



GM MARTITION® glass partitions

Wall & door, one solution.
Highest sound insulation requirements
up to 49 dB $R_{res,w}$.

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Glas Marte company building

From the connection of tradition and innovation results the power, which made Glas Marte in its third generation one of the leading European glass specialists. Founded in 1930 and still managed as a medium-sized family enterprise, Glas Marte has around 270 employees at its business location in Bregenz today. Beside the domestic market, Vorarlberg and Eastern Switzerland, Glas Marte is realising projects for customers all over Europe.

Glass construction, glass processing and glass systems guarantee individual solutions at the highest technical level. Trend-setting developments in glass construction as well as solutions with the maximum possible application of glass and minimum required proportion of design work form the basis for the success of Glas Marte. This process is safeguarded by patented solutions and the constant exchange with international experts, universities and our membership in the Professional Association for Glass Construction.



GM MARTITION® general

Over the past years, the design of offices has fundamentally changed with glass as construction material. Transparency and optimal illumination with natural light are implemented in the planning of office space with highly increasing interest. Glas Marte pursues the user-oriented path, always views walls and doors jointly and achieves excellent results, in terms of both technology and design.

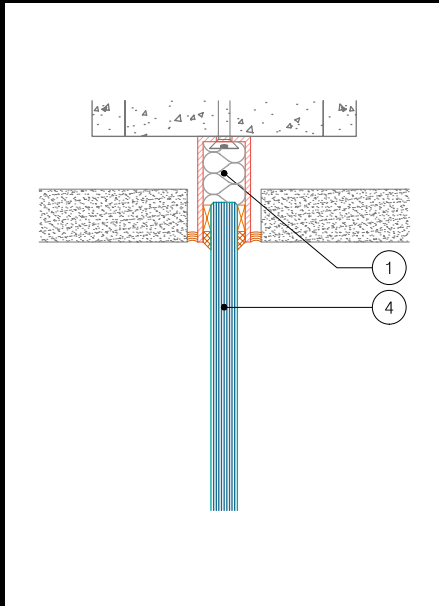
Under the umbrella term GM MARTITION®, Glas Marte offers different product series and suggestions for solutions.

GM MARTITION® Mono is a single-glazed glass partition wall, incl. door, in various designs, which excel with their lightness and clarity.

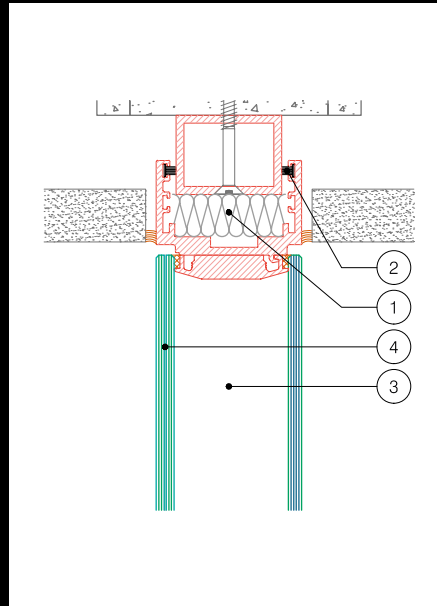
GM MARTITION® Light is the most filigree double-glazed glass partition wall, incl. door, with convincing functions, using which a wide spectrum of application requests can be implemented.

GM MARTITION® Plus is a double-glazed glass partition wall, incl. door, which stands for highest sound insulation requirements ($R_{res,w}$ 49 dB) in an exceptionally high "premium quality".

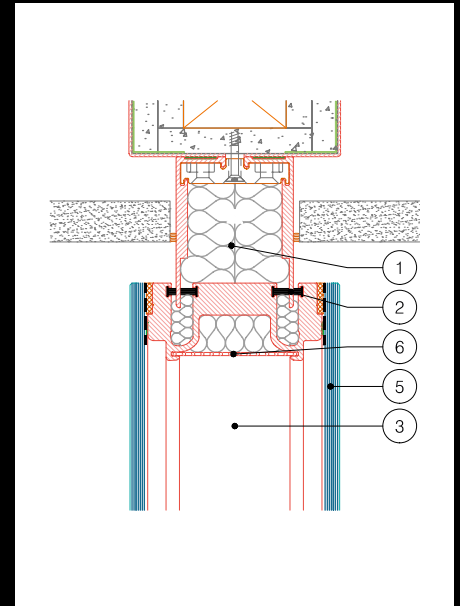
GM MARTITION® - acoustic



GM MARTITION® Mono



GM MARTITION® Light



GM MARTITION® Plus

1=soundproof structural connections, 2=decoupled from structure-borne sound, 3=double-glazed glass partition walls, 4=VSG possible with sound insulation film, 5=various glass structures possible, 6=perforated plate with sound absorption

What are decibels (dB)?

Decibel is the logarithmic “measure” of sound. It is stated in decibels, how loud a noise is. The higher the number of decibels, the louder it is. We can only really perceive whether a noise is getting louder or quieter from a certain number of decibels on. With sound levels in the range above forty decibels, for example, differences can only be heard, when the sound level changes by at least three decibels. A jump by ten decibels gives us the impression that the volume has doubled or halved. A change by only one decibel is hardly audible.

How loud are various noises?

Noises and how loud they are can be best imagined with examples:

Sound source	A-evaluated	Perception
	0 dB	hearing threshold
rustling leave	0-10 dB	(almost) audible
ticking clock	20 dB	hardly audible
fine rain	30 dB	very faint
living room	40 dB	quiet
normal conversation	50 dB	rather quiet
office	60 dB	moderately noisy
loud conversation at a distance of 1 m	70 dB	loud
average road traffic	70 dB	loud
loud music	80 dB	very loud
loud factory hall, heavy truck	90 dB	very loud
rock hammer	100 dB	very loud to unbearable
classical concert, disco, pop concert	110 dB	just under the threshold of pain
jet at a distance of 50 m	120 dB	unbearable
	130 dB	threshold of pain

GM MARTITION® - comparison

GM MARTITION® Mono - single-glazed glass partition wall

wall thickness	sound insulation dB $R_{res,w1}$	max. element size	max. size per door
8-18	20-30	3000 x 6000	1000 x 3000

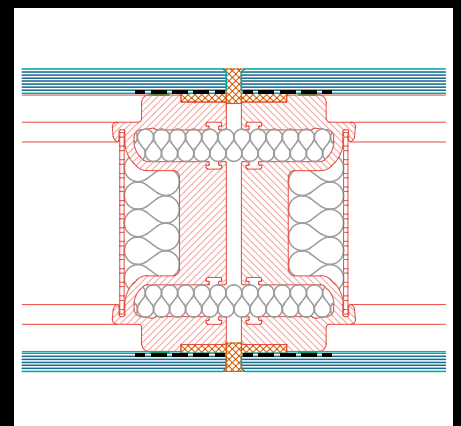
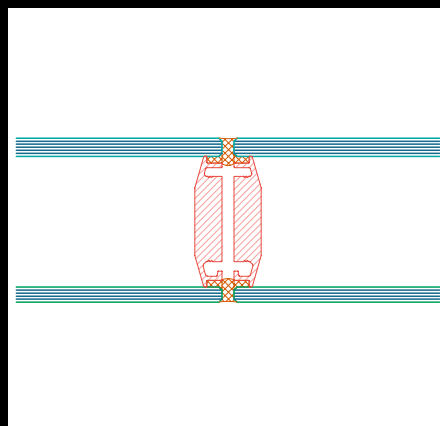
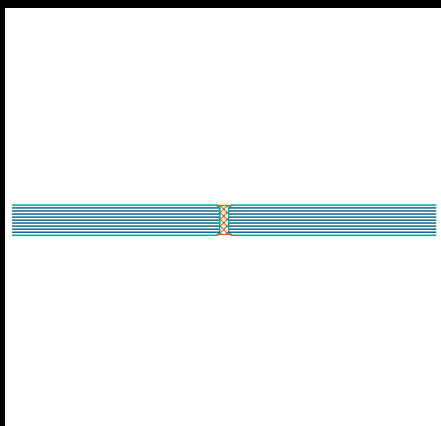
GM MARTITION® Light - double-glazed glass partition wall

wall thickness	sound insulation dB $R_{res,w1}$	max. element size	max. size per door
55	30-45	2400 x 4000	1000 x 2400

GM MARTITION® Plus - double-glazed glass partition wall

wall thickness	sound insulation dB $R_{res,w1}$	max. element size	max. size per door
100-110	40-50	2400 x 5100	1100 x 4000

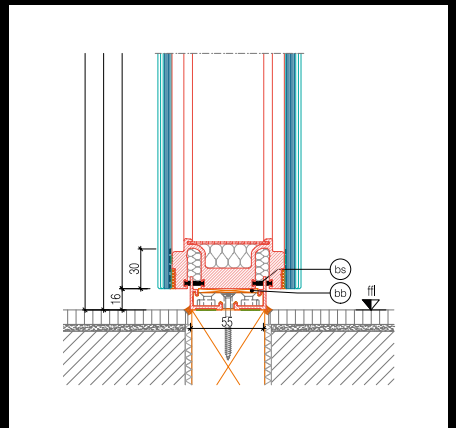
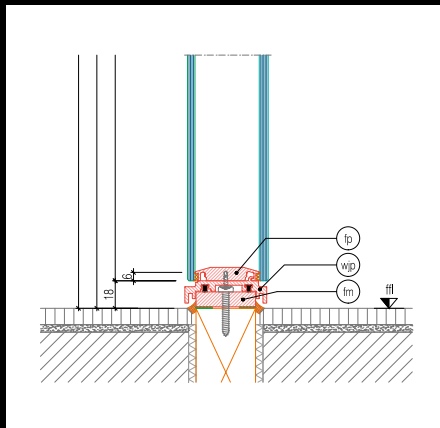
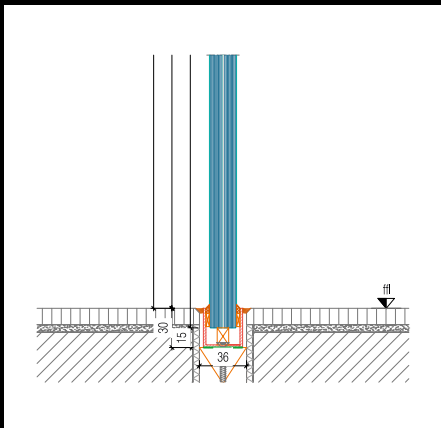
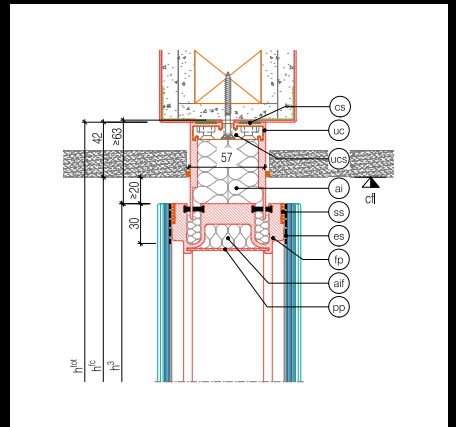
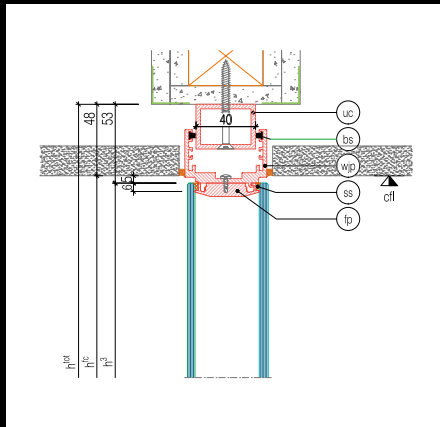
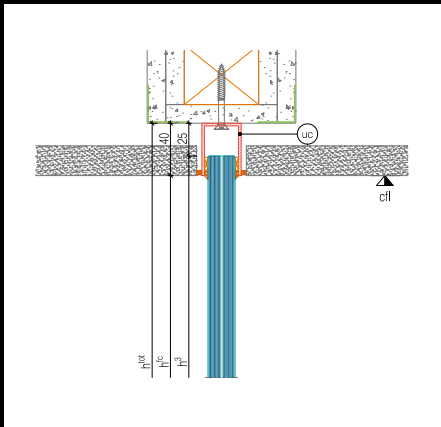
¹ Guidelines depending on completion



GM MARTITION® Mono

GM MARTITION® Light

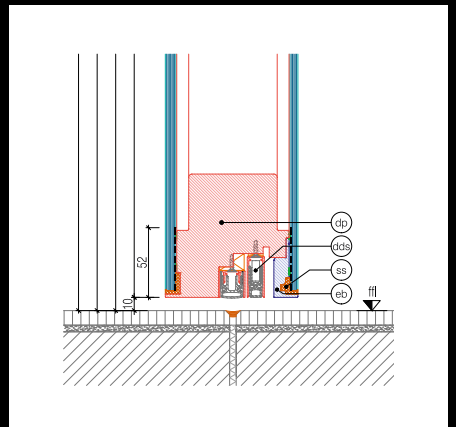
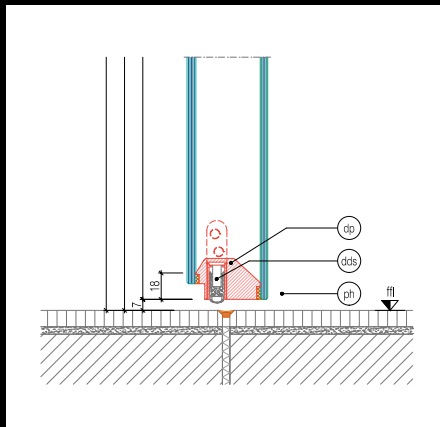
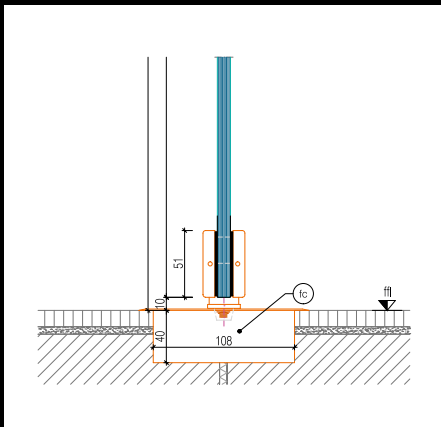
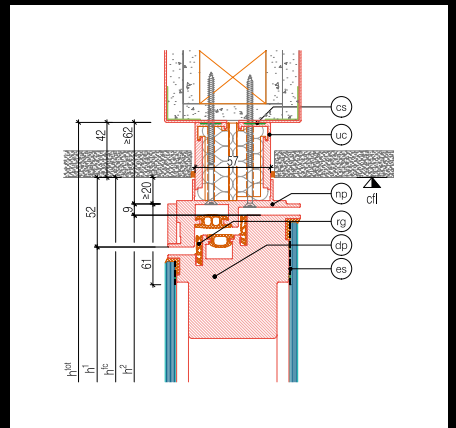
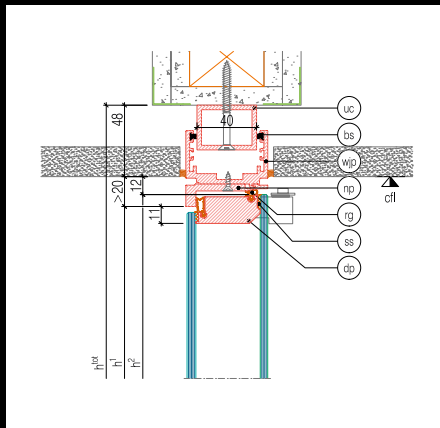
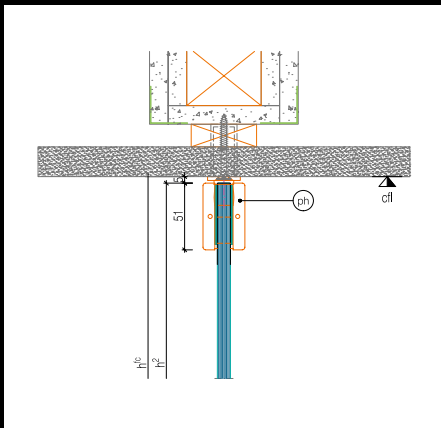
GM MARTITION® Plus



"Mono" wall component

"Light" wall component

"Plus" wall component



"Mono" hinged door

"Light" hinged door

"Plus" hinged door



Glass partitions

Glass walls and glass doors in living areas and offices enjoy the highest level of acceptance in modern interior architecture. Glass walls divide without separating and create individual and appropriate structures, without taking away the generosity and spaciousness of the rooms. Minimalistic and plain or sensual and frisky. Glas Marte enables endless design options thanks to the large variety of different types of glazing. Room for ideas made from glass.



GM MARTITION® Mono

single-glazed glass partition walls

Product advantages at a glance

- Wall, glass and door elements in one system
- High degree of prefabrication
- Short installation times
- Design variations for any requirements
- Concealed attachment of all wall elements
- Uniform wall thickness
- Narrow shadow joints
- Ability to be moved without material loss
- Ready, easy-care surfaces
- Maintenance-free wall elements





GM MARTITION® Mono

product details

Product details at a glance

- Width of module up to 6,0 m
- Overall sound insulation rate $R_{res,w}$ up to 30 dB (incl. door)
- Standard version bilaterally with single pane safety glass SECURMART®
- Fully/partially enamelled with screen printing or rotary printing, design enamel, ICE-H® structured glass, switchable glass, etched glass like SATINATO®, laminated safety glass of the VSG LAMIMART® glass collection
- Assembly directly on any floor coverings
- Mobile partition system



GM MARTITION® Light are double glazed glass partition walls for highest demands. Thanks to the timeless, clear shapes and use of high-quality materials, GM MARTITION® Light not only strongly emphasises visual features, but also combines any functions of a glass partition wall in one single shapely unit.

The variable all-glass module GM MARTITION® Light reduces office partition walls to the essential. The lack of the vertical posts enables transparency towards both sides. The doors, too - with equal construction depth as the fixed elements - blend harmoniously into the overall picture of the bilaterally flush-surface appearance. Shortened assembly times due to the glass module design promise very high profitability.



GM MARTITION® Light

double-glazed glass partition walls

Product advantages at a glance

- Double-glazed glass partition wall, double-sided all-glass optics
- Clear and light appearance - reduced to a minimum of profiles
- Prefabricated modules - for modifiable planning freedom
- Individual dimensions - varied design
- Minimalist and functional architectural language





GM MARTITION® Light


minimalist

Double-glazed glass partition walls - architecturally demanding - for very high sound insulation requirements

GM MARTITION® Light is a technically high-quality design, using which the geometry of the glazing can be flexibly planned and which can be variably repositioned. The glass construction modules are held by means of a connection profile and simultaneously separated from one another for sound insulation.

The doors are an integrative component of the entire wall, i.e. they are integrated into the planar glass face in a surface-flush, system-compatible and unobtrusive fashion.





GM MARTITION[®] Light – Swinging doors oversized

Double-glazed swinging doors in over-dimensional sizes such as e.g. from 1850 mm x 4200 mm (size 7.8 m²) and a low maximum weight of only 250 kg.

The almost invisible frames, concealed behind the glass edges, have a visible width of 10 mm (for fixed parts and eccentric doors 8 mm) and are of rounded design due to the rotary movement and construction thickness of 55 mm. Two brush seals can be integrated into the frame profiles, which are situated behind the glass surface. The bearings are central and equipped with floor springs.



Door room - height



Front door room - height front



Door with transom window hinge-side



Door with transom window lock-side



Doorknob with lock



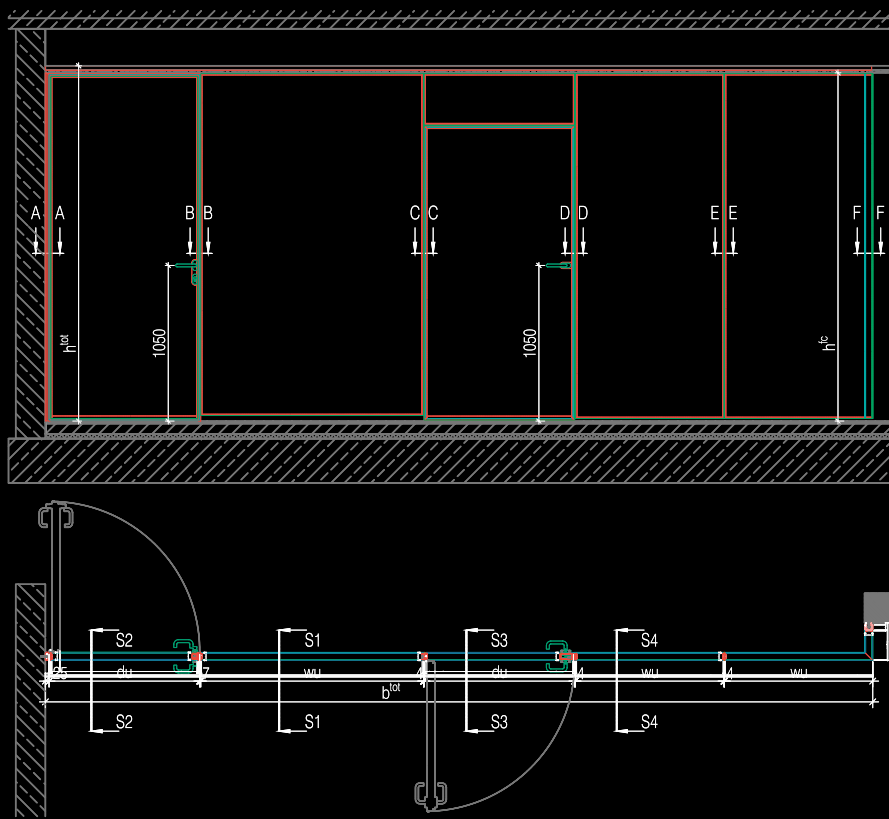
Doorknob without lock



Magnetic door lock



Drop-down seal

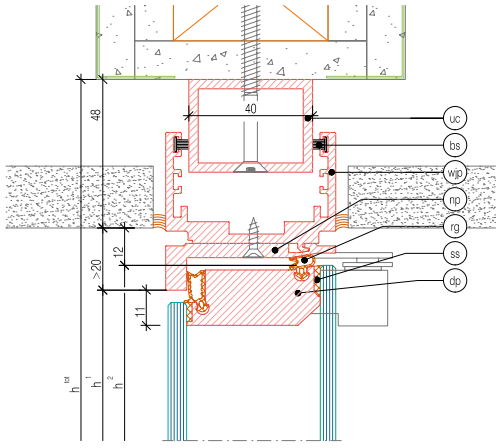


GM MARTITION® Light

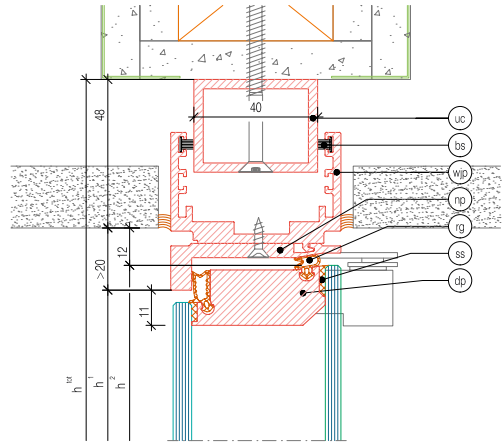
product details

Product details at a glance

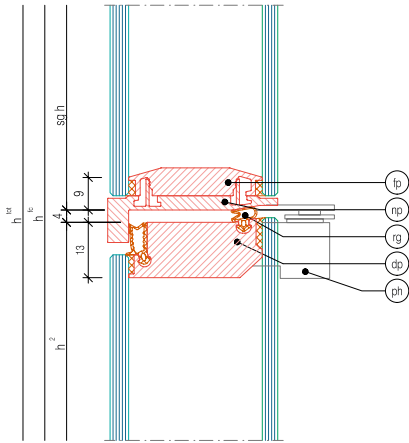
- Width of module up to 4,0 m
- Overall sound insulation rate $R_{res,w}$ up to 40 dB (incl. door)
- Standard version bilaterally with single pane safety glass SECURMART®
- Fully/partially enamelled with screen printing or rotary printing, design enamel, ICE-H® structured glass, switchable glass, etched glass like SATINATO®, laminated safety glass of the VSG LAMIMART® glass collection
- Assembly directly on any floor coverings
- Filigree fittings and locks



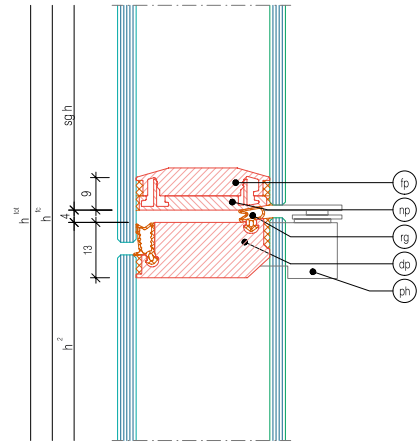
Vertical cross-section door to ceiling



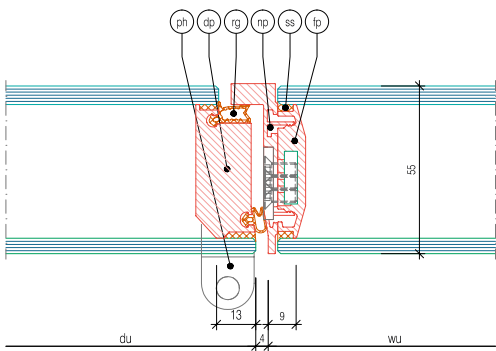
Vertical cross-section door to ceiling "Exklusiv"



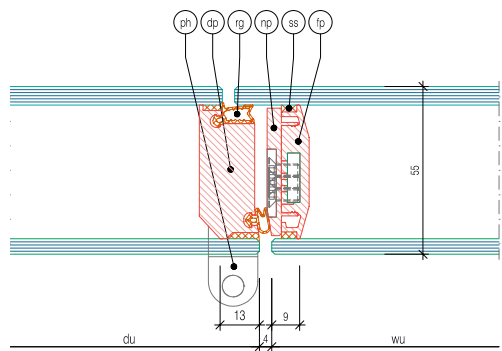
Vertical cross-section door to skylight



Vertical cross-section door to skylight "Exklusiv"

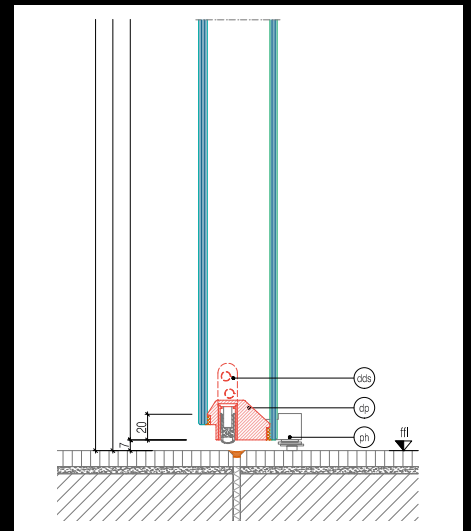
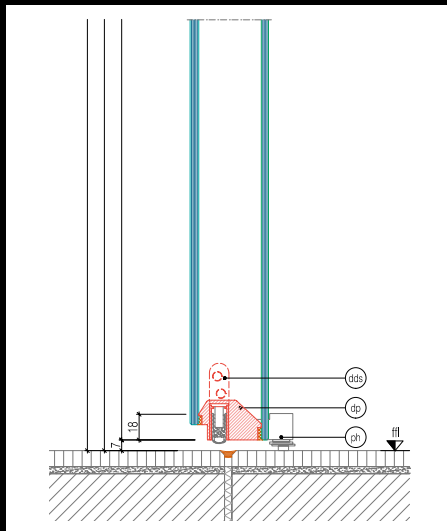
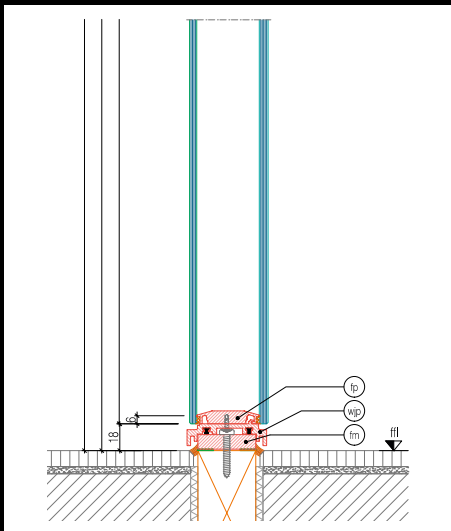
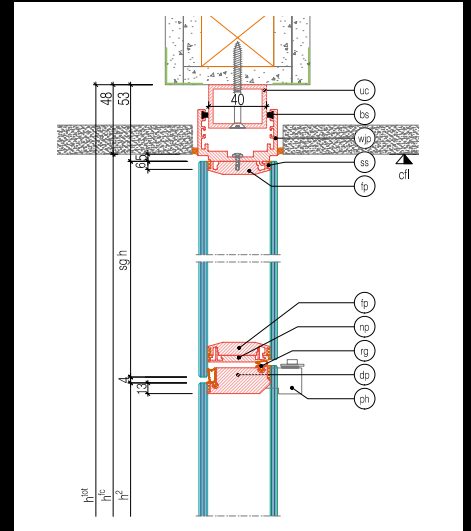
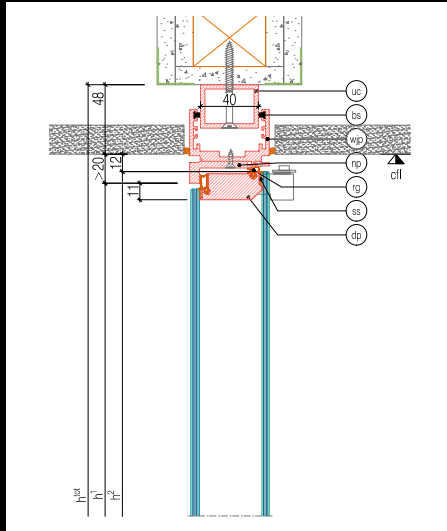
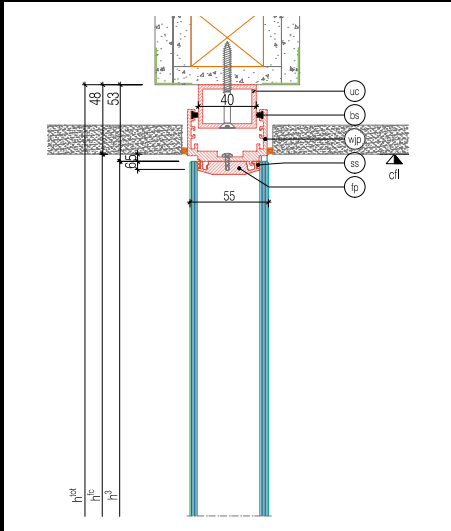


Horizontal cross-section hinge side



Horizontal cross-section hinge side "Exklusiv"

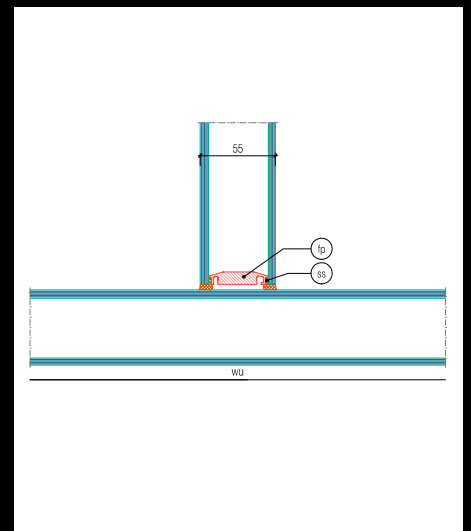
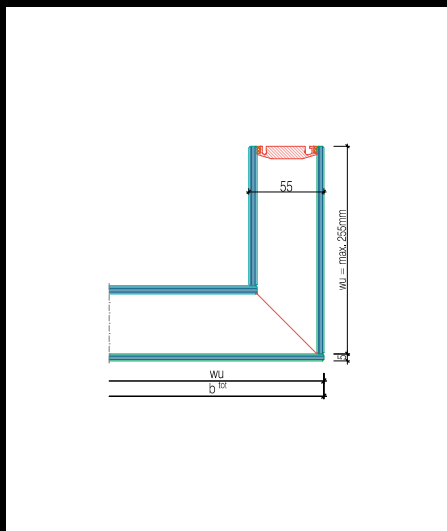
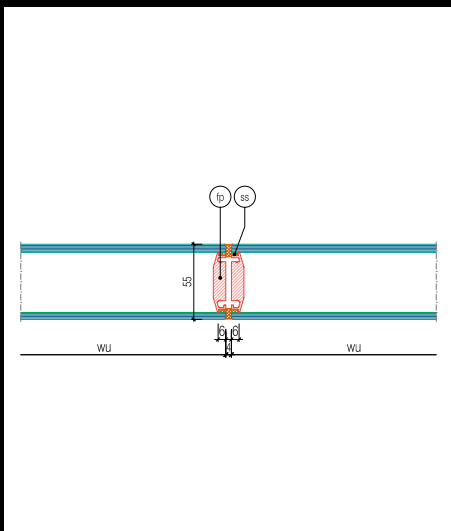
GM MARTITION® Light - details



Vertical cross-section fixed part

Vertical cross-section hinged door

Vertical cross-section hinged door with skylight "Exklusiv"



Horizontal cross-section fixed part

Horizontal cross-section glass corner

Horizontal cross-section T-joint



GM MARTITION® Plus are double-glazed glass partition walls for highest demands - a friendly atmosphere in lightflooded rooms with highest sound insulation characteristics.

GM MARTITION® Plus is the ideal solution wherever a visual impression, but above all highest sound insulation characteristics up to 49 dB $R_{res,w}$ are to be achieved.

The especially developed construction is above all characterised by flexibility and an impressive appearance. The doors, too, harmoniously fit into the big picture with the bilaterally flush and optically very attractive appearance of the glass construction modules - with the same construction depth as the stationary components.



GM MARTITION® Plus

double-glazed glass partition walls

Product advantages at a glance

- Wall & door, one solution - for highest requirements
- Overall sound insulation rate $R_{res,w}$ up to 49 dB (incl. door)
- Bilaterally flush design
- Individual sizes, types of glass, surfaces and design
- Reversible layout of wall and door elements
- Prefabricated modules for modifiable planning freedom



GM MARTITION® Plus – Wall components precise and individual

GM MARTITION® Plus is a technically high-quality construction, using which the geometry of glazing can be planned in a flexible manner. The glass construction modules are held using a connecting profile and simultaneously separated from one another for sound insulation.

The glass construction modules pre-manufactured at the factory are suspended into a support profile assembled at the site in advance. This type of module assembly protects the space between the panes against contaminations. Assembly takes place directly on any floor coverings, screed or raised floors.





GM MARTITION® Plus – Hinged doors flush on the inside and on the outside

The hinged doors are an integrative component of the entire wall, i.e. integrated into the planar glass front surface in a flush, system-compatible and discrete manner.

Hinged doors in a bilateral all-glass appearance are designed as room-height sound insulation doors consisting of an aluminium frame structure with two circumferential sealing levels, with a horizontal double drop-down seal at the bottom.

The stainless steel door hinges are threedimensionally adjustable, the latch-deadbolt lock has triple locking and the stainless steel door handle set is provided with a rosette.





GM MARTITION® Plus - Sliding doors

comprehensive and easy to operate

The sliding doors have a bilateral all-glass appearance with soundproofed and insulated frames analogue to the stationary components. At the side, double overlapping seals are attached, and respective brush seals at the top.

The runner is elastically embedded and manufactured for highest strains. Sliding door stops and a thrust brake are designed according to the system and the sliding mechanism is integrated in the area of the suspended ceiling. A door-height bar handle is attached on both sides. For the sliding door design, a reduction of the sound insulation values has to be expected.



Perforated metal strip incl. sound insulation



Drop-down seal



Filigree hinge



Hinged door with two sealing levels and adjustable door hinges



Integrable power socket



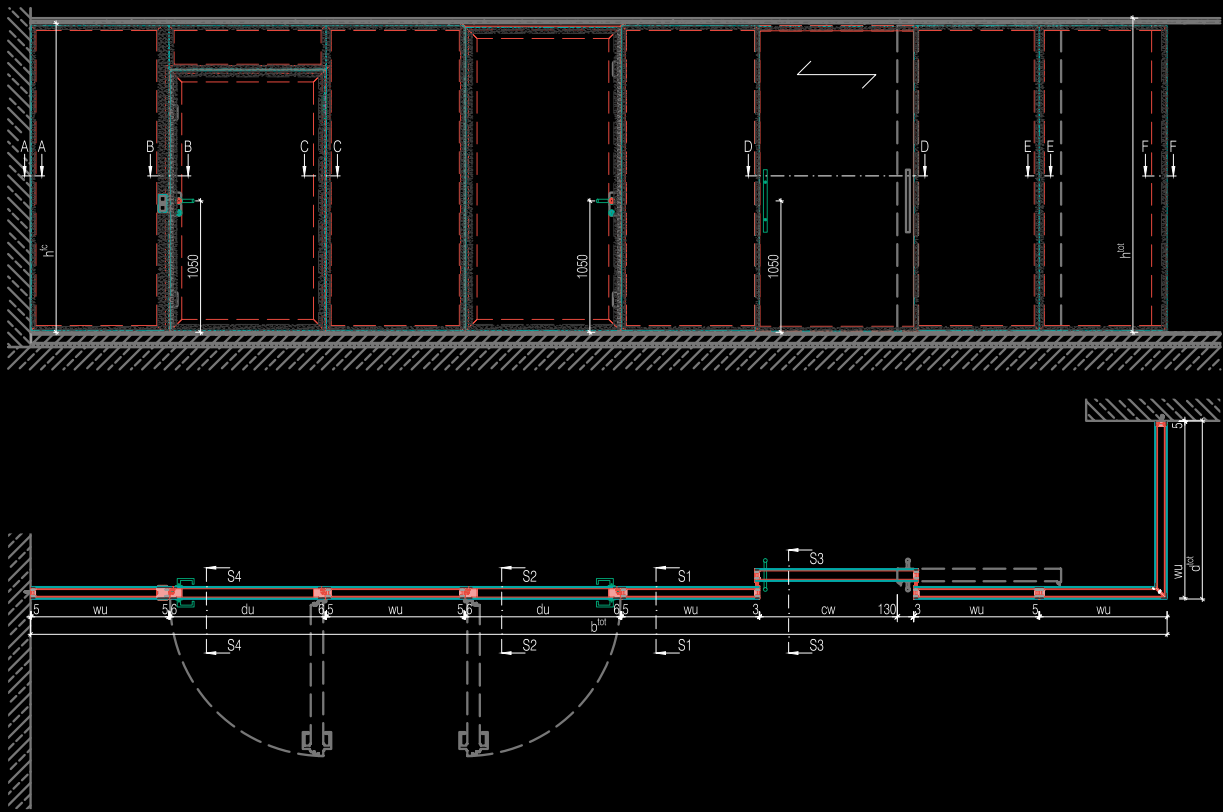
Integrable thermostat



Pair of handles



Available with wooden panelling

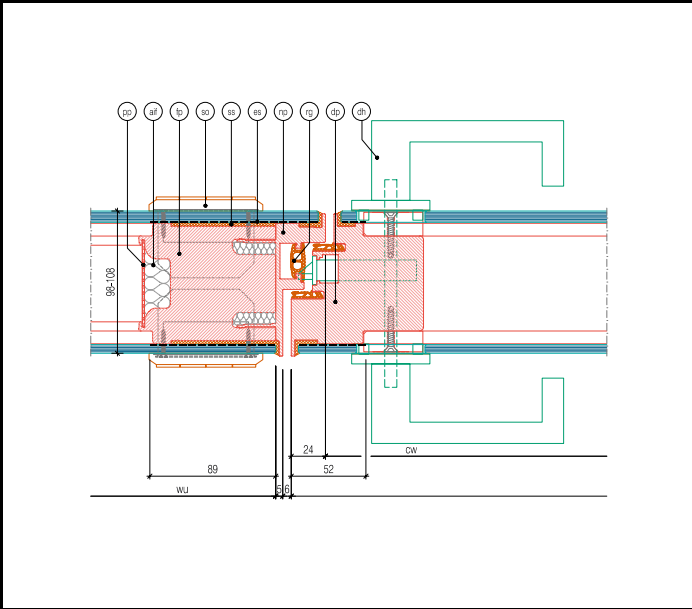


GM MARTITION® Plus

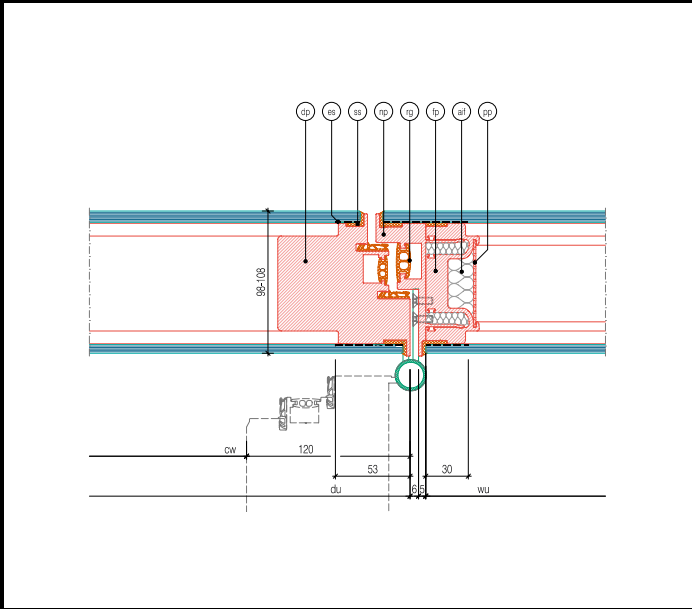
product details

Product details at a glance

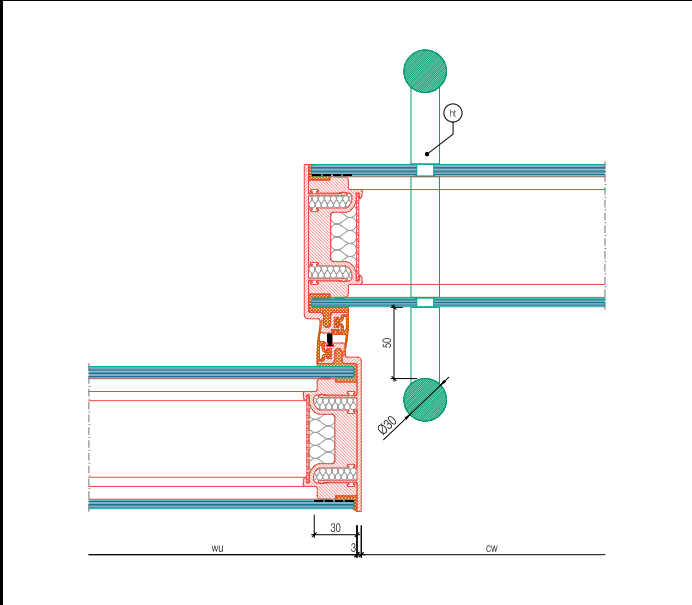
- Width of module up to 5,1 m
- Overall sound insulation rate $R_{res,w}$ up to 49 dB (incl. door)
- Standard version bilaterally with single-pane safety glass SECURMART®
- Full/partial enamelling with screen printing or roller printing, design enamel, ICE-H® structured glass, switchable glass, etched glass like SATINATO®, laminated safety glass of the VSG LAMIMART® glass collection
- Assembly takes place directly on any floor coverings
- Sliding doors bilaterally in all-glass appearance with soundproofed and insulated frames
- Stainless steel hinges three-dimensionally adjustable



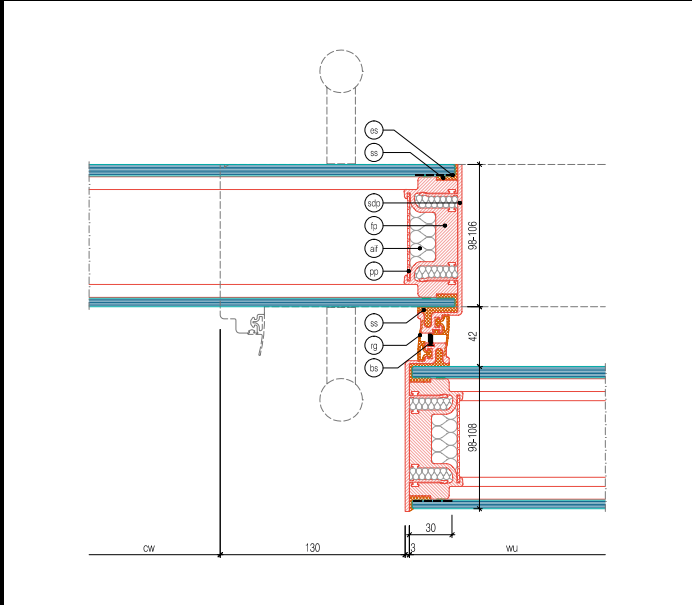
Horizontal cross-section hinged door lock-side



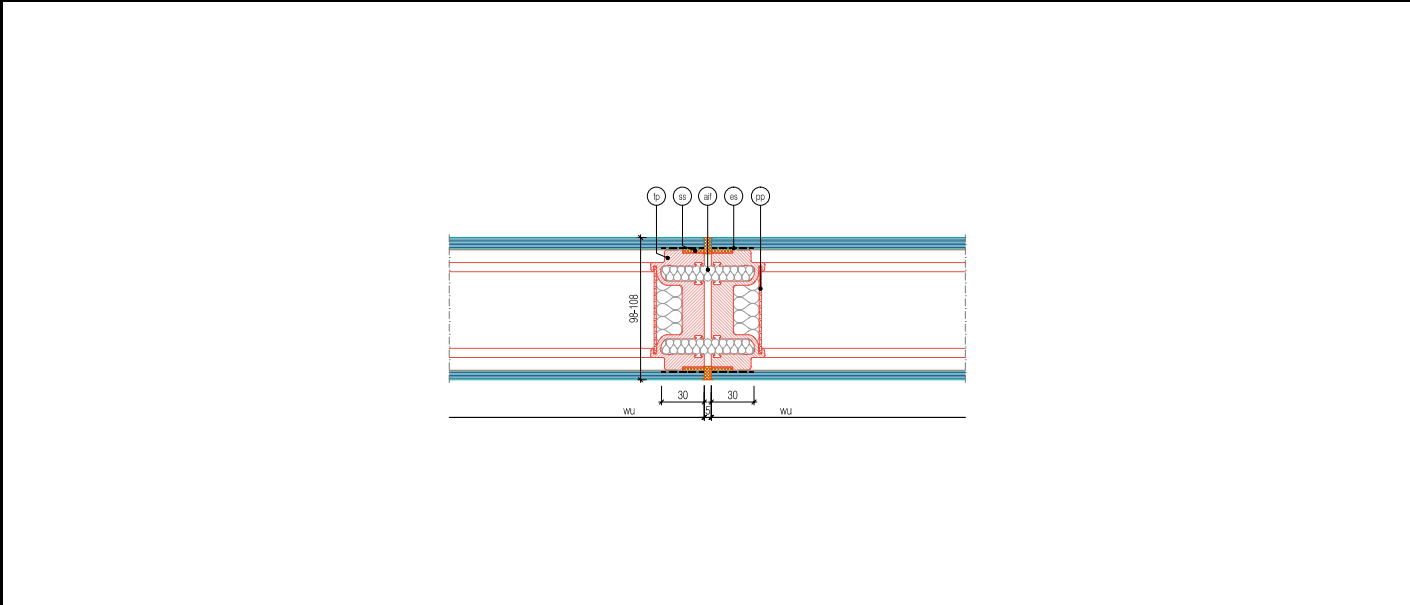
Horizontal cross-section hinged door hinge-side



Horizontal cross-section sliding door handle-side

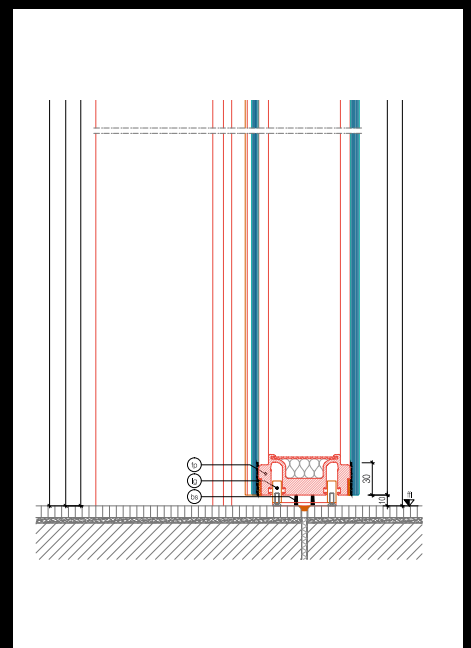
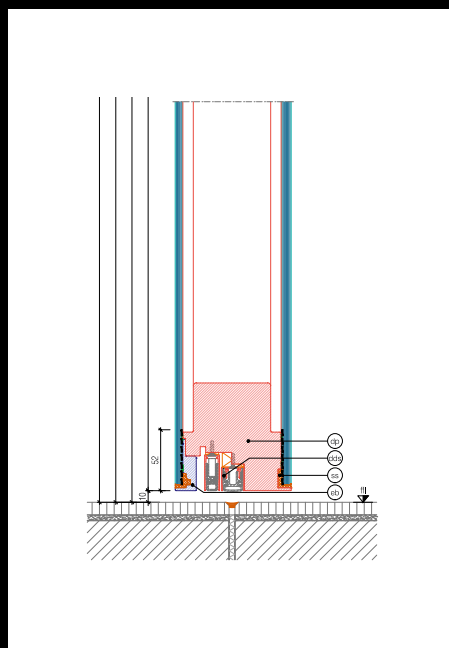
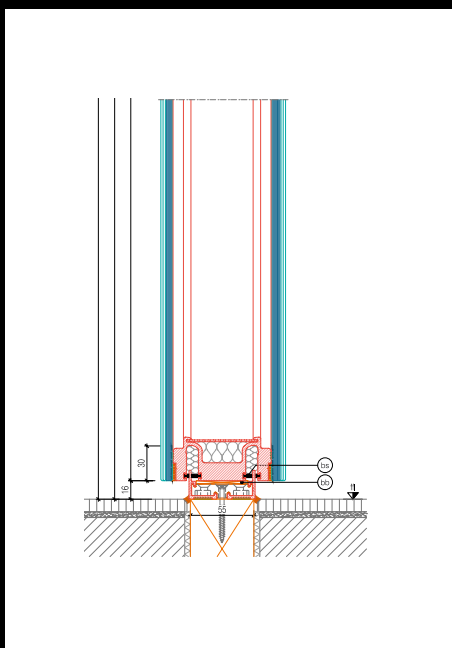
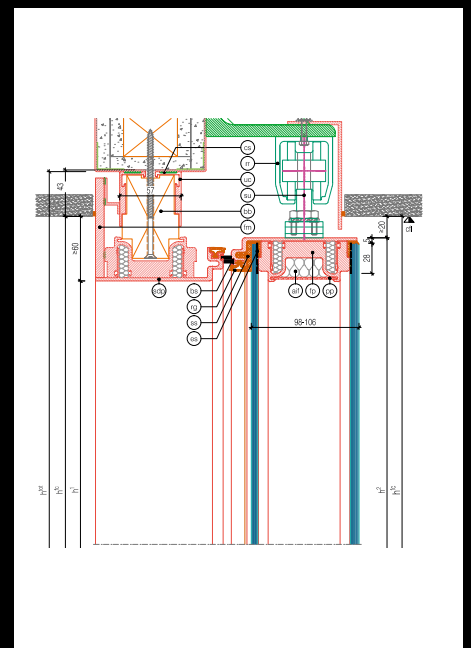
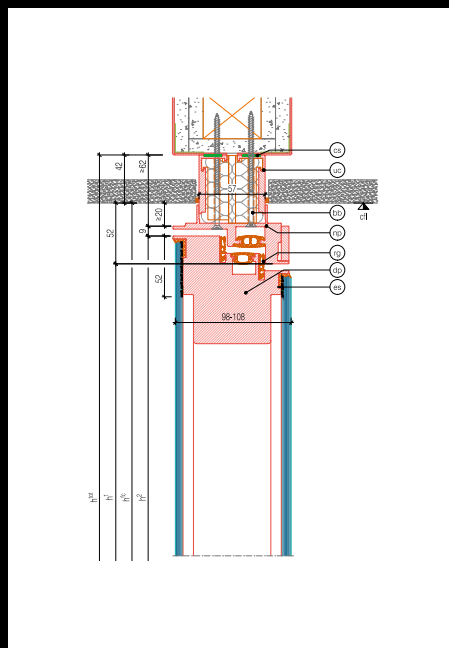
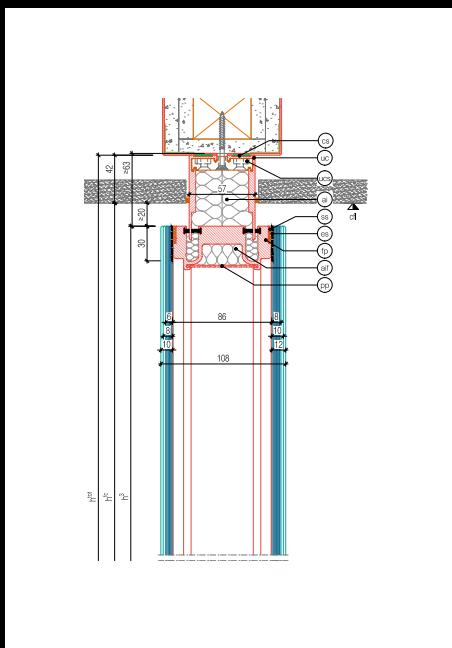


Horizontal cross-section sliding door handle counter-side



Horizontal cross-section wall element

GM MARTITION® Plus - details



Vertical cross-section wall element

Vertical cross-section hinged door

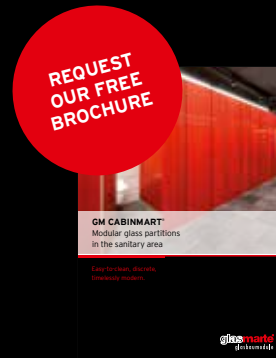
Vertical cross-section sliding door

Glas Marte glass modules - even more possibilities

GM CABINMART®

Modular glass partitions in the sanitary area

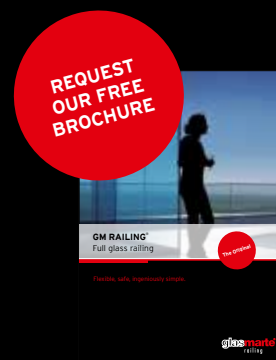
Doors or partitions made of glass appear light and elegant due to their surface compactness and give the impression of transparency. On the outside there are no attachments, mountings or handles because the locking unit is located on the inside. Visually disruptive fittings are integrated into the glass edge profiles, which bring off the exclusive character of the glass.



GM RAILING®

Full glass railing

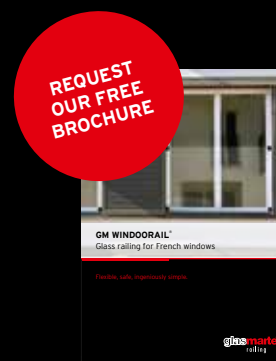
With their prefabricated glass construction modules in connection with a substructure profile and a continuous handrail, the GM RAILING® product range allows for a linear bearing without vertical support. The prefabricated glass construction modules are hung in the underconstruction profiles to be assembled on site, and are screwed together with cheese head screws or particular spacers.



GM WINDOORAIL®

Glass railing for French windows

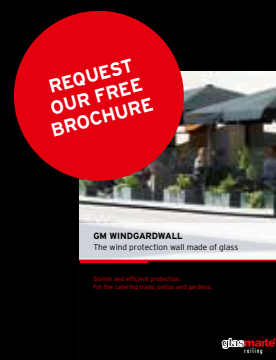
GM WINDOORAIL® are prefabricated glass construction modules with an anti-fall function for window elements, which reach up below the required parapet height. The glass-metal modules guarantee highest safety with an optimal and uniform glass mounting and an optimised, tested and checked fixation - a perfect solution for all types of windows (plastic, wood, wood-aluminium, aluminium, or steel).



GM WINDGARDWALL

The glass wind barrier

Glass panels as weather and spray water protection for the catering trade, for patios and gardens. Flexible sizes due to the modular principle. Easy to install and to store. The prefabricated all-glass modules are mounted in the substructure with the affixed support rails.



GM MARTITION® - legend

Components

aif	acoustic insulation foam
ai	acoustic insulation
bb	balance base
bs	brush seal
cs	caulking strip
dds	drop-down seal
dh	door handle
du	door unit
dp	door profile
eb	extension bar
es	enamel strip
fc	floor closer
fm	aluminium flat material
fp	frame profile
gt	glued truss
ht	handle tube
lg	local guideway
np	notch profile
ph	pin hinge
pp	perforated plate
rg	rubber gasket
rr	running rail
sdp	slide door profile
so	socket
ss	silicone seal
su	suspension
uc	underconstruction profile
ucs	underconstruction support
wjp	wall junction profile
wu	wall unit

Dimensions

d^{tot}	total depth
h^{tot}	total height
b^{tot}	total breadth
h¹	clear opening
h²	height of door unit
h³	height of wall unit
h^{fc}	height from floor to ceiling
cw	clear width
sg^h	height of skylight glazing
cfl	ceiling finish level
ffl	floor finish level



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