STONECARPET

RESIN + NATURAL STONE SYSTEM

FREE-DRAINING

SEAMLESS FINISH

HIGH RESISTANCE

UV-STABLE OPTIONS

DESCRIPTION

STONECARPET is a seamless flooring and wall system combining selected natural stone aggregates with a LUNIK resin binder. The system creates a durable, decorative and slip-resistant surface for indoor and outdoor applications. Depending on the selected binder, it can provide drainage, UV stability, chemical resistance, flexibility or rapid return to service.

The binder must be selected according to exposure, traffic, curing time and substrate requirements. STONECARPET is available with 1C, 2C EPOX, 2C PU and 2C POL resin technologies, including wall-grade versions for vertical applications.

SYSTEM DESIGN

RECOMMENDED THICKNESS

- Pedestrian traffic: 8-10 mm.
- Moderate traffic (terraces and access areas): 10-12 mm.
- Light vehicular traffic: 12-15 mm.
- Road traffic or higher loads: minimum 18 mm, subject to project validation.

AGGREGATE AND CONSUMPTION

- Pedestrian/decorative: 1-3 mm or 2-4 mm.
- Higher resistance/exterior: 2-6 mm or 4-6 mm.
- Approx. 15-18 kg/m² per 10 mm thickness.
- Approx. 22-27 kg/m² per 15 mm thickness.
- Use quartz aggregate for heavy traffic or high-load vehicles.

KEY PROPERTIES

- Combines natural stone with high-performance resin binders.
- Free-draining configuration helps prevent puddles.
- Suitable for indoor and outdoor surfaces with the appropriate binder.
- Slip-resistant texture and seamless decorative appearance.
- Unaffected by water or humidity after full cure.
- Maintains useful flexibility at low temperatures, depending on resin.
- Multiple aggregate colours and sizes available.
- Suitable for horizontal and vertical installation.

PULSATIA S.L.

Calle Benifaió, 38 · 46610 Guadassuar (Valencia), Spain

Tel. +34 96 052 85 03 · hello@lunik.cc

STONECARPET

RESIN TECHNOLOGIES

SELECTING THE BINDER

Select the resin according to the expected traffic, UV exposure, chemical exposure, temperature and required return-to-service time. The aggregate/resin ratio must also be adjusted to aggregate size.

STONECARPET 1C

READY-TO-USE ACRYLIC BINDER

- Simple one-component application.
- Good performance for light pedestrian traffic.
- Excellent exterior colour stability and non-yellowing behaviour.
- Breathable and permeable; suitable for free-draining systems.
- Wide aesthetic range with natural aggregates.

STONECARPET 2C EPOX

TWO-COMPONENT EPOXY BINDER

- Strong, homogeneous bond between natural stones.
- Excellent resistance to aggressive chemicals.
- High mechanical strength.
- Improved UV resistance versus conventional epoxy binders, but not total.
- Best suited where chemical and bond performance are priorities.

STONECARPET 2C PU

TWO-COMPONENT POLYURETHANE BINDER

- Balanced strength and flexibility.
- Absorbs impacts and accommodates substrate movement.
- Good UV resistance; suitable for exterior use.
- Resistant to oils, fuels and common chemicals.
- Good performance under humidity and temperature variations.

STONECARPET 2C POL

TWO-COMPONENT POLYASPARTIC BINDER

- Ultra-fast curing and rapid return to service.
- High mechanical and abrasion resistance.
- Excellent UV stability and non-yellowing finish.
- Cures at low temperatures, including below 0°C where specified.
- Wide chemical resistance; ideal for demanding applications.

RESIN CONSUMPTION BY AGGREGATE SIZE

For 1-3 mm aggregate, use approximately 7-8% resin by weight of aggregate. For 2-6 mm aggregate, use approximately 5-6%. A 1:17 resin-to-stone ratio is a useful initial reference and must be fine-tuned within these ranges.

Too much resin may reduce drainage. Too little resin may reduce cohesion and increase aggregate loss. Always confirm the final ratio by a project-specific trial using the selected aggregate and binder.

STONECARPET

HORIZONTAL INSTALLATION

APPLICATION PROCEDURE

1 SURFACE PREPARATION

Apply only to sound, stable substrates such as concrete, mortar or firmly bonded ceramic tiles. The surface must be clean, dry and free from dust, grease, oils, cement laitance and old coatings. Repair cracks and irregularities. Mechanical preparation by sanding or shot-blasting is strongly recommended.

2 PRIMING

Apply PREPOX as the epoxy primer where required and allow it to dry for approximately 12-24 hours. If residual or rising moisture is present, use the appropriate LUNIK moisture-control or vapour-barrier system. Confirm compatibility before proceeding.

3 MIXING THE BINDER

For 2C systems, homogenise Component A and then add Component B. Mix with a low-speed electric mixer at 300-400 rpm, avoiding air entrainment. For 1C systems, thoroughly homogenise the ready-to-use binder. Follow the product-specific pot life and mixing ratio.

4 ADDING THE AGGREGATE

Add the aggregate gradually until evenly distributed. Use the consumption range appropriate to the particle size. As an initial guide, use a 1:17 resin-to-stone ratio. For every 100 kg of stone, add 8 kg of QUARTZ XL during mixing where the specified system requires reinforcement.

5 LAYING AND COMPACTING

Spread the mixture evenly with suitable tools. Compact and smooth the surface, maintaining uniform aggregate distribution and eliminating air pockets. Work continuously within the binder's open time. For 2C systems, keep the finishing tool lightly moistened with the recommended solvent; for 1C systems use water where specified.

6 CURING AND INTERIOR SEALING

Protect the freshly installed surface from water and traffic for 48 hours, or for the curing period stated in the selected binder's data sheet. For interior installations, 1-3 mm aggregate is recommended. Seal with STONECARPET SEAL or another recommended LUNIK sealer when a closed, easier-to-clean surface is required.

IMPORTANT

Do not add unapproved solvents or alter the specified resin ratio. Prepare only the amount that can be applied within the working time.

STONECARPET

VERTICAL INSTALLATION

APPLICATION PROCEDURE

1 SURFACE PREPARATION

The substrate must be stable, clean, dry and free from dust, grease and contamination. Repair cracks and irregularities before starting. Vertical surfaces must be sufficiently strong and even to receive the system.

2 SELECT THE WALL-GRADE BINDER

Use the corresponding STONECARPET WALL resin. Its viscosity is specifically adjusted for vertical installation and differs significantly from horizontal binders. Do not substitute a horizontal-grade resin.

3 MIXING

For 2C WALL systems, homogenise Component A, add Component B and mix at 300-400 rpm without entraining air. Add the aggregate gradually until uniformly distributed. The 1:17 resin-to-stone ratio is an initial reference and must be adjusted to the selected aggregate and wall system.

4 PRIMING THE SURFACE

Before placing the stone mixture, apply the wall-grade resin/bonding mixture specified for the selected system as the bonding coat. This improves tack and supports the aggregate during vertical placement.

5 APPLYING THE COATING

Apply evenly with suitable tools, working in short sections. Compact and smooth the material to obtain uniform aggregate distribution. For 2C systems, keep the tool lightly moistened with the recommended solvent to prevent sticking. Fast-curing systems must be mixed in small batches.

6 CURING

Protect the installation from water for 48 hours or for the curing period specified for the selected resin. Do not load, wash or seal the surface before full curing.

WORKING PRACTICE

Because wall binders can have a limited working time, organise the area in manageable sections and maintain a wet edge throughout the application.

STONECARPET

APPLICATION CONDITIONS AND FINISHES

SUBSTRATE REQUIREMENTS

- Substrate: sound and stable concrete, mortar or firmly bonded ceramic tiles.
- Minimum tensile adhesion strength (pull-off): 1.5 N/mm².
- Residual moisture: below 4%. Use a suitable vapour-barrier system where rising damp is present.
- Do not apply to loose, crumbly, moving or poorly bonded surfaces.

ENVIRONMENTAL CONDITIONS

- Optimal application temperature: 15-25°C. General operating limits: 10-30°C, unless the selected binder specifies otherwise.
- The substrate temperature must be at least 3°C above the dew point.
- For exterior work, ensure no precipitation for the first 24-48 hours.
- Premature contact with water can cause whitening, carbonation or foaming in the resin.
- Follow the product-specific limits for STONECARPET 2C POL when applying below 10°C.

STANDARD AGGREGATE OPTIONS



WHITE
2-4 mm



DARK GREY
1-3 / 2-6 mm



BLUE GREY
1-3 / 2-6 mm



LIGHT GREY
1-3 / 2-6 mm



RED
1-3 / 2-6 mm



IVORY
1-3 / 2-6 mm



BLACK
2-4 mm

Aggregate colour and grading may show natural variations. Confirm the final appearance with a representative sample made with the selected resin and sealer.

PULSATIA S.L.
Calle Benifaió, 38 · 46610 Guadassuar (Valencia), Spain
Tel. +34 96 052 85 03 · hello@lunik.cc

STONECARPET

SAFETY, CLEANING AND STORAGE

SPECIAL PRECAUTIONS

Ensure good ventilation. Wear suitable protective gloves and safety glasses. In case of eye contact, rinse with plenty of water for at least 15 minutes. In case of skin contact, wash with soap and water. Do not swallow. If swallowed, do not induce vomiting and seek medical advice immediately.

- Good ventilation
- Protective glasses against splashes
- Chemical-resistant gloves

TOOL CLEANING

Clean tools immediately after use with the recommended solvent for 2C binders or with water for 1C binders, as specified in the corresponding product data sheet. Once hardened, the material can only be removed mechanically.

STORAGE

Store each component in its original sealed container, protected from weather, between 10°C and 30°C, in a dry and well-ventilated place away from heat and direct sunlight. Shelf life is 12 months from the date of manufacture when correctly stored. Always observe the product label and safety data sheet.

TECHNICAL NOTICE

The instructions and technical data in this document are based on current knowledge and typical applications. They are provided for guidance and may be modified without prior notice. Site conditions, substrate characteristics, aggregate grading and application practice can affect the final values and appearance. The installer must carry out suitable preliminary tests and confirm the system design for the intended use. Our warranty is limited to the quality of the supplied product.

Consult the individual technical and safety data sheet for the selected STONECARPET binder before use.

PULSATIA S.L.

Calle Benifaió, 38 · 46610 Guadassuar (Valencia), Spain

Tel. +34 96 052 85 03 · hello@lunik.cc