POLYZEN
WHERE SOVEREIGN SURFACES RULE

TECHNICAL DATA SHEET
INTERIM

ZENDECK Park ZK-100

RANGE
ZENDECK (Car-park)

MATERIAL FAMILY / GROUP
Car-park deck / epoxy broadcast

CHEMISTRY
multi-layer epoxy parking-deck broadcast system

1. PRODUCT DESCRIPTION

ZENDECK Park ZK-100 is a multi-layer epoxy parking-deck coating system with a broadcast aggregate wear course, engineered for the abrasion, point-loading and tyre traffic of car-park decks and ramps.

The system provides a durable, cleanable, slip-resistant surface with line-marking compatibility and an optional crack-accommodating membrane for movement-prone decks. Installed by POLYZEN.

2. SYSTEM (LAYER BUILD)

The ZENDECK Park system is applied by POLYZEN as one integrated installation:

LAYER	FUNCTION	DESCRIPTION
1 — Primer Coat	Adhesion	Epoxy primer sealing the prepared deck; crack-accommodating membrane option where movement is expected.
2 — Body + Aggregate Broadcast	Wear course	Epoxy body coat with broadcast aggregate for abrasion and slip resistance.
3 — Seal / Line Marking	Finish & wayfinding	Pigmented seal coat and durable line-marking / bay demarcation.

A crack-accommodating (elastomeric) membrane layer is specified for movement-prone or exposed decks; exposed top-decks use a UV-stable topcoat.

3. TYPICAL APPLICATIONS & SECTORS

- Multi-level & basement car parks
- Access ramps & driveways
- Service & loading decks
- Podium & terrace parking
- Commercial & retail parking
- Institutional car parks

4. KIT COMPOSITION

COMPONENT	DESCRIPTION
Part A — Resin	Bisphenol-A epoxy base
Part B — Hardener	Cycloaliphatic amine curing agent
Part C — Aggregate	Graded anti-skid broadcast aggregate

Supplied as a pre-measured multi-part kit. Mix full kits only, exactly as supplied — no part-mixing, no site additions. Kit pack size: **to be confirmed**. The formulation is proprietary to POLYZEN and is not disclosed.

5. TYPICAL / INDICATIVE PROPERTIES

Typical / indicative values — not a guaranteed specification; confirmed against POLYZEN batch testing & project commissioning.

PROPERTY	TEST METHOD	TYPICAL / INDICATIVE VALUE
Finish	—	Textured anti-skid, pigmented, line-marked
Solids content	—	High-solids / solvent-free class (indicative)
Applied thickness	—	multi-layer broadcast build (indicative)
Coverage / consumption	—	system-based per specification (indicative)
Pot life (mixed kit)	—	~25–40 min at 25 °C (indicative; shorter when warmer)
Overcoat interval	—	~12–24 h at 25 °C (indicative)
Light foot traffic	—	~24 h at 25 °C (indicative)
Full mechanical / chemical cure	—	~7 days at 25 °C (indicative)
Application temperature	—	10–35 °C; substrate ≥3 °C above dew point (indicative)
Substrate moisture	ASTM F2170	Within system limits per project assessment (indicative)
Hardness, Shore D	ASTM D2240	~80–85 (indicative)
Compressive strength	ASTM C579	~55–75 MPa (indicative)
Pull-off adhesion to concrete	ASTM D4541	>1.5 N/mm², typically cohesive failure in concrete (indicative)
Abrasion resistance (Taber)	ASTM D4060	~40–80 mg loss, CS-17, 1 kg, 1000 cycles (indicative)
Chemical resistance	ASTM C267	Resists motor oils, fuels, brake fluid & de-icing salts under intermittent exposure (indicative)
VOC content	—	Low-VOC / solvent-free class (indicative)

6. SURFACE PREPARATION

- **Concrete age & strength:** new concrete cured a minimum of 28 days; sound, structurally stable substrate of adequate strength for the intended service.
- **Mechanical preparation:** diamond grinding or captive shot-blasting to remove laitance, curing compounds and contamination, producing a clean, open-textured profile. Acid etching is not accepted.
- **Moisture:** substrate assessed per ASTM F2170 (in-situ RH) before application; moisture-mitigation primer specified where readings exceed system limits.
- **Repairs:** cracks, joints and defects repaired with compatible epoxy repair mortars before priming.
- **Priming:** full-coverage primer applied to the prepared substrate; the body coat is applied within the primer's overcoat window.

7. APPLICATION (OVERVIEW)

- **Mixing:** pre-condition kits to 15–25 °C. Power-mix components in sequence to a homogeneous, lump-free consistency using a low-speed mixer. Mix full kits only, exactly as supplied.
- **Placement:** apply by the specified method (roller / squeegee-and-backroll / notched trowel + spike-roll) at the stated rate; maintain a wet edge.
- **Intervals:** respect pot life, overcoat windows and cure times; plan pours in continuous bays to avoid day joints in visual areas.
- **Environment:** control ventilation, dust and direct sunlight during application and initial cure; protect from water and contamination until full cure.

A full project-specific Method Statement (bay layout, joint detailing, coving, quality checkpoints) is issued by POLYZEN for every installation.

8. STANDARDS & COMPLIANCE

The ZENDECK Park system supports compliance with the following (subject to system design, project detailing & site testing):

- **Performance test methods:** ASTM C579 (compressive), ASTM D4541 (pull-off adhesion), ASTM D4060 (Taber abrasion), ASTM C267 (chemical resistance), ASTM D2240 (Shore hardness), ASTM F2170 (substrate relative humidity).
- **Slip resistance (where a textured finish is specified):** evaluated per ANSI A326.3 (DCOF) and ASTM E303 (pendulum), subject to system design, footwear & site testing.
- **Deck movement:** crack-accommodating membrane system where specified (project-specific detailing; relevant IS/BIS where applicable).

9. PACKAGING, STORAGE & SAFETY

- **Packaging:** pre-measured multi-part kits. Pack size: **to be confirmed**.
- **Storage:** keep in original sealed containers, off the ground, in a dry covered area at 5–30 °C, away from direct sunlight, heat and moisture. Shelf life per batch labelling.
- **Safety:** uncured resins and hardeners can cause skin/eye irritation and sensitisation. Wear PPE (chemical-resistant gloves, goggles, protective clothing); ensure ventilation. Do not allow uncured material to enter drains.
- **SDS:** refer to the product Safety Data Sheet before use.

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