

# MSA - MONOFLEX W

## Flexible Polyolefin (FPO) Bandage

Flexible joint bandage for long-lasting sealing of construction and expansion joints in fluid retaining / excluding structures



## WATERPROOFING BANDAGE SYSTEM

### MSA-Monoflex W High Performance Waterproofing Bandage

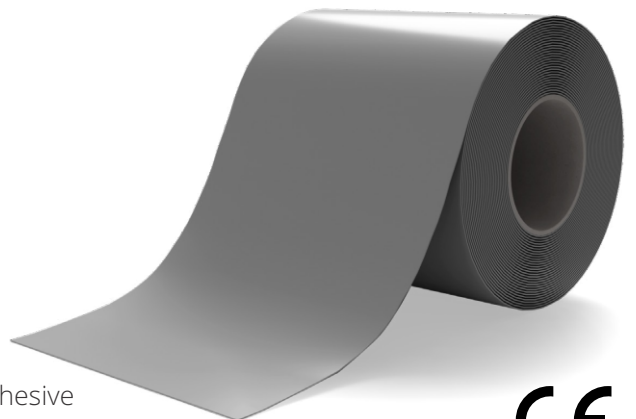
#### APPLICATION

Waterproofing of Expansion and Construction Joints in fluid retaining structures. For installation with suitable adhesives and sealants on various building substrates in critical areas with high and / or frequent movements.



#### ADVANTAGES

- Potability Approved and Certified
- Proven system for waterproofing construction & expansion joints
- High movement capacity
- No activation necessary
- Impermeable to fluids even against negative pressure
- Wastewater & chemical resistant
- Ozone, chlorine & UV resistant
- Suitable for marine structures
- Adhesive : **ASODUR-K4031** or **MSA-2031** thixotropic epoxide adhesive
- Tried and officially tested system (approvals available)



MADE IN GERMANY

## TECHNICAL DATA

Colour	Grey		
Resistance to temperature: min. / max.	- 30 °C / + 90 °C		
Physical Properties: (approx.)	DIN	Value	Tolerance
Available widths	Internal	150, 200, 250, 300, 350, 400, 500 mm (widths between 100 mm and 1000 mm upon request)	+/- 3 mm
Thickness	Internal	2,0mm	+/- 0,1 mm
Total weight	Internal	2070 g/m <sup>3</sup>	+/- 120 g / m <sup>2</sup>
Length per roll	Internal	20 metres (Alternative make ups upon request)	- 0,0 m / + 1 %
Tear resistance - lengthwise	DIN EN 12311-2 (Version B)	9,8 N/mm <sup>2</sup>	≥ 7,5 N / mm <sup>2</sup>
Tear resistance - across	DIN EN 12311-2 (Version B)	8,9 N/mm <sup>2</sup>	≥ 7 N / mm <sup>2</sup>
Elongation at break - lengthwise	DIN EN 12311-2 (Version B)	1000 %	≥ 650 %
Elongation at break - across	DIN EN 12311-2 (Version B)	1100 %	≥ 650 %
Tear resistance (nail shank)-lengthwise	DIN EN 12310-1	600 N	≥ 450 N
Tear resistance (nail shank)-across	DIN EN 12310-1	655 N	≥ 500 N
Water vapour permeability	DIN EN 1931 (version B)	180 m	≥ 130 m
UV-Resistance	DIN EN ISO 4892-3	≥ 6500 h	
Shore A hardness	Internal	approx. 87	
Bonding strength	DIN EN 1348	≥ 3,0 N / mm <sup>2</sup> *	
Peel test on wood carrier	Internal	≥ 100 N *	
Water tightness	DIN EN 1928-A- 60 kPa/24 Std.   watertight DIN EN 1928-B-400 kPa/72 Std.   watertight		
Burst pressure	Internal	≥ 4,0 bar	
Reaction to fire	DIN ISO 11925-2 EN 13501-1	Class E	
* in dependence of the used adhesive			
Chemical Resistance	To Hydrochloric acid, Sulphuric acid, Citric acid, Lactic acid, Potassium hydroxide, Sodium hypochlorite, Salt water and further substances		
Approval	CE Marking according DIN EN 13967 Certificate No. 0761-CPR-0849 WRAS Material Approval according BS 6920-1:2000 Approval Number 1808558		
Storage	36 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.		
Attention	Due to technical reasons the colour of the material or the printing may vary slightly from batch to batch		
Fusibility	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. Parts to be welded must be roughened or sanded. Please follow our processing instructions		



# APPLICATION



## 1. Surface preparation

Prepare the cleaned, weight bearing concrete substrate by mechanical means (eg. surface grinding to SA 2.5 profile) to be free from laitance, friable / loose particles, oil, dust or curing agents and all contaminants. (Repair all concrete defects where necessary with approved repair materials and obtain engineer's sign-off).



## 2. Cleaning

After the surface has been mechanically prepared clean thoroughly and remove all dust by vacuum. If the tape is dusty / dirty, wipe clean with dry or damp cloth. Do NOT use solvents.



## 3. Masking off the surface

Mask off the expansion area on the concrete substrate and on the tape (top side). Mask off at the margins ensuring an overlap of epoxy adhesive >1cm wider than the tape. The epoxy should overlap the tape by at least 1cm.



## 4. Mixing of the epoxy mortar

Mix parts A and B together for at least 3 minutes with a mixing spindle on a slow speed electric drill (max 300rpm). Pour the mixture into a clean container and mix again for 1 minute to yield a streak free uniform colour and consistency. Avoid aeration whilst mixing.



## 5. Applying the adhesive

In order to ensure all-over bedding apply the epoxy adhesive at least 1cm wider than the width of **MSA-Monoflex W** you use and minimum 50mm width from outer edge. Epoxy adhesive to be at 1mm minimum thickness.



## 6. Removing the adhesive tape

Remove the adhesive tape in the areas of the joint.



## 7. Laying and pressing

Lay out the **MSA-Monoflex W** and press it on firmly with a roller – within the open time of the epoxy adhesive. The adhesive to be squeezed out both sides of the tape with no air voids.



## 8. Grouting with Epoxy Application

Mask the surface of the bandage >50mm from the edge of the bandage and apply the epoxy adhesive to the bandage surface at least 50mm wide and 1mm thick. Total thickness should be 1mm above and 1mm below the bandage and 2mm on the concrete substrate.



## 9. Removing the adhesive tape

Remove the masking tape and feather the edges of the epoxy with a brush or trowel.



## 10. Finished surfaces



## 11. Bonding with epoxy

Roughen the overlaps with sandpaper (80 grit). Ensure that there is an overlap of 100mm and with a minimum layer thickness of 1mm when bonding the **MSA-Monoflex W** with epoxy adhesive.



## 12. Hot-air welding (preferable)

Roughen the overlaps with sandpaper (only in the welded zone). Using hot air blower pressure weld the joints with an overlap of at least 50mm; no air pockets or wrinkles. Approximate settings of 360°C to 420°C to be ascertained by site trials before each application.

The information contained in this Data Sheet is issued as a guide to the use of the product. Technical data is based on laboratory tests. Actual measured site specific data may vary due to circumstances beyond our remit. As we do not have any control over the application of the product, and given the multi-faceted variables experienced on each site, we cannot guarantee the results to be obtained. Users assume all risks and liability from the use of this product and must confirm the suitability thereof by conducting their own tests under site specific conditions. Refer to the most recent issue of the Product Data Sheet for the product concerned – copies available upon request. Refer to the Material Safety Data Sheet for safe use, physical and health hazard information. Liability is limited to replacement of faulty material. Field service does not constitute supervisory responsibility. Where other products are to be utilised in conjunction with this material, the relevant Product Data Sheets should be referred to so as to ascertain total requirements. MSASA has considerable experience acquired over many years – please consult us for further advice. FOR PROFESSIONAL USE ONLY.



**For other Construction & Expansion Joint Details, as well as joint sealants & adhesives, please visit :**



The information contained in this Data Sheet is issued as a guide to the use of the product. Technical data is based on laboratory tests. Actual measured site specific data may vary due to circumstances beyond our remit. As we do not have any control over the application of the product, and given the multi-faceted variables experienced on each site, we cannot guarantee the results to be obtained. Users assume all risks and liability from the use of this product and must confirm the suitability thereof by conducting their own tests under site specific conditions. Refer to the most recent issue of the Product Data Sheet for the product concerned – copies available upon request. Refer to the Material Safety Data Sheet for safe use, physical and health hazard information. Liability is limited to replacement of faulty material. Field service does not constitute supervisory responsibility. Where other products are to be utilised in conjunction with this material, the relevant Product Data Sheets should be referred to so as to ascertain total requirements. MSASA has considerable experience acquired over many years – please consult us for further advice. FOR PROFESSIONAL USE ONLY.