

Silicone joint sealant

PCI Silcoferm[®] VE

227

for kitchen/bathroom and living area as well as swimming pools and non-drinking water tanks

FIELDS OF APPLICATION

- For interior and exterior application.
- For walls and floors.
- Elastic sealing of corner, movement and connection joints.
- Elastic sealing of joints between glass, aluminium, timber, enamel, ceramic, rigid PVC and sanitary acrylic.
- Sealing of connection and movement joints in swimming pools including pool surrounds, non-drinking water tanks, cooling towers and sanitary areas.
- Glass groove sealing of window frames made of timber, anodized and non-anodized aluminium.



Elastic sealing of joints with PCI Silcoferm VE; colour shades match the grout.

- Elastic sealing of butt joints at glass blocks and other glass elements.

FEATURES AND BENEFITS

- **Elastic**, capable of absorbing movements in joints up to 20%.
- **Resistant** to weathering and UV radiation.
- **Temperature resistant** from -40 °C to +165°C, suitable for underfloor heating systems and joints exposed to direct sunlight.
- **Resistant** to hot and boiling water.
- **Easy** to gun and smooth.
- **Unprimed adhesion** to glazed ceramic.
- **Contains fungicides**, prevents mould and mildew growth.
- **Resistant** to permanent exposure to swimming pool water, salt water, household cleaners and chemicals used in swimming pools such as chlorine, hypo-chloride, ozone, copper sulphate, aluminium sulphate.



FEATURES AND BENEFITS

- **Does not turn yellow.**
- **Tested for decontamination** in accordance with DIN 25415-1 (BAM).

TECHNICAL DATA

MATERIAL

Material base	silicone rubber, acetic acid curing system
Components	1 part
Consistency	pasty
Density	approx. 1 g/cm ³
Labelling for	
- Regulation for hazardous goods on roads	non hazardous
- Regulation for hazardous substances	no labelling requirement for this product
<i>For further information refer to Health and Safety.</i>	
Shelf life	min. 12 months when stored in dry conditions at max. +35°C.
Packaging	310 ml cartridge with srew-on nozzle (One carton contains 12 cartridges.)

APPLICATION

Consumption	
Joint dimension	
- 10 x 10 mm	approx. 100 ml/rm
- 5 x 5 mm	approx. 25 ml/rm
Yield	Calculable according to the formula: joint width (mm) x joint depth (mm) = ml/running metre. For triangle joints consumption is reduced to half. 310 ml cartridge is sufficient for:
Joint dimension	
- 10 x 10 mm	approx. 3.1 rm
- 5 x 5 mm	approx. 12.4 rm
Joint width	up to 30 mm
Working temperature	+5°C to +35°C (substrate temperature)
Adhesion without primer to	glass, glazed ceramic, anodized aluminium (when exposed to permanent wetness: PCI Elastoprimer 150), melamine resin, sanitary acrylic
Adhesion with PCI Elastoprimer 135 to	concrete, fibre-reinforced cement, mineral render/plaster, untreated wood
Adhesion with PCI Elastoprimer 150 to	Hostalit Z, plastic windows, glaze-coated open-pored timber, brick lining, unglazed ceramic, non-anodized aluminium, stainless steel, chrome
Adhesion with PCI Elastoprimer 165 to	plasticized PVC, rigid PVC, sanded polyester
Curing speed*	approx. 2 mm/day
Curing time*	tack-free after approx. 10 minutes, forms a vulcanized skin of approx. 1 to 2 mm after a few hours
Temperature resistance	-40°C to +165°C, and beyond for a short time
Dependable elongation	approx. 20% of joint width
Shore A hardness	approx. 20

* At +23°C and 50% relative humidity. Higher temperatures and/or higher humidity reduce the curing time and increase the curing speed, lower temperatures and/or lower humidity increase the curing time and reduce the curing speed.

PACKAGING

Stock item no./EAN check digit
310 ml cartridge with screw-on nozzle.
(One carton contains 12 cartridges).

Colours	
01 Brilliant White	2978/7
16 Silver Grey	1214/7
18 Manhattan	1215/4
21 Grey	1205/5
31 Cement Grey	3058/5
Transparent	1199/7

PCI Elastoprimer 135	500 ml can (One carton contains 10 x 500 ml cans). 1503/2
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**PACKAGING
ADDITIONAL
PRODUCTS**

PCI Elastoprimer 150	250 ml bottle (One carton contains 10 x 250 ml bottles). 1577/3
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PCI Elastoprimer 165	250 ml bottle (One carton contains 10 x 250 ml bottles). 1851/4
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**PREPARATION
OF SUBSTRATE**

- **Requirements**

The joint width must be well designed that a maximum movement of 20% between the adjacent construction units is not exceeded. The following joint dimensions have to be considered for movement joints – related to the joint width:

Width	Depth
up to 10 mm	same as width, but min. 6 mm
10 mm	8 - 10 mm
15 mm	8 - 12 mm
20 mm	10 - 14 mm
25 mm	12 - 18 mm

For joints outdoors the width and depth of the joints should be at least 10 mm.

- **Preparation**

The joint sides must be dry, sound and free from dust and other contamination. Remove oil stains and grease from non-absorbent substrates with PCI Univerdünnner. Before sealing glass groove prime substrate with PCI universal thinner.

Fill deep joints with closed-cell polyethylene backer rod. The backer rod must not be damaged during the application. Adhesion of the sealant to the bottom of the joint must be avoided. Backer rods containing bitumen or tar are not allowed to be used. The sides of the joints should be primed if necessary.

APPLICATION PROCEDURE

- 1 PCI Silcoferm VE can be applied by conventional hand- or air-operated caulking guns (e.g. available from Kreuzpointner or Vaupel).
- 2 Cut off tip of threaded nipple, screw on nozzle and cut off the tip at an angle corresponding to the joint width.
- 3 Gun PCI Silcoferm VE into the joint using positive pressure to ensure full contact and adhesion. Tool to a bevel in corner joints.
- 4 Smooth joint sealant before a skin forms using a suitable joint-shaping tool moistened with PCI Glättmittel. A skin forms within a few minutes.
Work may be interrupted because new PCI Silcoferm VE perfectly bonds to material which has already cured.

PLEASE NOTE

- Do not apply PCI Silcoferm VE at temperatures below +5°C or above +35°C.
- Requirements for glass grooves before sealing are stipulated in the standard DIN 18 545-1 „Sealing of glazings with joint sealants“.
- The elastic sealing of movement and connection joints with PCI Silcoferm VE is not a substitute for required sealing measures in the substrate structure.
- PCI Silcoferm VE cannot be overpainted.
- PCI Silcoferm VE is not suitable for joints in engineering construction.
- Never use backfilling materials containing bitumen or tar.
- PCI Silcoferm VE is not suitable for floor joints subject to heavy mechanical loads.
- The use of silicone rubber for ceramic coverings outdoors might cause contamination in the adjacent area. For this field of application it is recommended to use PCI Elritan 140 or PCI Elritan 100 when exposed to low mechanical stress.
- Although PCI Silcoferm VE contains fungicides, the joints should be cleaned with appropriate household cleaners and/or disinfectants in sanitary areas to prevent mould and mildew growth.
- Opened cartridges can be stored several days if the nozzle is plugged with some sealant. Prior to further application remove the cured sealant from the nozzle.
- Sealant spills should be removed with PCI Univerdünner while the material is still uncured. Smooth and cured surfaces can only be cleaned by mechanical means.

PLEASE NOTE

- It is recommended to test the adhesion to coated substrates.
- We recommend to test adhesion to and compatibility with plastic substrates.
- In case of contact with bitumen substrates discolourations and bonding problems may occur.
- When using cleaning agents and disinfectants which separate iodine discolourations on PCI Silcoferm VE may occur.
- Wait for at least 7 days (at +23°C and 50% relative humidity) before filling the pool with water.
- PCI Silcoferm KTW must be used for potable water tanks.
- Suitable tools are available e.g. from Harald Kreuzpointner, Auf der Grün 22, 83714 Miesbach/Germany, or Vaupel GmbH, PO Box 22 25, 35216 Biedenkopf-Wallau/Germany.
- Minor colour variations are possible, it is therefore recommended to use the same batch number for the same project.
- PCI Silcoferm VE is not suitable for natural stone coverings. PCI Carraferm should be used in this case.
- Storage: cool and dry.
- Shelf life: min. 12 months when stored in dry conditions at max. +35°C.
- Data for the application of PCI Elastoprimer 135, 150 and 165 are included in the data sheet no. 201 PCI Elastoprimer.

HEALTH AND SAFETY

Contains acetic acid. Avoid contact with eyes. Uncured sealant may cause skin irritations.

For further information refer to the PCI Material Safety Data Sheet.

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