

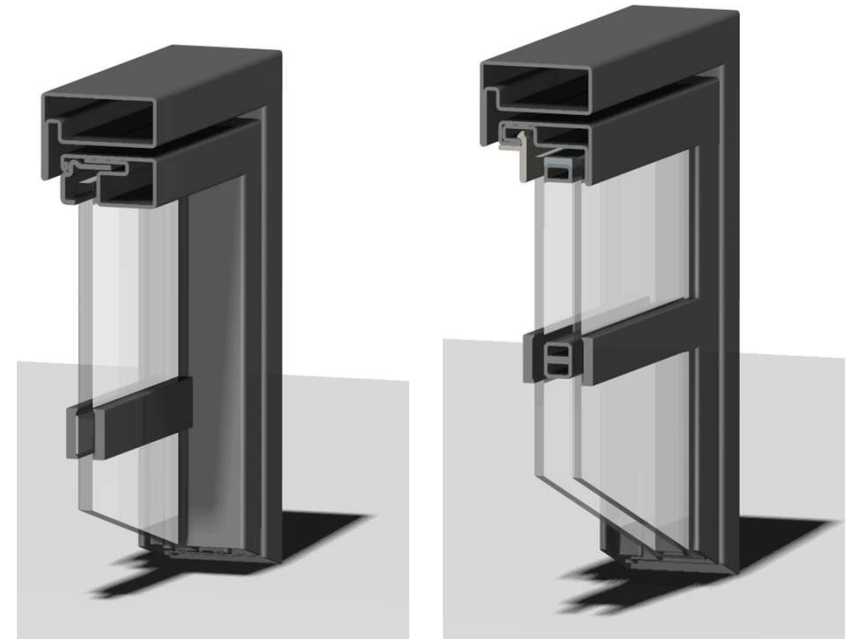
STEEL INTERIOR DOORS

Bespoke to you needs

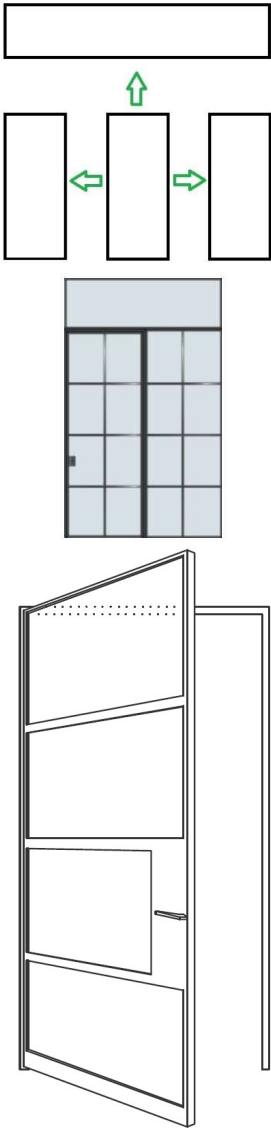
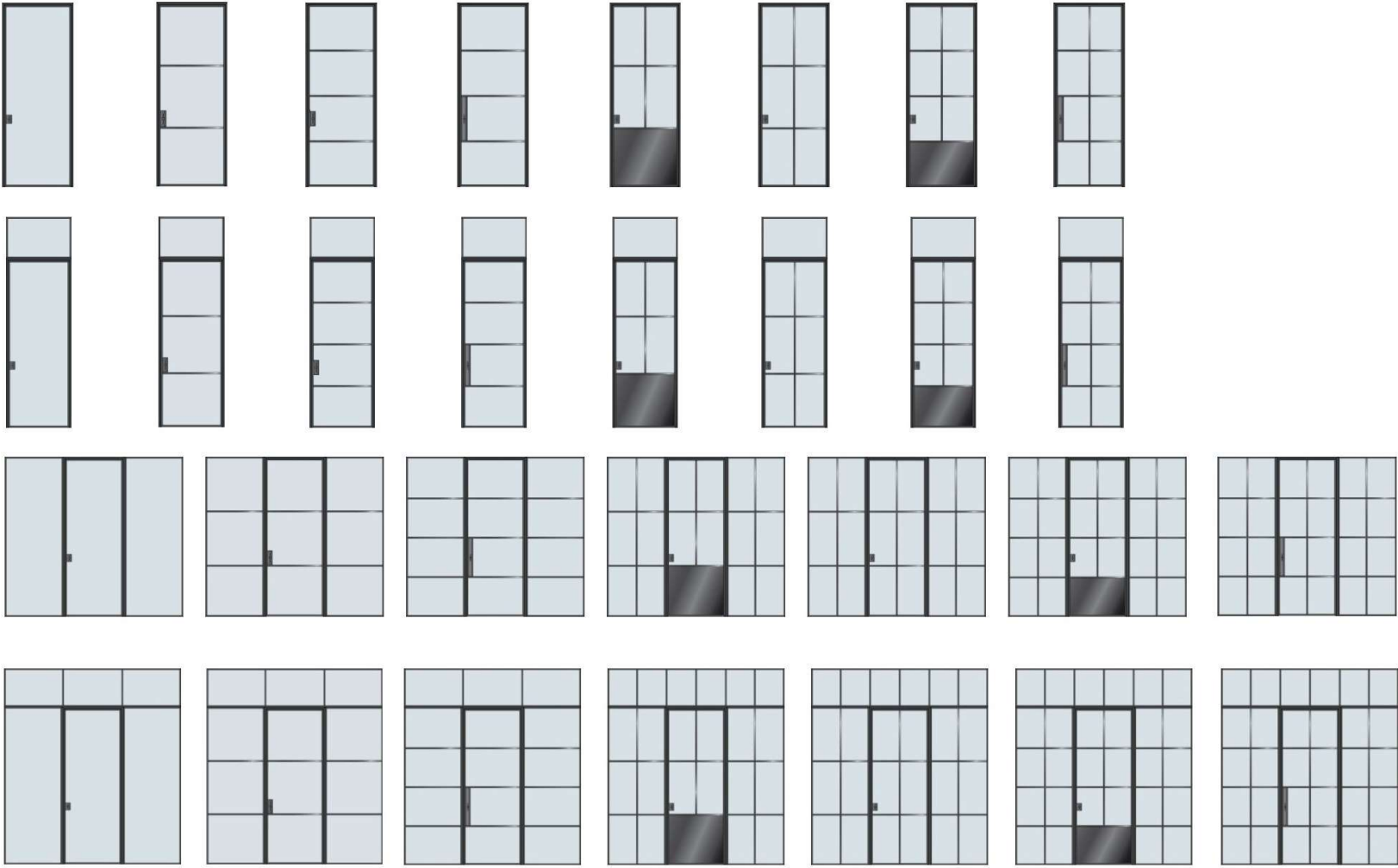


ABOUT V40

- Our V40 system offers thin yet strong steel frames combined with glass, a combination that provides maximum light into the room.
- It allows to create multiple kinds of doors and fixed units in several finishes.
- V40 system can accommodate both single and insulated glass up to 20mm thickness
- Unlimited options of desing to your liking
- Available in any RAL colour



V40 Possible combinations of single doors

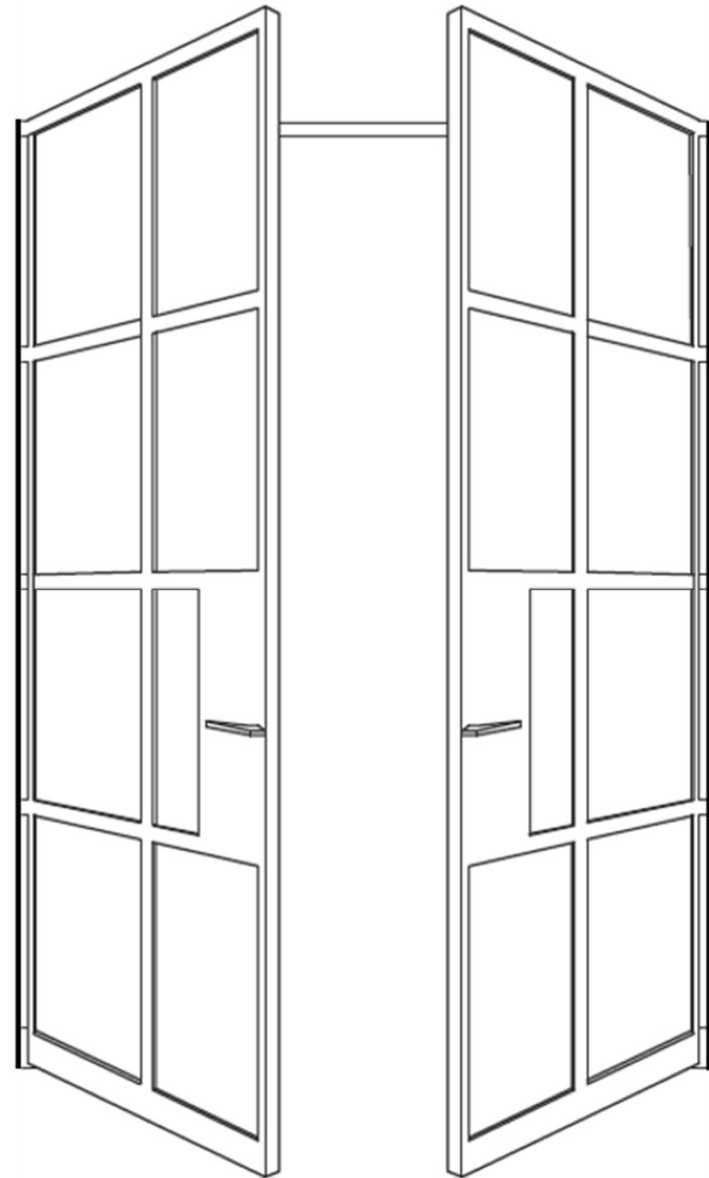


V40 Possible combinations of double doors



V40 Possible constructions

1. SINGLE LEAF DOORS
2. DOUBLE LEAF DOORS
3. FIXED UNITS, TRANSOMS AND SIDELIGHTS
4. FOLDING DOORS
5. SLIDING DOORS
- 5.2 BARN DOORS
6. PIVOT DOORS



V40

1. SINGLE LEAF DOORS

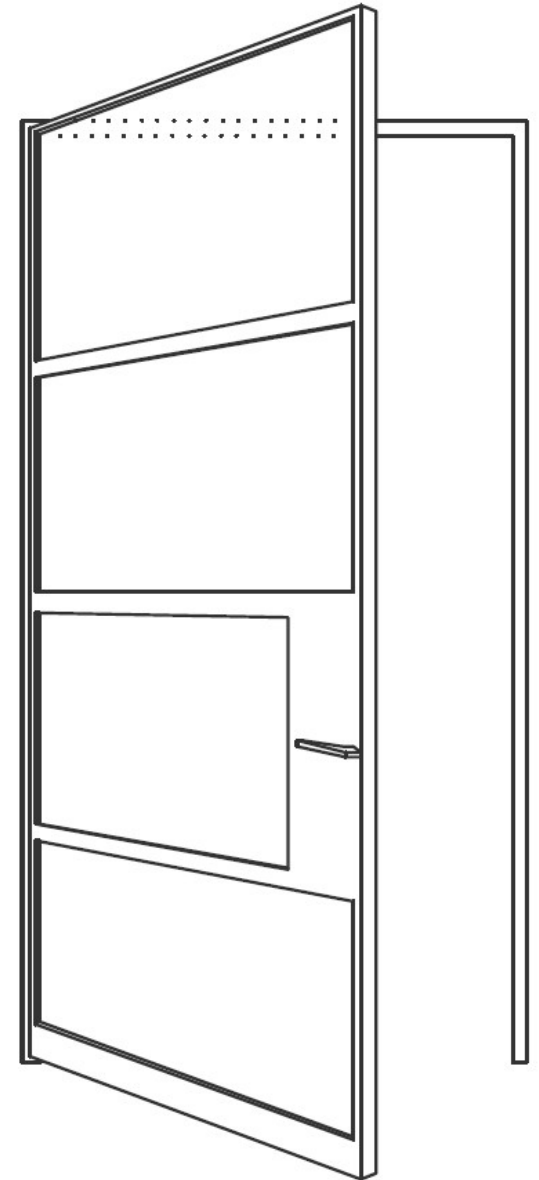
Outwards and inwards opening

Maximum standard leaf sizes:

- Width up to 1050mm (41 3/8")
- Height up to 3050mm (120")
- Weight up to 60kg (130 lbs)



If the maximum dimensions are exceeded, contact the manufacturer to check the technical possibilities



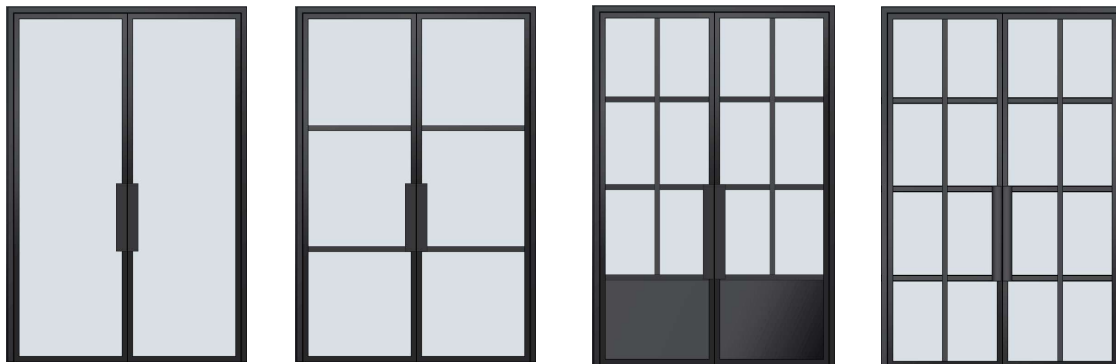
V40

2. DOUBLE LEAF DOORS

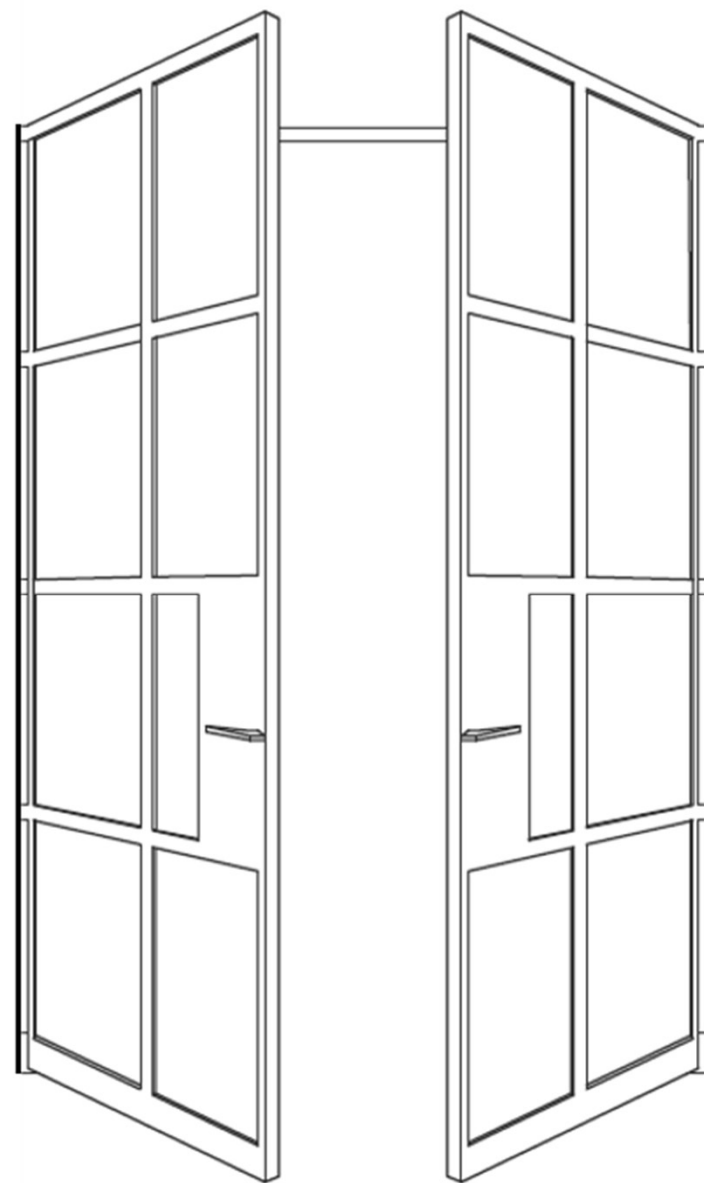
Outwards and inwards opening

Maximum standard sizes:

- Width up to 2030mm (80") for both leaves (1010mm (40") single slab)
- Height up to 3050mm (120") for both leaves
- Weight up to 60kg (130 lbs) per one leaf



If the maximum dimensions are exceeded, contact the manufacturer to check the technical possibilities



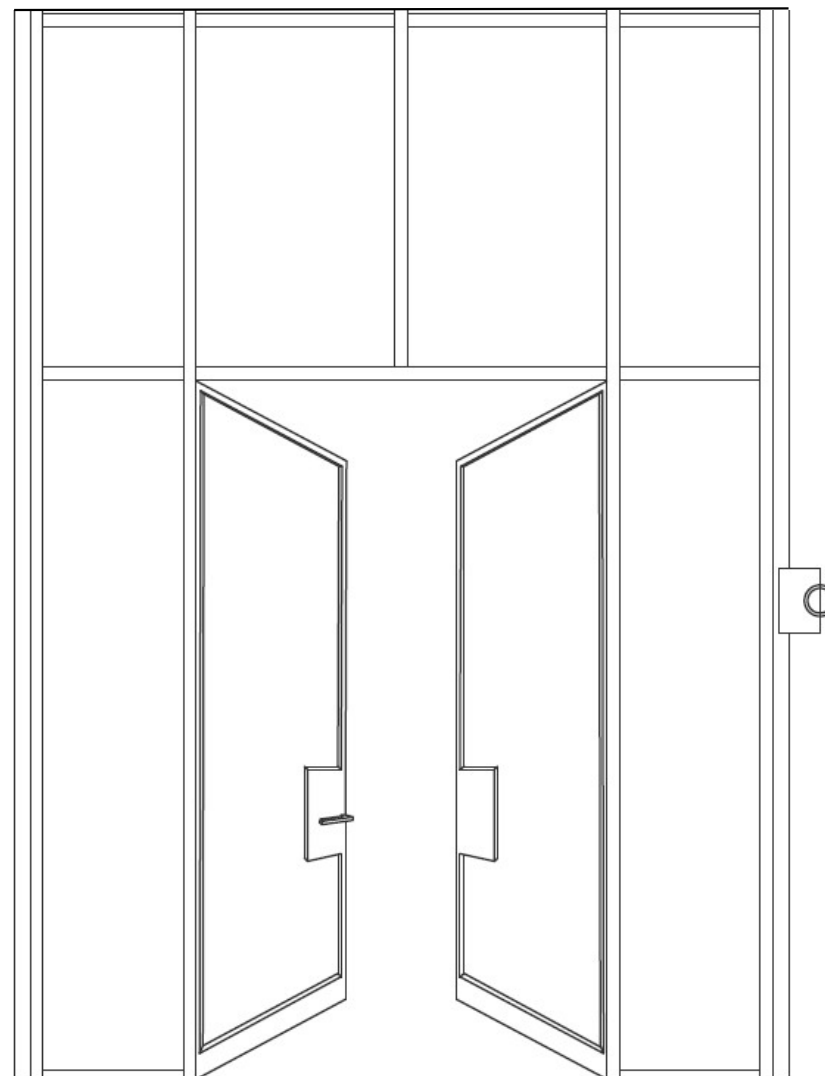
V40

3. FIXED UNITS, TRANSOMS AND SIDELIGHTS

- Fixed units, sidelights and transoms can be made in variety of heights and widths.
- They can be integrated with the doors frame or can be just connected to them.
- The final dimensions depend on the choice of glass and general door design.
- For leaves exceeding the maximum limit, contact the factory to check the possibilities

Maximum standard sizes:

- Width up to 2500mm (98 3/8")
- Height up to 3050mm (120")
- Weight – no limits



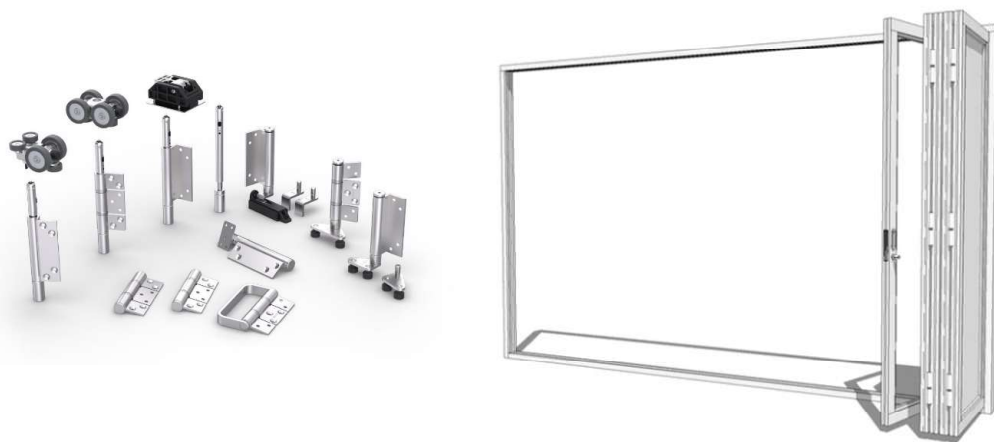
V40

4. FOLDING DOORS

Maximum standard sizes:

- Maximum leaf width: 900mm (98 3/8")
- Maximum leaf height: 2800 mm
- Maximum No. of Leaf's: 9

Folding doors have been equipped with CENTOR hardware



If the maximum dimensions are exceeded,
contact the manufacturer to check the technical possibilities



V40

5. SLIDING DOORS

Maximum standard dimensions depend on the weight of the unit – max. 100kg/per leaf.

- Width up to 1600mm (62") per leaf
- Height up to 2700mm (106")
- Weight up to 100kg (200 lbs) per leaf

Sliding doors have been equipped with HAWA Porta 100 HMT hardware.

Fastening to the wall or the ceiling

Soft-close available at additional cost



V40

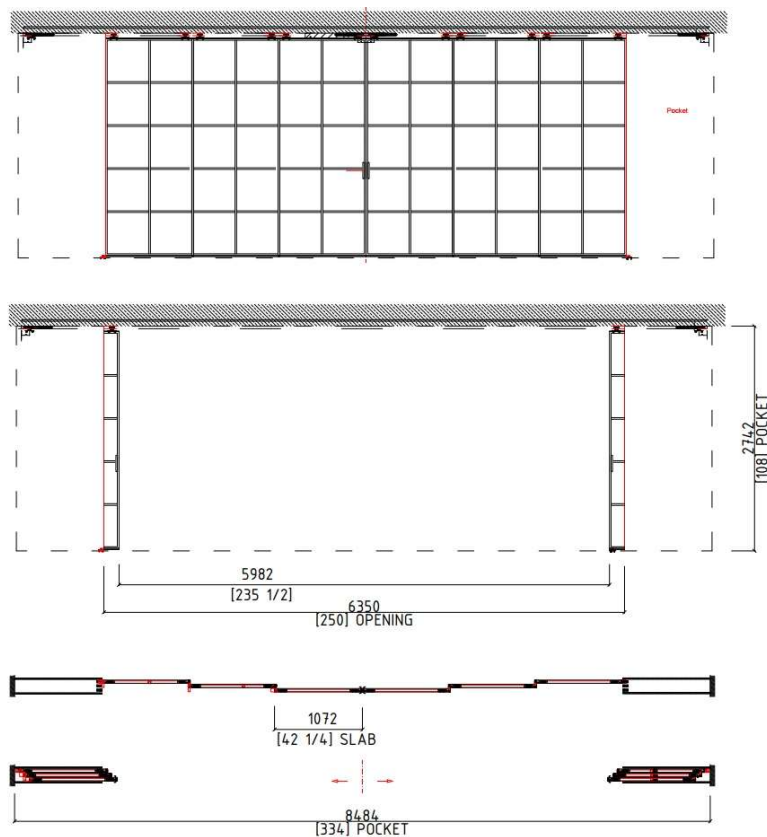
5.1 SLIDING DOORS - POCKET

Example:

Pocket sliding doors

6 leaves unit

335"x108"; OPENING 250"

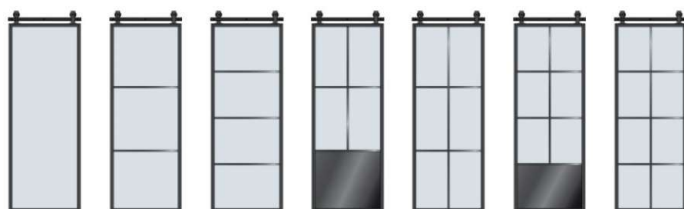


V40

5.2 BARN DOORS

Maximum standard dimensions depend on the weight of the unit – max. 100kg/per leaf.

- Width up to 1000mm (39")
- Height up to 2540mm (100")
- Weight – 100 kg (220 lbs)

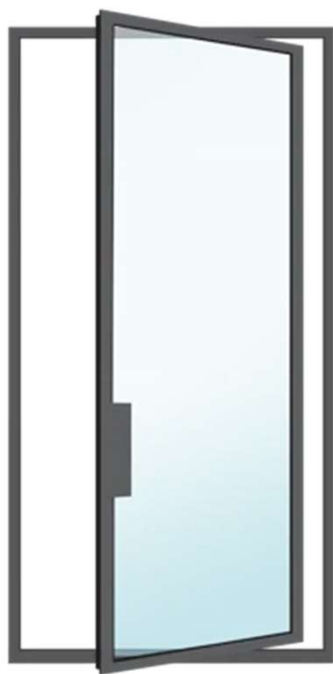


If the maximum dimensions are exceeded,
contact the manufacturer to check the technical possibilities



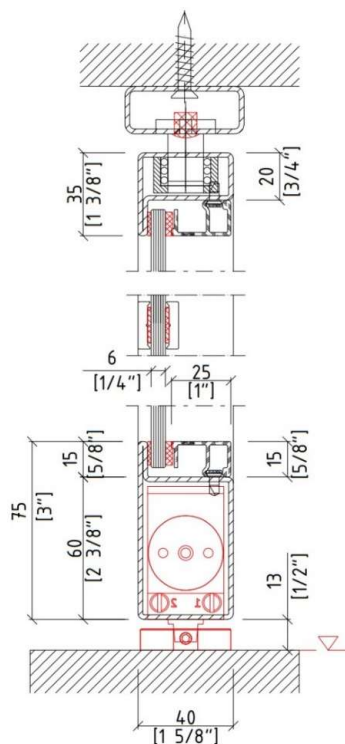
V40

6. PIVOT DOORS.



Maximum standard sizes:

- Width up to 1000mm (39")
- Height up to 2540mm (100")
- Weight - 100 kg (220 lbs)



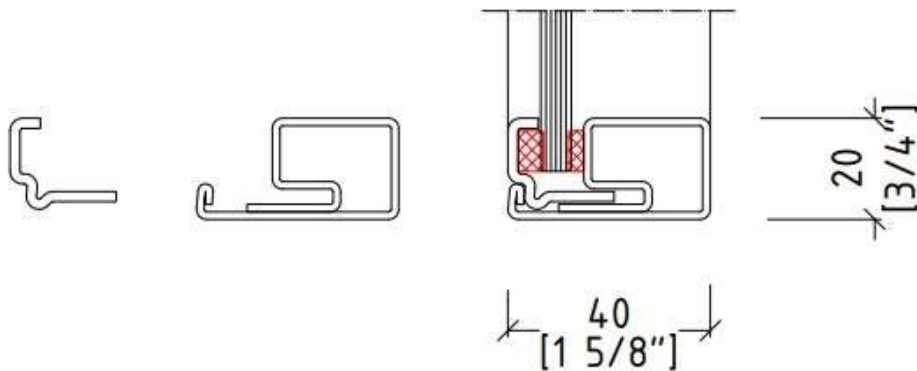
Pivot doors have been equipped with ARGENTA PIVOTICA PRO pivot hinges

If the maximum dimensions are exceeded,
contact the manufacturer to check the technical possibilities

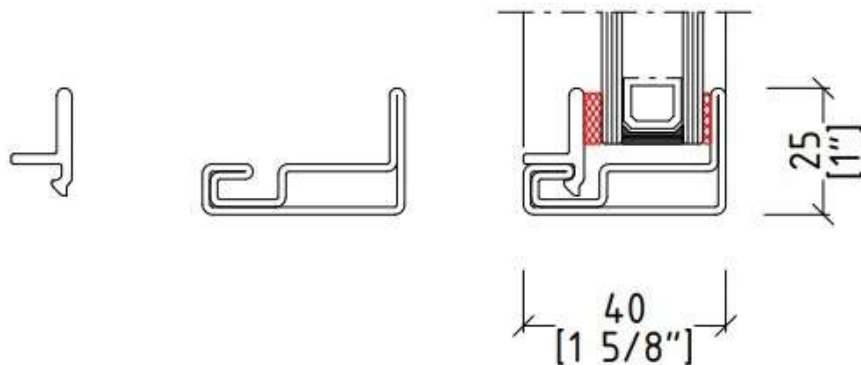


V40 Profiles and glazing beads:

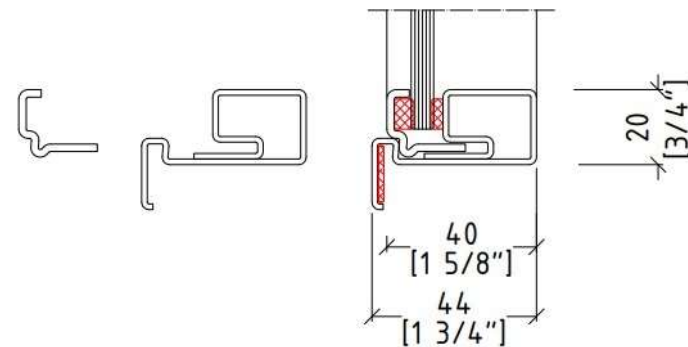
- „V20” Profile of door leaf for single glass 6mm (1/4")



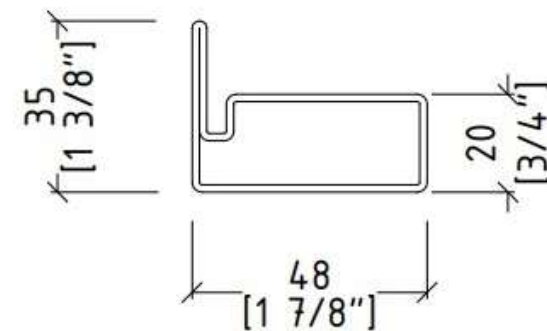
- „V25” Profile of door leaf for insulated glass 20mm (3/4")



- „V20c” door leaf rebate profile – for single glass



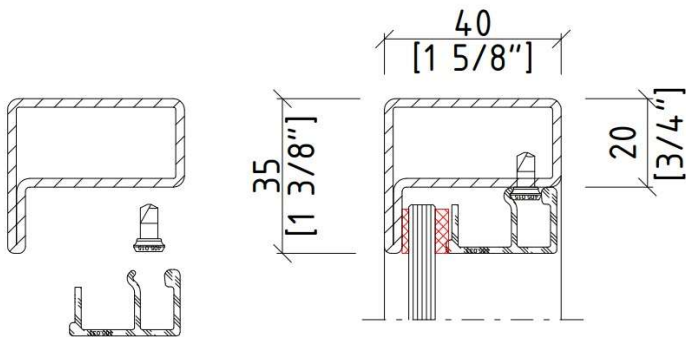
- „V35” Jamb profile - applied for both versions of doors leaves



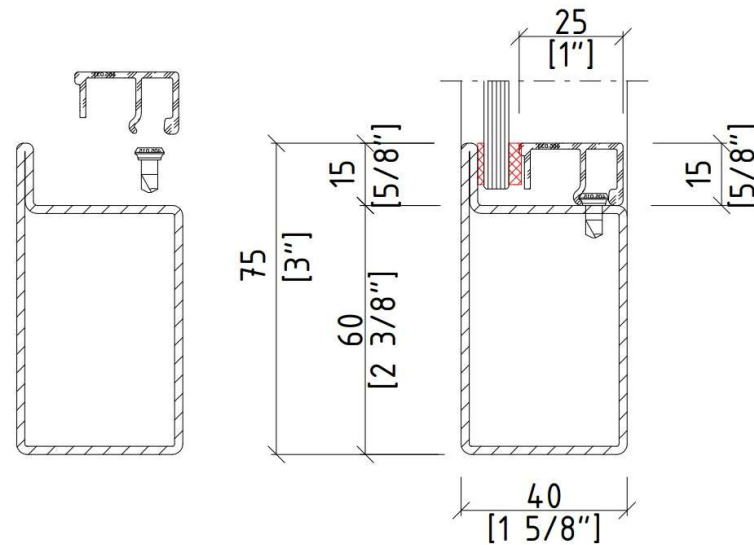
V40 Profiles and glazing beads:

Pivot doors

- „V35” jamb profile



- „V75” - pivot leaf profile for single glass 6mm (1/4")



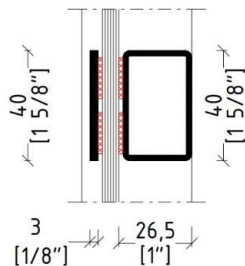
V40 Dividing lines:

DIVISION OF GLASS

TDL

true
divided
light

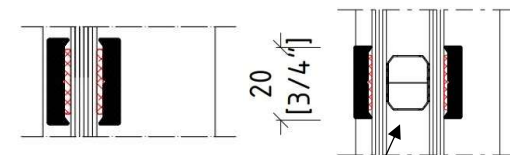
- Single pane of glass
(each light is NOT a separate pane of glass)
- Divisions are created by flat bar on the inside and square profile outside
- Square profile is welded to door frame



SDL

simulated
divided
light

- Single pane of glass
- Divisions are created by flat bar on the outside and inside
- Aluminum flat-bars are glued to the the glass with double-sided tape.
- Flat-bars ara availabe in 2 widths:
 - 20mm thick (3/4")
 - 40mm (1 - 37/64")
- Insulated glass is equipped with inter-pane mullions - RAL 9005



Inter-pane mullions

Single glass for the „V20” door leaf profile

1. Laminated glass

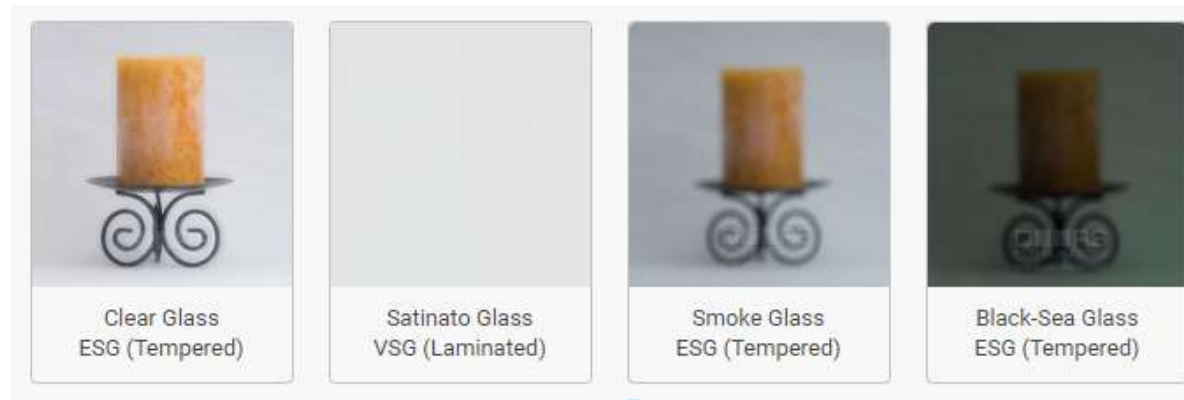
- VSG 33.1 Safety laminated glass, NON INSULATED 6mm (1/4”) - 3 mm pane of glass / layer of foil / 3 mm pane of glass

2. Tempered glass

- ESG 6mm glass

3. Ornament glass

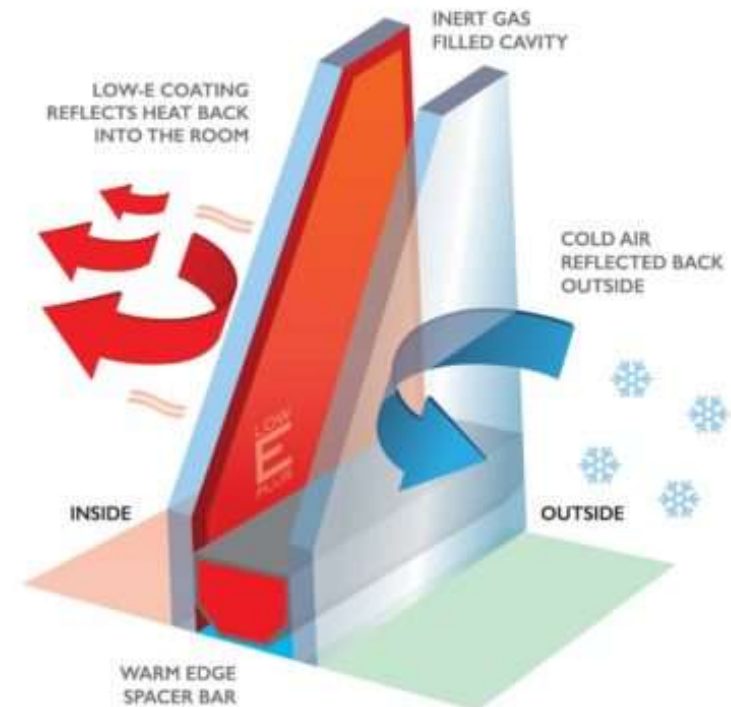
- VSG 33.1 mat (satinato) glass
- ESG 6 mm smoke glass
- ESG 6 mm black-sea glass
- ESG 4mm clear reed glass
- ESG 4mm flutes glass
- ESG 6mm clear wired glass



Double insulated glass for the „V25” door leaf profile

1. ESG 4/12/ESG 4 low-e
2. ESG 5/10/ESG 5 – without low emission coating

Inter-pane mullions are not available for glass ESG 5/10/ESG 5



Technical specification of double insulated glass:

Optical properties EN 410:2011

Light transmittance (τ_v)	82 %
External light reflectance ($\rho_{v,e}$)	12 %
Internal light reflectance ($\rho_{v,i}$)	12 %
General colour-rendering index (R_a)	98

Energy properties EN 410:2011

Total solar energy transmittance (solar factor) (g)	64 %
Shading coefficient (solar factor g / 0.87) (SC)	74 %
Secondary internal heat transfer factor (q_i)	8 %
Solar direct transmittance (τ_e)	56 %
External solar direct reflectance ($\rho_{e,e}$)	26 %
Internal solar direct reflectance ($\rho_{e,i}$)	26 %
Solar direct absorptance (α_e)	18 %
Solar direct absorptance pane 1 ($\alpha_{e,1}$)	9 %
Solar direct absorptance pane 2 ($\alpha_{e,2}$)	9 %
UV-Transmittance (τ_{UV})	30 %
Selectivity (S)	1.3

Thermal properties EN 673:2011

Thermal transmittance (U_g)	1.3 W/m ² K
Tilt angle	90 °

Acoustic properties EN 12758:2011

Weighted sound reduction index ($R_w(C;C_{tr})$)	32 [-1; -4] dE
The values given are only estimates.	

Mechanical properties

Resistance against manual attack (EN356)	NPD
Bullet resistance (EN1063)	NPD

Fire resistance EN 13501-2 2016

Fire resistance class (EN13501-2)	NPD
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Thickness and weight

Thickness (mm)	20.00 mm
Weight (kg/m ²)	20 kg/m ²



ESG 4 / 12 / ESG 4 low-e

Door hardware: PULL HANDLES



Pull 25



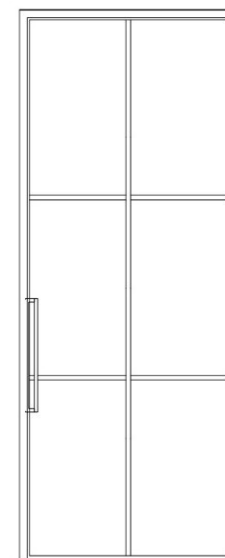
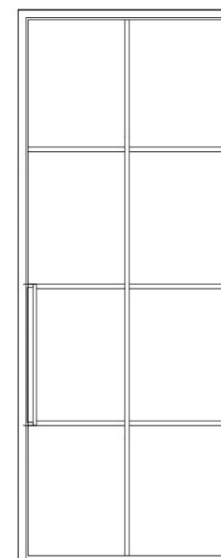
Pull 30



Pull 50

The length of door pull handles can be adjusted to your liking.

Please see the example below



Door hardware: HANDLES

Steel handles - Single point lock



Loft handle



Lucy handle



Square handle



Modern handle

Door hardware: HANDLES

Steel handles - Single point lock - Keyway lock



LONG handle



LUCY handle



Square handle

Door hardware: HANDLES

Steel handles – Single point lock – Thumbturn lock



LUCY handle



Square handle

Door hardware: LOCKS

V40 doors have been equipped with magnetic locks. The latch is always hidden in a door slab. The door frame has a magnetic catch that pulls out the latch. This solution eliminates the possibility of scratches.



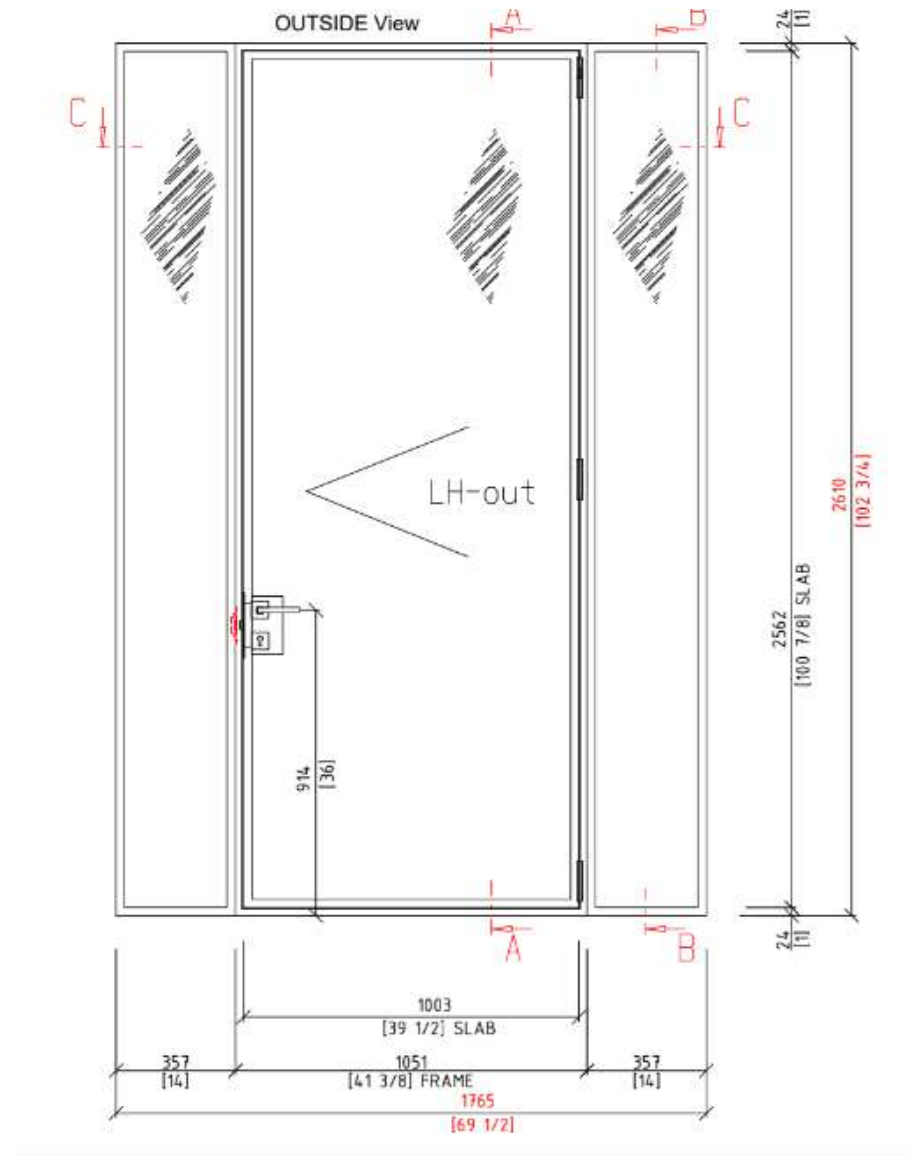
Door hardware: Flash bolts and magnets

- Flush bolts prevent the passive door leaf from opening in double doors
- They are installed both at the bottom and the top of a leaf.
- Both flash bolts are controlled separately by using a small lever
- Flush bolts are in black colour.
- Alternatively, we can install magnets, which are glued-on on the leaf and frame of the doors and are concealed by the door gasket



Door hardware: HINGES

- Weld-on hinges
- Steel, $\varnothing 16$, length 120mm [0-5/8"; 4-23/32"]
- With fixed pin and brass intermediate washer.

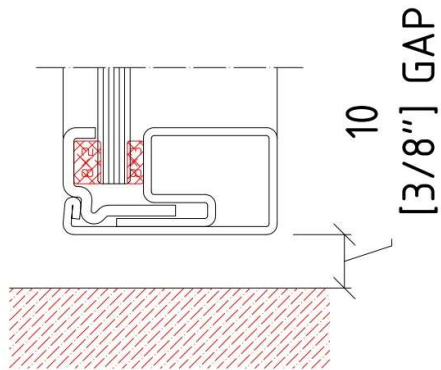


Threshold :

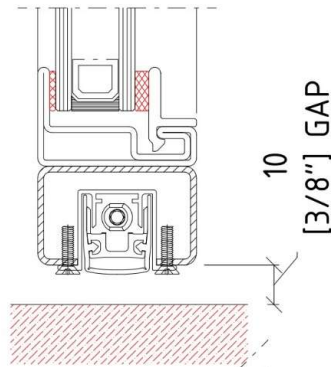
Possible threshold solutions in V40:



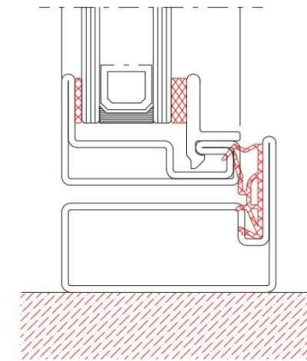
1. NO threshold, gap between floor and a door slab



2. Automatic drop down gasket (Wine cellar)



3. Threshold made of „V35” jamb profile



Coating & protection:

System V40 is powder coated with additional zinc underlayer

The Powder Coating Process

- Grinding the surfaces
- Washing and degreasing
- Applying primer with zinc coat (C4 - high protection) 80 μ m
- Top color coat (80 μ m)
- There is possibility of C5 coating by adding extra primer layer 80 μ m

Our standard colours:



Available in any RAL Colour



FINISHES

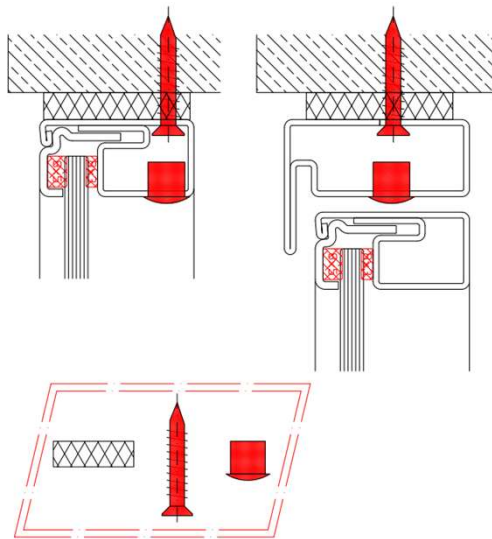
Smooth

Structure

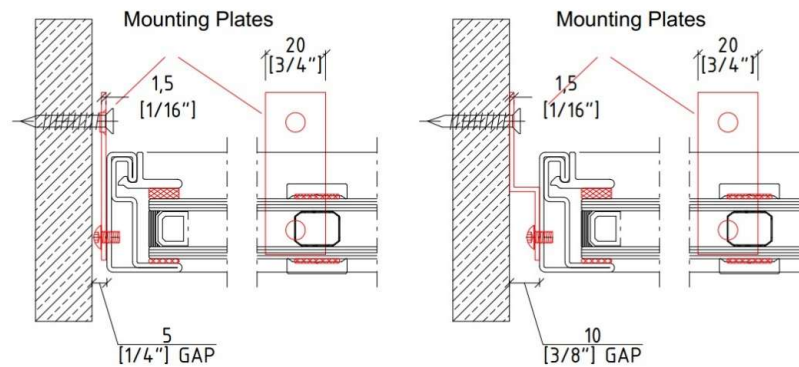


Installation:

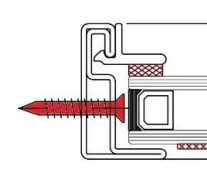
- A) Door leaf profile „V20” and a door frame are fastened to the wall through the profile. Holes are covered with plastic caps.
- B) Profile V25 is fastened to the wall with anchors. Screws are visible. Anchors will have to be covered on the job site by the client
- .C) It is the possibility to install units through the frame using the the V25 profile, however, fix units, sidelights, and transoms would have to be glazed on job-site.



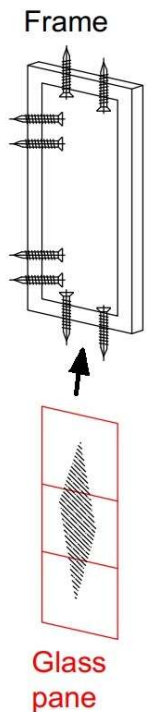
Installation A



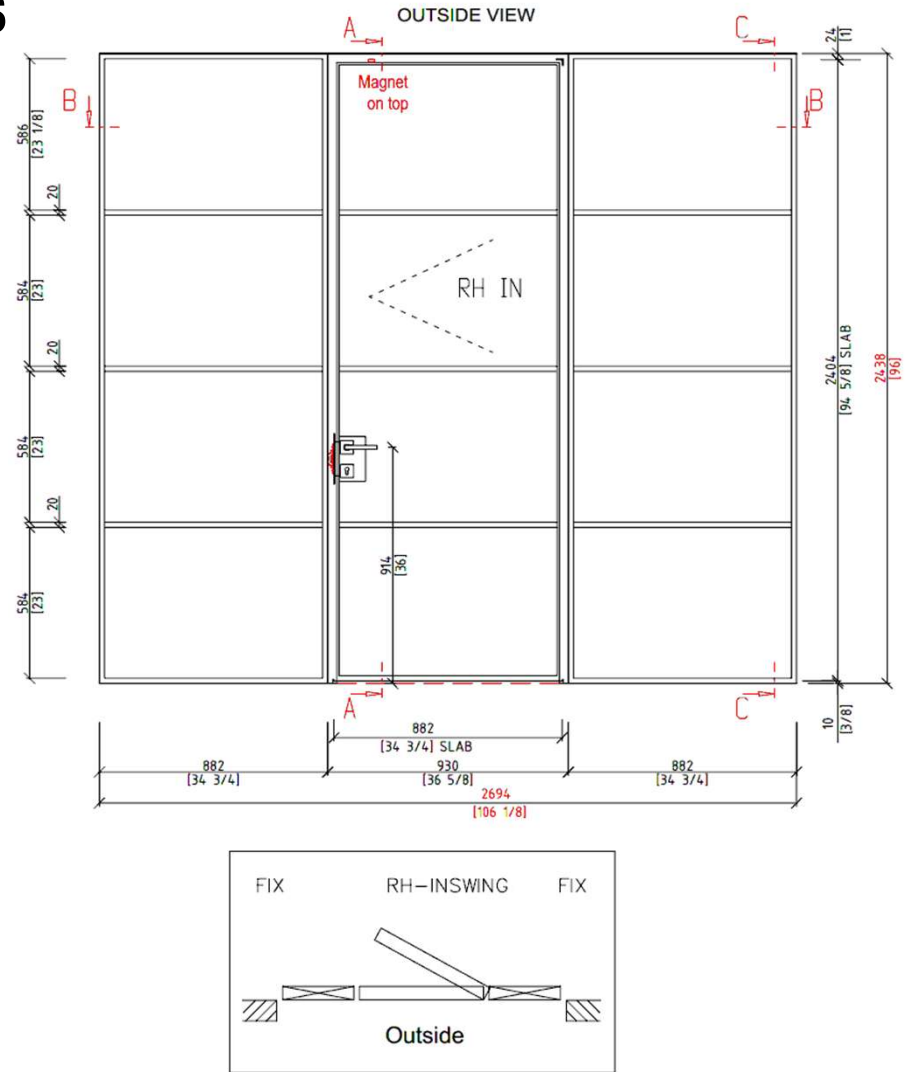
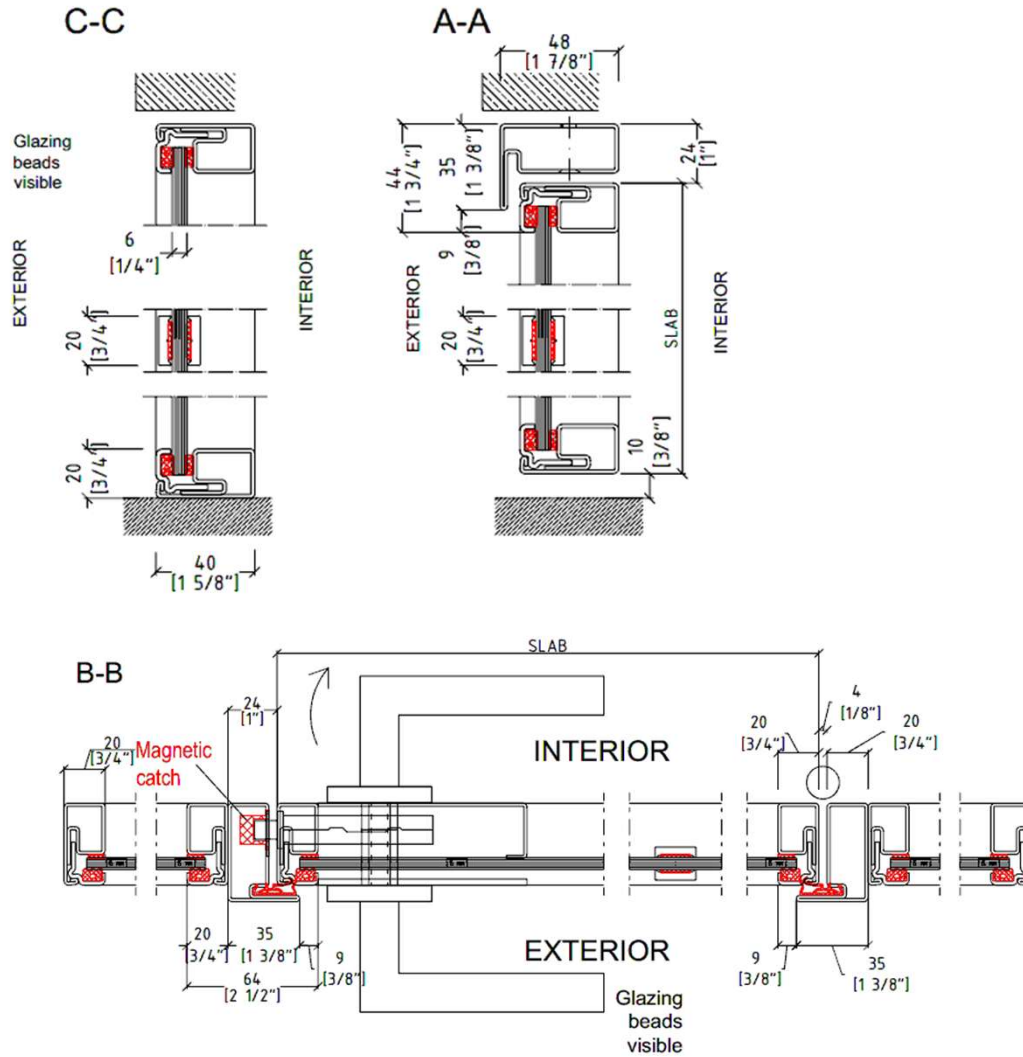
Installation B



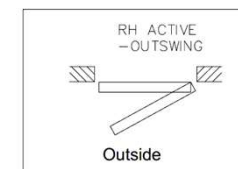
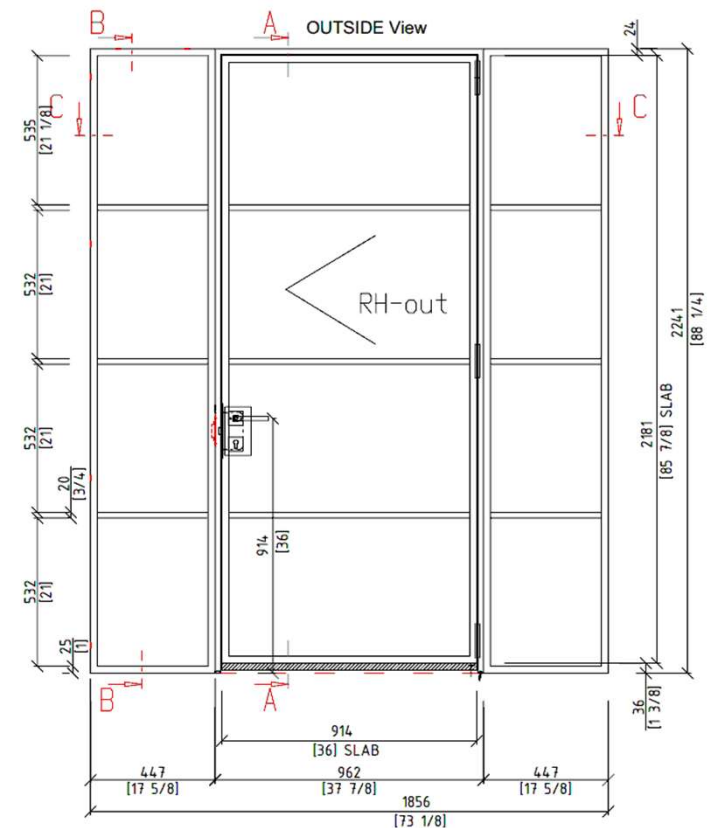
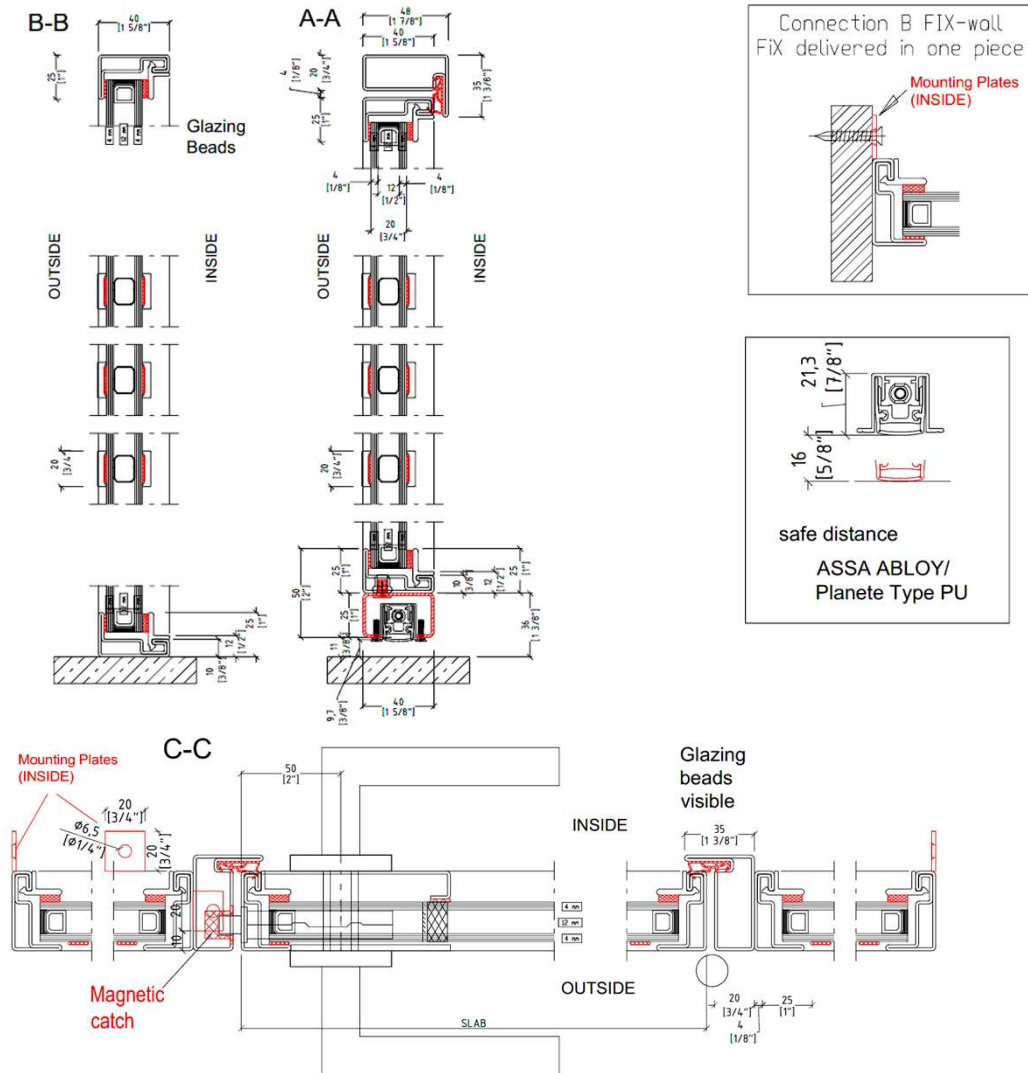
Installation C



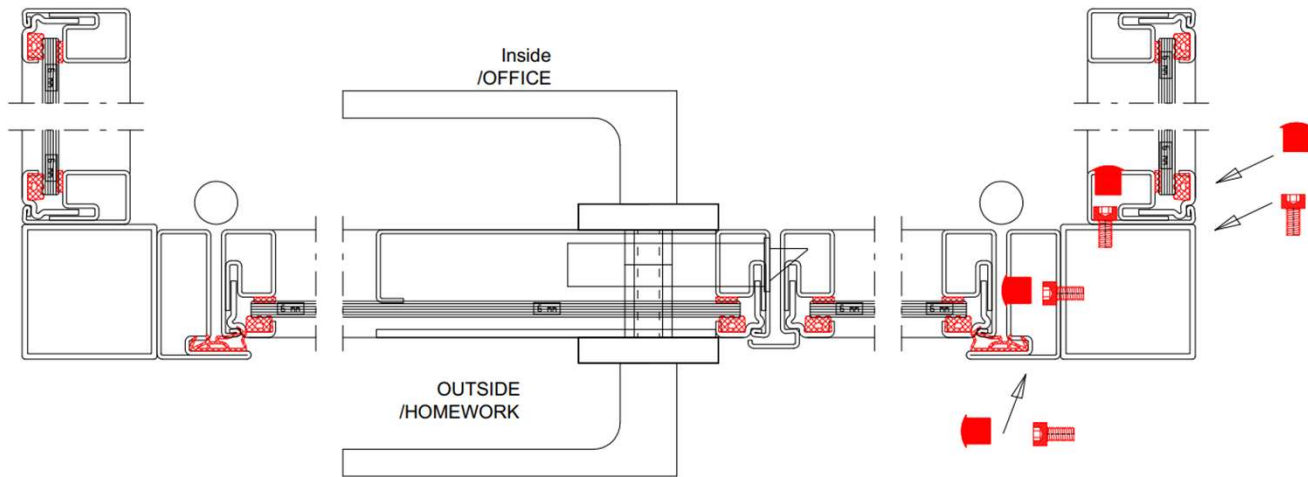
Example drawings - single door with single glass



Example drawings - single door with sidelights, insulated glass (wine cellar):



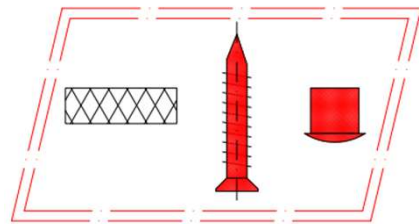
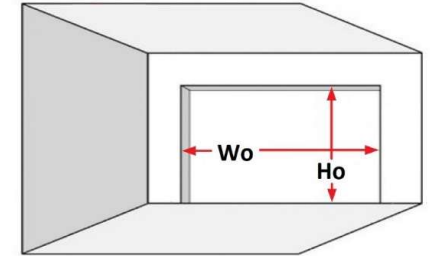
Example drawings – single door with corner sidelights, single glass



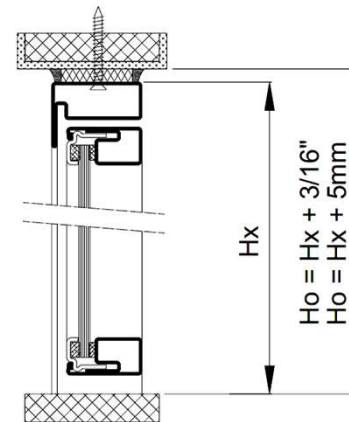
How to measure:

To take correct sizes for door we need to check:

- R.O. – raw opening. The opening must be $\frac{3}{8}$ " (10mm) wider, and $\frac{3}{16}$ " (5mm) taller than the door unit .
- „0" level – Finished Floor level – FFL
- Angles and diagonals of the opening

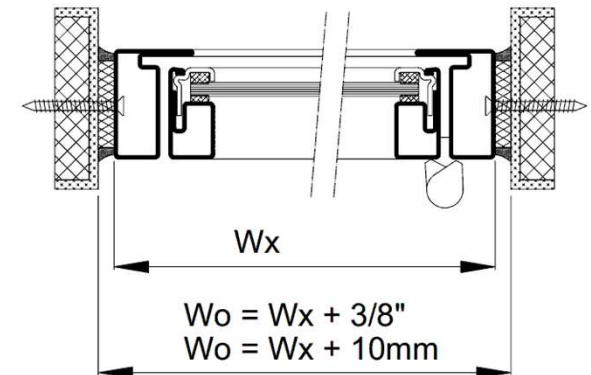


Distance plates, screws and caps.



Vertical Detail

H_x = Total Unit Height
 H_o = Total Finished Opening Height



Horizontal Detail

W_x = Total Unit Width
 W_o = Total Finished Opening Width

Warranty:

Terms of warranty:

- 1. The 5-year warranty is provided for doors, glazing units and steel/aluminium cladding relating to defects resulting from production or material flaws.**
- 2. The warranty for door hardware items, such as: hinges, handles, locks, sash-limiters etc. is 1 year.**
- 3. Manufacturer guarantees the finish on its steel doors and windows against major discoloration for a period of 5 years. That excludes mechanical damage.**



