



Dempsey Dyer Ltd

Section 1 - Industry Standards - Survey and Design and Installation

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Please read all Installation Instructions with care. Please note that the cost of customer complaints and remedial work that are a consequence of a failure to install the products in accordance with the installation standards in Section 1 and the specific methods for frame preparation and positioning. Sections 2 - 10 are the responsibility of the customer.

Please ensure you give a copy of the enclosed Maintenance Guidelines (Section 10). To the customer.

1.1 Survey & Installation Standards

Currently, there is not a standard for the survey of timber windows and door sets. However the following are useful:

- BS 8213-4 2007 - Windows, Doors and Roof Lites Code of Practice for Survey and Installation.
- The Glass and Glazing Federation document - “Good Practice Guide for the Replacement of Windows and Doors” - July 2011.
- NHBC Standards - Doors, Windows and Glazing.
- Building Regulation Approved Documents including those relating to:
 - Fire Escape - Approved Document B
 - Resistance to Sound - Approved Document E
 - Ventilation - Approved Document F
 - Protection from Falling Impacts or Collisions - Approved Document K
 - Conservation of Fuel & Power - Approved Document L
 - Access - Approved Document M
 - Glazing Safety in relation to Impact, Opening & Cleaning - Approved Document N

The above documents should be taken into account during a survey to ensure you specify the correct window and door design and specification on your order.

In addition, the surveyors must consider security requirements relating to the locking and glazing systems, e.g. Laminate glass to windows and doors.

1.2 Moisture Content, Doorsets Excess Movement and Unheated Buildings

Installation in New Build, Refurbishment Open to the Elements and Unheated Conservatories

Our external door sets, with an ex-factory moisture content of 12% to 16% are designed to operate in a heated building. Therefore our door sets should not be installed in damp or wet building environments.

The timber components of the door leafs will take up excess moisture when newly installed into surrounding “wet” building fabric e.g. new brickwork, plaster work and cement. (The problem is more severe when installing in winter months.) Consequently, doors will take up moisture and swell across the grain with the possibility of sticking doors and the bowing of door stiles.

The correct procedure is to avoid fitting the door leafs until the heating is applied and the building fabric has dried out. The door leafs are then installed into an environment at a moisture level for which they were designed.

It is important that the Multi-Point locks are fully “locked” when the doors are not in use - to restrain any movement by the way of bowing.

Any door “sticking” may be relievable by the customer using the lateral adjustments on the adjustable hinges, but in severe cases of moisture take up, it may be necessary to wait for the door to dry out which can take a few months in winter conditions as the building itself dries out and heating is applied.

An alternative to waiting for the doors to dry out is for the customer, to “let” the hinge into the door case leg, deepening the hinge slots, rather than planing the leafs on the hinge side and re-staining the hinge side after planing.

Doors manufactured in Accoya have reduced dimensional movement when subject to a moisture laden environment. Consideration therefore should be given to specifying Accoya on your order when doors are to be installed in building subject to excessive moisture take up.

Site Through Traffic

Doors should not be used for through site operatives traffic. They should be locked off when installed to avoid damage and ‘movement’ during the build process.

3D Adjustable Hinge Adjustment

See section 6 - Door, Residential and French for 3D Hinge Adjustment Method.

1.3 Stainless Steel Fixings

Oak / Accoya / Idigbo

The tannins in Oak and Idigbo will attack and erode ferrous metals. The Acetic Acid in Accoya will attack ferrous metals. Therefore always make sure you use stainless steel or brass fixings on Oak, Accoya and Idigbo.

1.4 Drying/Curing Process of Waterborne Coatings

Following application, waterborne coating are touch dry very quickly as the solvent (water) evaporates from the surface. However, it takes many hours for the coating to through dry and even longer to fully cure.

This means that in periods of high humidity joinery may be exposed to weather before the drying/curing process is completed. Under these circumstances it is possible that rain will leave a milky stain on the joinery. As the coating cures this stain will disappear and is in no way detrimental to the finish.

The process of drying described enables the coating to maintain its elasticity and therefore, its long term durability.

Traditional alkyd products contain raw materials which naturally repel water from the moment the coating is dry. The down side to this type of coating is that it will immediately begin to embrittle and therefore does not offer the same elasticity as a waterborne coating. On external joinery the flexibility of the coating is very important as the product expands and contracts with changes in temperature and humidity.

1.5 Visual Quality Standard for Installed Insulating Glass Units

Transparent glass used in the manufacture of insulating glass units is identical to that used traditionally for single glass and will therefore have a similar level of quality.

Both panes of the sealed unit shall be viewed at right angles to the glass from the room side standing at a distance of not less than 2 metres but for toughened, laminated or coated glasses (not less than a distance of 3 metres) in natural daylight and not in direct sunlight with no visible moisture on the surface of the glass. The area to be viewed is the normal vision area with the exception of a 50mm wide band around the perimeter.

Flat transparent glass, including laminated or toughened (tempered) glass, shall be deemed acceptable if the following phenomena are neither obtrusive nor bunched: totally enclosed seeds, bubbles or blisters; hairline or blobs; fine scratches not more than 25mm long, minute embedded particles. Obtrusiveness of blemishes shall be judged by looking through the glass, not at it, under lighting conditions as described above.

When thermally toughened glass is viewed by reflection, the effect of the toughening process may be seen under certain lighting conditions. The visibility of surface colouration or patterns does not indicate deterioration in the physical performance of the toughened glass. Because of the nature of the toughening process, distortion will be accentuated when the glass is viewed in reflection or incorporated in insulating glass units.

Visible double reflection can occur under certain lighting aspect conditions, especially when viewed from an angle. This is an optical phenomenon arising from multiple surface reflections in sealed units.

The manufacture of flat laminated glass does not usually affect the visual quality of the glass incorporated in insulating glass units. However, the faults generally accepted in Paragraph 3 may be increased in number if several glasses and inter layers are used in the production of laminated glass. When viewed under certain light conditions, insulating glass units incorporating clear or tinted flat laminated glass may show a distortion effect caused by reflection on the multiple surfaces of the components of the laminated glass.

The appearance of the optical phenomenon known as Brewster's Fringes is not a defect of the glass and can occur with any glass of high optical and surface quality. This phenomenon is a result of the high quality now being achieved world wide by modern methods of glass manufacture. Brewster's Fringes occur if wavelengths of light meet up with each other when they are exactly 180 degrees out of phase - an example of the phenomenon known to physicists as the interference of light. The effect is similar to, although usually much smaller than, the interference fringes which can sometimes be seen on toughened glass windscreens. Brewster's Fringes occur when the surfaces of the glass are flat and the two panes of glass are parallel to each other, i.e. when the light transmission properties of the installation are of a very high order. This phenomenon is not a defect of the product, being dependant on the laws of physics and not on the quality of the insulating glass. In fact it arises because modern glass made by the float process is flat, therefore, free of the distortion inherent in sheet glass. The occurrence of Brewster's Fringes is in its nature rather like (though very much more rare than) the fact that under certain conditions, the observer will see a reflection of himself in any window or door - and no-one could claim that this was a defect of glass.

Patterned Glass - The above criteria do not apply to patterned glass, as due to the method of manufacture, imperfections such as seeds and bubbles are deemed to be acceptable.

1.6 Paint System - Touching Up & Pin Holes

Touch Up After Installation

Fully finished frames are finished with 3 coats of factory applied 'Teknos' paints or stains.

1 x base coat - by Flow Coater or Air Assisted Spray

2 x top coat (build up coat) by air assisted spray

Additional coats are required on site, during and after installation for:

a) If Site glazed - touching up, bead end grains, all external beads.

b) All external cill projections

c) Installations finished in satin or gloss white which will usually require a finishing coat applied by site in order to "paint out" transit and installation surface blemishes.

We recommend 'Tecknos' brushing formulation in the appropriate colour for this purpose. It can be applied with a good quality synthetic brush (not natural bristle).

If frames are supplied base-coated only, (or basecoat plus 1 top-coat), 2 full coats (or 1 full coat) of 'Teknos' will be required on site.

Note: - experiment on a small hidden area with above formula to ensure you achieve desired effect before carrying out on visible area.

Filling Bead Pinholes

Bead Pinholes - Internal Only

- Translucent stains and opaque paints
- Use the colour coded wax filler stick supplied by Dempsey Dyer
- See the recommended colour coded nail and pin hole wax filler sticks on page 25

Bead Pinholes - External Only

- Use an external grade woodfiller, colour coded if required.

Repairs to Damaged Paint Films

Scruffs & Scratches - Surface Only, Not on Bare Wood.

- Clear area of debris with a damp cloth and degrease with a soap solution if there is grease or oil contamination. (Otherwise the paint / stain will not adhere).
- Gently flat off the immediate area with a fine (320 grit) sandpaper first taking care not to damage the surface.
- Brush and Application Method. (See Maintenance Guidelines) Use a good quality synthetic brush designed for use with Acrylic Paints. Apply the correct colour by brush with 1 forward stroke leaving a thick coat of paint / stain gel on the timber. Use a thinner or wider brush to suit the width of area to be covered.
- Coating System for:
 - Solid colour**
 - If the finish colour is a solid colour, apply a coat of Anti Stain 2902. Allow to dry.
 - Apply a coat of Aquatop 2600. Allow to dry.
 - Apply a second coat of Aquatop 2600. Allow to dry.
 - Continue to apply coats of Aquatop 2600 until the paint film is level with the surrounding area.
 - Translucent**
 - If the finish colour is a stained colour, apply a coat of Colourless Aqua Primer 2902 Allow to dry.
 - Apply a coat of Aquatop 2600. Allow to dry.
 - Apply a second coat of Aquatop 2600. Allow to dry.
 - Continue to apply coats of Aquatop 2600 until the paint film is level with the surrounding area.

Paint Surface Damage & Minor Surface Damage

Use the same approach as in “Scuffs & Scratches” above but the coating system as in paragraph 2 Above changes as follows;

- Coating System for:

Solid colour

- If the finish colour is a solid colour, apply a coat of Anti Stain 2902. Allow to dry.
- Fill the minor area of damage with “Teknos Acrylic Filler” 5001
- Apply a coat of Aquatop 2600. Allow to dry.
- Apply a second coat of Aquatop 2600. Allow to dry.
- Continue to apply coats of Aquatop 2600 until the paint film is level with the surrounding area.

Translucent

- If the finish colour is a stained colour, apply a coat of Colourless Aqua Primer 2902 Allow to dry.
- Apply a coat of Aquatop 2600. Allow to dry.
- Apply a second coat of Aquatop 2600. Allow to dry.
- Continue to apply coats of Aquatop 2600 until the paint film is level with the surrounding area.

Exposed Cut Ends

Apply TEKNOSEAL 4000 End Grain Sealer to the cut ends to seal the end grains against moisture ingress. This Teknos product can be purchased from Dempsey Dyer.

Alternatively apply 3 liberal coats of ‘Teknos’ brushing formulation, we supply a minimum 250mm bottle in the fixing kit.

Note. The end grains must be sealed to prevent moisture take-up through the end grain which will result in:

- Timber discolouration
- Paint discolouration and failure
- Movement of the timber component.

Major Gaps and Deep Scratches into Bare Wood (either)

1. Hot wax: A hot wax can be applied to larger gaps. Request details from us for a recommended hot wax application gun together with a range of suitable colour coded wax sticks.

2. “Timberfil” by ‘Metalux’ this is a 2 part glue/filler.

Pine, teak and mahogany shades are available

Note. Wash off excess Metalux after applying it with water before it dries to try and avoid having to sand the Metalux filler flat).

- Stain up Timberfil using Colron Wood dye
- Use Colron Rosewood for Mahogany & dark colours
- Use Colron Georgian mid oak for light oak and light colours
- Finish off using ‘Teknos’ 2600 as a touch up (2 coats or more as required to obtain an even surface with the surrounding area.