

# **Smart Surface Solutions**

Waterproofing and Damp Proofing Specialists

# **CEMtobent DS**

**Product Information Page** 

CEMtobent DS is a sodium-bentonite waterproofing membrane, specially designed for use on vertical and horizontal applications on below ground reinforced concrete structures. CEMtobent DS consists of two high quality woven clay liners, a transparent polyethylene honeycomb liner where the sodium bentonite powder is held, and a rain protection non-woven fleece, which are mechanically stitched together to form a strong composite. CEMtobent DS is used for waterproofing of all basement grades according to BS8102:2009.

## **Specification Tip for Design Professionals:**

CEMtobent DS may be specified by name or by using the following description: a propriety waterproofing membrane consisting of a two high quality woven clay liners, a transparent 3D composite liner with a unique cell structure, which encapsulates the sodium bentonite powder, and a rain protection non-woven fleece, which are mechanically stitched together to form a strong composite.



- Tough and resistant
- Seals small cracks in the concrete
- **Demonstrates self-healing properties**
- Higher puncture and tear resistance compared to conventional foils and coating
- Quick and install without easv to complicated welding equipment
- High compound shear strength
- The reinforcement fibre structure and thermally bonded cover layer form a tight composite
- Can be installed in every season independently of temperature and weather conditions
- Quality control tests to ensure consistent high quality.
- May be installed pre or post-form

### How does CEMtobent DS work:

Penetrating water causes the sodium bentonite to hydrate and swell producing an impermeable membrane which is self healing, and is capable of sealing any small cracks in the concrete.

## How do I prepare the surface:

The substrate onto which CEMtobent CDS Plus is to be placed should be sound, well compacted and without voids or deflections which are greater than 20mm.

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### How do I install CEMtobent DS:

CEMtobent DS should be placed on a properly prepared flat surface, with the open-side facing the concrete to be waterproofed. The edges of the membrane should be overlapped by 150mm and the ends of the rolls staggered by 300mm, the overlaps should be detailed using Cemtobent-Paste or Cemtobent-Powder.

The minimum thickness of the reinforced concrete used should be 150mm. Backfilling should be clean, well graded and compacted every 300mm. It should be free from construction debris.



### How do I store How do I store CEMtobent DS:

CEMtobent DS should be stored off the ground in dry conditions.

## Packaging:

12m<sup>2</sup> rolls (1.2mx10m) 54m<sup>2</sup> rolls (1.8mx30m)

For additional information, practical presentations or independent test reports on CEMtobent DS, please contact our Technical Department.



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TECHNICAL DATA:	Test method (based on)	Unit	Value
Mass per unit area, total	DIN EN 965	g/m²	≈5,400
Mass per unit area, non-woven extra light (PP white, filled with bentonite)	DIN EN 965	g/m²	60
Mass per unit area, honeycomb (PE-3-D Composite, filled with bentonite)	DIN EN 965	g/m²	70
Mass per unit area, bentonite layer (sodium bentonite, powder)	DIN EN 965	g/m²	5,000
Mass per unit area, carrier woven (PP-slit film woven, beige)	DIN EN 965	g/m²	120
Mass per unit area, top layer woven (PE-coated woven, black)	DIN EN 965	g/m²	100
Thickness, total	DIN EN 964-1	Mm	≥8
Max. tensile strength, md/cmd*	DIN EN ISO 10319; ASTM-D-4595	kN/m	2x10 <sup>-13</sup>
k-value	DIN EN ISO 18130; ASTM-D-5887	m/s	2x10 <sup>-13</sup>
Roll dimensions, width x length	-	mxm	1.80 x 30 3.60 x 30
*md = machine direction amd = cross machine direction			

### \*md = machine direction, cmd = cross machine direction

BENTONITE PROPERTIES, SODIUM BENTONATE	Test method (based on)	Unit	Value		Test method (based on)	Unit	Value
Montmorillonite content	XRD	%	≥70	Water absorption	DIN 18132 (24hrs)	%	≥500
Methylene blue consumption	Methylene blue test, VDG P 69	Mg/g	≥200	Swell index	ASTM-D-5890	ml/2g	≥20
Water content	DIN 18121 (5hrs, 105ºC)	%	≤15	Fluid Loss	ASTM-D-5891	ml	<20

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## **Test Reports:**

- German Standards DIN EN 965, 964-1, DIN 18121, DIN 18132
- Independent Test on Product's Performance Brendebach Ingenieure GmbH (Structural Engineers)
- CE Marking

Please protect the environment: Dispose of waste in accordance with the local authority regulations.

**Disclaimer:** The general information provided in the present technical description, application guidelines and other recommendations, is based on research and experience. However, the client is obliged to determine themselves what products are suitable for use. Accordingly, no liability will be accepted by IBC Limited t/a SURFASOLOGY™.

For further information contact the SURFASOLOGY™ Technical Department.

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# WHO WE ARE

SURFASOLOGY, formerly IBC Ltd., is Ireland's leading waterproofing and damp proofing specialist that has been proudly providing market leading, innovative, and sustainable construction solutions since 1976.

Our high-quality products and systems are accompanied by our professional technical support and a full SURFASOLOGY installation service. technical consultancy team have unrivalled experience in major construction projects, as well as solving everyday problems for homeowners, with long term trustworthy solutions.

Our products are all manufactured in ISO Quality System compliant facilities and meet the relevant local, National, European standards. **SURFASOLOGY** network members manufacture products exclusively in Germany, Switzerland, Spain, Greece and the UK. We support these products in local markets with highly-qualified technical professionals, who understand both on-site demands and the design detail. We work in a collaborative way with our clients at all stages of the project to ensure that the correct design, preparation, and application are carried out to ensure a timely and successful outcome for all stakeholders.

Get in touch with us today!

## AREAS OF EXPERTISE

#### Structural Waterproofing

Our world class solutions encompass the whole building envelope both above and below ground.

#### Damp Proofing & Remedial

A comprehensive range of first class damp proofing and timber treatment solutions.

#### Specialist Screeds & Coatings

High quality floor finish on domestic, commercial, under-floor heating or industrial projects.

#### Concrete Repair

We offer a highly efficient selection of products for the repair and protection of concrete elements.

### WHAT WE DO

### Material Supply

Reliable and sustainable surface solutions accompanied by unrivalled technical support.

### Installation Service

Specialised installation service provided by our approved contractors delivering high quality workmanship you can trust.

#### **Technical Support**

Extensive experience and expertise in Project Design and Technical Support Services ensuring reliable outcomes for all our clients.

#### **CPD Seminars**

RIAI and RIBA approved CPD Seminars to specifiers on a variety of topics covering structural waterproofing and damp proofing.

INNOVATIVE, WORLD-CLASS, SUSTAINABLE CONSTRUCTION **SOLUTIONS, POWERED BY OUR EXTENSIVE EXPERIENCE AND EXPERTISE.** 

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Unit 143, Grange Drive, Baldoyle Industrial Estate, Dublin 13, D13 W9V2, Ireland





