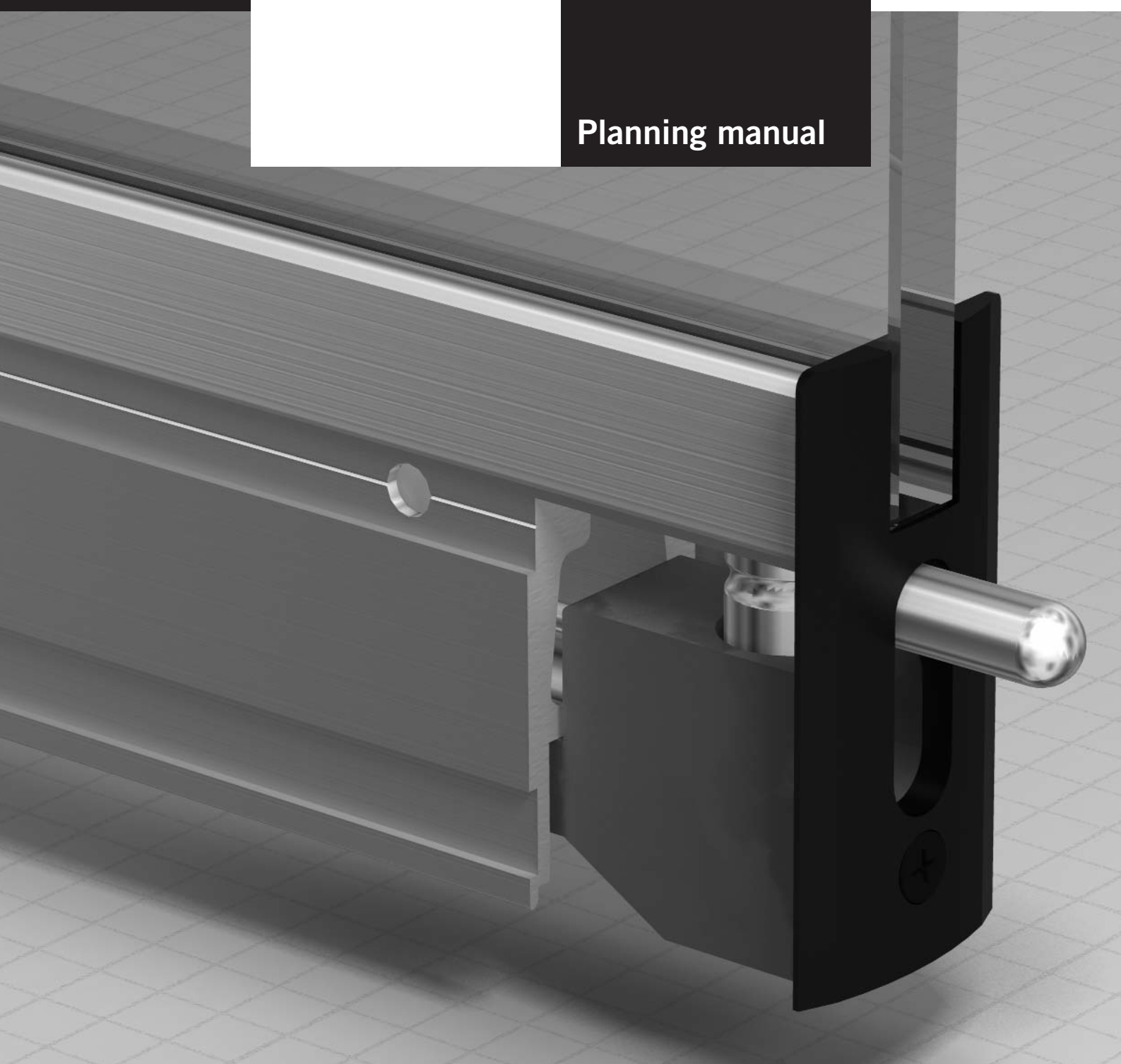


HSW-Midrange

Planning manual



Stacking systems

Perfect parking every time

Existing structures or unusual layouts often require special solutions, particularly in the design of the stacking area. DORMA HSW-Midrange can be parked in a range of different positions. The stack of panels can be aligned parallel or square to the frontage, be readily visible for effect or hidden behind columns etc.

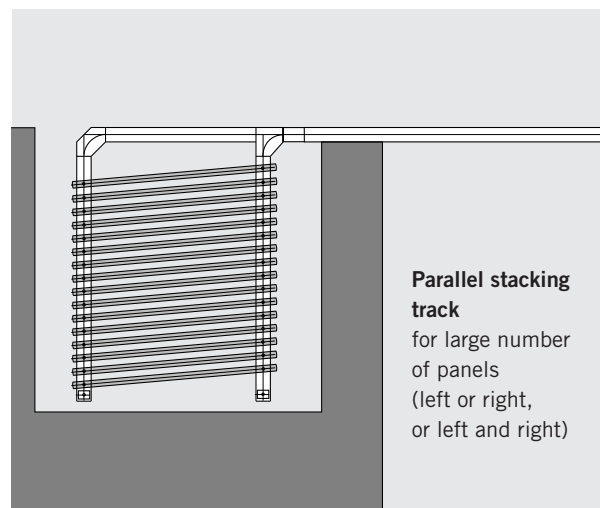
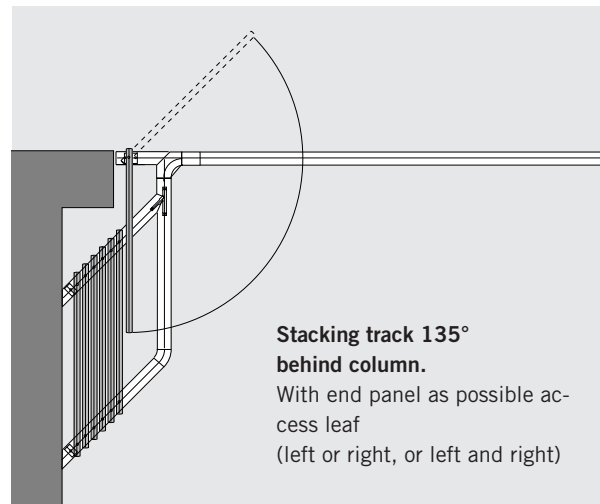
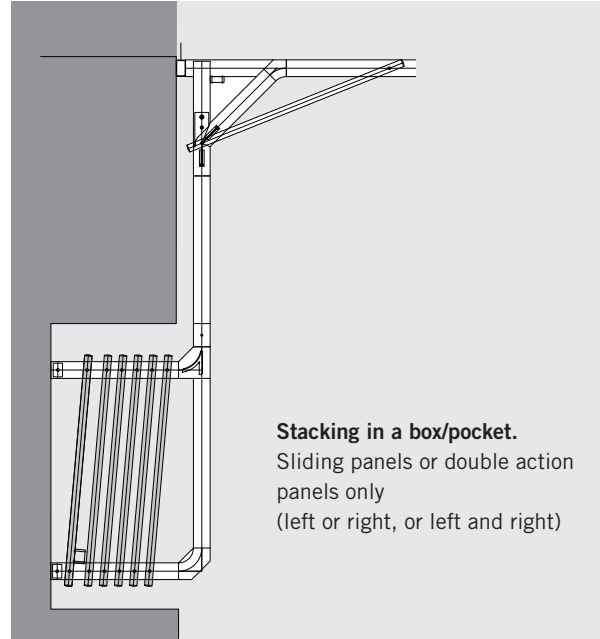
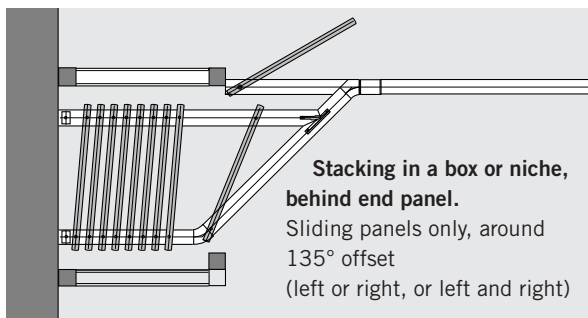
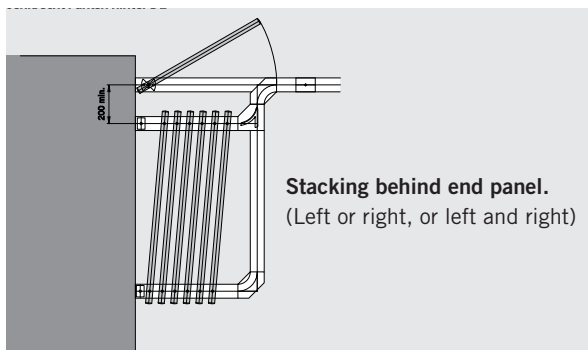
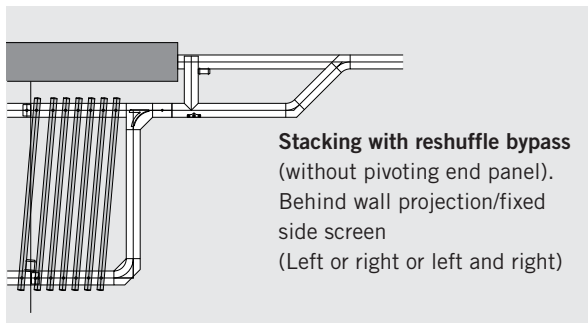
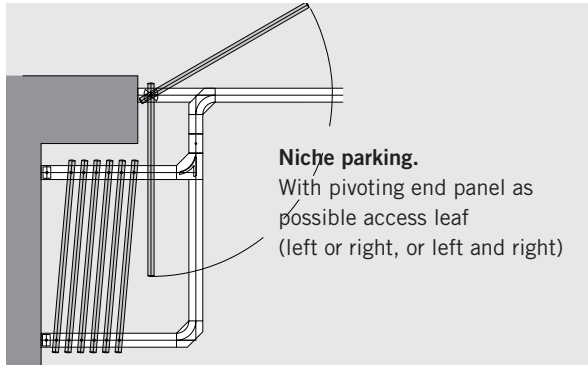
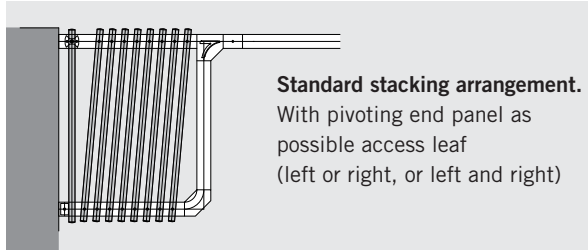
Another possibility is that of parking the system in line but out of the way, whether behind a wall or in a niche (see also pages 3 - 7).

The panels can also perform certain functions when the frontage is open, such as providing the sides of internal store windows and showcases, or, if provided with the appropriate printing on the glass, for adding artistic value to a wall.

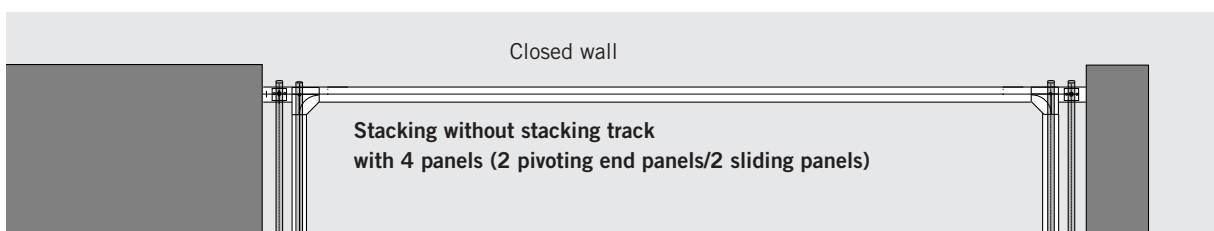
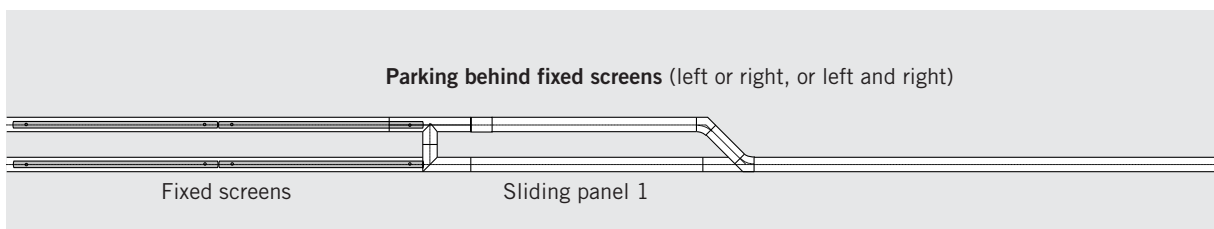
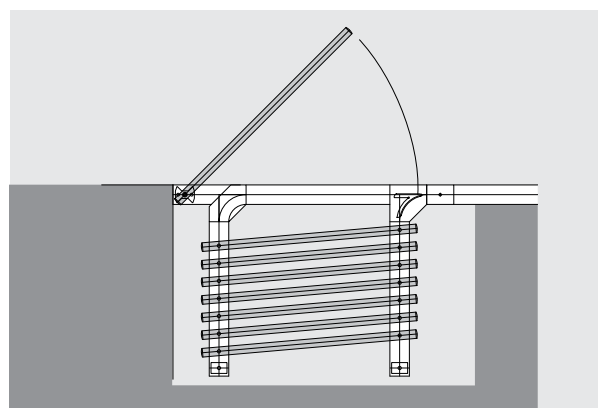
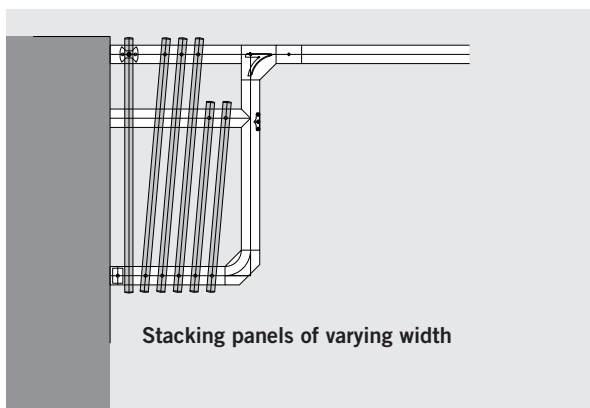
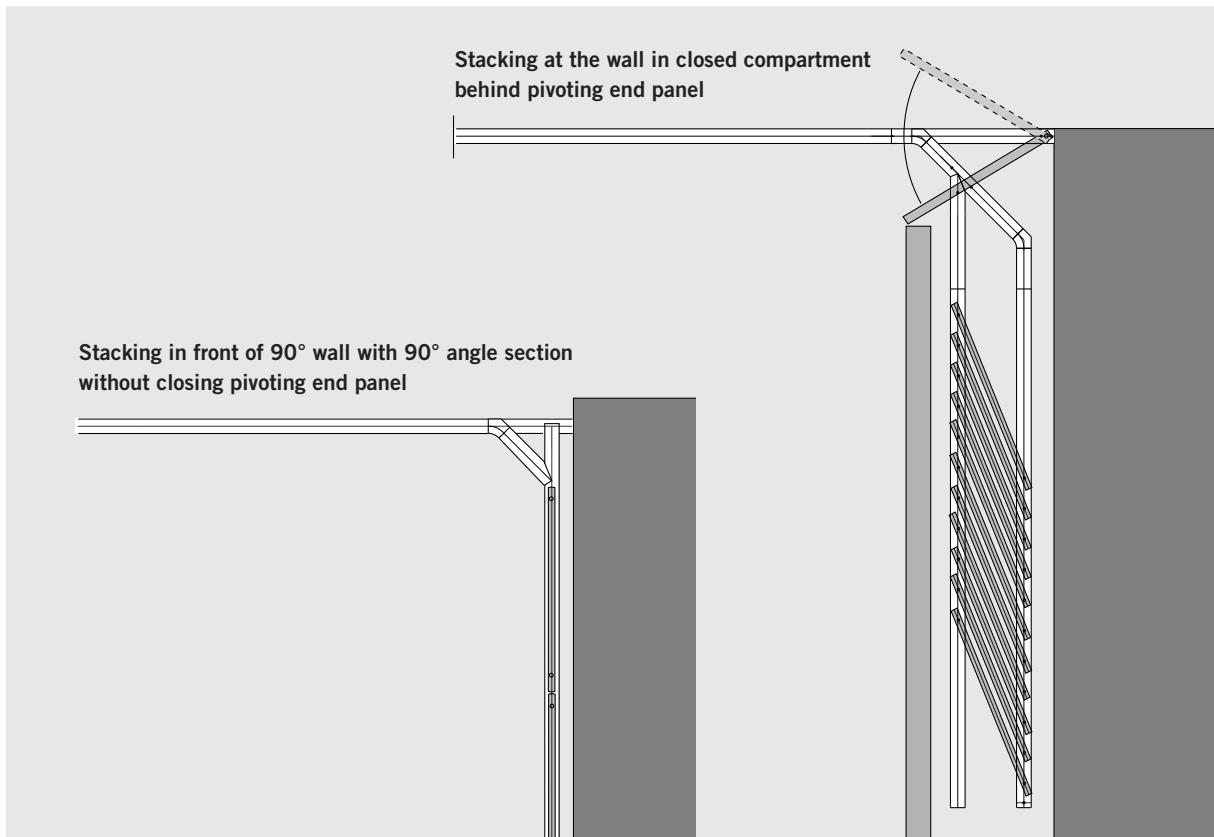
The following pages show some system solutions devised in answer to a wide range of different problems.

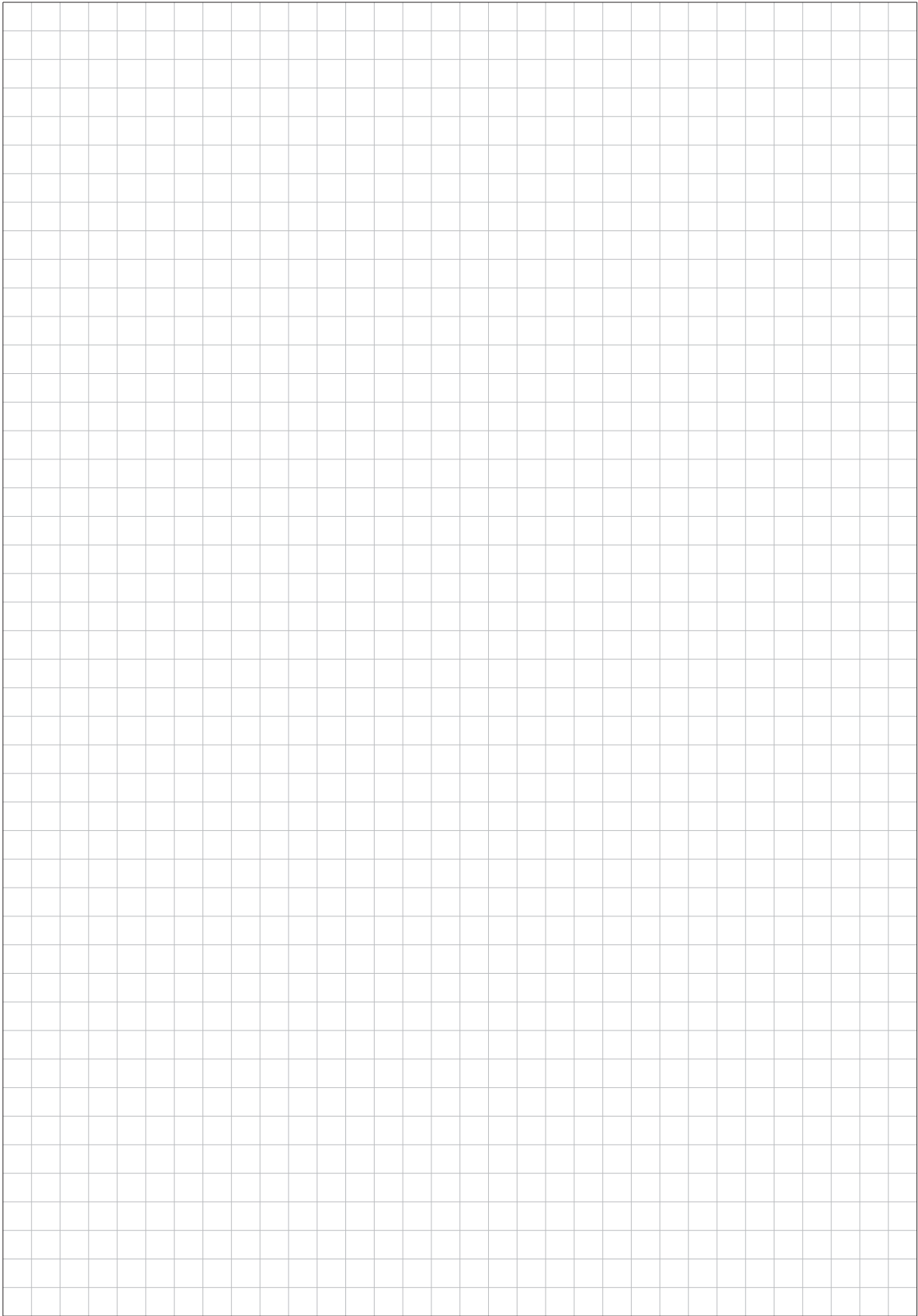


Panels stacked 90° transverse to travel direction

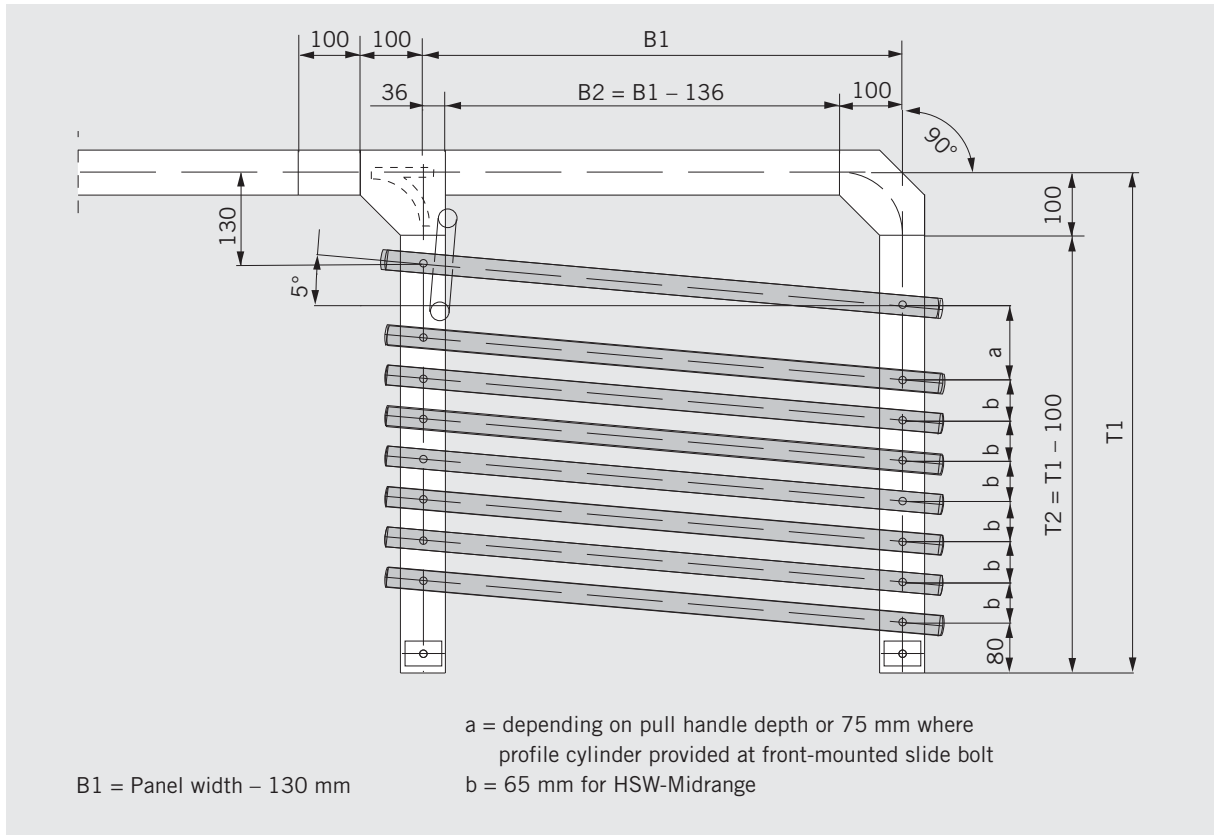


Special stacking arrangements

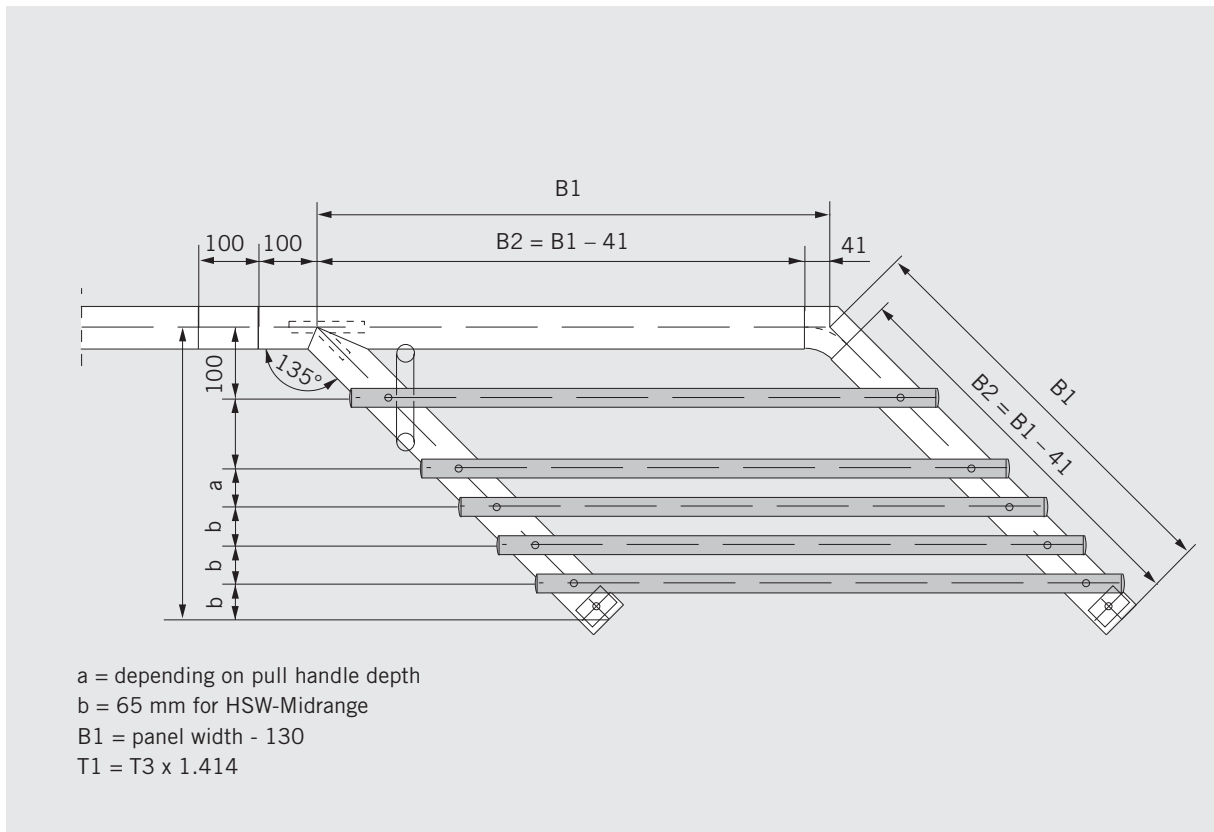


A large rectangular area filled with a fine grid of small squares, intended for taking notes or drawing.

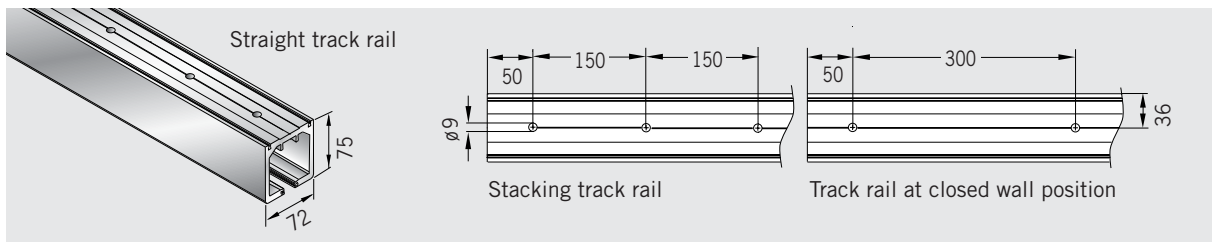
Straight track rail with stacking position parallel to travel direction (90°) with more than 6 panels



Straight track rail with stacking track parallel to direction of travel (135°)



Track rails and modules

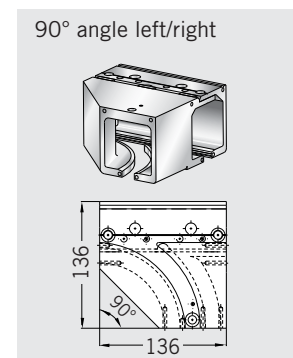
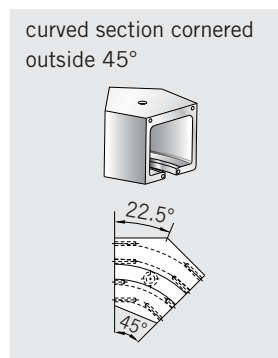
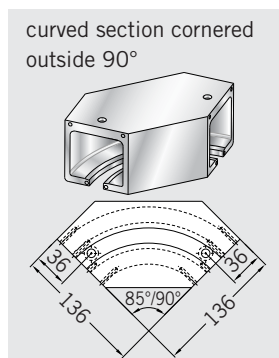
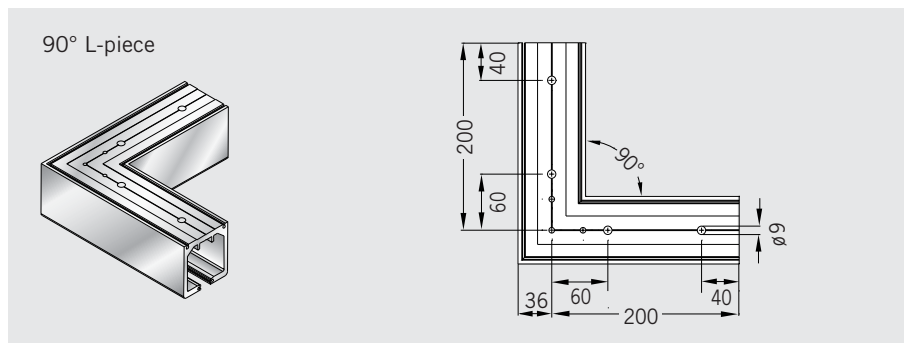
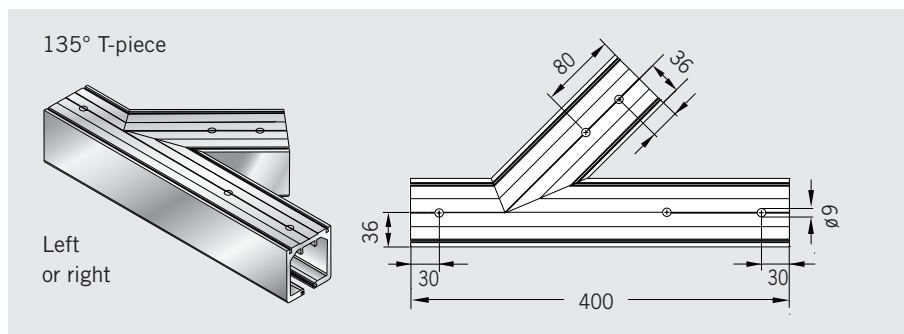
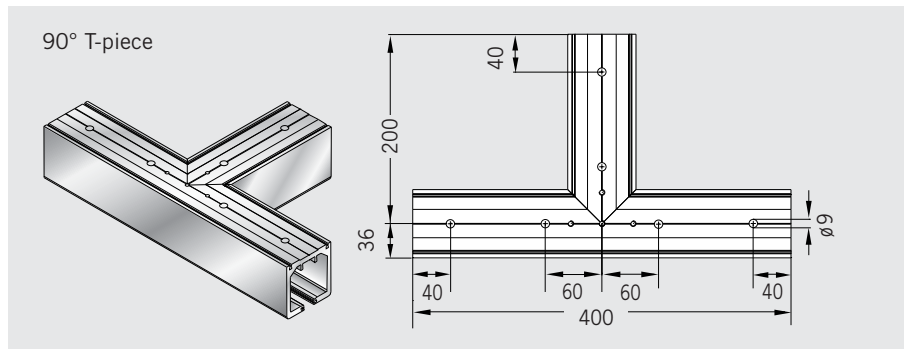


Flexible and stable

Horizontal sliding walls can be constructed in a wide range of different configurations to suit the site of installation, prevailing structural conditions and the planning concept. With DORMA HSW systems, a variety of designs can be implemented with ease. Straight, segmented and curved track rails can be combined to produce virtually any serpentine shape required. The track rails in the form of hollow sections combine all the virtues of light weight, stability and torsional stiffness. And when combined with the HSW substructure, installation becomes even easier. Flexibility and stability mean that even unusual system configurations can be implemented without problem to give maximum functional reliability.

Straight track rail

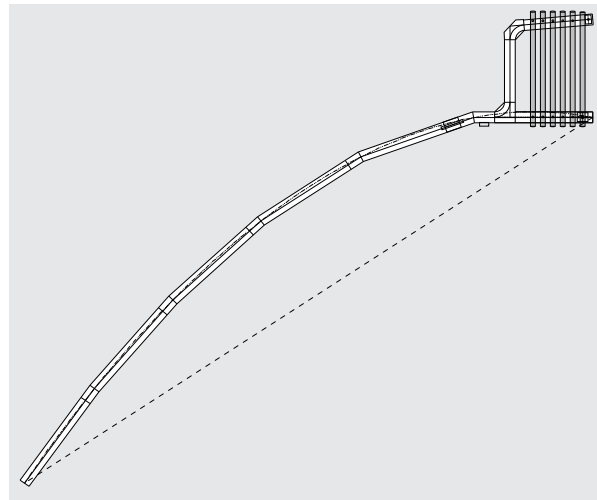
For a straight-line system configuration, a drill hole interval of 300 mm in the track rail is sufficient, while the stacking area requires an interval of 150 mm. Where the track assumes an angle of 161-179°, the track rail is mitred, while at angles between 90 and 160°, a cast curve is incorporated. The standard modules available are indicated in the adjacent illustrations.



Segmented track rail

With the segmented track rail, it is possible to implement the DORMA HSW as a polygonal partition or frontage. In so doing, it is essential to note the following requirements:

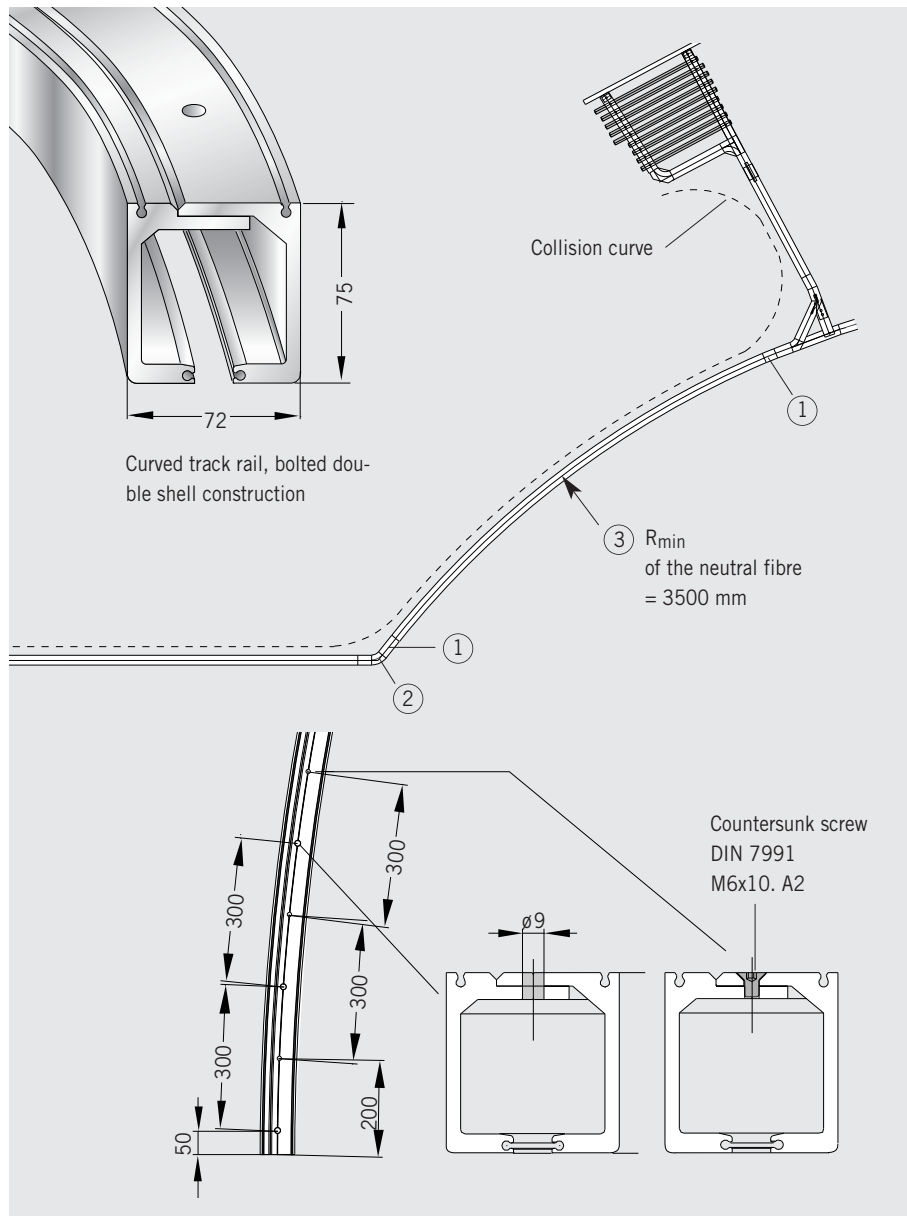
- the panel width and segment chord length must be properly coordinated;
- segment panels are provided at the bottom with locks or face-mounted floor bolts and the end face profile covers are equipped with additional buffers for collision protection;
- it is important to ensure that the opening sweep of single action and double action panels does not give rise to collisions.



Curved track rail

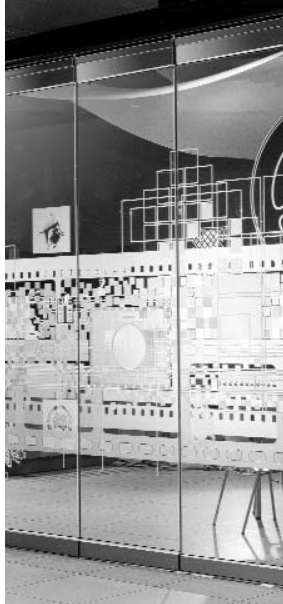
A curved track rail is also available where a curved DORMA HSW system configuration is required. The most important technical prerequisites for this are as follows:

- only non-pivoting sliding panels may be installed in the curved track rail section;
- the track rail must be straight in the parking or stacking area;
- no top locking element can be installed;
- each panel is provided with two face-mounted floor bolts;
- a 100 mm straight track section ① is necessary as the transition from the curved track rail to the straight stacking track rail;
- blends from the curved configuration to a straight line can be implemented using standard modules ②;
- the smallest curve radius is 3500 mm (smaller radii on application) ③;
- the feasibility of elliptic system configurations must be considered on a case-by-case basis – for this, drawings will be necessary;
- the start and end points of the curve are always provided with a 90° saw cut (radial saw cut).

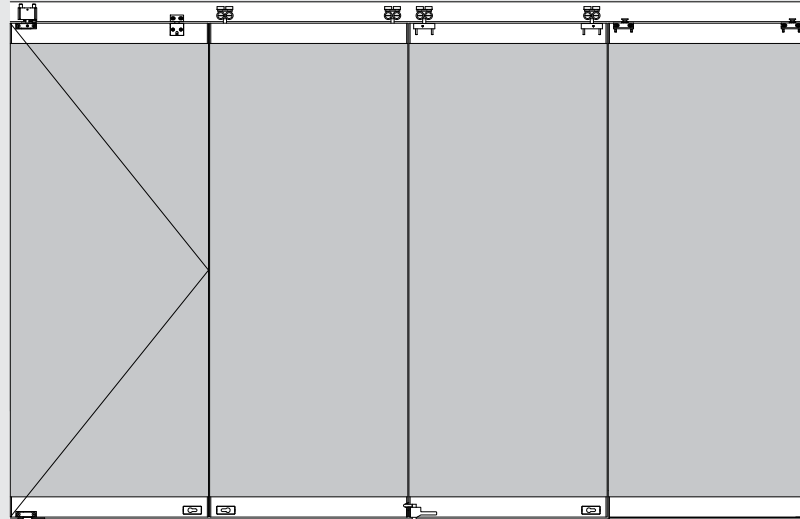


HSW-Midrange panel types and functions

Horizontal sliding walls
Fully glazed with glazing rails
top and bottom



Within an HSW-Midrange system, the individual panels can be designed to perform certain special functions. Each system can be assembled to suit individual requirements.



Single action /
double action end
panel

Sliding panel

Sliding panel

Fixed panel

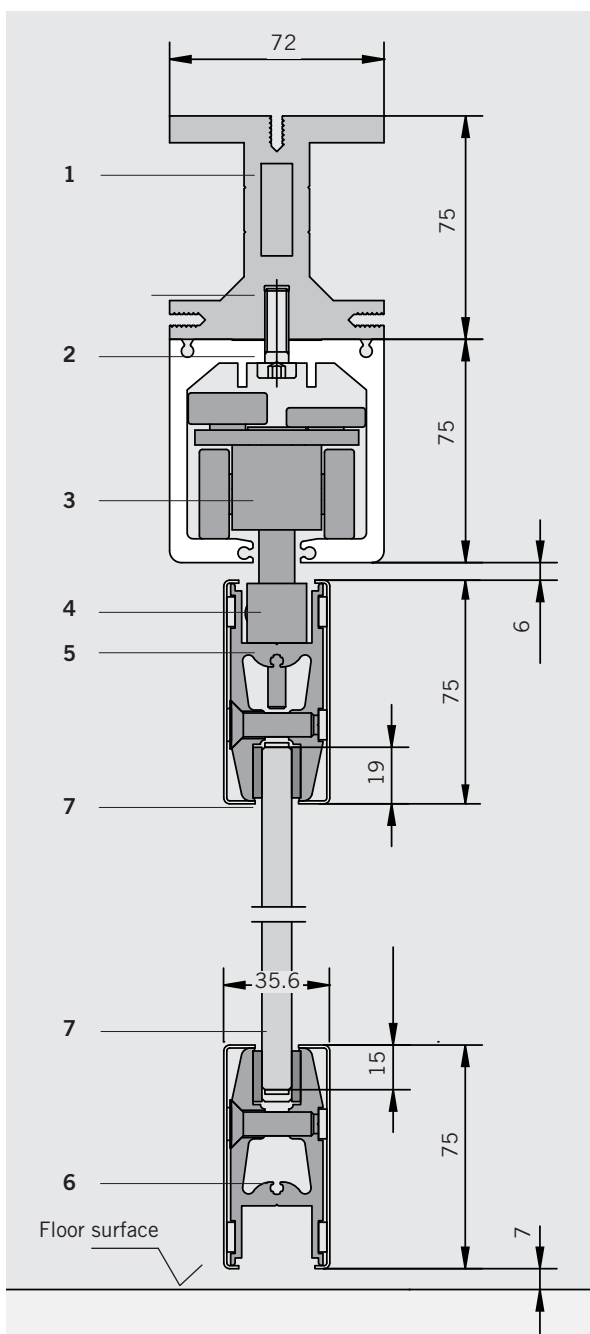
Max. panel sizes and weights

Max. system height	3000 mm	3000 mm	3000 mm	3000 mm
Max. panel width	1250 mm	1250 mm	1250 mm	1250 mm
Max. panel weight	100 kg	100 kg	100 kg	100 kg

HSW-Midrange system design

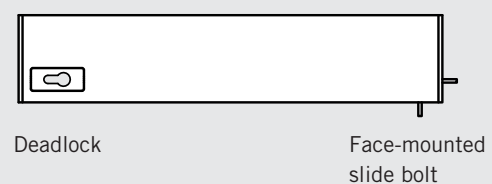
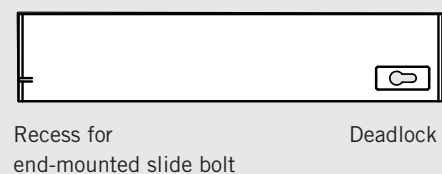
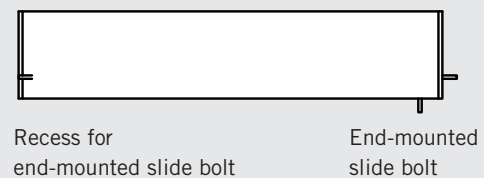
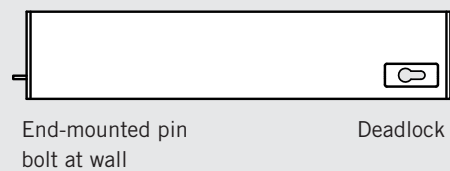
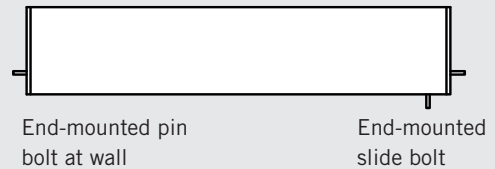
Irrespective of the function of the individual panels, an HSW-Midrange system comprises the following basic components:

- 1 Installation-efficient DORMA substructure to accommodate track rail mounting requirements (optional)
- 2 Track rail for bolting to the substructure.
- 3 Carrier
- 4 Suspension assembly and
- 5 Top door rail and
- 6 bottom door rail, both comprising base profiles with velcro face and side covers.
- 7 Toughened safety glass or toughened laminated safety glass (by others)



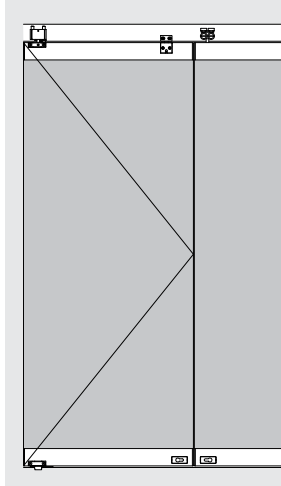
Bottom door rail designs

All depicted combinations are also available as mirror arrangements



End panel

Non-moving and always equipped with a bottom dead-bolt with the option of a top bolt or side-action deadlock. Can be designed as a double action or single action leaf.



Double action end panel

Assembly types:

- Floor pivot with round spindle
- BTS 84 for panels up to 100 kg, with optional hold-open at 90° door opening angle

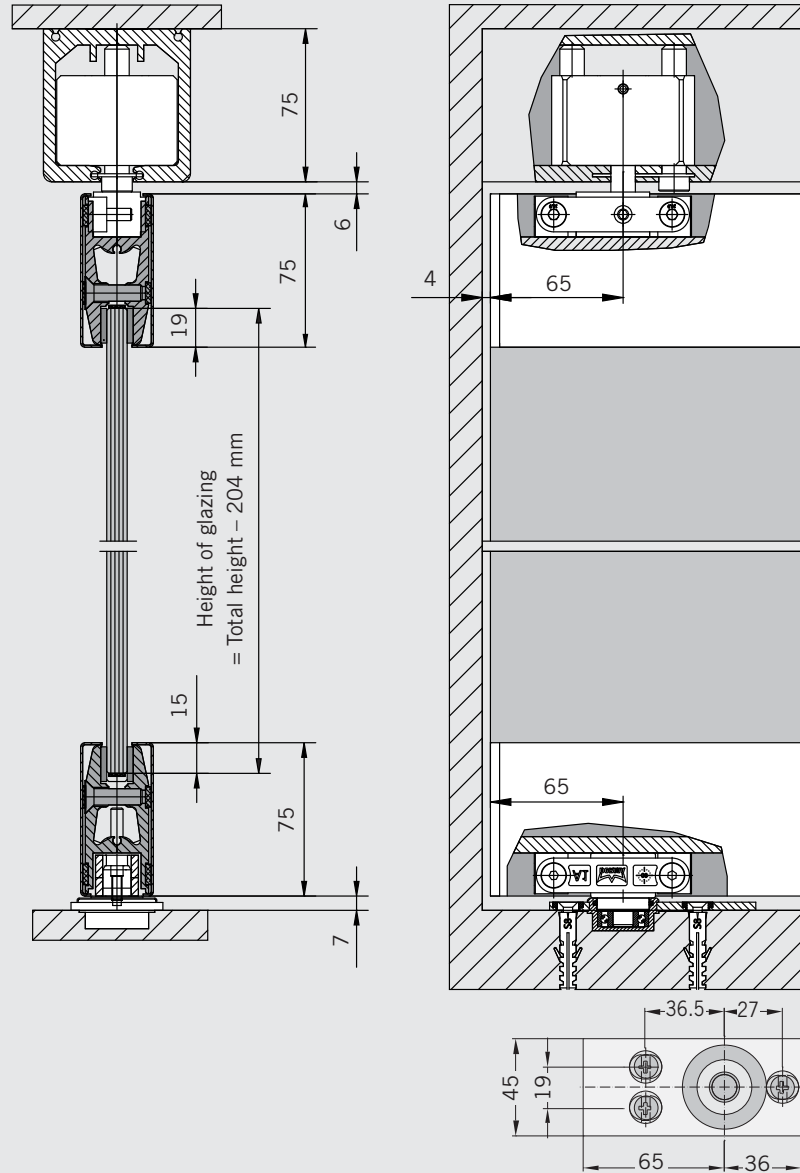
Single action end panel

with stop-type covers top and bottom.

Assembly types:

- Floor pivot with round spindle
- BTS 84 for panels up to 100 kg, with optional hold-open at 90° door opening angle

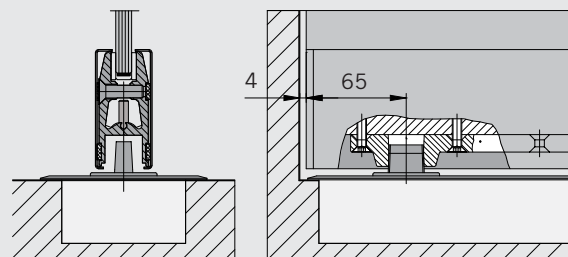
Single action or double action end panel with floor pivot



Double action end panel with floor spring

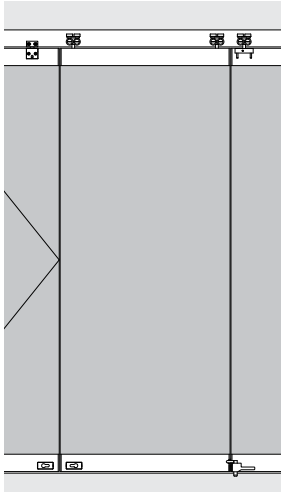
Mounting dimensions

	BTS 84
a	108
b	40
c	306
d	51 - 58



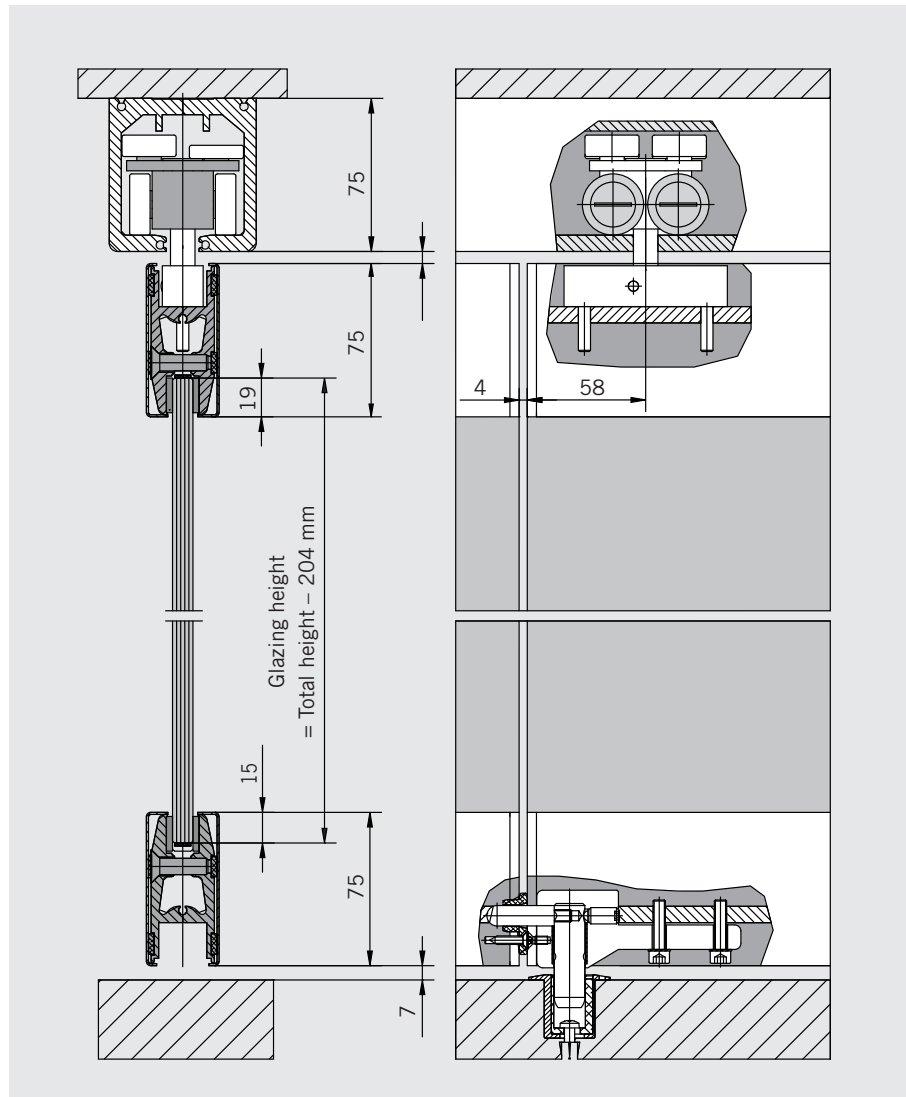
Sliding panel

Stationary when the frontage or partition is closed.

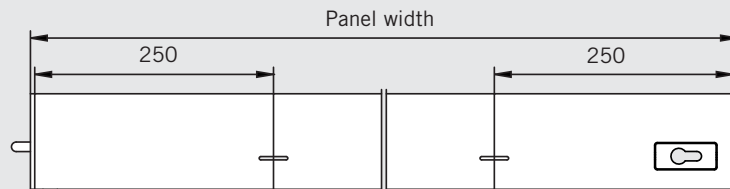


Sliding panel

The sliding panels are the moving elements. Once in their closed position, they are locked down. The components available for this are provided in the bottom door rail in the form of face-mounted slide bolts, end-mounted slide bolts, end pin bolts or deadlocks.



Bottom door rail

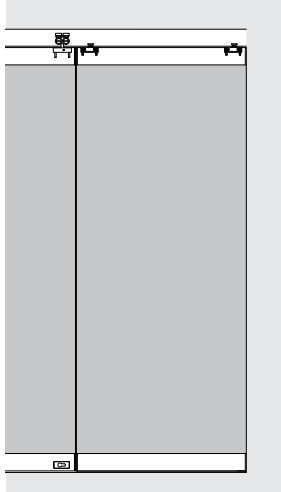


Base profile with integral functional element (here: end-mounted slide bolt)

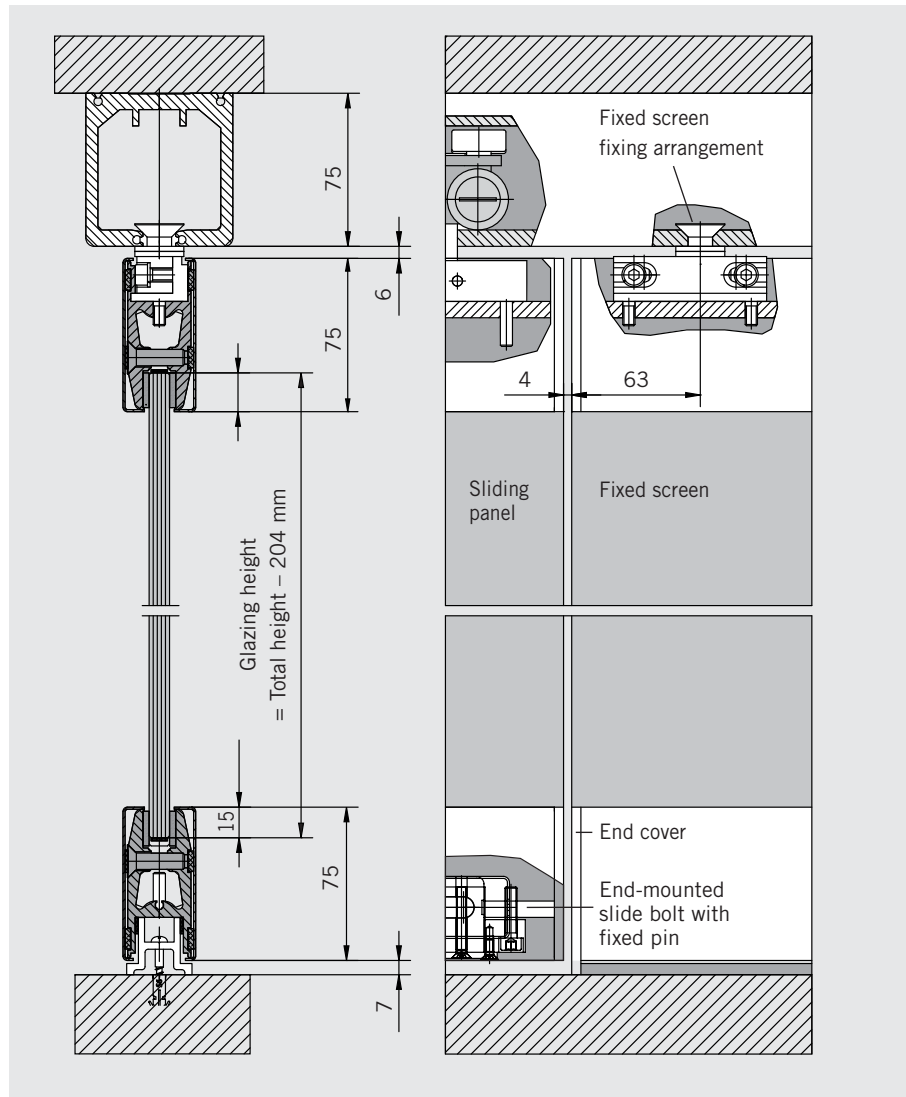
Base profile with functional element (here: deadlock)

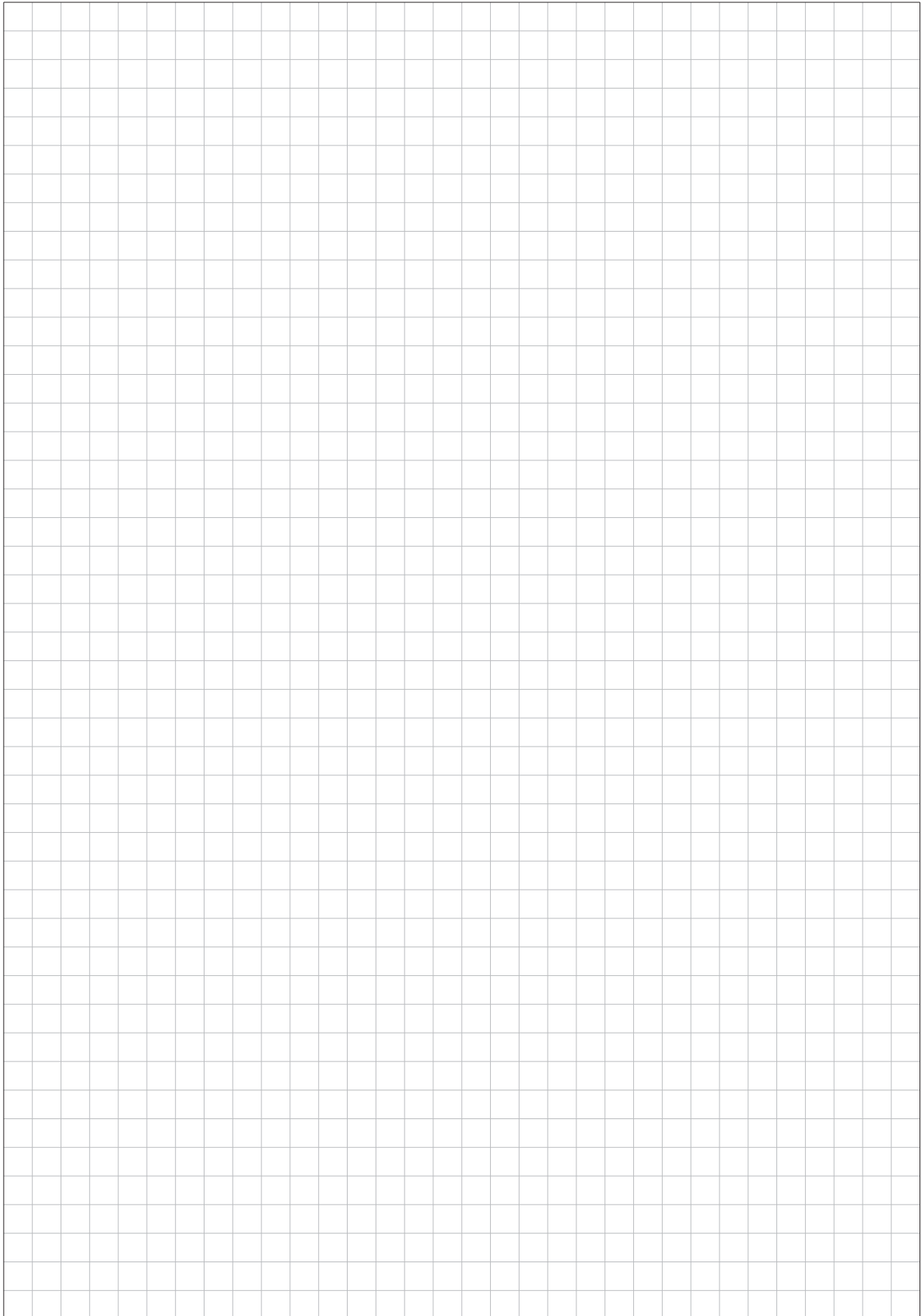
Fixed side screen

Non-moving side screen, independent of the rest of the system.



The fixed side screen is of the same basic design as the sliding panels. And if required, the fixings can be replaced by a carrier system to convert such a screen into a sliding panel.



A large rectangular area filled with a fine grid of light gray lines, intended for taking notes.



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