sun louvres
By Louvretec

SPIRAL PIVOT SUN LOUVRES

SUN LOUVRES SPIRAL PIVOT **GALLERY**

1.

2.

3.

4.

5.

1. MOTORISED 165MM HI-SPAN LOUVRES 2. MOTORISED 135MM HI-SPAN LOUVRES IN ELAM STREET FRAMES 3. MOTORISED 200MM FLUSH LOUVRES
4. MOTORISED 200MM RECTANGULAR LOUVRES
5. MOTORISED 150MM MIDI LOUVRES

DRIVE SYSTEM: SPIRAL PIVOT

Motorised and Hand Operable Sun Louvre Panels

The Spiral Pivot operating system is as well suited for motorising Sun Louvre panels as it is for motorising Opening Roofs.

HAND ADJUSTABLE, OVERHEAD SUN LOUVRES FITTING WITHIN AN OPENING

The Spiral Pivot System

Louvretec's award winning Spiral Pivot system operates 17 different styles and shapes of louvres.

Engineered to include:

- Marine grade 12.7mm SS hex drive shaft
- Self-lubricating drive and pivot bearings
- Notched angle double fixed blade retention
- Powered by Somfy motors & controls

Everything is hidden from sight & protected from the weather. There are no unsightly drive arms or external motors on show.

Reliability

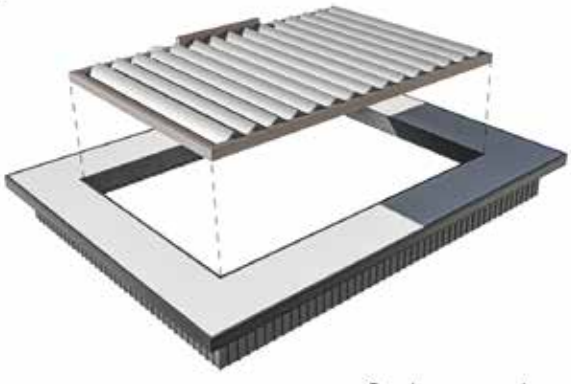
2025 sees over one million individual louvre blades worldwide pivoting with the Louvretec Spiral Drive system. Numbers that speak volumes regarding style, reliability & being totally fit for purpose.

MOTORISED, VERTICAL SUN LOUVRES FITTING WITHIN AN OPENING

MOTORISED, VERTICAL SUN LOUVRES INCLUDING STRUCTURAL FRAME

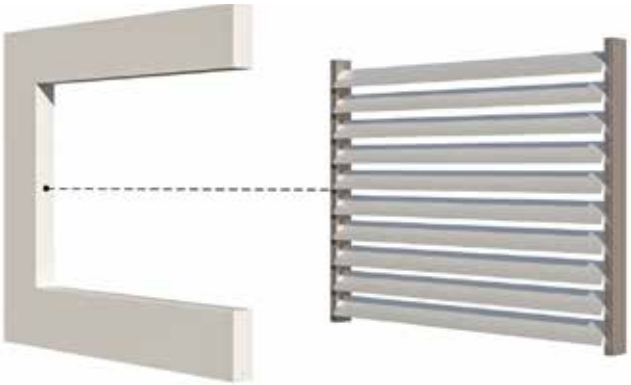
MOTORISED & HAND OPERABLE SPIRAL PIVOT SUN LOUVRE PANELS

Installation options :



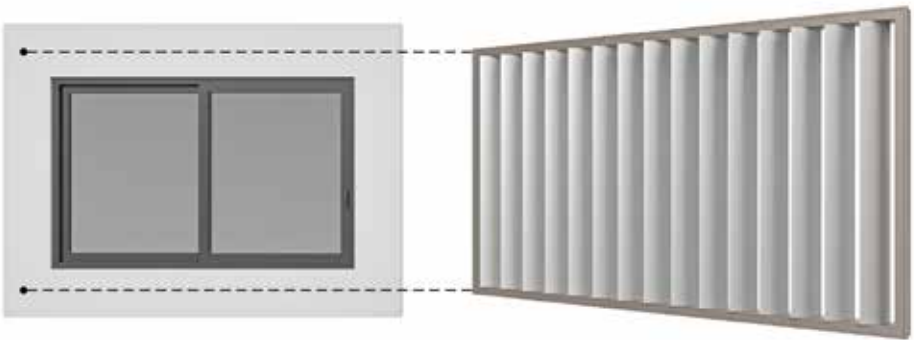
OVERHEAD FITTING INTO AN EXISTING OPENING

Sun Louvre panel may have Drive and Pivot Frames only or may have Frame to Four Sides. Motor may be located on top in motor cover, or down under.



VERTICAL FITTING INTO AN EXISTING OPENING

Sun Louvre panel may have Drive and Pivot Frames only or may have Frames to Four Sides. Motor located down under.



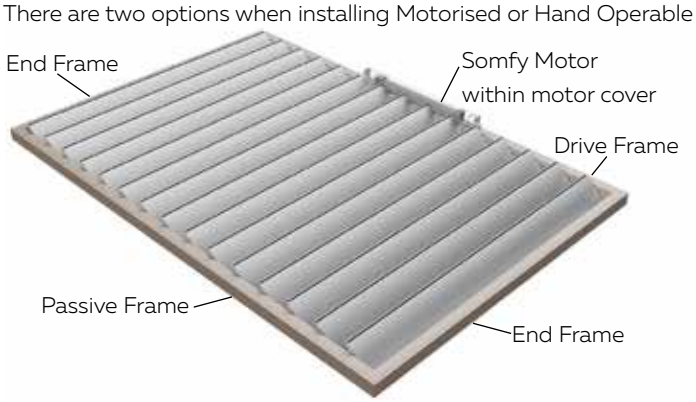
VERTICAL REQUIRING A STRUCTURAL SUB-FRAME

Sun Louvre panel includes Elam-Street Structural Frame to Four Sides. Motor located down under.

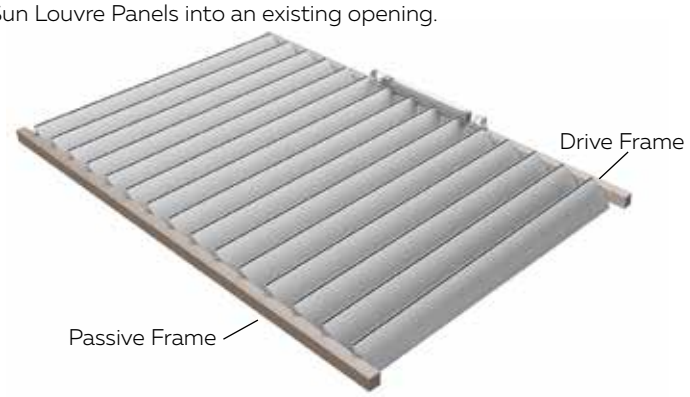
OVERHEAD SUN LOUVRES FITTING IN TO AN EXISTING OPENING

Two Frame Options

There are two options when installing Motorised or Hand Operable Sun Louvre Panels into an existing opening.

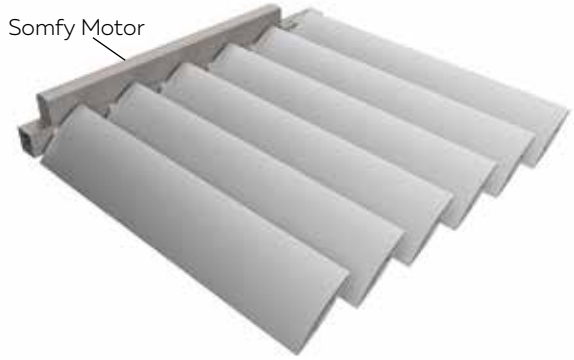


1. FRAME TO FOUR SIDES - WRAP AROUND
Drive and Pivot sides are connected with Passive End Frames.



2. TWO SIDED DRIVE & PASSIVE FRAME
Frame is Two Sided only with Drive and Passive sides.

Motorised: Two Options for Motor Location



1. MOTOR ON TOP - LOCATED WITHIN A MOTOR COVER

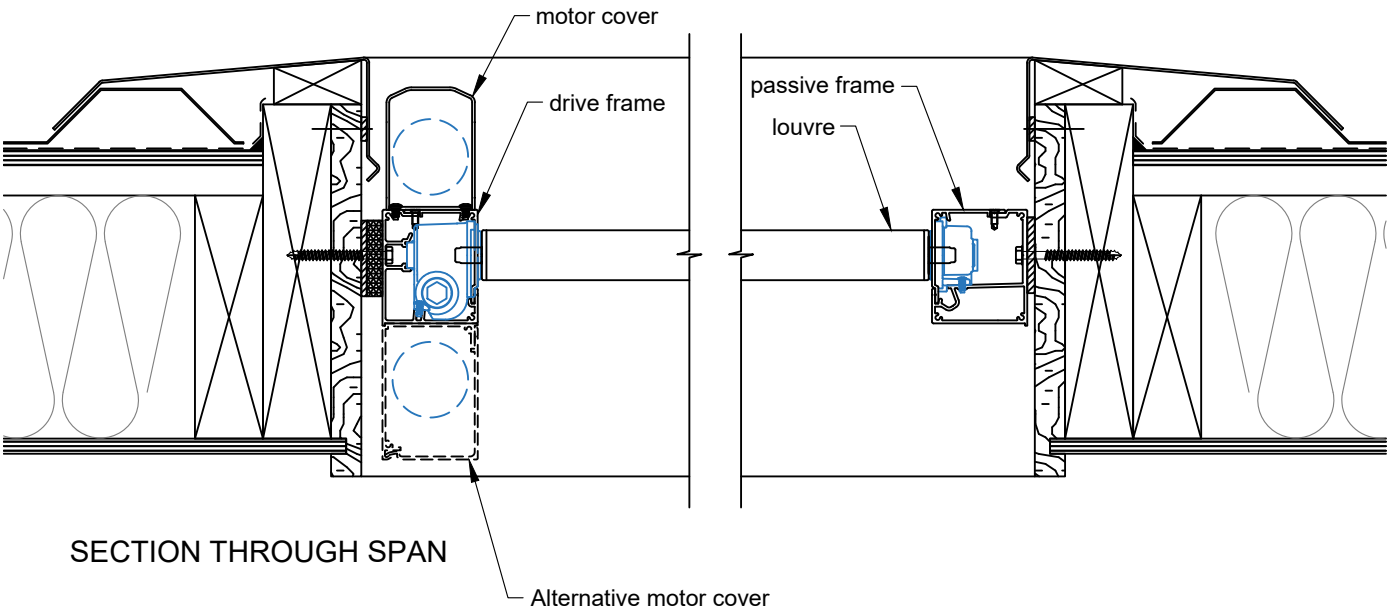
2. MOTOR DOWN-UNDER - LOCATED WITHIN A DOWN-UNDER FRAME

Hand Operable Option

HAND OPERATED OPTION WITH GEARBOX & CRANK HANDLE

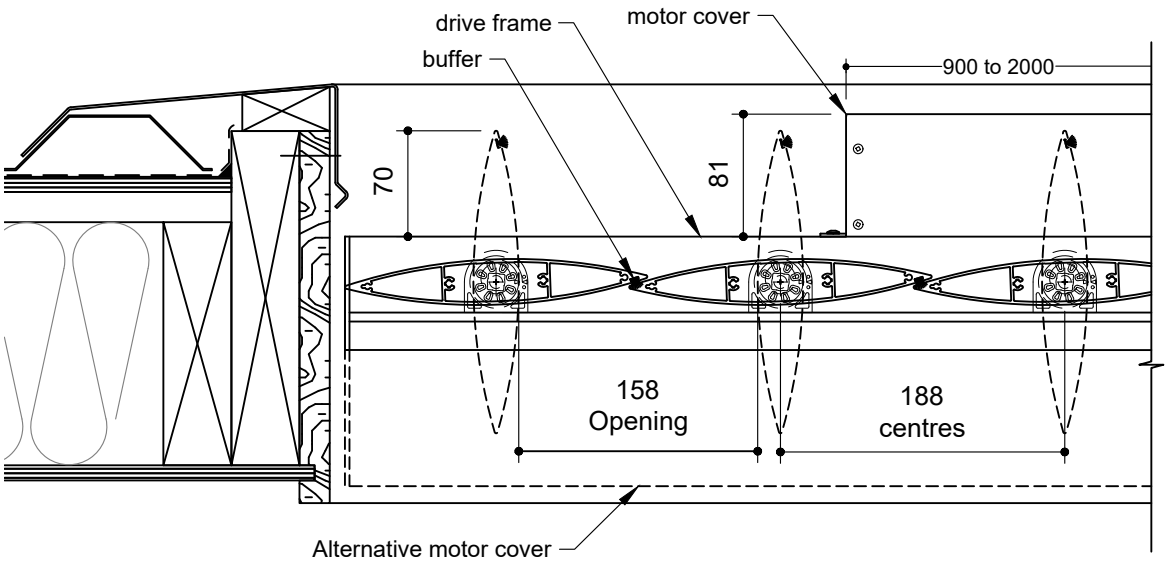
TYPICAL DETAIL: MOTORISED OVERHEAD SPIRAL PIVOT SUN LOUVRES FITTING INTO EXISTING OPENING

SECTION THROUGH SPAN - MOTORISED 200MM MAXI LOUVRE INTO EXISTING OPENING



SECTION THROUGH SPAN

SECTION THROUGH LOUVRES - MOTORISED 200MM MAXI LOUVRE INTO EXISTING OPENING



SECTION THROUGH LOUVRES

FILE: SUN LOUVRES Spiral Pivot 10.2.06 DATE MODIFIED: 01/10/2024 SCALE:

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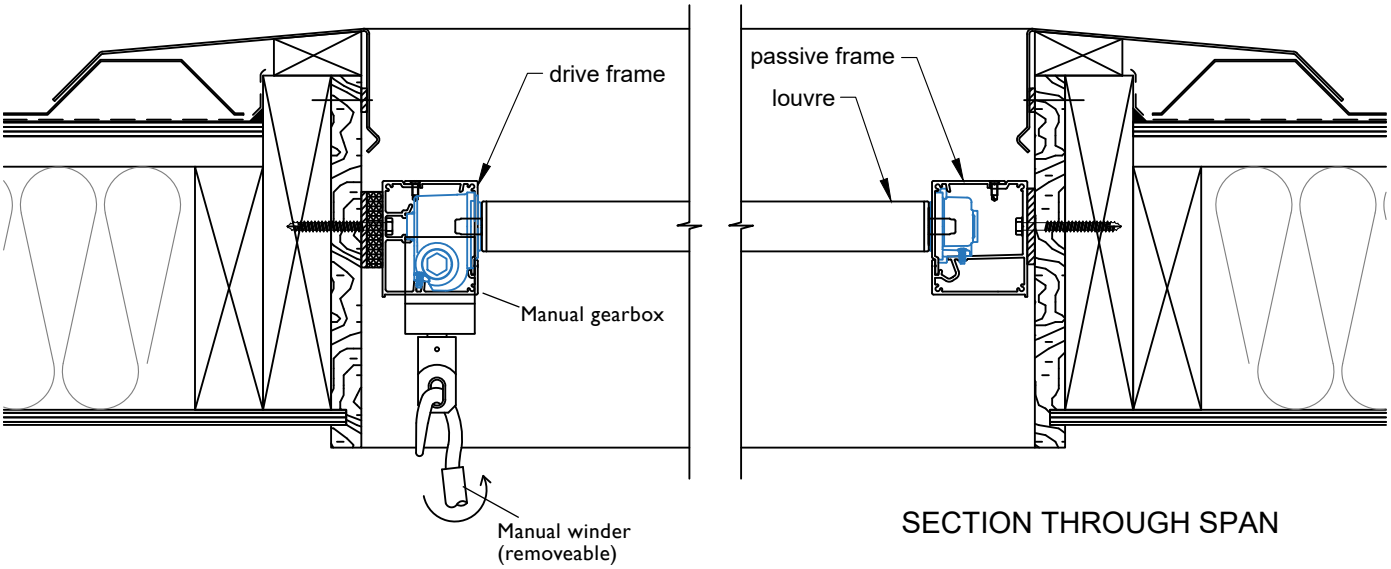
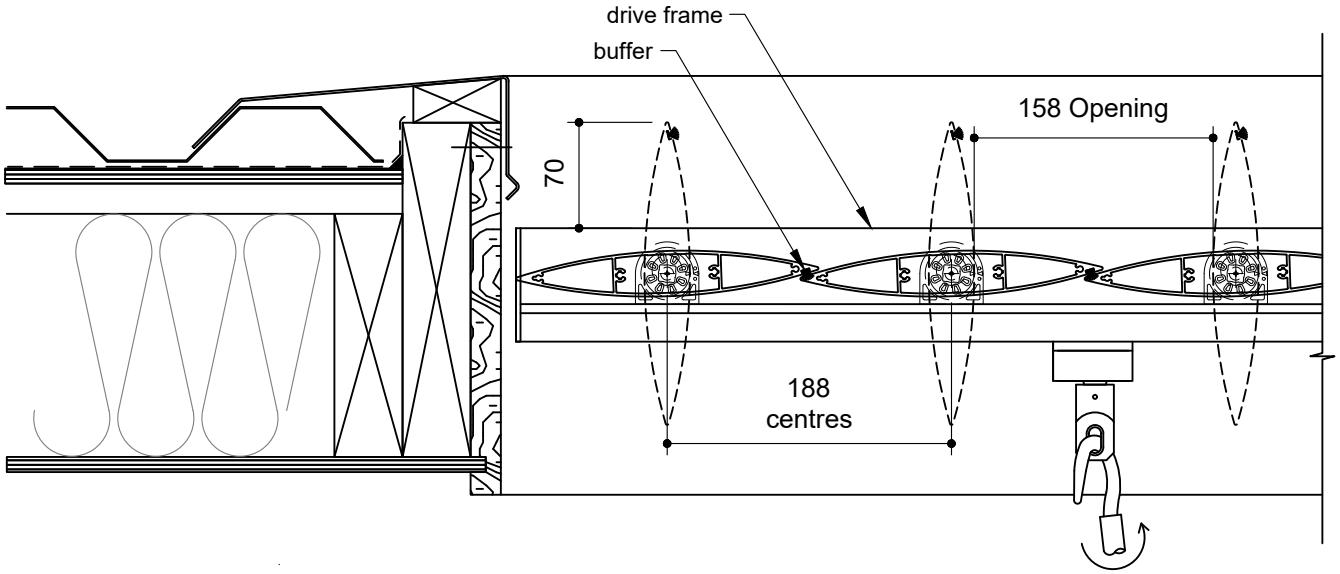
SECTION - MANUALLY OPERABLE 200MM MAXI LOUVRE INTO EXISTING OPENING



SECTION THROUGH SPAN

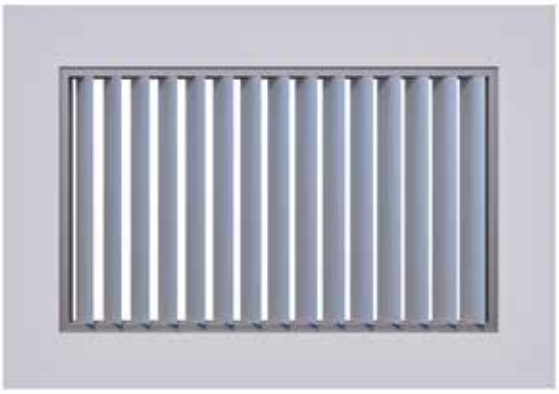
SECTION - MANUALLY OPERABLE 200MM MAXI LOUVRE INTO EXISTING OPENING



SECTION THROUGH LOUVRES

VERTICAL SPIRAL PIVOT SUN LOUVRE PANELS

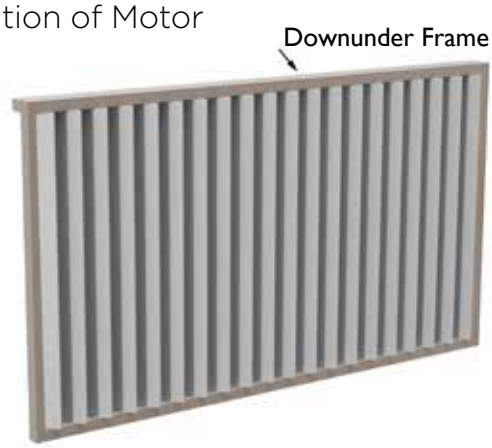
Installation: Blades can be installed vertically or horizontally



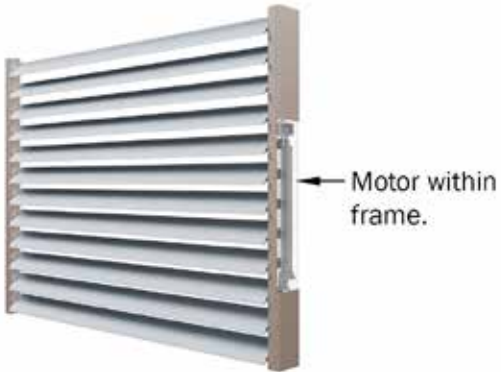
1. VERTICAL MOTORISED LOUVRE PANEL WITH BLADES RUNNING VERTICALLY, FITTING INTO AN EXISTING OPENING

2. VERTICAL MOTORISED LOUVRE PANEL WITH BLADES RUNNING HORIZONTALLY, FITTING INTO AN EXISTING OPENING

Location of Motor



1. FRAME IS FOUR SIDED WRAP AROUND. DRIVE AND PIVOT SIDES ARE CONNECTED WITH PASSIVE END FRAMES



2. FRAME IS TWO SIDED ONLY, DRIVE AND PIVOT SIDES

Hand Operable

VERTICAL LOUVRES CAN BE HAND OPERATED WITH A GEARBOX & CRANK HANDLE

REFER TO PAGE 10.2.14

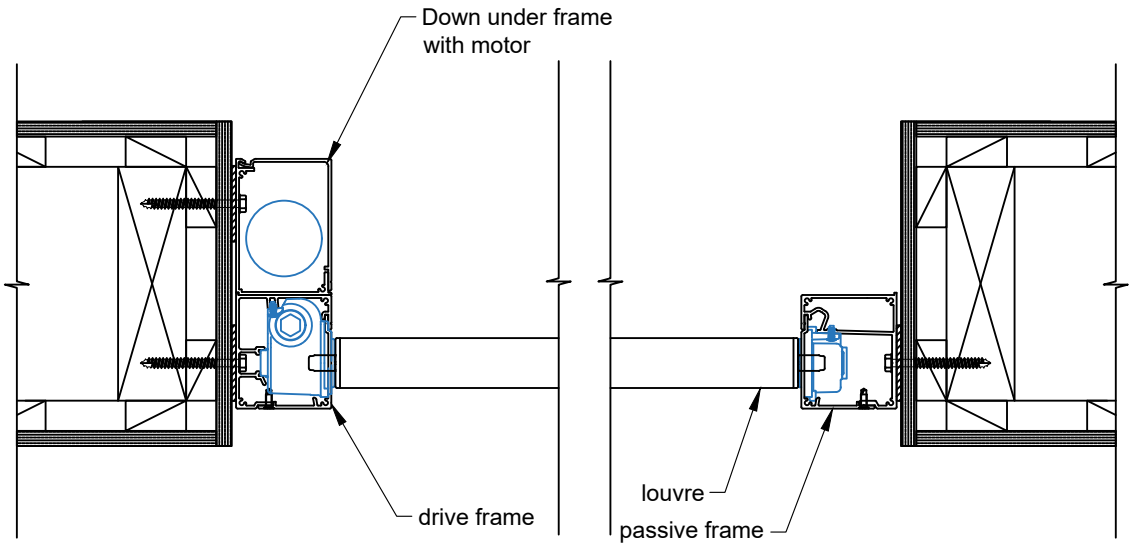
VERTICAL PANELS

- Short crank handles for easily accessible vertical panels are available in three standard lengths; 30mm, 95mm, 150mm
- Refer to page 10.2.14 for details

OVERHEAD PANELS

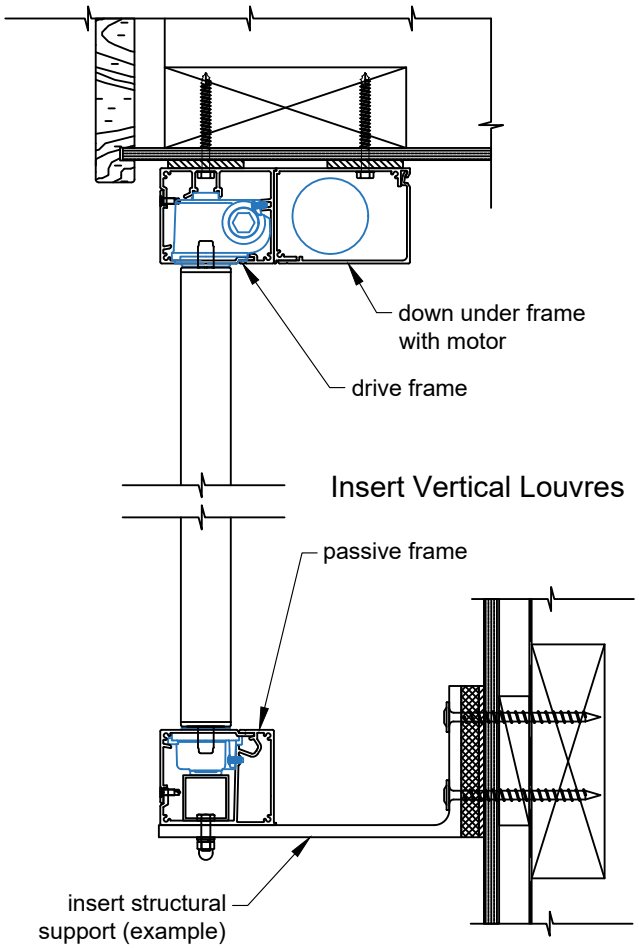
- Overhead access is made easy with hook handles available in the following standard lengths; 600mm, 900mm 1200mm, 1500mm, 1800mm
- A short or long eyelet is also available.

INSERT HORIZONTAL LOUVRES - PLAN VIEW



Insert Horizontal Louvres

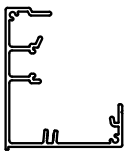
INSERT VERTICAL LOUVRES - SECTION VIEW



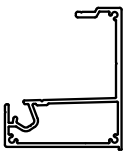
Insert Vertical Louvres

DRIVE, PASSIVE & DOWN UNDER FRAMES

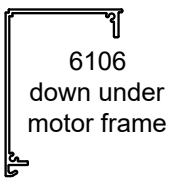
6102
spiral cover
angle



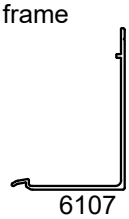
6105
spiral 63mm
drive frame



6104
spiral 63mm
passive frame



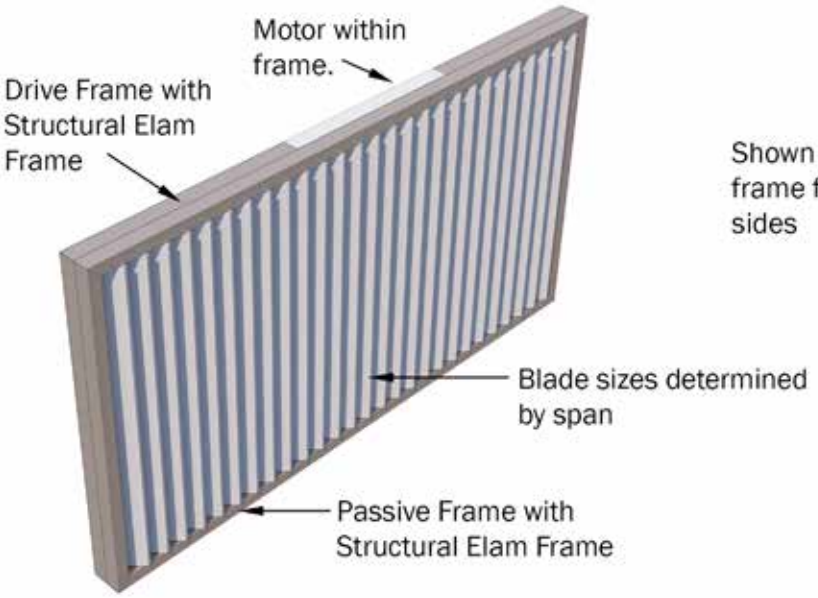
6106
down under
motor frame



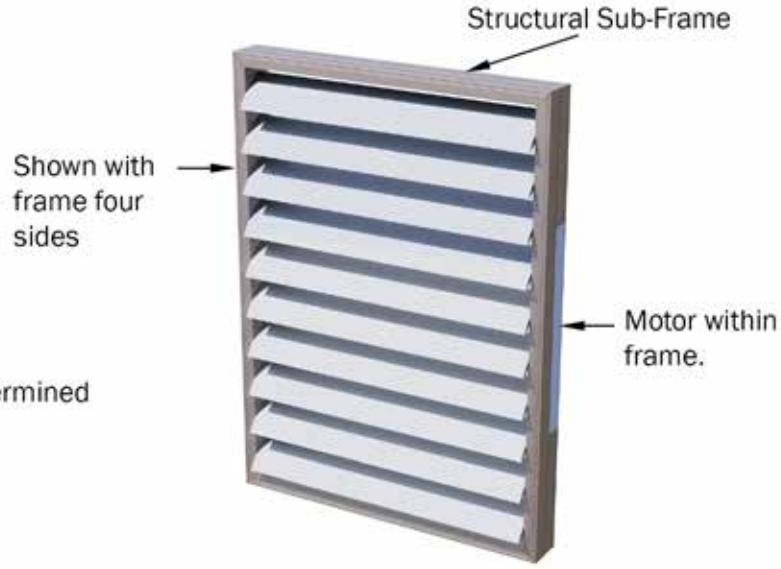
6107
down under
motor cover

VERTICAL SPIRAL PIVOT SUN LOUVRE PANELS

Installation: Blades can be installed vertically or horizontally in a Structural Sub-Frame

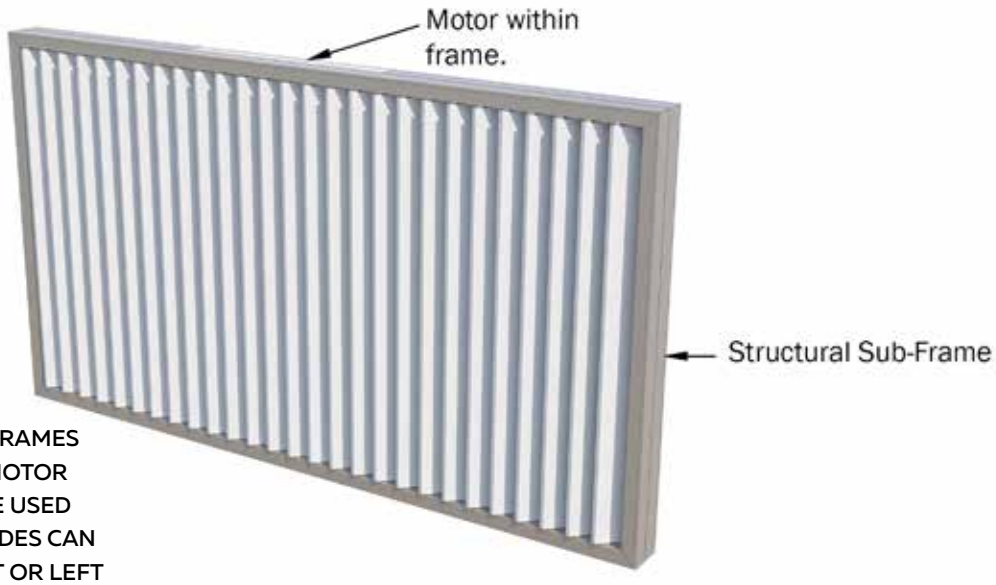


1. VERTICAL MOTORISED SUN LOUVRES RUNNING VERTICALLY, FITTING WITHIN AN ELAM STREET STRUCTURAL SUB-FRAME



2. VERTICAL MOTORISED SUN LOUVRES RUNNING HORIZONTALLY, FITTING WITHIN AN ELAM STREET STRUCTURAL SUB-FRAME

Location of Motor

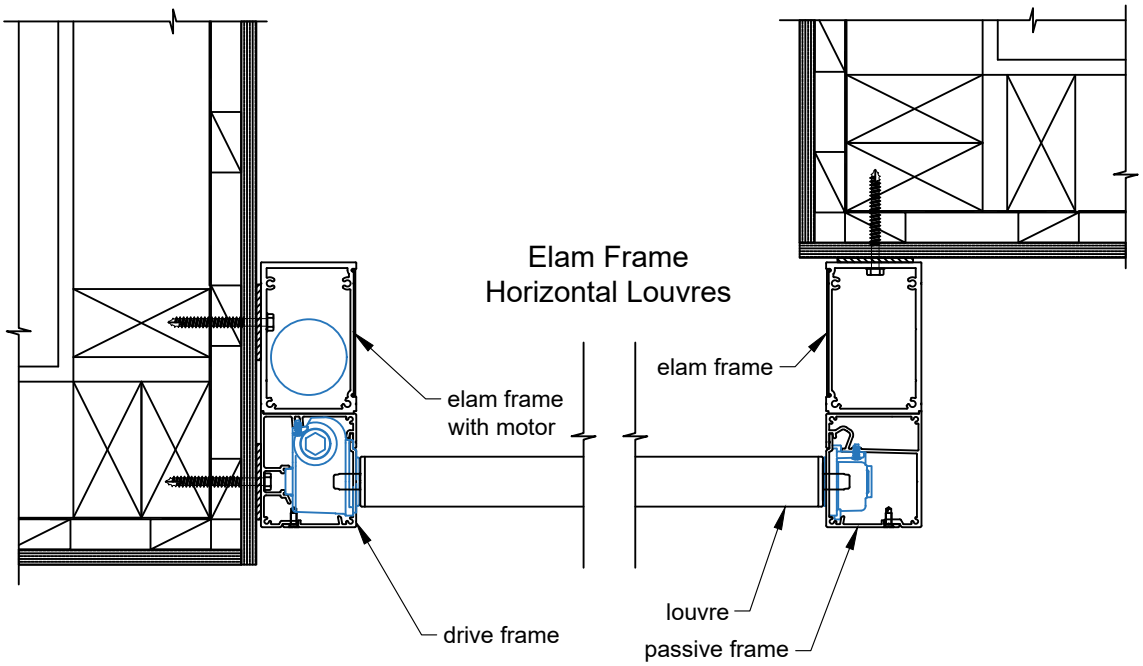


ELAM STREET STRUCTURAL SUB-FRAMES EXTEND ALL FOUR SIDES HIDING MOTOR & WIRING. DEPENDING ON LOUVRE USED CONFIGURATION DRIVE & PIVOT SIDES CAN BE EITHER TOP OR BOTTOM, RIGHT OR LEFT

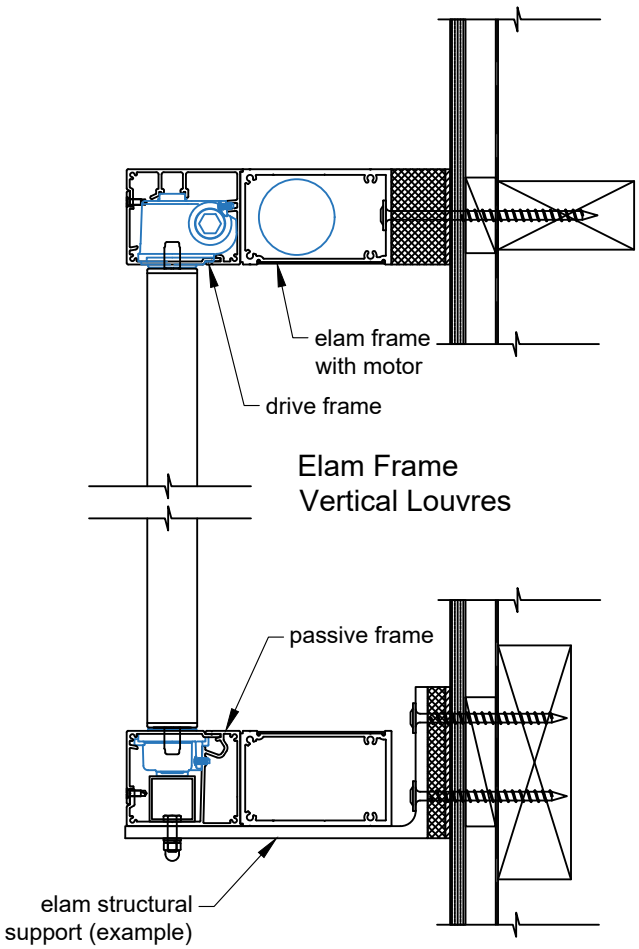
Hand Operable

Due to the Structural Frame sitting outside the building, very few Elam Street panels are hand operated as this would require the gearbox shaft protruding through the building. Conventional Motorised or Solar Powered Motorisation (if no power is available) are the preferred options.

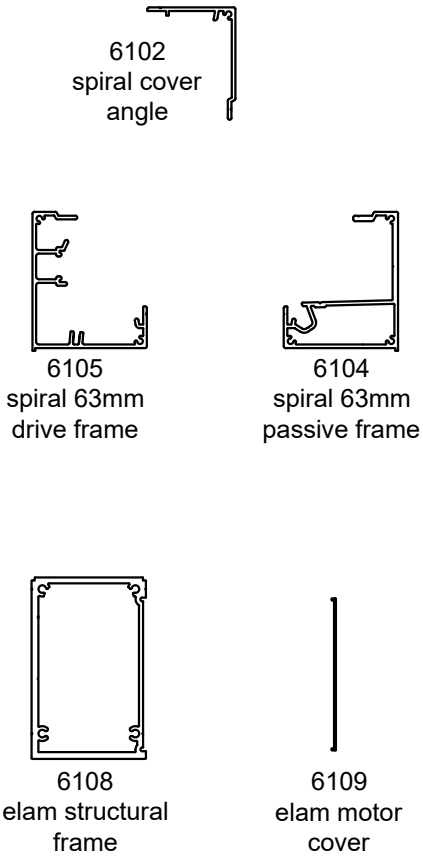
ELAM STREET STRUCTURAL SUB-FRAME - HORIZONTAL LOUVRES - PLAN VIEW



ELAM STREET STRUCTURAL SUB-FRAME VERTICAL LOUVRES - SECTION VIEW



ELAM STREET STRUCTURAL SUB-FRAMES



DRIVE SYSTEM - SPIRAL PIVOT

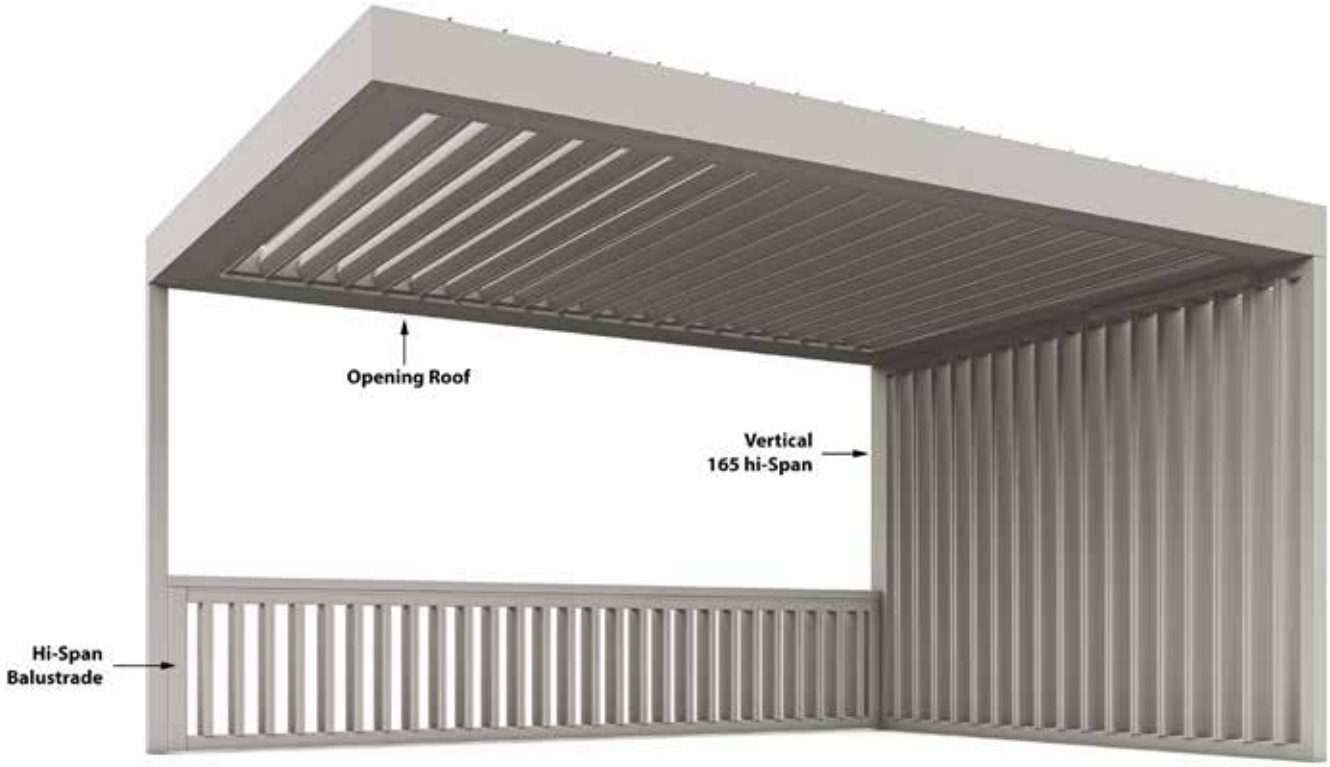
Vertical Balustrades

Louvretec's Hi-Span Spiral Pivot operated balustrade louvre system has been designed to meet Australian & NZ Standards.

- Motorised or hand-operated this unique louvre system can be used as a balustrade, spanning up to 3000mm high.
- 165mm Hi-Span opens to a maximum of 125mm as required in Australia.
- 135mm Hi-Span opens to a maximum of 100mm as required in NZ
- The louvre is rated to be used as an infill panel only.
- Structural balustrade support of the infill panel by others.

HAND OPERABLE HI-SPAN BALUSTRADE

1M PLUS AND FULL HEIGHT BALUSTRADE LOUVRES



VERTICAL HI-SPAN BALUSTRADE

MOTORISED RAKING PANEL, THE NETHERLANDS

DRIVE SYSTEM - SPIRAL PIVOT

Raking panels

Louvretec can offer Raking Frames covering a wide range of Spiral Pivot Louvres.

- Choice of Airfoil or Rectangular Louvres
- Suitable for Vertical Wall Panels or Raking Overhead Panels.
- Can be installed on any pitch up to 45 degrees.
- Spiral Drive system sits within non-raking side.

Contact your local Louvretec Dealer regarding custom made Raking Panels.

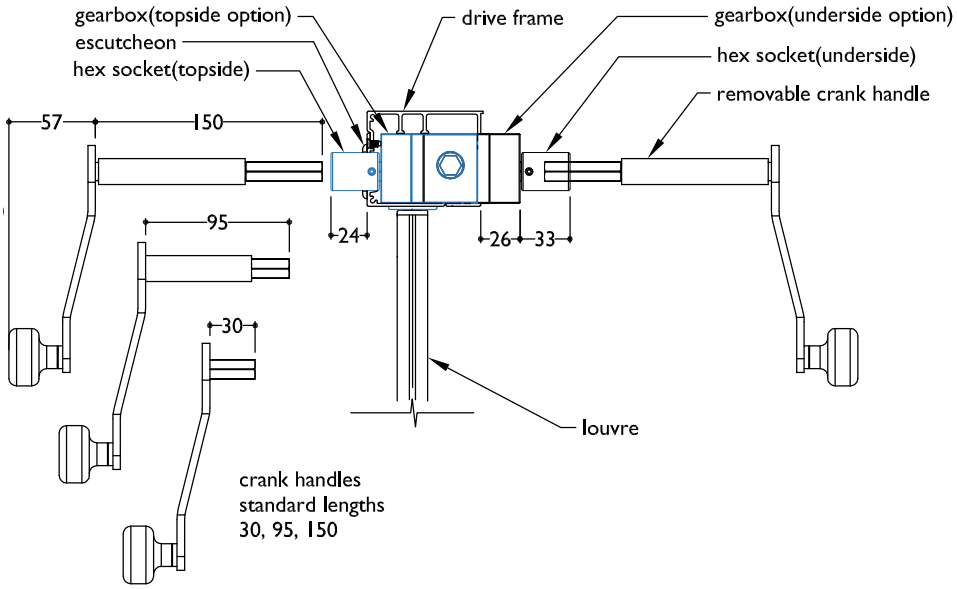
VERTICAL OR OVERHEAD PANELS

200MM MAXI LOUVRE RAKING PANEL. MOTORISED BY SPIRAL PIVOT SYSTEM

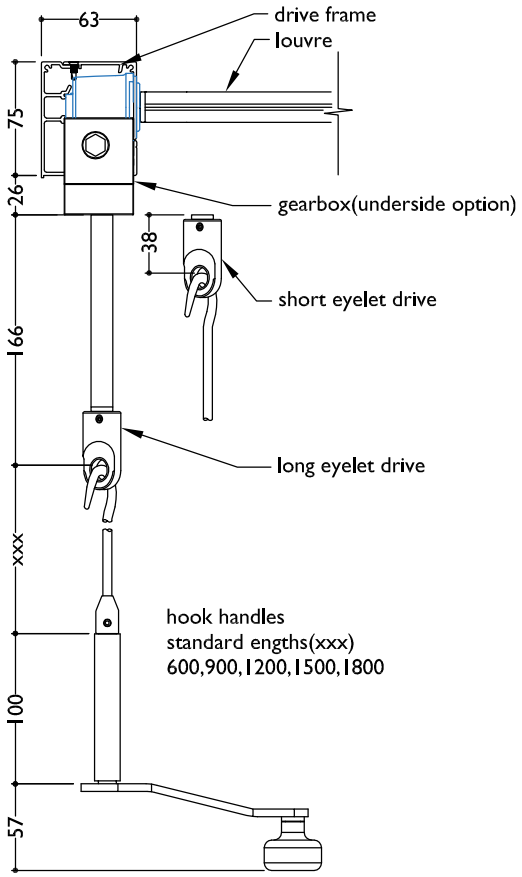
SPIRAL PIVOT DRIVE SYSTEM

Manually operated Spiral Pivot with Pivot Handle

VERTICAL PANELS HANDLE DETAILS



OVERHEAD PANELS HANDLE DETAILS



MANUAL OPERATION

Manual gearboxes can be installed for operation from either the topside or the underside of the Drive Frame. The Gearbox Hex Socket and Escutcheon (topside only) have a hard, anodised finish (silver). Louvre handles are stainless steel/aluminium

FILE: SUN LOUVRES Spiral Pivot 10.2.14 DATE MODIFIED: 01/10/2024 SCALE:
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QUICK REFERENCE

COMPATIBLE SUN LOUVRES WITH SPIRAL PIVOT SYSTEM

SPIRAL PIVOT SUN LOUVRES RANGE

APPLICATION OVERVIEW **GROUPED SPIRAL PIVOT LOUVRES AT GLANCE**

MINIMUM - MAXIMUM BLADE SPANS AT A GLANCE AS DETERMINED BY WIND SPEED. REFER TO SECTION ENGINEERING REPORTS FOR FULL DETAILS ON BLADE SPANS.

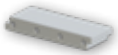
EXTRA HIGH WIND SPEED 198KM/H 55M/S — EX HIGH

LOW WIND SPEED 115KM/H 32M/S — LOW

LOUVRETEC SUN LOUVRES COMPATIBLE WITH SPIRAL PIVOT SYSTEM

Motorised & Hand Operable Sun Louvre System

IF A LOUVRE YOU WISH TO SPECIFY IS NOT SHOWN IN THIS SECTION PLEASE CONTACT YOUR DEALER.
WE'RE FOCUSED TO MEETING YOUR NEEDS WITH TAILORED SOLUTIONS.

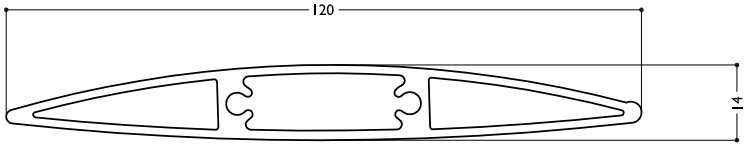
SPIRAL PIVOT APPLICATION	LOUVRE	MAXIMUM SPANS
MOTORISED & HAND OPERABLE INSERT PANELS	 120 AIRFOIL LOUVRE	1600MM (EX HIGH) / 2300MM (LOW)
	 180 AIRFOIL LOUVRE	2050MM (EX HIGH) / 2950MM (LOW)
	 150 MIDI LOUVRE	1900MM (EX HIGH) / 2750MM (LOW)
	 200 MAXI LOUVRE	2350MM (EX HIGH) / 3700MM (LOW)
	 120 FLUSH MINI LOUVRE	1750MM (EX HIGH) / 2500MM (LOW)
	 180 FLUSH MIDI LOUVRE	2250MM (EX HIGH) / 3350MM (LOW)
	 200 FLUSH MAXI LOUVRE	2250MM (EX HIGH) / 3350MM (LOW)
RAKING PANELS	 200 MAXI LOUVRE	2350MM (EX HIGH) / 3700MM (LOW)
	 200 FLUSH MAXI LOUVRE	2250MM (EX HIGH) / 3350MM (LOW)
BALUSTRADES	 135 HI SPAN BALUSTRADE	3000MM (EX HIGH) / 3000MM (LOW)
	 165 HI SPAN BALUSTRADE	3300MM (EX HIGH) / 3300MM (LOW)

MOTORISED & HAND OPERABLE INSERT PANELS AIRFOIL LOUVRES

Compatible Louvres: 120 Airfoil, 180 Airfoil, 150 Midi, 200 Maxi

120MM AIRFOIL LOUVRE

Ideal for use within a structural frame



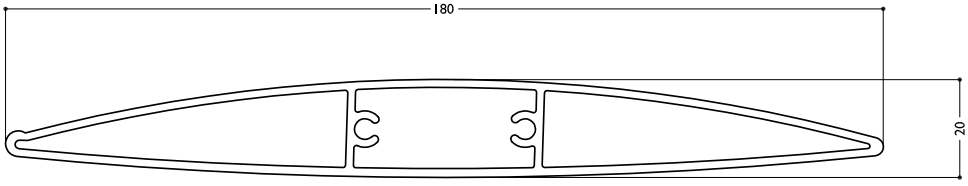
NTS

120MM AIRFOIL LOUVRE

REFER TECHNICAL DETAILS PAGE 10.2.18

180MM AIRFOIL LOUVRE

Solution for wider openings



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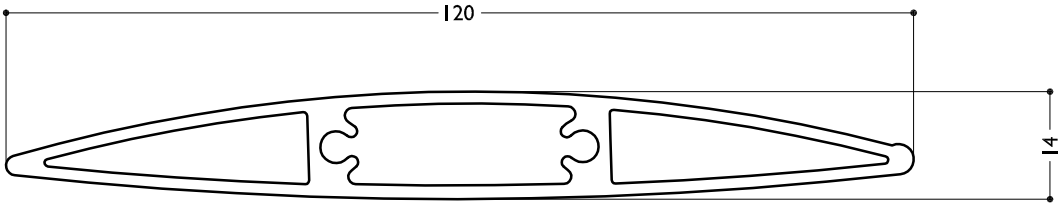
180MM AIRFOIL LOUVRE

REFER TECHNICAL DETAILS PAGE 10.2.20

SUN LOUVRES **SPIRAL PIVOT**

BLADE SPECIFICATIONS 120MM AIRFOIL LOUVRE



BLADE SPECIFICATIONS			
Blade cover - opening system	115 mm	Weight per linear metre - opening system	1.3 kg/lm
Weight per square metre - opening system	11.3 kg/sqm	Actual blade width	120 mm
Blade centres - opening system	115 mm		

SPANS AT A GLANCE

Refer Engineering Section. Climate, terrain, shielding, location, type of structure contribute to determine spans.

WIND ZONE	INSIDE	LOW	MEDIUM	HIGH	VERY HIGH	EXTRA HIGH
Factored wind speed at building	Self wt	32 m/s 115 km/hr	37m/s 133 km/hr	44 m/s 158 km/hr	50 m/s 179 km/hr	55 m/s 198 km/hr
Adjustable & Fixed, Horizontal & Vertical	2400	2300	2100	1850	1700	1600

INSTALLATION OPTIONS

SPIRAL PIVOT SYSTEM: CALCULATE OPTIMUM FRAME OPENING SIZES

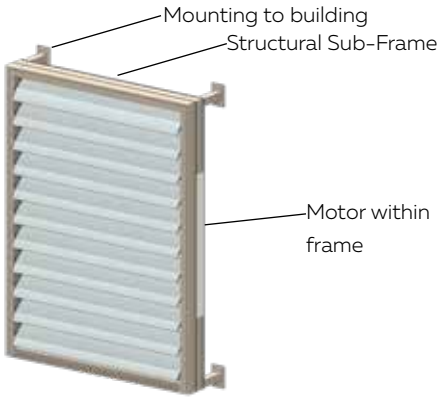
Width: Check engineering limits

Height: Calculation example showing 17 blades

STEP 1	
16 blades x 115	1840
1 blade at 120	120
17 blades	=1960

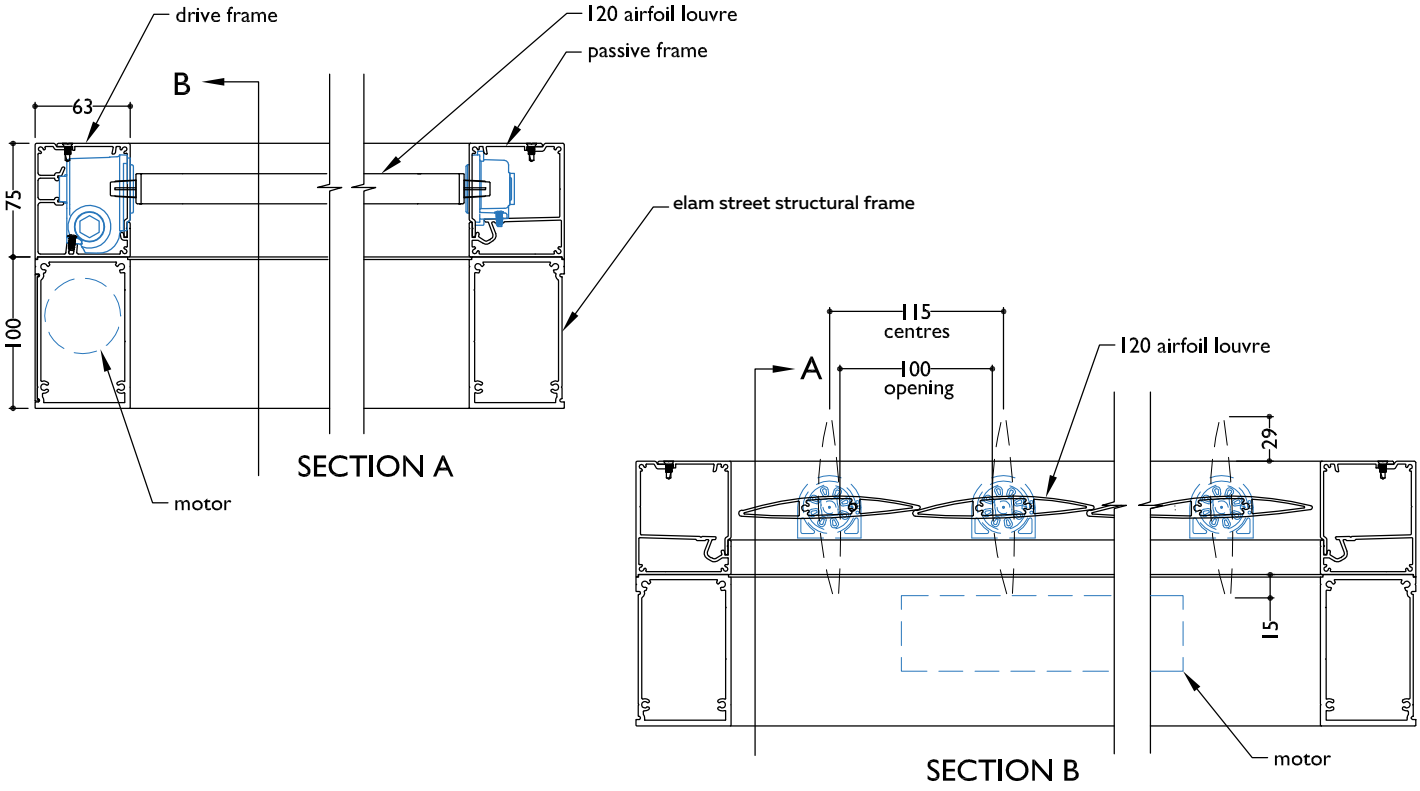
STEP 2	
Blade cover	1960
+ top and bottom closing angles allow for	
5mm + 5mm	10
Total exact opening height	=1970

*This is inside measure - not outer frame size

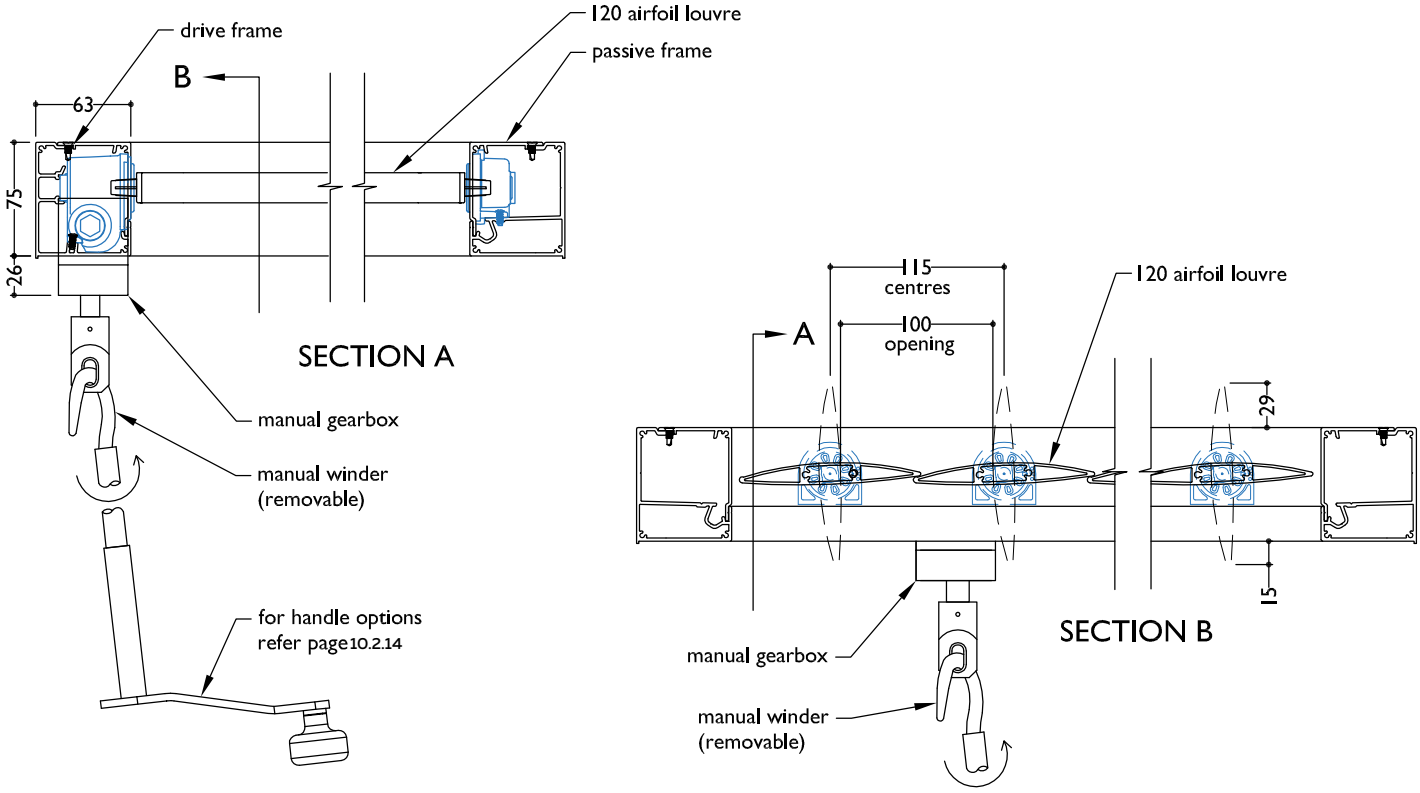


ELAM STREET STRUCTURAL FRAME
VERTICAL PANEL - HORIZONTAL BLADES

SECTION - MOTORISED 120MM AIRFOIL LOUVRE SPIRAL PIVOT ON ELAM STREET STRUCTURAL FRAME

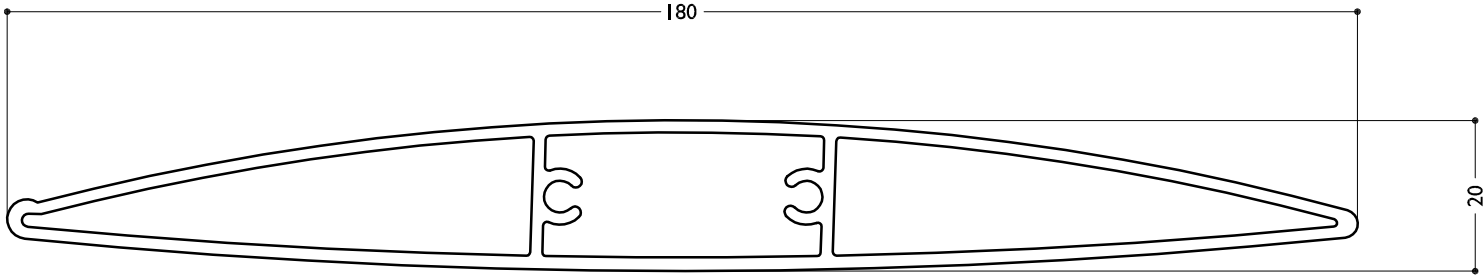


SECTION - INSERT PANEL FOUR SIDED FRAME HAND OPERABLE SPIRAL PIVOT 120MM AIRFOIL LOUVRE - MOTORISED 120MM AIRFOIL LOUVRE SPIRAL PIVOT ON ELAM STREET STRUCTURAL FRAME



SUN LOUVRES **SPIRAL PIVOT**

BLADE SPECIFICATIONS **180MM AIRFOIL LOUVRE**



BLADE SPECIFICATIONS			
Blade cover - opening system	169 mm	Weight per linear metre - opening system	1.85 kg/lm
Weight per square metre - opening system	11 kg/sqm	Actual blade width	180 mm
Blade centres - opening system	169 mm		

SPANS AT A GLANCE

Refer Engineering Section. Climate, terrain, shielding, location, type of structure contribute to determine spans.

WIND ZONE	INSIDE	LOW	MEDIUM	HIGH	VERY HIGH	EXTRA HIGH
Factored wind speed at building	Self wt	32 m/s 115 km/hr	37m/s 133 km/hr	44 m/s 158 km/hr	50 m/s 179 km/hr	55 m/s 198 km/hr
Adjustable & Fixed, Horizontal & Vertical	3100	2950	2700	2400	2200	2050

INSTALLATION OPTIONS

SPIRAL PIVOT SYSTEM: CALCULATE OPTIMUM FRAME OPENING SIZES

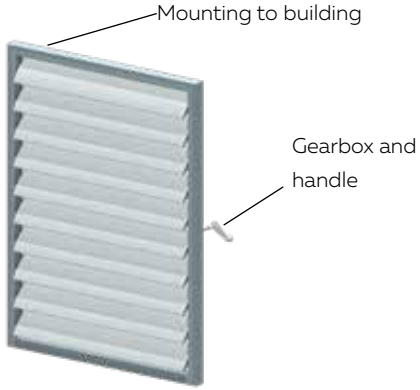
Width: Check engineering limits

Height: Calculation example showing 17 blades

STEP 1	
16 blades x 169	2704
1 blade at 180	180
17 blades	=2884

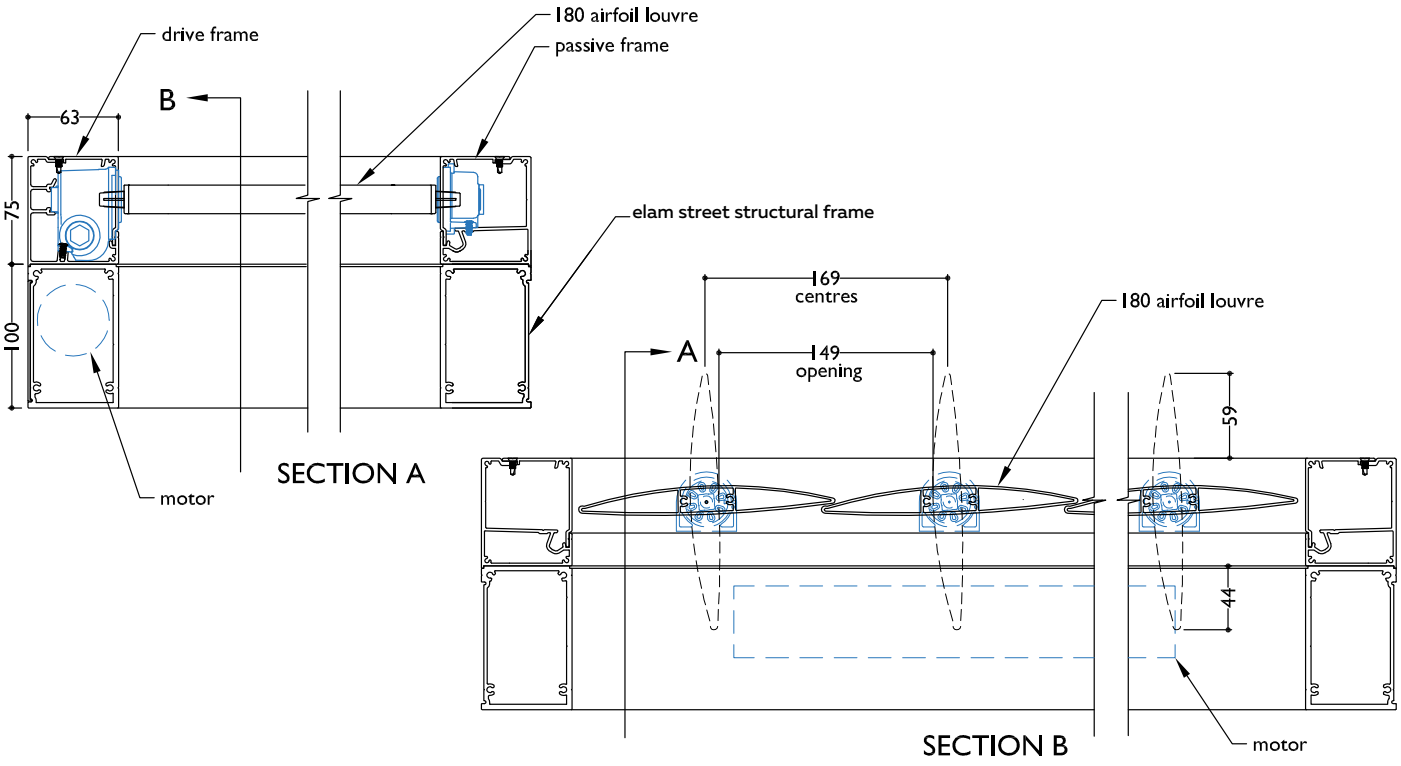
STEP 2	
Blade cover	2884
+ top and bottom closing angles allow for	
5mm + 5mm	10
Total exact opening height	=2894*

*This is inside measure - not outer frame size

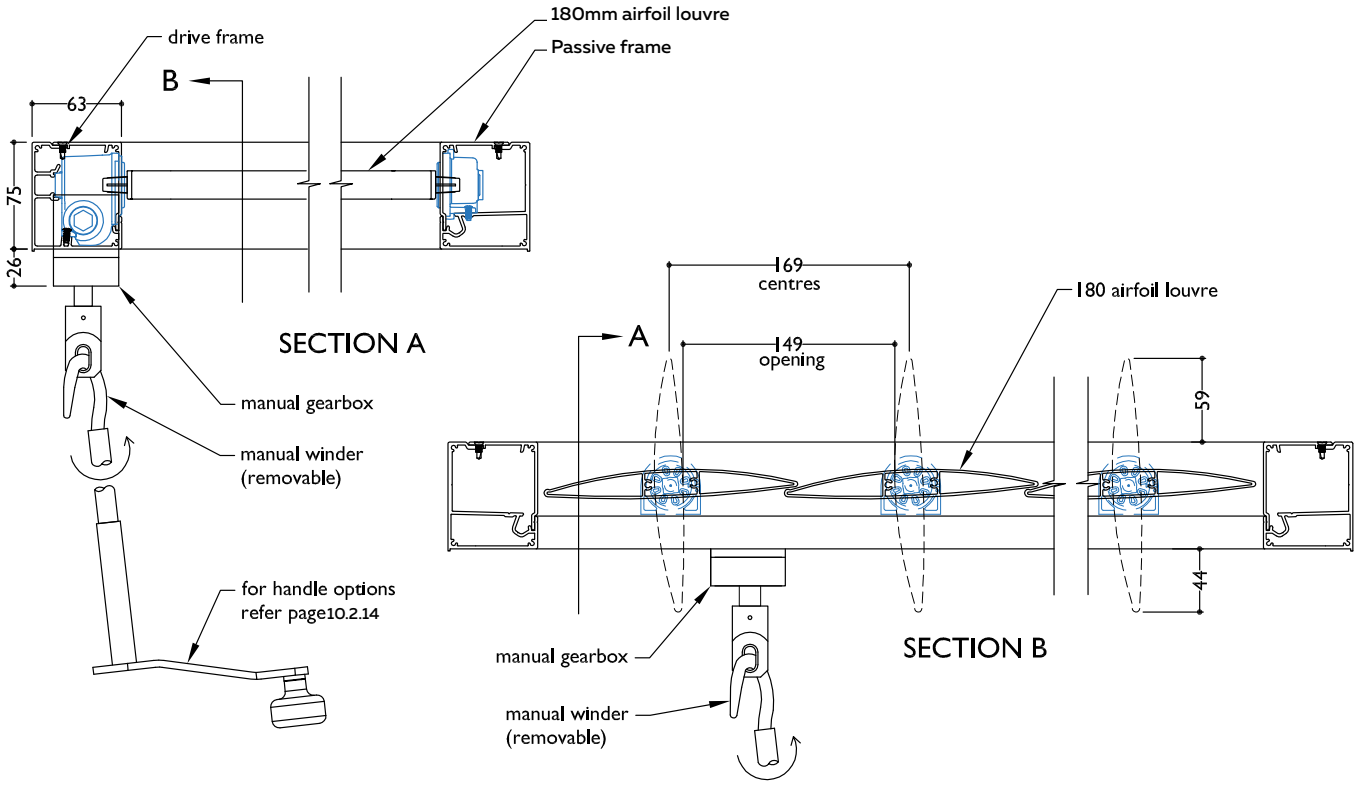


ELAM STREET STRUCTURAL FRAME
VERTICAL PANEL - HAND OPERABLE HORIZONTAL BLADES

SECTION - MOTORISED 180MM AIRFOIL LOUVRE SPIRAL PIVOT ON ELAM STREET STRUCTURAL FRAME

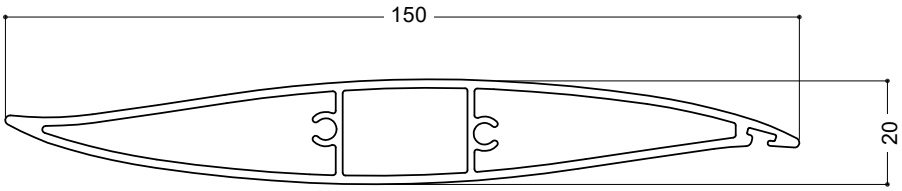


SECTION - MANUALLY OPERABLE 180MM AIRFOIL LOUVRE SPIRAL PIVOT INSERT PANEL FOUR SIDED FRAME



150MM MIDI LOUVRE

Wave shaped louvre



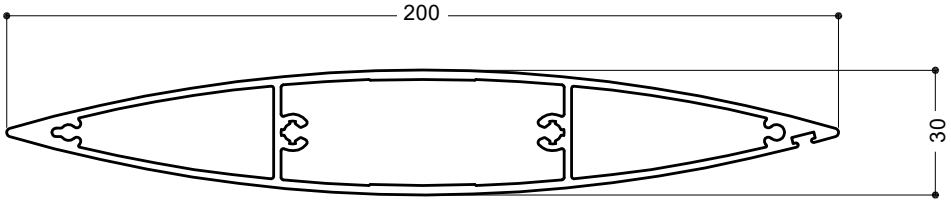
NTS

150MM MIDI LOUVRE

REFER TECHNICAL DETAILS PAGES 10.2.23

200MM MAXI LOUVRE

Most specified Maxi Louvre

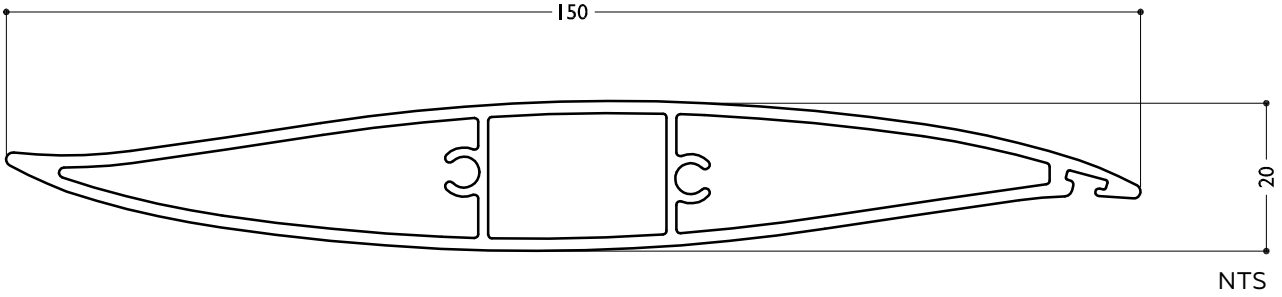


NTS

200MM MAXI LOUVRE

REFER TECHNICAL DETAILS PAGES 10.2.25

BLADE SPECIFICATIONS **150MM MIDI LOUVRE**



BLADE SPECIFICATIONS			
Blade cover - opening system	138 mm	Weight per linear metre - opening system	1.47 kg/lm
Weight per square metre - opening system	10.7 kg/sqm	Actual blade width	150 mm
Blade centres - opening system	138 mm		

SPANS AT A GLANCE

Refer Engineering Section. Climate, terrain, shielding, location, type of structure contribute to determine spans.

WIND ZONE	INSIDE	LOW	MEDIUM	HIGH	VERY HIGH	EXTRA HIGH
Factored wind speed at building	Self wt	32 m/s 115 km/hr	37m/s 133 km/hr	44 m/s 158 km/hr	50 m/s 179 km/hr	55 m/s 198 km/hr
Adjustable & Fixed, Horizontal & Vertical	2900	2750	2500	2200	2000	1900

INSTALLATION OPTIONS

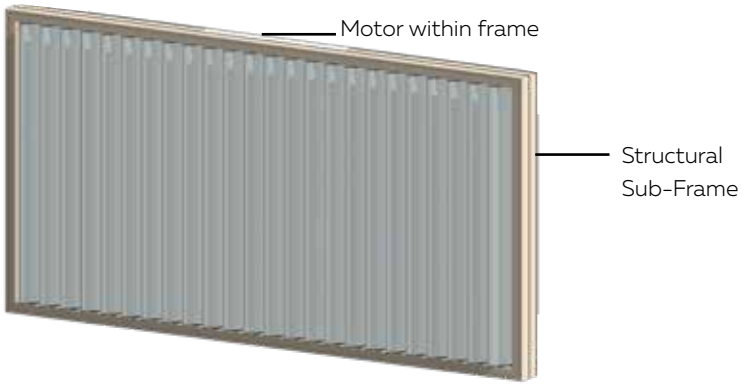
SPIRAL PIVOT SYSTEM: CALCULATE OPTIMUM FRAME OPENING SIZES

Width: Check engineering limits

Height: Calculation example showing 17 blades

STEP 1	
16 blades x 138	2208
1 blade at 150	150
17 blades	=2358
STEP 2	
Blade cover	2358
+ top and bottom closing angles allow for 5mm + 5mm	10
Total exact opening height	=2368*

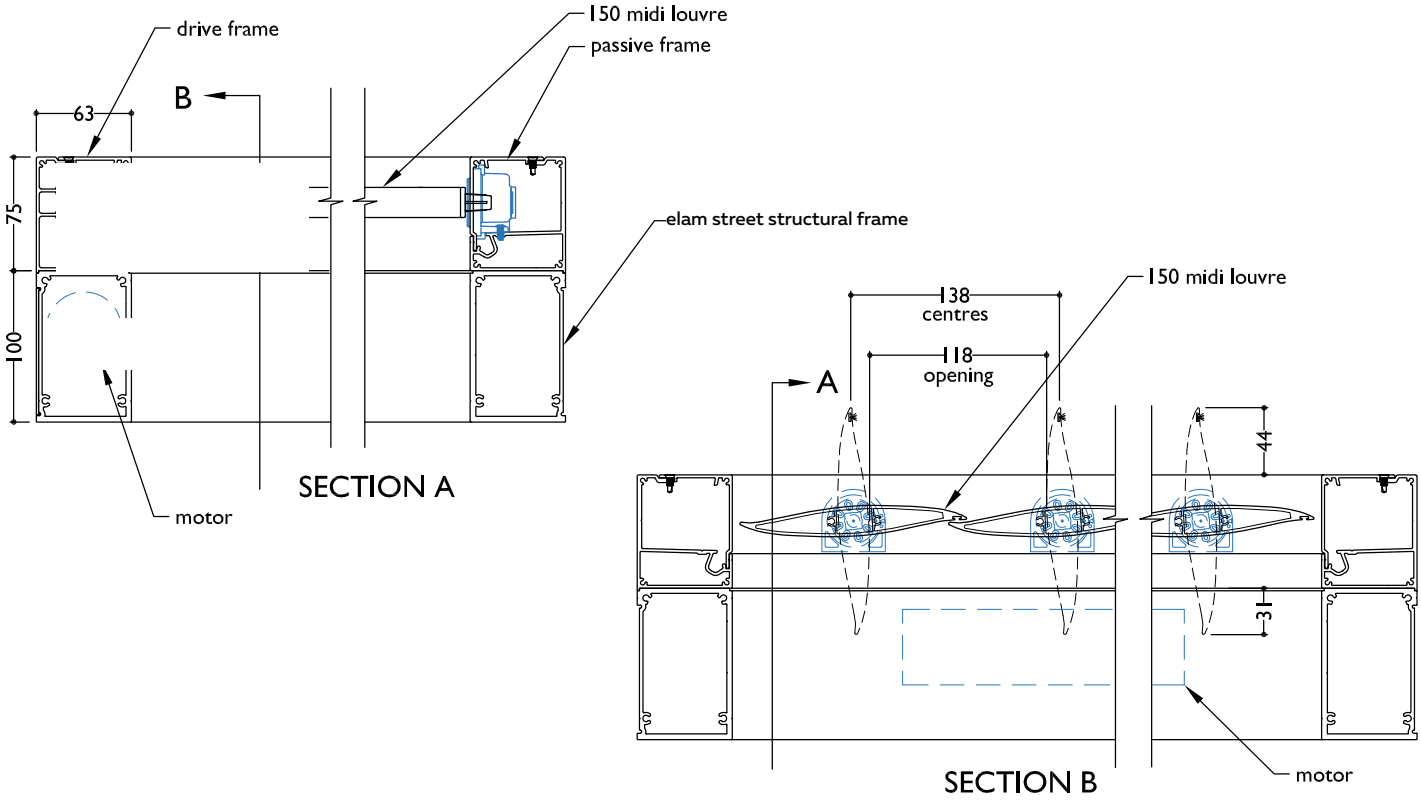
*This is inside measure - not outer frame size



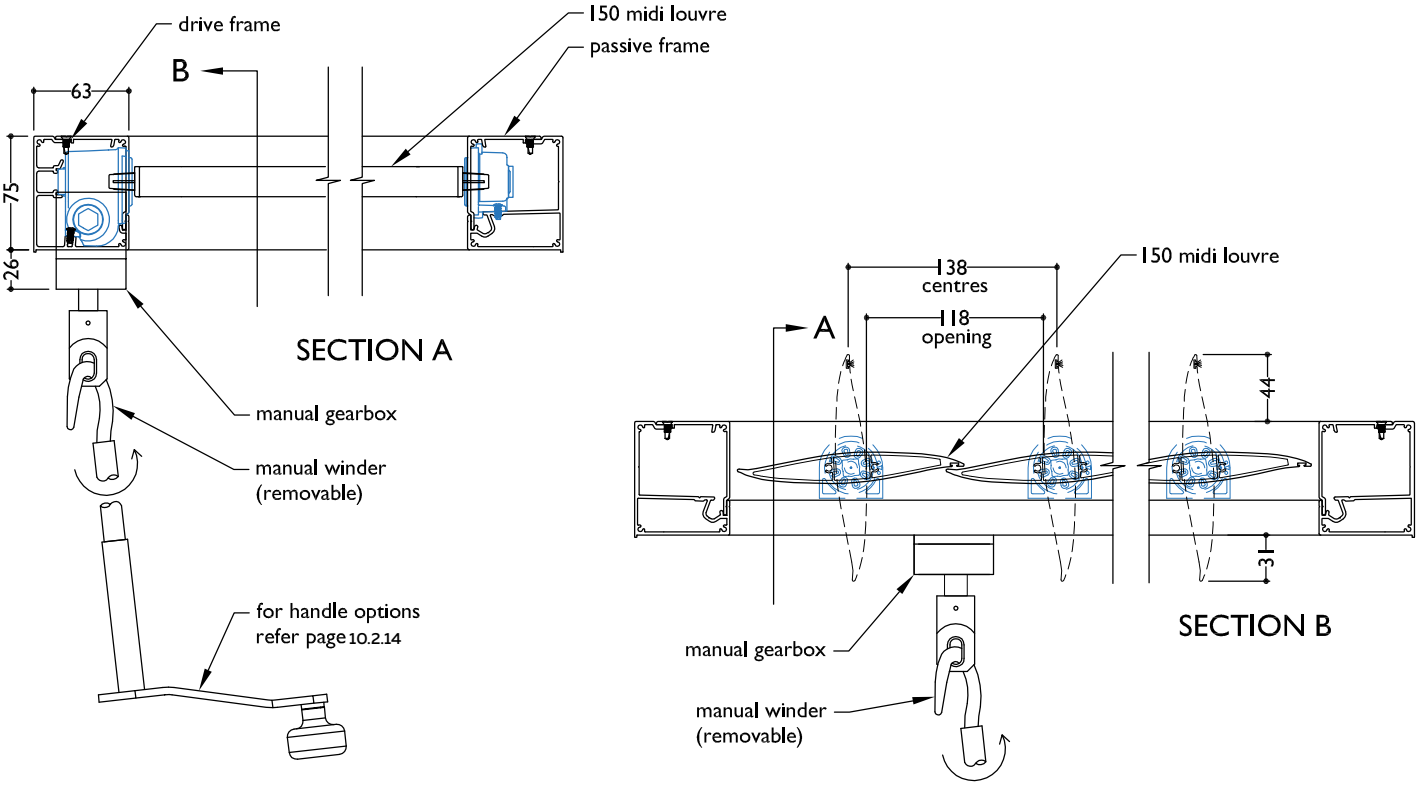
ELAM STREET STRUCTURAL FRAME WITH SUB-FRAME VERTICAL PANEL - VERTICAL BLADES

TYPICAL DETAIL: SPIRAL PIVOT SYSTEM
150MM MIDI LOUVRE

SECTION - MOTORISED 150MM MIDI LOUVRE SPIRAL PIVOT ON ELAM STREET STRUCTURAL FRAME



SECTION - MANUALLY OPERABLE 150MM MIDI LOUVRE SPIRAL PIVOT INSERT PANEL - FOUR SIDED FRAME



FILE: SUN LOUVRES Spiral Pivot 10.2.24 DATE MODIFIED: 01/10/2024 SCALE:

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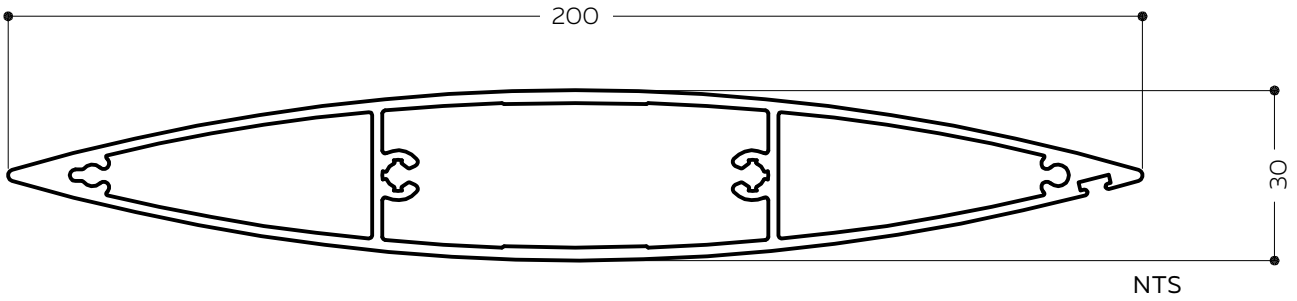
BLADE SPECIFICATIONS 200MM MAXI LOUVRE



BLADE SPECIFICATIONS			
Blade cover - opening system	188 mm	Weight per linear metre - opening system	2.75 kg/lm
Weight per square metre - opening system	14.63 kg/sqm	Actual blade width	200 mm
Blade centres - opening system	188 mm		

SPANS AT A GLANCE

Refer Engineering Section. Climate, terrain, shielding, location, type of structure contribute to determine spans.

WIND ZONE	INSIDE	LOW	MEDIUM	HIGH	VERY HIGH	EXTRA HIGH
Factored wind speed at building	Self wt	32 m/s 115 km/hr	37m/s 133 km/hr	44 m/s 158 km/hr	50 m/s 179 km/hr	55 m/s 198 km/hr
Adjustable & Fixed, Horizontal & Vertical	3700	3700	3550	2950	2600	2350

INSTALLATION OPTIONS

SPIRAL PIVOT SYSTEM: CALCULATE OPTIMUM FRAME OPENING SIZES

Width: Check engineering limits

Height: Calculation example showing 17 blades

STEP 1

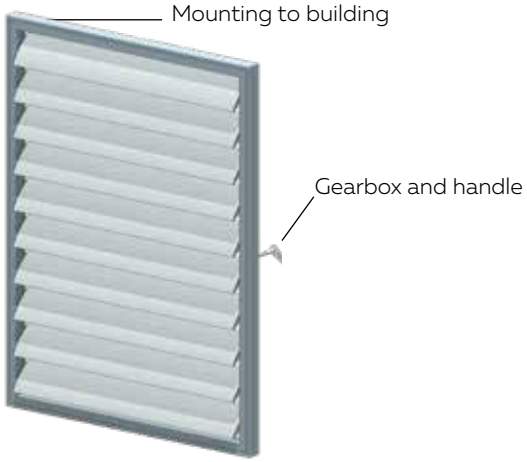
16 blades x 188	3008
1 blade at 200	200
17 blades	=3208

STEP 2

Blade cover
+ top and bottom closing
angles allow for

5mm + 5mm	10
Total exact opening height =	3218*

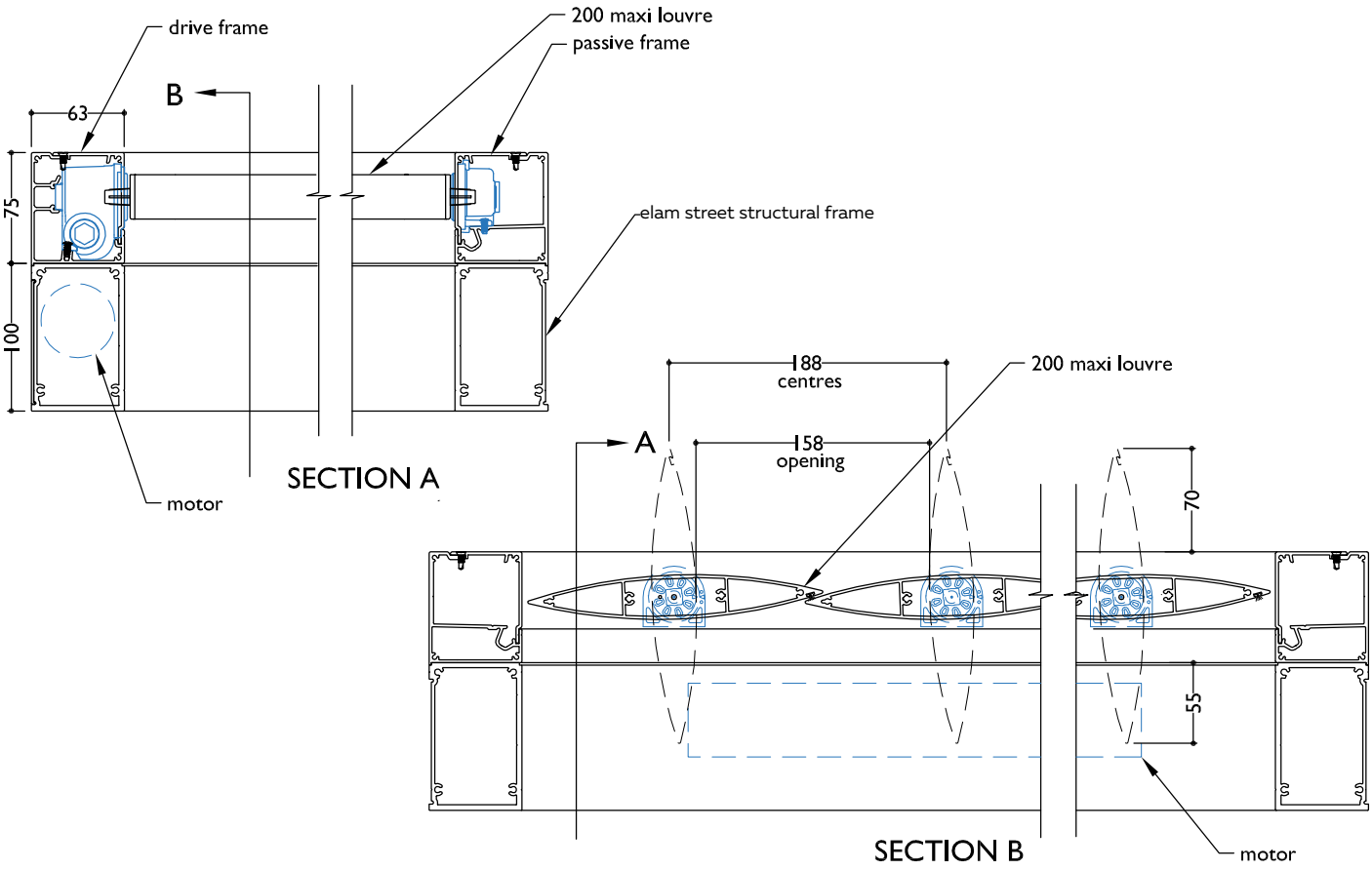
*This is inside measure - not outer frame size



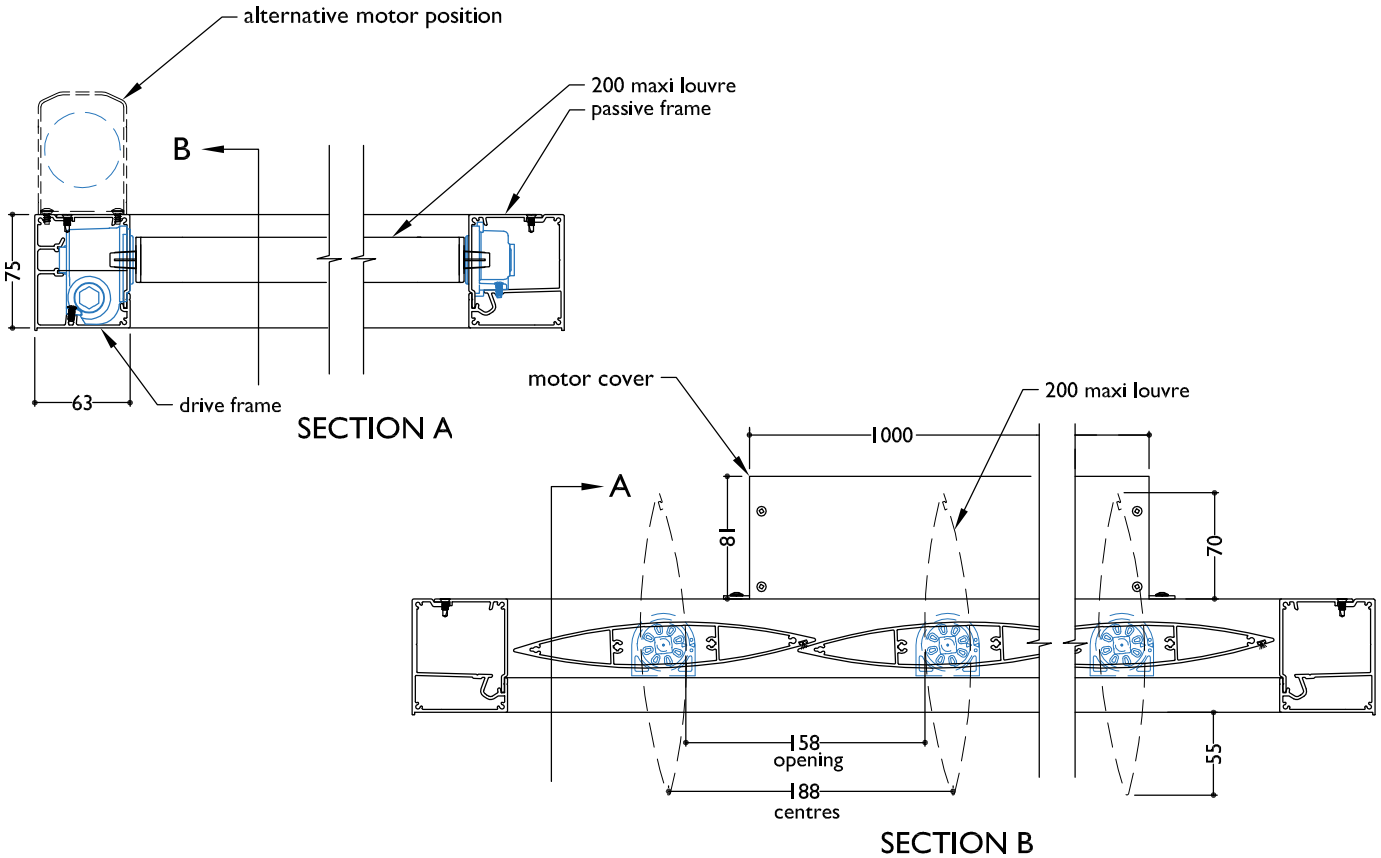
ELAM STREET STRUCTURAL FRAME
VERTICAL PANEL - HAND OPERABLE HORIZONTAL BLADES

TYPICAL DETAIL: SPIRAL PIVOT SYSTEM
200MM MAXI LOUVRE

SECTION - MOTORISED 200MM MAXI LOUVRE SPIRAL PIVOT ON ELAM STREET STRUCTURAL FRAME



SECTION - MOTORISED 200MM MAXI LOUVRE SPIRAL PIVOT WITH TOP MOUNTED MOTOR INSERT PANEL FOUR SIDED FRAME



FILE: SUN LOUVRES Spiral Pivot 10.2.26 DATE MODIFIED: 01/10/2024 SCALE:

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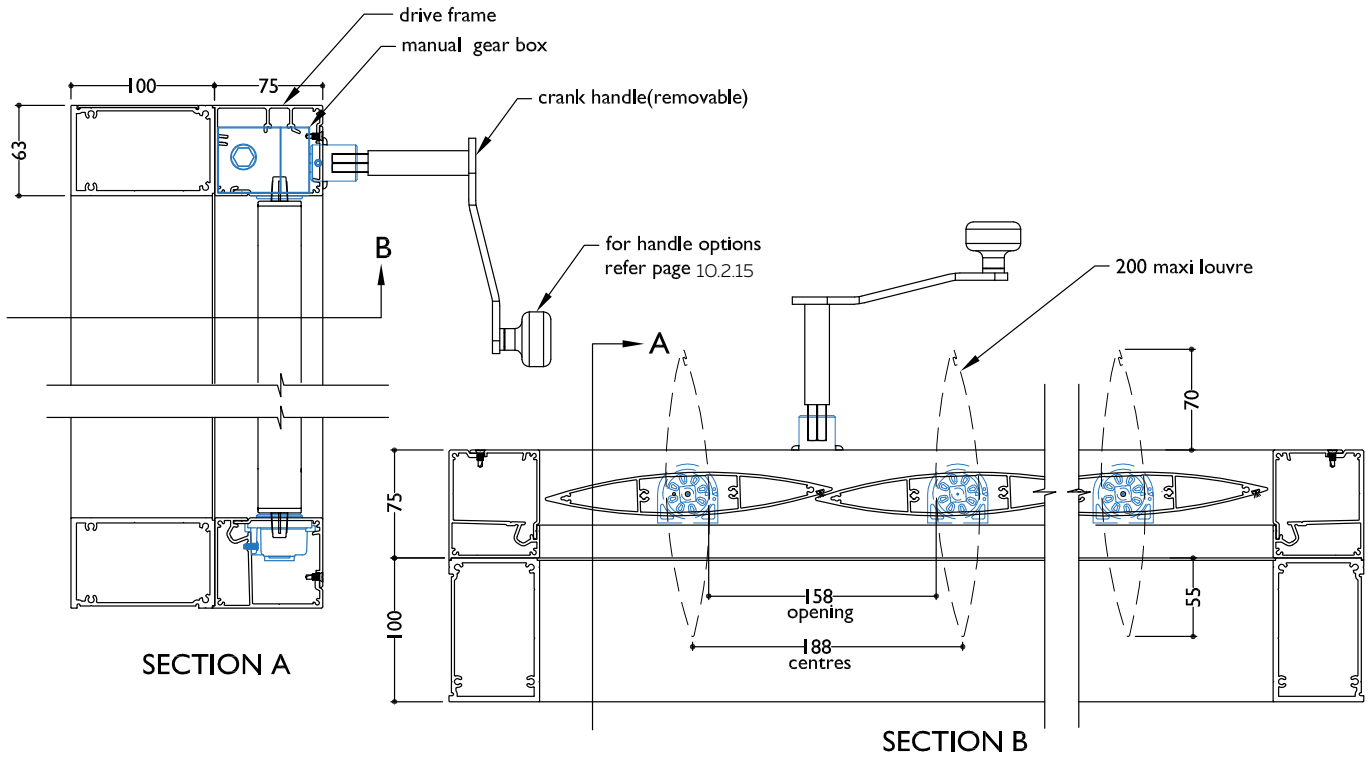
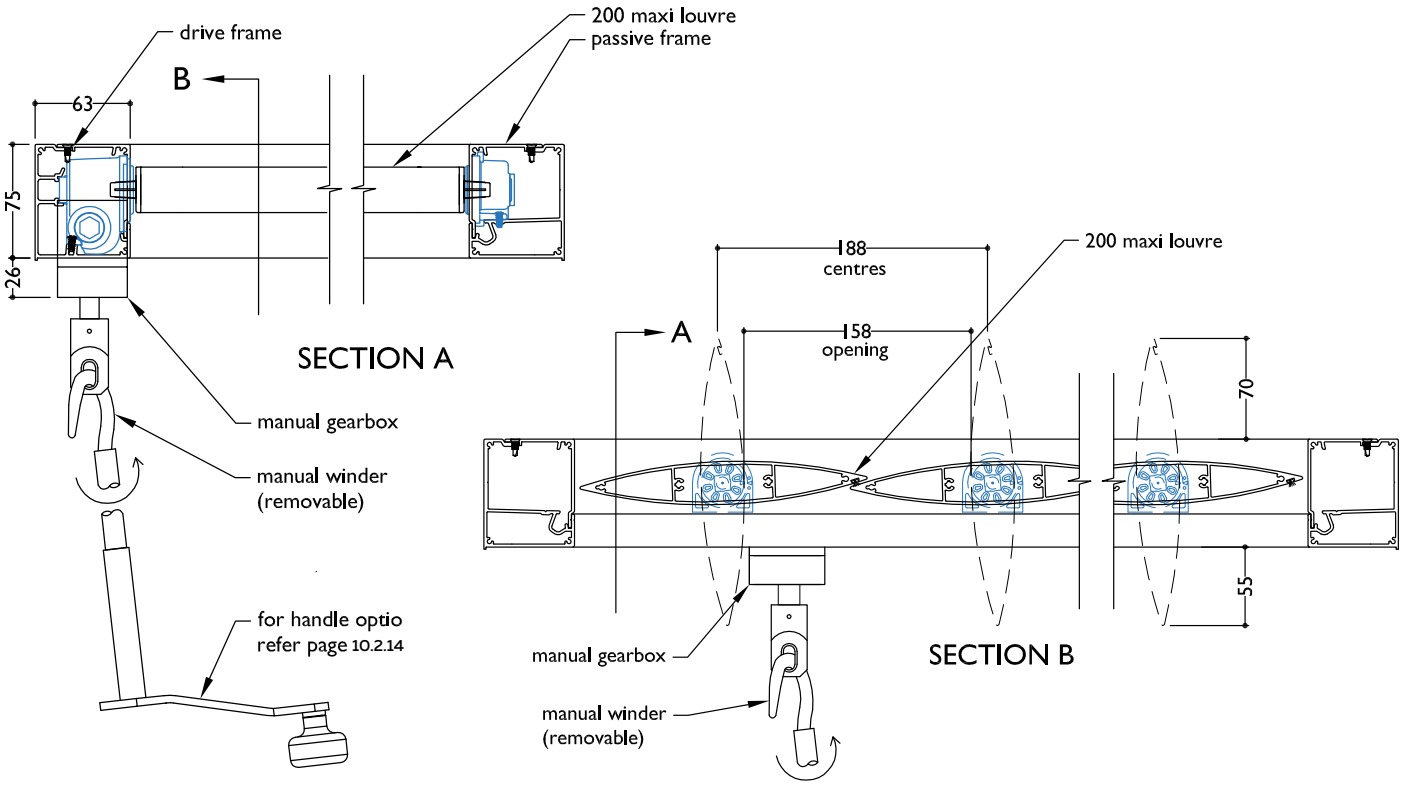
SECTION - MANUALLY OPERABLE 200MM MAXI LOUVRE USING SPIRAL PIVOT SYSTEM ON ELAM STREET STRUCTURAL FRAME



SECTION - MANUALLY OPERABLE 200MM MAXI LOUVRE USING SPIRAL PIVOT SYSTEM INSERT PANEL - FOUR SIDED FRAME

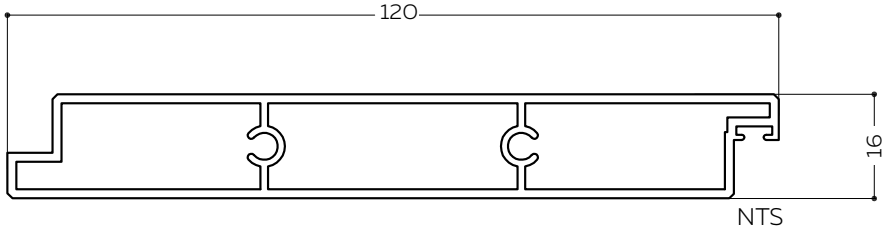


MOTORISED & HAND OPERABLE INSERT PANELS RECTANGULAR LOUVRES

Compatible Louvres: 120 Flush Mini, 180 Flush Midi, 200 Flush Maxi

120MM FLUSH MINI

Wall Panel / Sun Louvre / Balustrade

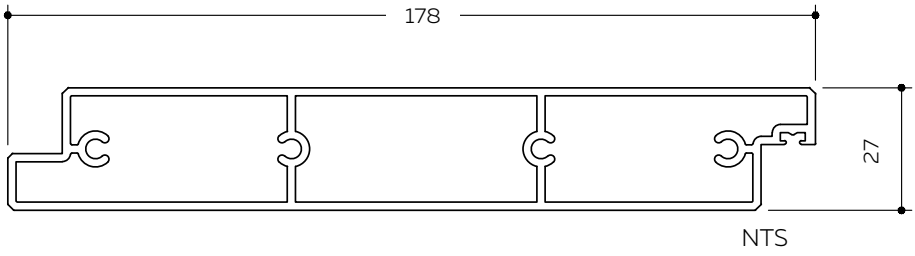


120MM FLUSH MINI LOUVRE
CENTRE PIVOT

REFER TECHNICAL DETAILS PAGES 10.2.29

180MM FLUSH MIDI

Wall Panel / Sun Louvre / Balustrade

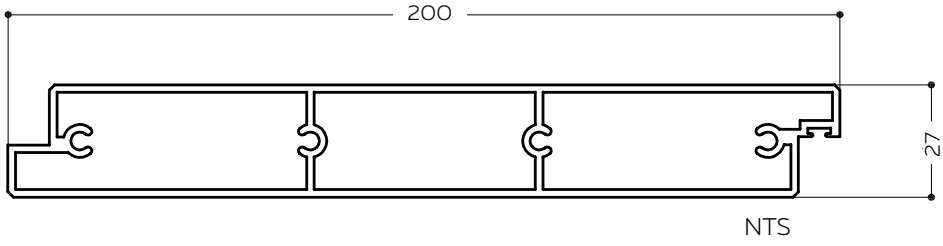


180MM FLUSH MIDI LOUVRE
CENTRE PIVOT

REFER TECHNICAL DETAILS PAGES 10.2.31

200MM FLUSH MAXI

Wall Panel / Sun Louvre / Balustrade

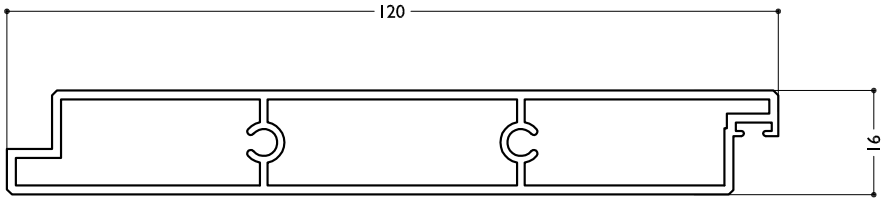


200MM FLUSH MAXI
CENTRE PIVOT

200MM FLUSH MAXI
REAR PIVOT

REFER TECHNICAL DETAILS PAGES 10.2.33

BLADE SPECIFICATIONS **120MM FLUSH MINI**



NTS

BLADE SPECIFICATIONS			
Blade cover - opening system	115 mm	Weight per linear metre - opening system	0.86 kg/lm
Weight per square metre - opening system	8 kg/sqm	Actual blade width	120 mm
Blade centres - opening system	115 mm		

SPANS AT A GLANCE

Refer Engineering Section. Climate, terrain, shielding, location, type of structure contribute to determine spans.

WIND ZONE	INSIDE	LOW	MEDIUM	HIGH	VERY HIGH	EXTRA HIGH
Factored wind speed at building	Self wt	32 m/s 115 km/hr	37m/s 133 km/hr	44 m/s 158 km/hr	50 m/s 179 km/hr	55 m/s 198 km/hr
Adjustable & Fixed, Horizontal & Vertical	2600	2500	2300	2050	1900	1750

INSTALLATION OPTIONS

SPIRAL PIVOT SYSTEM: CALCULATE OPTIMUM FRAME OPENING SIZES

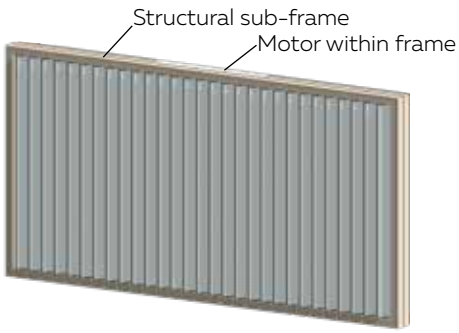
Width: Check engineering limits

Height: Calculation example showing 18 blades

STEP 1	
16 blades x 115	1955
1 blade at 120	120
17 blades	=2075

STEP 2	
Blade cover	2075
+ top and bottom closing angles allow for 5mm + 5mm	10
Total exact opening height	=2085*

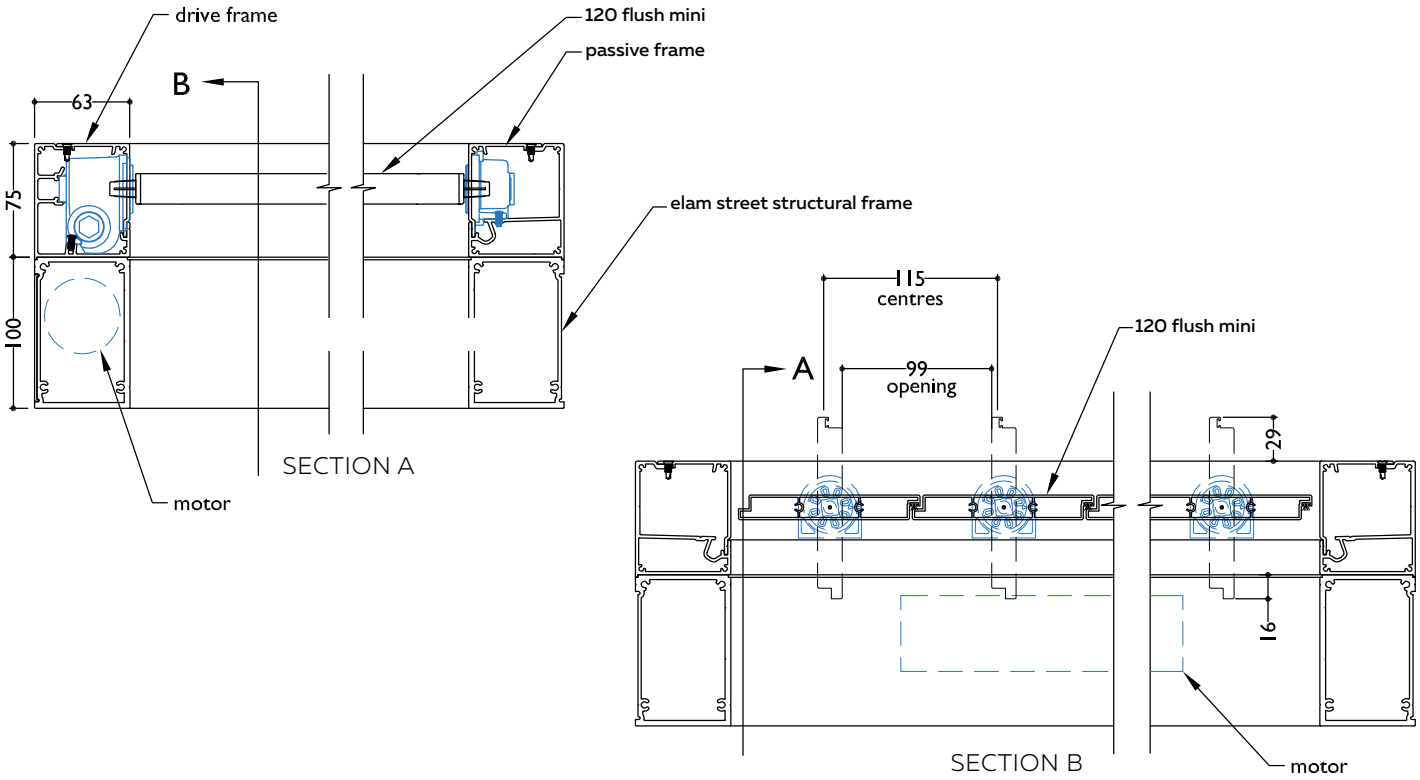
*This is inside measure - not outer frame size



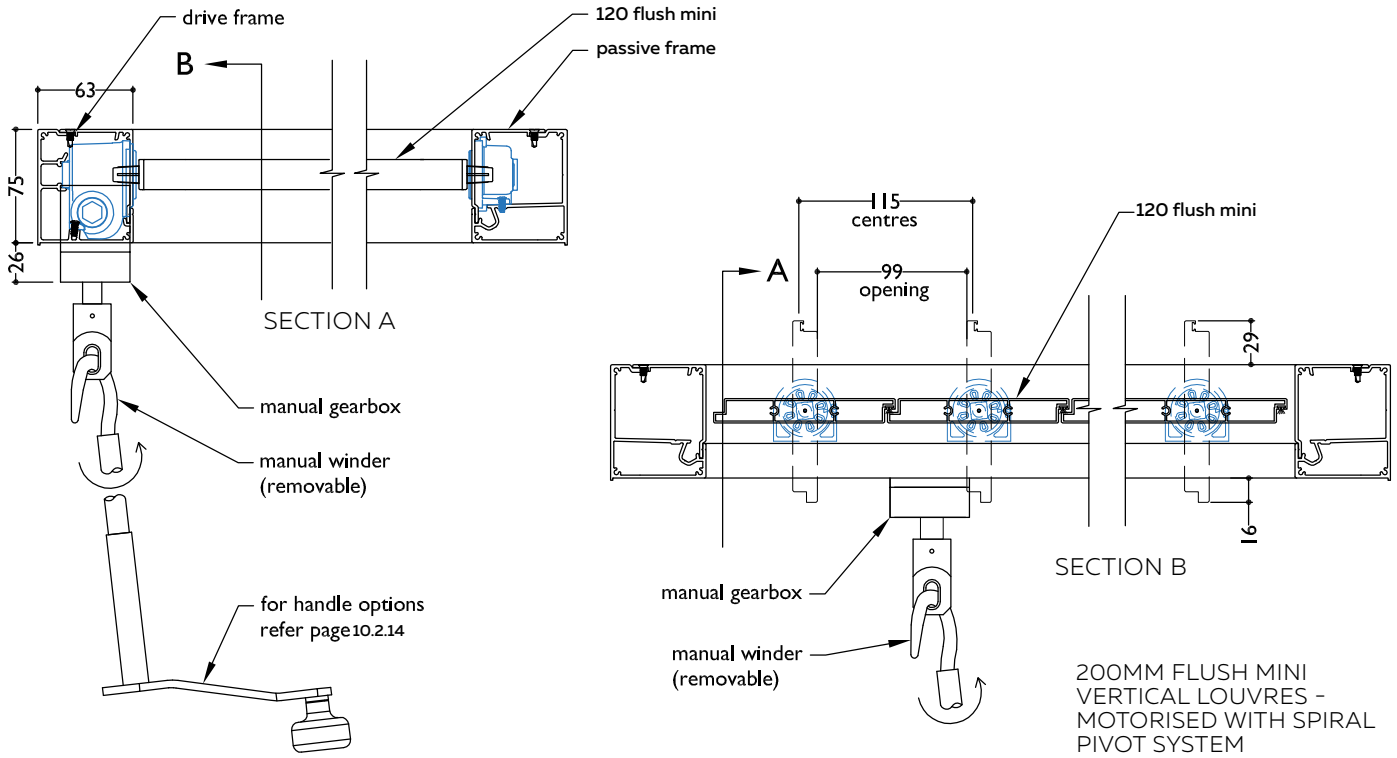
ELAM STREET STRUCTURAL FRAME WITH SUB-FRAME VERTICAL PANEL - VERTICAL BLADES

TYPICAL DETAIL: SPIRAL PIVOT SYSTEM
120MM FLUSH MINI - ELAM STREET STRUCTURAL FRAME

SECTION - SPIRAL PIVOT SYSTEM MOTORISED - 120 MINI PANEL IN ELAM STREET STRUCTURAL FRAME



SECTION - SPIRAL PIVOT SYSTEM HAND OPERABLE - 120 FLUSH MINI INSERT IN TO FOUR SIDED FRAME



200MM FLUSH MINI VERTICAL LOUVRES - MOTORISED WITH SPIRAL PIVOT SYSTEM

FILE: SUN LOUVRES Spiral Pivot 10.2.30 DATE MODIFIED: 01/10/2024 SCALE:
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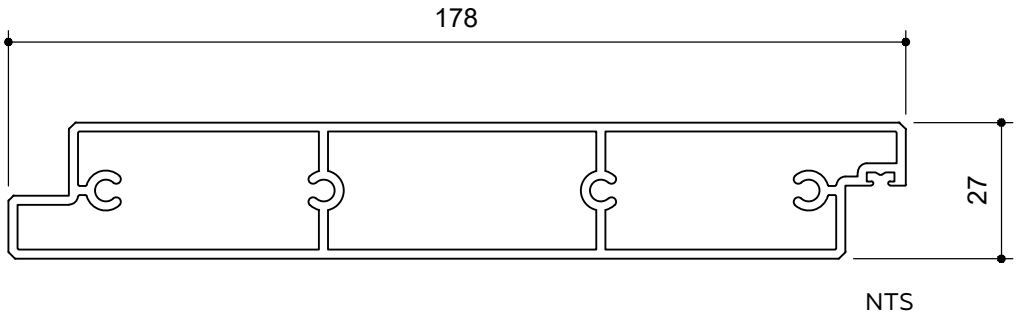
BLADE SPECIFICATIONS **180MM FLUSH MIDI**



BLADE SPECIFICATIONS			
Blade cover - opening system	169 mm	Weight per linear metre - opening system	2.44 kg/lm
Weight per square metre - opening system	13.95 kg/sqm	Actual blade width	178 mm
Blade centres - opening system	169 mm		

SPANS AT A GLANCE

Refer Engineering Section. Climate, terrain, shielding, location, type of structure contribute to determine spans.

WIND ZONE	INSIDE	LOW	MEDIUM	HIGH	VERY HIGH	EXTRA HIGH
Factored wind speed at building	Self wt	32 m/s 115 km/hr	37m/s 133 km/hr	44 m/s 158 km/hr	50 m/s 179 km/hr	55 m/s 198 km/hr
Adjustable & Fixed, Horizontal & Vertical	3500	3350	3000	2650	2450	2250

INSTALLATION OPTIONS

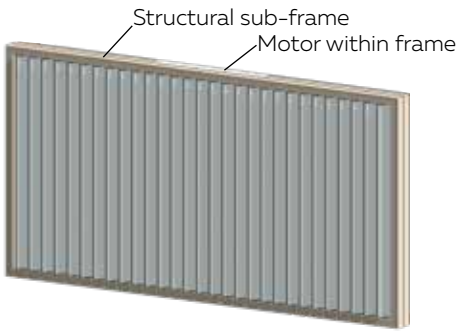
SPIRAL PIVOT SYSTEM: CALCULATE OPTIMUM FRAME OPENING SIZES

Width: Check engineering limits

Height: Calculation example showing 17 blades

STEP 1	
16 blades x 169	2704
1 blade at 178	178
17 blades	=2882
STEP 2	
Blade cover	2882
+ top and bottom closing angles allow for	
5mm + 5mm	10
Total exact opening height =	2892*

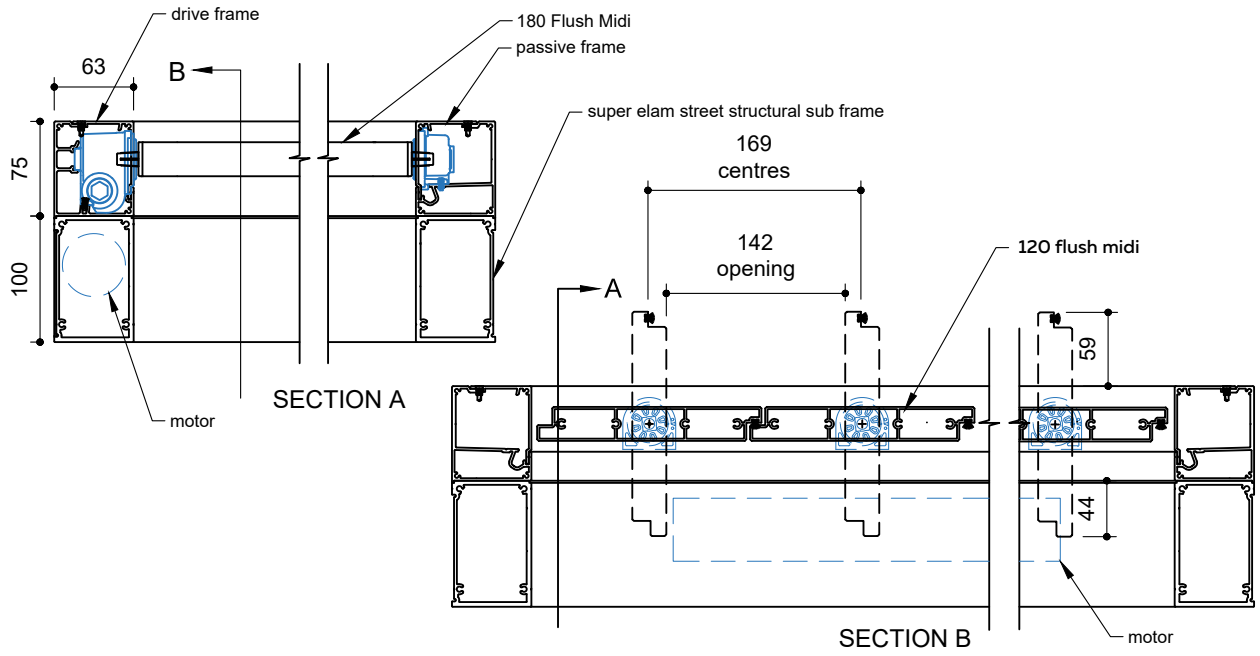
*This is inside measure - not outer frame size



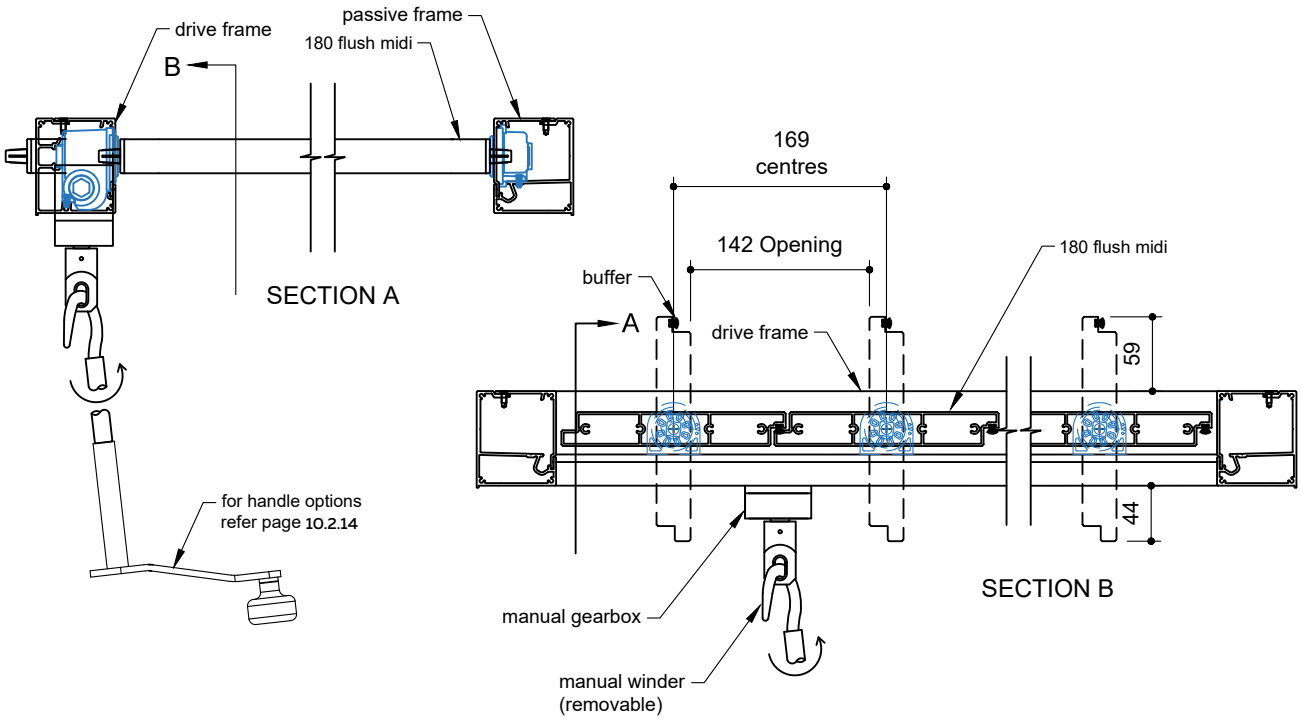
ELAM STREET STRUCTURAL FRAME WITH SUB-FRAME VERTICAL PANEL - VERTICAL BLADES

TYPICAL DETAIL: SPIRAL PIVOT SYSTEM
180MM FLUSH MIDI - ELAM STREET STRUCTURAL FRAME

SECTION - SPIRAL PIVOT SYSTEM MOTORISED - 180 FLUSH MIDI IN ELAM STREET STRUCTURAL FRAME

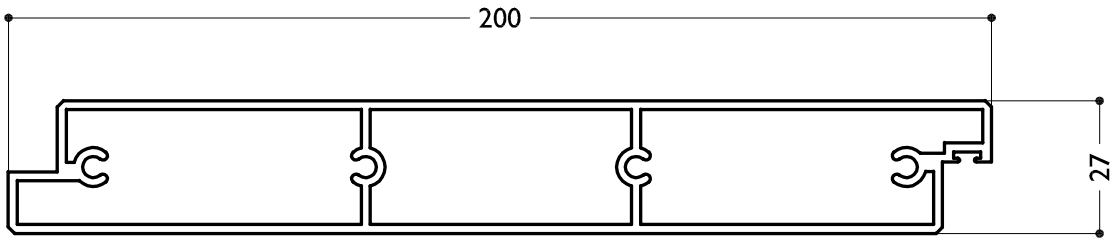


SECTION - SPIRAL PIVOT SYSTEM HAND OPERABLE - 180 FLUSH MIDI INSERT



FILE: SUN LOUVRES Spiral Pivot 10.2.32 DATE MODIFIED: 01/10/2024 SCALE:

BLADE SPECIFICATIONS **200MM FLUSH MAXI**



NTS

BLADE SPECIFICATIONS			
Blade cover - opening system	192 mm	Weight per linear metre - opening system	2.67 kg/lm
Weight per square metre - opening system	13.95 kg/sqm	Actual blade width	200 mm
Blade centres - opening system	192 mm		

SPANS AT A GLANCE

Refer Engineering Section. Climate, terrain, shielding, location, type of structure contribute to determine spans.

WIND ZONE	INSIDE	LOW	MEDIUM	HIGH	VERY HIGH	EXTRA HIGH
Factored wind speed at building	Self wt	32 m/s 115 km/hr	37m/s 133 km/hr	44 m/s 158 km/hr	50 m/s 179 km/hr	55 m/s 198 km/hr
Adjustable & Fixed, Horizontal & Vertical	3500	3350	3000	2650	2450	2250

INSTALLATION OPTIONS

SPIRAL PIVOT SYSTEM: CALCULATE OPTIMUM FRAME OPENING SIZES

Width: Check engineering limits

Height: Calculation example showing 17 blades

STEP 1

16 blades x 192crs	3072
1 blade at 200	200
17 blades	=3272

STEP 2

Blade cover	3272
+ top and bottom closing angles allow for	
5mm + 5mm	10
Total exact opening height =	3282*

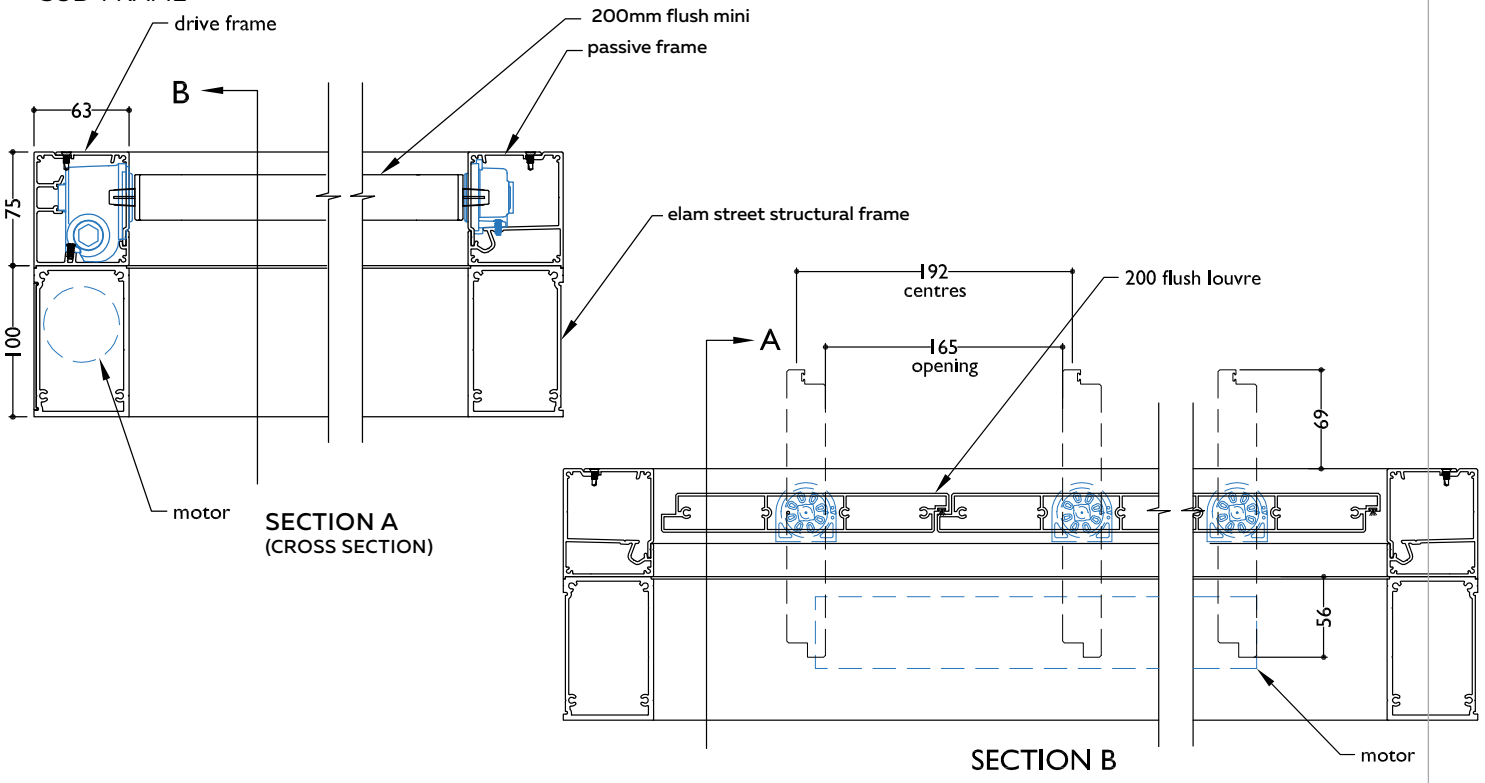
*This is inside measure - not outer frame size

200 FLUSH MAXI - CENTRE PIVOT

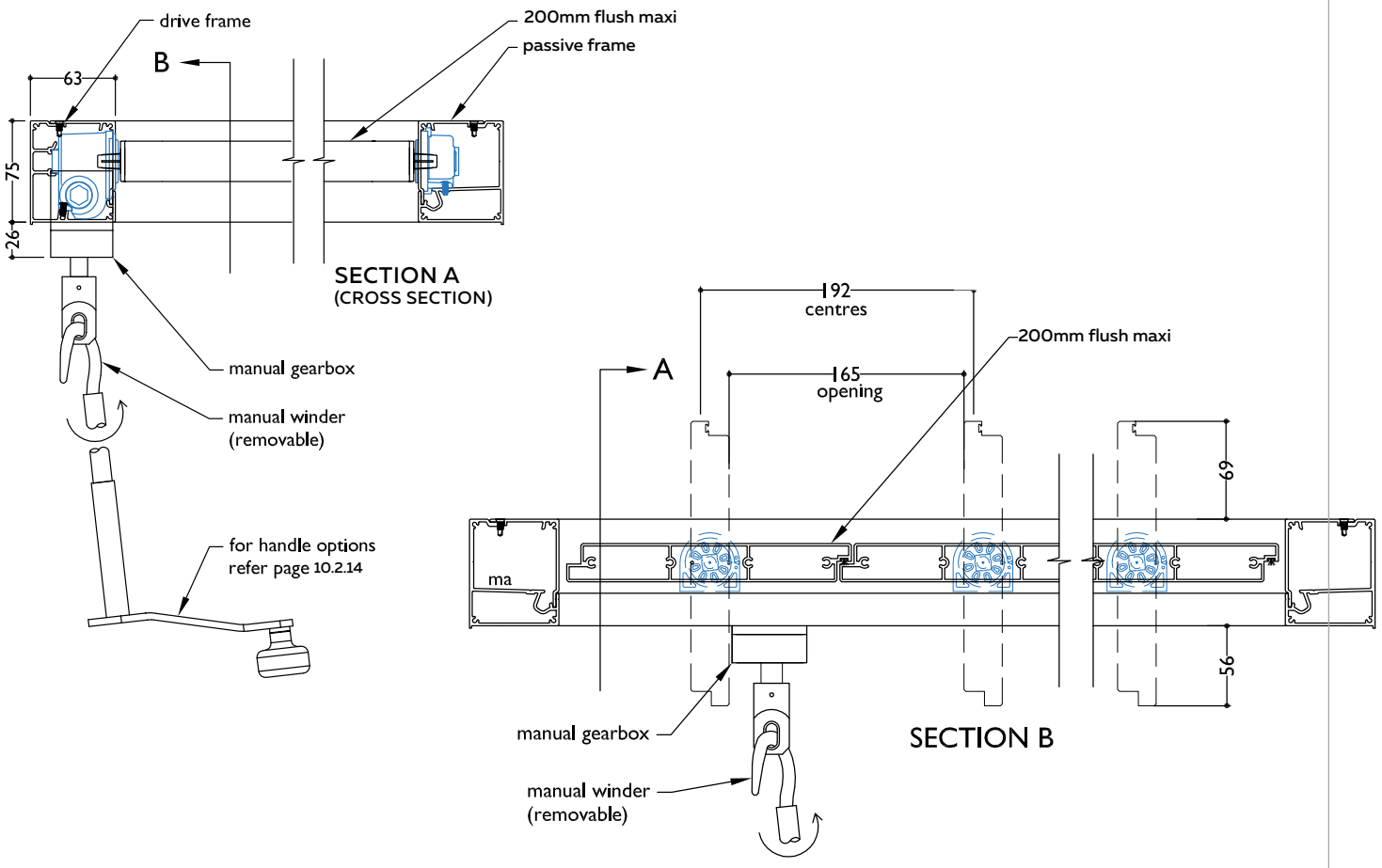
200 FLUSH MAXI - REAR PIVOT

TYPICAL DETAIL: SPIRAL PIVOT SYSTEM
200MM FLUSH MAXI - CENTRE PIVOT

SECTION - CENTRE PIVOT MOTORISED 200 FLUSH MAXI SPIRAL PIVOT ON ELAM STREET STRUCTURAL FRAME WITH SUB-FRAME



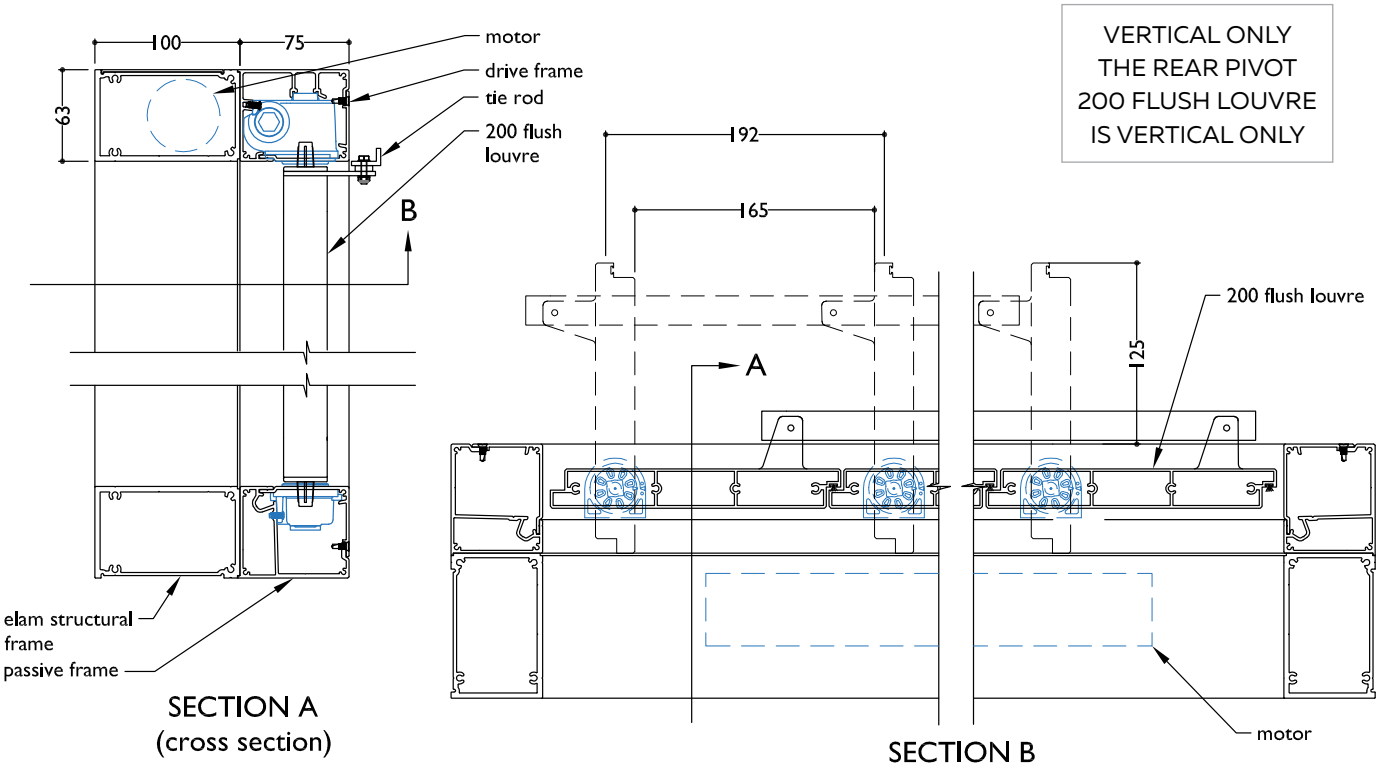
SECTION - CENTRE PIVOT MANUALLY OPERABLE 200 FLUSH MAXI SPIRAL PIVOT INSERT PANEL FOUR SIDED FRAME



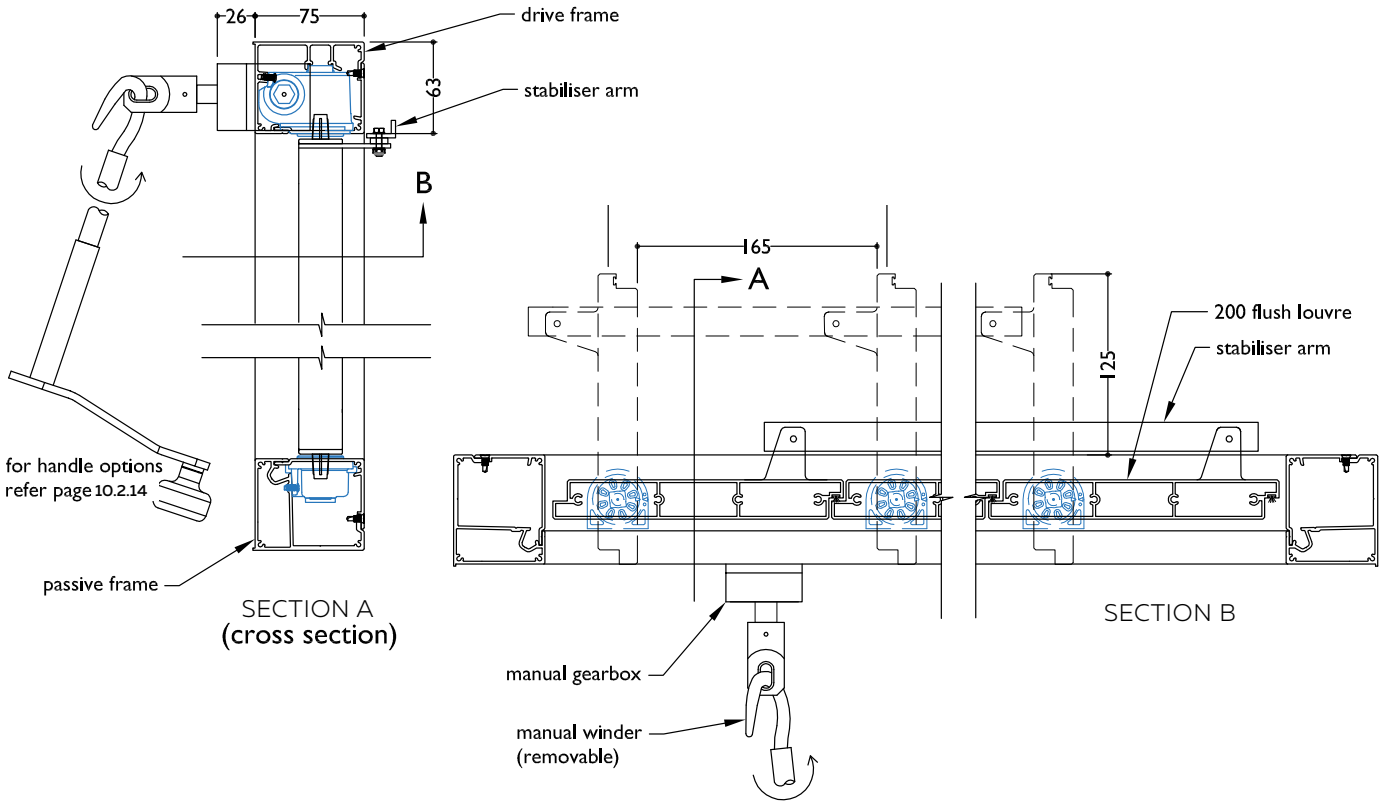
FILE: SUN LOUVRES Spiral Pivot 10.2.34 DATE MODIFIED: 01/10/2024 SCALE:

SECTION - REAR PIVOT MOTORISED 200 FLUSH MAXI SPIRAL PIVOT ON ELAM STREET STRUCTURAL FRAME

VERTICAL ONLY
THE REAR PIVOT
200 FLUSH LOUVRE
IS VERTICAL ONLY



SECTION - REAR PIVOT MANUALLY OPERABLE 200 FLUSH MAXI SPIRAL PIVOT INSERT PANEL FOUR SIDED FRAME



MOTORISED, HAND OPERABLE OR END FIXED BALUSTRADE

Compatible Louvres: 135mm Hi-Span, 165mm Hi-Span

DRIVE SYSTEM: SPIRAL PIVOT

Operable or End Fixed Balustrade Systems

NEW ZEALAND COMPLIANT OPERABLE OR FIXED BALUSTRADE SYSTEM

135MM HI-SPAN BALUSTRADE
ALUMINIUM FRAME, VERTICAL PANEL

AUSTRALIAN COMPLIANT OPERABLE OR FIXED BALUSTRADE SYSTEM

165MM HI-SPAN BALUSTRADE
ALUMINIUM FRAME, VERTICAL PANEL

135MM HI-SPAN LOUVRES AS BALUSTRADE

SPIRAL PIVOT OPERABLE 135MM HI-SPAN BALUSTRADE LOUVRE CAN ALSO BE END FIXED

135MM HI-SPAN BALUSTRADE LOUVRES

Operable Balustrades

The 135mm Hi-Span louvre has been designed to provide an operable Spiral pivoting louvre suitable to be used as a balustrade system in NZ.
The louvre is to be used as an infill panel only and does not include structural horizontal or vertical balustrade supports.
Structural balustrade support by others.

Balustrade - Technical details

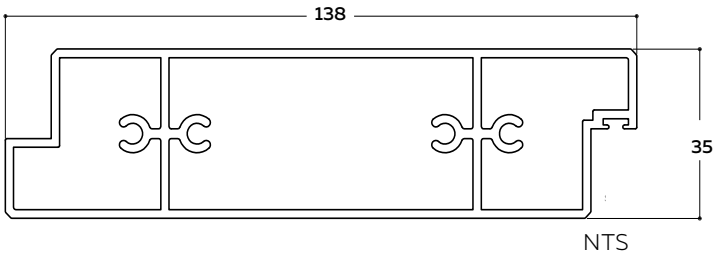
NZ AND AUSTRALIAN
COMPLIANCE REQUIREMENTS

This is a general guideline outlining some key requirements as at the time of printing. Please confirm all details with your local regulatory authority prior to balustrade installation.

1. A barrier is required when someone could fall vertically 1m or more.
2. Balustrade or barrier must be 1m high and of adequate strength to cope with people pressing against it.
3. Ensure nowhere on the balustrade a child can get a foot hold between 150mm & 750mm above the deck surface to climb over the balustrade or fall through.
4. In NZ the maximum opening between balustrade verticals is 100mm.
5. In Australia the maximum opening between balustrade verticals is 125mm.

135MM HI-SPAN BALUSTRADE LOUVRES

Operable Balustrades



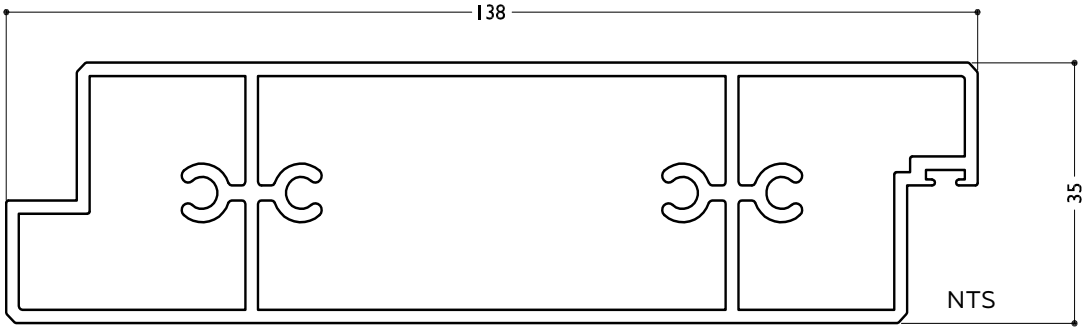
NTS

REFER TECHNICAL DETAILS PAGE 10.2.38

135MM HI-SPAN BALUSTRADE LOUVRE

SUN LOUVRES **SPIRAL PIVOT**

BLADE SPECIFICATIONS **135MM HI-SPAN BALUSTRADE LOUVRES**
(NOTE ACTUAL BLADE WIDTH 138MM)



BLADE SPECIFICATIONS			
Blade cover - opening system	130 mm	Weight per linear metre - opening system	2.16 kg/lm
Weight per square metre - opening system	16.4 kg/sqm	Actual blade width	138 mm
Blade centres - opening system	130 mm		

SPANS AT A GLANCE

Refer Engineering Section. Climate, terrain, shielding, location, type of structure contribute to determine spans.

WIND ZONE	INSIDE	LOW	MEDIUM	HIGH	VERY HIGH	EXTRA HIGH
Factored wind speed at building	Self wt	32 m/s 115 km/hr	37m/s 133 km/hr	44 m/s 158 km/hr	50 m/s 179 km/hr	55 m/s 198 km/hr
Adjustable & Fixed, Horizontal & Vertical	4850	4400	4400	4100	3700	3500
Adjustable & Fixed - Balustrade	3000	3000	3000	3000	3000	3000

INSTALLATION OPTIONS

SPIRAL PIVOT SYSTEM: CALCULATE OPTIMUM FRAME OPENING SIZES

Width: Check engineering limits

Height: Calculation example showing 17 blades

STEP 1	
16 blades x 130	2080
1 blade at 138	138
17 blades	=2218
STEP 2	
Blade cover	2218
+ top and bottom closing angles allow for	
5mm + 5mm	10
Total exact opening height =	2228*

*This is inside measure - not outer frame size

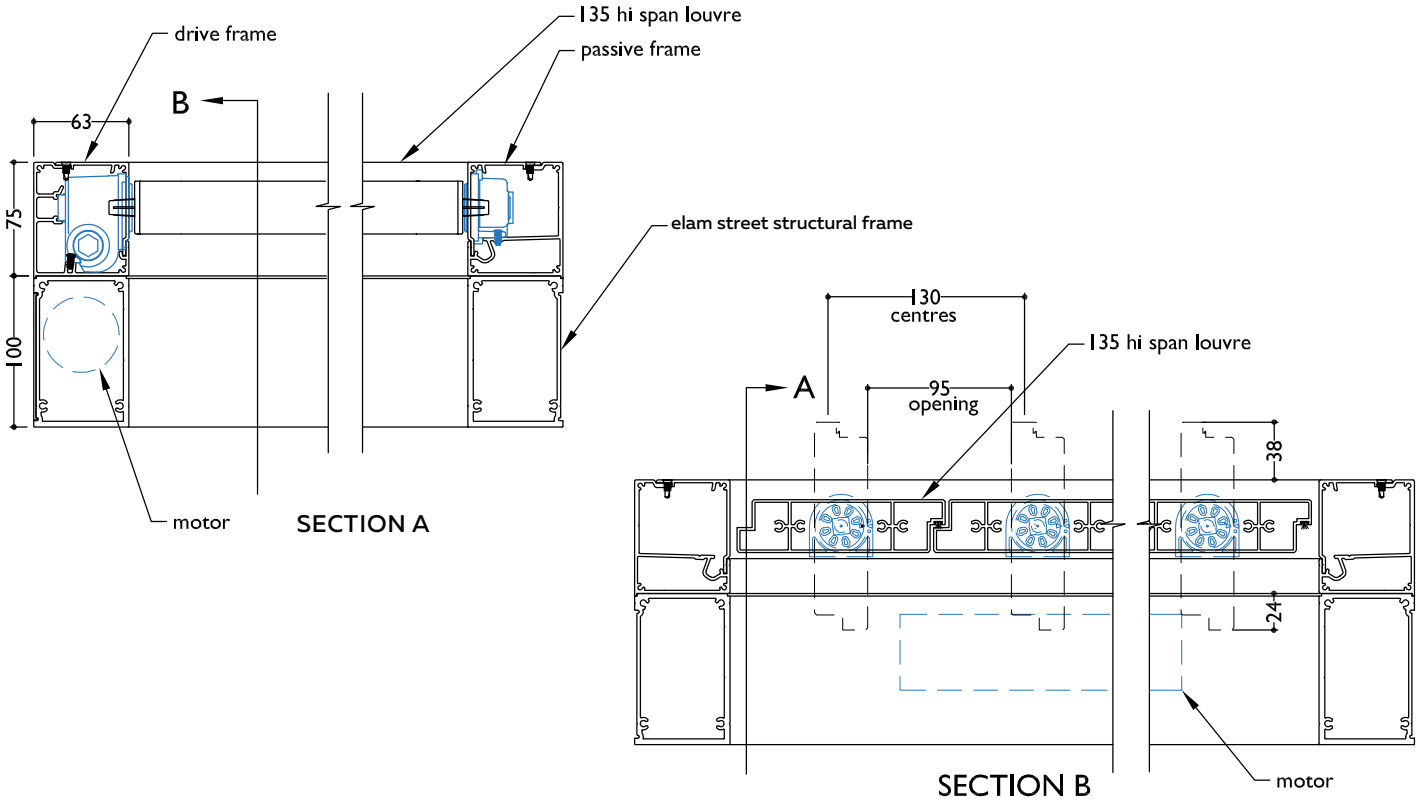
TECHNICAL DETAILS BALUSTRADES NZ AND AUSTRALIAN COMPLIANCE REQUIREMENTS

This is a general guideline outlining some key requirements as at the time of printing. Please confirm all details with your local regulatory authority prior to balustrade installation.

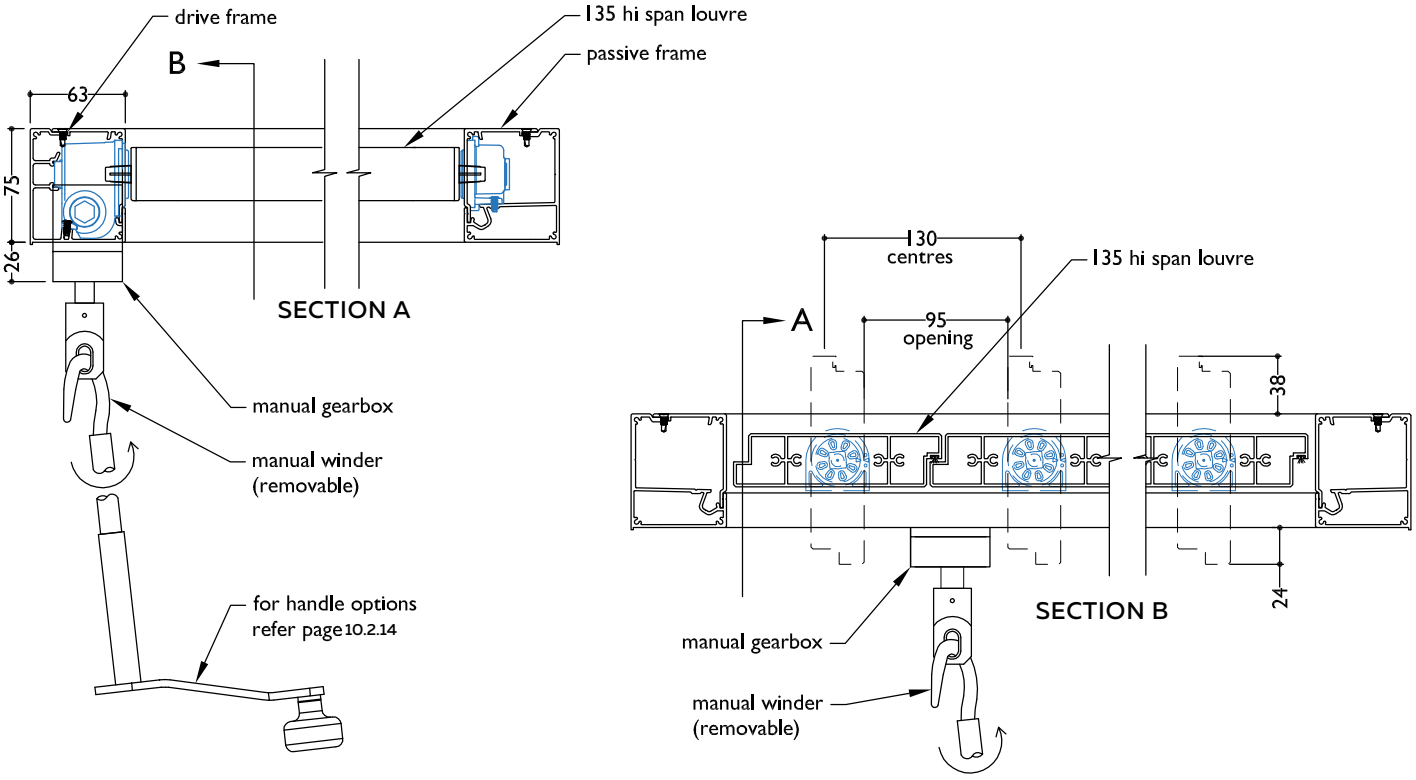
1. A barrier is required when someone could fall vertically 1m or more.
2. Balustrade or barrier must be 1m high and of adequate strength to cope with people pressing against it.
3. Ensure nowhere on the balustrade a child can get a foot hold between 150mm & 750mm above the deck surface to climb over the balustrade or fall through.
4. In NZ the maximum opening between balustrade verticals is 100mm.
5. In Australia the maximum opening between balustrade verticals is 125mm.

NEW ZEALAND COMPLIANT OPERABLE OR FIXED BALUSTRADE SYSTEM

SECTION - MOTORISED 135MM HI-SPAN LOUVRE SPIRAL PIVOT ON ELAM STREET STRUCTURAL FRAME

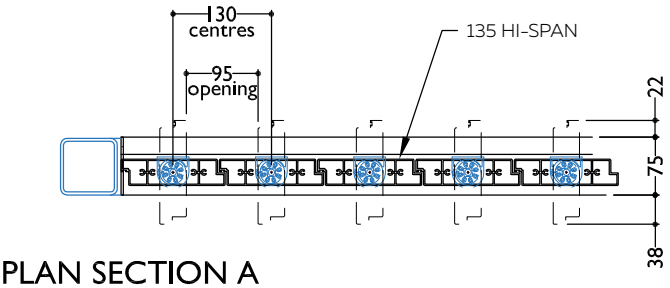


SECTION - MANUALLY OPERABLE 135 HI-SPAN LOUVRE SPIRAL PIVOT INSERT PANEL FOUR SIDED FRAME

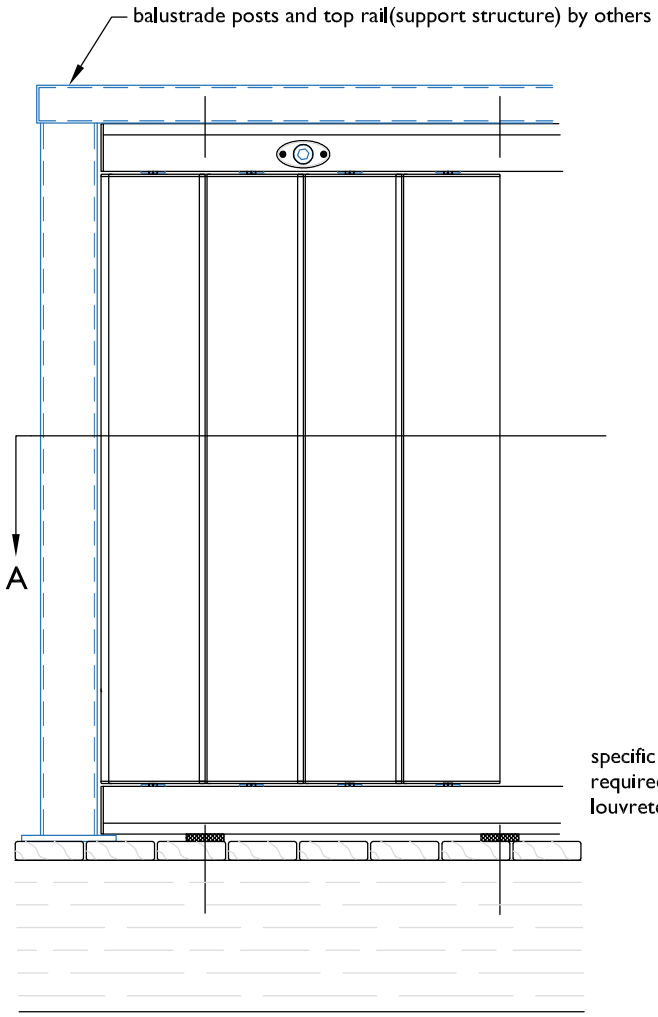


135 Hi-Span is compliant with the relevant standards as an infill for residential balustrade in New Zealand.

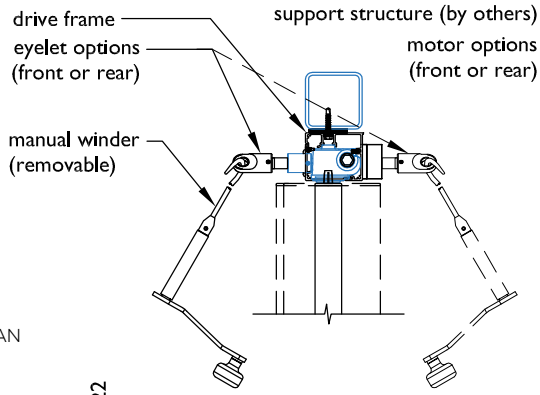
Refer Section 13, Table 3 for maximum spans

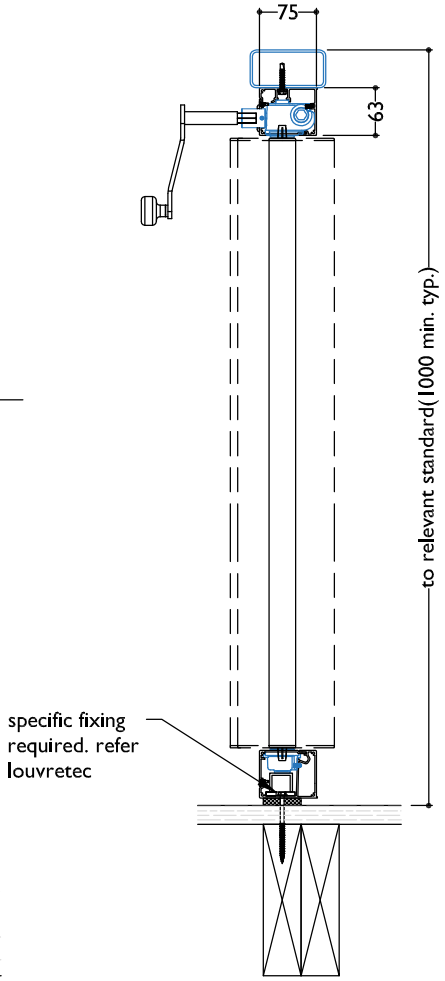


PLAN SECTION A

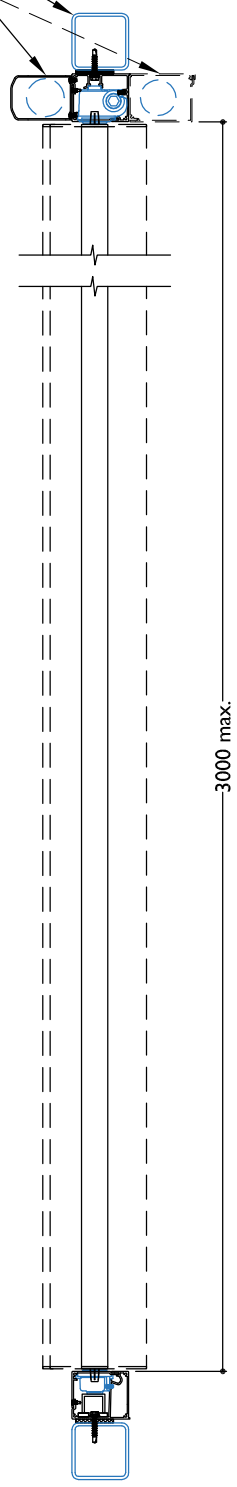


ELEVATION: 135 HI-SPAN AS STANDARD BALUSTRADE INFILL





SECTION:
135 HI-SPAN
STANDARD HEIGHT



SECTION:
135 HI-SPAN
STANDARD HEIGHT

FILE: SUN LOUVRES Spiral Pivot 10.2.40 DATE MODIFIED: 01/10/2024 SCALE:

165MM HI-SPAN LOUVRES AS BALUSTRADE

SPIRAL PIVOT OPERABLE 165MM HI-SPAN BALUSTRADE LOUVRE CAN ALSO BE END FIXED

165MM HI-SPAN BALUSTRADE LOUVRES

Operable Balustrades

The 165mm Hi-Span louvre has been designed to provide an operable Spiral pivoting louvre suitable to be used as a balustrade system in Australia.
The louvre is to be used as an infill panel only and does not include structural horizontal or vertical balustrade supports. Structural balustrade support by others.

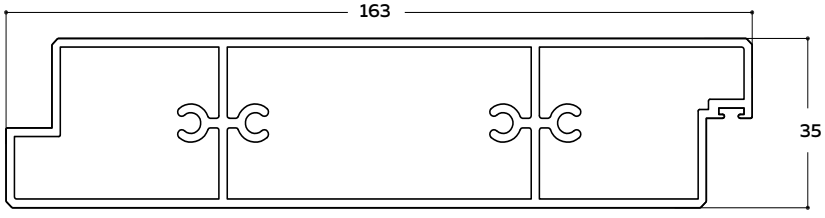
Balustrade - Technical details

NZ AND AUSTRALIAN
COMPLIANCE REQUIREMENTS
This is a general guideline outlining some key requirements as at the time of printing. Please confirm all details with your local regulatory authority prior to balustrade installation.

1. A barrier is required when someone could fall vertically 1m or more.
2. Balustrade or barrier must be 1m high and of adequate strength to cope with people pressing against it.
3. Ensure nowhere on the balustrade a child can get a foot hold between 150mm & 750mm above the deck surface to climb over the balustrade or fall through.
4. In NZ the maximum opening between balustrade verticals is 100mm.
5. In Australia the maximum opening between balustrade verticals is 125mm.

165MM HI-SPAN BALUSTRADE LOUVRES

Operable Balustrades



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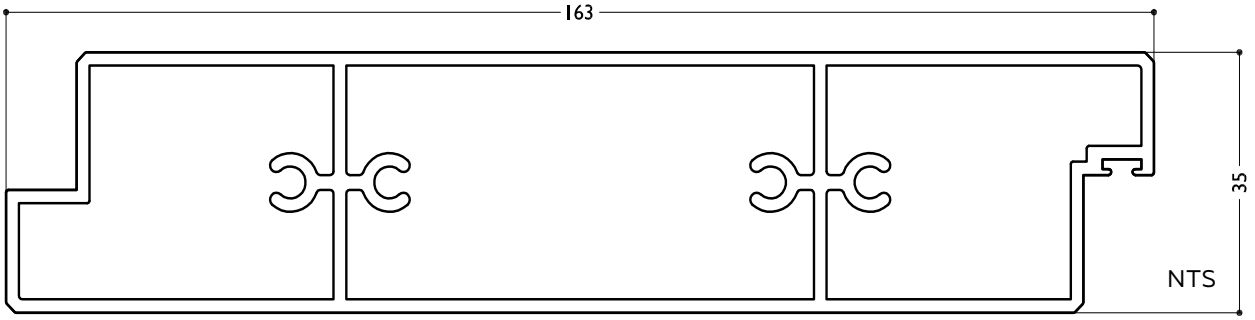
165MM HI-SPAN BALUSTRADE LOUVRE

REFER TECHNICAL DETAILS PAGE 10.2.42

SUN LOUVRES **SPIRAL PIVOT**

BLADE SPECIFICATIONS **165MM HI-SPAN BALUSTRADE LOUVRES**
(NOTE ACTUAL BLADE WIDTH 163MM)



BLADE SPECIFICATIONS			
Blade cover - opening system	155 mm	Weight per linear metre - opening system	2.556 kg/lm
Weight per square metre - opening system	16.4 kg/sqm	Actual blade width	163 mm
Blade centres - opening system	155 mm		

SPANS AT A GLANCE

Refer Engineering Section. Climate, terrain, shielding, location, type of structure contribute to determine spans.

WIND ZONE	INSIDE	LOW	MEDIUM	HIGH	VERY HIGH	EXTRA HIGH
Factored wind speed at building	Self wt	32 m/s 115 km/hr	37m/s 133 km/hr	44 m/s 158 km/hr	50 m/s 179 km/hr	55 m/s 198 km/hr
Adjustable & Fixed, Horizontal & Vertical	4950	4500	4500	4200	3800	3500
Adjustable & Fixed - Balustrade	3300	3300	3300	3300	3300	3300

INSTALLATION OPTIONS

SPIRAL PIVOT SYSTEM: CALCULATE OPTIMUM FRAME OPENING SIZES

Width: Check engineering limits

Height: Calculation example showing 17 blades

STEP 1	
16 blades x 155	2480
1 blade at 163	163
17 blades	=2643
STEP 2	
Blade cover	2643
+ top and bottom closing angles allow for	
5mm + 5mm	10
Total exact opening height	= 2655*

*This is inside measure - not outer frame size

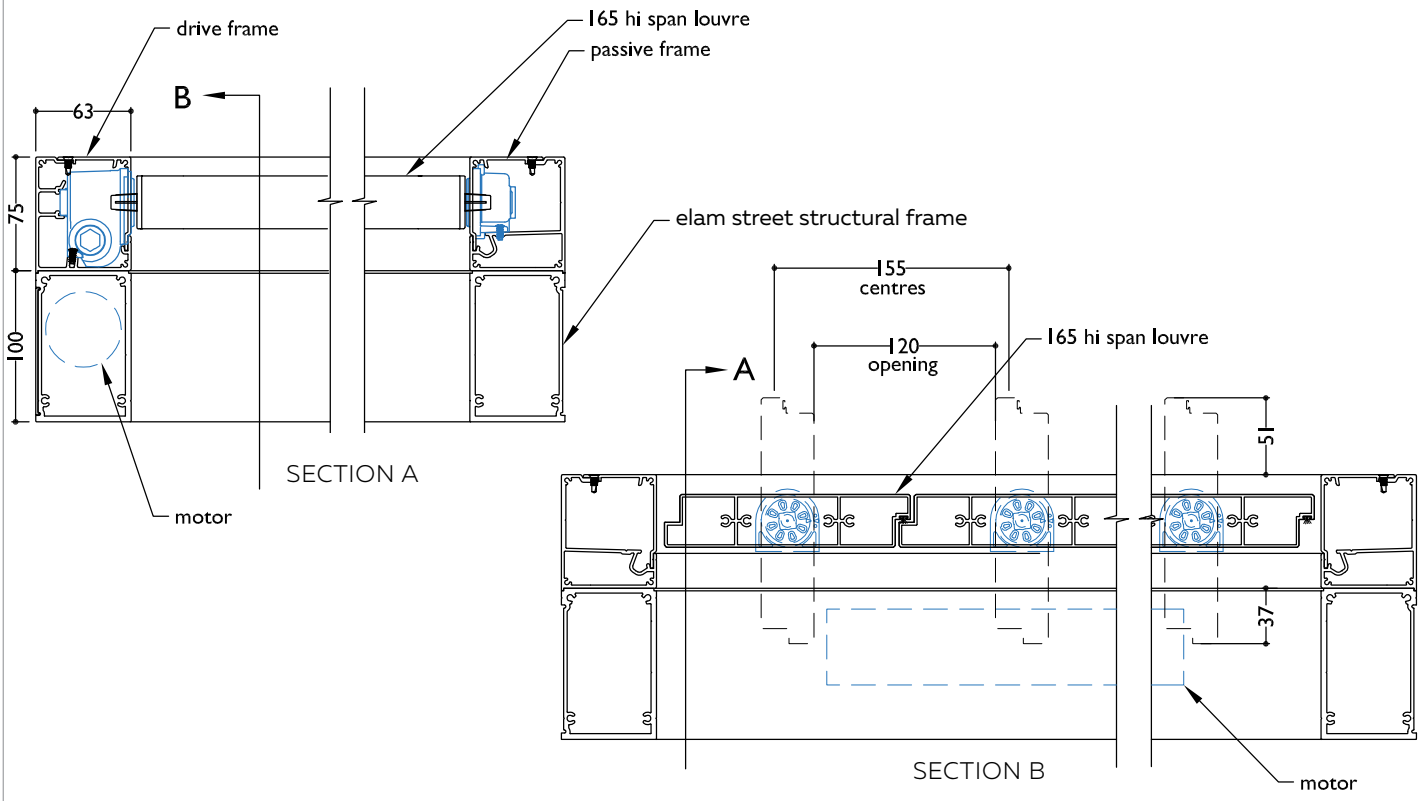
TECHNICAL DETAILS BALUSTRADES NZ AND AUSTRALIAN COMPLIANCE REQUIREMENTS

This is a general guideline outlining some key requirements as at the time of printing. Please confirm all details with your local regulatory authority prior to balustrade installation.

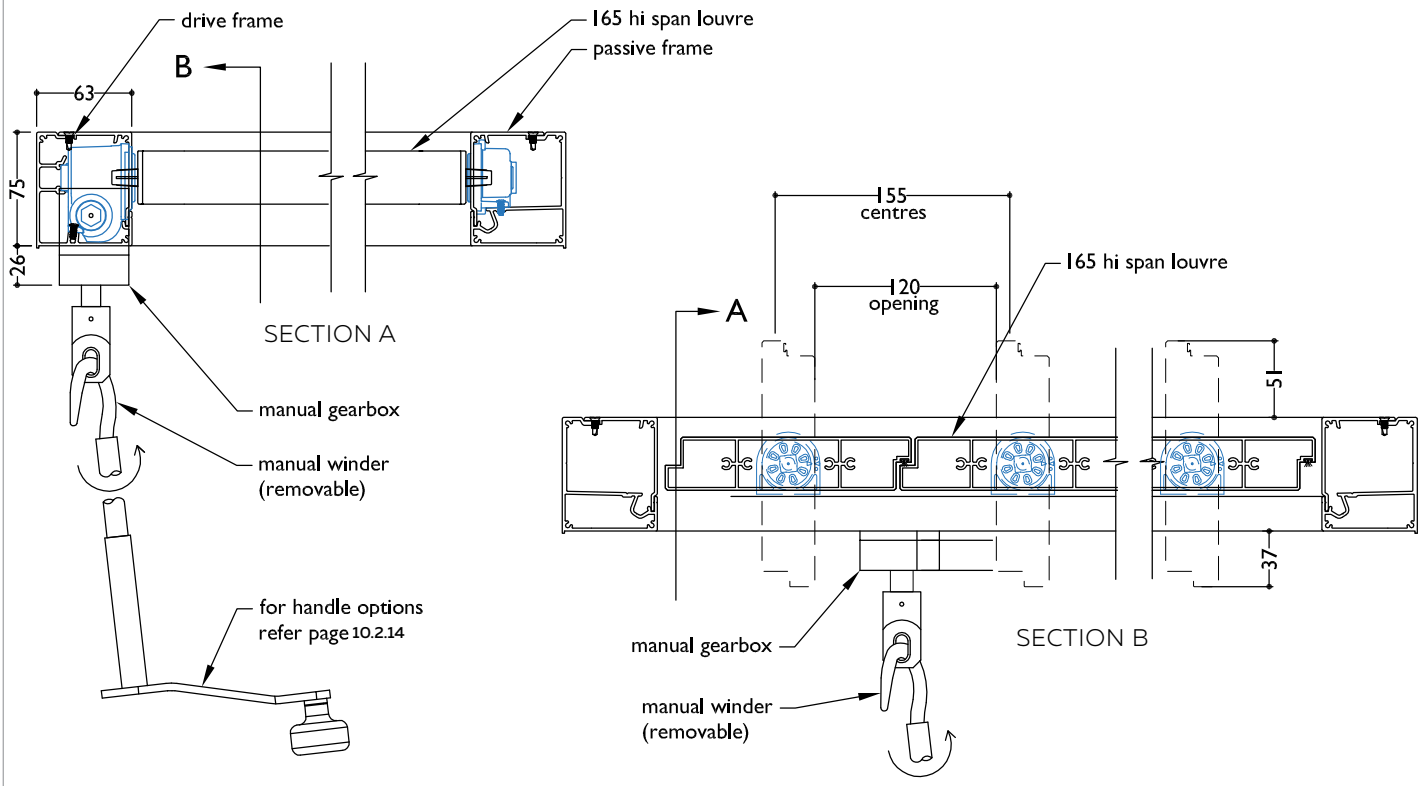
1. A barrier is required when someone could fall vertically 1m or more.
2. Balustrade or barrier must be 1m high and of adequate strength to cope with people pressing against it.
3. Ensure nowhere on the balustrade a child can get a foot hold between 150mm & 750mm above the deck surface to climb over the balustrade or fall through.
4. In NZ the maximum opening between balustrade verticals is 100mm.
5. In Australia the maximum opening between balustrade verticals is 125mm.

AUSTRALIAN COMPLIANT OPERABLE OR FIXED BALUSTRADE SYSTEM

SECTION - MOTORISED 165MM HI-SPAN LOUVRE SPIRAL PIVOT ON ELAM STREET STRUCTURAL FRAME

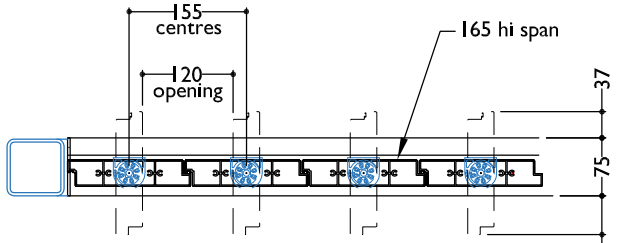


SECTION - MANUALLY OPERABLE 165 HI-SPAN LOUVRE SPIRAL PIVOT INSERT PANEL FOUR SIDED FRAME

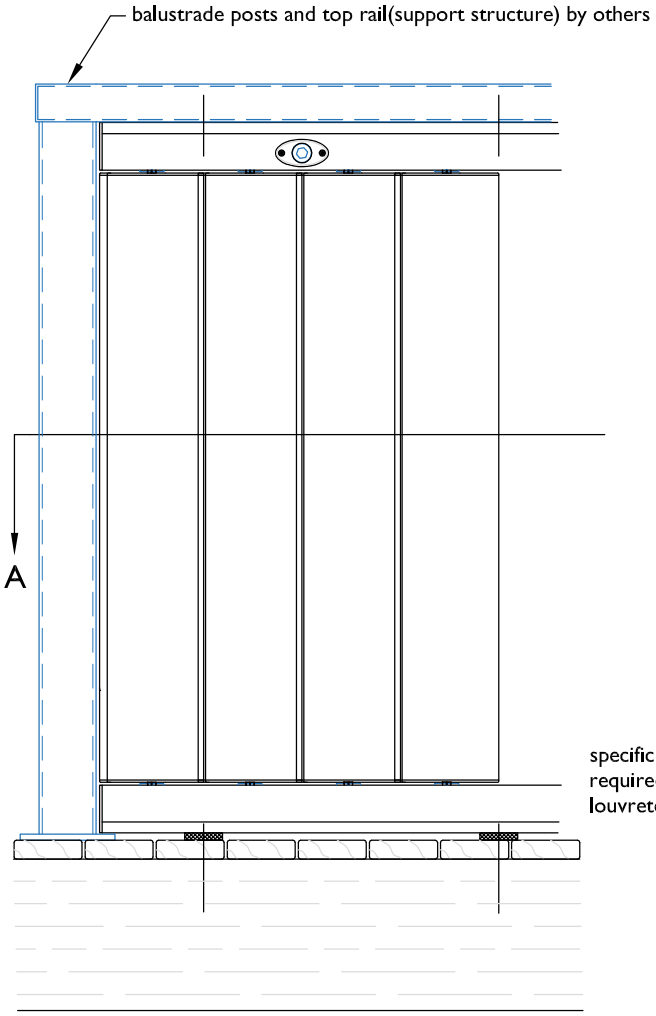


165 Hi-Span is compliant with the relevant standards as an infill for residential balustrade in Australia.

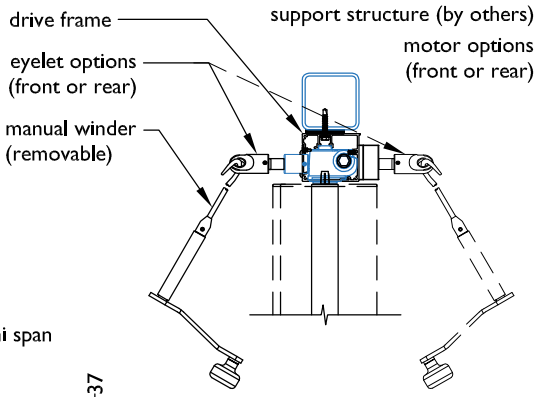
Refer Section 13, Table 3 for maximum spans

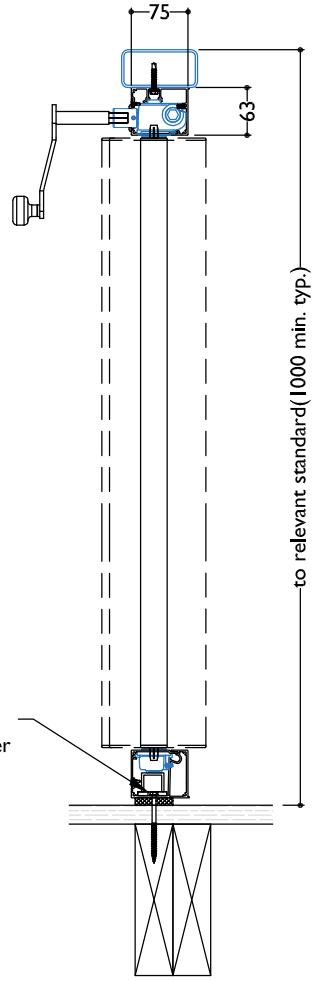


PLAN SECTION A

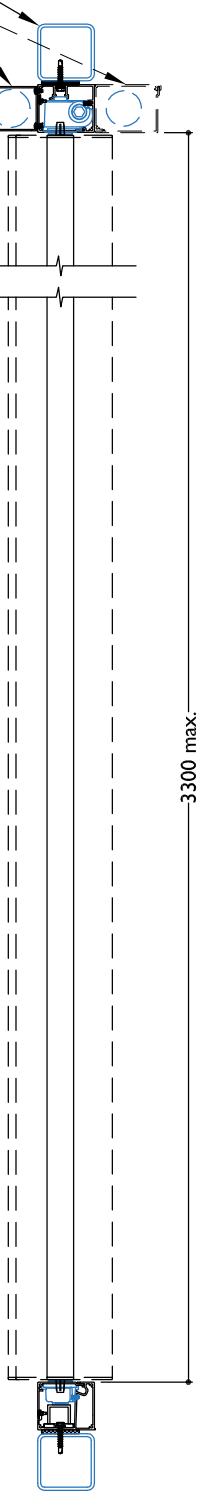


ELEVATION: 165 HI-SPAN AS STANDARD BALUSTRADE INFILL





SECTION:
165 HI-SPAN
STANDARD HEIGHT



SECTION:
165 HI-SPAN
STANDARD HEIGHT

FILE: SUN LOUVRES Spiral Pivot 10.2.44 DATE MODIFIED: 01/10/2024 SCALE: