BAUDER
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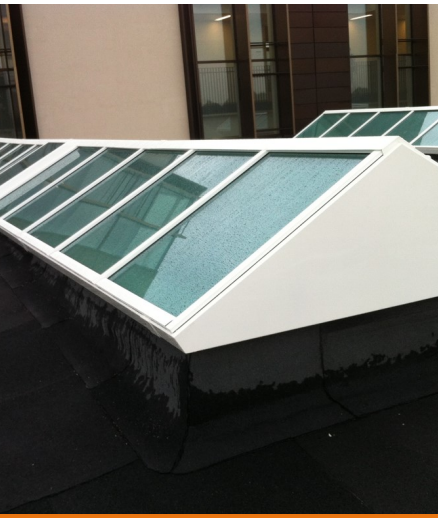
General Maintenance Rooflights

Bauder Rooflights



General maintenance procedures

Bauder rooflights systems

Bauder rooflights are designed to last for many years and provide trouble free operation. However, regular inspection, cleaning and maintenance is recommended in accordance with the plan below in order to get the best performance from these units.

Inspection and test plan

Inspection/activity/ test description	Frequency of test or inspection	Method of inspection	Acceptance criteria/ tolerance/parameters	Cleaning frequency
Polyester powder coating	Yearly	Visual inspection for deep scratches and paint flaking	Light scratch	Yearly
UPVC	Yearly	Visual inspection	No deterioration	Yearly
Glass	Yearly	Visual inspection for any cracks or damages	Undamaged and uncracked glass	6 Monthly
Polycarbonate	Yearly	Visual inspection for any cracks or damages	Undamaged and uncracked polycar-bonate	6 Monthly
Seals & sealants	Yearly	Visual inspection	No deterioration	Yearly
Hardware - hinges, handles, locks, wormgears, gas springs	6 Monthly	Visual inspection for loose components	Operational	6 Monthly
Motors/electrical items	3 Monthly	Test the operation	Operational	N/A

Polyester powder coating

Cleaning

- All metalwork is polyester powder coated to provide a durable, easy to clean protective system that will last for many years, provided the correct maintenance is carried out.
- Commencing from the date of installation at no less than yearly intervals, cleaning can usually be accommodated within other routine maintenance/cleaning procedures.
- Usual maintenance can be done using water with mild detergent (pH 5 to 8) using a soft brush, sponge or chamois leather. Under no circumstances, should any coatings be cleaned using abrasive cleaners, solvents, acids or alkali materials, or cutting and abrasive polish.
- If the atmospheric pollution has resulted in heavy soiling of the coating, some stains or marks may require stronger domestic products such as products based of alcohol, petroleum spirits, white spirit, or bleach (diluted to 5%). In this case, it is necessary to rinse the coating immediately after the cleaning product has been used. In no circumstance should any abrasive cleaner or polish, or any cleaner containing ketones or esters be used.

General maintenance procedures

Bauder rooflights systems

Polyester powder coating cont.

Maintenance

Although there is a durable and robust finish, the coatings used are as with all applied finishes, susceptible to mechanical damage. These can be repaired with a suitable spray-on liquid. Cromadex 903 Two Pack Chromate Free Etch Primer and Cromadex 800 Two Pack Non-Isocyanate Acrylic Topcoat are widely available.

Method 1:

Minimum requirements to repair scratch damage (small isolated areas approx.5-6cm^2)

- All surfaces should be painted with a suitable cleaning/degreasing agent by applying liberally using a clean lint-free cloth and wiped dry using lint-free cloths, physically removing all sealants and mastics, etc.
- All areas should be coated with abrasive paper (up to P320 grade if necessary), to ensure the surface is ready to be coated and then wiped clean using lint-free tack rags.
- Apply by brush to exposed metal surfaces only one thin coat of primer and allow to dry for one hour.
- Apply by brush or spray one coat of the relevant topcoat, matched to shade and gloss.

Method 2:

Minimum requirements to repair larger areas of damage

- Mask all surrounding surfaces of the damaged areas to the edge of the panel or a suitable break line.
- All surfaces should be painted with a suitable cleaning/degreasing agent by applying liberally using a clean lint-free cloth and wiped dry using lint-free cloths, physically removing all sealants and mastics, etc.
- All areas should be coated with abrasive paper (up to P320 grade if necessary), to ensure the surface is ready to be coated and then wiped clean using lint-free tack rags.
- Apply by brush or spray to the exposed metal surface only one thin coat of primer and allow to dry for one hour.
- Apply by spray a minimum of 40 microns topcoat according to the data sheet instructions.
- Alternatively apply by brush 50 microns of topcoat as detailed in the relevant product data sheets.
- De-mask, clean down and remove debris, etc.

UPVC

Cleaning

- UPVC is a maintenance free hard-wearing material requiring minimal cleaning.
- Commencing from the date of installation at no less than yearly intervals, cleaning can usually be accommodated within other routine maintenance/cleaning procedures.
- Avoid all solvent based or abrasive cleaners, wash frames with a mild soap and water solution periodically to remove any grime and atmospheric deposits.
- If required, clean with Solusafe or an alternative non-abrasive proprietary cleaner to remove any stubborn blemishes.
- Take care not to disturb any sealants or rubber seals.
- No further maintenance is required.

Glass

Cleaning

- Glass should be cleaned regularly—failure to do so may result in discolouration and deterioration of the surface.
- Commencing from the date of installation at no less than yearly intervals, cleaning can usually be accommodated within other routine maintenance/cleaning procedures.

General maintenance procedures

Bauder rooflights systems

Glass cont.

Cleaning
Do not:
- Use abrasive or highly alkaline cleaners.
- Scrape the glass with razor blades or other sharp instruments.
- Clean glass products in hot sun or at elevated temperatures, as this can lead to staining and marking.

Periodic cleaning of glass rooflight units and / or roof glazing, following the correct general procedures and using inert cleaning chemicals, is recommended to both prolong service life and maintain performance levels.

Recommended cleaning solutions	Recommended solvent cleaners
Household soap	White spirit
Household detergent	

Procedure 1 (small areas)
- Wet sheet with copious quantities of lukewarm water.
- Wash sheet with a weak solution of mild soap or household detergent and lukewarm water, using a soft cloth, sponge or very soft bristle brush to loosen any dirt and grime. Keep cloth, brush or sponge very wet and gently agitate any soluble surface contamination.
- Spots and splashes of paint or tar should be treated with white spirit.
- Rinse with cold water and dry with a soft cloth to prevent water spoiling. Alternatively, providing all surface contamination has been removed, water can be removed with a squeegee.

Procedure 2 (large areas)
- Clean surface with a high pressure water and / or steam cleaner.
- Care should be exercised when using high pressure water or steam as the sealing of the system may be compromised and water could enter the building beneath.
- Use of additives to the water should be restricted to weak soap or detergent.

REMEMBER: When carrying out any cleaning or maintenance, always follow correct HSE safety guidelines. Remember that some rooflights are classified as ‘FRAGILE’.

Maintenance
- Broken or cracked panes, which may lead to damage of the building by allowing rain to penetrate, should be made waterproof at once.
- Replacement glass should only be as originally specified on the approved drawings and in fire rated and safety glass applications to conform to the approved standards. This will also apply to the glazing gasket material. Please seek expert advice.
- If laminated glass is broken and allowed to remain in place, the interlayer adjacent to the exposed edge may discolour, due to water absorption.

Polycarbonate / Lumira glazing

Cleaning
- Commencing from the date of installation at not less than 6 monthly intervals, usually can be accommodated within other routine maintenance / cleaning procedures.

General maintenance procedures

Bauder rooflights systems

Polycarbonate / Lumira glazing

Cleaning
Do not:
- Use abrasive or highly alkaline cleaners.
- Scrape the glass with razor blades or other sharp instruments.
- Clean glass products in hot sun or at elevated temperatures, as this can lead to staining and marking.

Periodic cleaning of glass rooflight units and or / roof glazing, following the correct general procedures and using inert cleaning chemicals is recommended to both prolong service life and maintain performance levels.

Recommended cleaning solutions	Recommended solvent cleaners
Household soap	White spirit
Household detergent	Petroleum Ether (BP 65°)
Teepol	Hexane
	Heptane

Procedure 1 (small areas)
- Wet sheet with copious quantities of lukewarm water.
- Wash sheet with a weak solution of mild soap or household detergent and lukewarm water, using a soft cloth, sponge or very soft bristle brush to loosen any dirt and grime. Keep cloth, brush or sponge very wet and gently agitate any soluble surface contamination.
- Spots and splashes of paint or tar should be treated separately (see below).
- Rinse with cold water and dry with a soft cloth to prevent water spoiling.

Procedure 2 (large areas)
- Clean surface with a high pressure water and / or steam cleaner.
- Care should be exercised when using high pressure water or steam as the sealing of the system may be compromised and water will build beneath.
- Use of additives to the water should be restricted to those compatible with polycarbonate sheet.

Procedure 3 (paint and bitumen removal)
- Identify and treat individual areas of contamination.
- Use only clean and very soft cloths or cotton wool soaked with one of the solvent cleaners listed.
- Gently agitate the surface contamination with light pressure.
- Change cleaning cloth frequently during the cleaning procedure.
- If stubborn, soak small piece of cloth or cotton wool with solvent and allow to sit over spot for several minutes until soft enough for gentle rubbing to remove.
- Finally, wash surface with detergent as in procedure 1 & 2, rinse and dry.

REMEMBER: When carrying out any cleaning or maintenance, always follow correct HSE safety guidelines. Remember that some rooflights are classified as ‘FRAGILE’.

General maintenance procedures

Bauder rooflights systems

Polycarbonate / Lumira glazing cont.

Maintenance

- Broken or cracked panels, which may lead to damage of the building by allowing rain to penetrate, should be made waterproof at once.
- Replacement polycarbonate should only be as originally specified on the approved drawings and conform to the approved standards. This will also apply to the polycarbonate gasket material. Please seek expert advice.

Seals and sealants

These should be examined on a three yearly basis for any signs of deterioration, where they form a weather seal.

Maintenance

- Damaged or deteriorated seals should be replaced where any form a weather seal and a specialist installer must be called in to deal with any problems.

Hardware

General

- The frequency of maintenance of hardware and all mechanical working parts is directly related to the level of use. Therefore, any items in areas of heavy traffic will demand increased levels of maintenance, to ensure continued and satisfactory operation of the component parts. This will entail the checking and tightening, as required, of all mechanical fixings.
- On no account must vents be wedged open, as this can cause distortion and subsequent malfunction of hardware and damage to seals.

Hinges

A vent not properly hinged can result in sagging and dropping. An adequate number of hinges are therefore always recommended. Heavy hinges of good quality should always be used where high frequency service is expected.

Fixing and maintenance of hinges:

- Ensure that butt hinges are fitted with the hinge pin head at the top of the hinge.
- Pins must be in true alignment.
- Ensure all hinges in external and / or harsh environmental conditions are lubricated regularly, the frequency of which will be determined by the severity of the conditions.
- If the vent is either stiff or produces a squealing sound - ensure that metal hinges are lubricated three times a year, or more frequently in harsh environments.

Locks and cylinders

With locks and latches, alignment of the strike plate is essential to ensure correct location of both the latch bolt and deadbolt. Lock and latch cases mortised into the door too tightly may result in the key and bolt jamming.

Maintenance of locks and cylinders:

- If key sticks inside the lock - apply graphite only to the cylinder (UNDER NO CIRCUMSTANCES MUST OIL BE USED) and check the mortising of the lock case.
- If the leadbolt / latchbolt is sticking - check the alignment of the strike and the mortising of the lock case.
- If the key rotates without operating the deadbolt - check the cylinder and followers for wear.

General maintenance procedures

Bauder rooflights systems

Hardware cont.

Handles
- Backplate and rose fixings should be periodically checked for tightness and adjusted if necessary. Badly fitted and maintained furniture can prevent the lock from operating correctly. Spindle grub screw fittings should be checked and tightened.
- Pull handles should be inspected to ensure that the fixings are positive with grub screws, where used, firmly in position. Any movement of the handle will damage the face and cause the handle to become unstable and fail in service.

Worm gear
- Check fixings are tightened, clean and check operation lubricate with WD 40 if necessary at 6 monthly intervals.

Gas springs
- Gas springs are self-contained units that require no periodic maintenance or service beyond being kept clean and dry.
- Lubrication of the spring is internal and no external lubrication is required.
- Repair of gas springs is not possible as loss of force is caused by main seal damage and gas springs should be replaced.

Finishes

Dust, which is chemically active, and moisture which is frequently acid are the main natural hazards affecting finishes. Simple, but regular cleaning is, therefore more successful than more severe sporadic treatment. Irreparable damage can be caused to the surface if proprietary metal polishes, harsh abrasive cleaners or emery cloths are used on an electrolytically deposited finish.

Finishes cleaning procedures:
- Anodised aluminium finishes should be dusted regularly and washed periodically with weak detergent solutions and occasionally wiped with wax polish.
- Lacquered (polished brass etc.) finishes should be cleaned occasionally with good quality wax free polish. Abrasives and metal polishes must not be used.
- Stainless steel finishes should be dusted regularly and occasionally washed with soap and water.
- Bronze finishes should be dusted regularly and periodically washed in warm soapy water and treated occasionally with a sparing rub of wax or furniture polish.
- Nickel and chrome finishes should be dusted regularly and washed periodically with weak detergent solutions and rubbed occasionally with a cloth dampened in paraffin or light oil.
- Powder coated (epoxy, polyester or polyurethane) finishes should be cleaned with a soft cloth and any household furniture polish. Under no circumstances must industrial solvents be used.

Motors / electrical items

Cleaning
- Wiping off dirt with a clean lint-free cloth or brush is usually satisfactory.
- Clean casings annually with lukewarm mild household detergent with a damp (not wet) cloth. Accumulated dirt or grease may require a solvent to be removed - a cloth barely moistened (not wet) with non-flammable solvent can be used for wiping.

General maintenance procedures

Bauder rooflights systems

Motors / electrical items cont.

Maintenance
The actuators incorporate components that do not require significant routine or extraordinary maintenance.

In heavy duty conditions (e.g. very dirty work areas, frequent use, elevated temperature changes, load variations caused by wind, snow etc.) ensure at least once every six months that the following are checked:

- Actuator assembly components are clean.
- Fixing systems (brackets and screws) are tight.
- The window frame is not deformed and the seals are tight.
- Check cable connectors.

Rain sensors

- Maintenance free component - clean annually with lukewarm mild household detergent. Check cabling if any fault or deterioration is found.

Wind sensors

- Maintenance free component – check annually for freedom of movement. Check capability and replace if any fault or deterioration is found.
- To prevent damage in high winds it is recommended that the wind sensor is set to close in wind speeds above 10 metres / second as per BS EN 1873:2014 and A1:2016.

Compatible general purpose cleaners

Material	Supplier	Product	Application Method
Glass / polycarbonate	Nilco	Anglian window glass cleaner	Hand / high pressure spraying
Polycarbonate	Marollaud	Oloram DTU 5216	Hand / high pressure
Polycarbonate	Johnson Wax	123 Emerel, 7% Jonclean 111, 1% Jonclean 112, 2%	Hand / cloth Hand / cloth High pressure
Polycarbonate	Applied Chemical Limited	Heavy duty pressure washing detergent 2%	High pressure
Polycarbonate	Witty Chemical	Witty Pool red SE Witty Pool red HR	Cloth Cloth
Glass	UK Office Direct	2 Work Glass & Window Cleaner 5 Litre 701	Hand / high pressure
Polycarbonate	AVQ	Taski Swissan, 1% Taski R 50, 5% Taski Calcadid 10%	Spraying / cloth Machine Spraying