



Your guide to

operation and maintenance

BALHOUSIE
Windows, Doors & Conservatories



Congratulations
on your brand new
Linlar installation



Thank you for choosing Liniar

Whether you've purchased Liniar windows, doors, bi-folds, patio doors, a full conservatory or decking and fencing products, this guide will help you to keep your Liniar products looking, and working, their best for many years to come.

We've included performance, accreditation and warranty details, together with a variety of useful tips and information to help you follow the correct operating procedures and carry out simple maintenance.

Please spend some time to familiarise yourself with the contents to ensure you enjoy your Liniar installation and get the best from your investment.

It is important you follow the guidance in this manual to ensure warranties are maintained.

In the unlikely event of any difficulties, please contact your installer in the first instance, who will be pleased to help you. Your Liniar installer's details can be found on the back of this guide.

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Quality assured

The Liniar product you have purchased has been subjected to extensive testing during its design and build.

The company's UK-based PVCu extrusion facility is accredited with ISO 9001:2000 for quality systems.

Accredited

In addition, Liniar products have attained the following industry accreditation:

- BS EN 12608 Unplasticized polyvinylchloride (PVCu) profiles for the fabrication of windows and doors.
- PAS 24:2012 – Enhanced security for windows and doors.
- BBA accreditation for white casement and tilt & turn windows.
- Secured by Design status for windows and doors.
- Tested to the requirements of BS7412 – Plastic windows made from unplasticized polyvinylchloride (PVCu) extruded hollow profiles.



Fully guaranteed

Linlar profiles are manufactured using tried and tested formulations from approved suppliers and will not warp, split or discolour for 10 years from date of installation.

The Linlar guarantee is issued in association with our raw material suppliers and based on proven technology for UV stabilised products.

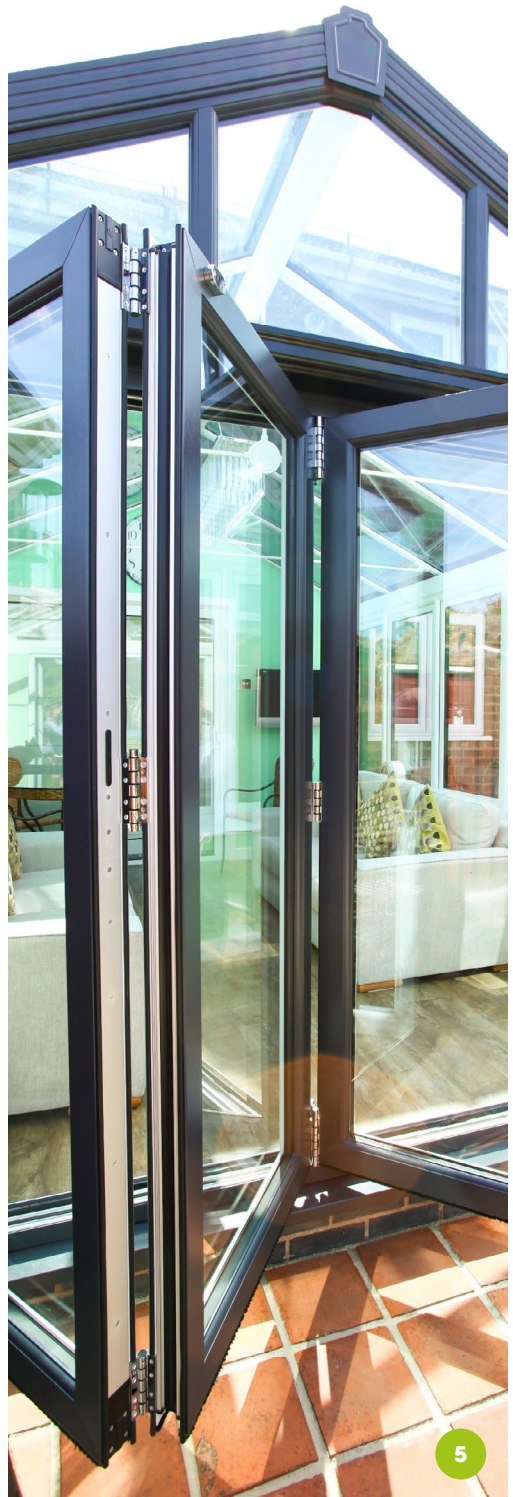
Further details, weathering data and full conditions can be supplied on request.

Linlar bi-folding and patio doors consist of a wide variety of components that are covered under a variety of 1 year, 5 year and 10 year guarantees - see individual product guarantees for more information or visit:

www.linlar.co.uk/about/guarantees

Installations must comply with all aspects of Linlar guidelines.

Comprehensive installation guides and videos can be found on the Linlar website.



General cleaning rules

Your Linar products require a minimal amount of care in order to give you trouble-free operation and remain in optimum condition for many years to come.

Standard PVCu frames

- Wash with a soap and water solution (dilute washing up liquid is fine) to avoid the build up of atmospheric deposits.
- For stubborn stains, use a non-abrasive PVCu liquid cleaner - use sparingly and buff to shine.
- Avoid solvent-based cleaners and take care not to disturb any sealants.

Foiled PVCu frames

- Only use a soap and water solution to clean woodgrained or foiled windows.
- Never use cleaning fluid or solvent-based cleaners.
- Minor scratches can be repaired using a matching RAL touch up pen.

Hardware and Furniture

- Only clean with a soap and water solution.
- Do not use abrasive cleaners.

Glazed units

- Remove all hand jewellery prior to cleaning to avoid scratching.
- Remove any heavy external grime with a soap and water solution.
- Use a proprietary household cleaner, apply with a soft cloth and buff to a shine.
- Glass fitted with external Georgian Bars may be cleaned in the same way - taking care not to disturb.
- If leaded strips are bonded to the glazed unit, take care as excessive pressure may dislodge the lead. External lead will oxidise, this is a natural phenomenon

Conservatories

Liniar does not advise accessing a conservatory roof without the use of scaffolding or platforms. Never lean ladders against PVCu frames, gutters or glass as this may result in damage.

Self-cleaning glass

- Do not use abrasive or solvent based cleaners on the external glazing surface as the self-cleaning properties may be affected.
- Use a soft cloth with warm soapy water and buff to a shine.
- A proprietary household cleaner may be used on the inside glass.

Polycarbonate

- Clean in a similar way to PVCu frames, removing grime and atmospheric deposits.



General maintenance

Maintaining your Linar products with a few simple actions can keep seals, locking systems and mechanisms in optimum condition.

Lubrication

- All locking systems require periodic lubrication, and your Linar windows and doors are no exception.
- For hardware and opening mechanisms, use light machine oil (for example 3-in-1) or silicone- based spray.

Drainage

- All Linar glazed products are designed with an in-built drainage system, comprising of slots within the lower thresholds that allow any water ingress to flow on the outside. To ensure an efficient system, these slots must remain unblocked.
- Periodically remove dirt, clean drain holes and check the drainage operation by flushing through water.

Mastic Seal



- The mastic seal is the waterproof seal found around your windows and doors
- Please note that some discolouration of the seal is a natural occurrence and cannot be avoided.
- Periodically check that the seal is still intact between frame and brickwork.



Condensation

Water vapour remains undetectable while floating in warm air – but when it comes into contact with cold surfaces such as windows, mirrors and tiles, condensation occurs as the vapour turns into water droplets.

In the home, this natural water content is increased by normal day to day living – for example, activity that generates steam such as cooking, bathing, laundering, boiling a kettle and even breathing.

Traditional house construction allowed the escape of this water vapour through natural ventilation, including open flues of coal fires, air bricks and ill-fitting windows and doors. However the drive to conserve energy and reduce heating costs has led to the sealing of homes, resulting in trapped water vapour and increased problems of condensation.

New buildings can also produce water vapour. During the construction stages, they can absorb up to 7,000 litres of water – so throughout the drying out process, it all needs to go somewhere.

With Liniar's highly energy efficient windows and doors, condensation can even form on the outside face of a double glazed unit, due to the outside surface being much colder than the inside – this is perfectly normal and nothing to worry about.

Certain elevations of property can be more susceptible to condensation e.g. north facing buildings.



Ventilation

Provide ventilation in your home wherever possible by:

- Opening a window (please keep security in mind when leaving open an easily accessible window).
- Fitting a ventilation or extraction unit in the kitchen and bathroom.
- Fitting wall vents to provide air flow.

Heating

Maintain heat in the house during cold weather and marginally increase the temperature in areas where condensation is a particular problem.

An electric dehumidifier can help in problem areas by extracting excess vapour from the air.

Circulation

Water vapour will easily drift from its originating point due to the convection currents in your home. To avoid this:

- Keep internal doors to kitchen and bathroom areas closed and draught-sealed where possible.
- Ensure bedrooms are ventilated at night to provide air movement. If doors must be closed, install a ventilation grill in or above the door.
- To ensure air flow in the vicinity of windows, curtains should be a minimum of 150mm (6") away from the window, with suitable gaps at the top and bottom.

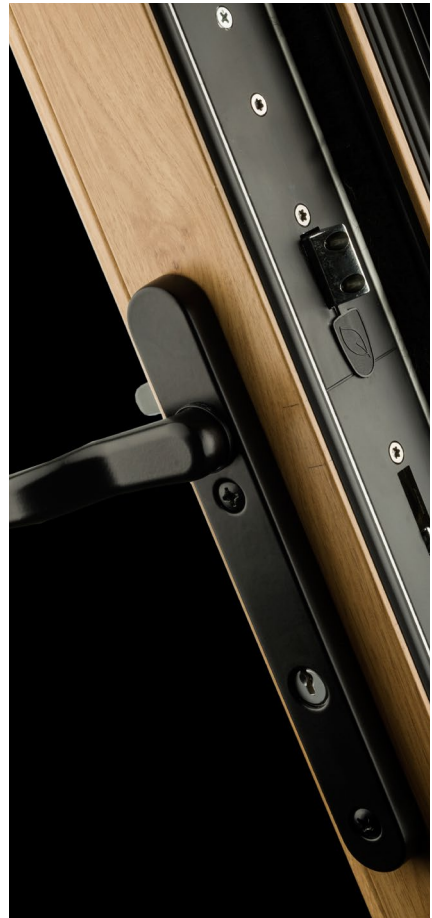
Security

Your Linar windows, doors and roof have been specifically designed to include a number of security features to protect your home and family against intrusion.

Remember: prevention is better than cure.

We recommend the following sensible security precautions should also be taken:

- Never leave a window or door open when your home is unattended.
- Lock all windows whenever they are in the closed position and remove all keys.
- To provide adequate means of escape in an emergency, locate keys adjacent to the window but out of external view.
- When leaving the house unattended at night, ensure door handles are fully lifted and that the keys are turned, in order to throw and lock all deadbolts and shootbolts for full security.



Glazing information

Certain imperfections in the glass cannot be avoided, even in the most carefully controlled production environment.

Such blemishes and imperfections are therefore beyond our control, but are considered acceptable by even the most rigorous industry standards – we would like to draw your attention to the following extract from an industry-accepted standard in relation to glass:

1. Transparent glass used in the manufacture of double glazed units is identical to that used in traditional single glazing and will therefore have a similar level of quality.
2. Both panes of the double glazed unit shall be viewed from the room side, standing at a distance of two metres (6'6") in natural daylight and not in direct sunlight. The area to be viewed is the normal vision area, with the exception of a 50mm (2") wide band around the perimeter of the unit.
3. Flat transparent glass shall be deemed acceptable if the following

phenomenon are neither obtrusive nor bunched; Totally enclosed seeds, Bubbles or blisters, Hairlines or blobs, Fine scratched, not more than 25mm (1") long.

4. Obtrusiveness of blemishes shall be judged by looking through the glass and not at it, under normal lighting conditions as in point 2.

Other glazing information

Your installer has used only the highest quality float glass available, whether laminated, toughened or annealed, which conforms to the requirements of BS 6262. Double and triple glazed units produced to BS 7513 conform to the highest manufacturing standards and the most uncompromising quality control and inspection routines.

Patterned glass originates in very large sheets and due to spacing repetition, centralisation of any design in a specific window cannot be guaranteed.

Caring for your windows

To keep your Liniar windows operating smoothly, please read and note the steps you can take yourself.

Open out windows

- Liniar windows may be opened outwards and are fitted with friction hinges, (either egress, easy clean or restricted) that hold them in any desired position when opened.
- The locking mechanisms, which can be either espag or shootbolt locking, fitted to the opening edge of the window, engages with slotted 'keeps' fitted to the outer frame.
- The secondary slot within the keep enables the window to provide a 'night vent' position with the window slightly open, whilst providing ventilation.
- Accessible windows should not be kept in the 'night vent' position when the house is unoccupied.

Operation



- To open, turn the key if fitted, then push the button in the centre and whilst pressed, turn the handle through 90° to unlock the handle.
- To close, simply turn the handle back the other way until it engages with the lock.
- Once closed turn the key to lock the window, remove it and keep it somewhere safe nearby.

Friction Hinges

- To attain optimum performance, the scissor mechanism of the friction hinges will require periodic lubrication. The pivots, sliding shoe and tracts should be kept free of debris.
- Oil all pivot points with light machine oil (one drop per pivot is sufficient) and wipe away excess.



Espag

- Lubricate as required. Keep the sliding mechanism free of dirt and lubricate each slot with light machine oil.



Keeps

- Lubricate the slots of the keeps with petroleum jelly as required.

Tilt & Turn Windows

- This style of window is capable of two modes of operation - tilt mode for ventilation and turn mode for cleaning and emergency exits.
- Most of Liniar's tilt and turn windows are fitted with 'tilt before turn' (TBT) mechanisms for safety reasons - ensuring the window cannot be easily opened by children.
- As the name suggests, the tilt mode must be performed prior to turning the window - however, these windows may also be supplied in 'turn before tilt' mode, where the sequence is reversed.
- The window must always be fully closed before changing the handle's position.
- If you are in any doubt as to the sequence of operation for your windows, please contact your installer.

Operation



- If fitted, turn the key to unlock the window.
- To select tilt mode, rotate the handle through 90° from downwards to horizontal and pull the window inwards towards you.
- The bottom of the window will remain hinged to the frame, while the top tilts inwards to allow ventilation.
- To select turn mode, close the window and rotate the handle through 90° until it points upwards, then pull the window inwards.

Please note

- The switch barrier projecting from the locking mechanism, adjacent to the handle, is a safety device. It ensures only one mode can be selected at any time, by securing the handle into the selected mode while the window is open.
- Avoid pressing the switch barrier as this action releases the handle and could allow it to be inadvertently rotated to the alternative mode, resulting in the window disengaging from its hinge points.
- Always firmly close the window before changing handle position.

Maintenance

- Keep sliding mechanism free of dirt and lubricate each slot with light machine oil as required.
- Lubricate the faces of the keeps with petroleum jelly as required.



Window restrictors

If fitted, the restrictor limits the opening of the window, for child safety and to control ventilation. The restrictor may be disengaged to allow the window to be fully opened.

Standard restrictors

To open - restricted

- Operate handle and open window as normal. The restrictor arm will limit opening.

To open - fully

- Once opened to the restricted position, close the window slightly and manually release the restrictor by lining up the slot opening with the striker post. Whilst holding the latch, open the window fully.

To close

- Close the window in the normal manner. The restrictor will automatically re-engage into the restricted position.

Security restrictors

- A special key is supplied to provide adjustment for the swinging arm and to enable the unit to be locked

To open - restricted

- Select required mode and open the window. The restrictor arm will limit opening.

To open - fully

- Close window. Whilst holding down control button, re-open the window. Release button as soon as the window has cleared the frame.

To lock restrictor

- Insert special key at the back of the unit and rotate clockwise half a turn.

To adjust swinging arm

- Insert the key into the socket at the side of the unit and rotate clockwise to tighten the swinging arm, or anti-clockwise to loosen.
- In the unlikely event that adjustment is needed, only a small movement (1/4 turn) will be required.

To close

- Close the window in the normal manner. The restrictor will automatically re-engage.
- To provide means of escape in the event of an emergency, we recommend that the keys to all windows are located adjacent to the window, but out of view.



Residential doors

Linear PVCu doors are available in a variety of styles and operations.

Residential doors

- Doors may be fitted with lever/pad handles that limit outside opening by use of a key or twin hookbolts and single deadbolt combination with latch and lock.
- In addition, up to 4 rollers may be present. All locking points engage in keeps fitted to the frame jamb.



Operation

To lock

- To lock, close the door - latch engaged.
- Lift the handle or pad to engage the top and bottom deadbolts/hookbolts/rollers.
- Insert key and turn to engage the centre deadbolt and fully lock.
- If the key will not turn, lift the handle or pad to its maximum.

To unlock

- To unlock, insert the key and turn to unlock.
- Press handle or pad down to disengage top and bottom deadbolts/hookbolts/rollers.
- With lever handle, the door will open.
- With pad handle, continue to turn key to open.

Maintenance

Locking mechanisms

- With the door open, lubricate the deadbolts, hookbolts, rollers and latchlock with light machine oil if required.
- DO NOT add additional lubricant to the lock cylinder as this is packed with special grease.
- Clean and lightly oil moving parts.

Hinges

- Clean with a soap and water solution.
- No lubrication is required.



French doors

Linear French doors are designed to open fully for a wide aperture. Please note their operation and maintenance to keep them working properly.

Operation

Dependent upon the locking mechanism fitted to your door, there are two slave door locking options:

1. Full slave locking (a handle operated shootbolt that operates in the same way as the master door);
2. Fingerbolts (hand operated fingerbolts fitted to the top and bottom of the slave door). There is no handle present on this type of locking option.

Always open the master door first to avoid spraining the lock. Your installer should have shown you which door is the master.

To lock the door after use, turn the handle upwards to engage the multi-point locks and then turn the key.

Maintenance

- Ensure frames are free of dirt by cleaning with soap and water.
- Check drainage holes and remove any blockages.
- Lubricate pivot points with light machine oil.
- Minor foil scratches can be repaired using a matching RAL touch up pen.
- Check for obstructions, signs of wear and ensure fixing screws are secure.



Patio doors

The 'air glide' motion of a Linar patio door is what sets it apart. Ensure many years of use by following these simple steps.

Operation

Linar patio doors are fitted with its patented integral high security ModLok™ locking mechanism, featuring a multi-point locking system and shoot-bolts with integral reinforcement, together with bespoke Linar leaf-embossed handle.

- To open, move the lever upwards, take hold of the handle and slide the door open.
- To close and lock, ensure the door is in contact with the frame and move the lever into the downward position.

Maintenance

- Ensure frames and tracks are free of dirt by cleaning with soap and water.
- Check drainage holes and remove any blockages.
- Minor foil scratches can be repaired using a matching touch-up pen.
- Check for obstructions, signs of wear and ensure fixing screws are secure. Keep brush pile free from dirt.



Bi-fold doors

These operating instructions apply to all Linar bi-folding systems, including Standard, ModLok™ and Alumina.

Operation - Opening

1. Unlock and open the first door in the run. Fold the door back and ensure the magnets at the top of the doors engage if applicable.
2. Move the internal handle between the first folding set of doors and 90° - this will unlock the shootbolts in the top and bottom track.
3. Push (or pull depending on the doors opening direction) the "c-handle" to start the folding mechanism.
4. Slide until the doors fold back into place, making sure the magnets at the top of each door are engaged to hold them in place.

Operation - Closing

5. Slide the folding door towards the centre of the opening.
6. Towards the end of the motion pull (or push depending on the doors' opening direction) the c-handle and compress the door against its weather seals.
7. Turn the internal handle 90° to lock the doors in place.
8. Close and lock the master door.

Step 1 & 8

3-2-1



Step 3 & 6



Step 4 & 5



3-3-0



PVCu Bi-fold doors

Carry out minor maintenance periodically to ensure the ongoing smooth operation of your Linar PVCu bi-fold.

Maintenance

- The rolling mechanisms that carry the door panes along the track are fitted with sealed stainless steel bearings and require no lubrication.
- Ensure the top and bottom tracks are kept free from dust and debris, which may impair the function of your doors.
- Door locking mechanisms should be cleaned, with hinges and locking mechanisms lightly lubricated with a machine oil at least once each year (and more frequently where appropriate).



Alumina doors

Alumina doors are made from Aluminium, with operation, maintenance and cleaning instructions similar to those of PVCu doors.

Maintenance

- The rolling mechanisms that carry the door panes along the track are fitted with sealed stainless steel bearings and require no lubrication.
- Ensure the top and bottom tracks are kept free from dust and debris, which may impair the function of your doors.
- Door locking mechanisms should be cleaned, with hinges and locking mechanisms lightly lubricated with a machine oil at least once each year (and more frequently where appropriate).

Cleaning

- Powder coated frames should be cleaned with a mild soap and water solution with a soft brush, sponge or cloth. Stubborn stains can be removed with white spirit using a soft cloth and gentle wiping only.
- Clean with a mild soap and water solution with a soft brush, sponge or cloth. Avoid solvent based cleaners. Minor scratches can be repaired using a matching RAL touch-up pen.

Please refer to pages 24-25 for opening and closing instructions.

Outdoor range

The Linar outdoor range includes deckboards, balustrading and fencing, as well as piling and retention systems.

Decking

- No maintenance is required for the Linar decking system, but as with any outdoor surface, a regular clean is recommended to keep it looking at its best.
- We recommend frequently washing the handrails and posts with a cloth using warm, soapy water and wipe dry.
- Use a stiff bristled brush with warm, soapy water to clean the deckboards.
- A jet wash may also be used to clean the deckboards.
- Do not use glass cleaner on the deckboards or balustrades or any type of bleach, solvent (e.g. white spirit, methylated spirit, nail varnish) or adhesives.
- We recommend that hot surfaces such as barbecues are not used in association with PVCu decking.
- Some rubber-backed mats can cause discolouration of deckboards over time.
- Some brands of suncream can also stain foiled finishes on balustrades, please take care.
- As with most surfaces, footwear should be worn to protect feet in hot weather.

Fencing

- All Linar fence posts, gravel boards and picket fencing systems require very little maintenance to make sure they enhance your garden for years to come.
- If necessary, wash with warm soapy water and a soft cloth, and buff to a shine with a window chamois or leather.
- Woodgrain foiled finishes should be treated as foiled frames - see page 6 for more details.

Piling

- If you've installed Linar log pile in your garden, either for pond erosion protection, soil retention, or simply for decorative purposes, you won't need to sand, paint or varnish it to maintain its appearance.
- A quick spray with the hosepipe whilst watering your plants should be all that's necessary to keep it clean.
- As with all Linar PVCu products, do not use any hard abrasives or harsh chemicals.

Dos and Don'ts

Read and note the following checklist to ensure continual optimum performance of your Liniar products.

Do...

- ✓ Clean glass regularly with a good quality liquid spray glass cleaner.
- ✓ Frequently wash down PVCu profiles with warm soapy water and wipe dry.
- ✓ Only use cleaning materials which don't impair anti-corrosion properties of the surface coatings.
- ✓ Use cream cleaner for isolated stubborn stains on white PVCu only. Apply with a damp cloth using minimal pressure.
- ✓ Ensure drainage slots are unblocked and free from dirt and debris.



- ✓ Keep all tracks clear of dust and debris in order to reduce wear and tear on sliding parts.
- ✓ Check all fire escapes' hardware regularly for wear and tear and a consistent fit.
- ✓ All moving parts are lubricated but will benefit from a small application of light oil once a year.
- ✓ Ensure conservatory gutters and their outlets are kept clear of leaves and debris to ensure unobstructed flow.
- ✓ Replace damaged or worn parts with original Liniar parts.

Don't...



Use abrasives or brass cleaner on furniture: handles, door knockers, letter plates.



Use glass cleaner on the PVCu profile.



Use high pressure or steam cleaners (except on deckboards).



Lean ladders against conservatory guttering.



Paint the PVCu profiles.



Use any type of bleach, solvent cleaner (e.g. white spirit etc) or adhesives.



Use abrasive paste or cream cleaners on any PVCu profile.



Use excessive loads on the windows and doors.



Use abrasive solvent-based cleaners on self-cleaning glass.



Use any unspecified tools or abrasive papers.

7 great reasons to choose Liniar

Innovative - continual investment in research, development and testing delivers the most advanced products on the market.

Energy efficient - designed from scratch to achieve the pinnacle of thermal performance and retain more heat in your property

Safe and secure - engineered with built-in security features and approved by independent testing facilities

British made - Liniar PVCu is extruded in our state-of-the-art factory in the heart of Derbyshire

Lead free - all Liniar products use materials that are 100% lead free

Quality assured - backed with ISO 9001 accreditation for your peace of mind

Guaranteed - all Liniar products are guaranteed - see individual product guarantees for details

