

MasterSeal 930

High performance sealing system for irregular and unconventional joints

Material Description

MasterSeal 930 joint sealing system consists of two products -MasterSeal 930 Flexible Polyolefine (FPO) tape and MasterBrace 1446 or 1444 2 component Solvent Free Structural Epoxy adhessive. The MasterSeal 930 tape is a highly elastic, root-proof and chemically resistant waterproofing tape.

Areas of Application

Waterproofing of outside construction joints, expansion joints, connecting joints, Wall to Floor joints, cracks and crevices to ensure a long-term waterproof and functional building envelope.

Typical uses are for concrete tanks, chemical bunds, cast and cement-pipe connections, bridge decks, tunnels, water towers and reservoirs, ponds, silos, containers, secondary tanks. **MasterSeal 930** can be applied on dry or slightly humid substrates. It is ideal for joints with very large expansion or irregular, broken joint flanks. **MasterSeal 930** is grey coloured, weather and waterproof.

Characteristics & Benefits

- Durable
- Long lasting elasticity, even at low temperatures and both across and lengthwise directions
- Root resistant
- Cost effective
- Easy to apply
- User friendly heat welding tape overlaps
- Perforated option available for extra bond
- · Can be applied horizontally, vertically and even overhead
- Approved to **AS/NZS 4020:2018** (tested to the maximum exposure level) suitable for contact with potable water

Properties

Physical Properties	Unit	Standards	Value (Tolerance)
Tear resistance lengthwise	MPa	EN 12311-2	lmm: 13.2 (≥10.5) 2mm: 9.8 (≥7.5)
Tear resistance Across	MPa	EN 12311-2	lmm: 8.8(≥7) 2mm: 8.9 (≥7)
Tear resistance (nail shank) lengthwise	Ν	EN 12310-1	lmm:265 (≥220) 2mm:600 (≥450)
Tear resistance (nail shank) Across	Ν	EN 12310-1	lmm:275 (≥220) 2mm:655 (≥500)
Elongation lengthwise/Accross	%	EN 12311-2	lmm:800 (≥600) 2mm:1000%(≥650)
Shore Hardness A	Internal		87
Bonding strength*	MPa	EN 1348	≥3,0
Peel test on wood carrier*	Pa xm2	Internal	\geq 100
Water vapour permeability	m	EN 1931	lmm: 98 (≥50) 2mm: 125(≥80)
Water tightness	EN 1928-A- 60 kPa/24std. EN 1928-B-400kPa/72Std.		watertight
Burst pressure	KPa	Internal	≥360
Reaction to fire	ISO I I	925-2;EN13501-1	Class E

*in dependence of the used of adhesice

Chemical Properties:

To Hydrochloric acid, Sulphuric acid, Citric acid, Lactic acid, Potassium hydroxide, Sodium hypochlorite, Salt water and further substances

Resistance to temperature:

min. / max. :-30/+90°C



MasterSeal 930

High performance sealing system for irregular and unconventional joints

Application

Surface Preparation

Contact surfaces must be clean and free from dust, grease, water, oil, and other contaminants impairing adhesion. Concrete should be at least 4 weeks old. In order to provide maximum adhesion, concrete surfaces should be mechanically abraded.

Application

To provide a 'base coat' of epoxy adhesive, apply the <u>MasterBrace 1446</u> or <u>1444</u> on both sides along the joint or crack on the prepared substrate, preferably with a notched trowel or spatula. Layer thickness should be about I-2mm. When sealing cracks or narrow joints the MasterSeal 930 tape should not be bonded along the centre line of the tape. A minimum unbonded width of 20mm is recommended to allow for expansion and contraction.

Parts to be welded must be roughened or sanded. Wipe the edges of the tape with **MasterSeal 930** Cleaner then place the clean and well-aired tape immediately into the adhesive layer and press well in with a roller (for very wide joints draw the tape suitably into the joint so that a hollow is formed).

Apply the **MasterBrace 1446** or **1444** 'top coat' wet-on-wet with the 'base coat' ensuring the edge of the **MasterSeal 930** tape is completely covered with **MasterBrace 1446** or **1444** to a thickness of 2-3mm.

For a detailed Installation methodology, please refer to: "<u>Application Guide MasterSeal 930</u>".

Note

- The product is fusible with standard hot-air-dryers (recommendation = 1500 watt / 340°C). It is important to select a low temperature setting so that only the surface of the tape melts in order not to affect the tightness of the product.
- By warming up the membrane, it can be stretched over slight irregularities of the substrate. The same method can be used in case of corners, cavities, pipe crossing.
- In the case of negative water pressure, back up the membrane with an adequate support eg steel sheet.

- If individual tapes need to be connected into longer pieces (also T-pieces etc) they can easily be joined using an appropriate heat welder as per the following:
- I. Provide an overlap of I 0cm.
- 2. Cut the tape to size where required.
- 3. Round the corners of the top tape.
- 4. Roughen overlaps with sandpaper (80 grit).
- 5. Prepare the bottom tape thoroughly with an abrasive pad (grit size 150) to a minimum width of 30mm.
- 6. Clean bottom tape thoroughly to remove any dirt.
- 7. Prepare the underside of the top tape as per steps 4-6
- 8. In the area of the overlaps (10 cm), use a suitable hot-air blower to carefully weld the two strips free of cavities.
- 9. Using the heat welder, spot fix along the width of the tape joint to provide initial bond.
- Press the welded tapes together powerfully and free from voids. Avoid air pockets and wrinkles.
- II. If no surface coverage is applied, enclose the tape with adhesive to protect it from external influences.

Above the expansion zone (joint) one Leave area of 20 - 30 mm free. Welding temperatures – 1mm thickness = approx 270°C (or 4 on the Leister Triac); 2mm thickness = approx 360 °C (or 5.5 on the Leister Triac).

Packaging

MasterSeal 930 is available in 1 and 2mm thick and a range of widths between 100mm to 1000mm and made to order. The below sizes are stock availability: 2mm x 150 x 20m or 2mm x 250x 20m.

Storage

maximum of 12 months – it is essential that goods are kept in the original packaging, keep cool and dry, protect against sunlight. If packaging film has been opened apply the material within 2 months.



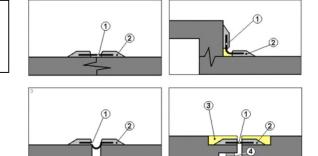
MasterSeal 930

High performance sealing system for irregular and unconventional joints

Specification Clause

Elastic FPO Tape Sealing system for irregular and unconventional joints and wall penetrations. The tape is UV resistant, trafficable, watertight and highly elastic in both lengthwise and accross directions. To be root-proof and chemically resistant. This sealing tape to be used with twopart solvent free Epoxy adhesives; which establishes a strong bond to various types of substrate greater than 3MPa. The tape meets the requirements of the Physical properties table.

- I: MasterSeal 930
- 2: MasterBrace 1446 or 1444
- 3: MasterEmaco T 545 or similar
- 4: Bearing



Disclaimer

			MasterSeal-930 -ANZ-V7-1023	
STATEMENT OF RESPONSIBILITY	The technical information and application advice given in this MB Solutions Australia Pty Ltd publication are based on the present state of our best scientific and practical knowledge. As the information herein is of a general nature, no assumption can be made as to a product's suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness either expressed or implied is given other than those required by law. The user is responsible for checking the suitability of products for their intended use and for ensuring that the application and use of the product is in accordance with the manufacturer's guidelines and recommendations.			
NOTE	Field service where provided does not constitute supervisory responsibility. Suggestions made by MB Solutions Australia Pty Ltd either orally or in writing may be followed, modified or rejected by the owner, engineer or contractor since they, and not MB Solutions Australia Pty Ltd, are responsible for carrying out procedures appropriate to a specific application.			
MB Solutions Australia ABN 69 634 934 419 II Stanton Road Seven Hills NSW 214		MB Solutions New Zealand Ltd 45C William Pickering Drive Albany, Auckland New Zealand	Emergency Advice: 1300 954 583 within Australia (24hr) 0800 001 607 within New Zealand	
Freecall: 1300 227 30 www.master-builders	-	Phone: +64 9 414 7233		