

RESSI EPO Aesthetica is a two-component, solvent-free decorative epoxy flooring system formulated with pearl-effect pigments. It is designed for trowel and self-levelling applications at thicknesses from 300 microns to 4000 microns, producing a seamless, high-gloss floor with distinctive flowing patterns, tonal movement and visual depth.

The system combines decorative appearance with the mechanical performance of a heavy-duty epoxy floor. It provides resistance to abrasion, impact and limited exposure to mild chemicals, making it suitable for showrooms, retail interiors, reception areas, offices, restaurants, residences, studios, galleries and other spaces where appearance and durability are both required. It may also be used in selected industrial, commercial and institutional locations, subject to the required finish and service conditions.

RESSI EPO Aesthetica is based on a specially modified Bisphenol A epoxy resin, pearl-effect pigments, high-gloss agents and a cycloaliphatic clear curing agent. Its solvent-free formulation is compatible with properly prepared concrete, metal, wood, ceramics, selected plastics and other suitable substrates.

ADVANTAGES

- ✓ Decorative pearl-effect finish: Creates unique marbled, flowing or cloud-like patterns with visual depth.
- ✓ Excellent mechanical properties: Provides high strength and durability for demanding commercial and decorative environments.
- ✓ High-gloss seamless surface: Produces a continuous finish without joints and supports a distinctive premium appearance.
- ✓ Excellent abrasion resistance and adhesion: Bonds firmly to properly prepared substrates and resists wear in service.
- ✓ Excellent impact resistance: Withstands normal impact loading without readily cracking or chipping.
- ✓ Easy to apply: A workable formulation suitable for trained applicators using appropriate decorative epoxy techniques.
- ✓ Early development of initial hardness: Reduces downtime and allows the area to return to service sooner.
- ✓ Good bond strength: Provides lasting adhesion to a range of correctly prepared substrates.
- ✓ Resistance to a range of acids, alkalis and industrial chemicals: Provides protection under limited-exposure conditions; suitability should be confirmed for the intended chemical environment.

SURFACE PREPARATION

Surfaces must be free from grease, oil, chemical contamination, dust, laitance and loose concrete. Appropriate surface-preparation equipment such as shot blasting, scarifying or grinding must be used to obtain a sound substrate. Surfaces showing traces of oil must be degreased with a suitable chemical degreaser before mechanical preparation. Cracks, pinholes and potholes should be repaired with **Ressi EPO Crack Fill**. Uneven concrete should be levelled to produce a flat surface. New concrete floors must be at least 28 days old before application. Moisture content of concrete or cementitious floors must be below 5%. Expansion, control and isolation joints should be carried through the flooring system and filled with a suitable sealant.

PRIMING

Prepared surfaces should be primed using **Ressi EPO Primer / Ressi EPO Primer LV**. Apply the primer into the substrate using a stiff brush or roller and allow it to become tacky, normally within 10-20 minutes, before applying **Ressi EPO Aesthetica**. If the primer has dried, apply an additional coat and allow it to become tacky before proceeding.

MIXING

Stir the base and hardener components separately. Combine the components in the specified ratio and mix thoroughly with a slow-speed drill fitted with a suitable paddle for at least 3 minutes at 400-600 rpm, until a uniform and homogeneous mix is achieved. Avoid excessive mixing speed, which may entrap air.

APPLICATION

Lay **Ressi EPO Aesthetica** over the prepared surface while the primer is still tacky. Spread with a notched trowel to a uniform thickness and level with suitable trowels and tools. Decorative movement may be developed using the selected trowel, squeegee or blending technique while the material remains workable. A spiked roller may be used where required to release entrapped air and achieve a uniform surface.

The final visual effect depends on pigment distribution, application technique, mixing sequence, lighting and viewing angle. A representative site sample should be approved before full application. To maintain visual continuity, use consistent batches, mixing times, crew techniques and application sequence across adjoining areas.

LIMITATIONS

At higher temperatures, pot life will be reduced. At approximately 40°C, the pot life may be reduced by half, so application should be planned accordingly.

For work below 5°C, the unopened components may need to be conditioned in a warm-water bath before mixing.

Pearl pigments naturally create variation. Exact replication of a sample, panel or adjoining area cannot be guaranteed.

Direct sunlight and ultraviolet exposure may cause colour change or yellowing typical of epoxy systems; use should be assessed where long-term UV stability is required.

Ressi EPO Aesthetica is a decorative epoxy coating and is not designed as an abrasion-resistant flooring system. The finished surface may be susceptible to scratching and will require periodic maintenance to preserve its decorative appearance. For improved resistance to scratching and abrasion, the application of a compatible clear polyurethane protective topcoat is recommended.

PACK SIZE

Ressi EPO Aesthetica is available in the following packaging.

1.4 KG:	1 KG Part A 400g Part B
14 KG:	10 KG Part A 4 KG Part B
28 KG:	20 KG Part A 8 KG Part B

TECHNICAL PROPERTIES @ 25°C

Appearance	-	Coloured medium-viscosity decorative epoxy
Color	-	Pearl-effect shades as per approved sample or shade reference
Mix Ratio (Part A: Part B)	-	100 : 40
Mix viscosity (cPs)	Theoretical	1000-2000
Mix Density g / cc	ASTM D 1475	1.15
Coverage per KG of material	-	16-18 sq ft at 500-micron thickness
Working time	-	60 - 90 minutes
Gel time	-	5-6 hours
Tack Free time	-	8-10 hours; 24 hours if average temperature is below 25°C
Overcoat time	-	24-48 hours, depending on coating thickness
Time until foot traffic	-	24 Hours
Time until all traffic	-	96 Hours
Full cure time	-	7 days; 14 days if average temperature is below 25°C
Flexural Strength	ASTM D790	39.7 N/mm ² at 7 days
Compressive Yield Strength	ASTM D695	80.5 N/mm ² at 7 days
Compressive Strength	ASTM D695	102.1 N/mm ² at 7 days

Note: At 40°C pot life will half so application should be planned accordingly.
Typical Results under Laboratory Conditions

SHELF LIFE

12 months from the date of manufacture when stored under warehouse conditions in original unopened packaging. Extreme temperature / humidity may reduce shelf.

HEALTH AND SAFETY

The packed material of **Ressi EPO Aesthetica** is regarded as non-hazardous for transportation. Containers which have been opened and used should be disposed off as per local rules and regulations of the area. Please refer to the MSDS for further health and safety guidelines.

DECORATIVE FINISH GUIDANCE

Ressi EPO Aesthetica is designed to create an individual decorative floor rather than a flat, uniform paint finish. Pearl-effect pigments respond to movement during placing and finishing, producing natural variation in tone, direction, contrast and pattern. These variations are an intended characteristic of the system and form part of its decorative appearance.

Sample approval: Prepare and approve a representative sample using the intended substrate, thickness, shade combination and application technique.

Application continuity: Plan adjoining areas, termination points and crew movement so that wet edges are maintained and unintended cold joints are avoided.

Batch consistency: Use material from consistent production batches wherever possible and maintain the same mixing time and application method throughout each visible area.

Site conditions: Control dust, airflow, temperature, humidity, lighting and access during installation and initial cure.

Protection: Protect the finished surface from contamination, water, impact and traffic until the stated curing period has elapsed.

NOTE:

If printed packaging is not available, the product may be supplied in neutral packaging with an identification label. The lot number and manufacturing date are to be stamped on the back of each package.

The information in this Technical Datasheet is based on laboratory data and practical experience. Site conditions, substrate quality, application method and workmanship are outside the manufacturer's control and may affect the final result. Users should verify suitability through trials and refer to the latest product documentation before use.