VARITRANS COMFORTDRIVE

Fully automatic operating system
for glass panel partitions

THE FULLY AUTOMATIC GLASS PARTITION OPERATOR.
VARITRANS COMFORTDRIVE. OPENING UP NEW HORIZONS.

Quick and easy frontage, foyer and showroom adaptation.

The Varitrans ComfortDrive is the fully automatic partition within the Varitrans portfolio – a model that offers outstanding convenience in flexible space utilisation. At the push of a button it enables showrooms and presentation areas, foyers, shops and self-service zones in banks to be adapted quickly and efficiently to daily changing requirements. With this system, multi-functional space management is a truly simple affair.

Advanced technology – the ComfortDrive operating system.

With the Varitrans ComfortDrive, transparent partition elements can be moved to their individually pre-programmed positions under fully automatic control. The control interface takes the form of a user-friendly touch screen. A high level of safety is ensured by an integrated monitoring system that stops the partition motions the moment contact is made with an obstacle.

Spatial management at the push of a button.

The Varitrans ComfortDrive can be controlled with just one finger operating a central touch screen. Aside from the standard functions "Open", "Close" and "Stop", a number of special positioning modes such as "One element open" ("Personnel opening" function), "Gapped configuration" or various free positioning patterns can be individually programmed and selected.

CONTENTS

THE BENEFITS AT A GLANCE

- Fully automatic actuation at the push of a button
- Exceptional convenience with dynamic opening and closing speeds of up to 250 mm/s
- Easy operation with self-explanatory touch screen
- Aesthetically elegant with slender track of just 98 mm in width
- Several element types and partition systems can be combined within one layout
- High level of safety ensured by an integrated monitoring system that stops and reverses the partition on contact with an obstacle – TÜV safety-tested
- Corresponds to the technical Rules for Workplaces – Doors and gates (ASR A1.7), the UVV and VDE regulations

- Smart control system: elements communicate while on the move
- Individually programmable for custom configuration
- Parameterisable microprocessor control (bus system) for activation and monitoring of the operational sequence and functions
- Last element equipped with an electro-mechanical lock to prevent unauthorised operation
- In the event of a power failure, the partition can be manually operated
- Up to 30 elements per partition system, with up to 50 metres of track
- Element heights up to 4,000 mm
- Single element weights up to 250 kg
- High spatial configuration flexibility
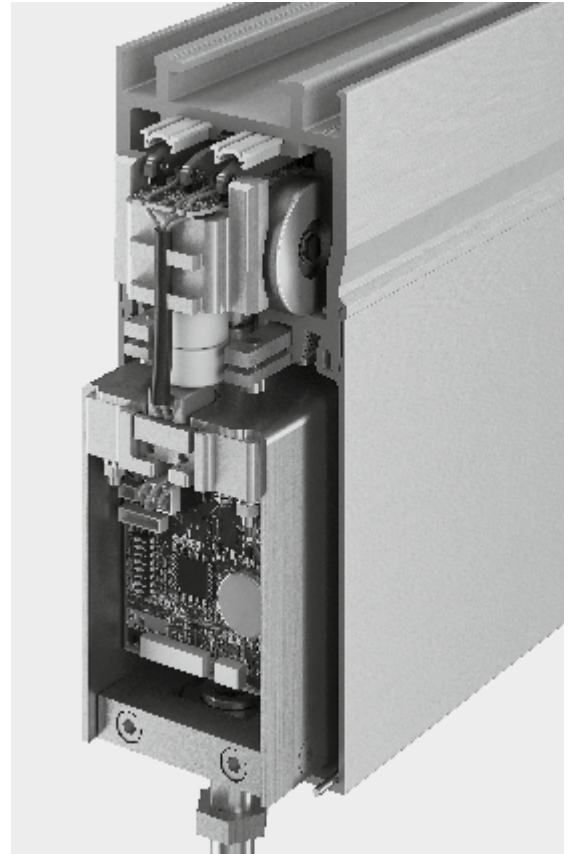
TECHNICAL DATA

General specifications	ComfortDrive
Track width	98 mm
Operator height	238 mm
Max. length with one control unit	50 m
Max. number of elements	30
Element width	600 – 1,500 mm
Max. element height	4,000 mm
Max. element weight	250 kg
Radius (directional changes)	150 mm
Track layouts	straight and segmented
	curved (min. radius 3 m)
Hold-open time, personnel access	variable
Travel speed	dynamic response up to 250 mm/s
Force limited to	150 N
Parameterisation	with laptop
Power consumption, stand-by mode	20 W
Max. power consumption (20 elements)	1,000 W
Electro-mechanical locking device	●
Manual unlocking	●
TÜV safety-tested	●
Line fuse	16 A
Power supply	230 V AC
Power supply within operator	36 V DC
Class of protection	III

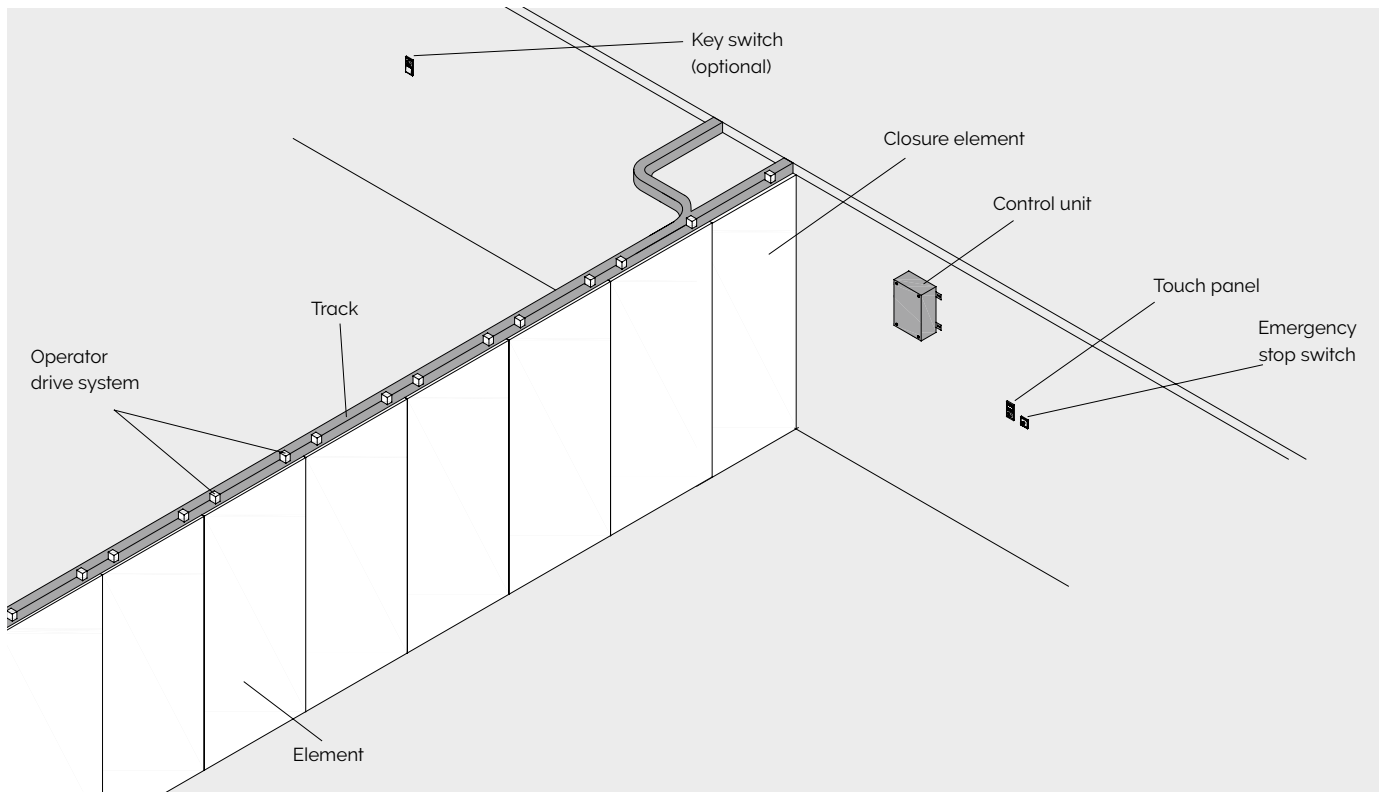| Control functions	
Touch panel functions	
Basic functions	
OPEN	●
CLOSE	●
STOP	●
Extended basic functions	
Partial opening / Partial closing	○
Personnel opening	○
Gapped configuration	○
Special modes	
Zonal opening	○
Free positioning	○
Key switch for personnel access	○
Emergency power module	○
Floating contact	●
Bus interface	●
Status feedback signalling	●

● Standard   ○ Option

SYSTEM STRUCTURE
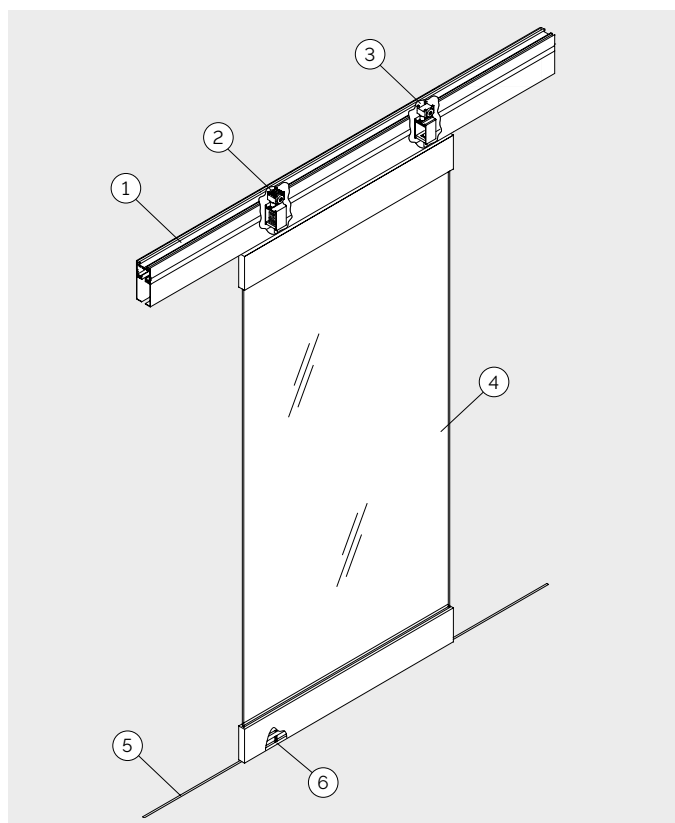
1. Ceiling-mounted load-bearing guide track with busbar system and cover
2. Driven carriers with element suspension mountings
3. Non-driven carriers with element suspension mountings
4. Glass partition elements
5. Floor-recessed guide track
6. Floor guide pin fitted to each partition element

PARTITION LAYOUT

Key switch (optional)

Closure element

Control unit

Track

Touch panel

Emergency stop switch

Operator drive system

Element

OPERATING MODES

In all operating modes, the partition elements are moved to their preprogrammed positions under fully automatic control. The operating behaviour is dynamically adapted according to where an element is currently loca-ted and where the preceding and following elements are positioned at any given moment in time. **The system operating behaviour can be adjusted by parameter reconfiguration.**

OPERATING BEHAVIOUR

Speed

Stop | Creep speed | Decele-ration | Fast speed | Accele-ration

Gapping

Elemens waiting
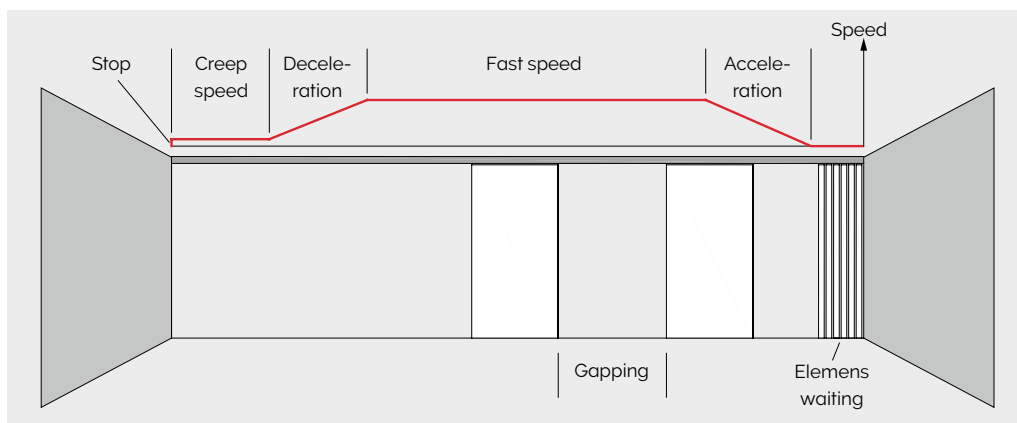
Acceleration: As soon as an element receives the command to go, it checks to ensure that the way ahead is free and then accelerates to the preprogrammed speed.

Fast speed: If the way ahead is unimpeded over a good distance, the element is accelerated to the highest speed of travel.

Creep speed: The element switches to creep mode to travel the final few inches to its preprogrammed position.

Deceleration: As the element approaches its preprogrammed position, the speed is reduced to the required creep value.

Stop: The element stops once it has reached its preprogrammed position.

Staggered travel mode: The element follows the preceding element at a defined distance as they move into their respective positions.

Waiting: Although elements may have received the command to go, they remain in waiting mode until the way ahead is free.
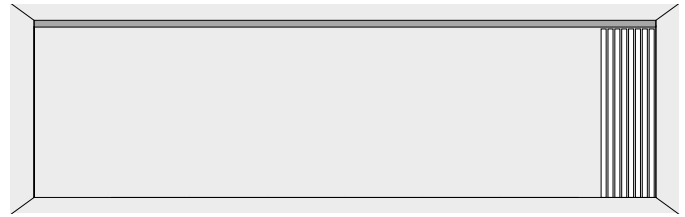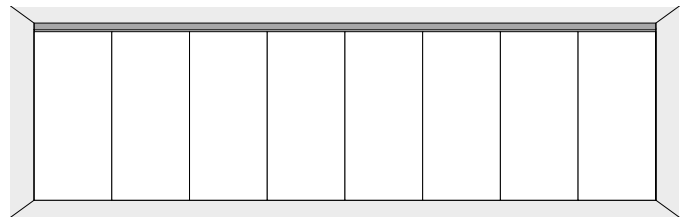
TRACK CONFIGURATIONS

Example applications

Straight track

Track configuration with 90˚ angle

Track configuration with obtuse angle (e.g. 135˚)

Segmented track configurations

Curved and partially curved track configurations
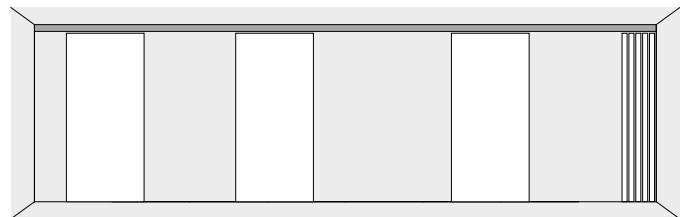(min. radius 3 metres)
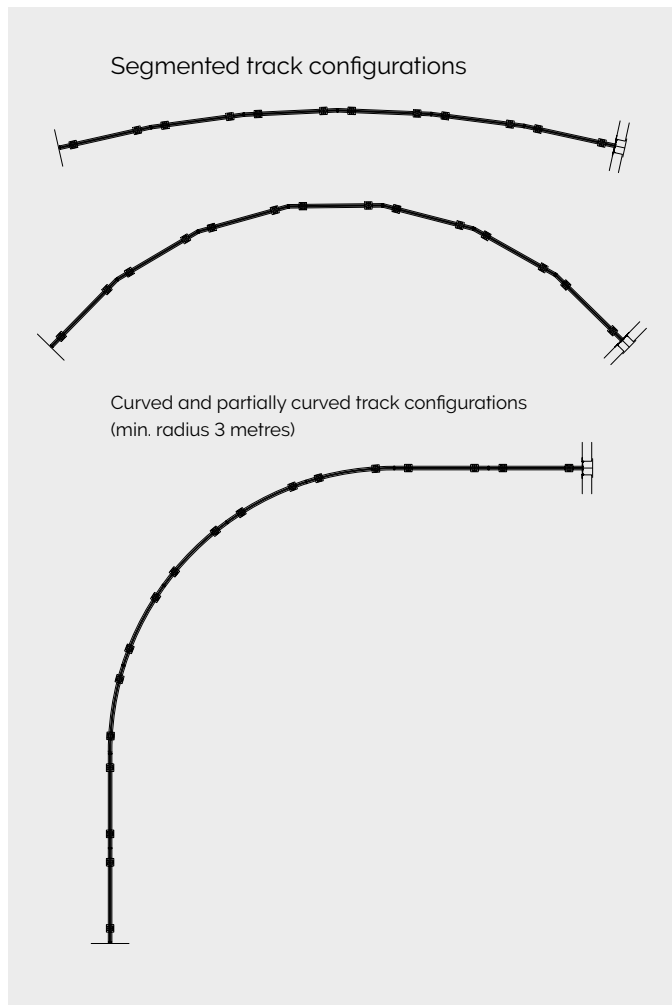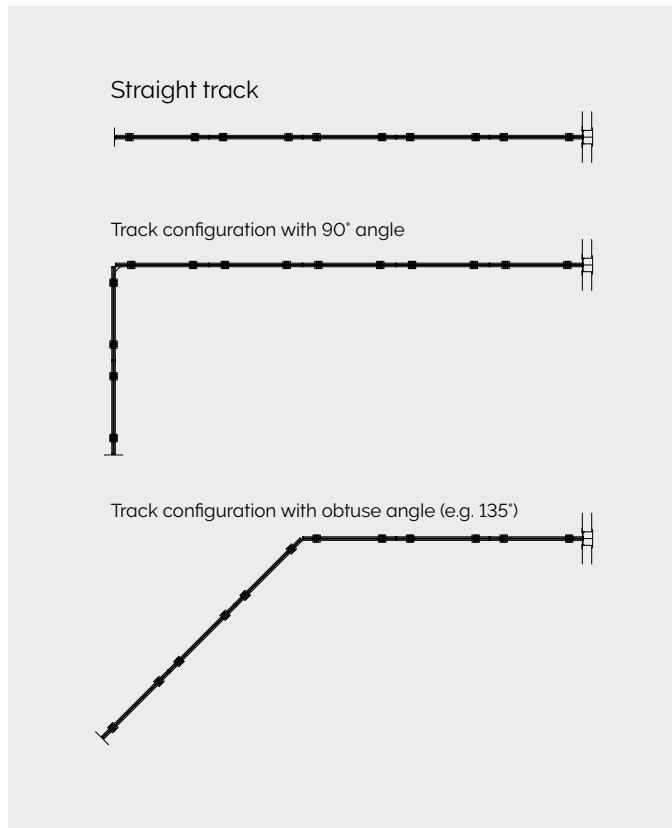
BASIC FUNCTIONS

OPEN

All elements move under fully automatic control to the
OPEN position.

CLOSE

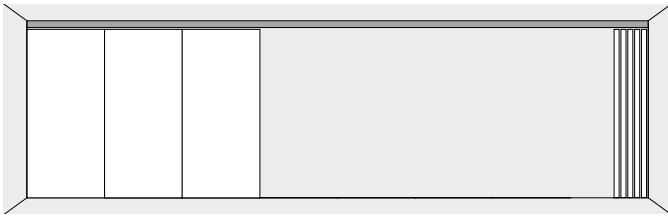All elements move under fully automatic control to the
CLOSED position.

STOP

Immediate interruption of all travel functions.

EXTENDED BASIC FUNCTIONS
(optional)

PARTIAL CLOSE

Partial opening or closing of partition. The number of elements affected can be preset by parameter configuration.

PERSONNEL OPENING
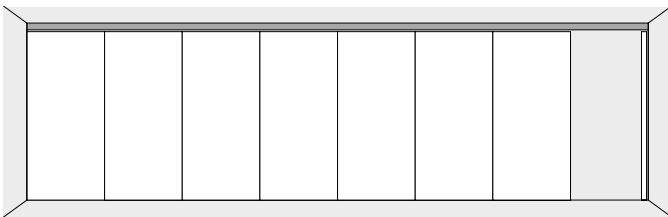
Partial open mode (personnel access). The number of elements that open or close can be preset by parameter configuration.

GAPPED
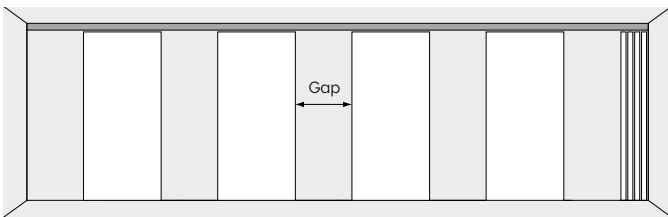
Positioning of the elements at a preprogrammed distance apart. The number of elements and the gapping distance can be preset by parameter configuration.

SPECIAL OPERATING MODES
(optional)

ZONAL OPENING Example 1
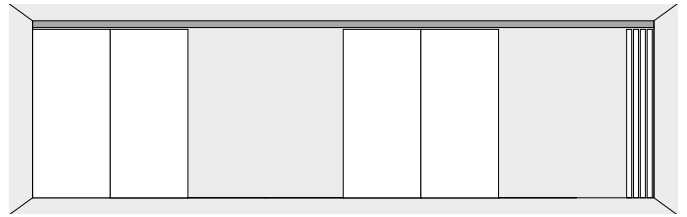
Certain areas of the partition can be opened. The position and number of elements can be preset by parameter configuration.

ZONAL OPENING Example 2
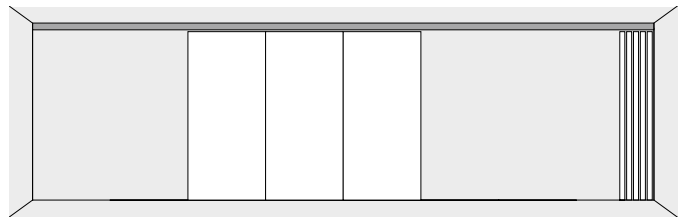
Certain areas of the partition can be opened. The position and number of elements can be preset by parameter configuration.

FREE POSITIONING
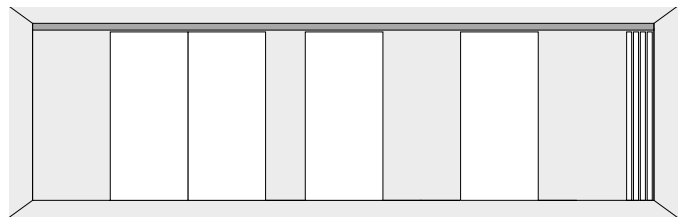
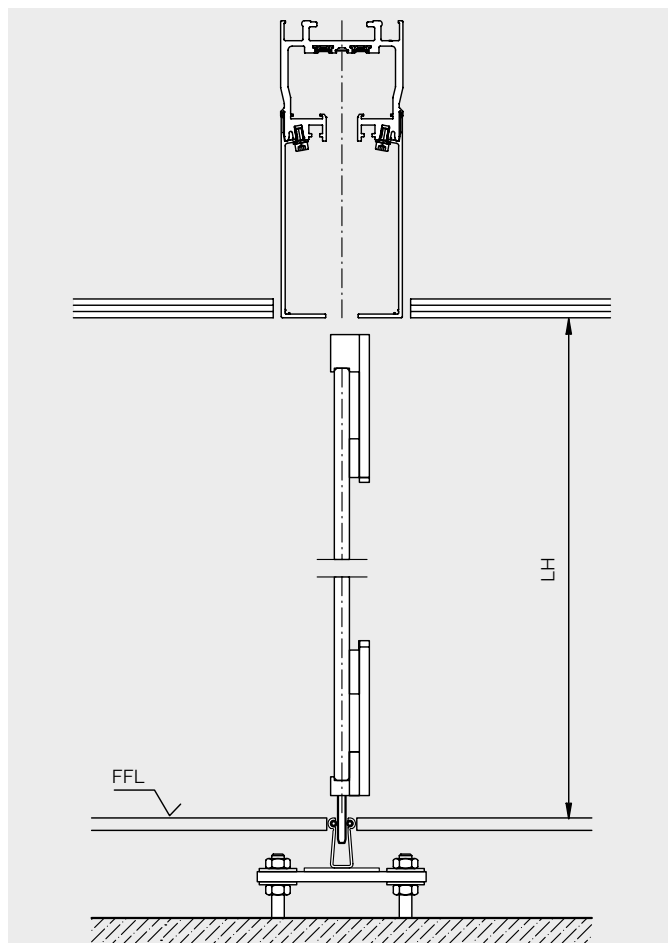This mode offers the possibility of placing the elements at any track location.
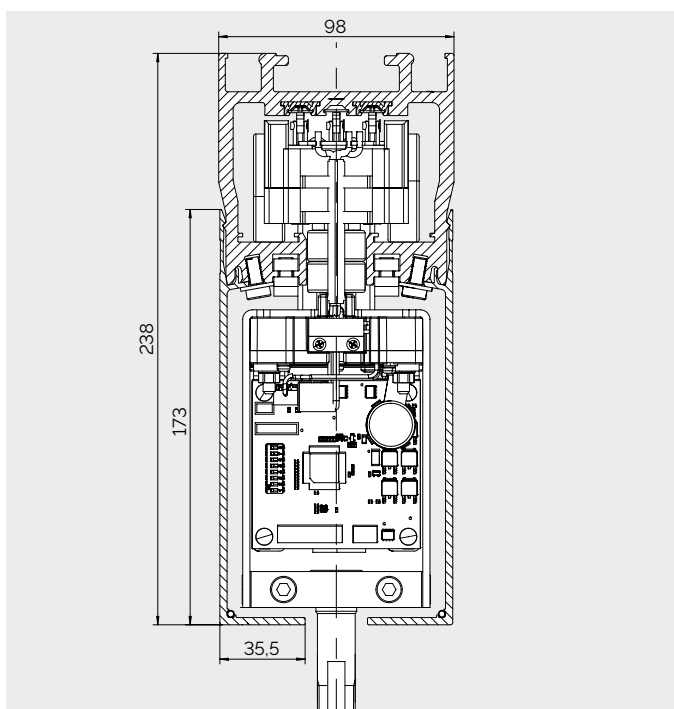
VERTICAL SECTIONS

Vertical section
with a Varitrans CompactLine element
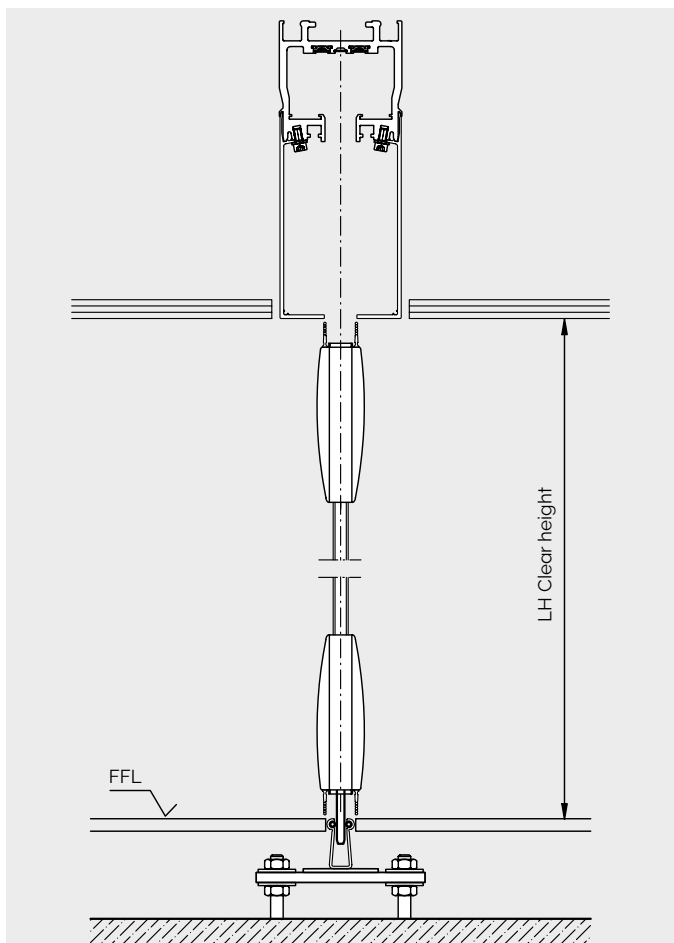
Vertical section
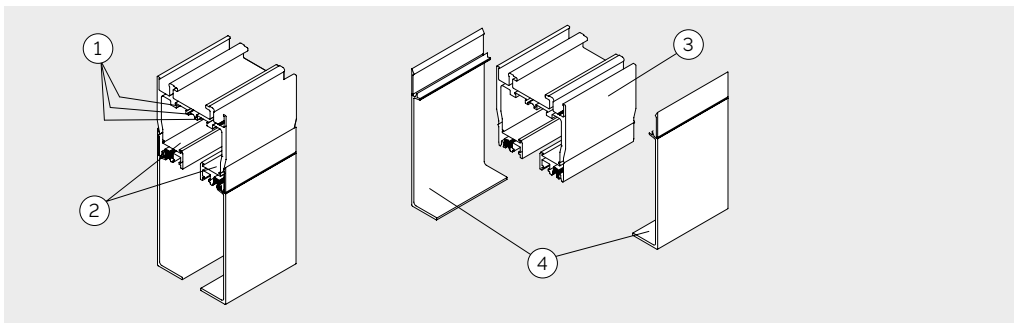## with a Varitrans MetalLine element

Vertical section
through track

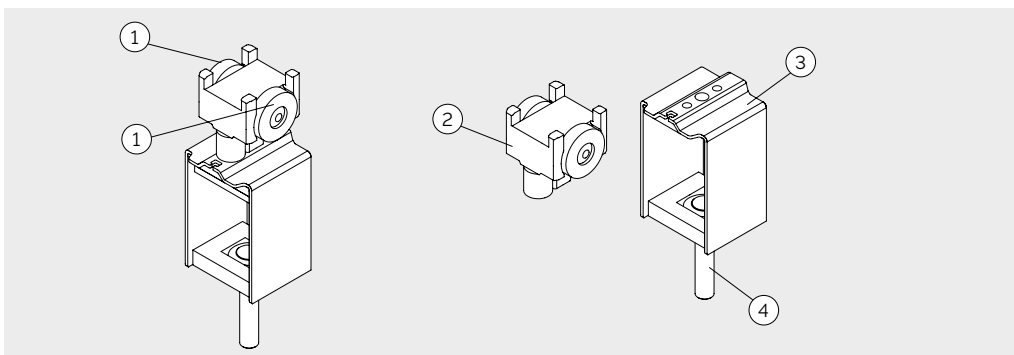Drawing shows track and carrier trolley
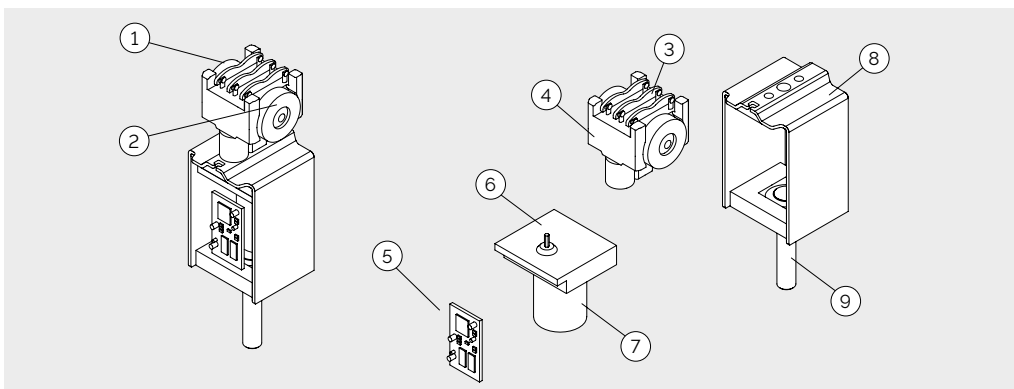
TRACK DESIGN DETAILS

Track rail

1. Busbars (contact rails)
2. Running surfaces
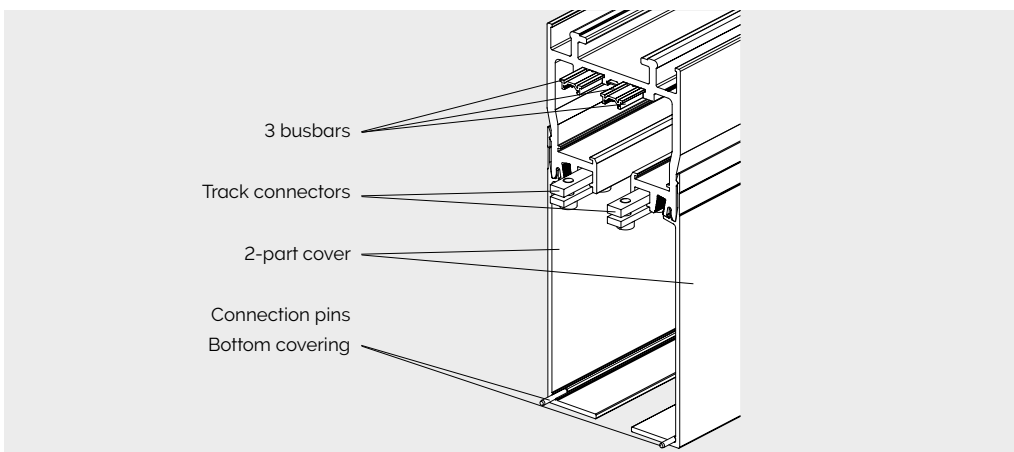3. Track profile
4. Track covers

Non-driven carrier

1. Non-driven roller
2. Roller head
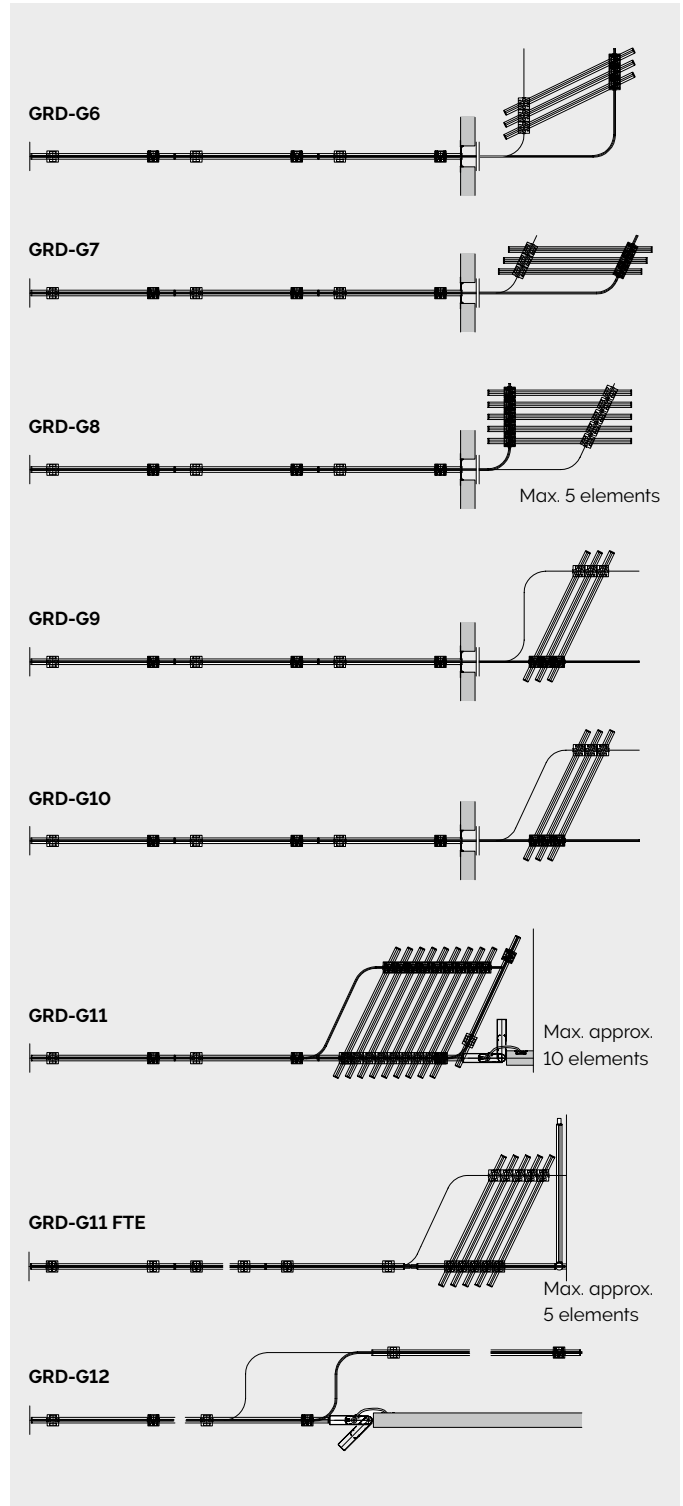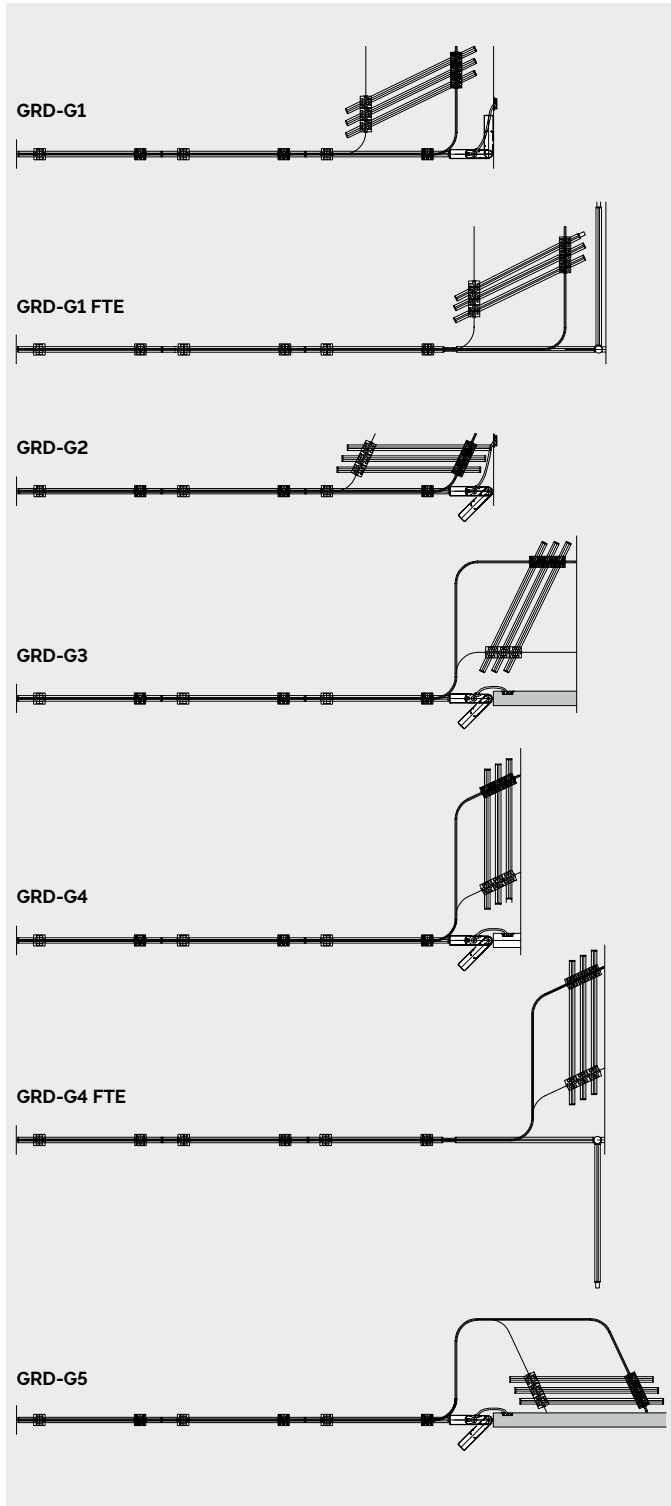3. Support frame
4. Carrier pin

Driven carrier

1. Driven roller
2. Non-driven roller
3. Collector
4. Roller head
5. PCB
6. Drive gear
7. Motor
8. Support frame
9. Carrier pin

Track interconnection

3 busbars

Track connectors

2-part cover

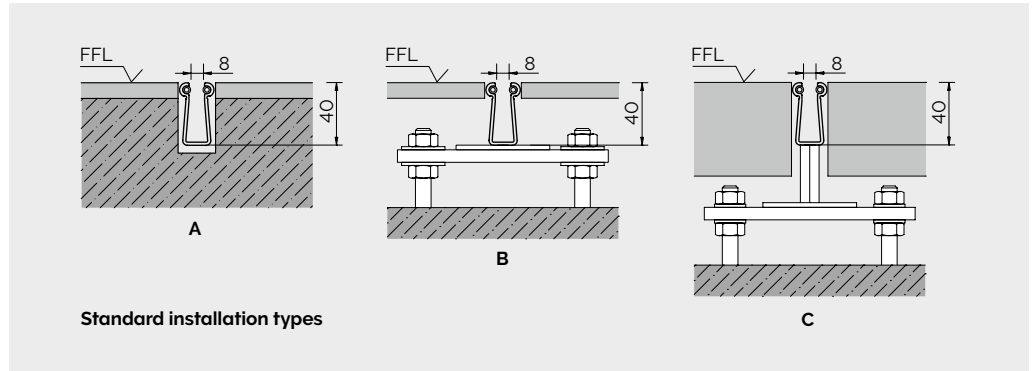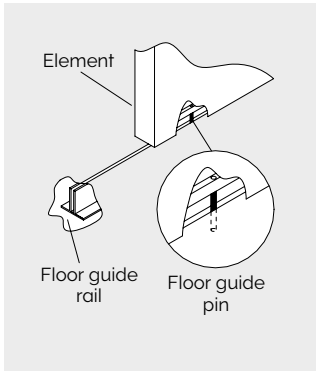Connection pins
Bottom covering

STACKING TRACK OPTIONS

The stacking tracks serve to store the elements in a compact stack and can – depending on the room size and shape – be located within a very small area for maximum spatial efficiency. The low weight of the elements and the advantages that this brings in terms of the structural building requirements that need to be fulfilled are particularly beneficial in the stacking areas. The following shows our standard stacking track arrangements. Custom solutions to meet specific requirements can also be provided on request.

GRD-G1

GRD-G1 FTE

GRD-G2

GRD-G3

GRD-G4

GRD-G4 FTE

GRD-G5

GRD-G6

GRD-G7

GRD-G8

Max. 5 elements

GRD-G9

GRD-G10

GRD-G11

Max. approx. 10 elements

GRD-G11 FTE

Max. approx. 5 elements

GRD-G12

FLOOR GUIDES

- Element
- Floor guide rail
- Floor guide pin

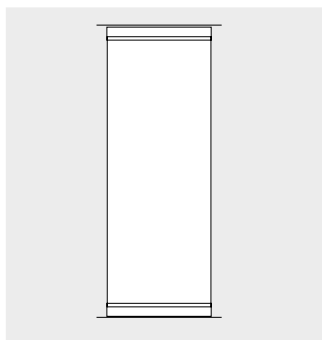**Standard installation types**

A

B

C

SUSPENSION SYSTEMS

The track suspension system is selected on the basis of the specific application requirements.
The following examples show the most common suspension systems used for the partition track type in question.
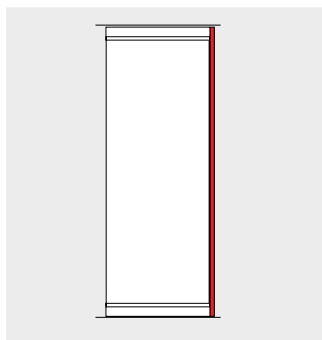

A — 285 – 650

B — 300 – 1150

C — 450 – 1650

D — 300 – 650

E — 1150 – 2150

F — 330 – 650

G — 650 – 2150

11
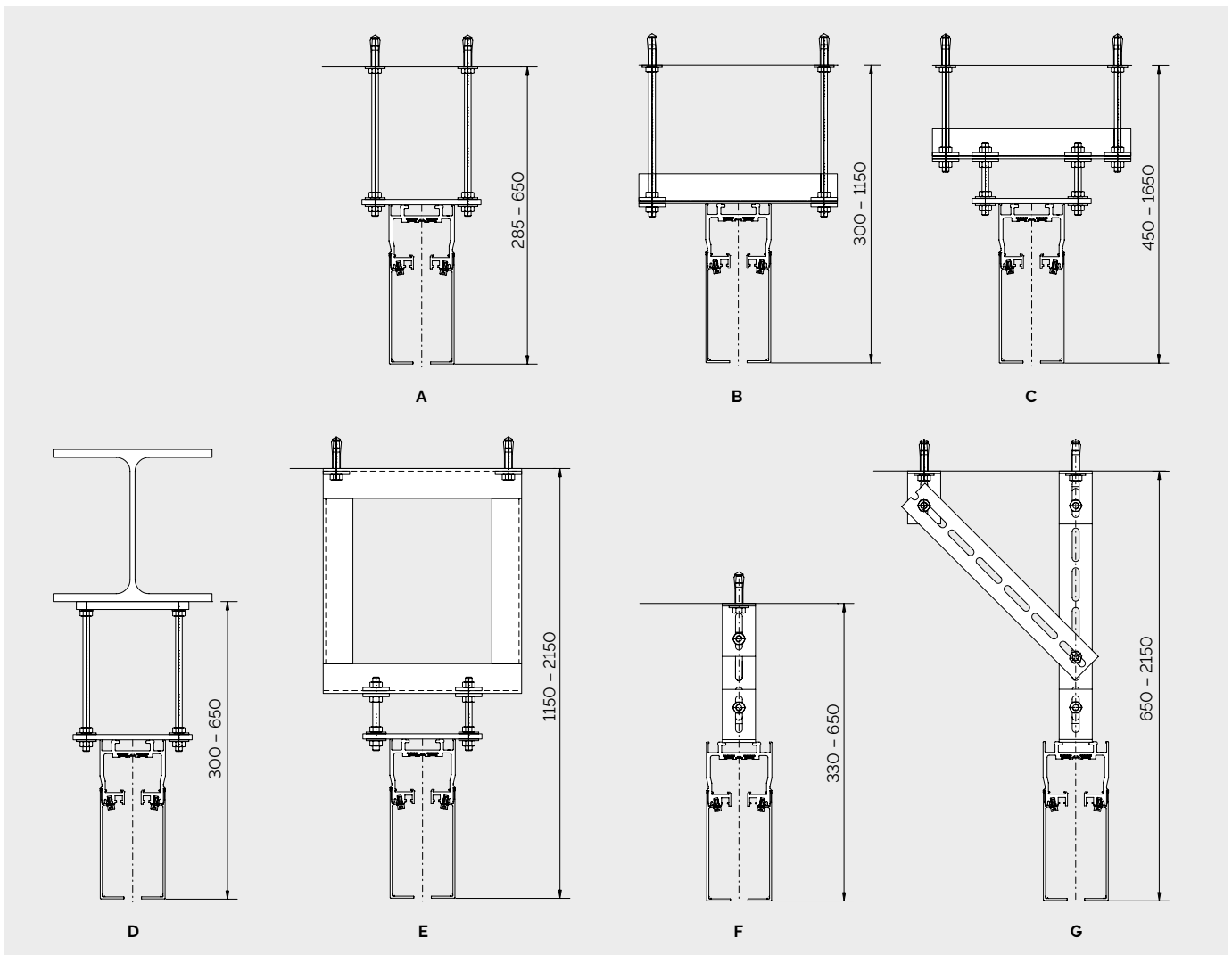
COMPACTLINE – TOUGHENED GLASS, GLAZING RAILS
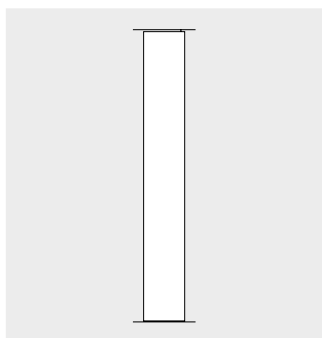
VE

Fullwall element

EE

Corner element

WE
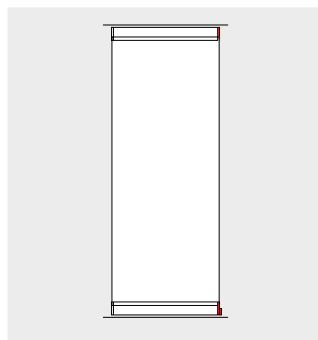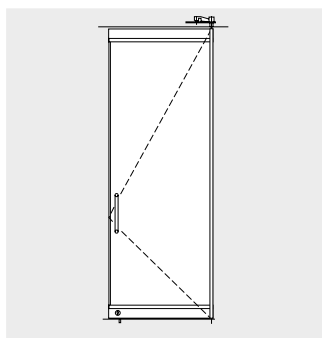

Angle element 160˚ - 175˚

WE
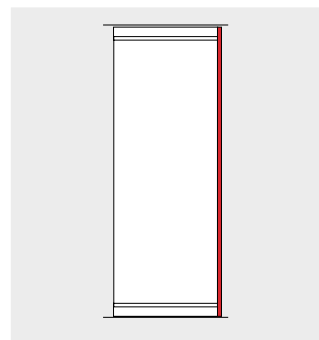
Angle element 99˚ - 159˚
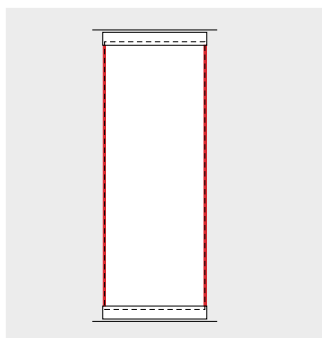
WK

Closure flap

FTE

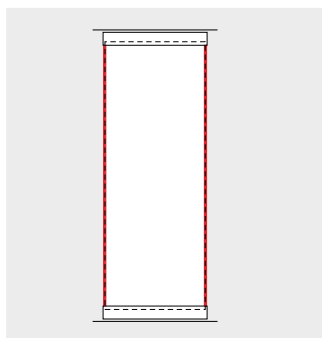Fixed full-height passdoor,
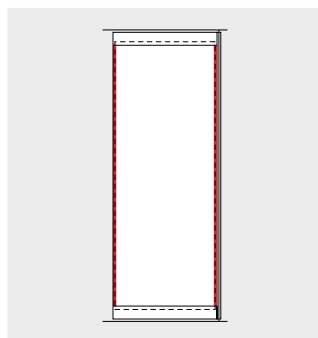electrically operated

COMPACTLINE – TOUGHENED GLASS, ALU-FRAMED

VE

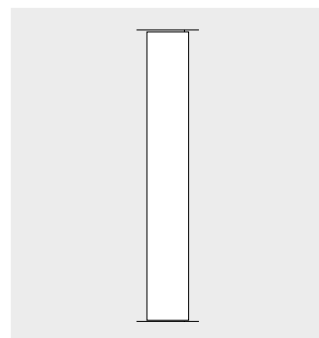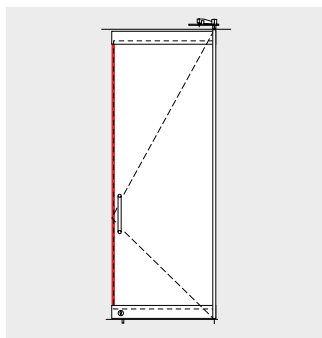Fullwall element

EE

Corner element

WE

Angle element 99˚ - 175˚
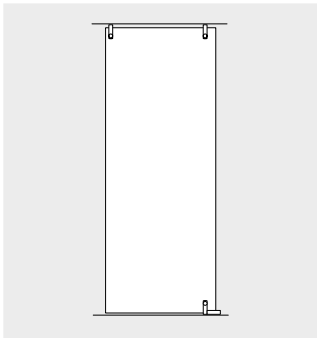
WK

Closure flap

FTE

Fixed full-height passdoor,
electrically operated
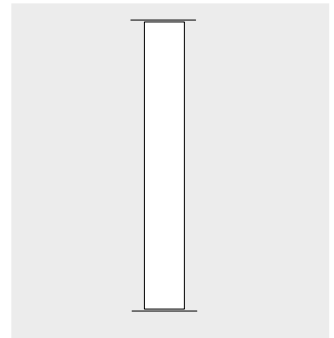
METALLINE

VE

Fullwall element

EE
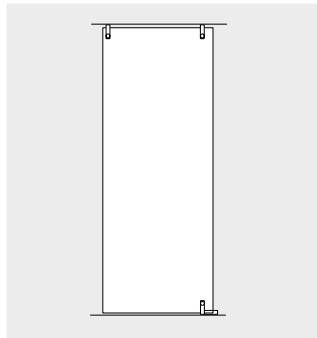
Corner element

WE
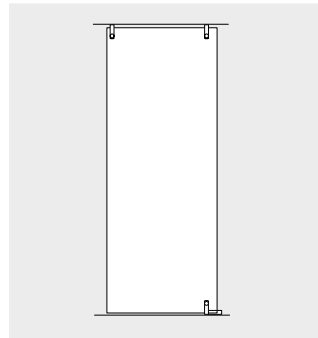
Angle element

WK

Closure flap

DT-H
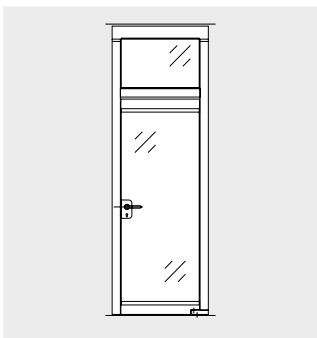
Passdoor, H-frame

LOCKING DEVICE

Locking device

85
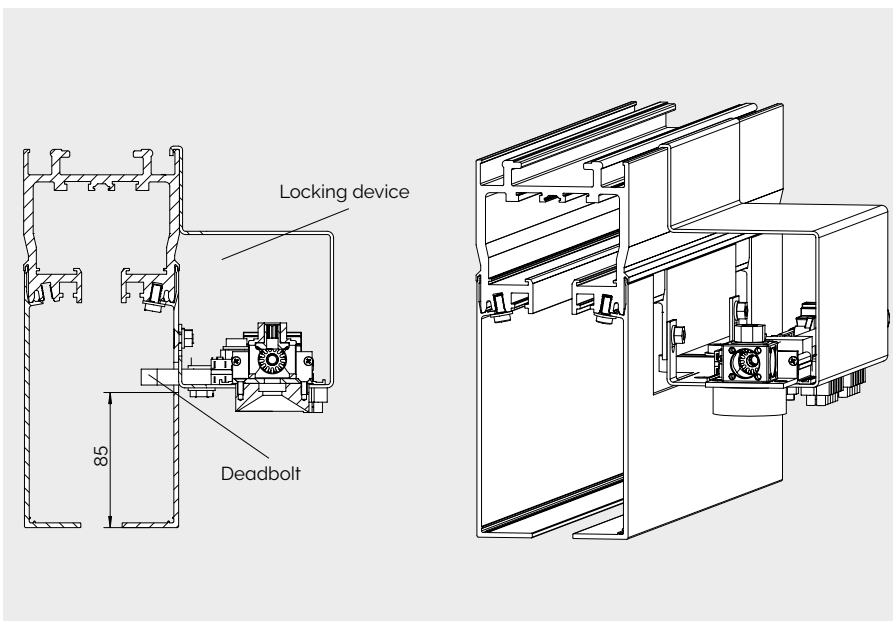
Deadbolt

The locking device takes the form of an electro-mechanic-ally operated deadbolt designed to engage and secure the elements. It is fitted to the track rail and is mainly used to lock the closed partition. It is usually located at the closure element of a glass panel partition. The locking device is equipped with two sensors that detect and signal the ENGAGED and DISENGAGED end positions of the deadbolt. There are two further sensors to signal whether the locking device is locked. One of these two sensors has a floating contact and can be connected to an alarm system.

AUXILIARY EQUIPMENT

Touch panel with display for control and programming functions

All the functions of the Varitrans ComfortDrive can be controlled with just one finger operating the buttons of the central touch screen. Aside from the standard functions "Open", "Close" and "Stop", a number of special positioning modes such as "Personnel opening", "Gapped configuration" or various free positioning patterns can be individually programmed and selected. A bus link with the building control system can also be provided.

Standard display: Key pad
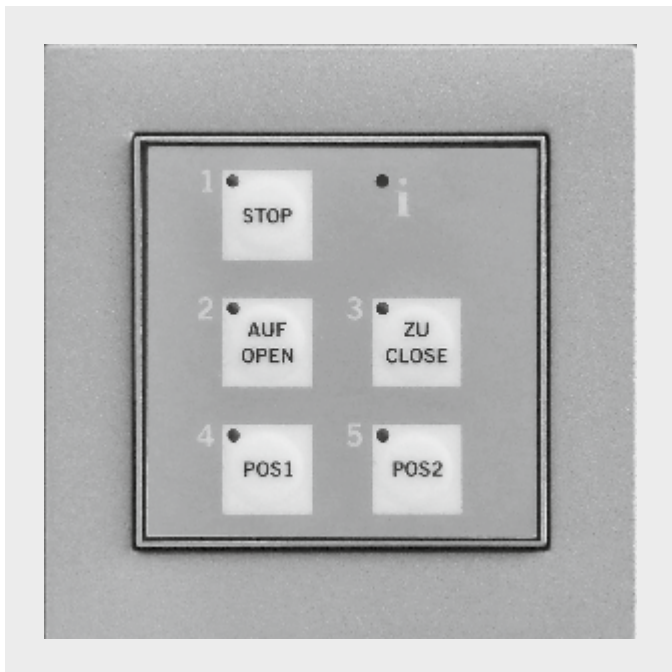
Premium display: Touch display
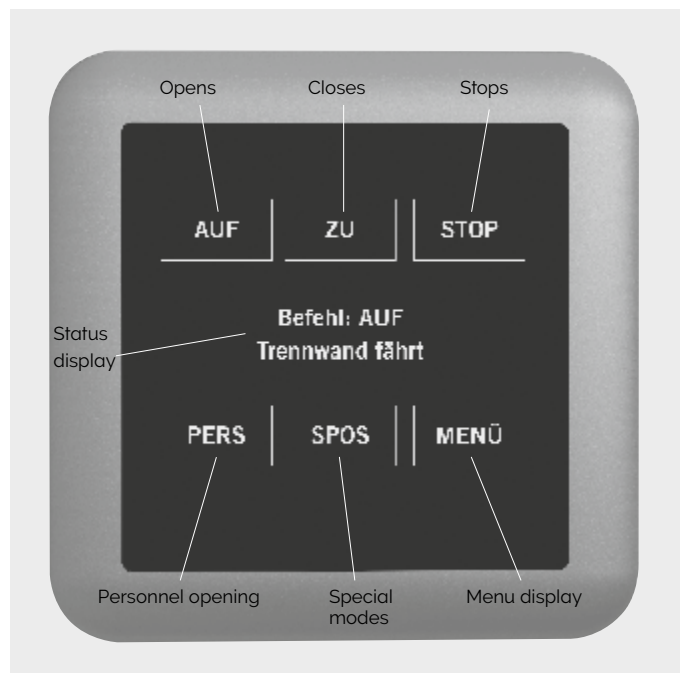
Cabling/wiring diagram

Control system:
Both wall and ceiling installation are possible.
If installing in a false ceiling cavity, e.g. between the stacking tracks,
always provide an inspection hatch measuring at least 600 x 600 mm.

Cable from factory
3 x 0.75 mm²
Max. length 1.5 m

Power socket by others
100-120V or 200-240V
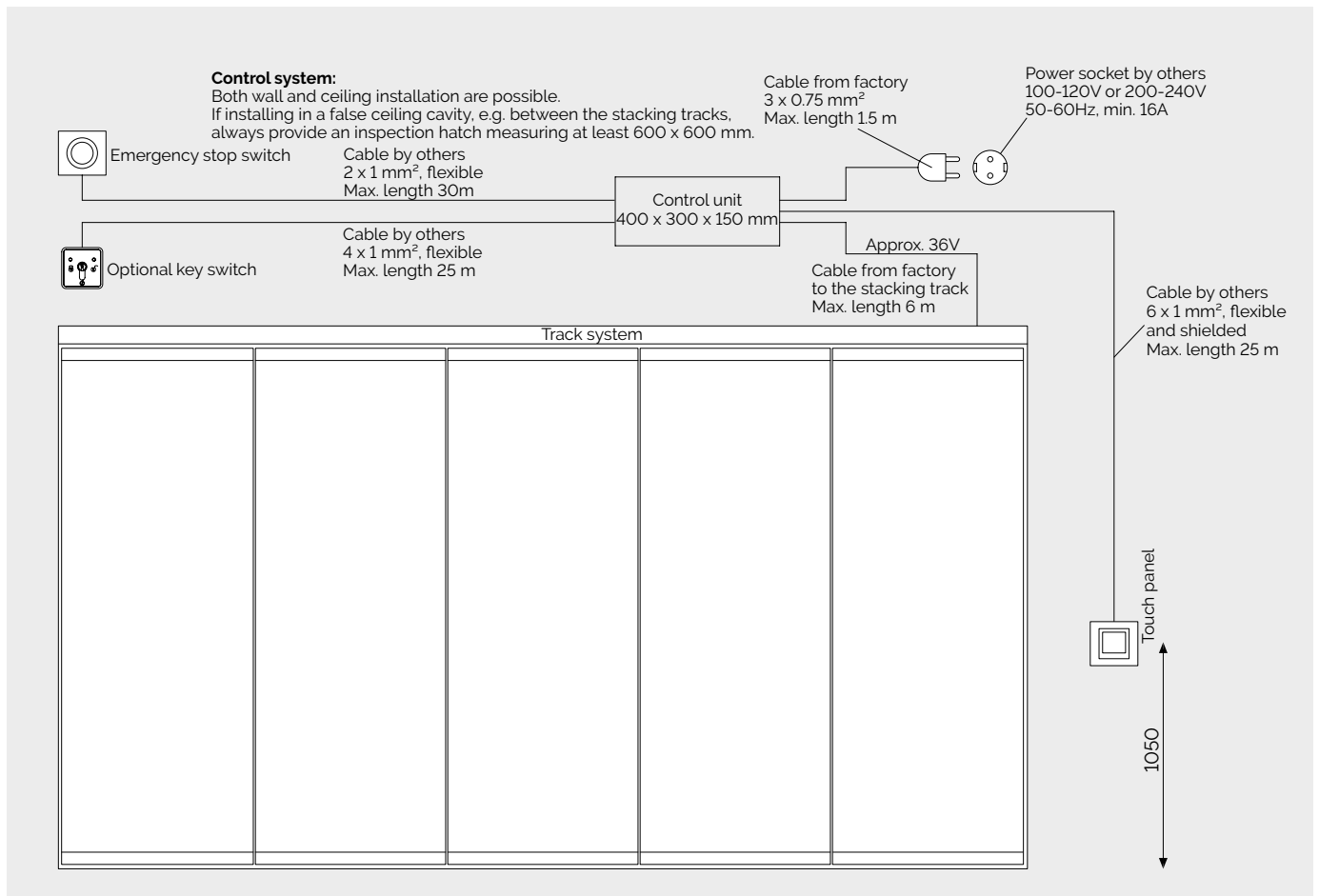50-60Hz, min. 16A

Emergency stop switch

Cable by others
2 x 1 mm², flexible
Max. length 30m

Control unit
400 x 300 x 150 mm

Optional key switch

Cable by others
4 x 1 mm², flexible
Max. length 25 m

Approx. 36V

Cable from factory
to the stacking track
Max. length 6 m

Cable by others
6 x 1 mm², flexible
and shielded
Max. length 25 m

Track system

Touch panel

1050

COMFORTDRIVE FOR SOUND-INSULATING PARTITIONS

Fully automatic partition system with Variflex elements.

For more information, please see the brochure: "Variflex ComfortDrive – Fully automatic operating system for sound insulating partitions".

If you don't have the brochure, we will be glad to send you one.

DORMAHÜPPE

SKYFOLD

dormakaba Group

DE

AT

DORMA Hüppe
Raumtrennsysteme GmbH + Co. KG
Industriestraße 5
26655 OCHOLT
GERMANY
Phone +49 4409 666-0
Fax   +49 4409 666-489
info-hueppe@dormakaba.com
www.dorma-hueppe.com

DORMA Hüppe Austria GmbH
Hollabererstraße 4b
4020 LINZ
AUSTRIA

Phone +43 732 600451
Fax   +43 732 650326
office@dorma-hueppe.at
www.dorma-hueppe.at