



Car-Park Deck & Ramp (Anti-Skid)

SYSTEM FAMILY

Deck coating / application methodology

TYPE

Multi-layer anti-skid deck / ramp system

NOMINAL BUILD

multi-layer broadcast

1. SCOPE & SYSTEM DESCRIPTION

This Application Data Sheet describes POLYZEN's method for installing **car-park deck and ramp coatings** — multi-layer broadcast systems engineered for abrasion, point-loading, tyre traffic and slip resistance, with a crack-accommodating membrane option for movement-prone or exposed decks.

It is a **brand-flexible application guide** applicable with a POLYZEN system product or a client-approved equivalent of the same type.

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).
- Falls, drainage and movement / isolation joints identified and detailed before starting.
- Substrate dry and free of oil, grease, curing compounds and previous coatings.

3. SURFACE PREPARATION

- Mechanically prepare the deck by grinding / shot-blasting; open and clean the surface.
- Repair spalls, potholes and joints; treat cracks and install a crack-accommodating membrane where movement is expected.
- Assess moisture per ASTM F2170; ensure drainage and falls are correct.
- Vacuum before priming.

4. ENVIRONMENTAL CONDITIONS

- Substrate & ambient temperature 10–35 °C; substrate ≥ 3 °C above dew point throughout application and initial 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 car-park deck / anti-skid ramp system (**ZENDECK Park ZK-100 (decks) / Grip ZK-300 (ramps)**) — primer, body and any seal/top coat from one compatible system — **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 Technical Data Sheet**.

6. MIXING

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

7. APPLICATION PROCEDURE

- **Prime:** apply primer; apply crack-accommodating (elastomeric) membrane on movement-prone or exposed areas.
- **Body + broadcast:** apply the body coat and broadcast anti-skid aggregate to set the grip level (heavier on ramps and turning circles).
- **Seal:** apply pigmented seal; use a **UV-stable (aliphatic) topcoat** on exposed top-decks.
- **Line-marking:** apply durable bay demarcation, arrows and hazard markings.

8. COVERAGE, COATS & THICKNESS

- Primer, membrane, body, broadcast and seal system-based per specification (indicative). Per the selected material's data sheet.

9. CURING & RETURN TO SERVICE

- Foot traffic typically ~24 h; vehicular traffic typically ~48-72 h at 25 °C (indicative). Per the selected material's data sheet.

10. FINISHING & DETAILING

- UV-stable topcoat on exposed decks; heavy anti-skid on ramps.
- Slip evaluated per ANSI A326.3 (DCOF) / ASTM E303 (pendulum); crack-accommodating membrane where movement is expected.

11. QUALITY-CONTROL CHECKPOINTS

- Verify substrate repair, falls and drainage.
- Check membrane and broadcast coverage / grip level.
- Confirm line-marking set-out and cure before trafficking.
- Record ambient conditions.

12. DO'S & DON'TS

Do

- Detail crack-accommodating membrane where movement is expected.
- Use UV-stable topcoat on exposed decks.
- Set grip level higher on ramps/turns.
- Follow the selected material's data sheet.

Don't

- Don't trafficker before the stated cure.
- Don't skip crack/joint detailing.
- Don't apply over standing water or damp deck.
- Don't mix products from different systems.

13. CLEANING & MAINTENANCE

- Routine mechanical sweeping and periodic wash-down.
- Repair localised wear on ramps promptly.
- Refresh line-marking as needed.

14. HEALTH, SAFETY & ENVIRONMENT

- Uncured epoxy resins and amine hardeners can cause skin/eye irritation and sensitisation — wear chemical-resistant gloves, goggles and protective clothing.
- Ensure adequate ventilation during mixing and application; control spills and prevent uncured material entering drains.
- Refer to the selected material's Safety Data Sheet (SDS) for full handling, first-aid, spill and disposal information.

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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 and cure times are governed by the selected material's data sheet. All parameters are typical/indicative and are confirmed in the project-specific Method Statement. POLYZEN reserves the right to revise this document; the latest version supersedes all previous.