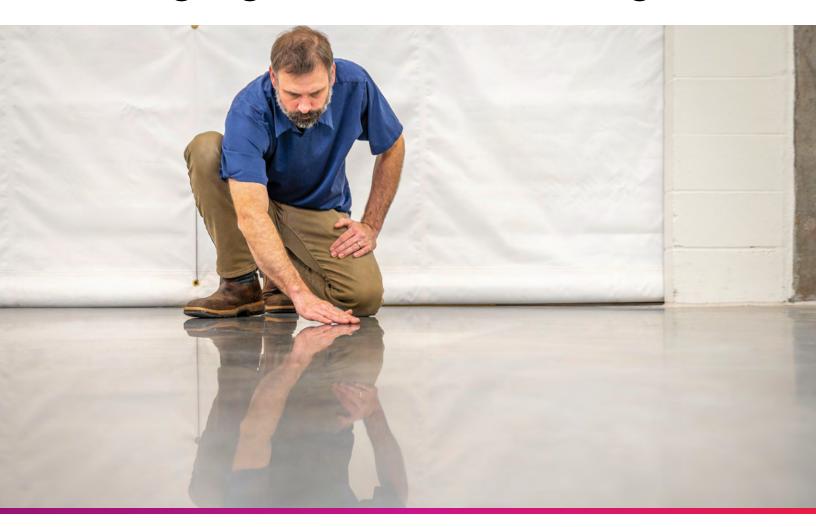


Exploring the trend toward concrete floors in commercial facilities

Some concrete facts about managing concrete flooring



As a floor material in food service, healthcare and many other facilities, concrete is growing in popularity. Patrons are far more aware of their surroundings. They no longer worry about just surfaces that are touchable by hand. A floor that appears unkempt is an unmistakable signal that countertops and other surfaces might not be adequately clean.

Most importantly, floors that are difficult to clean can actually harbor dirt and microbes. Concrete floors typically provide a flat, simple surface where there can be literally no place for dirt to hide. It's also surprisingly affordable to maintain and looks fantastic!

The evolution of concrete as a flooring material

Bare, gray concrete used to be the only option – and not a very attractive one – for floors. Now, there are several ways to beautify it for the overall experience of a facility.

Sealed concrete

First, concrete floors can (and should) be coated with a quality sealer that resists moisture. Sealers can actually provide shine and create new shades that can help bring facility interiors to life even if it's just the basic concrete surface. Concrete can also be dyed specific colors before it is poured.

Stained concrete

Concrete floors can be stained to create custom colors and ambiance within the facility. Stained concrete should also be sealed with a water-based sealant for protection.

Polished concrete

Polished concrete floors are especially popular, as they can convey the professional, "just-cleaned" look of more traditional flooring like terrazzo, vinyl tile composites, quarry tile and carpeting

Concrete is densified during the polishing process, so polished concrete is also extra durable without the need for a finish or a sacrificial surface such as wax.

An added benefit: concrete is a great way to connect the exterior and interior of the facility. The material that is generally installed for utilitarian purposes outdoors can be stained, dyed or polished to create a smooth but distinctive transition from outside in.

Saving money before and after installation

Concrete has a built-in advantage as a flooring material: it is already very common to building in general. Most building foundations and subfloors are made from concrete, meaning that the floor can be specified and priced at the same time without worrying about price fluctuations that can occur with higher-cost materials like marble, terrazzo, hardwoods or luxury vinyl tile (LVT). Installation of concrete is also inclusive of labor; instead of paying for hardwoods or other flooring material, it's often possible to simply finish or polish an existing slab or install a concrete overlay.

Sometimes concrete can carry the perception of cold, hard and impersonal. However, concrete has excellent thermal mass – when exposed to regular sunlight, it is



great at absorbing and storing heat. Furthermore, it slowly releases this heat at night which can save substantially on energy bills in colder climates. Concrete also absorbs cool air, which helps save cooling costs during the day. It is especially efficient for the cost-effective installation of radiant floor heat (either from electricity or water) when poured over existing concrete slabs.

Concrete and the environment

Sustainability is always top-of-mind in building design and maintenance. The main environmental concern about concrete has been that the production of cement, the main ingredient in concrete, is very CO₂-intensive. The Global Alliance for Buildings and Construction points out that by 2060, concrete is expected to contribute 12 per cent of global greenhouse gas emissions.

But there's a big story happening behind the suitability of concrete for current and future facilities. The <u>Global Cement and Concrete Association (GCCA)</u> has created a roadmap aimed at achieving net zero concrete by 2050. Concrete also requires less energy to produce than other types of flooring, and is reusable and fully recyclable.

Cleaning concrete floors

Concrete floor cleaning is relatively easy when compared with cleaning other types of flooring. There are no grout lines as quarry tile has where hard-to-reach dirt can accumulate. They often require sealant, but a proper seal resists soil and stains – unlike common acrylic coatings, which can trap and hold dirt until messy strip-and-recoat processes are performed.

As with other flooring types, the frequency of maintenance depends on the amount of traffic it receives. But the usual cleaning protocol is fairly routine. Concrete is hard, so a simple dry or damp mop, vacuum or sweeping can immediately take care of spills or debris concentrated in one area. Quick, small-area cleaning can also be done with a steam mop, or simply warm water and dish soap.

If concrete is natural (i.e. not stained or polished), the best cleaners are either alkaline (high-pH, such as baking soda or borax) or pH neutral (pH of around 7). This helps protect the floor from dirt and stains without damaging the floor itself. For common acid-soluble stains like minerals, mildew and rust, acid-based cleaners can be used when properly diluted. It is not advisable to use acids such as muriatic acid if the floor will be stained later.

Low-pH cleaners are not recommended for stained, sealed concrete as they can damage the sealant material as well as the floor.

Though concrete is quite resistant to moisture and worked-in grime, these substances can be easily spread if the floor is not cleaned daily. Microfiber mop pads are a good solution for quick and regular daily cleaning, as they trap dirt and debris



without depending completely on a rinse. The best floor cleaning pads combine microfibers with durable scrubbing materials like polypropylene that remove stuck-on dirt without damaging the surface.

Some facility managers opt for washable sponges and pads, as they are reusable. But reusable cleaning pads can actually end up costing more vs. disposable pads in extra water and cleaners required for the pads themselves. Disposable mop pads can be quickly changed daily without added time.

Daily cleaning usually involves scrubbing machines with light abrasive pads on low speed, maintaining the polish, and refining small scratches. The best methods include liquid floor cleaners applied with mineral-coated floor brushes. This combination highlights the shine, enhances densification, and reduces the need for heavier (and more costly) burnishing, top scrubbing, and stripping.

Help for a range of cleaning challenges

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