ATLAS DEKO M type TM 1

fine-aggregate decorative mosaic render

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

Properties

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

Rich colours - possibility of application on various types of substrates, great freedom in designing walls in showrooms, car showrooms, offices, flats, staircases, waiting rooms, lobbies, hallways, facades of residential and public buildings, etc. To enhance the decorative effect of the composition, mosaic renders (TM 1) can be enriched with the addition of mica, glitter.

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 facade 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 - natural fillers in the form of coloured quartz aggregates are used in the product, in order to achieve a very wide range of possibilities to shape the render to the tastes and needs of the customers. This gives a rich colour palette that also includes dark and intense colours.

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

Type of render ATLAS DEKO M	TM 1
appearance	fine-grained effect
number of colours available aggregates	8
number of possible render compositions	120
23.8 kg package	component A - aggregate 3 x 5.4 kg component B - base 7.6 kg
decorative accessories	silver brocade black mica

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) boards,
- 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 coatings (e.g. oil paints), 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/cm³
diffusion resistance	0.14 m ≤ S_d < 1.4 m
pH	8
application temperature*	from +5 °C to +30 °C
air relative humidity*	< 80 %
render semi-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_2
Water absorption	W_2
Adhesion	0.35 MPa
Reaction to fire - for renders up to 2.0 mm - for renders up to 1.2 mm	 A2-s1, d0 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 3

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 GRUNT NKP; 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 render, 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,

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 with other ATLAS adhesive mortars	min. 3 days*	ATLAS CERPLAST**
new cement renders made with ready-to-use ATLAS plastering mortars, traditional cement and cement-lime renders	min. 7 days/1 cm thickness*, moisture content 4%	- Preliminary priming - ATLAS GRUNT NKP - Secondary priming - ATLAS CERPLAST**
concrete substrates	min. 28 days*, structural moisture < 4%	ATLAS CERPLAST**
coatings with good adhesion to the substrate in interior applications	no requirements	ATLAS CERPLAST**
gypsum substrates	moisture content < 2%	- Preliminary-priming - ATLAS GRUNT NKP - Secondary priming - ATLAS CERPLAST**
gypsum plasterboards and fibre cement boards, firmly fixed in accordance with manufacturers' recommendations and the rules of the art		

*) 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)

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

Preparation of the rendering mix

ATLAS DEKO M - Type TM 1

The set consists of two elements:

- component A, i.e. coloured quartz aggregate in bags (8 colours, bags of 5.4 kg)
- component B, the base in a bucket (7.6 kg).

Three bags of aggregate should be used to prepare the render mix. The aggregates should be poured into the bucket with the base and mixed (the total weight of the aggregates poured into the bucket should be 16.2 kg). The render thus prepared should be mixed very thoroughly.

Aggregates

Dyed aggregate colours for the preparation of TM 1 type	Grain size
Black A1	0,2 - 0,8
White A2	0,2 - 0,8
Brick A3	0,2 - 0,8
Brown A4	0,2 - 0,8
Sand A5	0,2 - 0,8
Grey A6	0,2 - 0,8
Silver A7	0,2 - 0,8
Earthy A8	0,2 - 0,8

Extras

In the TM 1 variant, it is possible to modify the composition with silver glitter or black mica. Please note: only one of these additional ingredients can be used in the render being prepared. Mica or glitter can be added at the stage of render or mass preparation. To do so, pour the entire contents of the package with the additional ingredient into the bucket with the base or into the bucket with the already mixed render mass. In the latter case, the entire contents should be mixed thoroughly to ensure homogeneous distribution of the additive in the mass being prepared.

Preparation of mass for application

The mass must not be combined with other materials, diluted or thickened. The mass must be stirred to an even consistency immediately before use.

Application of compound and smoothing of render

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 smallest possible angle to the surface to be smoothed in order to avoid fine irregularities. Excess material should be drawn back into the bucket and stirred.

NOTE: Due to the fine aggregate, on uneven substrates it may be necessary to apply the render in two coats. The second coat should be applied after the first coat has dried, i.e. after approximately 24 hours. Unevenly smoothing (especially (especially when using mica or glitter additives) may cause local colour differences on the rendered surface.

Manual application of the compound and smoothing of the 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 natural stone or brick on the wall. To further enhance the effect achieved with the stencil (available on request from the supplier), the use of a self-adhesive cardboard stencil is recommended. from the supplier), the use of ATLAS CERPLAST primer in a contrasting colour to the render composition is recommended.

After the primer has dried, stencil sheets should be glued one next to the other over the entire rendered surface, taking care of the accuracy of the joint (both the stencil with the substrate and the stencils between each other). Then, the ATLAS DEKO M render should be applied according to the 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 sheets have been peeled off, ATLAS CEPRLAST will trace the joint between the stone imitation surfaces.

Consumption

The average consumption of ATLAS DEKO M type TM 1 render is 1,5 - 2,5 kg/m². It depends on: the type of substrate, layer thickness, appearance of the expected final texture. We recommend that you determine the exact consumption of the material on the basis of a test.

Packaging

Name of variant	Packaging
ATLAS DEKO M type TM 1 - 23.8 kg	plastic bucket with base 7.6 kg bags of aggregate 3 x 5.4 kg black mica 0,075 kg silver glitter 0.125 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 of the base.

Important additional information

As a standard, for selected colour compositions, it is recommended to use ATLAS CERPLAST primer in white (not coloured) or coloured: clinker, brown, graphite, sand, grey, coffee.

Primer colour ATLAS CERPLST	Colours of ATLAS DEKO M - Type TM 1
BRONZE	A4 A4 A1; A3 A4 A1; A4 A4 A3; A4 A5 A3; A4 A7 A3; A4 A4 A4; A3 A4 A2; A4 A4 A2; A4 A5 A4; A4 A7 A4; A4 A6 A4; A4 A6 A3; A4 A4 A8
CLINKER	A3 A3 A1; A3 A5 A3; A3 A6 A3; A3 A7 A3; A3 A4 A3; A3 A3 A3; A3 A3 A2; A3 A3 A8
GRAPHITE	A1 A7 A1; A1 A6 A1; A1 A1 A1; A4 A5 A1; A1 A5 A1; A1 A2 A1; A1 A4 A1; A1 A3 A1; A3 A5 A1; A1 A1 A8
PIASK	A5 A5 A2; A5 A5 A5; A5 A7 A5; A5 A6 A5; A5 A5 A1; A5 A5 A3; A5 A5 A4; A5 A6 A4;
GREY	A6 A6 A5; A6 A7 A2; A6 A6 A2; A7 A7 A2; A7 A7 A5; A6 A7 A5; A7 A7 A7; A6 A6 A6; A6 A7 A6; A7 A7 A6; A2 A7 A1; A2 A6 A1; A5 A6 A1; A5 A7 A1; A6 A7 A1; A7 A7 A1; A4 A6 A1; A4 A7 A1; A6 A6 A1; A3 A6 A1; A3 A7 A1; A6 A7 A4; A7 A7 A4; A6 A6 A3; A7 A7 A3; A6 A7 A3; A6 A6 A4 ; A6 A6 A8; A7 A7 A8; A6 A7 A8
COFFEE	A5 A5 A8; A8 A5 A8; A8 A8 A8; A5 A6 A8; A8 A8 A1; A8 A8 A2; A8 A8 A3; A8 A8 A4; A8 A6; A8 A7
WHITE	A2 A2 A1; A2 A2 A2; A4 A7 A2; A2 A4 A1; A2 A5 A2; A2 A3 A1; A2 A6 A2; A2 A7 A2; A5 A7 A2; A2 A5 A2; A2 A5 A1; A5 A6 A2; A2 A4; A2; A4 A6 A2; A3 A6 A2; A3 A5 A2; A3 A7 A2; A5 A7 A4; A5 A7 A3; A4 A5 A2; A5 A6 A3; A2 A3 A2

After application, the render is milky white in 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.

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 1 render:
- render of the same date of manufacture should be applied to a single surface,
- when different types of aggregates of a given colour are used in a composition, they should have the same production date,
- try to perform 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 and smoothing).

When joining process fields, use the wet-on-wet method, not allowing the smoothed batch 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° 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 °C, the render's setting time may be prolonged.

Clean the tools with clean water, immediately after use. Use ATLAS RESIN AWAY to remove residues of the set compound which are difficult to remove.

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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