

| [Z] ZowoTec [®] | 444 |
|--------------------------|-----|
| TopCoat Door | Х |

| Product Description | |
|-------------------------|--|
| | |
| Product Type | Water-based, glazing intermediate and top coat. Especially for wooden front doors, as well as colorless protective glaze |
| | » Low inventory, as one product for two applications |
| | » Intermediate and top coat for wooden front doors |
| | » Colorless protective glaze for pigmented top coats |
| | » Protects the [Z] ZowoTec [®] windows coatings under heavy use against pigment- abrasion and scratches |
| | » Single-component |
| | » Highly weather-resistant |
| | » Highly dosed UV-protection |
| | » Extra scratch resistance |
| | » Good chemical and hand lotion resistance |
| | » Very good grinding properties |
| Area of Application | Front-doors made of wood and wood-based materials, in- and outdoors, also mechanically strained indoor wooden components, especially window-sills and room doors. Not suitable for wooden windows. |
| Technical Data | |
| | |
| Base of Binder | Hybrid system made of polyurethane and acrylate |
| Pigments | Strong weather-resistant and lightfast inorganic and organic colored pigments |
| Color | » Front door glaze: Color-Line Nature, Color-Line Classic and special colors based on [Z] ZowoTec [®] 444 Base EL. Integrated into the Berger-Zobel Color Mixing System. Color differences to [Z] ZowoTec [®] 420/421 and [Z] ZowoTec [®] 425/426 may appear. |
| | » Protective Glaze: colorless |
| | » Color of coating structure results through the interaction between the color of the primer, the intermediate coat and the top coat. |
| | » Color can be influenced by timber-species, -quality, -humidity and processing conditions. |
| | » By adding [Z] ZowoSmart [®] EffectPigment Silver metallic colors can be made. The quantity of use is listed in the technical datasheet of [Z] ZowoSmart [®] EffectPigment Silver. |
| Density | Approx. 1,0 up to 1,2 g/ml depending on color |
| Viscosity | Thixotropic setting |
| Gloss Level | Dull matt, matt and silk-gloss |
| Processing Instructions | |
| | |

Application Method

Spraying

| Spraying process | Nozzle | Pressure | Atomiser |
|---------------------------|-------------|-----------|----------|
| | [mm] | [bar] | [bar] |
| Airless / Airmix | 0,21 – 0,28 | 50 – 100 | 0 – 2,0 |
| Low Pressure Air Spraying | 1,4 – 2,5 | 1,5 – 3,5 | ./. |

Front door glaze

- » Can be sprayed up to a wet-film thickness of 150 $\mu m^{\ast}.$
- » 150 μm corresponds to a dry film thickness of 45 $\mu m.$
- » By spraying more than 150 µm wet film thickness, the drying time rises up significantly and also the performance of the lacquer, for example adhesion and hardness can be impacted negatively.

*Depending on color and processing conditions, the maximum wet-film thickness may be less in individual cases

Protective Glaze

- » Can be sprayed up to a wet-film thickness of 150 µm**.
- » By spraying more than 150 µm wet-film thickness, the drying time rises up significantly and also the performance of the lacquer, for example adhesion and hardness can be impacted negatively.

**Depending on the processing conditions, the maximum wet-film thickness may be less in individual cases.

Ready to use. If necessary, can be thinned with max. 5% water (preferably demineralized water).

- » To avoid flocculation, may not get in contact with solvents.
- » Substrate must be dry, free of dust and grease.
- » Approx. 20 °C for substrate, material und environment, approx. 50% relative air humidity.
- » Do not process below 15 °C or more than 30 °C.
- » To avoid skin formation, always keep containers tightly closed.
- » To remove any paint-particles that may have formed, filter the paint with a sieve, mesh size 125 μ m (e.g. quick sieve).
- » Apply [Z] ZowoTec[®] 444 colorless as a protective glaze **without intermediate sanding** at the earliest after 4 hours, at the latest however within 48 hours after application of the [Z] ZowoTec[®] final coating.
- » Stir material before use; avoid air inclusion.

Approx 150 ml/m² at a wet-film thickness of 150 μ m (without overspray).

Air drying:

» Drying time depends on applied quantity and ambient conditions. Low temperature and high humidity retard drying. Always ensure adequate temperature and air exchange.

Immediately after use with water or [Z] ZowoSmart® HydroCleaner

Processing Conditions

Processing Viscosity

Product Consumption Drying Time (20 °C / 50% relative Air Humidity)

Cleaning of the Tools



System Products

| Impregnation | [Z] ZowoTec [®] 118 Impregnation ProtectX |
|-------------------|--|
| Primer | [Z] ZowoTec [®] 200 Primer |
| | [Z] ZowoTec [®] 203 Primer ProtectX |
| Intermediate coat | [Z] ZowoTec [®] 340 InterCoat IsoX Spray |
| | [Z] ZowoTec [®] 444 TopCoat DoorX |
| Top coat | [Z] ZowoTec [®] 444 TopCoat DoorX |

Steps of coating exemplary. The respective technical data sheets of the products must be observed

Approved top coats to be painted over with [Z] ZowoTec $^{\circ}$ 444 TopCoat DoorX as a protective glaze:

| [Z] ZowoTec [®] 420 | [Z] ZowoTec [®] 426 | [Z] ZowoTec [®] 484 |
|------------------------------|------------------------------|------------------------------|
| [Z] ZowoTec [®] 421 | [Z] ZowoTec [®] 444 | [Z] ZowoTec [®] 485 |
| [Z] ZowoTec [®] 425 | [Z] ZowoTec [®] 480 | [Z] ZowoTec [®] 494 |

Standard Steps of Coating

| Front Door Glaze | 1 x [Z] ZowoTec® 118 Impregnation ProtectX 1 x [Z] ZowoTec® 200 Primer 1 x [Z] ZowoTec® 444 TopCoat DoorX approx. 150 μm 1 x [Z] ZowoTec® 444 TopCoat DoorX approx. 150 μm |
|------------------------|--|
| Protective Glaze | Standard coating structure from the [Z] ZowoTec [®] series |
| | 1 x [Z] ZowoTec® 444 TopCoat DoorX colorless, approx. 150 μm |
| Type of Packaging | |
| | |
| | 20 Liters, further packaging units on request |
| Additional Information | |
| | |
| Special Information | » Perform a test coating. Check color before use. Subsequent claims cannot be considered. Wood ingredients can cause discoloration! |
| | » Use only one batch no. per layer and color tone! |
| | » Please observe Berger-Zobel steps of coating! |
| VOC-Labeling | EU-limit for the product (Cat. A/e): 150 g/l (2007) / 130 g/l (2010) This product contains maximum < 130 g/l VOC |
| Minimum Shelf Life | 12 months cool but free of frost in the closed original packaging. |
| Compatibility | The processor has to test the compatibility of the coating with contact materials like tapes or seals. Cleaning new coated Surfaces earliest after 6 weeks. Use only water-based cleaner, e.g. [Z] ZowoSmart® 5101 Cleaner or a mild neutral cleaner. To avoid irreparable damage, clean without abrasive cleaner, steel wool, abrasive sponges, blades, solvent cleaner. |



Safety Instructions

Always read label and product information before use. Please observe the usual precautions during processing and storage. For safety-relevant data and instructions on disposal refer to the Material Safety Data Sheet.

All information provided is state of the art. Because of the large number of options for use and processing, however, obligation and liability must be ruled out. With the appearance of new versions, previous editions lose their validity