ARL 309 – Working guideline for coating dimensionally stable construction elements
Windows & front doors

Coating system Elements

Contents

1. Basics

This objective working guideline describes the wood species and coating systems covered by the Elements guarantee and must be observed in addition to the corresponding guarantee folder. Construction and indications for processing as well as general information such as wood quality can be found in the **ARL 300 - Working guideline for coating dimensionally stable and limited dimensionally stable construction elements - General part.**

All ADLER products must be processed in accordance with the technical data sheets and the General Terms and Conditions of ADLER-Werk Lackfabrik Johann Berghofer GmbH & Co KG must be observed. All relevant standards or guidelines for construction and storage must also be taken into account for windows. Compliance with the construction monitoring obligation as well as the proper assembly of wooden windows and doors according to the state of the art and measures intended for protection during the construction phase must be ensured.

2. Guarantee coating systems

The listed coating systems are valid in combination with the wood species Spruce, Fir, Pine, Larch, Douglas, Hemlock, Oak, Chestnut, Meranti, Mahogany, Teak and Accoya (modified wood).

V-joints must be treated with ADLER V-Fugensiegel 55630 f and end-grain wood areas with ADLER Hirnholzversiegelung 55621 f. For front doors, a final treatment with Aquawood Protect 53215 in 2-component application (for higher mechanical and chemical resistance) or the use of the Protor coating system for front doors (see **ARL 305 - Working guideline for coating**

dimensionally stable and limited dimensionally stable construction elements – Coating front doors and garage doors with Aquawood Protor) is required.

2.1. For Spruce, Fir, Pine, Douglas, Hemlock and Accoya

TRANSPARENT – 3-layer-coating system		Application
Graduated sanding up to at least grit size 120		
1. Impregnation	**1x Aquawood Primo A3** 5453 **- A6** 5456	Immersion or flow-coating
Light smooth sanding, if necessary		
2. Intermediate coat	**1x Aquawood Intermedio FlowQ** 5721 or 1x Aquawood Intermedio HF 53769	Immersion or flow-coating
	1x Aquawood Intermedio ISO 5705 or 1x Aquawood Intermedio Isogrip 5714	Spraying
Intermediate sanding with grit size 220 - 240		
3. Finishing coat	**1 x Aquawood Finatop 40 5140**	Spraying

OPAQUE – 3-layer-coating system		Application
Graduated sanding up to at least grit size 120		
1. Impregnation	**1 x Aquawood Primo A2** 5452	Immersion or flow-coating
Light smooth sanding, if necessary		
2. Intermediate coat	**1 x Aquawood Intercare SQ** 5522 or 1 x ADLER Acryl-Fensterfüller HighRes 5501 or 1x Aquawood Intercare ISO 5503 or 1x Aquawood Intercare Isogrip 5505	Spraying
Intermediate sanding with grit size 220 - 240		
3. Finishing coat	**1x Aquawood Covatop XT 20** 5020	Spraying

*Exception see chapter 3 Colour shades

Please observe the relative technical data sheets of the products.

2.2. For Meranti, Mahogany, Teak and Larch**

TRANSPARENT – 3-layer-coating system		Application
Graduated sanding up to at least grit size 150		
1. Impregnation	**1x Aquawood Primo A3** 5454 **- A6** 5456	Immersion or flow-coating
Light smooth sanding, if necessary		
2. Intermediate coat	**1 x Aquawood Intermedio ISO** 53613 ff or 1x Aquawood Intermedio Isogrip 5714	Spraying
Intermediate sanding with grit size 220 - 240		
3. Finishing coat	**1x Aquawood Finatop 40** 5140	Spraying

OPAQUE – 3-layer-coating system		Application
Graduated sanding up to at least grit size 150		
1. Impregnation	**1 x Aquawood Primo A2** 5452	Immersion or flow-coating
Light smooth sanding, if necessary		
2. Intermediate coat	**1x Aquawood Intercare SQ** 5522 oder 1x ADLER Acryl-Fensterfüller HighRes 5501 oder 1x Aquawood Intercare ISO 5503 oder 1x Aquawood Intercare Isogrip 5505	Spraying
Intermediate sanding with grit size 220 - 240		
3. Finishing coat	**1x Aquawood Covatop XT 20** 5020	Spraying

**Colour shades on larch as under chapter 2.1 for Spruce, Fir, Pine, Douglas, Hemlock and Accoya

Please observe the relative technical data sheets of the products.

2.3. For Oak and Chestnut

TRANSPARENT - 4-layer-coating system		Application
Graduated sanding up to at least grit size 150		
1. Impregnation	**1x Aquawood Primo A4** 5454 **- A6** 5456	Immersion or flow-coating
No slight smooth sanding required		
2. Primer coat	**1x Aquawood Intermedio DQ** 5706	Immersion or flow-coating
Light smooth sanding, if necessary		
3. Intermediate coat	**1x Aquawood Intermedio ISO** 5705 alternatively: Primer and intermediate coat 2x Aquawood Intermedio Isogrip 5714	Spraying
Intermediate sanding with grit size 220 - 240		
4. Finishing coat	**1x Aquawood Finatop 40** 5140	Spraying

OPAQUE - 4-layer-coating system		Application
Graduated sanding up to at least grit size 150		
1. Impregnation	**1x Aquawood Primo A2** 5452	Immersion or flow-coating
No slight smooth sanding required		
2. Primer coat	**1x Aquawood Intercare FlowQ** 5521 oder 1x ADLER Acryl-Flutfüller Weiß 5510	Immersion or flow-coating
Light smooth sanding, if necessary		
3. Intermediate coat	**1x Aquawood Intercare SQ** 5522 or 1x ADLER Acryl-Fensterfüller HighRes 5501 or 1x Aquawood Intercare ISO 5503 or 1x Aquawood Intercare Isogrip 5505	Spraying
Intermediate sanding with grit size 220 - 240		
4. Finishing coat	**1x Aquawood Covatop XT 20** 5020	Spraying

Please observe the relative technical data sheets of the products.

3. Colour shades

Colour shade changes of transparent coating systems on wood during weathering are fundamentally unavoidable, but should not be disturbing (assessment analogous to VFF Merkblatt HO.05: 2009-05). For softwoods, all shades of Aquawood Primo A3 5453 - A6 5456 are permitted, with the exception of light brown. For hardwoods, all shades of Aquawood Primo A4 5454 - A6 5456 are permitted. The lightest colour shade to be used for the finishing coat is F015.
Colour tone combinations can be taken from the current ADLER window colour charts.

For the opaque colour shades there are no restrictions for RAL and NCS colour shades. Effect and metallic colour shades are generally excluded from the guarantees. The use of an antiheat pigmentation leads to a significantly reduced temperature on the surface in direct sunlight (depending on the colour shade approx. 10 °C – 20 °C). This leads to an increased durability (reduced thermomechanical stress) and significantly lower resin flow in woods rich in resins such as pine or larch. Colour shades with anti-heat finish are available from the factory.

4. Maintenance

Annual cleaning with ADLER Top-Cleaner 51696 and maintenance with ADLER Top-Care 7227000210 (in the kit ADLER Windoor Care-Set 7229) is required.