

DSF 353 FLEX SUPER ELASTIC **FLEXIBLE, 2-COMPONENT, CEMENT-BASED,** **BRUSHABLE SEALING SLURRY**

➤ **COATING (C)**
➤ **IP-MC-IR**

ACCORDING TO
EN 1504-2

DESCRIPTION

DSF 353 SUPER ELASTIC is a flexible, brushable waterproofing mortar suitable for sealing interior and exterior surfaces. It consists of 2 components, a dry powder (component A) and a liquid dispersion (component B). **DSF 353 SUPER ELASTIC** protects building constructions against ground moisture, surface or uprising moisture and water under pressure. It is resistant to frost; it has very good transpiration ability (vapour permeable) and does not corrode the

steel reinforcement. It also has the ability to bridge microcracks and exhibits excellent adhesion to various substrates. It meets the requirements of the standard **EN 1504-9** and is classified as a concrete protection product according to standard **EN 1504-2 coating (C)** and principles **IP, MC and IR**. It is suitable for application in drinking water reservoirs and for applying to surfaces in contact with food, according to W-347.

FIELDS OF APPLICATION

DSF 353 SUPER ELASTIC is suitable for sealing:

- Surfaces of concrete, brick, aerated concrete block, plaster, gypsumboard, mosaic, wood, metal etc.
- Walls of over ground constructions,
- Basement walls and foundations,
- Shafts, tunnels, columns
- Concrete tanks underground or above ground to be filled with water
- Swimming pools

Suitable for sealing surfaces subject to expansion, contraction and vibration such as:

- Balconies and terraces,

- Inverted roofs,
- Underground water tanks,
- Wet areas (bathrooms, kitchens), floors,
- Wells, tunnels etc.

Suitable for protecting concrete structures by:

- Contact with seawater containing corrosive agents such as chlorides of sodium or calcium sulfates.
- Penetration of carbon dioxide, especially in cities and industrial areas.
- Inadequate coverage of the metal reinforcement

ADVANTAGES - FEATURES

- Excellent sealing
- Bridging microcracks
- Produced with quartz sand
- Suitable for negative and positive pressures
- Protection from contact with seawater.
- Protection against carbon dioxide penetration
- Suitable for use on potable water tanks as well as on surfaces in direct contact with food products, according to W-347 and W-270.
- It is classified as a concrete protection product according to EN 1504-2.

MIXING

DSF 353 SUPER ELASTIC should be used as a system which is prepared and stored in specific proportions. Pour slowly component A (dry mortar bag of 20 kg) in a bucket filled with the component B (liquid part 10Kg).

Use an electric stirrer and stir for about 3 minutes until a homogeneous mixture is achieved. The product can be used with in 45 minutes at +20°C (the working time could change according depending on the climatic conditions).

SUBSTRATE PREPARATION

The substrate must be dry, stable, free of dust, dirt, oil, free from decayed material and loose particles. If there are any defects, hollows, etc. on the substrate to they must be repaired before applying the product with an

appropriate **THRAKON** repairing material. Coatings of paint must be removed. The substrate should be slightly wet to ensure good adhesion.



APPLICATION

The application is done by roller or brush within 1 hour after preparation of the mixture. It should be at least two layers crosswise (minimum total thickness of 1,5-2mm). For cases where the sealing substrate subject to hydrostatic pressure application is 3-4 or more hands as the water load (minimum total thickness 2,5mm). Apply every layer after the drying of the previous layer, approximately 4-6 hours (the application time depends on weather conditions - never leave more than 24 hours to pass between two layers). The fresh waterproofing layer must be protected from abrupt drying due to sun, wind and rain for the first 24 hours. **DSF 353 SUPER ELASTIC** has high compressive strength and allows applying protective layers such as concrete, flooring, tiles or plaster after three days. To avoid the crack formation on the substrate the construction of expansion joints is recommended (**ELASTO PU** or **ELASTO PU FLEX**). Do not apply **DSF 353 SUPER ELASTIC** on frozen substrates, frost or high temperatures (the temperature of the substrate $+8^{\circ}\text{C}$ or high temperatures (more than $30-35^{\circ}\text{C}$)).

Enhancement a' layer:

For waterproofing substrates that show cracks (eg balconies, terraces, pools, swimming pools) or for application to substrates that receive increased loads and high loads armed the first layer with fiberglass **CLIMAPLUS 160g/m²**. with eye of 4,5 x 4 mm.

Enhancement of joints:

Signs around expansion joints and joints between horizontal and vertical surfaces (wall-floor, floor-parapet, etc.) are reinforced with tape drying polyester mesh joints **F 12**, or the film drying joints fiberglass **KF 12**.

Construction of water vapour pipes.:

When applying the **DSF 353 SUPER ELASTIC** on large surfaces (terraces, etc.) where the product remains uncovered or particularly absorbent substrates such as lightweight cement floors should be made vapor ducts approximately every 20-25 m² depending on the substrate moisture levels.

Cure time after application:

Let the material mature:

- At least 5 days before tiling (at 20°C). At lower temperatures this time period expands.
- At least 28 days when it is used for waterproofing of drinking water tanks. Prior to filling the tank, thorough cleaning should be carried out with successive hot water washes.

CONSUMPTION

Requires two or more coats depending on the moisture load.

Charge	Minimum consumption	Minimum thickness
Moisture	2,0-2,5 kg/m ²	Approximately 1,5mm
Water without pressure	3,0-3,5 kg/m ²	Approximately 2,0mm
Water under pressure	3,5-4,0 kg/m ²	Approximately 2,5mm

PACKAGING

- A component – bag 20kg (dry)
- B component – plastic bucket 10Kg (liquid part)

TOOLS

For the preparation of the material the use of an electric stirrer with suitable vanes is recommended. Apply with a stiff brush or trowel

CLEANING TOOLS & MACHINES

With plenty of water immediately after use.

STORAGE

The product is kept sealed for a year in dry storage areas

DSF 353 SUPER ELASTIC

FLEXIBLE, 2-COMPONENT, CEMENT-BASED, BRUSHABLE SEALING SLURRY

NOT RECOMMENDED

- Not recommended the application of the product
- In environmental conditions of frost or heat.
 - On surfaces subjected to movements and vibrations
 - During rain.

- When water leaks exist
- It is not recommended to add aggregates, sand, cement, water or other admixtures to the product.

PRECAUTIONS

DSF 350 FLEX contains cement reacts with water, producing an alkaline solution. For this reason, protect your eyes and skin. In case of contact, wash with plenty of water. In case of contact with eyes, seek immediately medical advice.

Wear suitable protective clothing and gloves. Read the information on the label and in the technical brochure of the product before use. The MSDS of the product is available upon request to the professionals

ACCORDING EUROPEAN STANDARDS EN 1504-2 / COATING (C) & EN 1504-9

TECHNICAL CHARACTERISTICS	UNITS	STANDARD	VALUE
COMPONENT A			
Form			Dry powder
Color			Grey
Dry density	(Kg/m ³)	EN 1079-3	1230±50
Maximum grain size	(mm)		0,5
COMPONENT B			
Form			Liquid dispersion
Color			White
Destiny	(Kg/m ³)	EN 2811-1	1340±50
Flow time using 4mm diameter containers	(sec)	EN 2431	19
pH		EN 787-9	6±0,5
MIX OF READY-TO-USE PRODUCT A+B			
Ratio of ingredients - dry mix : water	(parts w/w)		2:1
Destiny of fresh mixture	(Kg/m ³)	EN 1015-6	1780±50
Compressive strength	(N/mm ²)	EN 12190	31±0,5
Adhesion strength by pull-off test	(N/mm ²)	EN 13578 / EN 1766 / EN 1542	1,7
Tensile strength (unreinforced)	(N/mm ²)	EN 12311-2	1,4
Elongation	(%)	EN 12311-2	35
Minimum operating temperature without any crack	(°C)	EN 495-5	-10
Water vapour diffusion Sd	(m)	EN ISO 7783-2	<5 (Class I)
Water absorption (w<0,1)	(Kg/m ² h ^{0,5})	EN 1062-3	0,01
Permeability CO ₂ (Sd>50m)	(m)	EN 1062-6	62
Watertightness (10 and 60kPa) at 24h		EN 1928	No water leak
Watertightness		EN 14981/ EN 206	No water leak
Adhesive strength at normal conditions	(N/mm ²)	EN 14981	1,0
Adhesive strength after immersion in water	(N/mm ²)	EN 14981	0,98
Adhesive strength after heat ageing	(N/mm ²)	EN 14981	1,17
Tensile adhesion after freeze-thaw cycles	(N/mm ²)	EN 14981	1,12

Note: The measurements were taken in laboratory environment under a temperature of +23°C, Relative humidity 50 % and without ventilation. It is possible for them to vary depending on the conditions prevailing at the worksite, such as temperature, humidity, ventilation, absorbability of the substrate.

The technical information and instructions contained in the present brochure and referring to the application and end use of Thrakon products are based on the up to now know-how and experience of the Company with regards to the products and are provided in good faith as long as such products are stored, used and applied as per Thrakon recommendations. Due to the inability, on our part, to directly inspect the conditions prevailing at the worksite as well as the application procedures of the product, the Company does not provide any guarantee with regards to the adequacy of its products for specific purpose while the Company shall not bear any legal responsibility based on the information stated in the present brochure or any other written, oral, or otherwise provided recommendations and instructions. The users of the products are advised to perform a limited surface testing of the products adequacy for the eventual application and use intentions. Thrakon reserves the right to modify the features of its products without prior notification. All orders shall be approved only following acceptance of the above and under the eventual Commercial Policy terms of the Company. The issuance of the present brochure voids any prior vers