# DURAFLEX TECHNOLOGY

## SIKKENS WOOD COATINGS

## ELASTICITY FOR HIGH WEATHER-RESISTANCE

Optimum durability and longlasting protection thanks to a perfect combination of substrate and coating: The Duraflex coating system fulfills the highest of quality expectations.

Passion for wood



## DURAFLEX TECHNOLOGY: OUTSTANDING COMBINATION OF WOOD AND COATING

The Sikkens Wood Coatings Duraflex coating system stands for durability through the best weather protection and also contributes towards your customers being completely satisfied with their wooden windows.

Optimum durability is achieved with the new Sikkens Wood Coatings Duraflex coating system. Thanks to the long term elasticity of the film – particularly needed in the case of temperature fluctuations – the product is optimally suited to the substrate. Innovative light stabilizers (in the translucent coatings) give the coating high and long-lasting protection against against UV radiation. The outstanding permeable properties of the film ensure an especially good moisture balance in the wood. Thanks to these properties the Duraflex coating system guarantees an extremely high weather resistance.

## For opaque and translucent coating systems

With RUBBOL® WF 382 (semi matt) and RUBBOL® WF 387 (satin-gloss) as well as CETOL® WF 952 (semi matt) and CETOL® WF 957 (satin-gloss) for opaque and translucent coatings, Sikkens Wood Coatings offers a complete system with innovative Duraflex technology: The products can be used as mid and top coats.

#### At a glance:

- Long term elasticity particularly needed in case of temperature and moisture fluctuations
- Extreme resistance to the impact of extreme weathering
- Very good timber adhesion
- Optimum durability
- Ideal customization for the wood substrate
- High UV protection through innovative new light stabilizers
- Long-lasting effectiveness of UV light stabilizers
- Especially effective moisture protection through the film's outstanding permeable properties
- High resistance to cracking



All products with Duraflex technology have the SKH-KOMO product certificate 33199 according to external tests by the SKH Institute in the Netherlands.

## System benefits that impress:

#### Duraflex coating

Wood

Conventional coatings

#### Heat:

The wood releases its moisture and shrinks. The **coating follows** the movement without material stress.



## PROVEN IN ENDURANCE TESTS

The high, long-lasting weather protection that the Duraflex technology provides the coating with has been proven by the weathering tests in the Q-Lab Weathering Research Service. In addition, the Fraunhofer Wilhelm-Klauditz-Institut für Holzforschung (WKI) has confirmed the very high elasticity of the coating.

#### **Extreme weathering conditions**

The Q-Lab, based in Homestead, southern Florida, is an internationally recognized centre for the testing of the endurance of coatings.

Thanks to year-round

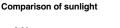
- intensive sunlight
- · high temperatures,
- high air humidity and
- copious rainfall

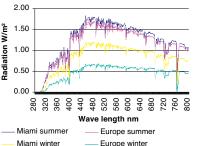
the humid climate there offers the ideal prerequisite for making incredibly realistic predictions of the UV and weather resistance of products. And in the shortest space of time as one year of weathering in Florida is equivalent to that of 2.5-3 years in Central Europe.



www.q-lab.com

The comparison of radiation intensity proves that Florida is rightly described as the Sunshine State: whilst the sun data in Miami in summer are very similar to those in Central Europe, there are significant differences in the sun intensity in the winter. After 24 months of weathering in Florida – or the equivalent weathering period of fix to six years in Central Europe – the CETOL® WF 952/957 coating still looks as good as it did on the first day. Intermittent maintenance coating is therefore not necessary.





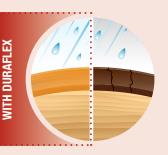


Coating structure with Duraflex after 24 months in Florida

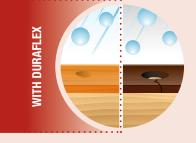
Primer: CETOL® WP 566 Mid coat: CETOL® WM 675 Top coat: CETOL® WF 957 (2x)

#### Rain:

The ingressing **moisture** makes the wood **swell**. But the **flexible coating** expands and ensures a controlled **release of moisture** thanks to its special diffusion characteristics.



Hail: Better impact strength reduces cracking.





#### Proven elasticity

Coatings for windows and doors made from wood should react to swelling and shrinking as well as other minor distortions of the wood without cracking. In accordance with guideline H0.03 for dimensionally stable wooden parts it should therefore show an elongation at break of more than 20 percent. According to elasticity measurements carried out by the Fraunhofer Wilhelm-Klauditz-Institut für Holzforschung (WKI), CETOL® WF 957 not only fulfills the HO.03 guideline and can therefore be recommended for wooden windows. With over 200 percent the coating even exhibits an above-average elongation at break.



#### **Extreme sun:**

The **UV light is absorbed** by the coating. Wood and coating remain undamaged.



#### Frost & snow:

Even at **low temperatures** the **coating remains elastic** and ensures that **diffusion is pos-sible** for a regulated moisture equilibrium.



## **TECHNICAL DATA**



Extremely weather resistant mid and top coats for dimensionally stable and semi stable wooden components

Type of binder:Pure acrylicGloss level:Semi mattProcessing:Spray

#### **Product characteristics**

- Highly flexible binder
- Very good impact strength
- Early water-resistance

#### Color

Pure white RAL 9010 White similar to RAL 9016 Color shades made from 4041 color concept, RAL and NCS

#### Packsizes

## RAL 9010: 20 litres RAL 9016: 20 litres/120 litres Base NO0: 4.9 litres/9.8 litres/ 19.6 litres Base W05: 5 litres/10 litres/ 20 litres



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   properties

#### Color

Sikkens Wood Coatings standard colors

Joinery Color Classics

#### Packsizes

5 litres/20 litres

CETOL® WF 957

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Sikkens Wood Coatings standard colors

Joinery Color Classics

#### Packsizes

5 litres/20 litres

The optimum translucent coating structure for porous timber species (leaf woods)

Primer: CETOL® WP 566 Mid coat: CETOL® WM 675 or CETOL® WM 680 (Ion-Lock-Technology) Top coat: CETOL® WF 952 or CETOL® WF 957 (Duraflex technology)

The isolating and pore-filling properties of the lon-Lock-Technology in combination with the weather resistant properties of the Duraflex technology as a top coat guarantee a protection of the highest quality!

Our technical data sheets and safety data sheets can be downloaded at: www.sikkens-wood-coatings.com



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#### www.akzonobel.com

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For more information please visit www.akzonobel.com

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