



TSN 1 & TSN 2

TSN SERIES | schröders system







MODELS

TSN 1
single hinged leaf

TSN 2
double hinged leaf



MODELS

TSN 1

TSN 2

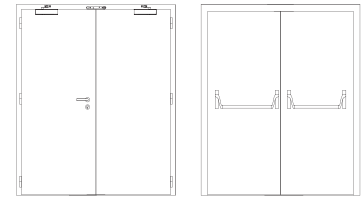
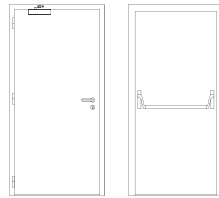
description

Hinged metal door with electro-zinc coated steel frame (1,5 mm thickness), cold-formed and construction by welding. An intumescent seal is embedded in the frame, which ensures the necessary tightness against flames and hot gases.

The leaf, with a door stop edge in all three sides of the frame, is made of two electro-zinc coated steel panels, ranging from 1 to 1,5 mm thick, and contains thermal insulating and acoustic materials according to Schröders constructive system.

The pivoting behavior of the door is ensured by two welded hinges of the system (per leaf), with a 16 mm diameter solid steel pin and movement on thrust ball bearings, allowing an opening up to 180°.

specification



model | typology

TSN 1 | single hinged leaf

TSN 2 | double hinged leaf

classification achieved when tested

FR integrity (EN 1634-1) ⁽¹⁾	E 30	E 30
FR integrity and insulation (EN 1634-1) ⁽¹⁾	EI ₂ 30	EI ₂ 30
radiation control (EN 1634-1) ⁽¹⁾	EW 30	EW 30
cold sealing (EN 1634-3)	Sa / S200	Sa/ S200
thermal coefficient (EN ISO 10077-1)	1.3 W/(m ² .°C)	1.2 W/(m ² .°C)
air permeability (EN 1026)	up to classe 4 (optional)	up to classe 3 (optional)
watertightness (EN 1027)	up to classe 8A (optional)	up to classe 3A (optional)
wind resistance (EN 12211)	up to classe C5 (optional)	up to classe C4 (optional)
burglar resistance (EN 1627)	up to RC4	up to RC4
pressure (EN 12211)	up to 5000 Pa	up to 3800 Pa

⁽¹⁾ classification according to standard EN 13501-2

dimensions (mm)

W x H (standard) ⁽²⁾	800 / 900 x 2000 / 2100	1400 / 1600 / 1800 x 2000 / 2100
W maximum	2152	4452
H maximum	3800	3800
external frame (standard)	L + 148 x H + 74	L + 148 x H + 74
other dimensions	upon request	upon request

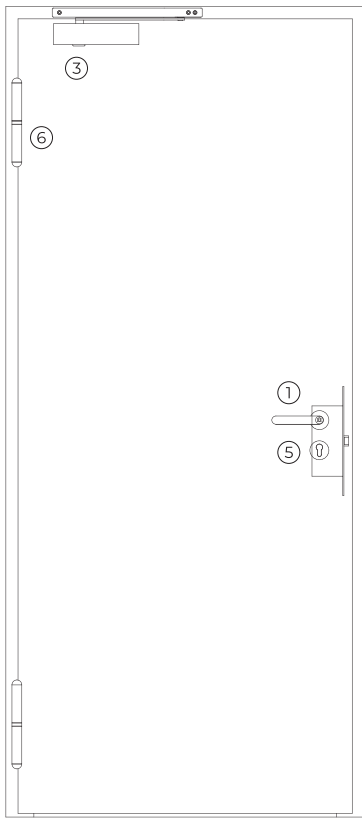
⁽²⁾ W x H = width x height = free passage

construction

leaf thickness (mm)	68	68
leaf weight (kg/m ²)	30 / 40	30 / 40
hinges (per leaf)	2	2
vision panel (mm)	Ø 300 / 450 x 450 / L ≤ 942 / H ≤ 2155 ⁽³⁾	Ø 300 / 450 x 450 / L ≤ 942 / H ≤ 2155 ⁽³⁾
finishing (standard)	electro-zinc coated steel for painting / lacquering in standard RAL color ⁽⁴⁾	electro-zinc coated steel for painting / lacquering in standard RAL color ⁽⁴⁾

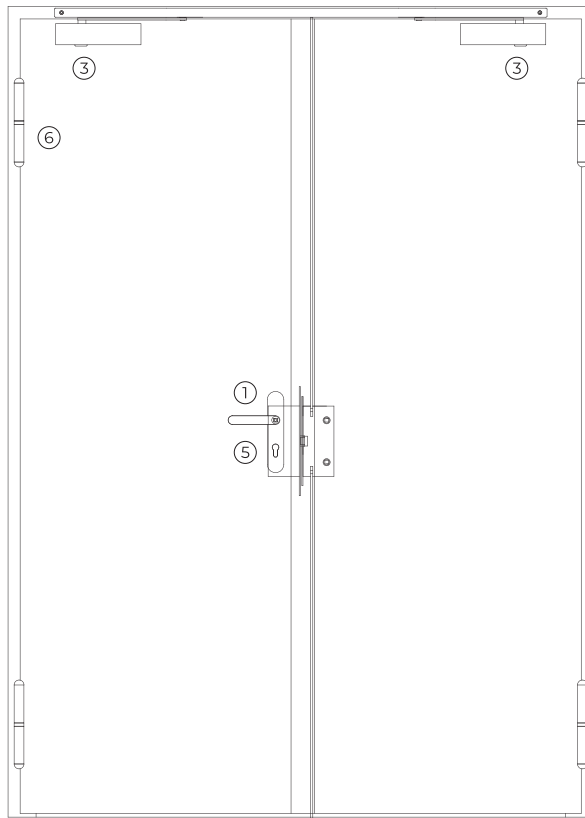
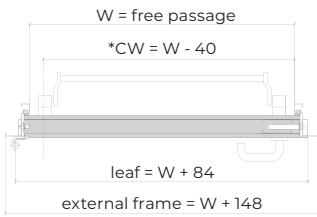
⁽³⁾ minimum border dimension= 130 mm / central glazing bar (optional)

⁽⁴⁾ standard RAL colors= 7035, 7038, 9005 e 9010



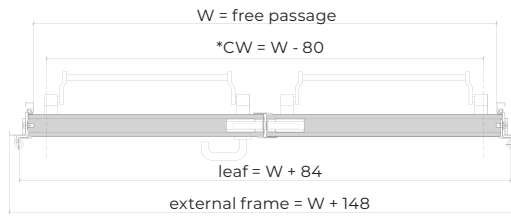
TSN 1

exterior view

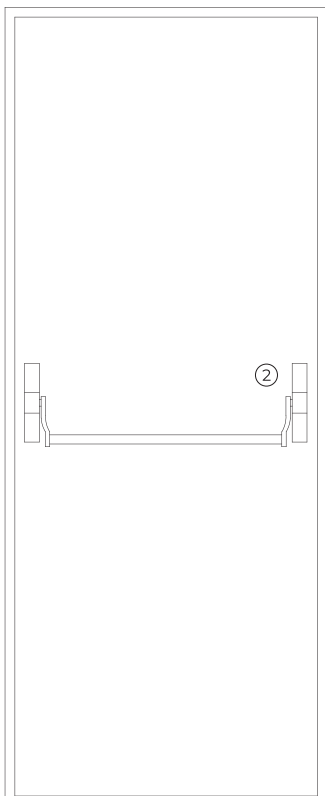


TSN 2

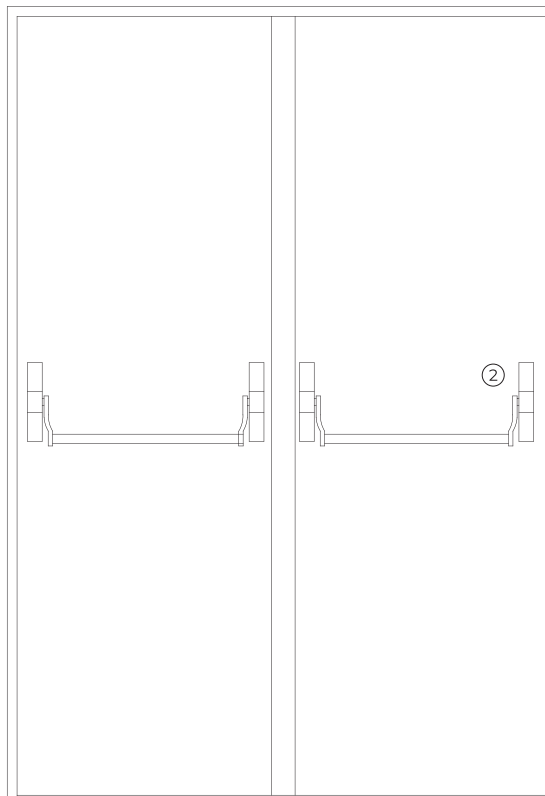
exterior view



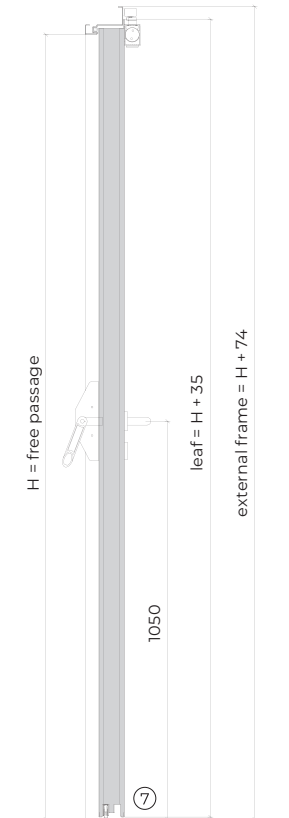
*CLEAR WIDTH, measured with the door leaf in a 90-degree open position excluding panic push bar and handles.



interior view



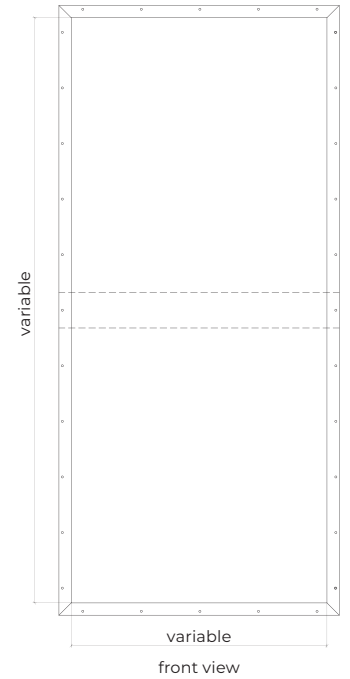
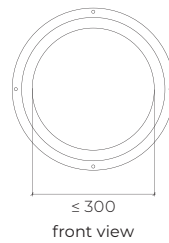
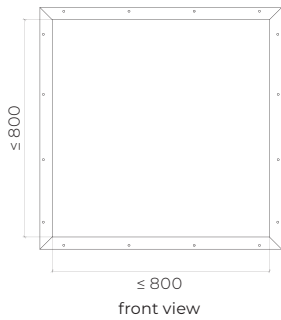
interior view



vertical section

optionals

vision panels



accessories and hardware

TSN 1

TSN 2

handle / anti-panic bar ⁽⁵⁾

- | | | | |
|---|----------|--|--|
| 1 | standard | anti-panic lever handle with drill finished in black (standard) or stainless steel. | |
| 2 | standard | anti-panic bar with gear unit, tube, cover caps and arms finished in nylon black (standard) or stainless steel alternatively, the door may be equipped with a pair of handles. | |

⁽⁵⁾ alternatively, the door may be equipped with a pair of handles.

hidraulic door closer ⁽⁶⁾

- | | | | |
|---|----------|--------------------------------------|-------------------------------------|
| 3 | standard | door closer with an articulated arm. | door closers with articulated arms. |
| | optional | door closer with sliding rail. | door closer with sliding rail. |

⁽⁶⁾ with electromagnetic hold-open (optional).

lock / counter lock

- | | | | |
|---|----------|---------------------------------------|--|
| 4 | standard | anti-panic lock with 1 locking point. | anti-panic lock with 1 locking point + counter lock. |
|---|----------|---------------------------------------|--|

cylinder

- | | | | |
|---|----------|----------------------------------|--|
| 5 | standard | 1/2 cylinder (european profile). | |
|---|----------|----------------------------------|--|

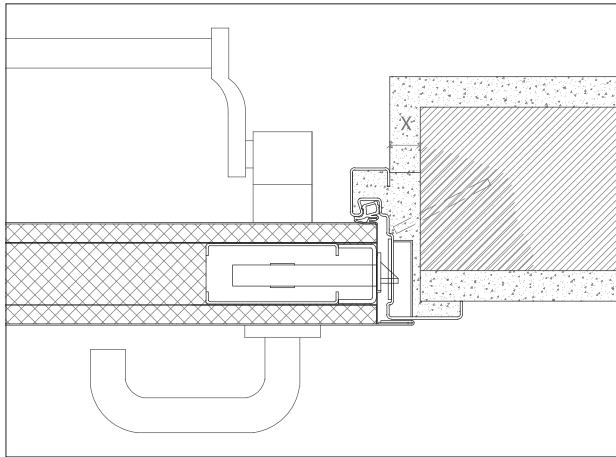
hinges

- | | | | |
|---|----------|------------------------------------|------------------------------------|
| 6 | standard | 2 exclusive hinges of this series. | 2 exclusive hinges of this series. |
|---|----------|------------------------------------|------------------------------------|

others

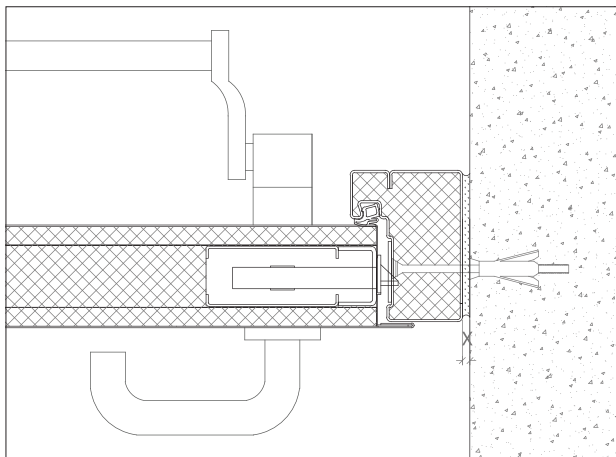
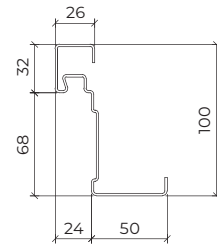
- | | | | |
|---|----------|-----------------------------|-----------------------------|
| 7 | optional | automatic seal. (VAS). | automatic seal.(VAS). |
| | optional | optical door viewer (180°). | optical door viewer (180°). |
| | optional | acoustic kit. | acoustic kit. |

details



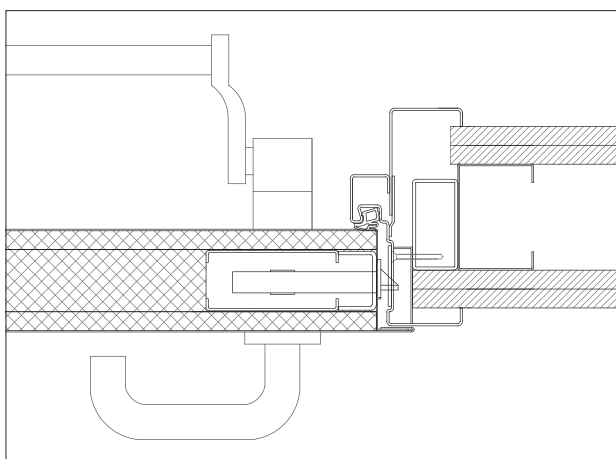
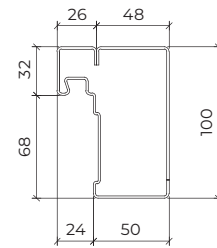
$x > 20$ mm (steel rod fixation)

F1 frame – standard frame | masonry wall mounting | steel rod fixation | plaster finish.



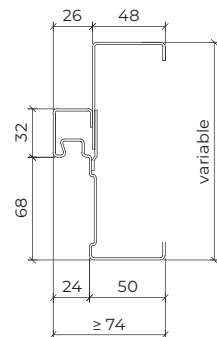
$X \geq 5-10$ mm (for fixing with metal wall plugs according to wall type)

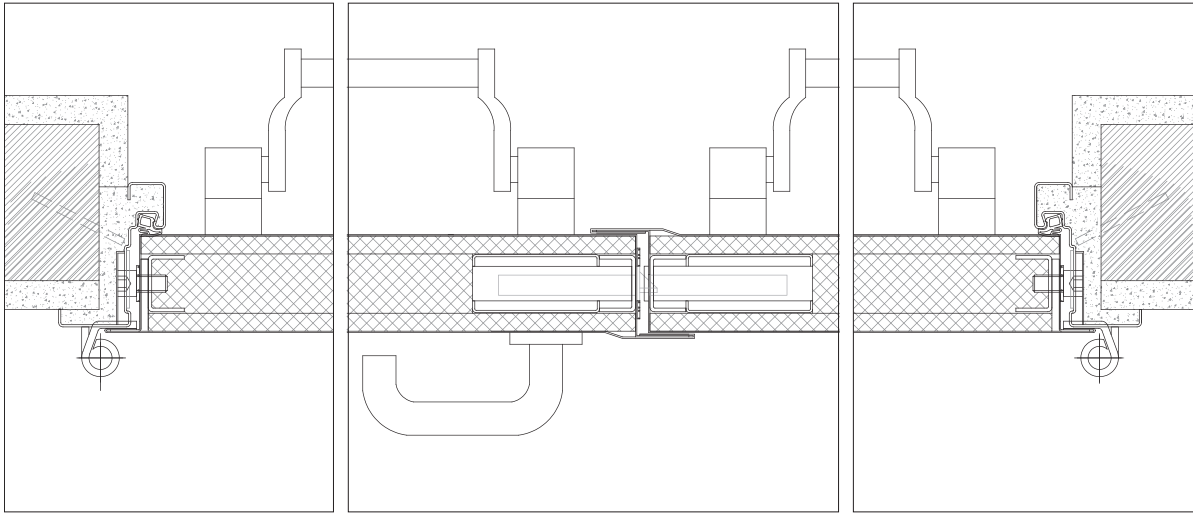
F2 frame – Closed frame | concrete wall mounting | metal wall plugs fixation.



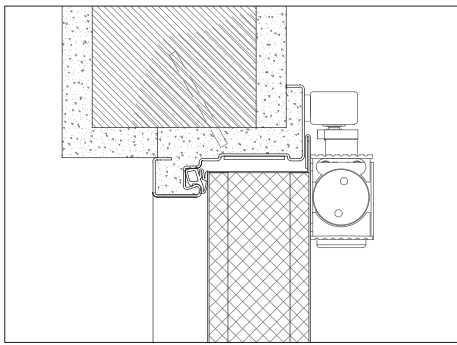
Note: there are certain elements – namely intumescent and acoustic seals and / or leaf and frame fillings – shown in details, that can be suppressed depending on the technical requirements of the door.

F3 frame – frame + counter-frame | gypsum wall mounting | metal portico fixation.

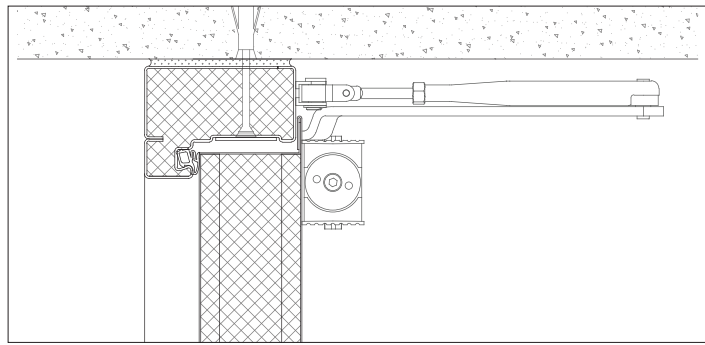




F1 frame – standard frame | masonry wall mounting | steel rod fixation | plaster finish

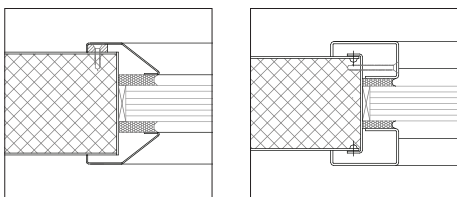


F1 frame – standard frame | masonry wall mounting | steel rod fixation | plaster finish | door closer with sliding rail



F2 frame – standard frame | masonry wall mounting | steel rod fixation | plaster finish | door closer with articulated arms

types of vision panels



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VERS.**06.26**