

ARL 308 – working guidelines for the coating of dimensionally stable construction components

Windows and exterior doors

Advanced coating systems

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1 Basic principles

These working guidelines set out the types of wood and coating systems that are covered by the Advanced guarantee and should be seen as an addition to the relevant guarantee folder. Advice on construction and use, as well as general information such as wood quality, can be found in **ARL 300 – working guidelines for the coating of dimensionally stable construction components and construction components with limited dimensional stability – general section**.

All ADLER products are to be used in accordance with the technical data sheets and the General Terms & Conditions of ADLER-Werk Lackfabrik Johann Berghofer GmbH & Co KG. Likewise, all the relevant standards and guidelines on the construction and storage of windows must be taken into consideration. It must be ensured that all obligations with regard to buildings inspection are complied with, that wooden windows and doors are professionally installed in line with current standards of technology, and that protective measures are ensured during the construction phase.

2 Guaranteed coating systems

The coating systems listed are only valid when used in combination with the following types of wood: spruce, fir, larch, pine, Douglas fir, hemlock, oak, meranti, mahogany, teak and accoya (modified wood).

V-shaped joints must be pre-treated with **ADLER V-Fugensiegel** (7509). Exterior doors require final treatment with **Aquawood Protect** (5128) used as a two-component product (for a higher degree of mechanical and chemical resistance). Or alternatively, we would recommend using the Protor coating system for exterior doors (see **ARL 305 – working guidelines for the coating of dimensionally stable construction components and construction components with limited dimensional stability – coating exterior doors and garage doors**).

2.1 For spruce, fir, Douglas fir, hemlock, accoya and meranti

TRANSPARENT		Application
Progressive sanding up to at least grit size 120		
1. Impregnation	1x Aquawood Primo (5453)	Dip coating or flow coating
If necessary, sand lightly to create a smooth surface		
2. Intermediate coat	1x Aquawood Intermedio FlowQ (5721) or 1x Aquawood Intermedio DQ (5706) or 1x Aquawood Intermedio ISO (5705)	Dip coating or flow coating
		Spray application
Intermediate sanding, grit size 220 – 280		
3. Finishing coat	1x Aquawood Finapro 20 (5101) or 1x Aquawood Finapro 40 (5135) or 1x Aquawood Finapro 60 (5176)	Spray application

ADLER GREEN - TRANSPARENT		Application
Progressive sanding up to at least grit size 120		
1. Impregnation	1x Aquawood Primo (5453)	Dip coating or flow coating
If necessary, sand lightly to create a smooth surface		
2. Intermediate coat	1x Aquawood Intermedio Terra SQ (5708)	Spray application
Intermediate sanding, grit size 220 – 280		
3. Finishing coat	1x Aquawood Finapro Terra (5113)	Spray application

OPAQUE		Application
Progressive sanding up to at least grit size 120		
1. Impregnation	1x Aquawood Primo A2 (5452)	Dip coating or flow coating
If necessary, sand lightly to create a smooth surface		
2. Intermediate coat	1x Aquawood Intercare FlowQ* (5521) or 1x Aquawood Intermedio DQ (5706) or 1x Aquawood Intermedio FlowQ (5721) or 1x Aquawood Intercare SQ (5522) or 1x Aquawood Intercare ES (5501) or 1x Aquawood Intercare ISO (5503)	Dip coating or flow coating
		Spray application
Intermediate sanding, grit size 220 – 280		
3. Finishing coat	1x Aquawood Covapro 20 (5023) or 1x Aquawood Covapro 40 (5029) or 1x Aquawood Covapro 60 (5027)	Spray application

Please take note of the content of the technical data sheet for the product in question.

* in particular for Meranti

2.2 For oak, pine, mahogany, teak and larch

TRANSPARENT		Application
Progressive sanding up to at least grit size 150		
1. Impregnation	1x Aquawood Primo (5453)	Dip coating or flow coating
If necessary, sand lightly to create a smooth surface		
2. Intermediate coat	1x Aquawood Intermedio ISO (5705) or 1x Aquawood Intermedio SQ** (5718)	Spray application
Intermediate sanding, grit size 220 – 280		
3. Finishing coat	1x Aquawood Finapro 20 (5101) or 1x Aquawood Finapro 40 (5135) or 1x Aquawood Finapro 60 (5176)	Spray application

ADLER GREEN - TRANSPARENT		Application
Progressive sanding up to at least grit size 120		
1. Impregnation	1x Aquawood Primo (5453)	Dip coating or flow coating
If necessary, sand lightly to create a smooth surface		
2. Intermediate coat	1x Aquawood Intermedio Terra SQ (5708)	Spray application
Intermediate sanding, grit size 220 – 280		
3. Finishing coat	1x Aquawood Finapro Terra (5113)	Spray application

OPAQUE		Application
Progressive sanding up to at least grit size 150		
1. Impregnation	1x Aquawood Primo A2 (5452)	Dip coating or flow coating
If necessary, sand lightly to create a smooth surface		
2. Intermediate coat	1x Aquawood Intercare SQ (5522) or 1x Aquawood Intercare ES (5501) or 1x Aquawood Intercare ISO (5503)	Spray application
Intermediate sanding, grit size 220 – 280		
3. Finishing coat	1x Aquawood Covapro 20 (5023) or 1x Aquawood Covapro 40 (5029) or 1x Aquawood Covapro 60 (5027)	Spray application

Please take note of the content of the technical data sheet for the product in question.

** in particular for larch

2.3 4-layer coating system

Alternatively, the coating systems can be applied in 4 layers. The transparent version with Aquawood Primo TIM in combination with Aquawood Interprimer, or opaque with Aquawood Primo TIM and Aquawood Primo A2 White, otherwise the same as the 3-layer coating system.

3 Colours

Changes in the colours of wood glaze finishes as a result of weathering are generally unavoidable, but should not occur to a dramatic extent (assessment analogous to the VFF fact sheet HO.05: 2009-05). For softwoods, only medium and dark impregnation colours should be used, from Eiche Mittel, and for hardwoods from Kastanie or darker. The lightest shade that should be used as a finishing coat is F015.

You can find various colour combinations in the current ADLER colour cards for windows.

For opaque colours there are no restrictions for RAL and NCS colours. Special effect and metallic shades are not generally covered by the guarantee. The use of an Anti-Heat pigmentation results in a significant reduction in the temperature on the surface when it is exposed to direct sunlight (depending on the colour, approx. 10 °C – 20 °C). This leads to an increase in the lifespan of the surface (reduced thermomechanical strain) and a significant reduction in resin flow in resinous woods such as pine or larch. Colours with Anti-Heat properties are available ex-factory.

4 After-care

Annual cleaning with ADLER Top-Cleaner (7208) and after-care with ADLER Top-Care (7227) are required (available as a package in the **ADLER Windoor Care-Set** (7229)).