







# ATLAS CERMIT N-100

# acrylic render for templates

- perfect for brick and stone effects
- very flexible
- resistant to soiling
- improved resistance to mechanical damage



#### Use

ATLAS CERMIT N-100 is designed for application of decorative and protective thin-coat rendering coats outdoors and indoors:

- with external thermal insulation composite systems (ETICS) with polystyrene boards,
- upon even, appropriately prepared mineral substrates (e.g. concrete, traditional cement and cement-lime plasters),
- with the use of templates, e.g. imitating brick or stone wall in cases as listed above.

Types of rendered buildings/objects – residential, public access, educational, healthcare, commercial and service, industrial, offices, warehouses, infrastructure, outbuildings, heritage buildings, passive housing, energy efficient buildings.

Building location – urban areas, industrial, investment and economic zones, rural and agricultural areas, wet and damp areas close to water tanks, areas close to clusters of greenery, shadowed places.

Types of substrates – base coat of external wall insulation system, concrete, traditional, cement and cement-lime plasters on walls made of ceramic, cellular or silicate bricks, blocks or hollow blocks, gypsum plasters and plasterboards (indoors).

# **Properties**

ATLAS CERMIT N-100 is based on microfibres-reinforced mix of acrylic resins with silicone hydrophobic agents, dolomite aggregate and quartz dust, with addition of modifiers and specially selected pigments.

Strong surface hydrophobisation, self-cleaning ability – significant content of acrylic resins allows for durable hydrophobic effect, which prevents dust and dirt particles from adhering to coat surface and allows for possibility of their washing off during precipitation.

**BIO PROTECTION** – creates unfavorable conditions for fungi and algae growth due to low surface absorption. High grade of hydrophobisation, coat structural tightness and very high content of surfactants eliminate the threat and form unfavorable conditions for development of mould, algae and lichen upon the façade surface, **even after long term precipitation**.

**Outstanding coating durability** – owing to the use of mix of silicone dispersions, special additives and modifiers, the render offers:

- improved coating durability,
- resistance to atmospheric conditions and UV radiation,

- aesthetic façade appearance in long period of time; ATLAS CERMIT N-100 holds the ability of self-cleaning during precipitation – therefore does not require frequent maintenance actions.

**ELASTICITY AND STRENGTH** – formula providing improved elasticity and resistance to impacts; render significantly compensates stress resulting from surface hits, keeps consistent, does not chip off (when used on base coat made of ATLAS STOPTER K-100). Owing to the content of special polymer resins and reinforcing with microfibres the render offers availability of obturation of cracks resulting from thermal stress and impact. **RESISTANT TO CRACKING** – improved resistance resulting from the presence of specially selected fine fillers and content of dispersed microfibers which strengthen the render within its entire volume – render is protected against possible cracks caused by tension and alternate surface heating and cooling. **COLOUR DURABILITY** – advanced technology assures colour durability resulting from the use of modern pigments and special reflexive additives as well as automatic system of dozing and permanently supervised process of manufacturing. **Possibility of unlimited surface shaping** – depending on tools and technique of application.

Possible formation of the effect of smooth or weathered brick. Machine application with recommended plastering units possible.

**ENVIRONMENTALLY FRIENDLY** – render recipe was designed in accordance to the sustainable development aspects: maximally reduced amount of volatile organic compounds and use of natural fillers only.

400 colours	<ul> <li>in accordance with SAH Colour Scheme for Ren ders and Paints (on individual order)</li> </ul>
1 texture:	– spotted – N
Aggregate grain size:	– up to 1.0 mm

# Technical data

Density of the ready-to-use product	approx. 1.93 g/cm <sup>3</sup>	
Diffusion depending on the air layer thickness	0.14 ≤ S <sub>d</sub> ≤ 1.4m	
pН	8	
Substrate and ambient temperature during work	from +5°C to +30°C	
Relative humidity during application and setting	< 80%	
Use in low temperature (down to 0°C) and high humidity (up to approx. 80%)	with ATLAS ESKIMO agent	
Time of surface drying	approx. 15 minutes*	
Time of rendering coat drying	approx. 24 hours*	

\*) - note: for setting conditions: temperature +20°C, air humidity 50%

# **Technical requirements**

ATLAS CERMIT N-100 is listed in the ITB Approval as an element of the set of products for external wall insulation.

System name	Technical Approval No.	Certificate No.
ATLAS ETICS	AT-15-9090/2014	FPC-ITB-0562/Z

## Rendering

Substrate preparation

The substrate should be:

- **stable** sufficiently rigid, sufficiently long stabilized and primed. **Note**. When applying ATLAS CERMIT N-100 render with templates, one should match the colour of ATLAS CERPLAST with the colour of render,
- dry,
- even irregularities and gaps should be filled with, e. g. ATLAS ZW 50, ATLAS ZW 330, ATLAS PLASTERING MIX or adhesive mortars used for application of base coats of thermal insulation systems; prime the surface with ATLAS UNI-GRUNT emulsion before repairs (Note. Fine aggregate structure of ATLAS CERMIT N-100 rendering coat requires particularly even substrates as any significant irregularities will be transferred upon the rendering coat surface),
- clean free from layers which would impair the render bonding, especially dust, dirt, lime, oil, grease, wax, residues of oil and emulsion paints; substrates infected by biological corrosion (mould, algae, etc.) must be cleaned with ATLAS MYKOS agent.

#### Detailed requirements for substrates.

Substrate type	Stabilization	Priming
base coats of ETICS systems, made of ATLAS adhesive mortars	min. 3 days*	
freshly applied cement plasters made of ATLAS plastering mortars, traditional cement and cement-lime plasters	min. 7 days*, moisture content 4%	ATLAS CERPLAST
concrete	min. 28 days*, structural moisture content < 4%	
paint coatings well bonded to the substrate, indoors	no requirements	
gypsum substrates		
plasterboards and fibre-cement boards, stably fixed in accordance to manufacturer's recommendations and construction practice	moisture content < 2%	initial ATLAS UNI-GRUNT main ATLAS CERPLAST

#### **Rendering mass preparation**

The render is delivered as a ready to use mass. It must not be mixed with other materials, diluted, or thickened. Just before application, the mass should be mixed in order to unify the consistency.

#### Mass application

Apply the rendering mass with a smooth stainless steel trowel. Collect excessive material, put back in the bucket and remix.

Render can be applied mechanically – the following units recommended: - WAGNER PC 830e,

- MAI 2MULTIPUMP,

- GRACO Textspray RTX 1500.

Before the rendering mass application, apply through the hose a little bit of ATLAS CERPLAST mass in order to liquefy the hose and prevent clogging. The textures of renders applied manually and mechanically differ, therefore slight differences in shade can occur. It is not allowed to combine various application technologies on the same building.

#### **Texture forming**

Freshly applied mass requires texture forming with a plastic float, with circular moves. Machine-applied renders are not textured.

#### Mass application and render smoothing with templates

In order to form additional visual effect, one can use self-adhesive cardboard templates (available on order). The template projects shape of stone wall (so called cyclopean wall) or brick wall (so called stretcher bond).

When the priming mass dries, stick the templates one beside other upon the wall, make sure they adjoin precisely and bond well to the substrate. Apply ATLAS CERMIT N-100 render as described above. Just after the render application and smoothing, remove the templates. The priming mass imitates grout between surfaces imitating stones. Match the colour of ATLAS CERPLAST priming mass with the colour of ATLAS CERMIT N-100 rendering coat.

#### Renovation of rendering coat

Renovation of a façade after years of operation can be done with the use of ATLAS SALTA façade paint. This type of work is not possible in case of ATLAS CERMIT N-100 coats applied with templates.

# Consumption

The actual consumption can be established on basis of sample application upon particular substrate.

Average consumption: < 2.0 kg for 1m<sup>2</sup>.

# Important additional information

- The maximum surface possible to render in a single technological cycle (application and floating; for particular substrate type and weather conditions) should be established experimentally.
- Apply the render with the "wet on wet method", prevent the textured coat from drying before application of the subsequent coat. Otherwise the seams will be visible. Technological breaks have to be planned in advance, e.g. in corners and angles of a building, under rainwater pipes, on lines of contact of two colours, etc.
- Protect the rendered surface both during application and render setting against direct sunlight, wind and precipitation.
- The setting time depends on substrate type, temperature and relative air humidity, and can vary from 12 up to 48 hours. In high humidity and temperature close to +5°C the setting time can extend.
- In order to avoid differences in colour shades an individual surface should be coated with acrylic render of the same manufacturing date.
- Dark, intensive rendering coat colours (HBW < 20) are advisable for small, limited façade areas (architectonic details) as they are characterised by high absorption of sunlight.
- The product must not be used on horizontal surfaces, surfaces exposed to constant direct water and snow action, surfaces exposed to damp resulting from capillary action.
- The tools must be cleaned with clean water directly after use. Difficult to remove residues of the set render can be removed with ATLAS SZOP 2000 agent.
- Harmful to aquatic life with long lasting effects. Keep out of reach of children. Read label before use. Avoid release to the environment. Dispose of contents/ container to appropriately labeled containers designed for selective waste treatment, emptied by an authorized company. Follow the instructions of the Safety Data Sheet.
- Keep in tightly sealed original and labeled containers. Keep in dry and cool place, protect against overheating (> 30 °C) and freezing the product freezes and irreversibly loses its performance in temperature below 0 °C. Protect against direct sunshine. Incompatible materials: avoid contact with aluminum, copper and alloys of these metals. Shelf life in conditions as specified is 12 months from the production date shown on the packaging.

### Packaging

Plastic buckets: 25 kg Pallet: 600 kg in 25 kg buckets

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.

At the time of publication of this product data sheet all previous ones become void. Date of update: 2017-03-08

