



# PAVILUX CRYSTALQUARZ

# **DESCRIPTION**

PAVILUX CRYSTALQUARZ is a ready to use color hardener mix composed of pure high resistance German quartz and Portland cement Cem II/A-LL-42,5 R, with Ministerial Ordinance 10.05.2004, to apply as dust finish and wear protection on new concrete of industrial and public floors.

# **FIELDS OF APPLICATION**

- New floors in: residential, industrial and commercial buildings
- Schools, hospitals
- Car parks, garages and basements
- Pitches, sidewalks and terraces
- Depot floors with light rubber traffic

#### Do not use

In chemical and food industries where it is expected the use of acid or aggressive substances.

# **TECHNICAL INFORMATION**

Type of product: ready-for-use powder

Compression resistance:

- > of 45 N/mm<sup>2</sup> after 3 days
- > of 75 N/mm<sup>2</sup> after 28 days

# Flex resistance:

- > 7,5 N/mm² after 3 days
- > 9N/mm² after 28 days

Abrasion resistance: 2,95 mm

(Amsler, sliding attrition on 1000mt paths)

# **CONSUMPTION**

A minimum of 4 kg/m<sup>2</sup> to a maximum of 7 kg/m<sup>2</sup> depending on the wear resistance required.

# **AVAILABLE COLORS**

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

Ral chart based on demand special colors are available.

# PHYSICAL AND MECHANICAL CHARACTERISTICS





- The PAVILUX CRYSTALQUARZ composition facilitates the incorporation of 4-7 Kg of hardener per m² of the floor. The concrete surface mechanical resistances is increased for the high concentration of the siliceous aggregates and for the reduction of the water/cement ratio caused by the hardener;
- We recommend to apply the hardener of PAVILUX CRYSTALQUARTZ on a concrete with the following proprieties:

Rck after 28 days: >25 N/mm<sup>2</sup>
Maximum diameter of the aggregates: 15-20-30 mm

Workability: S4

Cement type: CEM II/A-LL 42.5 (to exclude extra volatile ashes to the concrete from the packager)

**N.B:** all external floors with 2b exposing grade, (wet environment with frost), 3 (wet environment with frost and defrosting salt) will have to use concrete with added air from 4% to 6%, in accordance with the UNI 9858 recommendations and water/cement ratio respectively of 0.55 and 0.50.

- A floor hardened with PAVILUX CRYSTALQUARZ last much more than a floor in "quartz free cement" (up to 2 to 4 times much);
- PAVILUX CRYSTALQUARZ reduces the growth of the floor dust formation due to the high siliceous concentration of the superficial hardener. The product reduces the penetration of oils and greases and also facilitates cleaning;
- The hardener in PAVILUX CRYSTALQUARZ is more resistant to the atmospheric agents, frost, thaw and to winter salt compared to normal concrete surfaces and it is ideal for sidewalks, aprons, ramps and parking areas.

# **INSTRUCTION FOR USE**

PAVILUX CRYSTALQUARZ is a product to apply as superficial hardener on new concrete with two consecutive coats. The first coat requiring approximately 2/3 of the expected total quantity.

As soon as the hardener is hydrated with the concrete water mix and/or a possible spraying of the concrete, a double trowelling at right angle passes.

Subsequently, the rest of the product is applied and the trowelling process is performed to the desired finish.

#### **CURING**

It is recommended to carefully and continuously maintain the floor surface wet for approximately a week as soon as it has hardened and before executing the cut of the joints.

As an alternative an anti-evaporation film to withhold the concrete moister during the initial phases of the hydration process. This enables to optimize the achievement of the mechanic resistance and reduce risks of cracking.

Notes: OPENING TO TRAFFIC AND SHREWDNESS DURING CURING

The concrete reaches the characteristic resistance 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 staining the floor with oils, greases, paints, glues, adhesives (including paper tapes), solvents, diesel and petrol, silicones becuase if a resin is expected for maturation of the concrete, this will bring out the point in contact with the aforementioned pollutants. Likewise, nothing will be deposited on the concrete floor during the maturation phase, even for a few days, as the floor would not be allowed to mature evenly, causing unrepairable aesthetic damages.

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

# **PACKAGE AND STORAGE**

PAVILUX CRYSTALQUARZ is supplied in 25 Kg moisture-resistant bags. The product must be stored in dry areas on pallets and it has a shelf life of over 6 months.





#### IMPORTANT:

IMPORTANT:
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. Also note that ISOPLAM products are intended for professional use only. ISOPLAM provides recurring and on demand training for its customers. Use of ISOPLAM products without receiving the proper certification will be at the customer's own risk.