PAVILUX
ACCIAIO (STEEL)

DESCRIPTION

Isoplam® Pavilux Iron is a ready for use mixture made of high hardness and ductility metallic aggregate, pure high resistance German quartz and 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 obtain a resistant dustproof and spark-proof superficial protection to rolling and sliding friction stress and to accidental shocks.

FIELDS OF USE

Industrial floorings subject to medium-high stress:

- Steel and mechanical industry;
- Paper and printing industry;
- Textile industry;
- Hangars and explosive danger storages;
- Warehouses and heavy load storages.

It supports the transit of rubber, Vulkollan, polyamide and metallic wheels carts (with appropriate joints).
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 Steel lasts more than a floor made with tamped cement (4-8 times more) and it has a better resistance to rolling and sliding friction stress and to shocks.
- Superficial mechanical resistances of concrete are improved by the high concentration of the metallic aggregate and by the reduction of the water/cement ratio of the sprinkling.
- Pavilux Steel eliminates all the inconvenients caused by the dust formation of the surfaces because its protection is metallic and malleable and with a high mechanical resistance. This reduces the cleaning costs and it helps to eliminate malfunctions and wear of precision machineries.
- The protection of Pavilux Steel disperses the static electricity: this is due to its conductivity that avoids the sparks generation and the consequent dangers.
- Impact sparks caused by the resilience of the metallic surface are also eliminated.

TECHNICAL FEATURES

Isoplam® Pavilux Steel complies UNI EN 13813:2004.

Product shape: ready for use powder

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Azienda certificata UNI EN ISO 9001:2015 *Rev. del 09.06.2020*

Compression resistance:
> 45 N/mm^2 (3 days)
> 70 N/mm^2 (28 days)
bending:
> 8 N/mm^2 (3 days)
> 10 N/mm^2 (28 days)
Abrasion resistance: 2.1 mm
(Amsler, sliding friction on a 1000 m path)

CONSUMPTION

4,5 kg/m² - 8 kg/m² depending on the wear and accidental impact resistance that the flooring will support.

COLORS

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

SUPPORT 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/mm^2 (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

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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 Steel, 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 Steel 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.

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 Steel is supplied in moisture resistant bags of 25kg.
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 Steel is intended for professional use only.
Consult the Safety Data Sheet before use.

IMPORTANT:
The product PAVILUX ACCIAIO 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

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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 STEEL 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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