



ATLAS GEMINI RS

silicone render

- easy application
- simple and quick texturing
- ATLAS CAPS - long-term facade protection
- pigment protection system
- increased protection against dirt
- ATLAS 3D-flex - highly flexible, fibre-reinforced



4K

ATLAS GEMINI RS contains four types of texturing aggregates and fillers which, at the application, texturing and use stages, give the render many unique properties.

The **4K formula**, acting at the application and texturing stage, makes **ATLAS GEMINI RS** the first* render to provide:

- very good adhesion to tools and wall surfaces, leading to a significant reduction in the consumption of the product
- speed of texturing, without the need for repetition and trowel cleaning,
- achieving full surface coverage and an even distribution of the aggregate, resulting in a highly aesthetic façade surface,
- durable colours on the façade for many years.

*on the external validations of ATLAS renders carried out.

ATLAS 3D-flex

The high elasticity guarantees the ability to compensate for thermal deformations in summer-winter and for rapid temperature changes on the façade surface, e.g. during sudden, intense rain on a sunny, hot day.

MIRROR EFFECT

The latest **MIRROR EFFECT** technology used in ATLAS GEMINI RS render provides

- high light reflectance (mirror effect),
- lowering the surface temperature of the render, which minimises thermal deformation,
- effective protection of polymer resins and pigments against the destructive effects of UV rays,
- the initiation of a self-cleaning process on the render surface (photocatalytic effect).

Thanks to **MIRROR EFFECT**, ATLAS GEMINI RS render retains its high service life for many years .

BIOSEC TECHNOLOGY

The high protection of **ATLAS CAPS** allows for the slow release of biologically active agents over the long life of the render. Their high concentration persists even during heavy rainfall. The biologically active substances are then rapidly released, providing effective protection of the render against the development of biological infestation (algae, mould).

CLEAN TECHNOLOGY

The high content of silicone resins, the addition of siloxanes and the airtight structure of the render allow for a complex hydrophobic effect, lasting over time, both in the structure and on the surface. Such strong hydrophobisation of the render excludes the possibility of deeper penetration of rainwater and dust particles accumulated on the surface of the render, even during prolonged and strong precipitation.

The render dries very quickly, as soon as the precipitation stops, eliminating the risk of biological infestation (mould, algae and lichen) appearing on its surface.

The strong surface hydrophobisation and tight, flawless structure eliminate the possibility of dust and dirt particles adhering permanently to the surface of the coating. This ensures that they can be effectively flushed away during precipitation - the water removes dirt accumulated on the surface, keeping the façade clean for a long time.

Colours

ATLAS GEMINI RS has a rich colour range of 418 SAH colours - it is tinted based on individually designed colours.

The colour-intensive coloured render, with a light reflectance of **15<HBW<20**, can be used when the reinforced layer is made on the basis of one of the adhesives:

- ATLAS STOPTER K-50,
- ATLAS STOPTER K-20,

The tinted render in intensive colours, with no restrictions on the minimum **HBW** reflectance, can be applied to a maximum of 10% of the façade.

Colour - 406 colours according to the Paints and Renders colour range
Texture: - spotted - rustic
Grain size: - up to 1.5 mm (spotted) - up to 2.0 mm (rustic)

Purpose

ATLAS GEMINI RS is particularly recommended for rendering on building partitions where, among other things, high resistance is required:

- **mechanical damage** - e.g. proximity to playgrounds, pedestrian and crossing gates, vehicle parking areas, etc,
- **soiling** - operational factors, heavy dust, industrial pollution, etc.

ATLAS GEMINI RS is used to make decorative and protective thin-coat renders on the exterior of existing buildings, newly constructed buildings and indoors:

- in complex external thermal insulation composite systems (ETICS) for buildings using polystyrene (EPS) boards
- on even, properly prepared mineral substrates (e.g.: concrete, traditional cement and cement-lime render).

PLACE OF USE	
façade in an insulation system with polystyrene boards	+
façade in an insulation system with mineral wool boards	Use ATLAS ROKER SYSTEM
single-layer wall façade	+
ceiling side	Use ATLAS ROKER G system
wall inside the building	+

TYPES OF FACILITIES	
dwelling construction	+
public, educational, office, healthcare, sports facilities	+
commercial and service construction	+
industrial construction	+
industrial warehouses	+
traffic construction	+
farm and livestock buildings	+
historic buildings	+
passive construction	+
energy-efficient construction	+

LOCATION	
urban and urbanised areas	+
industrial and investment areas and economic zones	+
rural and agricultural areas	+
wetlands and humid areas, surroundings of water bodies	+
close proximity to tree stands and green areas	+
shaded areas	+

SUBSTRATE TYPE	
reinforced layers of indicated insulation systems	+
concrete	+
traditional, cement and cement-lime renders made on walls made of bricks, blocks ceramic, cellular or calcium-silicate blocks and hollow bricks	+
gypsum plaster, plasterboard (inside the building)	+

Technical data

Density of the ready product	approx. 1.9 g/cm ³
Diffusion resistance	0,14 ≤ S _d < 1,4 m
pH	8
Temperature of the compound preparation and of the substrate and surroundings before, during and after the setting period	+5 to + 30 °C
Relative air humidity during application and setting	< 80%
Use at reduced temperatures (above 0°C) and increased humidity (up to approx. 80%)	after addition of ATLAS ESKIMO G
Initial drying time	approx. 15 minutes*
Drying time of the render	approx. 24 hours*

*) - applies at T=20°C, relative humidity 50%

Technical requirements

ATLAS GEMINI RS complies with the requirements of EN 15824:2017-07 - a water-thinnable silicone thin-coat render for use on external and internal walls, columns and partition walls.

ATLAS GEMINI RS (2023) Declaration of performance No. 280/CPR EN 15824:2017	
Intended use - for external walls, ceilings and columns. - for internal walls, ceilings, columns and partitions	
Water vapour permeability	V _{l2}
Water absorption	W ₂
Adhesion	0.35 MPa

ATLAS GEMINI RS is a component of product sets for thermal insulation systems:

Name of the system	National Technical Assessment
ATLAS GRIP	ICIMB-KOT 2022/0180 Issue 1
ATLAS ETICS	ITB-KOT-2020/1616 Issue 3

Rendering

Substrate preparation

The substrate should be:

stable - rigid, seasoned and primed,
dry,

even - any irregularities and cavities should be filled in using e.g. ATLAS ZW 330, ATLAS PLASTERING MIX or adhesive mortars for the reinforcement layer in insulation systems,

cleaned - from layers that may impair adhesion of the render, especially from dust, dirt, lime, oil, grease, wax, oil and emulsion paint residues. If there is biological infestation on the substrate (mould decay fungi, algae, etc.) they need to be removed with ATLAS MYKOS PLUS.

Specific requirements for substrates

Substrate type	Requirements concerning seasoning	Priming method
reinforced layer in the ATLAS GRIP system, made of ATLAS GRIP U mortar	min. 3 days*	ATLAS CERPLAST or SILKON ANX
reinforced layer in ETICS systems, made of other ATLAS adhesive mortars	min. 1 day	ATLAS CERPLAST or SILKON ANX
new cement render made from ATLAS ready-mixed mortars, traditional cement and cement-lime renders	min. 7 days*/1 cm thickness moisture content 4%	
concrete substrates	min. 28 days* structural moisture < 4%	
paint coatings with good adhesion to the substrate in internal applications	no requirements	
gypsum substrates	moisture content < 2%	preliminary ATLAS GRUNT NKP ATLAS UNI-GRUNT proper ATLAS CERPLAST or SILKON ANX
gypsum plasterboards and fibre cement boards, firmly fixed in accordance with the manufacturers' recommendations and the rules of the trade	moisture content < 2%	

*) - Note: applies to curing conditions: T= 20°C, 60 % humidity

Preparation of the rendering mix

The render is supplied as a ready-to-use mass. It must not be combined with other materials, diluted or thickened. Immediately before use, the mass should be stirred to even out the consistency. When working at temperatures at the upper end of the permitted range, 1 % pure water may be added to the render mass.

Application of the mass

The compound should be applied to the substrate in a layer the thickness of an aggregate, using a smooth stainless steel trowel. Excess material should be drawn back into the bucket and stirred. The render can be applied by machine - the use of an rendering machine is recommended:

Device	Recommended nozzle	Adjusted feed rate on the unit	Set compressor pressure [Bar].
Wagner - PC 830 - PC 1030	6 mm	Minimum feed - 2 / 10	2,2
Graco TexSpray RTX 5500 PX	6 mm - round	8 mm - round / 6 mm - flat	Medium administration - 2/6
Device	Recommended nozzle	Pressure directed at the nozzle	Pressure directed at the tank
Graco TexSpray Fast Finish	6 mm - flat 6 mm - round 8 mm - flat	Average feed	Green zone - maximum

The working pressures given are indicative for standard hose lengths. For longer hoses, the pressure must be determined directly before application on site.

Before applying the render, a small amount of ATLAS CERPLAST or ATLAS SILKON ANX compound should be passed through the hose of the unit. The effect of this action is to wet the hose and avoid clogging.

Texturing

The freshly applied mix should be textured with a plastic float. The spotted effect is achieved by rubbing the render in a circular motion. Machine-applied renders should not be textured.

The textures of hand-applied and machine-applied render differ. This may result in slight colour differences depending on the degree of surface development. Therefore, it is not permissible to combine different render application technologies on the same object.

Render restoration

Renovation of the render can be carried out by painting with silicone paint:

- ATLAS SALTA,
- ATLAS SALTA N,
- ATLAS SALTA N PLUS.

Consumption

Render consumption:

For aggregate 1.5 mm

- from 2.3 kg/m² when applied by hand,

- from 1.9 kg/m² when applied mechanically.

For aggregate 2.0mm

- from 2.4 kg/m² when applied by hand

The indicated consumption refers to even substrates in accordance with the Technical Conditions for the Execution and Acceptance of Construction Work ITB 2020. The average render consumption for mechanical application will be lower than the consumption indicated for manual application. This is due, among other things, to the different structure of the render obtained (less aggregate compaction)

The exact consumption value can be determined by a test carried out on the rendered substrate.

Packaging

Plastic buckets 25 kg

Safety information

Safety information is given on the product packaging and in the Safety Data Sheet, available at www.atlas.com.pl.

Storage and transport

Information on storage and transport is given on the product packaging and in the Safety Data Sheet, available at www.atlas.com.pl.

The shelf life of the product (best before use) is 12 months from the production date on the packaging.

Important additional information

It is necessary to determine experimentally (for a given type of substrate and given weather) the maximum surface area possible in one process cycle (application and texturing).

The material should be applied using the wet-on-wet method, not allowing the already applied batch to dry before the next batch is applied. Otherwise, the jointing line will be visible. Technological breaks should be planned in advance, for example: in the corners and folds of the building, under drain pipes, at the junction of colours, etc.

The rendered surface should be protected, both during the work and during the render drying period, from direct sunlight, wind and precipitation.

The drying time of the render, depending on the substrate, temperature and relative air humidity, is approx. 24 hours. In conditions of increased humidity and a temperature of approx. +5 °C, the render's setting time may be prolonged.

To avoid differences in colour shades when using renders, apply render of the same date of manufacture to one surface.

The use of the product on horizontal surfaces exposed to permanent direct contact with water and snow, on surfaces exposed to dampness due to capillary rise of moisture, is excluded.

Clean the tools with clean water immediately after use. Use ATLAS SZOP 2000 to remove difficult to remove residues of the set compound.

The information contained in this Technical Data Sheet is a basic guideline for the use of the product and does not relieve the user of the obligation to carry out the work in accordance with the rules of the art of construction and safety regulations. With the issue of this Technical Data Sheet, all previous ones are no longer valid. Documents accompanying the product are available at www.atlas.com.pl.

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