

# TECHNICAL DATA SHEET

## IZOLSAN FIX

*Single-component quick-setting grout mixture for installation of duct covers*

### DESCRIPTION

IZOLSAN FIX is cement quick setting repair mortar suitable for repairs of concrete constructions in the thickness between 10 and 100 mm (10 to 40 mm in case of vertical surfaces) in a single layer.

IZOLSAN FIX is used in places, where operation shutdown needs to be reduced to minimum.

### ADVANTAGES

IZOLSAN FIX is delivered in a package as a dry prefab mixture, which is to be mixed with water.

- Quick strength build-up – it can carry load already after 90 minutes
- Non-shrinkable
- Very strong
- Does not contain chloride
- Single-component, only water is added
- Exceptional grip to concrete and steel without special adhesive bridge
- Highly resistant to frost
- Highly resistant to chemical defrosting agents
- Low absorption
- Highly resistant to abrasion

### DESCRIPTION

Malta IZOLSAN FIX is delivered as ready dry mixture, which is to be mixed with batch water in the given ratio. Material is based on Portland cement basis, separated aggregate and special additives.

### PROPERTIES

Colour	Grey
Density	
powder	App. 1550 kg/m <sup>3</sup>
Set mortar	App. 2110 kg/m <sup>3</sup>
Compressive strength	
after 90 minutes	> 11MPa
after 24 hours	> 35 MPa
after 28 days	> 50 MPa
Tensile strength in offset	
after 24 hours	> 3.5 MPa
after 28 days	> 5.5 MPa
Grip to concrete	> 1.5 MPa
Flexibility module	> 25 GPa
Thermal expansion coefficient	10.5 - 11.5 [10 <sup>-6</sup> *K <sup>-1</sup> ]
Resistance to chemical defrosting agents (pursuant to TKP MDS, chapter 18 method C)	Waste < 50 g/m <sup>2</sup>
Batch water	0.125 – 0.145 l/kg
Workability time	12 - 15 minutes
Begins to set	15 - 18 min
Setting process ends	18 - 25 min

### INSTRUCTIONS AND DATA FOR USE

#### Sub-base preparation

Contact surfaces have to be cleaned of any damaged or hollow concrete, concrete contaminated by paint, oil or other contaminants so that no microscopic cracks are created. The surface needs to be moistened thoroughly prior to application. Just prior to application, remove all excess water from the surface that is being repaired.

#### Mortar preparation

Grout is prepared by thorough mixing of relevant volume of dry mixture and batch water using a mixer.

It has to be mixed to 2 minutes. Workability time for mortar is between 12 and 15 minutes.

**The ratio for mixing the dry mixture and batch water is always stated on the label placed on the bag.**

#### Workability time

It depends on temperature and construction. When the temperature of the air, construction and batch water is 20 °C, then the workability time is approximately 15 minutes.

**During application, mix only volume that can be able to process in the given time period.**

**Temperature of batch water changes workability time significantly.**

Repairs cannot be realised, when temperature of the air or construction drops below **+0 °C** or exceeds **+35 °C**.

#### Application

IZOLSAN FIX is applied as soon as possible after being mixed to a well prepared sub-base. Mortar is applied evenly using finishing trowel, so that air does not get trapped under the material. Perfect grip of the layer along the whole surface is a condition for top quality final grip. The layer is completed to the final thickness, so that unfilled areas are not created. In case the repair cannot be realised in a single layer, it is recommended to start the repair at the deepest point and develop the area so that the last layer is compact along the whole surface (in best case in a constant thickness). Each layer should be finished with continuous, unbroken, but not smooth surface. Each layer has to be applied immediately after the open time for the previous layer expires.

In a single layer, IZOLSAN FIX is applied to horizontal surfaces in thickness between 10 and 100 mm. When applied to vertical surfaces, mortar has to be mixed with smaller share of batch water.

IZOLSAN FIX is levelled to the required level and the surface treatment is finished by metallic, wooden or polystyrene finishing trowel.

#### Treatment

Repairs must be protected against direct sunlight and warm wind for at least 24 hours. During this time (unless the repaired surface is covered by another layer) it is important to keep the repaired areas moist (not excessively wet though), including concrete around the repair using for example common sprinklers. When the material is setting, excess water can precipitate in a form

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IZOLSAN FIX  
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of small crystals. These crystals disappear as the material naturally matures.

## Restrictions

Grout IZOLSAN FIX must not be used when temperatures of air of the base drop below +0 °C and keep on falling and in temperatures exceeding 35 °C. Temperature of batch water must be lower than 25 °C.

Repaired surfaces can be subjected to flowing water not earlier than after 2 hours at the temperature of 10 °C.

## CONSUMPTION

**IZOLSAN FIX** 20 - 21 kg/m<sup>2</sup>/cm thickness

## PACKAGING

**IZOLSAN FIX** 25 kg bags (1 t pallets)

## STORAGE AND TRANSPORT

Mortar needs to be stored in dry and ventilated room. Product must be transported by covered means of transport.

## HEALTH AND SAFETY PRECAUTIONS

**IZOLSAN FIX** contains cement powder and admixtures that irritate eyes, air passages and skin. Prevent inhaling the dust. The product is subject to the warning symbol **Xi – Irritant**. Mixed mortar is highly alkaline. During application, prevent eyes and skin from being contaminated. Standard protective gear should be used. Do not drink, eat or smoke when working with the product. When working, adhere to toe safety rules and health precautions valid for work with cement and calciferous materials. In case of contact with the skin, wash immediately using large volume of water and soap. When eyes are contaminated, wash out thoroughly and immediately and seek medical help. When swallowed incidentally, seek medical help immediately – do not **induce vomiting**

Material IZOLSAN FIX is non-flammable

For further information, refer to safety data sheet.

Production is subject to integrated quality assurance system pursuant to ČSN EN ISO 9001:2009 a 14001:2005.

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IZOLSAN s.r.o. Hradec 161 332 11 Hradec u Stoda
10 <b>EN 1504:2006</b>
<b>IZOLSAN FIX</b> , mortar for repairs to the static function, class R3
Compressive strength: ≥ 25 MPa Share of chloride ions: ≤ 0.05% Bond strength: ≥ 1.5 MPa Carbonisation resistance: ≤ d <sub>k</sub> - compliant Flexibility module: ≥ 15 GPa Fixed retraction/expansion: ≥ 1.5 MPa Dangerous material in compliance with 5.4 Reaction to fire: class A1

### Important Notice

In case of any discrepancy between the Technical Sheet and the packaging, the data indicated on the packaging always apply. Products of the Redrock Construction s.r.o. Company are subject to a warranty covering the material and the manufacturing, while their sale is governed by commercial terms. Although the Redrock Construction s.r.o. Company makes certain that all the advice, recommendations, specification or information that the Company provides are correct and accurate, since the Company has no direct and permanent control of where and how its products are being used, the Company cannot accept any responsibility for the usage of its products. The new issue of Technical Sheet cancels the validity of the previous one.