

Quartz Aggregate Surface Hardener



# Description

Tecnica 32 DS

Cementitious, quartz aggregate containing dry shake, ready to use surface hardener for the surfaces exposed to medium-heavy wear.

# **Fields of Application**

- Suitable for interior and exterior applications.
- Industrial building floors.
- Maintenance workshops and hangers.
- Garages and carparks.
- Storage areas.
- Loading areas.
- Areas exposed to tire wheeled vehicle traffic.

# **Properties**

- Easily applicable on fresh concrete.
- Provides an even and homogenous surface.
- Prevents abrasion due to mechanical wear.
- Provides resistance against impact.
- Delays dusting of the surface.

### **Preparation of Substrates**

- The quality of the provided concrete should not vary, the strength should be uniform over the surface.
- The concrete floor should be totally compressed, have the class of min. C25 (dose of 350, 25 N/mm²) and prepared with minimum water/cement ratio.
- The thickness of the applied concrete should be minimum 15 cm.
- The air entrained concrete is not convenient for surface hardener application.
- The fresh concrete surface to be applied should have been levelled with a wooden trowel.

# Application

- The concrete surface should reach a minimum bearing capacity. The footprint formation when walked over the surface should have a depth of 0.5-1.5 cm.
- Wait until the bleeding water should be evaporated from the surface due to conditions.
- For mechanical applications; Tecnica 32 DS should be spread evenly on the surface just immediately after it is applied to the surface with the automatic spreader with the amount of 5 kg/m<sup>2</sup> at once.
- Application in two steps is recommended for manual applications (3 kg/m² at first step, 2 kg/m² at the second step).
- Careful and homogenous scattering over the surface should be provided by preventing the variations. Scattering to the areas more than 2 m away distances is not recommended.
- Wait until the material scattered over the surface is moisturized enough by absorbing the water content of the concrete. The moisture level can be tracked by the colour change.
- The surface should be compacted by a low speed mechanical trowel.
- Water addition to the surface where the hardener applied is not allowed.
- Final finishing can be made manually or by mechanical trowel.
- Looseness or laitance on the surface indicates that the concrete is still fresh.
- Unless the concrete reaches the minimum required hardening conditions, the surface should be compressed by low speed tray finishing and then final knife finishing should be made with high speed.

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# Tecnica 32 DS Quartz Aggregate Surface Hardener



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Technical Properties	(at 23°C and 50% RH)
Appearance / Colours	Red/Green/Gray/Natural / Black powder
Shelf Life	12 months
Consumption	4 - 6 kg/m²
Surface Temperature	5 - 35 °C
Compressive Strenght (7 days, EN 196-1)	75 N/mm <sup>2</sup>

 $\leq$  2,5 cm<sup>3</sup> / 50 cm<sup>2</sup>

# **Post-Application Protection & Suggestions**

• Do not apply in high weather current conditions.

Abrasion Resistance (28 days, TS 699)

- Do not use on concrete surfaces with fly ash content due to its low workability.
- Water and cement content properties of the concrete may cause slight colour variances.
- Protection against environmental effects and clean application provides colour consistency.
- Colour shading during the drying process is natural.
- Correct timing and trowelling techniques are obligatory
- The surface and medium temperature should be within 5-35 °C.
- Low temperatures decrease and high temperatures increase the application speed.
- Efflorescence may occur at relative humidity conditions lower than 40%.
- Late curing and hardening may occur at relative humidity conditions higher than 80%.
- Anti-slip surfaces can be provided by chemical abrasion method.
- The impact and abrasion resistance of the surface increase by the surface hardener application, the mechanical strength of the concrete is not affected.
- Curing process is required after Tecnica 32 DS application. Tecnica 22 CW is recommended.
- Shelf life is valid for appropriate storage conditions without opening the pails.
- The tools and equipment used should be cleaned with water immediately after the application. The residues can be cleaned mechanically after hardening.
- For further information refer to the safety data sheet.

# Storage

- Packages should be kept dry and cool at between +5°C and +35°C in moisture free conditions. Avoid direct
- Packages should be protected from water, frost and adverse weather conditions.
- Shelf life is maximum 12 months conditional to complying with the above mentioned conditions.

# **Packaging**

• 25 kg multi-ply paper bags.

# **Quality Certificates**

FN 13813 EN 1504-2:2004



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