



This CFR is written by Jennifer Faller, LGM's newest associate. Jennifer has 24 years of expertise in concrete flooring. Interior or exterior, decorative or utilitarian, her in-depth knowledge and experience of concrete surface preparation, concrete chemicals-including cure and seals, water repellents, densifiers and coatings, concrete repair, and finally pol-ished concrete, for which she is known world-wide, will be an incredible asset to our clients and to the industry. Contact LGM to put Jennifer's expertise to work on your next project.

So, what is the big deal about Polished Concrete?

As an expert in concrete construction, finishes, and Polished Concrete, I think it would be useful to revisit some definitions and characteristics of Floor Coverings, Concrete Flooring, and Polished Concrete to help sort this out. Specifically, we will discuss how and why Polished Concrete is uniquely different from Floor Coverings and highlight some useful distinctions. And, uncover why Polished Concrete has continued to gain momentum and demonstrate growth, and why industry statistics show that Polished Concrete is now 15-20% of the total "flooring" installed each year.

For decades, most architects, general contractors, and facility owners tended to lump Floor covering/ flooring and Polished Concrete into the same category – usually this was Division 9 (Finishes), because they did not commonly consider the differences. Due to the "flooring" industry's significant efforts to educate (and provide proper specifications to) architects, contractors, and owners, these client groups now (mostly!) categorize Polished Concrete and Concrete flooring under Division 3 (Concrete), right where they belong.

Just as we do for our client base, let us start by defining each category.

Floor Covering and Flooring are terms that generically describe any finish material applied over a floor structure to provide a walking surface. It is common for these terms to be used interchangeably. For this discussion, we will simply use the term Floor Covering.

The working definition for **Concrete Flooring** is an exposed concrete floor that provides a flat, durable finish and walking surface; it can appear utilitarian or architectural, depending upon the installation techniques and the finishing processes.

Some back story: for the greater part of a decade, Architects and Specifiers called out "Polished Concrete" as a type of flooring, but at that time, the product & process had no real standards. Contractors were bidding a variety of processes that looked like shiny concrete, such as waxing, installing clear epoxy or acrylic sealer, or in some cases, even grinding, honing, and polishing a concrete floor (the real deal). These floors produced dramatically different results and square foot pricing, ranging from \$0.50/square foot to \$7.00 or more per square foot Imagine the confusion about **Polished Concrete**. Imagine the mess! For the real Polished Concrete industry to survive, skilled polishers, technicians, and vendors formed an association, and Polished Concrete became defined and standards were developed.

The industry's association CPC (Concrete Polishing Council) now agrees that Polished Concrete is a process of progressive grinding, honing, densifying, and polishing that refines a concrete surface into an aesthetically pleasing, highly durable, light reflective, dustproof, safe, and functional floor finish.

And finally, the CPC's definition of **Polished Concrete**: it is the act of permanently changing a concrete surface, with or without aggregate exposure, to achieve a specified appearance level. This definition was developed out of necessity! In fact, there are now three subcategories of Polished Concrete as well: Bonded Abrasive, Hybrid, and Burnished Polished Concrete.

It is becoming important for floor covering contractors, designers, site owners, and consumers to learn about what Polished Concrete is, along with its Pros & Cons, for our client base. With an agreed upon working definition of Floor Covering and Polished Concrete, there are many unique reasons why Polished Concrete is so popular and desirable and why is it replacing some of Floor Coverings' normal uses and is an accepted alternative.

A New idea in Flooring (Polished Concrete)

Polished Concrete is perceived as a new idea (flooring option), which it really was back in 1996. Researchers have studied "idea generation" and they explain that ideas go through phases, and so do our clients. Polished Concrete now meets all four of these phases:

1. Make it relevant

Polished Concrete has a certain <u>relevant</u> aesthetic and at the same time a casual attitude that attracts people. Designers are frequently making it their focal point. It can be integrally colored when it is poured, or topically colored during the installation process to bring in an element of color and design beyond gray.

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2. Prove it

Since concrete is one of the most used building materials on the planet, it is frequently already scheduled as part of the building structure; therefore, using what is already there becomes an easy choice, depending upon the use and image they need. Value engineering and sustainability are driving this desire, resulting in greater usage frequency, popularity, and general acceptance. Large box retailers started using it in the late 1990s, and as of last year, TARGET made Polished Concrete into a significant piece of their design concept. TARGET actually resisted Polished Concrete until they had proof that their customers would continue to shop in their stores (without bright white VCT), and it finally gained agreement that Polished Concrete is the right idea for stores like theirs. Their conclusion was that it is saleable.



3. Make it safe

Polished Concrete suggests a shiny floor, so there has always been a safety concern that it would be slippery, unsafe, and frankly, a liability. Since Polished Concrete has been in the mainstream of commercial building floor choices for over 10 years, our clients have learned that it is a <u>safe</u> flooring choice, and that in fact, people slip less for several reasons. One is the visual difference. Ceramic tile or VCT floors remain the same





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Saturday, 12/7 – Monday, 12/9, 2019 www.fcica.com/3-days-CIM • (248) 661-5015 color when wet; since the floor does not wet out or darken, pedestrians cannot readily see the changed condition. Conversely, since Polished Concrete has squillions of pores at the surface which absorb enough liquid to leave a darker area visible, pedestrians can see the change and react accordingly. Extensive research has measured the coefficients of friction on a wide range of walking/working surfaces; results clearly show that Polished Concrete is among the safest of floors, no matter the shine level or aggregate exposure level. This research will be discussed at length in a future CFR (Commercial Flooring Report).

4. Show it is Saleable

Finally, Polished Concrete is <u>saleable</u>, especially since becoming a top choice for the Architecture & Design community and the younger generations. Just last week, two publications in my mailbox featured Polished Concrete on their covers (CB2 catalog and Modern Steel Construction). And recently AMAZON has let it be known that their distribution centers are polished (low sheen), durable, dustproof, and highly functional.

Polished Concrete has now met the criteria of all four phases of idea generation. It's an idea whose time has come, and it has reached a critical mass. It is no longer a question of will it be used; it is more about where, and is it ideal for a particular project?



Along with the many features and benefits of Polished Concrete, it is also important to understand when it is not the answer.

Polished Concrete is permanent, has a unique/natural look, and once installed, it cannot be easily removed. It can be covered with a floor covering or the surface can be physically abraded if a change is required. It is sustainable and may contribute points toward a **LEED** certification. It is highly **durable** and is ideal for high traffic environments due to surface refinement during installation. Additionally, the installation process results in a flatter/ smoother floor and provides greater traction, making it a good choice for vehicular traffic, with less vibration to equipment, fewer employee injuries, and easier level object placement. Polished concrete has a low life-cycle cost due to its permanency, ease of repair, maintenance & cleaning, making it more sanitary (no grout), as clean concrete will not act as a host for mold. Polished Concrete is



breathable, which eliminates the MVER concern; however, it can still experience a temporary side effect from moisture drive called efflorescence which appears as a whitish powder on the surface.

Concrete also has a **high-thermal mass** providing inertia against temperature fluctuations and its ingredients are chemically inert and virtually **non-combustible**, thus concrete does not catch on fire. It also does not emit VOCs during any part of its life cycle, and there is no "new polished concrete" smell. Polished concrete can even be a low-cost installation when in a larger footprint and can appear industrial or aesthetically beautiful.

What concrete does not provide is sound absorption, texture, luxury, incredible variety, warmth, comfort, cushion, design warmth, ability to cover-up concrete problems, controlled manufacturing, or predictable results. By way of example, I was in the airport just last week, and as a man was pushing a woman in a wheelchair, I overheard their conversation. He said "Wow!" with an exerted expression, and she said, "It's harder to push on the carpet, huh?" and then she continued by saying, "...but it is so much nicer than that hard floor."

Polished Concrete is also not well suited for continually wet surfaces, floors that are exposed to harsh chemicals, areas used for containment, spaces that require sound dampening, spaces that must be grounded, walk-off areas, or soft, extensively damaged, or uneven slabs. Floor coverings or coatings will need to be selected for these uses and of course each and every time people simply desire a floor covering.

There is room for all types of flooring and knowing these characteristics and having a well-versed understanding of both floor coverings and concrete flooring (Polished Concrete) will make you better prepared when discussing "which floor product shall we choose" for your next project contributing to your continued success!

Please welcome our newest associate, Jennifer Faller, who is an expert in polished concrete, concrete surfaces and associated concrete conditions. If you need help with a project before or after, with polished concrete or any other flooring, contact us at LGM. We can help and we have the answers.



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- 27. Nylon vs. Polyester <u>https://www.youtube.com/watch?v=VmAhZBRMLsI</u>
- 28. FloorDaily.net: Market Conditions in the Floorcovering Business https://www.youtube.com/watch?v=TkR9mJL6Cbl&t=17s
- 29. FloorDaily.net: Concrete Moisture and Flooring Installation Issues https://www.youtube.com/watch?v=qAsQr97k2MY
- 30. FloorDaily.net: Solutions that Could Solve the Installation Labor Issue https://www.youtube.com/watch?v=vohfpHHJ5Mg
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