

ARC PRO-LINE SILICONE

DESCRIPTION

Arc Pro-Line Silicone is a premium grade sealant developed to compliment the Pro-Line Grout range and available in 9 matching colours. It is a low modulus, neutral cure, 100% non-staining silicone containing a fungicide. Extremely flexible and waterproof, it will accommodate movement up to 50%. Suitable for use with all tiles, including marble and natural stone without staining, metals, painted surfaces, sanitary ware, glass, plaster, brick and many other porous and non-porous surfaces.



SPECIAL PROPERTIES

- elastic silicone-based sealant, especially designed for weather-sealing applications
- low odour formulation
- outstanding UV resistance, ageing- and weather-resistant
- good adhesion on many substrates, including metals and many plastics, compatible with copper
- low modulus (conforms to ISO 11600 F&G 25 LM)
- movement capability up to 50% (ASTM C920 class 50)
- non staining (ISO 16938-1, ASTM C 1248)
- compatible with paints

FIELDS OF APPLICATION

For sealing joints and connecting joints in façades (glass/glass, glass/metal, curtain wall and cladding), around windows and for many other applications. Also suitable in marble / natural stone facades (non staining).
Silicone OX 4484 must not be used in aquarium construction, as mirror adhesive, in underwater applications and in areas with direct food contact.
Not suited for plastics with in general poor adhesion to silicones (eg PE, PP, PET).

YIELD

Meters of joint per 310 ml cartridge for the following joint dimensions:

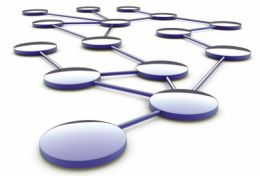
5 x 5 mm approx. 12.0 m

10 x 10 mm approx. 3.0 m

COLOURS AND PACKAGING

Standard colours: sandstone, limestone, silver grey, charcoal, brown, beige, white, ivory & mid grey.

Packaging: 310 ml cartridges;



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USAGE INSTRUCTIONS

Substrate pretreatment

The substrate must be dry, firm, and free of dust and grease (clean with isopropanol, if necessary). Porous substrates (e.g. concrete, plasterboard and untreated wood) must be primed. Before primer application, remove any cement slurry, mold release agents or impregnations. In renovation projects, old sealant, remains of paint and loose material must be fully removed. On coated substrates (paints, lacquers), compatibility to the sealant must be tested.

The joint must always be provided with a suitable, correctly dimensioned joint backing (e.g. PE cord, rock wool) to prevent adhesion on three faces. To avoid contamination and to achieve a precise joint, we recommend masking the joint edges with adhesive tape before primer application and filling.

Joint dimensions

Joint dimensions should be at least 5 x 5 mm for indoor and 10 x 8 mm (width x depth) for outdoor applications. With increasing joint width (up to 30 mm), joint depth should be roughly half the joint width. Make sure that triangular bevels have uniform sides of equal length with at least 7 mm bonding surface on each side.

Tooling

After applying the sealant with a suitable manual, battery-powered or pneumatic caulking gun, the sealant can be smoothed in the joint with water or with a neutral, non-staining waterbased smoothing agent and a suitable tool (e.g. jointing trowel). Smoothing is not only recommended for optical reasons, but also establishes close contact and good adhesion to the substrate.

Remove excess smoothing agent (risk of schlieren).

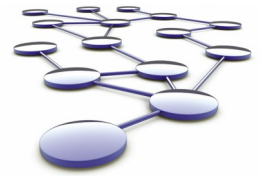
Any adhesive tape used should be removed immediately after smoothing.

IMPORTANT REMARKS

The function of the sealant can only be guaranteed if correctly applied in accordance with the technical recommendations given in this data sheet and in related standards. Sealant application in situations with strongly fluctuating temperatures (premature stressing of the sealant) must be avoided.

The sealant is compatible with many paints and lacquers. Owing to the large number of different coating systems on the market, own tests concerning adhesion and compatibility have to be performed prior to application. For example, it is known that alkyd resin based paints may give discolouration in combination with neutral curing silicones. The sealant is not overpaintable,

Especially on powder-coated substrates, adhesion has to be tested carefully, since it can be affected negatively depending on the coating used (may even vary for different colours of the same brand of powder coating)



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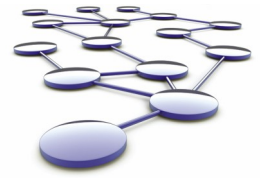
USAGE INSTRUCTIONS

In contact with bituminous, tar- or plasticizer-releasing substrates (eg EPDM, neoprene, butyl), discolouration and/or loss of adhesion may occur. Good ventilation must be provided during application and curing to allow curing by-products to evaporate. Low temperatures, low humidities and joint depths above 15 mm can retard skin formation and curing significantly. Exposure to liquid (eg acid-based cleaning agents, strongly colored liquids) or gaseous chemicals (eg. tobacco smoke) for longer periods can result in discoloration of the product, especially for light colors (white). In general, the mechanical properties of the sealant are not adversely affected.

TECHNICAL DATA

Density (DIN EN ISO 2811-1)	1,42 ± 0,04 g/cm ³
Skin forming time (23°C/50% r.F)	app. 30 min
Penetration (DIN 51579 / 5 sec.)	160 ± 30 1/10 mm
Slump (ISO 7390)	£ 2 mm
Cure rate (within first 24 hours)	min. 2 mm
Shore A hardness (DIN 53505)	15 ± 5 units
Tensile strength (ISO 8339-A, 100%)	app. 0,4 N/mm ²
Maximum movement tolerance	25 % (ISO 11600) 50% (ASTM C 920)
Volume loss (DIN EN ISO 10563)	max. 4 %
Application temperature (sealant & substrate)	+5 to +35°C
Temperature stability range (fully cured sealant)	-40 to +150°C

Rate of curing depends on temperature, humidity and depth of substrate. The data given refer to tests at standard conditions (23°C / 50% rel. humidity). Under these conditions, a 10 x 10 mm joint will cure in 8 to 14 days. Low temperature, low humidity and joint depth above 15 mm will retard skin formation and curing significantly. Data given were determined shortly after production, and may slightly vary with increasing age of product and for different colours. They are not meant for specification purposes.



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PRECAUTIONS

For more information and precautions, refer to the safety data sheet.

NOTE

The information contained in this spec sheet is given voluntarily and in good faith. It is to the best of our knowledge true and accurate; however it may contain information which is inappropriate under certain conditions of use. The company cannot accept responsibility for any loss or damage due to inappropriate use or the possibility of variations of working conditions and of workmanship outside our control.

The user must ensure the product's suitability for the application intended and if in doubt should seek a written technical specification for the product's application.

So our guarantee is limited to ensure the quality of our products, according to our quality standards.



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