



Dempsey Dyer Ltd

## **Section 10 - Maintenance Guidelines for the Window & Doorsets**

These maintenance guidelines must be given to the customer by the installer of the window and doorsets.

We recommend the installer explain the maintenance guidelines to his customer.

## Maintenance Guidelines

### Ventilation and Heating After Installation

Ventilation and heating should be provided as soon as possible after glazing, in order to bring the frames to their normal service conditions. Care must be taken to ensure that heating is gradually brought up to the normal service level.

### Teknos Timber Microporus Stain & Paint Systems

Dempsey Dyer Ltd use the 'Teknos' Protective translucent coating system manufactured by 'Teknos', one of Europe's leading manufacturers of wood stains and paint systems.

Provided you have ordered the full factory finished system, the finishing coats applied in the factory will be as follows;

Paint	Timber Species			
	ERW	Sapele	Oak	Accoya
Preservative – 1410	✓	-	-	-
Primer 1 – 2902	✓	✓	✓	✓
Primer 2 – 5200	-	-	-	✓
Top Coat 1 – 2600	✓	✓	✓	✓
Top Coat 2 - 2600	✓	✓	✓	-

(Note: The above factory finish top coat paint codes relate to translucent stains and white. The remaining opaque top coat paint codes are either 'Teknos' Aqua 2610 or 2990).

### Ordering Your Paint/Stain Supplies

If you require a further supply of 'Teknos' Paint ring 'Teknos' direct on 01608 683494 – requesting the Colour to match the factory finish colour you requested from the following Colour Description Matrix.;

#### For the following stains:-

Aquatop 2600 Ref; Iroko, Aformosia, Oak, Mahogany 045, Hawthorn, Walnut

#### For the following opaque paints:-

Aquatop 2600, Ebony. Satin White 2600, Brilliant White Gloss 2600

Aquatop 2610 Chartwell Green SIK JO 1060, Magnolia SIK F 60986, Olive Green /SIK K 21020, Lavenham Blue SIK PO 1545.

If you requested a non-standard colour please request the exact colour description with Dempsey Dyer including the RAL No. in writing and then contact Teknos after you receive our written reply.

### Product Ordered Without a Factory Finish

If you have ordered products bare or treated with a primer these window and door products DO NOT CARRY ANY WARRANTY. Please request from us the site finishing system!

### After Installation

We suggest a light 'Teknos Brushing Formulation' coat is applied to 'polish up' the frames after installation. This is recommended practice with white factory finished frames which are more liable to show transit and installation surface blemishes.

### **Reason for Stain & Paint Maintenance**

Micro porous finishes add colour and improve the water-repellency of the frame and must be maintained in good condition, in order to control the moisture absorption by the timber and restrain the degree of movement. If the finish is allowed to deteriorate excessive movement will occur.

### **Inspection of Stain/Paint Coating Integrity**

Regular inspection is essential. If the water repellency of the finish had diminished, the timber must be re-coated to maintain the integrity of the window. Any deterioration should be addressed immediately before the coating has a chance to flake. Particular care is necessary with horizontal surfaces (such as bottom beads, cills and bottom rail joints and end grains) where the finish is more vulnerable to breakdown from the combination of water runoff and ultra violet light. When carrying out maintenance on the frames, the glazing system (beads and gaskets/tapes) must be inspected, to ensure the weather-tightness of the glazing seals. Additional glazing pin may be required to maintain the suspension of the glazing seats.

### **Maintenance Intervals and Method**

Factory finished frames must be re-coated with the relevant Teknos product (for stain or Opaque finishes) every 3-5 years or sooner dependent upon:

- The exposure of the frames to extreme weathering or industrial pollution.
- The stain shade. (Light stain finishes, e.g. Cypruss, Aformosia, Light Oak, require more regular/sooner maintenance than Darker Stains whilst Opaque finishes give the longest protection cycle).

### **Maintenance Intervals - Severe Weather Exposure**

Re-coating at more frequent intervals will be required in case of severe weather exposure which includes

- Open aspect locations
- South facing external locations which require the higher degree of protection against ultra violet radiation and
- High altitude exposed locations or exposed coastal locations where the coating will deteriorate sooner due to exposure to frequent wind driven rain and damp conditions.

For severe exposure sites we recommend an annual inspection which may necessitate touching up of vulnerable areas (bottom beads, cills, bottom rail joints and exposed end grains). This annual “preventive” maintenance stops the spread of any paint deterioration. For stain finishes on severe exposure sites, a complete re-coating will be required at least every 2 years. We recommend a lighter stain than the original stain used to avoid over darkening the stain finish.

### **Recommended Paint System Specification**

Remember the paint or stain must be:

- Micro porous.
- Water Based.

Therefore use “Teknos Paints”, our recommended paint system. Available from ourselves or Teknos UK Limited (tel 01608 683494).

**DO NOT USE SOLVENT BASED PAINTS, VARNISHES OR LACQUERS**

## **Teknos Brush Application Guidelines**

### **Benefits of waterborne paints/stains:**

The brush application of waterborne and solvent borne materials requires different techniques, mainly due to the shorter drying times of waterborne coatings and their reduced flow. Most of the application principles which apply to waterborne materials also apply to solvent borne coatings, but the application tolerance of waterborne coatings is lower and they are less forgiving of abuse. However, the benefits of very low solvent levels, rapid drying and good durability, due to the flexibility of the dry coating, far outweigh the application difference which are easily overcome by experience and follow a few simple steps.

### **Brush Type**

Use a good quality long haired synthetic brush; a short haired or worn brush may leave lines in the dry coating film. Prior to application thoroughly wet the brush with water, ensuring that the base of the bristles (the heel of the brush) is fully wetted. A variety of brushes are now readily available which are specifically made for the application of waterborne coatings, the bristles are generally manufactured from synthetic materials.

### **Application of Paint to Brush and Brush to Surface**

For the best results a three stage application technique should be developed:

- Load the coating generously onto the substrate and disperse over the surface
- Even out the coating with light diagonal cross strokes ... DO NOT OVERBRUSH ... the coating will flow level naturally.
- Finish the application with light brush strokes in the direction of the grain.

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

### **Application Temperature**

Do not apply in extreme temperature. The most suitable temperature range is between 5 degrees and 15 degrees humid conditions will prolong the "wet edge" time of the coating and warm windy conditions will reduce it. When possible avoid application in direct sunlight.

### **Brush Cleaning**

For brush cleaning wash out brush with a mild detergent solution and rinse with clean water.

### **Preparation of Timber Surfaces Prior to Painting**

Before applying the 'Teknos' Brushing Formulation wash down the frames with detergent solution, rinse thoroughly with clean water and leave until completely dry. If the coating is in poor condition consult your 'Teknos' specialist for detailed guidelines.

### **Touching up Between Maintenance Intervals**

It is possible to re-stain/re-paint the product more frequently, i.e. Touching up between maintenance periods. In the case of stain finishes, we recommend a lighter shade than the shade on the product is selected – to avoid over-darkening the product.

## Resin Exudation

Resin exudation from the timber is a natural phenomenon which can occur during the summer months when the heat forces resin to the surface of timber. The resin can be removed, by the customer, as follows:

### HARDENED (CRYSTALLISED) RESIN

- Scrape off with a chisel taking care not to damage surrounding stain/paint. Remove any remaining resin by de-nibbling (with fine 300 grit sandpaper) the resin and the surrounding component area.
- Wipe clean with white spirit on a rag – then re-apply top coats of relevant paint/stain

### Soft (Sticky) Resin

- Gently scrape off with a chisel taking care not to damage surrounding paintwork.
- Clean off remainder with White spirit on a rag. Re-stain the surface of whole component, if needed to avoid colour variation.

## Shade Variation

Some initial shade variation will occur on all translucent stained timber products – due to the natural shade variation of timber itself; See our Shade Variation Data Sheet for full details. Subsequently due to weathering, there can be further shade variation over a period of time e.g. the effects of ultra-violet light on the southern elevation, weathering on all elevations and the application of stain during the maintenance programme.

WAX FILLER STICK COLOUR CODES OR INTERNAL USE SELECT FROM THE DEMPSEY DYER PAINT/ STAIN COLOUR MATRIX. THEY CAN BE ORDERED FROM US.

Stain/Paint Colour	Softwood	Hardwood
Aformosia	121	122
Oak	81	16
Special Mahogany 045	17	18
Hawthorn	113	104
Walnut	165	19
Black	166	166
Iroko	13	138
Chartwell Green	654/01	654/01
Magnolia	655/01	655/01
Olive Green	652/01	652/01
Lavenham Blue	653/01	653/01
Satin / Brilliant White	656/01	656/01

(Note: Wax filler can be painted / stained over).

# Ironmongerey

## General

To attain optimum performance, as with most mechanical devices, the hinges will require periodical maintenance and lubrication. The hinges in general and particularly the pivots, sliding shoe and track should be kept free from dirt, debris and any obstruction at all times.

## At Time of Installation

Lubricate all pivot points with an appropriate silicone spray. NOTE Do not use oil based lubrication (e.g. WD40) as this can damage the glazing gaskets and weather seals.

## Every Three Years

Clean any dirt or debris from hinges and clear obstructions. Apply lubrication as detailed in above. Check the tightness and security of all fixing screws and rivets.

## Location Regularly Exposed to Corrosive Spray

When hinges are fitted in a location which is regularly exposed to corrosive spray, (e.g. Sea spray in coastal locations), it is recommended that in addition to the lubrication as detailed above, all metal surfaces are lightly coated with an appropriate proprietary anti-corrosion spray (follow anticorrosion spray manufacturer's instructions) taking care to avoid contamination of the gaskets and weather seals. The maintenance may also need to be carried out more frequently, depending on the severity of the prevailing conditions.

## Care of Finishes

Lacquered Brass and Bronze:

Regular cleaning with warm soapy water will help maintain the general appearance and an occasional application of a good wax polish will help to protect the finish. The life of the lacquer can be affected by many environmental or atmospheric conditions, including sea air and industrial pollution. If the lacquer does start to breakdown we recommend that it is removed with paint stripper and the article is kept clean in the traditional way using a metal polish (e.g. Autosol or Brasso)

Un-Lacquered Brass and Bronze:

Although originally polished, if left untouched the finish will naturally become dull and darken over a length of time. To retain the polished finish regular cleaning with a propriety brand of metal polish (e.g. Autosol or Brasso) will be required.

## 3D Door Hinges

Columbus Hinges from Simonswerk are virtually maintenance free, however, periodical cleaning of the hinge is required to prevent damage to the hinge finish.

To clean the hinges use a soft damp cloth (no detergent) and dry with a soft cloth.

## DO NOT OIL OR GREASE THE HINGE

The hinge bearing are maintenance free and do not require oiling or greasing. To do this will damage the bearing.

Ensure that the hinge clamping and fixing screws are kept tight and the hinge-pin is fully engaged in the hinge from the top.

## **Glazing**

The glazing gasket should be inspected from time to time, to ensure compression on the glass unit is being maintained. If installed correctly, the gasket system should require minimum maintenance. If compression is “slack” additional glazing pins into the bead may be required.

## **Product Protection On Site**

All products must be protected from moisture until they are installed and glazed. Exposure of glazed or non-glazed timber frames to rain before the frames are fixed and glazed will result in an increase in the moisture content of the timber and consequent swelling of the components.

Mortar and other building materials should not be allowed to come into contact with the timber or ironmongery because they can degrade the components.

## **Durability by Design**

Your Windows and Doors have been designed to our “Durability by Design” standards for a long service of life. “Durability by Design” plays a big role in the responsible management programme of scarce resources, ensuring windows and door sets have a long service life. Product maintenance is one of the elements in “Durability by Design”.