



## ATLAS DEKO M

### type TM 5

decorative mosaic render -  
effect of natural stone

- highly resistant to mechanical damage
- excellent resistance to washing
- creates unique colour compositions



FROST  
AND WATERPROOF



FOR INTERIOR  
AND EXTERIOR USE



RESISTANT  
TO DIRT



DURABLE  
AND HIGHLY FLEXIBLE



RICH  
COLOUR PALETTE

### Properties

ATLAS DEKO M is a line of mosaic renders consisting of a modern base: a mixture of aqueous dispersions of acrylic hydrophobic agents, modifying additives and specially selected coloured quartz aggregates.

ATLAS DEKO M is a light and durable render coating with increased resistance to washing, cleaning and scrubbing.

**Rich colours** - can be applied to a wide range of substrates, great freedom when designing walls in showrooms, car showrooms, offices, flats, stairwells, waiting rooms, lobbies, hallways, facades of residential buildings, public buildings, etc.

**High elasticity, resistance to mechanical damage** - ability to bridge thermal stresses and impacts ensured by high content of dedicated polymer dispersions. The render perfectly compensates for the stresses resulting from different thermal expansion of the layers underneath it, arising, for example, from strong sunlight.

**High durability of the render during use** - through the use of a combination of acrylic dispersions, special additives and modifiers:

- increased durability of the coating,
- increased resistance to weathering and UV radiation,
- increased resistance to microbial growth is provided,
- ensures that the aesthetic appearance of the façade is maintained over the long term.

**Strong surface hydrophobisation, self-cleaning ability** - the highly UV-resistant hydrophobic layer effectively reduces the structural absorption of the render and allows for a water repellent effect that lasts over time, ensuring that dust and dirt particles do not adhere and can be rinsed away during precipitation.

**Dark and intense colours** - the product uses natural fillers in the form of natural broken aggregates, coloured by coating. This has made it possible to obtain:

- a very broad spectrum of expedition design, taking into account the diverse tastes and needs of the audience,
- a rich colour palette that also includes dark and intense colours.

**High colour fastness** - ensured through the use of natural aggregates coloured with polyurethane resins using special hybrid mixtures of inorganic pigments and organic pigments with increased resistance to external influences.

Type of render ATLAS DEKO M	Type TM 5
appearance	natural stone effect
number of possible render compositions	13
23.8 kg package	component A - aggregate 16,2 kg component B - base 7.6 kg
decorative accessories	black mica or silver glitter (in a ready mix)

## Purpose

ATLAS DEKO M is used for the application of decorative and protective thin-coat renders on the outside of existing buildings, newly constructed buildings and indoors:

- in complex external wall insulation composite systems (ETICS) for buildings, using polystyrene (EPS) panels,
- On even, properly prepared mineral substrates (e.g. concrete, traditional cement and cement-lime renders and gypsum plaster, on gypsum plaster boards, gypsum fibre boards, chipboards, OSB boards, well-bonded paint coats (e.g. oil paint coats), etc.).

ATLAS DEKO M renders are recommended for:

- indoor applications in areas with heavy traffic and high wear and tear (lobbies in schools, kindergartens, healthcare facilities, office buildings, underground passageways, etc.).
- Outdoor applications exposed to weather conditions that require frequent cleaning, e.g.: building plinths, fences, retaining walls, columns, façade parts or architectural elements (e.g. bay windows, dormers, etc.).

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

TYPES OF FACILITIES	
housing construction	+
public, educational, office and healthcare buildings	+
commercial and service construction	+
industrial construction	+
industrial warehouses	+
traffic construction	+
farm and livestock 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, cellular or calcium-silicate walls	+
Gypsum plaster, plasterboard (inside the building)	+

## Technical data

density	approx. 1.6 g/cm <sup>3</sup>
diffusion resistance	0.14 m ≤ S <sub>d</sub> < 1.4 m
pH	8
application temperature*	from +5 °C to +30 °C
air relative humidity*	< 80 %
render initial drying time**	approx. 15 minutes
render drying time**	approx. 24 hours

\*) the preparation of the mass and the substrate and surroundings before starting the works, during the works and the setting period (\*\*\*) at 20 °C and 60 % humidity

## Technical requirements

ATLAS DEKO M render meets the requirements of EN 15824:2017-07 - decorative water-thinnable mosaic render for use on external and internal walls, columns and partition walls.

ATLAS DEKO M (2019) Declaration of performance No. 049/1/CPR. EN 15824:2017	
Intended use: for external walls, ceilings and columns. For internal walls, ceilings, columns and partitions	
Water vapour permeability	V <sub>2</sub>
Water absorption	W <sub>2</sub>
Adhesion	0.35 MPa
Reaction to fire	
- for renders up to 2.0 mm	A2-s1, d0
- for renders up to 1.2 mm	B-s1, d0

ATLAS DEKO M is a component of the set of products for thermal insulation system em

Name of the system	National Technical Assessment
ATLAS ETICS	ITB-KOT-2020/1616 Issue 2

## Rendering

### The substrate should be:

**stable** - sufficiently stiff and sufficiently long seasoned and primed, dry,

**even** - irregularities and defects should be filled in using e.g. ATLAS ZW 330, ATLAS plastering mortar or adhesive mortars for making the reinforcement layer in thermal insulation systems; before repairing, the substrate should be primed with ATLAS UNI-GRUNT; leaving the surface with a punctured reinforced layer is not allowed (WT ITB for ETICS systems, 2020),

**cleaned** - from layers that may impair adhesion of plaster, especially from dust, dirt, lime, oil, grease, wax, oil and emulsion paint residues. If there are effects of biological infestation on the substrate (fungi, algae, etc.) they need to be removed using ATLAS MYKOS PLUS or ATLAS MYKOS NR 1.

**protected from contamination** - nearby surfaces, e.g. window frames, should be thoroughly protected before machine application, **uniformly primed:**

- ATLAS CERPLAST primer should be applied with a brush (application with a roller is not recommended for this plaster);

- If the substrate is not uniform in colour, apply a second coat of primer with ATLAS CERPLAST to make the colour uniform,

- ATLAS CERPLAST should be applied in the recommended colour, as uniform in colour as possible.

As a standard, for selected colour compositions, it is recommended to use ATLAS CERPLAST primer in white (not tinted) or in tinted colours: clinker, graphite and sand. Note: ATLAS CERPLAST unevenly applied on the substrate (with locally visible reinforced layer), may lead to differences in the shade of the applied render (substrate piercing effect).

Primer colour ATLAS CERPLST	Colours of ATLAS DEKO M - Type TM 5
CLINKER	GNEISS 05
GRAPHITE	GRANITE 05 BASALT 02 BASALT 03 GNEISS 03 GNEISS 04
SAND	GNEISS 01 GNEISS 02
WHITE	GRANITE 01 GRANITE 02 GRANITE 03 GRANITE 04 BASALT 01

### Specific requirements for substrates

Substrate type	Seasoning requirements	Method of priming
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 adhesive mortars	min. 3 days*	ATLAS CERPLAST**
new cement renders made from ATLAS ready-mixed render mortars, traditional cement and cement-lime renders	min. 7 days/1 cm thickness*, moisture content 4%	Pre-priming - ATLAS UNI-GRUNT Proper priming - ATLAS CERPLAST**
concrete substrates	min. 28 days*, structural moisture < 4%	ATLAS CERPLAST**
Paint coatings with good adhesion to the substrate in internal applications	no requirements	ATLAS CERPLAST**
gypsum substrates	moisture content < 2%	- Initial priming - ATLAS UNI-GRUNT - Main priming - ATLAS CERPLAST**
gypsum plasterboards and fibre cement boards, firmly fixed in accordance with the manufacturers' recommendations and the rules of the trade		

\*) Note: applies to curing conditions: T= +20° C, 50 % humidity

\*\*) it is recommended to use ATLAS CERPLAST in one of the recommended colours (the table with the appropriate colour of the primer can be found in the paragraph IMPORTANT ADDITIONAL INFORMATION)

Plasters applied for ATLAS DEKO M should be trowelled sharply and, in addition, in the case of gypsum plaster, the render should not be "drawn out". When gypsum plaster has been classically smoothed during application, the surface should be matted.

### ATLAS DEKO M - Type TM 5

The set consists of two elements:

- component A, a composition of coloured aggregates in bags (16.2 kg)

- component B, the base in a bucket (7.6 kg).

The aggregate should be poured into the bucket with the base. The render thus prepared should be mixed thoroughly.

## Aggregates

Coloured aggregate colours to prepare TM type 5	Grain size [mm]
Basalt 001	0,1 - 1,2
Basalt 002	0,1 - 1,2
Basalt 003	0,1 - 1,2
Granite 001	0,1 - 1,2
Granite 002	0,1 - 1,2
Granite 003	0,1 - 1,2
Granite 004	0,1 - 1,2
Granite 005	0,1 - 1,2
Gneiss 001	0,1 - 1,2
Gneiss 002	0,1 - 1,2
Gneiss 003	0,1 - 1,2
Gneiss 004	0,1 - 1,2
Gneiss 005	0,1 - 1,2

### Preparation of mass for application

Immediately before use, the mix should be stirred to an even consistency.

### Mechanical application of the compound and smoothing of the render

The basic method of application of ATLAS DEKO M type TM-5 render is machine application. It should be applied on all large surfaces such as façades or their fragments, staircases, etc. A spray test is recommended before each application in order to select optimum working parameters.

The render should be applied on an evenly primed substrate after the ATLAS CERPLAST primer has dried. Application of the mass should be carried out in two stages.

**Stage 1 - Base coat.** The first layer of render should be applied manually with a trowel. The mass should be applied on the substrate in the form of a layer of aggregate thickness, with the use of a smooth stainless steel trowel (standard or Venetian) and simultaneously smoothed in various directions. The trowel should be guided at the lowest possible angle to the surface to be smoothed.

**Stage 2 - finishing coat.** The second layer should be applied 20-40 minutes after the application of the first layer, after it has set slightly. Before spraying, 5% water should be added to the finished render and mixed thoroughly to a uniform consistency. The render should be sprayed from a distance of approx. 1 m, using a compressor with a basket gun, using a 6 mm nozzle, air working pressure is 0.5-3 atm, maintaining the application direction perpendicular or close to perpendicular in relation to the façade plane. In the case of renders containing mica additives, adjust the spray parameters by selecting the optimum pressure and distance from which the spray is applied. The render should be applied over the base coat in a thin, even layer imitating the irregular texture of split natural stone.

Note: The texture and visual impression of the resulting render may vary depending on the set working parameters (distance of the nozzle from the substrate, amount of pressure, how the nozzle is guided, amount of material applied).

### Manual application of compound and smoothing of render

Manual application of the render is only allowed on smaller areas. On larger areas, manual application is recommended only with the use of stencils or on rusticated surfaces with laths/dividing lines spaced a maximum of 50 cm apart.

The compound should be applied to the substrate in a layer the thickness of an aggregate, using a smooth stainless steel trowel (standard or Venetian), while smoothing continuously in the same direction. The trowel should be guided at the lowest possible angle to the surface to be smoothed. Excess material should be drawn back into the bucket and stirred. A trowel slightly moistened with water can be used for smoothing.

NOTE: Due to the small and non-uniform diameter of the aggregate, it may be necessary to apply the render in two coats on uneven substrates. The second coat should be applied after the first coat has dried completely, i.e. after approximately 24 hours. Uneven rendering may result in local differences in colour shade on the rendered surface (resulting from uneven aggregate distribution and filling of the spaces between aggregate grains with the binder).

### Manual application of compound and smoothing of render using a stencil

For additional visual effect, a self-adhesive cardboard stencil can be used (this is available from the supplier on special order). The stencil reproduces the shapes of a stone or brick wall on the wall. In order to make the effect achieved with the stencil (available on request from the supplier) more visible, it is recommended to use the stencil on the wall. From the supplier, it is recommended to use an ATLAS CERPLAST primer in a colour contrasting with the render composition. After the primer has dried, stick the stencil sheets one next to the other on the entire rendered surface, taking care of the accuracy of the joint (both the stencil with the substrate and the stencils between each other). ATLAS DEKO M render should then be applied according to the technology described in the previous paragraph. Immediately after the application of the render, all sheets of the stencil should be peeled off one by one. Once all the sheets have been peeled off, ATLAS CERPLAST will trace the joint between the surfaces imitating blocks of stone or brick.

## Consumption

Average consumption of ATLAS DEKO M type TM 5 render:

Mechanical application:	Manual application
1st layer by hand 2.4 - 3.6 kg/m <sup>2</sup>	(on smaller areas only):
2nd layer mechanically approx. 0.8 kg/m <sup>2</sup>	2.4-3.6 kg/m <sup>2</sup>

It depends on: the type of substrate, the thickness of the layer, the appearance of the expected final texture. We recommend determining the exact consumption of the material on the basis of a test.

## Packaging

Name of variant	Packaging
ATLAS DEKO M type TM 5 - 23.8 kg	plastic bucket with base 7.6 kg bags with aggregate composition 16.2 kg

## Safety information

Safety information is given on the product packaging and in the Safety Data Sheet, available at [www.atlas.com.pl](http://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](http://www.atlas.com.pl).

The shelf life of the product (shelf life) is 12 months from the date of manufacture of the base.

## Important additional information

The use of protective nets on scaffolding during application and drying of the product is absolutely required. This applies particularly to dark render colours applied in bright sunlight.

After application, the render has a milky white colour and acquires its proper colour after it has dried completely. High atmospheric humidity and low temperatures may prolong the setting time of the render and cause a change in shade.

The appearance of mosaic render on different surfaces can vary. This is due to the specific characteristics of this type of product, especially of several colours of mineral aggregates. Clusters of aggregates in one colour are not regarded as a defect in the material. The appearance can also be affected by uneven thickness or inaccurate (uneven colour) priming of the primer.

With constant contact with water, a 'slickness' may appear which disappears when the surface dries. Avoid using render where it will be exposed to prolonged exposure to water or moisture (e.g. on horizontal surfaces or those with a slight slope, in ponds, etc.), as well as on elements that do not have adequate damp proofing.

To avoid variations in the colour shades of ATLAS DEKO M TM 5 render:

- render with the same base production date should be applied to a single surface,
- when aggregates from several bags are used on one surface, they should have the same production date,
- try to execute one surface in one process cycle,
- always mix the mixture before use.

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, spraying and smoothing).

When joining process fields, use the wet-on-wet method, not allowing the applied layer to dry. Otherwise, the location of this joint will be visible. Technological breaks should be planned in advance, e.g.: 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.

It is imperative that protective nets are used on scaffolding for external applications. If daytime air and surface temperatures before application or during setting  $> +25^{\circ}\text{C}$ , limit application to morning hours only. Failure to follow these recommendations may result in insufficient transparency of the binder in areas exposed to strong sunlight or direct exposure to temperatures higher than those indicated in this data sheet.

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.  $+5^{\circ}\text{C}$ , the render's setting time may be prolonged.

Clean the tools with clean water immediately after use. Use ATLAS CEMENT 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](http://www.atlas.com.pl).

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