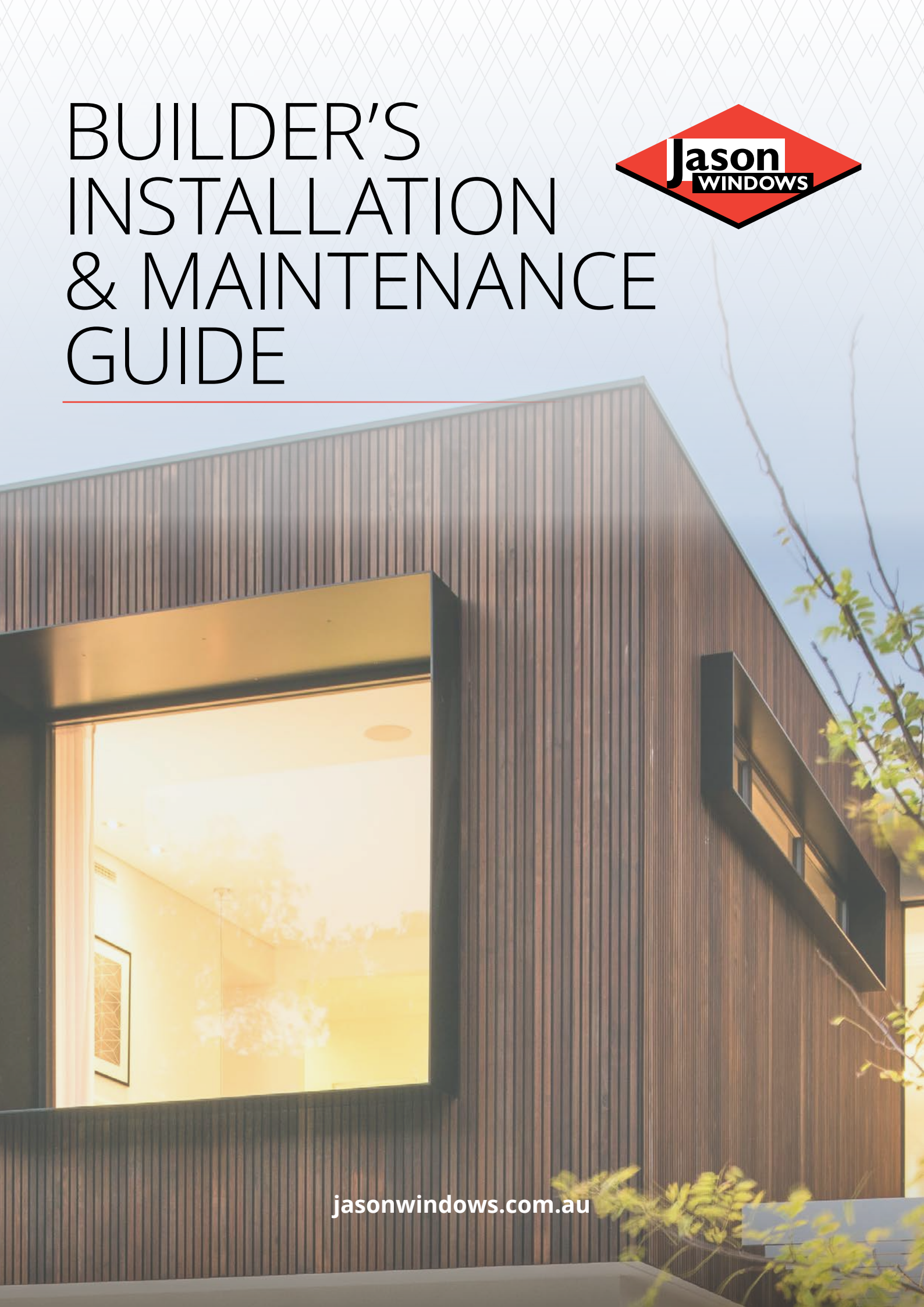
BUILDER'S INSTALLATION & MAINTENANCE GUIDE



jasonwindows.com.au

The Australian Glass and Window Association (AGWA) has published an industry guide called “A Guide to Residential Installation” which provides the basic handling and installation instructions for windows and doors in residential buildings. The following outlines key instructions and advice as published in this guide. The full guide can be obtained from www.agwa.com.au

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Installation Access

- Jason frames can only be glazed from the outside
- It is the builder's responsibility to supply and erect all scaffold and hoist requirements
- Hoist and clear access externally to all windows (including raked windows) and doors is required to carry out all upper floor glazing and frame installs
- If a hoist is not supplied, then sufficient alternative access in the form of staged scaffold or clear stairs must be provided along with a provision for additional labour
- If scaffolding and hoist are not setup adequately, installation maybe delayed
- NB. Scaffolding is not required for screen installation as Jason screens are installed internally to upper floors. Louvre screens are the exception and will require scaffolding for both glazing and screens

Glass is a dangerous substance and as such the glazing process on site is dangerous. Oher trades on site is one of the biggest challenges faced by our glaziers. We ask that other trades are not booked to attend on the day of glazing to ensure the safest environment for everyone. If other trades or deliveries need to be onsite we request that our glaziers are given right of way to ensure they can get their vehicles as close to the build as possible. If our glaziers feel the glazing installation will be unsafe they will contact the site supervisor to make alternative arrangements.

Installation Problems

The severity of exposure to wind is the most important factor in the specification and installation of windows and doors in openings. Components and installation practices acceptable in sheltered situations may quickly fail when exposed to the full force of the wind and rain. However, installation problems such as incorrect fitting or the omission of flashings, smothered or missing weep holes, or the loss of continuity in the water barrier are the prime cause of leaks in window assemblies.

Claims for damaged frames must to be submitted to Jason Windows within 2 weeks from frame delivery.

Claims can be submitted to scheduling@jasonwindows.com.au

Flashing

The National Construction Code (NCC) stipulates flashing requirements for:

1. Masonry veneer construction: flashings must be fitted to the top and bottom (head and sill) of an opening. Detailed in Clause 3.3.5.8

2. Timber and composite wall cladding: flashing must be provided to the tops, sides and bottoms (head, jamb and sill) of an opening. Detailed in Clause 3.5.4.6

It is the builder's responsibility to ensure windows and doors are installed in such a way that water does not penetrate from the outer skin to the inner skin of the building envelope. The extent of the flashing required will depend on site classifications and local weather conditions. In some instances, only sill flashings may be required and in others, jamb and head flashing may be required. For further information please refer to the NCC.

Jamb Flashing

Required in all locations to ensure that water which enters between the window jamb and the outer skin is drained to the sill flashing. Where jamb flashing overlaps sill flashing, the overlap should extend the full depth of the sill flashing.

Head Flashing

Provided to stop water wetting the inner skin by bridging across the window or door head. Also provided above any wall penetrations not specifically designed to stop water reaching the inner skin, i.e. exhaust fans and ventilation ducts.

- Must project horizontally a minimum of 150mm both sides past the opening
- Must be of approved materials to AS2904
- Must be provided with weep holes to let the water out

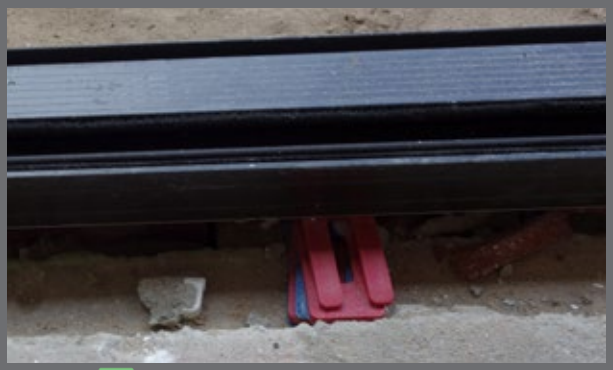
Sill Flashing

- Provided to stop water entering across the underside of the window and wetting the inner skin
- The window generates run off in down pours and sill flashing stops this water being blown across the cavity under the window. The sill flashing also collects water which runs down the jamb flashing
- Must project a minimum of 150mm both sides past the opening
- Must be of approved materials to AS2904
- The brickwork must be provided with weep holes to let the water out – As per NCC reference Volume 2 Part 3.3.5.9 Weepholes

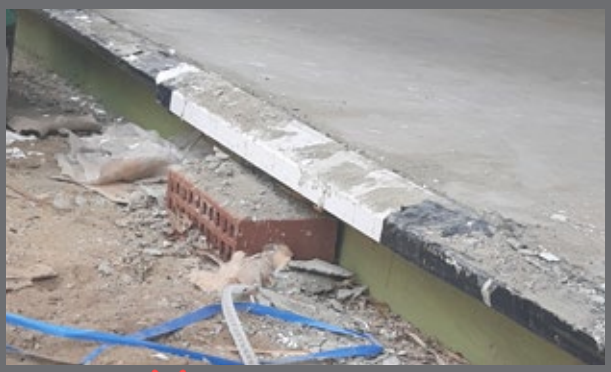
Note: A weep hole is a small opening that allows ventilation and water to drain from a wall cavity. The Australian Building Code states: "Australian Standards 3700 – 2011 Section 4.7.2: Weep holes shall be provided wherever it is necessary to drain moisture from or through masonry construction. Where flashings are incorporated in the masonry, weepholes shall be provided in the masonry course immediately above the flashing, at centers not exceeding 1200mm. Refer to the AGWA "A Guide to Residential Installation" for examples of best practice.

Flashing - Fixing Instructions

1. Fit flashing to window surrounds as required. Refer to the AGWA Industry guide: “A Guide to Residential Installation” for requirements
2. Frame must be packed plumb, square and not twisted between the openings. Ensure the sill is fully supported along the full width at both the front and back of the profile; failure to do so may result in the sill rolling. Sills on all windows and doors must be straight and level and should be packed and secured with the appropriate number of fixing required to suit the specified engineering plans for the site rating. Refer to the AGWA Industry guide: “Correct Fixing to Windows & Doors”
3. With cavity brick construction use galvanised window lugs. As a rule of thumb, window lugs should be positioned at 450mm maximum centres. For brick veneer applications, secure aluminium windows by screw fixing through the reveal frame, flashing fin or angle trim. Refer to the AGWA industry guide “A Guide to Residential Installation” for suitable quantity, location and specifications of fixing types.



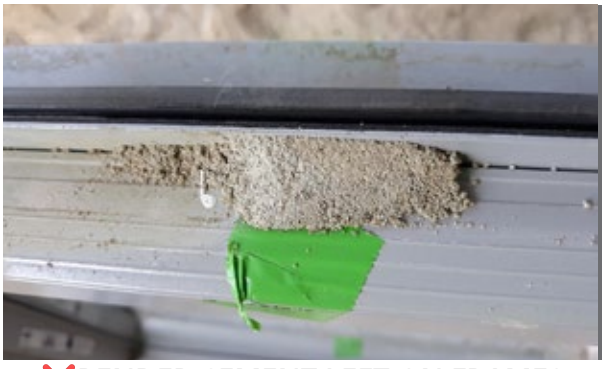
✅**SILL PACKED CORRECTLY**



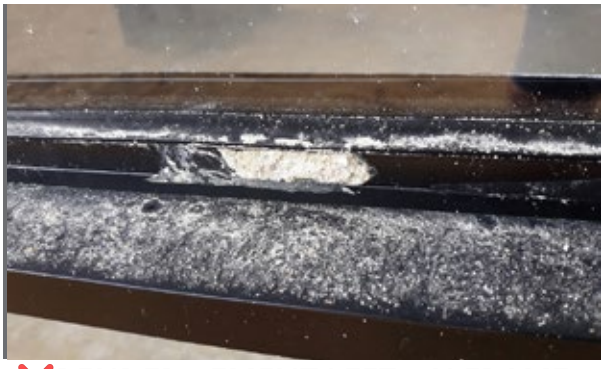
❌**NO SILL SUPPORT**

4. For higher wind ratings consult the NCC for the number of fixings required.
5. If the windows are glazed keep sashes closed and in the locked position were possible whilst installing frames.
6. Windows and doors are not load bearing. Do not permit weight of eaves or arch bars to bear on any window or door frame.

7. Remove cement mortar and plaster droppings from windows immediately, taking care to avoid scratching glass and/or frames, as permanent damage can result. Immediate attention must be given by washing off with water before material sets. Particular attention should be paid to removing debris from sliding sash sill tracks.
8. To ensure the satisfactory long-term performance of sliding doors, the sill should be level and fully supported.



❌RENDER CEMENT LEFT ON FRAMES



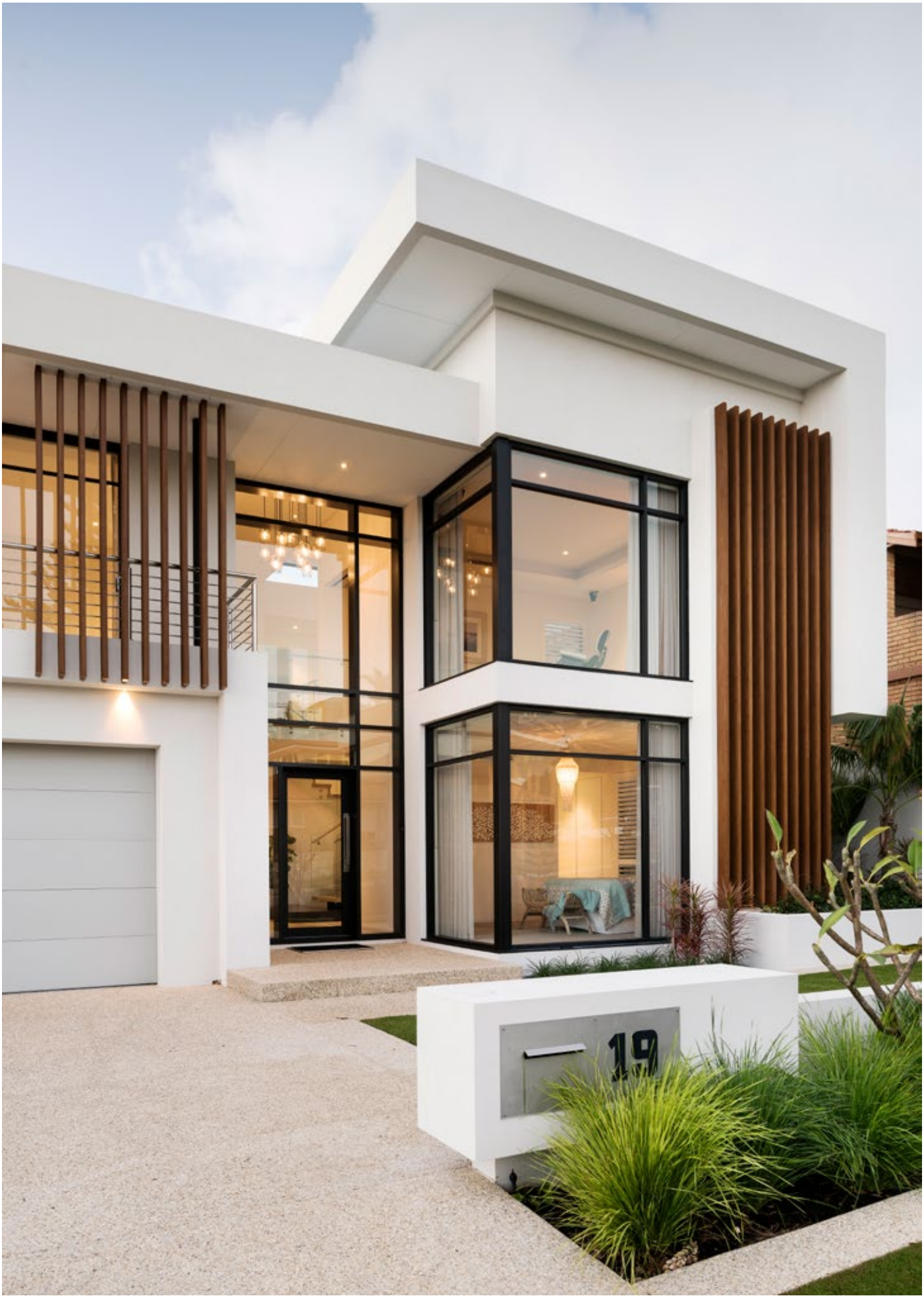
❌RENDER CEMENT LEFT ON FRAMES

Where the sill projects during construction the sill should be fully supported with temporary supports until sill bricks or tiles are installed. When provided, sill protection covers should not be removed until site conditions limit the potential for damage to the sill from traffic in and out through the opening.

The use of an isolation membrane between the aluminium and the sill and/or jamb is a recommended corrosion preventative measure.

Build in Details

Jason Windows build in detail drawings can be found under the builders section of the Jason Windows website.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Double Storey Homes

In 2013 the NCC introduced the “kids can’t fly” regulations to help prevent the growing number of children falling from upper floor windows.

The changes came into effect 2014 in WA.

Any window that has a fall of 2 metres or more should be restricted so that a sphere of 125mm cannot pass through the opening at a force of 250N or 25kg of force.

The requirements are divided into two categories:

1. Windows that are in a bedroom only, where the internal floor level is equal to or greater than two meters above outside ground level
2. All windows that the internal floor level is equal to or greater than four meters above ground level

Restrictors can be avoided if security screens are installed. Refer to the AGWA “Fall Prevention and the Protection of Openable Windows” update for further information.

Corrosive Environments

Considerations need to be made when installing frames into corrosive environments in particular near (coastal, swimming pool, estuary) though it's important to note that site specific localised issues like sprinklers close to windows, bore water usage and rising damp can also cause corrosion.

Deterioration of the coating occurs mainly as a result of grime deposition and attack by contaminated moisture, which in a coastal environment contains sodium chlorides and in an industrial or urban environment can contain chlorides and sulphur compounds. Deposited grime absorbs moisture like a sponge and holds it against the powder coated surface; this permits corrosive attack to proceed, thereby damaging the coating.

The following can increase the chances of corrosion in aluminium frames:

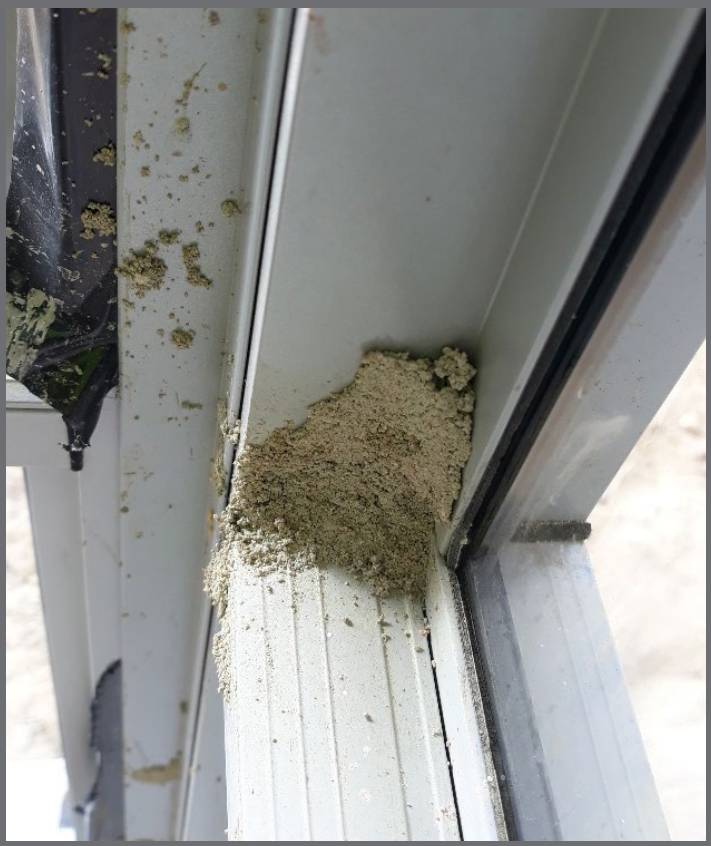
- Airborne pollutants allowed to sit on aluminium surfaces, with higher exposure in Industrial areas
- Airborne salt deposits allowed to sit on aluminium surfaces, with higher exposure in coastal or estuarine environments
- Rising damp in buildings caused by inadequate damp proofing, or unsealed masonry surfaces. Rising damp is reduced when cavity ventilation is adequate
- Using acidic sand in mortar. The AGWA recommends washed sand
- Frames in contact with excessive wet cement
- Window sills that slope backward encouraging water pooling
- Consistent water from sprinklers watering garden beds near windows. Drip watering systems are a recommended alternative
- Windows built around pools being subject to splashing
- Windows that have narrow gaps around the frame, creating crevice's where water can sit due to lack of airflow
- Washing brick work with excessive brick acid and not cleaning the frames or galvanised screws thoroughly afterwards
- Non-compatible metals attached to the aluminium, for example steel which triggers galvanic corrosion

Preventative Measures

The AGWA recommends the following preventative measures:

- Reduce exposure to moisture using effective dampcourses and sealants
- Reduce chlorine in the environment, for example, using washed sand
- Prevent exposure to highly alkaline solutions such as wet mortar
- The use of an isolation membrane between the aluminium and the sill and/or jamb
- If using applied coatings all surfaces including cuts and fixing holes must be coated
- The use of effective damp course and sealants
- Eliminate crevices and contact points where possible. If crevices are unavoidable ensure that there is sufficient ventilation via cavities or weep holes to prevent moisture build up

More details and recommendations from the AGWA is available in their Crevice Corrosion Key Message.



Frames in contact with excessive wet cement can increase the chance of corrosion in aluminium frames

Builder On-Site Care

Window frames should be stored in a clean, dry area away from cement, lime, paint, brick acid, hydrochloric acid, and must be protected from building materials and loose debris such as wet plaster, mortar, paint and welding splatter.

- Store frames in a dry location, under cover where possible, to protect against damage
- Carry windows in the vertical position with sashes locked
- Do not rack frames out of square
- Prevent exposure to moisture particularly pooling and ponding
- Do not remove corner bracing (if fitted) until after installation
- Handle and stack frames carefully on site. Stand them upright on their sills, raised off the ground on pieces of timber or bricks to limit damage or significantly distort the critical flashing leg of the frame. Stand them against a flat, vertical surface such as a shed and tie firmly.
- Do not lean frames against a tree or post as they can be subject to permanent damage. If the site is bare, lay frames flat on top of each other with weight evenly distributed to avoid buckling and distortion.

Soiling

- If removal of debris is delayed and scraping becomes necessary, the finish may be damaged. Remove cement, mortar and other droppings immediately, using ample clean water and a sponge or rag to avoid permanent staining of finished surfaces.
- Door Track & Sills
- Door tracks and window sills should be protected from planks, scaffolding and barrows. Do not remove any sill protective covers which may be supplied with some products until site conditions minimise risk of damage.

Acid Spills

- Acid used for cleaning brickwork MUST be prevented from contacting powdercoated or anodised aluminium windows and door surfaces including all hardware and fittings.
- If any acid or similar corrosive material does contact window or door surfaces those areas must be washed IMMEDIATELY with large quantities of clean water.
- Brick Acid which contacts Stainless Steel finishes can aggressively corrode stainless steel and leave an appearance of rust.

Use of Hose

- If using a hose or similar apparatus to clean windows and/or doors, ensure the hose nozzle/jet fitting is set to a fine spray.
- At NO time should a window or door be hit with the full force of a hose nozzle using a jet setting or similar.
- Full forced water can get under the frame and has the potential to damage window gaskets or sealed joints.

Routine Cleaning of Glass

The build up of dirt and grit on glass can damage and reduce visibility and light transmission. Glass has specific cleaning requirements depending on the glass type.

How to Routinely Clean Annealed or Float Glass

1. All cleaning should be conducted wearing gloves and all items of jewellery such as watches should be removed beforehand.
2. Recommended glass cleaning solutions:
    a. Mix 1 part distilled white vinegar to 10 parts clean water
    b. Windex® Multi Surface Cleaner (colourless)

    Only use the recommended cleaning products as others may cause damage to the glass. Ammonia or alcohol based cleaners are not recommended and will leave streaky residue on the surface.

3. Ensure the glass is cool to touch, and soak the surface with clean water to loosen any residues, deposits or dirt. Do this before applying the recommended cleaning agent.
4. Spray the cleaning product either onto the glass surface or a cloth to apply. Wash the wetted surface with a lint free cloth or towel and lightly sponge off any leftover dirt.
5. Do not allow water or cleaning materials to remain in contact with the glass, frame, sealants or gaskets. Doing this can cause deterioration to the components over time.
6. Dry the glass by wiping with a clean lint-free cloth being careful not to scratch the surface of the glass. To prevent streaking, stop wiping the glass when it is almost dry and a uniform film of moisture is left on the glass surface. The film will quickly evaporate leaving the glass surface clean.
7. Remove any paint spots on the glass with a solvent or graffiti removal solution. Solvent based cleaners should not come into contact with the powder coated aluminium frames or hardware.

⚠ **DO NOT USE RAZOR BLADES, STEEL WOOL, SCOURING BRISTLES OR OTHER METALLIC OR ABRASIVE OBJECTS ON THE GLASS SURFACES. IF METALS HAVE CONTACTED THE GLASS SURFACE DURING CONSTRUCTION, THEY MAY HAVE SCRATCHED THE COATED SURFACE OR RESULTED IN A DISCOLOURED STAIN WHICH IS DIFFICULT TO REMOVE USING NORMAL CLEANING PROCEDURES.**

LOW E GLASS

Special care needs to be taken when cleaning high performance glass such as Low E (ComfortPlus, SmartGlass and Sunergy are brand names of Low E glass). These glass products have a very thin coating on the interior glass surface. This hard, durable coating gives the glass improved thermal insulation and solar control performance compared to standard clear glass. The coated surface of high performance glass requires alternative cleaning methods to normal glass.

LAMINATED GLASS

Laminated glass may have a reputation for being tough and scratch-resistant but you should still be careful when cleaning it. Follow the cleaning guidelines below to look after laminated glass.

How to Routinely Clean Low-E & Laminated Glass

1. Follow the below cleaning instructions for the interior surface. The exterior surface of the glass can be cleaned in the same way as standard glass.
2. Recommended glass cleaning solutions:
    a. Mix 1 part distilled white vinegar to 10 parts clean water
    b. Windex® Multi Surface Cleaner (colourless); or
    c. Renew Glass Cleaner, available from Jason Windows

    Only use the recommended cleaning products as others may cause damage to the glass. Ammonia or alcohol based cleaners are not recommended. Corrosive cleaners such as those containing an acid base are too harsh for the glass and can cause damage.
3. When cleaning, ensure jewellery and watches are removed and gloves are worn.
4. Spray the glass surface with cleaning solution. Be generous with the amount of solution applied.
5. Scrub the wetted surface with a clean, lint free towel or cloth. Wipe dry with a dry, clean lint free towel or cloth. Do not use a squeegee on the coated (interior) surface.
6. To prevent streaking, stop wiping when the glass is almost dry and there is a uniform film of moisture left on the glass surface. The film will quickly evaporate leaving a clean surface.

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Specialised Cleaning of Glass—Spot Cleaning

Spot cleaning may be required to remove stubborn dirt or markings from grease, oil, tape adhesive and crayons or other waxy materials as well as paint and rub-off marks from plastics. Note: Spot cleaning should be followed by the routine cleaning procedure.

Recommended Product

Acetone solvent, available from hardware stores, must be used strictly in accordance with the manufacturer's recommendations and warnings.

1. When cleaning, ensure jewellery and watches are removed and gloves are worn.
2. Apply a small quantity of the acetone to a clean, wet cloth or towel. Rub on areas of glass needing spot cleaning.
3. Wipe with a dry, clean, lint free towel or cloth.

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Specialised Cleaning of Glass— Plaster or Cement Residue Removal

Specialised Cleaning may be required and can be effective for splashed concrete or hard water stains when routine or spot cleaning has been attempted first.

Recommended product:

Hydrochloric Acid, available from hardware stores.

1. When cleaning, ensure jewellery and watches are removed and gloves are worn.
2. Carefully follow the chemical manufacturer's use and safety instructions. Apply a small quantity of the specialised cleaning product to a small piece of dry, clean, folded soft rag or cloth. Ensure that acid cleaner does not contact the aluminium frames.
3. Dab the solution onto the area of glass. Wipe clean using a dry, clean, lint free towel or cloth.
4. Rinse the area with soapy water after using Hydrochloric Acid. This will remove any residue or smell.
5. Specialised cleaning should be followed by routine cleaning.

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Cleaning Post Installation Care During Construction

Cleaning is essential if the fine finish of powder coated aluminium and or installed hardware is to be preserved and the original performance characteristics are to be maintained. Recommendations for the frequency of cleaning during construction are as follows:

ENVIRONMENT	CLEANING FREQUENCY	NOTES
Rural/ Suburban Environments	Recommended cleaning every 3 months. Maximum period between cleaning is 6 months (cleaning every 6 months may be enough to remove deposits and maintain the appearance)	Grime deposition and pollution are site specific, 6-month cleaning is a minimum recommendation only
Coastal/River/ Pool/Industrial Environments	Monthly cleaning is advisable. The maximum period between cleaning should never be more than 3 months	Under the worst conditions involving heavy grime deposition and atmospheric pollution by both sulphur compounds and chlorides, more frequent cleaning is advisable if deterioration of the coatings or surface finishes is to be prevented.

How to Clean Aluminium Window and Door Frames

1. All cleaning should be conducted wearing gloves. Remove any items of jewellery such as rings and watches.
2. Jason Windows recommend clean, warm soapy water for powder coat finishes. Harsher solutions can damage the finish and will void the warranty. Solvent based cleaners should only be used in isolation to remove stubborn marks such as tape residue.
3. Use a non-abrasive sponge or cloth to wash the aluminium frame and to dry, preferably use a chamois or a soft cloth. The use of abrasive material will damage the surface of the frame.
4. All tracks and sills must be cleared of any sand, dirt, grit and even pet hair. These can cause damage and restrict the proper function of rollers, guides and drop bolts. Weep holes must be kept clear to enable maximum drainage. To properly clean window tracks, first spray the tracks with warm soapy water, wiping the tracks down with a soft cloth. Use a screwdriver on the cloth to reach the bottom of the track. Spray a touch of silicone spray to finish off.

Maintaining Hardware

It's the builders responsibility to ensure all Jason Windows hardware is maintained during construction.

- Locks, catches and rollers should be kept free of any materials that may affect their function
- The internal workings of graphite locks, handles and catches should be maintained by applying a light spray of silicon base lubricant when necessary into the areas of any moving parts
- Ensure the external finish of all hardware are kept clean by removing any harmful residue, such as salt spray. These should be removed from the surface using a non-abrasive cleaning agent and wiped down with a soft cloth moistened with inox, available from hardware stores
- Ensure that when maintaining handles the lubricant doesn't come into contact with the finished surface of the product
- Rollers will either be of an axle design or pre-greased meaning they don't require lubrication
- All tracks and sills must be cleared from any sand, dirt and grit. These can damage the product and restrict the proper function of rollers, guides and drop bolts. Weepholes must also be kept clear to enable maximum drainage
- Hardware that is not maintained during construction will be replaced at the builders cost
- Ensure that when maintaining handles the lubricant doesn't come into contact with the finished surface of the product
- Rollers will either be of an axle design or pre-greased meaning they don't require lubrication
- All tracks and sills must be cleared from any sand, dirt and grit. These can damage the product and restrict the proper function of rollers, guides and drop bolts. Weepholes must also be kept clear to enable maximum drainage
- Hardware that is not maintained during construction will be replaced at the builders cost

Jason Windows Warranty

Jason Windows offer a 10 year structural warranty and a 2 year moving parts warranty. Our full warranty statement is available on our website.

Maintenance Guide for Home Owners

Jason Windows have a maintenance guide outlining regular care and maintenance to assist home owners maintain the performance and life of their Jason Windows products.

The guide is available online and for your hand over packs.

The Maintenance Guide can be downloaded from jasonwindows.com.au/brochures.

Copies of the Maintenance Guide can also be requested by emailing communications@jasonwindows.com.au.

DISCLAIMER

This document is intending to provide general guidance and awareness to builders and owner builders. It should not be viewed as a definitive guide and should be read in conjunction with the requirements of the National Construction Code (Visit www.abcb.gov.au). While every effort has been made to ensure the information is accurate Jason Windows expressly disclaims all and any liability to any person for anything done in reliance on this publication. No responsibility is accepted by Jason Windows for any mistakes, errors or omissions in this publication.

Jason WINDOWS

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HOME BASE (Display Only): 55 Salvado Rd (cnr Harborne St), SUBIACO

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10 YEAR STRUCTURAL WARRANTY

2 YEAR MOVING PARTS WARRANTY

Made in Western Australia

Certified System Quality ISO 9001 SAI GLOBAL

AGWA AUSTRALIAN GLASS & WINDOW ASSOCIATION