

ANTI-CRACKING SYSTEMS FOR BUILDING FACADE RENOVATION

ARMASIL RSA

Renovation silicone
anti-cracking system for building renovation

MAIN ADVANTAGES

- Comprehensive system for renovation of cracked walls and facades
- Very high vapour permeability
- Very low surface water absorption
- High dirt resistance
- High adhesion to both mineral and synthetic substrates
- Wide range of colours
- Easy method of renovation

AREAS OF APPLICATIONS

ARMASIL RSA system is a complex set of products for renovation of cracked external walls of buildings. It contains materials based on high quality silicone resins manufactured based on proven Swiss technology. The system is applied in residential industry (single and multi-family), public utility and industrial premises as well as for renovation of historic buildings. It provides an efficient joining of cracks and scratches, protects against their further development and allows for aesthetic and decorative finishing of facades. It makes up a flexible system of high water vapour permeability layers and low surface water absorption. Protects from the impact of adverse atmospheric conditions (such as rainfalls, freeze, temperature deviations, sun and wind) and assures high dirt resistance. It is applied on all typical mineral substrates (such as concrete, lime render, cement-lime render, cement render, sandstone and on raw walls made of bricks, blocks, concrete blocks and other ceramic or silicate materials of that type) as well as on substrates covered with well set polymer-based coatings. Depending on the nature and width of scratches, the system is available in 3 options what allows for easy selection of the solution for the specific object.

- Option 1
- Option 2
- Option 3

hairline and net cracks (crack width up to 0.3 mm);
shrinking and joint cracks (crack width from 0.3 to 5 mm);
dynamic cracks (crack width over 5 mm);

Note: The system is intended for single use on the structural object. Renovation anti-cracking systems do not eliminate the reasons of cracks and scratches and only improve the facade aesthetics and protect against their harmful impact on the building.

TECHNICAL SPECIFICATION

Base binder: silicone binder;

Pigments: non-organic coloured pigments resistant to atmospheric conditions;

Relative diffusion resistance: $S_d = 0.18 \text{ m}$ (standard requirement $S_d \leq 2.0 \text{ m}$);

Surface water absorption coefficient: $w = 0.18 \text{ kg/m}^2 \cdot \text{h}^{0.5}$ (standard requirement $w \leq 0.5 \text{ kg/m}^2 \cdot \text{h}^{0.5}$);

Colours: natural white, colours from the KABE colour chart and selected NCS colours or samples provided (it can be obtained by adding non-organic pigments);

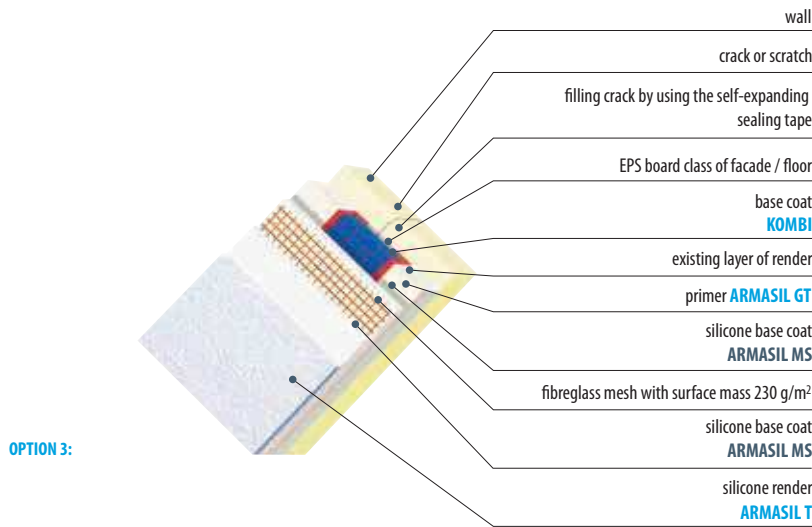
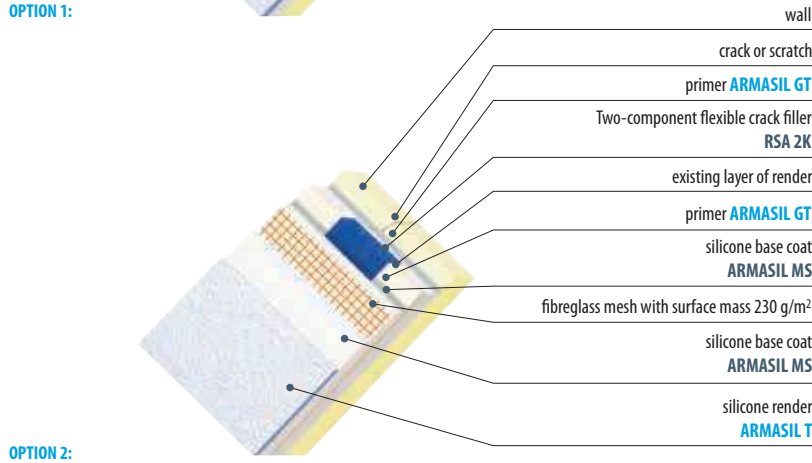
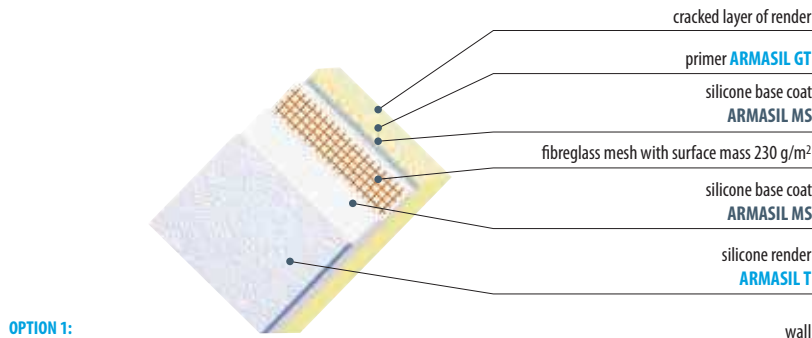
Textures: solid/grained;

Grain sizes: 1.5 mm; 2.0 mm; 2.5 mm; 3.0 mm

Temperature of application (air and substrate): from +5°C to +25°C;

Relative humidity: $\leq 75\%$.

SYSTEM STRUCTURE:



Option	Type and width of scratches	Characteristics of scratches
1	Hairline and net cracks (crack width up to 0.3 mm);	<ul style="list-style-type: none"> – Surface cracks – Thin cracks in the top render layer
2	Shrinking and joint cracks (crack width from 0.3 to 5 mm)	<ul style="list-style-type: none"> – Net cracks – Cracks which permeate all render layers
3	Dynamic cracks (crack width over 5 mm)	<ul style="list-style-type: none"> – Ceiling cracks – Cracks in the window lintels – Cracks caused by compression stress, tensile stress and as a result of lack of expansion – Cracks which run in the wall vertical and horizontal joint – Cracks formed as a result of movement of construction substrate, its setting or settling

Note: Due to the excessive heating of dark-coloured facades, it is not recommended to apply colours with a low light reflection coefficient (Y<20%).