

Maruti Hydrophilic Swell Bar

Description-Maruti 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 450%.

Uses –

1. To seal construction joints.
2. To seal construction joints in tunnel segments, precast concrete, cable ducts etc.
3. To seal pipe & steel work penetration through walls and slabs.

Advantages-

1. Easy and secure application.
2. Good swelling properties on contact with water.
3. Good elastic properties.
4. Permanent water resistance, no leaching.
5. Non-polluting, ecological user friendly system.
6. Need no hardening time.



Profile Type :-

| Available Size*: Type(mm) | Width(mm) | Thickness(mm) |
|---------------------------|-----------|---------------|
| MTSW1010 | 10 | 10 |
| MTSW2003 | 20 | 3 |
| MTWS2005 | 20 | 5 |
| MTSW2006 | 20 | 6 |
| MTSW2010 | 20 | 10 |
| MTSW2020 | 20 | 20 |
| MTSW2030 | 20 | 30 |
| MTSW2040 | 20 | 40 |
| MTSW2503 | 25 | 3 |
| MTSW2505 | 25 | 5 |
| MTSW2506 | 25 | 6 |
| MTSW2510 | 25 | 10 |
| MTSW2525 | 25 | 25 |
| MTSW3105 | 31 | 5 |
| MTSW3106 | 31 | 6 |

*** We also manufacture as per end user requirement.**

- ❖ **Colour** - Blue, Red, Black or as per requirement.
- ❖ **Packaging**-25-100 meters rolls or as per requirement.
- ❖ **Maruti** can also do private branding in specific colours and sizes.

Technical Data:-

Physical Properties-

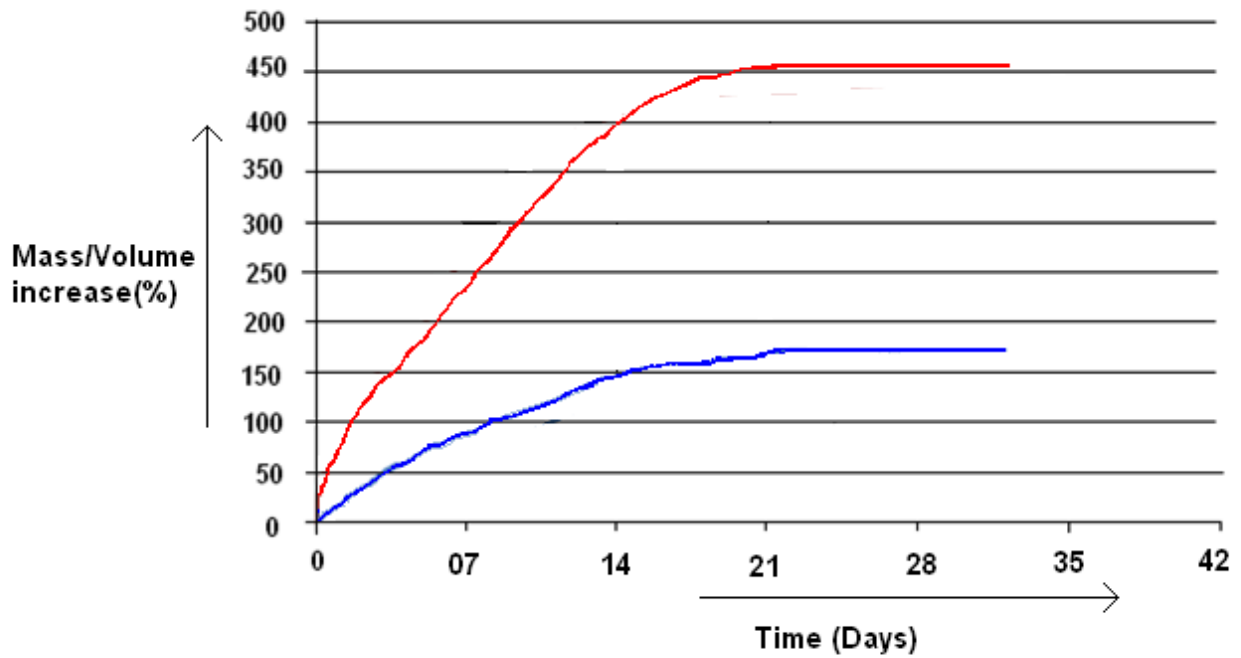
| | |
|----------------------------------|---|
| Tensile strength | 13 Kgf/cm² |
| Specific density | 1.25 gm/cm³ |
| Hardness | 40-50 (Shore A) |
| Elongation at break | 300% min. |
| Swelling rate | 450% vol. in pure water & 175% vol. in sea water |
| Service temperature range | -30°c to 60°c |
| Change of volume | 7 days in tap water ≥ 200% 14 days in tap water ≥ 300% |

Chemical Properties:-

- Classification** - + **Resistance**
- **No Resistance**
- +/- **Limited Resistance**

| Chemical Compound | Classification | Remarks |
|----------------------------------|-----------------------|---|
| Sulfuric acid 95% | - | |
| Sea water | + | |
| Benzyl alcohol | +/- | Resistant in case of accident for 72 h |
| Ethyl acetate | + | Accelerated expansion |
| o-Xylene | + | Accelerated expansion |
| m-Xylene | + | Accelerated expansion |
| Toluene | + | Accelerated expansion |
| Petrol | + | |
| Diesel | + | |
| Kerosene ,Jet fuel | + | |
| Mineral oil | + | |
| Liquid manure | + | |
| Ethylene glycol | + | |
| Ethanol | + | |
| Methanol | + | |
| Acetone | + | Strong accelerated expansion |
| Ammoniac solution 32% | + | |
| Sodium hydroxide solution | + | |
| 2-Butoxyethanol sol.10% | + | |
| n-Hexane | + | |
| Acetic acid 96% | + | Accelerated expansion |

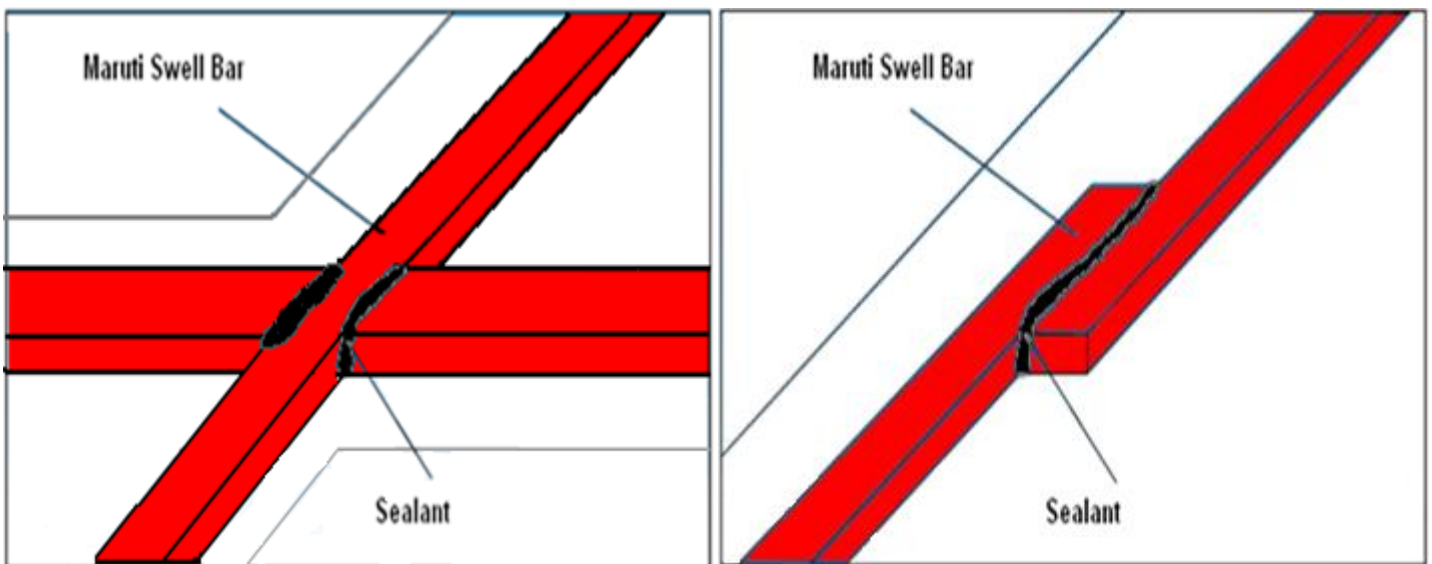
Hydro Swelling Graph



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

Sealing of construction joints

Maruti Swell Bar profiles can be fixed with the help of appropriate sealant for lap over parts and joints.

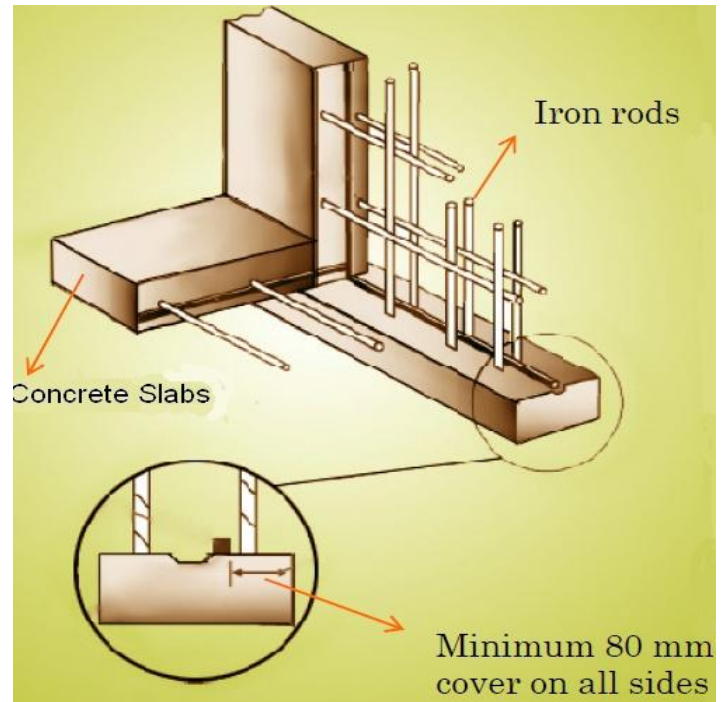


Installation of Maruti Swell Bar

- 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 cm 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.

