

Heavy-duty elastomeric expansion joint system

## DESCRIPTION

**WABOFLEX SR** comprises a monolithic moulded neoprene section reinforced with integral structural steel angle plates, and an embedded hard-wearing aluminium anti-skid plate. **WABOFLEX SR** is available in six types depending upon the movement required. The system is anchored to the structure by mechanical anchors.

### TYPICAL APPLICATIONS

**WABOFLEX SR** is an extremely durable heavyduty expansion joint system. It is particularly suited for road bridge applications where movements up to 330 mm have to be accommodated.

## **ADVANTAGES**

- Accommodates large movements (up to 330 mm)
- Long-lasting and hard-wearing
  proven track record over 35 years
  long life under heavy traffic
- Skid resistant
- Smooth riding
- Maintenance free
- Suitable for various types of recess

## PACKAGING

WABOFLEX SR2A, SR2.5A, SR4A, SR6.5A and SR9A are supplied in sections 1829 mm in length. WABOFLEX SR13A is supplied in sections 1219 mm in length.

## PRODUCT DATA

**WABOFLEX SR** sections can accommodate movements from 51mm up to 330 mm.

- Continuous full-width tongue-and-grove joints between sections provide watertightness
- High-strength ribbed aluminium alloy extrusion inserts provide skid-resistance
- Aluminium extrusions are vulcanised to the neoprene and mechanically locked to prevent delamination and buckling
- Ribbed armoured aluminium surface protects the neoprene rubber from vehicle abrasion and edge load impact
- Steel angle plates are embedded in the neoprene to provide structural reinforcement
- Partial confinement of neoprene reduces deflection under traffic load
- Multiple movement grooves split the deck opening into smaller gaps for smooth transition
- Drainage channels provide rapid discharge of surface water
- Kerb details, skews and other directional change are totally welded and treated to ensure water-tightness



Sr. No	Description	Test Method	Unit	Specification	
1.	Hardness	ASTM D2240	Shore A	55±5	
2.	Tensile strength, min.	ASTM D412	MPa	12.4	
3.	Elongation at break, min.	ASTM D412	%	400	
4.	Compression set, method B max. (22 hr @ 70°C)	ASTM D395	%	20	
5.	Heat resistance @ 100°C for 72 hr	ASTM D573			
5.1.	Change in hardness	ASTM D2240	Shore A	Max. +15	
5.2.	Change in Tensile strength	ASTM D412	%	Max15	
5.3.	Change in Elongation @ break	ASTM D412	%	Max 40	

Sections through the WABOFLEX SR joint are shown in Figures 1 and 2 (not in scale)

## Figure 1 : WABOFLEX SR2A – SR2.5A joint system

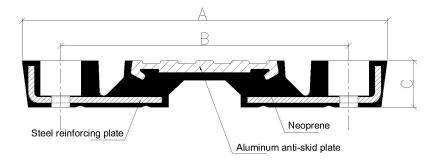
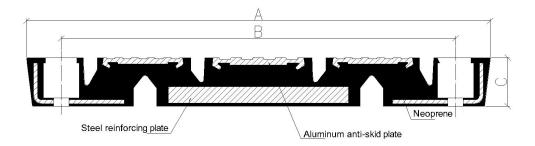


Figure 2 : WABOFLEX SR4A - SR13A joint system





## Key dimensions <sup>(a)</sup>

## WABOFLEX SR movement capability

Туре	Joint opening			Total movement		
	Min	Mid.	Max.			
SR 2A	21	46	71	51		
SR 2.5A	30	62	93	64		
SR 4A	53	94	135	82		
SR 6.5A	28	110	192	165		
SR 9A	31	145	259	229		
SR 13A	35	200	365	330		

## WABOFLEX SR anchor details

Туре	Length	Diameter
	(min.)	
SR 2A	160	12
SR 2.5A	170	14
SR 4A	170	14
SR 6.5A	190	16
SR 9A	140	20
SR 13A	250	24

## WABOFLEX SR dimensions and weight

Туре	Length	Width	A		В		С	Unit
			Min	Max	Min	Max		Weight, kg
SR2A	1828	270	245	295	185	235	40	40
SR 2.5A	1828	355	323	387	248	312	45	65
SR 4A	1828	584	543	625	471	553	54	150
SR 6.5A	1828	720	638	802	530	694	75	245
SR 9A	1828	900	836	1014	680	908	97	375
SR 13A	1219	1208	1043	1373	915	1245	129	400

<sup>(a)</sup> dimensions quoted to nearest mm



## INSTALLATION

**WABOFLEX SR** is a specialist expansion joint system and should only be installed by contractors that have been trained and approved by WBA representative.

The primary operations involved in the installation of WABOFLEX SR entail: creation and preparation of a recess, placing of a specific bedding mortar, drilling and location of anchors, placing of joint drain (optional) and secondary sheet membrane (optional), sequential placing and fixing of WABOFLEX SR sections, final torque setting of bolt fixings, filling bolt cavities with WABO recommended sealant, and a transition strip with STRELAX RN or WABOCRETE II (see Product Data Sheets). Further details are available upon request from local Master Builders Solutions representative office.

## **Additional Requirements / Equipment**

- Torque wrench to tighten anchors
- Pry bar to move or position panel
- Hydraulic ram assembly to adjust system for ambient temperature.

## STORAGE

**WABOFLEX SR** gland and anchor block components should be stored free from contamination prior to installation, as contamination may impair the performance of contact products such as WABO URA and **WABOFLEX SR** sealants.

### HEALTH AND SAFETY

Appropriate health and safety advice can be found in the Material Safety Data Sheet.

Users are advised to wear gloves and eye protection when installing **WABOFLEX SR**.

## QUALITY AND CARE

All products originating from Master Builders Solutions Dubai, UAE facility are manufactured under a management system independently certified to conform to the requirements of the quality, environmental and occupational health & safety standards ISO 9001 and ISO 14001.

\* Properties listed are based on laboratory controlled tests.

#### MBS\_CC-UAE/Wabo\_Flex\_SR\_05\_2003/v1/03\_21/v2/03\_22

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