

DECO NUVOLATO GRIP

Nuvolato concrete floor for exterior

DESCRIPTION

Deco Nuvolato Grip Isoplam® is a system that allows you to create continuous non-slip material floors in cloudy decorative concrete that appear shaded, with darker color variations that stand out against a lighter background, as if they were clouds.

This decorative solution is based on the use of Deco Nuvolato Isoplam®, a ready-to-use premixed powder armor, composed of special formulations of spheroidal quartz, Portland cement, selected Bayer iron oxides resistant to ultraviolet rays and atmospheric agents and other special additives. Deco Nuvolato is easily incorporated into fresh concrete surfaces for the creation of power throwel worked floors with a “cloudy” finish suitable for outdoor use, where a high degree of slip resistance is required.

FIELDS OF USE

Deco Nuvolato Grip Isoplam® is highly appreciated in all those outdoor places where aesthetically appreciable but highly resistant and non-slip concrete floorings are required: exteriors of civilian homes (sidewalks, driveways, porches...), squares, boulevards...

TECHNICAL & PERFORMANCE DATA

The Deco Nuvolato Grip Isoplam® system conforms to UNI EN 13813:2004 standards.

<i>Performance feature</i>	<i>Test method</i>	<i>Product performance</i>
Reaction to fire	-	A1
Corrosive substances release	-	NPD
Water permeability	-	NPD
Water vapor permeability	-	NPD
Mechanical compression strength	UNI EN 13892-2:2005	C60
Mechanical bending strength	UNI EN 13892-2:2005	F7
Mechanical resistance to wear	UNI EN 13892-4:2005	AR2
Sound insulation	-	NPD
Sound absorption	-	NPD
Thermal resistance	ASTM E1530-11	1,2 [W/(m · K)]
Chemical resistance	-	NPD
VOC Emission	UNI EN ISO 16000-9:2006	A+

Slipping resistance	DIN 51130:2014	R12 (business): strong grip, suitable for environments with production of dairy products, cured meats or slippery substances, large kitchens of restaurants and car parks. R13 (business): very strong grip, for environments with large amounts of fats and oils.
Adhesion force	UNI EN 13892-8:2004	2,79 N/mm ²
.SRI (Solar Reflectance Index)	ASTM E1980-11(2019)	>49 test performed on Nuvolato Light Gray

SUPPORT PREPARATION

The substrate must be prepared according to UNI 11146 standard, compacting and correctly establishing the jet levels. Avoid the passage of pipes over the support that reduce the thickness at that point of the next concrete cast and that would thus entail the possibility of cracking of the flooring.

The application of Isoplam® Nylon as a vapor barrier and Isoplam® Nonwoven Fabric is recommended in order to avoid moisture rises, rapid drying and pitting. Apply the Isoplam® Perimeter Band.

Apply Pavigel Isoplam® sacrificial gel to protect washable surfaces adjacent to the cast from concrete.

Properly reinforce the concrete according to regulations, using Isoplam® Spacers for the correct positioning of the net, or using Isoplam® Structural Fibres.

It is recommended to properly choose the type of concrete mix that must comply with the UNI EN 206 standard for floors exposed to frost in the absence of disgel salts.

It is recommended to rely, whenever possible, on reliable concrete plants that use selected cements and aggregates to avoid the appearance (even after years) of efflorescence. These appear in the form of whitish spots when the salts dissolved in the CIs rise to the surface together with the water that contains them, or in the presence of strong humidity (even after the construction of the flooring) with the formation of calcium carbonate.

The strength class shall not be less than Rck 30 N/mm² (C25/30). The cement dosage must not be less than 350 kg/m³ (type 325 cement in the summer period and 425 in the winter period). An aggregate composed of inert not less than 15-18 mm (depending on the intended use), washed and non-reactive is recommended in order to avoid pop-out phenomena.

The average minimum thickness must not be less than 8 cm for pedestrian areas and 12 cm for vehicular traffic areas.

In case of mechanized concrete laying using Magic Screed Isoplam® Vibrating Screed, the appropriate consistency class will be S2-S3. In the case of manual laying of the concrete with Isoplam® Aluminium Screed, the appropriate consistency class will be S4.

In order not to compromise the final resistance of the flooring and to contain the risk of cracks, it is advisable not to exceed the amount of water in the CLS mixture. To this end, the use of seasonal superfluidifying additives such as Hotpav Isoplam® or Coldpav Isoplam® is recommended.

The use of Isoplam® Polypropylene Fibre CIs in the mix is recommended to limit the formation of micro cracks caused by the plastic shrinkage of the concrete.

Choose concrete plants close to the construction site. It is important that the concrete intended for the same construction site is always prepared by the same plant with the same dosages, in order to avoid differences in colour tones between one cast and another.

APPLICATION & RIPENING

Once the concrete has been staked respecting the minimum slope of 1% (in the case of combed floors, the minimum slope will be 2%) and once the water on the surface has disappeared, apply Deco Nuvolato Isoplam® by dusting it evenly in at least two crossed coats (two thirds of product for the first coat, the remaining third for the second coat) and proceed with the roughing operations using the Isoplam® floating machine, until an anti-slip effect with a degree of resistance to slipping R12 or R13 is obtained.

Do not use Deco Nuvolato Isoplam® to cover areas with excess water: this procedure could cause surface scaling phenomena.

Avoid wetting the surface during processing: this would result in cortical weakening. Instead, use E red Isoplam®, processing aid and anti-evaporant, spraying it on the surface during the various passages of the powe trowel machine.

To create a less plain appearance or to further increase the grip of the surface it is possible to create a combed effect on the fresh floor: after incorporating the Deco Nuvolato and smoothing the surface, it is enough to pass the Isoplam® Brushed Floor Broom to create a highly non-slip brushed finish suitable even for ramps with little slope.

Once the processing is finished, it is recommended to apply Isoplam® Antievaporant which forms a film to retain the moisture of the concrete during the early stages of hydration. This makes it possible to optimise the achievement of mechanical strengths and reduce the risk of the formation of pitfalls.

As soon as possible, cut the joints (generally the day after casting), wash the floor and adjacent surfaces treated with Pavigel with a pressure washer and apply the Isoplam® neoprene sheath.

Depending on the intended use of the flooring, consult the Isoplam® Technical Department for the protective treatments to be applied later.

Notes.

- The concrete reaches the characteristic strength after 28 days. It is therefore advisable to adjust the opening to heavy traffic accordingly.

- All companies that operate for the most disparate reasons above the concrete floor must avoid soiling the floor with oils, greases, paints, glues, adhesives (including that of paper tapes), solvents, diesel and gasoline, silicones, since, if a resin is provided when the concrete has matured, this will highlight the point of contact with the aforementioned pollutants. Similarly, nothing should be deposited on the concrete floor during maturation, not even for a few days, as the floor would not be allowed to ripe uniformly, causing unrepairable aesthetic damage.

- Even after the application of the transparent protector, it is recommended not to let carpets or other objects that we have contained in rubber settle on the surface, for example doormats, rubber mats of all kinds, pipes for irrigation water...: this material releases oils that stain the floor over time.

CONSUMPTION

The consumption of Deco Nuvolato varies depending on the chosen colour and the intended use of the flooring: the lighter the chosen colour and the heavier the load that the flooring will have to bear, the greater the amount of Deco Nuvolato to be applied.

The recommended dosage is 4 to 6 kg per m².

Never exceed the dosage of 6 kg per m², in order to avoid scrapping.

PACKAGING & COLORS

Deco Nuvolato Grip Isoplam® is in 25 kg nylon-coupled paper bags and is available in 34 colours as per Isoplam® Colour Chart. Custom colours can be ordered on request and for minimum quantities of 1500 kg.

STORAGE, EXPIRY, WARRANTIES AND SAFETY

Deco Nuvolato Isoplam® must be stored in a dry place, at temperatures not lower than +5°C in the original package.

If properly stored, the product is guaranteed for 6 months from the date of manufacture indicated on the packaging. Isoplam Srl does not guarantee its products when used mixed or superimposed on other similar products.

The quality of the raw materials used and the production system of Isoplam is ensured by the ISO 9001:2015 Quality System.

Consult the Safety Data Sheet before use.

Individual works must be carried out with a single production batch. Otherwise, Isoplam Srl is not liable for any colour differences.

IMPORTANT:

The product DECO NUVOLATO is intended for the use as indicated above. Adding any other product will impair the final result. All information contained herein is based on the best practical experiences and laboratory research. It is the customer's responsibility to determine whether the product is suitable for the intended application. The manufacturer declines all responsibility on the results due to incorrect application of its products. The product shall always be tested on a small area before full scale application. This data sheet replaces all previous data sheets. ISOPLAM reserves the right to change the data on the data sheet at any time. DECO NUVOLATO is intended for professional use only. ISOPLAM provides frequent and on demand trainings for its customers. The use of ISOPLAM products without receiving the proper certification will be at the customer's own risk.