

MIG DHMb® Lining System**Exterior Application**

MIG-ESP® Rooflect

Active roof coating with low-emission surface

- ✓ brilliant roof surfaces through light reflection (UV - IR)
- ✓ increases roof lifespan
- ✓ heating and cooling regulation (infrared reflection)
- ✓ natural prevention against algae and fungi
- ✓ recommended for ecological, energy-efficient renovation
- ✓ reduces CO₂ emissions
- ✓ non-flammable - building material class A2

**Product Description**

MIG-ESP® Rooflect is an elegant matte and high-coverage roof coating based on the **MIG DHMb® Lining Technology** (DHMb® = Double Hybrid Membrane) according to DIN EN 13300.

MIG-ESP® Rooflect can be applied with paint rollers, brushes or the **MIG-Zip 52** spraying unit.

MIG-ESP® Rooflect can be used with an appropriate primer on a variety of substrates in the entire outdoor area.

MIG-ESP® Rooflect should not be used on surfaces that are submerged in water for an extended period of time. The gradient must be at least 2 %.

The **MIG-ESP®**-colour chart offers a wide range of colour options.

Technical consulting service

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Processing and Substrate Pretreatment

MIG-ESP® Rooflect is fast-drying and odourless during application.

Do **not** mix **MIG-ESP® Rooflect** with other materials.

Before processing, stir the material mechanically for approx. 3 minutes.

Cover all adjacent components well or protect against splashes.

Do not process in direct sunlight, rain or when the relative air humidity is high.

The object and ambient temperature should not fall below + 5°C or exceed + 35°C during application.

Shade from the sun whenever possible when exposed to summer temperatures.

Spread **MIG-ESP® Rooflect** evenly with suitable rollers, brushes or the **MIG-Zip 52** spraying unit.

The nozzle size should be 2.5 mm. The **MIG-Zip 52** low-pressure spraying device with a nozzle size of 2.5 mm, which is specified for the coating, is available from us.

When using rollers or brushes, a dilution with drinking water or **MIG-ESP® Sealing Primer** of max. 2 %, and when using the **MIG-Zip 52** spraying device, a dilution of max. 3 %, is recommended for better processing.

Surface drying can be achieved after only approx. 30 minutes. The drying time for each of the two coating processes is approx. 24 hours under normal conditions (+ 20°C/60 % relative air humidity). Lower temperatures and higher relative air humidity may extend the drying time.

The substrate must be clean, dry, solid, free from efflorescence, dust and loose parts or release agents (e.g. formwork oil).

Any structural defects or damages must be remedied before application.

For absorbent substrates, a priming coat with **MIG-ESP® Sealing Primer** is necessary. This consolidates the substrate and compensates for different absorption characteristics.

For metal and concrete surfaces, cement fibre boards as well as contaminated, penetrating substrates we recommend **MIG-ESP® Special Primer** as a bonding agent.

For bituminous substrates, we recommend **MIG-ESP® Bitumen Primer** as an adhesion bonding agent.

A layer thickness of 0.40 mm is required to achieve the full effect of the MIG DHMb® Lining Technology!

When applying MIG-ESP® Rooflect with a roller or a brush, experience shows that two coats are necessary for the required layer thickness.

When applying tinted MIG-ESP® Rooflect, use MIG-ESP® Rooflect, White as the first coat before applying the tinted second coat.

Coating Procedure

Substrate preparation	Substrate must be clean, dry, solid, free of efflorescence, dust and loose parts or release agents (e.g. formwork oil)
Apply primer	Depending on substrate (see page 5, MIG DHMb® Lining System – Products → Primers), apply e.g. MIG-ESP® Sealing Primer as plaster strengthener - allow to set for approx. 1 hour
Stir	Stir MIG-ESP® Rooflect with an electric stirrer for approx. 3 minutes until the texture is creamy
First coat	Spread MIG-ESP® Rooflect, White evenly in a crosswise motion and finish off by rolling the surface in one direction
Drying time	24 hours drying time between both coating processes
Second coat	Spread MIG-ESP® Rooflect, White or tinted evenly in a crosswise motion and finish off by rolling the surface in one direction

Technical Data

solvent-free, environmentally friendly and odourless

highly UVA resistant, water-repellent, microporous and non-film forming

Building material class A2 (non-flammable) according to DIN 4102, Part 1 (May 1998)

Water vapor permeability
(S_D Value) 0.07 m ± 0.02 according to DIN 52615
equivalent to V1

Water absorption after 24 hours
(w Value) < 0.06 kg/m²h^{0.5} according to DIN EN 52617
equivalent to W3

Wet abrasion class II

Opacity class II at approx. 0.25 L/m²

Degree of whiteness according to CIE > 90 %

Gloss grade matt (DIN 53778)

pH Value 8.0 (± 1.0)

Density 1.20 g/cm³ (± 0.10)

Degree of reflection > 90 % for white coating

Emissivity Value
(ε_n) 0.315 at 5.5 to 23.3 μm
with FTIR Bruker Vertex 70 according to DIN-EN 12898:2019-06

Crack-filling up to approx. 0.50 mm

SRI Value (Solar Reflectance Index)
104.6 in low-wind (0 – 2 m/s)
104.2 in medium-wind (2 – 6 m/s)
104.0 in high-wind (6 – 10 m/s)

Solar reflectance 0.829 (82.9 %)

Solar absorptance 0.171 (17.1 %)

Processing temperature + 5°C to + 35°C

UV and Weather Resistance

MIG-ESP® Rooflect is extremely weather-resistant and UV-stable. This ensures a long-lasting facade hygiene (against soiling, algae infestation, etc.).

U-Value Effect

Hygrothermal energy efficiency simulation to demonstrate energy efficiency can be done on request.

Consumption

Depending on the type and porosity of substrate, approx. 0.50 L/m² with two coats on smooth surfaces. **Rough, structured or highly absorbent surfaces can significantly increase consumption. Exact consumption quantities can be determined by creating test areas.**

Cleaning

Clean tools thoroughly with water after use. The containers must be emptied completely and recycled.

Storage

At least 12 months shelf life from date of sale if stored dry, frost-free and cool under proper conditions in original sealed containers.

Tinted goods must be processed within 3 months.

Packaging

5 L (per plastic bucket) x 60 buckets (per pallet) = 300 L

15 L (per plastic bucket) x 24 buckets (per pallet) = 360 L

1,000 L IBC

Customs Tariff Number

32099000

MIG DHMb® Lining System – Products

Coatings

MIG-ESP® Interior
MIG-ESP® Exterior
MIG-ESP® Interior Anti-Microbial
MIG-ESP® Rooflect

Plasters

MIG 262
MIG Therm M 65
MIG Therm M 55
MIG Thermalife® Ecoplaster
MIG-HRP Heat Resistant Protector
MIG-HRP 280 Bonding Agent
MIG Therm L 14

Primers

MIG-ESP® Sealing Primer
MIG-ESP® Special Primer
MIG-ESP® Primer quartz-filled
MIG-ESP® PVC Primer
MIG-ESP® Primer for Wood (for indoor use only)
MIG-ESP® Bitumen Primer

Sealing

MIG Sealer

Impregnation

MIG Impreg. Agent for Natural Stone Facades

Warranty

We provide a 10-year colour tone guarantee on our exterior coating **MIG-ESP® Rooflect**. This guarantee applies exclusively to the product applied to surfaces by specialist firms and not to the associated services, subject to compliance with our warranty conditions. A complete chain of evidence of correct application must be provided.

For the warranty conditions form:

Legal Information

The information in this publication is derived from our current technical knowledge and experience. Given the multitude of potential influences during the processing and application of our products, users are required to conduct their own tests and trials. The provided details serve as general guidelines and do not constitute a legally binding assurance of specific properties or suitability for a particular purpose. Users are responsible for adhering to any industrial property rights, as well as existing laws and regulations.

With the release of this data sheet, all prior versions become obsolete.