

APSEQUARZ TOP

CEMENTITIOUS SLURRY HARDENER WITH
NATURAL AGGREGATE FOR CONCRETE
FLOORING



DESCRIPTION

APSEQUARZ TOP is a ready-to-use mixture based on natural mineral aggregates (quartz) of high hardness, selected to have a suitable particle size distribution, suitable for protecting concrete floors. Its high mechanical strength makes it particularly suitable for use in industrial facilities and warehouses with heavy traffic and intensive material handling. Attractive finishes can be achieved in a range of colours by adding selected inorganic pigments. APSEQUARZ TOP is a product pre-mixed with cement, specific additives and other components, and is applied manually or mechanically to fresh concrete using the 'slurry, fresh-on-fresh' method, or as a dry-shake application at a rate of 3.5–4.5 kg/m². Also available in a fibre-reinforced version.

FIELDS OF USE

With the "slurry (fresh-on-fresh)" system, the main areas of application are:

- New flooring in residential, commercial and industrial buildings;
- Logistics warehouses;
- Storage facilities, courier and freight forwarding companies;
- Intermodal terminals and storage areas;
- Loading areas;
- Airport hangars;
- Road surfaces;
- Garages and car parks;
- Automotive industry, etc.

With the specific "slurry (fresh-on-fresh)" system for ramps, the main areas of application are:

- Ramps;
- Access ramps to garages or car parks.

PACKAGING

25 kg polythene-lined paper sacks.

CONSUMPTION

12 kg/m² at a thickness of 6 mm

18-20 kg/m² at a thickness of 9-10 mm if the floor requires grinding.

MIXING RATIO

Water : APSEQUARZ TOP = 3.5 ÷ 4.0 lt. : 25 Kg

FEATURES AND BENEFITS

- Increases the surface's mechanical strength;
- Suitable for floors requiring high abrasion resistance;
- Enhances resistance to wear caused by rolling and sliding friction, generated by the passage of wheeled mechanical equipment, including solid wheels;
- The surface can be ground to achieve a better aesthetic appearance and a cleaner look;
- It can be coated with METALCRIL or VERNILUX and does not cause oxidation;
- The finish can be smooth or anti-slip;
- The product complies with fire-resistance classification standards;
- When treated with METALCRIL, it provides excellent resistance to weathering, freeze-thaw cycles, de-icing salts, and becomes water-repellent.

CERTIFICATIONS

APSEQUARZ TOP complies with UNI EN 13813: materials for screeds (DoP n° 214).

ISO 9001 certified quality management system (Certificate No. IT.17.0227.01.QMS).

APSE S.r.l. is an active member of CONPAVIPER.



SUBSTRATE PREPARATION

Large concrete areas should be cast using a laser screed. For smaller areas, the traditional method using level strips is sufficient.

Lightly trowel the concrete, either manually or with a power trowel.

PRODUCT PREPARATION

Mix in a vertical concrete mixer, adding 3.5 to 4.0 litres of clean water for each 25 kg bag of APSEQUARZ TOP, and continue mixing until a homogeneous, lump-free mortar with a soft consistency is obtained.

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APPLICATION OF THE MIXTURE

Apply the mixed mortar onto fresh concrete in a layer with a thickness of 6–10 mm, as soon as the concrete begins to set.

The air content/entrapped air in the concrete must be less than 3%.

Allow the layer to stiffen (this time may vary depending on temperature and humidity conditions). Then start the trowelling operation, which must be repeated until a perfectly smooth and uniform surface is achieved. Dopo cominciare l'operazione di frattazzatura che dovrà essere ripetuta sino all'ottenimento di una superficie perfettamente liscia e omogenea.

Using the slurry method, the surface can be ground after a curing period of 7–10 days to achieve a finish that highlights the quartz aggregates.

Note: In this case, trowelling should not continue until a completely smooth surface is obtained. Instead, the surface should be left slightly rough, as this will facilitate the grinding process.

Apply the product at temperatures between +5°C and +35°C.

Slurry Application for Garage Ramps (using APSEQUARZ TOP specifically designed for GARAGE RAMPS)

- Mix APSEQUARZ TOP in a vertical concrete mixer, adding 4.0–4.5 litres of clean water for each 25 kg bag, and continue mixing until a smooth, homogeneous, lump-free mortar with a workable consistency is obtained;
- Prepare the panel layout (construction bays);
- Apply the mortar onto the fresh concrete in a layer 8–12 mm thick;
- Allow the layer to stiffen. The setting time will vary depending on the ambient temperature and humidity;
- Using the appropriate profiled trowels and aluminium straightedges, form the characteristic grooves of the anti-slip garage ramp surface by passing the tools repeatedly over the mortar until uniform, compact grooves are obtained.

APPLICATION DATA (Slurry Method)

Minimum application thickness: 6 mm

Maximum application thickness: 12 mm

Recommendations for achieving the best results:

- Do not mechanically spray the slurry. Apply APSEQUARZ TOP evenly using an aluminium straightedge on level guides to achieve the required thickness;
- When APSEQUARZ TOP begins to stiffen, finish the edges manually with a steel trowel and the main surface mechanically using a power trowel;
- Surface finishing must be carried out using a power trowel;
- For light colours (Ivory, Salmon and White), use Teflon blades on the power trowel to prevent surface burnishing.

Application of APSERING AQ, BETONCURE or METALCRIL 12 J – anti-evaporation curing agents

- APSERING AQ, BETONCURE or METALCRIL 12 J must be applied immediately after finishing;
- Apply evenly over the entire surface using a low-pressure sprayer at a coverage rate of approximately 100 g/m² (please refer to the relevant Technical Data Sheets).

CURING

For curing times (at +20°C), refer to the table below:

Workability time	35 min.
Start of setting	60 min.
Pedestrian traffic	7 days
Light vehicular traffic	14 days
Full service (forklifts)	28 days

CLEANING OF TOOLS

Clean with water while the product is still fresh. Once hardened, remove mechanically.

HEALTH SAFETY WARNINGS

For safety information, hazard warnings and precautionary advice, please refer to the most recent Safety Data Sheet (SDS), available upon request at: ufficiotecnico@apsebg.it

STORAGE

2 months, with regard to the directive on hexavalent chromium content. Up to 12 months if properly stored in original packaging in a dry place and protected from moisture. Store at temperatures between +5°C and +35°C.

DISPOSAL

Dispose of contents and/or container in accordance with local regulations.

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PRODUCT TECHNICAL DATA

PHYSICAL CHARACTERISTICS (at +20°C)

CHARACTERISTICS	STANDARD	RESULT
Appearance	-	Powder and granules
Colour	-	Grey, red, green, tobacco, yellow – GB420 (for other colours, see colour chart)
Density	EN 1015-6	1.92 ± 0.1 g/cm ³

QUARTZ CHARACTERISTICS

CHARACTERISTICS	STANDARD	RESULT
Natural quartz colour	-	White-yellow
Origin	-	Metamorphic sedimentary
Particle size	-	0.50 – 0.70 - 1 - 2 – 3 mm
Loss on ignition (LOI)	EN 196-2	0.2%
Mohs hardness	EN 101	6°-7°

PERFORMANCE OF THE PRODUCT ACCORDING TO UNI EN 13813

CHARACTERISTICS	STANDARD	RESULT
Compressive strength at 28 days	EN 13892-2	≥ 80 N/mm ²
Flexural strength at 28 days	En 13892-2	≥ 10 N/mm ²
Böhme abrasion resistance	EN 13892-3	9 cm ³ /50 cm ²
Abrasion resistance (wheel test)	EN 1339	I
Reaction to fire	EN 13501-1	A1 _{fl}

The above data are information obtained based on our best technical knowledge, application, and research experience. However, since we are unable to intervene directly in site conditions and work execution, they represent general indications that do not bind APSE S.r.l. in any way. - V&V Group. The information given does not relieve the purchaser of his responsibility to personally test our products as to their suitability with regard to their intended use. The customer is also responsible for verifying that this data sheet is valid for the batch of product of interest to him and is not outdated as superseded by later editions. If in doubt, contact our Technical Department in advance. APSE S.r.l. - V&V Group reserves the right to make technical changes of any kind without prior notice. This revision cancels and supersedes all previous ones, all under the continuous verification of data according to the new current Standards and our ISO 9001 management system. Please feel free to check the most up-to-date version of this Data Sheet on our website www.apse.it

