

ABM SWELLING-540

DESCRIPTION:

ABM swell bar is used for sealing of concrete construction joints, precast concrete segments, proofing of shafts and pipe penetration subjected to continuous or intermittent hydrostatic pressure. It swells in contact with water to seal the gaps and pores in a concrete joint. It can swell up to 400%

USES

To seal:

- Construction joints and tunnels
- Pipe and steel work penetrations through walls and floor slabs
- Construction joints in cable ducts, etc.
- Around all types of penetrations through concrete

ADVANTAGES:

- Easy and secure application.
- Good elastic properties.
- Good swelling properties on contact with water.
- Permanent water resistance.
- Highly economical.
- Swells in contact with water.
- Easy to apply.
- Swell into cracks and gaps.
- Long-term reliability tested.
- Resistant against water and various chemical sub-stances.
- No hardening time required.
- No welding required.
- Adaptable to fit many different detailing tasks.
- Different types and dimensions available.

Tensile strength	13 Kgf/cm ²
Specific density	1.25 gm/cm ³
Hardness	40-50 (Shore A)
Elongation at break	300% min.
Swelling rate	450% vol. in pure water & 175% vol.
Service temperature range	-30°C to 60°C
Change of volume	7 days in tap water ≥ 200% 14 days in tap water ≥ 300%

Technical Data Sheet

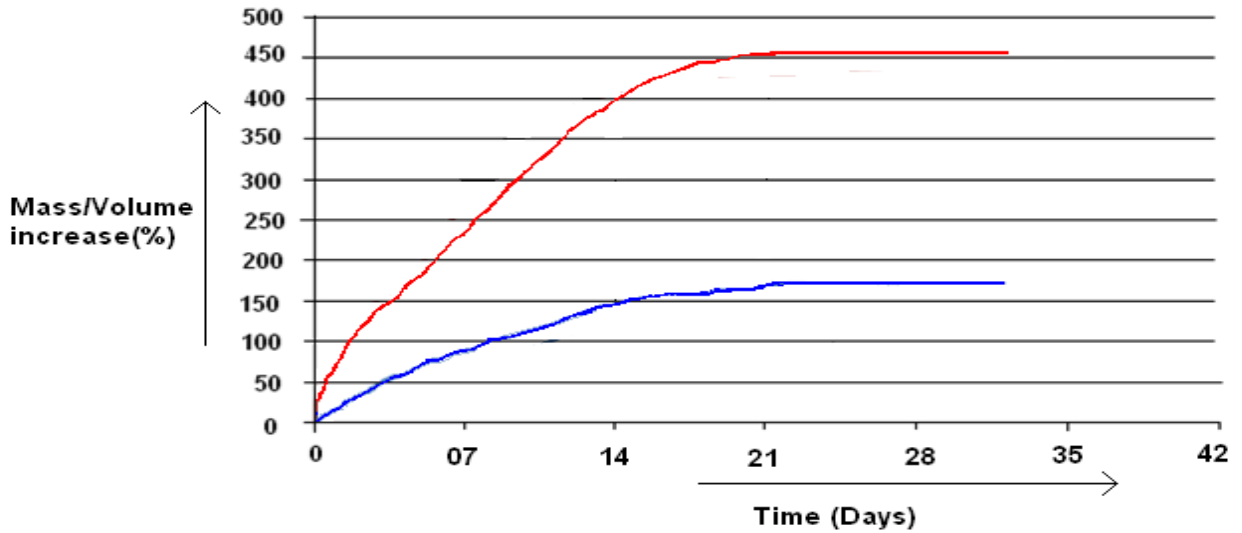
No.	Test Items	Requirements	Results	Standard
1	Hardness (shore A degree)	$\geq 45 \pm 7$	50	GB/T18173.3-20146.3.7
2	Tensile Strength (mpa)	≥ 3.5	3.7	GB/T18173.3-20146.3.7
3	Elongation at break (%)	≥ 450	470	GB/T18173.3-20146.3.7
4	Volume Expansion (%)	≥ 400	420	GB/T18173.3-20146.3.7
5	Repeated Immersion test (Tensile Strength (mpa) (Elongation at break (%) (Volume Expansion (%))	≥ 3 ≥ 650 ≥ 300	3.2 630 340	GB/T18173.3-20146.3.7
6	Low Temperature bending	No cracks	Pass	GB/T18173.3-20146.3.7

Swelling Technology:

At present, the water-swelling rubber water bar of waterproofing structure construction seam antiseep has two kinds of fixing meanss, one: groove is reserved on the constuction joint surface, groove is of a size of the wide 20mm of end opening, wide 30mm suitable for reading, the trapezoidal groove of dark 10mm is pasted along being stitched to catch out, press down to put down sealing rod with special-purpose adhesive. But reserve groove at the concrete construction joint place, the general method of laying batten that all adopts, and the batten of layin

g is subjected to concrete extruding, be difficult to guarantee the straight and smooth of groove, and the construction dregs that retain that drop should not be cleaned out in the groove, water-swellaable watertight rubber bar is owing to be not very soft more slightly, this will cause the not closely connected situation of rubber water-swellaable sealing rod and constuction joint surface, like this, water-swelling rubber water bar just might enter in the concrete of back cast in the fluid concrete process of back, makes it lose meaning. Its two: adopt cement nail to be fixed on the basal plane on constuction joint surface. But this method is when fixing sealing rod, and lower-layer concrete intensity is very high, and the nail cement nail is difficulty very; And top body of wall reinforcing bar colligation moulding when fixing sealing rod, fixing not easy to operate with fixed mass.

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Red graph = swelling in neutral drinking water
Blue graph = swelling in 4 % sea water

Installation of ABM Swell Bar

- Surface should be clean and dry.
- Rubber can be bound to concrete surface by driving nails, hooks or adhesive.
- Typically the product is installed at the centre and should have at least 80 mm cover.
- The coil ends should overlap at least 10 side by side.
- Keep away from moisture to avoid premature swelling.

Storage:-

Store in a cool and dry place in the original packing to prevent from moisture and premature swelling.

Safety precautions:-

- Use gloves to avoid rare allergic reactions.
- Do not reuse containers for storage of consumable item.

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Product Specifications

Length(mm)	Width(mm)	Thickness(mm)
2500	20	30
5000	10	20
Standard Specifications: 1. Section Size:5X20mm, 10X20mm, 20X20mm, 20X25mm, 20mmX30mm; 2. Length:5.0m/roll; 3. Package: cartons, 5 rolls per carton or customize 4. Size bias:Length can be customized, width and thickness can be customized within 5-50mm. 5. Other special specification and size is confirmed by two sides.		

Product Performance and Standard(JG/T141-2001- The People's Republic of China Building Industry Standards)

Items	Index	
	Common	Slow-swelling
Anti-water pressure, Mpa;	1.5	2.5

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Water welling rate in specified time/%	4h	200- 250	----
	24h	----	200- 250
	48h		
	72h		
	96h		
	120h		
	144h		
Maximum water swelling ratio/%;		400	300
Density,g/cm3		1.6±0.1	1.4±0.1
Heat resistance	80°C,2h	----	No
	150°C,2h	No	----
Low temperature flexibility	-20°C,2h circleΦ2 0	----	No crack
	-35°C,2h circleΦ2 0	No crack	----
Water resistance	Soak 24h	No mud	----
	Soak 240h	----	Overall expansion,no

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