



EXTERIER

WOOD STAIN FOR EXTERNAL USE

PRODUCT IDENTIFICATION

Belinka Exterior

DESCRIPTION

Belinka Exterior is a stain developed to protect wood against weathering. It gives wood a decorative colour and enhances its appearance.

COMPOSITION

Acrylic resins, water-repellent substances, film preservative, UV absorbers, nano-filters, weather-resistant pigments, additives and water.

CHARACTERISTICS

Belinka Exterior:

- » is resistant to weathering,
- » protects wood from UV rays,
- » keeps the natural wood grain visible,
- » has no unpleasant odour,
- » dries quickly and enables the application of several coats in one day,
- » gives a silky gloss finish.

AREA OF APPLICATION

This product is used to protect the surface of all types of wood outdoors. It is suitable for windows, doors and all other wooden elements exposed to the weather. The woodstain is not suitable for walkable surfaces or surfaces where water is collecting.

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COLOUR SHADES

Belinka Exterior stain is produced in 8 standard colour shades and naturally transparent. Some sales outlets offer the possibility to prepare the additional 76 Exterior colour shades based on the Belinka mix colour chart.

The colour charts are made on selected and quality processed spruce wood. Because wood is a natural material, slight differences may occur in the shade on wood of different quality. On other types of wood the shade may differ considerably because of the effect of the base, which is why we always recommend that a preliminary test coat be applied to a small sample of wood.

The colour shade on wood also depends on the previous treatment of the wood element and on the number of coats. On a rougher, poorly sanded wood surface the colour is more distinctive than on a smooth surface. A stronger, fuller colour is obtained by applying the coating several times.

Individual colour shades can be arbitrarily mixed, thus increasing the range of colours. Test the colour mix on a small board, which should be finished in the same way as the wood to be coated.

SUBSTRATE PREPARATION

New wood must be dry, clean and protected with Belinka Impregnant.

We cannot guarantee the quality of the coating when impregnation agents of other manufacturers are used.

When renewing old stains, it is necessary to first clean dirt and loose particles from the surface, then gently sand and remove the dust.

When renewing old top coats (enamels, varnishes) these must be completely removed and then treated as with new wood.

APPLICATION METHOD

Mix well before applying the stain. Apply in two coats (naturally transparent in three) with a brush, roller or by spraying. Use tools made of stainless materials.

Diluting the stain is unnecessary, as a rule.





For work with water-borne coatings we recommend that the temperature of the base, coating and surroundings be above 10 °C and never lower than 5 °C. Relative air humidity should be below 80 %.

Avoid coating in strong sunshine. The coat dries rapidly especially at higher temperatures and lower air humidity.

Rapid drying can result in mottled surfaces. This occurs when a fresh coat is applied on one that is only partly dry. At this point a double layer coating is obtained, which is revealed as a darker patch. Moreover, each correction on a coat that is not dry or only partly dry can produce spots or patches. That is why special care should be taken when coating larger surfaces and relief surfaces of uneven wooden elements.

In such cases first coat larger surface areas, then the edges and at the same time correct any defects (e.g. flow marks). For large, flat surfaces (e.g. exterior doors) we recommend coating with a microfiber roller or spray gun. Rollers made of rubber foam or velour are not suitable.

When using a roller, edges and gaps must be simultaneously corrected using a brush. Wooden panelling is coated longitudinally along individual boards from beginning to end. In each case coat the wood along the wood grain.

Two coats suffice to protect wood and three coats when using natural transparent.

Ensure that with each stroke of the brush or roller the coat is applied well and evenly so that coverage per m² of surface area is as prescribed.

To achieve a fuller appearance a third coat can be applied, but then you should consider that the shade would be darker as a result.

DRYING

The coat is dry in 4 - 6 hours under normal conditions (20 °C, 65 % relative air humidity).

At lower temperatures or very high air humidity the coat takes a longer time to dry. From the aspect of coating, this is favourable as it extends the open time of the coating, i.e. the time in which the coat can be corrected without spoiling the appearance. At higher temperatures and/or very low relative air humidity the drying time is shorter.

The next coat should not be applied until the first one is completely dry.





CONSUMPTION

One litre of stain covers:

- » 12-15 m² with first coat,
- » 8-10 m² with two coats,
- » 6-8 m² with three coats.

Consumption relates to spruce wood protected with Belinka Impregnant.

When coating surfaces that had already been coated, one liter is enough to cover 20–25 m² with 1 coat.

Consumption is greatest with the first coat. With respect to the type of wood, consumption is greater for strongly absorbant types of wood (e.g. pine sapwood) and less for non-absorbant deciduous hardwoods (e.g. oak).

Consumption depends strongly on the quantity applied and the type and processing of wood.

Less coating remains on smoothly finished wood surfaces, which is why consumption is also lower. Most smooth of all is a surface finished with quality smooth planing or sanding. Less smooth is a poorly planed surface, and least of all sawn wood.

For all these reasons it is hard to predict how many coats are necessary.

That is why the amount of coating that must be used per m² of surface area to provide suitable protection is more appropriate data.

In the case of Exterior it holds true that for optimum protection at least 0.1 l/m² should be used. As a rule, this is possible in two coats, and if not then in more.

CLEANING TOOLS

Tools and accessories should be cleaned with water and detergent immediately after use.

COATING CARE

An undamaged coating is to be treated twice a year with a caring milk for acrylic water-based coatings (e.g. Belcare).





This closes the micro pores (cracks) which appeared on the coating due to wood expansion, retouches the surface and expands the durability of the protection.

Such treatment is required for all elements which are cleaned frequently (windows and exterior doors).

The treatment of other easily accessible surfaces is also recommended (e.g. balcony railings).

REFRESHING THE COATING

Any mechanical damage on the coating (bolting, hail, scratches, cracks) must promptly be repaired with Exterior. Failure to perform remedial treatment immediately can cause the coating to peel off around the damaged area, and formation of dark blotches in the wood. This is especially important for Exterior 61 and light colour shades. The remedial treatment is done on the damaged spots by lightly sanding these areas and coating them with two layers of Exterior. Regular restoration of wood is required when an overall deterioration of the coating can be seen on otherwise undamaged surfaces.

If there are no signs of peeling, it is enough to lightly sand the surface (sandpaper for acrylic coatings with grit size 180 to 220 is recommended) and apply one fresh layer of Exterior. If parts of the surface are cracked and there are visible signs of surface peeling, all loose parts of the coating must be sanded. One layer of Impregnant should be applied on parts that were sanded all the way to the wood.

The first layer of Exterior is to be applied only on sanded parts, while the second layer should be applied onto the entire surface of the element that requires restoration. If the coating is heavily cracked and is peeling off, it is required to sand off the entire coating. Once the surface is prepared in this manner, protect it with Impregnant and two layers of Exterior. If the wood is heavily deteriorated, it is important to sand off the top layer of the wood before applying coatings, as such a layer is worn off and does not provide good adhesion with the coatings.





ADVICE

Use tools that do not rust. We recommend using quality brushes for water-borne coatings.

The appearance of the surface is nicer if after the first coat of Exterior it is sanded with fine sandpaper (220 granulation) and has the dust removed. We recommend using sandpaper for acrylic coatings.

Should there be a problem with applying the coat on new wood during the first application (too rapid drying, brush marks), it can be diluted with up to 10 % water. If the product is diluted, several coats are required for the same level of protection, as a rule. The standard measure is the coverage of undiluted coating per m² of surface area.

It is essential to follow the prescribed consumption of the product for good protection. Too thin coatings significantly impair the durability of the coating. We must be especially careful when protecting the edges of the wooden element, as the thickness of the coating on them is usually thinner, which causes faster deterioration of the coating on these parts. We have less problems if the wooden elements have rounded edges.

A stronger shade is obtained with many coats. This can be reduced by mixing coloured Exterior and Exterior 61 – naturally transparent. At least half of the mixture with Exterior 61 must consist of coloured Exterior. In order to determine the greatest level of protection against UV rays, we recommend that the first and second coat be in the basic shade, while the third and subsequent coats can be applied as a mixture.

Exterior 61 – naturally transparent can be used separately only on impregnated raw timber. This product contains UV absorbers and nano-filters that prevent the damaging action of UV rays in a range of up to 400 nm of the light spectrum. As this product is desired to be colourless as much as possible, we cannot prevent permeability of the visible light spectrum, whose action within a certain field of radiation is also damaging to wood. For this reason, this product is somewhat less weather-resistant than coloured Exterior and should therefore be renewed more frequently.

The renewal intervals can be extended by increasing the dry film thickness, e.g. with three coats.





All assembly cuts, especially cross-sectional, must be well protected with Impregnant and Exterior before assembly. Cross-sectional cuts must be given special attention as water penetrates into the wood at these points. We recommend that a larger number of coats be applied there.

When planning timber structures and elements, it is necessary to observe the rules of construction protection (proper installation of wood). It is particularly important for the design to be such that water does not accumulate in any place where it can cause rapid decay of the coating and timber itself.

WARNING

Exterior 61 is not suitable for coating coloured surfaces because the special nano-filters can produce a milky appearance on the surface.

The soft milky appearance occurs when using this product on darker types of wood.

Water-borne coatings on woods that contain water-soluble substances can cause yellowing of the surface. This should be taken into account when using Exterior 73 – creamy white. Yellowing can occur on knots (spruce, pine) and on wood rich in tannin (oak, chestnut). For acrylic stains this is unavoidable.

The product does not stick, however, direct wood-to-wood contact should be avoided, as the coating is thermoplastic. Therefore, seals suitable for water-based acrylic coatings should be applied onto joinery which is protected with water-based acrylic coatings. Check with the manufacturer or dealer that the seals are suitable.

Unsuitable seals can cause adhesion between the seal and the coating, or even tearing off.

Belinka Exterior is a water-borne dispersion with a milky appearance. For this reason while coating first a milky film appears, which subsequently becomes transparent when dry.

Also when working with coatings that contain low quantities of volatile organic substances, ventilation of the working area should be ensured.





STORAGE AND HANDLING

Belinka Exterior is to be kept in well-sealed packaging at a temperature between +5 to 30 °C, out of reach of children and animals, and away from foodstuff. Pour any unused amount of the product from the big packaging to the top of a smaller packaging, seal well and mark.

This product must not freeze!

SHELF LIFE

Shelf life printed on packaging.

ENVIRONMENT

Do not pour coatings into the drainage system, surface water courses or anywhere in the environment. Use all contents till empty. Dispose of packaging or unused product as special waste. For collection centres ask authorities in your country.

REGULATIONS

In connection with regulations governing product safety, safety at work and transport, read the material safety data sheet.

ADDITIONAL TECHNICAL INFORMATION

More information can be obtained from our distributors or visit our website: www.belinka.com.

The purpose of this technical information is to describe technical properties and application possibilities of the product. Although advices are based on our long term experiences, buyers must determine for themselves, by preliminary tests or otherwise, the suitability of the product for the expected use. Due to the large number of influences on the properties of product, from substrates, application conditions, workmanship experiences of user, environmental conditions ect., no liability of the producer can be derived from the contents of this information sheet. In case of doubt call our technical consultants.

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