Technical Specifications

The Technical Specification describes the correct application of GoTherm paint, produced by FCOM Sp. z o.o.

APPLICATION

Protection against the penetration of frost and surface water vapor condensation, as well as for solving the problem of thermal bridges and improving health and safety conditions, and as a surface finish with antibacterial properties. GoTherm is recommended for insulation and protection of steel elements, plaster, concrete, wood, etc. The paint can be applied, among others, on:

- hot and cold water pipelines,
- sanitary fittings, valves,
- ventilation and air conditioning ducts, fittings and pipes,
- roofing material,
- sheet metal garages, containers,
- industrial installations,
- rooms with high air humidity with a risk of mold and fungi, such as e.g. swimming pools and saunas,
- public utility facilities such as hospitals, medical clinics and various types of offices in which the use of antibacterial coatings is recommended, prevents the development of, among others, staphylococcus aureus, E. coli or pneumonia,
- historic buildings where, due to the complex shape of the facade, wool or polystyrene cannot be used,
- partitions made of brick, plaster or concrete, elements made of wood

Our paints are effective, ecological and safe for health, which allows them to be used both outdoors and indoors.

PRODUCT CONSUMPTION AND PERFORMANCE

Consumption, depending on the application, is 0.5 - 3.0 liters of paint on the surface of $1m^2$.

- **radiation reflection** - total layer thickness min. 0.5 mm (0.5 l/m2),
- **mold and fungi on the walls** - total layer thickness min. 1 mm (1 l/m2),
- **water vapor condensation** - total layer thickness min. 1.5 mm (1,5 l/m2),
- **thermal insulation** - total layer thickness min. 1-3 mm (1-3 l/m2),
- **hot surface** (e.g. pipe) - total layer thickness 1.5-3 mm (1.5-3 l/m2).

HOW TO USE

Preparation of the product

The product should be thoroughly mixed before use. For mixing, it is recommended to use low-speed mixers with a maximum speed of 200 RPM. Too intensive mixing may lead to aeration of the paint and damage the microspheres contained in it.

When working with a spraying unit, as well as in conditions with increased ambient temperature, it is recommended to dilute the paint with water in the proportion of 3% - 40%.

Surfaces with a temperature above + 80°C should be primed with several layers of paint diluted with water in the proportion of 30% -40%.

It is recommended to dilute only the amount of the product that will be used within 3-5 hours.

Substrate preparation:

The substrate must be load-bearing, dry, clean and free of free fractions so as to ensure the maximum adhesion of the paint to the substrate. The surfaces of newly made cement-lime and cement plasters and concrete should be seasoned at least. 4 weeks. In the case of other finishes, the manufacturer's instructions should be followed.

Raw substrates (previously unpainted):

Remove loose parts of the substrate, dirt, grease stains. Clean loose/dusty surfaces or improve their stability by using e.g. primers. High gloss surfaces should be roughened. If there is mold or fungus on the substrate, remove them. In the case of the facade, it is best to wash the whole surface with water under high pressure, while in the case of steel substrates (if required by the specification), they should be protected with anti-corrosion paint. Unevenness and cracks to be smoothed out with mortar, small defects can also be finished with GoTherm Seal.

Previously painted surfaces:

Remove loose parts of the substrate, dirt, grease stains. Clean loose/dusty surfaces or improve their stability by using e.g. primers. High gloss surfaces should be roughened. If there is mold or fungus on the substrate, remove them. In the case of the facade, it is best to wash the whole surface with water under high pressure, while in the case of steel substrates (if required by the specification), they should be protected with anti-corrosion paint. Unevenness and cracks to be smoothed out with mortar, small defects can also be finished with GoTherm Seal.

As a manufacturer, we recommend each time a trial painting is performed, which will allow to assess the adhesion of the coating to the painted substrate (e.g. by means of a grid of cuts) and if the customer ordered the dyeing of the product, which is white as standard, such prior painting of the test surface will allow for the assessment of the appearance and color of the coating.

Temperature during and after application:

Apply at the air and substrate temperature not lower than + 5°C and not higher than + 150°C. Avoid rain during painting and for 24 hours after applying the paint under optimal conditions (temperature + 20°C - +150°C). This time in conditions of increased air humidity and lower air and substrate temperatures may be extended.

Our paints are water-soluble, they must not be used or transported in temperatures below zero.

Application

Our paints are suitable for use directly in the form in which they were delivered to the recipient and only require thorough mixing with low-speed mixers before use. We distinguish between a product in the **form of a mass** to be applied with a steel trowel, as in the case of gypsum plaster, and **a liquid paint** to be applied with a short pile roller, brush or low-pressure painting unit. If the coating will be applied with a painting unit, or the temperature of the substrate will be> 50°C, the coating density should be adjusted by gradually adding water until the proper consistency is obtained. The amount of water added for dilution may be 5-40% by volume of the paint.

A single layer of paint should not exceed 1mm thick, e.g. to obtain a final layer of 2mm, at least 2 layers should be applied. In order to avoid streaks and discoloration, paint the surface continuously. Plan technological breaks at the edges of the walls. Provide enough paint from one production batch, especially if the product is colored with pigments. Mix the paint from different batches before use.

Drying and recoating times depend on the layer thickness, temperature and relative air humidity. For example, the drying time of a single layer at a temperature of +20 ± 2°C is up to 24 hours, while if the substrate temperature is > 50°C, this time is reduced to 1 hour.

IF YOU HAVE ANY DOUBTS AS TO THE METHOD OF PREPARING THE PRODUCT PLEASE CONTACT US

Tools

It is recommended to use the following tools for the application of paints:

- **Manual**
  - short-pile nylon rollers for low-roughness surfaces,
  - polyacrylic string rollers with long pile for rough surfaces,
  - brushes,
  - putty (only for thick paint).

- HVLP mechanical low pressure units
  - **for large areas use**, for example, a Graco RTX 5500 series aggregate

  - **for surfaces <50 m2**, we recommend using it
    - Graco HVLP TURBO FORCE II 9.5 PROCONTRACTOR,

    or
    - pressure tanks with a manual or pneumatic agitator,

    or
    - a spray gun with an upper paint cup (**nozzle 2.0 - 2.5 mm**) and a compressed air source not exceeding 3 bar.

Tool cleaning

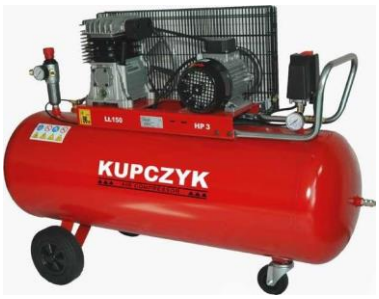
- Clean tools and dirty surfaces with water.

Sample hardware solution

1. 10l or 20l pressure tank. with a pneumatic agitator together with a DÜRR EcoGun 246 air paint gun


When working with the unit, remove all paint filters from it or replace it with a filter with a mesh diameter of at least 1 mm !!!

2. HVLP / LVLP gun with nozzles with a diameter of **2.0-2.5 mm** with a compressor with an air capacity of **260 - 380 l / min**.

Maintenance

Maintenance consists of:

- visual assessment of the technical condition of the painted surface,
- repainting the surface with defects (welding of pipeline sections, etc.).

Any noted defects should be removed.

Instructional videos

Website

YouTube

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