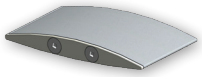
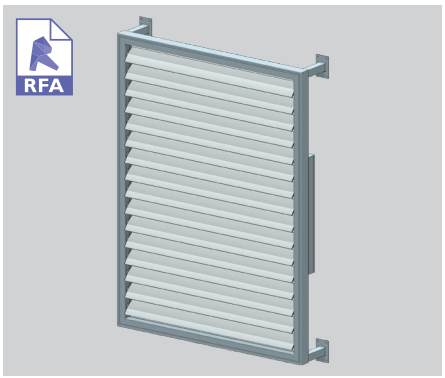


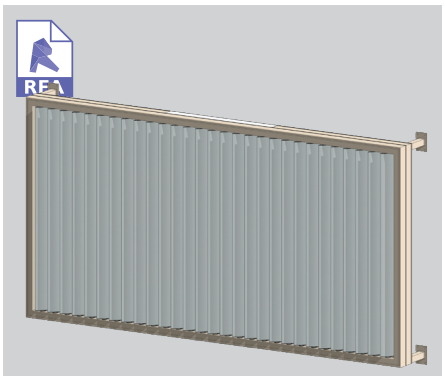
120MM AIRFOIL LOUVRE

wide range of design applications

This airfoil shaped sun louvre blade combines distinctive styling and cool functionality in one.
Also available in180mm wide, both the 120mm and the 180mm Airfoil sun louvre blades provide a wide range of design applications.
Available motorised or hand operable using the Spiral Pivot system. The 120mm Airfoil is ideal for use within a structural frame for external window protection and privacy.
Also available as end fixed or bracket fixed, horizontal or vertical overhead panels.

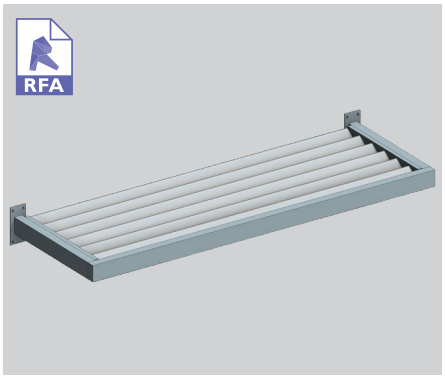


ELAM STREET STRUCTURAL FRAME FRAME - HORIZONTAL

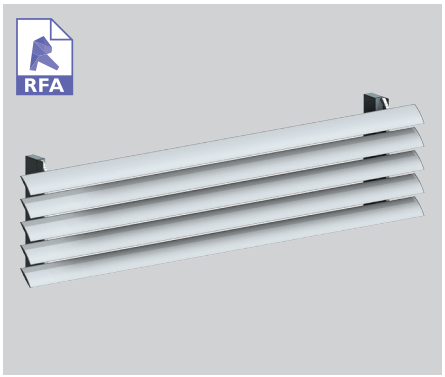


SUPER ELAM STREET STRUCTURAL FRAME WITH SUB-FRAME

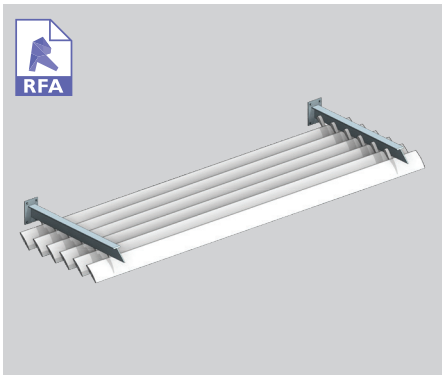
END FIXED - VERTICAL PANEL



END FIXED - OVERHEAD PANEL



BRACKET FIXED - VERTICAL PANEL



BRACKET FIXED - OVERHEAD PANEL

SURFACE COATINGS

A wide range of options are available.

ANODISED

WOOD FINISH

POWDERCOATED

OPERATING THIS SUN LOUVRE - THE CHOICE IS YOURS

Fixed options

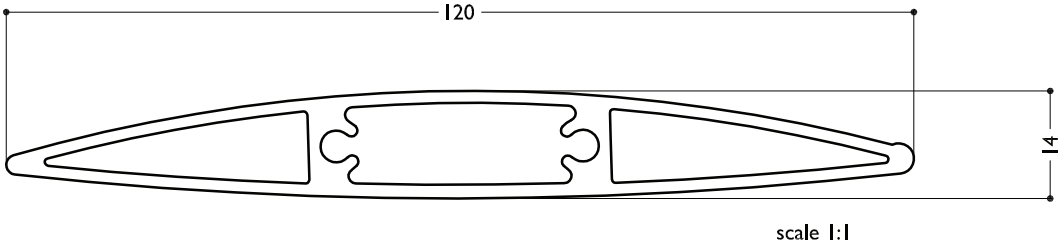
Operable systems

LOUVRETEC GEARBOX

HOME MOTION by somfy

MOTORS AND SENSORS

TECHNICAL DETAILS 120MM AIRFOIL LOUVRE



BLADE SPECIFICATIONS			
Blade cover - opening system	115 mm	Weight per lineal metre	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 NB 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	37 m/s 133 km/hr	44 m/s 158 km/hr	50 m/s 179 km/hr	55 m/s 198 km/hr
Ultimate limit state loads (kPa)		+0.92 & -1.15	+1.23 & -1.53	+1.74 & -2.17	+2.24 & -2.80	+2.71 & -3.39
Adjustable and 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

END FIXED

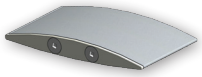
Louvres at any pitch

Louvres at any centre

BRACKET FIXED

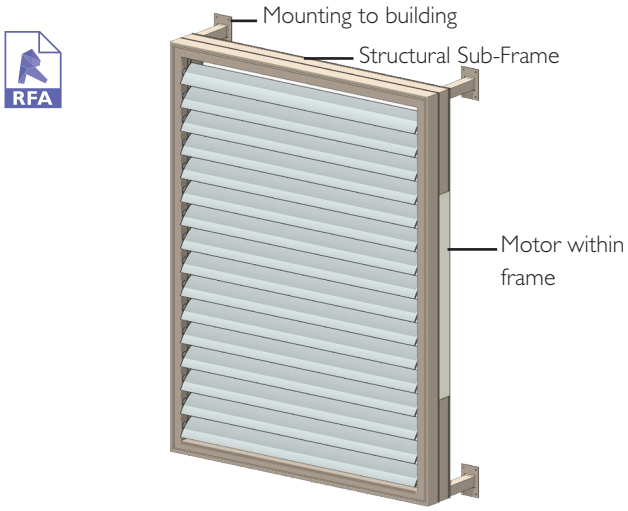
Louvres at any pitch

Louvres at any centre

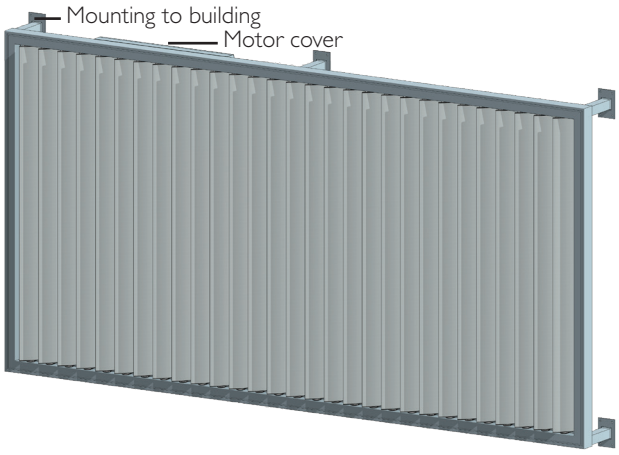


TECHNICAL DETAILS 120MM AIRFOIL LOUVRE SPIRAL PIVOT

TYPICAL DETAIL 3D MODELS **120MM AIRFOIL SPIRAL PIVOT MOTORISED LOUVRE**

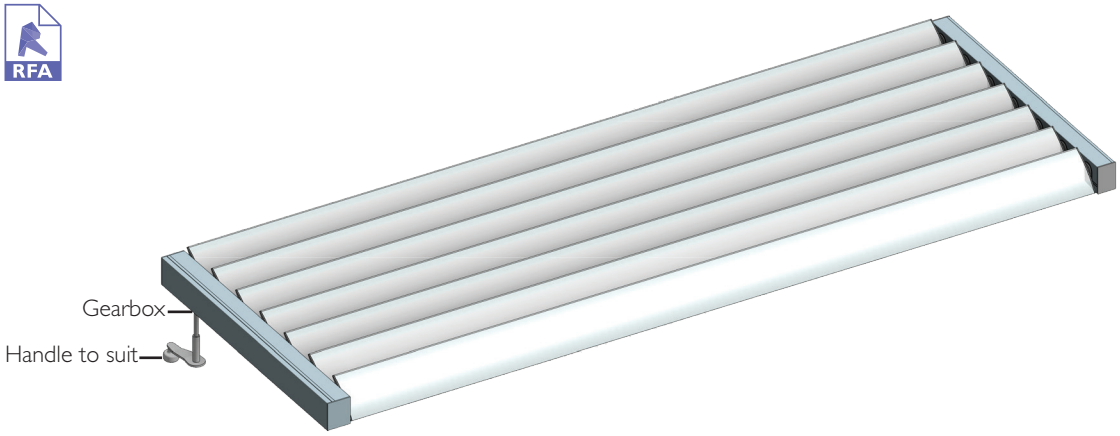


Super Elam Street Structural Frame
Vertical panel - horizontal blades



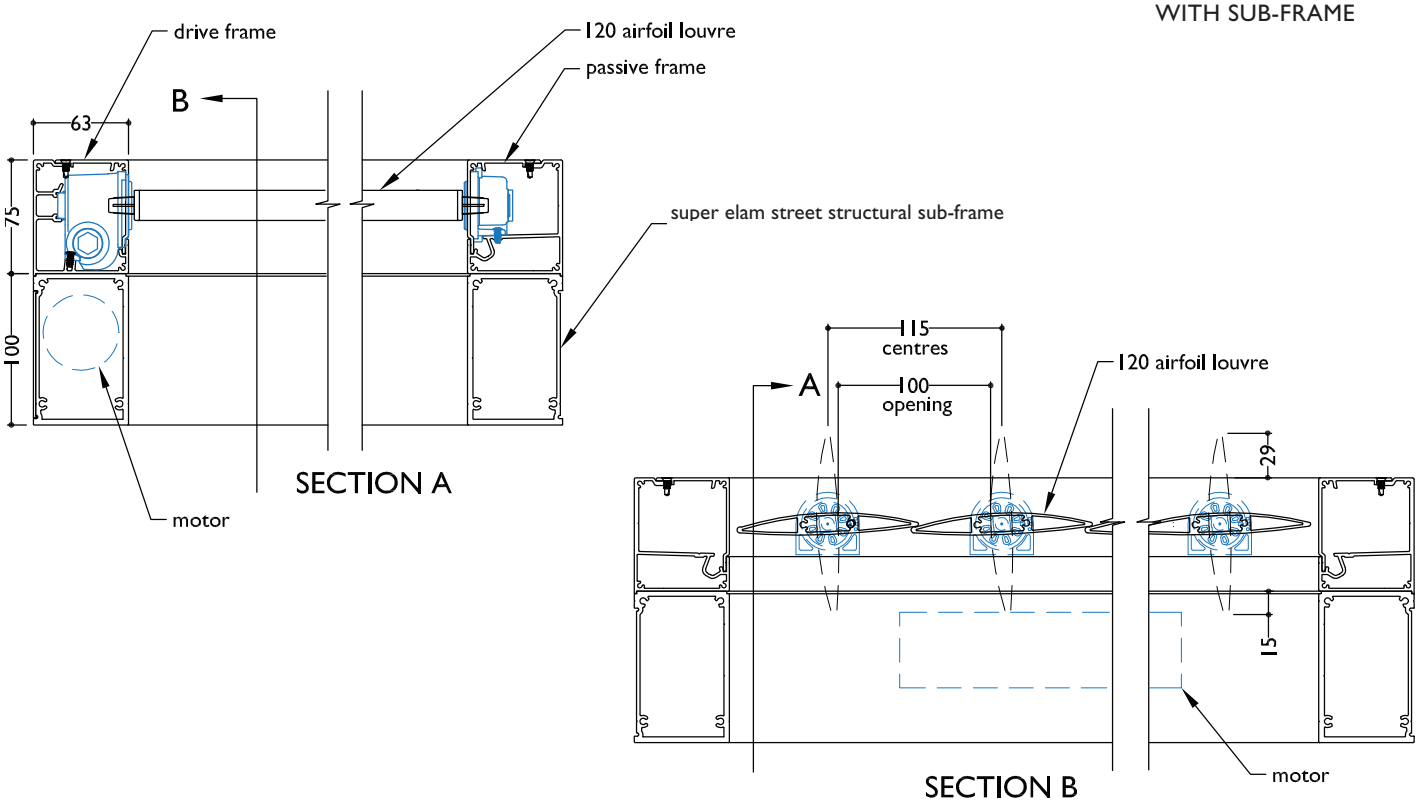
Elam Street Structural Frame
Vertical panel - vertical blades

TYPICAL DETAIL 3D MODEL **120MM AIRFOIL SPIRAL PIVOT HAND OPERABLE LOUVRE**

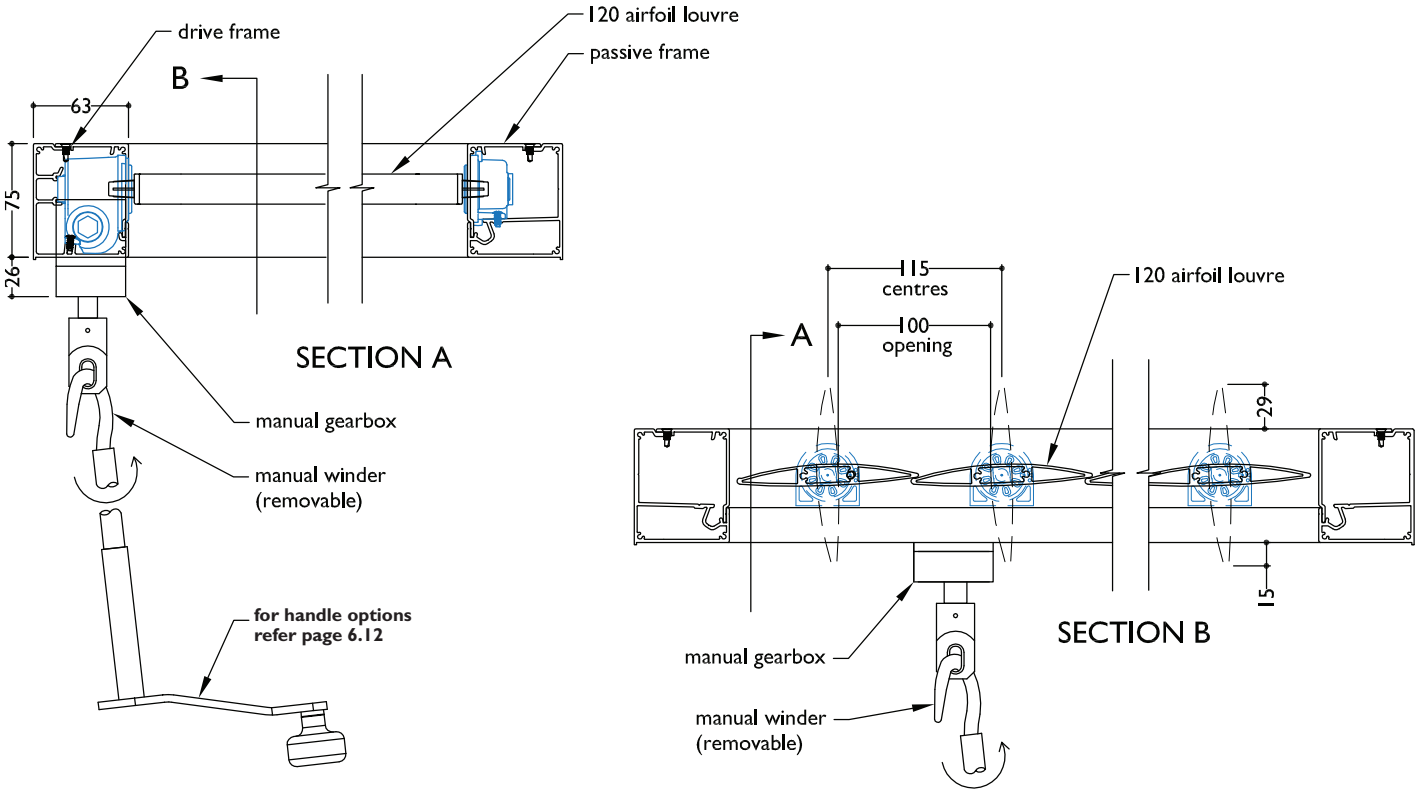


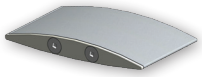
120mm Airfoil louvre Spiral Pivot overhead panel - hand operable

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



TYPICAL DETAIL : ELAM STREET STRUCTURAL FRAME HAND OPERABLE SPIRAL PIVOT 120MM AIRFOIL LOUVRE

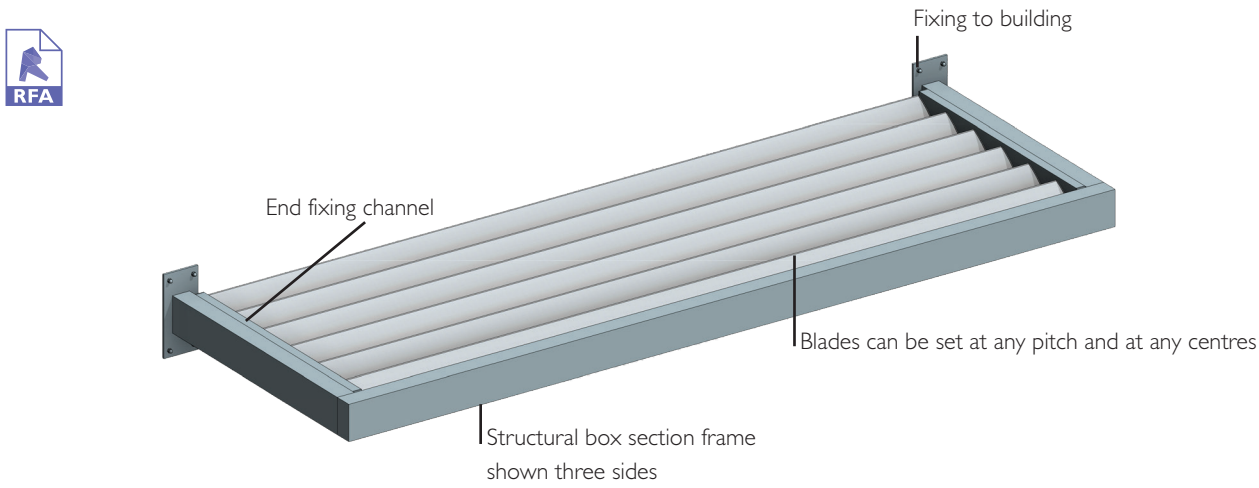




TYPICAL DETAIL 3D MODEL **120MM AIRFOIL LOUVRES END FIXED - VERTICAL PANEL**

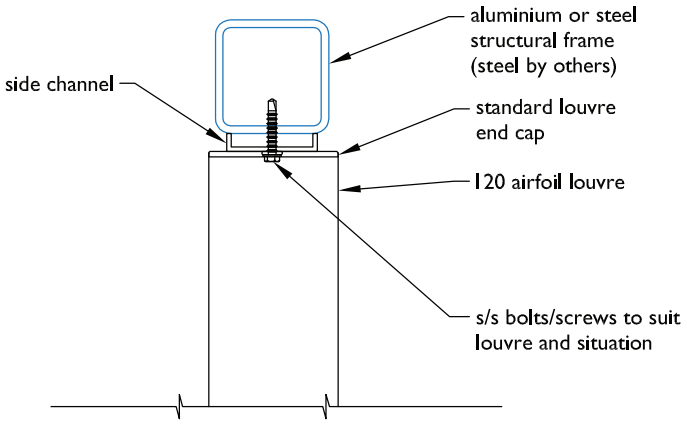
End fixed vertical panel

TYPICAL DETAIL 3D MODEL **120MM AIRFOIL LOUVRES END FIXED OVERHEAD PANEL**

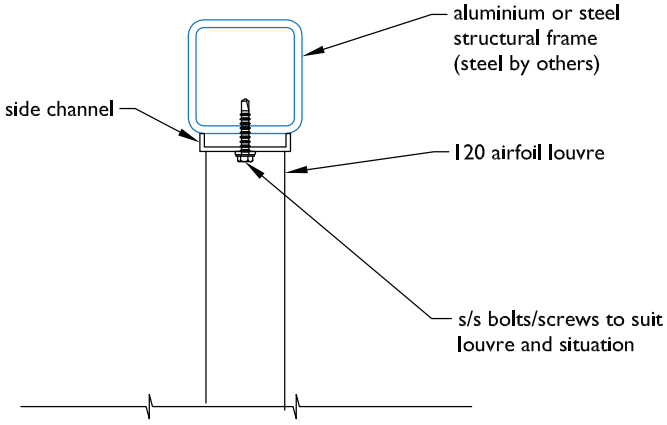


End fixed overhead panel

PLAN

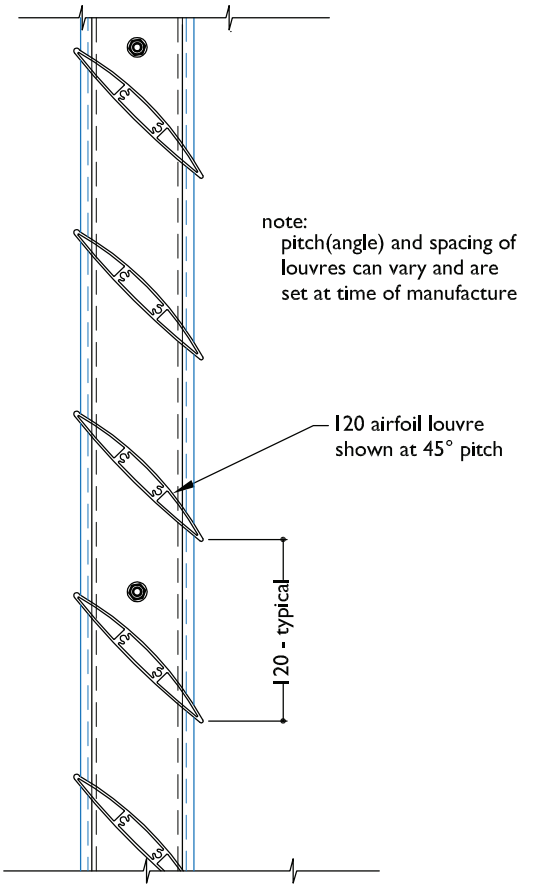


On side channel
end caps required

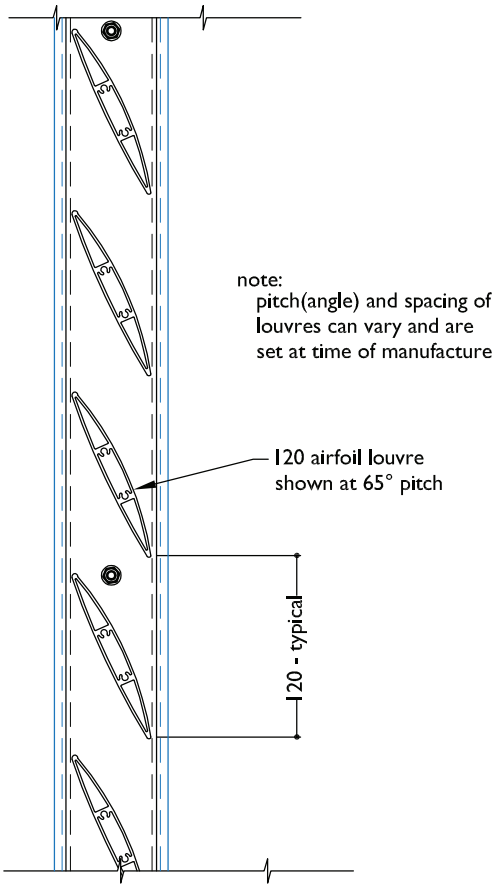


On side channel
no end caps required

SECTION



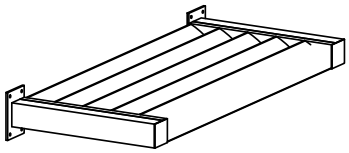
Louvres outside side channel
end caps required



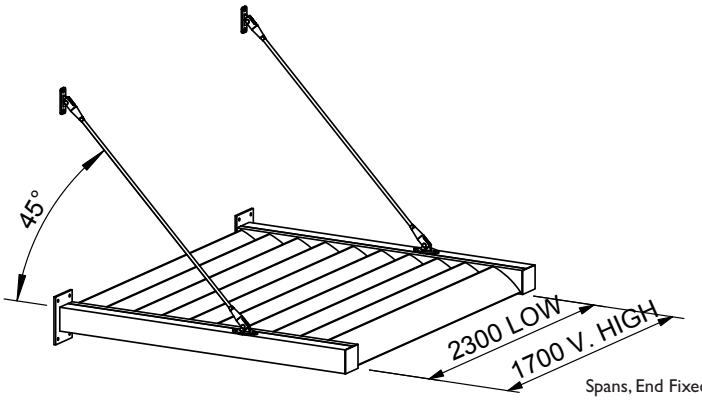
Within side channel
no end caps required

TYPICAL DETAIL OVERHEAD EYEBROW END FIXED LOUVRES

CALCULATIONS FOR BLADE SPANS SHOW RANGE FROM
Low Wind Zone 115km/h, 32m/s to
Extra High Wind Zone 198km/h, 55m/s
Refer Engineering Details, Section 11



Free Span Example



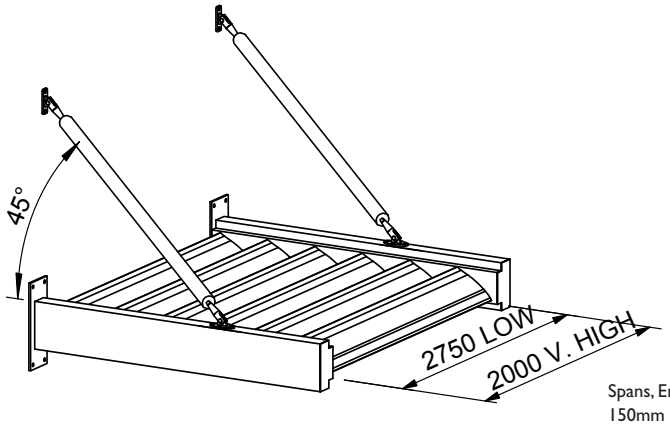
Ø20 SS Strut Support Example,
Strut at Optimum 45° angle.

Spans, End Fixed
120mm Airfoil Louvre.

KEY
LF = Free span
LS15 = Strut @ 15°
LS30 = Strut @ 30°
LS45 = Strut @ 45°

Plain Column:
Low - Med Wind Zone.
Up to 133Km/h - 37m/s

Shaded Column:
High - VHigh Wind Zone.
Up to 179Km/h - 50m/s



Ø42 SS Strut Support Example,
Strut at Optimum 45° angle.

Spans, End Fixed
150mm Midi Louvre.

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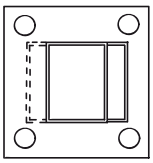
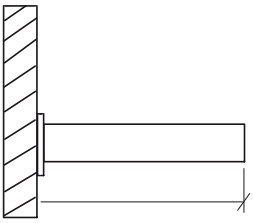
TYPICAL DETAIL OVERHEAD EYEBROW END FIXED LOUVRES



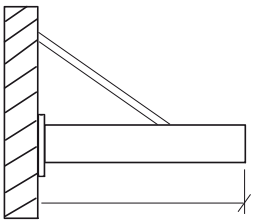
Base Plate: 100 x 150 x 6mm
Box Section: 75 x 50 x 2.5mm
Channel: 75 x 25 x 3mm

Free Span



LF	LF
600	500

Strut Support

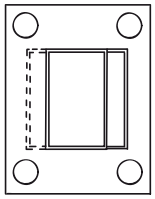


Strut Ø16mm
Stainless steel

LS15	LS15
1000	800

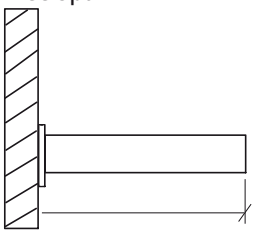
LS30	LS30
1100	900

LS45	LS45
1100	900



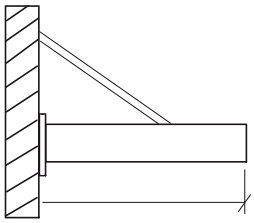
Base Plate: 100 x 225 x 6mm
Box Section: 100 x 50 x 3mm
Channel: 100 x 25 x 3mm

Free Span



LF	LF
800	700

Strut Support

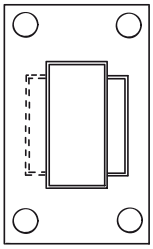


Strut Ø20mm
Stainless steel

LS15	LS15
1200	1000

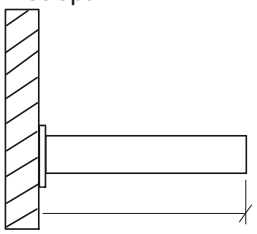
LS30	LS30
1400	1200

LS45	LS45
1500	1200



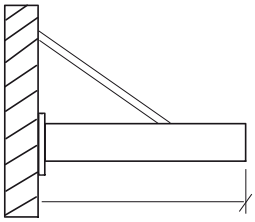
Base Plate: 100 x 275 x 6mm
Box Section: 150 x 50 x 3mm
Channel: 100 x 25 x 3mm

Free Span



LF	LF
1200	1000

Strut Support

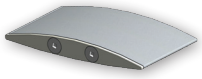


Strut Ø42mm
Stainless steel

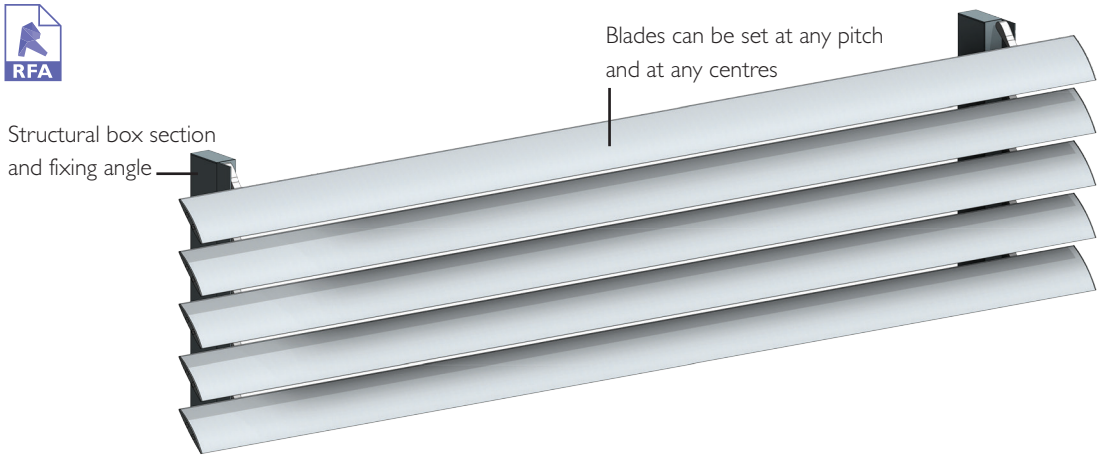
LS15	LS15
1700	1300

LS30	LS30
1800	1600

LS45	LS45
2000	1700

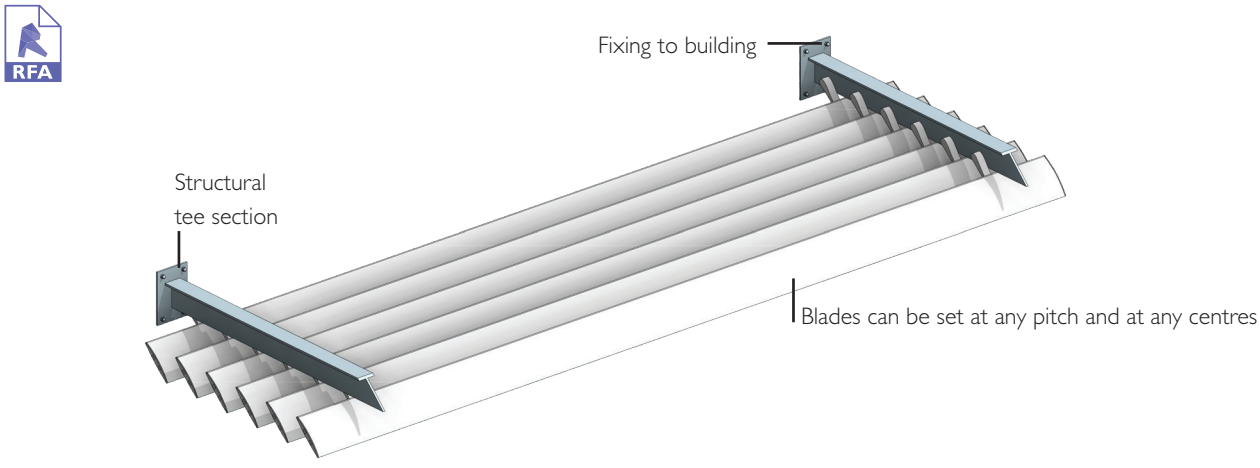


TYPICAL DETAIL 3D MODEL **120MM AIRFOIL LOUVRES BRACKET FIXED VERTICAL PANEL**



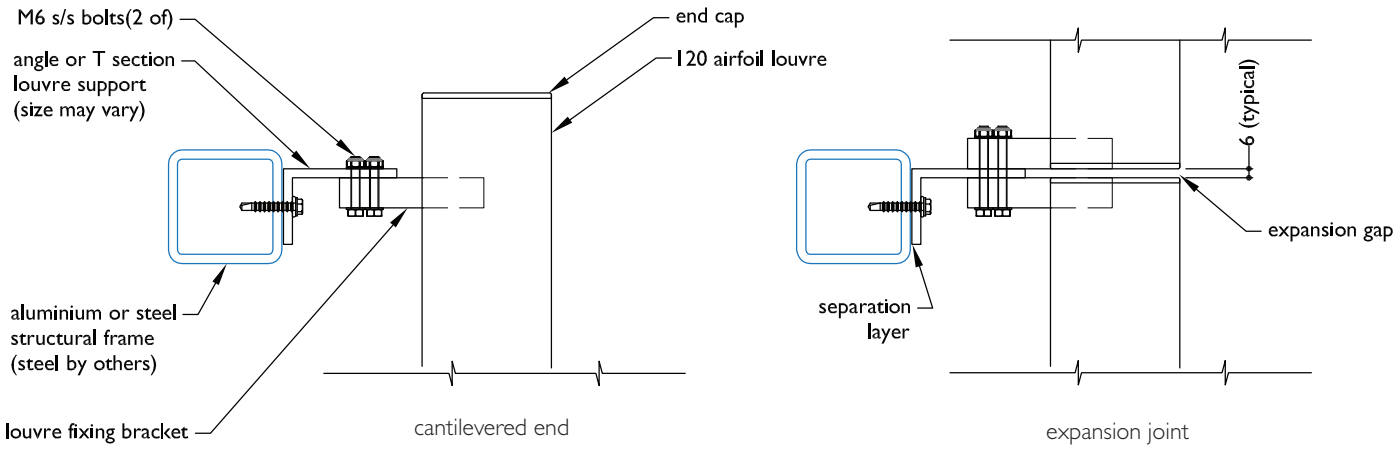
Bracket fixed vertical panel

TYPICAL DETAIL 3D MODEL **120MM AIRFOIL LOUVRES BRACKET FIXED OVERHEAD PANEL**

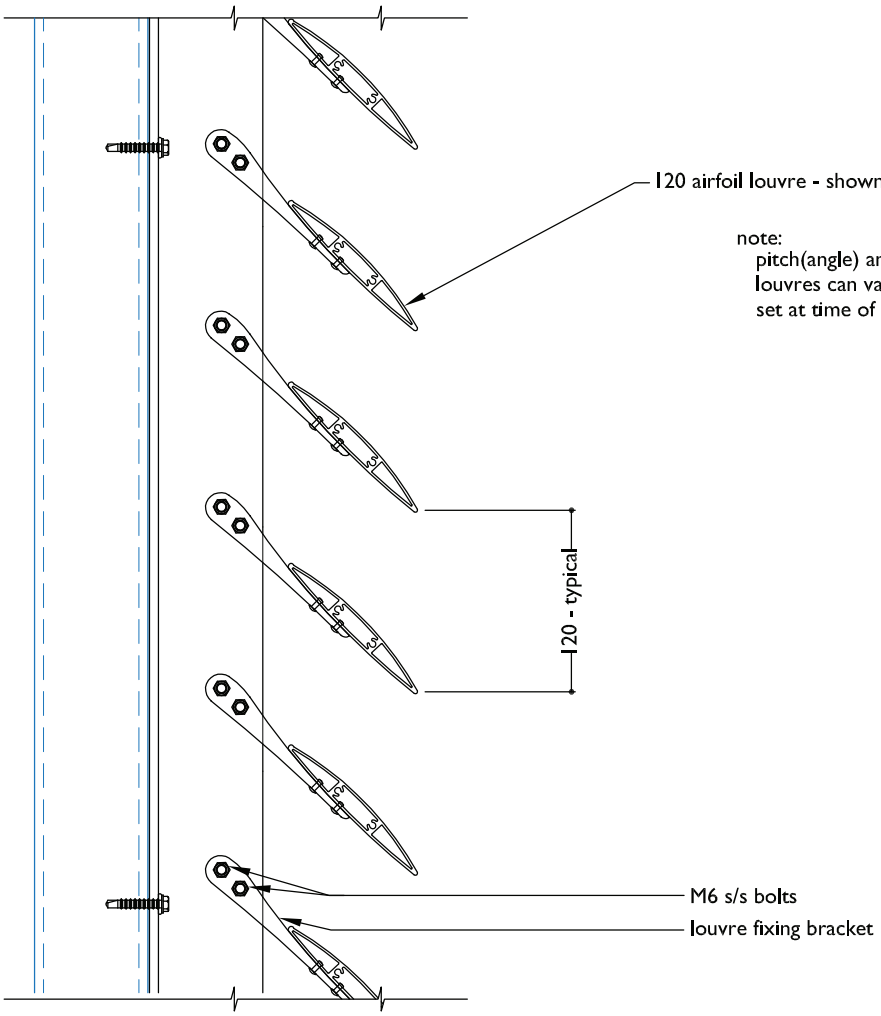


Bracket fixed overhead panel

PLAN

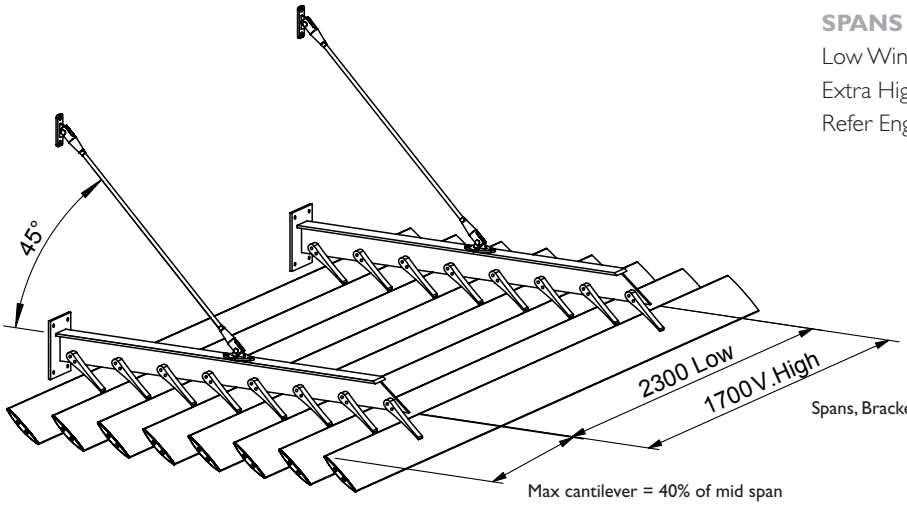


SECTION



OVERHEAD EYEBROW BRACKET FIXED LOUVRES

CALCULATIONS FOR BLADE SPANS SHOW RANGE FROM
Low Wind Zone 115km/h, 32m/s to
Extra High Wind Zone 198km/h, 55m/s
Refer Engineering Details, Section 11



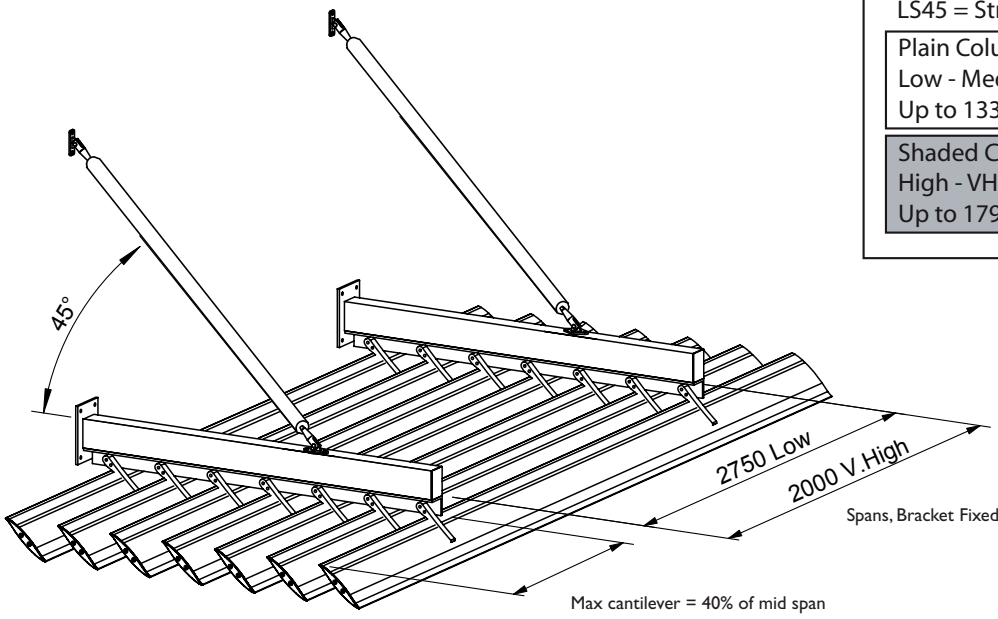
Spans, Bracket Fixed 120mm Airfoil Louvre.

Ø20 SS Strut Support Example,
Strut at Optimum 45° angle.

KEY
LF = Free span
LS15 = Strut @ 15˚
LS30 = Strut @ 30˚
LS45 = Strut @ 45˚

Plain Column:
Low - Med Wind Zone.
Up to 133Km/h - 37m/s

Shaded Column:
High - VHigh Wind Zone.
Up to 179Km/h - 50m/s



Spans, Bracket Fixed 150mm Midi Louvre.

Ø42 SS Strut Support Example,
Strut at Optimum 45° angle.

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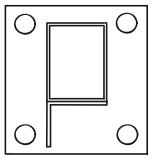
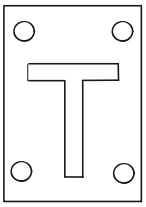
TYPICAL DETAIL : BRACKET FIXED OVERHEAD WALL STRUTS FOR 120MM AIRFOILS & 150MM MIDI LOUVRES SPANS AT A GLANCE

TYPICAL DETAIL OVERHEAD EYEBROW DETAIL

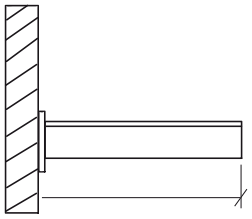


Base Plate:
150 x 100 x 6mm
Box Section:
75 x 50 x 2.5mm
Angle:
50 x 50 x 3mm



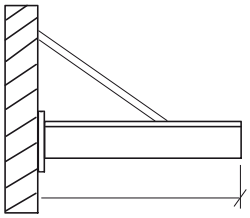
Base Plate: 120 x 100 x 6mm
'T' Section: 75 x 50 x 6mm

Free Span



LF	LF
600	500

Strut Support

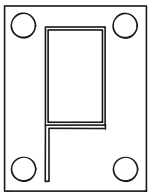


Strut Ø16mm
Stainless steel

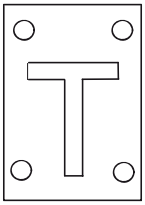
LS15	LS15
1000	800

LS30	LS30
1100	900

LS45	LS45
1100	900

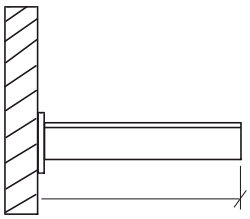


Base Plate:
225 x 100 x 6mm
Box Section:
100 x 50 x 3mm
Angle:
50 x 50 x 6mm



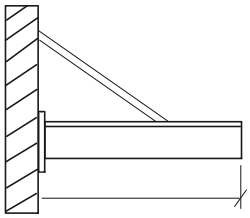
Base Plate: 170 x 100 x 6mm
'T' Section: 100 x 50 x 6mm

Free Span



LF	LF
900	700

Strut Support

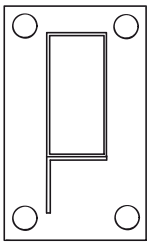


Strut Ø20mm
Stainless steel

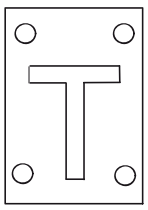
LS15	LS15
1300	1100

LS30	LS30
1500	1200

LS45	LS45
1500	1300

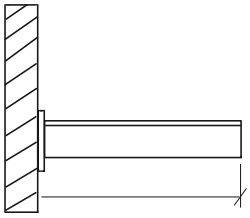


Base Plate:
275 x 100 x 6mm
Box Section:
150 x 50 x 3mm
Angle:
50 x 50 x 6mm



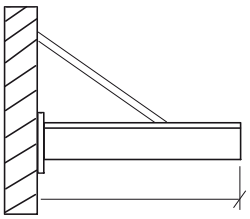
Base Plate: 170 x 100 x 6mm
'T' Section: 100 x 50 x 6mm

Free Span



LF	LF
1200	1000

Strut Support



Strut Ø42mm
Stainless steel

LS15	LS15
1800	1400

LS30	LS30
2000	1600

LS45	LS45
2100	1700