WHAT IS THE SELF LEVELLING

<u>Self-leveling</u> concrete can be a fast, cost-effective solution to the problem whenever you need to repair, smooth, or raise a floor.



Self-leveling concrete is a cementitious mixture much like concrete. But unlike concrete, it flows easier and sets up much faster. The product is mixed with water, pumped or poured into place and spread evenly with a gauge rake.

Depending on the product, it may be smooth and flat within 1-2 hours. In about 6 hours, it may be completely hardened and ready for use, depending on the flooring material being installed on top. we are using them as an underlayment for tile, carpet, or other floor coverings.

Now, let's clarify some things concerning product names. Instead of "concrete," you might see products called "self-leveling underlayment." This name means the same thing as "self-leveling concrete."

Self-leveling concrete can be poured as thin as a quarter of an inch, just enough to smooth out small imperfections if that's all you need. But if the concrete floor has low spots and needs to be smoothed even more, it can be poured as thick as an inch and a half without adding aggregate and 5 inches with the addition of aggregate (though make sure you follow all manufacturer's guidelines).

If you find moisture is a problem in the slab, you need to get a professional to handle the moisture remediation. You can also visit the <u>International Concrete Repair Institute (ICRI)</u> for more information on next steps or to find an expert to help.

Installing Self-Leveling Concrete

7 Tips for a Better Concrete Installation:

- 1. Read and follow the manufacturer's instructions to the letter. Don't skip or skimp on any step. And if any of these tips conflict with the instructions, go with the manufacturer's process instead.
- 2. Buy more product than you need. A difference of a fraction of an inch thickness can mean several bags of product. You have to finish the job in one pour so you can't go back to the store for more.
- 3. Have all your tools and supplies ready. Once you pour, you may only have about 10-20 minutes to work.
- 4. Keep your leveler product <u>dry</u> store the bags indoors and up off the ground.
- 5. Do not mix product in extremes of heat or cold.
- 6. Do not add water to the product while spreading it. The mix ratio is critical.
- 7. Be careful not to pour more product than you need. If you do, quickly and carefully scoop it up into a bucket and remove it.

Where we use Self-Leveling Concrete?

Let's say you're upgrading an old, damaged concrete floor that's settled or cracked. Or maybe you're installing a radiant heating system in a floor. Maybe you're building an addition and you need to match the floor to the floor in an adjoining room. Maybe you're finishing a basement where the floor is rough and uneven concrete.

Other concrete toppings applications include warehouse floors, light industrial applications, retail stores, and institutional facilities. Concrete toppings can also receive pigmented color dyes, stains, saw cuts, or mechanical polishing to produce a decorative concrete finished wear surface.

Preparing to Use Self-Leveling Compound

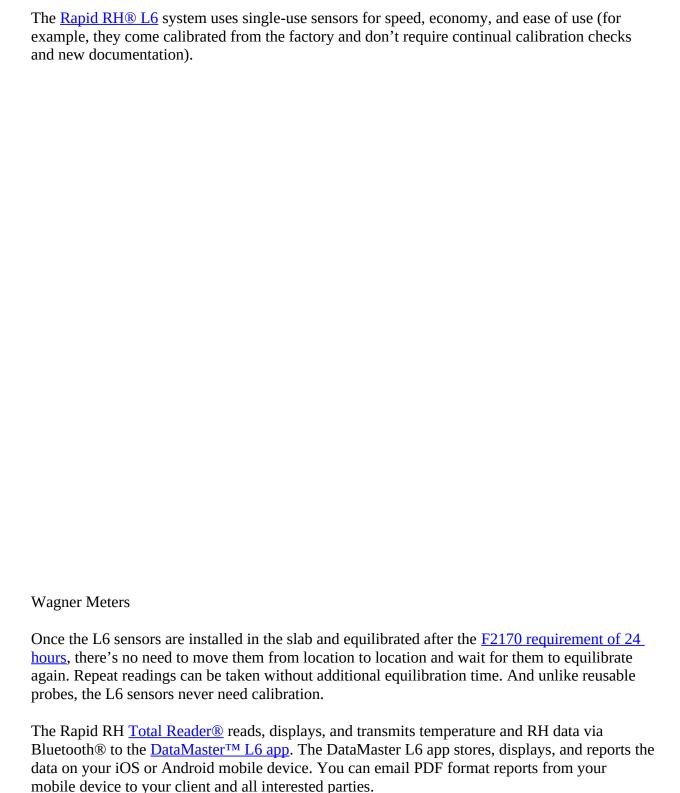
Before installing your new floor, there's an essential consideration you need to address: moisture in the existing concrete floor. All concrete contains moisture, and if the moisture level is too high, it may cause the leveling compound to degrade over time. So you need to test the slab to ensure the moisture level is not too high.

This isn't something you can do just by looking at the slab. No matter how the slab looks, moisture deep in the slab can migrate to the surface over time and cause serious problems. If the moisture level deep in the slab is too high, you need to take steps to remediate it before you can pour your new concrete floor.

https://youtu.be/vc_5eAKILiY

This is a well-known problem with a well-known and scientifically proven solution. The way moisture moves in a concrete slab has been studied since the 1960s, and researchers have developed a scientifically proven test for measuring moisture levels deep inside a slab.

RH testing is the basis for the ASTM F2170 standard. This standard governs the processes of obtaining results using in situ probes in concrete slabs. Despite the complex terminology, this test method is actually very easy and much faster than you would think.



1. Shop vacuum, broom, and mop

Here's a list of what you'll need to do the job:

- 2. Mixing buckets or barrels, as large as you need (6-gallon minimum)3. Mixing drill and mixing head
- 4. Gauge rake5. Cleats
- 6. Kraft paper or plastic sheet7. Silicone caulk
- 8. Leveling product and primer