

Technical Data Sheet			
Version	4		
Revision date	5/9/2018	First published	18/1/2013

Multibond Sealant & Adhesive

High performance interior sealant and adhesive

DESCRIPTION

Marmox Multibond Sealant & Adhesive is a high performance professional quality, easy to use sealant and adhesive. Based on an innovative new **Inert Polymer Technology (IPT)** 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, butyl & acrylic based products as a sealant and adhesive – the only sealant free from dangerous emissions.

Marmox Multibond 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.

Marmox Multibond 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. **Marmox Multibond Sealant & Adhesive** overcomes this by offering the tradesman one solution for all internal building applications.

FEATURES

- Interior use
- White
- Primerless adhesion
- 25 year mold 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 mold 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



USAGE

JOINT SIZE (MM)	6X6	9X6	12X6	25X10	7X7 FILLET	10X10 FILLET
linear metre/ cartridge	8.63	5.5	4.1	1.2	2.0	6.0

SUBSTRATES

Marmox Multibond Sealant & Adhesive is suitable for use with all Marmox product, eg. Multiboard, Showerlay, etc., as well as:

- Polystyrene
- Masonry
- Plaster
- Stone
- Ceramics
- Wood
- Plastics
- Metals

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.

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APPLICATION INSTRUCTIONS (CONT.)

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. **Marmox Multibond 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.

FIRE CLASSIFICATION

Marmox Multibond 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

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 R_{s,w}

Marmox Multibond 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.

Remark: As a part of our policy of on-going product development and testing, we reserve the right to modify, alter or change product specifications without giving notice. All information contained in this document is given in good faith and is provided for guidance only. Any drawings provided are for illustrative purposes only. As Marmox (UK) Ltd has no control over the methods or competence of installation and of prevailing site conditions, no warranties, expressed or implied, are intended to be given as to the actual performance of the product mentioned or referred to herein and no liability whatsoever will be accepted for any loss, damage or injury arising from the use of the information given.

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		

Marmox Multibond 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.

Marmox Multibond Sealant & Adhesive is the only technology available with no dangerous emissions during usage and curing.

Tested by Eurofins Product Testing, report number G17798A.

LIMITATIONS

- Internal use only
- Where metals are not compatible with water contact, they should be primed prior to and sealant application.
- The sealant is soluble in water in wet/uncured state and cannot be used submerged or in rain. Applied sealant must not be sprayed with water or other fluids before skin formation (<30 min).
- Store between +5°C and +35°C

HEALTH AND SAFETY

Wash the material from the skin while still wet. Material in contact with eyes should be washed out immediately with water. Seek medical advice if dis-comfort persists.

More detailed information can be found in the relevant **Marmox Multibond Sealant and Adhesive** Safety Data Sheet.

ACTIVE INGREDIENTS

Acrylic polymer (waterbased)
Dolomites (main filler)
Clay (filler)
Titanium dioxide /waterbased pigments (colour) Polybutene Alkyl sulphate surfactant Preservative <0.1%

PACKAGING

Marmox Multibond Sealant & Adhesive is available in 300ml cartridges, 12 cartridges per white box.

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TECHNICAL DATA

Form:	Ready to use thixotropic paste	Service Temp:	40°C to +75°C
Specific gravity:	1,54 g/cm ³	Classification	CE Facade (interior) 25LM Sanitary joints XS1
VOC:	0 g/l	Colour:	White
Durability w/ageing:	Type X (UV / water) (pass)	Packaging:	300ml cartridge
Chemical resist.	Test passed (resistant)	Health & safety:	No health hazard, indoor hygiene EMICODE EC1 ^{PLUS} classification, approved for BREEAM rated building projects. See safety data sheet.
Salt water immersion:	Test passed (resistant)	Test laboratories:	SP Sveriges Provningsverk, SE Intertek Chemicals & Phar., GB BM Trada, GB Eurofins Product Testing, DK .
Microbiologic growth:	0 (no growth)	Responsible:	Marmox Multibond Sealant & Adhesive is manufactured by Polyseam Limited in the UK
Hardness:	Shore A 47		
Shrinkage:	15%		
Tensile properties:	3.79 MPa (379 N/mm ²)		
Tensile elongation:	270%		
3D-tensile prop.:	0,24 MPa (24 N/cm ²)		
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		
Flashpoint:	None		
Reaction to fire:	Classification D-s2, d0		
Fire resistance	Up to class EI 240		
Tack free time:	60 minutes maximum		
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 unopened 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 (to EN 12667)		
Thermal Conductivity.	Can be used in contact with most building and decorating materials		
Compatibility.			