

Technical and material data sheet

ALPHA FLEXIBLE



Reflexně izolační
nátěry

Downloads



Číslo šarže: etiketa

Datum výroby: etiketa

Datum expirace: 12 / 24 měsíců / etiketa

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18L

ALPHA FLEXIBLE is a highly flexible coating suitable for coating roofing or other building and construction elements made of PVC, PC, PS, asphalt strips (IPA), plastics, polycarbonate, hardened PVC, etc.

The properties of the coating prevent overheating of the building in the summer months. In the winter months, it also protects the building from heat leakage. This contributes to significant energy savings for cooling or heating the building.

The material does not allow atmospheric influences to penetrate and has increased resistance to mechanical damage. The coating reflects 92% of TSR and up to 97% of visible light. The coating is health-safe and environmentally friendly.

Main properties

- Coating of structural elements made of PVC, plastic, asphalt strips, polycarbonate, etc.
- Prevents heat leakage from the building in winter months
- Prevents the building from overheating in summer and creates a pleasant climate inside
- Significantly reduces energy costs for cooling or heating
- UV stable
- Resists surface condensation
- Can be coloured

Application

ALPHA FLEXIBLE is used as a final coating for roofing and structural elements made of PVC, PC, PS, asphalt strips (IPA), plastics, polycarbonate, hardened PVC, etc.

Technical properties

| | |
|--------------------------------------|---|
| Theoretical consumption ¹ | 0, 1 litres / m ² / layer thickness 150 µm |
| | 0,24 litres / m ² / layer thickness 180 µm |
| | 0,30 litres / m ² / layer thickness 200 µm |
| Practical consumption | Practical consumption depends on many factors such as porosity, surface roughness and material loss during application. |
| Dilution | Not diluted |

| | |
|---------------------------------------|--|
| Recommended wet film layer | 300 µm |
| Stirring | Always the whole package after opening, with a construction mixer or auger mixer on a drill, at approx. 150 rpm. |
| Stirring during prolonged application | Stir every 40 minutes |
| Packing | 18 litres / 9,88 kg |
| Density | 0,54 g/cm ³ |
| Appearance | White, whiteness 96 % |
| Colour | Yes, waterborne paste/pigment |
| Gloss level | Matte |
| Odour | Odourless |
| Shelf life ² | 24 months, must not freeze |
| Flash point | Non-flammable |

Repaintability and curing time ³

| | |
|--------------------|----------|
| To the touch | 1 hour |
| For handling | 2 hours |
| For the next layer | 6 hours |
| Fully dry | 24 hours |

Safety instructions

Read the Technical and Safety Data Sheet

¹ Consumption depends on the surface

² Stored in original and sealed containers at a temperature between +5 °C - +35 °C

³ At +20 °C and 50% PH

Surface preparation

The surface must be free of loose elements, dry, firm, free of oil and grease stains, free of dust, mould, salts and old incoherent coatings. The surface must be perfectly hardened and structurally uniform. Plastic and other smooth surfaces must be roughened beforehand to prevent coating run-off during application.

You can apply the coating immediately to the surfaces or create an adhesion layer with ALPHA FLEXIBLE. The adhesion layer is created by diluting the coating 1:1 with water and applying the diluted coating in one layer to the surface to be coated. Depending on the surface and ambient temperature, allow this layer to dry between 3 and 4 hours. You can then apply the undiluted ALPHA FLEXIBLE.

Procedure and application / tools

The coating must be thoroughly mixed before application! Always mix the entire contents of the package! Before application, mix the coating preferably with a rotary mixer at a maximum speed of 150 rpm until the mixture is homogeneous. Mixing may take several minutes.

When the bucket is opened, a crust is formed on the surface of the containing microspheres, which must be mixed with the dispersion at the bottom of the bucket.

The coating is preferably applied with a professional spraying device (airless type with a minimum flow rate of 4.3 litres/minute) to achieve a perfect aesthetic appearance. In spraying equipment it is necessary to remove all filters before application! The pressure at the spray gun nozzle during application must not exceed 200 bar.

The coating can be applied with a brush or roller. A flocking roller or a decorative roller made of coarse foam is ideal. When applying with a brush, it is not recommended to go back for minor imperfections. Partial overpainting of already painted layers will cause the coating to be inconsistent with significant aesthetic flaws. It is recommended to apply the coating generally in two to three cross layers. Apply coating only in complete areas.

The application of the coating itself is not difficult in principle if the procedure is followed. Dip the roller in the coating and apply to the surface in short strokes. Soak the roller, make a short up and down stroke (approx. 50 cm per stroke, depending on how wet the roller is) and then soak the roller in the coating again. Apply the coating in one layer to the entire area.

Then allow to dry for at least 12 hours before applying a second layer. The drying of the layer is important to achieve the desired reflective and insulating properties. Failure to follow this procedure will result in staining and uneven application to the surface being painted. In the case of a prolonged application of the coating, always re-mix the entire coating at intervals of 40 minutes to ensure uniform homogenisation of the coating and to combine all the components contained in the coating.

The material consumption is influenced by the surface texture and the method of application. Apply the coating as required in individual layers and always in accordance with the application instructions. During prolonged application, the coating must be mixed every 40 minutes with a mixing device (drill, stirrer or other). In case of higher ambient temperatures (e.g. direct sunlight), mix the coating more frequently. It is not advisable to work with the coating in humid environments.

The coating can be tinted to the desired shade with suitable pigments, e.g. tinting paste for waterborne pigments. Do not add more than 3% by weight of the entire package of tinting paste, i.e. 540 ml per 18 litres of product. The resulting colour shade can be significantly affected by the condition of the surface, temperature and humidity conditions. Apply the pigment directly into the coating and again mix the entire coating mixture evenly and properly.

The coating will gradually cure after 24 hours. After approximately 12 hours, once the surface is dry to the touch, continue with another layer of coating. Avoid applying excessive amounts of coating. Applying excessive amounts of coating will cause run-off or other optical defects.

After approximately 24 hours after application, the final hardening of the coating occurs. After this time, the functionality of the coating is already noticeable. In case of any damage, the area can only be repainted again according to the recommended procedure above.

Important notes/restrictions

Failure to follow the coating application procedure may result in insufficient polymerization of the coating and thus affect the properties and functional characteristics of the coating.

Do not apply the coating if

- rain is expected during outdoor application
- the coating must not be exposed to direct rain for at least 6 hours after application
- the relative humidity is > 80%
- the moisture content of the surface is > 4% by weight (concrete: > 2.5%)
- substrate (surface) and ambient temperature is < +17 °C
- ambient temperature is > + 35 °C
- the surface is exposed to direct sunlight and the ambient temperature is > + 35 °C

After opening the original packaging, we recommend to consume the contents as soon as possible, keep unused coating in a sealed container with as little air above the surface as possible. The applied coating must not be exposed to direct steam, water or other liquids for long periods of time.

Cover areas where coating will not be applied with material to protect against contamination of unpainted surfaces: masking film, non-woven fabrics, tape, etc.

Application conditions

- Surface temperature: +17 °C min. +35 °C max.
- Ambient temperature: +17 °C min. +35 °C max.
- Relative humidity: < 80 %

Drying conditions

The coating does not require any special measures during drying (curing). Drying time depends on air temperature, humidity and surface temperature.

Drying time

Drying time depends on the surface temperature and humidity. The drying (curing) time is a maximum of 24 hours. Apply the next layer only after the previous layer has completely dried. The ambient temperature during drying must be at least +17 °C, ideally +23 °C.

Cleaning tools

With water - as soon as possible after use.

Storage / transport / shelf life

This product retains its useful properties for at least 24 months from the date of manufacture when stored in the prescribed manner in the sealed, intact original packaging. Store at a temperature of +5 °C to +35 °C, humidity up to 80 %. The temperature during transport of the material should not fall below +5 °C and rise above +35 °C. Protect the product from direct sunlight, frost and high temperatures during transport and storage.

Notice

The products can be applied when the surface temperature is above +17 °C and the air temperature is between +23 °C and +30 °C. Avoid application if adverse weather conditions are expected during the curing period (wind, increased dustiness, rain, frost).

Read the technical and material data sheet, the safety data sheet and the application manual before use.

Note

The information contained in the Technical Data Sheet corresponds to our current knowledge of the manufacturer. Products are of the highest quality and uniform within manufacturing tolerances. The values and data given in this Technical Data Sheet are based on the results of laboratory tests and manufacturer's testing. The information given, especially the advice for the processing and use of the coating, is based on experience with practical applications under standard conditions and proper storage and use.

These values may vary with practical application. Due to variations in processing conditions and other external influences, and the varying nature and treatment of surfaces, a procedure based on the information given, or other written or oral recommendations, may not always guarantee a satisfactory working result. All recommendations made by the manufacturer or distributor of the coating are general. The applicator must verify that the coatings are suitable for the intended purpose of application. The latest edition of the application instructions and product data sheet should always be followed. These, together with other information, are available on request from the manufacturer. Purchasers and users are encouraged to perform a self-test on a sample of the area to be coated prior to application.

The manufacturer shall not be liable for defects resulting from failure to follow the instructions for use given in the Technical and Material Data Sheet, Safety Data Sheet and Application Manual.

Precautions for handling the products

The coating does not contain substances harmful to health, is not labelled or classified as hazardous to health.v

Safety precautions

Use protective equipment such as goggles, gloves, protective clothing, etc. to protect eyes and skin when working. Protect the respiratory tract with a suitable respirator in confined spaces and during spray application. Provide ventilation in case of application in closed rooms. More detailed information on hygiene, occupational safety and environmental protection is given in the safety data sheet.

Wash splashed skin with soap and water. Rinse mouth with water if swallowed. If eyes are affected, flush with a stream of water. Exit to fresh air if inhaled.

The material is non-flammable. In the event of a fire in structures, equipment or buildings to which the coating has been applied, we recommend the use of water, foam, dry chemical extinguishing agents or carbon dioxide to extinguish the fire. In the event of a coating leak or spill, use any absorbent material such as sand, etc.

Disposal of packaging/product

The material is not classified as an environmentally hazardous substance (Act No. 185 2001 Coll. on Waste). Dispose of unused material or packaging in accordance with applicable regulations. Clean packaging: category 'O' 15 01 02 - Plastic packaging; Product residues: category 'O' 08 02 99. Keep out of reach of children. Packaging is fully recyclable.

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1.2.2023

Version

For professional use only

Producer



ALPHA CZECH s.r.o.

Na Příkopě 854/14

110 00 Praha 1 – Nové Město

Czechia

www.alphaczech.com