

# ROMIX BL

## SILICON-CORUNDUM INDUSTRIAL FLOOR HARDENER

### ADVANTAGES

- Minimises the occurrence of micro-cracks (spider webs)
- Special combination of mineral and synthetic ingredients plus chemical modifiers ensure excellent workability and ease of application and processing
- Stability and repeatability from batch to batch
- Once set and properly cured, forms a hard "shell" with excellent adhesion to the substrate
- High density of silica fillers makes the floor extremely resistant to heavy mechanical use
- High watertightness of the completed floor
- Easy to apply both manually and mechanically
- High resistance to temperature differences of -65 to + 95°C

### USE

- Romix - silicone-cement hardener for application to freshly poured concrete, for the production of industrial floors of versatile use in industrial construction.
- It is a product specially developed for the use of professional work teams specialised in "INDUSTRIAL FLOORINGS".
- The primary task of Romix is to ensure that the concrete surface achieves technical parameters that meet the requirements of construction standards and the individual needs of the investor
- The use of Romix hardener is justified wherever there are mechanical loads on the industrial floor and high sanitary requirements
- Typical examples of the use of the hardener are facilities for warehousing and logistics, retail, wide-area production, car parks, garages, workshops, etc.

## CHARACTERISTICS

- Product according to PN-EN 13813
- Abrasion resistance class AR0.5 - if all technological requirements and floor execution conditions are met
- Compressive strength after 28 days 80 MPa
- Flexural strength class F7
- The floor has enhanced resistance to water and oil penetration After bonding with the concrete subfloor, it forms a wear-resistant layer with a uniform structure
- According to tests, Romix increases the abrasion resistance of concrete by more than 400%.
- Impact abrasion resistance measured in the RS1 apparatus - Romix cured pavement has withstood more than 5,000 cycles without damage, thus guaranteeing maximum resistance of the floor to hard wheel loads

## INSTRUCTION OF USE

**First of all, when preparing for the application of Romix, we need to secure the correct concrete mix.**

**The requirements for the concrete are as follows:**

- Minimum C20/25 floor concrete
- Do not add ash other than the original ash in the ash cements to the concrete. The acceptable amount of such ashes, if the cement does not contain them, is a maximum of 30 kg per m<sup>3</sup> and only from verified sources.
- Do not add additives with an aerating effect
- It is recommended to use CEM IIIA group cements in hot weather under a roof, and for larger surfaces (less shrinkage and longer processing time), CEM II or if making floors in cold conditions CEM I
- For light coloured floors we recommend a slag based cement
- If in doubt, contact the manufacturer's representative

The concrete base, once evenly distributed, must be vibrated and allowed to dry. The first work begins as soon as a slight shoe mark (about 5 mm) is observed on the concrete. The first step is to rub the raw concrete with a trowel to break up the cement laitance, then apply Romix at a rate of 2 to 3.5 kg/m<sup>2</sup> and rub in the hardener with the trowel, making sure that each pass of the machine is perpendicular to the previous one. Afterwards, sprinkle the concrete again with 1 to 3 kg/m<sup>2</sup> of Romix and trowel until the surface is uniformly smooth. The amount of hardener applied in the following steps depends on the needs, the contractor's possibilities, the external conditions and the application method.

The manufacturer recommends the use of 3.5 to 5.5 kg/m<sup>2</sup> of material, if a larger quantity is required, contact the manufacturer for application conditions and concrete formulation. It is also possible to apply Romix hardener with a high-performance self-propelled seeder. It must then be applied to freshly vibrated concrete. This type of application is fully compliant with the application technology and the art of construction. It guarantees the most even and correct application.

The temperature when applying the Romix technology should be between +5 and 25°C. If possible, the surface to be laid should be protected from rain, draughts and sunshine.

## OPERATION

The maximum load on the cured floor should start after 28 days. The cured floor should also be protected against excessive drying, for this purpose it is necessary to treat the floor by traditional or chemical method with P100, P200, PH100, PHW100. In order to prolong the life of the floor, it is important to remember about the correct way of cleaning. Use a chemical cleaner with a pH value close to 8, and vacuum the floor to remove any hard, scratch-inducing dirt. It is recommended to use cleaning strings

## CLEANING AND MAINTENANCE OF A CONCRETE FLOOR

- **Si-Clean** – preparation for daily cleaning and care
- **Si-Wax** – self-gloss polymer paste
- **Si-Active Concrete Clean** – alkaline cleaner for basic cleaning and removal of heavy soiling

## STORAGE, TRANSPORT AND SIZE OF PACKAGES

- The storage period for Romix, in a dry place, is 6 months from the date of production
- Romix is packed in 25 kg bags, 1200 kg/pallet.
- During transport, transport in original packaging and protect from moisture

## PRECAUTIONS

- Romix contains cement which, when dry, does not pose a risk to the skin, but when mixed with water the cement is alkaline and has an irritating effect on the skin
- When handling this material, avoid inhaling dust
- It is recommended to wear protective goggles and gloves

## CONCLUDING REMARKS

DST floors will never be uniform in colour, the surface will always have darker and lighter discolourations and shades. This phenomenon is commonly referred to as marbling. Characteristic of DST technology is also the appearance of a network of localised micro-cracks on the floor's wearing surface. These are the result of stresses arising from the physical and chemical processes taking place in the maturing concrete floor. The concrete manufacturer and flooring contractor can try to reduce this phenomenon but cannot completely eliminate it. With steel fibre reinforced floors, some of it may be visible on the floor surface. With an abrasive layer, the permissible amount of visible fibres is 3 fibres per 1 m<sup>2</sup> of surface. During machine troweling, granules may escape from the floor, resulting in additional cracks and holes in the surface. If the number of cavities does not exceed 6 in 10m<sup>2</sup> of surface and at the same time does not exceed 20 per 100m<sup>2</sup> of surface, this should not be regarded as a defect.

## AS DETERMINED

- VOB/B (*german business law*)
- B.E.B.
- ACI 302.1R.-06 Guide for Concrete Floor Construction (*American Concrete Institute report. Guidelines for the Construction of Industrial Concrete Floors*)
- DIM
- WTCB (*Edition of the Scientific and Technical Centre for Construction*)
- DIN 15185

**Note:** *The above information has been compiled to the best of our technical knowledge, but is not legally binding.*