4 REASONS WHY YOUR CONCRETE IS TAKING FOREVER TO DRY
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Your whole project likely revolves around having dry, functional concrete.

As a general contractor, you have a timeline you need to keep. But rushing that timeline will only jeopardize the integrity of your work and create bigger problems down the line.

If you’re the flooring installer, you may not have poured the slab, but when you put your flooring on it, that’s your reputation.

The temptation may be to skip the precautionary measures and power through to reach your short-term goal of completion, which would be a disaster.

But you don’t have to choose between sticking to the schedule or producing quality work—you can have your cake and eat it too.

When you identify these 4 reasons why your concrete isn’t drying properly, the solutions become clear.
The first step to solving the drying issue is understanding the difference between curing and drying. They are completely different processes in the lifespan of concrete.

"‘Curing’ is the chemical reaction that creates the agglomerate better known as concrete, while ‘drying’ is the loss of water not needed to hydrate the cement." - Interior and Sources

Curing is the actual process the mix goes through to become concrete. And that will happen no matter what.

**HOW LONG SHOULD CONCRETE TAKE TO CURE?**

In general terms, slabs set in 24 to 48 hours and are hard enough to walk on at that point.

But that’s only the first step of the curing process. For the concrete to substantially cure, it typically takes up to 28 days, but in reality, the concrete can continue to cure for much longer.

**HOW LONG SHOULD CONCRETE TAKE TO DRY?**

Drying the concrete is a little more nuanced. Unlike curing, drying won’t happen “no matter what.” Conditions have to be consistent and reasonable for your concrete to dry.

So, what are those conditions and how do you get them perfect? ■
THE 4 REASONS WHY YOUR CONCRETE ISN’T DRYING PROPERLY AND WHAT YOU CAN DO TO FIX IT
WATER/CEMENT RATIO IS NOT CORRECT

An imbalanced water/cement ratio only adds time to the project. Too much water in the mix can increase drying time. Most experts would recommend keeping the W/C ratio to 0.50 or less.

Double-check the amount of water added to the mix to make sure you’re not over-pouring. A good rule of thumb is to use a lower water/cement ratio in the mix to prevent oversaturation.

UNFAVORABLE DRYING CONDITIONS AND/OR OVER-FINISHING OF SLAB

Be sure not to over-trowel or seal the surface. This can block the pores in the concrete and diminish moisture evaporation, which increases drying time. Ambient conditions also have a huge impact. If the conditions around the concrete slab aren’t monitored, the time it takes to dry could be longer than necessary. Use environmental controls earlier in the project to create an ambient environment that is conducive for drying. Aim for consistent, reasonable temperatures and low relative humidity.
LACK OF OR IMPROPER VAPOR BARRIER

Concrete slabs need vapor retarders underneath to keep moisture from penetrating the slab from below. Without proper installation of a vapor retarder, groundwater will naturally seep through the porous concrete.

If there's nothing to minimize water intake underneath, the slab may never have an opportunity to dry.

UNREALISTIC EXPECTATIONS ABOUT DRYING SPEED

Concrete can take a surprising amount of time to dry, even when ambient conditions are ideal. Although drying times can vary widely, the general rule of thumb is one month of drying for every inch of slab thickness. It is important to maintain realistic expectations and allow enough time for drying to occur.
Understanding the science of how concrete dries is important. It can also be valuable to have data logging. With the Rapid RH L6 system—the most advanced data logging technology available—storing your data is easier than ever.

With the Rapid RH L6, there are two battery-powered devices that automatically log data: the DataGrabber® and the DataGrabber with Bluetooth®.

The Rapid RH L6 pairs perfectly with the DataMaster™ L6 app to collect and store your data. The app runs on any iOS or Android device and can connect with the DataGrabber with Bluetooth or the DataGrabber using the Total Reader®.

Protect your job and have peace of mind with Wagner’s Rapid RH L6 system.

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