POLYZEN
WHERE SOVEREIGN SURFACES RULE

APPLICATION DATA SHEET
INTERIM

Food-Grade / Hygienic Flooring

SYSTEM FAMILY
Hygienic resin flooring / application methodology

TYPE
Seamless food-safe floor (coved, wash-down)

NOMINAL BUILD
PU cement 4–6 mm / epoxy SL 2–3 mm

1. SCOPE & SYSTEM DESCRIPTION

This ADS describes POLYZEN's method for installing **food-grade / hygienic flooring** — a seamless, coved, easily-cleanable floor for food & beverage processing that withstands wash-down, thermal shock, organic acids, fats and sugars.

Delivered brand-flexibly. The system is selected to the duty: **PU cement screed** for wet-process / thermal-shock areas, or **epoxy self-leveling** for dry / moderate areas — always with integral coving, anti-slip texture and hygienic detailing for FSSAI / HACCP compliance.

2. SUBSTRATE REQUIREMENTS

- New concrete cured a minimum of 28 days; sound and structurally stable.
- Compressive strength typically ≥25 N/mm² and surface tensile (pull-off) ≥1.5 N/mm² (indicative; per project).
- Substrate dry and free of oil, grease, curing compounds and previous coatings.

3. SURFACE PREPARATION

- Mechanically prepare by diamond grinding or captive shot-blasting to a clean, open profile (typical CSP 2–3). Acid etching is not accepted.
- Remove laitance, contamination and unsound material; repair cracks, spalls and joints with compatible repair mortars.
- Assess substrate moisture per **ASTM F2170** (in-situ RH); treat where readings exceed the selected system's limit.
- Vacuum the prepared surface immediately before priming.

4. ENVIRONMENTAL CONDITIONS

- Substrate & ambient temperature 10–35 °C; substrate ≥3 °C above dew point throughout application and cure.
- Relative humidity within the selected material's limits; do not apply in falling temperatures.
- Protect the area from dust, water, direct sunlight and traffic during application and cure.

5. MATERIALS

Materials: POLYZEN food-grade / hygienic flooring system (ZENPU Cretescreed ZP-300 (wet/thermal) or ZENFLOR Pro ZF-300 (dry areas)) — **or a client-approved equivalent** of the specified type meeting the project specification and standards. Exact mix ratios, consumption, film thickness and cure times are per the **selected material's data sheet**.

6. MIXING

- Pre-condition components to 15–25 °C.
- Power-mix resin and hardener to a homogeneous, lump-free consistency; add graded filler/aggregate where used.
- Mix full kits only, exactly as supplied — no site additions of solvent or water. Respect the material's pot life.

7. APPLICATION PROCEDURE

- **Prime / scratch coat:** prime (or scratch-coat for PU cement) to the prepared, anchor-grooved substrate.
- **Body:** apply PU cement screed (4–6 mm, trowel) for wet / thermal areas, or epoxy self-leveling (2–3 mm) for dry areas.
- **Integral coving:** form seamless coving to walls, plinths and equipment bases to eliminate dirt-trapping angles.
- **Anti-slip & seal:** broadcast anti-slip aggregate to the wet-area slip target and seal for a cleanable, food-safe finish; detail drains and falls for wash-down.

8. COVERAGE, COATS & THICKNESS

- PU cement ~2.0–2.2 kg/m² per mm; epoxy SL ~1.5 kg/m² per mm (indicative). Per the selected material's data sheet.
- Falls to drains for wash-down; anti-slip level set to the wet-duty DCOF target.

9. CURING & RETURN TO SERVICE

- Light foot traffic typically ~24 h at 25 °C (indicative).
- Return to service typically ~48–72 h at 25 °C (indicative).
- Full cure typically ~7 days at 25 °C (indicative); cure extends at lower temperatures — per the selected material's data sheet.

10. FINISHING, DETAILING & COMPLIANCE

- Seamless, coved, drained hygienic finish with anti-slip texture.
- Supports compliance with **FSSAI** and **HACCP** frameworks (seamless, non-dusting, cleanable) — subject to overall facility design.
- Thermal-shock & steam-clean resistance where PU cement is specified.

11. QUALITY-CONTROL CHECKPOINTS

- Verify coving, falls and drain detailing.
- Check thickness, anti-slip level (ANSI A326.3 / ASTM E303) and seal continuity.
- Confirm no dirt-trapping angles remain; record ambient conditions.

12. DO'S & DON'TS

Do

- Cove to all walls, plinths and equipment bases.
- Choose PU cement for wet / thermal-shock duty.
- Set anti-slip to the wet-area target.
- Detail falls and drains for wash-down.

Don't

- Don't leave 90° floor-wall angles in hygiene zones.
- Don't use a dry-area epoxy in steam / thermal-shock areas.
- Don't over-smooth wet-process floors (slip risk).
- Don't mix products from different systems.

13. CLEANING & MAINTENANCE

- Designed for regular wash-down and (PU cement) steam-cleaning.
- Neutral-pH scrubbing; keep coving and drains clear.
- Inspect the seal and anti-slip texture periodically.

14. HEALTH, SAFETY & ENVIRONMENT

- Follow the selected material's SDS (epoxy amines / PU isocyanates are sensitisers).
- Provide PPE and ventilation; observe food-facility hygiene and allergen controls during works.
- Control spills and prevent uncured material entering drains.

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