

Maintenance Guidelines for Timber Windows and Doors Finished With Water Bases Coatings

Timber windows and doors produced by A R Manley & Son Ltd are accurate components designed and manufactured using the best available techniques to produce performance rated components. The way they are maintained after installation can affect their long-term performance. Good practice avoids damage, maintains quality and saves money.

General Care

Simple steps such as wiping down the joinery finish to remove dirt and insects will help extend the decorative finish. This can be done at the same time as cleaning the glass.

Good household maintenance also helps to extend repainting intervals. At least once a year:

- Check hinges and handles and treat with a light oil if necessary
- Clean weather seals and ventilators to remove dust or grime
- Each spring, inspect the joinery and spot repair any minor areas of coating damage, shakes or open joints.

Redecoration

All areas to be re-coated should be lightly abraded with a fine grade abrasive paper (180 or 220 grit), washed down with mild detergent solution and rinsed with clean water to remove dust, insects and other contaminants that can form a base for algae and fungi growth.

Ensure the temperature is above 10°C. Using a good quality, long-haired, synthetic brush, designed for use with acrylic paints, apply one or two coats of water-based opaque or translucent topcoat in the appropriate shade, colour and gloss level. Allow to dry for four hours between coats.

Applying Water Based Paints

The short drying time and reduced flow of water-based paints require a specific technique to achieve a good finish:

- The quality of the brush is important; a long-haired synthetic brush will give the best results. Avoid short-haired or worn brushes, which may leave lines in the dry film
- Wet the brush thoroughly with water before starting, ensuring the base of the bristles (the heel of the brush) is fully wetted
- Thinning with between 5 and 10% of water will improve the flow and levelling properties of the product, particularly in warmer weather
- Load the coating generously onto the surface and disperse the paint briskly
- Even out the coating with light diagonal cross strokes - **do not over brush** - the coating will flow and level naturally
- Finish the application with light brush strokes in the direction of the grain.

With practice, an even coat can be applied quickly. An even coating film is important for durability, but also for appearance, particularly in the case of translucent wood stain.

Apply and finish each section systematically, one component at a time (e.g. top rail followed by the style and then the bottom rail).

When applying darker opaque colours over previously applied lighter shades, use a base coat of the final colour to aid opacity.

Do not attempt to paint when the temperature is below 5 degrees Celsius, or if the relative humidity exceeds 80% as the curing and performance of the coating may be impaired.

If there is any doubt about the substrate or underlying paint film, apply the appropriate product to a small, inconspicuous area, allow to dry for 24 hours and then inspect for appearance and adhesion to substrate.

Wash brushes with a mild detergent solution, such as washing-up liquid, then rinse with clean water.

Trouble-shooting

If regular maintenance is delayed or damage has occurred, additional steps may be necessary to reinstate the finish to its original condition.

Where minor flaking affects small areas of the topcoat surface but the timber substrate is not exposed:

- Abrade the damaged area with a fine grade abrasive paper to remove all unsound coating and feather out to leave a smooth surface
- Clean down and wash the abraded area to remove dust, and allow to dry thoroughly
- Apply a coat of topcoat in the appropriate shade, colour and gloss level to the damaged area
- Allow to dry for four hours before applying a second coat
- If the damaged area is widespread, lightly abrade the complete frame, repair the damaged area as described above, and apply the second coat to the complete frame.

Where moisture has penetrated joints, end grain, or mitres, or where natural movement of the timber has opened shakes, treat as follows:

- Abrade the damaged area with a fine grade abrasive paper to remove any unsound coating and feather out to a smooth surface
- Clean down and wash the abraded area to remove dust, and allow to dry thoroughly
- Prime
- seal any open joints with joint sealer applied by mastic gun. Wipe with a damp cloth or spatula to give a smooth joint and allow to dry to a clear finish
- Seal any exposed end grain with end grain sealer and allow to dry thoroughly
- Apply a topcoat and allow to dry for four hours before applying a second coat.

Resin exudation

Resin occurs naturally in timber, in pockets within the wood or associated with knots. Some timber species are naturally more resinous than others, but the presence of resin is normally not detectable when joinery is manufactured.

Resin exudation often occurs on southern elevations and with darker colours, where the sun's heat liquefies and mobilises the resin, drawing it to the surface.

Where resin has exuded through the coating:

- Avoid trying to remove fresh sticky resin as it can be very difficult and its presence indicates the exudation is still continuing
- Wait until the first maintenance period, by which time the resin has dried and oxidised, forming a white crystalline powder
- Remove the dried resin with a stiff nylon or natural bristle brush
- Wash off any remaining residues with a cloth.

Water-based coatings often allow the passage of resin to the surface without damaging the coating. If the finish is not damaged by over- vigorous scrubbing during crystal removal, re-coating is often unnecessary. Otherwise an overall application of a finish coat restores the general appearance of the timber and maintains its protection

Weather seals

Weather seals need no special maintenance apart from ordinary cleaning with a cloth and a solution of soap and water.

Ensure that the fitted weather seals do not become dislodged from their grooves. Should this occur, slide them back into position immediately to avoid damage when the window is closed.

If the weather seals are broken or damaged and you are able to feel a draught, ensure prompt repair or replacement by a competent person.

Glass Care

Glass cleaning:

- Remove heavy external grime with a solution of soap and water
- Use a proprietary household glass cleaner with a soft cloth.

Condensation

After a frosty night, external condensation can form in the middle of the glass unit, when the external surface of the glass is colder than the air outside. Caused by the low-emissivity coated glass that reflects heat back into the room, it will disappear as the temperature rises during the day.

If there is condensation on the inside of the glass unit, it is a sign that the relative humidity in the room needs to be reduced. This can normally be reduced by improving air circulation. Building regulations require new windows in sensitive locations, such as kitchens and bathrooms, to be fitted with trickle vents.