RAMCO HARD WORKER

BONDING AGENT SBR HW404

Styrene-butadiene rubber (SBR) latex bonding agent and mortar modifier

TECHNICAL DATA SHEET

Product Description

Hard Worker Bonding Agent SBR HW404 is a polymer-modified bonding agent based on styrene-butadiene rubber latex, supplied ready-to-use in liquid form. It provides strong adhesion between old and new cementitious surfaces and, when gauged into repair mortars and screeds, improves tensile and flexural strength, enhances cohesion and reduces shrinkage and cracking. HW404 is suitable for bonding on concrete, plaster, brick and masonry.

Features

- Excellent bond between old and new concrete
- Improves tensile and flexural strength of repair mortars
- Enhances cohesion and reduces shrinkage and cracking
- Ready-to-use, single-component liquid
- Suitable for repair mortars, screeds and floor toppings

Uses

Recommended as a bonding agent for:

- Bonding between old and new concrete
- Polymer-modified repair mortars
- Screeds and floor toppings

Surface Preparation

The substrate must be free from dust, laitance, rust, paint, oil and any other contaminants. Pre-saturate concrete substrates for at least 2 hours to achieve a saturated surface-dry (SSD) condition. Roughen smooth surfaces by scabbling or grit blasting to provide an adequate mechanical key.

Mixing Instructions

Mix HW404 with cement in the ratio 1 : 1 (bonding agent : cement) using a low-speed electric mixer to a homogeneous, lump-free slurry. The bonding slurry must remain tacky when the screed or mortar is overlaid.

Applications

Apply the bonding slurry to the prepared substrate with a brush, and place the mortar or screed while the surface is still tacky (wet-on-wet). Do not allow the slurry to dry before overlaying; if it dries, remove it and re-prime the clean substrate.

Technical Properties

Property	Typical Result
Appearance	Liquid
Colour	White
Solid Content	50 – 60%
Specific Gravity (27°C)	1.020 g/ml
Tack-Free Time	30 – 35 minutes
Pot Life	60 minutes

Performance Properties

Property	Value
Bond Strength, 28 days (ASTM D 4541)	**2.2-2.5 MPa**
Slant-Shear Strength, 28 days (ASTM C 882)	**3.0 – 3.2 MPa**

All values tested under standard laboratory conditions.

Coverage

Approximately 8–12 sq. ft. per litre for two coats at 1 mm thickness. Coverage may vary with the substrate.

Cleaning

Wash all tools with clean water immediately after use. Do not allow the material to harden on tools or surfaces.

Package

Available in 1 L, 5 L, 10 L, 20 L and 50 L containers

Shelf Life

Shelf life of 12 months from the date of manufacture. Store in a cool, dry place away from direct sunlight, in sealed condition.

Precautions and Safety

Use gloves, a mask and eye protection during use and avoid inhalation. In case of skin or eye contact, rinse thoroughly with clean water.

Additional Information

The Hard Worker range includes a comprehensive selection of concrete repair and construction chemical products — precision and anchoring grouts, repair mortars and micro-concretes, epoxy and SBR bonding agents, integral and surface waterproofing systems, tile adhesives and grouts, block-fixing mortars and admixtures. Separate technical data sheets are available for each product.

Technical Support

All values provided are tested under controlled laboratory conditions; performance may vary depending on site conditions and workmanship. For site-specific recommendations, technical data, or detailed guidance, contact the Hard Worker Technical Services Team at:

Toll-free number 1800 202 5700

Email customercare@ramcocements.co.in

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