

# ALPHA FACADE

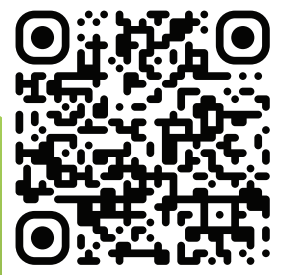
**ALPHA FACADE** is an advanced facade coating designed for **residential, commercial, and industrial buildings**, ensuring **thermal comfort throughout the year**. In summer, it reflects solar radiation back into the atmosphere, preventing the facade and interior from overheating, while in winter it prevents heat from escaping from the building. The result is significant energy savings on cooling and heating and a reduction in the building's carbon footprint. ALPHA FACADE can be tinted to any color.

ALPHA FACADE is the only coating of its kind that helps combat heat islands and creates healthy and cool cities and streets, as facades coated with ALPHA FACADE do not absorb heat radiation in summer and therefore do not radiate heat into the street at night. They improve the comfort of living, and the coating has a significant impact on the lives of residents. The coating has a service life of more than 20 years.

The coating is **highly resistant to weathering, acid rain**, and mechanical abrasion. At the same time, it retains **vapor permeability**, promoting a healthy climate in the building. It is suitable for a wide range of mineral substrates (coatings of mineral surfaces such as cement and silicate plasters, birch plaster, stucco plasters, raw concrete, asbestos cement, common facade systems, and many other similar materials). ALPHA FACADE is **non-toxic and environmentally friendly**.



## Downloads



**Batch number:** label

**Last revision:** 11/15/2023

**Date of manufacture:** label

**Version:** 01 For professional use

**Expiration date:** 24 months from the date of manufacture in the original unopened packaging



# Technical and material sheet

## ALPHA FACADE

### Hlavní vlastnosti

- ✔ Protects the facade from overheating in summer and heat loss in winter
- ✔ The only coating that ensures that heat does not radiate from the surface into the street at night
- ✔ Eliminates heat islands in cities and residential areas
- ✔ 60x lower carbon footprint than conventional insulation materials
- ✔ Significantly reduces energy costs and contributes to climate protection
- ✔ High UV stability and weather resistance
- ✔ Vapor-permeable and abrasion-resistant
- ✔ Can be tinted as desired (including RAL/NCS shades)
- ✔ Environmentally friendly
- ✔ Lifespan of tens of years
- ✔ Suitable for residential and industrial buildings

### Application

**ALPHA FACADE** is designed for coating mineral surfaces such as cement and silicate plasters, roughcast, stucco plasters, raw concrete, eternit, and conventional facade systems.

### Technical properties

**Color:** White in the basic version, tinting can be done with water-soluble tinting pigments. Can be tinted to NCS on tinting machines using ALPHA coloring systems.

**Coverage:** Coverage per 1 m<sup>2</sup> is approx. 0.3/0.4 liters of coating material to maintain the reflective insulation properties of the facade. The total thickness will be approx. 300–400 microns! Coverage may vary depending on the absorbency and structure of the substrate, application technique, thickness of the applied layer, and other factors. The exact coverage for a specific substrate must be determined on a test area at the application site.

**Application temperature:** The temperature of the coating, the environment, and the substrate must be between +5 and +35 °C during application and for 24 hours after application, ideally between +10 and +25 °C.

**Storage:** Store in a dry, cool, frost-free place in the original sealed packaging for 24 months at temperatures between +5 °C and +35 °C. Once opened, use the contents within 14 days. Do not expose to direct sunlight. Opened and unused paint (if not diluted with water) can be stored in a well-sealed container for possible repairs for 3 months with as little air space as possible.

**Packaging:** 18 liters in PP buckets.

### Application information

**Tools:** Paint rollers, brush, small area brush, large area application by AIRLESS spraying. Drill with mixer or special mixer with speed control.

**Recommended dilution:** The coating can be diluted. Please note that excessive dilution reduces the coverage and may impair the parameters of the paint. **Dilute with drinking water**

18-liter package – add 0.7 liters of clean water or a maximum of 0.5 liters of tinting pigment.

### If you are tinting the paint, do not add water.

**Mixing:** Before use, ALPHA FACADE must be thoroughly mixed with a cordless mixer to a homogeneous (uniform) consistency, according to the above recommendations, dilute with clean water. When mixing, stir the coating lightly, add water, and mix the entire contents thoroughly. Please note that excessive dilution of the coating reduces its coverage and impairs its parameters. Once the container has been opened, it is advisable to use the paint as soon as possible. The entire surface must be painted using paint from a single production batch. Remove any dried paint (not hardened) from the lid of the container and mix the paint thoroughly. When handling or mixing, proceed in such a way as to prevent excessive air from entering the coating material. When applying with Airless equipment, it is ideal to strain the coating material into a second container so that the coating material does not contain any lumps that will clog the nozzle.

**Note:** During prolonged storage and after opening the bucket, the coating may appear to be a hard, dry mass. This is because during storage, some components (microspheres) have risen to the top and the dispersion (liquid part) has settled to the bottom. However, you can mix the coating into a consistent mass – thick "Greek yogurt." Use a spatula to break up the larger, harder pieces into smaller pieces for thorough mixing. If there is dried, hard coating on the lid, do not scrape it into the rest of the bucket, otherwise you will have lumps in the coating and it will need to be strained through a sieve.

**Airless equipment:** When applying with airless equipment, remove all filters from the device! There are usually three: suction, pump, and gun. The maximum pressure of the device must not exceed 160 bar. If you hear crackling in the hose, the pressure is too high and the microspheres have broken. The recommended nozzle is 517, but it is necessary to test which nozzle is most suitable for the given application and device. Use the spray device from a suitable distance so that no lines or transitions are formed, which can cause optical reflections. The flow rate of the device must be at least 2.4 liters per minute.

**Drying:** The coating is dry to the touch after approx. 30 minutes. The next coat can be applied after 6 hours (data applies to one coat of standard thickness under standard conditions (T = 20°C; relative humidity 60%)). Under standard conditions, freshly painted surfaces are resistant to damage (washing off of the paint layer) after 24 hours at the latest. Lower temperatures or higher humidity can prolong the drying time.

To the touch:	30 minutes
For the next coat:	6 hours <small>(WFT 240 µm, t = 20 °C, relative humidity 60% vol.)</small>
Fully dry and functional:	24 hours

### Cleaning tools and after application

Protect all tools from drying out during work breaks and wash with water after use. Wash contaminated areas immediately with water, as dried paint is difficult to remove. Protect all tools from drying out during work breaks.

**Surface protection:** If areas that are not to be coated become contaminated, wash them immediately with water, as dried paint is difficult to remove. Ensure thorough ventilation during application and drying.

# Technical and material sheet

## ALPHA FACADE

Density	0,53 g / cm <sup>3</sup>
Appearance	White, whiteness 96%
Gloss level	Matte
Odor	Typical for acrylic paints
Shelf life	24 months, must not freeze
Safety instructions	Read this Technical and Safety Data Sheet

**Do not apply the paint if:** Relative humidity is higher than 70%. The moisture content of the substrate is more than 4%, concrete more than 2.5%.

**Substrate and substrate preparation:** The substrate must be dry, cohesive, free of impurities and active biological infestation (mold, algae), non-salty, non-greasy, chemically stable, mature. The substrate must be solid, dry, free of cracks, crevices, dust, and flaking parts. The substrate must have the same absorbency and structure across the entire surface. The substrate must be sufficiently flat; any unevenness and imperfections will be copied by the coating material.

**Facade composition:** If you are only applying ALPHA FACADE to prevent overheating of the building, apply ALPHA TOTAL PRIMER in the first step according to the instructions in the Technical and Material Data Sheet.

If you want to improve the thermal insulation properties of the building, apply ALPHA TOTAL PRIMER, then ALPHA ISOLATION in a 1 mm layer, and only then can you apply ALPHA FACADE.

**Procedure and application:** After opening the bucket, thoroughly mix the entire contents of the coating material with a mixer immediately before application and dilute with water if necessary, but not more than 4% by weight of the entire package. (AKU with screw, etc., mixer, 150 rpm).

You can adjust the coating by adding water according to the recommended dilution, see above. When applying multiple coats, allow a minimum of 6 hours between coats. For new substrates or substrates with significantly different shades, apply more coats of ALPHA FACADE coating as needed.

If the final application is to be colored, the previous (bottom) layers must be white, and only the top layer will be colored. This will ensure that all solar radiation is reflected back into the atmosphere and that the reflective insulation and thermal functions are ensured.

The prepared coating can be applied immediately, in at least two coats for protective coatings against solar radiation – i.e., as a reflective insulating coating. The application is carried out with a roller, brush, or spray equipment. The previous coat (layer) must be completely dry. Coatings are applied at ideal temperatures between +5°C and +35°C. Do not apply in high humidity or on a damp substrate. During application, we recommend stirring ALPHA FACADE occasionally, ideally every 15 minutes. Contaminated areas, tools, and work equipment must be washed before the coating dries. Apply evenly and without interruption.

The coating is dry to the touch after approx. 30 minutes. The next coat can be applied after 6 hours (data applies to one coat of standard thickness under standard conditions (T = 20°C; relative humidity 60%)).

Under standard conditions, freshly painted surfaces are resistant to damage (washing off of the paint layer) after 24 hours at the latest. Lower temperatures or higher humidity may prolong the drying time. If you are applying the coating with a sprayer, it is better to pour the mixed coating material through a strainer into a second container to avoid small clumps of microspheres that could clog the nozzle.

The total thickness of the applied ALPHA FACADE coating must be at least 300-400 microns.

### Warning and general instructions

**Processing conditions:** The temperature of the substrate and air must not fall below +5 °C. During application, it is necessary to avoid direct sunlight, wind, or high humidity. In conditions that promote rapid drying of the interior coating (temperature above +35 °C, drafts, heated substrate, etc.), the applicator must consider all circumstances (including, for example, the size of the area) affecting the possibility of proper application, especially joining. In conditions that prolong drying (especially low temperatures and high humidity), slower drying of more than 12/24 hours must be expected. High temperatures, especially in summer, adversely shorten the drying time. High humidity or low temperatures (e.g., in late autumn) can significantly prolong the drying time and adversely affect the final color shade or properties of the coating.

**Color shade:** The intensity of the final color shade can be adversely affected by the condition of the substrate, temperature, or humidity. In particular, with an uneven substrate (structure, absorbency) or when applied under variable "weather" conditions, there is an increased risk of uneven coloration (risk of staining).

The tinted ALPHA FACADE coating is used as the final/last layer; the previous layers will be in basic white!

Color shade consistency can only be guaranteed within a single production batch, so it is recommended to order the required amount of material for the entire building at once. When processing different production batches of the same shade on a single surface, it is necessary to ensure that they are thoroughly mixed together. Mechanical action may cause color changes on the surface of the coating (e.g., rubbing off of color pigments). This phenomenon does not affect the technical functionality of the coating and is not related to the quality of the delivered product. Differences in color shades between sample colors and original products are possible for technological reasons (different types of substrate and printing technology). With this in mind, it is recommended to apply test samples before starting the application. Since it is not always possible to guarantee completely identical processing and curing conditions for the samples presented and the interior materials subsequently supplied, any slight color difference cannot be considered a defect.

**Maintenance and restoration of finished surfaces:** To maintain the functional and decorative parameters of the coating in the long term, it is advisable to regularly inspect and maintain the coated surfaces as follows: sweep, vacuum, or wash off loose dirt. Remove more stubborn dirt using universal cleaning agents and then wash with clean water.

**Safety precautions:** See the product safety data sheet for details.

Do not eat, drink, or smoke when working with ALPHA FACADE coating. We recommend protecting your eyes with goggles with side shields. If swallowed, rinse your mouth with water. If the product comes into contact with your eyes, rinse them with running water. If symptoms persist, seek medical attention. Treat your skin with a regenerative cream after washing. Keep out of reach of children.

# Technical and material sheet

## ALPHA FACADE

**Disposal of packaging:** The packaging is fully recyclable. The material is not classified as environmentally hazardous. Dispose of unused material or packaging in accordance with applicable regulations. Dispose of product residues as mixed construction and demolition waste.

### Other information

This technical data sheet, provided as part of our support to customers and processors, has been created based on our own experience and the current state of science and technology. The procedures and recommendations provided herein represent, in a general sense, optimal and safe solutions, but are not legally binding and do not establish a contractual relationship or additional obligations under the purchase agreement. Nor do they relieve the processor of the responsibility to verify the suitability of this product for its intended use under specific conditions. The consumer is responsible for the correct use of the product. The information provided in this technical data sheet is based on laboratory findings and our professional experience with the aim of achieving the best possible results at a professional level when using the product. We accept no responsibility for damage caused by incorrect use of the product or its inappropriate selection. We therefore recommend that the buyer or user test our materials professionally and technically to ensure that they are suitable for the intended purpose under the given conditions in the given object.

This technical data sheet loses its validity upon the publication of its amendment. The manufacturer reserves the right to make possible later changes and additions. The manufacturer reserves the right to change the information in technical and promotional materials without prior notice. Updated versions of technical data sheets are available from the manufacturer upon request. All information in this manual is non-binding.

### Manufacturer



**ALPHA CZECH s.r.o.**

U Plynárny 348/83  
101 00 Prague 10  
Czech Republic  
[www.alphaczech.com](http://www.alphaczech.com)