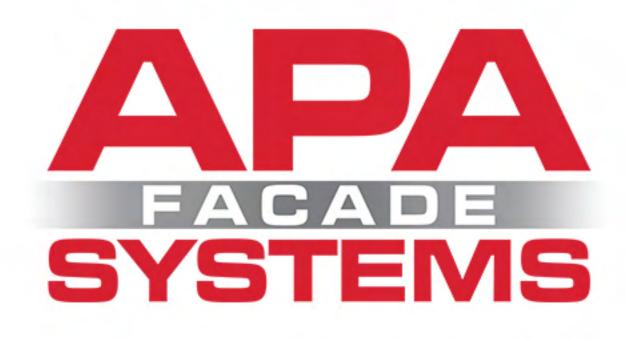


ALUMINIUM SOLAR SHADING SYSTEM WITH VERTICAL & HORIZONTAL BLADES





BRISE SOLEIL

ALUMINIUM SOLAR SHADING SYSTEM

The use of Brise Soleil or Sun Screens to reduce solar heat gain through glazed facades is now recognised as an important consideration in modern buildings. Countries situated in northern latitudes such as Ireland, must deal with the sun's angle being lower, which results in more exposure through vertical glazing causing greater heat gains.

Functions

The elliptical design of the blades reduces the susceptibility of the Brise Soleil to wind load, allowing it to be used on high rise buildings and in all weather conditions. Both vertical and horizontal Brise Soleil provide highly effective shading in the summer with uninterrupted views, whilst minimising the effect on light transmission in the winter. Most bespoke and traditional Brise Soleil or solar shading panels can be manufactured off-site, into modular or unitised forms, ensuring speedy installation. The system has an array of accessories allowing for cost effective project specific be spoke solar shading designs to be incorporated into the facade. When designing horizontal solar shading the length, width and projected dimensions of horizontal sunscreens will depend on a number of factors, one being the time of year. For south facing elevations in Ireland the highest sun angle occurs at midday during the month of June. The angle of the sun rises during the months of April and May peaking in June then declining through the remainder of the year.

Introduction

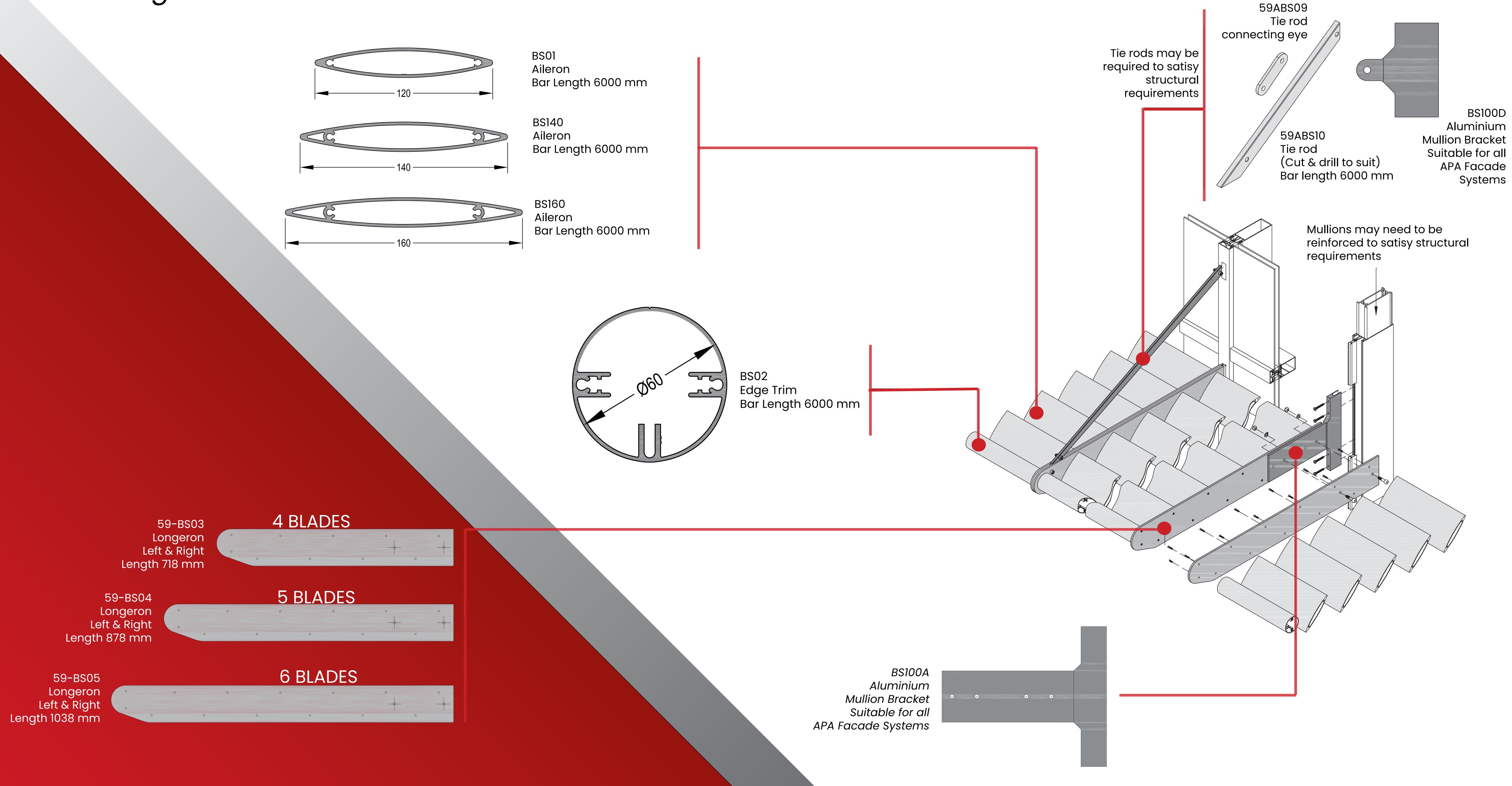


Approximate angle of the sun at midday in Ireland (based on 52° latitude)

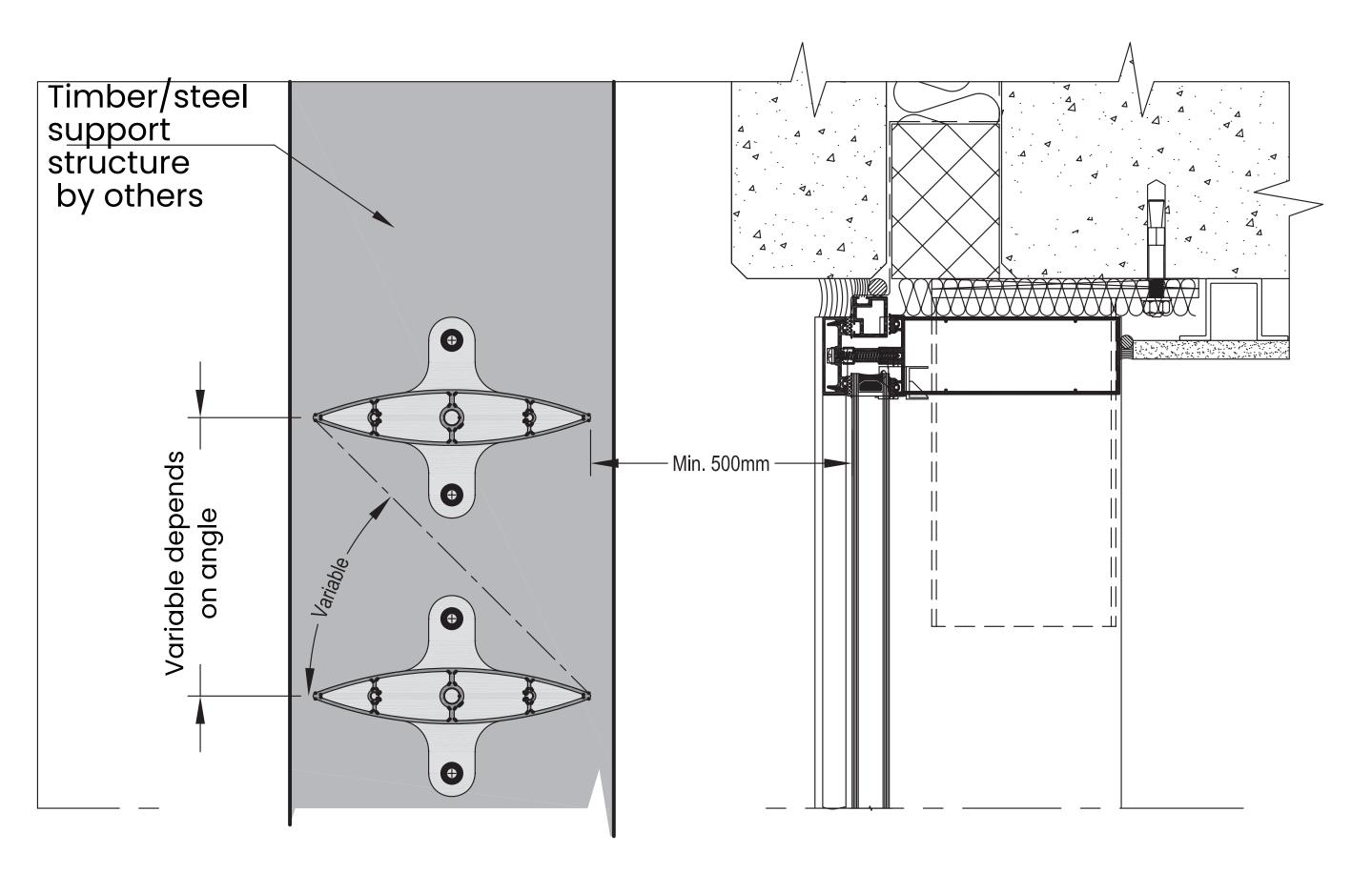
> April 50° May 58° June 62° July 58° August 50° September 38°

SYSTEM BLADES & BRACKETS

Max spans given are to be used for guidance only and are based on a combined snow and wind load of 0.75Kn/m². An engineer should be consulted if the parameters of the design differ from this. The blades can be assembled onto side plates for connection to support arms – reducing site labour time.

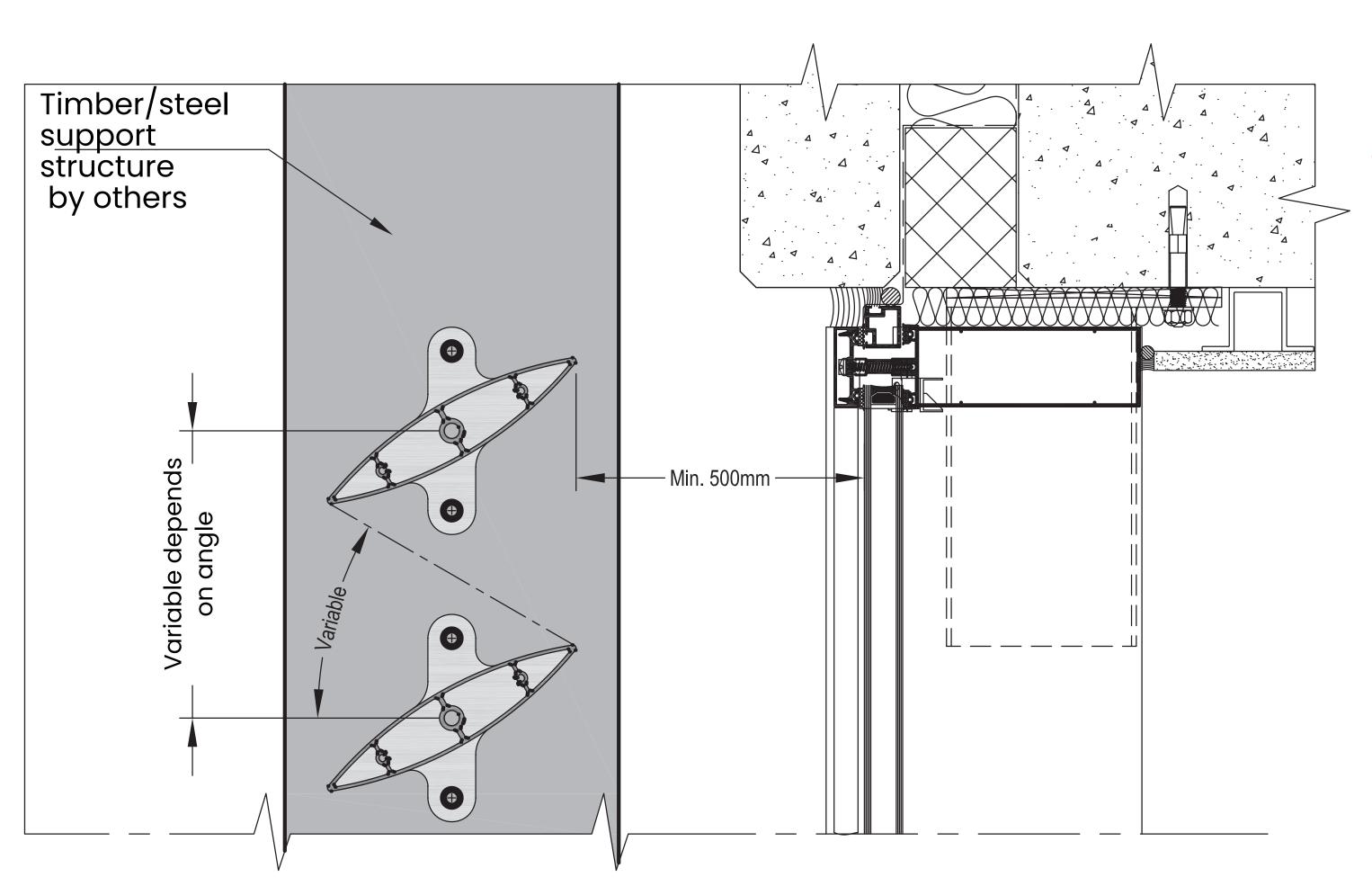


MAX SPANS FOR BLADES							
APA Item Number	Blade Size Width Height		Max. Blade Span in mm 45				
BS01	120	20		2000			
BS140	140	20		2100			
BS160	160	20		2200			



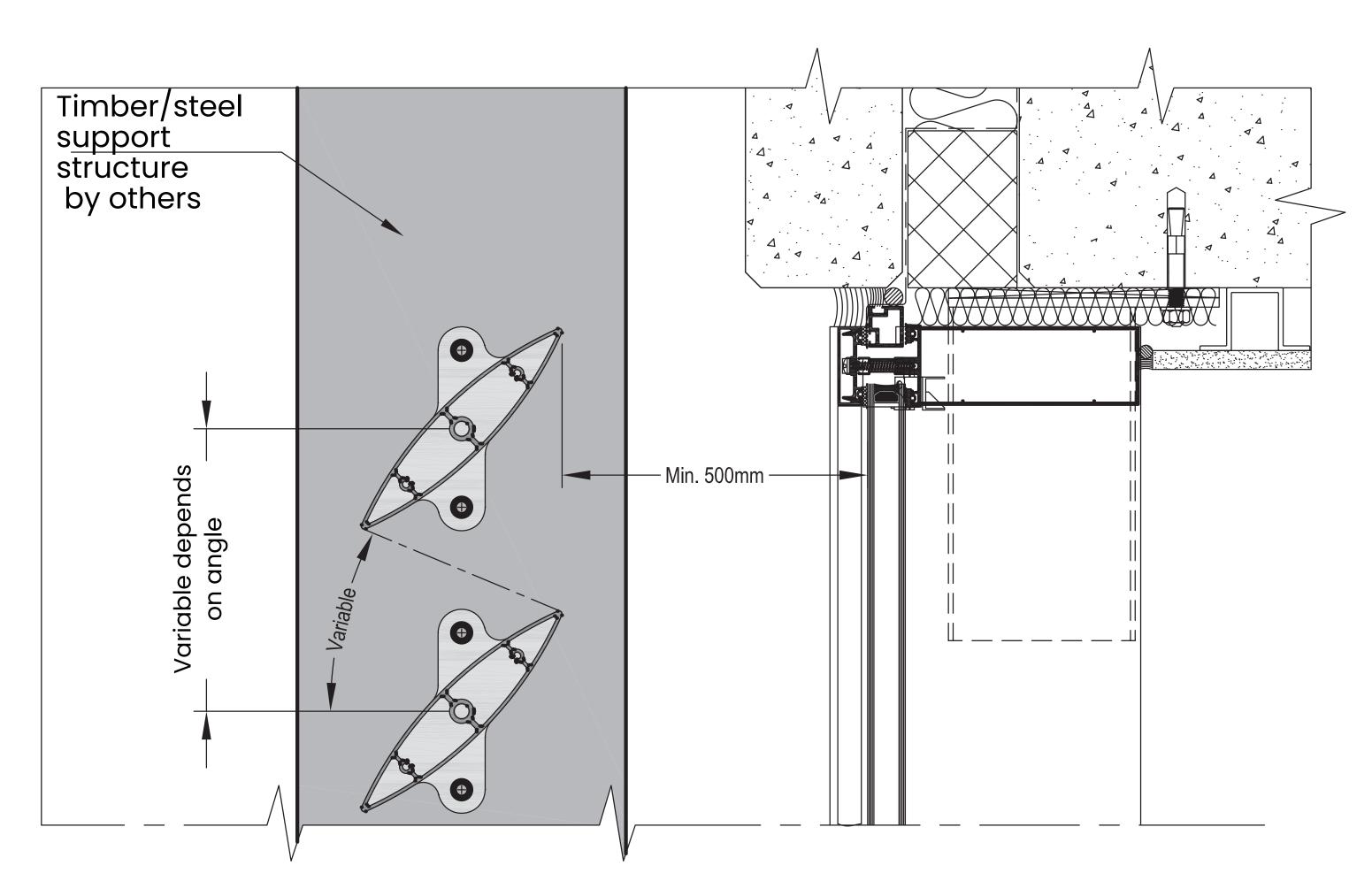
0/90°

Being manufactured from polyester powder coated extruded aluminium, colour, structural stability & long term longevity are not an issue



30°

² Large blades allow for larger gaps between the blades, ensuring excellent transparency with sufficient light for the building



45°

Our Brise Soleil product range offers a system based solution, enabling easy installation onto any facade system

BRACKETS & BLADES

Various horizontal and vertical elliptical shaped blades ranging insize from 100 mm up to 450 mm, are available along with a huge variety of fixing brackets, to allow the design team flexibility.

Timber/steel support structure by others



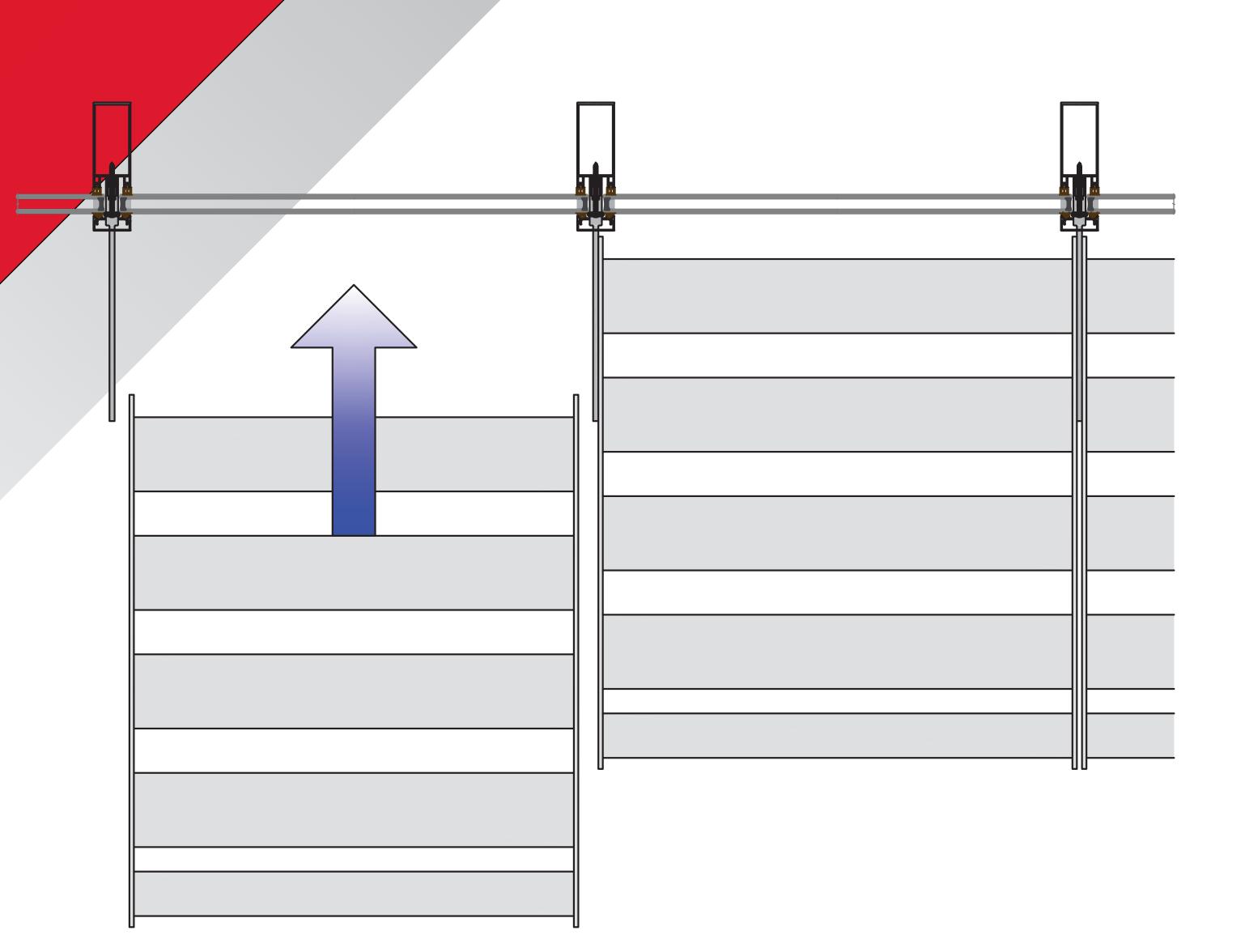
STANDARD HORIZONTAL SYSTEM

DETAILS & VIEWS

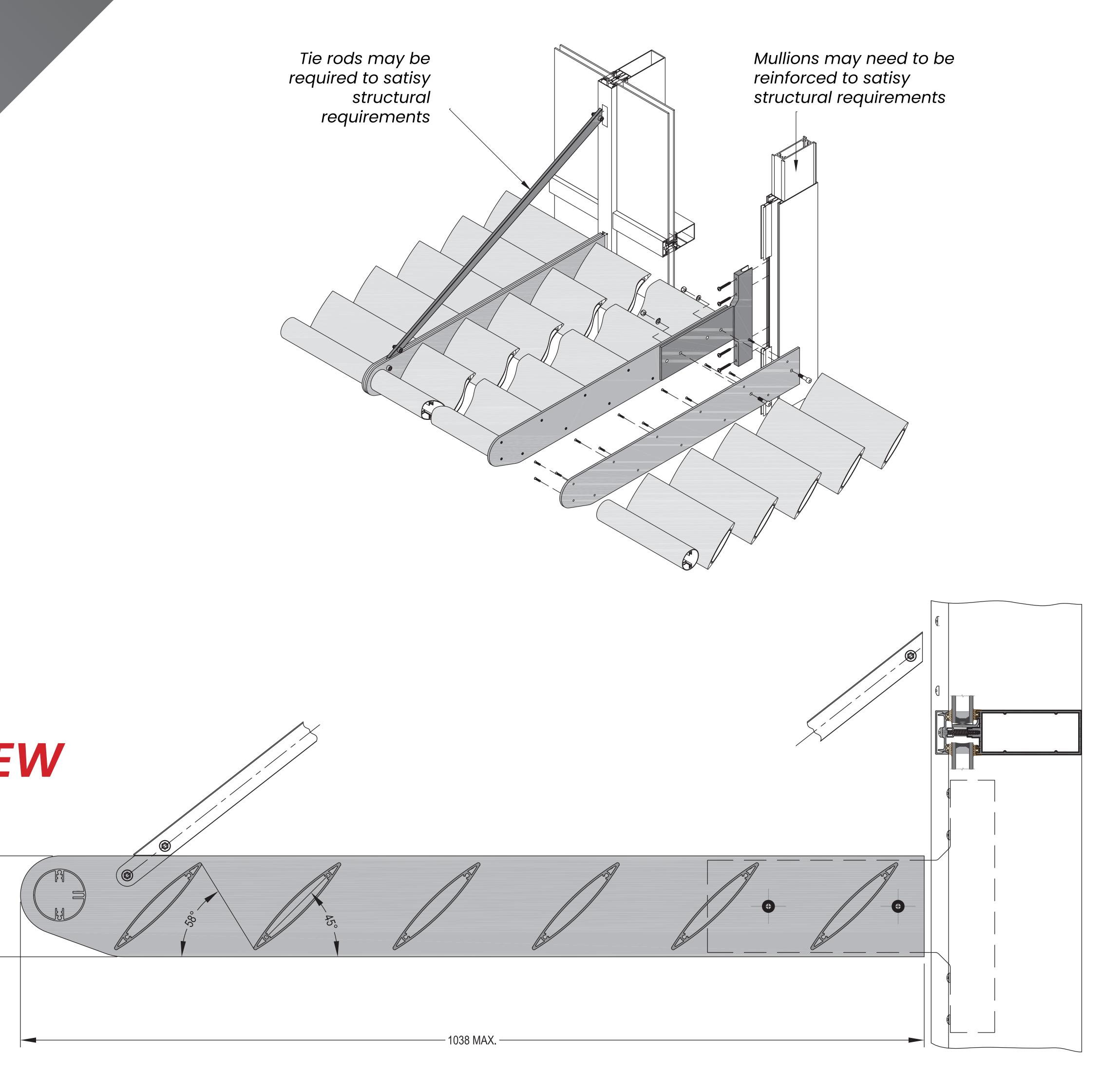
Site Installation

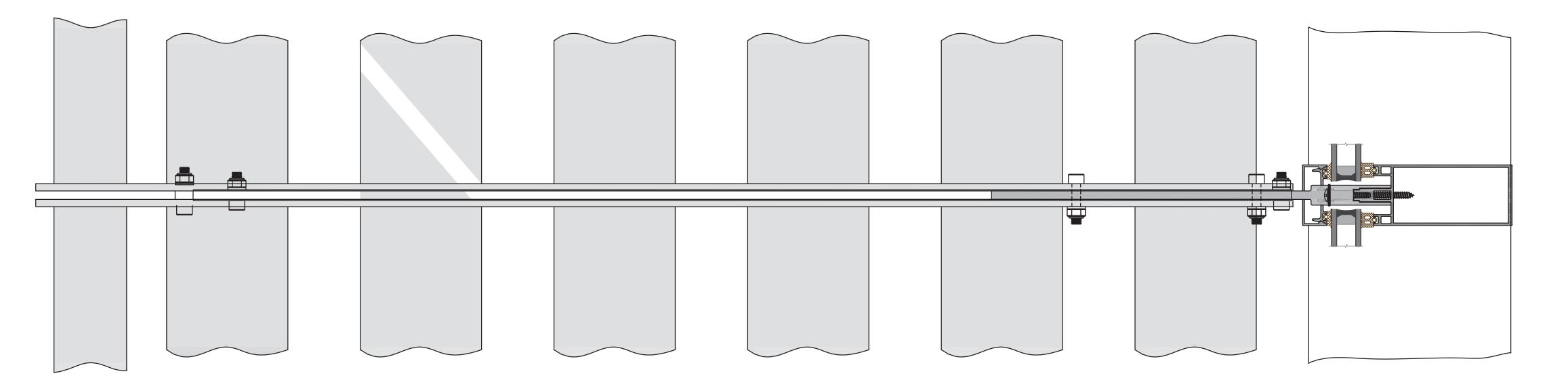
The unit would normally be pre-assembled in the workshopand fixed as one piece on site as illustrated below

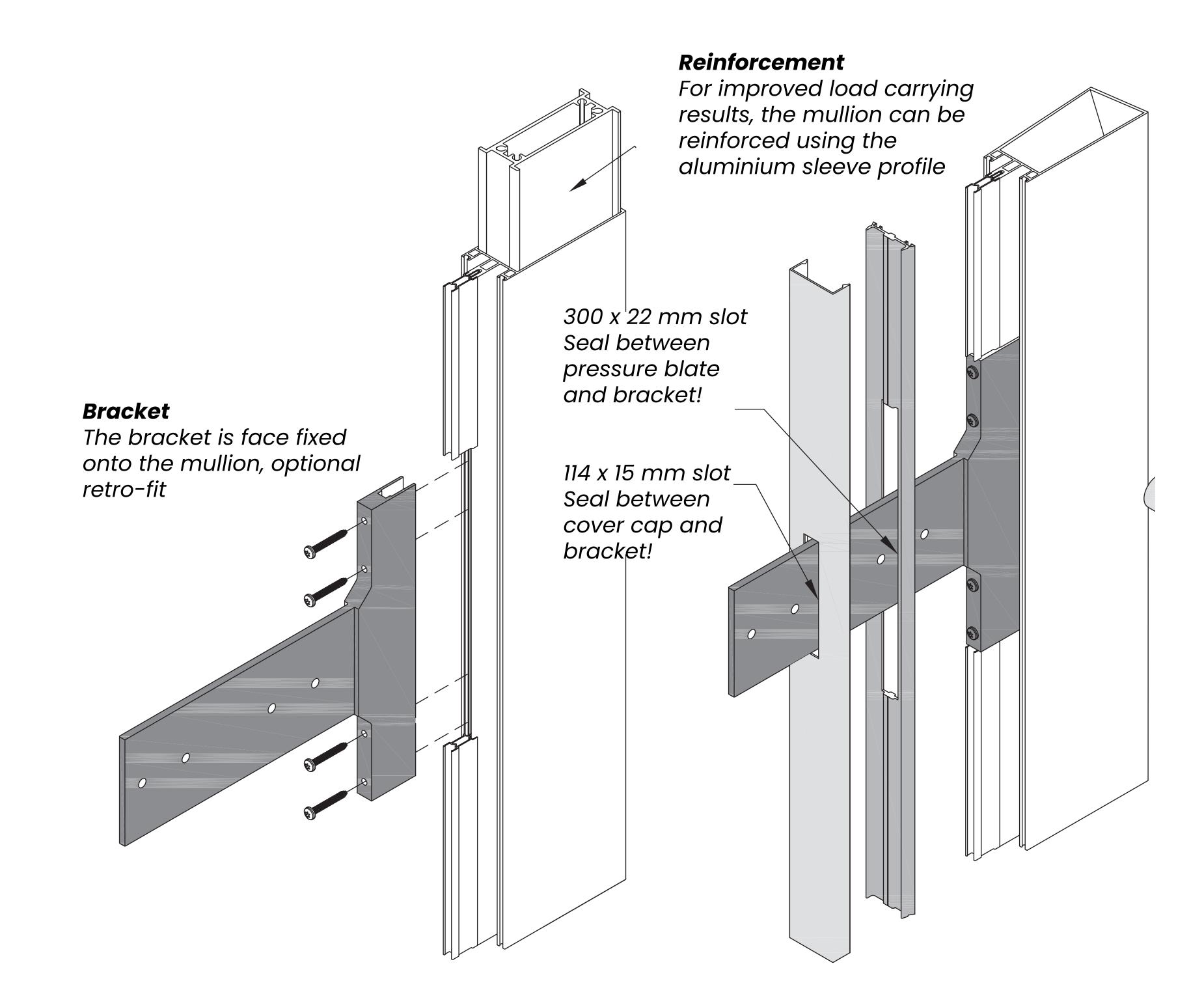
SIDE VIEW



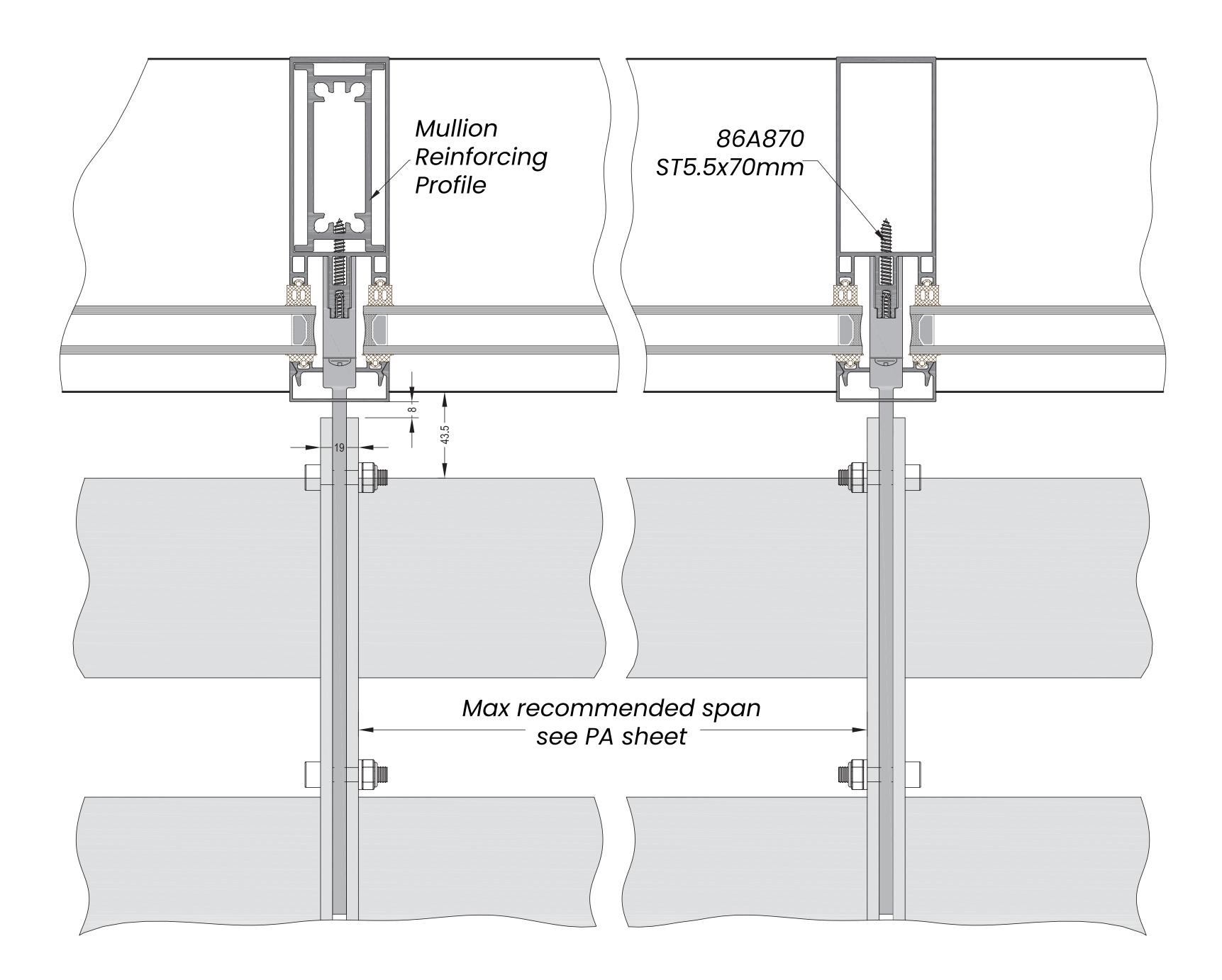
PLAN VIEW



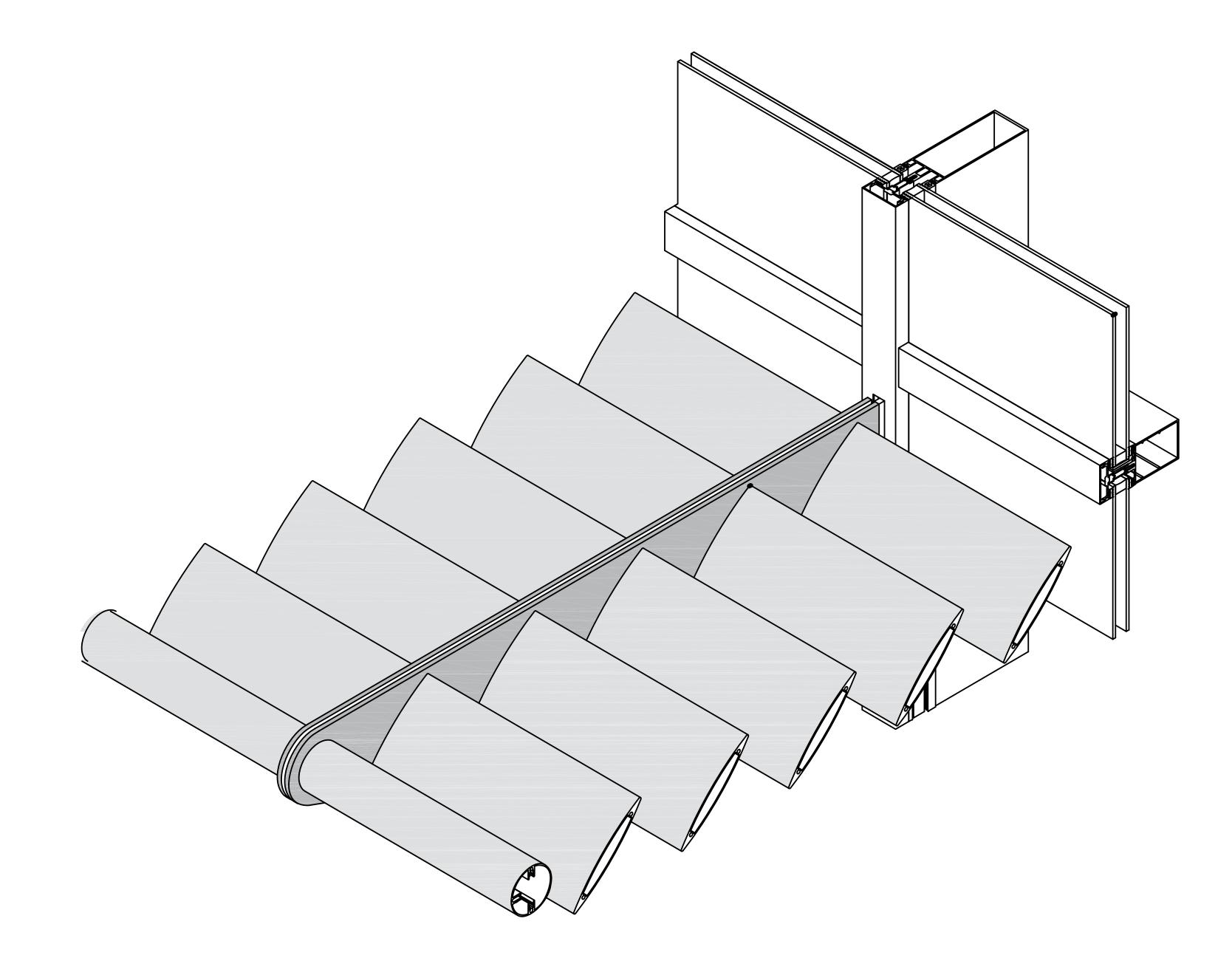




PLAN VIEW



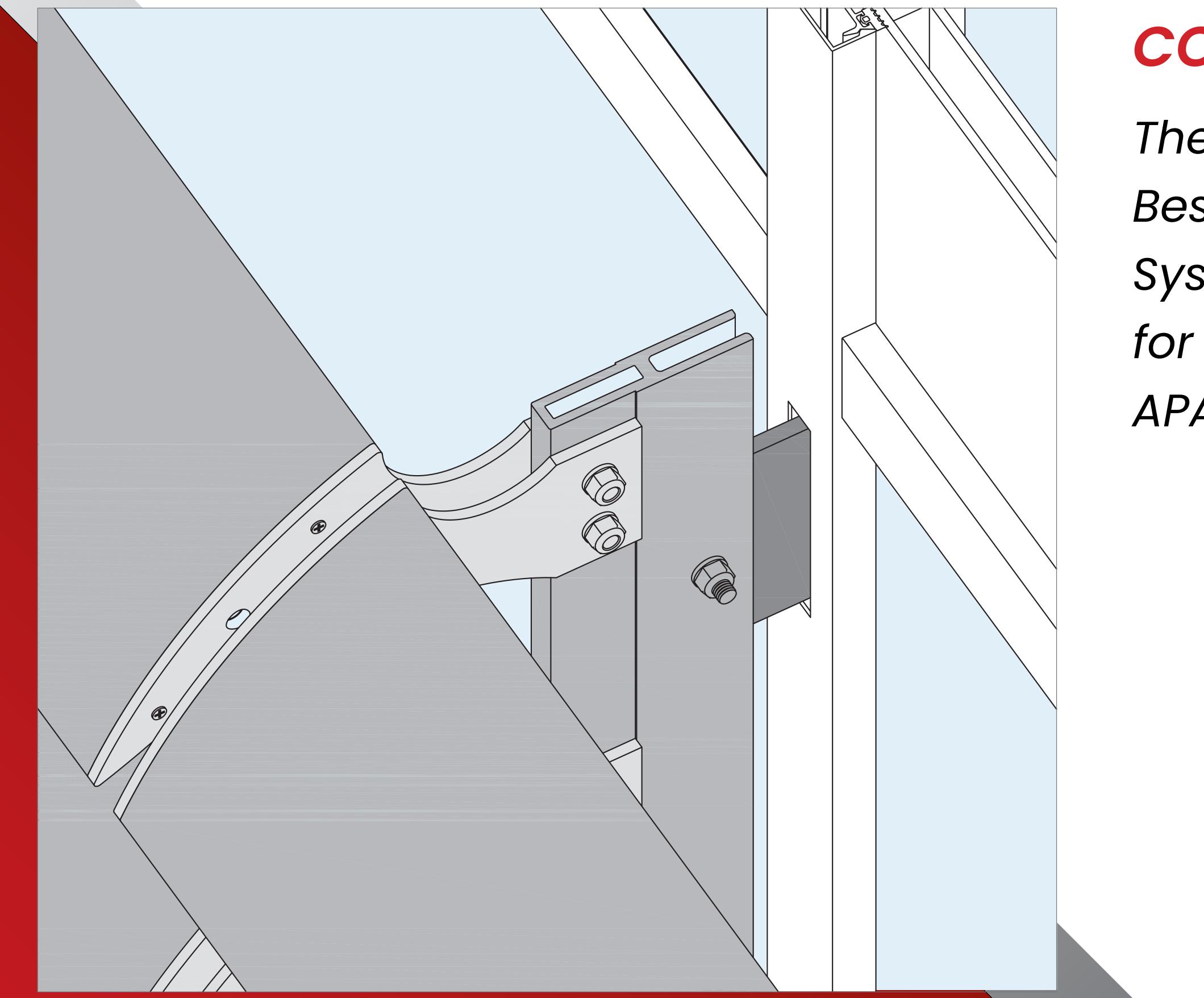






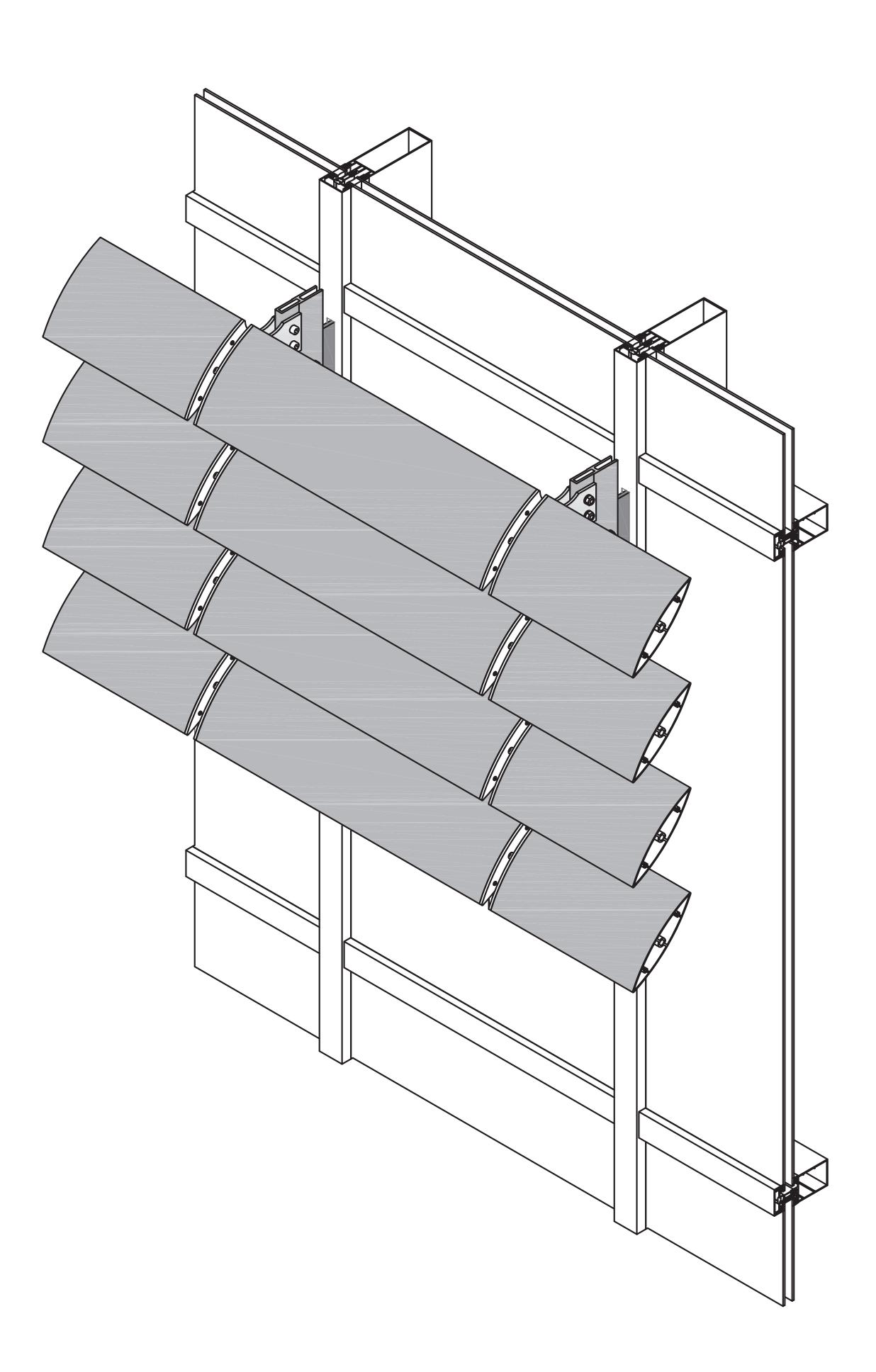
VERTICAL SYSTEM

All blades have a variety of plate brackets pitched at different angles. These plates are fixed to the end of the blades by stainless steel screws (PanHead No.5.5x38mm) into extruded screw grooves in the blades. The vertical runner which connects the blades, can be fixed to curtain wall facades or different structures which surround punched open windows, such as brick or block walls, cladding, etc.

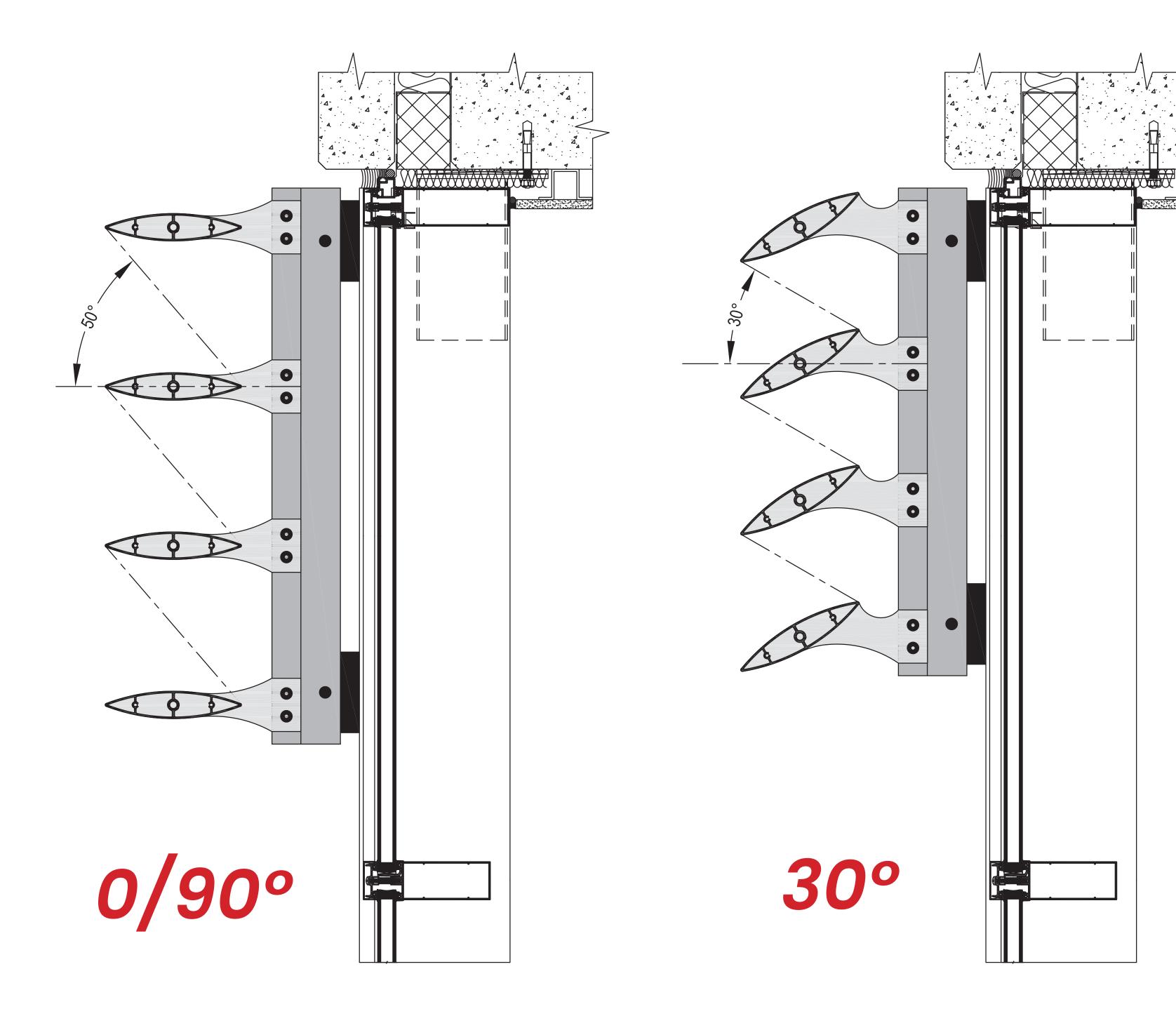


COMPATABILITY

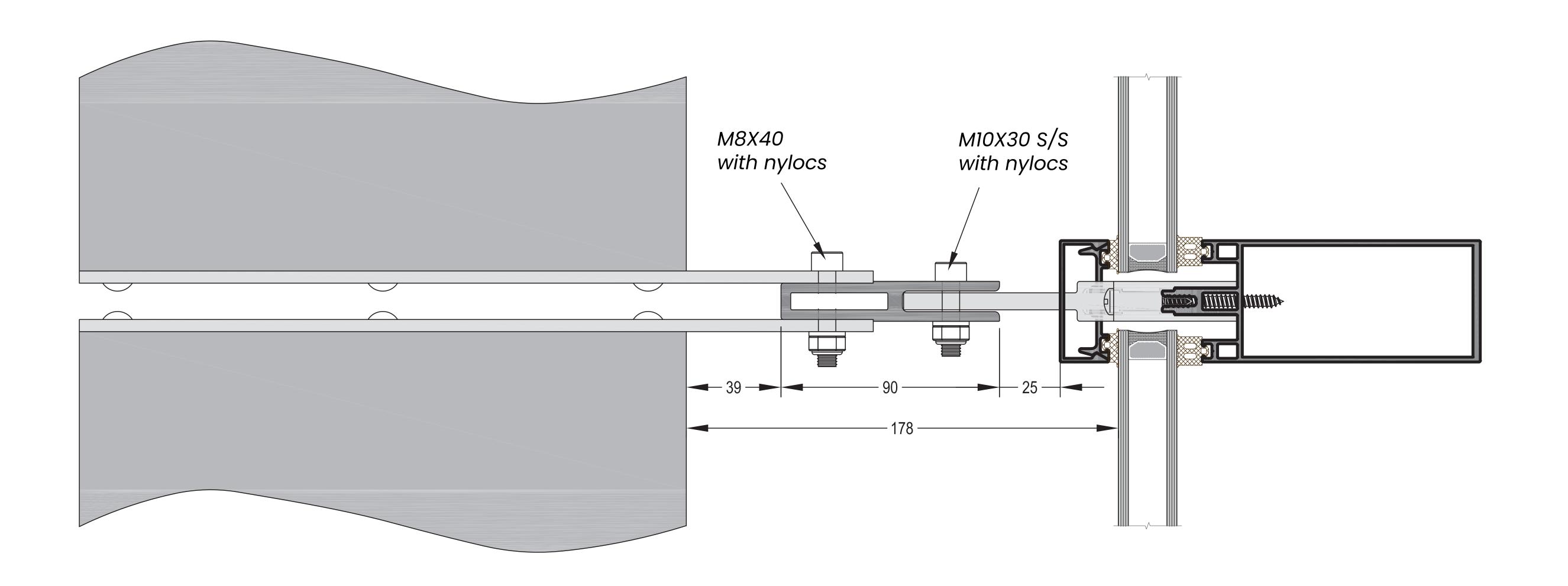
The Facade BS – Bespoke Vertical System is suitable for all of APA's Facade Systems

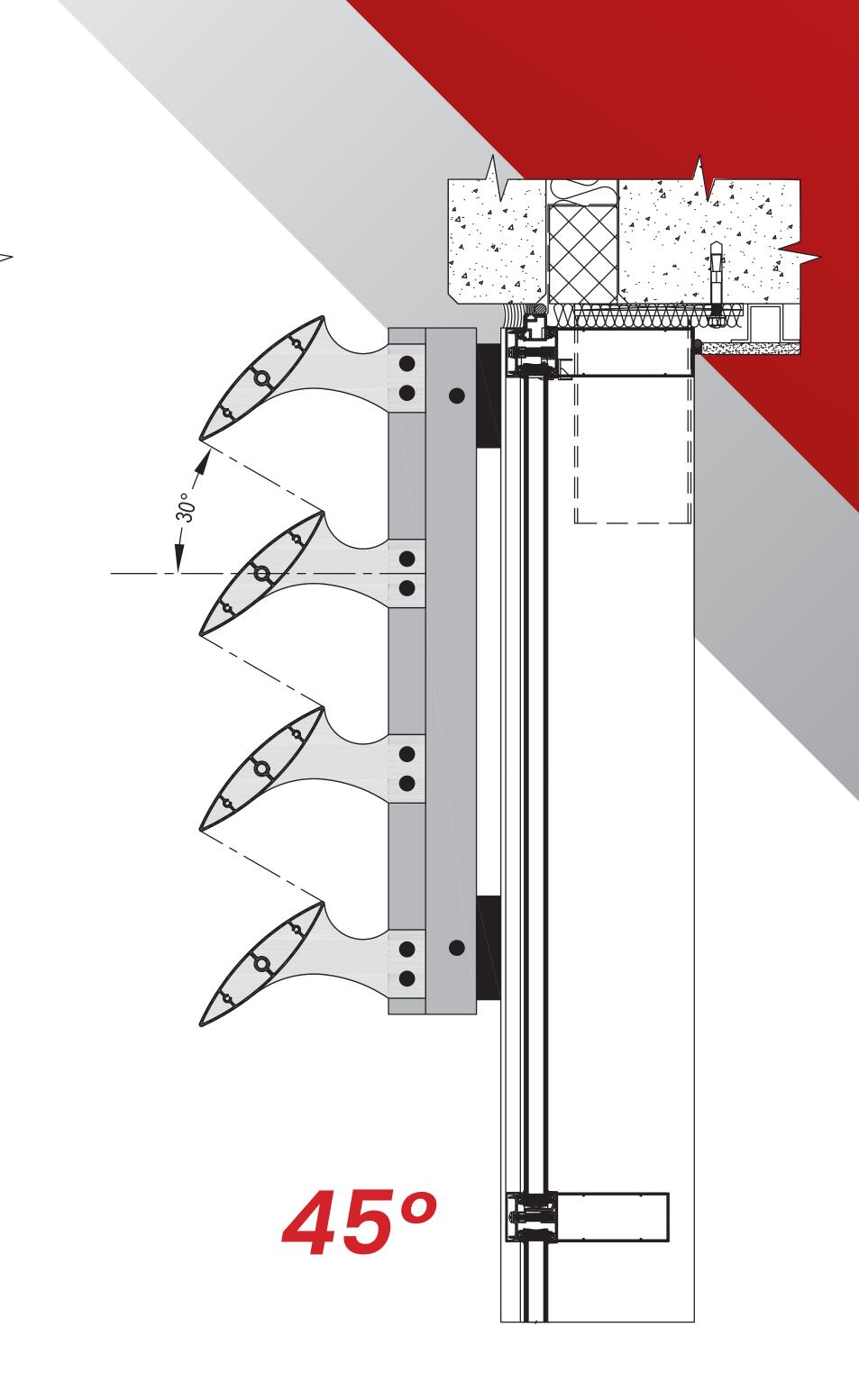


SIDE VIEW

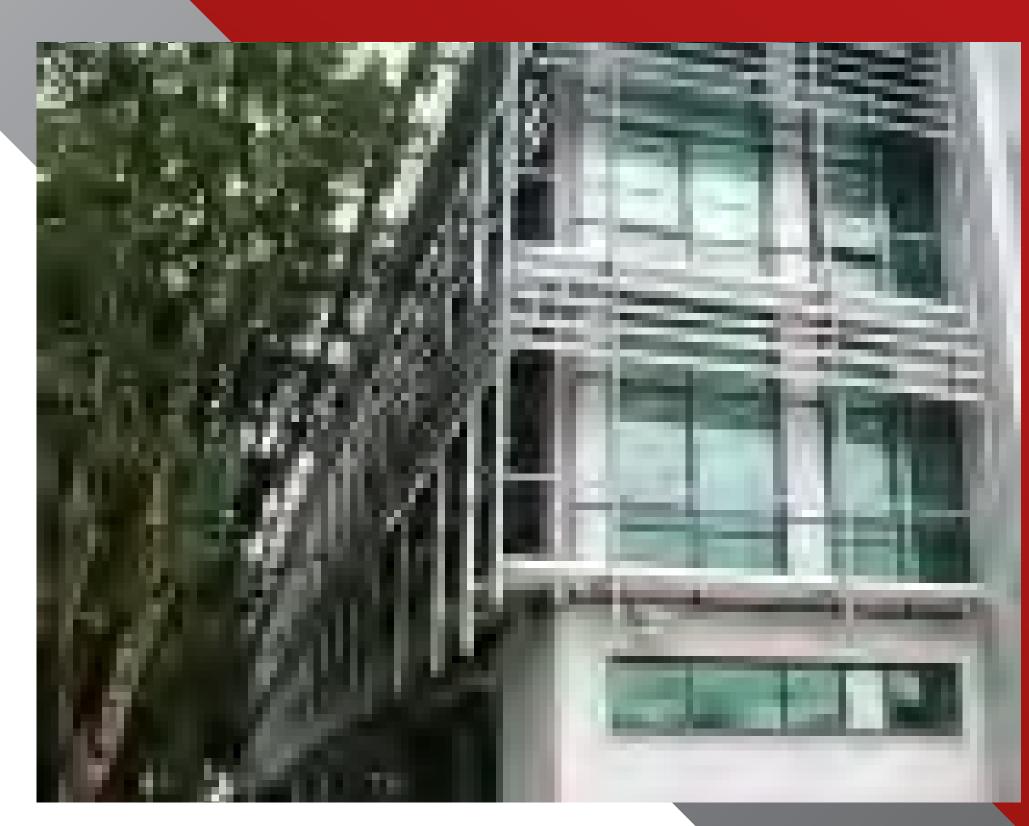


PLAN VIEW









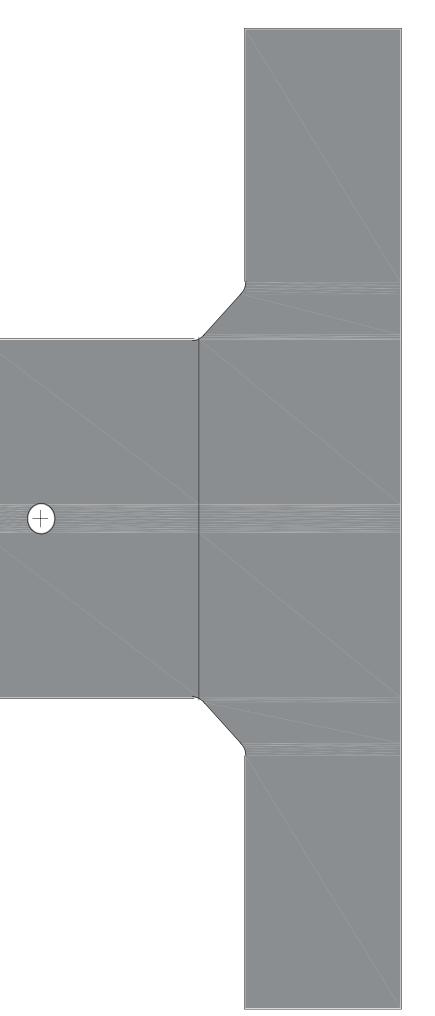




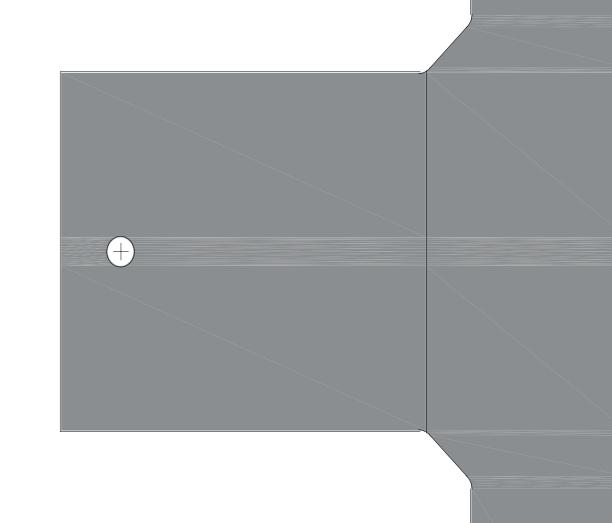
VERTICAL SYSTEM

SITE INSTALLATION

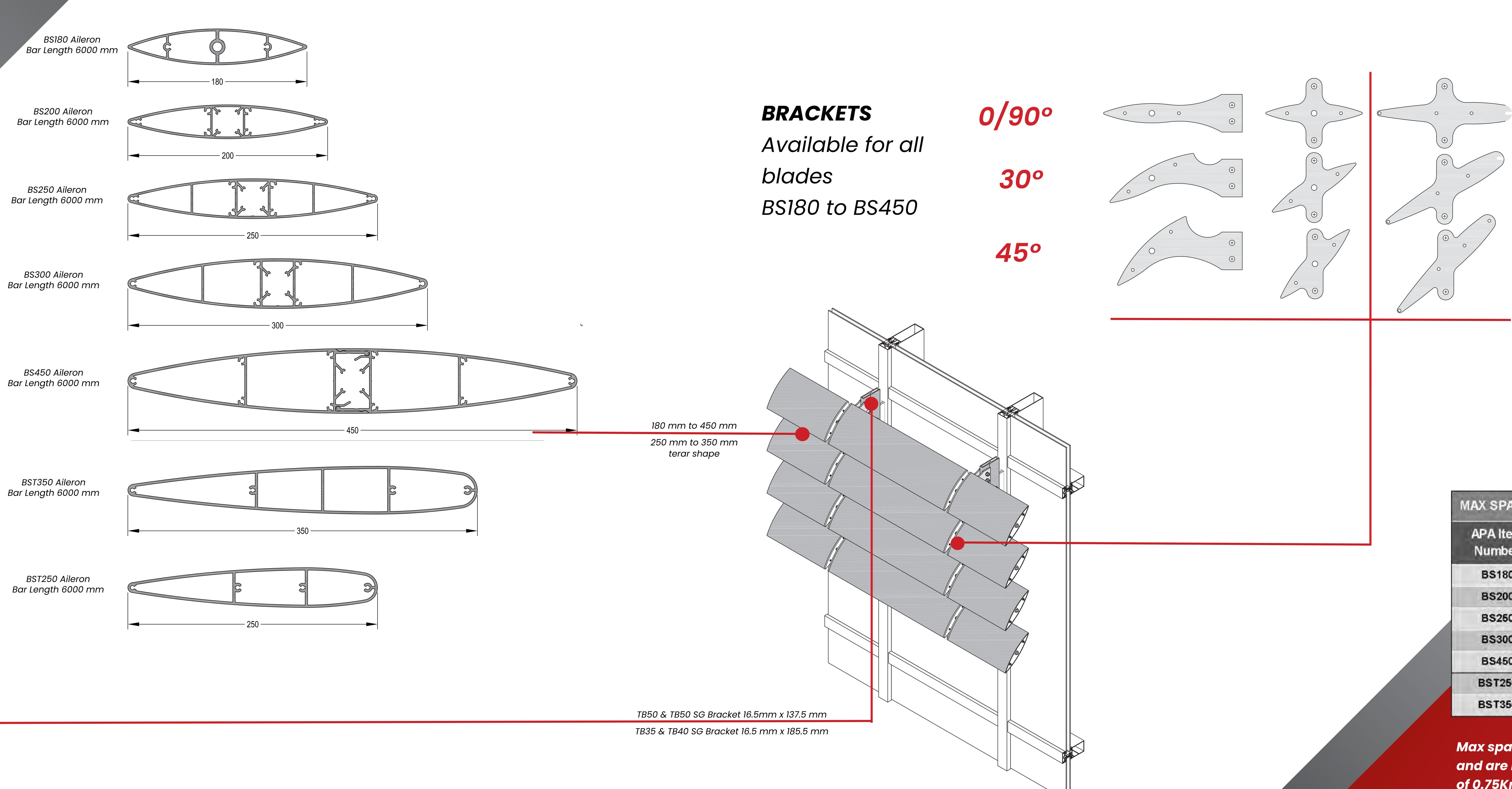
Horizontal or vertical positioning of the blades is limited only to the designer's imagination.



BS100C Bracket for TB50 & TB50 SG BS90V Bracket Adaptor



BS100B Bracket for TB35 & TB40





BRACKETS

Available for all blades BST250 & BST350

MAX SPANS FOR BLADES IN A HORIZONTAL POSITION

APA Item Number	Blade Size		Max. Blade Span in mm		
	Width	Height	0/90	30	45
BS180	180	36	2750	2725	2675
BS200	200	34	3365	3325	3275
BS250	250	40	3825	3800	3725
BS300	300	50	4400	4380	4300
BS450	450	65	5500	5400	5100
BST250	250	40	3800	3775	3700
BST350	350	48	5000	4900	4875

Max spans given are to be used for guidance only and are based on a combined snow and wind load of 0.75Kn/m². An engineer should be consulted if the parameters of the design differ from this.

Sustainability

Our profiles are manufactured with a significant proportion of recycled aluminium, reinforcing our commitment to sustainable manufacturing practices. Recycling aluminium requires 95% less energy and thus produces 95% fewer greenhouse gas emissions than produced during primary production, whilst still retaining 100% of its mechanical properties.

At APA, our window systems are fabricated with expandable cast cleats and secured with conical screws. This allows them to be dismantled, recycled, reproduced and reused, contributing to the circular economy of the construction industry.

Our profiles have been installed on LEED Platinum and BREEAM outstanding certified projects - representing the pinnacle of sustainable building standards.

Environmental Product Declarations

Each of our products are accompanied by an Environmental Product Declaration (EPD). An EPD is a comprehensive document that provides detailed information about the environmental impacts and sustainability of a specific product throughout its entire life cycle.

We developed EPD's as a valuable tool for sustainability-conscious architects and contractors to help them make informed decisions that align with the sustainability goals of the project.

Locations

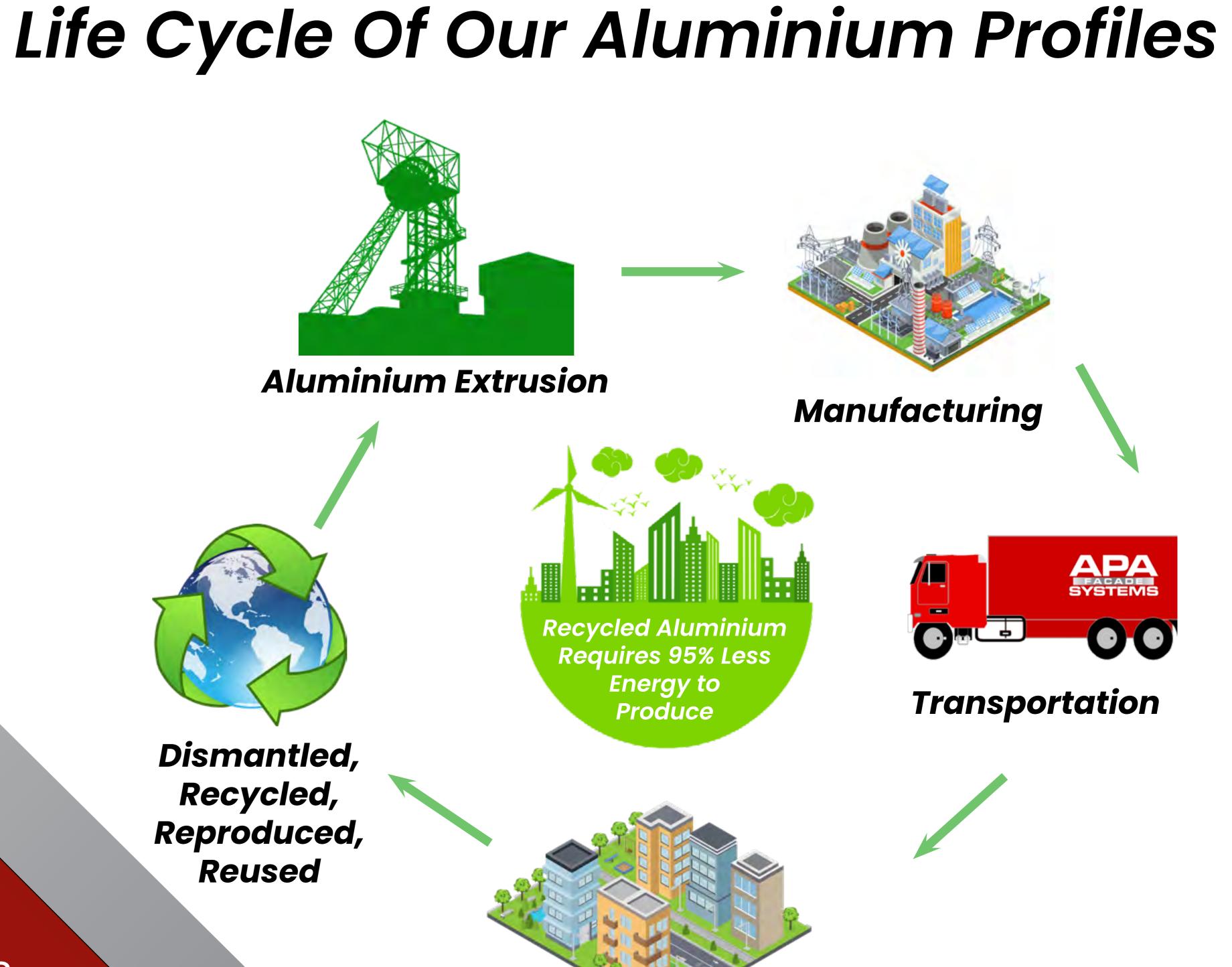
<u>Dublin</u>

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INFO@APAFACADESYSTEMS.COM









Dismantled, Recycled, Reproduced, Reused





Installation

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