

ReArm Bond 4031

(Formerly known as MYK INDUBOND VK 4031 (I))

Two Component Resin-Based, Thixotropic, Multipurpose Adhesive



Product Description

ReArm Bond 4031 is a two-component, solvent-free, 100% solids, high-modulus, non-sag, multipurpose bonding agent for horizontal, vertical and overhead applications. When mixed ReArm Bond 4031 will give a smooth, paste like consistency used for structural and waterproof bonding of a wide range of construction substrates.

Uses

- ReArm Bond 4031 is a multipurpose, structural adhesive typically used for:
- Structural bonding of pre-cast elements such as segmental bridge units, crash barriers, parapets, curbs etc.
- Fixing dowels and starter bars
- Blow hole filling
- Levelling undulated surfaces
- Filling and sealing of static cracks
- Fixing surface injection packers
- Bonds with Steel, wood, Aluminium, concrete

Also can be used as a Repair mortar

- Corner & edges
- Holes & void filling
- Rigid Joints

Features and Benefits

- Easy to mix, apply & clean
- High early & final compressive, flexural, bond & tensile strengths
- Resistant to many dilute acids, alkalis and solutions aggressive to concrete
- Bonds to both dry & damp substrates
- Bonds to many substrates such as mortar, steel, aluminium & glass
- Two-color coded components indicate mixing homogeneity once achieved
- For horizontal, vertical and overhead application
- Hardens without shrinkage
- Excellent abrasion resistance
- Innocuous once cured
- Solvent free
- No primer needed
- High initial and ultimate strengths
- Good abrasion & Chemical resistance
- Adhesive and filler in one
- Impermeable to liquids and water vapour

Application Methodology

Step no 1:

Tools: For surface preparation:

As appropriate to substrate condition & size of repair area involved use chisel, grinder (such as High Grinder 125.4RO* or similar) sandblasting, water-blasting or Grit - blasting equipment.

For mixing:

Use a spiral mixing paddle (such as MG140*) attached to a variable slow speed mixer (such as High Mix EHR23*).

For application:

Use a straight or notched steel trowel for surface applications & for filling of anchor grout holes use a barrel type sealant gun attached with a flexible hose.

Surface Preparation:

The area to be treated must be sound and free from adhesion inhibiting substances such as dust, laitance, grease, rust, etc. Dependent on the type and condition of the substrate use suitable means of preparation such as scrubbing, grit-blasting, water-blasting or shot-blasting.

The following criteria must also be respected, dependent on the substrate type: Cement-based:

Concrete quality: M20/M25
Age of substrate: Min. 28 days
Tensile adhesion strength: > 1.5 N/mm²

Iron and steel: Surfaces are to be abraded to a bright white metal finish in accordance with Swedish standard SA 2&12.

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TECHNICAL DATA SHEET

Step no 2: Priming:

ReArm Bond 4031 does not require a primer.

Step no 3: Product Mixing:

Both components, A (resin) and B (hardener), are delivered in a predetermined mixing ratio. Empty all the contents of component B into the component A container. Mechanically stir both components using appropriate mixing paddle attached to a slow speed mixing drill (300 to 400 RPM) until a homogeneous and well dispersed mixture is obtained. Ensure that no unmixed material is left on the sides and bottom of the container. Decant the material into a clean container and thoroughly mix once again for 3 minutes. The material temperature during mixing should always be 25° C or lower.

Step no 4 :Product Application

Evenly spread ReArm Bond 4031 onto the well-prepared substrate as an adhesive using a trowel, steel float or notched trowel and ensure a minimum adhesive bed thickness of 2.0 mm. When using as an anchoring grout, apply ReArm Bond 4031 into the prepared opening ensuring continuation and compaction of the product to prevent air entrapment. Push – whilst gently twisting in one direction – the reinforcement bar until fully embedded.

Curing:

Protect uncured product from rain & moving water. Once hardened no curing procedures are required.

Cleaning & Equipment Maintenance:

During continued application, all tools must be regularly & thoroughly cleaned with water and/or solvent every 25 to 40 minutes (dependant on temperature) to prevent the product from setting on tool surfaces. Thorough cleaning must also be carried out immediately at the end of works or whenever work is suspended. Cured material can only be removed mechanically.

Technical Data

Basis	2-components epoxy-resin
Color	Component A: Off white Component B: Dark grey
Mixed product	Grey
Viscosity	Trowel able consistency
Density at 25°C	Approx. 1.55 g/ml
Mixing Ratio	3:1 parts by weight
Pot life at 25°C	60 min.
Adhesive open time at 25°C	90 min.
Sag Flow	On vertical surfaces it is non-sag up to 10 mm thickness. (According to FIP 5.3 with measurement according to ASTM D2730)
Layer Thickness	30 mm max. When using multiple units, one after the other. Do not mix the following unit until the previous one has been used in order to avoid a reduction in handling time.
Overcoat after at 25°C	16h
Full cure	7 days
Light traffic/full load at 25°C	After 48h/7 days
Tensile adhesion strength Concrete failure	> 1.5 N/mm ²
Tensile strength @30°C (According to ISO 527)	3 days 5 - 8 N/mm ² 7 days 8 - 10 N/mm ²
Shear Strength	10 N/mm ²
Flexural strength @ 7 Day	15 N/mm ²
Compressive strength	
1 Day	40 N/mm ²
3 Day	45 N/mm ²
7 Day	50 N/mm ²

Standards:

ReArm Bond 4031 complies with all the requirements of ASTM C-881; "Epoxy Resin-Base Bonding Systems for Concrete" Types I & IV, Grade 3, Class B and C.

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Consumption

ReArm Bond 4031: approx. 1.55 kg/m² per 1mm thickness. Higher consumption is expected on rough surfaces. Always allow for wastage when calculating quantities to order.

Packaging

ReArm Bond 4031 is supplied in 6 kg kits consisting of 2 components. Both components are delivered at a predetermined mixing ratio.

Storage and Shelf Life

Both components (A and B) have a shelf life of 12 month when original, unopened containers are stored in a dry and frost-free environment above 5°C.

Annotation

- Always mix a full pack. Do not mix part packs.
- Do not expose applied material before initial cure to moving water.
- Protect from rain before initial cure to prevent surface deformations.
- Lower site temperatures may reduce workability whilst reaction times (pot life & full cure) are extended. Higher temperatures shorten the pot life.
- Applications that are not clearly explained in this technical data sheet may only be carried out after consultation with and written confirmation from the Technical Services Department of MYK Arment
- ReArm Bond 4031 is classified as non-hazardous in accordance with the Ordinance on Hazardous Substances.

Health & Safety

Once completely cured, ReArm Bond 4031 is harmless. The hardener (component B) is corrosive. Therefore, implicitly ensure that the hardener does not come into contact with skin. Always wear protective gloves and adequate eye protection when working with this product. Clean up contamination with plenty of water and soap, preferably with the addition of 10% household vinegar. Should splashes get into the eyes, rinse immediately with plenty of water and seek immediate medical help with reference to the current valid Material Safety Data Sheet. Adhere to the general government health and safety protective directive.

Product Categories Available



Legal Note

The information, and, in particular, the recommendations relating to the application and end-use of MYK Arment products, are given in good faith based on MYK Arment current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with MYK Arment's recommendations. In practice, the difference in materials, substrates and actual site conditions are such that no warranty in respect of merchant ability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application & purpose. MYK Arment reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local product data sheet for the product concerned, copies of which will be supplied on request.

MYK Arment Private Limited
8-2-703/A, 3rd Floor, Leela Gopal Towers, Road No. 12, Banjara Hills, Hyderabad -500 034
Tel: +91 40 6816 0001 | Email: myk@mykarment.com | www.mykarment.com