

sentinel™ saba expansion joint system

EXPANSION JOINT BANDAGE SYSTEM

DESCRIPTION

Sentinel™ Saba Expansion Joint System is a liquid applied two component, solvent free bandage based on high performance flexible resins. It is formed in-situ to create a highly resilient expansion joint and is available in Self-Levelling (SG) and Thixotropic grades.

USES

Sentinel™ Saba Expansion Joint System can span a wide range of movement gaps and accommodate movements in 3 dimensions to provide a seamless continuous barrier against water ingress in a variety of both new and refurbishment applications in a number of industries including:

- Car parks as a trafficable expansion joint
- Building joints
- Podium Decks
- Concealed joint under landscaped areas
- Chemical tanks
- Petrol and diesel containment tanks
- Petrol station forecourts (as a sealant)
- Light transit railway systems, elevated structures
- Footbridges
- Ramps

FEATURES

- Waterproof expansion joint
- Accommodates directional changes
- Highly versatile
- No site or factory splicing
- Easy to apply
- Can be designed to accept a variety of movement ranges
- Accepts horizontal, vertical and shear movement
- Resistant to petrol, diesel and LPG
- Resistant to solvents and chemicals
- Suitable for Green Roof applications
- Installed only by authorised and trained contractors

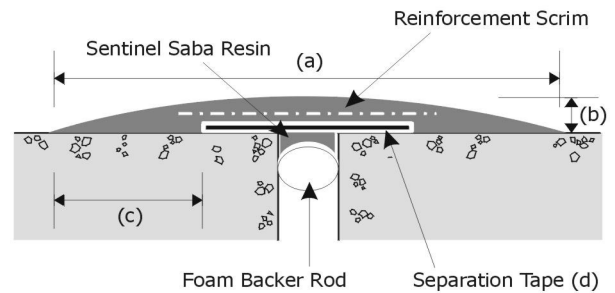
TECHNICAL DATA

The total width of the Sentinel™ Saba joint is dependent upon the design movement, the shape of the construction and the condition of the surface on which the system must be applied.

The range of movements accommodated are shown in the following table.

Standard Dimensions (See Diagram)

	Total Movement Capacity ¹	Total Width of System (a)	Height of Joint (b)	Width of Bonded Area (c)	Width of Separation Tape (d)	Cover Protection (buried)
Trafficable	2mm	80mm	5mm	35mm	10mm	Sentinel™ System Red
	5mm	120mm	6mm	50mm	20mm	
	10mm	150mm	7mm	55mm	40mm	
	15mm	200mm	8mm	70mm	60mm	
	20mm	250mm	9mm	85mm	80mm	
Non-Trafficable	25mm	280mm	10mm	100mm	80mm	Sentinel™ System Blue
	30mm	290mm	10mm	100mm	90mm	
	35mm	305mm	10mm	100mm	105mm	
	40mm	320mm	10mm	100mm	120mm	
	50mm	350mm	10mm	100mm	150mm	



TECHNICAL DATA

PROPERTY	VALUE	
	Self Levelling Grade (SG)	Thixotropic Grade (TG)
Application Temperature Range ²	+5 to 30°C	+5 to 30°C
Density:		
Part A	1340-1480 kg/m ³	1400 kg/m ³
Part B	1700 kg/m ³	1700 kg/m ³
Solid Content	100%	100%
Curing Time		
23°C @ 75% R.H.	24-48 Hours	24-48 hours
5°C @ 75% R.H.	2 - 7 Days	2 - 7 Days
Shrinkage	None	None
Temperature Resistance	-40°C to +120°C	-40°C to +120°C

¹ Larger movements than those mentioned above can be accommodated by project specific design specifications. Please consult our Customer Services Department.

² For temperatures outside this application range please contact our Customer Services Department.

sentinel™ saba expansion joint system

EXPANSION JOINT BANDAGE SYSTEM

SURFACE PREPARATION

It should be stressed that the success of any joint or waterproofing system is dependent on the thoroughness of the surface preparation.

Mark the desired width of the expansion joint central to the expansion gap. Working within this area, all concrete substrates must be prepared by suitable mechanical means such as grit blasting or diamond grinding to provide a clean, dry and structurally sound surface. The surface must be free from any laitance, oils, curing agents and other surface contaminants. If in doubt, the area must be cleaned using a suitable solvent.

On new works, after the substrate preparation has been completed, the expansion gap is filled with foam backer rod material (see diagram on Page 1).

In the case of refurbishment work it is not necessary to remove the existing expansion joint caulking material, unless it is considered that the material will impede the compressive movement of the joint.

On steel surfaces all rust, dirt and contamination should be removed to expose bright metal to achieve a surface finish to comply with Swedish standard Sa2.5 prior to the application of Sentinel Saba primer.

After substrate preparation to the required standard above, re-mark the area of the expansion joint and clean the area with clean, dry, uncontaminated compressed air or by thorough brushing.

APPLICATION

Priming

For cementitious substrates, apply Sentinel™ Saba H17 primer by brush and allow to dry for at least 30 minutes and a maximum of 6 hours.

For metal substrates and polyester drains, apply Sentinel™ Saba 9102 single component primer by brush and allow to dry.

For asphalt surfaces apply Sentinel™ Saba 9911 two component primer by brush.

Apply the separation tape centrally across the expansion gap width.

Laying

Sentinel™ Saba resin is supplied in pre-measured packs of differing sizes designed for whole pack mixing. Only full kits should be used. Select the size suitable for the intended works. Using the special Sentinel Saba application mixing equipment³, mix the two components together (for further details see Document No. QA345 Sentinel™ Saba Expansion Joint Application Guidelines).

Once the material has been mixed, apply a 2-3mm thick layer of material onto the primed substrate between the marked

perimeter lines. Whilst the resin is still wet embed the selected reinforcement strip central to the expansion joint.

Joints at the interface of a deck and wall should have half of the reinforcement width applied to the vertical surface and half to the horizontal surface.

Following embedment of the reinforcement strip apply a second layer of mixed Sentinel™ Saba Resin TG with a thickness of between 2mm to 10mm, as required.

Finish the Sentinel™ Saba system by smoothing the top face using water with a high concentration of soap (5–10%) as a lubricant. The surface profile can be formed using a Sentinel™ Saba roller.

Ensure that the outer edges of the applied sealer material have been finished to a "feather edge".

REPAIRS & DAY JOINTS

The high performance polymer in the Sentinel™ Saba system allows adhesion to old material, without the risk of delamination. For repairs and the continuation of work from a day joint no mechanical preparation is necessary but the surface of the lap area should be cleaned with Sentinel™ Saba Solvent No.48.

JOINT PROTECTION

The Sentinel™ Saba joint is very robust in normal use but is at risk of damage in the following situations:

- During the curing period immediately after application
- By following trades
- In operation if they are buried under hard or soft landscaping

In these situations permanent, effective protection to the completed Sentinel™ Saba joint should be provided using the Sentinel™ Cover System. The Sentinel™ Cover Information Note, Document No. MA523 illustrates the use of the Sentinel™ Cover System.

EQUIPMENT

For information on the variety of hand sealing pistols and pumping equipment available please contact our Customer Services Department.

COVERAGE

Sentinel™ H17 Primer - 0.1 kg/m²

Sentinel™ 9102 Primer - 0.1 kg/m²

Sentinel™ 9911 Primer - 0.1 kg/m²

Sentinel™ Saba Resin – coverage rate is calculated based on total width of the system, thickness and surface texture. For more information please refer to the Application Guidelines, Appendix 1.

COLOURS

Sentinel™ Saba is available in Black.

³ Sentinel Saba resin must not be mixed with any equipment other than that specifically designed for this purpose as supplied by Stirling Lloyd Polychem Ltd.

sentinel™ saba expansion joint system

EXPANSION JOINT BANDAGE SYSTEM

PACKAGING & STORAGE

Sentinel™ Saba	
Self-Levelling Grade (SG)	- 2.5ltr & 7.5ltr packs
Thixotropic Grade (TG)	- 2.5ltr & 7.5ltr packs
Sentinel™ H17 Primer	- 1.04ltr pack
Sentinel™ 9102 Primer	- 1ltr cans
Sentinel™ 9911 Primer	- 0.5ltr cans

All components of the Sentinel™ Saba Expansion Joint System should be stored off the ground in cool, dry, protected conditions, out of direct sunlight and in accordance with the relevant site Health & Safety regulations. Storage temperature should not drop below 5°C or rise above 35°C. Do not store near naked flames or foodstuffs.

Stored under these conditions, in unopened containers, these products have a shelf life of six months.

HEALTH & SAFETY

The Material Safety Data Sheets must be read, understood and available on site before commencing work.

It is the Company's policy to take all reasonable steps to prevent injury to all property and personnel from foreseeable hazards. This extends to the public in so far as they come into contact with the Company or its products.

GENERAL INFORMATION

The Sentinel™ Saba Expansion Joint System is part of a wide range of specialist waterproofing, surfacing and repair materials manufactured and supplied by Stirling Lloyd. If you require any further information on this or any other of our products, please contact our Customer Services Department or visit www.stirlinglloyd.com



© 2005 Stirling Lloyd Polychem Ltd.

The information presented herein is accurate to the best of our knowledge. We pursue a progressive research and development policy and reserve the right to alter any of the details herein without notice. The information given must not be taken in any way to form a specification. All technical properties quoted are from laboratory prepared samples. We will not accept liability whatsoever arising out of the use of the information contained herein.

Union Bank, King Street, Knutsford, Cheshire, WA16 6EF, England
Tel: +44 (0) 1565 633111 Fax: +44 (0) 1565 633555
E-Mail: info@stirlinglloyd.com
www.stirlinglloyd.com