

**[Z] ZOBEL**

Coating Systems



# Your Coating Expert

In search of the perfect coating.

Although coating systems represent only a small fraction of the finished product, they are of great importance. Dr. Thomas Reiß, Technical Marketing Manager at Zobel Chemie GmbH, is an expert in this field and always striving for the perfect coating.

**Dr. Reiß, what is the perfect coating?**

It meets all the functional requirements, is tailored to the application of the fabricator and provides optimum protective action. Moreover, the perfect coating conveys a sense of life and joy.

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The experts from Zobel investigate the coats and glazes of the future.

# Shoulder check by the experts.

It depends on more than just the excellent quality of coatings and glazes when it comes to coating wood and PVC.

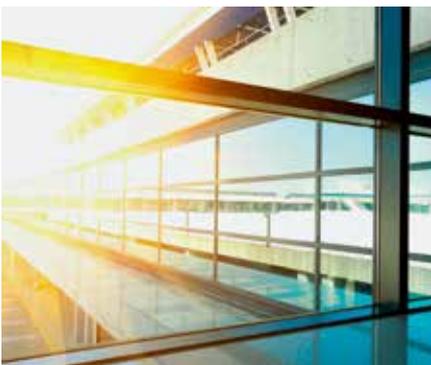
Zobel's water-based coatings and glazes for wood and plastic are a guarantee for efficiency- and cost-oriented coating processes. It is also possible to fulfil the special requirements of our customers at any time. With the help of Zobel colouristics during colour formulation and the Zobel colour mixing system, our customers can quickly and easily achieve their desired colour with high processing reliability and cost-efficiency.

Zobel develops and produces in Germany and therefore lives to the quality mark „Made in Germany“. Thanks to

our intensive research and development, we are particularly active in the area of sustainability. Physiologically harmless coatings and glazes with low VOC content are mandatory requirements when developing every product. Zobel products are "green". We document this through our environmental certification in accordance with DIN EN ISO 14001.

With Zobel ANTI-HEAT, we are the first company in the industry to develop coatings with thermal protection. They prevent excessive heating-up even in strong sunlight. The benefits are many: the surface

heats up to 30°C less, which also means darker colour tones are possible. Dimensional stability is nevertheless guaranteed. Cracks and the outflow of resin are minimised and the components are more durable. The latest development Zobel SUPER ANTI-HEAT reduces heating-up even further. This restricts the temperature difference between dark coated and white uncoated PVC profiles to about 6°C and makes deep black colour tones possible.



With the ANTI-HEAT concept, Zobel has given the industry new impetus. The composition of colour tones provides cooler surfaces in direct sunlight and ensures longer durability.

# See you. On a level playing field.

The customer relationship is just as important as product quality. That is why we give it special attention. Together with our customers, we work in long-term, intensive partnerships that are characterized by close cooperation, respect and an active exchange.

It takes two for a business relationship to be successful. We want to grow together with our customers. Consequently, we offer comprehensive, sales- and service-oriented support on location worldwide. Trained professionals assist our customers personally with technical issues and ensure there is an uncomplicated transfer of knowledge. The internal sales team provides support

from the headquarters. Moreover, we are part of a network of machine and plant manufacturers as well as many other partners in the field of coatings. Rely on us for quick, just-in-time solutions.

We also provide you with support in sales. You receive all the relevant media for marketing support, from brochures to presentations, on paper

or electronically. With our calculation tool, we provide the necessary overview that makes the cost savings clear.

In terms of training, we pursue the "train the trainer" concept. We welcome you in our application technology centre that is ready for series production.



The professionals from Zobel are at your side.

Continuation of the interview from page 1 with Dr. Thomas Reiß

## What are the greatest challenges to fulfilling these criteria?

The development of innovative solutions requires strong skills in conjunction with good contacts to the fabricators as well as to the raw materials and the technology side. The point is to know the needs of customers and to achieve this by subtly grasping what is feasible. For example, reducing lead times in production is a constant incentive for innovations.

The coating is the business card of every high-quality window. It is a key buying criterion and through the durability jointly responsible for customer satisfaction. Therefore, it is essential to not compromise in terms of the quality of the coating materials.

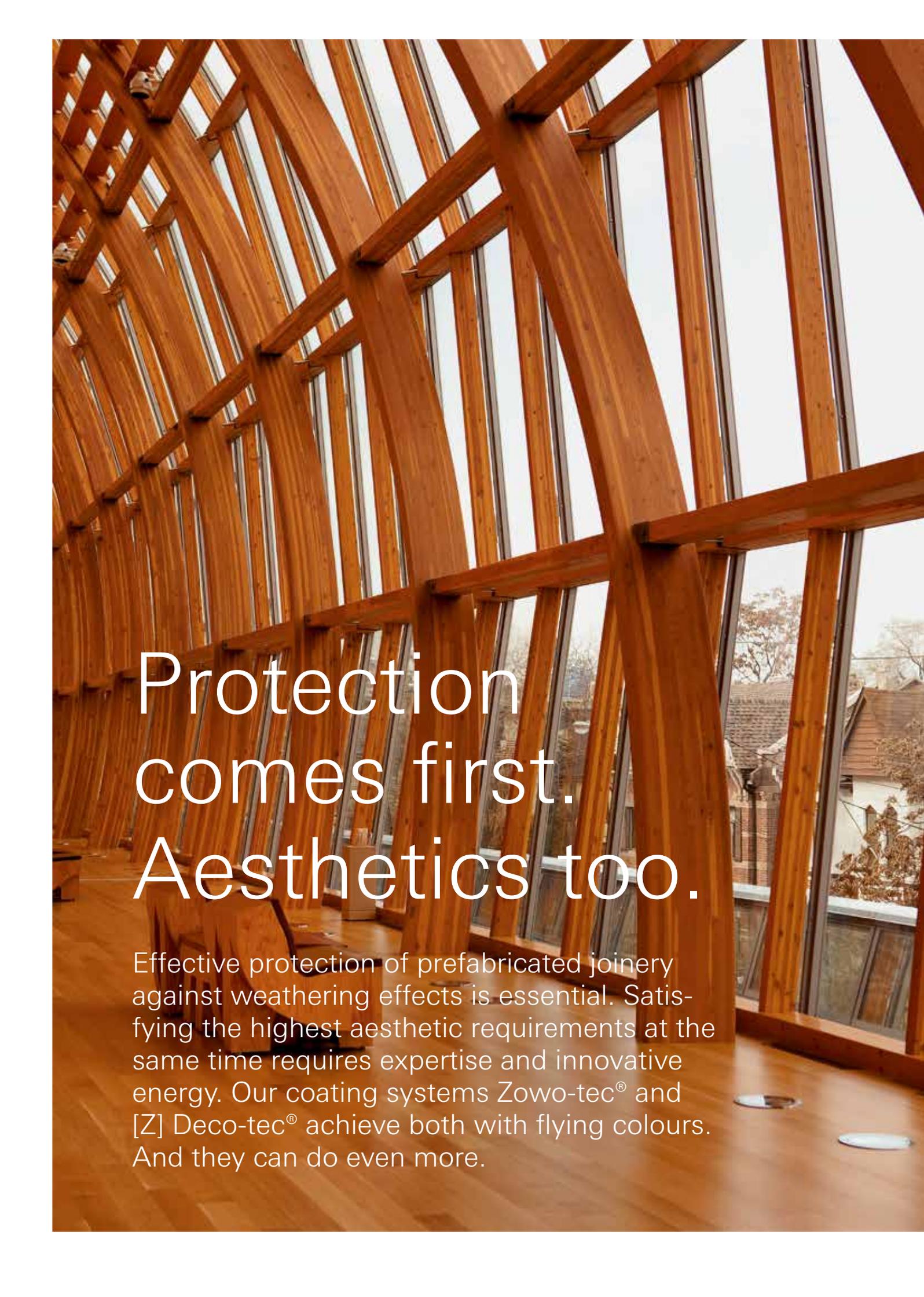
## As a medium-sized family business, Zobel is regarded as a premium manufacturer. How has work and business management changed

## since the company was founded 70 years ago?

The tasks have become more international and varied. New challenges such as sustainability have gained centre stage. Project and communication processes have also accelerated greatly. Nevertheless, despite all of these changes, our unaffiliated freedom of decision has remained the same. We can pursue long-term goals.

## What is Zobel's secret to success?

The long-term pursuit of goals is certainly a core element. It rightly means „You reap what you sow“. Another is expertise in key positions. Competent employees are the heart of the company. Collaborative partnerships with customers, trading partners and suppliers are also crucial.



# Protection comes first. Aesthetics too.

Effective protection of prefabricated joinery against weathering effects is essential. Satisfying the highest aesthetic requirements at the same time requires expertise and innovative energy. Our coating systems Zowo-tec® and [Z] Deco-tec® achieve both with flying colours. And they can do even more.

### Zowo-tec®

Wood as a building material is desired due to its natural aesthetics. In order to give it lasting protection despite exposure to moisture or UV radiation, high quality coatings are required for dimensionally stable structural elements such as windows and doors. With Zowo-tec®, Zobel has products in its range that overcome precisely these challenges. They preserve the natural wood structure and the wide range of coatings and glazes bring out strong colour accents.

Zowo-tec® sets standards even from an economic point of view. The well-structured range of core products can serve the complete spectrum, from glazing to super transparent through to opaque, and the quality of the coatings allow great savings in terms of storage, time and materials. The fabricator can therefore choose according to their working method between premium process-optimised and flow-coating process-optimised coating systems. Sanding work is system-optimised and therefore kept to a minimum. Time is money, and thanks to the early blocking resistance of top coats and their suitability for accelerated

drying, short cycle times can also be guaranteed. The range of standard products can be expanded in various ways.



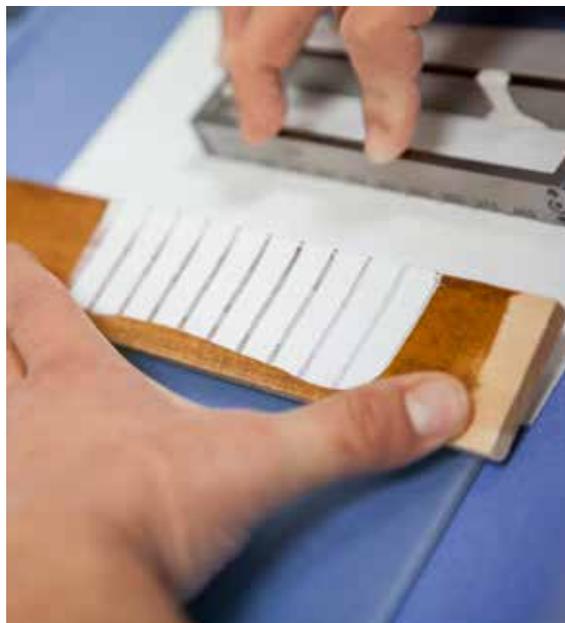
**Wood is protected, yet remains safe to walk on. Non-film-forming coating on outdoor wooden floors.**

In a collaborative partnership with you, we can provide customized solutions. Those who opt for Zowo-tec®, also opt for tried and tested weatherability even in the most varied of climatic zones, a brilliant surface finish and efficient insulation of wood components. In addition, Zobel has developed the ANTI-HEAT concept for significantly less heating up of dark components and the impressive Zobel long-term warranty.

### [Z] Deco-tec®

Façades, carports, shutters, fences, etc. are often exposed to extreme weather conditions. If wood elements have been installed openly, you can expect large volume changes due to

the active absorption and release of moisture. This places high demands on the breathability and elasticity of coatings. Effective UV protection must be guaranteed at the same time. The water-based premium coatings from the [Z] Deco-tec® series from Zobel are the ideal solution for indoor and outdoor non-dimensionally stable wooden components. Depending on the coating task, film-forming or non-film-forming products are available. [Z] Deco-tec® penetrates deep into the wood and protects the substrate from greying and fraying. As no or only slight layer formation takes place, the substrate retains its natural effect.



**Simultaneous application of various wet film thicknesses of a coating using a stepped doctor blade for determining the film thickness after drying samples in a vertical position.**

Always on the move: The water content of wood components also causes its volume to fluctuate.

Designed for extreme stress, the coatings are highly elastic and remain intact despite any shrinking and swelling movement of the wood. They are water-resistant, yet breathable. This enables the timber to release excess moisture in the form of water vapour again. The eco-friendly,

water-based one-component coatings are particularly easy to use and provide long-term protection.



# A fortress in a thousand colours.

The demands on coatings for PVC are high. With Zowo-plast®, premium finishes are possible that withstand even the toughest influences. There are also an unlimited variety of colours and optimum processing properties.





**Measurement of the layer thickness of a bare coating film in preparation for the elongation at break measurement for determining the flexibility of the coating.**



### **Zowo-plast®**

By fulfilling the world-wide hardest performance requirements for coatings that coat PVC (AAMA 615-13), the premium product Zowo-plast® is rightly called "Superior Performing Coating". Even in extreme climates such as Latin America, the Middle East or Siberia, the coatings perform impressively due to their high resistance.

As a thermoplastic plastic, PVC tends to deform at temperatures above about 70°C. Because objects in direct sunlight can heat up far above the ambient temperature, the use of dark colour tones with this material is usually critical. Here the Zobel ANTI-HEAT shield gets working and reduces the colour tone dependent heating-up to values that are similar to uncoated white PVC. This ensures dimensional stability as well as the functional

integrity of the PVC components even at a higher ambient temperature. ANTI-HEAT allows even deep black tones to be used.

The optical range is virtually unlimited with Zowo-plast®. PVCu profiles, PVC windows, doors and façades can be coated in every imaginable colour tone. This versatility is complemented by possible colour effects such as uni, structure and metallic. The result is a pure and smooth premium surface, as scratch and abrasion-resistant as a hardwood floor finish and particularly easy to maintain.

The cost saving potential of Zowo-plast® is enormous and exceeds alternative methods of colouring, such as extrusion/coextrusion or film lamination. It offers individual, flexible batch sizes, lower investment requirements, reduced

capital commitment, as well as lower material and process costs.

Even during use, Zowo-plast® is excellent thanks to high efficiency and a simplification of processes. Only one basecoat is necessary for all colour tones. Normally, all coating systems are achieved in one operation. Even metallic coatings are designed as a single-layer coating. The self-protected effect pigments do not require an additional clear varnish coating. The water-based 1C-PUR coating is process-efficient, eco-friendly and ensures excellent processing, whether hand held or automated by means of a spraying system, spraying robot or Vacumat.

The toughest test for PVC coatings:  
What exactly happens in the AAMA 615-13 test?

**AAMA 615-13** defines the performance criteria, such as hardness, impact resistance, abrasion resistance, dry adhesion, wet adhesion, resistance to acid, mortar, cleaner, resistance in climates with extreme humidity, temperatures change, extreme heat and high UV exposure.



“We have only one solution for you – the right one.”

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