



# Technical Data Sheet



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## Outdoor - Extreme Repair

High modulus weather-proof sealant and adhesive

### CHARACTERISTICS

Unibond Outdoor Extreme Repair is a single part, multi-purpose sealant and adhesive suitable for extreme weather conditions. Based on Flextex® SMP (silane modified polymer) technology.

- Good elasticity - movement capability 20%.
- Excellent adhesion to a wide range of construction materials without primer.
- High initial tack.
- Tack-free surface.
- can be applied to damp surfaces without bubbling or losing adhesion.
- Very good UV, weather, and ageing resistance.
- Silicone-free.
- Isocyanate free.
- Solvent-free.
- Non-corrosive.
- Good application even at low temperatures.
- No shrinkage during curing.
- Impact and vibration absorbing.

### APPLICATION FIELD

Outdoor Extreme Repair Sealant has an extra strong, flexible formula making it ideal for outdoor and indoor sealing and bonding, including:

- Window and door frames
- Roofing and guttering
- External cladding
- Double glazing
- Mirrors





## STANDARDS

- Conforms to BS EN ISO 11600
  - Conforms to BS EN 15651-1
  - GEV EMICODE®: EC 1<sup>plus</sup>
  - BS EN 15301-1
- Class F-20HM, sealant for building construction.  
Class 20HM, product type F-EXT-INT: sealant for facade for interior and exterior application.  
Very low emissions  
Reaction to fire: Class E

## INSTRUCTIONS FOR USE

### Application

Outdoor Extreme Repair Sealant is supplied ready to use and can be applied from the cartridge using a standard hand operated gun, with no special pre-treatment.

#### *Sealing application:*

The joint width must be designed to suit the movement capability of the sealant. In general, the joint width must be > 10 mm and < 35 mm. A width to depth ratio of ~1:0.5 must be maintained.

In cases of deep joints, fill with PE foam 'Backer Rod' prior to applying the sealant.

Extrude sealant into joint making sure that it is full contact with the side of the joint.

Masking tape can be used where sharp exact joint lines or exceptionally neat lines are required. Remove the tape whilst the sealant has still not formed a skin.

After application, smooth with Unibond Sealant Smoothing Tool.

#### *Bonding application:*

After substrate preparation apply Outdoor - Extreme Repair Sealant in vertical lines or spots on the bonding surface at intervals of a few centimetres. Use a twisting action to set the item to be bonded into position. Support, if necessary, until the adhesive has cured. An incorrectly positioned item can be easily repositioned in the first few minutes after application. Apply pressure again.

Optimum bonding will be obtained after complete curing, i.e., after 24 to 48 hours at +23°C for a thickness between 2 to 3 mm.

### Sealant application

The sealant should be applied ensuring that the seal is filled. Smoothing off the seal ensures good contact between the sealant and the bonding surfaces.

Directly after application, smooth off with an Unibond sealant smoother tool.

Remove any tape immediately, before surface skin has formed on the sealant.

Smooth over any proud sealant edges immediately.

### Cleaning tools/ Excess sealant

Fresh sealant may be cleaned with a cloth soaked in white spirit or alcohol (e.g., methylated spirit)

Cured sealant can be removed by scraping (e. g. using a razor blade) or by using a special silicone remover product.

### Drying time

The sealant will be touch dry in 30 mins and fully dry in approx. 24 hours\*

*\*Curing speed is dependent on temperature, air humidity and on the dimensions of the joint. Low temperatures, high air humidity or big joint dimensions require longer curing times.*

### Please note.

The joint must be cleaned and maintained regularly.

Ensure good ventilation in the room where the sealant is applied, if using indoors.

**TECHNICAL DATA:**

<b><u>Uncured product</u></b>	
Chemical base:	Flextec®-Polymer (Moisture curing silane modified polymer (SMP) - cures by reaction with atmospheric humidity.)
Odour:	Alcohol
Application temperature:	+5°C to +40°C (substrate and ambient)
Consistency:	Non-slump paste
Density:	~ 1.39 g/ml (ISO 2811-1) (Colours) ~ 1.05 g/ml (ISO 2811-1) (Trans)
Resistance to flow:	~ 0 mm (ISO 7390)
Skin formation time:	~ 15 - 20 minutes (23°C, 50% r.h.)
Curing speed:	~ 2 mm / 24 hours (23°C, 50% r.h., bead 20x10mm)
Initial tack:	~ >10 g/cm <sup>2</sup> (Colours) ~ >14 g/cm <sup>2</sup> (Trans)
<b><u>Cured product</u></b>	
Odour:	Odourless
Shore A hardness:	~ 40 (ISO 868)
100% Modulus:	~ 0,75 N/mm <sup>2</sup> (ISO 8339-A)
Tensile strength:	~ 0,9 N/mm <sup>2</sup> (ISO 8339-A) ~ 250 % (Colours)
Elongation at break:	~ 200 % (Trans)
Elastic recovery:	~ 85 % (ISO 7389-B)
Shrinkage:	~ -3 % (ISO 10563)
Movement capability	20 % (ISO 11600-F)
Recommended joint width	10-35 mm
Service temperature:	-40°C to 80°C

**Limitations**

Do not use as a sanitary or glazing sealant.

Cannot be overpainted.

Do not use on bituminous substrates or on building materials which might bleed oils, plasticizers or solvents which could attack the sealant.

Not suitable for joints with water pressure, permanent water immersion, e.g., in swimming pools or areas of permanent damp.

Do not use on copper and brass or natural stones (e.g., marble).

Product may only be used for mirror bonding if the mirror coating and the protective lacquer complies with BS EN 1036-1. In case of unknown mirror qualities please consult mirror producer.

**GENERAL INFORMATION****Storage**

Store in a cool, dry place between +10°C and +25°C. Shelf life is 12 months from date of production if stored in unopened cartridges.

**Packaging**

Cartridge – 389g (Colours)

Cartridge – 294g (Translucent)

**Colours**

White

Translucent

Grey

Brown

**HEALTH AND SAFETY**

Before using the product, please see related Material Safety Data Sheet that is available to download from [mymstds.henkel.com](http://mymstds.henkel.com).

"The information provided in this Technical Data Sheet (TDS) including the recommendations for use and application of the product are based on our knowledge and experience of the product as at the date of this TDS. The product can have a variety of different applications as well as differing application and working conditions in your environment that are beyond our control. Henkel is, therefore, not liable for the suitability of our product for the production processes and conditions in respect of which you use them, as well as the intended applications and results. We strongly recommend that you carry out your own prior trials to confirm such suitability of our product.

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