

#### 22/06/2023

### **PRODUCT DESCRIPTION**

Quartz Carpet is a seamless flooring system based on coloured or uncoloured quartz grains that are bonded with resin (epoxy or polyurethane). This system is used for houses, showrooms, office, etc. In fact every floor with high aesthetical demands and not intended to be subdued to a mechanical load of more than 20 N/mm<sup>2</sup> or to heavy chemical loads, can be fitted with this system. The floor can be best compared with a seamless and wear-resistant wall-to-wall carpet.

The advantages of a quartz carpet are actually a combination of advantages of other floor systems. For instance, quartz carpets with an open structure have numerous pores filled with air. Therefore, walking on the carpets with bare feet, gives a nice warm and soft feeling, as if it were a normal carpet. Whereas the wear-resistance is that of a tile.

Furthermore quartz carpets have another characteristic. Dust disappears between the pores. The advantage is that dust is not continuously stirred when someone walks across the floor. Nevertheless the dust can be easily removed with a normal vacuum cleaner. Because the granules remain in place and are not squashed by the vacuum cleaner, like the hairs of a 'normal' carpet, dust will be easily vacuum cleaned. It is, however, recommended to clean the stone carpet once or twice a year with a powerful wet cleaner/carpet cleaner (type Duplex 420).

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# **CONSTRUCTION OPEN QUARTZ CARPET**

Construction Open Quartz Carpet							
Topcoat	PU-TOPCOAT ETC						
Quartz carpet	QC EP-BINDER- EAA / PU360-QC PU-BINDER UV 360 + granules						
Broadcas t	H0,4-0,8 of 0,1-0,3						
Primer	EQC / EP- UNIVERSAL PRIMER PUP/ PU- TURBO PRIMER TURBO EP-RAPID PRIMER EAA.09 / EP- PRIMER 09 EMISSIONFRE E	EQC / EP- UNIVERSAL PRIMER PUP/ PU- TURBO PRIMER TURBO EP-RAPID PRIMER EAA.09 / EP- PRIMER 09 EMISSIONFRE E	ETP / EP- TILE PRIME R EPW / EP- FAST PRIME R	EQC / EP-UNIVERSAL PRIMER EP-RAPID PRIMER EAA.09 / EP-PRIMER 09 EMISSIONFREE	EQC / EP- UNIVERSAL PRIMER EAA.09 / EP- PRIMER 09 EMISSIONFRE E	EWS / EP-WET SURFACE PRIMER	
Kind of base	Screed	Concrete	Tiles	Wood Anhydrite		Concrete/Screed	
Condition base	DRY				<u>WET</u>		



# **CONSTRUCTION CLOSED QUARTZ CARPET**

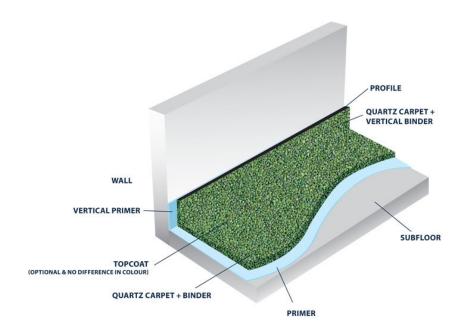
Construction CLOSED Quartz Carpet					
Topcoat	PU-TOPCOAT ETC / PU-TOPCOAT BASIC / EP-TOPCOAT				
Porefiller	SAD33 / QC AC FILLER 33				
Quartz carpet	QC EP-BINDER- EAA / PU360-QC PU-BINDER UV 360 + granules				
Braodcast	H0,4-0,8 of 0,1-0,3				
Primer	EQC / EP-UNIVERSAL PRIMER PUP/ PU-TURBO PRIMER TURBO EP-RAPID PRIMER EAA.09 / EP-PRIMER 09 EMISSIONFREE	EQC / EP-UNIVERSAL PRIMER PUP/ PU-TURBO PRIMER TURBO EP-RAPID PRIMER EAA.09 / EP-PRIMER 09 EMISSIONFREE	ETP / EP- TILE PRIMER EPW / EP- FAST PRIMER	EQC / EP-UNIVERSAL PRIMER EP-RAPID PRIMER EAA.09 / EP-PRIMER 09 EMISSIONFREE	EQC / EP- UNIVERSAL PRIMER EAA.09 / EP- PRIMER 09 EMISSIONFREE
Kind of base	Chape	Beton	Tegels	Hout	Anhydriet
Condition of base		<u>DRY</u>			





**3D-SECTIONS** 

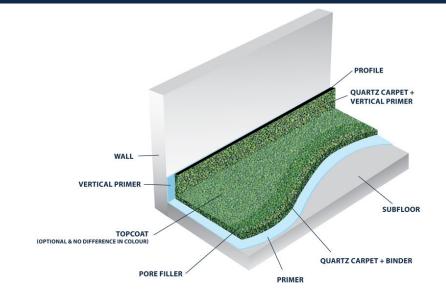
**OPEN STRUCTURE** 



### **CLOSED STRUCTURE**

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## POSSIBILITIES

Depending on where the quartz carpet will be fitted, different systems are available.

#### **INTERIOR**

All products are suitable for indoor use. For floors subject to high UV exposure (like large windows), it is recommended to use the interior system with high UV.

### **INTERIOR, WITH HIGH UV LOAD**

See separate system data sheet

### **HYGIENIC SPACES**

For hygienic reasons rooms such as toilets, kitchens or bathrooms might call for an additional 'sealing' of the quartz carpet. It is of course possible to apply this sealing in other spaces too, but not outside.

We do not recommend quartz carpets showers or saunas. Possibly a mortar system would make sense here.

### **GRANULES SIZES AND COLOURS**

Granule sizes for quartz carpets are available in four different sizes (1-2mm, 2-3mm, 3-4mm and 4-6mm) and in more than 3000 different colours. The possibilities of combining colours or mixing various colours are unlimited. Which makes it easy to include logos, drawings or initials in your carpet, allowing you to create a unique floor.

### CONDITIONS

The substrate on which the resin will be applied, should be strong enough and for the duration of application must always remain clean, dry, and free of dust and grease. Further specifications are listed under the General Conditions: Working with resin floors



# **APPLICATION INSTRUCTIONS**



Watch the application video on Sidec TV, Sidecs Youtube Channel, via www.sidec.eu

# PRIMER

Types :

Depending on the substrate, different primers are applied.

### Concrete and screed floor

most appropriate primer: EQC/A+B (this is a universal two component epoxy primer). Should the substrate still be moist, one can opt for a EWS/A+B primer.

Attention: Do not seal a quartz carpet which is applied on a wet subfloor.

For floors that will hardly be subjected to much load or wear and that are placed on a porous substrate, an acrylate fast primer APR.01 can be used. Consumption: depends on the level of suction of substrate (av. 0.200 kg/m<sup>2</sup>).

#### Tile floors

In most cases, it is absolutely necessary that the tiles are firmly attached and that the joints between the tiles are evened out. This can be done by applying a tile primer EPW/A+B or ETP/A+B first. The EPW/A+B is a fast-drying (30 minutes) water-based epoxy primer. However, the best possible bonding strength is obtained by ETP/A+B. For spaces that will be regularly wet, it is recommended to use ETP/A+B.

#### Wooden floor

#### EQC/A+B:

The wooden boards should be tight and not move in relation to each other when people walk on them. However, if this is the case, then we recommend applying a glass fibre in an epoxy gel (EGC/A+B) and this to avoid cracks. It is also possible to use an adhesive film.

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### Anhydrite floor

EQC/A+B, a universal two-component epoxy primer, is the most appropriate primer for anhydrite floors.

### Application

When you are using a two component primer, mix the A and B components with a drill to produce a homogeneous mixture.

Spread the resin across the floor with a sheepskin roller

Broadcast fine sand (0.1-0.3 mm or 0.3-0.8 mm) over the layer while it is still wet. Consumption:  $\pm$  0.100 kg/m<sup>2</sup>)

### NOTE

It is best to let the primer dry until it no longer sticks, but in the case of time constraints, you do not have to scatter sand on top and you can work 'wet in wet' (only for standard epoxy primer).

The best adhesion between primer and quartz carpet is obtained 12 to 24 hours after applying the primer. (Except for fast-drying primers APR.01 and EPW /A+B).

All these primers improve the adhesion, but are no waterproof products.



# QUARTZ

For most indoor floors it will suffice to use solvent-free and anti-allergic epoxy which hardly turns yellow at all. For this the binder EAA.05/A+B is used.

Mix the components A and B with a drill until you have obtained a homogeneous mixture. Add the homogeneous resin to the dry quartz and stir the mixture until all grains are equally coated. This can be done by using tools such as a slow drilling machine, a concrete mixer, a process mixer, double arm mixing machine.

Subsequently spread the quartz across the floor and even out the substrate with a trowel.

#### Important:

It's very important to use the same mixing time for the following mixtures of quartz and binder. Especially for SM-colors en SG-color is this necessary to avoid staining.

Consumption:

Size of quartz granules	1-2	2-3	3-4	4-6
Thickness of the floor (in mm)	6	6	8	10
Weight per m <sup>2</sup>	12	12,5	15	18
% resin added to quartz (EAA.05/A+B)	8	8	8	8
% resin added to quartz QC EP-BINDER 030 UV)	7	7	7	7

EAA05 / A + BS is available in a slower version as well: EAA05 / A + B L. This is intended for jobs that take a long time (logos, drawings, ...) or for installers who do not have enough experience with the normal EAA05 / A + BS. EAA05 / A + BL can also be used when temperatures are higher than 30C °. The hardening process takes approximately twice as long as EAA05 / A + B S.

In order to facilitate installation, you can spray some water on the trowel. To avoid the formation of white stains, make sure no drops fall onto the floor.

When laying the floor, the quartz should always be pressed upon very well. If that does not happen, the result will be a structure which feels rough and which will require a lot more sealing substance! Adding to that, the floor will be less resistant too.

It is best to have a 1000 Watt lamp shine over the floor during the entire application process. This also allows verifying whether the floor is even or not, and to spot any trowel marks or other flaws.

This should be repeated until the entire substrate is covered. After that, you will have to wait at least 16 hours before you can walk on the floor and apply a subsequent layer.

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Sidec epoxy binders have been used in stone carpet flooring since 1986. They have been specially formulated to keep uv discolouration to a minimum. Please consult our technical representative to ensure you have the correct binder for your application.

# SEALING

With this method you obtain a surface where 99% of the pores are sealed. This is especially recommended in kitchens, toilets and bathrooms.

We recommend to always seal quartz carpets that have a 1-2mm granule size. We recommend to no longer use an acrylic filter for granules more than 4 mm in size. We also do not recommend sealing outdoor floors and floors applicated on a wet subfloor.

	SAD		
Raw material base	Acrylic		
Handling type	Apply SAD with a trowel on the floor		
Consumption	Depending on granule sizes:		
	Apply SAD with a trowel on the floor   n Depending on granule sizes:   1-2 mm 0,60 kg/m²		
	2-3 mm 0,75 kg/m²		
	3-4mm 1,00kg/m²		

### To prevent foaming, never apply SAD with a brush.

If there is a floor heating, please stop it 1 day before the start of the application of the quartz carpet.

SAD is not resistant for:

- Some rubbers because of the danger of leaching.
- Some carpets will spread pigments who will pollute the SAD
- Tyres of motorcycles, cars,...

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# **TOP LAYER**

Depending on the desired final result, various finishing methods are possible :

### **OPEN STRUCTURE:**

In order to solidify the surface more, a PUW-ETC topcoat can be applied. This is a transparent finish which becomes invisible after application, but which provides additional UV and wear resistance.

- 1. PUW-ETC
- Apply some PUW-ETC to a roll
- Spread it evenly on the roller using a tray.
- Spread evenly across the smooth stone carpet! To avoid a foaming effect, make sure you do not use too much PU at one single spot.

### Consumption: +/- 100 g/m<sup>2</sup>

### **CLOSED STRUCTURE**

To establish a a matte or satin view to stone carpet with a closed structure (SAD33) the following topcoats can be applied.

- 1. PUW Sat (120 gr / m<sup>2</sup>)
- 2. PUW Mat (120 gr / m<sup>2</sup>)
- 3. PUW-ETC (100 gr/m<sup>2</sup>)

### Application

- Apply some PU to a roll
- Spread it evenly on the roller using a tray.
- Spread evenly across the smooth stone carpet!

PUW is not resistant for:

• Tyres

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# **SKIRTING BOARDS OR VERTICAL STAIRS**

Depending on personal preferences, an acrylic (VA.01), epoxy binding (EVB/A+B) or pu (PUVB) can be used :

Application: with acrylic binding agent VA .03 Use a paint brush and spread a small amount of binding agent across the surface that will be used in the application. Mix the quartz with ± 18% VA.03 and apply it using a stainless steel trowel. Not possible with the sm-colours! Application method: with epoxy binder EVB/A+B Mix components A and B using a drill Use a paint brush and spread a small amount of binding agent across the surface that will be used in the application.

Mix the quartz with 8 to 10% EVB/A+B and apply it using a trowel.

<u>Application method: with PU binder PUVB.02 / QC PU VERTICAL BINDER 02</u> Use a brush and spread a small amount of binding agent across the surface that will be used in the application. Mix the quartz with 6% PUVB.02 / QC PU VERTICAL BINDER 02 and apply it using a stainless trowel.

### NOTE:

Because of the different compositions of the binders, colour differences may occur between the floor and wall.

# **MORE INFORMATION ABOUT THE PRODUCTS**

For an appropriate execution of the application, it is necessary to consult the most recent data sheet of each of the products used.

## **TECHNICAL DATA**

### PRESSURE STRENGTH(according to NBN EN-196-1)

Grain size 2-3 + 8% EAA.05/A+B: 20,54 N/mm<sup>2</sup> Grain size 2-3 + 10% EAA.05/A+B: 31,13 N/mm<sup>2</sup>

BENDING STRENGTH(according to NBN EN-196-1)

Grain size 2-3 + 8% EAA.05/A+B: 6,56 N/mm<sup>2</sup>

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Grain size 2-3 + 10% EAA.05/A+B: 10,02 N/mm<sup>2</sup>

### **ADHESION STRENGTH**

Stronger than concrete. For specific information, see the datasheets of the various primers.

#### WEAR RESISTANCE

Amsler wear loss: 1.2-1.3 mm Sandblast Loss: 6.9 to 7.5 grams

### **TEMPERATURE RESISTANCE**

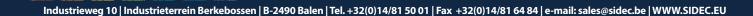
Operating temperature: from -4  $^{\circ}$  C to +60 $^{\circ}$  C Long-term resistance up to + 60 $^{\circ}$ C Short-term resistance up to +100 $^{\circ}$ C

**IMPACT SOUND INSULATION** (according to ISO 140-8:1998-03 and calculated according to ISO717-2)

Measured on rubber of 3mm:  $\Delta Lw = 17dB$ ;  $\Delta Llin = 7dB$ Measured on rubber of 6mm:  $\Delta Lw = 17dB$ ;  $\Delta Llin = 7dB$ 

### CHEMICAL RESISTANCE: (According to DIN 16524)

Name	Concentration	Result
Acetic acid	5-10%	excellent
Lactic acid	5-10%	excellent
Formic acid	5-10%	well
Wine Acid	5-10%	excellent
Hydrochloric acid	20%	excellent
Sulfuric acid	40%	excellent
Kitchen salt	20%	excellent
Caustic soda	20%	excellent
Ammonia	10%	excellent
Cement Solution	5%	excellent
Distilled water		excellent
N-Butanol		excellent
Xylol		excellent
Diesel oil		excellent
Skydrol		excellent





### **ANTI-SLIP**

	Pendelum/SRT		R Value nach DIN51130 (06/2004)		
	Dry	Wet	avarage total acceptance angle (in °)	Classification BGR 181 - 10/2003	
EAA010-2-3	60	41	13	R10	
EAA010-2-3+SAD33	48	37	13	R10	
EAA010-2-3+PUW AS80	56	33	13,3	R10	
EAA010-2-3+PUW AS160	53	32	13,5	R10	
EAA010-2-3+SAD33+PUW AS80	49	33	20,2	R11	
EAA010-2-3+SAD33+PUW AS160	48	34	11,2	R10	

### COMBUSTIBILITY

Classification according to European standard classification EN 13501-1:

a. Fire behaviour: Bfl

b. Additional classification : s1

Method used:

a. EN ISO 9239-1:2002 Average critical flux (kW/m²): ≥11 Average smoke attenuation (% min) : 0,91

b. EN ISO 11925-2:2002 Flame spread Fs: compliant Ignition of the filter paper: compliant

Classification according to ASTM E648-93a:

Average critical flux (kW/m<sup>2</sup>): 1.08

### **SKID RESISTANCE**

According to SRT-prEN14617-3 Wet: 30,8

Dry: 100,8

### **HOT-TYRE PICKUP**

Open structure: resistant Closed structure: not resistant

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## SAFETY

Always read the security (or the MSDS) sheet of the various products used THOROUGHLY.

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