

# **ATLAS CERMIT N-100**

# acrylic render for templates

- perfect for brick and stone effect
- very flexible
- impact-resistant
- high resistance to mechanical damage











# **Properties**

ATLAS CERMIT N-100 is a microfibre-reinforced mixture of acrylic resins with silicone hydrophobic additives, dolomite aggregates and quartz flours as well as modifying additives, hydrophobisers and specially selected pigments.

Strong surface hydrophobisation, self-cleaning ability - the high content of acrylic resins allows for a permanent hydrophobic effect, ensuring that dust and dirt particles do not adhere to the surface of the render and can be rinsed off during precipitation.

It is not susceptible to algae growth due to its low surface absorption, high degree of water repellency, structural tightness of the coating and very high content of encapsulated coating substances.

**High durability of the coating during** use - by using a combination of silicone dispersions, special additives additives and modifiers:

- increasing the durability of the expedition,
- weatherproof and UV-resistant,
- ensures that the aesthetic appearance of the façade is maintained over a long period of time; ATLAS CERMIT N-100 has the ability to self-clean during precipitation it therefore does not require frequent maintenance.

**ELASTICITY AND DURABILITY** - the formulation ensuring increased elasticity and resistance to impact makes the render perfectly compensate the stresses arising in case of impact to its surface and maintains its. The ability to bridge thermal stresses and impact impacts ensured by the high content of dedicated polymer resins and by micro-reinforcement with fibres.

**RESISTANCE TO CRACKING** - increased resistance achieved through a specially selected bulk stack of fine fillers and the presence of dispersed microfibres acting as effective reinforcement throughout the render volume - the render is protected against possible cracking due to stress and alternate heating and cooling of the surface.

**COLOUR DURABILITY** - advanced technology ensures colour fastness through:

- the use of modern pigments and a computer-controlled pigment dosing system,
- using special reflective additives,
- production process under constant control.

**Possibility of free-form surfacing -** depending on the tools used and the application technique.

Smooth or aged brick effect possible.

Machine application using recommended rendering units.

**ENVIRONMENTALLY-FRIENDLY** - the render formulation has been designed with sustainability in mind: the final product has a maximum reduction of volatile organic substances and uses only natural fillers.

**400 colours -** in accordance with SAH Paints and Renders Colours (on request)

ATLAS colouring system - selection of any individual colour according to the customer's instructions

type of texture

spotted (sheepskin) - N

aggregate thickness

up to 1.0 mm

# **Purpose**

ATLAS CERMIT N-100 is used for the application of decorative and protective thin-coat renders on the exterior of existing, newly constructed and interior areas:

- 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),
- for decorative renderings using stencils, e.g. imitating brickwork or stone walling in the areas defined above.

PLACE OF USE	
facade in an insulation system with polystyrene foam	+
single-layer wall facade	+
wall inside the building	+

TYPES OF FACILITIES		
housing 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, investment 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 insulation systems indicated	+
concrete	+
traditional, cement and cement-lime renders made on brick, block and hollow ceramic, cellu- lar or calcium-silicate walls	+
gypsum plaster, plasterboard (inside the building)	+

#### **Technical data**

Density of the finished product	approx. 1.93 g/cm³
Diffusion resistance	0.14 m < S <sub>d</sub> < 1.4 m
рН	8
Application temperature (substrate and ambient)	from +5 °C 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 h*

<sup>\*) -</sup> applies to T=20° C, relative humidity 60%

# **Technical requirements**

ATLAS CERMIT N-100 is a component of sets of products for making thermal insulation with systems:

Name of the system	National Technical Assessment
ATLAS ETICS	ITB-KOT-2020/1616 Issue 3

# Rendering

#### Substrate preparation

The substrate should be:

**stable** - stiff, seasoned and primed. Attention: When applying decorative rendering ATLAS CERMIT N-100 using stencils, ATLAS CERPLAST colour should be matched to the colour of the render,

#### dry,

even - unevenness and cavities should be filled in using, for example:

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

Please note: The fine-grained structure of the ATLAS CERMIT N-100 rendering mortar requires a particularly even substrate, all major irregularities will be reflected in the render layer.

Before repairing, the substrate should be primed with:

- ATLAS UNI-GRUNT or ATLAS UNI-GRUNT COLOUR,
- ATLAS UNI-GRUNT ULTRA,
- 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 residues; if the substrate is infested with biological infestation (mould decay fungi, algae, etc.) they need to be removed with ATLAS MY-KOS PLUS.

#### Specific requirements for substrates

Substrate type Seasoning requi- Method of pri-			
Substrate type			
reinforced layer in ETICS systems, made of ATLAS STOPTER K- 50 mortar	min. 3 days*	does not require a render base	
reinforced layer in ETICS systems, made of other ATLAS adhe- sive mortars	min. 3 days*		
new cement render made from ATLAS ready-mixed mortars, traditional cement and cement-lime renders	min. 7 days*, moisture con- tent 4%	ATLAS CERPLAST	
concrete substrates	min. 28 days*, structural moi- sture < 4%		
Paint coatings with good adhesion to the substrate in internal applications	no require- ments		
gypsum substrates gypsum plasterboards and fibre cement boards, firmly fixed in accordance with the manufacturers' rec- ommendations and the rules of the trade	moisture con- tent < 2%	preliminary ATLAS UNI- GRUNT proper ATLAS CER- PLAST	

<sup>\*) -</sup> Note: applies to bonding conditions: T= +20° C, 50 % 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.

#### 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 aggregate is recommended:

- Wagner PC 830/Wagner C330, nozzle 6 mm, operating pressure 2.2 bar, feed rate 2.0/10,

The operating pressures given are indicative for standard hose lengths. In the case of longer hoses, the pressure should be determined directly before application on site.

Before applying the render, a small amount of 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.

#### Invoicing

The freshly applied render should be textured with a plastic trowel by troweling in a circular motion. 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 object.

#### Applying the compound and smoothing the render using a stencil

For additional visual effect, a self-adhesive cardboard template can be used (available from the supplier on special order). The stencil reproduces on the wall a brick weft (a wagon-type brick bond, also called English or fortress brick bond) or a stone weft (a pattern of the so-called cyclopean wall, *opus incertum*).

After the primer has dried, stencil bits should be glued one next to the other over the entire rendered surface, taking care to ensure that the joint (both the stencil with the substrate and the stencils between each other) is accurate. ATLAS CERMIT N-100 render should then be applied according to the technology described in the previous paragraph. Immediately after the render has been applied and smoothed, all the stencil blocks should be peeled off one by one. After peeling off the lumps, the primer will imitate the joint between the stone imitation surfaces. Each time the ATLAS CERLAST colour scheme should be carefully matched to the colour scheme of the ATLAS CERMIT N-100 decorative render.

RENDER STENCILS	
Natural stone (SZABT-KN)	103.5 x 89.5 cm
Slate stone (SZABT-KL)	98.2 x 68.2 cm
Brick (SZABT-CE)	103.5 x 88 cm

#### Render restoration

Refreshing the façade after many years of use can be carried out with the silicone façade paint ATLAS SALTA N. This work is excluded in the case of ATLAS CERMIT N-100 decorative render applied using stencils.

# Consumption

Average consumption < 2.0 kg render per 1  $\rm m^2$ . 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 (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, e.g. in corners and folds of the building, under 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 between approx. 12 and 48 hours. In conditions of increased humidity and a temperature of approx. +5 °C, the setting time of the render may be prolonged.

In order to avoid possible differences in colour shades, render of the same date of manufacture should be applied to one surface.

Dark, intense colours of the render (HBW < 20 %) are recommended for use on small, limited façade areas (architectural details) due to increased absorption of solar radiation.

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 RESIN AWAY 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. The documents accompanying the product are available at www.atlas.com.pl.

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