time and, subsequently, more money.

- A wet cure method will allow the concrete to gain the required strength. If this is not available, we recommend a clear, water-dissipating curing agent, such as WR Meadows 1100-Clear or another compatible product.
- Concrete naturally shrinks as it cures. This can cause cracking, map cracking, or curling of the slab. It
 can also result in height differences between the slab and column pads. These expectations must be
 communicated to the placement contractor and Owner for any additional work required to grind down
 curled slabs or repair cracking. The additional work to correct these items can be performed by
 DANCER, but is not budgeted in our proposal unless specifically listed. Different aggregate sizes
 should be expected in these areas.
- When pouring in colder climates, blankets are sometimes used by the placement contractor. Blankets
 will leave curing marks on the surface. If these are used on a minimally processed concrete floor, the
 marks will stay. Some options exist to remove these marks by grinding deeper into the surface. An
 on-site sample can confirm this.

STAINS OR DYES

- When pouring in colder weather or needing a fast setting mix, only a non-chloride accelerator should be used. Calcium accelerators should not be used as this can affect the stain's color.
- If the concrete pouring will take multiple days, or the stain is applied at different times or applications, the client should be informed and understand that the stain will look different from each pour/application.
- Placing items on the concrete surface before the slab has fully cured can result in ghosting and discoloration, which cannot be fixed by our polishing or staining processes.

TERRAZZO

- For terrazzo patches, concrete should be pinned to the surrounding slab and poured level to a height of ½" below the surrounding terrazzo floor.
- For new concrete that will receive a terrazzo floor, a moisture mitigation plan should be included in the planning/design process.
- Control joint and cold joint placement should also be taken into consideration as the terrazzo divider strip layout will need to follow all joints.

EPOXY

For standard epoxy flooring installations to begin, the relative humidity in the concrete must be below 75% RH. These readings are taken by DANCER using Wagner RH Meters. All standard epoxy floor installations must be below 75% RH or use an appropriate Moisture Mitigation system below epoxy flooring.

- For official ASTM standard testing, a 3rd party should be brought in and the installation can proceed per their recommendation. The owner or General Contractor is responsible for all costs associated with testing.
- Moisture mitigation systems can be installed for an additional cost and increase your DANCER floor warranty to 5 years.

PROTECTING DURING CONSTRUCTION

Concrete needs to fully hydrate and reach its required strength before our work begins. Work on new concrete slabs can typically take place 3-4 weeks after initial concrete placement. On some installations, we may do a pre-grind 5 days after the pour. Each flooring system requires different cure times, please ask your Project Leader for your specific project. If you have trench patching as part of your remodel project, please contact your Project Leader to discuss best practices.

- Marks left by curing blankets and/or building materials may ghost or shadow in the finished floor.
- If the concrete will be covered during the curing process, we recommend using a heavy-duty construction grade cardboard, like Ram Board, taped together with a breathable seam tape. Follow manufacturer's instructions for installation.
- If the new floor is to be used during the curing period, some extra precautions must be taken. This may include installation of a protective barrier, like Ram Board, and informing other trades to care for the concrete. We recommend hanging signs around the job site to communicate with others that the concrete will be the finished floor.
- Oil will always leave permanent stains on a finished concrete floor. Any lifts should be inspected daily
 for leaks. If leaks are found, the equipment should be repaired or removed from the job site. Tires
 should also be inspected for rocks, screws, or other debris that can cause scratches or divots in the
 concrete surface.
- Any spills should be cleaned up from the surface immediately, even if floor protection material is used.
 Any soiled floor protection should be replaced as needed.
- Do not allow any pipe cutting operations to be completed in areas that will receive polished concrete flooring.

PLANNING WELL

Due to the nature of various concrete placement companies and standards of work, some proposed systems may not be available if proper pouring and finishing is neglected.

- The joint filler manufacturer requires waiting 60-90 days from the pour and, at minimum, 7 days of temperature controlled environment before filling control joints. This prevents the joint fill product from cracking when slab shrinkage occurs. This timeline is not available for many projects. If joint fill needs to happen before proper acclimation, cracking along control joints is normal and can be repaired once the floor is acclimated at additional cost.
- Efflorescence is caused by mineral salt deposits that have been brought to the surface with water; when the water evaporates, it leaves behind a mineral residue of salt. Our polishing and densification process reduces this effect, but this may appear in recently acclimated spaces. If a proper vapor barrier was used in the concrete pour, this will go away in time with routine cleaning. Efflorescence may cause a dulling of the floor or disintegration of the finish coat. More information on efflorescence can be found on our blog post about The Risks of Building Fast.