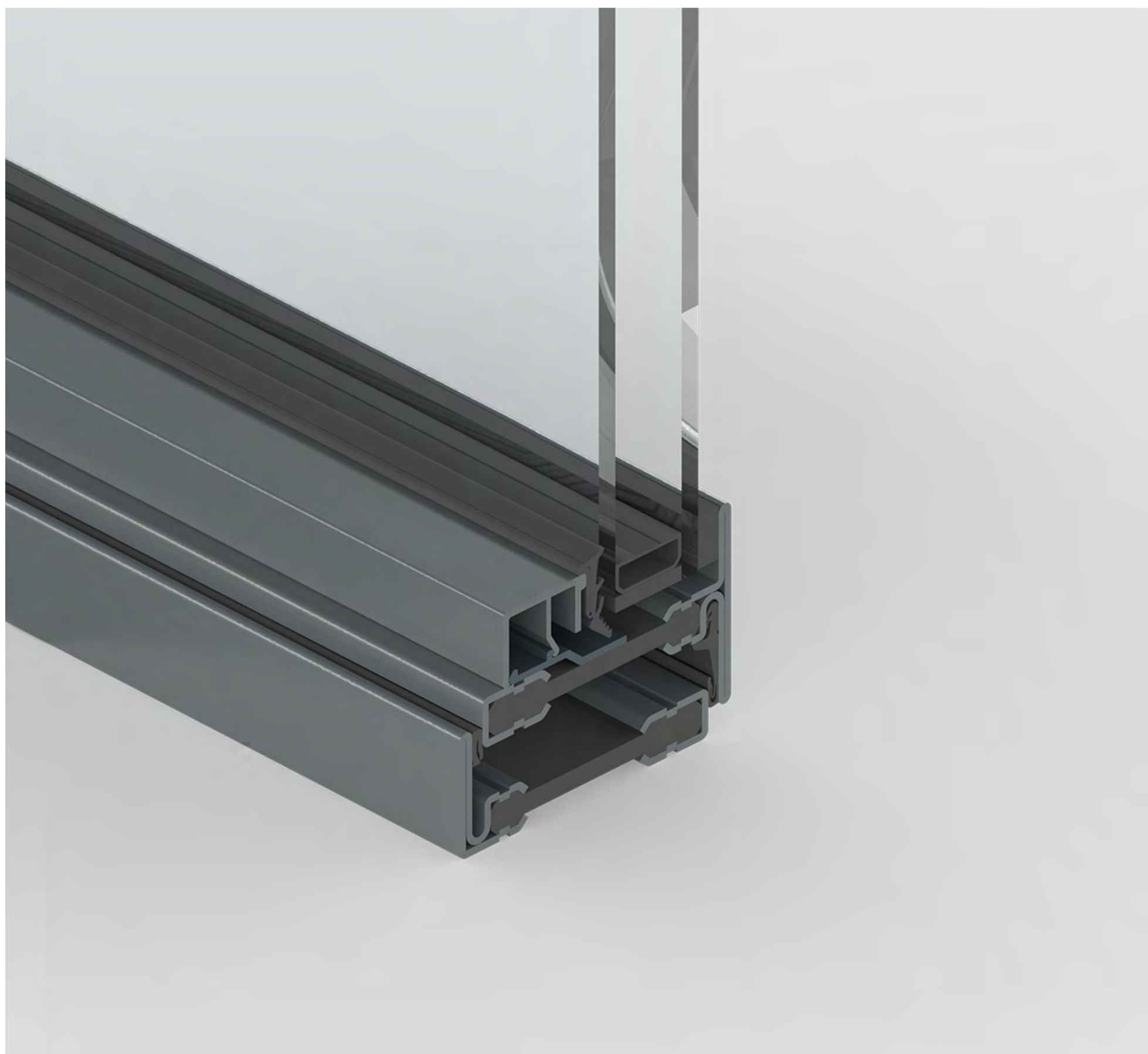


Slimline Steel



G2

Energy efficient thermally broken
steel windows & doors



Slimline Steel G2

High-performance technology with a classical appearance

Blending advanced thermal insulation with timeless steel craftsmanship, the Perla G2 system introduces the next generation of slimline windows and doors. Its thermally broken profiles, available in galvanised steel, stainless steel and Cor-Ten steel, provide durability and style. Whether revitalizing a historic building or complementing a modern home, Perla G2 offers a range of opening types, remarkable energy efficiency, and sleek, narrow face-widths.

Key features



1.4 W/m²K uValue
Highly energy efficient slimline steel profiles



Up to 2.5m Vent Height
Large vent sizes allow for total design freedom



RAL Finishes
Powder-coated finishes in any RAL classic colour



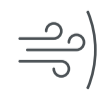
Sound Insulation
Cancels out exterior noise up to 45db (-1; -5)



Thermal Barrier
Heat-resistant glass fibre reinforced insulating bars



Burglary Resistance
Tested in accordance with EN 1627 up to RC2



2000Pa Wind Load
Certified C5 Class to meet EN 12210



600Pa Air Permeability
Certified 4 Class to meet EN 12207



600Pa Water Tightness
Certified 9A Class to meet EN 12208

Project: Bellview House
Architect: McLaren.Excell
Photographer: Johan Dehlin

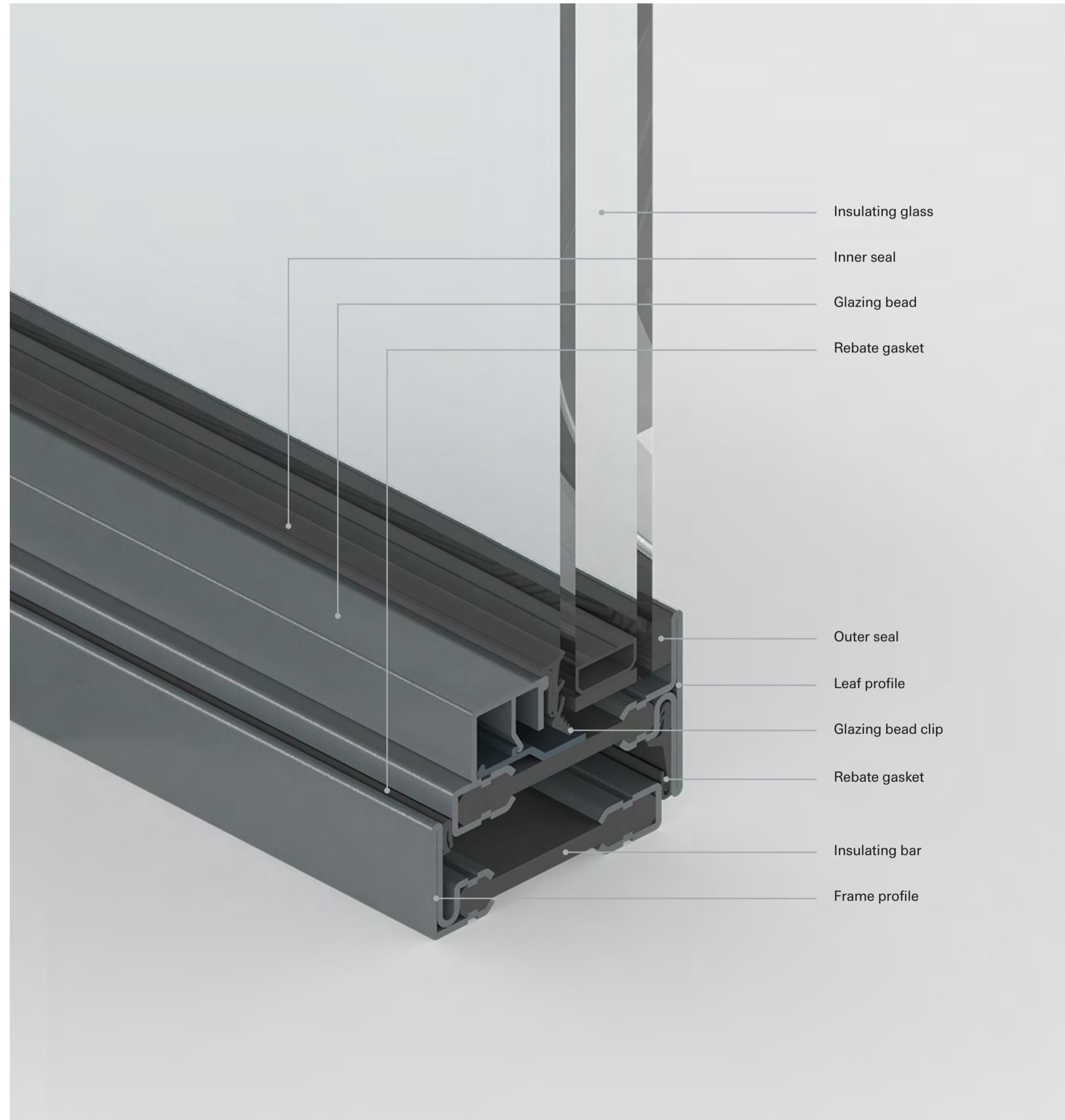


Overview

Perla
Slimline Steel G2
System overview

Advanced profile design and construction

1. Cold formed and sharp-edged 1.5mm tubular profiles
2. Very compact profiles with minimal depth and sightlines
3. Mechanically fixed rebate gaskets
4. Profile depth compatible with insulating glass up to 47 mm
5. High performance thermal barrier
6. Wide range of steel and aluminium glazing beads — rectangular, triangular and double "L" shape
7. Large range of specific fittings, including both visible and concealed hinges
8. Side-hung, single and double leaf inward or outward-opening windows and doors. Bottom-hung windows inward-opening. Top-hung and projected top-hung windows, outward-opening. Fixed glazing.



Distinctive narrow face-width
With a construction depth of 65 mm, the face width of the leaf and frame is just 45 mm, adding up to a slim 60 mm in the face plate.

65 mm
profile depth

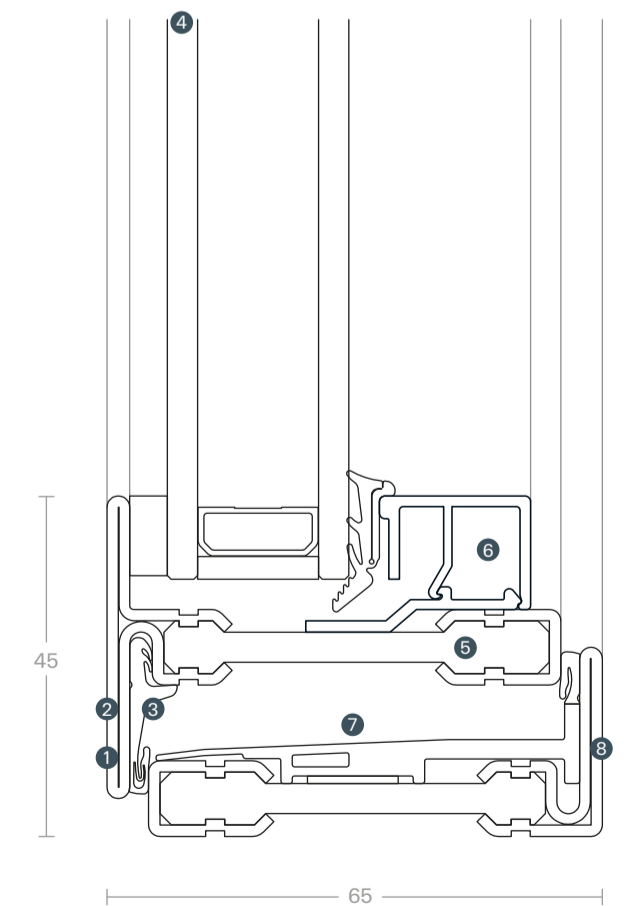
60 mm
face plate

Maximum dimensions
Element sizes of up to 1000 mm width x 2500 mm height per leaf (mx 150 kg leaf weight)

100 cm
mx leaf width

250 cm
mx leaf height

150 kg
mx leaf weight



Drawing scale 1:1

Finishes

Perla
Slimline Steel G2
Materials & Finishes

Powder Coated Steel

A versatile canvas to express your style without limits

Coating steel, including stainless steel, fulfills two key roles. Technically, it boosts the material's resistance to corrosion, while design-wise, it opens up endless possibilities for customization. This enables the creation of frames that align seamlessly with any architectural aesthetic. From traditional RAL colours to innovative, textured finishes, coated steel merges steel's strength with superior visual and mechanical qualities.

Classic Steel

Natural, uniform texture with a distinctive raw character

Cold-rolled steel profiles – whether galvanized or bright – feature a consistent texture that is ideal for a variety of finishes. Techniques like light brushing or blackening offer an alternative to traditional painting, providing a high degree of customization for the frame. The corners of cold-rolled steel doors and windows are always welded. Depending on the desired look, welds can be ground flat, left in their natural state, or highlighted with brushing or blackened using specialized patinas.

Cor-Ten Steel

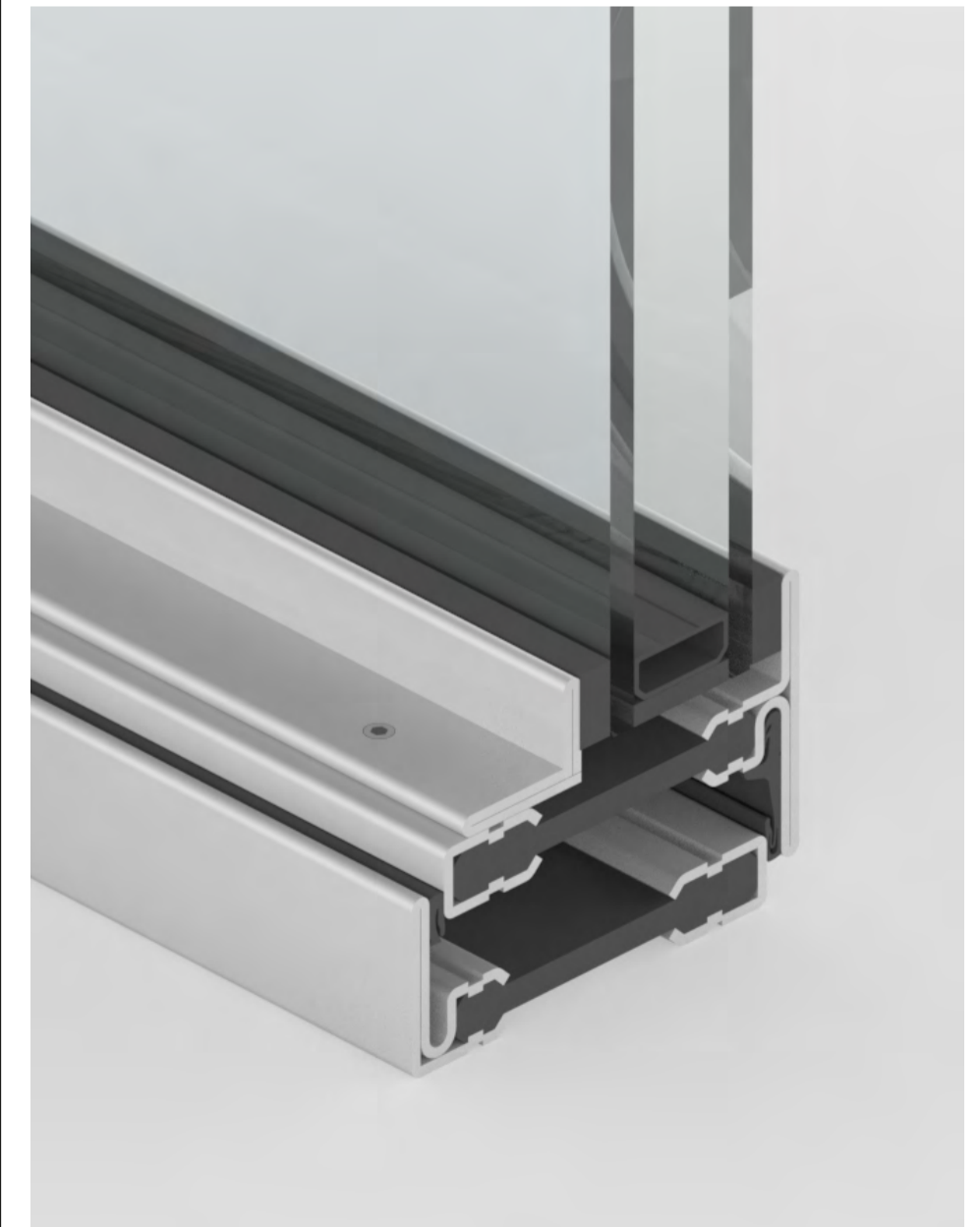
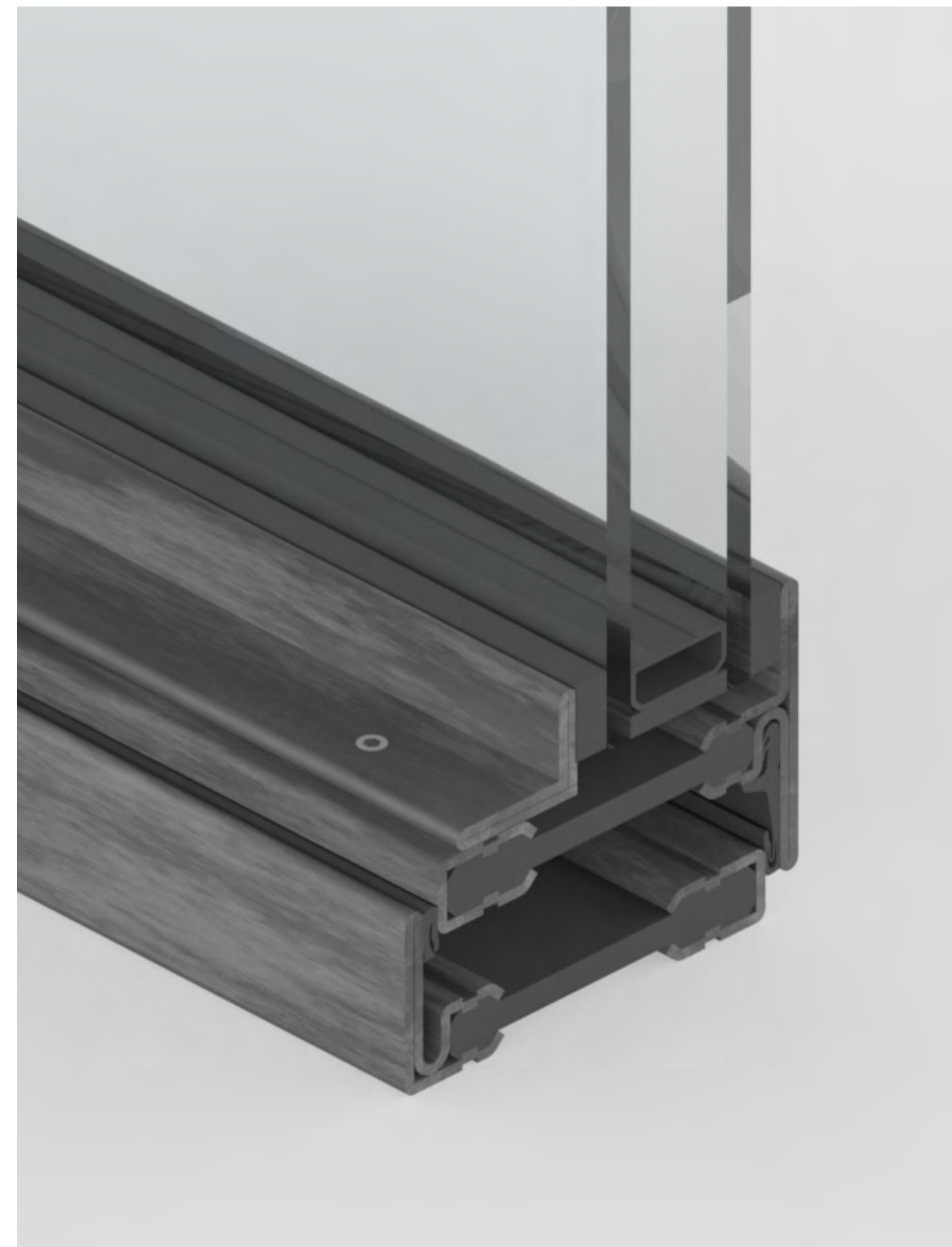
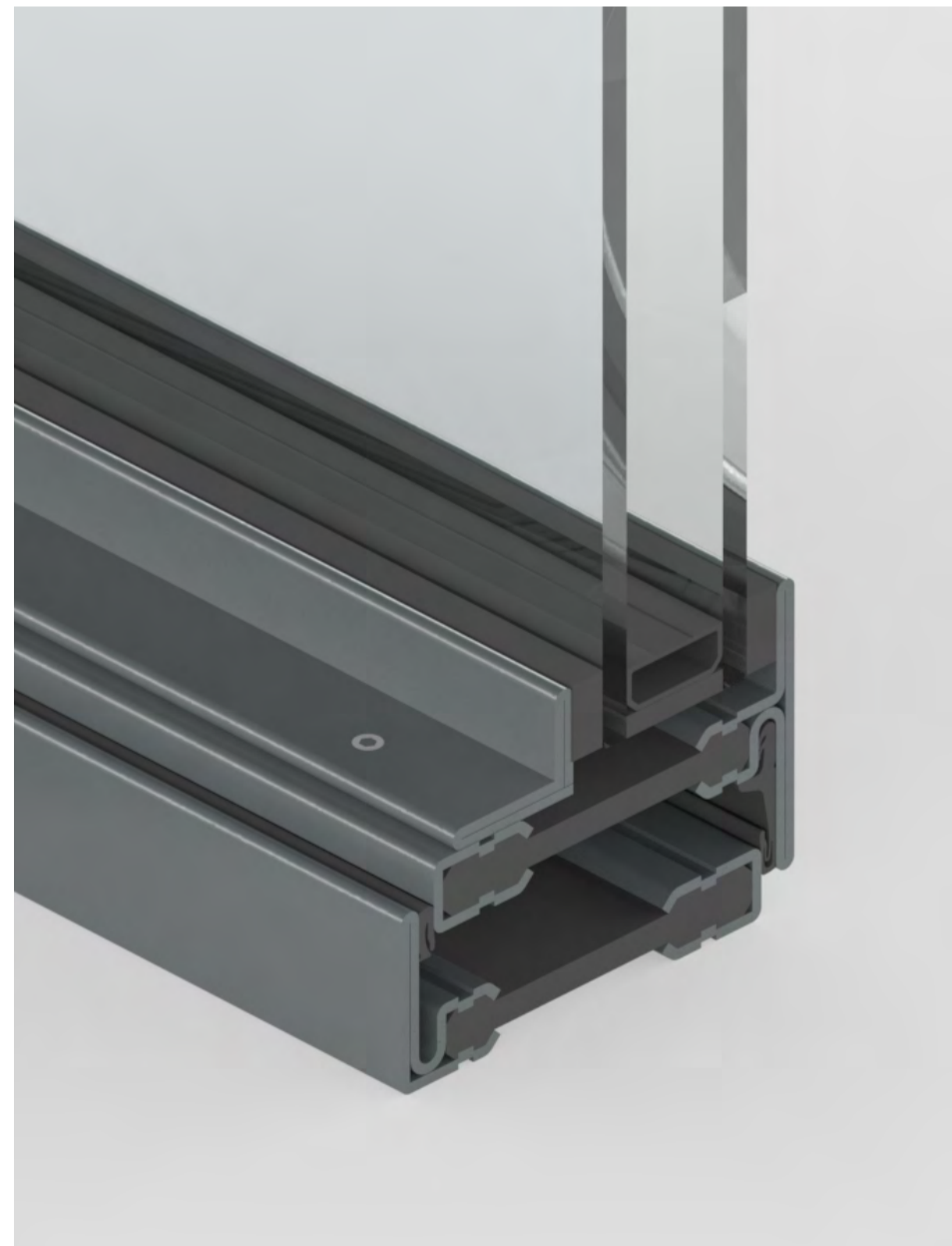
The ultimate combination of durability, hardness and style

Cor-Ten is a material celebrated for its remarkable visual impact and refined elegance, making it highly sought after for windows and doors in renovation and restoration projects. As a natural, living material, Cor-Ten takes on distinctive shades through its exposure to the elements. The oxidation process can be regulated with periodic applications of waxes or oils. The corners of the frames are welded, with the welding marks either left in their raw form or smoothed flat for a polished finish.

Stainless Steel

Unique, captivating and the highest expression of luxury

With its exceptional technical properties and long-lasting durability, stainless steel is a material of great popularity. Known for its metallic sheen, stainless steel allows for a wide range of design options, including finishes like black stainless steel. The natural and evocative texture of black stainless steel adds an exclusive character to windows and doors. The corners of windows and doors made from cold-rolled stainless steel profiles are welded, ground flat, and polished for a flawless finish.



Mullions

TDL mullions

Timeless industrial style and seamless construction

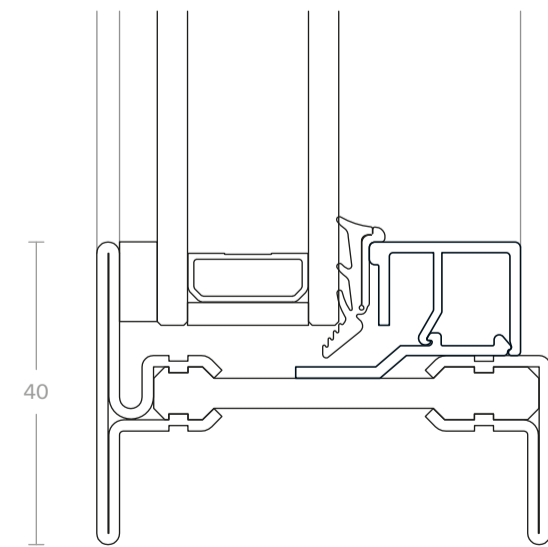
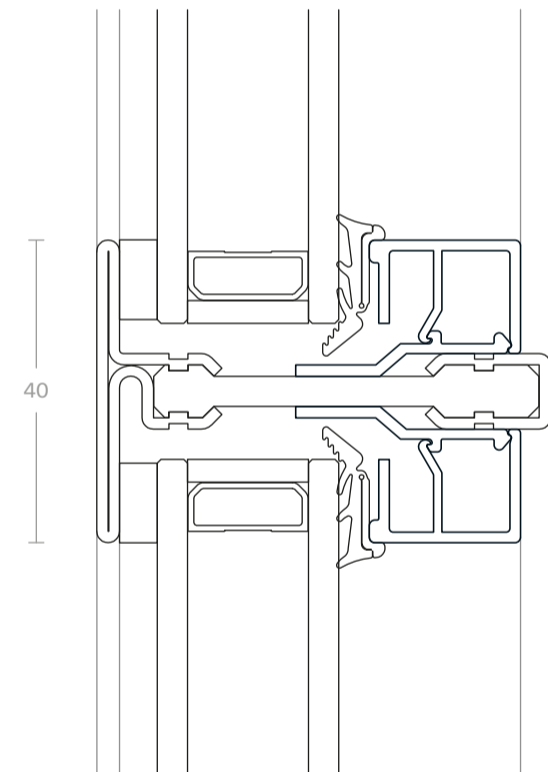
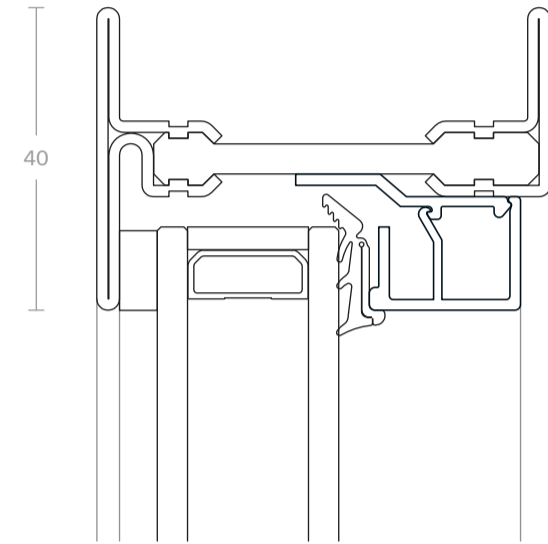
TDL mullions are a fundamental feature of the frame, designed to break up the depth of the frame and separate the glazing sections.

The interface between TDL mullions and the frame is flawlessly seamless, with joints that are expertly welded, polished, and finished to ensure a smooth, unified appearance with no visible seams.

While TDL mullions can support a wide range of design patterns, special attention should be given to glass size and weight. Ensuring the configurations are not top-heavy is essential for structural balance.

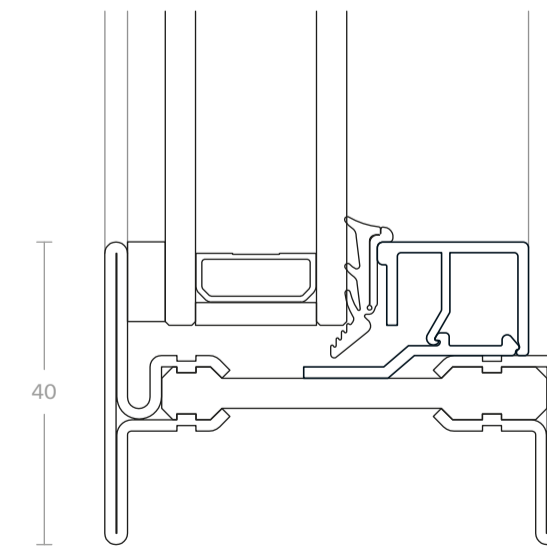
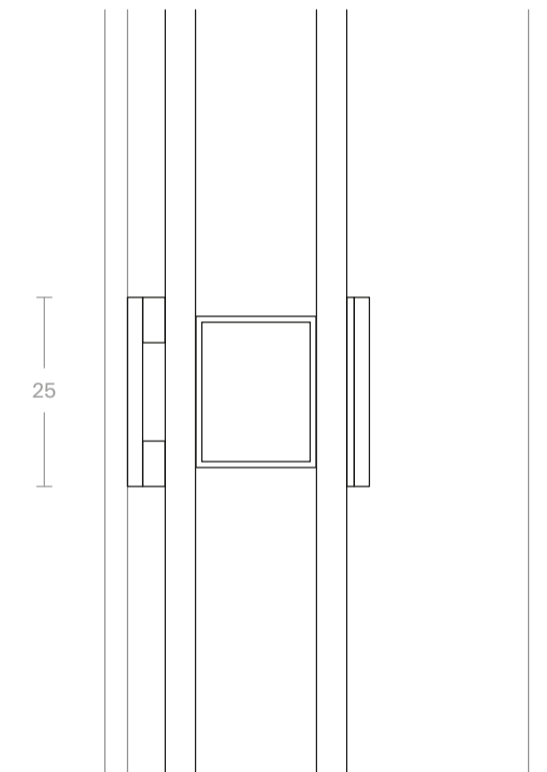
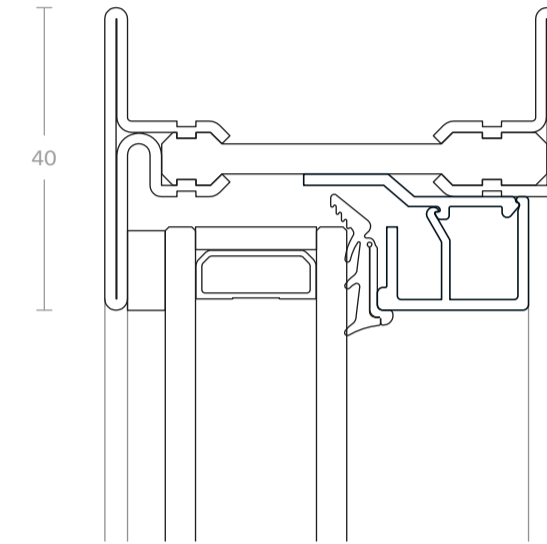
250 cm
mx leaf height

40 mm
glazing bar



Drawing scale 1:1

Perla Slimline Steel G2 Design options



Drawing scale 1:1

SDL mullions

Total design freedom with the slimmest sightlines

SDL mullions feature a glazing bar that is adhered directly to the surface of the glass unit. The glazing unit is full-sized, completely filling the frame, with the glazing bars applied in any configuration. The patterns can be as intricate as needed or tailored to match the design of existing buildings.

In contrast to TDL mullions, which are seamlessly welded to the frame, SDL mullions display a small joint between the glazing bar and the gasket. The glazing bar sits flat against the glass, while the surrounding frame has a slight relief, creating a subtle distinction between the two elements.

230 cm
max.leaf height

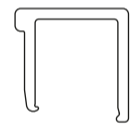
25 mm
glazing bar



Glazing Beads

Perla
Slimline Steel G2
Design options

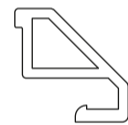
G2 405.021
Material Aluminium
Dimensions 15mm (w) × 15mm (h)
Finishes Powder coated



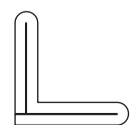
G2 406.930
Material Aluminium
Dimensions 15mm (w) × 15mm (h)
Finishes Powder coated



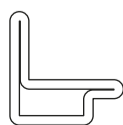
G2 406.931
Material Aluminium
Dimensions 15mm(w) × 15mm (h)
Finishes Powder coated



G2 402.190
Material Classic steel, Stainless steel, Cor-Ten steel
Dimensions 15mm (w) × 15mm (h)
Finishes Raw, powder coated



G2 62.510
Material Classic steel
Dimensions 15mm (w) × 15mm (h)
Finishes Raw, powder coated



Hinges

Perla
Slimline Steel G2
Design options

3D Screw-on hinge
Material Steel
Dimensions 15mm (w) × 110mm (h)
Finishes Raw, powder coated



3D Screw-on hinge
Material Matt stainless steel
Dimensions 15mm (w) × 110mm (h)
Finishes Raw, powder coated



3D Screw-on hinge
Material Matt stainless steel
Dimensions 15mm (w) × 110mm (h)
Finishes Raw, powder coated

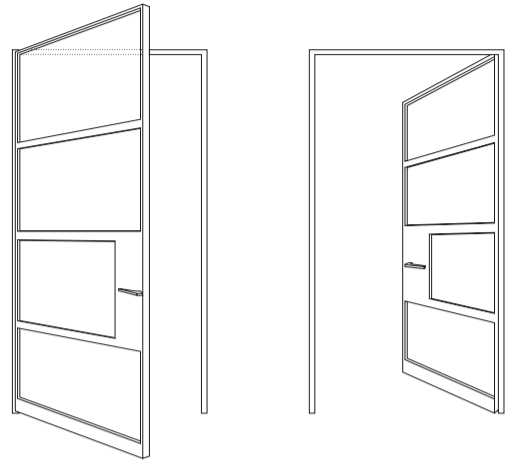


3D Screw-on hinge
Material Matt stainless steel
Dimensions 15mm (w) × 110mm (h)
Finishes Raw, powder coated

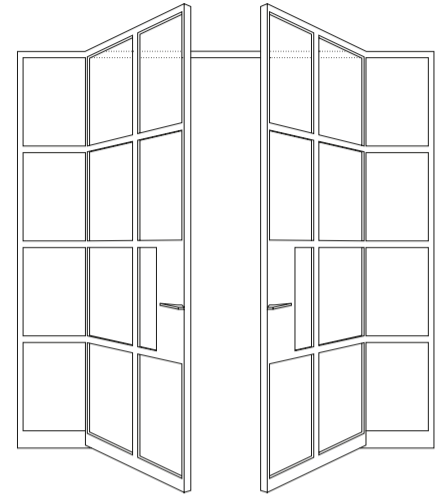


Doors & windows
Type overview

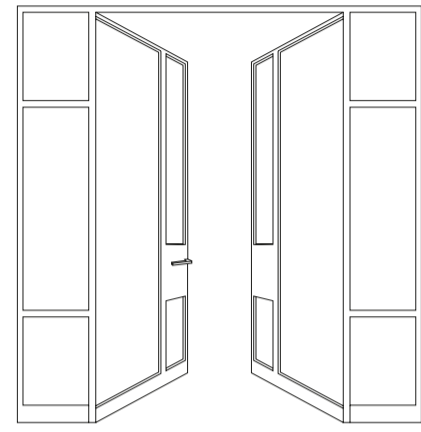
Perla
Slimline Steel G2
Type overview & dimensions



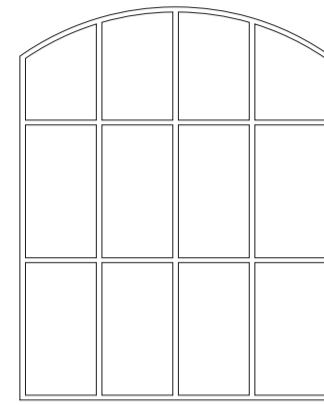
Single leaf inward / outward opening door



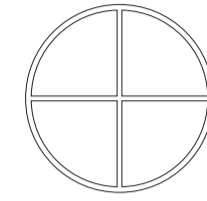
Double leaf inward opening door with side lights



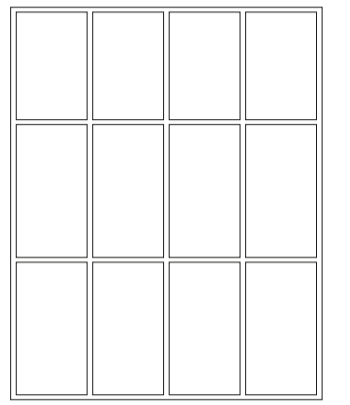
Double leaf outward opening door with side lights



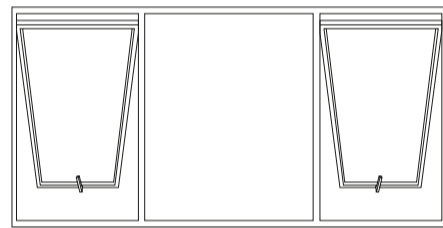
Fixed Glazing



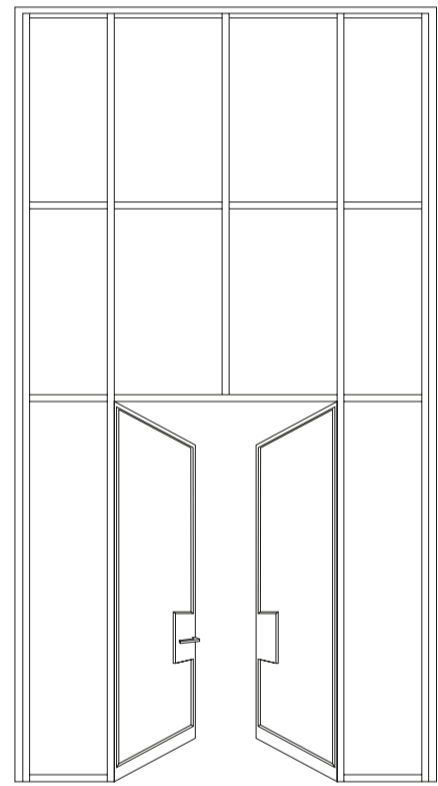
Fixed Glazing



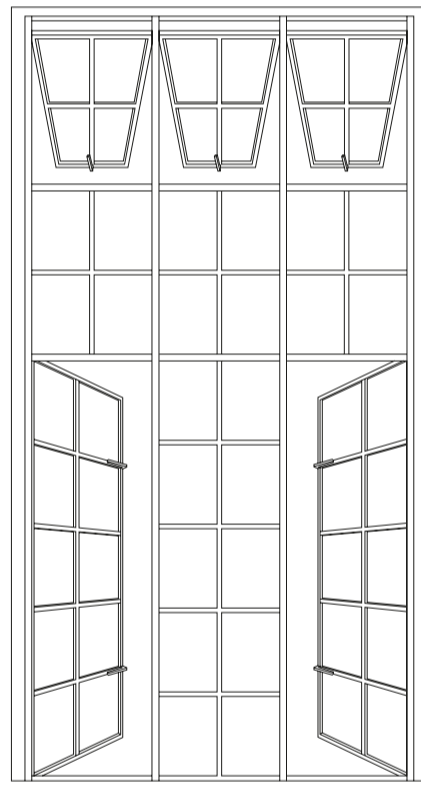
Fixed Glazing



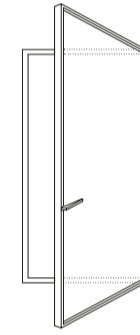
Fixed glazing with single leaf inward opening door with top hung windows



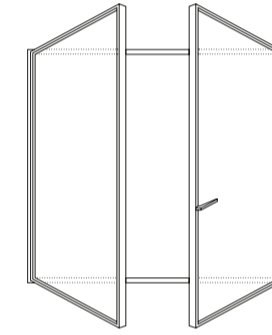
Curtain wall with double leaf outward opening door and top hung windows



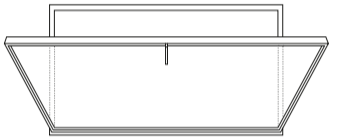
Industrial sidewall windows and historical curtain walls



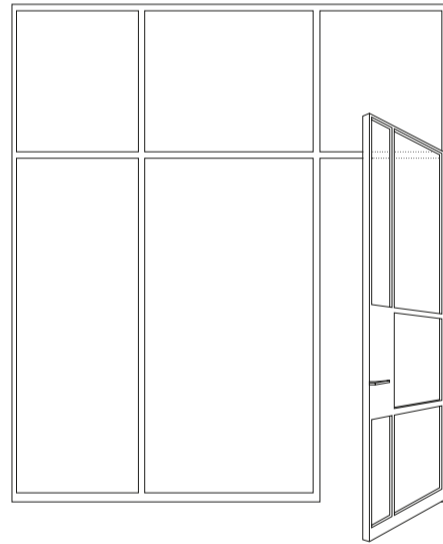
Single leaf inward opening side hung window



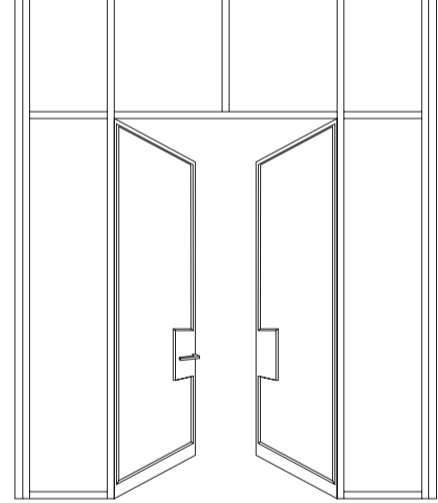
Double leaf inward opening side hung window



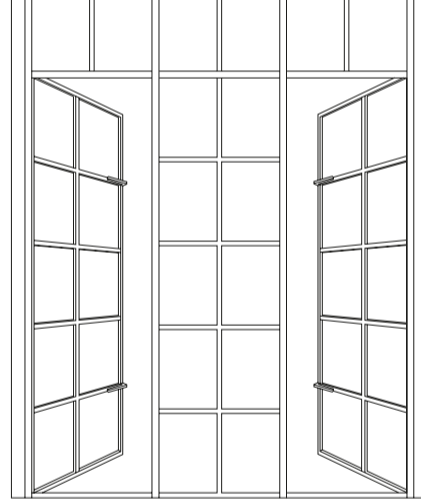
Inward opening bottom hung window



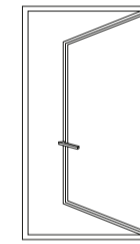
Fixed glazing with single leaf outward opening door



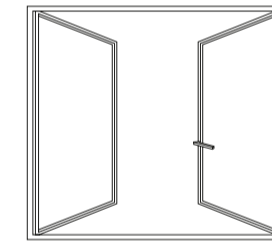
Curtain wall with double leaf outward opening door and top hung windows



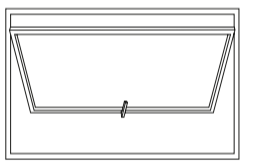
Industrial sidewall windows and historical curtain walls



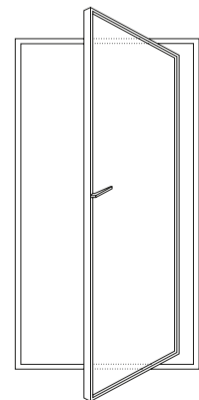
Single leaf outward opening side hung window



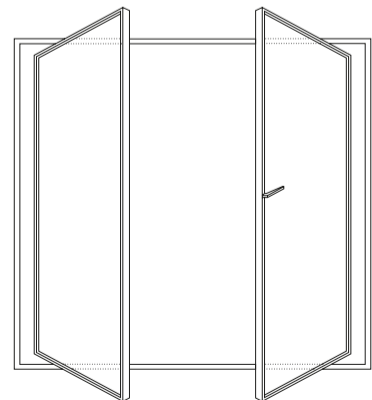
Double leaf outward opening side hung window



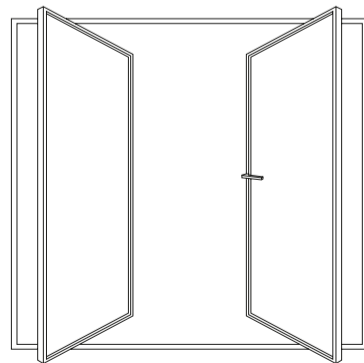
Outward opening top hung projecting window



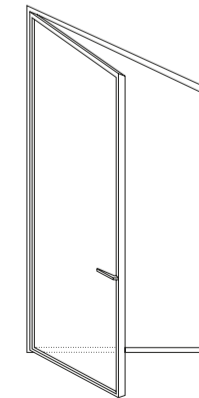
Single leaf inward / outward opening pivot door



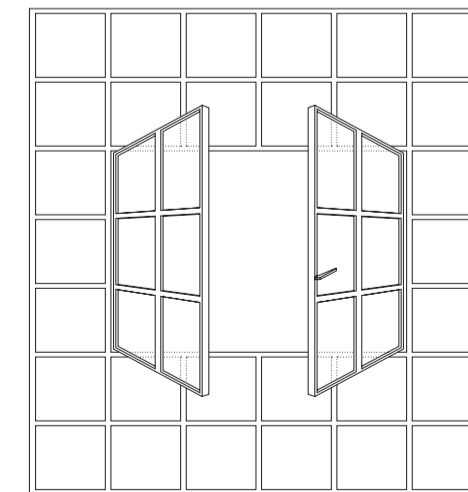
Double leaf inward / outward opening pivot door



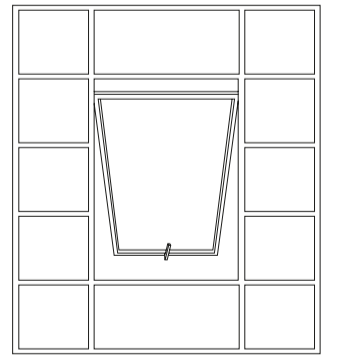
Double leaf inward / outward opening pivot door



For trapezoidal windows
Min angle of 80° on hinged side



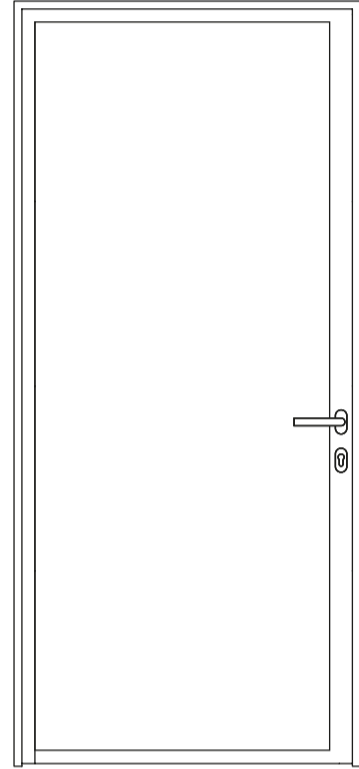
Double leaf inward opening side hung window in fixed glazing



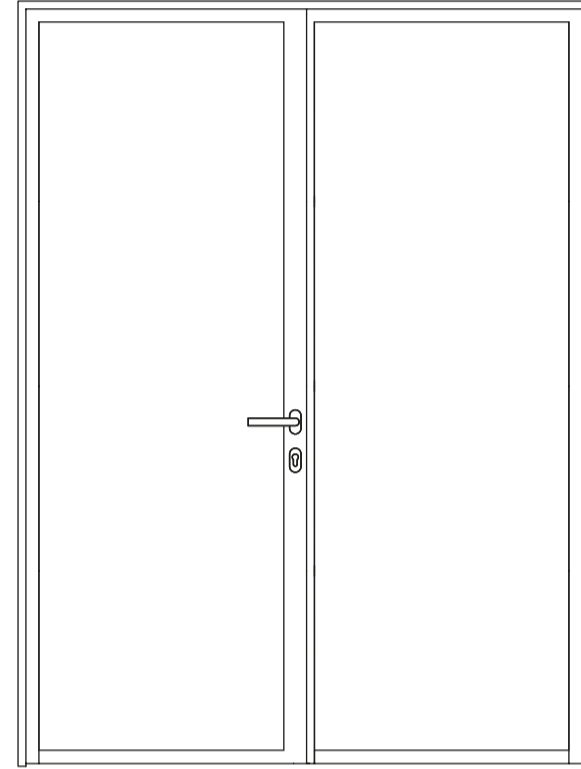
Outward opening top hung projecting window

Dimensions
Doors

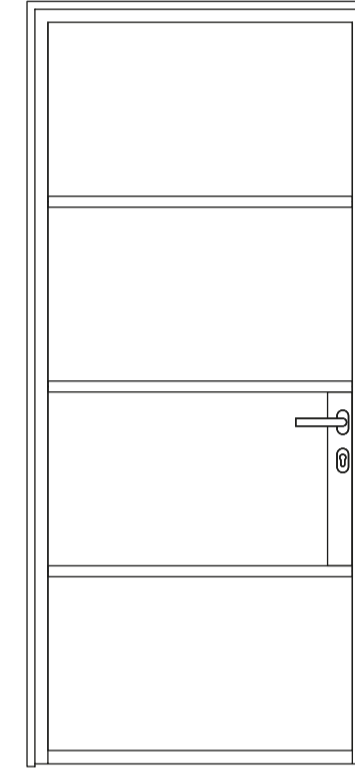
Perla
Slimline Steel G2
Type overview & dimensions



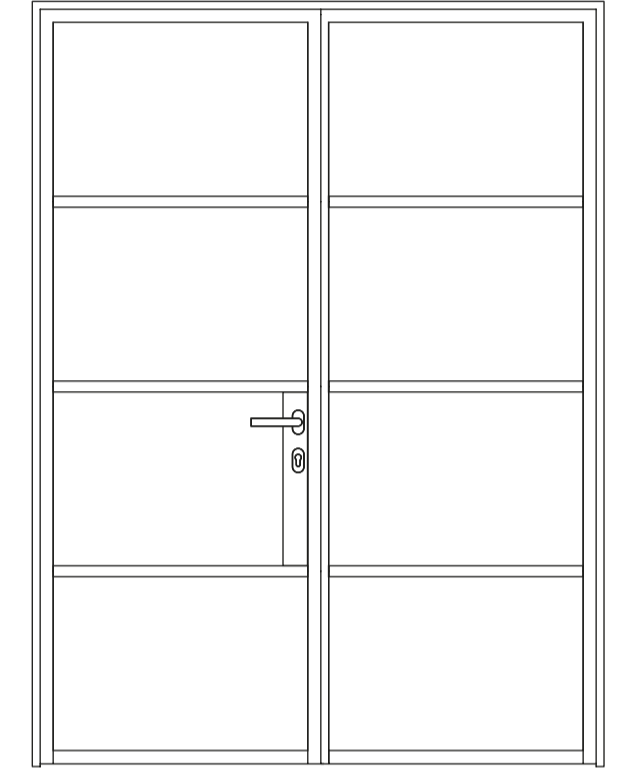
Single leaf door with widening on complete height on lock side
mn dimensions 700 mm (w) × 1800 mm (h)
mx dimensions 1250 mm (w) × 2500 mm (h)



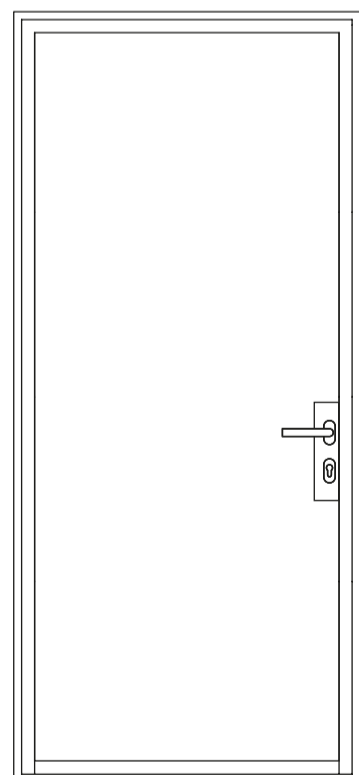
Double leaf door with widening on complete height on lock side
mn dimensions 1400 mm (w) × 1800 mm (h)
mx dimensions 2500 mm (w) × 2500 mm (h)



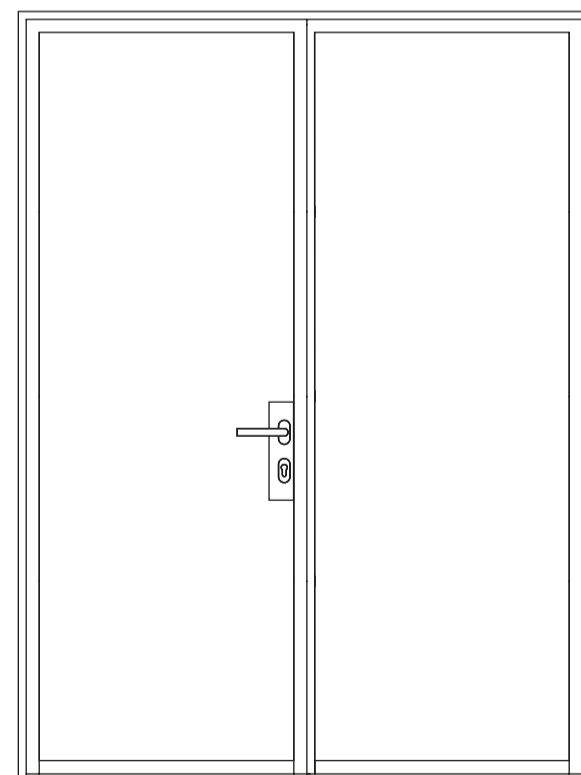
Single leaf door with TDL mullions and lock box
mn dimensions 700 mm (w) × 1800 mm (h)
mx dimensions 1000 mm (w) × 2300 mm (h)



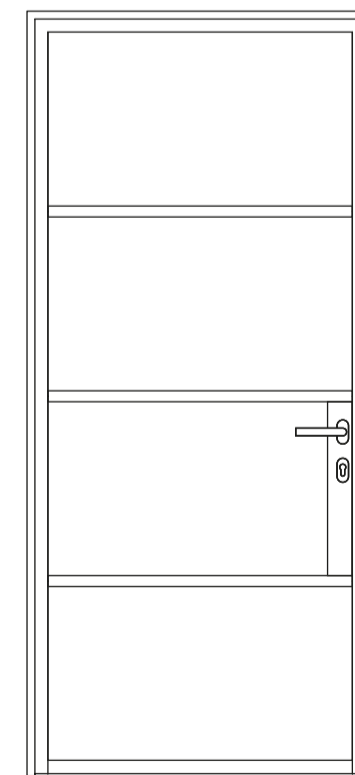
Double leaf door with TDL mullions and lock box
mn dimensions 1400 mm (w) × 1800 mm (h)
mx dimensions 2000 mm (w) × 2300 mm (h)



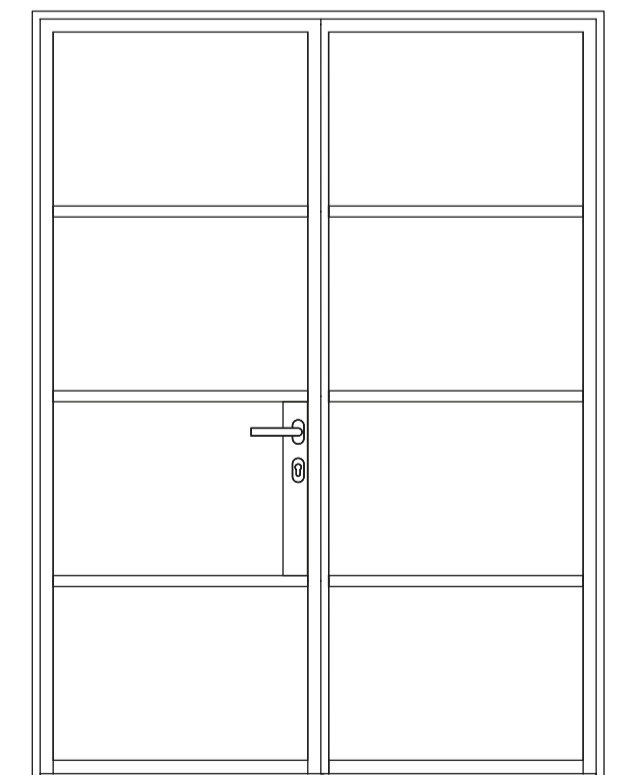
Single leaf door with floating lock box
mn dimensions 700 mm (w) × 1800 mm (h)
mx dimensions 1000 mm (w) × 2300 mm (h)



Double leaf door with floating lock box
mn dimensions 1400 mm (w) × 1800 mm (h)
mx dimensions 2000mm (w) × 2300 mm (h)



Single leaf door with SDL mullions and lock box
mn dimensions 700 mm (w) × 1800 mm (h)
mx dimensions 1000 mm (w) × 2300 mm (h)

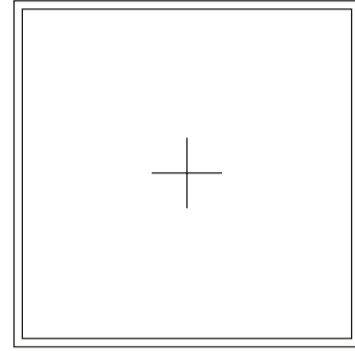


Double leaf door with SDL mullions and lock box
mn dimensions 1400 mm (w) × 1800 mm (h)
mx dimensions 2000 mm (w) × 2300 mm (h)

Dimensions Windows

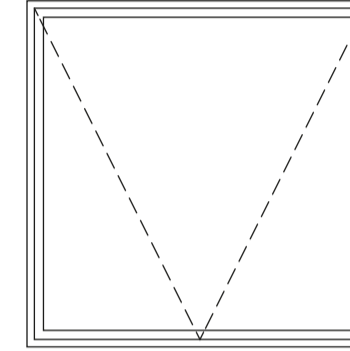
Perla Slimline Steel G2 Type overview & dimensions

Fixed window

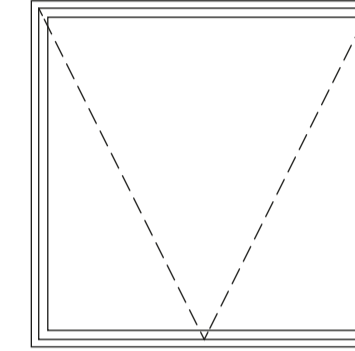


Single leaf outward opening
mn dimensions 300 mm (w) x 300 mm (h)
mx dimensions 1250 mm (w) x 2500 mm (h)

Top hung window

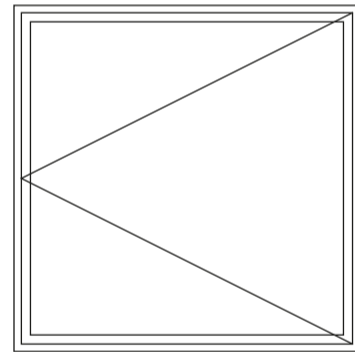


Outward opening
mn dimensions 370 mm (w) x 470 mm (h)
mx dimensions 1620 mm (w) x 650 mm (h)

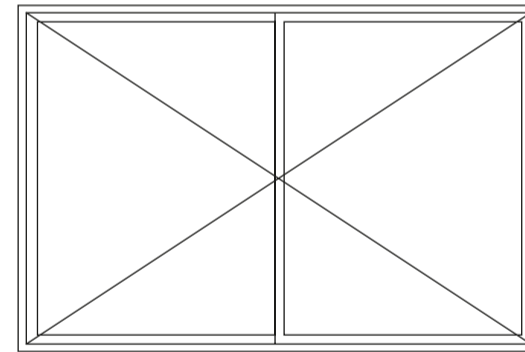


Projected outward opening
mn dimensions 300 mm (w) x 300 mm (h)
mx dimensions 1160 mm (w) x 1410 mm (h)

Side hung window

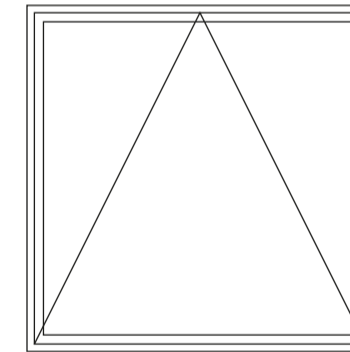


Single leaf inward opening
mn dimensions 370 mm (w) x 370 mm (h)
mx dimensions 970 mm (w) x 2370 mm (h)



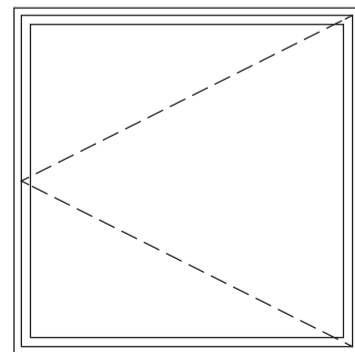
Double leaf inward opening
mn dimensions 720 mm (w) x 560 mm (h)
mx dimensions 1970 mm (w) x 2370 mm (h)

Bottom hung window

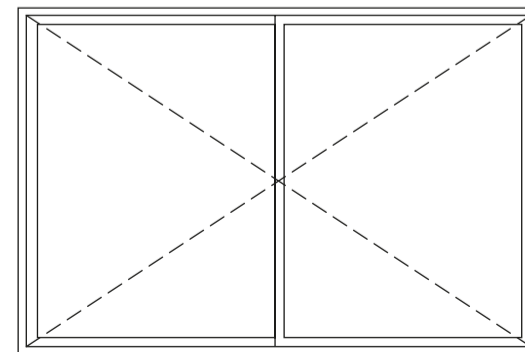


Inward opening
mn dimensions 370 mm (w) x 370 mm (h)
mx dimensions 2370 mm (w) x 970 mm (h)

Side hung window

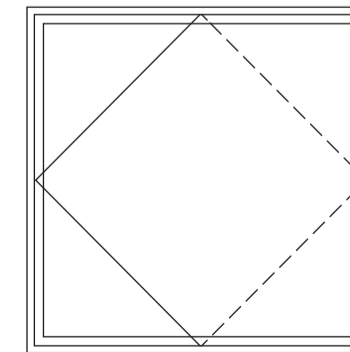


Single leaf outward opening
mn dimensions 470 mm (w) x 370 mm (h)
mx dimensions 970 mm (w) x 2370 mm (h)

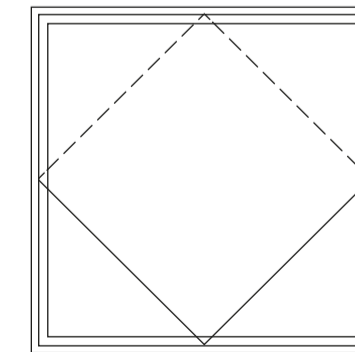


Double leaf outward opening
mn dimensions 820 mm (w) x 670 mm (h)
mx dimensions 1970 mm (w) x 2370 mm (h)

Pivot window



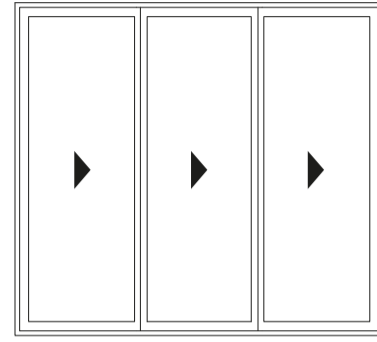
Vertical pivot
mn dimensions 570 mm (w) x 570 mm (h)
mx dimensions 1570 mm (w) x 1570 mm (h)



Horizontal pivot
mn dimensions 370 mm (w) x 570 mm (h)
mx dimensions 1370 mm (w) x 1570 mm (h)

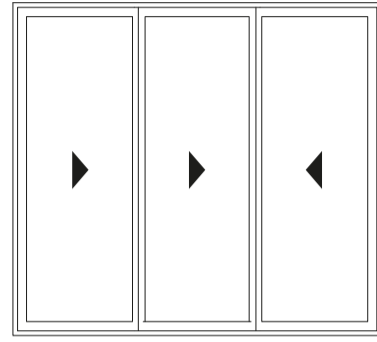
Opening Possibilities
Bifold doors

3 + 0



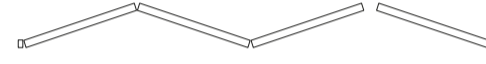
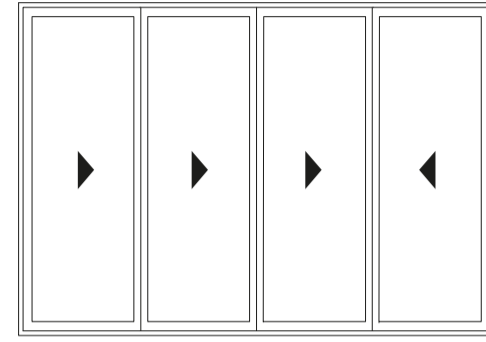
Max leaf dimensions
1000 mm (w) x 2500 mm (h)

2 + 1



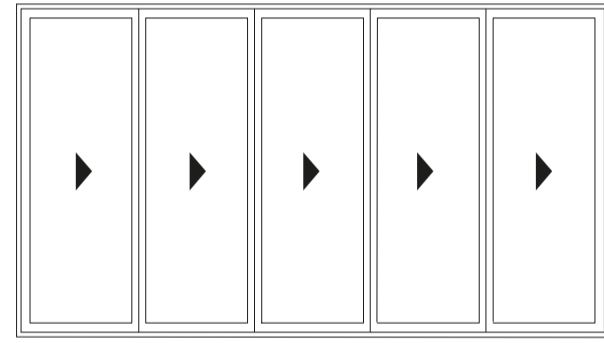
Max leaf dimensions
1000 mm (w) x 2500 mm (h)

3 + 1



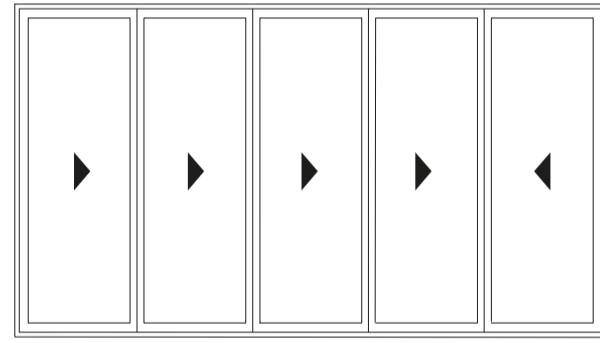
Max leaf dimensions
1000 mm (w) x 2500 mm (h)

5 + 0



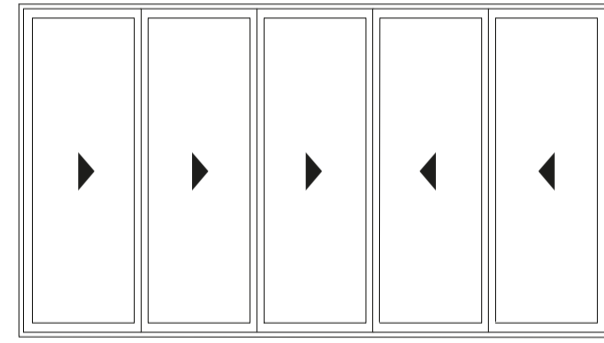
Max leaf dimensions
1000 mm (w) x 2500 mm (h)

4 + 1



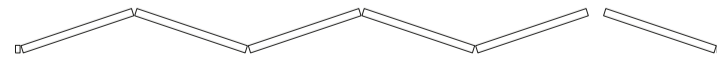
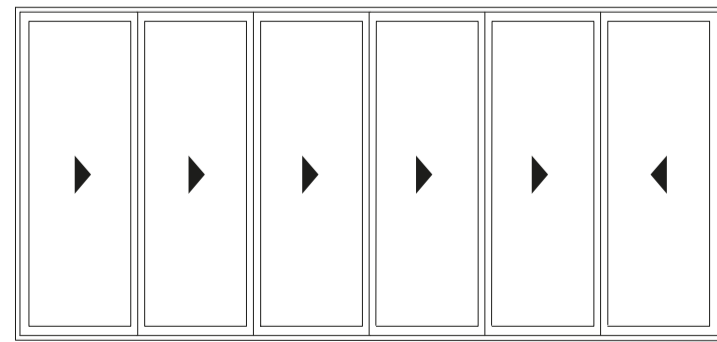
Max leaf dimensions
1000 mm (w) x 2500 mm (h)

3 + 2



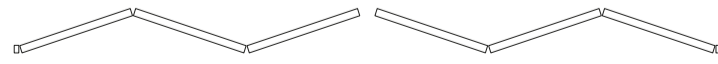
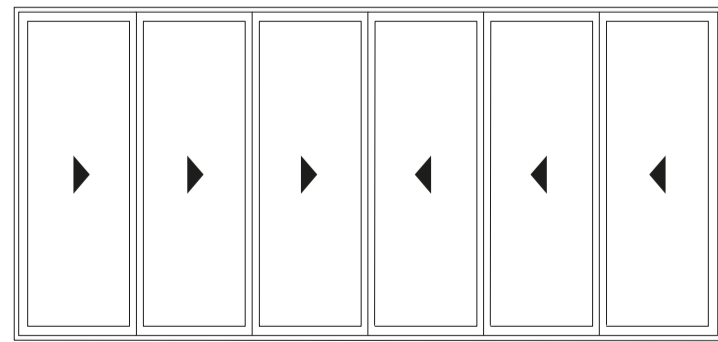
Max leaf dimensions
1000 mm (w) x 2500 mm (h)

5 + 1



Max leaf dimensions
1000 mm (w) x 3300 mm (h)

3 + 3



Max leaf dimensions
1000 mm (w) x 3300 mm (h)



Project: Chepstow Road
Architect: EMR Architects
Photographer: 82mm Photography

Outward-opening door
Threshold options

Perla
Slimline Steel G2
Example Drawings

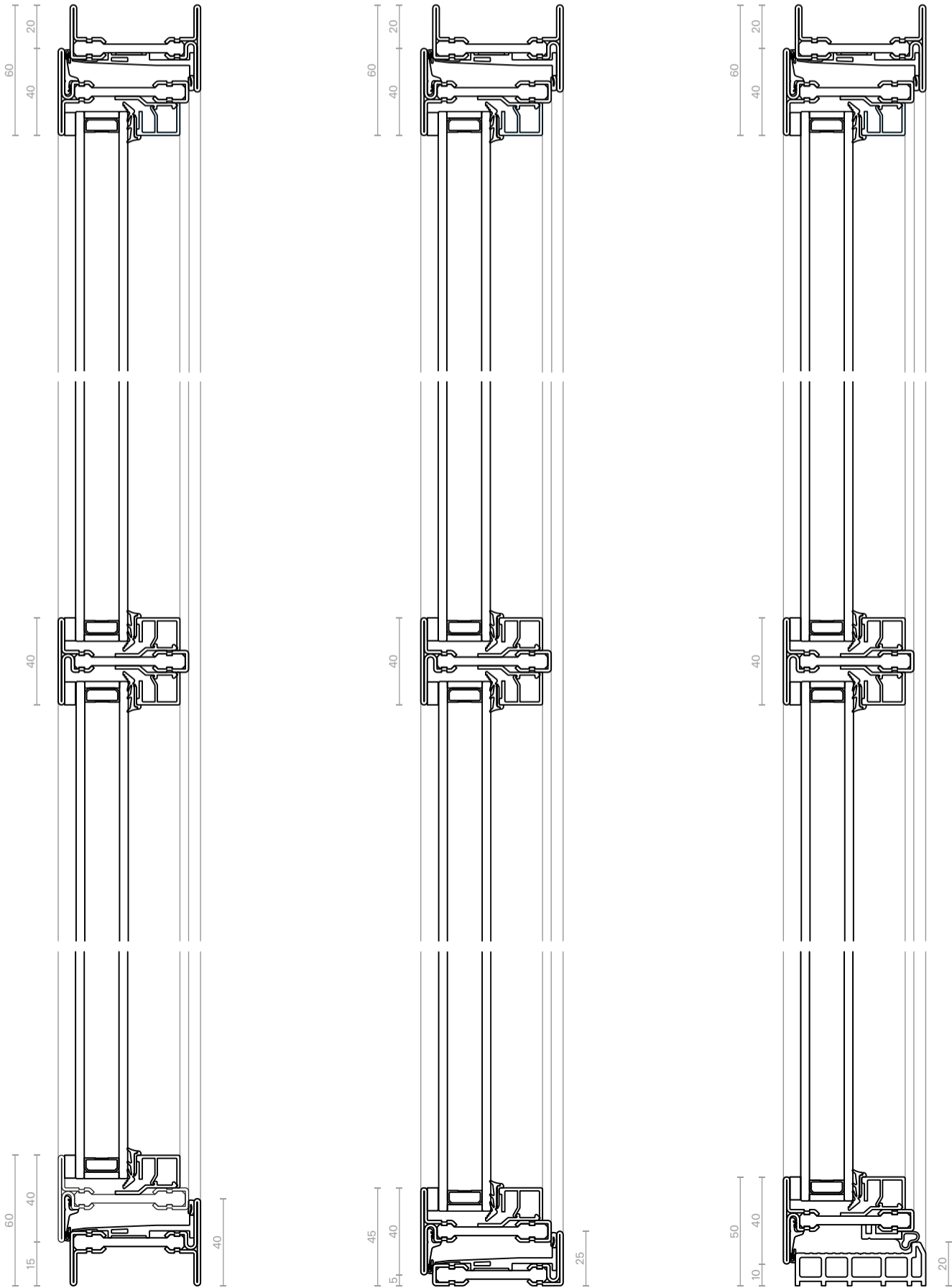
Outward-opening door
Full vent

Perla
Slimline Steel G2
Example Drawings

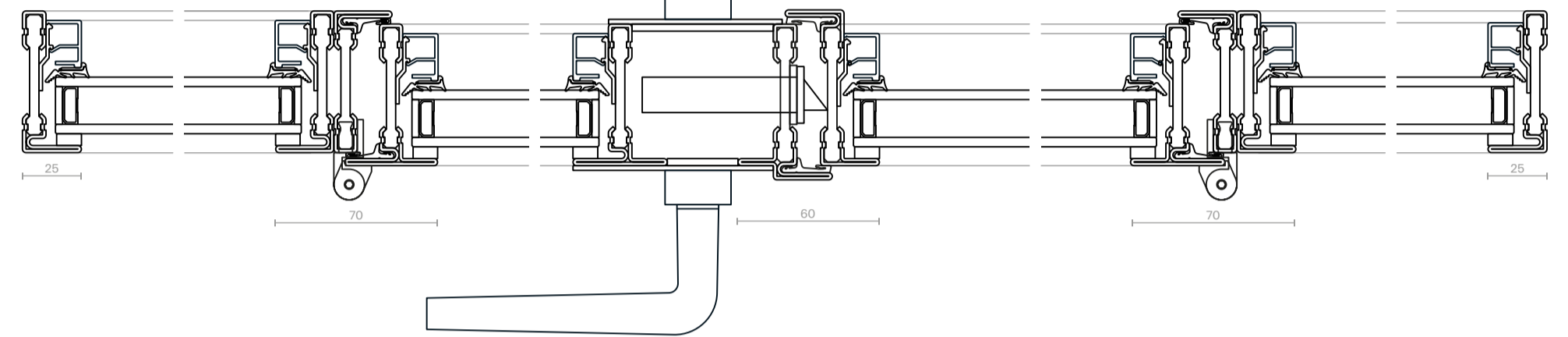
40 mm
Threshold

25 mm
Threshold

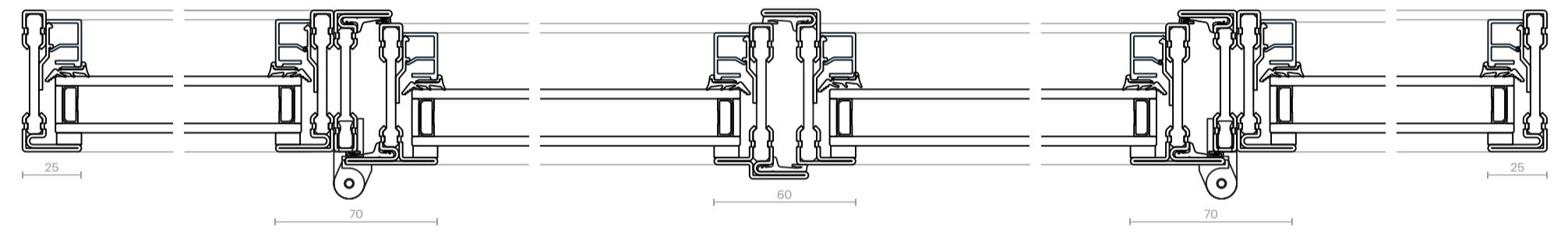
20 mm
Threshold



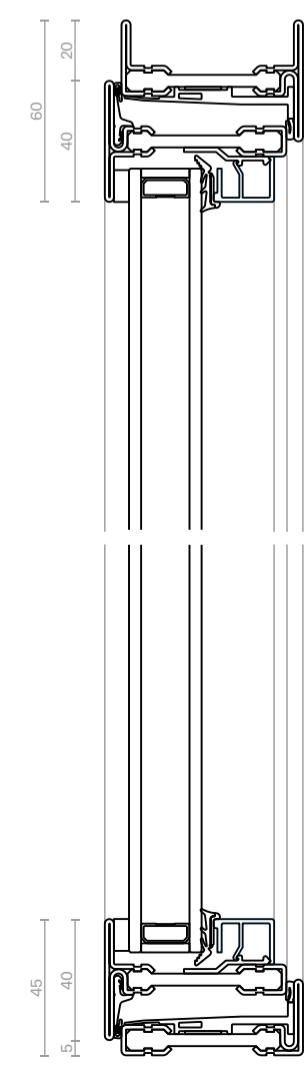
A-A



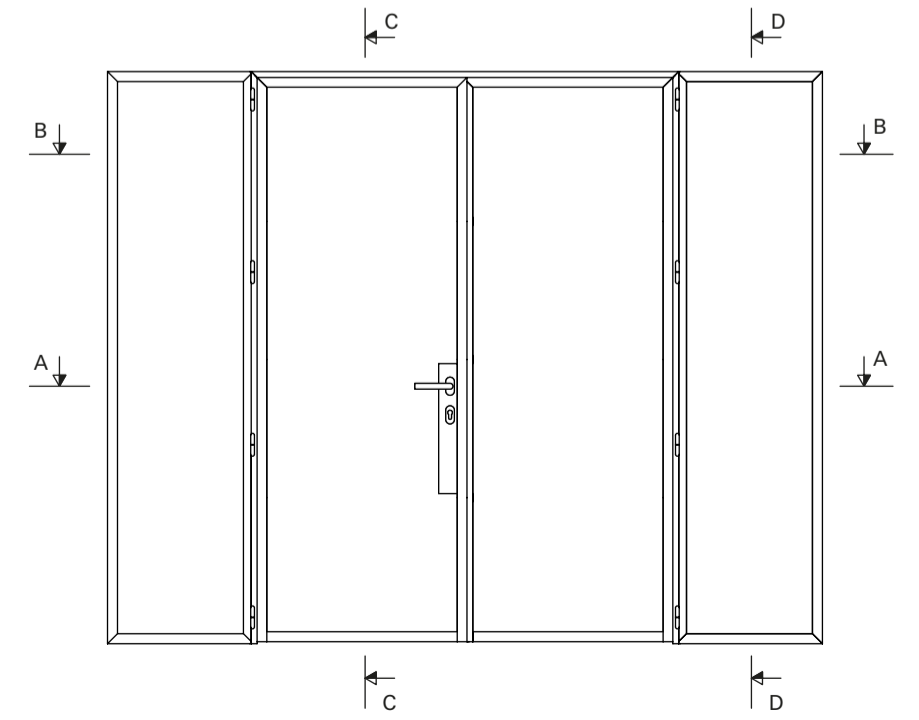
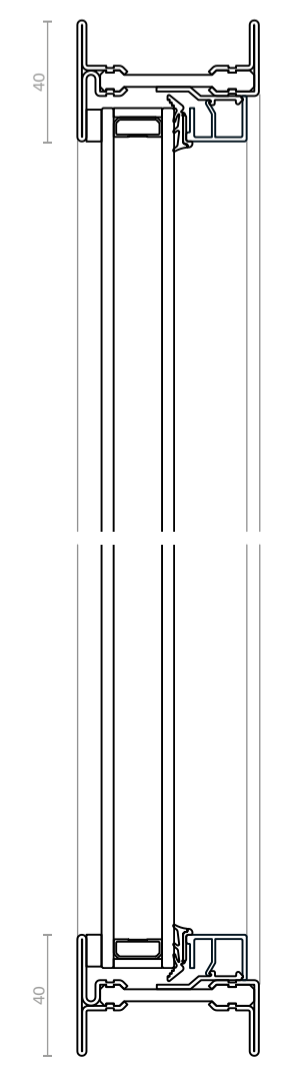
B-B



C-C



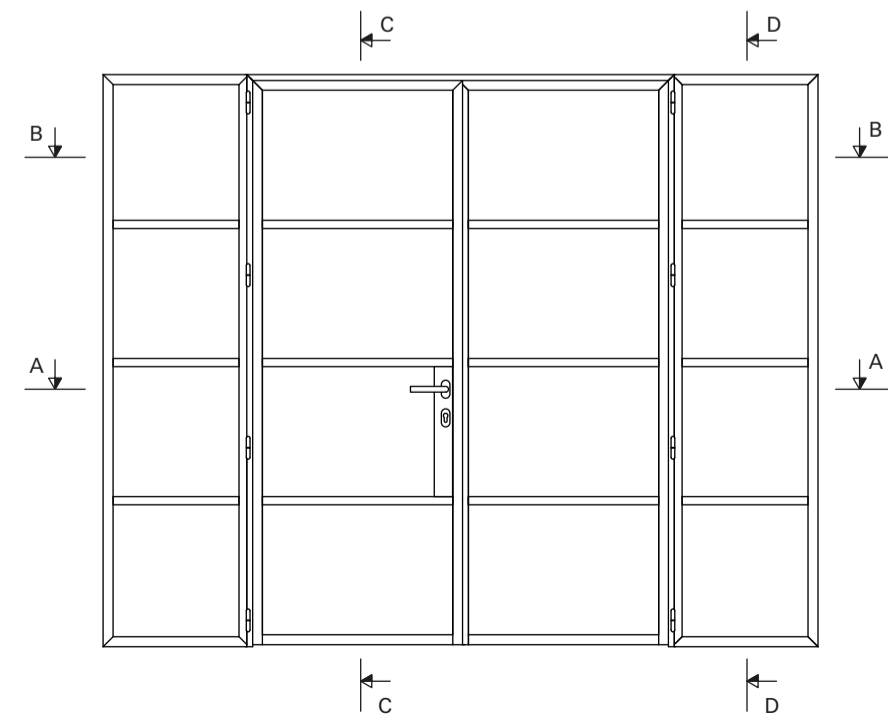
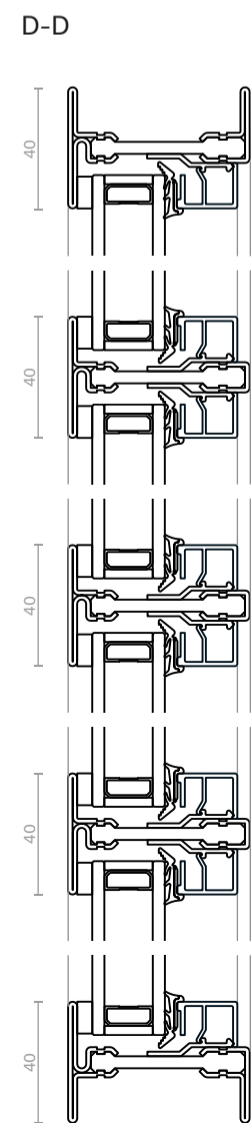
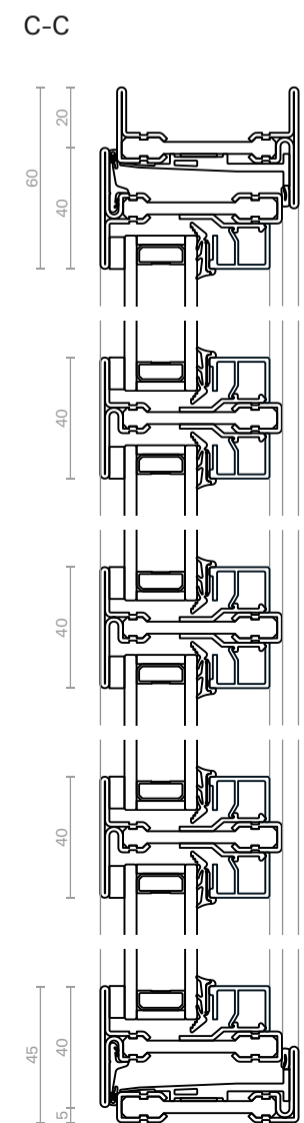
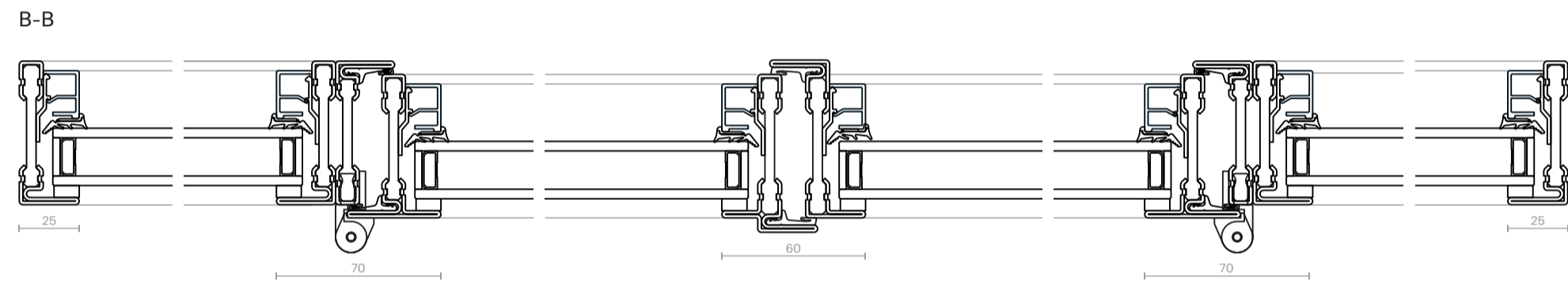
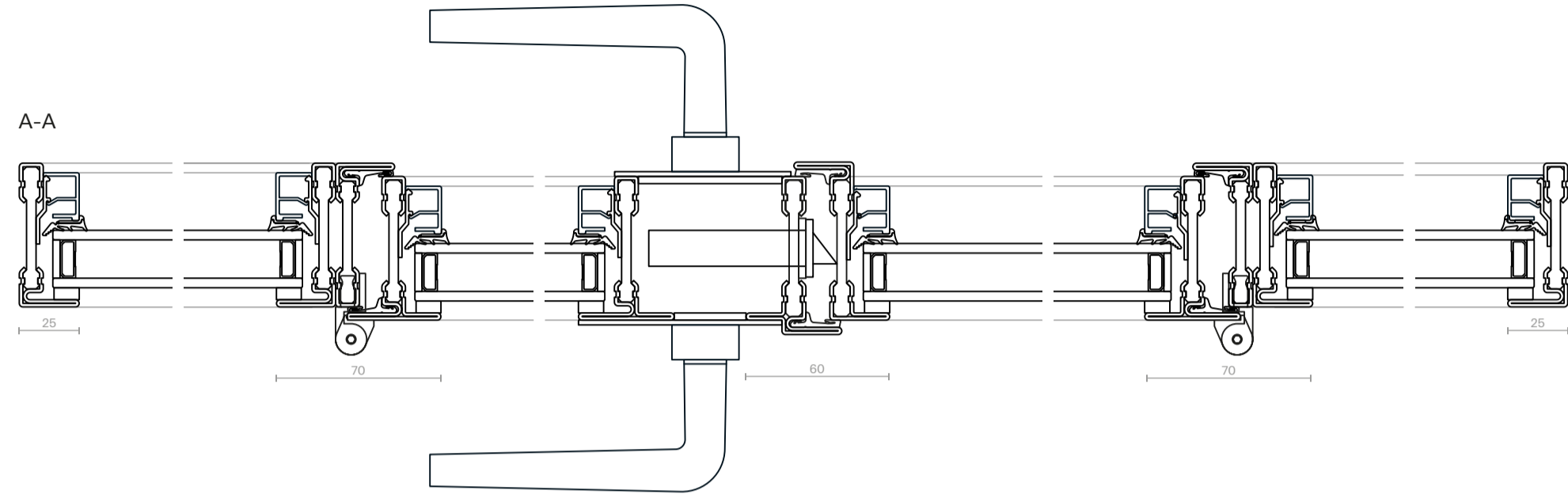
D-D



Outward-opening door
TDL mullion

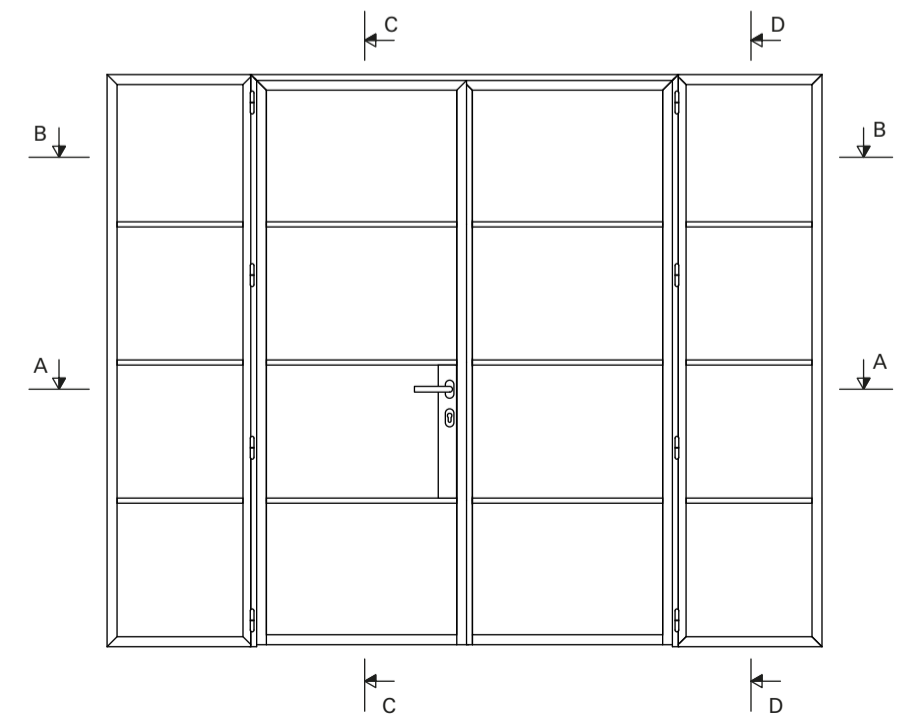
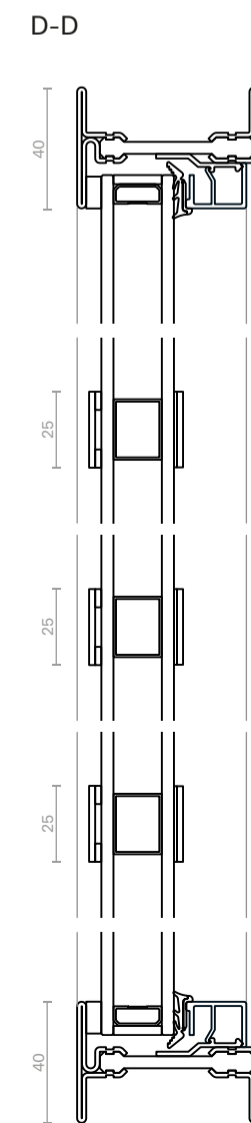
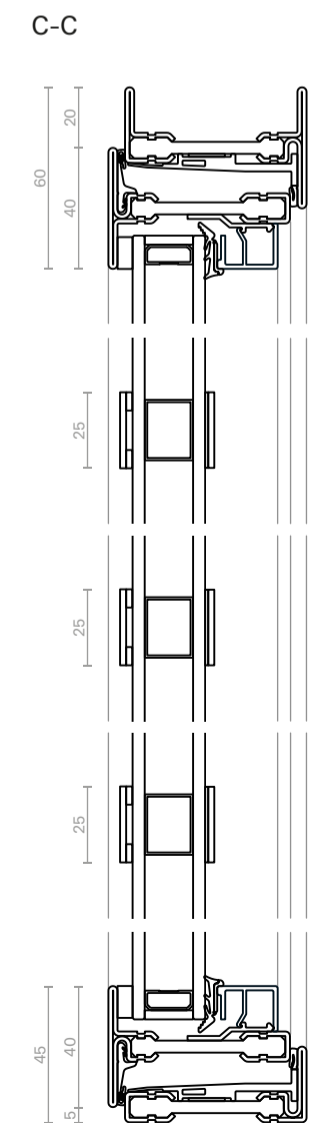
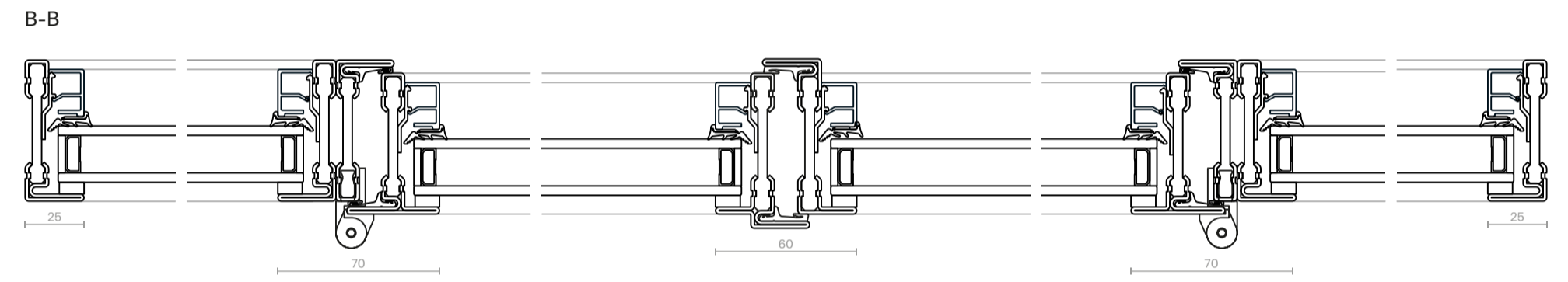
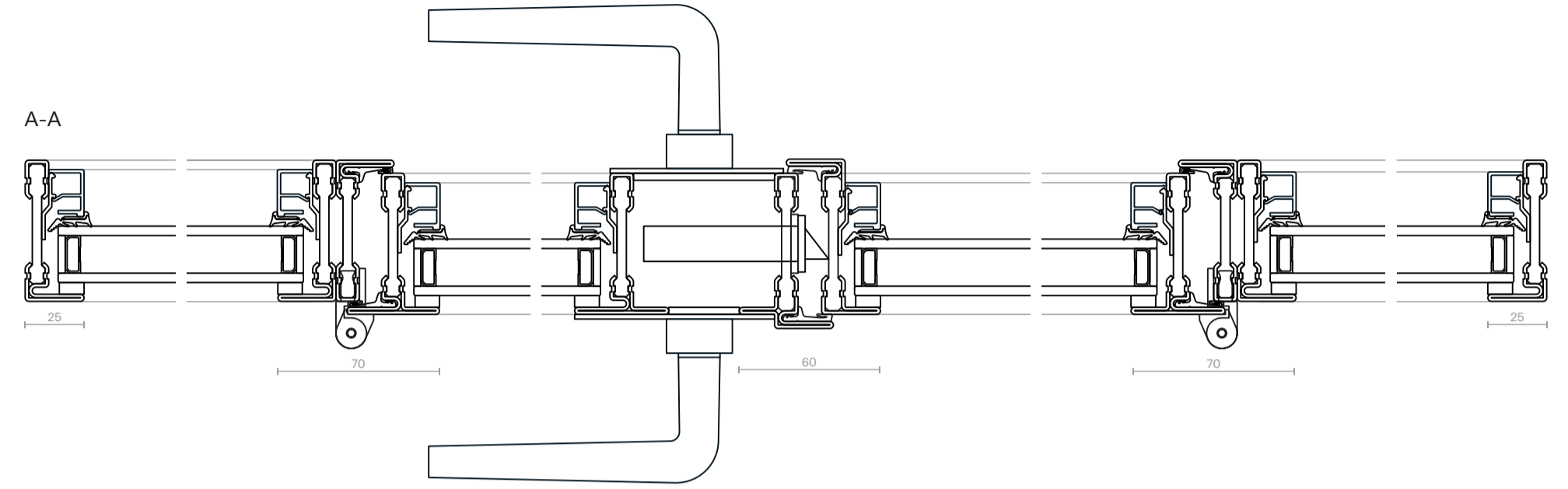
Perla
Slimline Steel G2
Example Drawings

Drawing scale 1:1



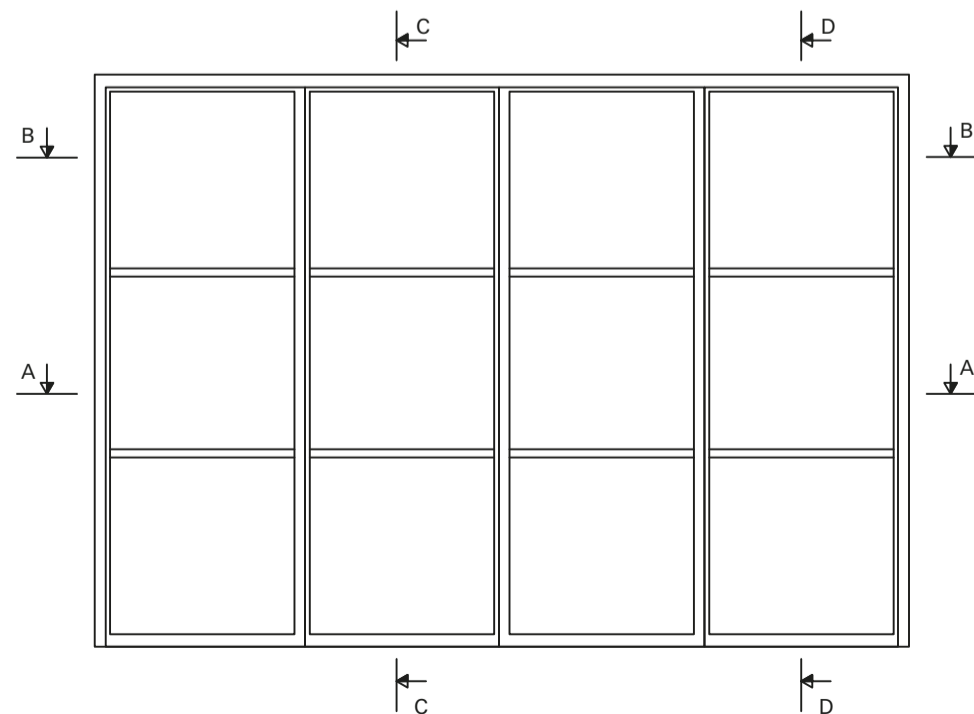
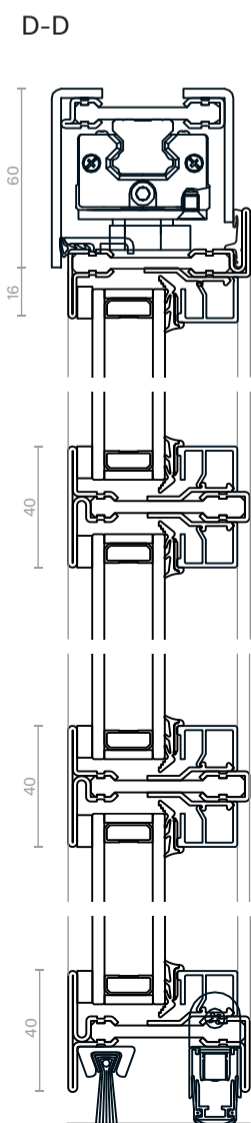
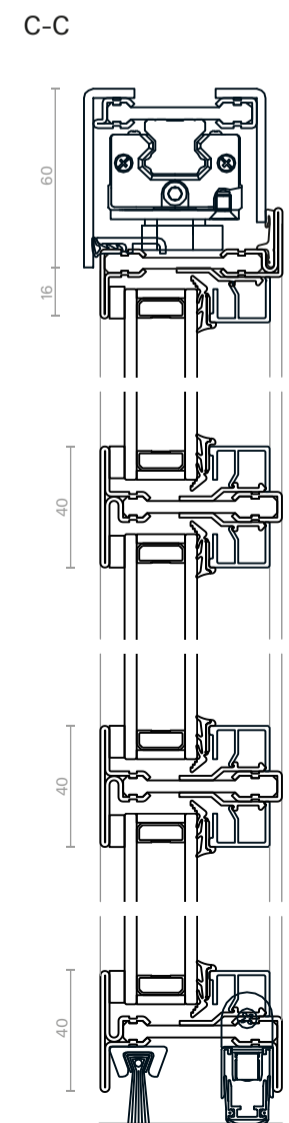
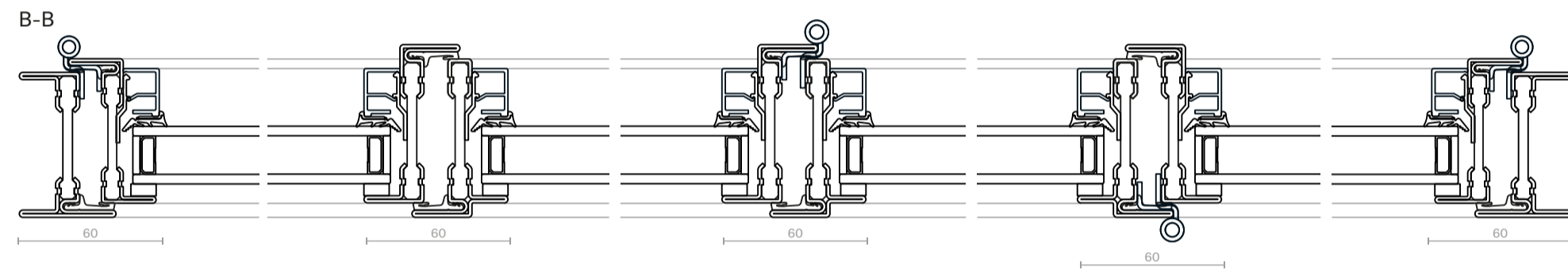
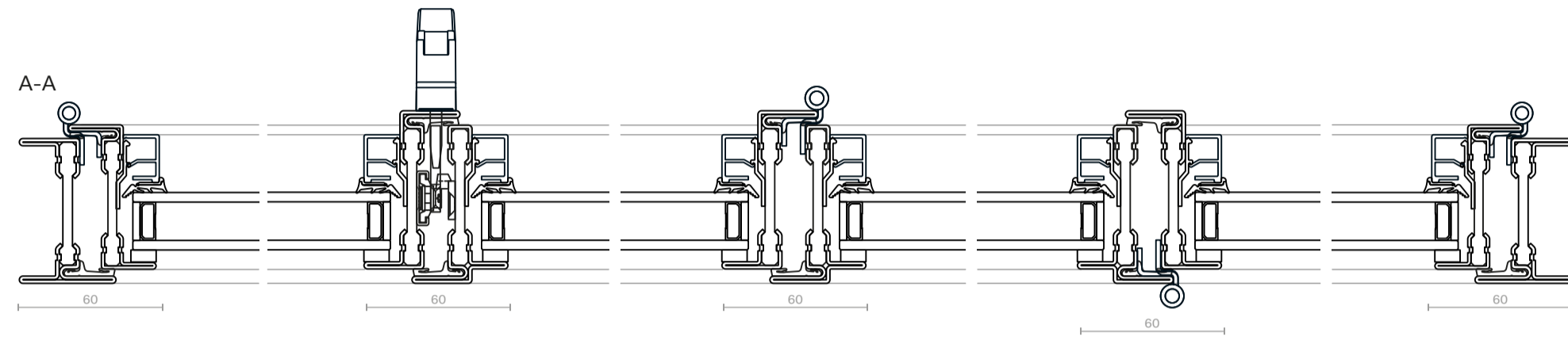
Outward-opening door
SDL mullion

Perla
Slimline Steel G2
Example Drawings



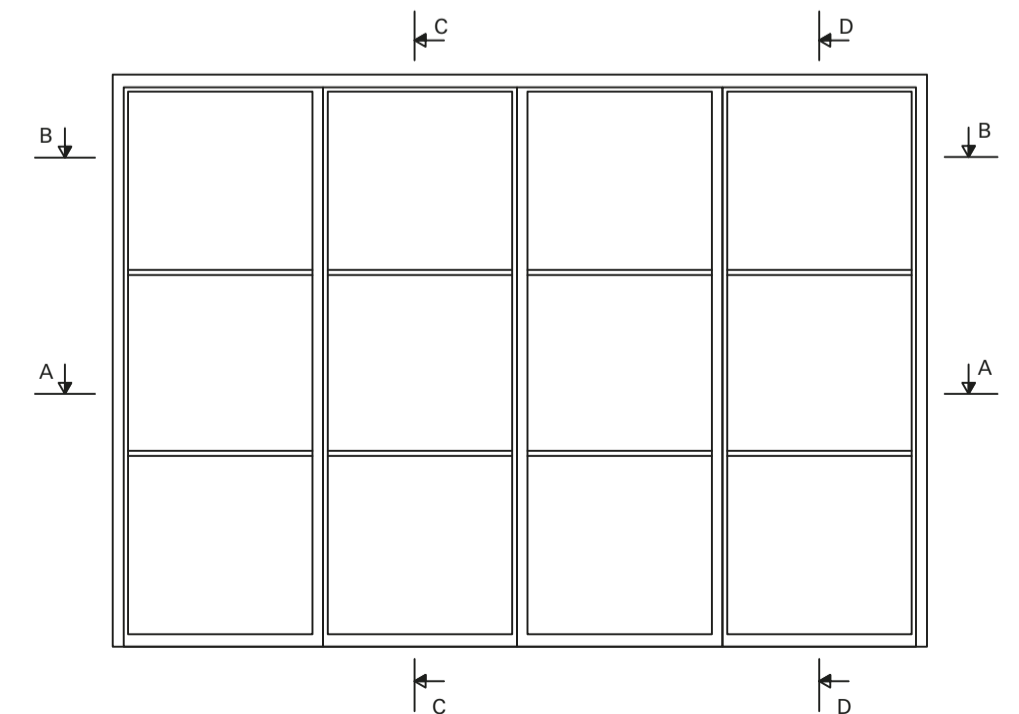
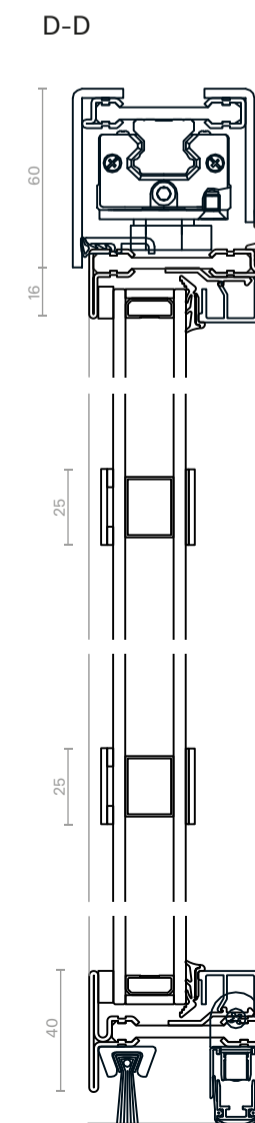
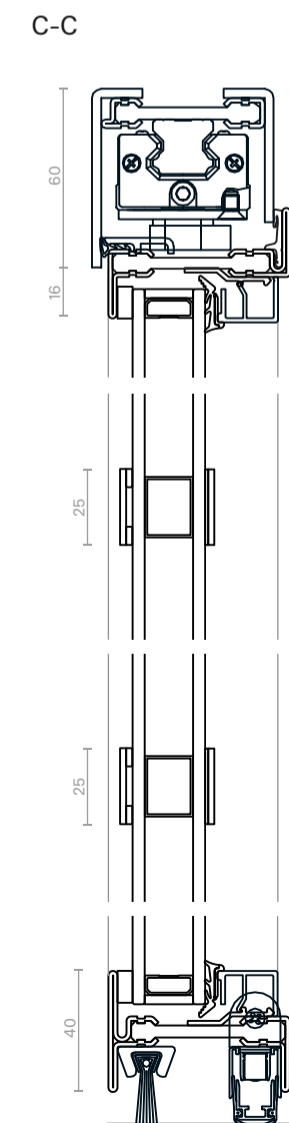
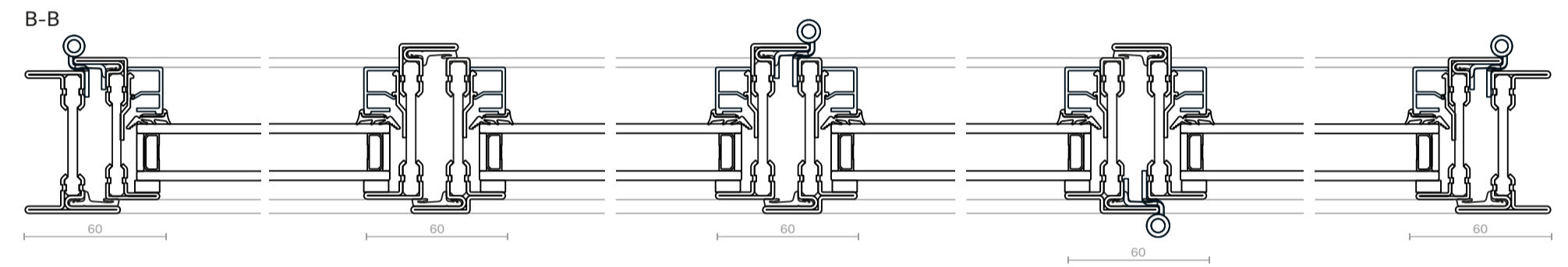
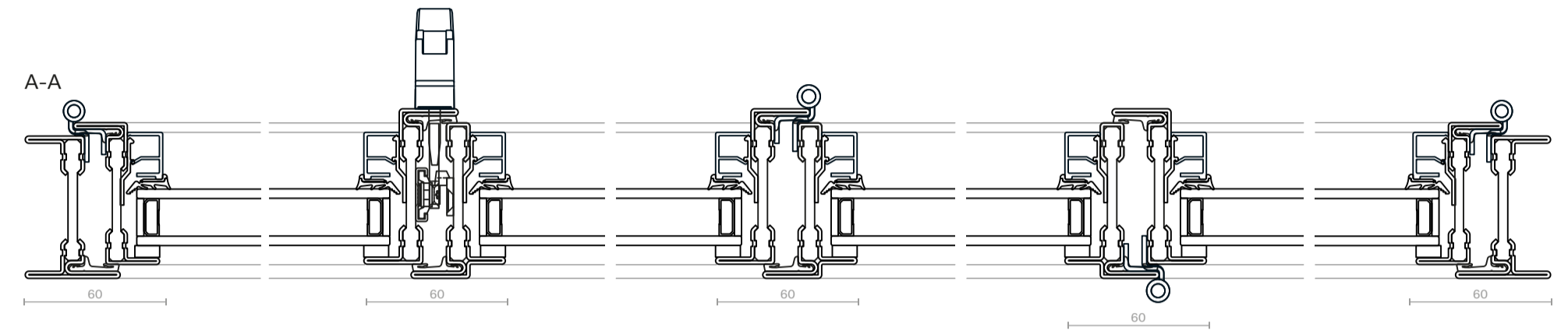
Bifold doors
TDL mullion

Perla
Slimline Steel G2
Example Drawings



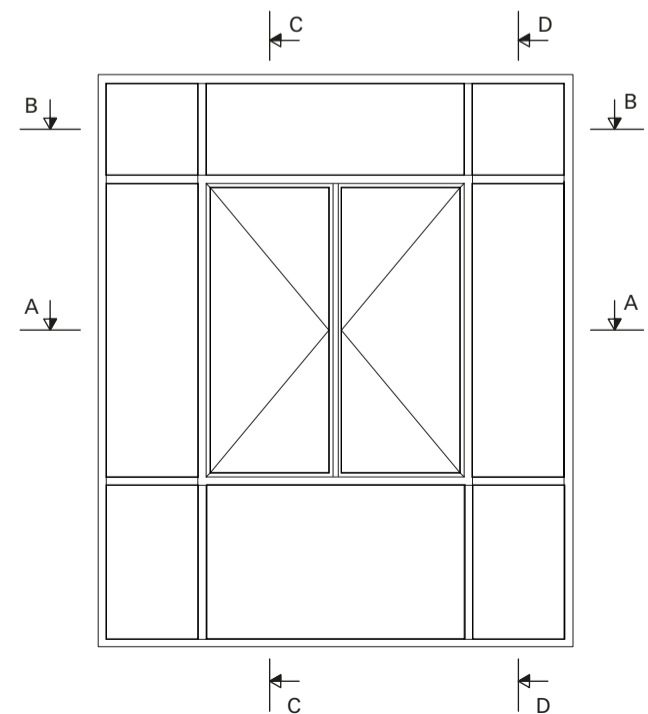
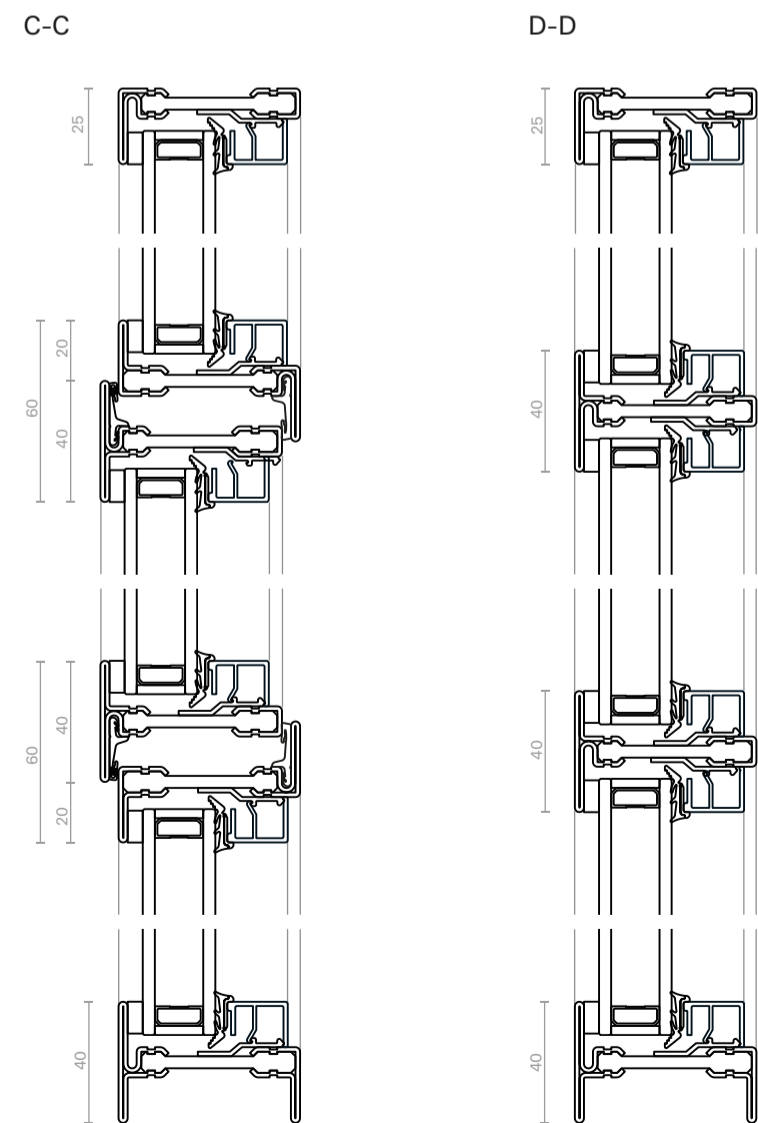
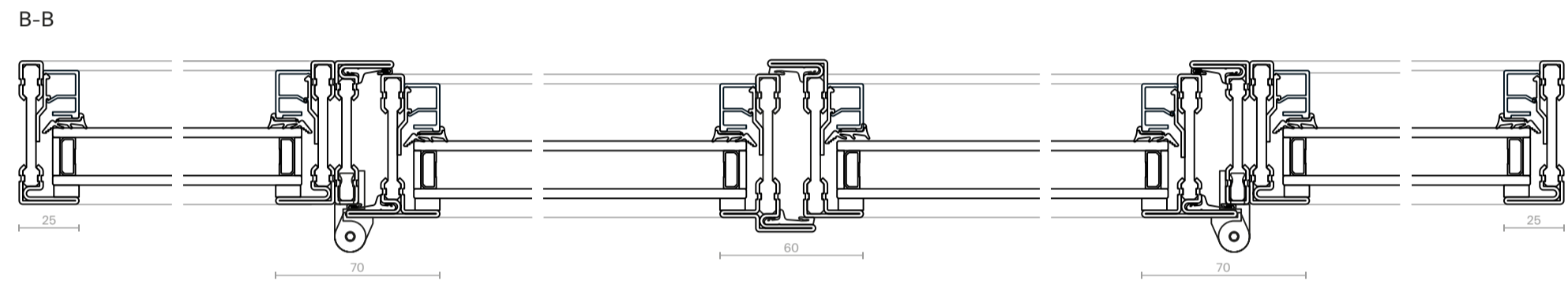
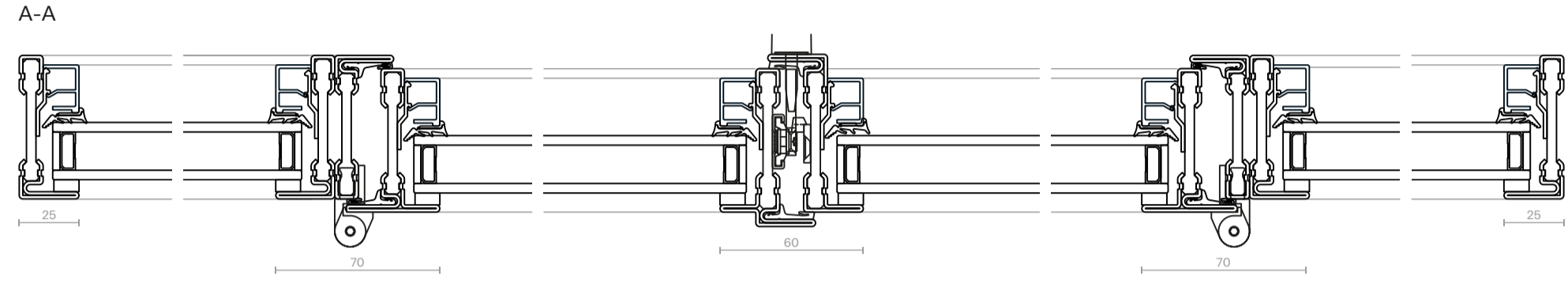
Bifold doors
SDL mullion

Perla
Slimline Steel G2
Example Drawings



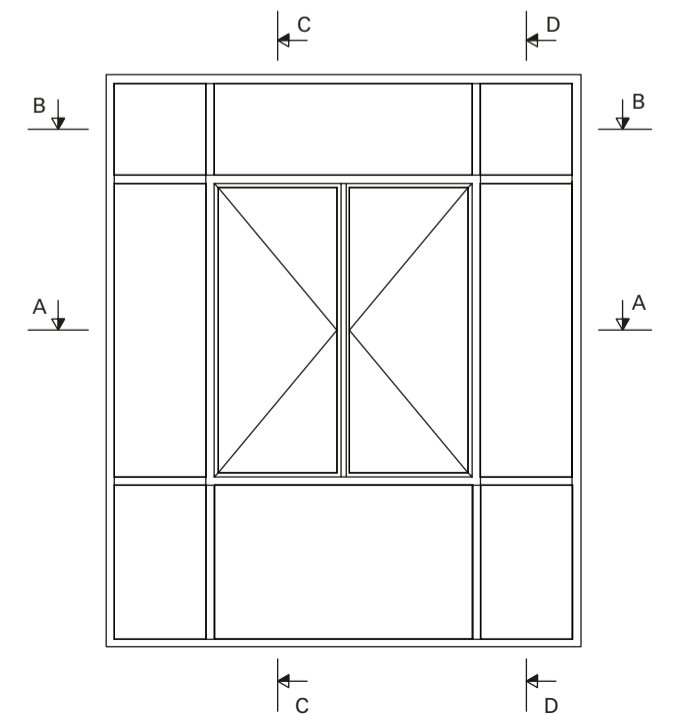
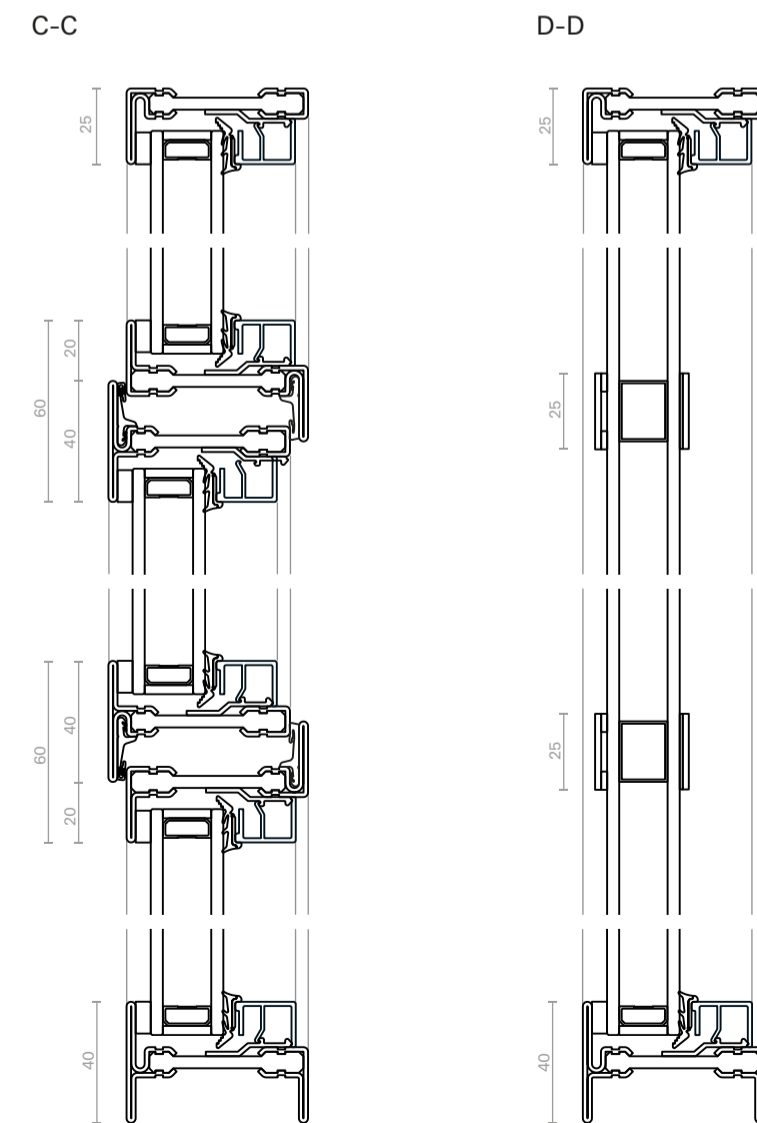
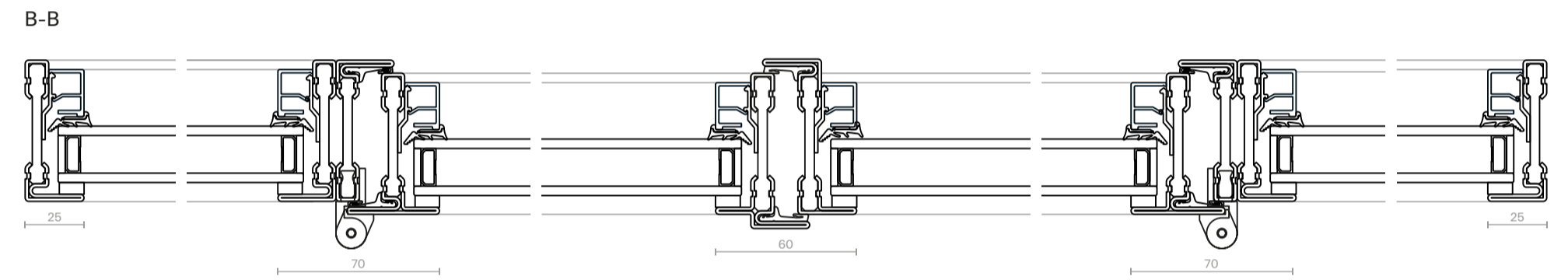
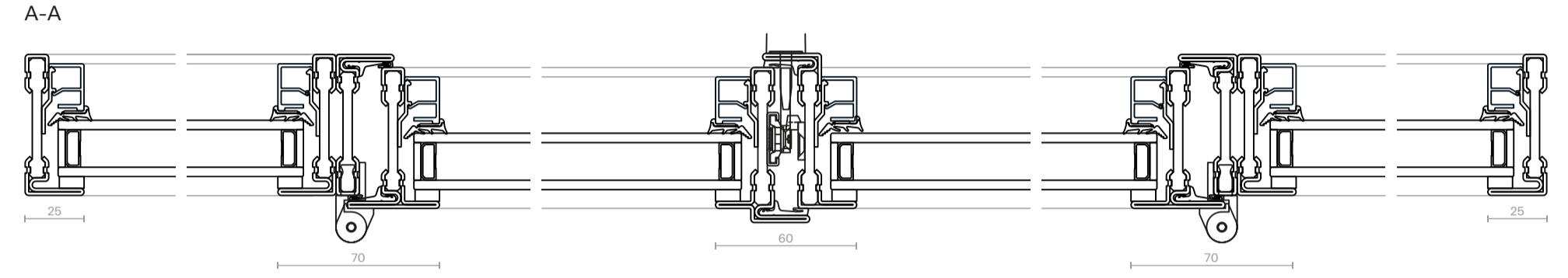
Side hung window
TDL mullion

Perla
Slimline Steel G2
Example Drawings



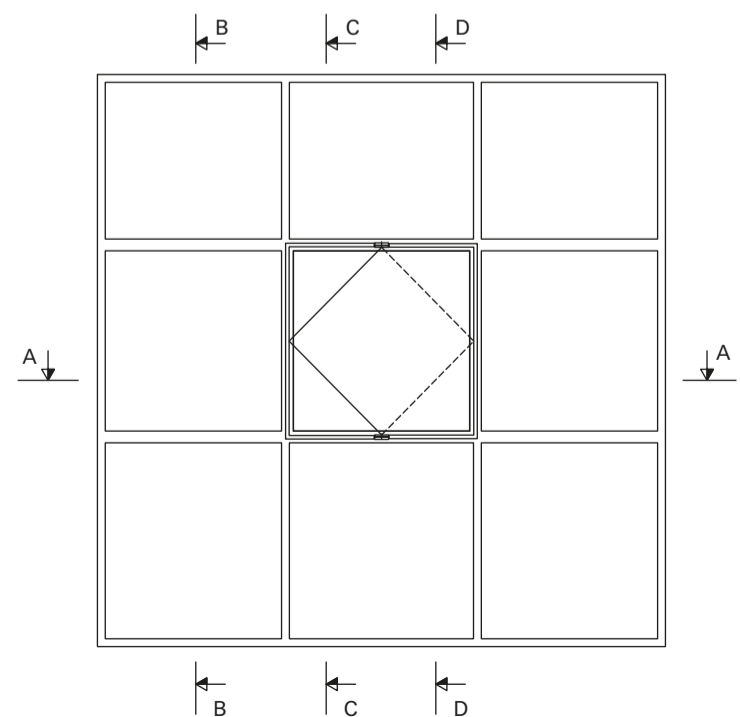
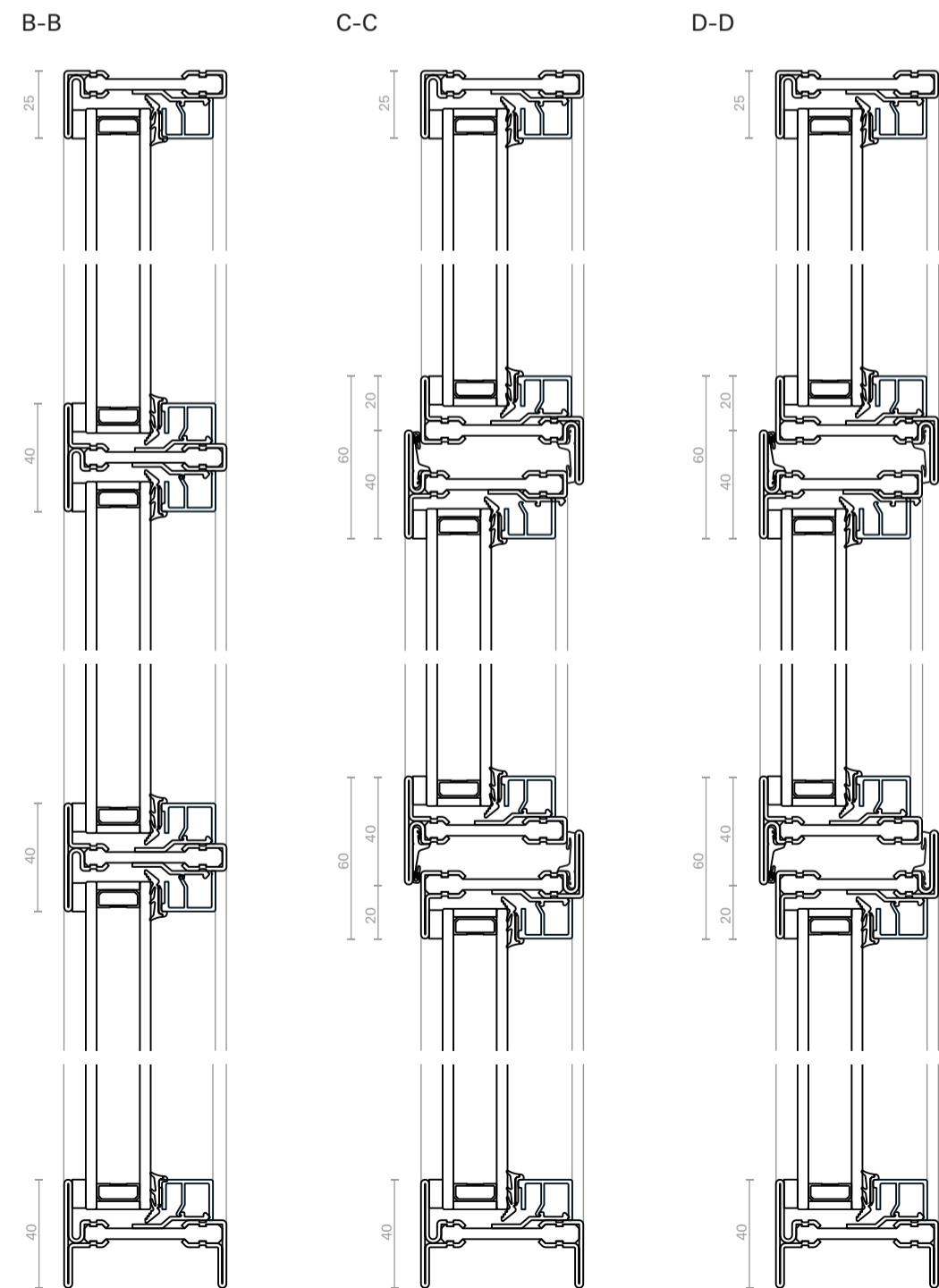
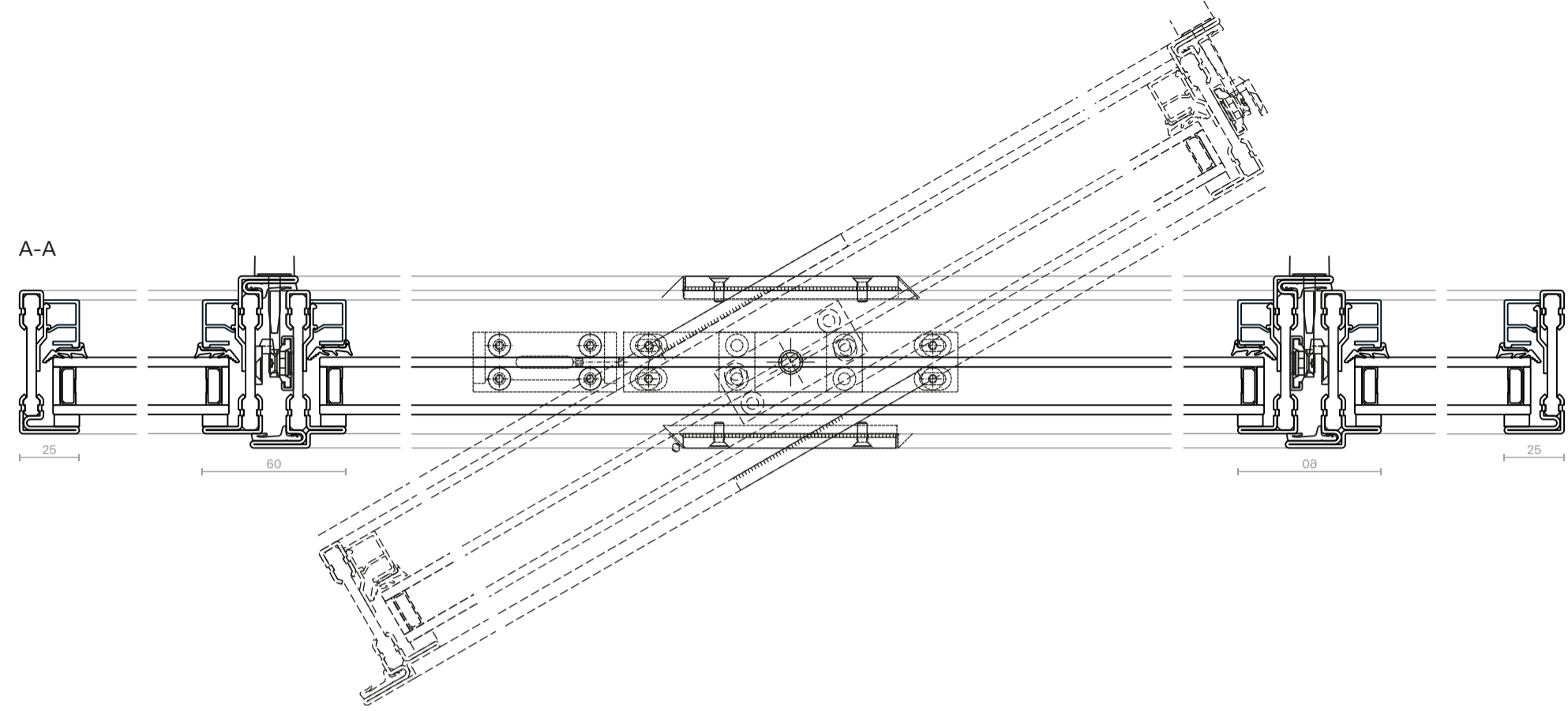
Side hung window
SDL mullion

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Example Drawings



Pivot window / door
Vertical pivot

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Slimline Steel G2
Example Drawings



Project: Kingscliffe
Architect: MLA Architecture
Photographer: Snook Photography

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