

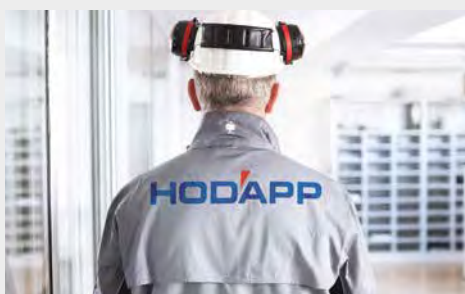


Multifunctional door

> Doors that matter.



Your specialist for tailor-made solutions



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Ventilation grille, flush on one side



Glazing, flush on one side



Full-surface ventilation grille with burglar protection and emergency exit function

One product, one vision.

> HoSta - Multifunctional door

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A sophisticated steel door that can meet every need

If you are looking for a tailor-made and sophisticated designed door of galvanised steel or stainless steel, for indoor or outdoor use, we have the right product for you. With its top quality materials, state-of-the-art design and manufacturing, brilliant selection of standard components and an assorted accessories, HoSta-Multifunctional door is the perfect product for you. Are you looking for a water resistant, fire protective, smoke protective, bullet resistant, burglary resistant door? A door that will not only inspire you but also make all of your wishes possible? Let HoSta be your answer.

The HoSta door range is an evolution in itself that has been designed from scratch by our own highly experienced and professional engineers. In order for the Hosta door to continue being the perfect solution for you, it undergoes numerous improvements and reinventions. Special attention is given to a sleek and uniform finish. Additionally, a wide variety of components such as hinges, ventilation grilles and sealing profiles have been newly developed in order to achieve the best results. The resistance and protection classes are also being continuously upgraded to offer you maximum protection and resistance. This can be seen in the 69 mm and 106 mm leaf-thickness doors that have a sound insulation of up to 54 dB and 60 dB respectively.

HoSta - Multifunctional door. Simply the best quality. Made in Germany. Made by Hodapp.



Design variations

> Standard and Highlights

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Standard design

Fittings: 2-part-construction-hinges with ball bearings, galvanised and primed. 2 hinges per leaf. Mortise lock prepared for profile cylinder. Plastic lever handle set in black look (short plate, round rosette is optional). Also available with high-quality aluminium or stainless steel fittings.

Additionally for 2-leaf-doors: Visually attractive flush-mounted centre rebate with sealing profile. Fixed leaf with rebate drive deadbolt upwards, or optionally locked downwards.

Frame: 3-sided-corner-frame with all-round sealing profile or alternatively with block, wrap-around or Z-frame.

Door leaf: 3-sided rebated (thin or thick rebate). Insulated with special insert.

Floor connection: Threshold-free with 10 mm clearance. Optional with floor seal, strip seal, stop seal or 4-sided frame.

Surface: Door leaf and frame galvanised and primed, or painted in RAL colours.

Alternative versions are available on request.

Highlights

High quality flush stainless steel striking plates with edge protection, protect the frame and set visual highlights.

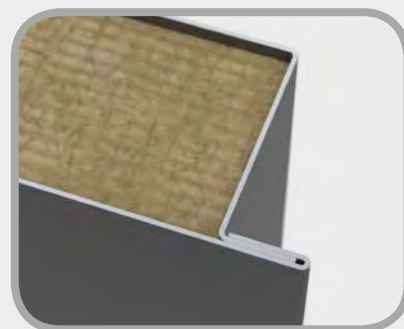
For more complex architecture, the HoSta multifunctional door also comes with a flush-fitting design, depending on the version.

3D hinge: strong, slim and simply beautiful.

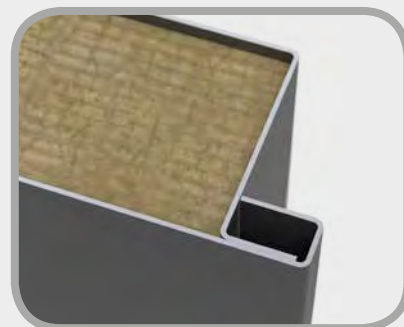
The newly developed state-of-the-art 3D hinges are designed for leaf weights of up to 300 kg. They can therefore carry the heavy sound proof or fire protection doors without a doubt. Furthermore, these hinges are completely maintenance-free and easy to replace when need be. The adjustability of the 3D hinges makes it easy for the door to be perfectly fitted and installation tolerances can subsequently be levelled out. The hinges are available in both galvanised steel and top quality polished stainless steel. The particularly slim hinge sits perfectly on the door frame which makes mortising work on the shell unnecessary.



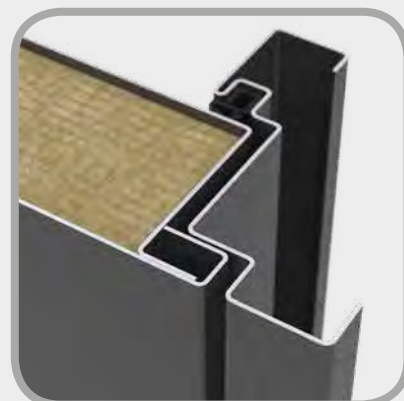
Flush center fold



Thin rebate



Thick rebate



Flush-fitting design



3D hinge, door closed









3D hinge, door open

Product overview

> Technical details











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				Multipurpose		Air tightness / Heavy rain / wind load		Sound protection	
				1-leaf	2-leaf	1-leaf	2-leaf	1-leaf	2-leaf
									
Dimensions	Range of dimensions (CW)	Width	from	500	1.000	500	1.000	500	1.000
			to	1.800	5.000	1.400	2.800	1.500	4.200
		Height	from	500	1.000	500	1.000	500	1.000
			to	6.000	6.000	2.500	2.500	3.200	3.200
	Leaf thickness			69	69	69	69	69 / 106	69 / 106
	Sheet thickness			1,5	1,5	1,5	1,5	1,5	1,5
Implementation	Galvanised steel primed / painted Stainless steel 304 L (V2A) / 316 L (V4A)			●	●	●	●	●	●
	Glazing			●	●	●	●	●	●
	Ventilation grilles			●	●	up to IP 43D	up to IP 43D	-	-
	Side and/or top part			●	●	-	-	-	-
	Thick or thin rebate			●	●	●	●	●	●
Performance characteristics	Fire protection <i>EN 13501-2⁽¹⁾</i>			-	-	-	-	-	-
	Smoke protection <i>EN 13501-2⁽¹⁾</i>			-	-	●	●	●	●
	Sound protection <i>ISO 717-1</i>			up to 37 dB	up to 39 dB	up to 37 dB	up to 39 dB	up to 54/60 dB	up to 51/54 dB
	Air tightness <i>EN 12207</i>			-	-	up to class 4	up to class 4	●	●
	Water tightness <i>EN 12208</i>			-	-	up to class 9A	-	●	●
	Wind load resistance <i>EN 12210</i>			-	-	up to class C5	up to class C4	●	●
	Burglary resistance <i>EN 1627</i>			-	-	-	-	●	●
	Heat transfer coefficient <i>ISO 10077</i>	Steel	(W/m²K)	U _D ≥ 1,5	U _D ≥ 1,5	U _D ≥ 1,5	U _D ≥ 1,5	U _D ≥ 1,8	U _D ≥ 1,8
		Stainless steel	(W/m²K)	U _D ≥ 1,0	U _D ≥ 1,0	U _D ≥ 1,0	U _D ≥ 1,0	U _D ≥ 1,3	U _D ≥ 1,3
	Protection class <i>EN 60529</i>			-	-	up to IP 66	-	●	-
Bullet resistance <i>EN 1522</i>			-	-	-	-	-	-	
Frame variants	3- or 4-sided frame			●	●	●	●	●	●
	Installation in masonry			●	●	●	●	●	●
	Installation in reinforced concrete			●	●	●	●	●	●
	Installation in cellular concrete			●	●	●	●	●	●
	Installation in light partition walls			●	●	●	●	● ⁽²⁾	● ⁽²⁾
	Installation in clad steel construction			●	●	●	●	●	●

● possible / - not possible

CW = Civil works dimension

All dimensions in mm

Burglary resistance Bullet resistance		Smoke protection		Fire protection EI ₂ 30		Fire protection EI ₂ 90		Fire protection EI ₂ 120	
1-leaf	2-leaf	1-leaf	2-leaf	1-leaf	2-leaf	1-leaf	2-leaf	1-leaf	2-leaf
									
500	1.000	500	1.000	500	1.150	500	1.150	650	-
1.850	3.700	1.700	3.150	1.450	3.000	1.450	2.500	1.600	-
1.000	1.000	500	1.000	550	1.000	550	1.000	1.050	-
3.050	3.050	2.950	2.950	2.600	2.600	2.600	2.300	2.550	-
69	69	69	69	69	69	69	69	69	-
1,5	1,5	1,5	1,5	1,5	1,5	1,5	1,5	1,5	-
●	●	●	●	●	●	●	●	●	-
●	●	●	●	●	-	●	-	●	-
●	●	-	-	-	-	-	-	-	-
●	●	-	-	-	-	-	-	-	-
●	●	●	●	Thin rebate	Thin rebate	Thin rebate	Thin rebate	●	-
-	-	●	-	EI ₁ 30 / EI ₂ 30	EI ₂ 30	EI ₁ 45 / EI ₂ 90	EI ₂ 90	EI ₁ 60 / EI ₂ 120	-
●	●	S _a -C5/S ₂₀₀ -C5	S _a -C5/S ₂₀₀ -C5	●	-	●	-	●	-
up to 37 dB	up to 39 dB	up to 54 dB	up to 51 dB	●	-	●	-	●	-
●	●	●	●	●	-	●	-	●	-
●	-	●	-	●	-	●	-	●	-
●	●	●	●	-	-	-	-	-	-
up to RC-4	up to RC-4	●	●	-	-	-	-	-	-
U _D ≥ 1,5	U _D ≥ 1,5	U _D ≥ 1,5	U _D ≥ 1,5	U _D ≥ 1,6	-	U _D ≥ 1,9	-	U _D ≥ 1,9	-
U _D ≥ 1,0	U _D ≥ 1,0	U _D ≥ 1,0	U _D ≥ 1,0	U _D ≥ 1,1	-	U _D ≥ 1,5	-	U _D ≥ 1,5	-
●	-	●	-	●	-	●	-	●	-
FB 4 / FB 6	FB 4 ⁽³⁾	-	-	-	-	-	-	-	-
●	●	●	●	●	●	●	●	●	-
≥ 115	≥ 115	●	●	≥ 115	≥ 200	≥ 175	≥ 200	≥ 175	-
≥ 100	≥ 100	●	●	≥ 100	≥ 200	≥ 125	≥ 200	≥ 175	-
≥ 170	≥ 170	●	●	≥ 150	-	≥ 150	-	-	-
≥ 100 ⁽²⁾	≥ 100 ⁽²⁾	F30 / EI30	F30 / EI30	F30 / EI30	-	F90 / EI90	-	-	-
● ⁽²⁾	● ⁽²⁾	F30 / EI30	F30 / EI30	F30 / EI30	-	F90 / EI90	-	-	-

⁽¹⁾ Delivery after technical clarification⁽²⁾ Wall according to requirement⁽³⁾ In progress

Fire and smoke protection

> Quality that can save your life

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Fire protection

Life is precious and as such it must be protected at all costs. With this in mind, fire protection feature is the absolute requirement of all doors. The way a door behaves when fire breaks out can determine whether lives are saved or not. HoSta doors do not compromise on this. We value your life and strive to achieve the ultimate goal of keeping you safe when fire breaks out. We therefore design doors especially for this purpose while keeping a uniform, sleek look and finish of the product. The safety standards are tested in accordance with the European standard EN 1634-1.

The following functions can be included in the fire protection doors:

Smoke protection, burglary protection, sound protection, air tightness, water tightness and wind load resistant



Smoke protection

The main danger in the event of fire are the life-threatening gasses emitted through smoke. They cause people to be unconscious and incapable of escaping to safety. In order to protect you against these deadly hazards, the HoSta doors are designed with special features such as lowerable floor seals that keep smoke away, thus allowing a smooth emergency exit. The safety standards are tested in accordance with the European standard EN 1634-1.

The following functions can be included in the smoke protection doors:

Burglary protection, sound protection, air tightness, water tightness and wind load resistant

Burglary protection

> An irresistible quality

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Burglary protection

Knowing that your property and your loved ones are protected from burglars, thieves and other criminals is the most fundamental need that every door must meet. In order to guarantee this function, we have developed and designed cutting edge burglar-resistant doors. The door leaves have been specially reinforced thus enabling the resistance class of up to RC-4 to be achieved with only one main lock. Our products have been tested according to the European standard EN 1627.

Overview of resistance classes:

RC-2	The burglar attempts to gain access using simple tools such as screwdrivers, pliers and wedges. He tries to open the door with the screwdriver and the wedges. Exposed hinges are then attacked with a small hand saw. Resistance duration: 3 minutes*
RC-3	The burglar is additionally equipped with a crowbar, a second screwdriver as well as various hand tools (e.g. small hammer, pin punch, mechanical drill). He can exert more force with the crowbar. The drilling tool can be used to attack susceptible closing devices. Resistance duration: 5 minutes*
RC-4	The experienced burglar also uses a heavy hammer, an axe, a chisel and a battery drill, giving him a wider range of attacking possibilities. He is determined to gain access and is willing to take a higher risk. Resistance duration: 10 minutes*



RC-3 Ventilation grille



RC-3 Ventilation grille



RC-3 safety glass / emergency doors

The following functions can be included in the burglary protection doors:

Sound protection, air tightness, water tightness and wind load resistant

* 1 leaf doors with a shell height of up to 2,400 mm

**The resistance duration corresponds purely to the time required for working on the individual points of attack

Sound protection

> An audible quality

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Sound protection

Noise pollution is undoubtedly one of the nuisances of the modern world. It's everywhere, it's annoying but most of all, it's a huge health hazard that affects people every day. Protecting yourself from the sources of noise is therefore a paramount requirement that a door must fulfil. The HoSta sound protection doors have been designed exactly for this special need. The excellent engineering work has produced extraordinary results which ensure that these doors can keep away noise of up to a value of 60 db. Another big advantage to this tested and proven quality is a design with flush floor, without threshold stop, as an ideal accessibility solution for all emergency exit routes.

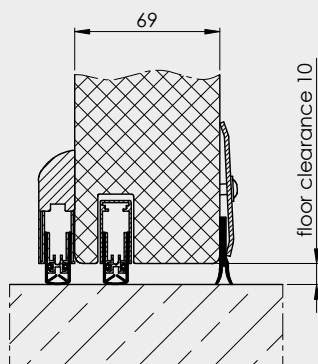
Our sound insulated doors require mainly a normal interchangeable mortise lock, which enables the use of emergency or electric locks. In addition to standard fittings, it is also possible to use panic push-bar handles.

Overview of sound protection designs

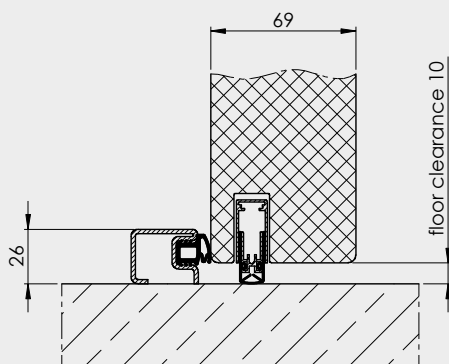
	1-leaf-door		21-leaf-door	
	without glass	with glass	without glass	with glass
Thin / thick rebate Door thickness 69 mm	up to 37 dB	up to 35 dB	up to 40 dB	up to 40 dB
Thin rebate with rebate seal Door thickness 69 mm	up to 54 dB	up to 49 dB	up to 51 dB	up to 49 dB
Thin rebate with rebate seal Door thickness 106 mm	up to 60 dB	up to 54 dB	up to 54 dB	up to 54 dB

Floor designs at a glance**

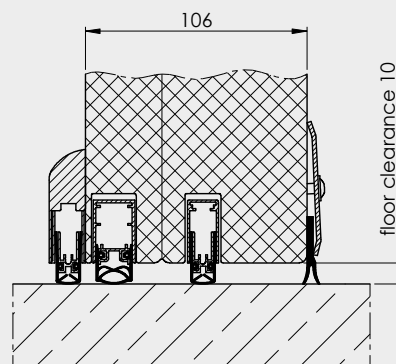
Door thickness 69 mm
(2 lowerable floor seals, strip seal)



Door thickness 69 mm
(compression seal, lowerable floor seals)



Door thickness 106 mm
(3 lowerable floor seals, strip seal)



The following functions can also be included in the sound protection doors:

Air tightness, water tightness and wind load resistant

* Design depends on selected sound insulation dimension

Ventilation grilles

> Fresh air and security

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Ventilation grilles

Be safe and breathe easy. Our HoSta and transformer doors can be equipped with ventilation grilles that not only protect you against heavy rain, strong wind and burglars, but also provide fresh air to your building. These attributes are achieved by the self-developed and designed ventilation grilles that offer an air flow cross-section of approx. 43 % for aluminium slats and approx. 47 % for steel and stainless steel slats. Furthermore, the superior and elegant appearance of the doors is maintained throughout due to the one-sided frameless design. The tamper-proof ventilation grilles with Y-shaped slats of up to resistance class RC-4 in conjunction with emergency requirements and up to IP43D are tested according to the European burglary protection standard EN 1627.

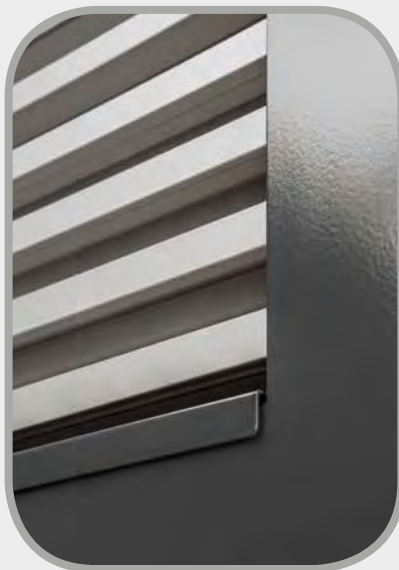
The ideal solution for fresh air and security.

The following designs are also available:

- Aluminium silver coloured (E6/EV1) anodized
- Steel primed or painted in RAL colour tone
- Stainless steel mill-finished, stainless steel polished grain 240



Stainless steel wire mesh



Anodised aluminium slats



Varnished steel slats



Glazings

> A visible quality

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Glazings

A light room is both welcoming and uplifting. The use of glass in the doors not only fulfils these requirements but also gives them an exclusive touch. Our HoSta steel doors can therefore be fitted with double-glazed and reinforced glass that lets in light and offers protection against fire, sound or burglary. The glazing is frameless on one side making it easy to clean and maintain the surface. The result is a solid, sleek, elegant and modern product that meets the required specifications.

More personalised, alternative designs are available on request.

Standard glass shapes:

- rectangle
- rhombus
- circle



Frameless-side glazing



Glass-holding frame

Fittings

- Door handle according to EN 1906
- Panic push-bar according to EN 1125
- Flush strike plate made of stainless steel as edge protection

Hinges

- 2-part standard hinge according to EN 1935
- 3-part standard hinge according to EN 1935
- 3D state-of-the-art hinge according to EN 1935
- XXL special hinge

Door closer

- with scissor-arm according to EN 1154
- with slide rail according to EN 1154
- with integrated hold-open, snap-in hold-open, opening restrictor

Earthing strap

- Stainless steel hinge with 16 or 25 mm² cross-section alternatively on hinge or opposite hinge side

Electrical equipment

- Electric door strike
- Bolt contact
- Magnetic contact VDS class C
- Further equipment available on request

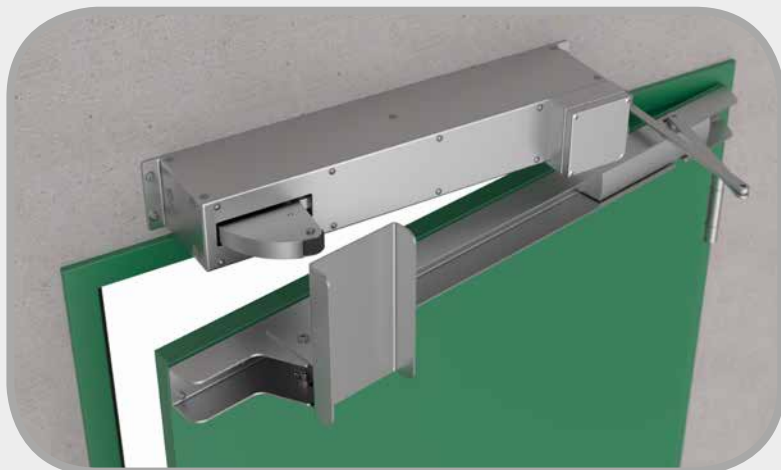
Door drives

- according to EN 16005

Opening support

- Opening aid (pressure relief) up to 500 Pa differential pressure
- Operating aid (30 N operating force)

Further accessories available on request.



Opening aid



Operating aid

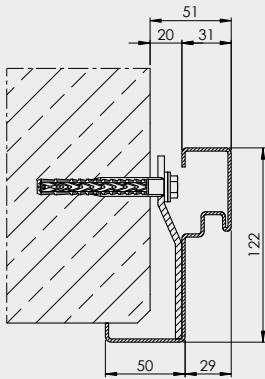
Wall connections

> Overview

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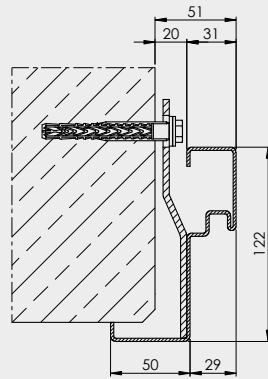
Corner frame

Concealed screw connection



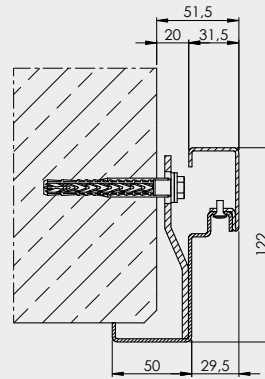
Corner frame

Visible screw connection



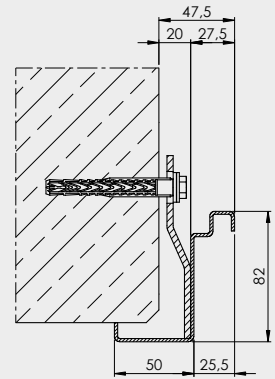
2-part-corner frame

Concealed screw connection



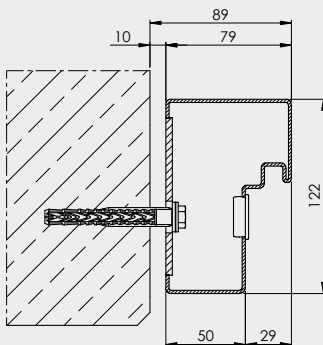
Z-frame

Visible screw connection



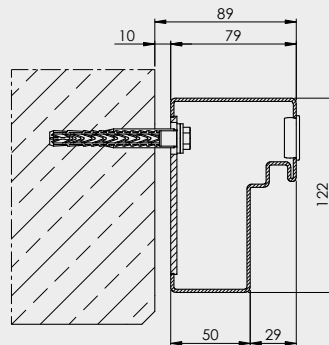
Block frame

Screwed through the rebate



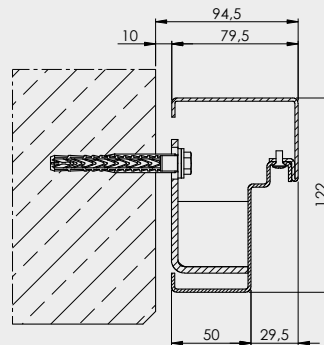
Block frame

Screwed through the reveal



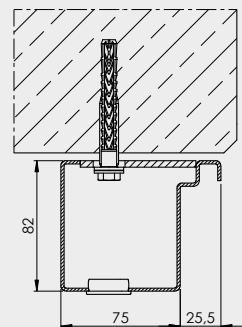
2-part-block frame

Concealed screw connection



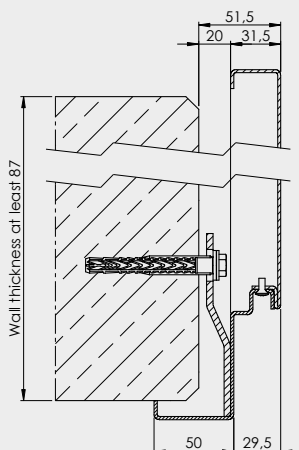
Block frame in front of the wall

Screwed through the frame mirror



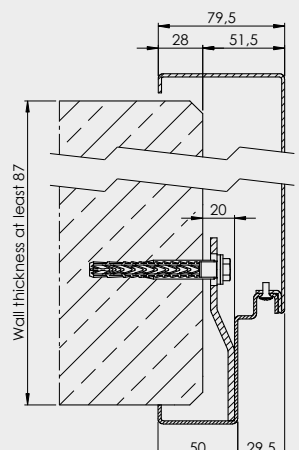
Wrap-around frame 2-part-slide-in module

Concealed screw connection



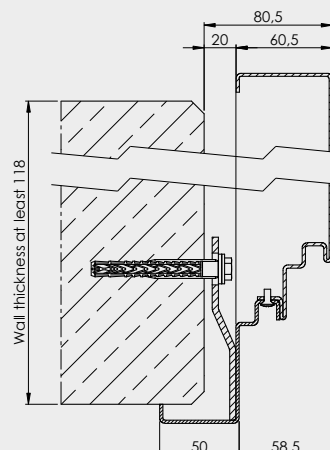
Wrap-around frame 2-part-equal wrap-around

Concealed screw connection



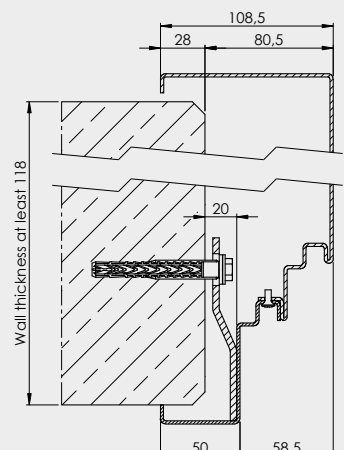
Wrap-around frame 2-part-slide-in module

with 2nd sealing level
Concealed screw connection



Wrap-around frame 2-part-equal wrap-around

with 2nd sealing level
Concealed screw connection

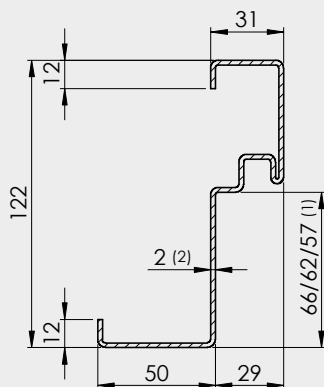


Frame designs

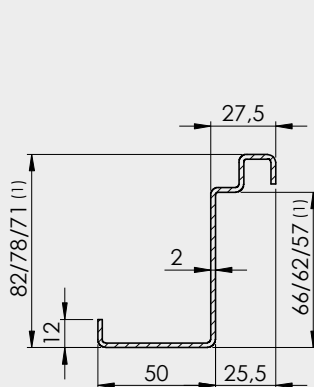
> Door leaf thickness 69 mm

15

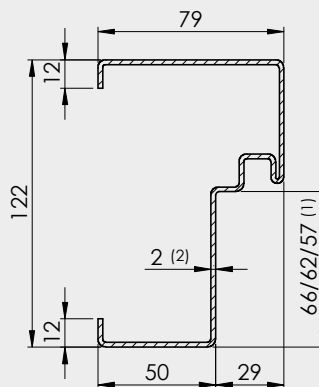
Corner frame



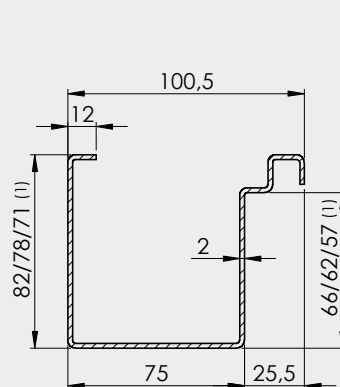
Z-frame



Block frame

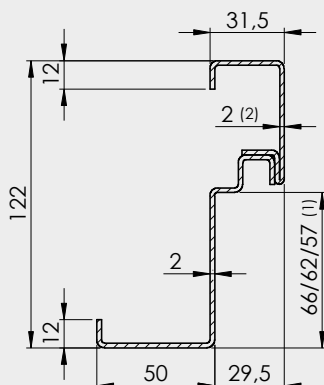


Block frame in front of the wall



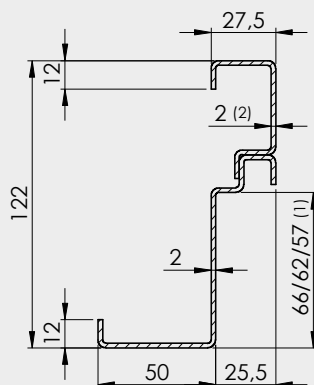
2-part-corner frame

Z-frame with counter-frame,
without joint



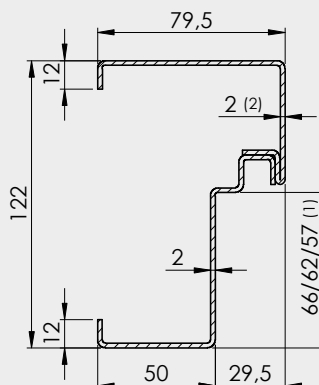
2-part-corner frame

Z-frame with counter-frame,
with joint



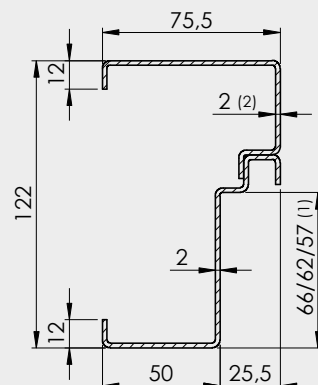
2-part-block frame

Z-frame with counter-frame,
without joint



2-part-block frame

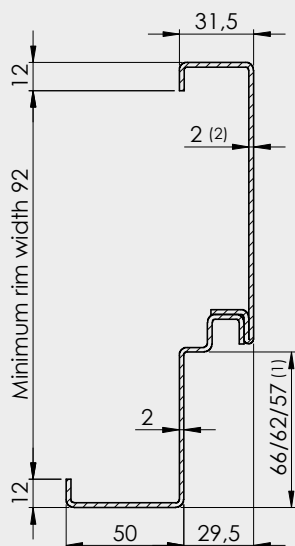
Z-frame with counter-frame,
with joint



Wrap-around frame

2-part-slide-in module

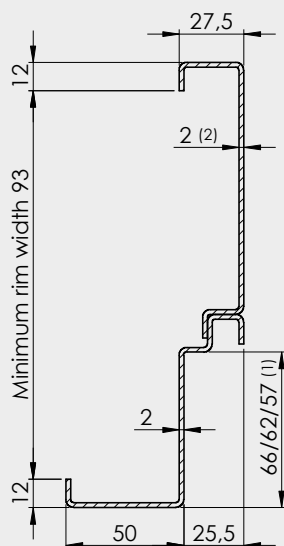
Z-frame with counter-frame,
without joint



Wrap-around frame

2-part-slide-in module

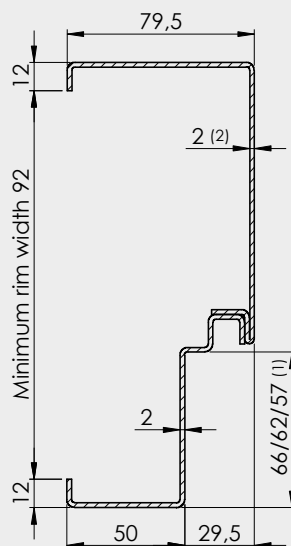
Z-frame with counter-frame,
with joint



Wrap-around frame

2-part-equal wrap-around

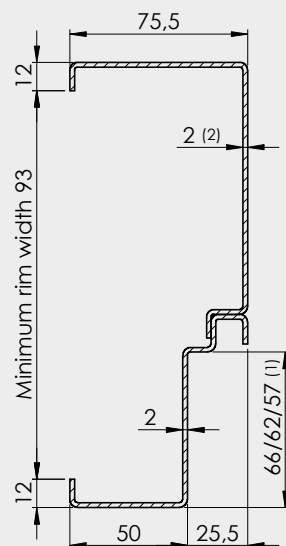
Z-frame with counter-frame,
without joint



Wrap-around frame

2-part-equal wrap-around

Z-frame with counter-frame,
with joint



⁽¹⁾ Depending on the rebate design

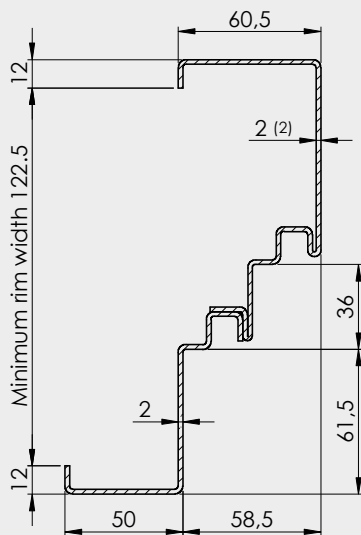
⁽²⁾ Sheet thickness for stainless steel design 1.5 mm

Frame designs / Frame dimensions

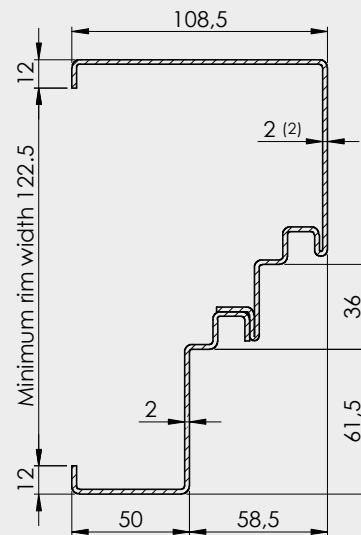
> Door leaf thickness 106 mm

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**2-part wrap-around frame, slide-in module
with 2nd sealing level for high level noise protection**
Z-frame with counter-frame, without joint

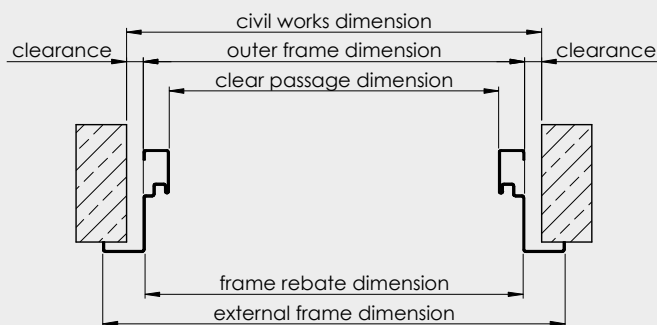


**2-part wrap-around frame, equal wrap-around
with 2nd sealing level for high level noise protection**
Z-frame with counter-frame, without joint

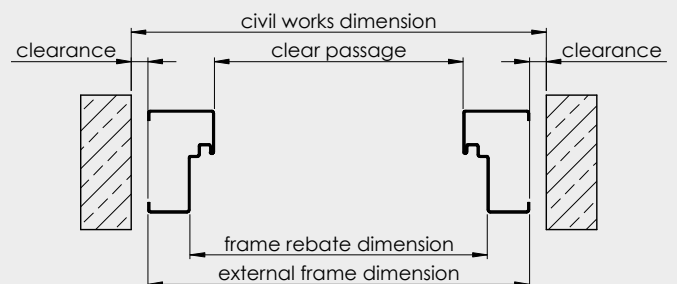


Frame dimensions at a glance

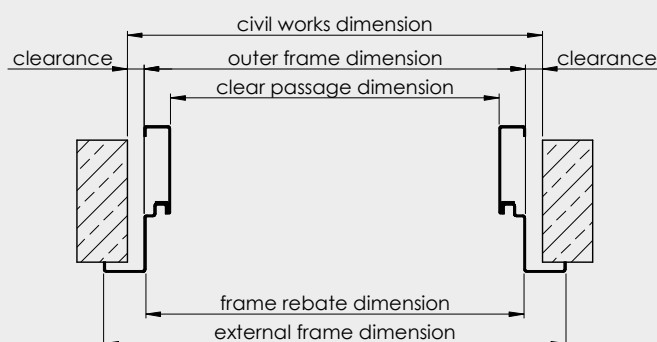
Corner frame



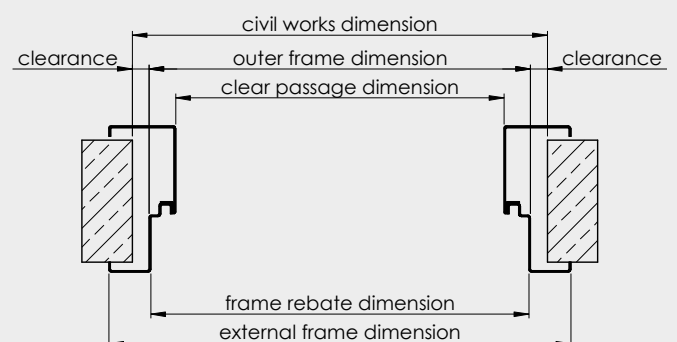
Block frame



Wrap-around frame, slide-in module



Wrap-around frame, equal wrap-around



Frame dimensions

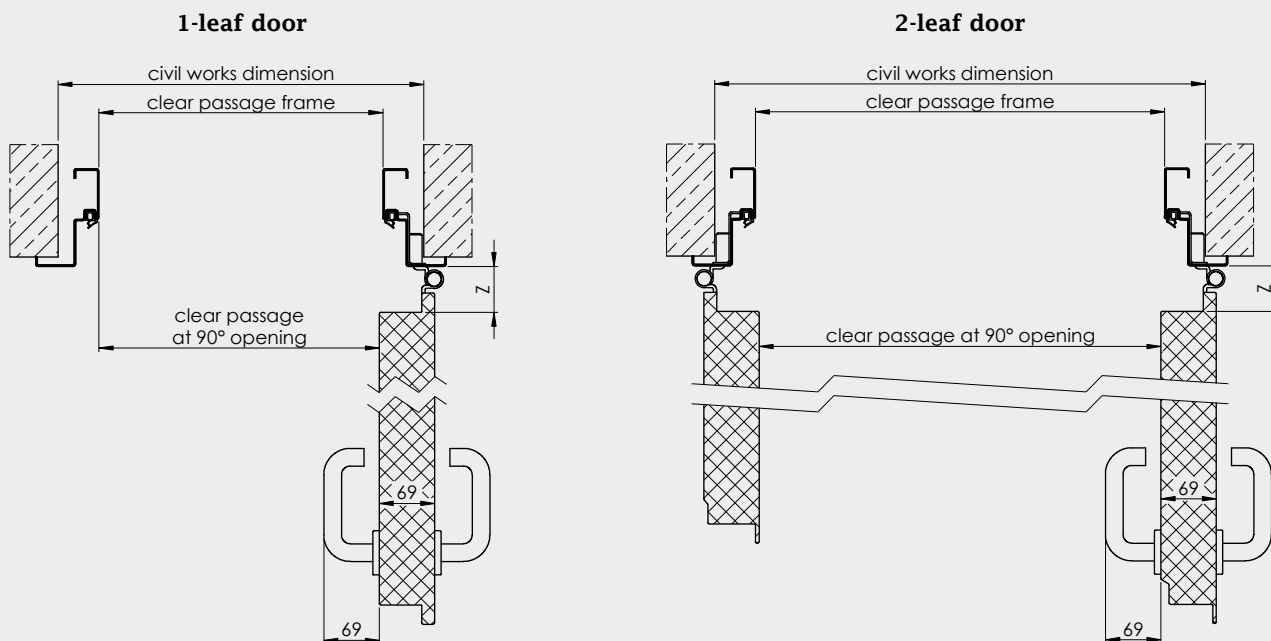
> Clear passage width

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Calculation of the clear passage width at 90° opening without consideration of fittings:

Clear passage width (90° opening) = civil works dimension - deduction dimension

The deduction measurement depends on the design of the door and can be taken from the table below. For single-leaf doors, it is possible to have a passage width of 29 mm greater than those of standard hinges.



Deduction dimensions at 90° opening angle**

	1-leaf-door				2-leaf-door			
	3D hinge		Standard hinge		3D hinge		Standard hinge	
	Thin rebate Z = 55 mm	Thick rebate Z = 62 mm	Thin rebate Z = 56 mm	Thick rebate Z = 61 mm	Thin rebate Z = 55 mm	Thick rebate Z = 62 mm	Thin rebate Z = 56 mm	Thick rebate Z = 61 mm
Corner frame	116	109,5	145	137	130	117	188	172
Block frame	192	185,5	221	213	206	193	264	248
2-parts wrap-around frame Slide-in/equal wrap-around without joint	117,5	111	146,5	138,5	131	118	189	173
2-parts wrap-around frame Slide-in/equal wrap-around with joint	113,5	107	142,5	134,5	131	118	189	173
2-parts wrap-around frame 2nd sealing level Slide-in/equal wrap-around without joint	183,5	-	212,5	-	205	-	263	-

* Depending on selected fitting version

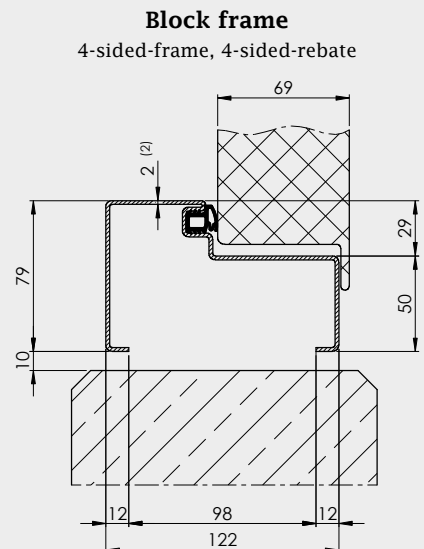
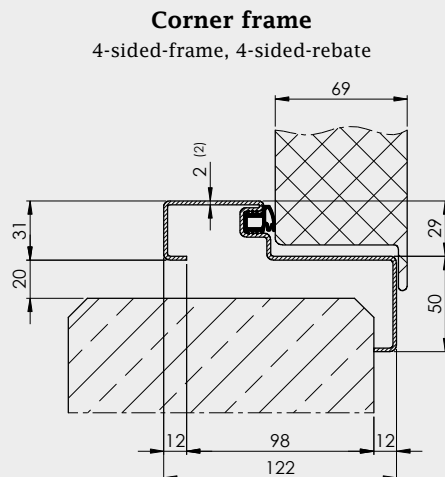
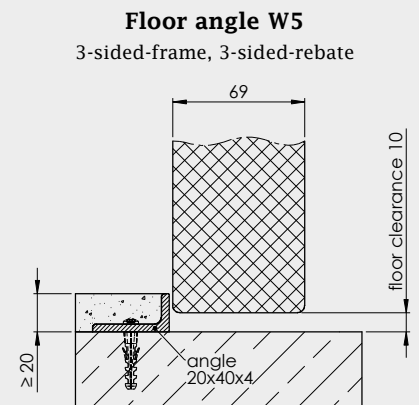
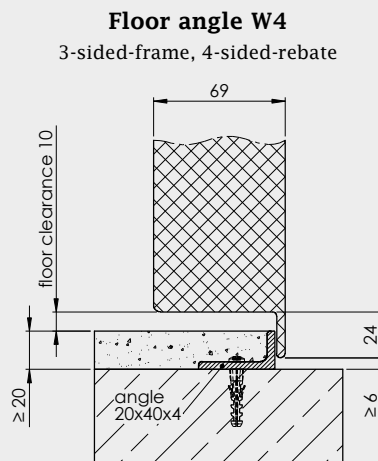
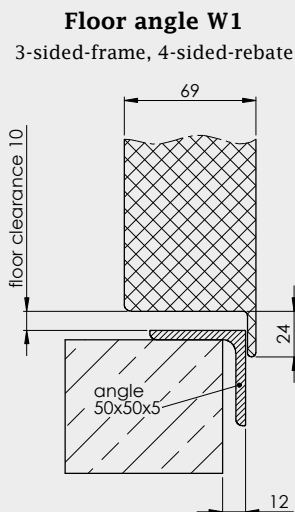
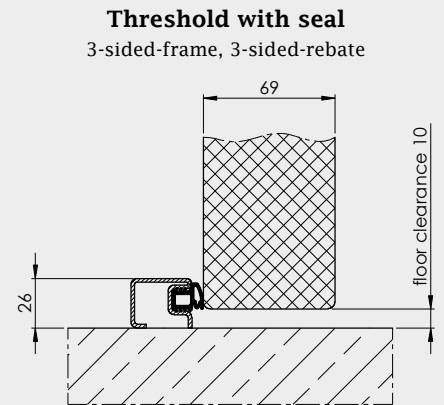
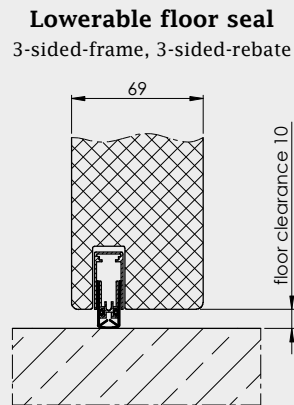
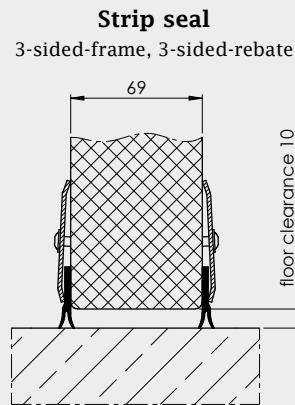
** Values apply to 20 mm clearance. Exception: block frame 10 mm

Floor connections

> Overview

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In addition to the standard floor connections illustrated here, other designs are also available on request.



⁽²⁾ Sheet thickness for stainless steel design 1.5 mm





Fire protection doors and gates

Smoke protection doors



Water protection doors

Sound insulating doors

Burglary resistant doors

Bullet resistant doors



Multipurpose doors

Multipurpose sliding doors

Folding gates

Tunnel doors



Facility protection gates

Prison cell doors

Conveyor closures

Liftable gates