



Version 2.3

[Z] Deco-tec®

Water-based coating systems for not dimensionally stable wooden building components in- and outdoors









[Z] Deco-tec® products offer many advantages:

- » ... eco-friendly as they are water based «
- » ... one-component system, for easy use «
- » ... protection of timber against the elements, ..
 - ⇒ open to diffusion, the timber can „breathe“, therefore regulating the humidity of the timber and protecting against secondary damage
 - ⇒ water repellent
 - ⇒ highly stretchable, to compensate for any swelling or shrinkage of the timber «
- » ... are focused on UV-stable pigments for color fastness «

1C-Hydro-Basis ✓





» [Z] Deco-tec®, the choice of the demanding manufacturer, is very economical, and quick and easy to apply. «

[Z] Deco-tec® – the right product for every application

Coloring	Glazing				Opaque	
Product*	[Z] Deco-tec® 5410 Dip Glaze	[Z] Deco-tec® 5420 Weather Protection Glaze	[Z] Deco-tec® 5425 Terrace Maintenance	[Z] Deco-tec® 5430 Spray Glaze	[Z] Deco-tec® 5450 Weather Protection Color	[Z] Deco-tec® 5480 Spray Coating
Application of the Top Coat						
Application						
Balkony boards	++	++		++	++	++
Block houses	+	++		++	++	++
Carports	+	++		++	++	++
Roof soffits	++	++		++	++	++
Facades	+	++		++	++	++
Garden houses	++	++		++	++	++
Garden furniture						
Window shutters		+		++		++
Play equipment	++		+			
Terrace decking			++			
Fences	++	++		++	++	++

[Z] Deco-tec® coating recommendations

► Glazing

Impregnation	([Z] Deco-tec® 5100)*	([Z] Deco-tec® 5100)*	([Z] Deco-tec® 5100)*	([Z] Deco-tec® 5100)*
Primer				[Z] Deco-tec® 5230
Intermediate Coating				([Z] Deco-tec® 5330)*
Final Coating	[Z] Deco-tec® 5410 (2 - 3x)	[Z] Deco-tec® 5420 (2 - 3x)	[Z] Deco-tec® 5425 (2x)	[Z] Deco-tec® 5430 (2x)
Application of Final Coating				

*if necessary

[Z] Deco-tec® 5100 Impregnation

- ▶ **preventive protection against blue stain, wood destroying fungi and insects**

⇒ for statically not stressed outdoor timber elements without ground contact

- ▶ **fast drying**

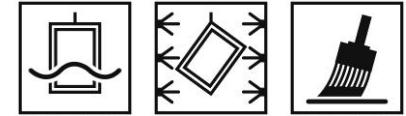
⇒ can be further processed after ca. 2 hours

- ▶ **excellent sandability**

- ▶ hybrid system with finely seized alkyd resin
⇒ high penetration depth

- ▶ **mild odor**

- ▶ equalizes uneven suction behavior of the substrate
⇒ improves color uniformity of the primer



Dip paint

Flow Coat

Brush



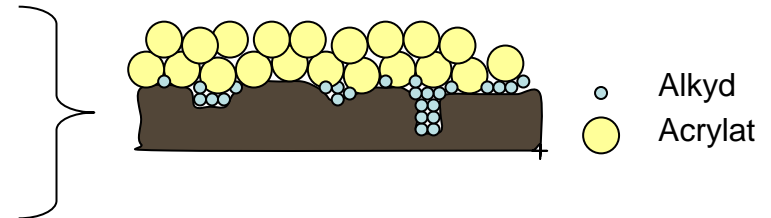
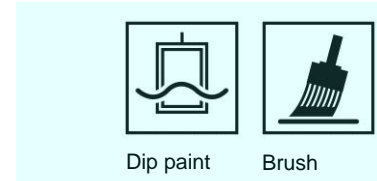
Impregnation	(Z) Deco-tec® 5100*
Primer	
Intermediate Coating	
Final Coating	[Z] Deco-tec® 5410 (2 - 3x)

*if necessary

[Z] Deco-tec® 5410 Dip Glaze

► Thin-layered glaze

- hybrid from alkyd and acrylat
⇒ for exceptional substrate fixation
- highly transparent pigments
⇒ to accent the grain of the timber
⇒ for intense colors
- integrated in **Zobel Color Mixing System**
⇒ Basis DEL
- coating system with one product
⇒ **reduces inventories**
- silk shine (ca. 35 units)



Impregnation	([Z] Deco-tec® 5100)*
Primer	
Intermediate Coating	
Final Coating	[Z] Deco-tec® 5420 (2 - 3x)

*if necessary

[Z] Deco-tec® 5420 Weather Protection Glaze, early block resistant



- ▶ **layer-building thin-layered glaze**
- ▶ **time saving due to early stackability**
- ▶ coating system with one product
⇒ **reduces inventories**
- ▶ **drip-reduced setting**
⇒ for easy and safe brush application
- ▶ highly transparent pigments
⇒ to accent the grain of the timber
⇒ for intense colors
- ▶ integrated in **Zobel Color Mixing System**
⇒ Basis DEL
- ▶ silk shine (ca. 35 units)



Impregnation	([Z] Deco-tec® 5100)*
Primer	
Intermediate Coating	
Final Coating	[Z] Deco-tec® 5425 (2x)

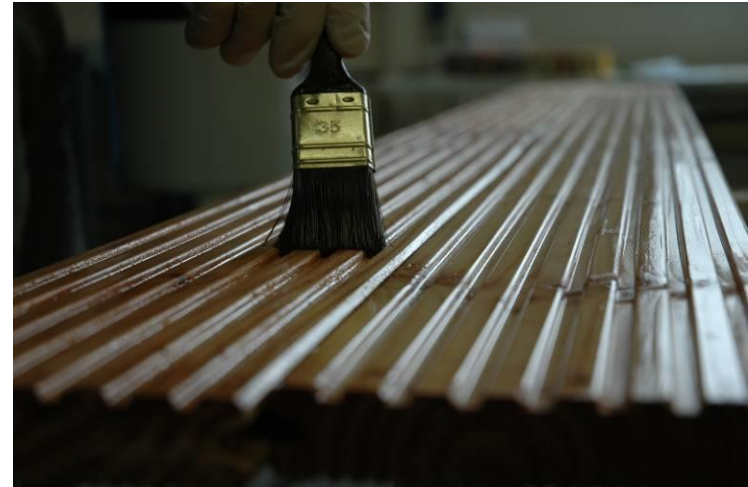
*if necessary

[Z] Deco-tec® 5425 Terrace Maintenance, glazing

- ▶ **no layer buildup** – the wood remains „walkable“
- ▶ refreshens the color tone and **protects against graying**
- ▶ strengthens the wood structure and **protects against fraying**
- ▶ coating system with one product
⇒ **reduces inventories**
- ▶ **early block-resistance**
- ▶ integrated in **Zobel Color Mixing System**
⇒ Basis DEL



Brush



Impregnation	([Z] Deco-tec® 5100)*
Primer	[Z] Deco-tec® 5230
Intermediate Coating	([Z] Deco-tec® 5330)*
Final Coating	[Z] Deco-tec® 5430 (2x)

*if necessary

[Z] Deco-tec® 5430 Spray Glaze

- ▶ **highly transparent intermediate and top coat**
- ▶ to be used with [Z] Deco-tec® 5230 Glazing Primer
- ▶ **intense color**
- ▶ integrated in **Zobel Color Mixing System**
⇒ Basis EL
- ▶ silk shine (ca. 35 units)
- ▶ **highly weather resistant**
⇒ perfect gloss durability
- ▶ **good stand reserve:** sprayable up to 300 µm wet-film thickness



Spray

Especially designed for shutters ✓

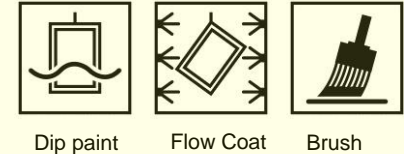


Impregnation	([Z] Deco-tec® 5100)*
Primer	[Z] Deco-tec® 5230
Intermediate Coating	([Z] Deco-tec® 5330)*
Final Coating	[Z] Deco-tec® 5430 (2x)

*if necessary

[Z] Deco-tec® 5230 Glazing Primer

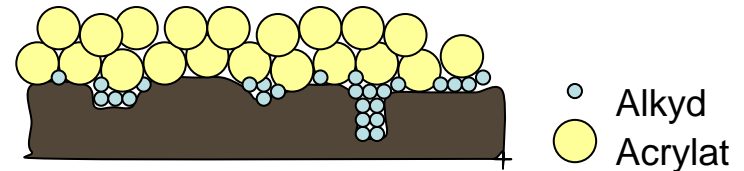
- ▶ coloring in combination with [Z] Deco-tec® 5430 Spray Glaze
- ▶ hybrid from alkyd and acrylat for perfect fixation on the timber



Dip paint

Flow Coat

Brush



- ▶ **excellent wetting properties**
- ▶ **even flow for uniform coloring**
⇒ saves on costly touch-up work
- ▶ integrated in **Zobel Color Mixing System**
⇒ Base GL

Impregnation	([Z] Deco-tec® 5100)*
Primer	[Z] Deco-tec® 5230
Intermediate Coating	([Z] Deco-tec® 5330)*
Final Coating	[Z] Deco-tec® 5430 (2x)

*if necessary

[Z] Deco-tec® 5330 Intermediate Coat, colorless

- ▶ to be used with [Z] Deco-tec® 5230 and [Z] Deco-tec® 5430
- ▶ **for resinous timbers, especially larch**
- ▶ **prevents surface disorders of the top coat,**
caused by solvent properties of resinous ingredients
- ▶ **diffusion barrier** through special surface treated
filling agent
- ▶ stand reserve for a secure adhesion even with
complicated geometry





Spray



[Z] Deco-tec® coating recommendations

► Opaque

Impregnation	([Z] Deco-tec® 5100)*	([Z] Deco-tec® 5100)*
Primer	([Z] Deco-tec® 5280)*	[Z] Deco-tec® 5280
Intermediate Coating		[Z] Deco-tec® 5380
Final Coating	[Z] Deco-tec® 5450 (2x)	[Z] Deco-tec® 5480
Application of Final Coating		

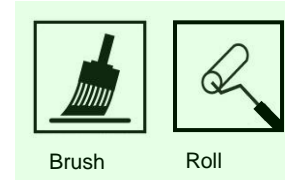
*if necessary

Impregnation	((Z) Deco-tec® 5100)*
Primer	((Z) Deco-tec® 5280)*
Intermediate Coating	
Final Coating	[Z] Deco-tec® 5450 (2x)

*if necessary

[Z] Deco-tec® 5450 Weather Protection Color

- ▶ **weather resistant, opaque surface coating**
- ▶ **water repellent**, due to micro hydrophobicity
- ▶ excellent wet adhesion properties, the surface coating is great in all weathers
- ▶ **high solid**, therefore good covering properties,
layers are built up quickly and rips/cracks are covered
- ▶ **exceptional color fastness**
- ▶ **early blocking stability**
- ▶ integrated in **Zobel Color Mixing System**
⇒ Basis A, B and C
- ▶ silk-matt (ca. 20 gloss units)



Impregnation	(Z) Deco-tec® 5100*
Primer	[Z] Deco-tec® 5280
Intermediate Coating	[Z] Deco-tec® 5380
Final Coating	[Z] Deco-tec® 5480

*If necessary

[Z] Deco-tec® 5480 Spray Coating

- ▶ opaque intermediate and final coat
- ▶ use in combination with [Z] Deco-tec® 5280 primer
- ▶ **good opacity and fast layer build-up**
- ▶ color tones available ex factory
- ▶ silk shine (ca. 35 units)
- ▶ **highly weather resistant**, perfect gloss retention
- ▶ **excellent color fastness**



Spray



Especially designed for shutters

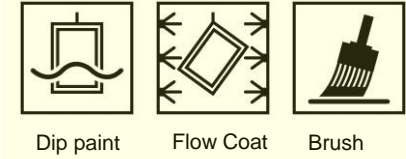


Impregnation	([Z] Deco-tec® 5100)*
Primer	[Z] Deco-tec® 5280
Intermediate Coating	[Z] Deco-tec® 5380
Final Coating	[Z] Deco-tec® 5480

*if necessary

[Z] Deco-tec® 5280 Insulating Primer white, opaque

- ▶ use with [Z] Deco-tec® 5480
- ▶ excellent bonding bridge: Hybrid system from alkyd and acrylat
- ▶ **insulating properties** against water-soluble ingredients of deciduous and coniferous trees
- ▶ ready to use
- ▶ high level of solid bodies for high opacity
- ▶ **excellent flowing properties**
⇒ no time-consuming sanding of drip marks
- ▶ good sandability



Impregnation	([Z] Deco-tec® 5100)*
Primer	[Z] Deco-tec® 5280
Intermediate Coating	[Z] Deco-tec® 5380
Final Coating	[Z] Deco-tec® 5480

*if necessary

[Z] Deco-tec® 5380 Insulating Intermediate Coat, white opaque



- ▶ use with [Z] Deco-tec® 5280 Primer and [Z] Deco-tec® 5480 Spray Coating
- ▶ **insulating properties for resinous timber**
 - ⇒ minimizes danger of discoloration
 - ⇒ reduces risk of surface disorders of the top coat caused by solvent properties of resinous ingredients
- ▶ **insulating properties against water-soluble wood ingredients**



Material consumption, based on application method

▶ Brush

consumption ca. 80 - 100 ml/m² per application
best results when applying with acrylic brushes



▶ Roll on

consumption ca. 80 - 100 ml/m² per application
foam- or gauze-rollers can be used



▶ Dip paint

consumption ca. 80 - 100 ml/m² per application




▶ Spray

consumption based on product: 125 – 175 ml/m²
per application (overspray not taken into consideration)



[Z] Deco-tec® effortlessly complies with „Decopaint“-guideline

Product	VOC-approved 	VOC content [g/l]	Limiting value VOC [g/l] Level II (2010)
[Z] Deco-tec® 5230 Glazing Primer		27	130
[Z] Deco-tec® 5280 Insulating Primer white, opaque		18	130
[Z] Deco-tec® 5330 Intermediate Coat, colorless		34	130
[Z] Deco-tec® 5380 Insulating Intermediate Coat, white		12	130
[Z] Deco-tec® 5410 Dip Glaze		47	130
[Z] Deco-tec® 5420 Weather Protection Glaze, early block resistant		29	130
[Z] Deco-tec® 5425 Terrace Maintenance, glazing		64	130
[Z] Deco-tec® 5430 Spray Glaze		46	130
[Z] Deco-tec® 5450 Weather Protection Color		53	130
[Z] Deco-tec® 5480 Spray Coating		60	130

[Z] Deco-tec® is highly stretchable

- ▶ to compensate for any swelling or shrinkage of the timber
- ▶ reduces danger of hail damage

Elongation at break during tensile test ^{1), 2)}

(average value derived from several measurements)

Product	Elongation at Break [%]
[Z] Deco-tec® 5430 Spray Glaze	169
[Z] Deco-tec® 5480 Spray Coating	119

1) In reference to DIN 53504

2) Application method, quantity and drying according to Zobel test method 01



[Z] Deco-tec® is harmless for humans

- Requirements of the EN 71 Part 3, Safety of toys – Migration of certain elements are fulfilled

tested by a certified institute



INSTITUT FÜR ANALYTISCHE CHEMIE UND MIKROBIOLOGIE

Umweltanalytik • Lebensmittelchemie • Mikrobiologie • Emissionsmessteile

Zobel Chemie GmbH
Weinheimer Straße 50
67547 Worms

Ihr Zeichen: Unser Zeichen: Datum: 15. 12. 2009

PRÜFBERICHT: Lacke

Prüfvorschrift s. Analysenbericht
Die Analyseergebnisse bewegen sich innerhalb der vereinbarten Nachtoleranz

Prüfbericht 3300-A123-2009/1-3

Probeneingang 25.11.2009

Entnahmedatum o.A.

Objekt Flüssigfarbe/Lack

Bezeichnung Deco-tec 5400

Probennehmer Auftraggeber

Bestellung Schreiben vom 18.11.2009, Udo Gumaholmer

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Emissionsmessstelle
nach § 26, 29 StmSchG
Trinkwasserlabore
zugelassen nach
§ 15 Trinkwasserverordnung
Mikrobiologisches Labor
zugelassen nach
§ 44 Infektionsschutzgesetz
Ministerium für Umwelt und
Vener. Güter/Württemberg
Anerkennung als
Untersuchungsstelle in der
Ablaufschicht
Sachverständige Stelle in der
Wasserwirtschaft

Die Prüfergebnisse bestätigen sich ausschließlich auf dem Prüfgegenstand und dürfen ohne Genehmigung auch nicht in Ausgängen vervielfältigt werden.

SAL - Akkreditierung für Lebensmittel und Bedarfsgegenstände

SA
nach § 1 der Gegenüber-Sachverständiger-Prüfaktenverordnung

[Z] Deco-tec® stands for eco-friendliness and quality

- ▶ water-based products with minimum VOC content
- ▶ physiologically harmless coatings and glazes
- ▶ energy-saving ZOBEL ANTI-HEAT concept
- ▶ highly durable products
- ▶ no heavy metals
- ▶ compliance with all legal requirements such as Decopaint, REACH, BPR
- ▶ products without hazardous or dangerous goods labeling
- ▶ green production with certified energy efficiency



[Z] Deco-tec® provides long-term protection

- ▶ glazing colors **up to 7 years***
- ▶ opaque colors **up to 12 years***

*Dependent on construction, exposure and correct processing.
It is to be taken into consideration, that the durability of elements that are subjected to extreme weathering and high humidity is reduced. The surface coating is to be checked on a yearly basis for damage and to be repaired in a good and workman like manner.



In many years of weathering proven stability

[Z] Deco-tec® is integrated in Zobel Color Mixing System

► based on base coats and colorants

Product	Glazing Colors		Opaque Colors	
	Color-Line Nature	Special Tones	RAL	Special Tones
[Z] Deco-tec® 5230	Basis GL			
[Z] Deco-tec® 5410	Basis DEL			
[Z] Deco-tec® 5420	Basis DEL			
[Z] Deco-tec® 5425	Basis DEL			
[Z] Deco-tec® 5430	Basis EL			
[Z] Deco-tec® 5450			Basis A, B, C	

Zobel Color Mixing System

» Colors are mixed within minutes and can be reproduced after years. «



► manual colorant dosing



► automated colorant dosing
with EDP supported recipe selection



Our competences

ZOBEL Zowo-tec®

Water-based coatings for
dimensionally stable wooden building
components – windows, doors

ZOBEL [Z] Deco-tec®

Water-based coatings for **not**
dimensionally stable wooden building
components in- and outdoors

Zobel Zowo-plast®

Water-based coatings for PVCu in- and
outdoors