STRONGTREAD POLISH – DEEP



StrongTread Polish – Deep digs deep into the concrete surface to reveal the large stones used as the building blocks of strength. This system offers consistent, large aggregate as the main finish.

<https://dancer.design/strongtread-polish-deep/>

**Durability.** Polished concrete offers one of the most durable flooring options available.

**Affordable.** Terrazzo-look at a fraction of the cost.

**One-of-a-Kind.** Aggregate is unique to each region and age of building.

**Best-of-the-Best.** Premium polished concrete selection.

**Additional Options**

* Joint Fill. For control joints and cold joints.
* Penetrating Dye or Reactive Stain. Define your space by adding color to your floors.
* Stain Guard+. Further reduce permeability and increase long-term durability.

QUICK SPEC

DANCER, STRONGTREAD POLISH – DEEP

COLOR: TBD BY ARCHITECT FROM MANUFACTURERS FULL RANGE – PENETRATING DYE or NATURAL (NO COLOR)

EXPOSURE: CLASS C

FINISHED SHEEN: SATIN, HIGH SHEEN, or SUPER SHEEN.

Nick Dancer, nick@dancer.design, 260-415-1951

DANCER offers AIA-Accredited Courses for Polished Concrete, Epoxy Coatings, and Terrazzo hosted in your office, our Shop, or online. Please contact us to schedule and for budget pricing, samples, or design considerations.

PART 1 – GENERAL

1.1    SUMMARY

1. Section includes products and procedure for multiple step concrete polishing process for designated area as specified herein as indicated on drawings.

1.2    SUBMITTALS

1. Product Data: Manufacturer’s technical literature for each product indicated, specified, or required.
2. Samples: For each type of exposure, finish or color.

1.3    QUALITY ASSURANCE

1. Field Sample Panels: After approval of samples, produce field sample panels to demonstrate range of selections made under sample submittals. Produce full-scale panels to demonstrate the expected range of finish, color, and appearance variations.
2. Locate panel as indicated or, if not indicated, as directed by the Architect.
3. Maintain field sample panels during construction in an undisturbed location to be used as a standard for judging completed work.
4. Polisher Qualifications: Company experienced in performing work similar in design, products, and extent to scope of this Project; with a record of successful in-service performance; and with sufficient production capability, facilities, and personnel to produce specified work.
5. Manufacturer Qualification: Approved by manufacturer to apply liquid applied products.

1.4    FIELD CONDITIONS

1. New concrete is to be placed, floated and smoothed per ACI guidelines. To attain the desired finish, the surface should be power troweled smooth until no ridges, trowel markings, or textured spots are left on the surface. Some burn marks are acceptable and favored rather than ridges. Concrete contractor, general contractor, and polishing contractor to meet for design meeting prior to pouring.
2. Damage and Stain Prevention: Take precautions to prevent damage and staining of concrete surfaces to be polished.
3. Prohibit improper application of liquid membrane forming curing compounds; vehicle's parking over the concrete surface; pipe-cutting operations over concrete surface; storage of items on concrete less than 28 days old; do not store petroleum, oil, hydraulic fluid, and acids on the concrete, as these may all affect final finish of floor treatment.
4. All flooring to be polished as noted on prints. All polishing to be completed within ¼’’ of wall surface with expectation that floor base will cover this unpolished area. Any areas needed to be polished closer than ¼” to be noted. All inside corners to be completed with an oscillating multi-tool fitted with abrasives to achieve similar results in all hard to reach areas.

1.5 WARRANTY

1. DANCER warrants that material and installation are free from defects and will perform substantially.
2. DANCER’s liability with respect to this warranty covers labor and material of installation for a period of two years.

PART 2 – PRODUCTS

2.1    ACCEPTABLE MANUFACTURES

1. Basis of Design: for products and materials specified StrongTread Polished Concrete Flooring System installed by DANCER, Fort Wayne, Indiana. Products of the manufactures are approved provided compliance with all technical requirements as specified herein:
2. DANCER, StrongTread Polishing System, Fort Wayne, Indiana. Contact: Nick Dancer, nick@dancer.design, 260-415-1951
3. Prosoco, Inc., Lawrence, Kansas
4. L & M Construction Chemicals, Permashine Polishing System, Bethany, Connecticut

2.2 PERFORMANCE REQUIREMENTS

1. Final Polishing Depth of Exposure
2. Aggregate Exposure Class C – Concrete Polishing Council Class C aggregate exposing 80 - 90% coarse aggregate and 10 - 20% blend of cement fines and fine aggregate.
3. Level of Floor Reflection

(RETAIN ONE)

1. Finished Gloss Level 1 – Satin – 400 Grit Finish
2. Finished Gloss Level 2 – High Sheen – 800 Grit Finish
3. Finished Gloss Level 3 – Super Sheen – 1500 Grit Finish

2.3    POLISHING EQUIPMENT

1. Field Grinding and Polishing Equipment
2. A multiple head, counter rotating, walk behind machine with diamond tooling affixed to the head for the purpose of grinding concrete. Excludes janitorial equipment.
3. If dry grinding, honing, or polishing, use dust extraction equipment with flow rate suitable for dust generated, with squeegee attachments.
4. If wet grinding, honing, or polishing, use slurry extraction equipment suitable for slurry removal and containment prior to proper disposal.
5. Edge Grinding and Polishing Equipment: Hand-held machine which produces same results, without noticeable differences, as field grinding polishing equipment.

2.4    REPAIR PRODUCTS

1. Grout Coat: A cementitious based, acrylic modified slurry used to fill in surface imperfections, small cracks and pop-outs on the floor.
2. DANCER, StrongTread Polishing Grout Coat
3. Repair Mortar: A rapid-setting resin-based repair mortar mixed with sand and/or stone aggregate to repair the floor in large cracks, crevices and divots. Product to be colored to coordinate with the final floor color selected.
4. DANCER, StrongTread Polishing Repair Mortar

2.5    STAIN MATERIALS

(RETAIN ONE OR DELETE FOR NATURAL/EXISTING CONCRETE COLOR)

1. Penetrating Dye: Non-film forming soluble colorant dissolved in a carrier designated to penetrate and alter coloration and appearance of a concrete floor surface without a chemical reaction.
2. DANCER, StrongTread Penetrating Dye
3. Reactive Stain: Acidic-based stain with wetting agents and high-grade, UV-stable metallic salts that react with calcium hydroxide in cured concrete to produce permanent, variegated, or translucent color effects.
4. DANCER, StrongTread Reactive Concrete Stain

2.6    LIQUID FLOOR TREATMENTS

1. Penetrating Liquid Floor Treatments for Polished Concrete, Densifier: Clear, waterborne solution of inorganic silicate or siliconate materials and proprietary components; odorless, that penetrates, hardens, and is suitable for polished concrete surfaces.
2. Products: Subject to compliance with
	1. DANCER, StrongTread Densifier

(Retain ONE OR BOTH. Select B to enhance colored or stained/dyed concrete. Select C for areas subject to oils. Select Both for areas subject to frequent spills or stains such as cafeterias. Selecting Both is DANCER’s Stain Guard+ Option.)

1. Semi-Penetrating Stain Guard: A micro film forming material which will penetrate into the polished and densifier concrete leaving a protective surface film.
2. DANCER, StrongTread Stain Guard SPF
3. Impregnating Stain Protection: Non film forming stain and food resistant penetrating sealer designed to be applied to densified and polished concrete.
4. DANCER, StrongTread Stain Guard PSG

PART 3 – EXECUTION

For More Detailed Steps on the Polishing Process for your particular project, please call Nick Dancer with DANCER at 260-415-1951 or by email at nick@dancer.design. Polishing tooling and steps vary depending on job site conditions or concrete. Execution section can be written for your specific job.

3.1 EXAMINATION

1. Verify that floor surfaces are acceptable to receive the work of this section.
2. Verify that flaws in concrete have been patched and joints filled with methods and materials suitable for further finishes.

3.2 GENERAL

1. Apply materials in accordance with manufacturer's instructions.

3.3 PREPARATION

1. Verify that surface is free of previous coatings, sealers, curing compounds, water repellents, laitance, efflorescence, fats, oils, grease, wax, soluble salts, residues from cleaning agents, and other impediments to adhesion.
2. Protect adjacent non-finished areas from damage, overflow, overspray, etc., immediately remove excess material.

3.4    POLISHING

1. All flooring to be polished as indicated. All polishing to be completed within ¼” of wall surface unless noted otherwise, with the expectation that the floor base will cover this unpolished area. All hard to reach areas to be completed with an oscillating multi-tool fitted with abrasives to achieve similar results to surrounding open floor areas.

1. Machine grind floor surfaces to receive polished finishes level and smooth; hand tool around all walls, openings and obstructions as necessary to approved depth of exposure and match approved mockup.
2. Treat surface imperfections with a grout process and/or repair mortar.
3. Apply penetrating liquid densifier for polished concrete in polishing sequence and according to manufacturer's written instructions, allowing recommended drying time between successive coats.
4. Continue polishing with progressively finer-grit diamond polishing pads to gloss level, to match approved mock-up and specified gloss level.
5. Apply specific stain guard treatment to floor and complete final burnishing with appropriate diamond impregnated burnishing pad or buffing pad.
6. Control and dispose of waste products produced by grinding and polishing operations.
7. Neutralize and clean polished floor surfaces.

3.5  PROTECTION

1. Covering: After completion of polishing, protect polished floors from subsequent construction activities with protective covering.
2. Maintenance: To be handled by the Owner. A concrete conditioning treatment detailed in the Maintenance Guide to be followed for best durability.

END OF SECTION 03 35 43