

## 0456P SAFETYLINE JALOUSIE LOUVRE WINDOWS

### Branded worksection

This branded worksection *Template* has been developed by NATSPEC in conjunction with **Safetyline Jalousie** louvre windows and may be used whilst the Product Partner is licensed to distribute it. The copyright remains with NATSPEC. As with all NATSPEC worksections, it is the responsibility of the user to make sure it is completed appropriately for the project. The user should also review its applicability for local conditions and regulations. Check [www.natspec.com.au](http://www.natspec.com.au) for the latest updated version.

### Worksection abstract

This branded worksection *Template* is applicable to Safetyline Jalousie louvre windows manufactured by SMR Designs Pty Ltd supplied as complete systems, and including installation accessories, such as fixings, flashings, sealants, caulking and weather-stripping, necessary for the satisfactory functioning of the whole.

### Guidance text

All text within these boxes is provided as guidance for developing this worksection and should not form part of the final specification. This *Guidance* text may be hidden or deleted from the document using the NATSPEC Toolbar or the hidden text *Hide* and *Delete* functions of your word processing system. For additional information visit FAQs at [www.natspec.com.au](http://www.natspec.com.au).

### Optional style text

Text in this font (blue with a grey background) covers items specified less frequently. It is provided for incorporation into *Normal* style text where it is applicable to a project.

### Related material located elsewhere in NATSPEC

If a listed worksection is not part of your subscription package and you wish to purchase it, contact NATSPEC.

Related material may be found in other worksections. See for example:

- *0432 Curtain walls*, if the project contains windows and window-and-spandrel assemblies in addition to louvred windows.
- *0451 Windows and glazed doors*, if the project contains windows other than to louvre windows.
- *0462 Structural silicone glazing*, for adhesive fixed glazing.
- *0463 Glass blockwork*, if the project contains glass blockwork in addition to louvred windows.
- *0524 Partitions – glazed* for glazed internal partitions.

### Material not provided in Product Partner

This worksection *Template* includes generic material which may not be provided by Safetyline Jalousie, including:

- Bushfire screens.
- Security window grilles.
- Frameless glass louvres. See the *Louvre windows* worksection.

### Documenting this and related work

You may document this and related work as follows:

- Schedule windows on drawings to your office documentation policy.
- If documenting louvre windows in the *0451 Windows and glazed doors* worksection, delete this worksection.
- For specifying glass, see NATSPEC TECHnote PRO 006.
- Bushfire protection: Depending on the level of construction to AS 3959 the doors should satisfy the construction requirements of AS 3959 and the NCC. See NATSPEC TECHnote DES 018 for information on bushfire protection.

Search [www.environmentdesignguide.com.au](http://www.environmentdesignguide.com.au), the Australian Institute of Architect's environmental advisory subscription service for the following:

- Daylighting of buildings.
- Energy efficiency in commercial buildings.
- BCA Section J and Commercial Building Facade Design.

### Specifying ESD

The following may be specified by retaining default text:

- Louvre assemblies for natural ventilation.
- Window seals to minimise air leakage when louvres shut.

The following may be specified using included options:

- Thermal performance to reduce heating/cooling load by specifying the required Total system U-Value, Total system SHGC, frame material (e.g. metal has higher conductivity than timber).

- Glass and frame selection with an acceptable Visible transmittance for natural lighting.
- High performance glass, e.g. low-e.

The following may be specified by including additional text:

- Australian Window Association (AWA) Window Energy Rating Scheme (WERS) – certified product performance data.
- Re-use of salvaged louvres.
- Recycled material content, e.g. aluminium frames.

Refer to the NATSPEC TECHreport TR 01 on specifying ESD.

## 1 GENERAL

### SAFETYLINE JALOUSIE LOUVRE WINDOWS PROFILE

Safetyline Jalousie is a leading louvre window brand with a history of more than 50 years in Europe. Since its arrival in the Australian market in 2009 Safetyline Jalousie has quickly established itself as high quality option for building specifiers looking for a louvre window system that delivers wide louvre spans (up to 1.4m), impenetrable building security and weatherproof seals. Safetyline Jalousie is distributed by SMR Designs who have been involved in the Australian home improvement and commercial building market for more than 20 years with its other external louvre product Vergola.

### 1.1 RESPONSIBILITIES

#### General

Requirement: Provide Safetyline Jalousie louvre windows, as documented.

*Documented is defined in 0171 General requirements as meaning contained in the contract documents.*

### 1.2 COMPANY CONTACTS

#### Safetyline Jalousie technical contacts

Website: [www.safetylinejalousie.com.au/contact](http://www.safetylinejalousie.com.au/contact)

### 1.3 CROSS REFERENCES

#### General

Requirement: Conform to the following:

- 0171 General requirements.

*0171 General requirements contains umbrella requirements for all building and services worksections.*

*List the worksections cross referenced by this worksection. 0171 General requirements references the 018 Common requirements subgroup of worksections. It is not necessary to repeat them here. However, you may also wish to direct the contractor to other worksections where there may be work that is closely associated with this work.*

*NATSPEC uses generic worksection titles, whether or not there are branded equivalents. If you use a branded worksection, change the cross reference here.*

### 1.4 STANDARDS

#### General

Selection and installation: To AS 2047.

Building classification: **[complete/delete]**

To use AS 2047 the building class needs to be nominated as follows:

- Housing: BCA Class 1 and 10.
- Residential: BCA Class 2, 3 and 4.
- Commercial: BCA Class 5, 6, 7, 8 and 9.

For smoke and heat venting, see AS 2665 which is cited in the BCA.

For information on the Window Energy Rating Scheme (WERS) see [www.wers.net](http://www.wers.net).

For information on the Australian Window Association (AWA) Accreditation Program, see [www.awa.org.au](http://www.awa.org.au).

Flashings: AS/NZS 2904 is cited in AS 2047 at clause 6.6.

#### Glazing

Glass type and thickness: To AS 1288, where no glass type or thickness is given.

For glass type and thickness refer to AS 1288 Table 4.1 and to AS/NZS 4667.

Glass thickness may be governed by human safety and other requirements – see AS 1288 Sections 5. The commonly available thicknesses of various glasses are shown on the wind pressure figures of AS 1288 Section 4.

Nominate a thickness if:

- The glass is to be thicker than required by AS 1288 or applicable regulations.
- There are unusual conditions requiring detailed calculations for which the designer should be responsible.

In other cases the determination of thickness is usually within the competence of the glazing contractor.

Where thickness is determined by wind loading, the design wind pressure needs to be known in order to interpret the figures and tables of glass sizes and thicknesses in AS 1288.

Design wind pressure: To AS/NZS 1170.2 or AS 4055 as appropriate.

Materials and installation: To AS 1288.

Quality requirements for cut-to-size and processed glass: To AS/NZS 4667.

Terminology for work on glass: To AS/NZS 4668.

## 1.5 MANUFACTURER'S DOCUMENTS

### Technical manuals

Design, installation and operation manuals, CAD, BIM files and REVIT models: [www.safetylinejalousie.com.au/design-manual](http://www.safetylinejalousie.com.au/design-manual)

Contact Safetyline Jalousie for the latest product updates.

## 1.6 INTERPRETATION

### Abbreviations

General: For the purposes of this worksection the following abbreviations apply:

- AWA: Australian Window Association.
- WERS: Window Energy Rating Scheme.

Edit the **Abbreviations** subclause to suit the project or delete, if not required. List alphabetically.

### Definitions

General: For the purposes of this worksection, the following definitions apply:

- Louvres - horizontal: Louvres that span between frames stiles, mullions or vertical supports.
- Total system SHGC: Solar heat gain coefficient as defined by NCC and tested in conformance with NFRC 200.
- Total system U-Value: Thermal transmittance as defined by NCC and tested in conformance with NFRC 100.

Edit the **Definitions** subclause to suit the project or delete if not required. List alphabetically.

## 1.7 SUBMISSIONS

### Certification

Conformance: Submit evidence that window assemblies meet documented design wind pressures and water penetration resistance.

Protection of openable windows: Submit a certificate of on-site fall prevention testing to AS 5203.

On-site testing may not be required if type tests of window assemblies are available.

### Operation and maintenance manual

General: Submit the Safetyline Jalousie instructions for operation, care and maintenance.

Refer to the Safetyline Jalousie website for care and maintenance details.

[www.safetylinejalousie.com.au/care-a-maintenance](http://www.safetylinejalousie.com.au/care-a-maintenance)

### Products and materials

Type tests: Submit results as follows:

- Conformance to AS 2047.
- Performance requirements as documented.
- Protection of openable windows: To AS 5203.

Type tests are carried out off-site. However, submission of evidence of a successful type test may be called up here for requirements specified in **SELECTIONS** or **PRODUCTS**, if there are no **SELECTIONS**.

Evidence of delivery: Submit delivery docket as evidence of delivery of [complete/delete]

If evidence of delivery to site is required, consider including this *Optional* style text by changing to *Normal* style text.

### Samples

General: Submit samples of louvre window system components as follows:

- Accessory and hardware items not selected as proprietary items including louvre handles, anchor brackets and attachments, masonry anchors and weather seals (pile or extruded).
- Colour samples of prefinished production material (e.g. anodised or powder coated extrusions and sheet) showing the limits of the range of variation in the selected colour.
- Frame member profiles and louvre materials.
- Frame member joining techniques.
- Label each sample, giving the product code reference and date of manufacture.

Louvre blades: Submit samples of glazing materials, each at least 200 x 200 mm, showing specified visual properties and the range of variation.

Edit as required.

### Shop drawings

General: Submit shop drawings to a scale that best describes the detail, showing the following:

- Frame member profiles.
- Hardware, fittings and accessories including fixing details.

If windows are to be fitted with non-standard hardware supplied by others, make sure that the selected window suites can accept the selected hardware. Nominate hardware in the **SELECTIONS**.

- Junctions and trim to adjoining surfaces.
- Layout (sectional plan and elevation) of the window assembly.
- Lubrication requirements.
- Methods of installation including fixing, joint sealing and flashing.
- Provision for vertical and horizontal expansion.

Certification: Submit an engineer's certificate verifying conformance to AS 2047.

Certification for a particular project may not be required if the window system is a proprietary product that conforms to AS 2047 Appendix B.

### Subcontractors

General: Submit names and contact details of proposed subcontractors endorsed by Safetyline Jalousie.

Evidence of experience: [complete/delete]

Safetyline Jalousie have a fabricator network for supply and installation. Refer to the Safetyline Jalousie website.

Delete if supplier/installer details are not required.

### Warranties

Requirement: Submit the following:

- [complete/delete]

Describe the requirements of warranties in **PRODUCTS** or **EXECUTION**, as appropriate, and list the submissions required here.

## 1.8 INSPECTION

### Notice

Inspection: Give notice so that inspection may be made of the following:

- Openings prepared to receive windows (if windows are to be installed in prepared openings).
- Fabricated window assemblies at the factory ready for delivery to the site.
- Fabricated window assemblies delivered to the site, before installation.
- Commencement of window installation.
- Completion of window installation.

Amend to suit the project adding critical stage inspections required .

**Hold points**, if required, should be inserted here.

## 2 PRODUCTS

### 2.1 GENERAL

#### Product substitution

Other products: Conform to PRODUCTS, **GENERAL, Substitutions** in *0171 General requirements*.

The *0171 General requirements* clause sets out the submissions required if the contractor proposes alternative products. Refer also to NATSPEC TECHnote GEN 006 for more information on proprietary specification.

#### Standards

Flashings: To AS/NZS 2904.

Aluminium extrusions: To AS/NZS 1866.

#### Protection of openable windows

Fall prevention: To BCA D2.24 and BCA 3.9.2.5.

Testing: To AS 5203.

Windows supplied as complete sets with security grilles and tested to AS 5041 are not required to be tested to AS 5203.

#### Product identification

General: Marked to show the following:

- Manufacturer's identification.
- Product brand name.
- Product type.
- Quantity.
- Product reference code and batch number.
- Date of manufacture.

Edit the list to suit the project or delete if not required.

### 2.2 GLASS

#### Glazing

Glass type: [complete/delete]

Refer to the Safetyline Jalousie website and select from the range of Clear, Tinted, Low-E and Satin glass.

Thickness: 6, 6.38 or 6.5 mm annealed, laminated, toughened or toughened and heat soak tested.

#### Safety glazing

Standard: To AS/NZS 2208.

AS/NZS 2208 includes toughened, laminated, wired, organic-coated glass and safety glazing plastics. The required grade (A or B) is specified in AS 1288 Section 5 *Human impact safety requirements* for each application.

### 2.3 GLAZING MATERIALS

If windows and glazed doors are selected as complete proprietary items, delete this clause.

#### General

Glazing materials (including putty, glazing compounds, sealants, gaskets, glazing tapes, spacing strips, spacing tapes, spacers, setting blocks and compression wedges): Appropriate for the conditions of application and the required performance.

#### Jointing materials

Compatibility: Provide recommended jointing and pointing materials which are compatible with each other and with the contact surfaces and non-staining to finished surfaces. Do not provide bituminous materials on absorbent surfaces.

#### Pile weather strips

Standard: To AAMA 701/702.

Standard: AAMA 701/702 is a guide to selecting pile weather strips used in windows and doors. It defines requirements to restrict air and water penetration.

Location: [complete/delete]

Materials: Polypropylene or equivalent pile and backing, low friction silicone treated, ultra violet stabilised.

Finned type: A pile weather seal with a central polypropylene fin bonded into the centre of the backing rod and raised above the pile level.

### Extruded gaskets and seals

Type: Non-cellular (solid) elastopressive seals.

Location or function: [complete/delete]

Material:

- Rubber products (neoprene, ethylene propylene diene monomer (EPDM) or silicone rubber): To BS 4255-1.
- Flexible polyvinyl chloride (PVC): To BS 2571, E type compounds, colour fastness grade B.

### Priming

Compatibility: Apply the recommended primer to the surfaces in contact with sealant materials.

## 2.4 GLASS IDENTIFICATION

### Safety glazing materials

Identification: Identify each piece or panel, to AS 1288.

Identification: See AS 1288 clause 5.23.

## 2.5 LOUVRE WINDOW ASSEMBLIES

### General

Description: Provide louvre blades mounted in a metal surround frame or subframe and able to withstand the permissible-stress-design wind pressure for that location without failure or permanent distortion of members, and without louvre blade flutter.

### Adjustable louvres

Description: Provide louvre blades glazed into louvre bearers, and end caps linked into bars, attached to side jamb together in banks. Each bank is operated by an individual operating handle.

Safetyline Jalousie louvres open completely to the outside, opening up to 80° with no interference to blinds and curtains with four different locking positions (three open and one closed) with the standard lever. Other operators are available which provide differing opening variants.

Select from the following Safetyline Jalousie louvre window products and nominate here:

- Glass louvre blades: Mounted in an aluminium blade holder (louvre bearer), fixed on three sides of the blade and hinged at the rear edge of each blade holder at 135 mm centres to the fixed window frame.
- Aluminium louvre blades: Curved 135 mm wide (one piece) blades hinged at the rear edge to the fixed window frame at 135 mm centres.

Seals: [complete/delete]

Nominate here type and extent of seals to be provided.

Safetyline Jalousie louvre blades are sealed on all four sides with EPDM gaskets.

Operators: [complete/delete]

The number required per window is dependent on the louvre type and width, refer to the manufacturer's recommendations for the number of operators required. Delete if requirement is more appropriately covered in **SELECTIONS, Louvre window schedule**.

### Power operated louvres

Description: Louvre rods, fitted with pins, directly operating the louvre end caps to open and close each bank of louvres. Louvres may be operated with or without remote control.

Louvre controls may be integrated with a building management system.

Motors: [complete/delete]

Each louvre bank is operated by motors supplied by either Safetyline Jalousie or a third party. Mounting options available include:

- Externally mounted on the frame.
- Concealed inside the frame.

## 2.6 INSECT SCREENS

Insect screens are usually installed to the external face of frame. Make sure the louvre assembly is located so that when fully opened the louvre blades are clear of the insect screens and security grille.

**Fixed screens**

General: Provide fixed screens to the window frames with a clipping device which permits removal for cleaning.

**Retractable screens**

General: Provide a proprietary retractable insect screen comprising aluminium frame with baked enamel finish, fibreglass mesh beaded into the frame, and a retraction system including tension spring, nylon bearings, positive self-locking device, and plastic sealing strip at sill.

**Aluminium framed screens**

General: Provide aluminium extruded sections with mesh fixing channel, mitred, staked and screwed at corners.

Mesh: Bead the mesh into the frame channel with a continuous resilient gasket, so that the mesh is taut and without distortion.

Safetyline Jalousie provides fixed insect screens attached to the inside of window frames, these screens may be removed for cleaning. Select from the following mesh types:

- Aluminium.
- Stainless steel.
- Fibreglass.

**2.7 SECURITY WINDOW GRILLES****General**

Requirement: Provide proprietary metal security grille screens, or operable screen and frame, fixed to the building structure with tamper resistant fastenings.

Security roads: Optional 8 mm diameter stainless steel rods inserted into the louvre blade holder.

**2.8 ALUMINIUM FRAME FINISHES**

Delete finish not required.

**Powder coatings**

Standard: To AS 3715.

Product: [complete/delete]

Product: e.g. AkzoNobel Interpon or Dulux standard powder coatings.

Type: 7 year or 10 year warranty coatings from Interpon and Dulux.

AS 3715 sets minimum standards for various performance criteria. Consult with manufacturers if variations are proposed.

AkzoNobel Interpon and Dulux offer powder coatings with enhanced protection that carry 10 year, 15 year and 20 year warranties.

Edit as appropriate.

Colour: [complete/delete]

Nominate colour name and code from AkzoNobel Interpon or Dulux powder coatings colour charts

**Anodised**

Standard: To AS 1231.

Thickness: 20 microns.

25 micron thick anodising, recommended for severe industrial and coastal conditions, can be made available by some suppliers upon request.

Colour: [complete/delete]

Select from the available range of colours by Australian Aluminium Finishing (AAF) or Universal Anodisers.

**3 EXECUTION****3.1 PRE-INSTALLATION****General**

Timber reveals: Prime all surfaces of timber reveals which are to be painted before fixing to aluminium frames.

### 3.2 INSTALLATION

#### Glazing

General: Install the glass as follows:

- Permanently fix in place each piece of glass to withstand the normal loadings and ambient conditions at its location without distortion or damage to glass and glazing materials.
- No transfer of building movements to the glass.
- Watertight and airtight for external glazing.

Temporary marking: Use a method which does not damage the glass. Remove marking on completion.

Toughened glass: Do not cut, work, or permanently mark after toughening. Use installation methods which prevent the glass making direct contact with metals or other non-resilient materials.

Heat absorbing glass: Provide wheel cut edges without damage or blemishes and with minimum feather in locations exposed to direct sunlight.

#### Louvre windows

General: Install louvre windows frames as follows:

- Plumb, level, straight and true within acceptable building tolerances.
- Fixed or anchored to the building structure in conformance with the wind action requirements.
- Isolated from any building loads, including loads caused by structural deflection or shortening.
- Allowing for thermal movement.

Power operated louvre windows: Make sure power and control signal services are provided at the louvre controls.

#### Flashing and weatherings

General: Install flashings, weather bars, drips, storm moulds, joint sealant and pointing to prevent the ingress of water between the window frame and the building structure under the prevailing service conditions, including normal structural movement of the building.

#### Fixing

General: Do not penetrate metal flashings with fixings.

Fastener spacing (nominal): 600 mm and maximum 150 mm from reveal ends.

Fasteners: Conceal fasteners. Use size and type to suit window unit size and wind loading conditions.

- Requirement: [complete/delete]

Comply with the louvre window manufacturer's recommendations and AS 2047 (for residential and commercial building) and AS 4055 (for houses) for fastener requirements.

Allow for the following requirements to suit fixing substrate:

- For aluminium – use aluminium or 300 series stainless steel fasteners.
- For galvanized steel – use hot-dipped galvanized steel or 300 series stainless steel fasteners.
- For stainless steel – use 300 series stainless steel fasteners.

Packing: Pack behind fixing points with durable full width packing.

#### Joints

Requirement: Make accurately fitted tight joints so that fasteners and fixing devices such as pins, screws, adhesives and pressure indentations are not visible on exposed surfaces.

Sealants: If priming is recommended, prime surfaces in contact with jointing materials.

#### Operation

General: Make sure moving parts operate freely and smoothly, without binding or sticking, at correct tensions or operating forces and are lubricated.

#### Protection

State a particular method here, or delete to leave the choice of method to the contractor. See AS 2047 Appendix F for information on on-site care.

Removal: Remove temporary protection measures from the following:

- Contact mating surfaces before joining up.
- Exposed surfaces.

Temporary measures: [complete/delete]



**In situ touch up**

Polyester or fluoropolymer coatings: Contact supplier for approval to apply touch up products otherwise replace damaged material.

**Trim**

General: Provide mouldings, architraves, reveal linings, and other internal trims using materials and finishes matching the window frames. Make neat and clean junctions between frames and the adjoining building surfaces.

**3.3 COMPLETION****Trade clean**

Method: Clean with soft clean cloths and clean water, finishing with a clean squeegee. Do not use abrasive or alkaline materials.

Extent: All frames and glass surfaces inside and out.

**Warranties**

Refer to the **WARRANTIES** in the 0171 General requirements worksection.

List the requirements of the action to be warranted.

Louvre windows: Provide a warranty as follows:

- Form: Against failure of materials and operation under normal environment and use conditions.
- Period: 6 years, subject to limitations and conditions.
- Powder coating: As offered by the manufacturer for the selected finish.
- Hardware: As offered by the manufacturer.

Safetyline Jalousie provides a 6 year warranty for the materials and workmanship of its products. Full details can be found at the Safetyline Jalousie website.

**4 SELECTIONS**

**Schedules** are a way of documenting a selection of proprietary or generic products or systems by their properties. Indicate their locations here and/or on the drawings. Refer to NATSPEC TECHnote GEN 024 for guidance on using and editing schedules.

**4.1 PERFORMANCE****Louvre window performance schedule**

Property	A	B	C
Total system U-Value (W/m <sup>2</sup> .K)			
Total system SHGC			
Weighted sound reduction index (R <sub>w</sub> )			
Visible transmittance (T <sub>vis</sub> )			
Reflectance (%)			
WERS Energy rating%: Heating			
WERS Energy rating%: Cooling			
AWA Compliance Certificate			
Water penetration resistance (Pa)			
Fire-resistance level (FRL)			
Bushfire protection (BAL)			
Ultimate limit state (ULS)			

Property	A	B	C
wind pressure (Pa)			
Serviceability limit state (SLS) wind pressure (Pa)			
Openable (free) area (m <sup>2</sup> )			

A, B, C: These designate each instance or type or location of the item scheduled. Edit to align with the project's codes or tags.

Edit codes in the **Schedule** to match those on drawings.

Total system U-Value (W/m<sup>2</sup>.K): Insert the thermal transmittance value used for determining BCA compliance. These should be obtained from tests to NFRC 100. Select the product to fulfil design and compliance requirements.

Total system SHGC: Insert the solar heat gain coefficient value used for determining BCA compliance. These should be obtained from tests to NFRC 200. Select the product to fulfil design and compliance requirements.

Weighted sound reduction index: State the required rating to AS/NZS ISO 717.1. It is advisable to obtain the advice of an acoustic consultant on the selection of an R<sub>w</sub> rating for sound transmission reduction. Refer to NATSPEC TECHnote DES 032 for information on airborne sound insulation. The BCA cites ISO 717-1:1996 and AS/NZS 1276.1 for testing of construction required to have a certain R<sub>w</sub> rating.

Visible transmittance (T<sub>vis</sub>): The visible light passing directly through the glass. The higher the T<sub>vis</sub>, the more daylight.

Reflectance %: A maximum value is often a council requirement. Refer to the BCA Glazing calculator [www.abcb.gov.au](http://www.abcb.gov.au). Delete if this requirement is more appropriately covered in the **Glass schedule**.

WERS Energy rating: Star rating system operated by the Australian Window Association.

AWA (Australian Window Association) Certificate of Compliance: Insert Required or Not required. The AWA Compliance Certificate will cover only those products that conform to AS 2047.

Water penetration resistance: e.g. 150 Pa.

Fire-resistance level (FRL): State the required level to AS 1530.4, delete or state Not applicable. See NATSPEC TECHnote DES 020 on fire behaviour of building materials and assemblies.

Bush fire protection: Fit screens and seals to AS 3959.

Ultimate and serviceability design wind pressure: Nominate the design wind pressures for the project to AS/NZS 1170.2 (for residential and commercial building) or AS 4055 (for housing, Class 1 and 10a buildings). AS 2047 Appendix A includes an informative guide to design wind pressure.

Openable area: State the openable area in m<sup>2</sup> to achieve BCA requirements for natural ventilation.

## 4.2 LOUVRE WINDOWS

### Louvre window schedule

For a summary and comparison of Safetyline Jalousie window systems and guidance on selecting Safetyline Jalousie louvre window options, refer to the Safetyline Jalousie website.

Property	A	B	C
Product name			
Proprietary suite			
Frame material			
Frame finish			
Louvre blade material			
Louvre blade finish			
Louvre window height and blade length (mm)			
Operator type			
Security bars			
Controls			
Glazing			

A, B, C: These designate each instance or type or location of the item scheduled. Edit to align with the project's codes or tags.  
 Edit codes in the **Schedule** to match those on drawings.  
 Product name: e.g. Safetyline Jalousie louvre windows.  
 Proprietary suite: e.g. JX Louvre Window with 63 mm extruded aluminium frame.  
 Frame material: e.g. Aluminium.  
 Frame finish: e.g. Powder coated, high performance powder coated, anodised.  
 Louvre blade material: e.g. Curved aluminium, glass. See *Guidance* on **Glazing** below.  
 Louvre blade finish: e.g. Powder coated, high performance powder coated, anodised. See *Guidance* on glazing below.  
 Louvre window height and blade length: Refer to Safetyline Jalousie Standard Heights – Glass Louvres, Standard Heights – Aluminium Louvres tables. Alternative: Note sizes on drawings.  
 Operator type: e.g. Left Lever, Right Lever, Reversible Turn Handle, Turn Handle. Delete if requirement is more appropriately covered in **PRODUCTS**.  
 Security bars: Yes/no. Include details of material and finish, e.g. stainless steel.  
 Controls: e.g. Lever, winder.  
 Glazing: Specify the glazing type and thickness in this schedule or the **GLAZING, Glass schedule**. Specifying glazing in this schedule is suitable for projects where the same glass is used for each window or glazed door type. It can be specified by description, e.g. 6.38 mm clear laminated glass, or by reference to a designated glass type in the **Glass schedule**. The latter approach may be more appropriate for projects with a large number of glazing types, or glazing that requires more detailed specification.  
 Safetyline Jalousie can provide any Viridian glass, providing the thickness is either 6 mm or 6.38 mm.  
 Refer to the *Guidance* for **Glass schedules** and the NATSPEC TECHnote PRO 006 for guidance on glass types.  
 For protection of openable windows conforming to BCA D2.24 and BCA 3.9.2.5, specify a device to restrict the window opening in this schedule or the **Window hardware schedule**, a screen in the **Screen schedule** and a barrier, as required.

**Power operated louvre window schedule**

For a summary and comparison of Safetyline Jalousie window systems and guidance on selecting Safetyline Jalousie louvre window options, refer to the Safetyline Jalousie website.

Property	A	B	C
Product name			
Proprietary suite			
Frame material			
Frame finish			
Louvre blade material			
Louvre blade finish			
Louvre window height and blade length (mm)			
Number of Banks			
Operation/control			
Security bars			
Glazing			

A, B, C: These designate each instance or type or location of the item scheduled. Edit to align with the project's codes or tags.  
 Edit codes in the **Schedule** to match those on drawings.  
 Product name: e.g. Safetyline Jalousie louvre windows.  
 Proprietary suite: e.g. JX Louvre Window with 63 mm extruded aluminium frame.  
 Frame material: e.g. Aluminium.  
 Frame finish: e.g. Powder coated, high performance powder coated, anodised.  
 Louvre blade material: e.g. Curved aluminium, glass. See *Guidance* on glazing below.  
 Louvre blade finish: e.g. Powder coated, high performance powder coated, anodised. See *Guidance* on glazing below.

Louvre window height and blade length: e.g. Blade height of 135 mm. Refer to Safetyline Jalousie Standard Heights – Glass Louvres, Standard Heights – Aluminium Louvres tables. Alternative: Note sizes on drawings.

Number of Banks: Refer to Safetyline Jalousie Standard Heights – Glass Louvres, Standard Heights – Aluminium Louvres tables. Alternative: Indicate number on drawings.

Operation/control: e.g. Wall switches, remote controls, control by sensor, integration with building management systems (central building control panel).

Security bars: Yes/no. Include details of material and finish, e.g. stainless steel.

Glazing: Specify the glazing type and thickness in this schedule or the **GLAZING, Glass schedule**. Specifying glazing in this schedule is suitable for projects where the same glass is used for each window or glazed door type. It can be specified by description, e.g. 6.38 mm clear laminated glass, or by reference to a designated glass type in the **Glass schedule**. The latter approach may be more appropriate for projects with a large number of glazing types, or glazing that requires more detailed specification.

Safetyline Jalousie can provide any Viridian glass, providing the thickness is either 6 mm or 6.38 mm.

Refer to the *Guidance* for **Glass schedules** and the NATSPEC TECHnote PRO 006 for guidance on glass types.

### 4.3 SCREENS

#### Screen schedule

Property	A	B	C
Product name			
Generic description			
Frame material			
Frame finish			
Mesh type			

A, B, C: These designate each instance or type or location of the item scheduled. Edit to align with the project's codes or tags. Edit codes in the **Schedule** to match those on drawings.

Product name: Safetyline Jalousie louvre windows.

Generic description: e.g. Flyscreen, fire protection screen, fall prevention screen. See the security window grille schedule for security grilles. See BCA D2.24 and BCA 3.9.2.5 for openable windows requiring fall prevention devices, screens and barriers.

Frame material: e.g. Aluminium.

Frame finish: e.g. Powder coat, anodised.

Mesh type: e.g. Aluminium, fibreglass, or stainless steel. BCA 3.7.4 and AS 3959 calls for screens of aluminium, corrosion resistant steel or bronze with a maximum aperture size of 1.8 mm to areas of medium bush fire attack category and excludes aluminium mesh in areas of high category. Fibreglass mesh is excluded in all bush fire areas.

### 4.4 SECURITY WINDOW GRILLES

#### Security window grille schedule

Property	A	B	C
Product name			
Generic description			
Material			
Finish			
Hinge: Material			
Hinge: Fixing			
Hardware			

A, B, C: These designate each instance or type or location of the item scheduled. Edit to align with the project's codes or tags. Edit codes in the **Schedule** to match those on drawings.

Product name: Delete if the selection is by generic performance.

Generic description: AS 5039 clause 5.2 describes the three window screen security classification type as follows.

- Type I prevents an arm from passing through.
- Type II allows an arm but prevents bodily entry.
- Type III prevents insects passing through.

Material: Steel, stainless steel or aluminium.

Finish: See AS 5039 clause 6.2 for corrosion protection finishes.

Hinges:

- Material: e.g. Aluminium, stainless steel or steel.
- Fixing: Rivets or fastening devices. See AS 5039 clauses 6.7, and 6.8.

Hardware: See AS 5039 clause 6.5. If the manufacturer's standard lock and hardware are not acceptable, nominate hardware to comply. Coordinate with your hardware schedule.

**4.5 GLAZING**

**Glass schedule**

Property	A	B	C
Glass type			
Glass thickness (mm)			
Body tint colour			
Interlayer colour			
Surface coating			
Surface coating: Colour			
Reflective coating: Colour			
Reflective coating: % reflectance			
Surface pattern			
Surface processing			
Surface processing: Pattern			
Surface processing: Colour			
Edge processing			
Number of edges processed			

A, B, C: These designate each instance or type or location of the item scheduled. Edit to align with the project's codes or tags.

Edit codes in the **Schedule** to match those on drawings.

Glass type: Refer to NATSPEC TECHnote PRO 006 for guidance on glass types.

Glass thickness: It is generally not necessary to specify thickness. Nominate a thickness where:

- The glass is to be thicker than required by AS 1288 or applicable regulations.
- There are unusual conditions requiring detailed calculations for which the designer should be responsible.

In other cases, the determination of thickness is usually within the competence of the glazing contractor.

Body tint colour: e.g. grey, bronze, green, blue. Consult the manufacturer for colours available. Do not use body tinted wired (cast or polished) in locations exposed to the sun; fracture may result.

Interlayer colour: For laminated glasses only. Consult the manufacturer for the colours available.

Surface coating: Describe by coating function, e.g. solar control, low emission, self-cleaning, decorative or by coating type, e.g. pyrolytic hard coating, vacuum sputtered or ceramic. Coatings are best described by the manufacturer's brand name.

- Self cleaning: Glass incorporating a coating which dissolves dirt (photo activ) and sheds water (hydrophilic) using natural UV light and rain.

Surface coating: Colour: e.g. grey, bronze, green, blue. Consult the manufacturer for colours available.

Reflective coating: Colour: e.g. silver, gold, bronze. Consult the manufacturer for colours available. Reflective coatings may be available on either clear or body tinted float. Consult manufacturer.

Reflective coating: % reflectance: Consult the manufacturer for reflectances available. Delete if this requirement is more appropriately covered in the **Louvre window performance schedule**.

The manufacturer's brand name is often the best way to identify tinted, reflective, and patterned glasses.

Surface pattern: For patterned glass only. Proprietary patterns are best described by the manufacturer's brand name. Patterns include diffuse reflection (picture glass).

Surface processing: e.g. Screen printing with ceramic paint fused to the surface, sandblasting, acid etching.

Surface processing: Pattern: Proprietary patterns are best described by the manufacturer's brand name.

Surface processing: Colour: Applicable to screen printed patterns only.

Edge processing: Maximum width varies with thickness. Wired glass is restricted to rough arrised edges. Consult with processor. Common edge types and typical applications for each edge type are:

- None (clean cut, no processing).
- Flat ground: Silicone structural glazing with exposed edges.
- Flat polished: Silicone structural glazing where edge condition is critical for aesthetic purposes
- Ground pencil edge: Mirrors, decorative furniture glass.
- Polished pencil edge: Mirrors, decorative furniture glass.
- Ground mitre: Silicone structural glazing.
- Bevelled: Mirrors, decorative furniture glass.
- Seamed edges: Normal edge treatment for heat-treated glass.

Refer also to NATSPEC TECHnote PRO 006 for more information on this topic.

Number of edges processed: e.g. 1 long, 2 long, all.

#### REFERENCED DOCUMENTS

The following documents are incorporated into this worksection by reference:

AS 1231	2000	Aluminium and aluminium alloys - Anodic oxidation coatings
AS 1288	2006	Glass in buildings - Selection and installation
AS/NZS 1866	1997	Aluminium and aluminium alloys - Extruded rod, bar, solid and hollow shapes
AS 2047	2014	Windows and external glazed doors in buildings
AS/NZS 2208	1996	Safety glazing materials in buildings
AS/NZS 2904	1995	Damp-proof courses and flashings
AS 3715	2002	Metal finishing - Thermoset powder coating for architectural applications of aluminium and aluminium alloys
AS/NZS 4667	2000	Quality requirements for cut-to-size and processed glass
AS/NZS 4668	2000	Glossary of terms used in the glass and glazing industry
AS 5203	2016	Protection of openable windows/ fall prevention – Test sequence and compliance method
BCA 3.9.2.5	2016	Acceptable construction - Safe movement and access - Barriers and handrails - Protection of openable windows
BCA D2.24	2016	Access and egress - Construction of exits - Protection of openable windows
BS 2571	1990	Specification for general-purpose flexible PVC compounds for moulding and extrusion
BS 4255		Rubber used in preformed gaskets for weather exclusion from buildings
BS 4255-1	1986	Specification for non-cellular gaskets
AAMA 701/702	2011	Voluntary specification for pile weatherstripping and able fenestration weatherseals

The following documents are mentioned only in the **Guidance text**:

AS ISO 717		Acoustics - Rating of sound insulation in buildings and of building elements
AS/NZS ISO 717.1	2004	Airborne sound insulation
AS 1170		Structural design actions
AS/NZS 1170.2	2011	Wind actions
AS/NZS 1276		Acoustics - Rating of sound insulation in buildings and of building element
AS/NZS 1276.1	1999	Airborne sound insulation
AS 1530		Methods for fire tests on building materials, components and structures
AS 1530.4	2014	Fire-resistance tests for elements of construction
AS 2665	2001	Smoke/heat venting systems- Design, installation and commissioning
AS 3959	2009	Construction of buildings in bushfire prone areas
AS 4055	2012	Wind loads for housing
AS 5039	2008	Security screen doors and security window grilles
AS 5041	2003	Methods of test - Security screen doors and window grilles
BCA 3.7.4	2016	Acceptable construction – Fire safety – Bushfire areas
BCA Section J	2016	Energy efficiency
NATSPEC DES 018	2008	Bushfire protection
NATSPEC DES 020	2011	Fire behaviour of building materials and assemblies
NATSPEC DES 032	2014	Airborne sound insulation

NATSPEC GEN 006	2007	Product specifying and substitution
NATSPEC GEN 024	2015	Using NATSPEC selections schedules
NATSPEC PRO 006	2013	Glass types used in buildings
NATSPEC TR 01	2017	Specifying ESD
NFRC 100	2017	Procedure for determining fenestration product U-factors
NFRC 200	2017	Procedure for determining fenestration product solar heat gain coefficient and visible transmittance at normal incidence
ISO 717		Acoustics - Rating of sound insulation in buildings and of building elements
ISO 717-1	1996	Airborne sound insulation