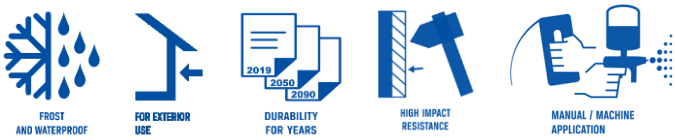
ATLAS
SILICONE RENDER

- hydrophobic, self-cleaning
- highly vapour-permeable
- highly resistant to UV, operational and thermal stresses
- resistant to algae growth
- rich colours, including extremely dark colours
- highly elastic, fibre-reinforced
- possibility of using dark colours on large facade areas



Properties

ATLAS SILICONE RENDER of the new generation is a mixture of silicone and siloxane resins, dolomite aggregates, quartz flours and special modifying additives, hydrophobisers and carefully selected pigments. It is reinforced with cellulose fibres.

High durability of the coating - through the use of a combination of silicone and siloxane dispersions, special additives and modifiers:
- increased durability of the coating, weather resistance and UV resistance,
- resistance to microbial growth has been increased,
- ensures that the aesthetic appearance of the facade is maintained over the long term.

High flexibility - ability to bridge thermal stresses, hail and impact impacts provided by high content of dedicated polymer resins and cellulose fibres.

Photocatalytic effect - provides an active self-cleaning effect on the façade and increased protection against the growth of micro-organisms on the façade surface.

Not susceptible to algae growth - due to the high degree of hydrophobisation, the structural integrity of the coating and the very high content of encapsulated coating-active substances (especially suitable for buildings located near green areas and bodies of water, in shaded areas in city centres with a high concentration of pollutants).

Strong surface hydrophobisation, self-cleaning ability - high content of silicone and siloxane resins allows for a durable hydrophobic effect over time, ensuring that dust and dirt particles do not adhere to the surface of the coating and can be rinsed off during precipitation.

High resistance to micro scratch formation - thanks to a specially selected bulk stack of fine fillers and additional structural reinforcement using microfibres.

Very low surface absorption - highly UV-resistant hydrophobic layer, tight bunker pile of textured aggregate and fine fillers effectively reduces the structural absorption of the render, thus reducing the danger of dirt penetration and the growth of biological life and the formation of stains.

Wide colour palette, including dark and intense colours - compared to traditional thin coat renders, ATLAS SILICONE RENDER can be used in an extended colour palette:
- with a light reflectance HBW > 15 % - in system with a reinforced layer made of ATLAS HOTER U2 WHITE universal gel mortar,

High colour fastness confirmed by **Xenotests** - ensured by the use of hybrid mixtures of inorganic and organic pigments with increased resistance to external influences and special reflective additives.

Machine application - using recommended rendering units (N-15 only).

The exceptional care for the environment at the stage of ATLAS SILICONE RENDER production taking into account the requirements of sustainable development is confirmed by the Environmental Statement III type.

Colour - 480 colours according to the SAH Paints and Renders colour range **ATLAS colouring system** - selection of any individual colour according to the customer's instructions
Texture – roughcast
textured aggregate max: up to 1.5 mm N-15 up to 2.0 mm N-20

Use

ATLAS SILICONE RENDER is recommended for the application of renders on building partitions where particularly high resistance to
- mechanical damage - e.g. proximity to playgrounds, pedestrian and crossing gates, vehicle parking areas, etc,
- dirt - operational factors, heavy dust, industrial pollution, etc.

ATLAS SILICONE RENDER is designated for application of decorative and protective thin-faced and protective thin-coat renders coatings on the outside of existing buildings, newly constructed buildings:
- in complex external thermal insulation composite systems (ETICS) for buildings using polystyrene (EPS) and mineral wool (MW) panels,
- On even, properly prepared mineral substrates (e.g.: concrete, traditional cement and cement-lime plaster).

It is a durable, hydrophobic render coating with high elasticity and high vapour permeability, resistant to dirt and atmospheric agents.

PLACE OF USE	
façade in an insulation system with polystyrene boards	+
façade in an insulation system with mineral wool boards	+
single-layer wall façade	+

TYPES OF FACILITIES	
dwelling buildings	+
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, investment and economic zones	+
rural and agricultural areas	+
wetlands and humid areas, surroundings of water bodies	+
close proximity of wood and green areas	+
shaded areas	+

SUBSTRATE TYPE	
reinforced layers of indicated insulation systems	+
concrete	+
traditional, cement and cement-lime plasters made on brick, block and hollow ceramic, cellular or calcium-silicate walls	+

Technical data

Density of the finished product	approx. 1.9 g/cm³
Diffusion resistance	$0.14 \leq S_d < 1.4$ 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
Drying time	approx. 15 minutes*
Drying time of the render	approx. 24 hours*

*) - applies to T=20° C, relative humidity 60%

Technical requirements

ATLAS SILICONE RENDER meets the requirements of PN-EN 15824:2017-07 - thin coat silicone render, water-dilutable for use on external walls, columns and partition walls.

ATLAS SILICONE RENDER (2020) Declaration of performance No. 145/3/CPR EN 15824:2017	
Intended use: for external walls, ceilings and columns.	
Water vapour permeability	V_2 - high
Water absorption	W_2 - average
Adhesion	0.35 MPa
Reaction to fire	A2-s1, d0

ATLAS SILICONE RENDER is a component of product sets for thermal insulation systems :

Name of the system	National Technical Assessment
ATLAS ETICS	ITB-KOT-2020/1616 Issue 3
ATLAS RENOTER	ITB-KOT-2021/2020 Issue 1
ATLAS ROKER	ITB-KOT-2021/1919 Issue 2
ATLAS ROKER G	ITB-KOT-2018/0583 Issue 2
ATLAS ROKER EPS	ITB-KOT-2020/1188 Issue 1

ATLAS SILICONE RENDER is a component of a complex thermal insulation system with render coatings :

Name of the system	European Technical Assessment
ATLAS	ETA-06/0081
ATLAS ROKER	ETA-06/0173
ATLAS GRAWIS	ETA-16/0933

Rendering

Substrate preparation

The substrate should be:

stable - rigid, seasoned and primed,

dry,

even - unevenness and defects should be filled in using e.g.

- ATLAS ZW 330,
- ATLAS PLASTERING MIX,
- adhesive mortars for the reinforcement layer in thermal insulation systems.

Before the repair the substrate should be primed with primer:

- ATLAS UNI-GRUNT,
- ATLAS GRUNT NKP (ready to use - without dilution),

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

Specific requirements for substrates

Substrate type	Seasoning requirements	Method of priming
reinforced layer in ETICS systems, made of ATLAS STOPTER K-50 or ATLAS HOTER U2-B mortars	min. 3 days*	No render base required
reinforced layer in ETICS systems, made of other ATLAS adhesive mortars	min. 3 days*	ATLAS SILKON ANX or ATLAS CERPLAST
new cement plaster made from ATLAS ready-mixed mortars, traditional cement and cement-lime plasters	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	no requirements	
gypsum substrates	moisture content < 2%	Preliminary ATLAS UNI-GRUNT appropriate ATLAS SILKON ANX or ATLAS CERPLAST
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 bonding conditions: T= +20° C, 50 % humidity

Preparation of the rendering mass.

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.

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.
Render with a granulation of up to 1.5 mm can be applied by machine - the use of an aggregate is recommended:

Device	Recommended nozzle	Adjusted feed rate on the unit	Set compressor pressure [Bar].
Wagner PC 830	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 operating pressures given are indicative for standard hose lengths. For longer hoses, the pressure should be determined directly before application on site.
Before applying the render, a small amount of ATLAS SILKON ANX or ATLAS CERPLAST compound should be passed through the hose of the unit. The effect of this action is to wet the hose and avoid clogging.

Texture formation

The freshly applied compound should be textured with a plastic float. The roughcast effect is achieved by rubbing the render in a circular motion. The machine-applied render should not be textured.
The texture of hand-applied and machine-applied render differs from each other, which may result in slight colour differences depending on the degree of surface development. For this reason, it is not permissible to combine different application technologies on the same facility.

Render restoration

Renovation of the render can be carried out by painting with ATLAS SALTA N silicone paint.

Consumption

Consumption of render with a granulation of up to 1.5 mm:
- from 2.2 kg/m^2 when applied by hand,
- from 1.9 kg/m^2 when applied mechanically.

Consumption of silicone render with a granulation of up to 2.0 mm
- from 2.8 kg/m^2 when applied by hand,

The indicated consumption refers to even substrates in accordance with 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 (shelf life) is 12 months from the date of manufacture 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 (stretching and rubbing).

The material should be applied using the wet-on-wet method, not allowing the smeared batch to dry before the next batch is applied. Otherwise, the joint 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.

Possibility of using dark colours of ATLAS SILICONE RENDER render coat:

Colours with HBW >15%	in a system with a reinforcing layer of HOTER U2-B adhesive mortar

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 release you from 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. The documents accompanying the product are available at www.atlas.com.pl.

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