

EFS

SILICONE

- + Available in 10 Colours — Colour Matched to Eco Fusion Grouts
- + Excellent Adhesion Properties
- + Neutral Curing Silicone Sealant
- + Low Odour Formulation
- + Single Component Silicone-Based Sealant
- + Protects Against Mould with Fungicide
- + For Sealing Joints in Wall and Floor Tiling Installations
- + For Sealing Joints Between Sanitary Wear and Tilled Finish
- + Used Internally and Externally
- + Good Adhesion on Metals and Many Plastics, Compatible with Copper

ECO FUSION SILICONE

is a premium, highly flexible, and high-performance silicone sealant for walls and floors. Eco Fusion silicone range has been specifically developed to compliment the Eco Fusion Grout range and all colours of grout have a matching silicone. It is neutral curing silicone sealant meaning it is suitable for use in connecting joints in glass, window, and metal construction. Eco Fusion Silicone contains advanced Anti-Mould technology that will protect against mould growth. Internal and External use, solvent free and low odour formulation.

Eco Fusion Silicone has two main areas of use:

- + For sealing joints between sanitary ware and ceramic and porcelain in bathrooms, kitchens, showers, cold storage areas, facades and wet rooms in both domestic and commercial environments.
- + For sealing movement joints in wall and floor tiling.

Eco Fusion Silicone has excellent adhesion properties and is suitable for use on a large variety of surfaces including ceramic, glass, porcelain, natural, PVC and wood. When cured Eco Fusion Silicone is highly flexible and will accommodate movement between two surfaces. It is waterproof and ideal for use in areas subject to prolonged wet conditions e.g., showers, wet rooms etc.

Eco Fusion Silicone is very easy to apply, smooth and clean off and it is suitable for interior and exterior use.

SURFACE PREPERATION

Before starting all surfaces must be clean, dry, and sound and be free of any contaminants. Anything that could affect adhesion, such as dust, dirt, oil, grease will need to be removed. Porous substrates (e.g., concrete, plasterboard, and untreated wood) must be primed (see Ecofusion Primer). Before primer application, remove any cement slurry, mould 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 PE foil) 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 and depth) for outdoor applications. With increasing 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.

APPLICATION

For internal use the recommended minimum joint depth is 6mm.

- + Cut off the tip of the Eco Fusion Silicone cartridge, ensuring the screw-thread is left intact.
- + Screw on the nozzle and cut nozzle tip to 45° angle with a nozzle diameter equal to the joint width.
- + Place the Eco Fusion Silicone cartridge in a caulking gun and apply a steady bead of silicone sealant to the required area.
- + Within 10-15 minutes of applying Eco Fusion Silicone, smooth the sealant with a wet jointing trowel, a finger dipped in water or a silicone finishing tool. Smoothing is not only recommended for optical reasons, but also establishes close contact and good adhesion to the substrate. Remove excess smoothing agent. Any adhesive tape used should be removed immediately after smoothing. (We recommend a caulking gun and smoothing jointing trowel).
- + Allow the Eco Fusion Silicone to cure. Sealant will be touch dry after 30 minutes and cured within 24 hours, depending on conditions.
- + Allow at least 3 days before contact with water.

After being fully cured, remains of sealant can be disposed via domestic or commercial waste.

PLEASE NOTE: When applying Eco Fusion Silicone to a bath, it is recommended to fill the bath half full with water whilst sealing. Leave the water in the bath for 24 hours to allow for full cure of the sealant.

NB: Eco Fusion Silicone is suitable for use with natural stone tiles, but suitability with very porous natural stone tiles must be tested prior to use.

Do not use to seal Aquariums, or areas that are fully submerged in water e.g., swimming pools, or with bitumen / asphalt, as a mirror adhesive and areas with direct food contact.

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. The sealant is not over paintable.

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).

In contact with bituminous, tar- or plasticiser- releasing substrates

(e.g., EPD, neoprene, butyl) discolouration and/or loss of adhesion may occur.

Good ventilation must be provided during application and setting/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 (e.g., acid-based cleaning agents, strongly coloured liquids) or gaseous chemicals (e.g., tobacco smoke, exhaust from other construction materials (e.g. woods, lacquers)) for longer periods can result in discolouration of the product, especially for light colours (white). In general, the mechanical properties of the sealant are not adversely affected.

Products with fungicide give additional protection against mould to the joint. But this cannot supersede good housekeeping; It's essential to keep the joint clean, dry, and free of substances that may serve as nutrition medium (e.g., soaps residues, skin scales) Although Eco Fusion Silicone contains anti-mould technology, the joints should be cleaned with appropriate household cleaners and/or disinfectants in sanitary areas to help prevent mould and mildew growth.

Not suitable for plastics with in general poor adhesion to silicones (e.g., PE, PP, PET) and for two-dimensional bonding.

COVERAGE

One cartridge (310mL) will give approx. 12m (5 x 5mm) or 3m (10 x 10mm) joint length.

STORAGE

This product has a shelf life of 18 months if stored in its unopened packaging in normal dry conditions. Do not use below 5°C and do not use in areas subject to permanent water immersion.

HEALTH AND SAFETY

For more information and precautions for use refer to safety data sheet.

The Information given in this technical sheet is given in good faith. Eco Fusion cannot accept liability for loss or damage caused by the incorrect use of its products or poor workmanship. The user must ensure the product's suitability for the application intended and if in doubt should seek written technical advice for the product's application.

TECHNICAL SUMMARY

STANDARD	Standard Conformity Conforms to EN 15651-1, EN 15651-2, EN 15651-3 Type S (XS1)
COVERAGE	One cartridge (310ml) will give approx. 12 m (5 x 5 mm) or 3m (10 x 10 mm) joint length.
PACK SIZE	310mL
APPLICATION TEMPERATURE	+5°C to +35°C
OPEN TIME	Forms a skin after approx. 12 minutes (at 23°C).
SET TIME	24 Hours at 3mm Depth
COLOUR	Arctic White Beige Chocolate Brown Dark Grey Jasmine Limestone Sandstone Silver Grey Slate Grey Charcoal
DENSITY (DIN EN ISO 2811-1)	1,19 +- 0,04 g/cm ³
TENSILE STRENGTH (ISO 8339-A, 100%)	Approx. 0,45N/mm ²
PENETRATION (DIN 51579/5SEC.)	160+- 30 1/10mm
SLUMP	≤2mm
VOLUME LOSS	Max 4%
MAXIMUM MOVEMENT TOLERANCE	25%
FIRE CLASSIFICATION	E
STORAGE	Store unopened, in a cool dry, frost-free conditions.
SHELF LIFE	Stored correctly this product has a shelf life of 18 months.
COMPOSITION	Neutral cure silicone sealant

Rate of curing depends on temperature, humidity, and depth of substrate. The data given refers 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 meant for specification purposes.