



Technical Details
Sound Insulating
Movable Walls

DORMA Hüppe Variflex

Intelligent solutions for sophisticated interior design requirements

Movable walls and partitions from DORMA Hüppe offer the very highest quality, functionality and variability for room-dividing and room-shaping applications. These high standards derive in particular from many years of know-how and accrued

competence in system development. The first partition systems were introduced into the German market back in 1955. Since that time, movable walls from DORMA Hüppe have become established on a worldwide scale. With

sophisticated aesthetics and functionally reliable technology, they create useful, variable areas and improve the cost-efficiency of interior space provision. There are no limits to the flexibility that they afford. Indeed, almost every conceivable

requirement can be satisfied by applying a corresponding solution from DORMA Hüppe – from operable sound-insulating partitions for auditoria and halls in major public buildings to conference, seminar, training and office rooms.



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DORMA Hüppe Variflex sound-insulating partition system

Properties and features

- Individually operable panel elements
- High quality, proven and rugged system
- Extensive variability and guaranteed flexibility for maximum functionality
- Torsionally stiff aluminium/tubular steel fine-frame construction
- Double-skin construction principle
- Panel element thicknesses: 100, 120 mm (depending on type)
- Element heights: up to 14,500 mm (larger heights by arrangement)
- Sound insulation values: Rw 34 to 60 dB (depending on type)
- Automatic, semi-automatic and manual operation possible
- Exceptional ease of use
- Multiple layout designs: straight, angled, polygonal and ellipsoid configurations possible
- Variants for preventive fire protection: F 30, F 90 (in closed position)
- Panels hung in acoustic-free suspension
- Panels interchangeable
- Panel designs: visible edge (K), protective edge (U), sheet steel skin (S)
- Positive locking with deep profile interlocking
- Large-area positive and non-positive locking thanks to integrated magnetic strip (exception: 'Standard' models)
- Horizontal closure provided by spring-loaded double seals (contact pressure up to 1500 N)
- Specially formed corner seal for stability and high sound insulation
- Large selection of element types
- Systems can be provided with passdoor and glazed elements as required
- Flush-closing telescopic element (TEF) can be provided
- Height adjustment by means of automatically locking mechanism without the need to remove or open the panel element
- Carrier axle pins with integral shock absorber
- Manual drive mechanism operated by bayonet-connected crank handle (lock-in function)
- Compact stacking arrangements in parking position
- Uniform appearance
- Unlimited range of surface designs and finishes possible
- High level of safety

Variflex Semi-Automatic

- With the Variflex Semi-Automatic, DORMA Hüppe is able to offer a particularly user-friendly solution that combines operating convenience with excellent cost-efficiency and enables spaces to be adapted as required – quickly and effortlessly. Such systems are regarded nowadays as essential in modern conference facilities.
- Eliminating the need for manual mechanism actuation with hand-operated cranks and the like, the Variflex Semi-Automatic partition could not be easier to operate. As soon as the connector contacts on the end face make the power feed connections, the user merely has to operate the central control unit and the sealing strips and telescopic elements extend and retract under electronic control. The individual elements are separated by means of an easily actuated toggle lever in the vertical profile, enabling them to be pushed along by hand in an effortless sliding movement.
- Once the partition has closed, all the sealing strips are automatically extended in accordance with the specified contact pressure. This guarantees optimum sound insulation as well as enhancing the stability of the system.
- Installation of these partitions is also effortless: the Variflex Semi-Automatic is supplied ready for connection to the power supply circuit (24V/DC). And in the event of a power failure, an emergency operating mechanism is also available so that the sealing strips can be manually actuated.
- The Semi-Automatic partition offers all the flexibility and variability of a manual model. It requires no floor guides, so there are no limitations to the layout configurations and parking arrangements that can be implemented. Such partitions can also be equipped with integrated glazed and passdoor elements.

Variflex-EM Automatic

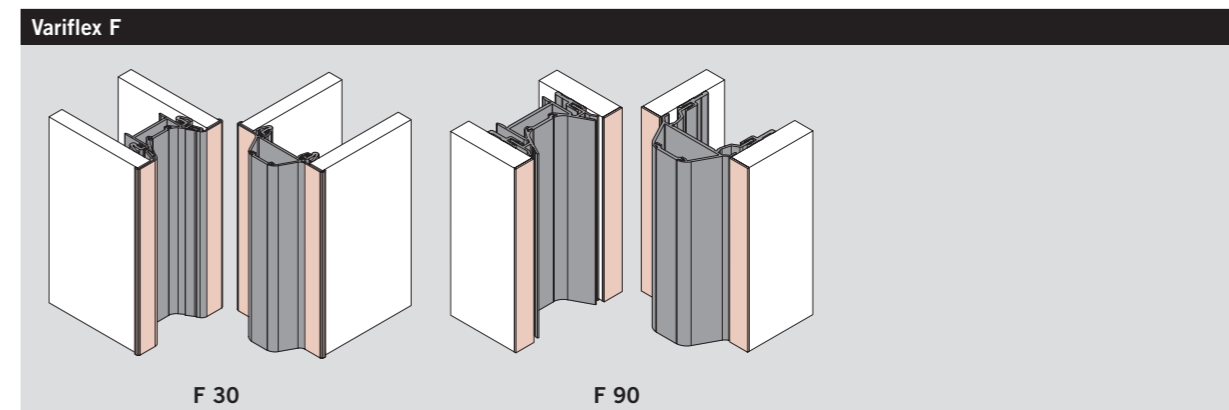
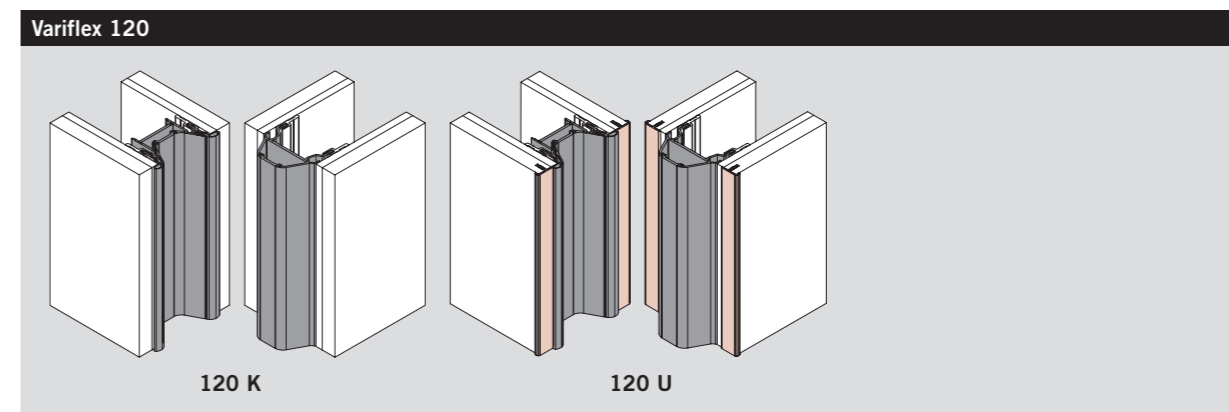
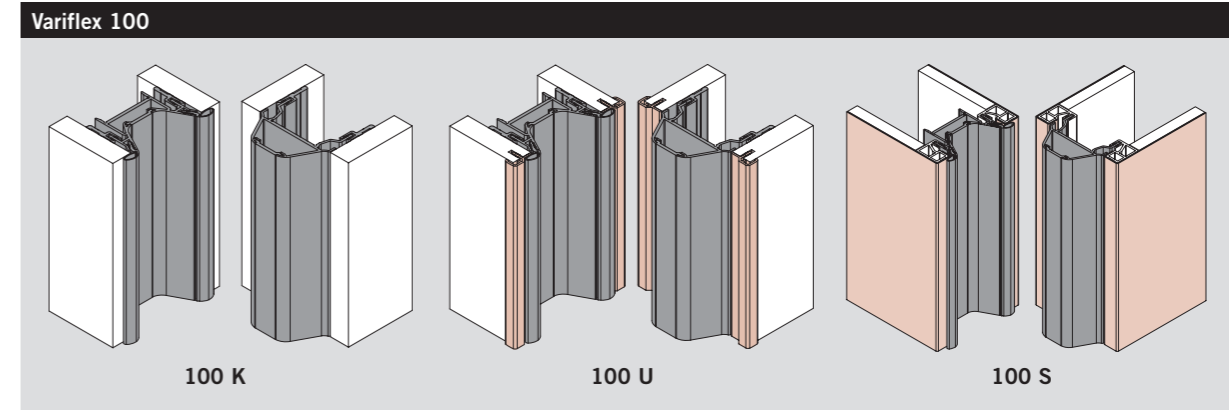


Additional information (brochures, leaflets, technical descriptions etc.) relating to our product range can be found in the program folder available from our field sales representatives.

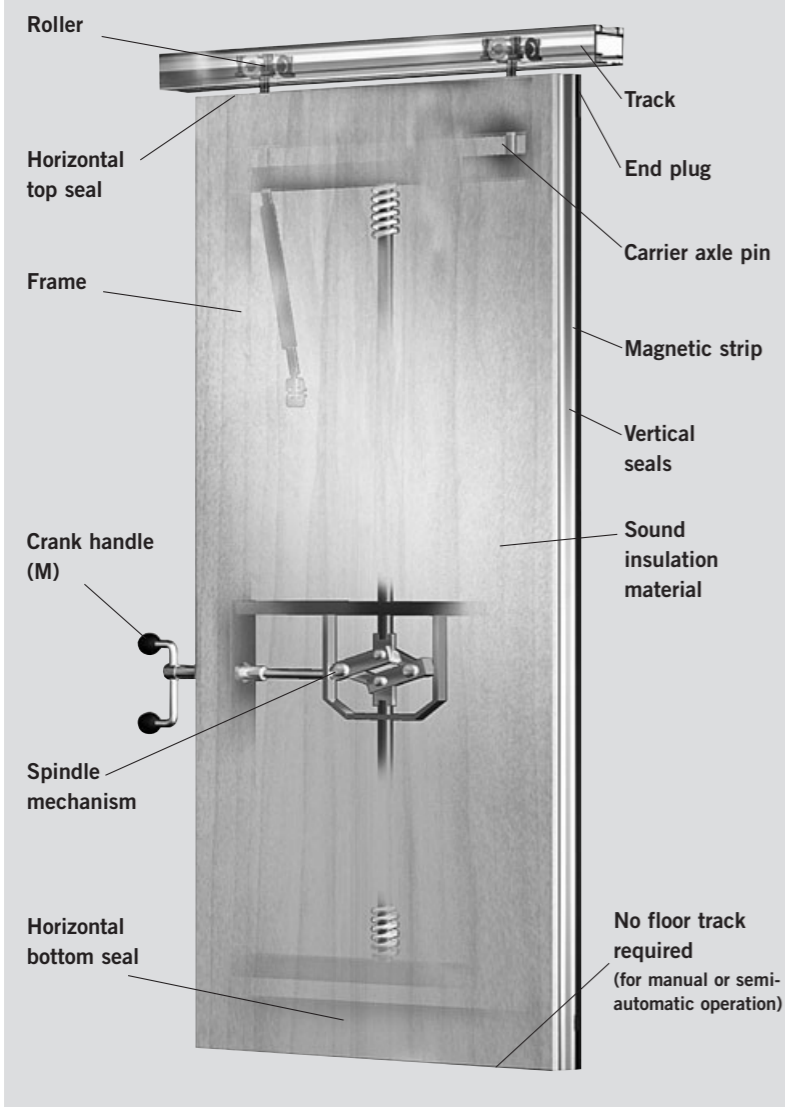
You can find further details on the Variflex featuring the automatic operator system in the technical brochure entitled 'DORMA Hüppe Variflex-EM'

Features		Variflex 100	Variflex 120
Benefits	Model description	The top model in terms of function and design. With a wide range of panelling and accessories for any application. Particularly robust with sheet steel skin	The best sound insulation values and the highest stability to meet specific requirements. Optimally suited to rooms with high ceilings
	Element thickness	mm 100	120
Dimensions*	Clear height (min./max.)	mm 2,000/14,500	2,000/14,500
	Element width (min./max.)	mm 600/1,220	600/1,220
Manual (M)	Clear height (min./max.)	mm 2,000/6,000	2,000/6,000
	Element width (min./max.)	mm 750/1,220	750/1,220
Semi-automatic (HA)	Clear height (min./max.)	mm 2,000/6,000	2,000/6,000
	Element width (min./max.)	mm 750/1,220	750/1,220
Automatic (EM)	Clear height (min./max.)	mm 2,000/4,000	–
	Element width (min./max.)	mm 750/1,220	–
Design	Framed construction	Aluminium-steel	Aluminium-steel
	Panel fixing	Acoustic-free suspension	Acoustic-free suspension
	Element interconnection/ design of the vertical profiles	Aluminium profile with integrated magnetic strip and external sealing lips	Aluminium profile with integrated magnetic strip and external sealing lips
Finish and trim	Panel design with K-type edge	With visible surface edging	With visible surface edging
	Panel design with U-type edge	With protective surrounding trim	With protective surrounding trim
	Panel design with S-type edge	With robust sheet steel skin up to Rw 58 dB	–
	Manual model (M)	Manual operation of the elements and actuation of the sealing strips	Manual operation of the elements and actuation of the sealing strips
	Semi-automatic model (HA)	Manual operation of the elements, electronically controlled extension and retraction of the sealings trips	Manual operation of the elements, electronically controlled extension and retraction of the sealings trips
	Automatic model (EM)	Fully automatic operation of the elements and actuation of the sealing strips	–
	Fire protection package F 30, F 90 (in closed position)	In conjunction with B1 (F 30) – and A 2 (F 90) – compliant particle board and special sealing compound	–
	Horizontal panel joint from element height (mm)	4,100 (with steel sheet skin: from 3,200)	4100
	Element types	Full wall element, telescopic element, corner element, angled element, sliding passdoor, fixed full-height passdoor, window elements, passdoor with glazed section, special element for non-load-bearing or inclined ceiling arrangements	Full wall element, telescopic element, corner element, angled element, sliding passdoor (subject to technical clearance from factory), fixed full-height passdoor, special element for non-load-bearing or inclined ceiling arrangements
	Passdoors	Single-leaf or double-leaf	Single-leaf following technical clearance from factory
Window element	Yes	–	
Telescopic element design	Sliding portion flush or external	Sliding portion flush or external	
Technical	Weighted sound reduction value Rw determined per EN 20140 in Rw (dB)	34 to 57 (as S: 58 dB)	58/60
	U-value per DIN with maximum sound insulation package (heat transfer coefficient)	0.664	0.380
	Contact pressure of the horizontal sealing strips per element in Newton up to	1,500	1,500
	Positive and frictional locking of the vertical element connections	Convex-concave profile form 40 N/m	Convex-concave profile form 40 N/m
	Track type	EM, MR, R and K track	EM, MR and R track

* Note regarding Variflex dimensions: Larger widths possible on application. Provisional details regarding the element heights/element widths indicated can only be confirmed following consultation with the Design Department.



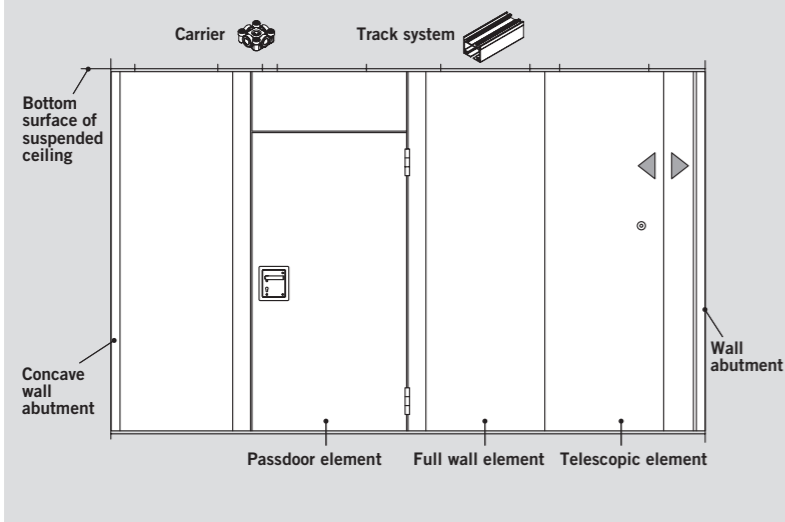
Element function diagram



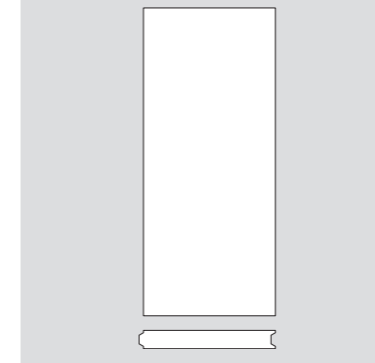
Customer benefits

- In order to achieve optimal sound insulation, the double-skin design principle is also effectively applied in the seal area. Extendable, spring-loaded, flexible double seals are pressed by a spindle mechanism against the floor and ceiling track. Any floor unevenness is absorbed by spring-mounted double-chamber seals. The contact pressure of the sealing strips does not apply excessive loading to screeds yet provides the Variflex system with enhanced stability, enabling the elements to withstand even heavy impact without noticeable shift.
- The Variflex system solves the technical problem in the area of corner seals with specially shaped, elastic corner adapters that likewise promote stability and improve sound insulation.
- The frame construction comprises torsionally stiff hollow aluminium chamber and tubular steel profiles. This prevents plastic deformation of the frame resulting from diagonal forces. Together with the cover panels, hung in acoustic-free suspension, the Variflex elements are able to offer high strength and outstanding sound insulation.
- Optimum vertical sealing for high sound insulation is ensured in all Variflex models by the flexible vertical sealing profiles. A good positive connection is also achieved thanks to the high depth of engagement.
- The individual elements are centered by the magnetic strips giving a high-volume interlock system combining positive and non-positive (frictional) components.
- Force of attraction of the magnetic strips up to 40 N/m.
- The cover panels are hung in acoustic-free suspension and are easy to replace. If a cover panel should be damaged, it can be easily removed and refitted without any further dismantling work. The basic element does not have to be detached from its suspension arrangement.
- The roller pin assembly arrangement is of impact-damped design to ensure that, when the elements are operated in the corner zone, the pins are protected against bending – or worse – breaking.
- Once installed, the elements can be height-adjusted without having to access their interior. There are no lock nuts.
- The actuating crank used in the manual designs for extending and releasing the sealing assemblies and for element disengagement features rotating plastic ball bearings plus a bayonet lock to prevent accidental detachment.
- The door hinges feature ball bearings for easy operation. The hinges protrude only very slightly.
- Sound insulation values up to Rw 60 dB with test certificate.
- TÜV type-tested/ball impact resistant; quality management to DIN ISO 9000 ff.
- Fire-rated up to 90 minutes in Variflex Top F models with partition closed.

Example of a multi-element partition

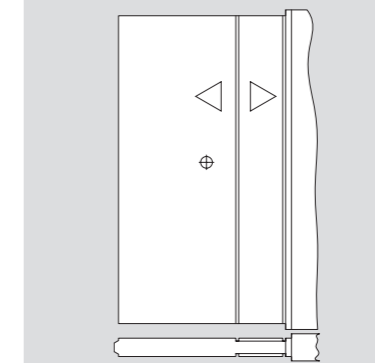


VE



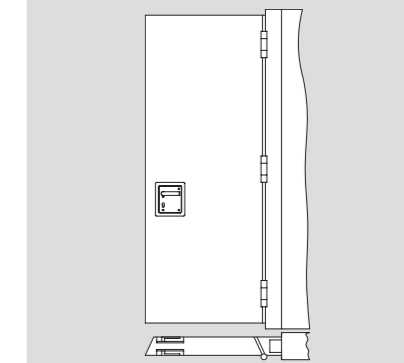
Full wall element

TEF / TE



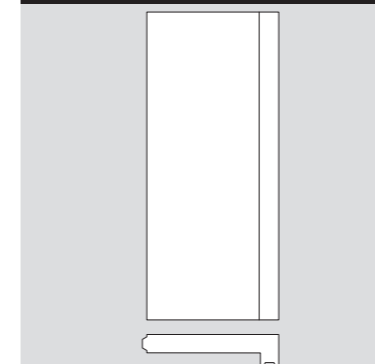
Telescopic element, flush type or external

FT



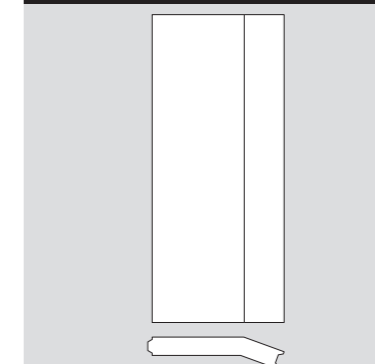
Fixed full-height passdoor

EE



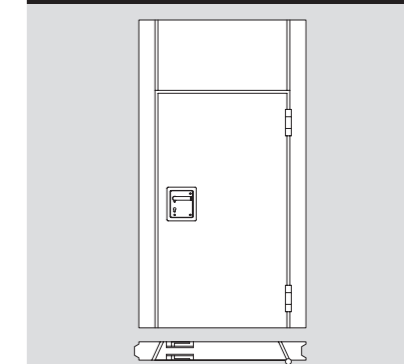
Corner element 90°

WE



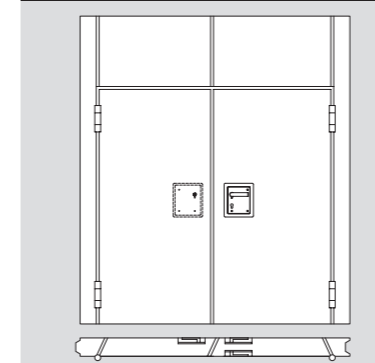
Angled element

DT



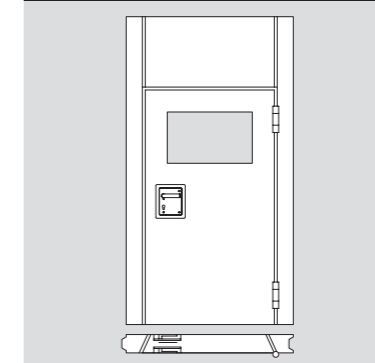
Passdoor

DTZ



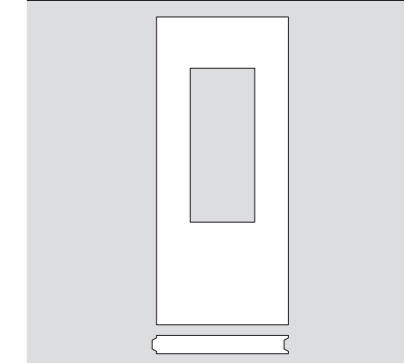
Double passdoor

DTF



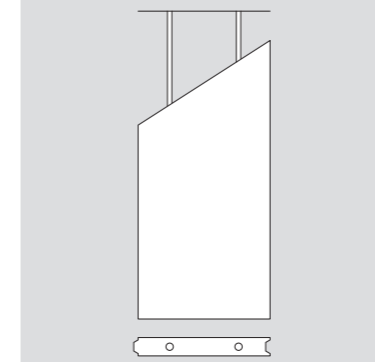
Passdoor with glazed section

FE



Window element

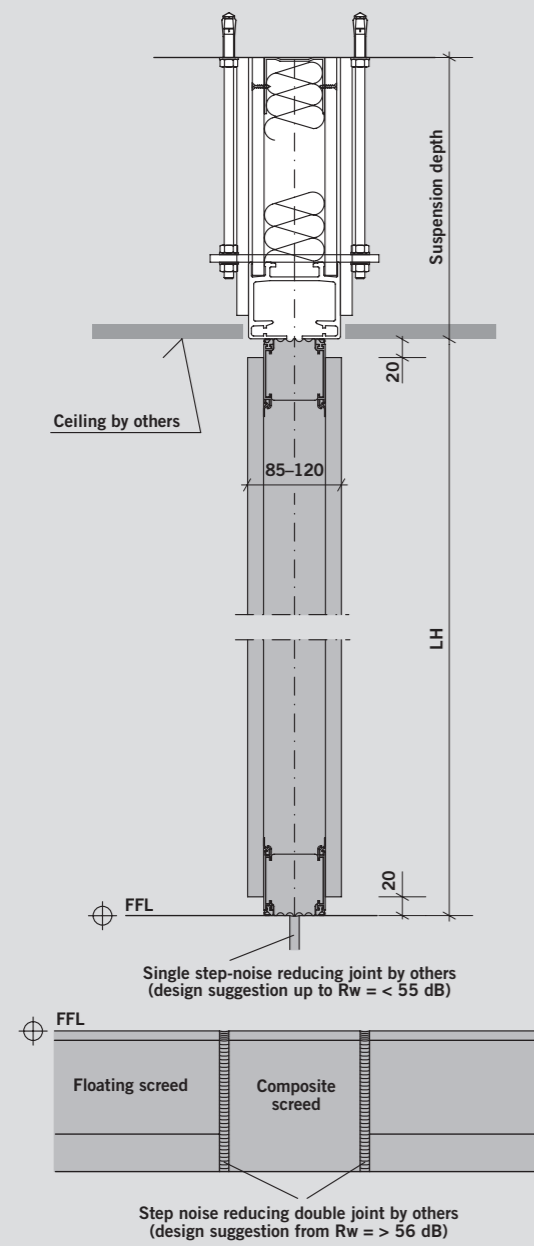
Special element



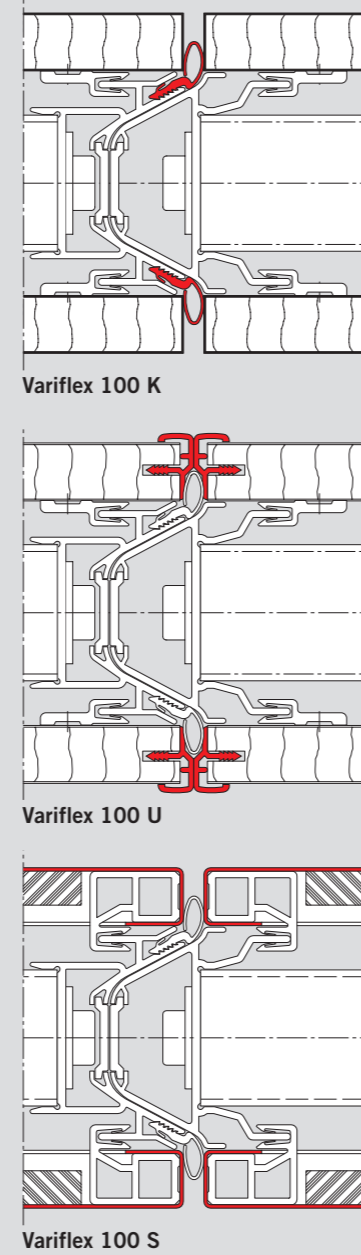
Special element with telescopic rods* for inclined or non-load-bearing ceiling arrangements (with floor track)

* not for Variflex Standard and Variflex-EM

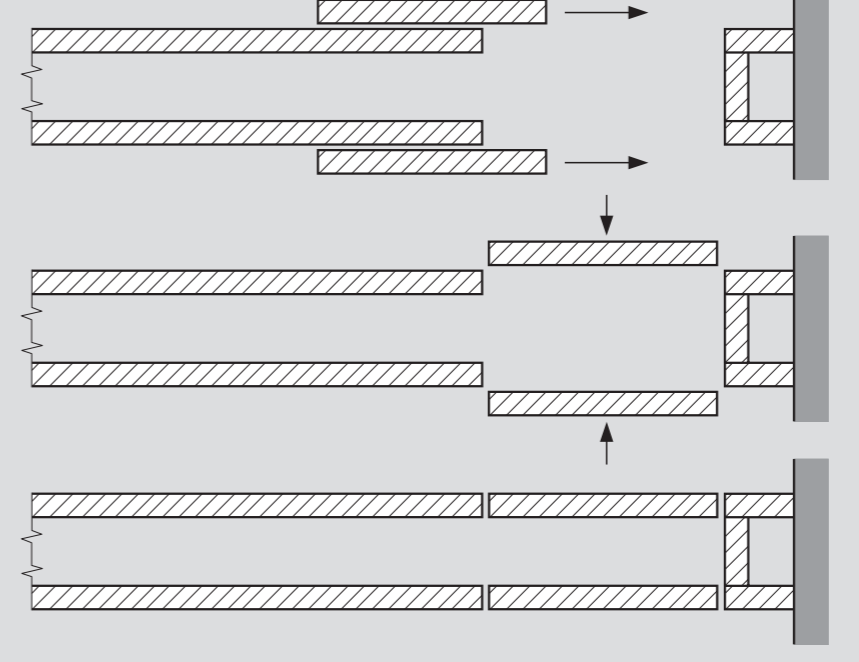
Vertical sections through a Variflex element



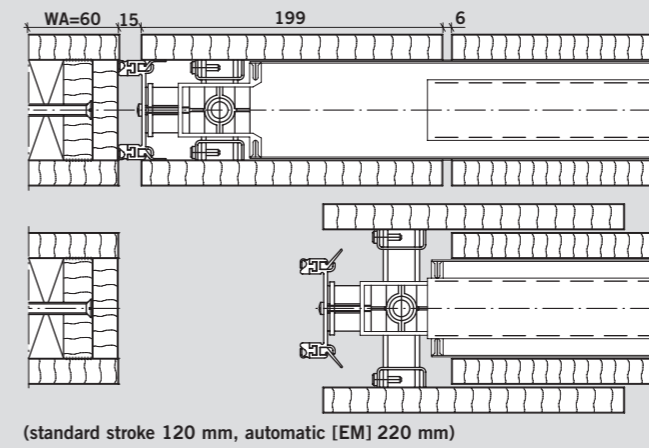
Element connections



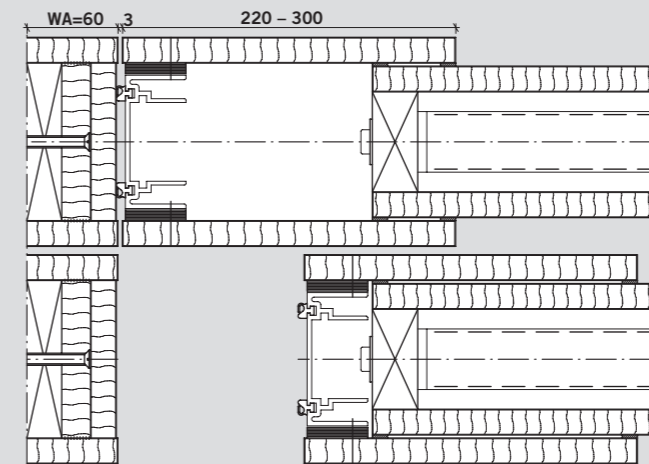
Functional principle of a flush-type telescopic element (TEF)



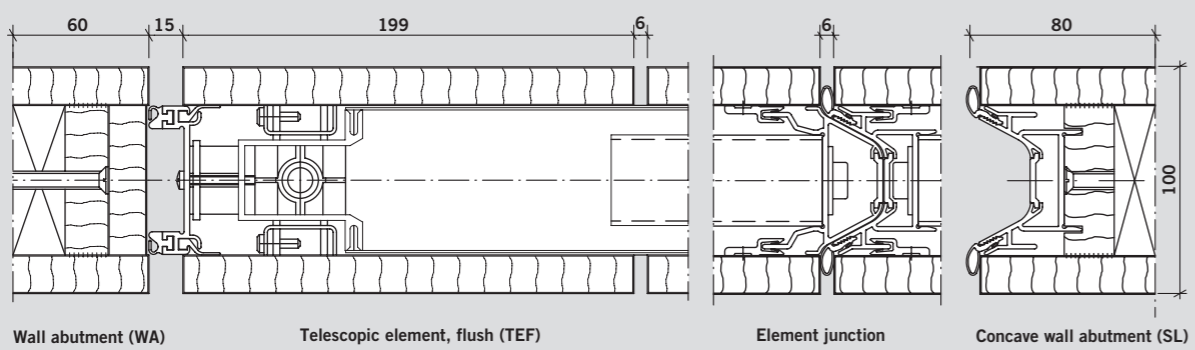
Telescopic panel, flush (TEF)



Telescopic element overlapping (TE)



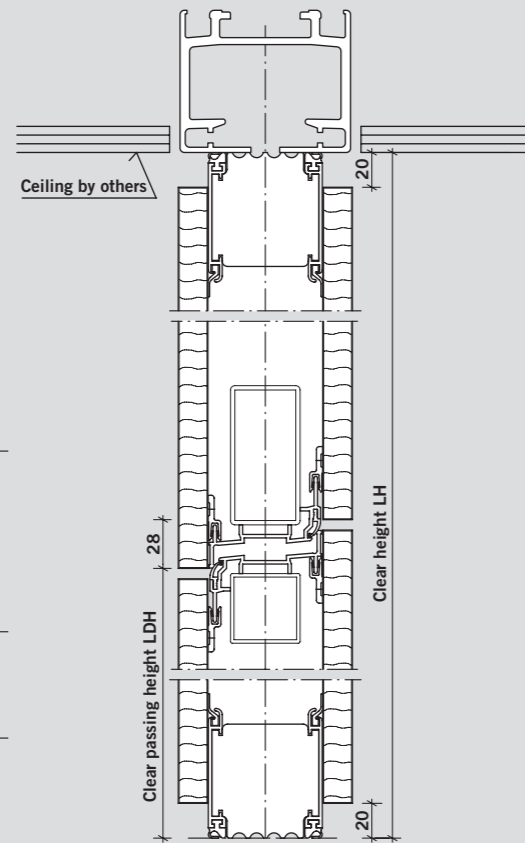
Horizontal cross-section, Variflex 100



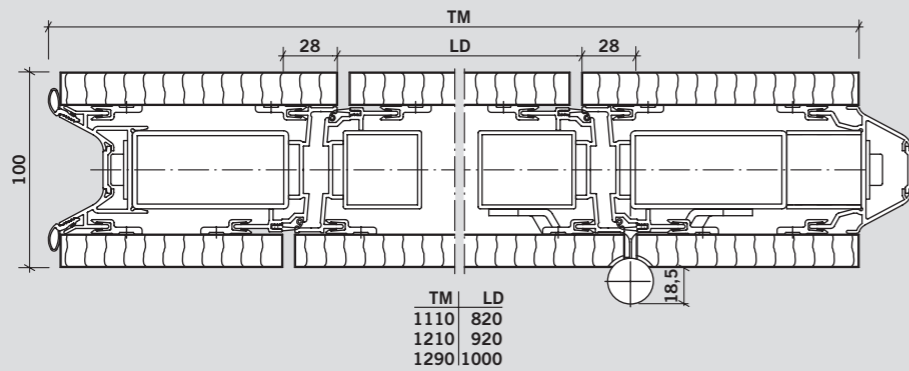
Passdoor / Double passdoor

DT Passdoor
DTZ Double passdoor

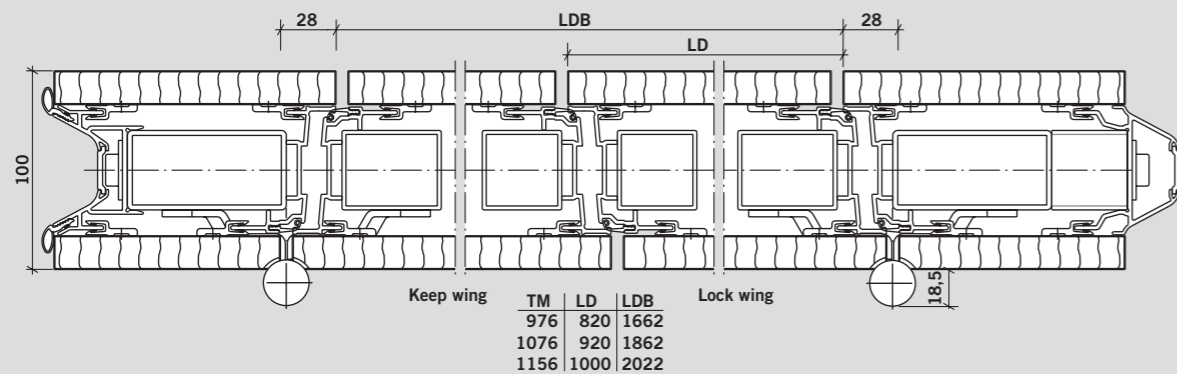
Clear height	Clear passing height
Variflex-M	
DT: min. 2400	2050
min. 2155	1968
DTZ:	
min. 2400	2050
min. 2320	1968
Variflex-HA	
DT + DTZ: min. 2630	2050
min. 2550	1968
Variflex-EM	
DT: min. 2630	2050
min. 2550	1968



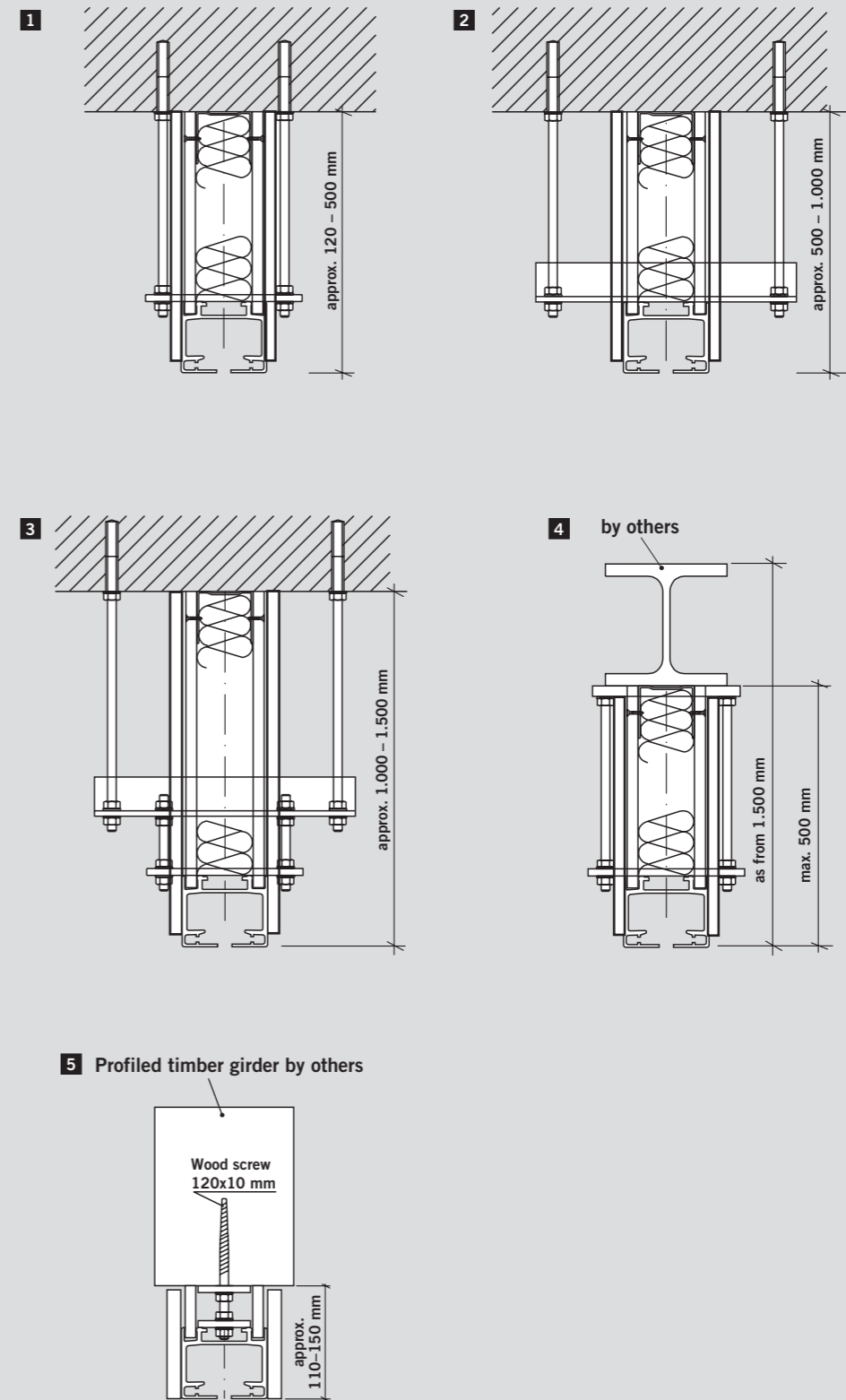
Element with passdoor (DT)



Element with double passdoor (DTZ)



Suspension arrangements



Type K track system

Track system featuring minimum dimensions. The mechanically coded branching system with curves and switches ensures simple operation when moving the elements.

Curved system configurations are possible. Element weight up to 250 kg.



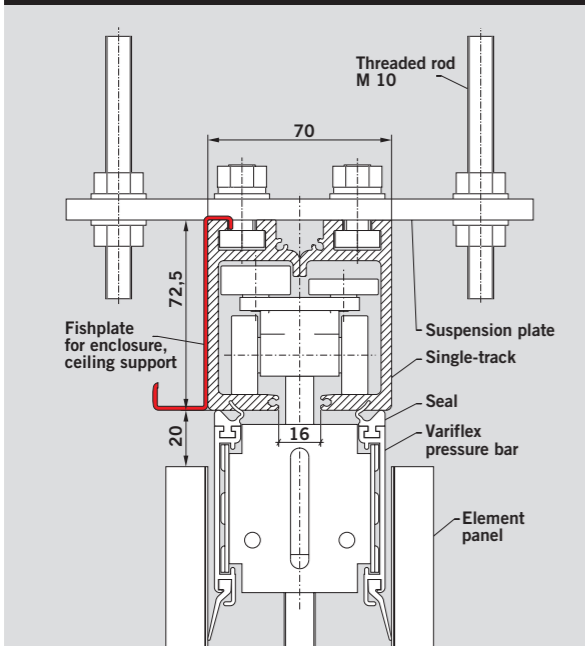
Type R track system

Track system for 90° branches with cross-roll travel paths. Suitable for a wide range of layout designs.

Guide rollers in the branching junctions and intersections ensure that the elements remain level as they cross or change direction.



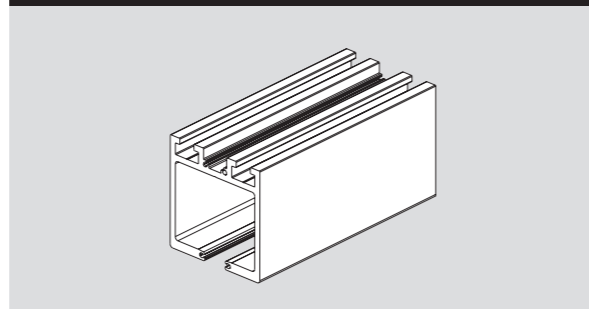
Vertical section through K track – Variflex



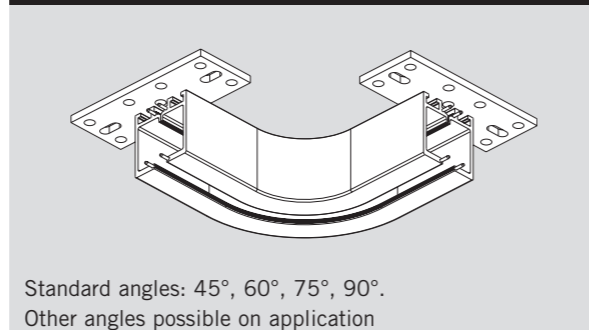
Roller assembly



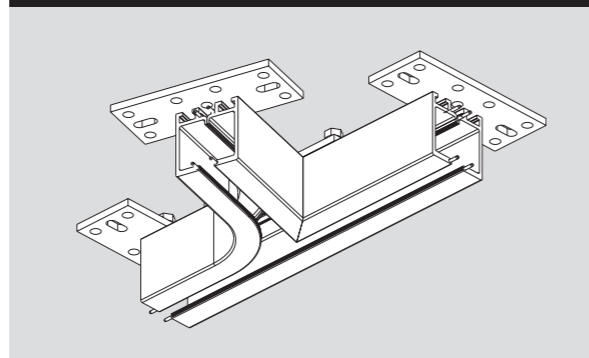
K track, straight



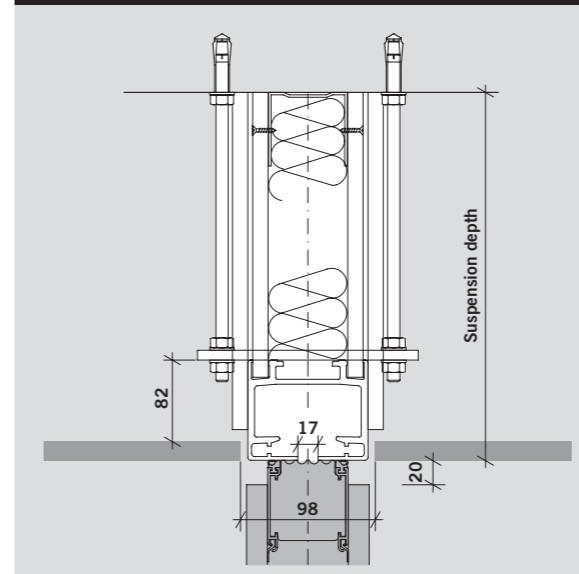
K track, curved



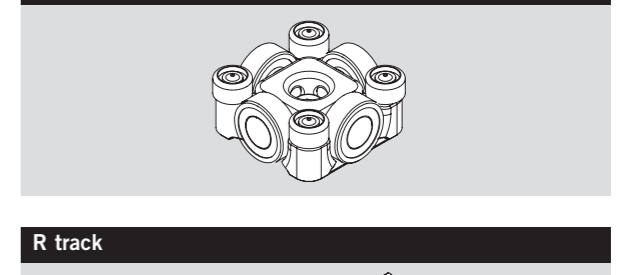
K track switch



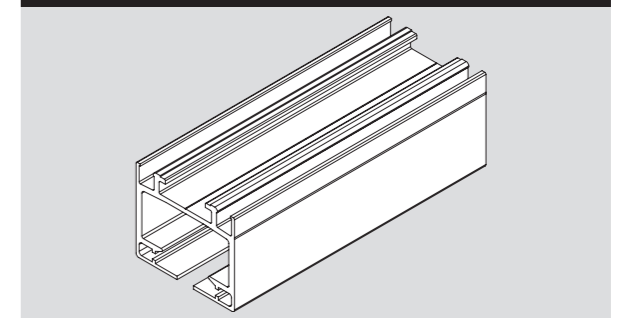
Vertical section through R track



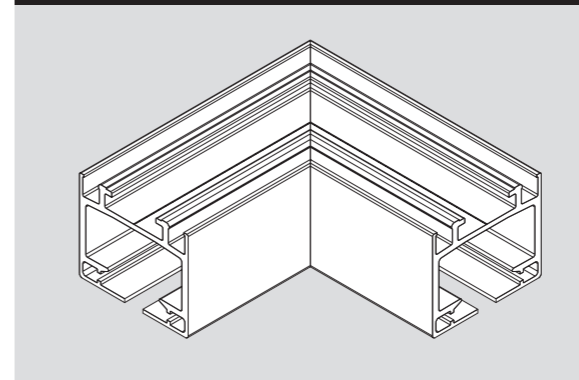
Roller assembly



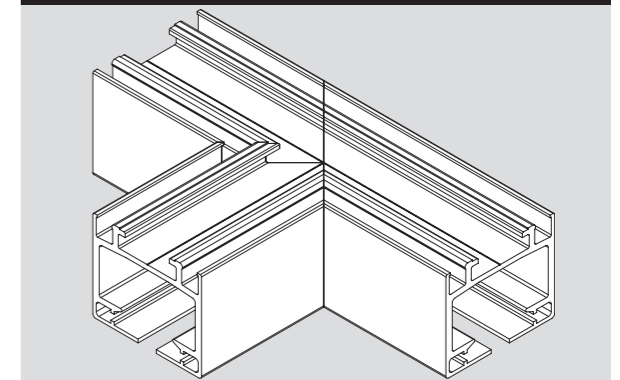
R track



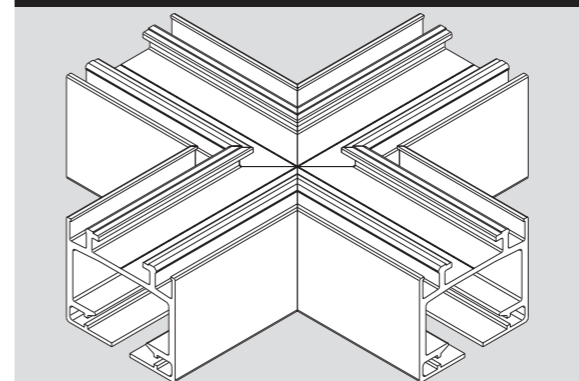
Corner section



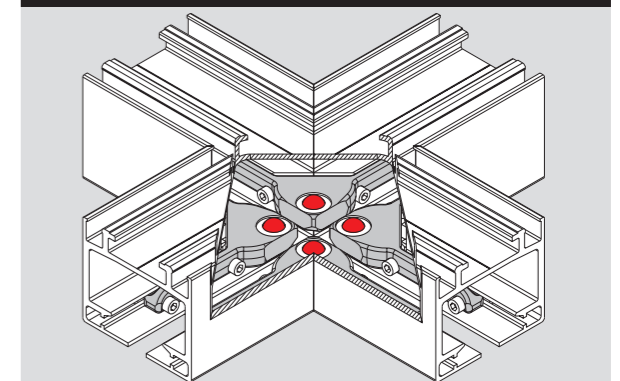
T-piece



Intersection



Intersection with support rollers

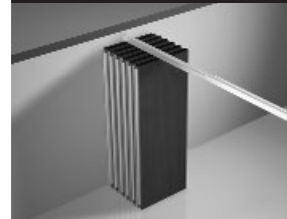


In their stacked position, the elements form a compact package and can be accommodated in the smallest of spaces depending on

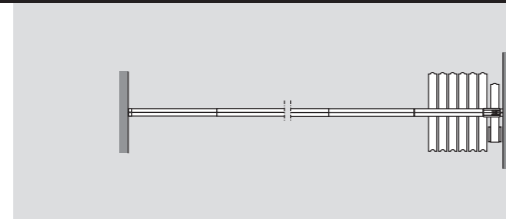
the room situation. The low weight of the elements and the associated structural advantages are particularly noticeable here.

Below you will find our standard parking solutions; individual solutions for special requirements are also possible.

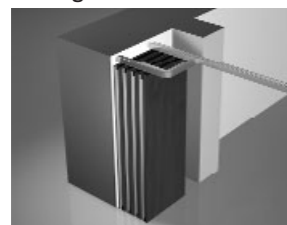
Inboard parking solutions



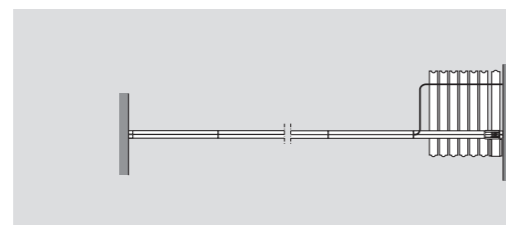
Parking solution PL1



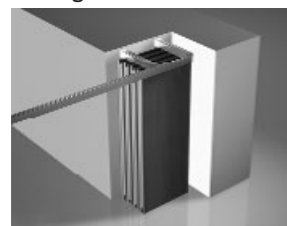
- Single-point suspension
- 90° to partition axis



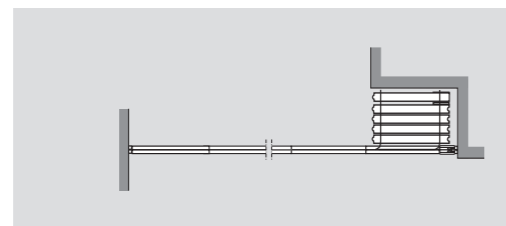
Parking solution PL2



- Two-point suspension
- 90° to partition axis



Parking solution PL3

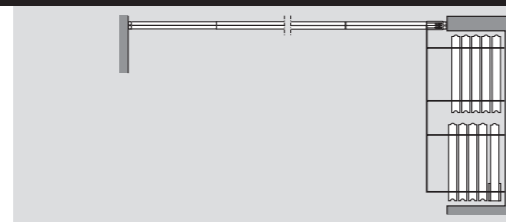


- Two-point suspension
- Parallel to partition axis

Outboard parking solutions



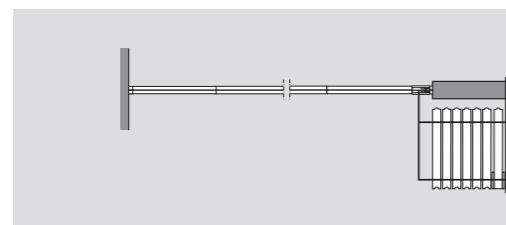
Parking solution PL4



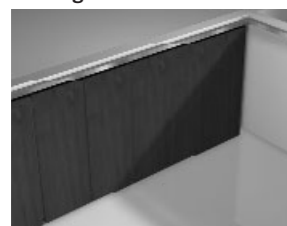
- Two-point suspension
- 90° to partition axis
- In several stacks



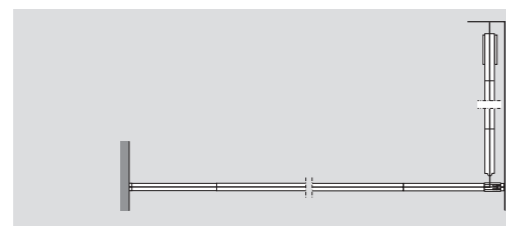
Parking solution PL5



- Two-point suspension
- 90° to partition axis
- Here with niche compartment door



Parking solution PL6



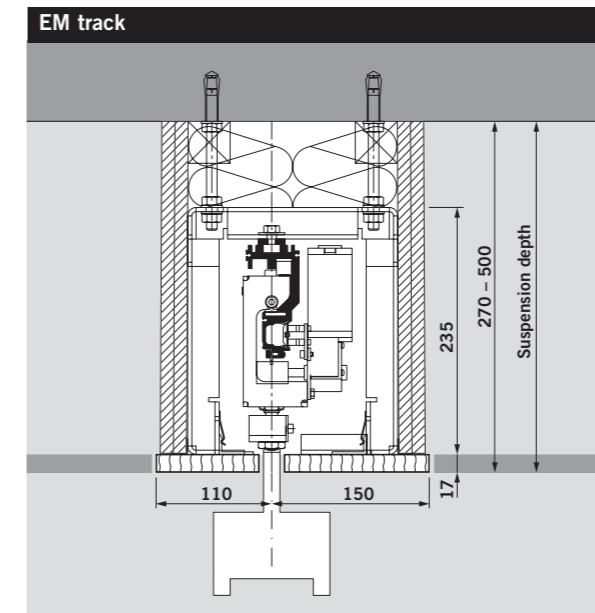
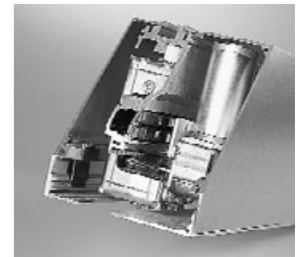
- Two-point suspension
- 90° to partition axis
- Parked in a row arrangement

Track system for the automatic EM operator

The automatic EM operator ensures fast traversing and particularly low-noise operation of the elements.

Aside from curved configurations, it can also be used for a combination of several systems.

Further information can be obtained from our field sales representatives and the Variflex-EM technical brochure.

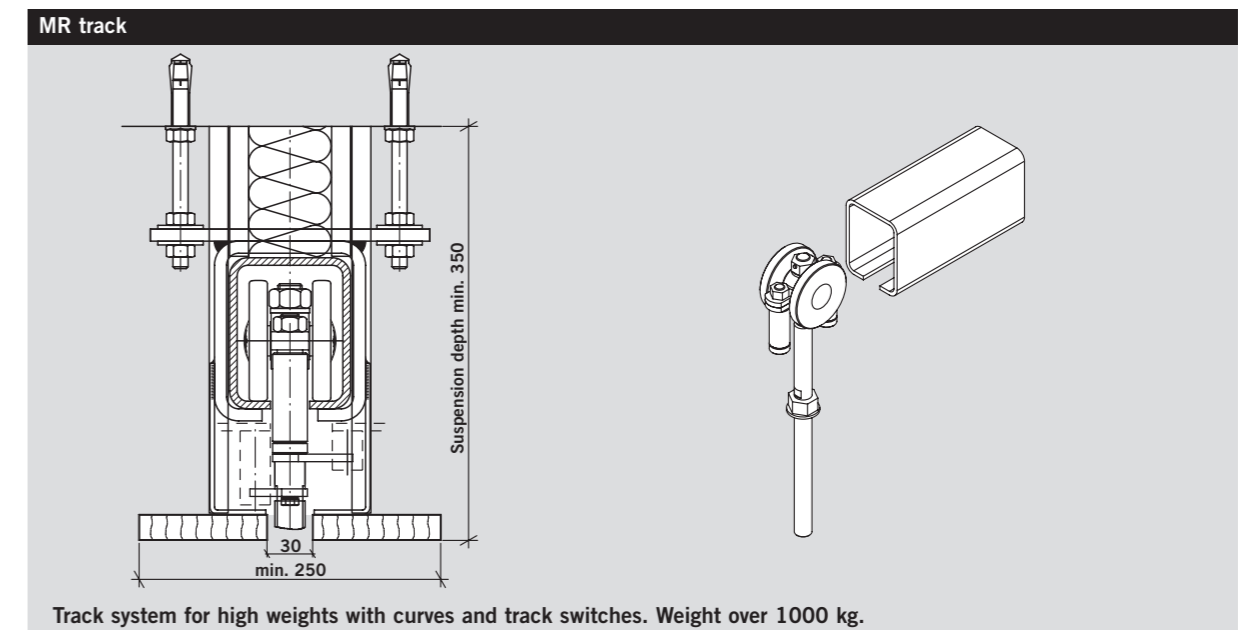


MR track system

The track system for very high weights. With the special roller-mounted carrier, this steel track can be used for

elements with weights up to 1,000 kg. The carrier is code-guided for curve and track switch negotiation,

ensuring light and easy element operation.



Track system for high weights with curves and track switches. Weight over 1000 kg.

Integrated systems.

DORMA's system approach and comprehensive portfolio for partition and door applications means that the step from planning idea to successful realisation is but at short one. Your benefit: an ideal solution for your clients every time.



Door Control



Automatic



Glass fittings and Accessories



Security/Time and Access (STA)



Movable Walls

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