PAVILUX
CORUNDUM D9

DESCRIPTION

Isoplam® Pavilux Corundum D9 is a ready for use mixture made of corundum (hardness 9), pure high resistance German quartz and of Portland Cement Cem II/A-LL – 42,5 R with low content of CR +6 as the Italian directive 2003/53/CE of 10.05.2004, to be applied by sprinkling on fresh concrete to protect civil and industrial floorings from wear.
Very high wear resistance

FIELDS OF USE

- New floorings in residential, commercial and industrial constructions;
- Schools and hospitals;
- Parking lots and basements;
- Terraces and sidewalks;
- Medium load storages. It supports the transit of rubber wheels carts (4-5kg/m^2) and of Vulkollan wheels carts with dosage of 6-7 kg/m^2.

Not to be used: in all the chemical and food industries in which the use of acid or aggressive substances is expected. In case of these conditions, contact Isoplam® Technical Office to choose the most suitable treatment.

ADVANTAGES

- A floor made with Pavilux Corundum D9 lasts more than a floor made with tamped cement: Superficial mechanical resistances of concrete are improved by the high concentration of the Corundum aggregate and by the reduction of the water/cement ratio of the sprinkling.
- Pavilux Corundum D9 reduces the dust formation on floorings thanks to the high Corundum concentration of the superficial protection. This reduces the oils and grease penetration, making the cleaning easier.
- The hardness of Pavilux Corindum D9 is more resistant to atmospherical agents, freeze-thaw cycles and to the attachment of deicing salt on a normal concrete surface and so it is ideal for sidewalks, ramps and parking lots.

TECHNICAL FEATURES

Isoplam® Pavilux Corundum D9 complies UNI EN 13813:2004.

Product shape: ready for use powder
Compression resistance:
> 40 N/mm^2 (3 days)
> 70 N/mm^2 (28 days)
bending:
> 7 N/mm^2 (3 days)
> 9 N/mm^2 (28 days)
Abrasion resistance: 1.45 mm
(Amsler, sliding friction on a 1000 m path)

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CONSUMPTION

3,5 kg/m² - 7 kg/m² depending on the wear resistance.

COLORS

Miele, rubino, cuoio, bosco, cemento, lavagna / Honey, ruby, leather, wood, concrete, blackboard (Bayer Bayferrox colors).

SURFACE PREPARATION

The substrate has to be prepared according to UNI 11146, compacting and establishing correctly the casting levels.
It is recommended the laying of Isoplam® Nylon as vapor barrier and Isoplam® Non-woven to avoid damp rising, fast drying and cracking. Apply Isoplam® Insulating Strip.
Reinforce the concrete according to legislation, using Isoplam® Spacers to apply correctly the mesh or Isoplam® Structural Fibers.
It is recommended to choose properly the kind of concrete mixture that must comply UNI EN 206 for floorings exposed to ice in absence of deicing salt.
It is recommended to rely on trusted concrete production plants that use selected cement and aggregate, to avoid efflorescences. These will be evident as whitish spots when dissolved salt in the concrete rises on the surface with the water that contains it, or in presence of high humidity (also after the realization of the flooring) with the formation of calcium carbonate.
The resistance class should not be inferior than Rck 30N/mm² (C25/30). The dosage of the cement should not be inferior than 350 kg/mc (concrete 325 in summer and 425 in winter). It is suggested a 15-18mm aggregate and not superior than 30 mm (depending on the destination use), washed and non-reactive, so to avoid pop-up.
The medium minimum thickness should not be inferior than 10 cm for pedestrian areas, 15 cm for light vehicular traffic.
In case of mechanical concrete laying with Isoplam® vibrating Magic Screed, the proper consistency class will be S2-S3. In case of manual laying with Isoplam® Aluminium Screed, the proper consistency class will be S4.
In order not to compromise the final resistance of the floor, it is recommended not to exceed with water in the concrete mixture, using proper seasonal superplasticizers such as Isoplam® Hotpav or Isoplam® Coldpav.
It is suggested the use of Isoplam® Propylene Fibers in the concrete mixture to limit the formation of micro-cracking cause by the concrete plastic shrinkage.
It is better to choose concrete production plants near to the construction site.
It is important that the concrete destined to the use in the same construction site is prepared always by the same concrete production plant with the same dosage, in order to avoid color differences between a casting and the other.

APPLICATION AND RIPENING

Once that the concrete has been kneaded with a screed respecting the minimum slope of 1% (in case of external floorings) and once the superficial water has disappeared, apply Isoplam® Pavilux Corundum D9, sprinkling it uniformly in two crossed coats (two thirds of the product as the first coat, the rest as the second one) and proceed with the process of roughing and smoothing with Isoplam® Power Trowel.
Do not use Isoplam® Pavilux Corundum D9 to cover areas with excess water: this may cause a superficial peeling.
Avoid to wet the surface during the kneading: this may cause a cortical weakening. Use Isoplam® E-Red, anti-evaporation kneading agent, spraying it on the surface during the several steps of the power trowel.

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It is suggested to maintain the surface of the flooring continuously wet for a week as soon as it hardens.
As an alternative, it is recommended to use Isoplam® Antievaporante that creates a film that holds the concrete damp during the first steps of hydration. This allows the optimization of the mechanical resistance and the reduction of cracking risk.
According to the flooring destination use, contact Isoplam® Technical Office for the proper protection treatments to be subsequently applied.

PACKAGING AND STORAGE

Isoplam® Pavilux Corundum D9 is supplied in moisture resistant bags of 25 kg.
Store at temperatures between +5°C and +35°C.
The product, if stored in a cool, dry place and at temperatures between + 5 ° C and + 35 ° C, is kept for more than 6 months from the date of packaging indicated on the bag.

SAFETY

Isoplam® Pavilux Corundum D9 is intended for professional use only.
Consult the Safety Data Sheet before use.

IMPORTANT:
The product PAVILUX CORUNDUM D9 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. PAVILUX CORUNDUM D9 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.

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