

# DOLINA NIDY SUPER LIGHT MACHINE-APPLIED PLASTER

**cement-lime plaster for indoor use**

- for mechanical and manual application
- yield of 12 kg/m<sup>2</sup>/cm
- grain size up to 0.5 mm
- super lightweight processing
- excellent plaster surface quality



## USE

- for the application of modern plaster coatings on walls and ceilings in and ceilings inside buildings
- recommended for machine and manual application
- for use as a category III topcoat or undercoat plaster for gypsum and cement plaster, thin-coat plaster, etc.
- for use in rooms with normal humidity, also in kitchens and bathrooms, ideal for living areas in detached and semi-detached houses
- 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 fibre cement boards and lime-sand, concrete and fibre cement panels

## 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 of the render while the lime improves workability and facilitates handling, the lime content also has a positive effect on the plaster's resistance to cracking
- super-light surface treatment resulting from the fine grain of the mortar
- its 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
- very fine grain size (max. 0.5 mm) for a plaster finish with excellent surface quality
- can be applied in a wide range of layer thicknesses (5 to 30 mm)
- high performance, around 30% higher than conventional cement or cement-lime plasters
- mortar designed for machine application, it ensures rapid plastering progress, with minimal use of pumps and plastering unit accessories.

## 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. When plastering substrates with different technical properties, e.g. at the junction of different construction materials (masonry and reinforced concrete lintels, etc.) as well as at the junction of chip-board/cement boards, it is recommended to use an 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 be initially 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. In the course of plastering works and during the plaster curing period it is recommended to maintain the temperature of the ground and ambient temperature 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 summertime), it is recommended to moisten the plaster surface with a fine water mist on a daily basis for about 7 days after the plaster processing is completed. When working in winter, in unheated rooms, it is recommended to use oil or electric heaters, avoiding direct heat flow onto the freshly made plaster. 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. Attention: It is recommended to commence finishing works when the plaster moisture content does not exceed 1%. In the event that hairline and shrinkage cracks are found on the plaster surface, in order to unify the properties of the substrate before further finishing works, it is recommended to apply BRIDGING-PRIMING PAINT GRUNT-TYNK.

## CONSUMPTION

On average, approximately 1.2 kg is used per 1 m<sup>2</sup> with a layer thickness of 1 mm.

## PACKAGING

Paper bags 30 kg.

## 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](http://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](http://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 |
| Performance                            | 100 kg mortar = approx. 80 l mortar            |
| Pot life                               | approx. 120 minutes                            |
| Max. aggregate diameter                | up to 0.5 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 harmonised European Standard PN-EN 998-1:2016-12 - Light-weight plaster mortar (LW) with defined properties, manufactured in factory, for manual and mechanical application, for internal use on masonry walls, ceilings, columns and partitions

|                                                                                                                                                 |                   |
|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|
| TYNK MASZYNOWY SUPER LEKKI CEMENTOWO-WAPIENNY<br>DO WEWNĄTRZ DOLINA NIDY (2019)<br>Declaration of Performance No. D122-1/1/CPR<br>EN 998-1:2016 |                   |
| Intended use:<br>for exteriors, walls, ceilings and columns;<br>for walls, ceilings, columns and partitions                                     |                   |
| Reaction to fire                                                                                                                                | A1                |
| Water absorption                                                                                                                                | IN 1 <sub>c</sub> |

## NOTE

The information contained in this Technical Data Sheet is a basic guideline for the use of the product and does not release you from 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](http://www.dolina-nidy.com.pl).

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| Substrate type                                                            | Requirements                                                                                                   | Preparation                                                                                                                                                                                                 | Method of priming                                                                                                                                                                                                                                                                                                 |
|---------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Masonry walls made from cellular concrete or lime-sandstone elements      | seasoned for 2 to 3 months, substrate moisture content less than 3% (as determined by the CM method),          | Clean the surface of the surface of dust, dirt, oil, grease, residues of paint coatings, etc. 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 preparation 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 |                                                                                                                |                                                                                                                                                                                                             | It is recommended to apply a primer EURO-GRUNT 300 or EURO-GRUNT 500 in a suitable dilution, alternatively wet 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% (as determined by the CM method), | Clean the surface of dust, dirt, oil, grease, residues of paint and release agents. Loosely bound 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).                                                                                                                                 |