



ZENDECK GRIP ZK-300

RANGE

ZENDECK (Parking deck systems)

SYSTEM TYPE

Anti-skid broadcast ramp coating

NOMINAL BUILD

~1.5 mm

1. SYSTEM DESCRIPTION

ZENDECK GRIP ZK-300 is a high-friction, quartz-broadcast anti-skid coating for ramps, slopes and turning zones, engineered to keep traction under braking and steering loads in wet conditions.

A ramp cannot take a self-levelling layer — flowing material migrates down the slope. GRIP therefore uses a thin, roller-applied pigmented base coat that holds on the incline, into which a heavy quartz broadcast is landed immediately; the aggregate locks the coat in place and builds the grip profile.

It pairs with ZENDECK PARK on the flat decks so that the whole route — deck, ramp and turn — carries one continuous specification.

2. RECOMMENDED USES

- Car park ramps and helixes
- Slopes, inclines and turning circles
- Approach aprons and speed transitions
- Trolley ramps and dock inclines
- Wet-zone circulation routes
- Localised anti-skid zones on existing decks

3. FEATURES & BENEFITS

- High-friction profile, wet and dry
- Heavier broadcast than a flat deck — by design
- Thin base coat holds on the slope without sagging
- Aggregate locks the coat as it lands
- Applied zone-wise with minimal downtime
- Pairs with ZENDECK PARK decks

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 coat	ZENTOP CL 100 + Part D, by roller	0.60 kg/m ²
4	Broadcast	ZENGRIT 12, heavy, to refusal	4.5 kg/m ² retained
5	De-sand	Sweep + vacuum after cure	—
6	Seal coat	ZENTOP CL 100, clear or pigmented	0.80 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	~1.5 mm	Design
Total consumption	6.08 kg/m ²	Design
Finish	Coarse textured, high-grip	Broadcast profile
Slip resistance	High — engineered for inclines, wet or dry	Heavy broadcast to refusal
Broadcast aggregate	ZENGRIT 12	Mohs 7 quartz
Hardness, Shore D	80 – 85	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 ramps only	Exposed ramps 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 coat	Disperse Part D into ZENTOP CL 100 Part A, add Part B and mix. Apply thin and even by medium-nap roller, working across the slope. Do not build thickness on the incline — a thin film holds; a heavy film runs.
Broadcast	Broadcast ZENGRIT 12 into the wet coat immediately, section by section up the ramp, to refusal. The aggregate arrests any flow and fixes the coat on the slope. Apply 6 – 7 kg/m²; recover the excess.
De-sand	After cure, sweep and vacuum all loose aggregate.
Seal coat	ZENTOP CL 100 applied lightly by roller so the grip profile stays open. On the steepest sections a second light pass is preferred over one heavy pass.
Traffic management	Ramps are closed lane-wise; a lane returns to service after 48 hours at 25°C.

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
ZENTOP CL 100	7.5 kg kit	POLYZEN/TDS/ZT-CL100
ZENGRIT 12	25 kg bag	POLYZEN/TDS/ZG-12

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.

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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.