



APSECOR S

HIGH WEAR RESISTANCE
CORUNDUM and SILICIUM CARBIDE
BASE HARDENER

APSECOR S is a high mechanical resistance aggregate for monolithic floors, used in high traffic industries and workshops, airports, hangars, logistics warehouses, ceramic industries, automotive industries, ports, etc..

DESCRIPTION

APSECOR S is composed by a mixture of mineral aggregates and synthetic abrasives (corundum and silicium carbide content equal or above 20%). Ready to use, premixed with cement, is available in 7 different colours. On request further colours are possible. APSECOR S is applied manually or mechanically, in both methods, fine mortar, or spread.

WHERE TO USE

With the topping application method "**Fresh on Fresh**" the main areas of usage are:

- New floors in construction
- Residential, commercial and industrial areas
- Logistics warehouses
- Couriers, forwarders storage
- Road ways
- Loading areas
- Airports
- Airport hangars
- Access ramps to garages and parking lots
- Automotive industries
- Ceramic industries



With the method "**fresh on fresh**" topping **specific for ramps**

- Ramps
- Access ramps to garages and parking lots



BENEFITS

- Increases surface mechanical resistance.
- Indicated on floors where a very good anti abrasion treatment is needed.
- Increases wear resistance due to oblique and rolling abrasion caused by mechanical traffic even with full wheels.
- The surface can be polished to obtain a better esthetical finish and easier to clean.
- May be coated with METALCRIL or VERNILUX. It doesn't oxidize.
- The finish surface may be smooth or non-slip.
- The product complies to fire restriction regulations.
- If treated with METALCRIL, it provides excellent resistance to atmospheric agents, frosting, defrosting and salt corrosion, and becomes water repellent.
- **APSECOR S complies with UNI EN 13813**

CONSUMPTION

- Application by hand: 2,5 - 3,5 kg/m² for the first coat; 1,5-2 kg/sqm for the second coat.
- Mechanical application (with spreader machine): up to 8-12 kg/m².





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APPLICATION

CONCRETE QUALITY

New concrete should be formulated with a minimum cement content of RCK 300c and with an aggregate suitable for the intended purpose. Plasticizers should be included to improve workability. Concrete air entrained must be lower than 3%. **APSECOR S** should be applied onto the concrete as soon as it will support the weight of a man (the foot-print test). This will normally be after 4-12 hours depending on the weather conditions.

SURFACE PREPARATION

Large areas of concrete should be laid using a laser screed. For smaller areas use of a rake with straight edge will provide a suitably even surface.



DRY SHAKE APPLICATION

APSECOR S is applied to new freshly laid concrete by dry shakes.

- For optimum results sprinkling should take place in two stages when applied manually. When applied using a mechanical spreader a single application is sufficient.
- Manually for the first sprinkle coat **APSECOR S** should be spread evenly over the surface at a rate of 2 to 3.5 kg/m². And from 1.5 to 2 kg per square metre the 2 sprinkle coat using a telescopic spreader.

- **APSECOR S** should be spread evenly over the surface at a rate of 8 to 12 kg/m².
- Once this application of **APSECOR S** has absorbed all of the moisture it should be floated using hand trowels for edges and corners and power trowels for the main surface.



- Immediately after the first power float is complete the second manual application of **APSECOR S** should be spread evenly over the surface at a rate of 2 to 3.5 kg/m².
- Once the has second absorbed all application of the moisture it should be floated using hand
- The curing agent APSERING AQ should be applied immediately after the finishing operation is complete. It is applied using a low pressure spray apparatus evenly over the entire surface at a rate of 100 g/m².



- It is essential that the curing process be well advanced before the floor is put into service. The following delays must be observed:

PEDESTRIAN TRAFFIC	7 days
LIGHT TRAFFIC	14 days
FULL USE (FORK LIFTS, ETC)	28 days





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CURING APPLICATION DATA

(Slurry topping)

Minimum thickness allowed 6 mm
Maximum thickness allowed 12 mm

CURING

It is essential to keep in the curing time before the floor area is used.

- walkable 7 days
- light traffic 14 days
- in use (fork lifts) 28 days

FRESH ON FRESH APPLICATION

Use a mechanical spreader (laser screed) for large areas.

Hand application spread the slurry by smoothing plank within formwork of the desired thickness.

Slurry topping application

- Shortly trowel by machine (photo 1) the concrete
 - Mix in a vertical concrete mixer adding 4 ÷ 4,5 lt. of clean water per APSECOR S 33 kg bag keep on mixing until an even soft consistency without lumps mixture is achieved.
 - Spread the slurry on the fresh concrete in a thick layer of 6 to 10 mm, as soon as the concrete starts to solidify (photo 2)
- Concrete air entrained must be lower than 3%.

Large Surfaces

Laser Screed application method



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Small Surfaces

Traditional application method



1



2



2





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- Wait until the layer starts to set (this can vary depending on humidity and temperature) Start to trowel. This operation will have to be repeated until a complete perfectly smooth, even surface is achieved.
- With the slurry topping method it is possible to polish after about 7-10 days, to obtain a finishing that will emphasize the quartz grains.

N.B. In this case trowelling must not go on until a smooth surface is achieved, but the surface must be left a bit rough as to ease polishing.

Access ramps slurry topping application with APSECOR S (specific for RAMPS)

- Mix in a vertical concrete mixer adding 4 ÷ 4,5 lt. of clean water per APSECOR S 33 kg bag; keep on mixing until an even soft consistency without lumps mixture is achieved.
- Form squares.
- Spread the slurry on the fresh concrete in a thick layer of 8 to 12 mm.
- Wait until the layer starts to set (this can vary depending on humidity and temperature)
- With the appropriate spatulas and aluminum smoothing plank, perform some anti-skid cuts typical of garage

Ramps, repeating this operation until you get smooth and even compact cuts.

Advices to obtain a perfect result:

- IT IS NOT ALLOWED mechanical spraying of APSECOR S.
- Spread the slurry by aluminum smoothing plank within formwork of the desired thickness.
- When APSECOR S begins to set, edges and corners should be smoothed by hand and the main surface by power trowel.
- Polishing must be done with power finishing trowel. Use Teflon trowels when finishing surfaces with the lightest colours (ivory, salmon, white) to avoid burning the surface.

CURING COMPOUND

Application of APSERING AQ or BETONCURE

- APSERING AQ or BETONCURE must be sprayed immediately after finish work is complete over the entire surface area.
- APSERING AQ or BETONCURE is applied by spray at low pressure on all the surface at about 100 gr/m² consumption.

PACKAGING

APSECOR N is packed in very resistant 25 - 33 kg polyethylene paper bags



STORAGE

2 Months due to chromo equivalents guide lines.

It has a lifespan of 12 months if stored in its original packaging in dry conditions and without humidity.





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TECHNICAL DATA

PRODUCT INDICATIVE DATA		PHYSICAL-CHEMICAL CHARACTERISTICS	
Consistence	Grains and powder	Natural quartz colour	White - Yellow
Colour	Grey, Red, Green, Tobacco, Yellow GB420	Origin	Sedimentary Metaphoric rock
Specific weight (g/cm ³)	1,8	Grain sizes (mm)	0,50 - 0,70 - 1 - 2 - 3
Storage	2 Months due to chromo equivalents guide lines. It has a lifespan of 12 months if stored in its original packaging in dry conditions and without humidity.	Loss to fire	0,2%
Danger classification in accordance to 1999/45/CE specifications	Before usage consult paragraph "HEALTH AND SAFETY" and Regulation written on packaging and safety data sheet.	Hardness according to Mohs scale	6° - 7° - 9°
APPLICATION DATA (at +23°C and 50% R. H.)			
Mixing ratio		One component, ready to use	
Workable time span at +20°C		35 min.	
Application temperature		from +1°C to +35°C	
Curing time		60 min.	
Walkable		24-36 hour	

MECHANICAL RESISTANCE

Test characteristics	Test method	Product performance
Compression resistance	UNI EN 13892/2	At 7 days.....77.85Mpa Beyond 28 days.....66.20 Mpa
Flexural strength	UNI EN 13892/2	At 7 days.....10.61 Mpa Beyond 28 days.....7.19 Mpa
Abrasion resistance Böhme	UNI EN 13892/3	Böhme A 2.96 CE A6 EN 1339 mm 17.92 CE I TABER 0.95 gm
MARKING CE APSECOR S EN 13813 CT-C70-F10-A3		
MOHS HARDNESS Corundum & Silicium Carbide => 9° Hard inerts => 7° Inerts => 6°		



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HEALTH AND SAFETY CAUTION

RISKS

Eyes irritant. Skin irritant.
It causes burns.

PRECAUTIONS

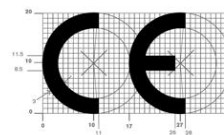
Keep out of reach of children. Avoid contact with eyes. Wear suitable protective eyewear. Avoid prolonged or repeated contact with skin. Wear suitable protective clothing. Do not breathe dust. In case of sufficient ventilation, wear suitable respiratory equipment. Wash soiled clothing before reuse.

FIRST AID

Wash exposed skin with soap and water. Flush eyes with large quantities of water. If breathing is difficult, move person to fresh air.

WASTE DISPOSAL METHOD

Dispose of this product in a landfill. In accordance with local regulations.



V&V srl

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EN 13813 CT-C70-F10-A3

HIGH WEAR RESISTANCE
CORUNDUM BASE HARDENER

Reaction to fire:	A2
Release of corrosive substances:	CT
Permeability to water:	NPD
Permeability to water vapor:	NPD
Compression strength:	C70
Flexural strength:	F10
Wear resistance:	A3
Sound insulation:	NPD
Sound absorption:	NPD
Thermal resistance:	NPD
Chemical Resistance:	NPD
Hazardous Substances:	SEE SAFETY DATA SHEET

DISCOVER ALL OF THE APSE PRODUCTS AND
DOWNLOAD TECHNICAL DATA DIRECTLY FORM SITE


www.apsebg.it
