# HYDROPHILIC SEAL/SWELL BARS



# AMROCK Hydrophilic Seal / Swell Bars

AMROCK Hydrophilic seal / swell bar stands out as a revolutionary synthetic rubber-based water swelling bar, setting itself apart from conventional counterparts by eliminating bentonite. Crafted from fully vulcanized rubber, it boasts a spectrum of advantages. Its fully vulcanized nature grants it unparalleled strengths, including high tensile strength, exceptional elasticity, resistance to deformation, an extended shelf life, erosion resilience, and a feather-light design. This amalgamation of qualities renders it a beacon of innovation in water-sealing solutions, promising reliability and longevity in diverse applications.



AMROCK Hydrophilic swell bars play a vital role in construction joints, swelling at the center of the joint post-construction when encountering water from leaks. This expansion effectively seals off any potential leakages, ensuring robust watertightness in the structure.

The swelling process occurs due to the interaction between water and hydrophilic agents integrated into the molecular structure. This expansion of the water bar establishes a firm seal against the concrete joint, effectively blocking water from entering the structure through the protected joint.

AMROCK HYDROPHILIC SEAL undergoes an impressive expansion, increasing to 600% of its initial volume within the construction joint when it encounters water after construction.

Additionally, it is coated with hydrophilic monomers, which prevent premature swelling of the seal, enhancing its sealing effectiveness. The compound manufacturing these seals is rigorously tested to endure numerous wet/dry cycles and remains non-hardening





# Installation

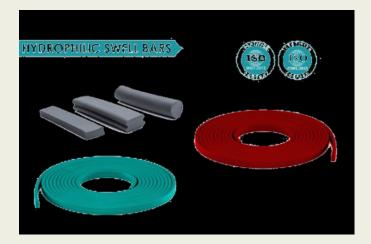
- Prior to installation, ensure the surface is clean and dry.
- Secure the rubber to the concrete surface using nails, hooks, or adhesive.
- Typically, install the product at the center of the wall or joint.
- Ensure the coil ends overlap by at least 10 cm side by side. Avoid moisture exposure to prevent premature swelling.

# **Technical Specifications**

Usage/Application	Concrete Filling and Jointing
Form	Rectangular section elastomeric strips
Sizes available	20 mm x 10 mm 20 mm x 5 mm 25 mm x 20 mm (Other sizes available on request)
Colours available	Black/Red/Blue (Other colors available on request)
Unrestrained volumetric expansion ratio	Up to 650%
Application temperature range	–30°C to 80°C
Service temperature range	–30°C to 80°C

#### **Surface Preparation**

- Before application, ensure the surface is thoroughly clean and dry, avoiding wet, frozen, greasy, or dusty conditions, especially in inclement weather.
- Press the entire length firmly onto the concrete surface. In vertical and overhead applications, maintain pressure for at least 15 seconds to ensure secure adherence.
- Ensure complete coverage of the surface by the water stop, paying particular attention to irregular surfaces.
- Use epoxy or silicone-based adhesive for optimal installation.







# **Physical Properties**

Tensile strength	13.2 kgf/cm
Specific density	1.3 gm/cm
Hardness	40-50 (Shore A)
Elongation at break	320% min
Swelling rate	650% vol. in pure water & 180% vol. in seawater
Service temperature range	-30°c to 80°C
Change in volume	07 days in tap water ≥ 300% 14 days in tap water ≥ 550%

#### Storage

To prevent moisture absorption and premature swelling, store the product in its original packaging in a cool, dry place.

#### Precautions

- Use gloves to reduce the risk of allergic reactions.
- Avoid reusing cartons to store consumable items.

#### ABOUT AMROCK ENTERPRISE PVT. LTD.

AMROCK ENTERPRISE PRIVATE LIMITED is an ISO 9001:2015 certified company established with a vision to supply superior quality products at an economical price. It is currently based in Rajkot, Gujarat. AMROCK has rapidly become a prominent supplier of PVC roundels, geotextile membranes, PVC water stoppers, Polypropylene Monofilament Micro Fibers, and power tools to projects spanning PAN India. The products are manufactured with best-in-class facilities.

Our primary goal is to provide the highest quality products to the projects. By doing so, we aim to empower owners and contractors with reliable and cost-effective options to address a myriad of geotechnical, transportation, hydraulic, and environmental challenges.

At AMROCK, we are unwaveringly committed to upholding the highest standards in all our commercial relationships with customers. Our dedication extends beyond transactions, emphasizing the cultivation of enduring, long-term partnerships. This commitment ensures that our clients not only receive superior products and services but also benefit from a sustained and mutually beneficial collaboration.

As we continue to evolve and innovate, AMROCK ENTERPRISE PRIVATE LIMITED remains steadfast in its mission to deliver excellence, foster innovation, and build lasting connections within the dynamic landscape of the construction and infrastructure industry.

## CONTACT US

AMROCK ENTERPRISE PVT. LTD. amrockbw@gmail.com 501, Sarang Apartment, Street no. 9, Jagnath Mandir Chowk, Rajkot - 360001