

TECHNICAL DATA SHEET

ISONEM M35 ELASTIC 1K

(Fully Elastic Super Crystallized Sealing Cement Based Waterproofing Material)

Product Description

It is a single component, cement based, a new generation waterproofing coating with crack-bridging capacity, walkable on and high abrasion resistance. It is highly suitable for use due to being not affected by UV and sun, fast drying and easy workmanship. It is applied by brushing, it has high elasticity. It closes capillary and shrinkage cracks on the applied surface. It reacts with lime particles thanks to inside super gels, produces crystals, and penetrates in-depth to the structure of concrete. It has high adherence. It adheres perfectly to surfaces like concrete plaster, screed, etc. and does not peel off by time. It is resistant to external weather conditions, mechanical impacts, and abrasion.

Usage Areas

- Insulation of walls and floors,
- Insulation of concrete, plaster, and screed,
- Balcony, terrace, swimming pools
- External curtain wall insulation,
- Precast and prefabricated elements, roofs.

Technical Specifications

Density (25°C, g/mL)	:	-
pH (25°C)	:	-
Viscosity (25°C, mPa.s)	:	-
Solid content (% Weight)	:	-
Water transmission rate (kg/ m ² . h ^{0.5})	:	< 0,1 CLASS W ₃
Adhesion strength by pull-off test (N/mm ²)	:	Crack bridging flexible systems without trafficking ≥ 0,8, with trafficking 1,5 N/mm ²
Permeability to water vapour (m)	:	5 ≤ S _D ≤ 50 CLASS II
Touch-free Drying	:	4 hours
Through-dry time	:	28 days
Pot life (23°C)	:	30 – 40 minutes
Solvent	:	Water
Class of fire reaction	:	B S1 d0
Color	:	Grey

Application Procedure

Surface preparation: All surfaces should be cleaned from foreign objects like oil, dust, dirt, etc. before the application. The surface must be clean and moist. If there are any segregations, voids or need for repair on the surface, they should be filled with ISONEM M 03 elastic mortar. If there are surfaces with adhesion problems, they should be primed with adherence enhancer ISONEM D 10 LATEX and ISONEM M35 ELASTIC 1K should be applied while the surface is slightly sticky and before it is completely dry.

Preparation of the mixture: 5 L of clean water is poured into a suitable container. While continuous mixing ISONEM M35 ELASTIC 1K (20 kg) should be poured slowly and stirring should be continued for 5 minutes. If possible, mix with a 400 rpm drill and mixer. When the mixing process is completed, it is obtained a paint-like mortar that can be applied with a homogeneous brush.

Application method: ISONEM M35 ELASTIC 1K should be applied in 2 coats. The application process should be perpendicular layers to each other, homogeneously and smoothly with the help of a brush. The wet film thickness should not exceed 1 mm at one layer. It should be waited a min. of 4 hours between the coats and it should not be interrupted for more than 24 hours. The application should not be done in extreme heat or frost, it should be done in the morning or evening cool. It is recommended to use with grout detail in chamfer applications. Tools used should be cleaned with water at the end of the application.

Application Conditions / Limitations

<u>Application</u>	: In perpendicular to each layers
<u>Surface humidity</u>	: Humid surface
<u>Primer usage</u>	: ISONEM D 10 LATEX
<u>Primer consumption</u>	: 200 mL/m ²
<u>Product usage</u>	: 2 layers
<u>Product consumption</u>	: 2 - 3 kg/m ² (twq layers application)
<u>Paintable (Coverage) Area</u>	: 10 - 15 m ² /set
<u>Between two coats</u>	: 4 hours
<u>Recommended application tools</u>	: Brush, spray
<u>Application temperature (°C)</u>	: 5 - 35 °C

Things to consider during and after the application: The application surface must be clean and free from all impurities like dirt, oil, and mud. Application should not be done in frost and extreme heat.

Other ISONEM products recommended: ISONEM D10 Latex should be used for adherence and ISONEM M 03 elastic repair mortar should be used for surface repair.

IMPORTANT

The surface should be protected from rain, water, mechanical loads and impacts for 24 hours during and after the application. Application should not be done in frost and extreme heat.

Packaging & Storage


<u>Packaging</u>	: 20 kg in metal buckets
<u>Storage temperature (°C)</u>	: 5 - 35 °C
<u>Shelf life</u>	: 24 months from date of production if stored in original, unopened, undamaged packages.
<u>Storage condition</u>	: Store tightly closed in a dry and cool place.

Cleaning of Tools

Clean all tools and application equipment with clean water immediately after use.

Health and Safety Information

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Safety Data Sheet containing physical, ecological, toxicological and other safety-related data.

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Isonem Paint and Insulation Technologies Construction Industry Trade Inc. - 35470/İZMİR İTOB OSB 10001 Sok. No:20 Tekeli Menderes / İzmir - TURKEY 19		
2765-CPR-0136 TS EN 1504-2: Surface protection systems for concrete - Coating (M35 ELASTIC 1K) DoP No: 23		
	STANDARD VALUE	CONTROL VALUE
Permeability to water vapour	Class I $S_D < 5$ m (permeable to water vapour) Class II $5 \text{ ms} S_D \leq 50$ m Class III $S_D > 50$ m (not permeable to water)	Class II - 40 m
Capillary absorption and permeability to water	$w < 0,1 \text{ kg/m}^2 \cdot \text{h}^{0,5}$	$0,02 \text{ kg/m}^2 \cdot \text{h}^{0,5}$
Adhesion strength by pull-off test	Without trafficking $\geq 0,8 \text{ N/mm}^2$ With trafficking $\geq 1,5 \text{ N/mm}^2$	Crack bridging flexible systems without trafficking $0,8 \text{ N/mm}^2$ with trafficking $1,5 \text{ N/mm}^2$
Dangerous substances comply with 5.4		
Class of fire reaction: B S1 d0		

Statement of Responsibility

The technical information and application advice given in this ISONEM Paint & Insulation Technologies publication are based on the present state of our best scientific and practical knowledge. As the information herein is of a general nature, no assumption can be made as to a product's suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness either expressed or implied is given other than those required by law. The user is responsible for checking the suitability of products for their intended use.

