

DOLINA NIDY LIGHT MACHINE-APPLIED PLASTER

cement-lime plaster for indoor use

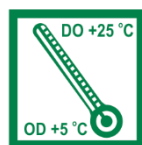
- for mechanical and manual application
- performance of 14 kg/m²/cm
- grit size up to 0.6 mm
- light processing



Machine
application



Pot life



Apply
temperature



APPLICATION

- for the application of modern plaster coatings on walls and ceilings inside buildings
- recommended for machine and manual application
- for use as a category III topcoat or undercoat plaster for ceramic tiles, gypsum and cement plaster, thin-coat plaster, etc.
- for use in rooms with normal humidity, also in kitchens and bathrooms, ideal for residential rooms in single-family and multi-family buildings, as well as public, healthcare and educational facilities such as schools, hotels, nurseries, hospitals, etc.
- recommended for substrates made of highly insulating materials (cellular concrete and expanded clay), can be used on substrates made of ceramic and lime-sandstone elements as well as concrete and chip-cement board

PROPERTIES

- ready-mixed building mortar based on mineral binders (Portland cement, lime), quartz aggregate, perlite and additives improving working and application parameters
- the cement binder provides the appropriate strength for the render, while the lime improves workability and facilitates handling, and the lime content also has a beneficial effect on the resistance of the render to cracking
- the low volumetric density gives the plaster a very favourable thermal conductivity coefficient (0.47 W/mK), almost twice as low as that of traditional cement or cement-lime plasters
- high open porosity, ensuring vapour-permeability of the plaster and free diffusion of water vapour
- fine grain size (max. 0.6 mm) to produce a plaster finish with a smooth surface
- can be applied in a wide range of layer thicknesses (5 to 30 mm)
- high performance, approximately 30% higher than conventional cement or cement-lime plasters
- mortar designed for machine application, ensuring rapid plastering progress with minimised use of pumps and accessories of plastering units

SUBSTRATE PREPARATION

The substrate should be suitably seasoned, dry, stable and cleaned of contaminants that could weaken the adhesion of the render and plaster. Plumbing voids should be filled with cement mortar before the render is applied.

For detailed recommendations, please refer to the table on the last page of the Technical Sheet.

Apply a bonding layer of CEMENT BASE COAT on the substrate, regardless of its type. Apply the CEMENT BASE COAT with a thickened consistency by hand or mechanically, on a suitably prepared substrate, maintaining 80 to 100% coverage. Do not level or trowel the surface. Leave it for preliminary hardening (1-3 days) and then proceed to the application of the proper layer (plaster overlay). In case of technological intervals exceeding 7 days or complete drying of the render coat, moisten the coat with water directly before applying the plaster. Note: Before plastering, gypsum substrates should be scratched with a sharp chisel in a dense, diagonal grid so that the scratch depth is ca. 3 mm and then dusted off and primed. When plastering substrates with different technical parameters, e.g. at the junction of different construction materials (masonry and reinforced concrete lintels etc.) and at the junction of chipboard/cement boards, it is recommended to use an additional reinforcement of alkali-resistant reinforcing mesh (galvanised steel or glass fibre with mesh size of 10x10 mm). The mesh is embedded in a thin layer of the applied cement-lime plaster and left for the mortar to set.

MORTAR PREPARATION

The mortar is prepared in a plastering unit equipped with a screw pump, pouring the dry mixture from bags. In case of manual application, the mortar preparation consists in pouring the dry mixture evenly into a vessel with a measured amount of clean water, in proportions specified in the Technical Data, and then mixing manually or mechanically until a homogeneous mass without any lumps is obtained.



METHOD OF APPLICATION

The prepared mortar is applied by machine with a spray gun or manually with a trowel. The application starts from the ceiling, then proceeds to the walls, in horizontal bands overlapping in a top-down direction. The superimposed mortar should initially be levelled using an "H" patch, the planes and angles should be brought out accurately and then allowed to set partially. Optimum layer thickness 10-20 mm on walls, 10-15 mm on ceilings. Level the sufficiently hardened render (i.e. after approx. 16-20 h) with a trapezoidal lath, then moisten the render surface with a water mist and thoroughly trowel or mechanical trowel until the desired surface quality is achieved. Starting the trowelling too late may hinder the desired effect. If the plaster is to be used as a substrate for ceramic cladding, trowel the surface sharply. In the course of plastering works, as well as during the plaster hardening period, it is recommended to observe the substrate and ambient temperature within the range from +5° C to +25 C.°

RECOMMENDATIONS FOR THE CARE OF THE COATING

The fresh render should be carefully maintained for a period of approx. 7-14 days after treatment. During this period, ensure adequate ventilation of the rooms and categorically avoid draughts that may cause the plaster to dry unevenly. Protect the fresh plaster from direct sunlight and frost. In case of elevated ambient temperatures (especially in summer), it is recommended to moisten the plaster surface daily with a fine water mist for up to 7 days. When working in winter, it is recommended to maintain positive temperatures indoors (minimum +5° C). The plaster drying time depends, among other things, on the place of application and the thickness of the plaster layer, as well as the temperature and humidity in the room.

RECOMMENDATIONS FOR FINISHING WORK

The plaster made as a topcoat can be painted with any paints intended for indoor use. It is necessary to follow the recommendations of the manufacturer of the paint used with respect to, among other things, substrate preparation and application of primers. If it is necessary to unify the plaster in terms of colour, the use of WHITE GRUNT-FARBA PRIMING SOLUTION is recommended. The plaster made as a primer is an excellent substrate for gypsum, cement or polymer plaster, and ceramic tiles of standard dimensions and weight can also be laid on it. Attention: It is recommended to commence finishing works when the plaster moisture content does not exceed 1%.

If hairline and shrinkage cracks are found on the plaster surface, the use of BRIDGING-PRIMING PAINT GRUNT-TYNK is recommended to unify the substrate before further finishing work.

CONSUMPTION

On average, approximately 1.4 kg is used per 1 m² with a layer thickness of 1 mm.

PACKAGING

30 kg paper bags.

TOOLS

Plastering unit, drilling machine with mixer, "H" patch, trapezoidal patch, spirit level, stainless steel plastering tools (trowel, steel trowel, long trowel, angle trowel), polystyrene trowel, felt trowel or mechanical trowel. Clean the tools with clean water immediately after use.

SAFETY INFORMATION

Safety information is given on the product packaging and in the Safety Data Sheet, available at dolina-nidy.com.pl.

The product is hygienically certified.

STORAGE AND TRANSPORT

Information on storage and transport is given on the product packaging and in the Safety Data Sheet, available at dolina-nidy.com.pl.

The shelf life of the product (best before use) is 12 months from the production date on the bag.

TECHNICAL DATA

Mixture proportions	5.85-6.15 litres of water per 30 kg of dry mix
Yield	100 kg mortar = approx. 70 l mortar
Pot life	approx. 120 minutes
Max. aggregate diameter	up to 0.6 mm
Substrate and ambient temperature	from +5° C to +25 C°
Minimum layer thickness	5 mm
Maximum layer thickness on the ceiling	15 mm
Maximum layer thickness on the wall	30 mm

TECHNICAL REQUIREMENTS

The product is a construction product for which the technical specification is the harmonised European standard PN-EN 998-1:2016-12 - lightweight plaster mortar (LW), with defined properties, manufactured in-house, for manual and mechanical application, for interior use on masonry walls, ceilings, columns and partition walls.

TYNK MASZYNOWY LEKKI DO WEWNĄTRZ DOLINA NIDY Declaration of Performance No. D101-1/1/CPR EN 998-1:2016	
Intended use: for walls, ceilings, columns and partitions	
Reaction to fire	A1
Adhesion	0.3 N/mm ² FP:B

NOTE

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. Documents accompanying the product are available at www.dolina-nidy.com.pl.

The contents of the technical data sheet and the designations and trade names used therein are the property of Atlas Ltd. Their unauthorised use will be sanctioned.

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Specific recommendations for substrate preparation.

Substrate type	Requirements	Preparation	Method of priming
Masonry walls made from cellular concrete or lime-sand-stone elements	seasoned for 2 to 3 months, moisture content of the substrate less than 3% (as determined by the CM method)	Remove dust, dirt, oil, grease, residues of paint, etc. from the surface. Chisel off any poorly bonded parts of the substrate or mortar, and clean any oily sections with a wire brush.	Priming with EURO-GRUNT 300 or EURO-GRUNT 500 is required. Apply the primer in a suitable dilution, by paintbrush, brush or roller. Allow to dry completely (approx. 12 h, depending on external conditions).
Masonry walls made of ceramic and expanded clay elements, ribbed ceilings			We recommend priming with EURO-GRUNT 300 or EURO-GRUNT 500 in a suitable dilution, or wetting the surface with water directly before applying the finishing coat. Apply the primer with a paintbrush, brush or roller. Allow to dry completely (approx. 12 h, depending on external conditions).
concrete and reinforced concrete	Monolithic elements seasoned for 4-6 months, substrate moisture less than 3% (determined by CM method)	clean off dust, dirt, oil, grease, residues of paint and release agents. Loosely bonded parts of the substrate should be chipped and cleaned of dust.	Priming with INTER-GRUNT is required. Apply the primer with a paintbrush, brush, or painting roller. Leave until completely dry (approx. 24 h, depending on external conditions).