

Exterior Seal Systems

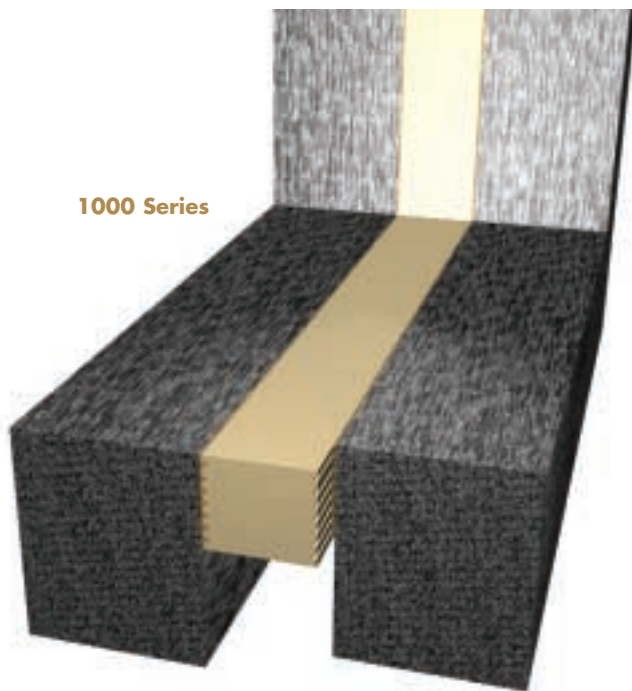
REACT 1000



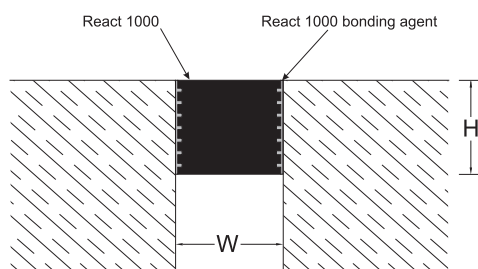
React 1000

Epoxy Bonded Seal Systems for Walls, Roofs, Parking and Bridge Decks

Joint Widths 20mm to 100mm



1000 Series



contains a Hindered Amine Light Stabiliser that inhibits the UV degradation of the material. This stabiliser is regenerated within the polymer and is not consumed leading to the extreme longevity of the joint. React 1000 does not use carbon black pigmentation in its formulation as this leads to heat generation and accelerated shrinkage of polymers that contain this compound.

React 1000 joints have grooves along the bond surfaces at 6mm to 12mm centres and these are typically 3mm wide x 3mm deep and run the entire length of the joint. These grooves increase the surface area of the bond surfaces and enhance adhesion to substrates.

React 1000 joints have a working movement range of 60% compression and 30% extension and are designed to be installed pre-compressed by 25% into structural gaps. Table 2 below shows the width of the uncompressed joint, associated gap width and +/- movement capacity from this gap width.

React 1000 joints supplied are sandy beige in colour and special React 1000 flexible coatings can be supplied which, when applied, permit colour co-ordination of the joint with other finishes without compromising the joint's performance.

The physical and chemical properties of this joint do not alter significantly over the temperature range -70°C to +70°C and all directional changes in the joint must be carried out using heat welding. This is accomplished by placing the joint material ends against a Teflon coated heating iron at 176°C for 10 to 20 seconds. The ends are then placed tightly together and fusion bonded. Do not test the weld until the material has completely cooled and full strength achieved.

React 1000 Bonding Agent is supplied and should be used to bond the joint to the structure. This bonding agent provides excellent adhesion in various weather conditions and tests indicate that the bond strength is greater than the joint material strength which is 0.8N/mm².

Table 1: Physical Properties

General	Meets ASTM 1056, Type 2, Class B, Grade 2 Meets AASHTO T-42-84 Modified
Compression Set	50% Compression for 22 hours at 73 °C:- -2 hour recovery - 10% set -24 hour recovery - 9% set
Extrusion	When a test specimen is compressed to 60% of its original width with three sides restrained, the amount of extrusion on the free side does not exceed 6mm
Elongation	The material has an elongation at break of at least 255%.
Density	Typically 48Kg/m ³
Water Absorption	Typically 0.3Kg/m ³
Weather Test	Tested to HH-F-341a, Type 1, Class A - no degradation
Tensile Strength	792.9KPa tested to ASTM D3575, Suffix T
Recovery	98.9% Recovery tested to ASTM D545
Tear Resistance	0.34Kg/mm
Environment	React 1000 is safe for use in potable and processed water applications
Tolerances	React 1000 joints are supplied to the following dimensional tolerances: Depth +10% -5% : Width +/- 2%

Joint Type

This joint is suitable for installation in exterior applications in floors, decks and walls forming a watertight impenetrable seal that is unaffected by road salts and petroleum products. Its elasticity will reject stones and debris and will sustain pedestrian traffic and repeated loading from wheeled vehicles.

Applications

External floor to floor, floor to wall and wall to wall applications including podiums, pavements, parking decks and ramps, airport runways, and bridges including steel deck bridges where positive anchoring is not possible. React 1000 joints are also suitable for use with potable and processed water applications including reservoirs and wastewater treatment plants.

React 1000 will resist hydrostatic pressure based upon the following depths of seal being used:

Seal Depth mm	Head of Water Metres
50	6.7
64	10.0
76	12.0
89	21.0

React 1000 has excellent resistance to a wide range of chemicals including dilute acids and alkalis. For specific applications, please contact our technical department for further assistance.

Product Description

The React 1000 series of joints are manufactured from impermeable, closed cell, cross-linked, ethylene vinyl acetate, low-density polyethylene co-polymer which is nitrogen rather than chemically blown. This joint material

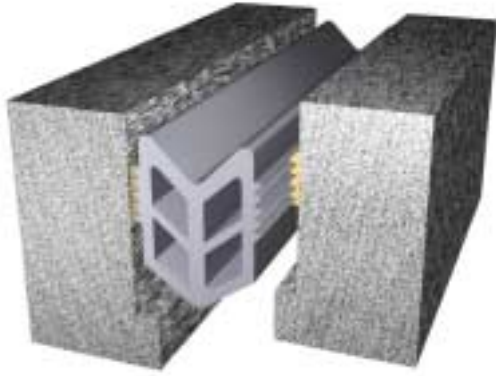
Table 2: Joint Specification

Joint Reference	Material Dimensions Width mm	Material Dimensions Depth mm	Structural Gap Width mm	Joint Movement +/-mm
1000-A01-020	25	25	20	10
1000-A01-025	32	50	25	12
1000-A01-038	48	50	38	19
1000-A01-044	56	50	44	22
1000-A01-050	64	50	50	25
1000-A01-057	71	64	57	28
1000-A01-063	79	64	63	31
1000-A01-070	87	64	70	35
1000-A01-075	95	76	75	37
1000-A01-083	103	76	83	41
1000-A01-090	111	76	90	45
1000-A01-095	119	76	95	47
1000-A01-100	127	89	100	50

React 1010/1020 Series

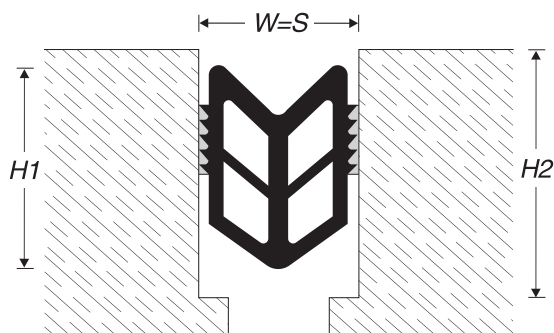
Epoxy Bonded Seal Systems for Parking and Bridge Decks

Joint Widths 25mm to 100mm

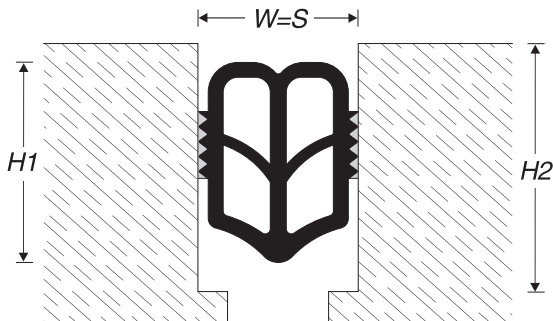


- Available in Neoprene or EPDM
- Installed with high strength epoxy adhesive
- UV, acid and alkali resistant
- For gaps in floors, walls and roofs up to 100mm wide with +/-50mm movement
- Fully watertight seal
- Heat-welded to form water tight transitions
- Standard colour is black
- Ideal for use in parking decks, pavements, exterior facades, podiums and bridge decks

1010 Series



1020 Series



OPTIONS

Fire Rated

Separate product and installation datasheet available

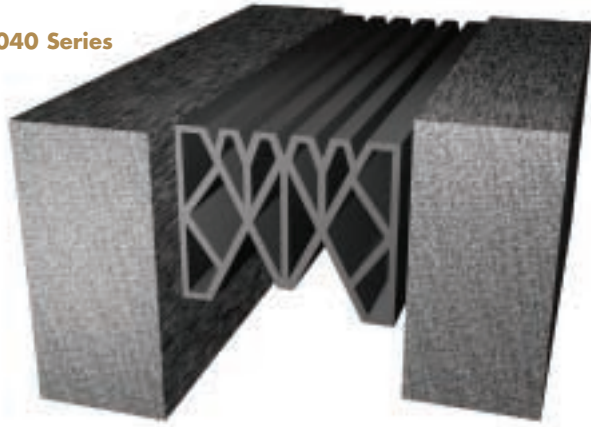
Application	Style	W	H1	H2	S	B	Movement ±	
		mm	mm	mm	mm	mm	Horizontal mm	Vertical mm
Deck/Deck	1010-A01-025	25	35	50	25	25	12	5
	1010-A01-038	38	50	64	38	38	19	8
	1010-A01-050	50	70	85	50	50	25	10
	1010-A01-064	64	85	105	64	64	32	12
	1010-A01-075	75	105	125	75	75	37	14
	1010-A01-080	80	110	130	80	80	40	16
	1010-A01-090	90	120	140	90	90	45	18
	1010-A01-100	100	130	150	100	100	50	20
Deck/Deck	1020-A01-025	25	35	50	25	25	12	5
	1020-A01-038	38	50	64	38	38	19	8
	1020-A01-050	50	70	85	50	50	25	10
	1020-A01-064	64	85	105	64	64	32	12
	1020-A01-075	75	105	125	75	75	37	14
	1020-A01-080	80	110	130	80	80	40	16
	1020-A01-090	90	120	140	90	90	45	18
	1020-A01-100	100	130	150	100	100	50	20

React 1030/1040 Series

Compressed Seal Systems for Parking and Bridge Decks

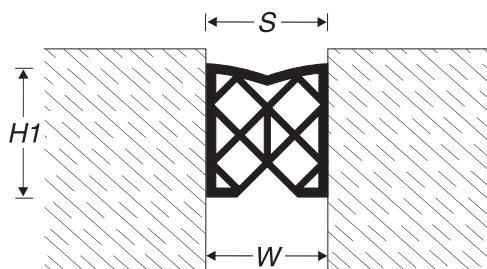
Joint Widths 28mm to 90mm

1040 Series

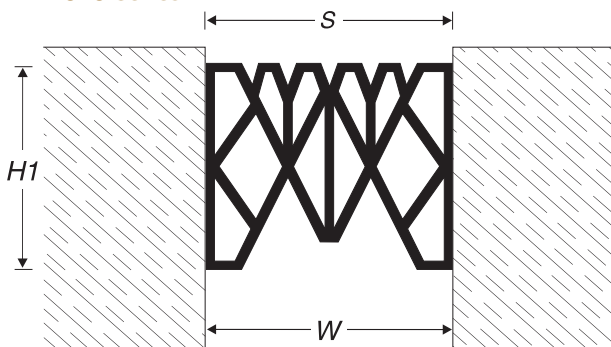


- Available in Neoprene or EPDM
- Installed by compressing seal into preformed gap
- UV, acid and alkali resistant
- React 1030 for gaps in floors, walls and roofs up to 73mm wide with +/- 22mm movement
- React 1040 for gaps in floors, walls and roofs up to 90mm wide with +/- 37mm movement
- Heat-welded to form water tight transitions
- Standard colour is black
- Ideal for use in parking decks, pavements, exterior facades, podiums and bridge decks

1030 Series



1040 Series



OPTIONS

Fire Rated

Separate product and installation datasheet available

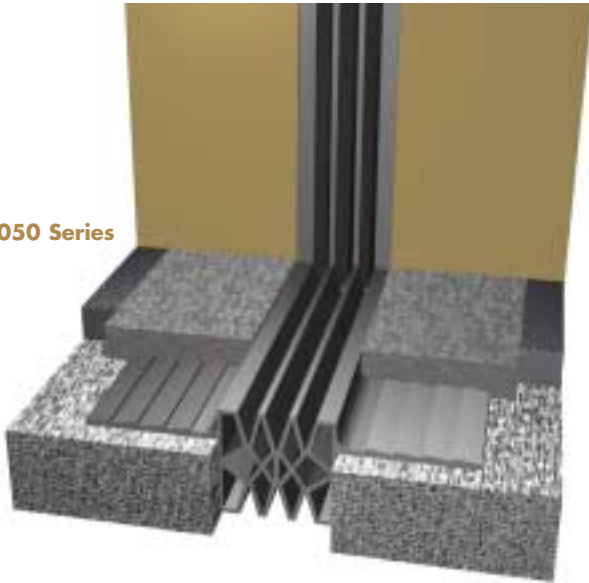
Application	Style	W mm	Seal		S mm	B mm	Movement ±	
			Width mm	Height mm			Horizontal mm	Vertical mm
Deck/Deck	1030-A01-028	28	44	44	28	-	8	3
	1030-A01-033	33	50	50	33	-	10	4
	1030-A01-036	36	56	63	36	-	11	5
	1030-A01-040	40	63	69	40	-	13	6
	1030-A01-049	49	75	81	49	-	15	7
	1030-A01-057	57	88	88	57	-	17	8
	1030-A01-065	65	100	100	65	-	20	9
	1030-A01-073	73	113	113	73	-	22	10
Deck/Deck	1040-A01-033	33	50	44	33	-	9	3
	1040-A01-036	36	56	44	36	-	11	4
	1040-A01-040	40	63	56	40	-	12	5
	1040-A01-050	50	75	56	50	-	14	6
	1040-A01-056	56	88	69	56	-	19	7
	1040-A01-061	61	100	75	61	-	23	9
	1040-A01-075	75	125	88	75	-	31	12
	1040-A01-090	90	150	107	90	-	37	15

React 1050/1060 Series

Membrane Systems for Parking and Bridge Decks

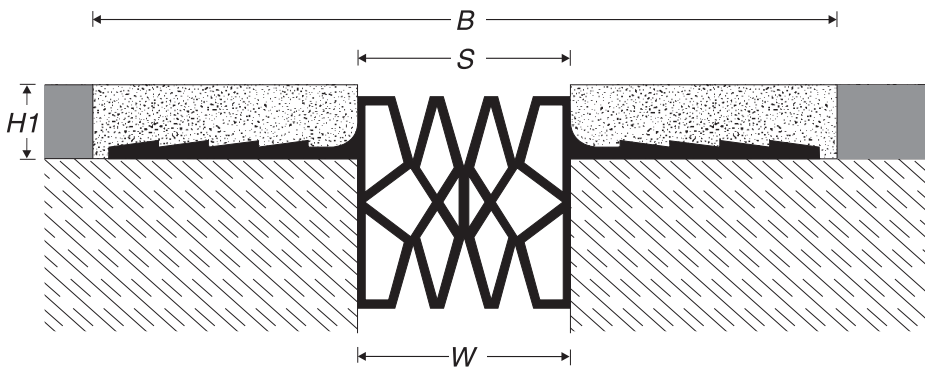
Joint Widths 25mm to 100mm

1050 Series



- High grade EPDM or Santoprene seals
- UV, acid and alkali resistant
- Affixed with high strength elastomeric concrete to resist heavy vehicular traffic
- React 1050 for gaps in floors up to 100mm wide with +/- 45mm movement and provides smooth transit for pedestrians even during cyclical movement
- React 1060 for gaps in floors up to 70mm wide with +/- 44mm movement. This is a low profile seal that is easy and fast to install
- Seals may be heat-welded to form water tight transitions
- Standard colour is black
- Ideal for use in parking decks, pavements and podiums

1050 Series

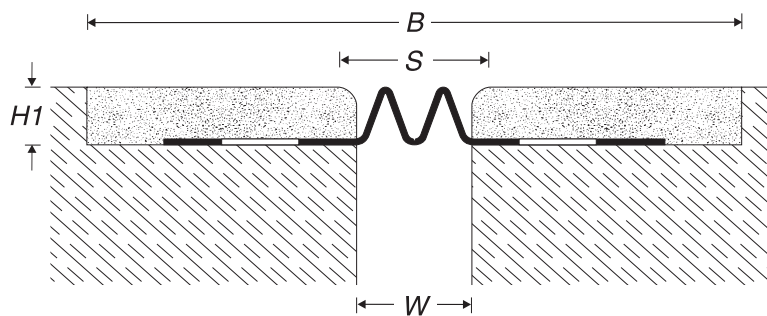


OPTIONS

Fire Rated

Separate product and installation datasheet available

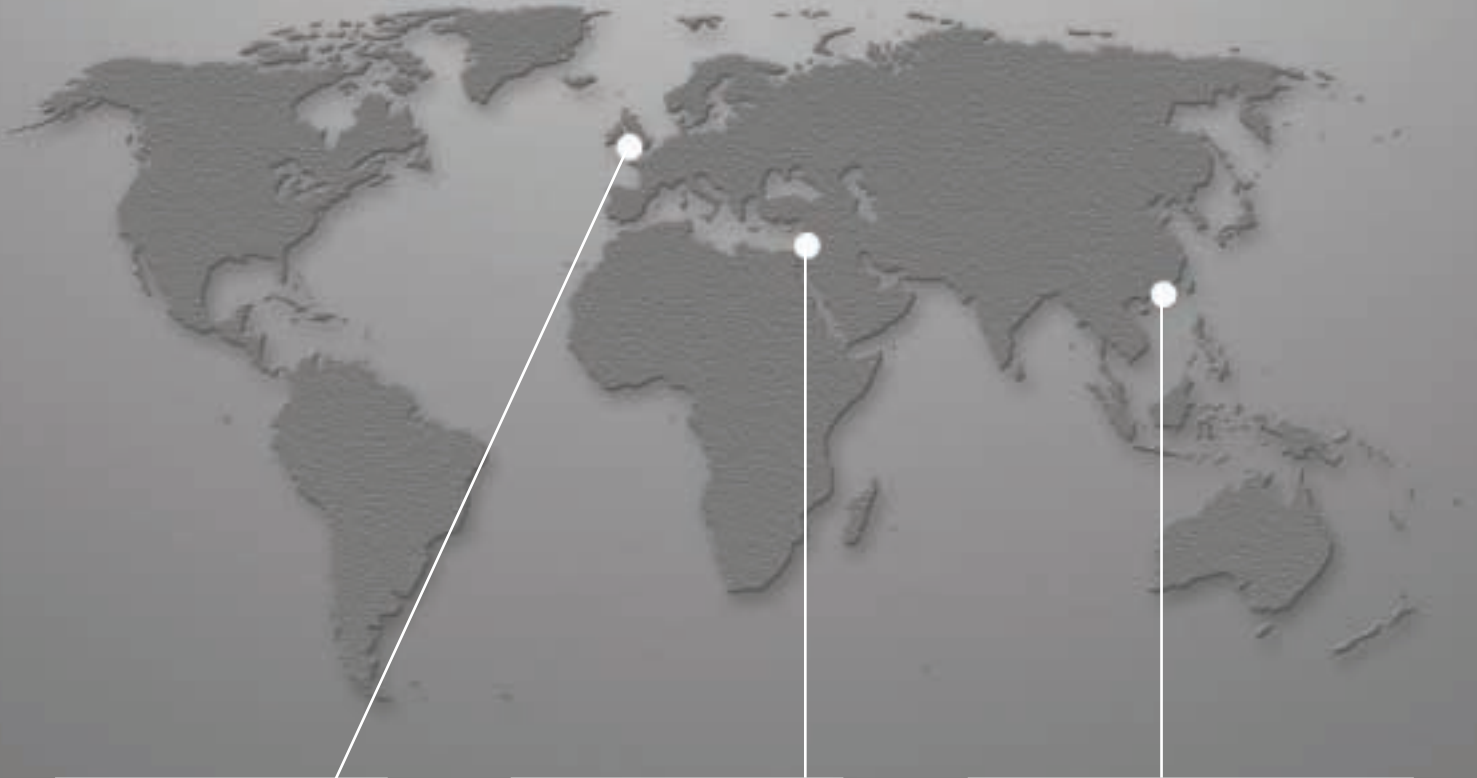
1060 Series



Application	Style	W	Seal	H1	S	B	Movement ±	
		Width mm	Width mm	Height 1 mm	Sightline mm	Blockout mm	Horizontal mm	Vertical mm
Deck/Deck	1050-A01-025	25	25	19	25	153	15	5
	1050-A01-038	38	38	19	38	166	19	7
	1050-A01-050	50	50	19	50	178	21	9
	1050-A01-057	57	57	19	57	185	28	12
	1050-A01-080	80	80	19	80	208	38	17
	1050-A01-100	100	100	19	100	228	45	25
Deck/Deck	1060-A01-044	44	44	19	44	172	25	9
	1060-A01-057	57	57	19	57	185	32	12
	1060-A01-070	70	70	19	70	198	44	15



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Acknowledgement: We would like to thank Sir Norman Foster and Partners for supplying and allowing us to use a picture of Chep Lap Airport, Hong Kong for the cover of this booklet.