

TECHNICAL DATA SHEET

ISONEM MD 28

(Flexible Waterproofing Compound)

Product Description

MD 28 is two-component, powder and liquid hybrid polymer-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 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

- Positive 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 B comp. (25°C, g/mL)	: 0,90 ± 0,10
pH B comp. (25°C)	: 7,0 – 9,0
Viscosity B comp. (25°C, mPa.s)	: 9000 - 12000
Solid content B comp. (% Weight)	: 48 ± 2
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 hours
Pot life (23°C)	: 30 – 40 minutes
Solvent	: Water
Class of fire reaction	: B S1 d0
Color	: Greenish gray

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 MD 28 should be applied while the surface is slightly sticky and before it is completely dry.

Preparation of the mixture: ISONEM MD 28 consists of two components. The first part is component A consisting of powder polymer and hardener and the second component is liquid component B consisting of liquid polymer. B component (10 kg) in liquid form is placed in a clean, sufficiently large container. A component (20 kg) of powder is slowly added to the continuous mixing liquid with the aid of a mixer and gently mixed so that no lumps remain. Mixing should be continued for 5 minutes. At the end of the mixing, a homogenous, brushable mortar is obtained.

Application method: ISONEM MD 28 should be applied in 3 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>	: 3 layers
<u>Product consumption</u>	: 2 - 3 kg/m ² (three 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>	: 30 kg set, Component A 20 kg powder craft bag + B Component 10 kg liquid PE drum
<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 (MD 28) DoP No: 23		
	STANDARD VALUE	CONTROL VALUE
Permeability to water vapour	Class I $S_D < 5$ m (permeable to water vapour) Class II $5 \text{ m} \leq S_D \leq 50$ 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.

