



ZENDECK PARK ZK-100

RANGE

ZENDECK (Parking deck systems)

SYSTEM TYPE

Epoxy broadcast deck system

NOMINAL BUILD

2 mm or 3 mm

1. SYSTEM DESCRIPTION

ZENDECK PARK ZK-100 is a quartz-broadcast epoxy deck system for covered and basement car parks, supplied in a 2 mm build for standard decks and a 3 mm build for heavy tyre traffic.

Coarse quartz is broadcast to refusal directly into the wet self-levelling base layer, de-sanded after cure, and locked with a clear seal coat. The embedded aggregate takes the tyre wear, provides the anti-skid profile and keys the seal coat mechanically to the base.

The system is for covered decks. Epoxy chalks and yellows under direct UV; an exposed top deck requires an aliphatic polyurethane wearing course, which is a separate specification.

2. RECOMMENDED USES

- Multi-level car parks — covered decks
- Basement parking
- Drive aisles and parking bays
- Trolley and buggy circulation areas
- Covered loading and unloading aprons
- Existing decks after mechanical preparation

3. FEATURES & BENEFITS

- Anti-skid broadcast profile, wet or dry
- Aggregate takes the tyre wear, not the resin
- Broadcast keys the seal coat — resists delamination
- 2 mm and 3 mm builds from one method
- Excess aggregate swept and reused
- Line marking and coating-only options available

4. SYSTEM BUILD-UP

#	Layer	Product / operation	Consumption
1	Surface preparation	Diamond grinding / shot blast to CSP 3	—
2	Primer	ZENPRIME 100	0.18 kg/m ²
3	Base — 2 mm build	ZENLEVEL 200 — 0.8 mm	1.60 kg/m ²
	Base — 3 mm build	ZENLEVEL 200 — 1.5 mm	3.00 kg/m ²
4	Broadcast — 2 mm build	ZENGRIT 12, to refusal	3.5 kg/m ² retained
	Broadcast — 3 mm build	ZENGRIT 25, to refusal	4.0 kg/m ² retained
5	De-sand	Sweep + vacuum after cure	—
6	Seal coat	ZENTOP CL 100, pigmented	0.80 / 0.90 kg/m ²

Consumption figures are practical site values including normal wastage; use them for estimating. Broadcast figures are the quantity retained — broadcasting to refusal needs 5 – 7 kg/m² applied, and the excess is recovered and reused.

5. SYSTEM DATA

Typical / indicative values. Figures below are typical for this class of system and are stated as minimum declared values, not as a guaranteed specification. Project values are confirmed by POLYZEN batch testing and project commissioning.

Property	Value	Basis
Nominal system thickness	2.0 mm or 3.0 mm	Design
Total consumption	6.08 / 8.08 kg/m ²	Design
Finish	Textured, anti-skid	Broadcast profile
Slip resistance	High — wet and dry	Broadcast to refusal
Broadcast aggregate	ZENGRIT 12 (2 mm build) / ZENGRIT 25 (3 mm build)	Mohs 7 quartz
Hardness, Shore D	78 – 82	ASTM D2240 — typical
Pull-off adhesion	> 1.5 MPa, concrete failure	ASTM D4541 — typical
Service temperature, dry heat	–20 to +60 °C	Typical
UV exposure	Covered decks only	Exposed decks need aliphatic PU
Component data	Per component TDS	See section 10

6. CHEMICAL RESISTANCE

Rating	Media
Resistant	Water and salt water · most salt solutions · mineral oils, greases and hydraulic fluids · diesel and petrol · brake fluid · neutral and alkaline detergents · dilute alkalis · dilute mineral acids to 10%
Intermittent spillage	Dilute acetic acid · ethanol and isopropyl alcohol · hypochlorite bleach · dilute hydrogen peroxide · hot water spillage
Not resistant	Concentrated nitric and sulphuric acids · formic acid · phenol · chlorinated solvents · ketones such as acetone and MEK

Ratings are for short intermittent contact at ambient temperature followed by cleaning, and are typical for the binder class. For continuous immersion or aggressive cleaning regimes, refer the specific media to POLYZEN before specifying.

7. SUBSTRATE REQUIREMENTS & PREPARATION

Requirement	Value	Standard
Concrete age	Minimum 28 days, or until the slab is dimensionally stable	—
Concrete compressive strength	Minimum 25 MPa	IS 516 / ASTM C39
Substrate pull-off strength	Minimum 1.5 MPa	ASTM D7234 / C1583
Surface profile after preparation	CSP 3 or greater	ICRI 310.2R
Surface cleanliness	Free of laitance, curing compounds, oil, grease and all bond-inhibiting matter	SSPC-SP 13 / NACE No. 6
Substrate moisture — in-situ RH	Maximum 75% RH	ASTM F2170
Substrate moisture — vapour emission	Maximum 5 lb / 1000 ft² / 24 h	ASTM F1869
Substrate moisture — site check	No visible moisture under plastic sheet	ASTM D4263
Where moisture exceeds the limits	Resin moisture-mitigation membrane before priming	ASTM F3010

8. CURING & PROTECTION

Foot traffic	24 hours at 25°C
Light vehicles	48 hours at 25°C
Full mechanical and chemical cure	7 days at 25°C
Protection during cure	Protect from traffic, water, spillage and dust for at least 48 hours. Do not wash the floor within 7 days.

9. INSTALLATION

Conditions	Ambient and material temperature 0 – 35°C; relative humidity below 65%; substrate at least 3°C above dew point. Application in monsoon conditions is not recommended.
Priming	ZENPRIME 100 at 0.15 – 0.20 kg/m². Overcoat the primer 3 – 4 hours after application, while it is still tacky. If the window is missed and the primer has cured hard, abrade mechanically and solvent wipe before proceeding.
Base layer	Mix the full ZENLEVEL 200 kit, pour, spread to depth with a pin screed and spike roll. The pot life is 25 – 30 minutes and the broadcast must land while this layer is wet — work bay by bay with the broadcast crew immediately behind the spreading crew.
Broadcast	Throw ZENGRIT upward so it rains onto the wet base; do not pour or rake. Continue to refusal — until no wet resin is visible. Apply 5 – 7 kg/m²; the excess is recovered. A missed patch shows as a smooth, slippery island.
De-sand	After cure, sweep and vacuum all loose aggregate. The surface must be dust free before sealing.
Seal coat	ZENTOP CL 100 with Part D, applied by squeegee and back-rolled. A heavier seal gives a smoother, easier-clean deck; a lighter one keeps the profile more open.
Line marking	Bay lines and direction arrows are applied over the cured seal coat as a separate operation, available on request.

10. MAINTENANCE

Routine cleaning	Sweep or vacuum grit daily. Wash with a scrubbing machine and medium brush, or hose and squeegee — a mop alone does not clean a textured profile.
Never use	Acid-based cleaners, steel wool or aggressive solvent washing.
Spillage	Oil and fuel spillage cleaned promptly — the texture holds liquids longer than a smooth floor.
Protection in service	Do not drag steel or sharp-edged loads across the surface.
Periodic	Inspect ramps, turning zones and drainage points annually. Worn texture is restored locally by re-broadcasting a new seal zone after mechanical abrasion.

11. COMPONENT PRODUCTS

Component product	Pack	Refer
ZENPRIME 100	7.5 kg kit	POLYZEN/TDS/ZP-100
ZENLEVEL 200	22.5 kg kit	POLYZEN/TDS/ZL-200
ZENGRIT 12	25 kg bag	POLYZEN/TDS/ZG-12
ZENGRIT 25	25 kg bag	POLYZEN/TDS/ZG-25
ZENTOP CL 100	7.5 kg kit	POLYZEN/TDS/ZT-CL100

Each component is supplied as a pre-measured pack and is covered by its own technical data sheet. Mix full kits only; no part-mixing and no site additions.

POLYZEN INDIA PVT. LTD.

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

Phone / WhatsApp: +91 80741 26496 | info@polyzen.in | polyzen.in

Doc Ref: POLYZEN/SYS/ZK-100 | Edition 08/2026 | This edition supersedes all previous versions.

Basis of data. Values attributed to supplier data are taken from the raw material manufacturer's technical data sheet. Calculated values are design values derived from component densities and mixing ratio. Values marked typical are typical for this class of material and are stated as minimum declared values, not as a guaranteed specification; they are confirmed by POLYZEN batch testing and project commissioning. **Statement of responsibility.** The information given reflects present knowledge and experience. It does not relieve the user of the responsibility to verify, by their own trials, that the product is suitable for the intended purpose and conditions of use. Final performance depends on substrate condition, system design, workmanship and service conditions. **Application outside the conditions stated in this sheet voids the written warranty.** Site services, where provided, do not constitute supervisory responsibility. Refer to the Safety Data Sheet before use.