

element7concrete

F L O O R I N G

grinding | polishing | scoring | staining | sealing | overlays

DIAMOND POLISHED CONCRETE GUIDE

MY PATH TO HERE:

On January 15th, 2000, I was living in Las Vegas, and I married an amazing girl from Texas. For six years my days were divided between studying math at UNLV and working as a doorman at The Golden Nugget.

When our son was three and our daughter a newborn, I decided I wanted to feed my family meeting a basic human need. Everyone needs flooring, and nothing seemed prettier or more durable than polished concrete. I diligently worked to learn the trade and the science behind it, we moved to Texas, and I went to work by myself at first.

By word of mouth the company grew 1400% over 12 years. Now, a new generation of artisans takes best practices from 1000s projects as a baseline, and our processes evolve. You have a choice for flooring now: element7concrete, or something to throw into a landfill later. Thank you for considering a better way.



Cory Hanneman | Managing Director



TABLE OF CONTENTS

- 3 | We love concrete flooring
- 5 | This is not for everyone
- 7 | Levels of exposure
- 9 | Seeding aggregate

- 11 | Saw cut designs
- 13 | Stain
- 15 | Planning + Scheduling
- 17 | Concrete placement + mix tips



WHY WE LOVE CONCRETE FLOORING

IT MATCHES NEARLY EVERYTHING.

After over a thousand projects, I don't remember one where the customer blew it. Matching stained concrete to wood, granite, etc. is like matching a t-shirt to jeans. It's hard to go wrong.



IT DOESN'T GO OUT OF STYLE.

The first staining projects, done in the 1920's, still look great a century later. Like good design in general, our floors may continue to be relevant indefinitely.



IT IS REALLY CLEAN.

When you clean your concrete floor, you are done. No deep cleaning needed.



IT IS A RESPONSIBLE CHOICE.

Concrete is made from some of the world's most abundant materials: sand, rock and gravel. This is the most environmentally sound choice possible.





WHY THIS IS NOT FOR EVERYONE

IT IS IMPERFECT.

A perfect concrete floor is like a unicorn: I can imagine it, but I no longer hope to see one in person. You should not (look for Unicorns) either.

IT IS UNPREDICTABLE.

You don't get to pick the imperfection you end up with. The color can vary from the sample imagined to the end result. We can control the general direction of the color and we have lots of tricks to swing the color, but even after over a thousand floors, we are occasionally surprised.

IT WILL CHANGE.

Your floor may develop small white spots, dark spots, brown spots, or none at all. If things changing freaks you out, you need to pick something else.

IT IS NOT COMPLETELY MAINTENANCE FREE.

For maximum stain resistance, the stain guard may be re-applied every 2-5 years.

LEVELS OF EXPOSURE



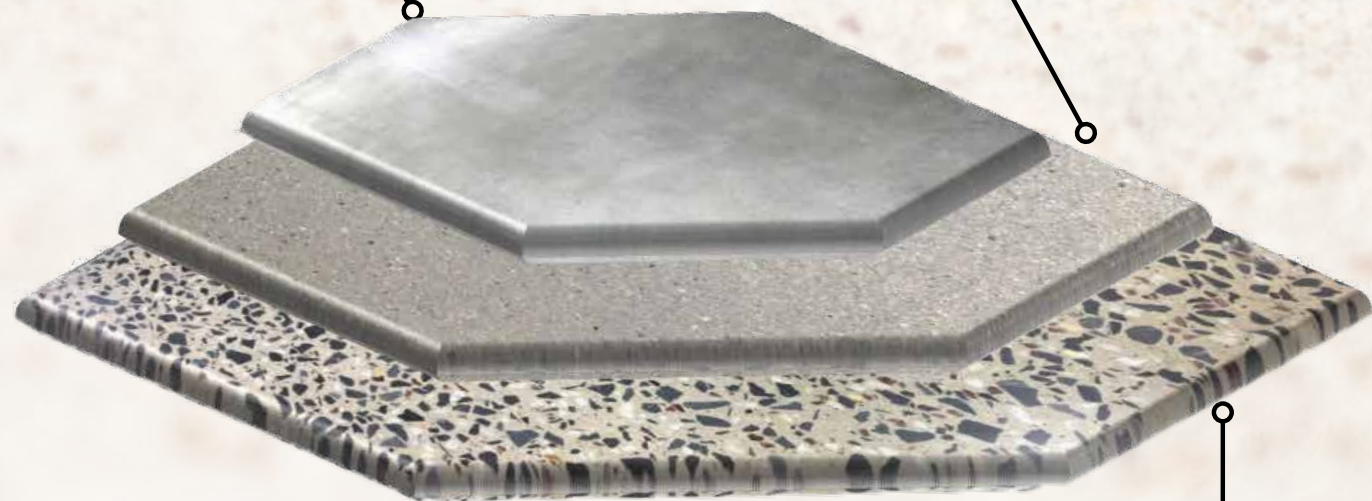
CLASS A CEMENT AND FINE SAND

These floors are imperfect in all the right ways. By starting with an abrasive that is not very coarse, these floors will wear very well, yet just the cement and fine sand show. These floors balance durability with economy and charm. There is something especially charming about high quality without fussiness.



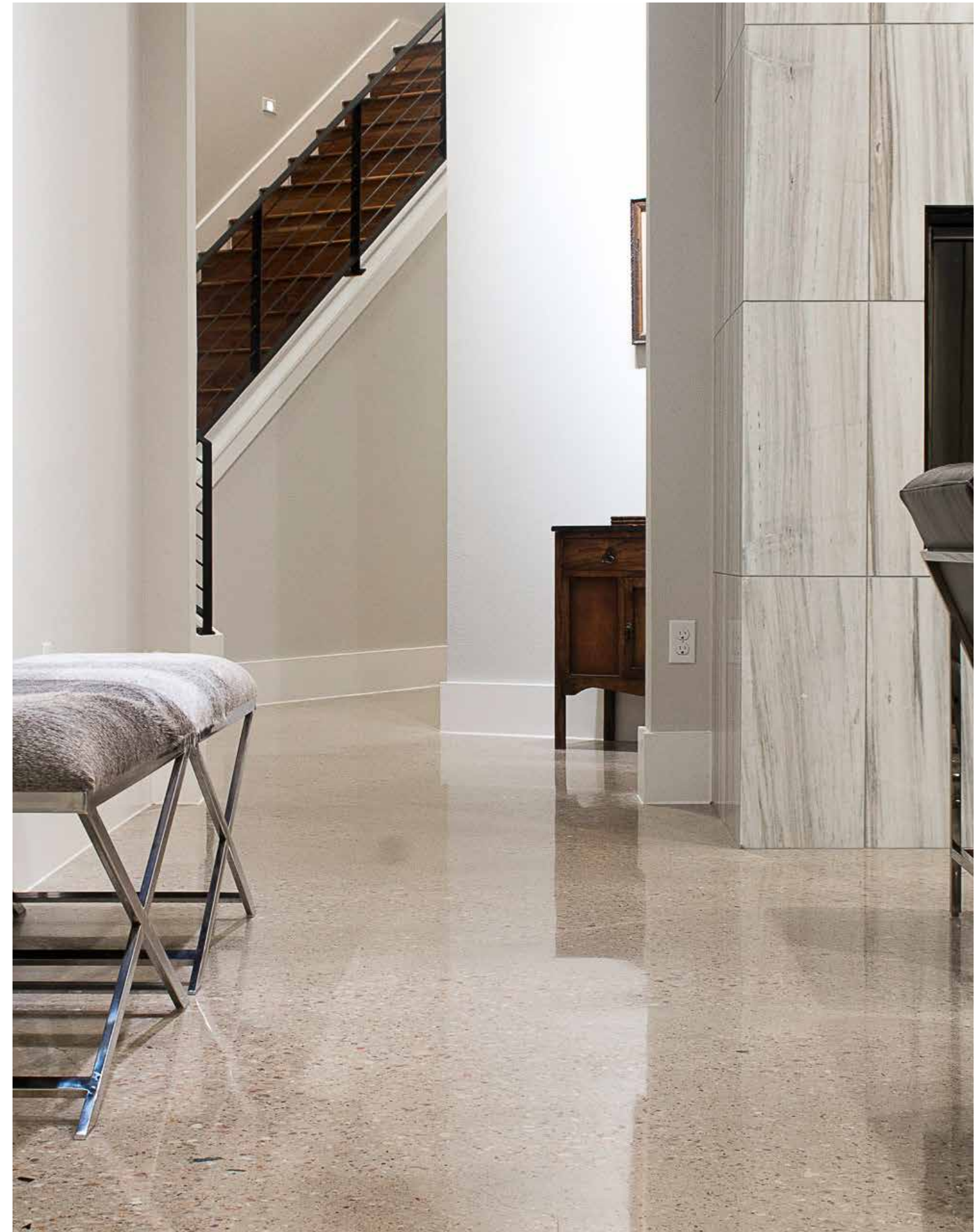
CLASS B FINE AGGREGATE

These floors are ground very flat, and that often allows for a more thorough polishing than Class A floors. They are defined as 85-95% Fine Aggregate with a 5-15% Blend of Cement Fines and Coarse Aggregate.



CLASS C COARSE AGGREGATE

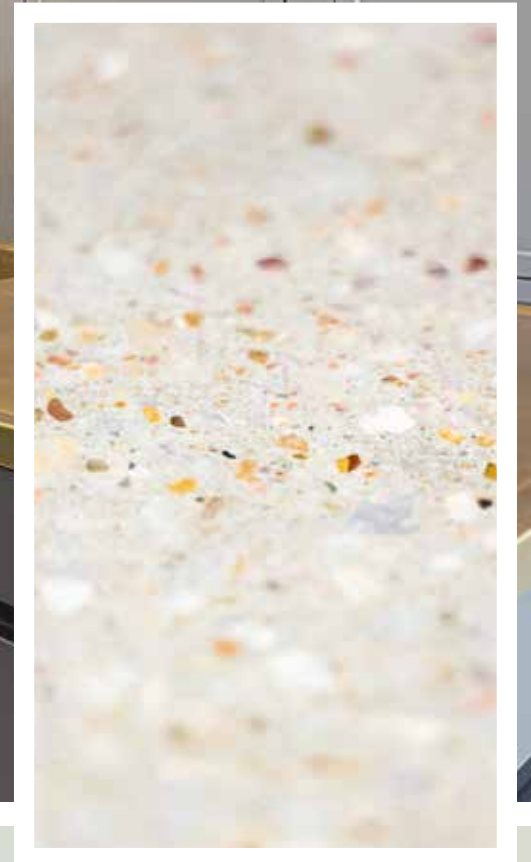
Hundreds of years ago, in Italy, these floors were called *terrazzo rustica*. One difference between our method and traditional terrazzo is consistency. This is because concrete is several inches thick, the rocks may be pushed down more in some parts versus others. That inconsistency might be exactly what makes this so charming. These floors are defined as 80-90% Coarse Aggregate and a 10-20% Blend of Cement Fines and Fine Aggregate.



SEEDING AGGREGATE

SELECTED ROCKS IN WET CONCRETE

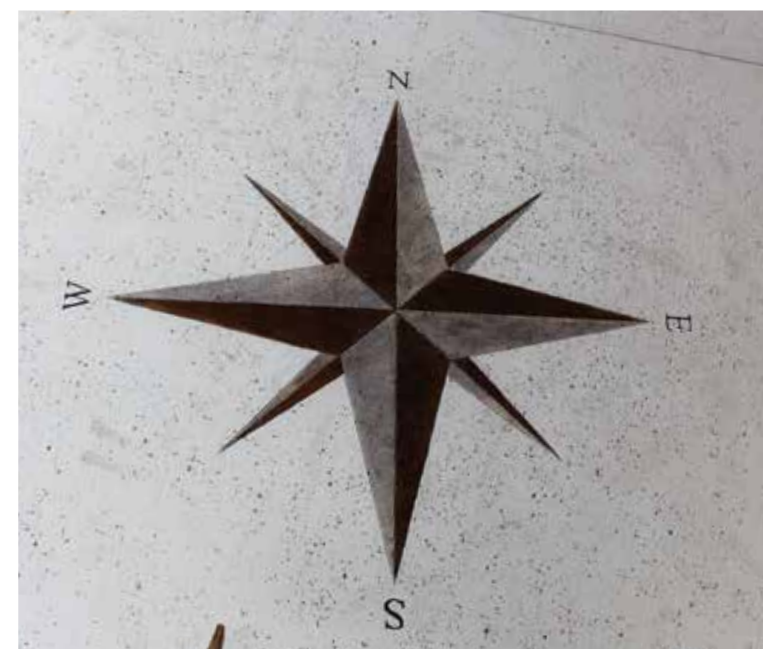
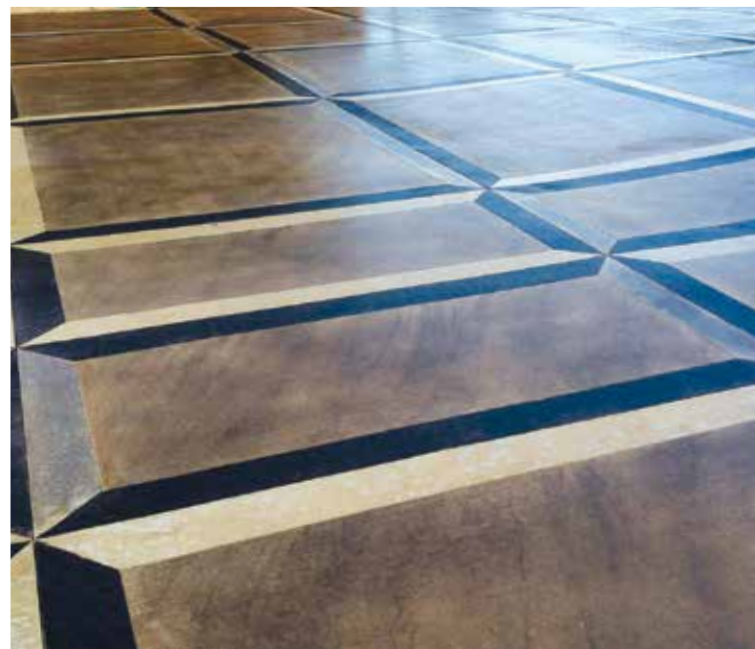
We will help you source custom rocks and stage the concrete pour. A seasoned artisan from element7concrete will be present on your pour day to consult and help guide your placement team. Material cost is passed on without mark-up.





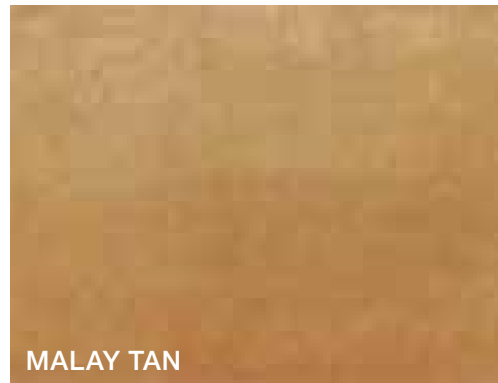
SAW CUT DESIGNS

Saw cutting a geometric pattern gives a great layer of craftsmanship and precision to something that is otherwise organic and random. We have worked out pricing on dozens of designs and patterns and can score anything you come up with into the floor.



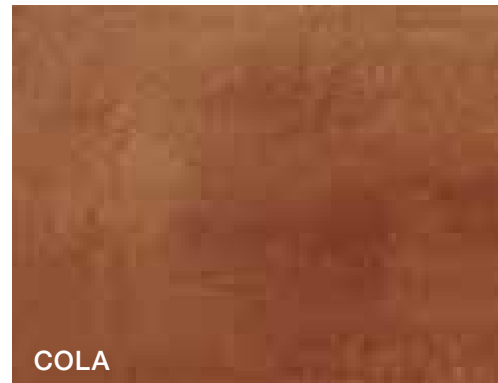
CHEMICALLY REACTIVE STAIN

In 1929, architects in California realized that a rust stain on concrete never seems to go away. When they rebuilt the Ahwahnee Hotel in Yosemite after a fire, they wanted a floor that could not burn, yet was warmer and more inviting than any concrete floor seen before. So, they intentionally rust stained the whole floor. Almost 90 years later, acid staining is still the best way to permanently create warm, interesting colors on cured concrete. The drawbacks are 1.) There are only a few metals that react with minerals in the concrete to create these colors, and 2.) Creating color with a chemical reaction is unpredictable and inconsistent. So, we use penetrating dyes to adjust color of chemically stained floors or to create bold colors or rich gray floors.



MALAY TAN

BUCKSKIN SUED TONE WITH CARAMEL BINDING



COLA

REDDISH BROWN RESEMBLING OLD LEATHER



BLACK

TORTOISE SHELL BLACK WITH BROWN MARBLING



AQUA BLUE

SOFT BLUE PATINA WITH UNDERTONES OF GREEN



ENGLISH RED

TERRA COTTA WITH RUST AND SOFT HUES



GOLDEN WHEAT

AMBER HUED UNDERTONES



GREEN LAWN

SOFT GREEN RESEMBLING AGED ITALIAN MARBLE



VINTAGE UMBER

RICH EARTHY BROWN WITH RED UNDERTONES



WALNUT

RUSTIC BROWN WITH BLACK MARBLING ACCENTS



PENETRATING CONCRETE STAIN

These work like wood or leather stains. In the middle of the polishing process, we dissolve a colorant in acetone and penetrate the concrete with it. We use a chemical floor hardener to help lock the stain in, and the polishing continues: no colorant is left on the surface. The polishing that happens after staining and hardening the floor ensures that the color will not come off over time like treatments other companies install.



PLANNING & SCHEDULING

INTERIOR POLISHED CONCRETE FLOORS

If a floor is to be scored without borders or ground to expose aggregate, that should happen before framing. Staining, polishing, and sealing should happen after the house is 100% dried in, but before installing drywall. If using foam insulation, schedule floor and covering beforehand. That stuff sticks to concrete well enough to require grinding to remove it. Final polish should be scheduled amid the final cleaning as it will make a little bit of dust.

The floor needs to be clean and dry for the final polish.





FRAMING, DRYWALL, TEXTURE, PAINT, TRIM, & PAINTING

Let the framer know that oily or acidic solutions can penetrate untreated concrete and adversely affect how it takes stain. Post signs to prevent spilled cokes, coffees, etc. Use blue chalk and pencil only. Clean up unneeded lines with a wet rag followed by a dry rag promptly. Do not Ramset into concrete for bracing where it will be seen. Slab should be swept daily. Plywood, stacked lumber, sawdust, insulation board, press board, polyethylene (plastic) can draw moisture from slab and cause patterned water stains to slab. Wall plates for doorways and cased openings need to be cut out promptly.

For the cleanest site, install covering over ours before tape, float and texture. That can then be discarded after their work.

Let the trim carpenter know to install on the paper along the edge. We cover with Ram Board in the middle and staple thin paper to the framing so the drywall and trim can be installed with the floor covering intact and the paper can serve as masking for the painter.

Leave the paper or staple new paper to the drywall before installing trim so the painter has masking under the trim without taping.

Remind the painter NOT TO TAPE DIRECTLY TO THE FINISHED FLOOR. See the three previous points. If those are missed, note that this finish is very hard to damage with anything other than tape. Paint easily cleans off of it. If given no other option, use a spray shield and a rag with solvent to fix mistakes.

CONCRETE PLACEMENT & MIX DESIGN TIPS

With woodworking, there are framers, and there are trim carpenters: those are two very different workmen.

Concrete is no different, placement contractors and element7concrete do very different jobs. Just as a trim carpenter doesn't ask much of the framer to finish well, we can work with what we are given. There is nothing special you must request for interior floors with our standard finish. Our enhanced concrete placement services can include integral color, white color hardeners or other options you might not be aware of.

Talk to your concrete placement team. If they are comfortable with high performance installations, (low water mixes with plasticizers over plastic with spray on finishing aids, etc.) that's great. However, if they place great slabs without all of that, let them do what they know best. Order a more cement rich mix on the cap of the interior slab; beams may be placed per engineering plan.

Consider engaging us to work with your placement contractor for pattern stamping, white polished concrete floors, or anything else that requires a high attention to detail. We have a long track record of success there.



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