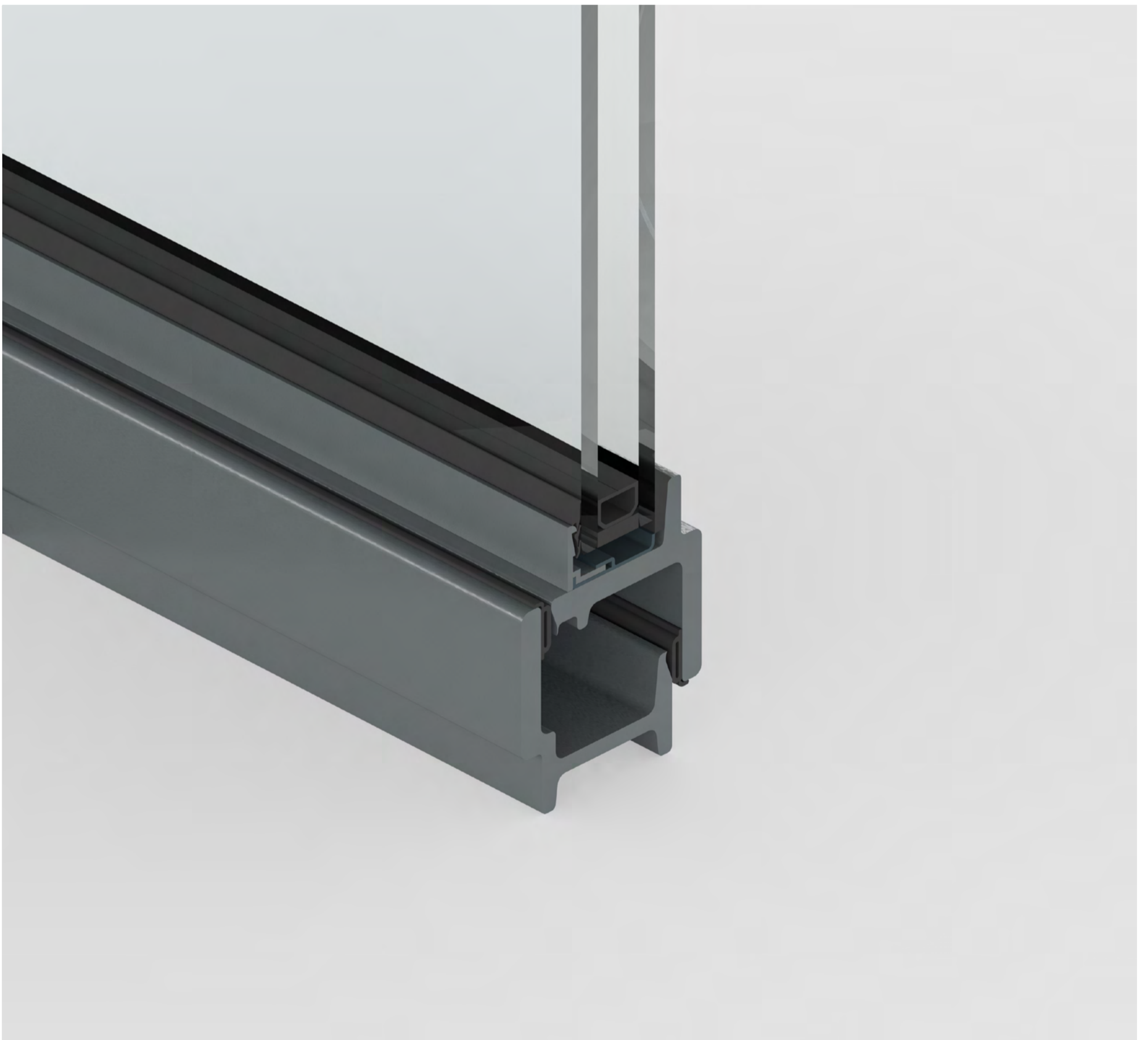


Slimline Steel



G1

B-Rated energy efficient
steel door system



Slimline Steel G1

Elegant and timeless;
the G1 is the bedrock
of steel systems

The Perla Slimline Steel G1, rated B for energy efficiency, is a complete range of hot-rolled steel profiles that reinterprets early 20th-century design with a modern edge. Suitable for both external openings and internal partitions, it ensures seamless visual continuity between exterior architecture and interior spaces. A diverse selection of finishes, from raw industrial steel to powder coatings, offers extensive design flexibility.

Features



B-Rated
In accordance with
BS EN ISO 10077-2:2017



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



RAL Finishes
Powder-coated finishes
in any RAL colour



Sound Insulation
Cancels out exterior
noise up to 40db



Thermal Transmittance
Profile designed to keep
heat in and the cold out



Burglary Resistance
Tested in accordance
with EN 356



2000Pa Wind Load
Certified C5 Class to
meet EN 12210



300Pa Air Permeability
Certified 4 Class to meet
EN 12207



300Pa Water Tightness
Certified 9A Class to
meet EN 12208



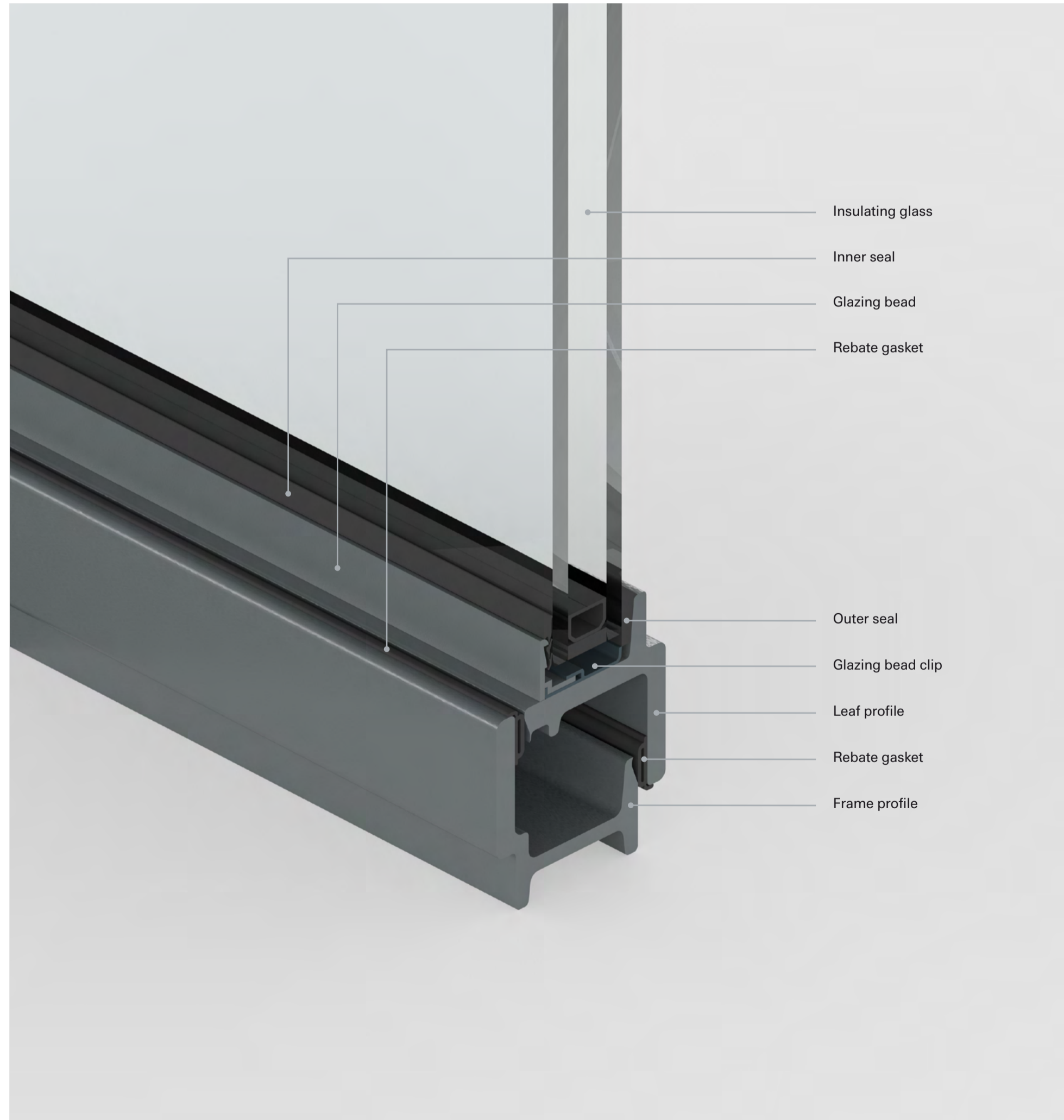
Project: West Hill House
Architect: Oliver Browning
Photographer: David Butler

Overview

Perla
Slimline Steel G1
System overview

High-performance profile design and construction

1. Rolled steel profile – high precision production lines
2. Solid profile with a thickness range of 3 to 5 mm
3. Both internal and external overlapping sightline
4. Self-adhesive non-shrinking gaskets
5. Profile depth compatible with insulating glass up to 21 mm
6. Wide choice of glazing beads, to customise the design of the frame
7. Wide range of exclusive fittings, both contemporary and reproduced from original designs of the modern era



Minimal sightlines

With a construction depth of 44 mm, the face width of the leaf and frame is just 55 mm, adding up to 55 mm in the face plate.

44 mm
profile depth

55 mm
face plate

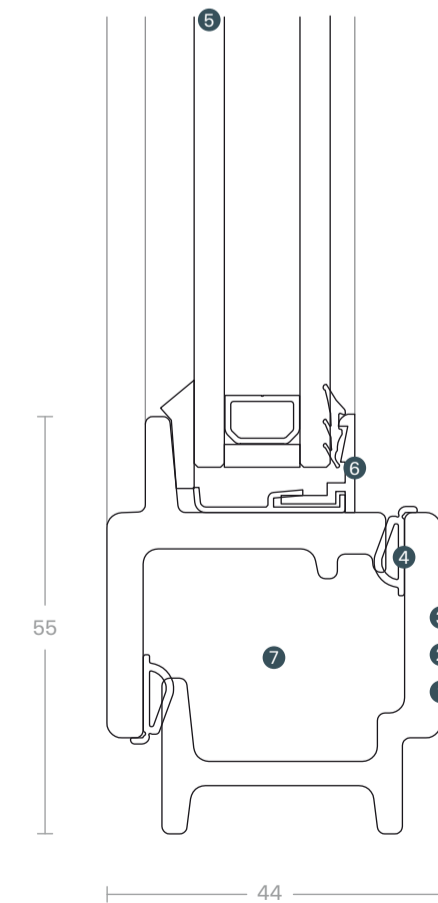
Maximum dimensions

Element sizes of up to 1050 mm width x 2500 mm height per leaf (max. 120 kg leaf weight)

105 cm
mx. leaf width

250 cm
mx. leaf height

120 kg
mx. leaf weight



Drawing scale 1:1

Finishes

Perla
Slimline Steel G1
Materials & Finishes

Powder Coated Steel

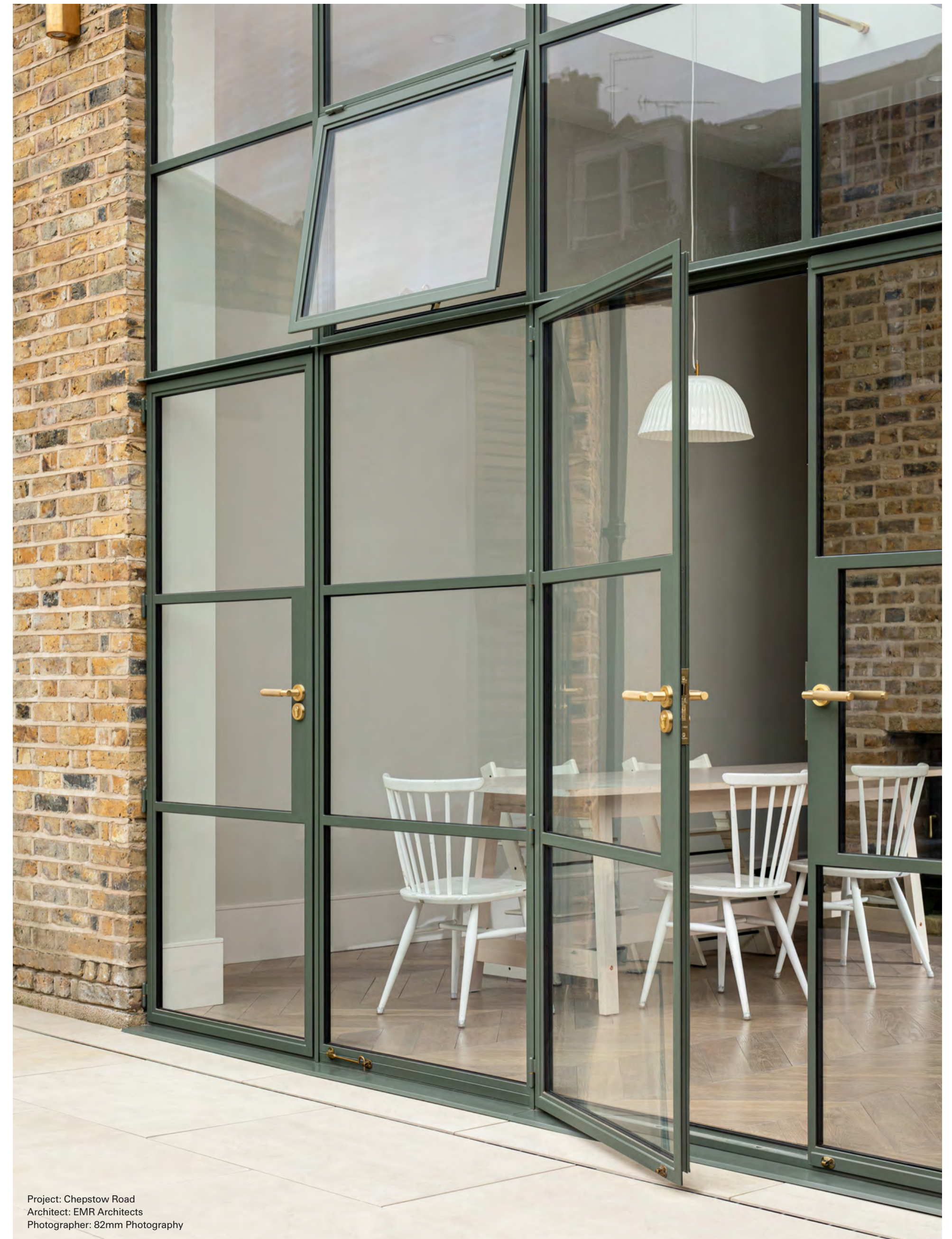
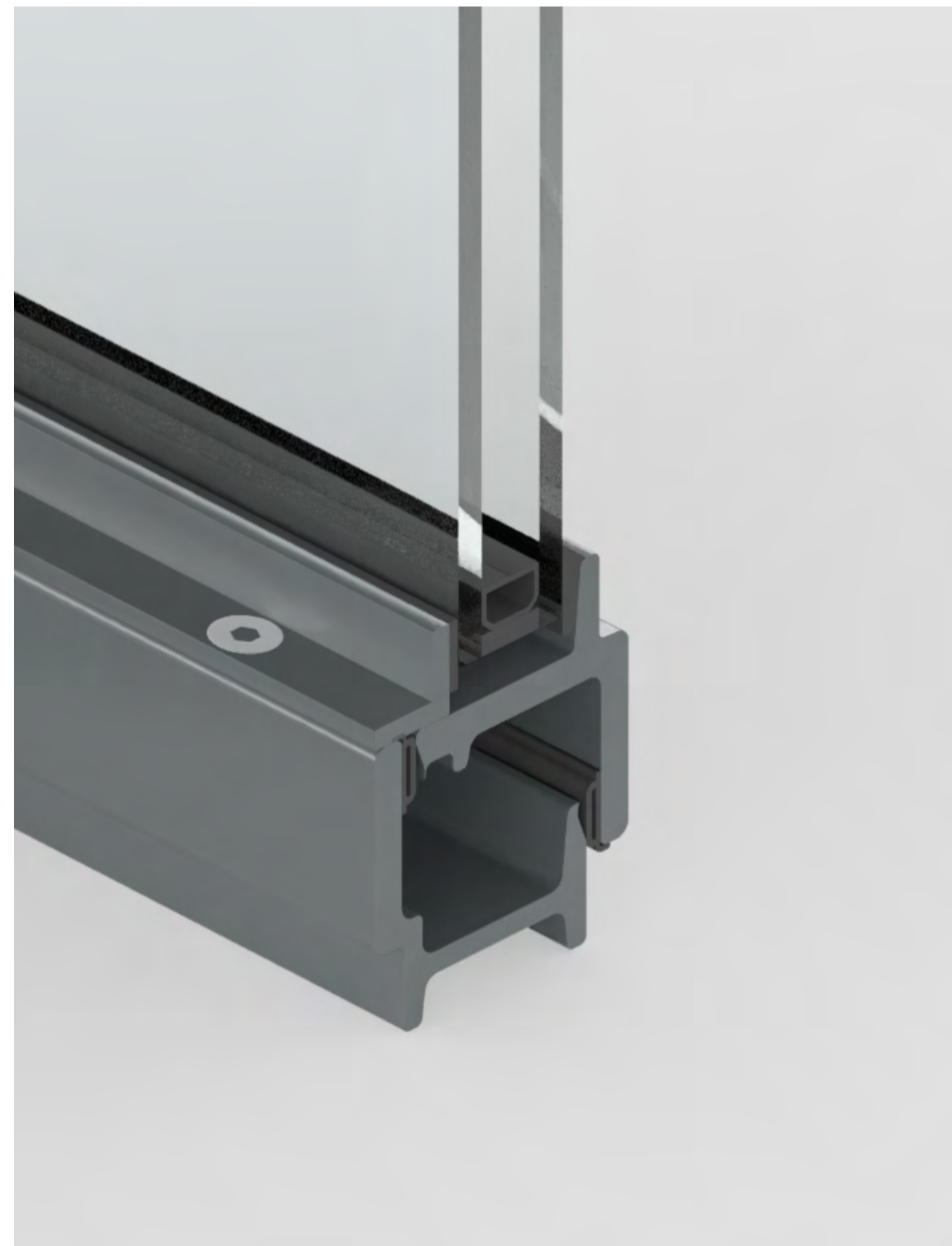
A versatile canvas to express your style without limits

Coated steel strikes the perfect balance between function and style. Technically, it improves corrosion resistance, enhancing durability, while aesthetically, it provides full creative freedom, allowing frame designs to align with any architectural vision. From classic RAL colours to bold textures, coated steel blends strength with outstanding visual and mechanical performance.

Classic Steel

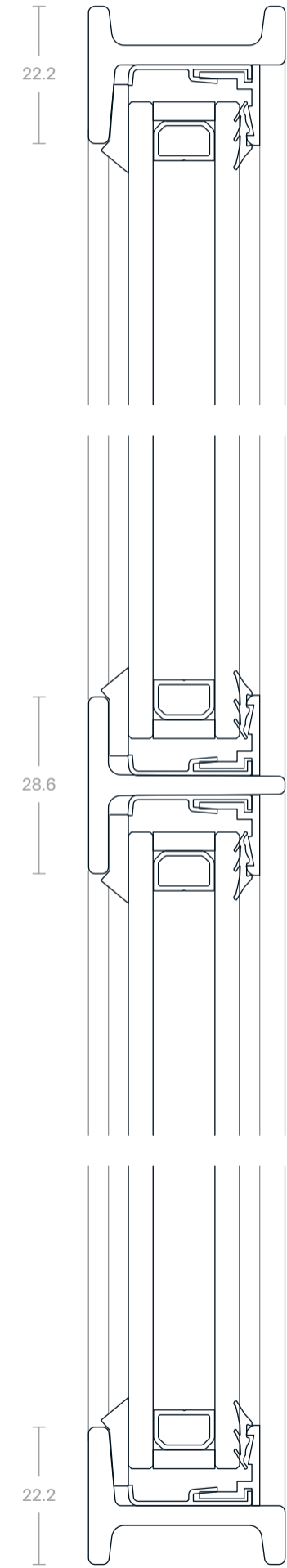
Natural uniform texture with a distinctive raw character

Hot-rolled steel profiles feature a consistent texture, making them ideal for various finishes. Light brushing or blackening offers an alternative to traditional painting, enabling a high degree of frame customization. The corners of hot-rolled steel doors and windows are always welded. Depending on the desired look, welds can be ground flat, left exposed, or highlighted through brushing or blackening with special patinas.



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

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

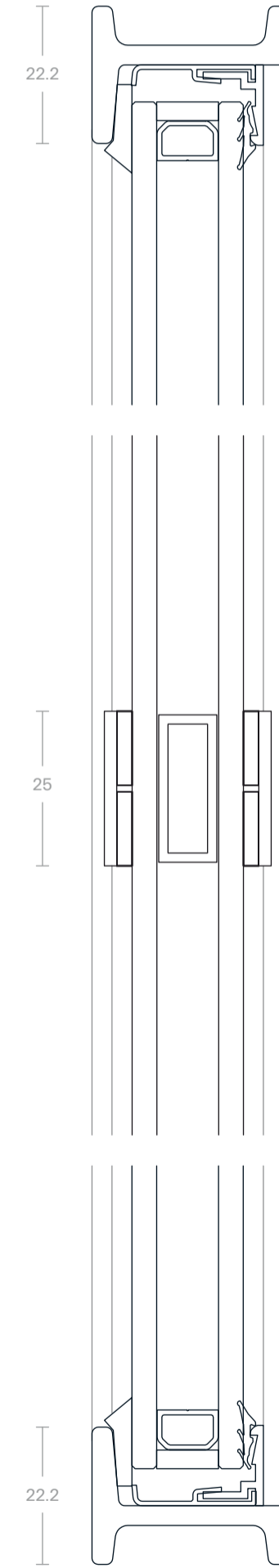
28 mm
glazing bar



Drawing scale 1:1

Perla Slimline Steel G1

Design options



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 outer frame. 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
mx.leaf height

25 mm
glazing bar

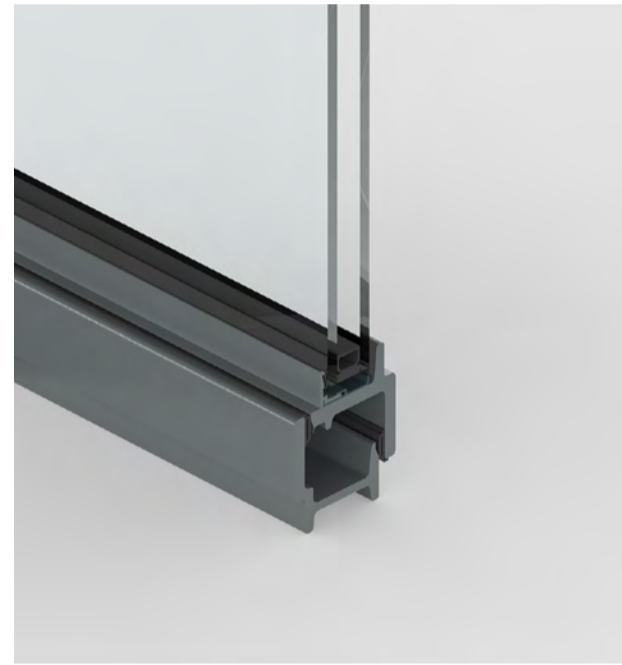


Drawing scale 1:1

Glazing Beads

Perla
Slimline Steel G1
Design options

G1 1302R
Material Aluminium
Dimensions 13mm (w) × 2.2mm (h)
Finishes Powder coated



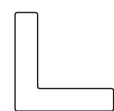
G1 1310S
Material Aluminium
Dimensions 13mm (w) × 10mm (h)
Finishes Powder coated



G1 1312R
Material Aluminium
Dimensions 13mm (w) × 10mm (h)
Finishes Powder coated



G1 1313A
Material Classic steel
Dimensions 13mm (w) × 13mm (h)
Finishes Raw, powder coated



G1 1310S
Material Classic steel
Dimensions 10mm (w) × 10mm (h)
Finishes Raw, powder coated



Hinges

Perla
Slimline Steel G1
Design options

202 Large bullet lift-off hinge
Material Steel
Dimensions 29.5mm (w) × 81.8mm (h)
Finishes Raw, powder coated



310 Welded / screw-on hinge
Material Steel
Dimensions 29.5mm (w) × 79mm (h)
Finishes Raw, powder coated



2050 Slimline butt hinge (50mm)
Material Steel
Dimensions 29.5mm (w) × 50mm (h)
Finishes Raw, powder coated



1260 Slimline butt hinge (85mm)
Material Steel
Dimensions 29.5mm (w) × 85mm (h)
Finishes Raw, powder coated



2100 Slimline butt hinge (100mm)
Material Steel
Dimensions 29.5mm (w) × 100mm (h)
Finishes Raw, powder coated

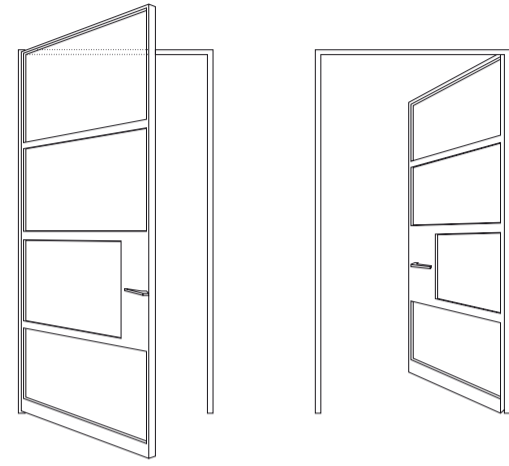


3100 Projection slimline butt hinge
Material Steel
Dimensions 34.25mm (w) × 100mm (h)
Finishes Raw, powder coated

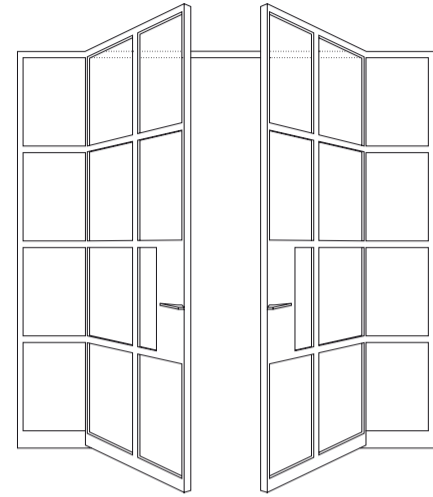


Type overview
Doors

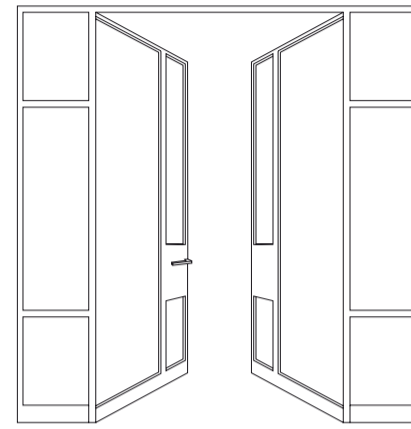
Perla
Slimline Steel G1
Type overview & dimensions



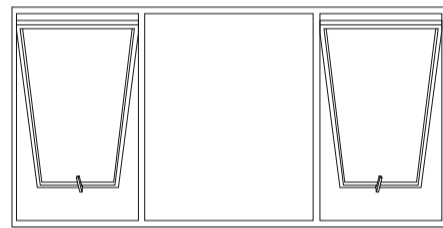
Single leaf inward / outward opening door



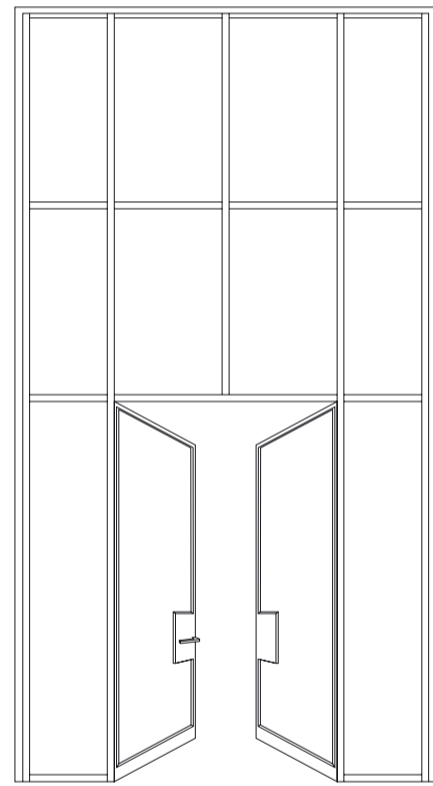
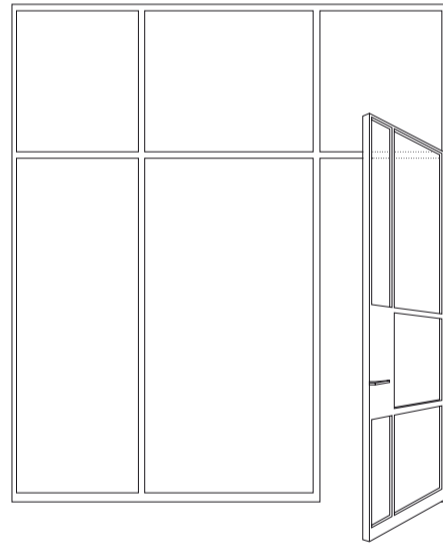
Double leaf inward opening door with side lights



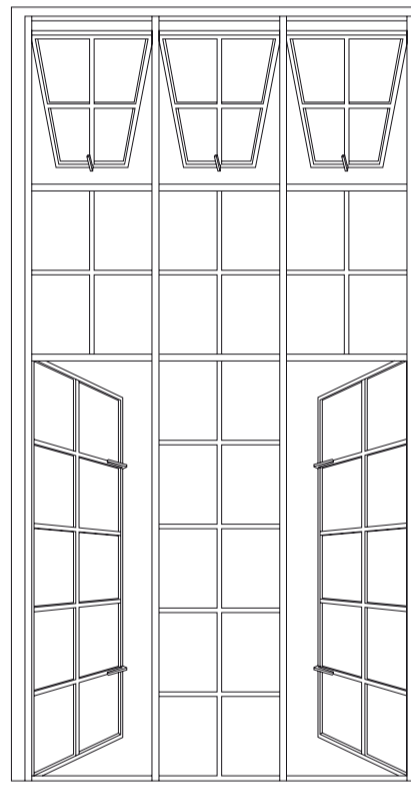
Double leaf outward opening door with side lights



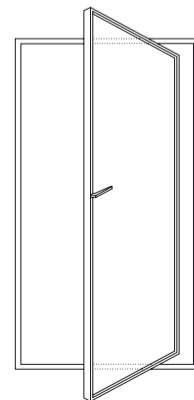
Fixed glazing with single leaf inward opening door with top hung windows



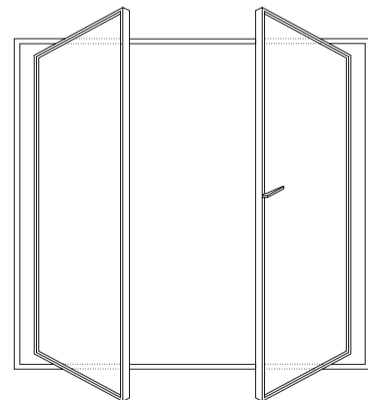
Curtain wall with double leaf outward opening door and top hung windows



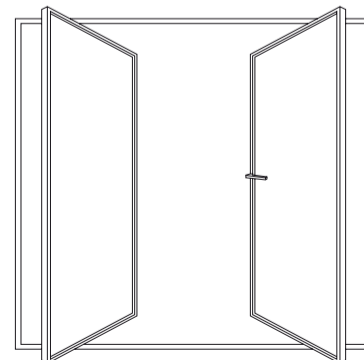
Industrial sidewall windows and historical curtain walls



Single leaf inward / outward opening pivot door

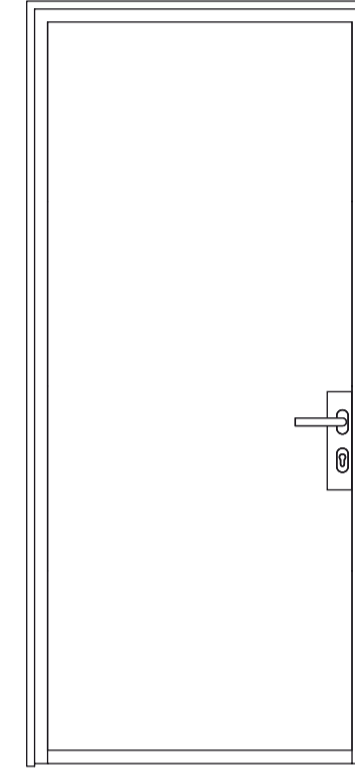


Double leaf inward / outward opening pivot door

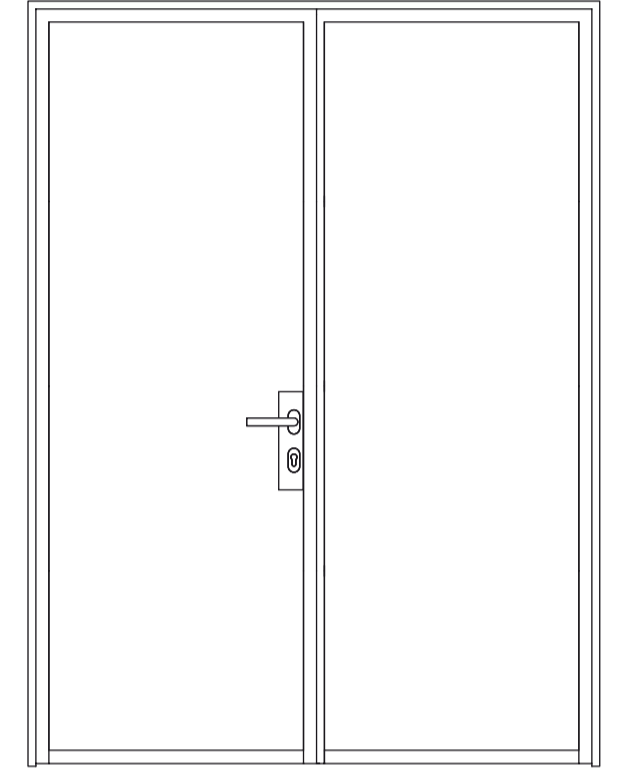


Dimensions
Doors

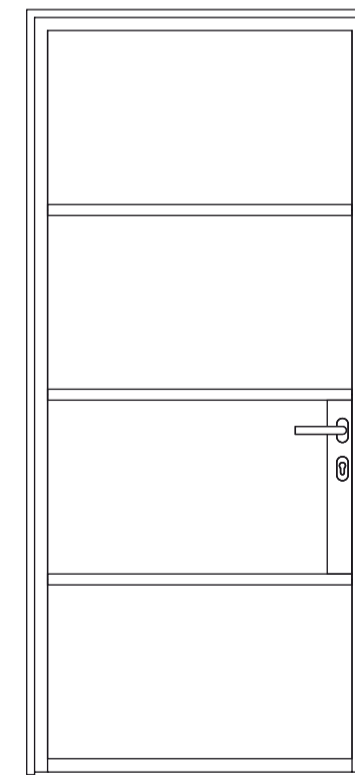
Perla
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Type overview & dimensions



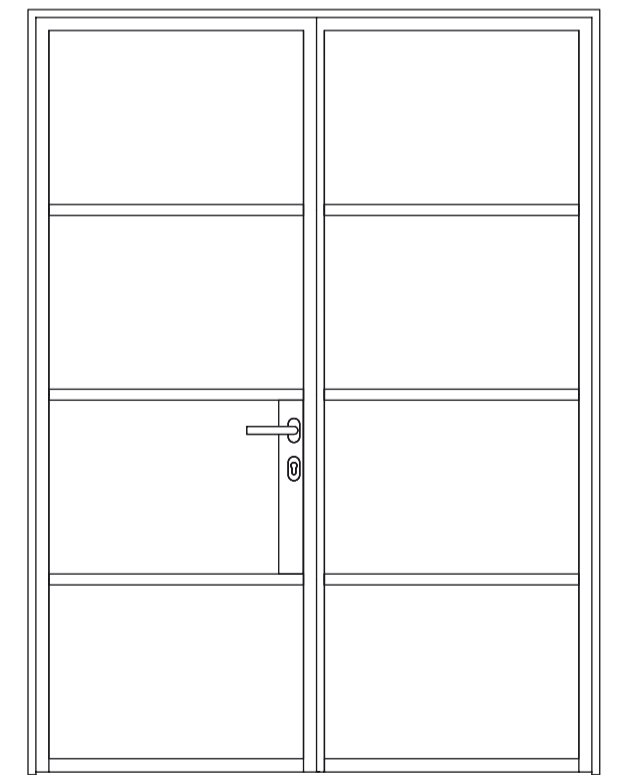
Single leaf door with floating lock box
mn dimensions 700 mm (w) × 1800 mm (h)
mx dimensions 1050 mm (w) × 2300 mm (h)



Double leaf door with floating lock box
mn dimensions 1400 mm (w) × 1800 mm (h)
mx dimensions 2100 mm (w) × 2300 mm (h)



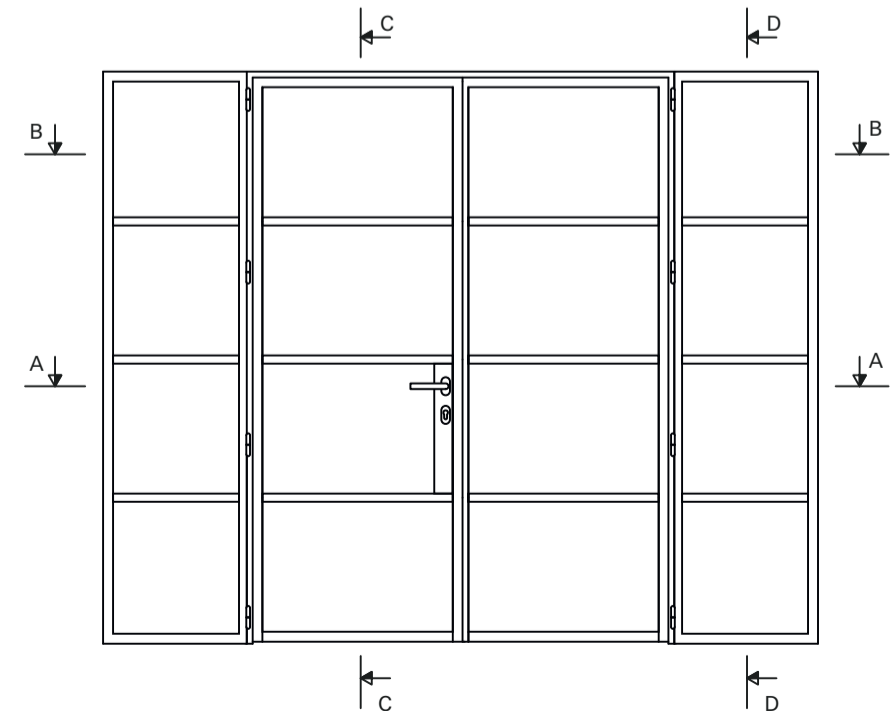
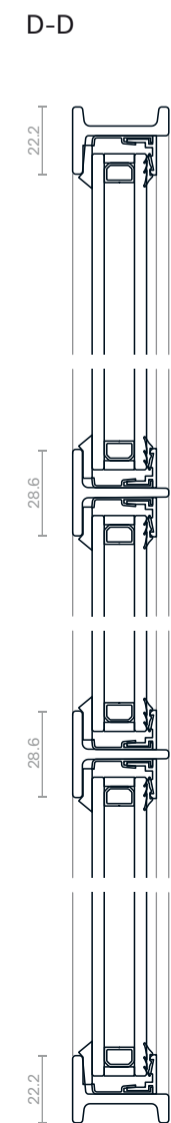
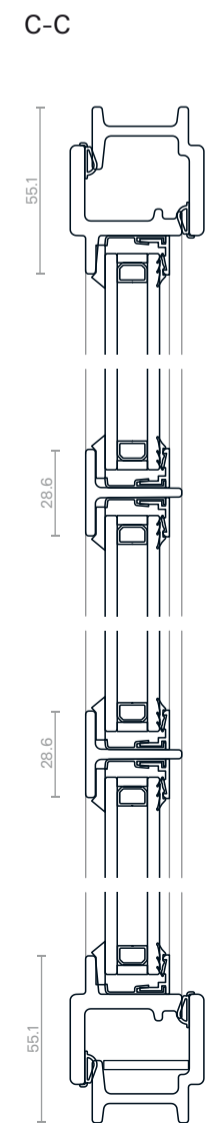
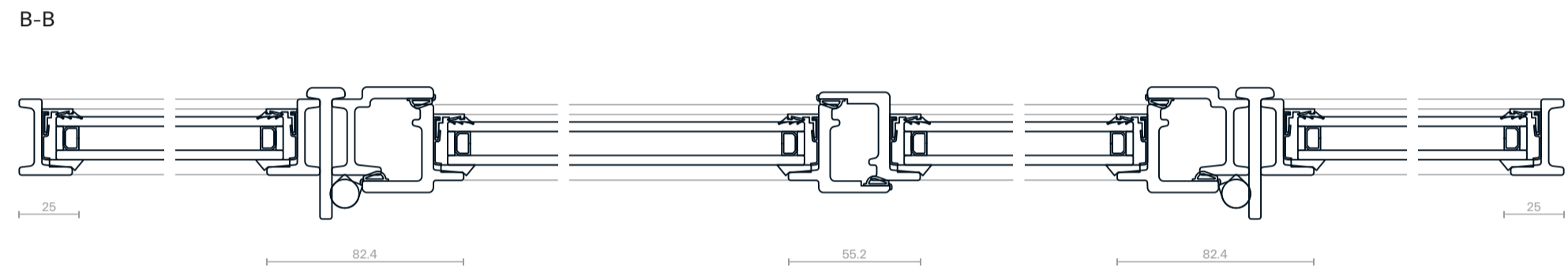
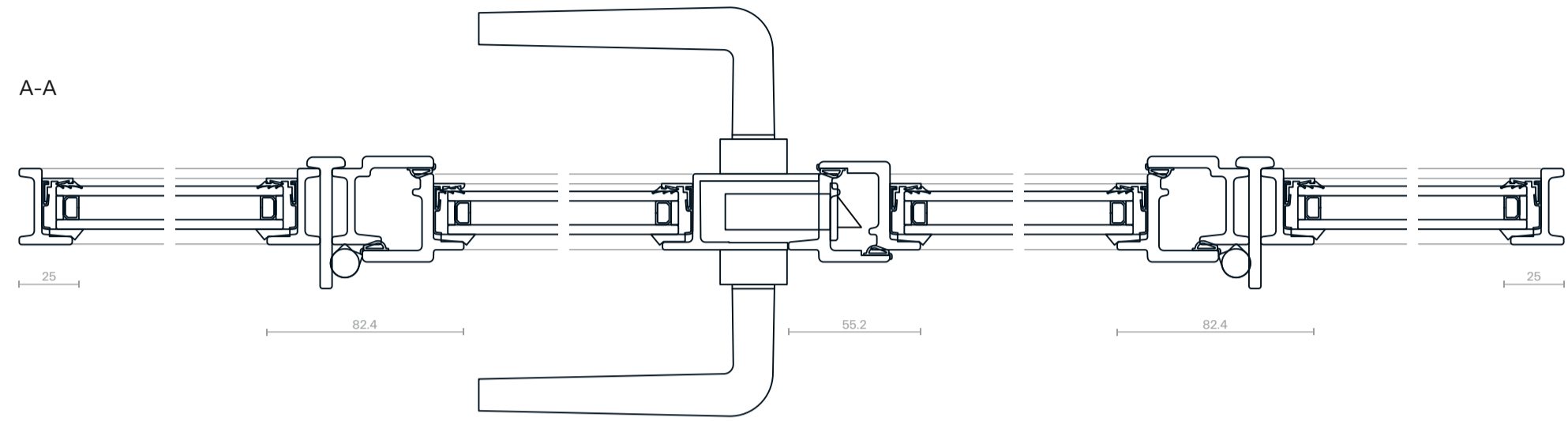
Single leaf door with mullions and lock box
mn dimensions 700 mm (w) × 1800 mm (h)
mx dimensions 1050 mm (w) × 2300 mm (h) SDL mullion / 2500 mm (h) TDL mullion



Double leaf door with mullions and lock box
mn dimensions 1400 mm (w) × 1800 mm (h)
mx dimensions 2100 mm (w) × 2300 mm (h) SDL mullion / 2500 mm (h) TDL mullion

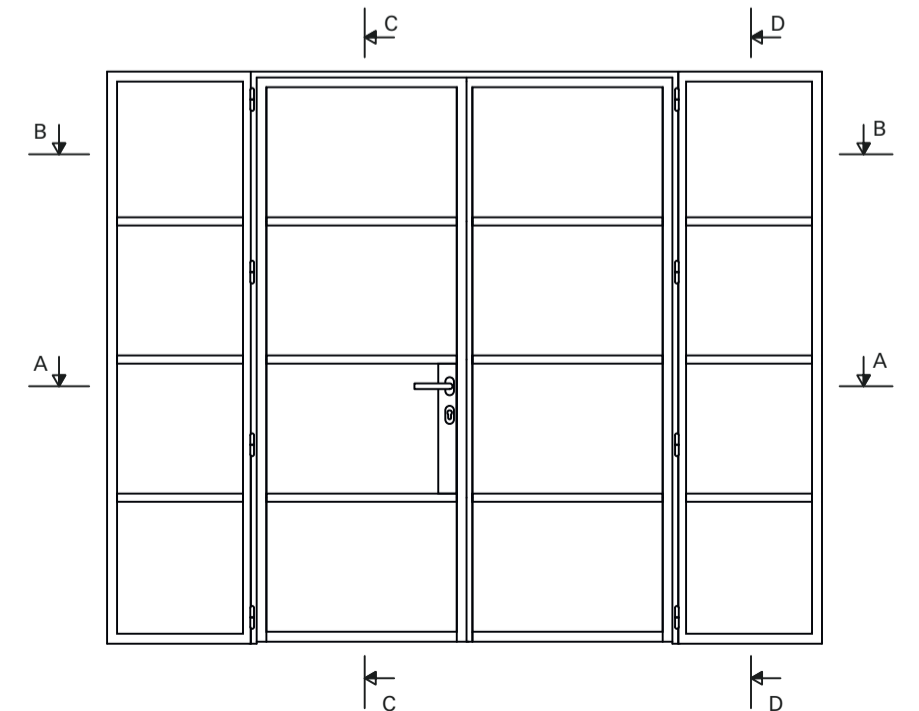
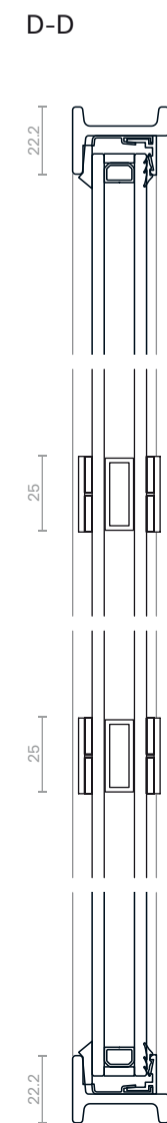
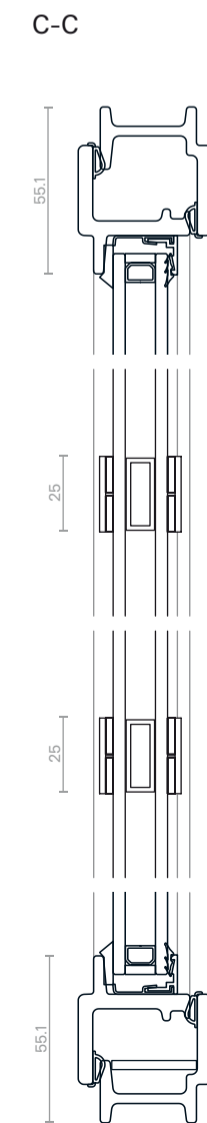
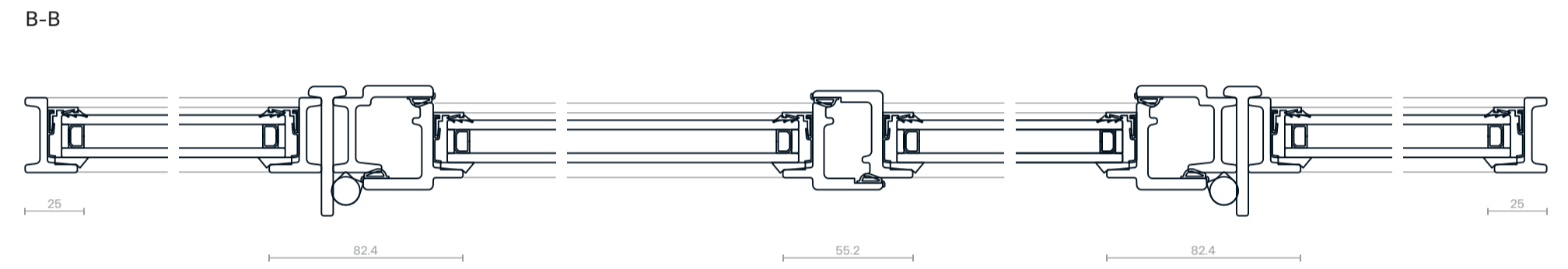
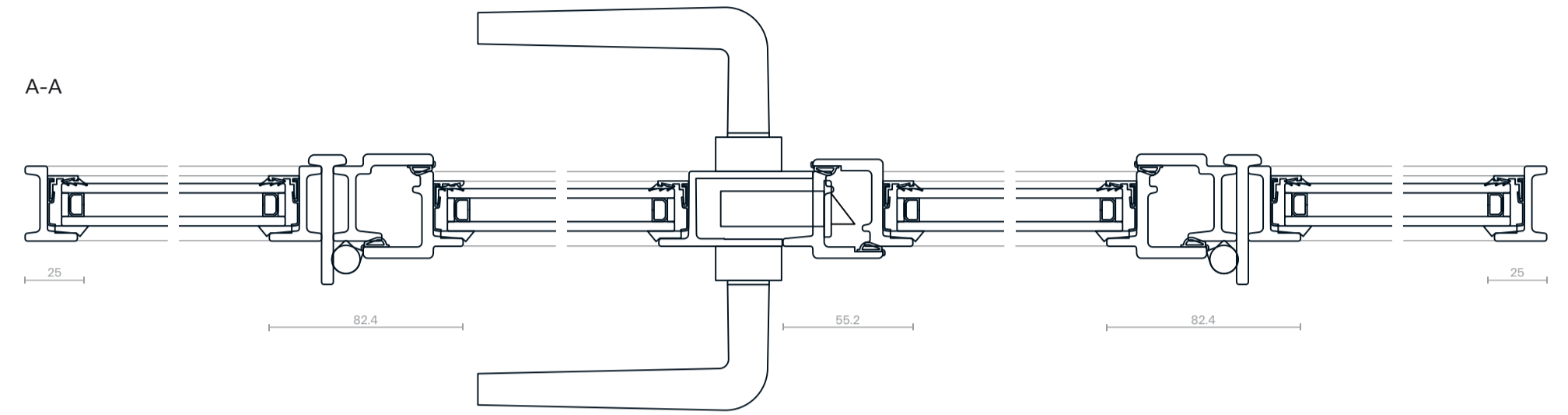
Outward-opening door
TDL mullion

Perla
Slimline Steel G1
Example Drawings



Outward-opening door
SDL mullion

Perla
Slimline Steel G1
Example Drawings



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