



Polished Concrete Flooring

SYSTEM FAMILY

Decorative concrete / application methodology

TYPE

Mechanically ground & polished concrete

NOMINAL BUILD

surface treatment (densified)

1. SCOPE & SYSTEM DESCRIPTION

This ADS describes POLYZEN's method for **mechanically polished concrete** — progressively grinding and polishing a hardened slab with a chemical densifier to a dense, dust-free, light-reflective surface at the specified gloss level.

Delivered as a **POLYZEN Applied System** using client-approved densifiers, guards and sealers — no POLYZEN branded product is required. This is a grinding / polishing process, not a coating.

2. SUBSTRATE REQUIREMENTS

- A sound, hardened concrete slab (typically ≥ 28 days), suitable for grinding; free of coatings and heavy contamination.
- Aggregate exposure level (cream / salt-and-pepper / full aggregate) agreed with the client.

3. SURFACE PREPARATION

- Remove existing coatings, adhesives and contamination; repair cracks, spalls and joints with matching repair material.
- Plan the grinding sequence, aggregate-exposure depth and joint treatment.

4. ENVIRONMENTAL CONDITIONS

- Work within recommended temperature ranges; densifier and guard applied within their temperature / humidity limits.
- Manage slurry and dust; keep the floor clean between grinding stages.

5. MATERIALS

Materials: delivered as a **POLYZEN Applied System** using a client-approved polished-concrete system — chemical hardener / densifier (lithium / sodium silicate), crack-repair material, stain guard / sealer and (optional) dye as per the project specification and standards. Exact products, consumption, thickness and cure times are per the **selected material's data sheet**. No POLYZEN branded product is required for this system.

6. MIXING

- Apply densifier, guard and any dye as supplied / per their data sheets — no site dilution beyond the instructions.

7. APPLICATION PROCEDURE

- **Coarse grind:** grind with metal-bond diamonds to the agreed aggregate exposure; repair / fill pinholes and cracks.
- **Densify:** apply the chemical densifier (hardener) and let it react to harden and dust-proof the surface.
- **Polish:** progress through resin-bond diamond grits (e.g. 100 → 200 → 400 → 800 → 1500/3000) to the specified gloss level.
- **Guard / seal & burnish:** apply the stain-guard / sealer and high-speed burnish to lock in the sheen.

8. COVERAGE, COATS & THICKNESS

- Densifier, guard and sealer consumption per the selected materials' data sheets; grit sequence per the target gloss (matte / satin / high-gloss).

9. CURING & RETURN TO SERVICE

- Trafficable shortly after the guard / sealer per its data sheet; full chemical hardening continues over days.

10. FINISHING, DETAILING & COMPLIANCE

- Specified aggregate exposure and gloss level; joints and cracks filled to match.
- Slip: measure DCOF (ANSI A326.3) / pendulum (ASTM E303); add treatment for wet areas as required.

11. QUALITY-CONTROL CHECKPOINTS

- Verify aggregate-exposure level and flatness after coarse grind.
- Confirm densifier reaction and each polishing stage before progressing.
- Check final gloss, guard coverage and slip.
- Record grit sequence and ambient conditions.

12. DO'S & DON'TS

Do

- Apply densifier before final polishing stages.
- Progress grits in sequence — don't skip.
- Fill pinholes / cracks for a dense finish.
- Measure slip for wet areas.

Don't

- Don't skip grinding grits (leaves scratches).
- Don't over-expose aggregate beyond the agreed level.
- Don't seal / guard a dusty or damp floor.
- Don't polish over an unrepaired, cracked slab.

13. CLEANING & MAINTENANCE

- Routine dust-mop and neutral-pH auto-scrub; polished concrete is low-maintenance.
- Re-apply guard and re-burnish periodically to maintain gloss.
- Avoid acidic cleaners (etch the surface).

14. HEALTH, SAFETY & ENVIRONMENT

- Silica dust from grinding — use dust extraction / wet grinding and RPE.
- Follow the selected materials' SDS; densifiers are alkaline (skin / eye protection).
- Provide PPE, ventilation and slurry / spill control.

POLYZEN INDIA PVT. LTD.

Plot No. 7 & 8, S V Heights, Haritha Vanam Colony Road, Bachupally, Hyderabad, Telangana – 500090

Phone / WhatsApp: 9640126496 | Email: info@polyzen.in | Web: polyzen.in

Doc Ref: POLYZEN/ADS/POLISHED-CONCRETE

Interim v1 | 2026

Polished Concrete Flooring

Disclaimer: this interim Application Data Sheet describes POLYZEN's typical application methodology for this class of system and is provided in good faith. It is a brand-flexible application guide; exact mix ratios, consumption, film thickness, electrical values and cure times are governed by the selected material's data sheet and the project specification. All parameters are typical/indicative and are confirmed in the project-specific Method Statement and commissioning report. POLYZEN reserves the right to revise this document; the latest version supersedes all previous.