



MULTI SEALANT & ADHESIVE

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DESCRIPTION

GRAFT® MULTI SEALANT & ADHESIVE is a high performance, professional quality, easy to use sealant and adhesive. Based on an innovative new Inert Polymer Technology it is suitable for a wide variety of building trade applications. Including decorating, flooring, joinery, plumbing, tiling, fire and sound sealing around windows and doors. This product out-performs conventional sanitary silicones, MSP's, butyl & acrylic based products as a sealant and adhesive – the only sealant free from dangerous emissions.

GRAFT® MULTI SEALANT & ADHESIVE is based on IPT which is a non-reactive environmentally friendly chemistry that ensures compatibility with most building materials and has the unique property of moving dynamically to accommodate the natural or unexpected movements of sealed/bonded joints within a building, for long-lasting performance.

GRAFT® MULTI SEALANT & ADHESIVE eliminates the selection choices that need to be made with conventional sealants and adhesives. Choosing a product for a building application can be confusing especially as there are a wide number of products available and within those products a variety of grades, with variations in properties to suit the substrate or application. GRAFT® MULTI SEALANT & ADHESIVE overcomes this by offering the tradesman one solution for all internal building applications.



SUBSTRATES

GRAFT® MULTI SEALANT & ADHESIVE is designed for sealing joints, voids/irregular holes in walls, partitions and other structures, resulting in an airtight and watertight seal.

GRAFT® MULTI SEALANT & ADHESIVE provides primerless sealing and bonding on a wide range of substrates including:

- Ceramic
- Plastics
- Wood
- Metals
- Plaster
- Masonry
- Stone

PROPERTIES

GRAFT® MULTI SEALANT & ADHESIVE has a 25 year mould free guarantee, remains permanently flexible after cure and is paintable with both alkyd resin and water based paints.

Suitable internal applications include:

- Fire resistant sealing
- Radon resistant sealing
- Decorating caulking and sealing
- Air and sound sealing
- Sealing around doors and windows
- Sealing where air quality for health is important
- Sanitary applications including showers
- Sealing of gaps around fitted furniture and worktops
- Sealing around flooring

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MULTI SEALANT & ADHESIVE

GRAFT® MULTI SEALANT & ADHESIVE can be used as an adhesive and has excellent initial grab quickly developing a high bond strength resulting in a permanent fixing. It is easy and economical to apply and is ideal for general construction fixing and bonding.

GRAFT® MULTI SEALANT & ADHESIVE bonds to most building materials. Substrates include:

- Brick, concrete, stone, slate, ceramic marble, granite
- Timber, plywood, block board, chipboard fiberboard
- uPVC plastic trims and polycarbonate
- Insulating board
- Expanded polystyrene
- Plasterboard and plaster
- Metals, aluminium, steel, lead, copper and alloys
- Painted surfaces

Surplus uncured material can be easily removed using a damp cloth as the uncured sealant is completely soluble in water.

FEATURES

- Primerless adhesion.
- 25 year mould free guarantee.
- Excellent adhesion to most substrates.
- Dynamic for low and high modulus applications.
- Fast cure - max bond strength is attained in 24 hours.
- 3D joint movement capability minimum 25%.
- Can be used for all applications internally.
- Fire rated up to 4 hours both integrity and insulation.
- Resistant against radon (radioactive particles).
- Recommended for use in joints up to 20mm wide, larger joints widths can be accommodated.
- Excellent slump resistance.
- Only sealant technology available that is VOC free.
- Resistant to mould and mildew.
- Low dirt pick up
- Non staining of susceptible surfaces
- Easy to apply and tool
- Excess can be wiped before curing with a damp cloth
- Paintable
- Low shrinkage
- Does not yellow
- Compatible with a wide range of substrates

APPLICATION INSTRUCTIONS

All surfaces must be clean and sound, free from dirt, grease and other contaminants. The surfaces may be damp but not running wet. Use a wet brush to clean surfaces before application to remove loose material and to ensure good contact for adhesion. Primers are not usually required.

In order to obtain maximum performance as a sealant the depth of the joint should be at least half the width and not less than 6mm. The use of backing material is strongly recommended e.g. polyethylene backer rod or mineral wool.

Cut nozzle to the desired angle and gun firmly into the joint to give a good solid fill. Strike the sealant flush with the joint sides within ten minutes of application, before surface skinning occurs. The sealant will have medium shrinkage during cure and for a flush finish it is recommended to leave the sealant proud.

The sealant can be tooled to a smooth finish using a moist plastic stick or similar within 30 minutes of application. GRAFT® MULTI SEALANT & ADHESIVE Tooling is designed for the optimum finish and is recommended instead of soap and water as it forms a film between the stick and the sealant.

Do not spray the sealant with water or other fluids before skin formation (<30 min). Uncured sealant is soluble in water prior to skinning due to its environmentally friendly IPT chemistry that uses water instead of solvents.

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APPLICATION CHART

A = EXCELLENT B = GOOD C = FAIR

INTERNAL GENERAL AREAS	RATE
MASONRY	
Cementitious fibre	A
Concrete / Cellular concrete / Brick work	A
Granite / Marble / Natural stone	A
Plaster	A
WOOD	
Fibre board / veneer	A
Solid and untreated wood	A
GLAS / CERAMICS	
Ceramics / Porcelain	B
layered Glass	C
METALS	
Copper and copper alloys	A
Iron	A
Lead	A
Stainless Steel	C
Untreated and anodised aluminium	A
Zinc	A
SYNTHETIC MATERIALS	
Acrylic / Fibreglass	A
Polycarbonate	B
Polyester	C
PVC and PVCu	A
OTHERS	
Acoustic sealing	A
Dry lining	A
Ductwork	A
Fire Sealing	A
Expansion joints	A
Frame fixing	A
Internal frame sealing	A
Low emission zones	A
Plumbing	A
Polystyrene	A
Skirting & architraves	A
Stonework	A
Woodwork	A

BATHROOMS/SANITARY/PUBLIC BAT HOUSES	RATE
MASONRY	
Cementitious fibre	A
Concrete / Cellular concrete / Brick work	A
Granite / Marble / Natural stone	A
Plaster	A
GLASS / CERAMICS	
Ceramics / Porcelain	B
Layered Glass	C
METALS	
Copper and copper alloys	A
Stainless Steel	C
Untreated and anodised aluminum	A
Zinc	A
SYNTHETIC MATERIALS	
Acrylic / Fibreglass	A
Polycarbonate	B
Polyester	C
PVC and PVCu	A
OTHERS	
Acoustic sealing	A
Dry lining	A
Ductwork	A
Expansion joints	A
Fire sealing	A
Frame fixing	A
Internal frame sealing	A
Low emission zones	A
Plumbing	A
Polyseylene	A
Skirting & architraves	A
Stonework	A
Woodwork	A

KITCHENS	RATE
Acoustic sealing	A
Concrete / Cellular concrete / Brickwork	A
Drylining	A
Ductwork	A
Fibreboard / Veneer	A
Granite / Marble / Natural stone	A
Internal frame sealing	A
Plumbing	A
Skirting & architraves	A
Solid & untreated wood	A
Stainless steel	C
Untreated & anodised aluminum	C
Woodwork	A

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FIRE CLASSIFICATION

GRAFT® MULTI SEALANT & ADHESIVE maintains integrity of a joint in a fire situation giving a minimum 4 hours as long as the surrounding construction remains intact.

Both the sealant and the backing material must be applied to a minimum depth to achieve the stated fire resistance.

The type of backing material must be as specified.

Joint with width ≤ 30mm	Backing material	Fire resistance
Concrete, masonry and gypsum walls ≥100mm thick		
Dbl sided seal ≥ 12,5mm depth	Stonewool ≥ 12,5mm depth	EI 120
Concrete floors ≥150mm thick		
Dbl sided seal ≥ 15mm depth	Stonewool ≥ 20mm depth	EI 240
Dbl sided seal ≥ 25mm depth on top	GRAFT backing ≥ 48mm depth	EI 180

EMISSION DATA (INDOOR AIR QUALITY)

Compound	Emission rate after 3 days	Emission rate after 4 weeks
TVOC	7,7 µg/m ³	< 5 µg/m ³
TSVOC	n.d.	n.d. (< 5 µg/m ³)
VOC w/o NIK	n.d.	n.d. (< 5 µg/m ³)
R Value	< 1	< 1
Formaldehyde	< 3 µg/m ³	< 3 µg/m ³
Acetaldehyde	< 3 µg/m ³	< 3 µg/m ³
Sum for+ace	< 0,002 ppm	-
Carcinogenic	n.d. (< 1 µg/m ³)	n.d. (< 1 µg/m ³)
n.d. = not detected		

GRAFT® MULTI SEALANT & ADHESIVE complies with the requirements of GEV and the results correspond to the EMICODE emission class EC 1^{PLUS} which is the best possible environmental and indoor hygiene health protection mark.

GRAFT® MULTI SEALANT & ADHESIVE is the only technology available with no dangerous emissions during usage and curing.

Tested by Eurofins Product Testing, report number G17798A.

USAGE

Joint size (mm)	6x6	9x6	12x6	25x10	7x7 fillet	10x10 fillet
linear metre/ cartridge	8.63	5.5	4.1	1.2	12.0	6.0

SOUND INSULATION

Description	Sound Rating
Gypsum wall without sealant ²	13 dB
Single sided seal 12mm depth ²	44 dB
Single sided seal 50mm depth ¹	47 dB
Double sided seal 12mm depth ²	45 dB
Double sided seal 25mm depth ¹	48 dB
Double sided seal 30mm depth ¹	50 dB
Double sided seal 50mm depth ¹	59 dB

- 1 Calculated value and practical experiences
- 2 Laboratory tested value Rs,w

GRAFT® MULTI SEALANT & ADHESIVE tested at Acoustic Testing Laboratory at the University of Salford Manchester (UKAS accredited); test report no. 1342-1175 according to EN ISO 10140-2:2010.

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TECHNICAL DATA

FROM:	Ready to use thixotropic paste	Service Temp	40°C to +75°C
Specific gravity:	1,54 g/cm ³	Classification CE	Facade (interior) 25LM
VOC:	0 g/l		Sanitary joints XS1
Durability w/ageing:	Type X (UV / water) (pass)	Colours	A range of colours are available. Standard colours are white, grey, anthracite, brown and black.
Chemical resist.	Test passed (resistant)		
Salt water immersion:	Test passed (resistant)		
Microbiologic growth:	0 (no growth)		
Hardness:	Shore A 47		
Shrinkage:	15%	Packaging:	200ml flexitube, 300ml and 380ml cartridge or 600ml foil.
Tensile properties:	3.79 MPa (379 N/mm ²)		No health hazard, indoor
Tensile elongation:	270%		
3D-tensile prop.:	0,24 MPa (24 N/cm ²)	Health & safety:	hygiene EMICODE EC1 ^{PLUS} classification, approved for BREEAM rated building projects. See safety data sheet.
3D-tensile elong.:	106%		
Tear properties:	50%		
Compression resist:	434 N / 1569 MPa		
Radon resistance:	1.5mm thickness gives Z = 2.9 O 108 s/m	Test laboratories:	SP Sveriges Provningsverk, SE Intertek Chemicals & Phar., GB BM Trada, GB Eurofins Product Testing, DK .
Flashpoint:	None		
Reaction to fire:	Classification D-s2, d0		
Fire resistance	Up to class EI 240		
Tack free time:	60 minutes maximum	Responsible:	GRAFT® MULTI SEALANT & ADHESIVE is manufactured by Polyseam Limited in UK Phone +44(0)1484 421036.
Skin time:	30 minutes maximum		
Rate of cure	10% at 24 hours		
Solids content	> 80%		
Resistance to flow	< 0.5 mm		
shelf life:	Up to 24 months when stored in un-opened cartridges under cool dry conditions and 6 months in opened and resealed cartridges. Avoid temperatures above 35°C & below 5°C		
Frost:	Uncured sealant should not be frozen. 0,845 W/mK (+/- 3%) at 20mm depth		
Thermal	(to EN 12667)		
Conductivity.	Can be used in contact with most building and decorating materials		
Compatibility.			



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