



DESCRIPTION: A cement-based quartz aggregate surface hardener, applied in powder form to fresh concrete surfaces exposed to moderate loads.

APPLICATION AREAS: Used in both indoor and outdoor environments, industrial facility floors, hangars and workshops, garages and parking lots, warehouses, loading and unloading areas, and areas exposed to traffic from rubber-tired vehicles.

ADVANTAGES: Easily applied to fresh concrete floors. Allows for a smooth and homogeneous surface. Prevents wear caused by mechanical loads. Provides resistance to impacts. Delays surface dusting.

SURFACE PREPARATION: The quality of the supplied concrete should be consistent, and the entire surface should have uniform strength. The concrete slab must be fully compacted, minimum C25 (350 dosage, 25 N/mm² grade, prepared with a minimum water-cement ratio). The thickness of the applied concrete must be at least 15 cm. Concrete with entrained air is not suitable for surface hardener application. The surface of the fresh concrete should be leveled with a wooden float. In large areas, to prevent level differences and ensure proper application, the application levels should be determined by creating a grid with a maximum size of 3x3 m. The application thickness should be determined considering the smoothness and porosity of the surface. For areas with significant surface irregularities or large areas, using a screed is important.

APPLICATION INSTRUCTIONS: Wait until the supporting concrete is walkable. The depth of foot imprints should be 0.5-1.5 cm when walked on. Depending on conditions, the evaporation water should be allowed to escape from the surface. In mechanical applications, immediately after spreading 4-8 kg/m² of **Petek Solid Floor 34** with an automatic spreader, the material should be evenly distributed on the surface. For manual applications, it is recommended to perform the spreading in two stages (with 2/3 of the total amount in the first stage and 1/3 in the second stage). Ensure a careful, homogeneous distribution without creating waves on the surface. Spreading should not be done from a distance greater than 2 m. The spread material should absorb the water from the concrete and become moist. Color change indicates that the moisture level is adequate. Finish with a low-speed mechanical trowel (helicopter). Do not add water to the surface that has been treated with a surface hardener. Final touches can be done manually or with a helicopter trowel. Loose or bleeding on the surface indicates that the concrete is still fresh. As soon as the concrete reaches the appropriate level of hardness, preliminary finishing should be done with a low-speed metal blade trowel at a minimum angle, and final finishing should be done at high speed.

WARNINGS AND RECOMMENDATIONS: Avoid application in environments with excessive airflow. Concrete containing fly ash has low workability and should not be used in such concrete floors. Characteristics such as water and cement content in concrete may cause slight color variations. Protecting from environmental effects and ensuring clean application will maintain color consistency and continuity. Color variations during the curing period are normal. Proper timing and troweling techniques are required. During application, the ambient and surface temperature should be between 5-35°C. High temperatures increase the application speed, while low temperatures decrease application time and speed. At relative humidity below 40%, efflorescence may occur on the surface. At relative humidity above 80%, sweating, slow curing, and hardening may occur. A slip-resistant surface can be achieved using chemical abrasion methods. Surface hardeners increase the wear and impact resistance of the applied surface but do not affect the concrete strength. Curing should be done after the **Petek Solid Floor 34** application. Tools and equipment used should be cleaned with water after application.

PACKAGING AND SHELF LIFE: 25 kg bags, 64 bags per pallet = 1600 kg, 1 year from the production date in dry and moisture-free environments. The packaging should be tightly sealed when not in use.

Technical Properties:

Structural Component:

Cement

Appearance- Colour:

Gray Natural Powder

Shelf Life: 12 months when stored in the original sealed packing in dry place.

Consumption:

4-8 kg/m²

Surface Temperature:

(+5°C) - (35°C)

CE

PETEK -KİMYA KİMYASALLARI İTH. İHR. SAN. TİC. LTD. ŞTİ
Topraktaş Mah. Topraktaş 6 Sk. S.S. Kund. Küç. San. Sit. B4
No:2/SBağlar/Diyarbakır/Türkiye

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In compliance with TSEN13813 Standards

Public Works Position No: 15.190.1002

Compression Strength: (7 days, EN196-1) 80N/ m²
Abrasion Resistance: (28 days TS699) ≤ 2cm³/50cm²

QUARTZ AGGREGATE SURFACE HARDENER



PETEK-KiM
OZ IRON

For Durable and Aesthetic Constructions