



ZENGRIT 12

RANGE

ZENGRIT (Broadcast aggregate)

MATERIAL FAMILY

Graded silica quartz

GRADING

0.6 – 1.2 mm

1. PRODUCT DESCRIPTION

ZENGRIT 12 is washed, kiln-dried and screen-graded natural silica quartz, grading 0.6 – 1.2 mm, supplied for broadcasting into wet resin. It is the aggregate that gives a POLYZEN broadcast floor its anti-skid profile, its wear surface and the mechanical key between coats.

The 0.6 – 1.2 mm grading gives an even, close grip profile: enough bite for traction under braking and steering, without the coarseness that makes a deck loud and hard to clean. It is the grade for 2 mm deck builds and for ramps, where profile matters more than build.

Quartz is chosen over softer fillers for a wearing surface because of its hardness: Mohs 7 against 3 for calcium carbonate and 1 for talc. It is also unaffected by dilute acids.

2. RECOMMENDED USES

- ZENDECK Park ZK-100 — 2 mm deck build
- ZENDECK Grip ZK-300 — ramp coating
- Anti-skid profile on existing resin floors
- Mechanical key between resin coats
- Texture for wet-area and process floors
- Localised grip zones and transitions

3. FEATURES & BENEFITS

- Mohs 7 — the hardest practical flooring filler
- Not attacked by dilute acids
- Washed and kiln dried — no fines, no moisture
- Screen graded to a stated size band
- Excess sweeps up and is reused
- Single grading — predictable profile

4. SUPPLY

Component	Qty	Description
ZENGRIT 12	25 kg bag	Grading 0.6 – 1.2 mm
Supply	Bagged	Not part of a resin kit; ordered by the bag against the broadcast rate

5. PRODUCT DATA

Typical / indicative values. Figures below are typical for this class of material and are stated as minimum declared values, not as a guaranteed specification.

Property	Value	Method / basis
Appearance	Free-flowing angular granules	Visual
Colour	Natural off-white to pale amber	Visual
Composition	Natural silica quartz	—
Silica content, SiO ₂	≥ 96 %	Typical
Grading	0.6 – 1.2 mm	Screen graded
Hardness	Mohs 7	Typical for quartz
Specific gravity	2.65	Typical for quartz
Bulk density	1.4 – 1.6 kg/litre	Typical
Moisture content	< 0.5 %	Typical — kiln dried
Acid solubility	Negligible in dilute mineral acids	Typical for quartz
Water absorption	< 0.5 %	Typical
Shelf life	Unlimited if kept dry	—
Packaging	25 kg bag	—

6. CONSUMPTION

System	Applied to refusal	Retained in the floor
ZENDECK Park — 2 mm build	5.0 – 6.0 kg/m²	3.5 kg/m²
ZENDECK Grip — ramp	6.0 – 7.0 kg/m²	4.5 kg/m²

Broadcasting is taken to refusal — aggregate is thrown until the wet resin will accept no more. The difference between applied and retained does not adhere; it is swept and vacuumed off after cure and reused on the next bay. Order against the applied figure, cost against the retained figure.

7. SUBSTRATE & RECEIVING LAYER

Requirement	Value	Standard
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
Substrate moisture — in-situ RH	Maximum 75% RH	ASTM F2170
Receiving layer	Wet POLYZEN resin layer, within its pot life	—

8. APPLICATION

Condition on delivery	Bags must be dry. Aggregate that has taken up moisture will not wet out in the resin and leaves weak, loose grains in the surface.
Broadcasting	Throw the aggregate upward and let it rain onto the wet resin so it lands evenly. Do not pour or rake it. Work continuously behind the resin crew and stay inside the pot life of the layer being broadcast. Applicators wear spiked shoes.
To refusal	Continue until the resin takes no more aggregate and no wet resin is visible. A missed patch shows as a smooth, slippery island in the finished floor.
De-sanding	After cure, sweep and then vacuum all loose aggregate. The surface must be dust free before the seal coat, or the seal will not bond.
Reuse	Swept aggregate that is clean and dry is reused on the next bay. Discard anything contaminated with dust, cured resin lumps or moisture.
Storage	Bags off the ground, under cover, sealed. Quartz is not damaged by age; it is damaged by damp.

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Doc Ref: POLYZEN/TDS/ZG-12 | 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.
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