

Operation & Maintenance Manual Supply Only



OPERATION & MAINTENANCE MANUAL

TABLE OF CONTENTS

1. Standard of Delivery	2
2. Handling and Storage	3
3. Timber and Moisture Control	4
4. Installation	5
5. General Maintenance	10
6. Operating Instructions	13
7. Summary	15



1. STANDARD OF DELIVERY

1.1. Window and Door Delivery

Wherever possible smaller windows and doors will be delivered in single units. Larger/heavier windows and doors will be delivered with sashes/doors supplied separately for fitting on site by the customer.

Where required, frames may be delivered in kit form for assembly on site – the customer must be responsible for specifying that frames are required in kit form. Surface mounted furniture will be supplied separately due to possible damage in handling or the installation process.

1.2. Delivery

When goods are received, the recipient or a person authorised by the recipient must visually inspect them. All components should be checked at the time of delivery to ensure that they are in accordance with the order schedule, the delivery is complete and that the components, including any protective packaging, are not damaged. Any damage must be immediately reported to Sash Window Shop Ltd either by phone on 01279 456 670 or by email hello@sashwindowshop.com and a comment must be made on the delivery note about any defects or damage occurred during the transport.

The contractor/installers/recipient of goods are responsible for any damage to exposed surfaces and must report damage before handling (while checking delivery) and not afterwards.

When all the pallets/units are unloaded the number of pallets/units must be counted and checked against the delivery note and signed for.

Any obvious transport damages and any delivery shortages must be reported immediately to Sash Window Shop Ltd either by phone on 01279 456 670 or by email hello@sashwindowshop.com. Sash Window Shop Ltd will not accept any report of damages to goods after 24h from collection or delivery.

Before the products' installation, the recipient of goods or a person authorised thereby must inspect the products in an appropriate way. A defective product must not be fitted without the matter first being discussed with the manufacturer.

The manufacturer provides manuals and service instructions for its products and the user/buyer must comply with these. The warranty is valid only if the manufacturer's instructions have been complied with. The manufacturer is not liable for any further damage caused by a defect. The manufacturer also provides guidelines for the maintenance and storage of the products, which the buyer must follow to ensure that the warranty remains in effect. The manufacturer is relieved of product related liability if the product in question has not been handled or stored appropriately or has not been fitted correctly. Products that have



not been installed must be stored in a place where they are protected from rain and harmful humidity rising, for example, from the ground.

Humidity accumulating and condensing under a protective plastic cover during storage may damage the product. The manufacturer does not compensate for any damage caused by excessive condensation accumulating during storage. The buyer, the dealer, or anyone who receives the products is responsible for storing and maintaining them in accordance with storage instructions. The products must also be kept in a space with adequate ventilation. The receiver who will keep the products in intermediate storage without opening the packaging must ensure that long-term storage does not cause any damage to the products (because of condensation, dirt, etc.). The warranty does not apply to any damage caused by long-term storage.

2. HANDLING & STORAGE

All windows/ doors will be delivered to a point on a safe hard road surface nearest to the delivery address. The customer is responsible for supplying the necessary labour or mechanical handling to unload and store the products in a safe and correct manner.

Timber windows and doors supplied by Sash Window Shop Ltd are accurate components designed and manufactured using the best available techniques to produce performance rated components. The wood is a natural, sustainable material with properties that make it ideal for making windows and doors. Correct installation with due care and ongoing maintenance historically has shown they can have a proven life of many generations. The way they are handled and stored on site can affect their long-term performance. Good practice avoids damage, maintains quality and saves money.

Windows and doors should be checked at the time of delivery to ensure that they are in accordance with the order schedule, the delivery is complete and that each window or door, including any protective packaging, is not damaged.

Take care not to damage the product during the unloading process. Windows and doors should be lifted by the main frame (not by the opening casements or the glazing bars) and carried in a vertical position to avoid any tendency to distort. Where possible windows and doors should be kept on site for a minimal time prior to fitting. The storage place should be prepared in advance and the products unloaded straight into it. Take care, when using sharp objects, to remove packaging so as not to cause damage to the product or paint finish. The foil wrapping the pallets, should be punctured to prevent the build-up of condensation on the windows or doors. The Installers/Contractor/ Client are responsible for products once they are on site.

For long term performance of the window or door and finish, it is important that this moisture content is maintained during storage on site and during the construction process. It is recommended that the moisture content of timber windows should be between 12% and 19% although fully factory finished windows may be of lower moisture content. Inspect



products regularly while in storage to ensure the conditions are correct and to check the base coat, primer or finish coats are in good condition.

Timber windows and doors must be stored vertically above the ground and spaced to ensure ventilation and avoid condensation. They should be kept under cover in a dry space protected from dust, moisture and damage. Polyethene sheeting should not be used as this can act like a greenhouse and encourage damp or humid conditions. Special care should be taken when there are high levels of humidity such as from plastering. Products should not be stored in a damp room or building. Avoid storing products flat. Water lying on a horizontal window or door will cause the timber to swell and will invalidate the warranty.

3. TIMBER & MOISTURE CONTROL

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.

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.

Timber windows and doors *should not* be installed 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 range of timber windows and doors are protected by Teknos 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 should be repaired immediately to prevent further damage.

4. INSTALLATION

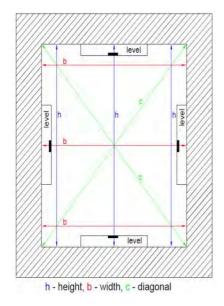
4.1 Fitting Your Windows and Doors

The following is a brief guide to installing Sash Window Shop products. This information is not a definitive instruction, it is for advice only, it is based on long term experience and good practice. Sash Window Shop takes no responsibility for any issues caused by following this advice.

4.2. Installation Instructions

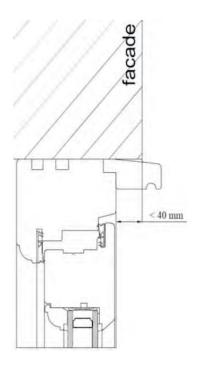
• Please check width and height in 3 points, also please check the two diagonals. The next step is to use a spirit level and check the level and rise of the structure.

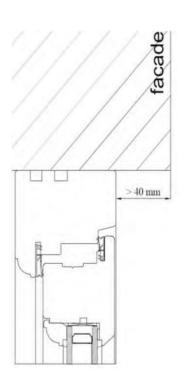




Please remember that joinery can't be installed flush (inline) with the external wall.
Joinery should be set back from the outer wall line of a minimum of 40mm. If joinery cannot be set back by a minimum of 40mm then an additional head drip must be used.

PLEASE NOTE: If joinery is installed in a flush line with the external wall, without any head drip, this will void the warranty.







• If external trims, head drip or cill extension are to be installed on site, please remember to secure connection place by silicone. If connection place is not secured by silicone, this will void the warranty.



4.3. Installation Completion Report

To avoid any issues arising in the future, we require the buyer to complete an Installation Report after installation.

The buyer should prepare a report of completion of the assembly with his or her appointed contractor and in particular when the building or premises is not inhabited and the carpentry is received by a construction worker or a person supervising renovation and construction works.

Installation completion report should have information about:

- The products have been installed properly and not modified prior to installation.
- The products have not been damaged due to improper storage, installation, use or maintenance.
- The product is fit for its intended use.
- The coating has not failed due to poor maintenance of the building, or by the building's inadequate design.
- The coating has not been soiled by plaster, which may damage the paint coating and then may leading.
- to excessive mould growth.
- Adequate ventilation was provided at the time of installation to regulate moisture content.



- Locking mechanism (handles, espagnolette, etc.) was checked and working correctly.
- Unit glass is fine, without visible defects.

4.4. Damp Unventilated Environments

Windows must not be fitted in recently plastered rooms or in enclosed rooms where moisture content is very high. A wet internal unventilated environment may damage paint surfaces or cause movement in the timber. Installation of windows into these environments without prior consultation may invalidate the warranty.

4.5. Protecting Windows that have been Fitted

It is essential that windows are protected at all times from site damage. This includes wet trades, dust, dirt and pollutants. Glass, paint finish, weather seals and hardware may be damaged if windows are exposed to these hazards.

Windows must be treated with care. Fitted windows and doors should be fully covered once fitted but still allowing suitable ventilation to ensure no build up of condensation on the product.

4.6. General Installation Advice

- Windows/doors are heavy and it is likely that two people (maybe more) will be needed to lift them into position.
- Windows and doors should be fitted into pre-existing openings and not built in.
- Windows should be fitted by someone experienced in the installation of traditional windows and doors.
- Opening should be approximately 10-15mm larger than the window required, this enables a simple fit and allows for a good external weather seal either with a silicone seal or cement filet externally.
- Use a DPM under the cill and up the sides of the window and door by 300mm.
- Do not use the window frame as a rest for a scaffold pole or for access without protection.
- Please note use of excessive amounts of foam may deflect the window frames.
- When fitting Accoya products only stainless steel screws and fixings must be used externally or in areas internally with high moisture, e.g. bathrooms. When fitting surface mounted internal ironmongery where not exposed to moisture, non stainless fixings are acceptable.
- If the paint finish is damaged in any way thereby exposing the timber, proper repairs must be undertaken, exposed areas must be end sealed and touched up with primer undercoat and top coat.



4.7. Fitting Sash Window Box Frames

- Traditional windows should be fitted with counter opposing timber wedges evenly spaced around the box frame.
- Once frames are fixed square and plum, secure with fixing screws or fixing brackets, fill the void behind the box frame with expanding foam. Take care not to use too much foam, as this may cause deflection in the frame.
- Do not use any form of mechanical fixing or screw through the hollow box section.
- Seal carefully externally with a mastic point or with traditional cement pointing.

4.7.1. Hanging Large Sashes

- Large sashes will be supplied separately and will need to be hung once the frames are correctly fitted.
- Sash weights will be supplied separately, all staff and parting beads will be pre-cut and ready for fitting.
- Spring balances will be supplied with the window for fitting by a competent person on site.

4.8. Fitting Casement Windows and Doors

- Windows should be packed/wedged evenly within the existing opening.
- It is important to ensure that frames are fitted absolutely square and level within the opening, as distortion may prevent doors or casements opening or closing properly.
- Either fix on stainless steel straps or screw through the frame and packing points directly into the brickwork using a Fischer fixing or similar in stainless steel.
- Fixings on the jambs should be close to the hinge points often underneath the hinges. For larger windows fix at the head and cill.
- Screw holes must be plugged, filled (with a quality two part filler) and touched up after fitting.

4.9. Fixing Items to Windows

If items are to be fixed to window frames such as shutters, then care must be taken. Accoya is very durable however they do have a low moisture content and are quite brittle, damage to the timber might occur if incorrect or inappropriate fixing is carried out.

Some important rules:

- Never fix to or through a hollow box frame
- Always pilot holes before screwing into the timber.



If you have any questions, please call for advice on 01279 456 670.

5. GENERAL MAINTENANCE

5.1. Care and Decoration

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.



5.2. 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)

5.3. 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.

5.4. 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.



5.5. 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.

5.6. 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.

5.7. 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.



5.8. 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.

5.9. 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. Redecorating 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.

5.10. 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.



6. OPERATING INSTRUCTIONS

6.1 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 <u>here</u>.

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.

6.2 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.

6.3 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.

6.4 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.

7. 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 specialises 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.