

system 8000 partitioning

technical and construction data

System 8000 introduction

System 8000

The components are designed to construct glazed partition walls with minimalist framework free from inter-panel joint trims. The overall thickness of the single glazed system is 33mm, with extruded aluminium profiles available as either satin silver anodised grade AA5 or polyester powder coated to a range of colours.

Elevations can be designed as either straight lines, faceted or curved with framework formed to suit.

System 8000 will be constructed with variable panel widths. The glass thickness used will be dependant on many factors, but generally will not be less than 10mm up to 2.5m overall height, 12mm between 2.5m and 3.0m overall height. Construction heights beyond 3.0m can be accommodated but further advice should be sought from the glazing contractor.

Doors are incorporated as side hung in either glass framed or unframed, or as timber framed leaves installed within door frames. Alternatively doors can be installed to slide aside with a track mounted onto the glass wall or ceiling.

Fire performance

The installed system does not offer fire resistance and cannot be used where this is a performance requirement.

Acoustic performance

The acoustic performance through the panel (panel only, not the whole construction) is suggested to be in the vicinity of 35–38dB but will vary dependant upon glass thickness used.

If performance for either fire resistance or higher levels of sound attenuation is a requirement, please refer to our other partition systems where these criteria are available options.

contents

technical specifications	2
method of build	4
setting out for door frames	5
recommended fixings	5
typical construction detail drawings (1:1)	7

System 8000 single glazed technical specifications

(Aluminium extrusions and accessories for frameless glazed partition systems)

Standards

System 8000 is an internal partitioning system for non-load-bearing walls, and as such complies with current Building Regulations, Fire Protection Acts and Health and Safety Regulations including glass and glazing.

The system is not marketed as performance partitioning, if this is a requirement then please refer to our other partition system information. It must be constructed in accordance with company recommendations as detailed.

Limitations

System 8000 is unsuitable for use in areas subject to continuous damp or humid conditions, unless seals have been approved in writing.

Whilst every effort is made during manufacture to maintain uniformity of colours of painted surfaces of profiles, there may be slight variations, particularly if sourced over significant time periods. SAS International is therefore unable to guarantee exact matching beyond paint powder and other manufacturers' limitations.

The stock hardwood veneered products we provide are 'off the shelf, mass produced components' and as such are priced accordingly. We will not be responsible for matching beyond the limit of the stock available, if in our judgement a match is indeed possible. If it is a requirement for the components to match then an enquiry should be made for bespoke materials, which will be priced on application, and lead-time advised.

It should also be noted that new material would never be the same colour as an existing installation or an aged sample.

Mismatches are not a valid reason for replacement, reimbursement or return.

Handling and storage

SAS International fully accepts its responsibilities as a supplier of building materials and systems as required by the Health and Safety at Work Act 1974. The designer should take full account of relevant regulations, and the contractor should ensure that all packaging notes are adhered to and that all materials are stored and used on site to avoid damage.

Content

The data in this publication is correct at the time of going to press. However, SAS International reserves the right to amend specifications without prior notification in accordance with our policy of continuous development.

Manufacturing

The fabrication of the aluminium profiles, polyester powder coating of aluminium components and secondary operations carried out to timber door leaves, are all performed at our manufacturing facility, under a Quality Management System which conforms with the requirements of BS EN ISO 9001 : 2008. Certificate no. FM 54954.

Fire resistance

SAS System 8000 has not been tested for fire resistance.

Acoustic performance

SAS System 8000 has not been tested for acoustic performance.

Structural stability

SAS System 8000 has been tested for structural stability to BS 5234: Part 2: 1992, annexes C, E & G and under these sections achieved results which were equivalent to those required for general office accommodation.

Extruded aluminium sections

Alloy grade 6063, T6 condition, conforms to BS EN 515 (1993) Aluminium and aluminium alloys. Wrought temper products. Temper designations.

Anodising

Grade AA5 (5 micron film thickness), conforms to BS EN 12373 – 1 (2001) Aluminium and its alloys. Method for specifying decorative and protective anodic oxidation coatings on aluminium.

Polyester powder coating

Aluminium finishing conforms to BS EN 12206-1 2004 Paints and Varnishes – Coating of aluminium and aluminium alloys for architectural purposes – Part 1 : Coatings prepared from coating powder (replaces BS6496 (1984)).

Minimum film thickness: 60 microns.

Door leaves

System 8000 can accommodate doors, either side hung or sliding, framed in either glass or timber or frameless in glass. Any requirement for doors will be addressed subject to specific requirements.

Glass & glazing sections

System 8000 single glazed is designed to accommodate glass with thickness up to 15mm. The thickness used will be determined by the overall height and general configuration of the partition. In general the glass thickness will not be less than:

- Up to 2.5m %all height 10mm
- 2.5m to 3.0m %all height 12mm
- 3.0m to 3.5m %all height 15mm

10mm and 12mm glass is retained within the profiles with a clear flexible pvc gasket. 15mm glass would be retained with silicone.

Approximate weights of glass:

- 10.0mm 25kg/m²
- 12.0mm 30kg/m²
- 15.0mm 37kg/m²

Glass installed must conform to:

BS6206 (1981) Specification for impact performance requirements for flat safety glass and safety plastics for use in buildings.

BS6262 – 4 (1994) Glazing for buildings. Safety related to human impact.

Building Regulations Approved Document N – Glazing – safety in relation to impact, opening and cleaning.

Large areas of transparent glass in non domestic applications will require manifestation which should conform to current Building Regulations and Approved Document N and Approved Document M.

Electrical

In accordance with BS7671 (1992), Amendment No. 2 1997, electrical wiring at a depth of less than 50mm from the surfaces of the wall or partition, should be installed within 150mm of the top of the wall or partition, or within 150mm of an angle formed by two adjoining walls or partitions. Where the cable is connected to a point, accessory or switch-gear on the wall or partition, the cable may be installed outside these zones only in a straight run either horizontally or vertically, to the point, accessory or switch-gear.

Where compliance with this regulation is impractical, the cable shall incorporate an earthed metallic covering which complies with the regulations for a protective conductor of the circuit concerned, or shall be enclosed in an earthed conduit, trunking or ducting satisfying the requirements of the regulations for a protective conductor, or by mechanical protection sufficient to prevent penetration of the cable by nails, screws and the like, or be of insulated concentric construction.

Environmental

SAS International Apollo Park, operates an Environmental Management System conforming to ISO 14001 : 2004, BSI Certification No. EMS 508066.

Please where possible recycle any waste or surplus materials or alternatively ensure they are disposed of responsibly.

System 8000

Method of build

SINGLE GLAZED

The method of construction will be dependant upon the adjoining construction, whether the total extent is to be glazed, or includes walls of solid stud and plasterboard construction on to which the glazed walls adjoin.

There is a range of glazing adaptors for other SAS partition systems which allow a ready interface between glazed and solid constructions.

The following assumes a wholly glazed construction, any adaptors used at interfaces would replace head channel used at abutments.

All fixing screws used in the installation of System 8000 should have countersunk heads and be fully recessed to avoid contact with the glass.

- 1 Accurately mark out the partition layout.
- 2 Cut the head channel as necessary and fix to the ceiling using suitable screws, on the line of the partition, with fixings positioned max. 150mm from each end and at max. 600mm centres.

Corner junctions are formed by cutting head channel sections to bisect the angle of the corner, using head channel connectors to align the sections and then firmly fixing in place. As an alternative preformed and welded corner sections can be used.

For three-way junctions the head channel sections abut one another, but it will be necessary to notch the head channel for the main partition run to allow the glass joint to be formed when the glass is installed. As an alternative preformed and welded three-way junctions can be used.

If the installation includes full height glass door leaves, prior to fixing the head channel, storey height glass door pivot blocks should be fitted within the head channel in the approximate position of any door leaves. Final positioning is completed as the doors are installed.

- 3 A further length of head channel is cut to fit neatly between the head channel and the floor, and fixed with screws at 600mm centres to the wall at the starting position, ensuring the post is plumb.

Base profiles:

There are currently 3 options for the profiles at the base, as follows:

- a) An angle (nominally 25 x 25mm) which is commonly used when the floor covering is carpet tile, the carpet tiles are cut to fit into the side of the angles leaving the angles partly concealed upon completion. The angles are installed by screw fixing the tapered leg to the floor with suitable recessed countersunk fixings positioned at max. 600mm centres, with the angles located equally spaced about the partition centre line allowing for the appropriate glass thickness between. Only one of these angles should be in place when the glass is installed, the other is re-fixed afterwards, a fine bead of silicone mastic applied to the top of the angles to complete.
 - b) A 22 x 22mm channel profile which can be used with any floor covering type. The channel is installed by screw fixing the channel to the floor with suitable recessed countersunk fixings positioned at max. 600mm centres, with the channel located centred upon the partition centre line. Glass is installed by raising each pane up into the head channel, above the base channel and then lowering the glass into the base channel. The glass is retained by the clear pvc 'wedge' profile used in the other sections fitted at both sides of the glass.
 - c) A two part base profile which can be used with any floor covering type. The main profile is installed by screw fixing to the floor with suitable recessed countersunk fixings positioned at max. 600mm centres. The channel is located centred upon the partition centre line with the open side facing towards the side from which the glass will be installed. When the glass has been installed the base bead is fitted into base section with the glass retained by the clear pvc 'wedge' profile used in the other sections fitted at both sides of the glass.
- 4 Using a plumb line from the head track mark the position of the base sections and fix lengths of the selected profile to the floor with suitable fixings positioned max. 150mm from each end and at max. 600mm centres, omitting the profiles at door openings.

Doors

Doors incorporated into the partition can be side hung, in either glass unframed or framed, or as timber leaves installed within door frames. Alternatively doors can be installed to slide aside with a track mounted onto the glass wall or ceiling.

Framed doors can be installed into aluminium frames from System 3000, System 4000 or System 7000 using glazing adaptors, or into timber frames.

Door frames would always be installed with appropriate supporting construction as necessary.

The following assumes a wholly glazed construction without door frames.

- The profiles used at the base are omitted at all door openings.
- The storey height door pivot blocks, if used, are more accurately positioned within the door openings.
- For full height glass doors the head channel at the door opening should be capped using the head channel infill for storey height doors, which is cut to length and clipped into position.
- Sliding doors would generally be installed with a glazed panel over and the framing sections at the head remain the same for both the walls and door openings.

System 8000 will be constructed with variable panel widths but in all cases where head channel is used at wall abutments, a minimum of two panes or ideally three should be used in each run of partition.

The glass thickness used will be dependant on many factors, but generally will not be less than 10mm up to 2.5m overall height, 12mm between 2.5m and 3.0m overall height. Construction heights beyond 3.0m can be accommodated but further advice should be sought from the glass supplier.

Glass retention

When the glass is installed, glazing packers are used to ensure that glass to glass joints are plumb. The glass is retained by the clear PVC 'wedge' profile fitted at both sides of the glass.

Manifestation

It is most likely that 'frameless' transparent glass walls in non domestic buildings will require manifestation to comply with current Building Regulations, Approved Document N and Approved Document M.

Recommended fixings

Head channel / wall abutments and base profiles to structure

- Timber backgrounds – 32 x 5.0mm wood screws.
- Masonry backgrounds – 32 x 5.0mm wood screws and red plugs.
- Metal backgrounds – 38 x 4.0mm self tapping screws.

Drill sizes for pilot holes

To ensure that the fixings are secure, the correct size pilot hole should be drilled first.

- 4.0mm self tapping screws – 3.5mm ($\frac{9}{64}$ " HSS drill.
- 5.0mm wood screws (into timber) – 3.5mm ($\frac{9}{64}$ " HSS drill.
- 5.0mm wood screws and red plugs – 6.0mm masonry drill.

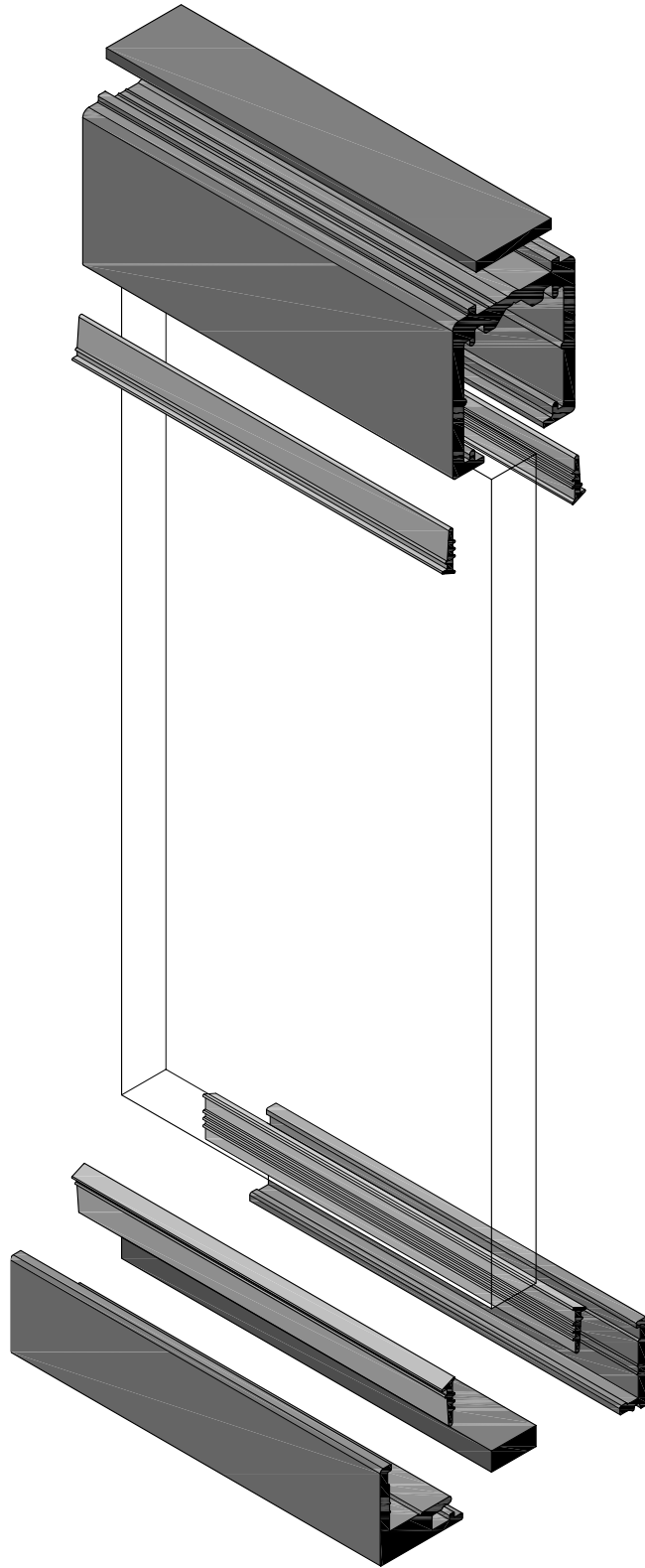
DOUBLE GLAZED

For details of double glazed construction please contact a member of the technical department

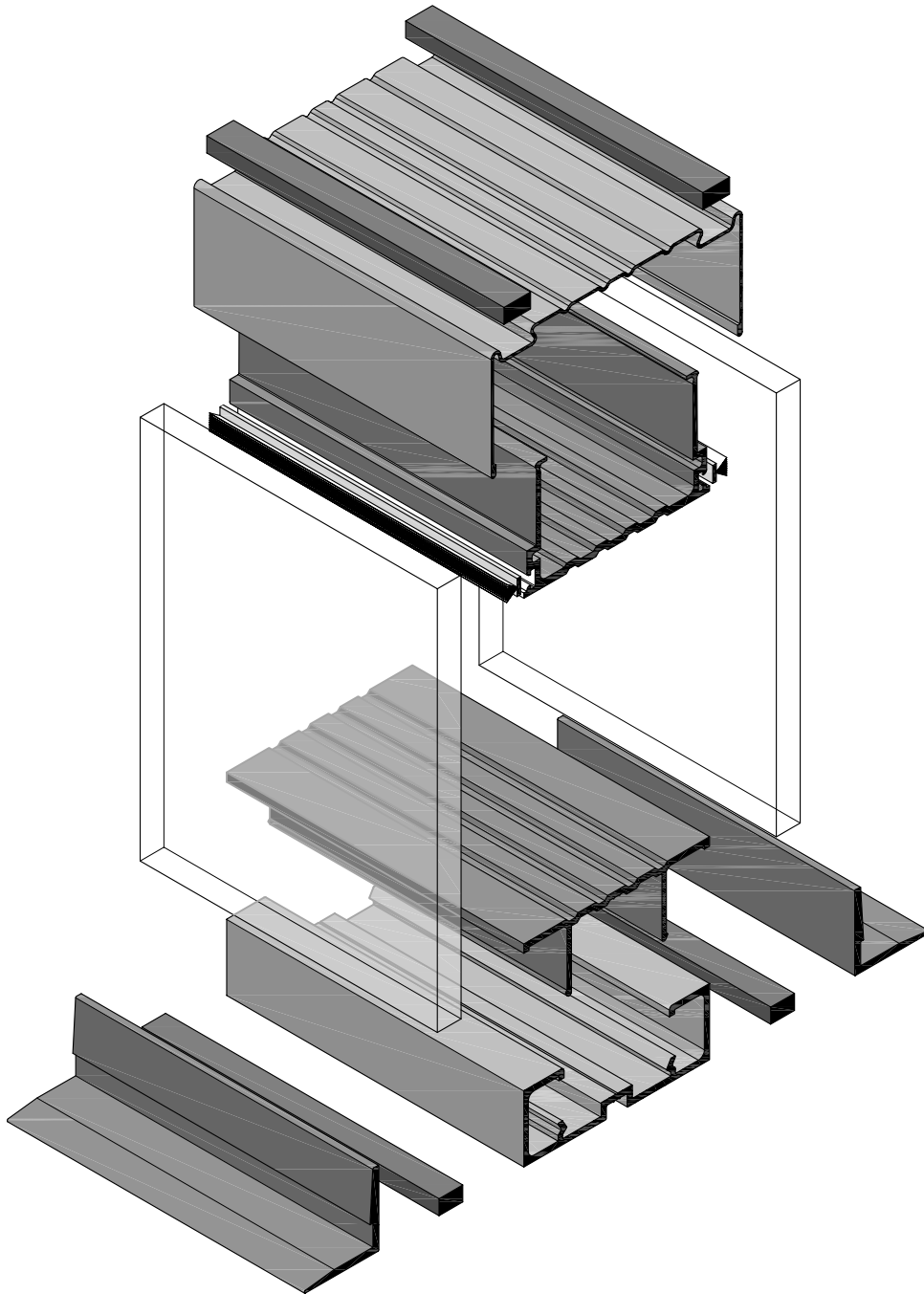
typical construction detail drawings

Name	No	Page
exploded view – full height single glazed		8
exploded view – full height double glazed		9
exploded view – full height double glazed with recessed skirting		10
head – frameless single glazing (38mm)	8101	11
head – frameless single glazing (32mm)	8102	12
head – double glazed	8206	13
base – frameless single glazing (two part)	8104	14
base – frameless single glazing (angles)	8103	15
base – frameless double glazing	8203	16
base – frameless double glazing (with blind)	8204	17
base – double glazed with recessed skirting	8202	18
mullion – frameless double glazing	8210	19
wall abutment – frameless single glazing	8111	20
dry wall – pocket adaptor (75mm)	8120	21
pocket adapter (system 7000)	8121	22
pocket adapter (system 3000)	8122	23
pocket adapter / system 3000 door frame	8123	24
pocket adapter (system 4000)	8124	25
pocket adaptor / system 4000 door frame	8125	26
S.A. doorset / double glazing (non-fire-rated)	8261	27
3 way post – double glazed / single glazed / solid	8197	28
90° corner post – double glazed / solid	8205	29
135° corner post – double glazed / solid	8215	30

system 8000 exploded view – full height single glazed

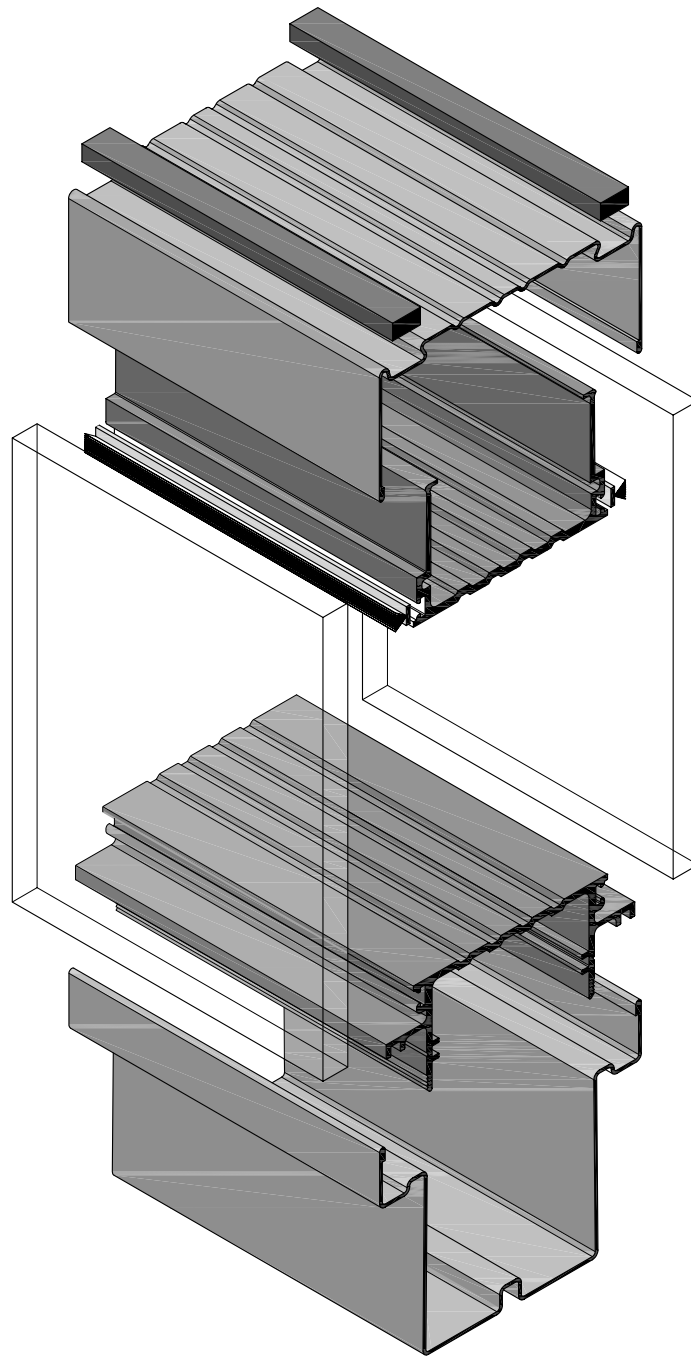


Drawing no: 8100



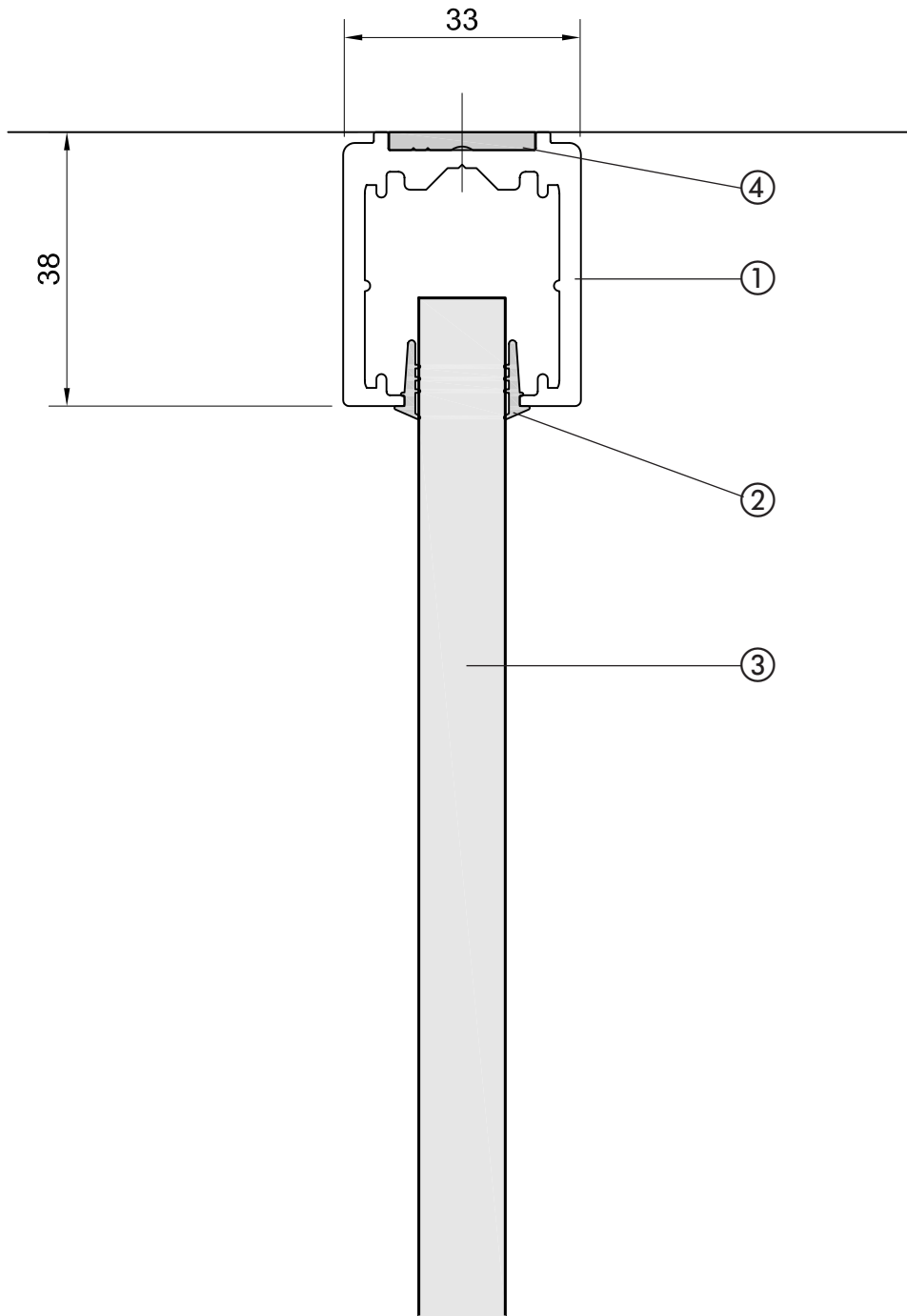
Drawing no: 8200

system 8000 exploded view – full height double glazed with recessed skirting detail



Drawing no: 8201

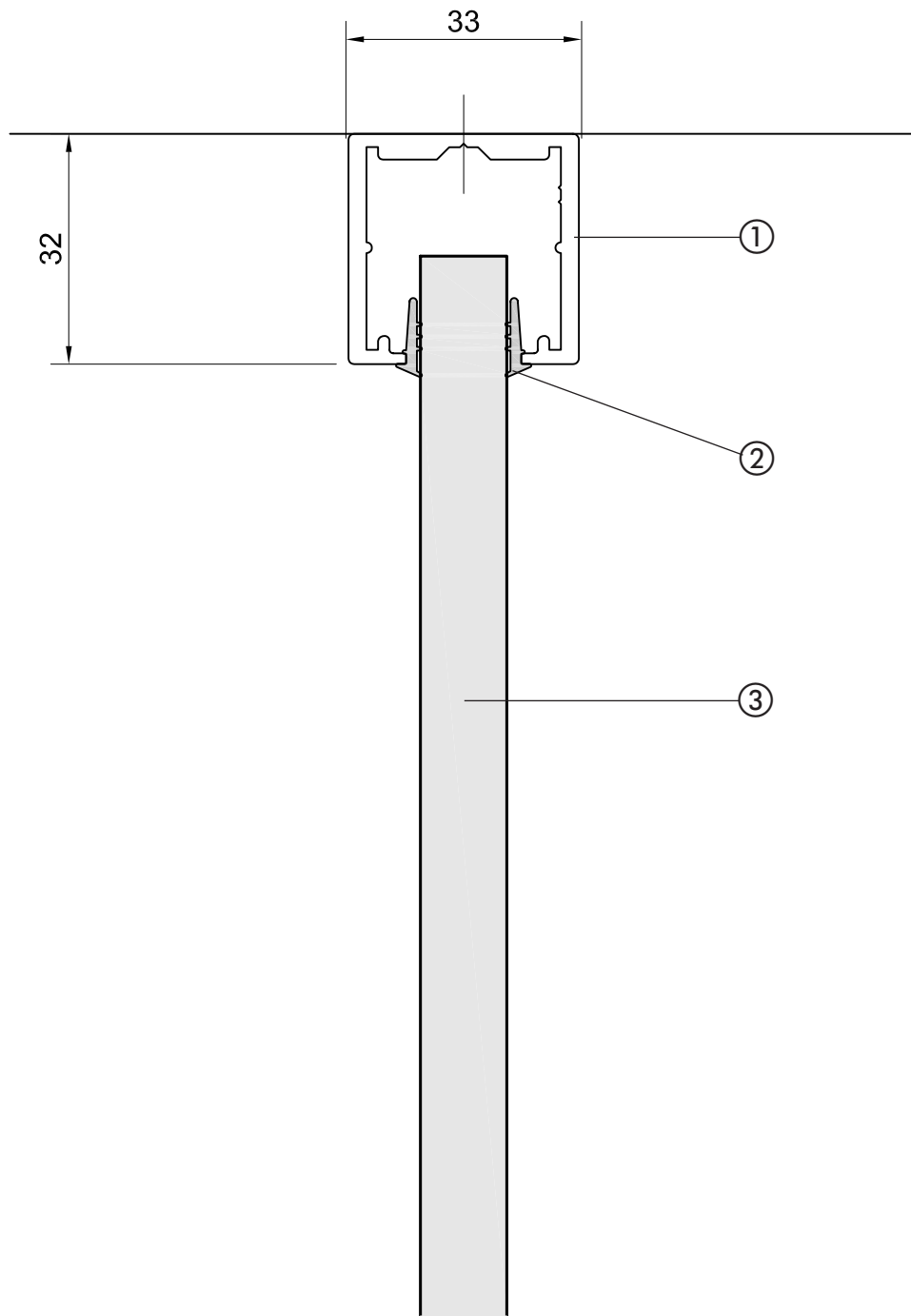
- 1) Frameless glazing head/abutment channel 38mm
- 2) Crystal clear wedge
- 3) Glass (10mm–12mm)
- 4) Foam gasket (optional)



system 8000 head – frameless single glazing (38mm)

8000 detail
Drawing no: 8101

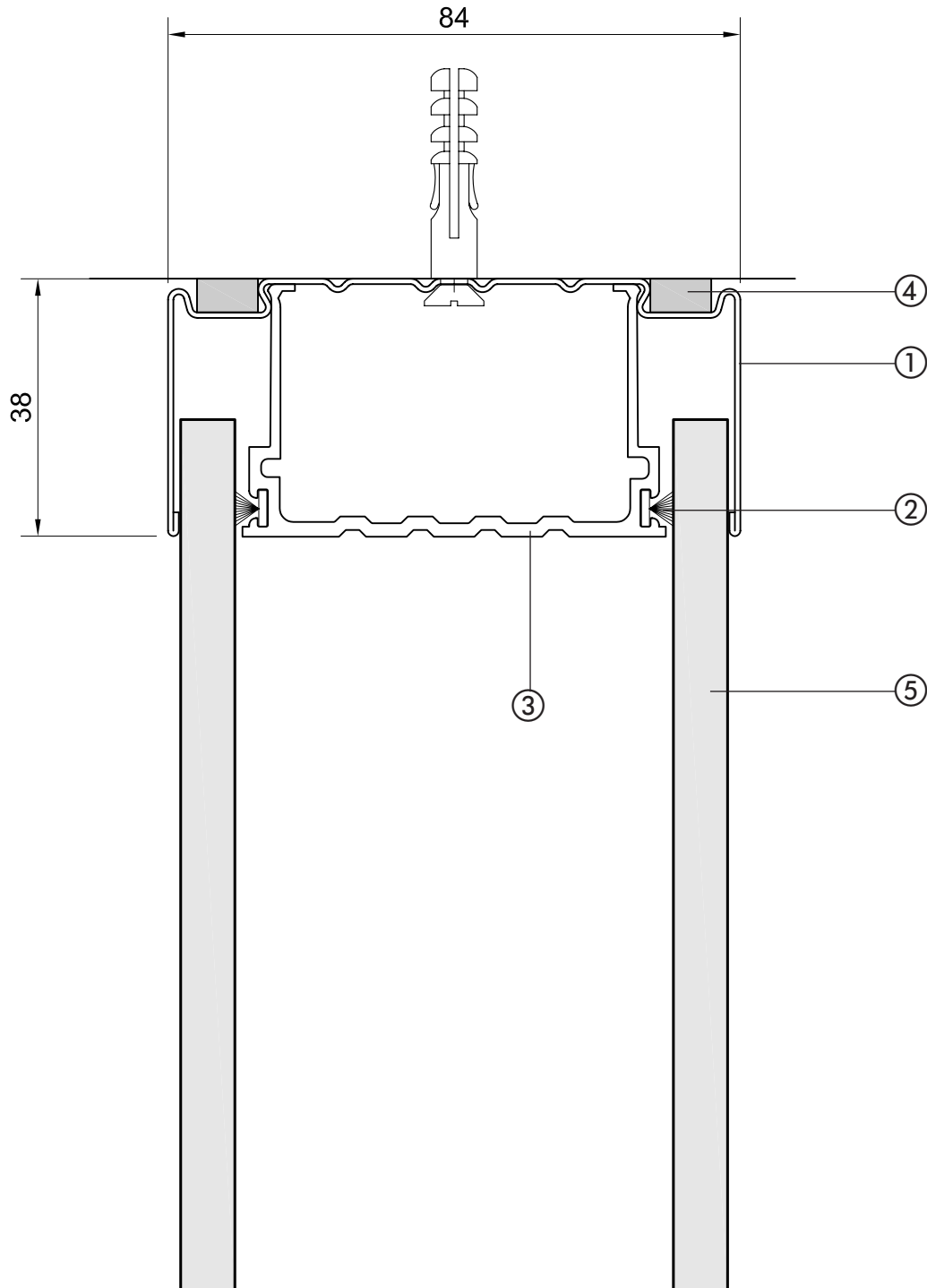
- 1) Frameless glazing head/abutment channel 32mm 2) Crystal clear wedge 3) Glass (10mm–12mm)



system 8000 head – frameless single glazing (32mm)

8000 detail
Drawing no: 8102

- 1) Head track 2) Brush seal 3) Double glazing head rail 4) Foam gasket (optional)
5) Glass (6mm+6mm, 6mm+8mm, 6mm+10mm, 8mm+8mm)

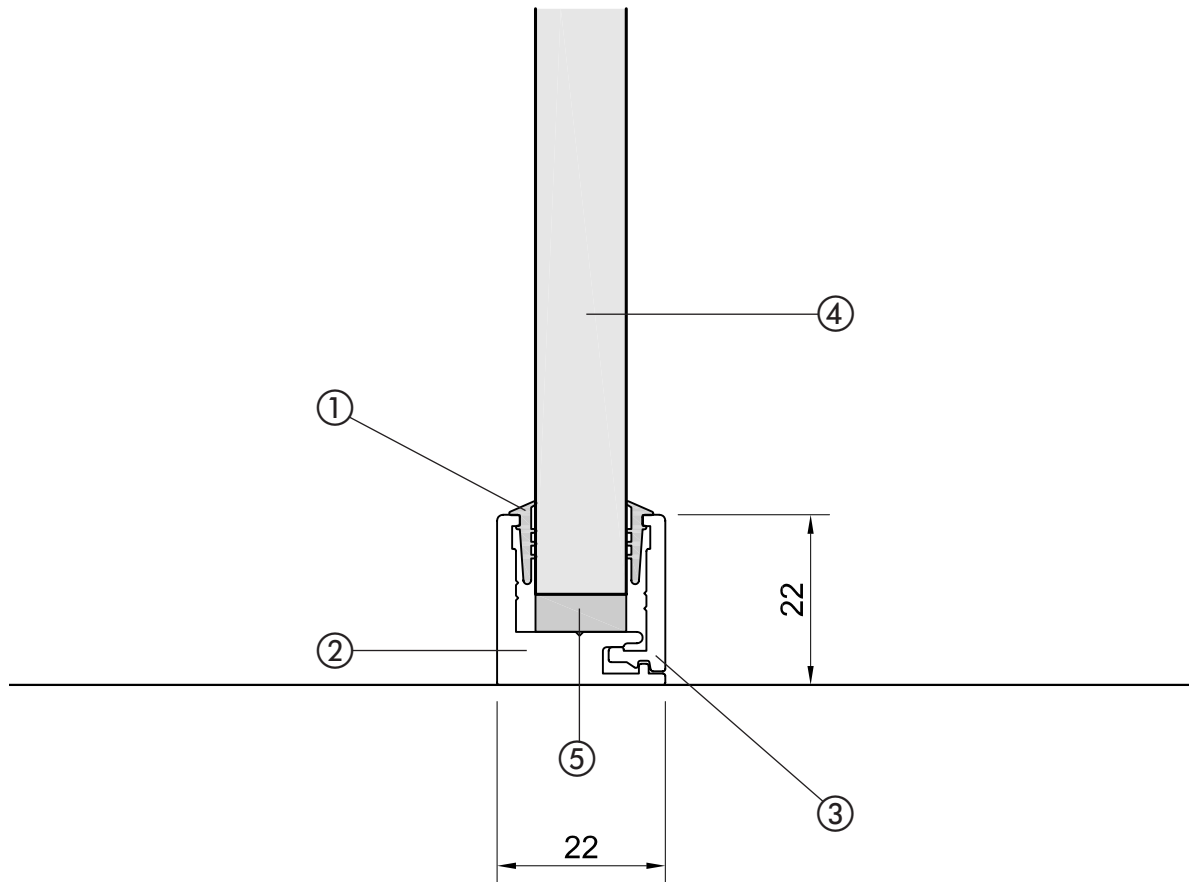


system 8000 head – double glazed

8000 detail
Drawing no: 8206

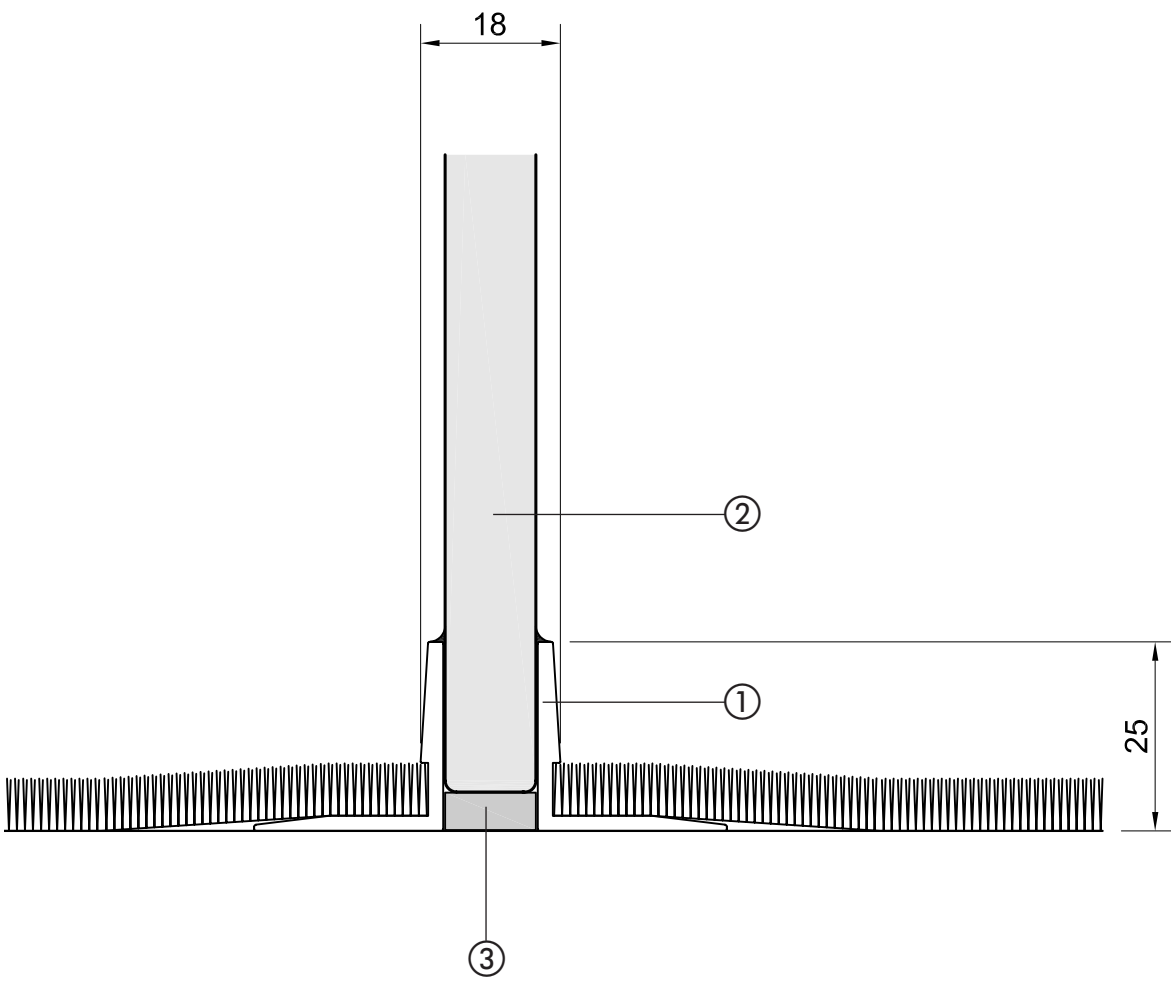
- 1) Crystal clear wedge 2) Two part base (main profile) 3) Two part base (clip-on section)
4) Glass (10mm–12mm) 5) Glazing block

system 8000 base – frameless single glazing (two part)



8000 detail
Drawing no: 8104

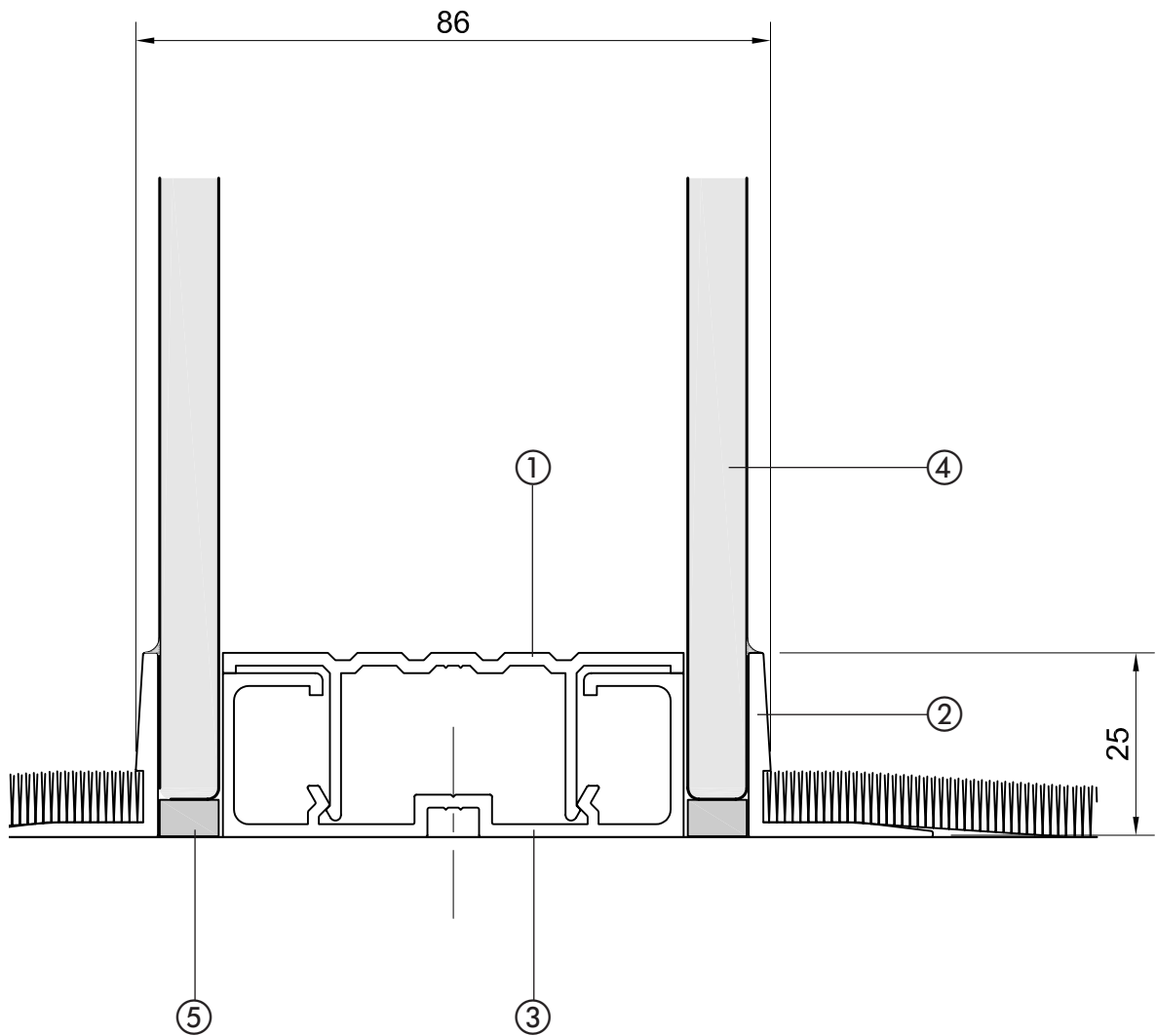
- 1) Frameless glazing base angle 2) Glass (10mm–12mm) 3) Glazing block



system 8000 base – frameless single glazing (angles)

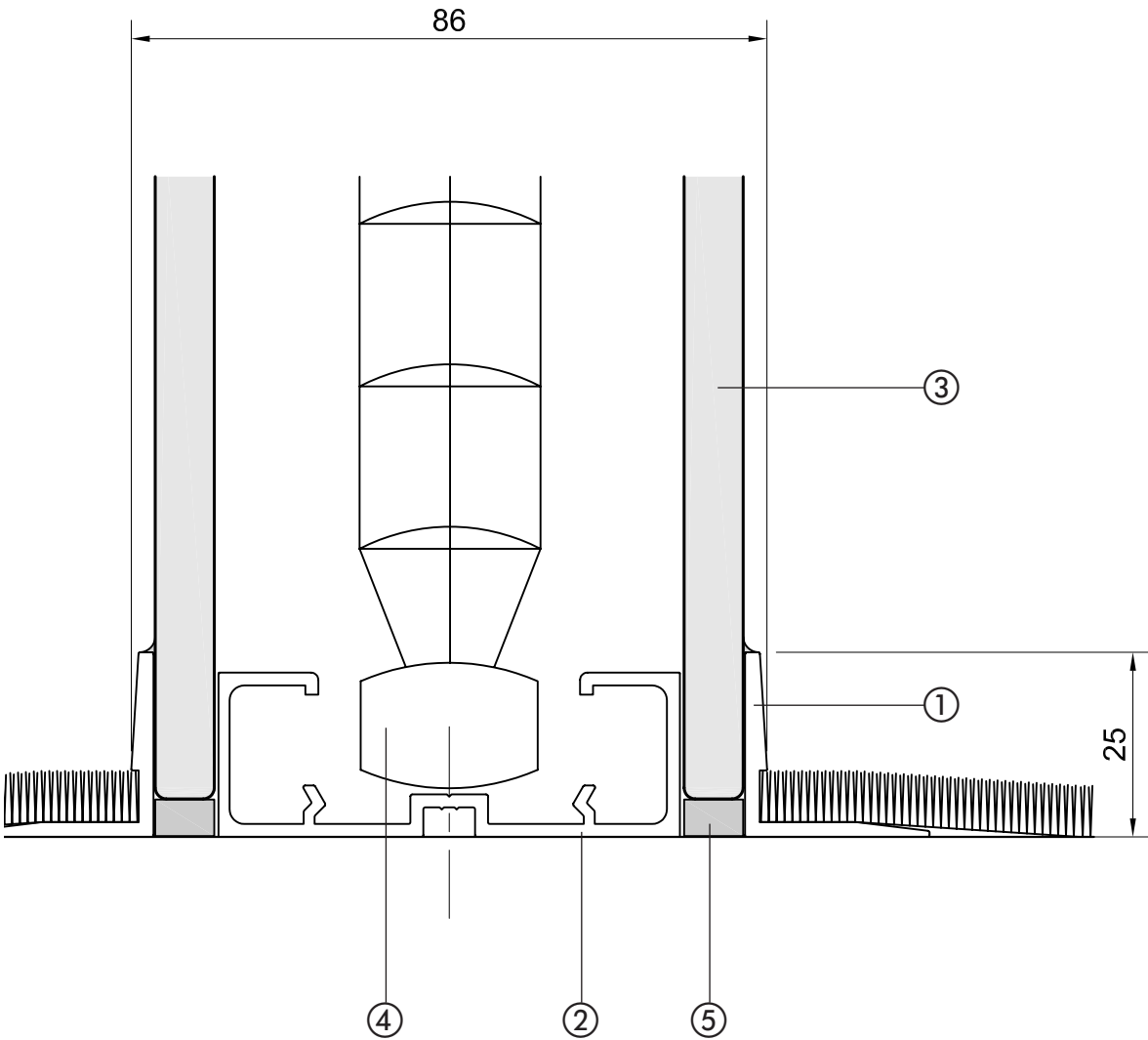
8000 detail
Drawing no: 8103

- 1) Frameless double glazing base insert
- 2) Frameless glazing base angle
- 3) Frameless double glazing base section
- 4) Glass (6mm+6mm, 6mm+8mm, 6mm+10mm, 8mm+8mm)
- 5) Glazing block



8000 detail
Drawing no: 8203

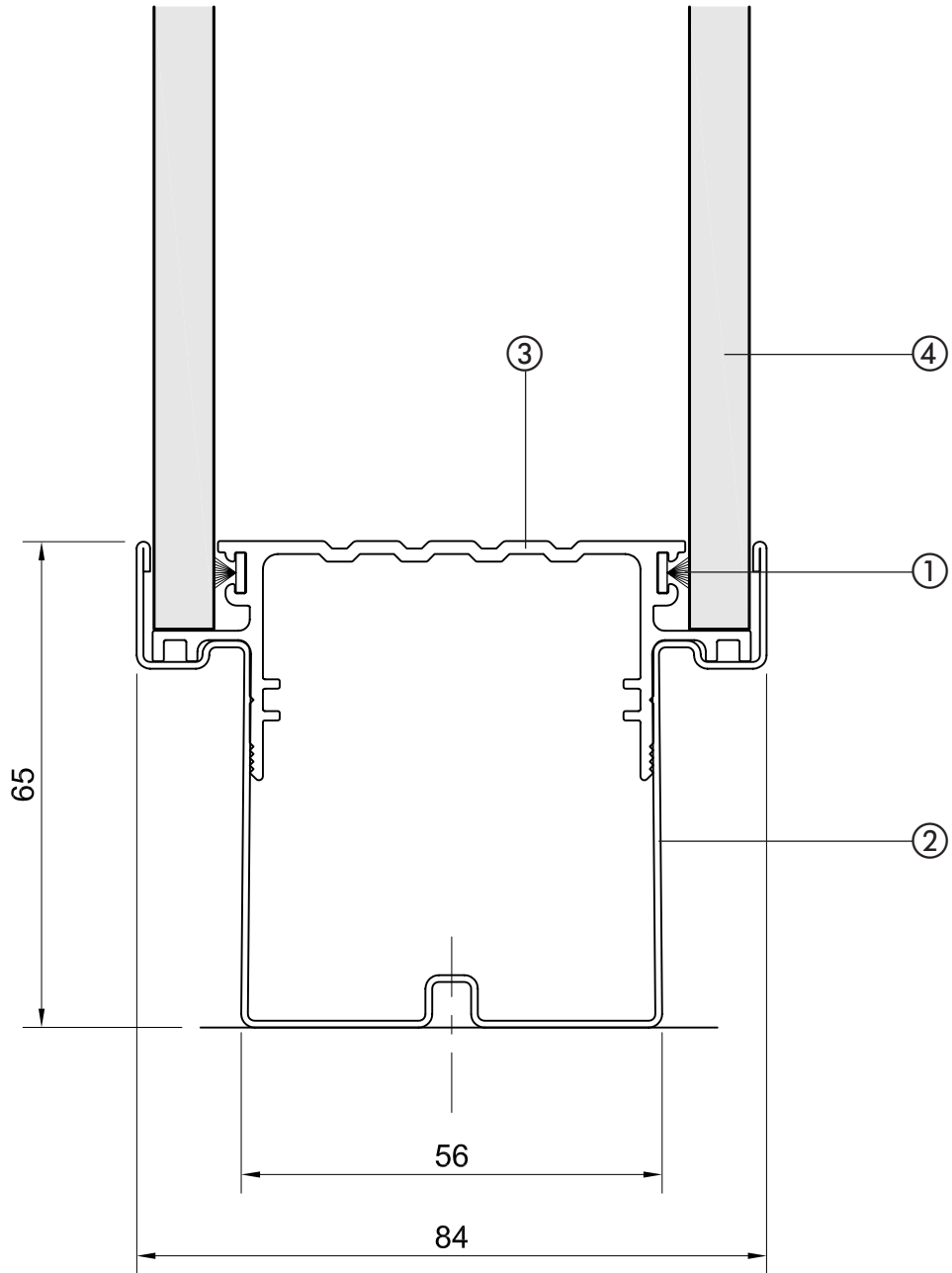
- 1) Frameless glazing base angle 2) Frameless double glazing base section
 3) Glass (6mm+6mm, 6mm+8mm, 6mm+10mm, 8mm+8mm) 4) Blind 5) Glazing block



system 8000 base – frameless double glazing (with blind)

8000 detail
Drawing no: 8204

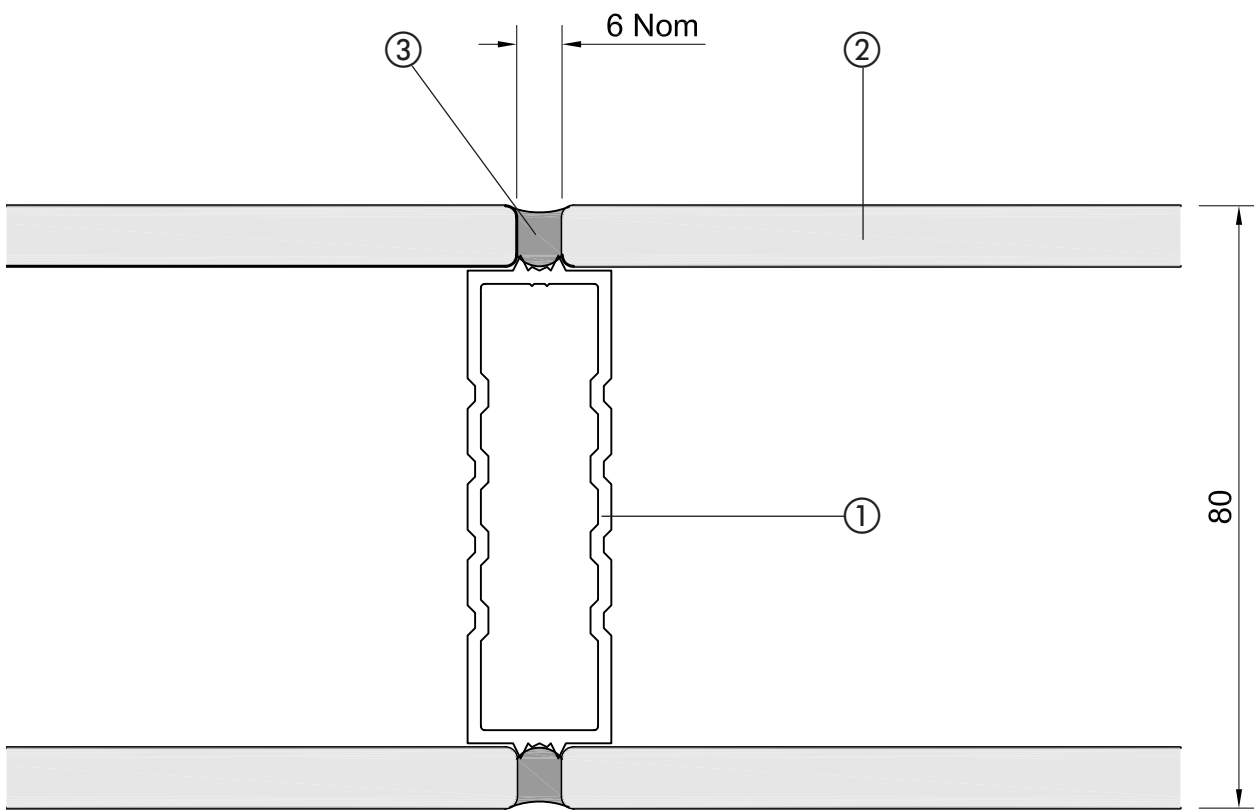
- 1) Brush seal 2) Skirting track 3) Double glazing base rail 4) Glass (6mm+6mm, 6mm+8mm)



system 8000 base – double glazed with recessed skirting

8000 detail
Drawing no: 8202

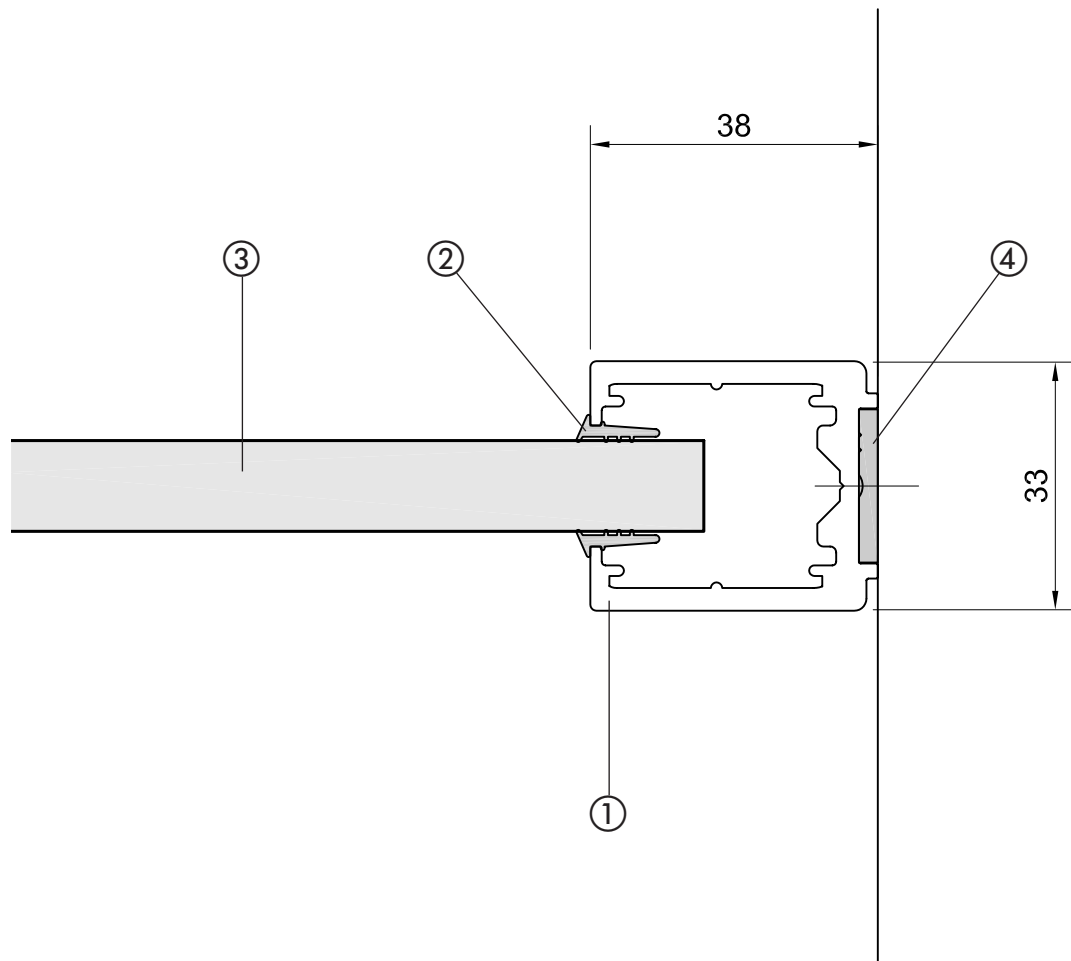
- 1) Frameless glazing mullion
- 2) Glass (6mm+6mm, 6mm+8mm, 6mm+10mm, 8mm+8mm)
- 3) Silicon joint



system 8000 mullion – frameless double glazing

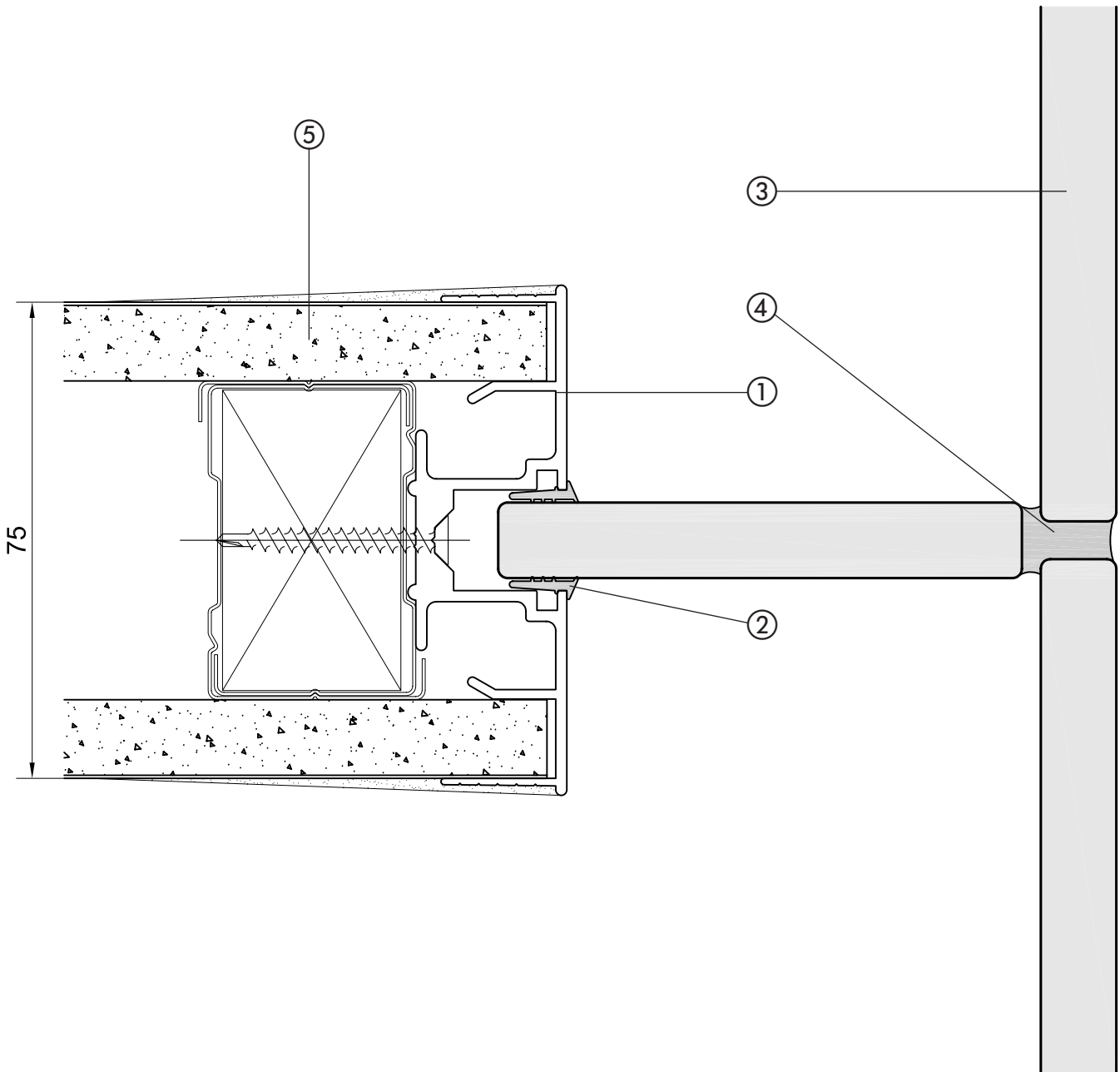
8000 detail
Drawing no: 8210

- 1) Frameless glazing head/abutment channel 38mm 2) Crystal clear wedge 3) Glass (10mm–12mm)
4) Foam gasket (optional)



8000 detail
Drawing no: 8111

- 1) Adaptor post – 75mm dry wall
- 2) Crystal clear wedge
- 3) Glass (10mm–12mm)
- 4) Silicon joint
- 5) Plasterboard



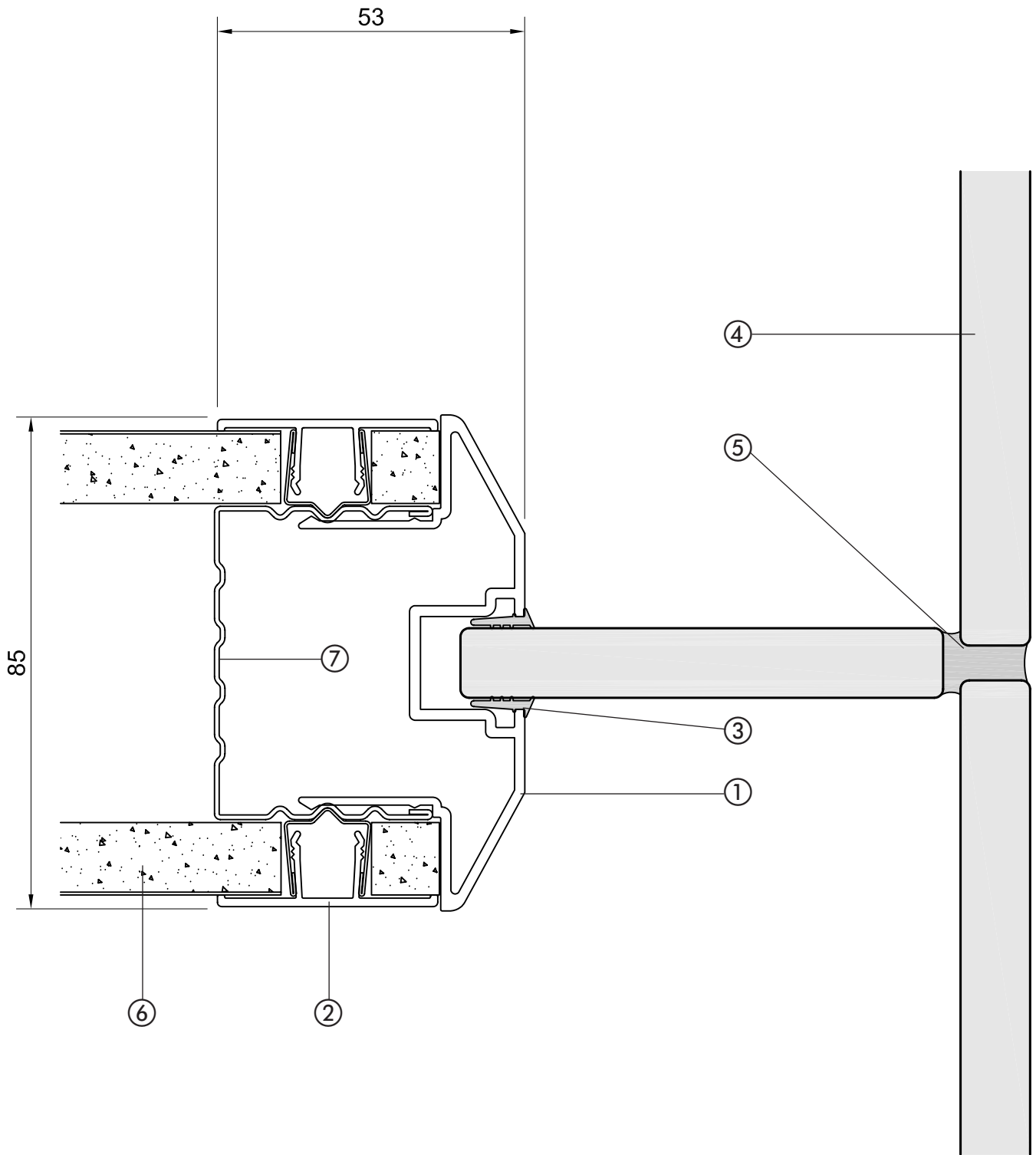
system 8000 dry wall – pocket adaptor (75mm)

8000 detail
Drawing no: 8120

1) Adaptor post – System 7000
4) Glass (10mm–12mm)

2) System 7000 flush cover trim
5) Silicon joint
6) Plasterboard

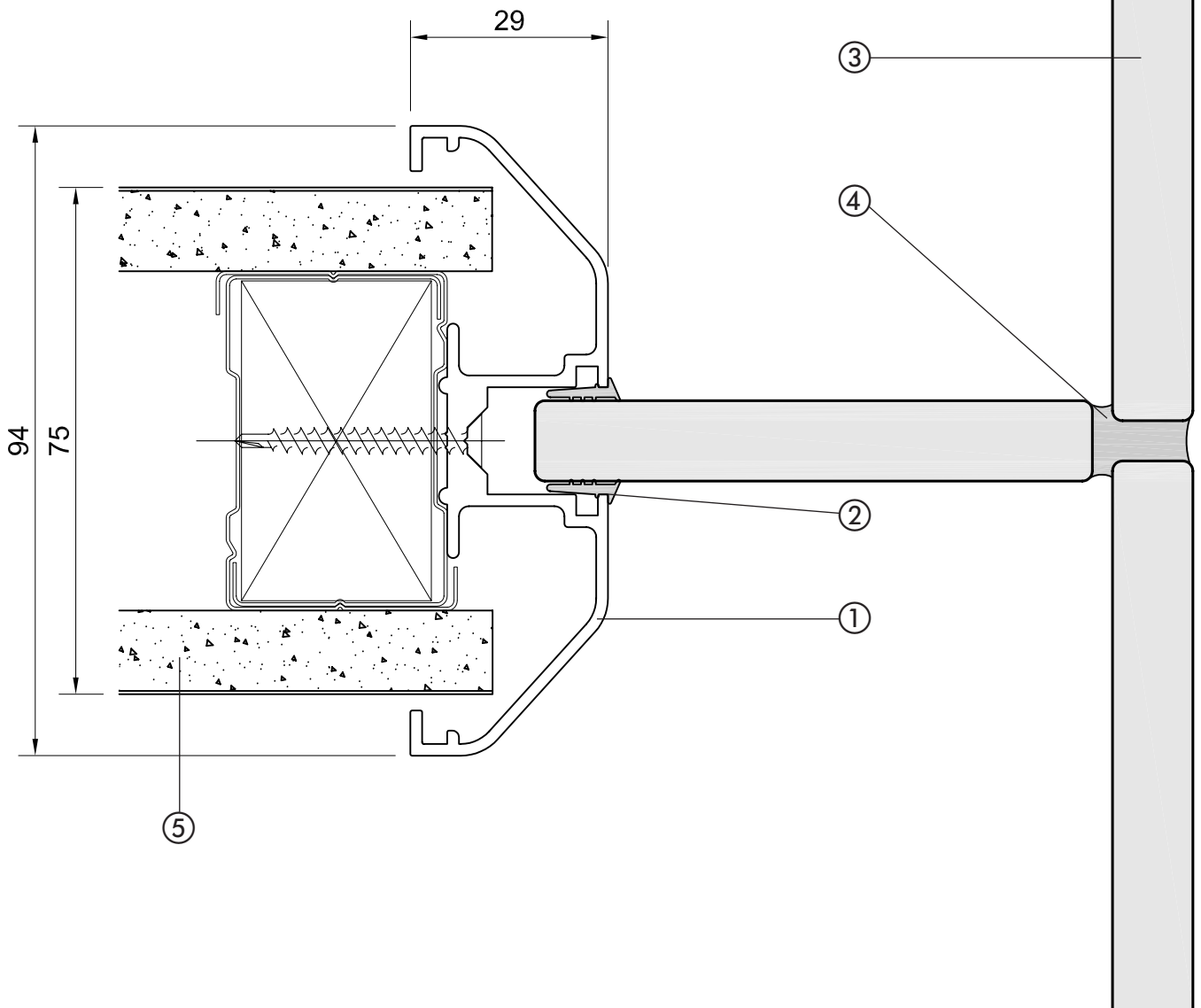
3) Crystal clear wedge
7) System 7000 stud



system 8000 – pocket adapter (system 7000)

8000 detail
Drawing no: 8121

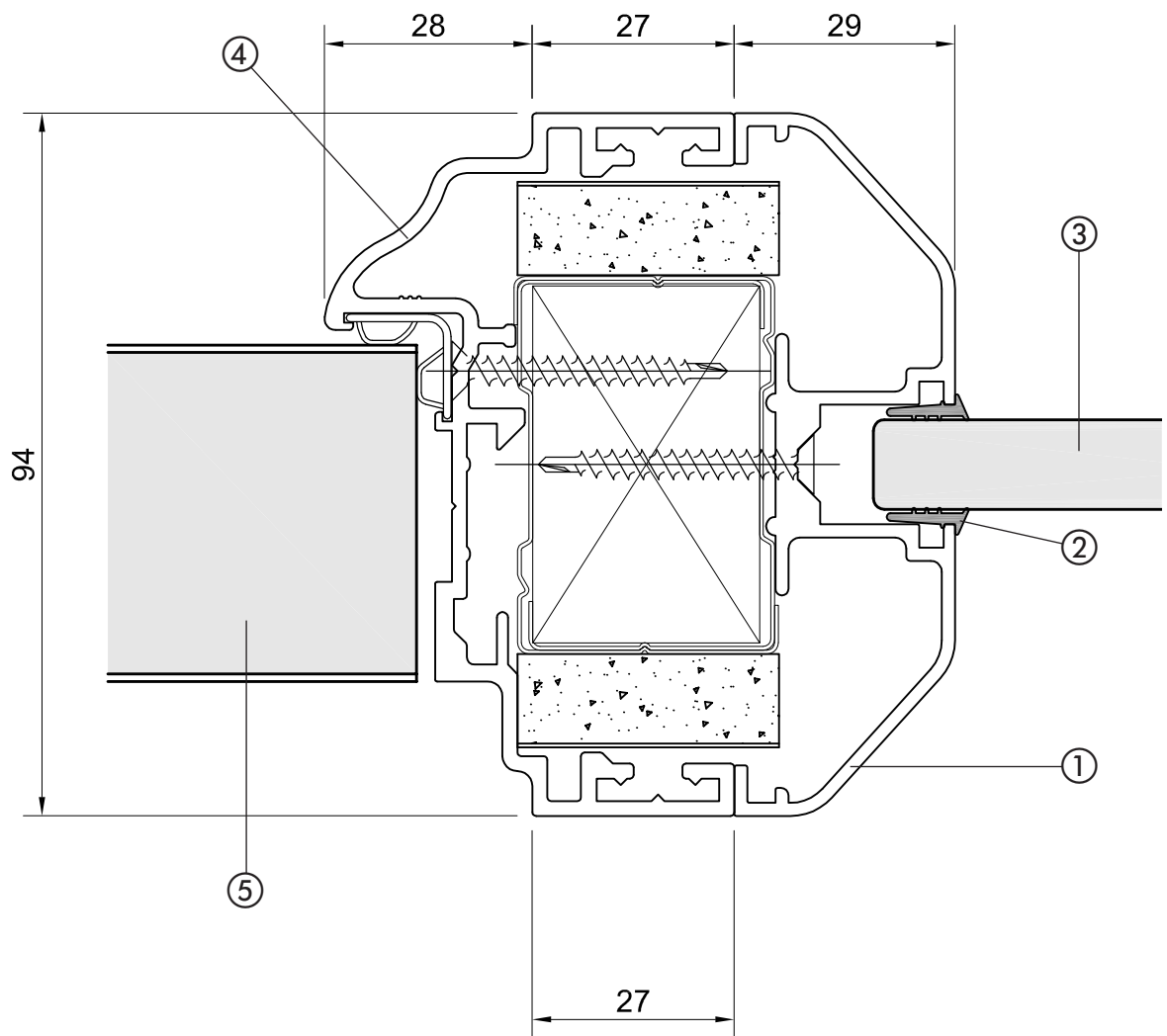
- 1) Adaptor post – System 3000
- 2) Crystal clear wedge
- 3) Glass (10mm–12mm)
- 4) Silicon joint
- 5) Plasterboard



system 8000 – pocket adapter (system 3000)

8000 detail
Drawing no: 8122

- 1) Adaptor post – System 3000
- 2) Crystal clear wedge
- 3) Glass (10mm–12mm)
- 4) System 3000 door frame
- 5) Door

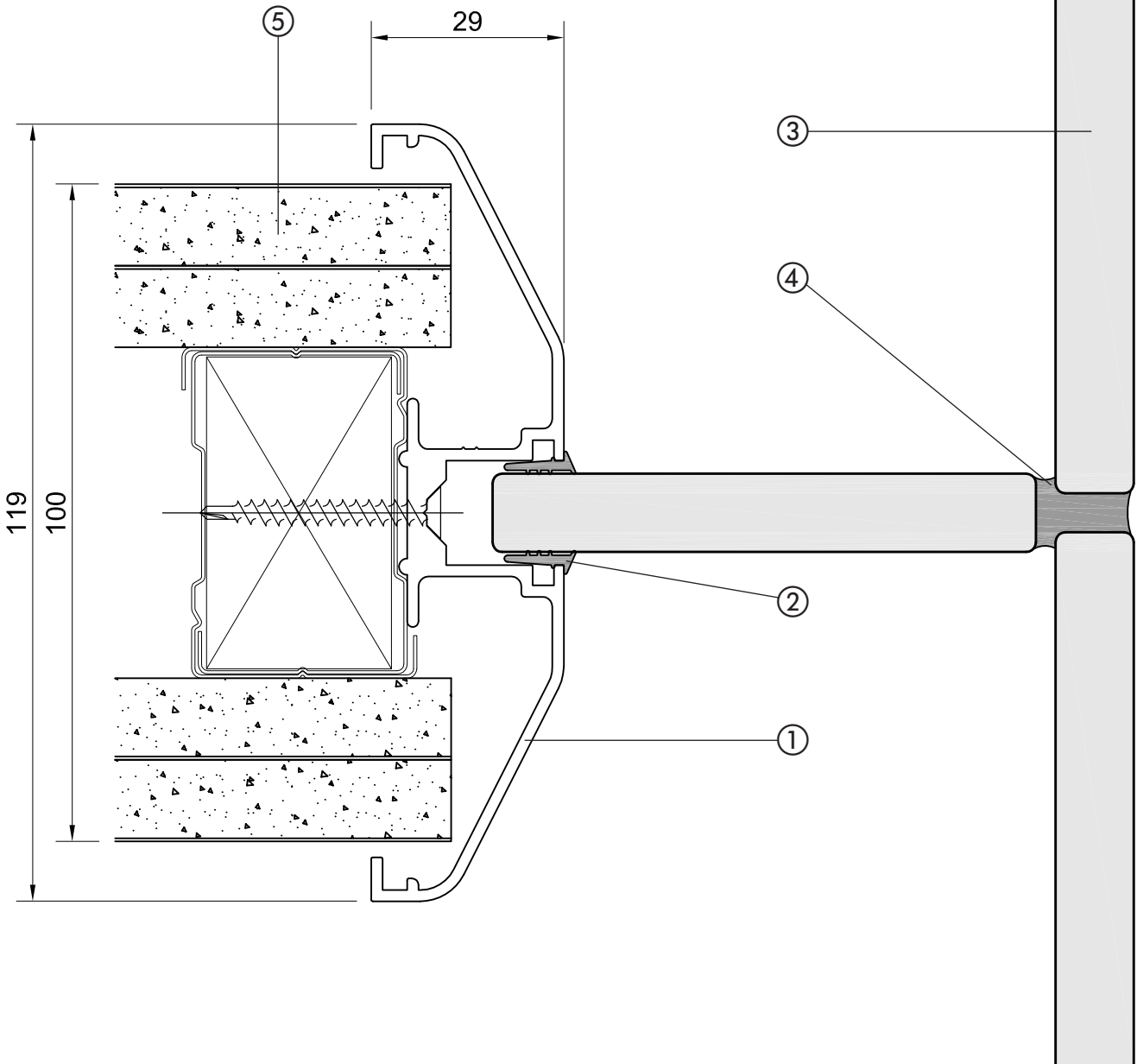


8000 detail
Drawing no: 8123

1) Adaptor post – System 4000
4) System 3000 door frame

2) Crystal clear wedge
5) Plasterboard

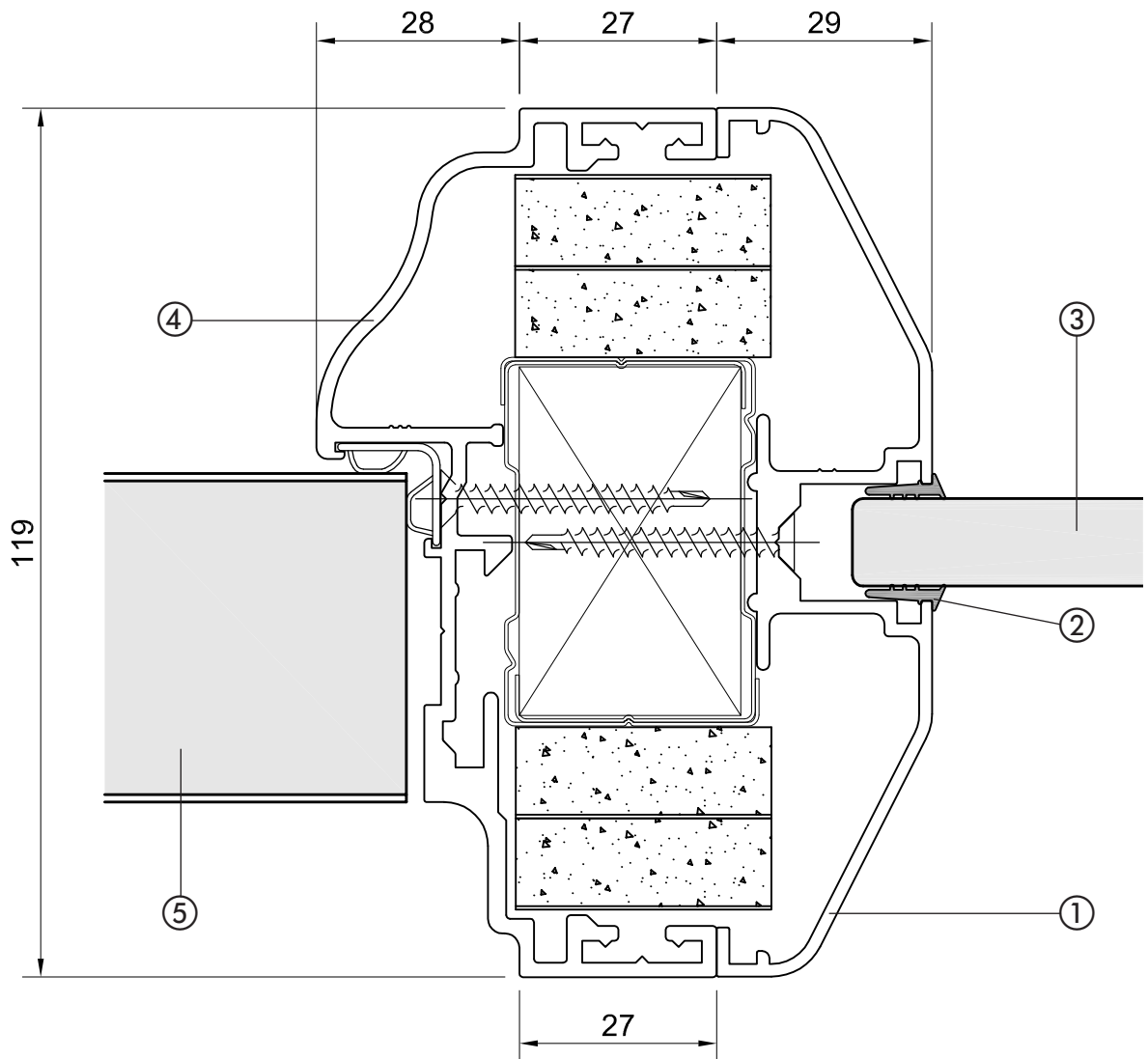
3) Glass (10mm–12mm)



system 8000 – pocket adapter (system 4000)

8000 detail
Drawing no: 8124

- 1) Adaptor post – System 4000 2) Crystal clear wedge 3) Glass (10mm–12mm)
- 4) System 4000 door frame 5) Door



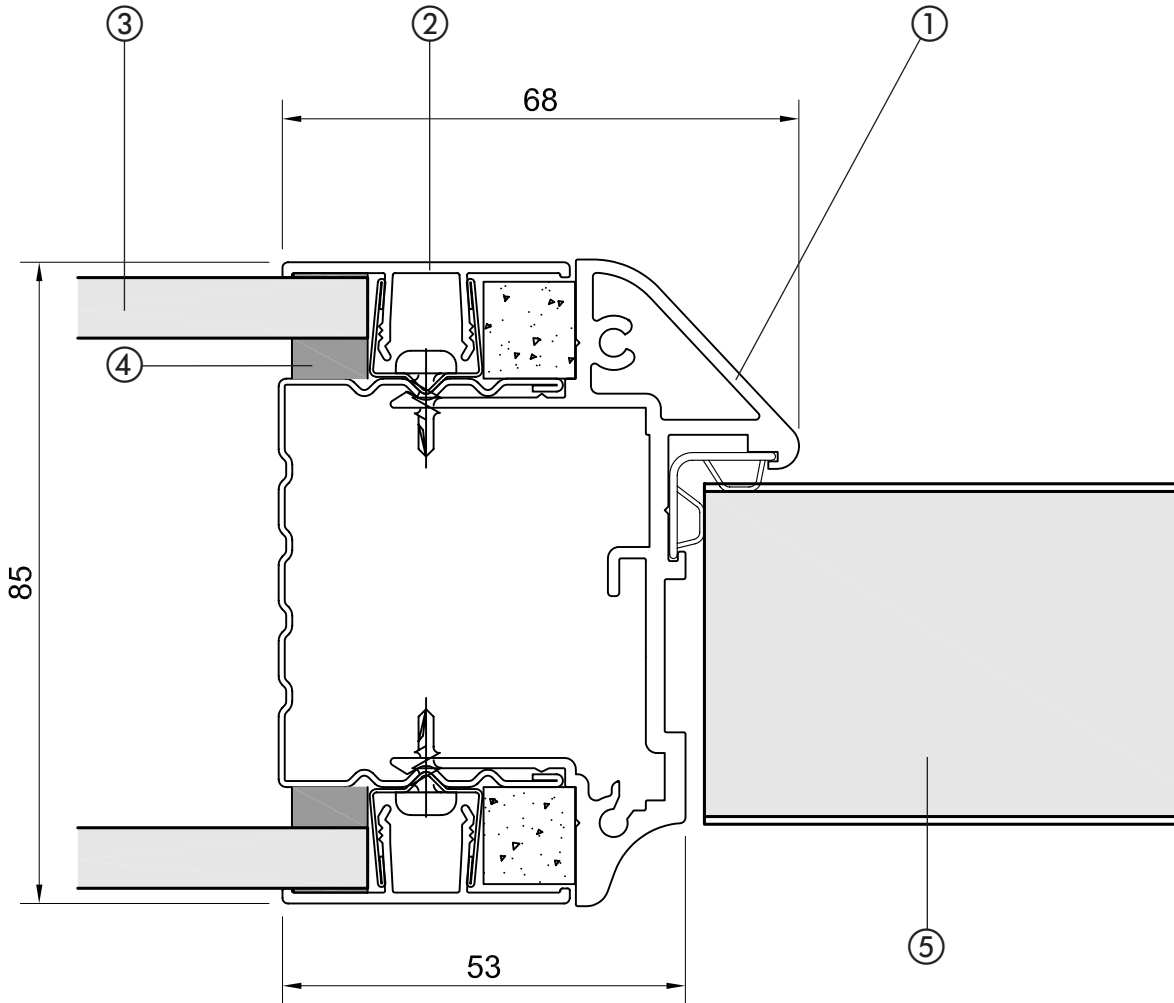
8000 detail
Drawing no: 8125

system 8000 – pocket adaptor / system 4000 door frame

- 1) Single action door frame
- 3) Glass (6mm+10mm, 8mm+8mm)

- 2) System 7000 flush cover trim
- 4) Foam gasket

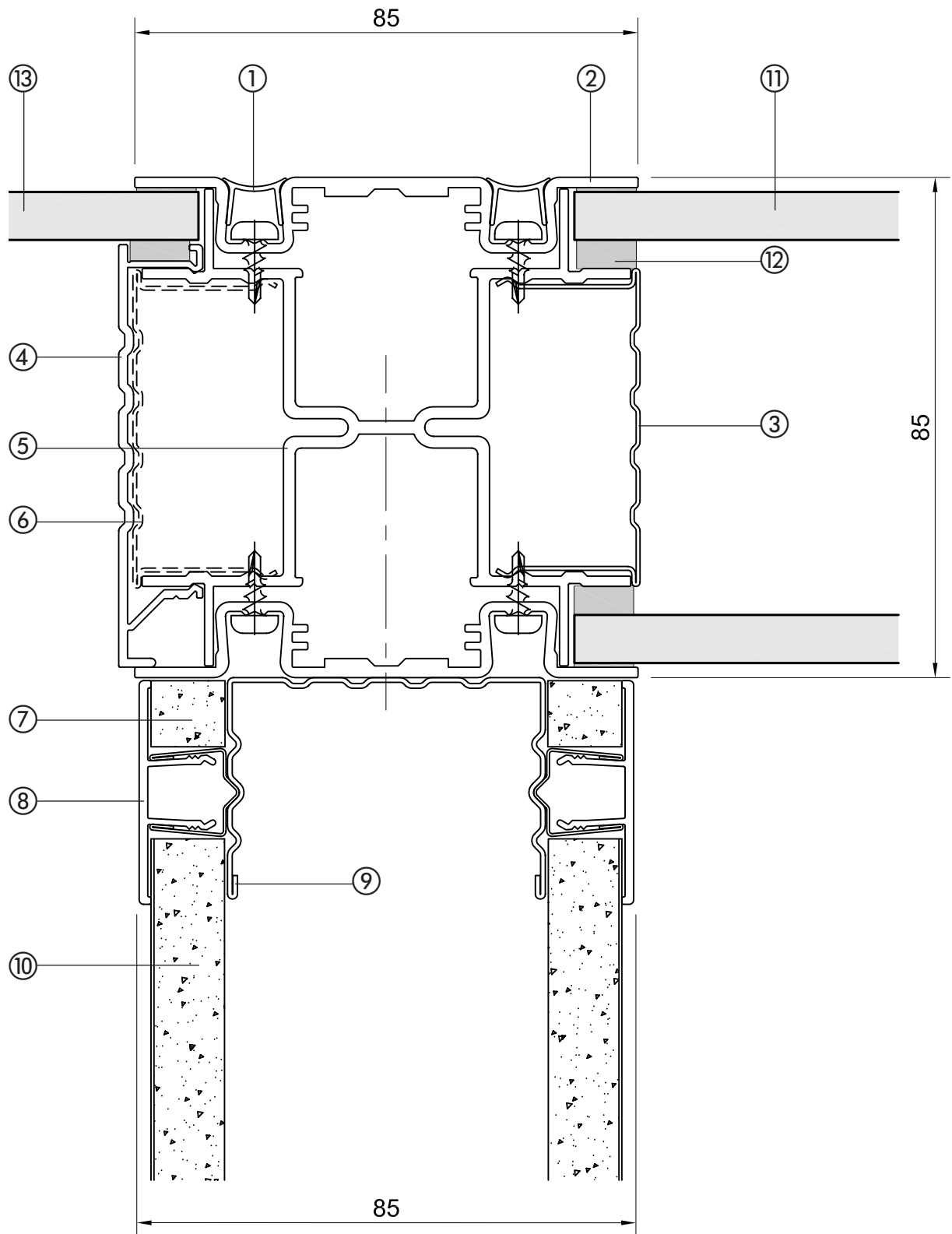
- 5) Door



system 8000 – S.A. doorset / double glazing (non-fire-rated)

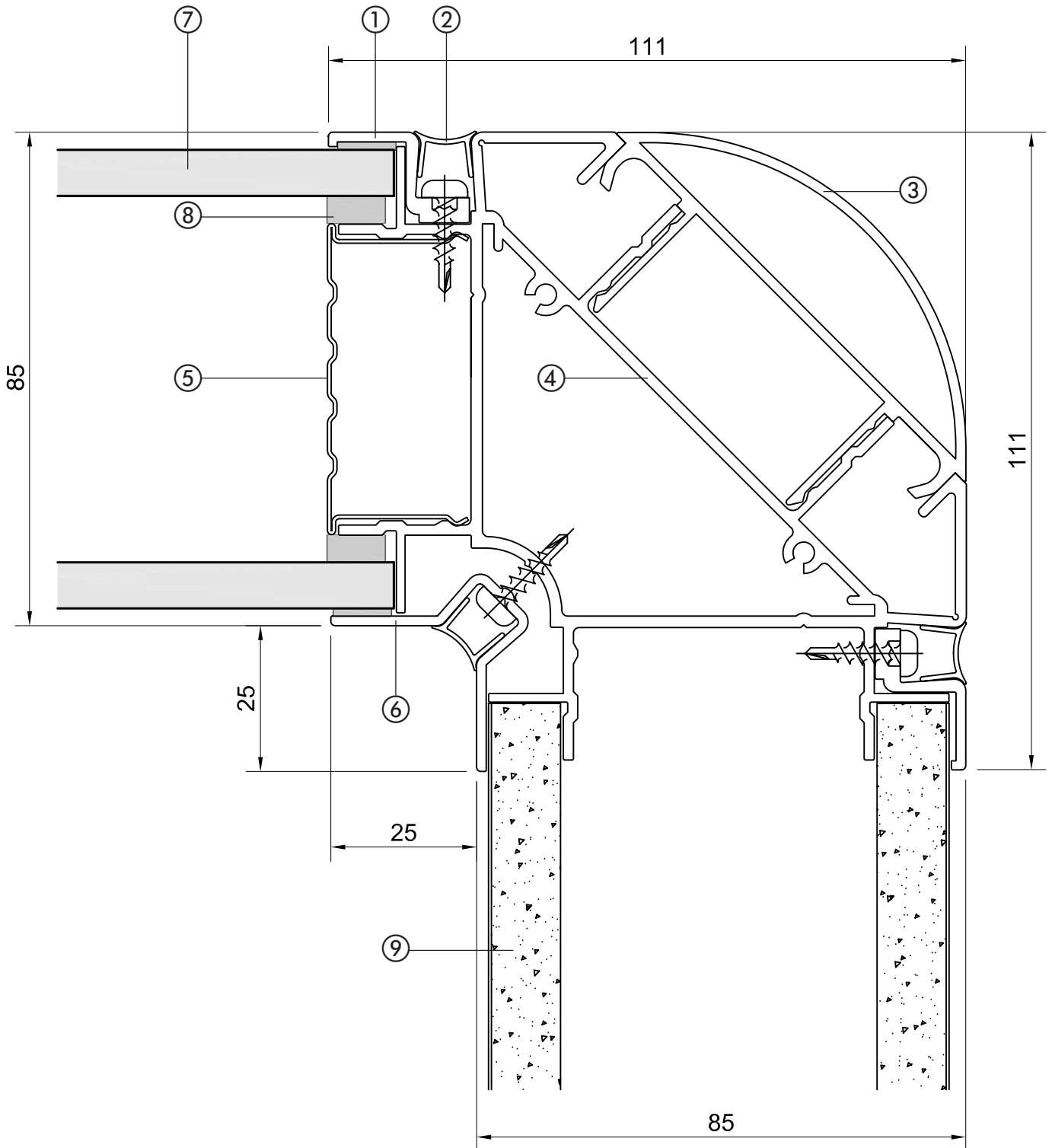
8000 detail
Drawing no: 8261

- 1) PVC infill trim 2) Universal post cover plate 3) Double glazing plate 4) Offset glazing plate
 5) Universal post 6) Double glazing plate 7) System 7000 13 x 12mm MDF packer
 8) System 7000 flush aluminium cover trim 9) System 7000 stud and channel
 10) Plasterboard 11) Glass (6mm+6mm, 6mm+8mm, 8mm+8mm) 12) Foam gasket 13) Glass (6mm)



8000 detail
Drawing no: 8197

- | | | |
|--------------------------------------|-------------------------|---------------------------------|
| 1) Part omega corner cover trim | 2) PVC infill trim | 3) Corner cap/stop end radiused |
| 4) 90° Corner post/Y junction | 5) Double glazing plate | 6) 90° Corner post inner trim |
| 7) Glass (6mm+6mm, 6mm+8mm, 8mm+8mm) | 8) Foam gasket | 9) Plasterboard |

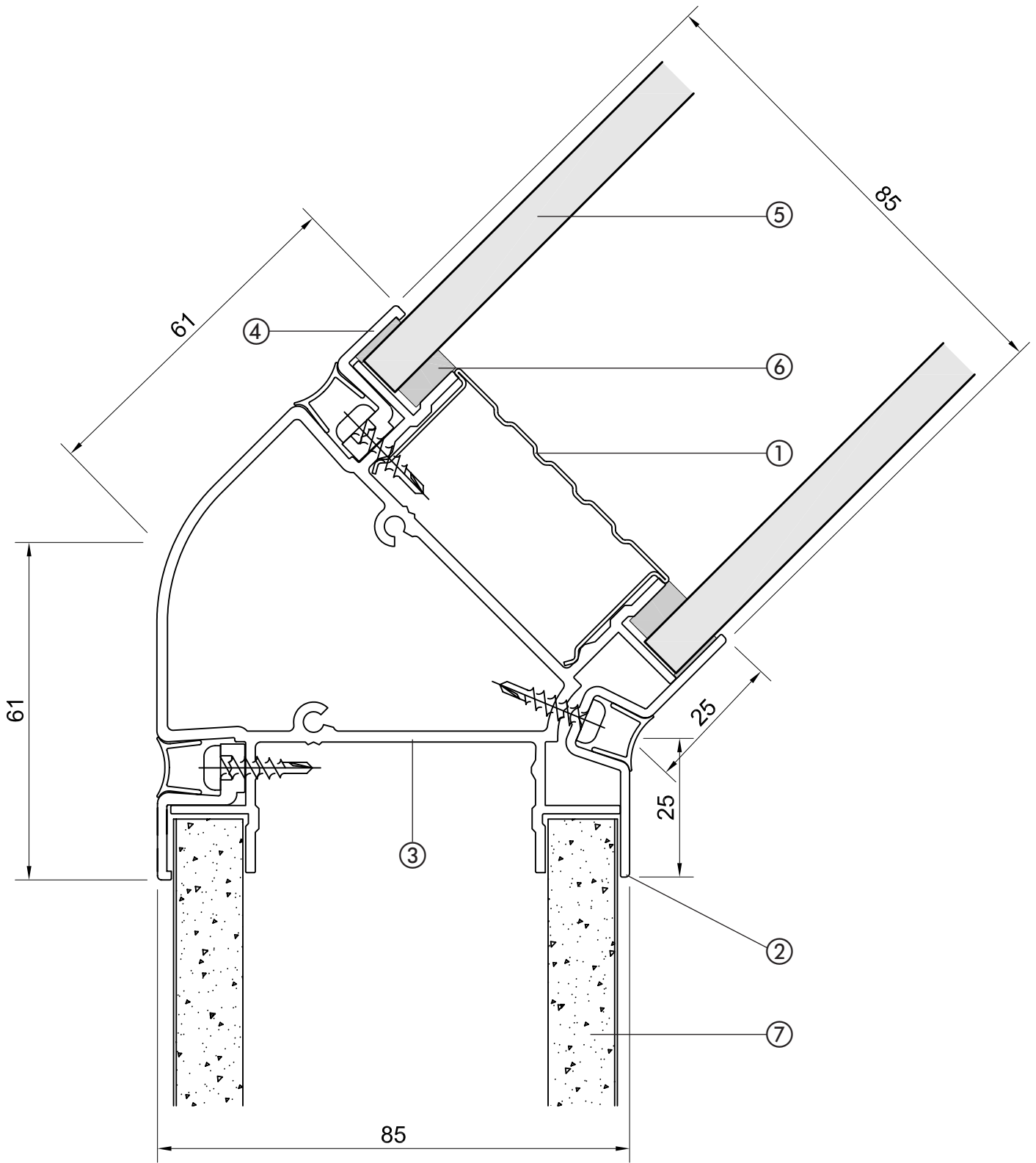


system 8000 90° corner post – double glazed / solid

8000 detail
Drawing no: 8205

- 1) Double glazing plate
- 2) 135° Corner post inner trim
- 3) 135° Corner post
- 4) Part omega corner cover trim
- 5) Glass (6mm+6mm, 6mm+8mm, 8mm+8mm)
- 6) Foam gasket
- 7) Plasterboard

system 8000 135° corner post – double glazed / solid



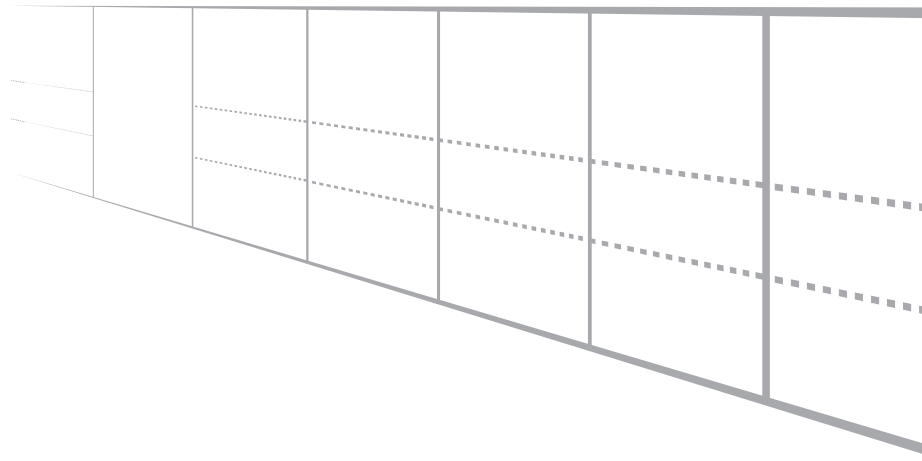
8000 detail
Drawing no: 8215

0 10 20 30 40 50mm



0 10 20 30 40 50mm

0 10 20 30 40 50mm



METAL CEILINGS • PARTITIONING • DOORS • ROOM COMFORT • ARCHITECTURAL METALWORK

SAS International · Apollo Park · Rounds Green Road · Oldbury · West Midlands B69 2DA
Tel: +44 (0)121 511 1300 · Fax: +44 (0)121 511 2920 · www.sasint.co.uk/partitioning

All information and details in this brochure are correct at time of going to press. SAS International reserve the right to change the specification of any product without notice.
Published by SAS International. All rights reserved. Copyright © 2009.