SASH WINDOW SHOP

Custom Made Wooden Windows & Doors

Operation & Maintenance Manual
Supply & Install

1. Introduction

Congratulations, you have chosen products made from wood and manufactured to your unique requirements. Our dedicated, highly skilled joiners have crafted your items from carefully selected and responsibly sourced timber. This natural product is one of the most versatile and beautiful materials available. If maintained properly, you will enjoy your windows and doors for many years to come.

2. Timber

Timber is the only truly sustainable material from which to manufacture windows and doors. Timber combines strength with natural insulating properties and has the advantage of being an easily renewable material with little environmental impact from extraction, processing and manufacture.

Some timber facts:

- Wood has the best thermal insulation properties of any mainstream construction material.
- Wood has the lowest embodied energy of any mainstream building material.
- Wood from sustainably managed forests can actually be better than carbon neutral.

3. Quality Control

Timber Selection
It is vitally important to remember that timber is a natural product and is hygroscopic in its nature.

It basically 'wants' to be in tune with the surrounding environment and conditions that it is subject to; therefore, if the atmosphere is wet, damp or humid the wood will take on water and expand. If dry it will lose water and shrink. This can cause your product to expand and contract at different times when subject to different conditions. This can also affect decorative coatings and can cause the timber to split or twist. Sash Window Shop is not responsible for movement or the reaction to the timber caused by the conditions in which it is placed.

We cannot install windows/doors in recently plastered rooms or in enclosed rooms where the moisture content is very high. A wet internal unventilated environment may well damage paint surface or cause movement in the timber. If plastering of rooms occurs after window/door installation, then adequate ventilation/dehumidifiers must be provided to allow moisture to escape. Failure to do this will invalidate the warranty.

Modern timber windows and doors are energy-efficient, ecological, comfortable in use, aesthetic and also highly durable. Sash Window Shop's Classic and Classic Plus range windows and doors are protected by Teknos and/or Sikkens which provides:

- effective timber protection from weather conditions (UV radiation, water, temperature changes) and biological factors,
- water vapor permeability (prevent moisture gathering in timber),
- high elasticity (coating is resistant to swelling and shrinkage of timber),
- increased dirt-resistance (easy to clean, increased resistance to aggressive detergents and alkalis),
- eco-friendly (water-based, manufactured according to EU standards concerning environment protection).

Nevertheless, windows shall undergo regular maintenance actions. A visual inspection should be carried out at least once a year, to check the external surfaces are free from any splits or cracks in the paintwork or timber. UV rays from the sun can also affect the surface treatment - especially on south and west facing elevations. Properties without overhanging eaves will also be more exposed to the UV rays. Any cracks in the paintwork or timber, will allow moisture to penetrate into the product and over time cause decomposition of the timber. If any defect is spotted it will have to be repaired immediately to prevent further damage.

4. Care and Decoration

General Maintenance

General cleaning should be carried out regularly (minimum twice a year) using a non-abrasive cloth with mild detergent and warm water (pH neutral solution) to remove any contaminants, whilst frequently changing the water. After cleaning, rinse thoroughly with clean water to remove all residues, dirt, bugs and other impurities but do not use hosepipes or pressure washers. During cleaning if any damage is noticed it must be repaired immediately. Ensure the bottom weather bars of door sets and aluminum channels for hinges to run in, if the product features these, are clean and free from grit or other debris.

We recommend that you wash the frames and sashes using products recommended by Teknos (please contact Sash Window Shop for the latest product information).

Diluted detergent should be applied evenly with a soft brush, sponge or cloth. After 5 minutes wash it off with clean water. Do not use it for the window's or door's hardware and

other metal surfaces. Do not use a brush on any putty glazed windows, a soft cloth is to be used only.

Under no circumstances should aggressive, alkaline or acidic cleaners be used. After cleaning, rinse thoroughly with clean water to remove all residues but do not use hosepipes or pressure washers.

Timber parts like extension sills, astragals or glazing beads require more maintenance care. They are thinner than window/door timber profiles and therefore they are more vulnerable to environmental conditions. They should by visually inspected at least twice a year and maintained if necessary.

Corner joints and end grain surfaces should be inspected to check they are free from any cracks in the coating or timber. Any cracks should be fixed with Teknoseal 4000 or other suitable product. Also "V" joints have to be inspected to check if they are free of cracks. Repairs should be carried out using Teknoseal 4001, Teknoseal 4007, Teknoseal 4008, Teknoseal 4009 or other suitable product. Inspect connections between glass unit and timber and repair accordingly, using a silicone sealant when necessary or putty (non Linseed Oil type) if putty fronted windows.

At least once a year, right after cleaning and repairs mentioned above, you should apply Teknos' care products TEKNOWAX or TEKNOCARE 4250 according to instructions.

5. Ironmongery

All ironmongery on our windows and doors is factory fitted where practical. Should the ironmongery become contaminated, use a soft cloth to remove any building debris but do not use abrasive cleaners. If in any doubt, temporary removal of the ironmongery by competent site personnel should be considered. Particular attention should be given to metallic fittings, which are vulnerable to scratching or tarnishing. Regular cleaning with warm soapy water will help to maintain the appearance, but if required a proprietary brand of chrome polish can be used (eg. Autosol)

6. General Care

All products deteriorate over time and this is particularly true of those that are exposed to the elements. Wind, rain and sunlight – not to mention wind-borne spores and insects – all contribute to the breakdown and deterioration of all materials' appearance. It is therefore important to protect these products by putting a barrier between them and the elements.

Whatever their framing material, windows are no exception. Previous claims that some windows were effectively 'maintenance free' have since been proven to be wrong.

Remove any loose coating material from the affected areas with a fine grade of sandpaper (or equivalent), taking care to sand in the direction of the "grain". Ensure that any 'grey' timber that has been damaged by ultraviolet light is removed back to a clean, bright surface.

7. Decoration

All joinery is painted in Teknos coating systems using a four stage coating application process. Wood Preservative Impregnation, Primer coating, Intermediate coating, Top coat in either Gloss or Satin finish. 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 to remove dust or grime.
- In Autumn, clear guttering and down pipes, and repair any leaks.
- Each Spring and Autumn, inspect the joinery and spot repair any minor areas of coating damage, shakes or open joints. Moisture should not be allowed to penetrate into the timber throughout its life.

8. Repair

In DRY weather the damaged coating should be repaired as follows:

- Rub down damaged area with fine sandpaper.
- Brush off shavings and sawdust and dry the area.
- Apply a layer of remedial paint in proper colour with high-quality brush suitable for water- based acrylic paints. After a few hours apply a second layer.
- If the damaged area is large, you should lightly sand all the frame and repaint it.

9. Glazing

Cleaning your glass should be carried out at regular intervals, as a minimum the glass should be cleaned approx. 3 times per annum. The following guidelines can be followed:

- Choose a calm day to clean your windows, following simple health and safety guidelines.
- Rinse the glass with warm water mixed with a mild detergent.
- Rinse the glass with clean water. It's important to remove all the remaining detergent as some detergents are harmful to wood.
- Dry glass using a chamois leather. It is a good idea to open the windows and wash all available surfaces, corners etc. where insects like to hide, twice a year. It is especially important to remove cobwebs and the like which in time will inevitably sit in the corners and can block the automatic water drainage and the natural ventilation around the frame which may lead to further damages. Glass labels on new windows can be removed by soaking them in water. Label residues on the glass can be removed by gently using a cleaner designed for ceramic hobs.

10. Condensation (Internal)

Internal condensation typically occurs with poorly insulated windows with high interior atmospheric humidity and a low exterior temperature. The normal room air is warmer than the cooled down air located near the window pane. The room air is cooled down near the window pane and, at the same time the relative atmospheric humidity increases in the cold air because it cannot carry as much atmospheric humidity as the warmer air. When the relative humidity reaches 100%, the so-called dew point, the water condenses as mist or water on the window panes.

How to avoid internal condensation:

- For newly built properties sufficiently ventilate the new construction to allow moisture in the air to escape.
- Provide good ventilation. Air rooms regularly.
- Ensure that the atmospheric humidity does not exceed 40%.
- Ensure that the warm room air can rise unhindered up over glass surfaces.

11. Condensation (External)

Under certain conditions, condensation may form on the outside of the glass. This may occur on energy efficient windows which have a very low U-value, indicating the glass construction provides effective insulation and small energy losses.

External condensation is formed primarily during the dawn and morning hours between September and April in the northern hemisphere climate. As the air becomes warmer over the course of the day, the condensation disappears. If the weather is calm, cold and clear

with high atmospheric humidity, the temperature of the outermost exterior pane may fall below the dew point and condensation is formed. The energy losses from inside are too small to keep the temperature of the outer pane above the dew point for the outside air.

12. Condensation Between Panes

In the unlikely event that condensation is found between the panes of glass of a sealed unit, please contact the Sash Window Shop office.

13. Slimline Heritage Double Glazing

For putty fronted windows and doors the paint protection of the glazing, including the overlap on to the glass face must be repainted every two(2) years to maintain the required protection. The same applies to external timber beading, ensure there are no splits in the timber or mitre joint movement of the beading.

Failure to carry out either of the above will invalidate the warranty.

Ultra Violet has a detrimental effect on most paints, particularly on south facing elevations. However more frequent 'spot painting' may be necessary to maintain the required standard of protection.

14. When to Decorate

In practice, carrying out the first redecoration approximately one year before the recommended time will significantly improve the longevity of the coating system. Re-decorating can be phased by elevation. The redecoration period for each face can be evaluated, avoiding the need to necessarily redecorate every elevation at the same time.

Please refer to the paint manufacturer's guidelines regarding the re-application of coats and for expected life span of coatings. Please note that different exposure levels will affect the time span between redecoration.

Please do not hesitate to contact us should you have any queries or require more specific advice and assistance with your joinery products.

15. Coastal Maintenance Advisory

Properties located within coastal regions are subject to higher levels of airborne salt, moisture, and UV exposure. These environmental factors can accelerate weathering of the paint finish and metal components if additional care is not taken.

For windows and doors installed within **20 km of the coast**, Sash Window Shop products are supplied with a **Teknos coastal-grade paint system**, formulated for enhanced durability against salt and UV impact. To maintain warranty coverage and performance in these conditions, we recommend:

- **More frequent cleaning** of all painted surfaces (at least four times per year) using mild detergent and warm water to remove salt deposits.
- **Annual inspection** of all external joinery for early signs of surface breakdown, particularly around joints, glazing beads, and cills.
- **Prompt repair** of any paint damage using Teknos-approved touch-up products.
- **Regular lubrication** of ironmongery and moving parts with silicone spray to prevent corrosion.
- **Re-decoration intervals** may be shorter than standard; please refer to the *Paint Finish Warranty* document for specific guidance.

Following these steps will help ensure long-term protection and appearance of your timber windows and doors in coastal environments.

16. Operating Instructions

16.1 Sash Windows:

To open the window, ensure the sash fastener is unlocked (if you have the locking version), pull the sash fastener to the open position, unlock the sash stops (sash restrictors). If you have Angel restrictors fitted, you can read the instructions here.

Lift the bottom sash handles (sash lifts) and pull up. The window is now in its ventilation position. To open the top sash, gently push down on either the meeting rail or sash ring eyes located at the top of the sash (if fitted).

To close, pull the bottom sash down and top sash up. Lock the sash fastener and activate the sash restrictors which are located on the sides of the sash.

If your sash windows are fitted with tricklevents, these are easily open by pressing simultaneously on the two white buttons situated either side of the vent. To close, push the vent shut by pushing the two white buttons situated either side of the vent.

16.2 Casement Window:

To open the window, lift the handle and push the sash outwards. The window is now in its ventilation position.

If your windows are fitted with stays, secure the open sash with the casement stay ensuring its locked into its pin. To disengage, unlatch the stay and pull the sash towards you into the closed position, close the handle and lock.

If your casement windows are fitted with tricklevents, these are easily open by pressing simultaneously on the two white buttons situated either side of the vent. To close, push the vent shut by pushing the two white buttons situated either side of the vent.

16.3 Front Doors:

Operation:

Please consult the Winkhaus AV2 Heritage Lock operation brochure here.

Maintenance and Adjustment

Ensure the bottom weather bar is clean and dirt free. All locking points, hinges, door locks should be lightly treated with a silicone spray twice yearly in order to improve performance.

16.4 French Doors:

Operation:

Unlock your French Doors, press the handle downwards to release the shoot bolts and locking mechanism. The door can now be opened.

To open the second leaf of your French Door, pull the handle downwards to release the shoot bolts positioned at the top and bottom of the door.

To close, move the door until it locates against the frame, lift the door handle upwards as far as it will go (approximately 45°) and release it.

To lock your French Doors, close the second leaf of the door: move it back towards the door frame until it relocates within the frame and then lift the handle to 45° to re-engage the top and bottom shoot bolts. Repeat this for the main door leaf to close your French Doors.

To lock your doors simply turn the key one complete revolution towards the frame. Your French Door is now securely locked.

It is recommended that you fit hooks on the outside faces of both leaves of your French Doors and eyebolts on the wall abutting both sides of the door in order that both door leaves can be secured whilst open.

If your French doors are fitted with tricklevents, these are easily open by pressing simultaneously on the two white buttons situated either side of the vent. To close, push the vent shut by pushing the two white buttons situated either side of the vent.

Maintenance and Adjustment

Ensure the bottom weather bar is clean and dirt free. Ensure the bottom weather bar is clean and dirt free. All locking points, hinges, door locks should be lightly treated with a

silicone spray twice yearly in order to improve performance.

17. Summary

Please read the above information carefully as Sash Window Shop may disclaim responsibility for any defect or failure that may subsequently occur which is attributable to non-compliance, either wholly or in part with the advice given in this information document**.**

Sash Window Shop specializes in the production of high quality bespoke joinery items, our craftsman offer a wealth of experience and expertise. We have been producing exceptional products for many years and we are dedicated to ensuring that our customers receive a professional service and a first class product. We are keen to ensure that the products you receive are to the highest standards and are made in accordance with your requirements. If you have any queries or concerns with the products supplied or need any advice on maintenance or decoration, please do not hesitate to call us.