

Technical manual

As of 01.06.2023

Industrial sectional doors

Series 60
Depth 42 mm

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Note:

All information in this document can only represent the status upon document creation.
Therefore deviations from the product configurator may occur.
All dimensions in mm.
Subject to design changes.

Detailed door leaf constructions and track applications as well as fitting examples are provided in this manual.
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Product descriptions

Door type	Door leaf / wicket door
Sectional door SPU F42: double-skinned steel sectional door, Stucco-textured / Micrograin, door sections 625 and 750 mm high	
Door leaf	Door sections made of PU-foamed, hot-galvanized sections. Door sections Stucco-textured on inside and outside with uniform horizontal ribbing, or Micrograin with fine horizontal embossing outside and Stucco-textured inside, 625 and 750 mm high, depth 42 mm. All door sections with finger trap protection. Surface protection with polyester-primer coating. Ventilation grilles optional.
Wicket door	Only to be installed in the centre fields of the door. Cannot be fitted in the outer fields – note the arrangement! Only opening outwards, LH or RH hinged. Ventilation grilles are not possible in wicket doors. In doors with wicket door with trip-free threshold, the clear frame dimensions (ordering size, LZ) must not exceed the clear opening width 10 mm. Attention (for threshold rail): For grid heights 2000, 2125 and 2250, the clear opening height must not be lower than the door height.
Glazing	Glazing frames of anodised aluminium extrusion profiles in the standard version or with thermal breaks or alternatively sections with compound glazing are possible within the fitting area shown below. Fewer compound glazings or different arrangements are possible subject to the minimum distances. Glazing frames are possible from FFL and compound glazing from 625 / 750 mm above FFL.
Sectional door SPU F42: double-skinned steel sectional door, Stucco-textured / Micrograin, door sections 375 and 500 mm high	
Door leaf	Door sections made of PU-foamed, hot-galvanized sections. Door sections Stucco-textured on inside and outside with uniform horizontal ribbing, or Micrograin with fine horizontal embossing outside and Stucco-textured inside, 375 and 500 mm high, depth 42 mm. All door sections with finger trap protection. Surface protection with polyester-primer coating. Ventilation grilles optional.
Wicket door	Only to be installed in the centre fields of the door. Cannot be fitted in the outer fields – note the arrangement! Only opening outwards, LH or RH hinged. Ventilation grilles are not possible in wicket doors. In doors with wicket door with trip-free threshold, the clear frame dimensions (ordering size, LZ) must not exceed the clear opening width 10 mm. Attention (for threshold rail): For grid heights 2000 and 2125, the clear opening height must not be lower than the door height.
Glazing	Glazing frames of anodised aluminium extrusion profiles in the standard version or with thermal breaks or alternatively sections with compound glazing are possible within the fitting area shown below. Fewer compound glazings or different arrangements are possible subject to the minimum distances. Glazing frames are possible from FFL and compound glazing from 500 mm above FFL.
Sectional door APU F42 / APU F42 Thermo: glazed aluminium sectional door with steel bottom section / glazed aluminium sectional door with thermal break, with steel bottom section	
Door leaf	Bottom section made of hot-galvanized, PU-foamed sections, 750 (standard version), or 1500 mm high, Stucco-textured inside and outside with uniform horizontal ribbing, or Micrograin with fine horizontal embossing on outside and Stucco-textured inside. Surface protection with polyester-primer coating. Other door sections with glazing made of standard anodised aluminium extrusion profiles (APU F42) or with thermal break (APU F42 Thermo). Depth: 42 mm. All door sections with finger trap protection. Infill: clear synthetic double panes, 26 mm (S2). Ventilation grilles in the bottom section possible.
Wicket door	Depending on the door type, made of anodised aluminium extrusion profiles in the standard version or with thermal breaks, installed into the centre fields of the door. Cannot be fitted in the outer fields – note the arrangement! Only opening outwards, LH or RH hinged. Ventilation grilles are not possible in wicket doors. In doors with wicket door with trip-free threshold, the clear frame dimensions (ordering size, LZ) must not exceed the clear opening width 10 mm. Attention (for threshold rail): If the wicket door has the same number of door sections as the sectional door, the clear opening height must not be lower than the door height (RM).
Sectional door ALR F42 / ALR F42 Thermo: glazed aluminium sectional door / glazed aluminium sectional door with thermal break	
Door leaf	Door sections with glazing made of standard anodised aluminium extrusion profiles (ALR F42) or with thermal break (ALR F42 Thermo). Depth: 42 mm. All door sections with finger trap protection. Bottom door section made of PU infill with 26 mm Stucco-textured aluminium sheet cover on both sides (FU), other door sections with 26 mm clear synthetic double panes (S2). Ventilation grilles in the bottom section possible.
Wicket door	Depending on the door type, made of anodised aluminium extrusion profiles in the standard version or with thermal breaks, installed into the centre fields of the door. Cannot be fitted in the outer fields – note the arrangement! Only opening outwards, LH or RH hinged. Ventilation grilles are not possible in wicket doors. In doors with wicket door with trip-free threshold, the clear frame dimensions (ordering size, LZ) must not exceed the clear opening width 10 mm. Attention (for threshold rail): If the wicket door has the same number of door sections as the sectional door, the clear opening height must not be lower than the door height (RM).
Sectional door ALR F42 Glazing: aluminium sectional door with extensive glazing, real glass	
Door leaf	Door sections of standard anodised aluminium extrusion profiles. Depth: 42 mm. All door sections with finger trap protection. All door section infills in 6 mm laminated safety glass (VG). Uniform infill heights.
Sectional door ALR F42 Vitraplan: aluminium sectional door with exclusive glazing	
Door leaf	Door sections of polyester primer-coated standard aluminium extrusion profiles. Depth: 42 mm. All door sections with finger trap protection and synthetic double panes, 26 mm (S2), clear, and 4 mm transparent synthetic glazings fitted in front, in grey. Ventilation grilles are not possible in the bottom section.

Product descriptions

Door type	Door leaf / wicket door
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Sectional door ALR F42 Vitraplan AT: Aluminium sectional door with facade covering

Door leaf	Door sections of polyester primer-coated standard aluminium extrusion profiles. Depth: 42 mm. All door sections with finger trap protection and PU infill with aluminium sheet cover, Stucco-textured on both sides, (FU) 26 mm and facade panels fitted in front. Ventilation grilles are not possible in the bottom section.
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Sectional door Parcel

Door leaf	The divisible industrial door for special package loading requirements. The optimal solution for the joint use of the same loading bay by both lorries and vans.
Door versions	SPU F42 Parcel, APU F42 Parcel Releasing an espagnolette lock can decouple one or more door sections.

Frame / track application

Enclosed, moulded angle frame with press-fitted external seal, made of hot-galvanized steel with screwed track and double radius 510 mm.

Door lock

Manually operated	Inside locking using a shootbolt, self-locking rotary latch (on request for track applications that have a low-mounted torsion spring shaft) or self-locking floor locking.
Power-driven	Inside locking using a shootbolt

Counterbalance

Torsion springs, with carrying cables on the side (with a low headroom track application, a combination of carrying chain and carrying cable). The torsion springs are designed for track applications N, ND, NS, NK, NA, NH, GD, GK, GS, L and LD for at least 25000 closing cycles and for all other track applications for at least 50000 closing cycles. For version with direct drive operator via the operator, tubular shaft and carrying cables on the side.

Safety-related equipment according to DIN EN 12604

- Manually operated doors using one torsion spring, on both sides with approved catch safety device and integrated anti-lift kit *)
- Manually operated doors using more than one torsion spring with approved spring safety device and with approved catch safety device on both sides as well as integrated anti-lift kit *)
- Power-driven doors with break-in-resistant anti-lift kit
- Inner and outer finger trap protection

* European patent

Seals

Bottom seal made of 5-chamber EPDM profile with flexible adjustment lip, side seal, lintel seal and intermediate seal between the door sections.

Note regarding surface coating

For the listed colours, the sectional doors SPU F42, APU F42 Thermo and ALR F42 Thermo with door width from 4510 to 5000 mm in combination with the track applications NH, GD, GK, GS, H, HD, HS, HK, HA, HU, RD, RS, RK, V, VA, VS, VU and WS are fitted with door leaf reinforcement to reduce any possible section deflection caused by sun exposure and require technical inspection.

RAL 3007 Black red
RAL 5003 Sapphire blue
RAL 5004 Black blue
RAL 5011 Steel blue
RAL 5013 Cobalt blue
RAL 5020 Ocean blue
RAL 5022 Night blue

RAL 6004 Blue green
RAL 6005 Moss green
RAL 6007 Bottle green
RAL 6008 Brown green
RAL 6009 Fir green
RAL 6012 Black green
RAL 6015 Black olive

RAL 6022 Olive drab
RAL 7016 Anthracite grey
RAL 7021 Black grey
RAL 7043 Traffic grey
RAL 8014 Sepia brown
RAL 8016 Mahogany brown
RAL 8017 Chocolate brown

RAL 8019 Grey brown
RAL 8022 Black brown
RAL 8028 Terra brown
RAL 9004 Signal black
RAL 9005 Jet black
RAL 9011 Graphite black
RAL 9017 Traffic black

Colour CH 703

Technical data overview

Construction and quality features	
Resistance to wind load EN 12424	Door without wicket door, $LZ \leq 4000$, class
	Door without wicket door, $LZ > 4000$, class
	Door with wicket door, $LZ \leq 4000$, class
	Door with wicket door, $LZ > 4000$, class
Water tightness EN 12425	Door without wicket door, class
Air permeability EN 12426	Door without wicket door, class
	Door with wicket door, class
Acoustic value EN 717-1	Door without wicket door $R_w = \dots$ dB
	Door with wicket door $R_w = \dots$ dB
Thermal resistance EN 13241-1, appendix B EN 12428	Door without wicket door, $U = W/m^2 \cdot K^{2)}$
	- Optional PU sandwich infill, $U = W/m^2 \cdot K^{2)}$
	- Optional triple glazing, $U = W/m^2 \cdot K^{2)}$
	- Optional climatic double panes (single-pane safety glass) $U = W/m^2 \cdot K^{2)}$
	- Optional double panes (single-pane safety glass) $U = W/m^2 \cdot K^{2)}$
	Door with wicket door, $U = W/m^2 \cdot K^{2)}$
	- Optional triple glazing, $U = W/m^2 \cdot K^{2)}$
Construction	- Section, $U = W/m^2 \cdot K$
	Self-supporting
Door sizes	Depth, mm
	Max. width mm, LZ
Space requirements	Max. height mm, RM ³⁾
	From page 53
Material, door leaf	Steel, double-skinned, 42 mm
	Aluminium, standard profile
	Aluminium, profile with thermal break
Surface, door leaf	Galvanized steel, coated RAL 9002
	Galvanized steel, coated RAL 9006
	Galvanized steel, coated RAL to choose
	Anodised aluminium E6/C0 (previously E6/EV1)
	Aluminium coated in RAL to choose
Door leaf reinforcement	From LZ, mm
	Notice regarding surface coating, see page 5, from LZ, mm
Wicket door	
Side door	Matching the door
Glazings	Type A section windows
	Type D section windows
	Type E section windows
	Glazing frame
Seals	All-round on 4 sides
	Intermediate seal between the door sections
ThermoFrame	PVC hard and soft seal
Locking systems	Inside locking
	Outside and inside locking
Anti-lift kit	For doors of up to 5 m height with shaft operator
Security features	Finger trap protection
	Side trap guard
	Spring safety device for manual operation
	Safety catch for doors with shaft operator
Fastening options	Concrete
	Steel
	Brickwork
	Others on request

● = standard
○ = Optional

* With glazing VG, E2 and G2
** Top door section

- 1) With optional double pane (single-pane safety glass)
- 2) For a door surface of 5000 x 5000 mm
- 3) Door height above 7000 mm on request (not with door type ALR F42 Glazing)
- 4) Optionally with ThermoFrame
- 5) Door width up to 5500 mm

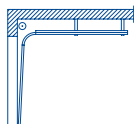

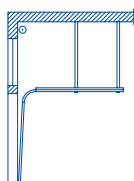
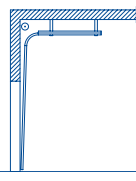
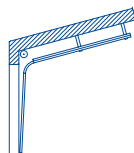
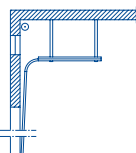
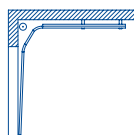
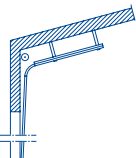
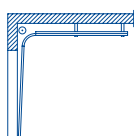
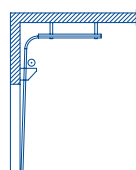
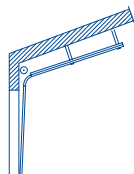
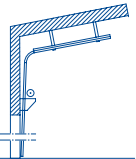
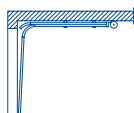
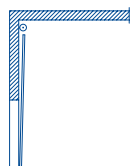
- 6) Class 4 = 1.0 kN/m² or 144 km/h
- 7) Class 3 = 0.7 kN/m² or 120 km/h
- 8) Class 2 = 0.45 kN/m² or 96 km/h
- 9) Class 2 = 12 m³/m²h
- 10) Class 1 = 24 m³/m²h

- 11) Lower class rating may apply for doors with compound glazing
- 12) For doors without glazing frame

Technical data overview

Спецификация							
SPU F42	APU F42	APU F42 Thermo	ALR F42	ALR F42 Thermo	ALR F42 Vitraplan	ALR F42 Vitraplan AT	ALR F42 Glazing
4 ⁶⁾ 11)	4 ⁶⁾	4 ⁶⁾	4 ⁶⁾	4 ⁶⁾	4 ⁶⁾	4 ⁶⁾	4 ⁶⁾
3 ⁷⁾ 11)	3 ⁷⁾	3 ⁷⁾	3 ⁷⁾	3 ⁷⁾	3 ⁷⁾	3 ⁷⁾	3 ⁷⁾
3 ⁷⁾ 11)	3 ⁷⁾	3 ⁷⁾	3 ⁷⁾	3 ⁷⁾	—	—	—
2 ⁸⁾ 11)	2 ⁸⁾	2 ⁸⁾	2 ⁸⁾	2 ⁸⁾	—	—	—
3 (70 Pa)	3 (70 Pa)	3 (70 Pa)	3 (70 Pa)	3 (70 Pa)	3 (70 Pa)	3 (70 Pa)	3 (70 Pa)
2 ⁹⁾	2 ⁹⁾	2 ⁹⁾	2 ⁹⁾	2 ⁹⁾	2 ⁹⁾	2 ⁹⁾	2 ⁹⁾
1 ¹⁰⁾	1 ¹⁰⁾	1 ¹⁰⁾	1 ¹⁰⁾	1 ¹⁰⁾	—	—	—
25 ¹²⁾	23	23	23 (30 ¹⁾)	23 (30 ¹⁾)	23	23	30 ¹⁾
24 ¹²⁾	22	22	22 (29 ¹⁾)	22 (29 ¹⁾)	—	—	—
1,0 (0,94 ⁴⁾)	3,4 (3,3 ⁴⁾)	2,9 (2,8 ⁴⁾)	3,6 (3,6 ⁴⁾)	3,0 (3,0 ⁴⁾)	3,2 (3,2 ⁴⁾)	3,2 (3,2 ⁴⁾)	6,1 (6,1 ⁴⁾)
—	2,4 (2,3 ⁴⁾)	1,9 (1,8 ⁴⁾)	2,6 (2,6 ⁴⁾)	2,0 (2,0 ⁴⁾)	—	2,6 (2,6 ⁴⁾)	—
—	3,0 (2,9 ⁴⁾)	2,5 (2,4 ⁴⁾)	3,2 (3,1 ⁴⁾)	2,6 (2,5 ⁴⁾)	3,0 (2,9 ⁴⁾)	3,0 (2,9 ⁴⁾)	—
—	2,5 (2,4 ⁴⁾)	2,0 (1,9 ⁴⁾)	2,7 (2,6 ⁴⁾)	2,1 (2,0 ⁴⁾)	—	—	2,7 (2,6 ⁴⁾)
—	3,4 (3,3 ⁴⁾)	2,9 (2,8 ⁴⁾)	3,6 (3,6 ⁴⁾)	3,0 (3,0 ⁴⁾)	—	—	3,8 (3,8 ⁴⁾)
1,2 (1,2 ⁴⁾)	3,6 (3,6 ⁴⁾)	3,1 (3,1 ⁴⁾)	3,8 (3,8 ⁴⁾)	3,2 (3,2 ⁴⁾)	—	—	—
—	3,2 (3,1 ⁴⁾)	2,7 (2,6 ⁴⁾)	3,4 (3,4 ⁴⁾)	2,8 (2,8 ⁴⁾)	—	—	—
0,5	—	—	—	—	—	—	—
●	●	●	●	●	●	●	●
42	42	42	42	42	42	42	42
8000	8000	7000	8000	7000	6000	6000	5500
7500	7500	7500	7500	7500	7500	7500	4000
●	●	●	—	—	—	—	—
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Overview of track applications

N  Normal track application A WA 500 FU is required for track application N3 with operator!	LD  As with track application L with inclination (maximum 30°) Door height RM ≤ 5000 mm
NA  As with track application N, with high-mounted torsion spring shaft Door height RM ≤ 5000 mm	H  High-lift track application
ND  As with track application N with inclination (maximum 46°) A WA 500 FU is required for track application ND3 with operator at an inclination of up to 6°!	HA  As with track application H, with high-mounted torsion spring shaft Door height RM ≤ 3500 mm
NS  As with track application N with double radius Door height RM ≤ 5000 mm RC 2 version only possible with angle C = 40° and 45°.	HD  As with track application H with inclination (maximum 30°)
NH  As with track application N, with minimum high-lift Double radius 361 mm Door leaf speed up to 500 mm/s possible. Door height > 5000 mm A WA 500 FU is required for track application NH3 with operator!	HU  As with track application H, with low-mounted torsion spring shaft
GD  As with track application NH with inclination (maximum 28°) Double radius 361 mm Door height RM ≤ 5000 mm	RD  As with track application HU, with inclination Door height RM ≤ 5000 mm
L  Low headroom track application Door height RM ≤ 5000 mm	V  Vertical track application (Additional hand pulley required for manually operated doors!)

Overview of track applications

VA  As with track application V, with high-mounted torsion spring shaft (Additional hand pulley required for manually operated doors!) Door height RM ≤ 3500 mm	VU  As with track application V, with low-mounted torsion spring shaft (Additional hand pulley required for manually operated doors!)
Note: An in-factory technical inspection is required for the following track applications!	
NK  As with track application NS, but the degree values of both radii are adapted to the situation on-site Door height RM ≤ 5000 mm RC 2 version only possible with angle C = 40° and 45°.	GS  As with track application NH with double radius Door height RM ≤ 5000 mm
GK  As with track application NH with double radius and inclination Double radius 361 mm Door height RM ≤ 5000 mm	HS  As with track application H with double radius
HK  As with track application H, with double radius and inclination	VS  As with track application V, but in the top sections the tracks are diverted using radii where the ceiling is too low (Additional hand pulley required for manually operated doors!)
WS  As with track application VU, but in the top sections the tracks are diverted using radii where the ceiling is too low (Additional hand pulley required for manually operated doors!) Door height RM ≥ 2250 mm	RS  As with track application HU with double radius Door height RM ≤ 5000 mm
RK  As with track application HU, with double radius and inclination Door height RM ≤ 5000 mm	
Note: The sectional door Parcel is only available with these track applications. Technical factory inspection required!	
HP  High-lift track application With high- and low-mounted torsion spring shaft Double radius 361 mm Door width LZ ≤ 3000 mm Door height RM ≤ 4250 mm Only for sectional door Parcel	VP  Vertical track application With high- and low-mounted torsion spring shaft Door width LZ ≤ 3000 mm Door height RM ≤ 4250 mm Only for sectional door Parcel

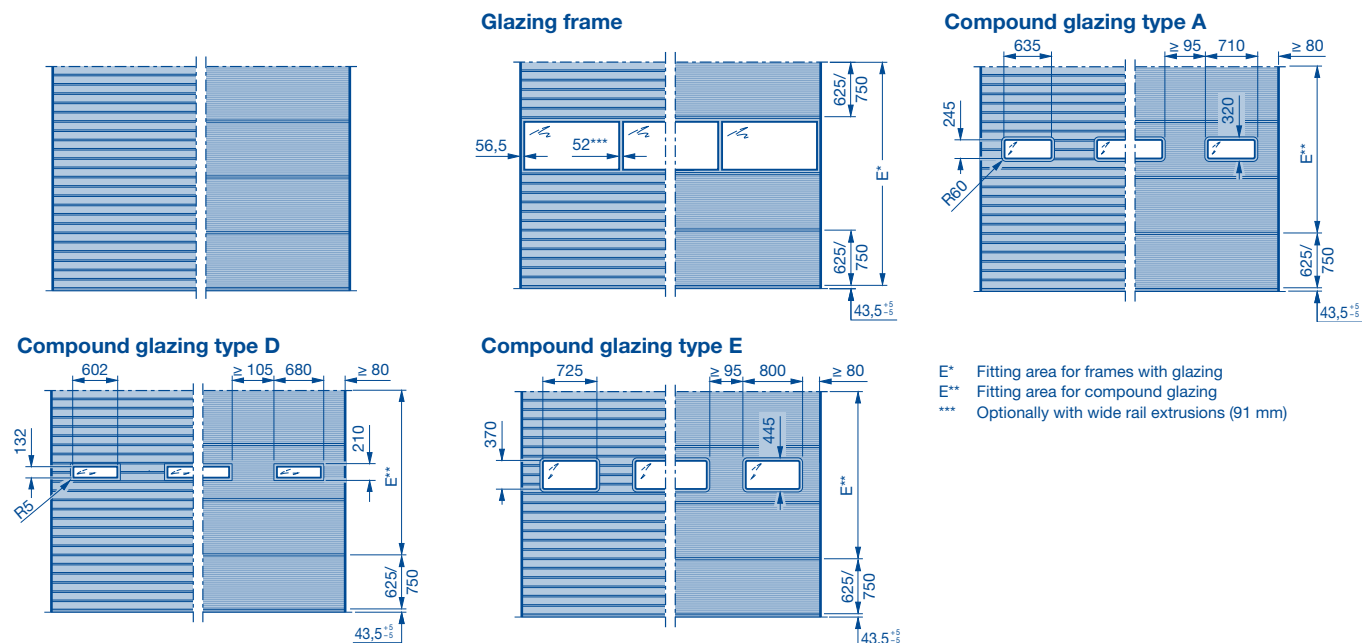
Sectional door SPU F42

Double-skinned steel sectional door

Stucco-textured / Micrograin

Door sections 625 and 750 mm high

External views



Size range

The validity tables with the size range shown are based on the standard door type version (see product description). In case of deviations, the valid size ranges in the product configurator must be taken into account. Any door width in 10 mm increments possible. Intermediate heights using glazing frames or shortened top door section are possible!

RM	SPB 52	LZ	n ₁	TH 625	TH 750
7500				1	10
7375				1	9
7250				2	8
7125				3	7
7000				4	6
6875				5	5
6750				5	4
6625				1	3
6500				2	2
6375				3	1
6250				4	0
6125				5	0
6000				5	0
5875				1	0
5750				2	0
5625				3	0
5500				4	0
5375				5	0
5250				5	0
5125				1	0
5000				2	0
4875				3	0
4750				4	0
4625				5	0
4500				1	0
4375				2	0
4250				3	0
4125				4	0
4000				5	0
3875				1	0
3750				2	0
3625				3	0
3500				4	0
3375				5	0
3250				1	0
3125				2	0
3000				3	0
2875				4	0
2750				5	0
2625				1	0
2500				2	0
2375				3	0
2250				4	0
2125				5	0
2000				1	0
1875				2	0

Notes:

- When using a shaft operator (installation example 5), the door locking is always opposite the operator side.
- For a view of the matching appearance with doors with wicket doors see page 37 – 39.
- Number of glazings, matching view to series 40, see page 40.

Table 1:

Number of compound glazings per door section

Type	Unit(s)	Door width
A, D	1	A: 1200 – 1670 mm D: 1200 – 1630 mm
	2	A: 1680 – 3000 mm D: 1640 – 3000 mm
	3	3010 – 4500 mm
	4	4510 – 5500 mm
	5	5510 – 6000 mm
E	1	1200 – 1850 mm
	2	1860 – 3000 mm
	3	3010 – 4500 mm
	4	4510 – 5500 mm
	5	5510 – 6000 mm

On request

Versions with glazing frame A3, B3, M3, S3, U3, LB, P on request!

n₁ No. of door sections

RM Grid height

LZ Clear frame dimensions (from 1200)

SPB Rail width

TH Door section height

**** Top door section 500 mm

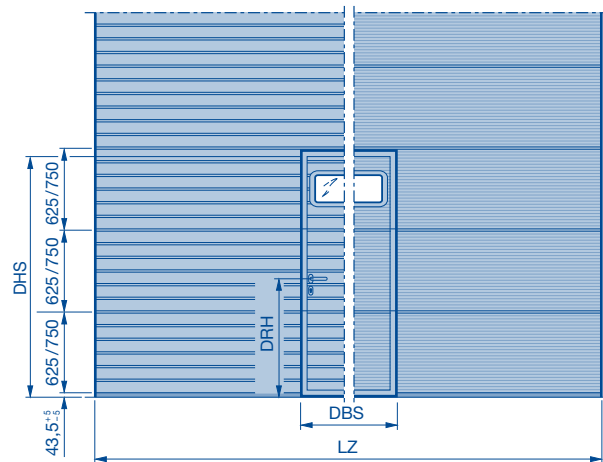
Sectional door SPU F42

with wicket door and trip-free threshold

Double-skinned steel sectional door

Stucco-textured / Micrograin, door sections 625 and 750 mm high,

External views



** Note on fitting compound glazings:

For door widths from 1750–3000 mm, a compound glazing can **only** be fitted in the wicket door. No compound glazing can be fitted to the left or right of the wicket door. Compound glazing type E must not be used in the wicket door area.

Wicket door clear passage width (DBS) = 940 mm*

* For a door width of 1750 - 1840 mm, the clear passage width is 833 mm.

For door widths below 1750 mm, the clear passage width (DBS) depends on the door width and is much smaller than standard dimensions.

Lever heights (DRH)

Bottom door section 625 = 960.5

Bottom door section 750 = 1085.5

Size range

The validity tables with the size range shown are based on the standard door type version (see product description). In case of deviations, the valid size ranges in the product configurator must be taken into account. Any door width in 10 mm increments possible. Intermediate heights using glazing frames or a shortened top door section above the wicket door are possible!

		SH ₁										SH ₂		TH 625		n ₁	TH 750	DHS	
RM	↑													7500	–		10	2205	
														7375	1	+	9	2205	
Range 3														7250	2	+	8	2205	
														7125	3	+	7	2205	
														7000	4	+	6	2205	
														6875	5	+	5	2205	
														6750	–		9	2205	
														6625	1	+	8	2205	
														6500	2	+	7	2205	
														6375	3	+	6	2205	
														6250	4	+	5	2205	
														6125	5	+	4	2205	
Range 2														6000	–		8	2205	
														5875	1	+	7	2205	
														5750	2	+	6	2205	
														5625	3	+	5	2205	
														5500	4	+	4	2205	
														5375	5	+	3	2205	
														5250	–		7	2205	
														5125	1	+	6	2205	
														5000	2	+	5	2205	
														4875	3	+	4	2205	
Range 1														4750	4	+	3	2205	
														4625	5	+	2	2080	
														4500	–		6	2205	
														4375	1	+	5	2205	
														4250	2	+	4	2205	
														4125	3	+	3	2205	
														4000	4	+	2	2080	
														3875	5	+	1	1955	
														3750	–		5	2205	
														3625	1	+	4	2205	
Range 0														3500	2	+	3	2205	
														3375	3	+	2	2080	
														3250	4	+	1	1955	
														3125	5	–	–	1830	
														3000	–		4	2205	
														2875	1	+	3	2205	
														2750	2	+	2	2080	
														2625	3	+	1	1955	
														2500	4	–	–	1830	
														2375	3	+	1***	1830	
Range -1														2250	–		3	2125	
														2125	1	+	2	2000	
														2000	2	+	1	1875	
														1875					
		3										4	5	Number of infills / fields per glazing frame					
		2	3										4	5	Number of compound glazings per door section**				
		(Number of infills / fields – 1) × 2												Number of ventilation grilles, ventilation cross-section 40 cm² per grille					
		1750	2000	2250	2500	2750	3000	3250	3500	3750	4000	4250	4500	4750	5000	5250	5500	5750	6000
		SPB 52																	
		LZ																	

Notes:

- When using a shaft operator (installation example 5), the door locking is always opposite the operator side.
- For a view of the matching appearance with doors without wicket doors see page 37–39.
- Number of glazings, matching view to series 40, see page 40.

	On request
	Versions with glazing frame A3, B3, M3, S3, U3, LB, P on request!
n ₁	No. of door sections
DHS	Clear passage heights of wicket door to grid height
SH ₁	Threshold height (rising from 5 to 10)
SH ₂	Threshold height (approx. 13)
SPB	Rail width
TH	Door section height
RM	Grid height
DBS	Wicket door clear passage width
DRH	Lever height
LZ	Clear frame dimensions (from 1500)
***	Top door section 500 mm

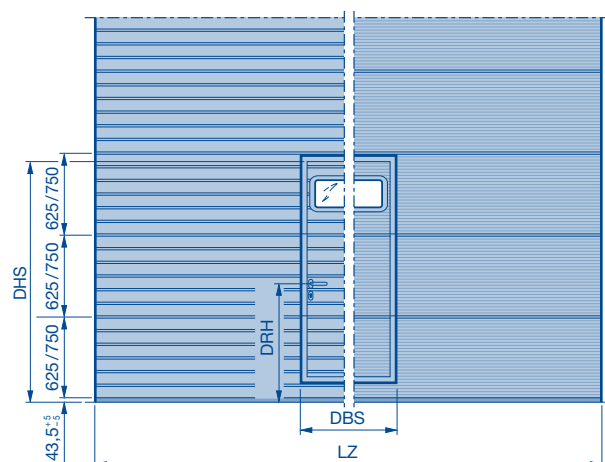
Sectional door SPU F42

with wicket door and threshold rail

Double-skinned steel sectional door

Stucco-textured / Micrograin, door sections 625 and 750 mm high

External views



** Note on fitting compound glazings:

For door widths from 1750–3000 mm, a compound glazing can **only** be fitted in the wicket door.
No compound glazing can be fitted to the left or right of the wicket door. Compound glazing type E must not be used in the wicket door area.

Wicket door clear passage width (DBS) = 940 mm*

* For a door width of 1750–1840 mm, the clear passage width is 833 mm.

For door widths below 1750 mm, the clear passage width (DBS) depends on the door width and is much smaller than standard dimensions.

Lever heights (DRH)

Bottom door section 625 = 960.5

Bottom door section 750 = 1085.5

Size range

The validity tables with the size range shown are based on the standard door type version (see product description). In case of deviations, the valid size ranges in the product configurator must be taken into account. Any door width in 10 mm increments possible. Intermediate heights using glazing frames or a shortened top door section above the wicket door are possible!

		SH ₁				SH ₂	n ₁		DHS		
							TH 625	TH 750			
Range 3	RM	7500					7500	–	10	2205	
		7375					7375	1	+	9	2205
		7250					7250	2	+	8	2205
		7125					7125	3	+	7	2205
		7000					7000	4	+	6	2205
		6875					6875	5	+	5	2205
		6750					6750	–	–	9	2205
		6625					6625	1	+	8	2205
		6500					6500	2	+	7	2205
		6375					6375	3	+	6	2205
Range 2	RM	6250					6250	4	+	5	2205
		6125					6125	5	+	4	2205
		6000					6000	–	–	8	2205
		5875					5875	1	+	7	2205
		5750					5750	2	+	6	2205
		5625					5625	3	+	5	2205
		5500					5500	4	+	4	2205
		5375					5375	5	+	3	2205
		5250					5250	–	–	7	2205
		5125					5125	1	+	6	2205
Range 1	RM	5000					5000	2	+	5	2205
		4875					4875	3	+	4	2205
		4750					4750	4	+	3	2205
		4625					4625	5	+	2	2080
		4500					4500	–	–	6	2205
		4375					4375	1	+	5	2205
		4250					4250	2	+	4	2205
		4125					4125	3	+	3	2205
		4000					4000	4	+	2	2080
		3875					3875	5	+	1	1955
Range 0	RM	3750					3750	–	–	5	2205
		3625					3625	1	+	4	2205
		3500					3500	2	+	3	2205
		3375					3375	3	+	2	2080
		3250					3250	4	+	1	1955
		3125					3125	5	–	–	1830
		3000					3000	–	–	4	2205
		2875					2875	1	+	3	2205
		2750					2750	2	+	2	2080
		2625					2625	3	+	1	1955
Range -1	RM	2500					2500	4	–	–	1830
		2375					2375	3	+	1***	1830
		2250					2250	–	–	3	2205
		2125					2125	1	+	2	2080
		2000					2000	2	+	1	1955
		1875					1875				
						Number of infills / fields per aluminium frame					
						Number of compound glazings per door section**					
						Number of ventilation grilles, ventilation cross-section 40 cm² per grille					

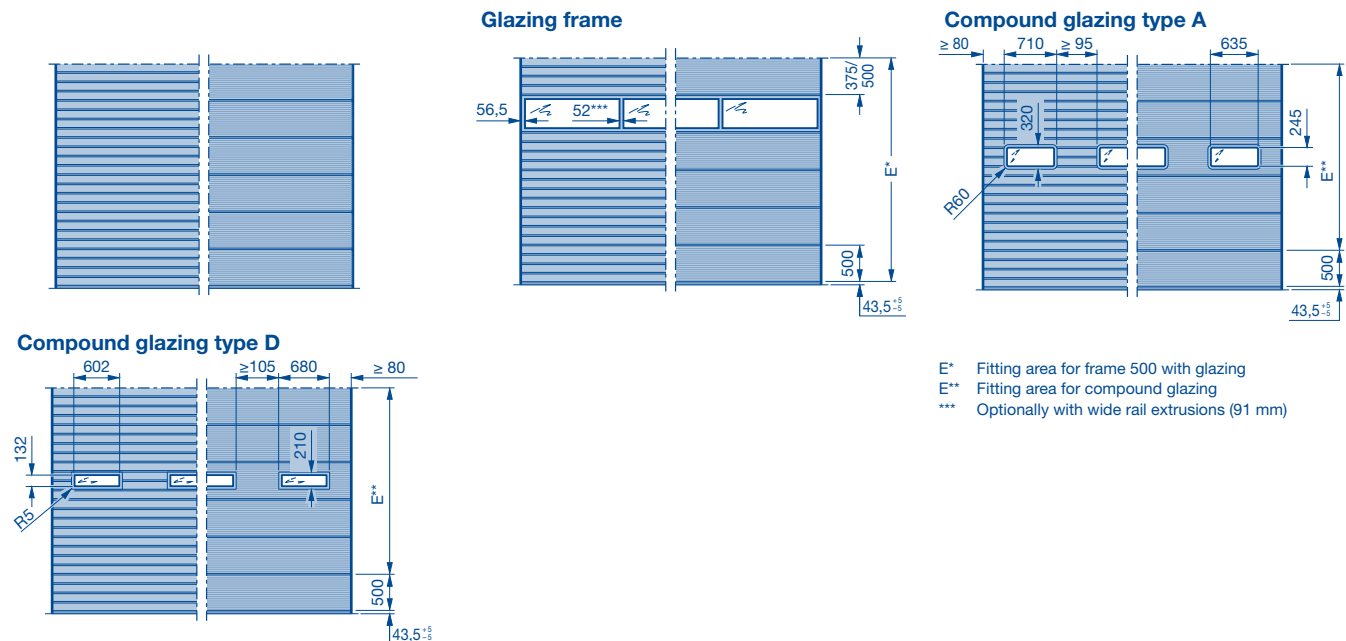
Sectional door SPU F42

Double-skinned steel sectional door

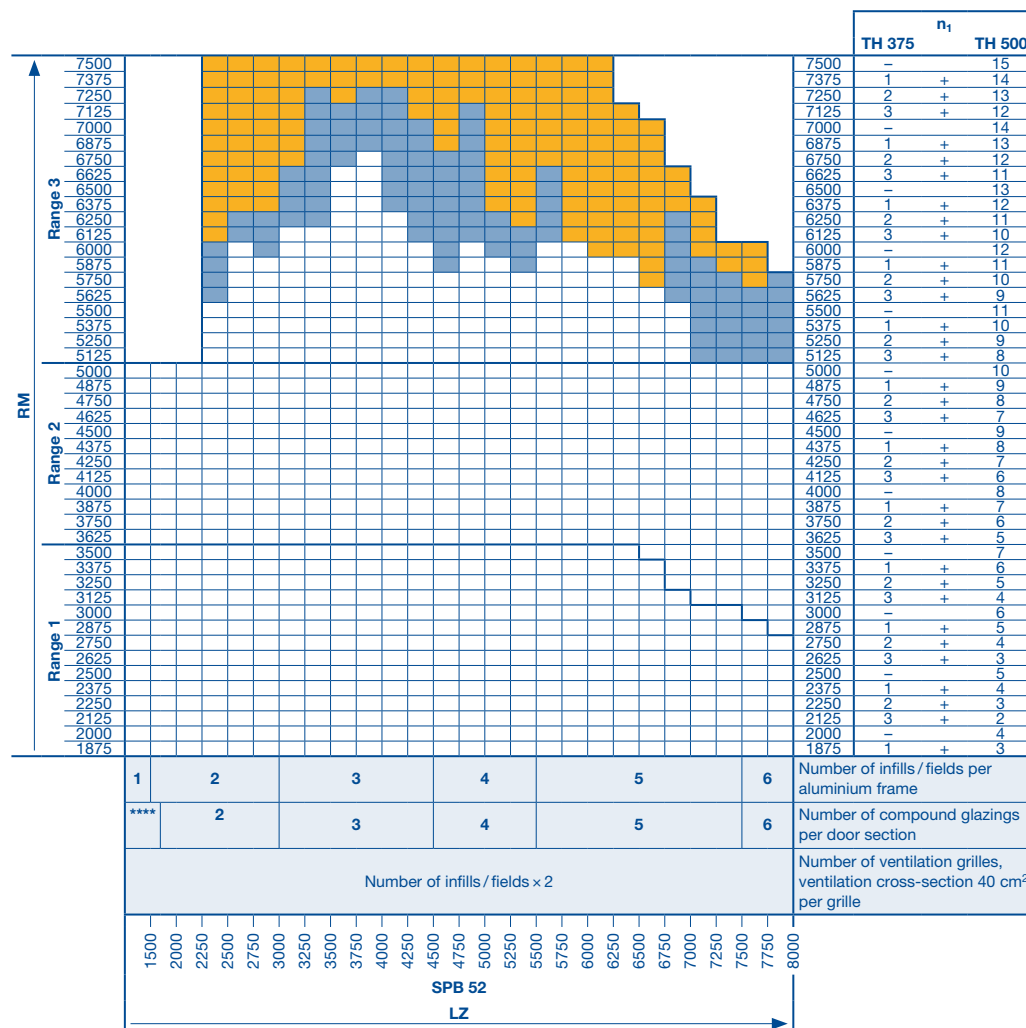
Stucco-textured / Micrograin

Door sections 375 and 500 mm high

External views



Size range



The validity tables with the size range shown are based on the standard door type version (see product description). In case of deviations, the valid size ranges in the product configurator must be taken into account. Any door width in 10 mm increments possible. Intermediate heights using glazing frames or shortened top door section are possible!

Notes:

- Glazing frame as thermo version only up to 7000 mm wide.
- For a view of the matching appearance with doors with wicket doors see page 37 – 39.
- Number of glazings, matching view to series 40, see page 40.

On request

Versions with glazing frame A3, B3, M3, S3, U3, LB, P on request!

Range change

n₁ No. of door sections

RM Grid height

LZ Clear frame dimensions (from 1200)

SPB Rail width

TH Door section height

**** See table 1 on page 10

Stucco-textured / Micrograin, door sections 375 and 500 mm high

Technical drawing of a door assembly showing dimensions and components. The drawing includes a vertical section on the left and a horizontal section on the right. Key dimensions and labels are as follows:

- Vertical Dimensions (Left):**
 - Top section: 500
 - Second section: 500
 - Third section: 500
 - Fourth section: 625
 - Fifth section: 625
 - Bottom section: 43,5 ± 0,5
- Horizontal Dimensions (Bottom):**
 - Left section: 500/625
 - Right section: 500/625
 - Bottom section: 43,5 ± 0,5
- Labels and Components:**
 - DHS:** Door Handle System, indicated by a vertical line on the left.
 - DRH:** Door Release Handle, indicated by a vertical line on the left.
 - DBS:** Door Bottom Seal, indicated by a horizontal line at the bottom.
 - LZ:** Lock Zylinder, indicated by a horizontal line at the bottom.

Bottom door section 625 = 960.5

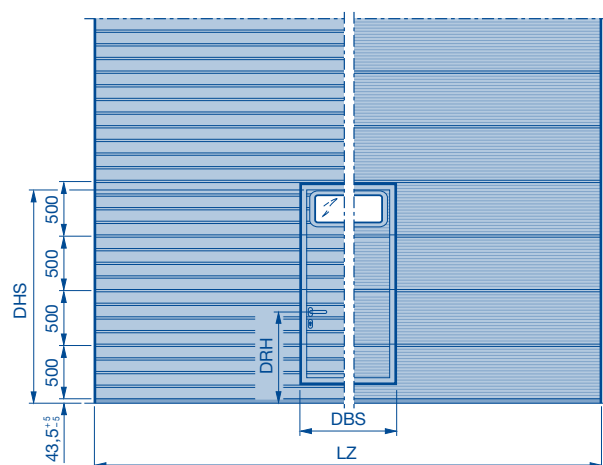
Technical manual: Industrial sectional doors depth 42 mm / series 60 / 06.2023 **HÖRMANN**

Sectional door SPU F42 with wicket door and threshold rail

Double-skinned steel sectional door

Stucco-textured / Micrograin, door sections 375 and 500 mm high

Viewed from outside



** Note on fitting compound glazings:

For door widths from 1750–3000 mm, a compound glazing can **only** be fitted in the wicket door.

No compound glazing can be fitted to the left or right of the wicket door.

Wicket door clear passage width (DBS) = 940 mm*

* For a door width of 1750–1840 mm, the clear passage width is 833 mm.

For door widths below 1750 mm, the clear passage width (DBS) depends on the door width and is much smaller than standard dimensions.

Lever heights (DRH)

Bottom door section 500 = 835.5

Bottom door section 625 = 960.5 (only for SH₂)

Size range

The validity tables with the size range shown are based on the standard door type version (see product description). In case of deviations, the valid size ranges in the product configurator must be taken into account. Any door width in 10 mm increments possible. Intermediate heights using glazing frames or a shortened top door section above the wicket door are possible!

		SH ₁										SH ₂										n ₁		DHS										
																						TH 375	TH 500											
RM	↑	7500																							7500	–	15	1955						
		7375																							7375	1	+	14	1955					
		7250																								7250	2	+	13	1955				
Range 3		7125																								7125	3	+	12	1955				
		7000																								7000	–	14	1955					
		6875																								6875	1	+	13	1955				
		6750																								6750	2	+	12	1955				
		6625																								6625	3	+	11	1955				
		6500																								6500	–	13	1955					
		6375																								6375	1	+	12	1955				
		6250																								6250	2	+	11	1955				
		6125																								6125	3	+	10	1955				
		6000																								6000	–	12	1955					
		5875																								5875	1	+	11	1955				
		5750																								5750	2	+	10	1955				
Range 2		5625																								5625	3	+	9	1955				
		5500																								5500	–	11	1955					
		5375																								5375	1	+	10	1955				
		5250																								5250	2	+	9	1955				
		5125																								5125	3	+	8	1955				
		5000																								5000	–	10	1955					
		4875																								4875	1	+	9	1955				
		4750																								4750	2	+	8	1955				
		4625																								4625	3	+	7	1955				
		4500																								4500	–	9	1955					
		4375																								4375	1	+	8	1955				
		4250																								4250	2	+	7	1955				
Range 1		4125																								4125	3	+	6	1955				
		4000																								4000	–	8	1955					
		3875																								3875	1	+	7	1955				
		3750																								3750	2	+	6	1955				
		3625																								3625	3	+	5	1955				
		3500																								3500	–	7	1955					
		3375																								3375	1	+	6	1955				
		3250																								3250	2	+	5	1955				
		3125																								3125	3	+	4	1955				
		3000																								3000	–	6	1955					
		2875																								2875	1	+	5	1955				
		2750																								2750	2	+	4	1955				
Range 0		2625																								2625	1***	+	4	2080				
		2500																								2500	–	5	1955					
		2375																								2375	1	+	4	1955				
		2250																								2250	2	+	3	1830				
		2125																								2125	1***	+	3	2080				
		2000																								2000	–	4	1955					
			3										4										5										Number of infills / fields per glazing frame	
			2					3					4					5					Number of compound glazings per door section**											
			(Number of infills / fields – 1) × 2																							Number of ventilation grilles, ventilation cross-section 40 cm ² per grille								
		1750	2000	2250	2500	2750	3000	3250	3500	3750	4000	4250	4500	4750	5000	5250	5500	5750	6000	6250	6500	6750	7000											
		SPB 52																																
		LZ																																

Notes:

- From LZ > 5500 mm bottom door section with deviating heights TH = 625 / 750 mm (made of 375 / 500 mm section and 2 × 125 mm aluminium bottom profile).
- For a view of the matching appearance with doors without wicket doors see page 37–39.
- Number of glazings, matching view to series 40, see page 40.
- For versions with real glass infill in the wicket door, the threshold height SH₂ begins at LZ 4510 mm.

On request

Versions with glazing frame A3, B3, M3, S3, U3, LB, P on request!

Range change

Glazings on request

n₁ No. of door sections

DHS Clear passage heights of wicket door to grid height

RM Grid height

LZ Clear frame dimensions (from 1500)

SH₁ Threshold height (207)

SH₂ Threshold height (330), bottom door section with 250 mm aluminium bottom section, glazing from 625 mm

SPB Rail width

TH Door section height

DRH Lever height

DBS Wicket door clear passage width

*** TH = 625 mm

Glazing heights for matching external appearance

SPU F42 Stucco-textured / Micrograin

(Centre of window from FFL)

Door section heights 500, 625 and 750 mm

Glazing heights for matching external appearance of compound glazing type A and D.

RM	Glazing heights (centre of window from FFL)											
	1160	1285	1535	1660	1785	1910	2035	2160	2285	2410	2535	2660
7500		X			X							
7375	X	X		X	X							X
7250	X	X	X	X	X		X		X		X	X
7125	X	X	X	X	X	X	X	X	X	X	X	X
7000		X			X				X			
6875	X	X		X	X			X	X			X
6750	X	X			X		X				X	X
6625	X	X		X	X	X	X			X	X	X
6500		X			X				X			
6375	X	X		X	X			X	X			X
6250	X	X	X	X	X		X	X	X		X	X
6125	X	X	X	X	X	X	X	X	X	X	X	X
6000		X			X							
5875	X	X		X	X							X
5750	X	X	X	X	X		X		X		X	X
5625	X	X	X	X	X	X	X	X	X	X	X	X
5500		X			X				X			
5375	X	X		X	X			X	X			X
5250	X	X			X		X				X	X
5125	X	X		X	X	X	X			X	X	X
5000		X			X				X			
4875	X	X		X	X			X	X			X
4750	X	X	X	X	X		X	X	X		X	X
4625	X	X	X	X	X	X		X	X	X	X	
4500		X			X							
4375	X	X		X	X							X
4250	X	X	X	X	X	X	X		X	X	X	X
4125	X	X	X	X	X	X	X	X	X	X	X	X
4000		X			X				X			
3875	X			X	X			X	X			
3750	X	X			X		X				X	X
3625	X	X		X	X	X	X			X	X	X
3500		X			X				X			
3375	X	X		X	X				X			
3250	X		X	X	X			X	X			
3125			X	X				X				
3000		X			X							
2875	X	X		X	X							X
2750	X	X	X	X	X						X	
2625	X		X	X						X		
2500									X			
2375				X				X				
2250	X	X					X					
2125	X					X						
2000					X							
1875				X								

RM Grid height

Calculating the glazing heights

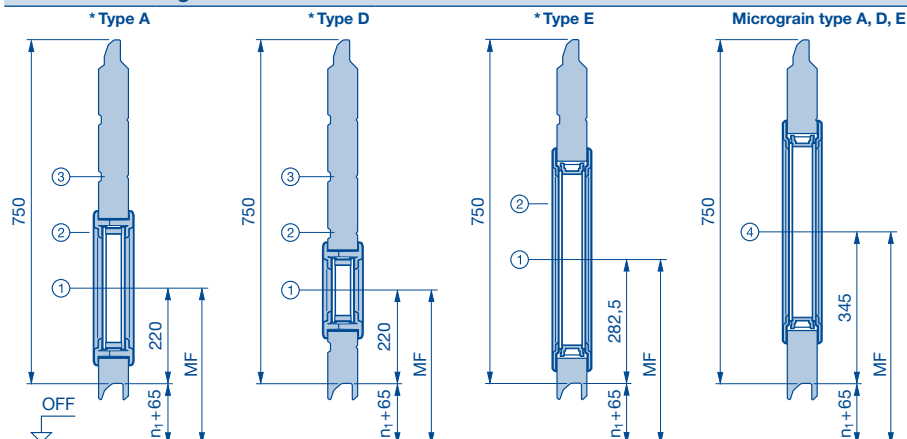
(Centre of window from FFL)

Door section heights 500, 625 and 750 mm

Calculating the glazing heights for compound glazing type A, type D and type E.

See door type for number of door sections and glazing areas! The illustrations correspond to a section depth of 42 mm.

Door section height 750 mm



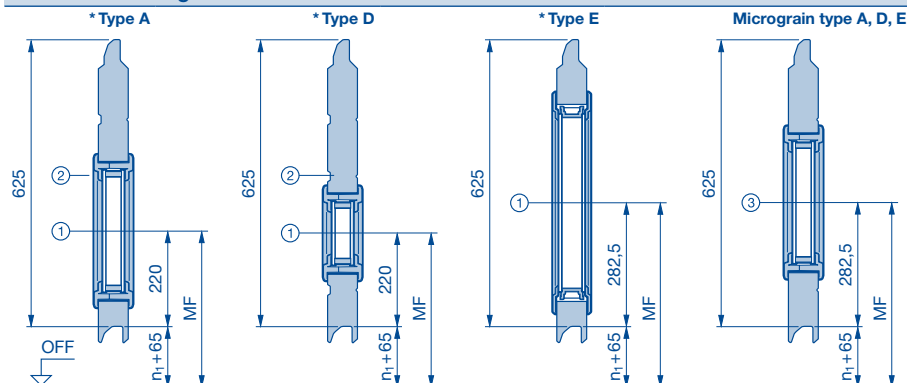
Glazing height type A and D

- ① = $n_1 + 65 + 220$
- ② = $n_1 + 65 + 220 + 125$
- ③ = $n_1 + 65 + 220 + 250$
- ④ = $n_1 + 65 + 345$

Glazing height type E

- ① = $n_1 + 65 + 282,5$
- ② = $n_1 + 65 + 282,5 + 125$
- ④ = $n_1 + 65 + 345$

Door section height 625 mm



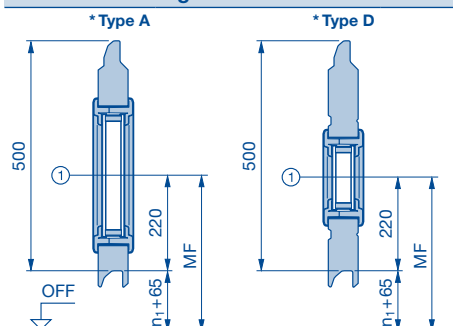
Glazing height type A and D

- ① = $n_1 + 65 + 220$
- ② = $n_1 + 65 + 220 + 125$
- ③ = $n_1 + 65 + 282,5$

Glazing height type E

- ① = $n_1 + 65 + 282,5$
- ③ = $n_1 + 65 + 282,5$

Door section height 500 mm



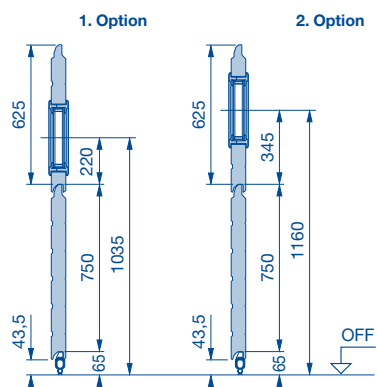
Glazing height type A and D

- ① = $n_1 + 65 + 220$

Glazing height type E

Not possible!

Calculation example



Given:

- Door type SPU F42; grid height (RM) = 3250 mm; glazing type A; position see below
- Door section 625 mm = 4 ×
- Door section 750 mm = 1 ×

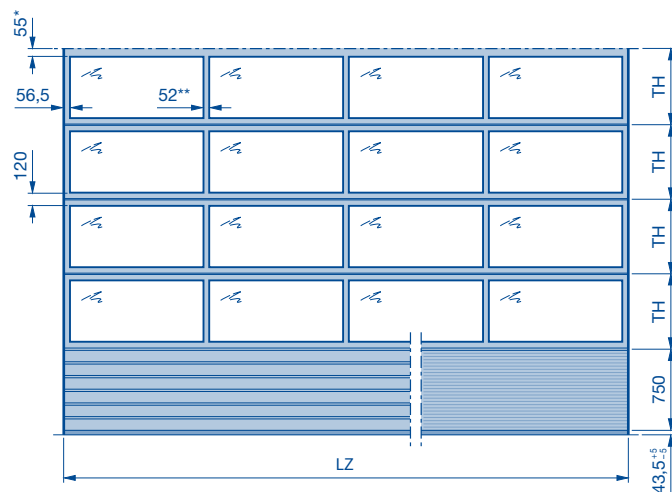
Option	Door section / position	Glazing height
1	in 2nd door section 625 mm at position 1	$750 + 65 + 220 = 1035$ mm from FFL
2	in 2nd door section 625 mm at position 2	$750 + 65 + 220 + 125 = 1160$ mm from FFL
3	in 3rd door section 625 mm at position 1	$750 + 625 + 65 + 220 = 1660$ mm from FFL
4	in 3rd door section 625 mm at position 2	$750 + 625 + 65 + 220 + 125 = 1785$ mm from FFL
etc.		

- * Stucco / Micrograin
- MF Centre of window from FFL
- n_1 No. of door sections
- OFF Finished floor level

Sectional door APU F42

Glazed aluminium sectional door with steel bottom section

Viewed from outside



$$TH = \frac{\text{Door height} - \text{bottom section height} - 35}{\text{Number of glazing frames}}$$

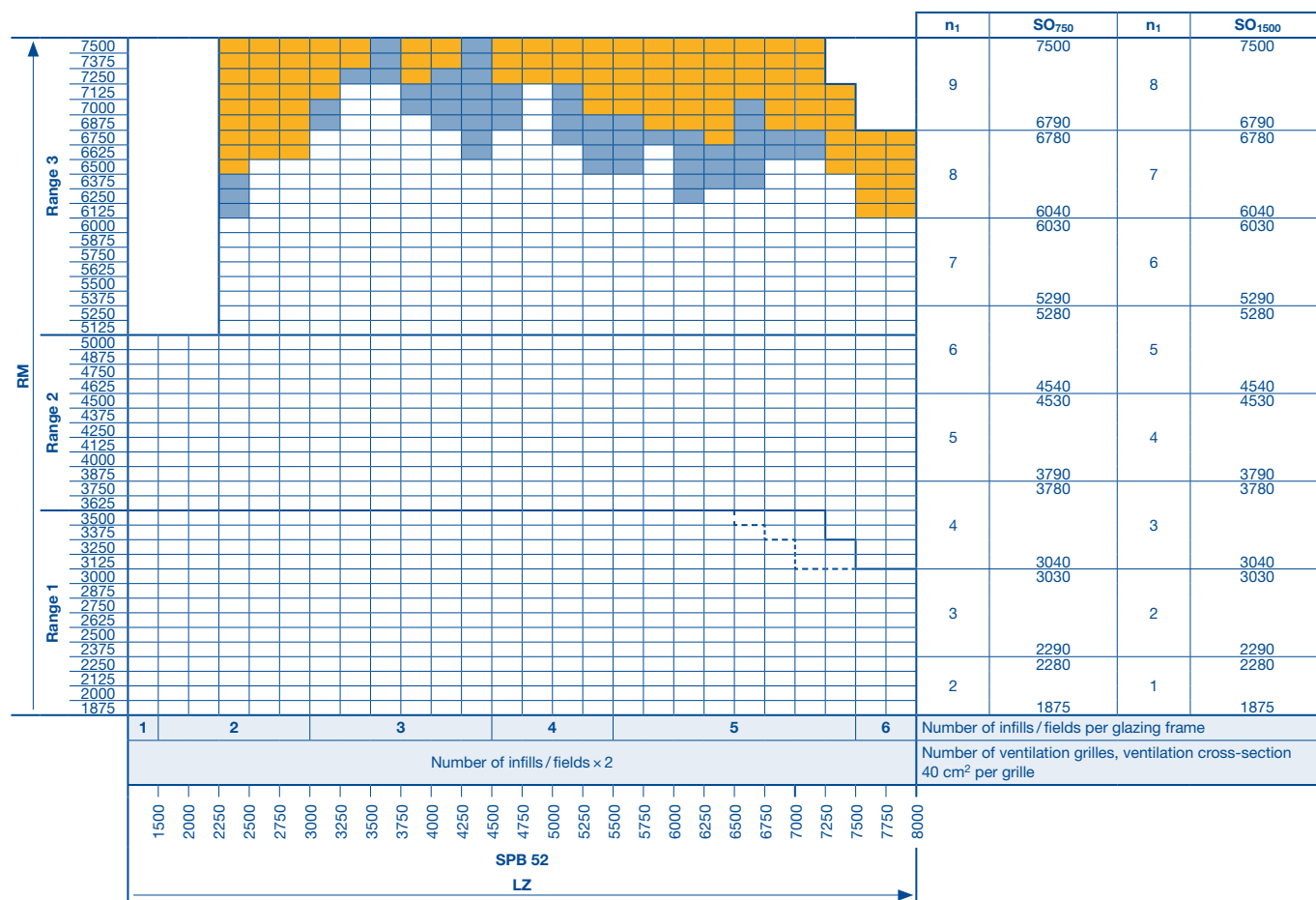
- * On request 115 mm in order to match the appearance of a sectional door with wicket door with trip-free threshold with the same door height.
- ** Optionally with wide rail extrusions (91 mm)

Note:

- When using a shaft operator (installation example 5), the door locking is always opposite the operator side.
- For a view of the matching appearance with doors with wicket doors see page 37 – 39.
- Number of glazings, matching view to series 40, see page 40.

Size range

The validity tables with the size range shown are based on the standard door type version (see product description). In case of deviations, the valid size ranges in the product configurator must be taken into account. Any door width in 10 mm increments possible.



- On request
- Versions with glazing A3, B3, M3, S3, U3, LB, P, XU on request
- Range change
- Range change with glazing A3, B3, M3, S3, U3, LB, P, XU

- SO750 Bottom section height 750 mm (standard)
- SO1500 Bottom section height 1500 mm
- RM Grid height
- LZ Clear frame dimensions (from 1200)
- SPB Rail width
- n1 Number of glazing frames
- TH Door section height

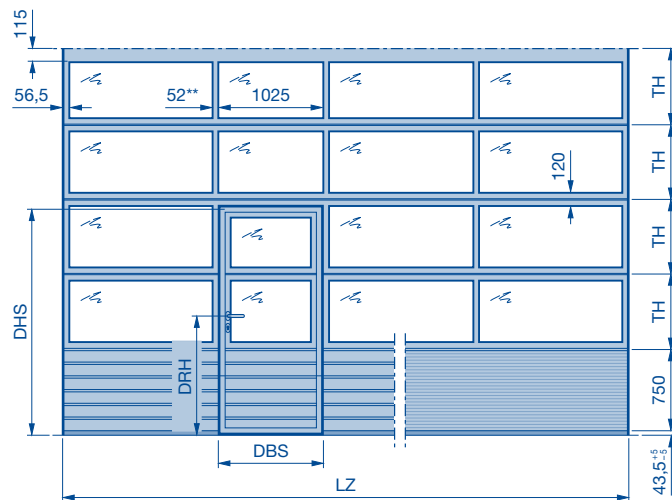
Sectional door APU F42

with wicket door and trip-free threshold

Glazed aluminium sectional door with steel bottom section

Bottom section height 750

Viewed from outside



Lever height on request

Wicket door clear passage width (DBS) = 940 mm***

Clear passage height of wicket door (DHS) = $Sn_1 \times TH$ + (bottom section height – 45*)

Sn_1 Number of frames in the wicket door
Attention: If there is no frame above the wicket door, then – 90 instead of – 45.
Optionally with wide rail extrusions (91 mm)
For a door width of 1750 – 1840 mm, the clear passage width is 833 mm.
For door widths below 1750 mm, the clear passage width (DBS) depends on the door width and is much smaller than standard dimensions.

Note:

- When using a shaft operator (installation example 5), the door locking is always opposite the operator side.
- For a view of the matching appearance with doors without wicket doors see page 37 – 39.
- Number of glazings, matching view to series 40, see page 40.

Size range

The validity tables with the size range shown are based on the standard door type version (see product description). In case of deviations, the valid size ranges in the product configurator must be taken into account. Any door width in 10 mm increments possible.

		SH ₁										SH ₂										n ₁	Height	RM	DHS	Sn ₁	Height									
RM	Range 3	7500																					9	7500	7500	2197	2									
		7375																						7375	7375	2169										
		7250																						7250	7250	2142										
		7125																						7125	7125	2114										
		7000																						7000	7000	2086										
		6875																					6875	6875	2058	8	2									
		6750																					6780	6750	2196											
		6625																					6625	6625	2165											
		6500																					6500	6500	2134											
		6375																					6375	6375	2103											
	6250																					6250	6250	2071	7	2										
	6125																					6040	6125	2040												
	6000																					6030	6000	2195												
	5875																					5875	5875	2159												
	5750																					5750	5750	2124												
	5625																					5625	5625	2088	6	2										
	5500																					5500	5500	2052												
	5375																					5290	5375	2016												
	5250																					5280	5250	1993												
	5125																					5125	5125	1952												
5000																					5000	5000	1910	5	2											
4875																					4875	4875	1868													
4750																					4750	4750	1827													
4625																					4540	4625	1985													
4500																					4530	4500	1941													
4375																					4375	4375	1914	4	2											
4250																					4250	4250	1891													
4125																					4125	4125	1875													
4000																					4000	4000	1852													
3875																					3790	3875	1838													
3750																					3780	3750	1818	3	2											
3625																					3625	3625	1798													
3500																					3500	3500	1778													
3375																					3375	3375	1758													
3250																					3250	3250	1738													
3125																					3040	3125	1718	2	3	2430										
3000																					3030	3000	1698													
2875																					2875	2875	1678													
2750																					2750	2750	1658													
2625																					2625	2625	1638													
2500																					2500	2500	1618	2	2	2420										
2375																					2290	2375	1598													
2250																					2280	2250	1578													
2125																					2125	2125	1558													
2000																					2000	2000	1538													
		3										4										5										Number of infills / fields per glazing frame				
		(Number of infills / fields - 1) × 2																														Number of ventilation grilles, ventilation cross-section 40 cm ² per grille				
		1750	2000	2250	2500	2750	3000	3250	3500	3750	4000	4250	4500	4750	5000	5250	5500	5750	6000	6250	6500	6750	7000													
		SPB 52																																		
		LZ																																		

Note:

For versions with real glass infill in the wicket door, the threshold height **SH₂** begins at LZ 4510 mm.

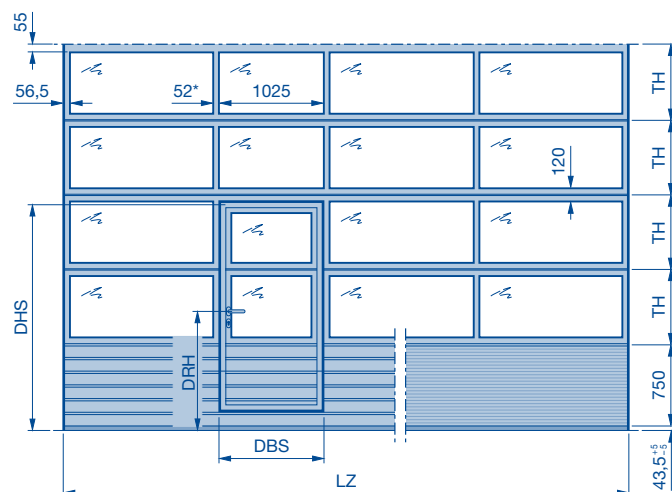
Sectional door APU F42

with wicket door and threshold rail

Glazed aluminium sectional door with steel bottom section

Bottom section height 750

Viewed from outside



Lever height on request

Wicket door clear passage width (DBS) = 940 mm**

Wicket door passage height (DHS) = $S_{n1} \times TH$ + (bottom section height - 45)

S_{n1} Number of frames in the wicket door
 * Optionally with wide rail extrusions (91 mm)
 ** For a door width of 1750 - 1840 mm, the clear passage width is 833 mm.
 For door widths below 1750 mm, the clear passage width (DBS) depends on the door width and is much smaller than standard dimensions.

Note:

- When using a shaft operator (installation example 5), the door locking is always opposite the operator side.
- For a view of the matching appearance with doors without wicket doors see page 37 - 39.
- Number of glazings, matching view to series 40, see page 40.

Size range

The validity tables with the size range shown are based on the standard door type version (see product description). In case of deviations, the valid size ranges in the product configurator must be taken into account. Any door width in 10 mm increments possible.

		SH ₁										SH ₂										n ₁	Height	RM	DHS	S _{n1}	Height														
Range 3	7500																					9	7500	7500	2197	2															
	7375																						7375	7375	2169																
	7250																						7250	7250	2142																
	7125																					8	7125	7125	2114	2															
	7000																						7000	7000	2086																
	6875																						6875	6875	2058																
	6750																					7	6780	6750	2196	2															
	6625																						6625	6625	2165																
	6500																						6500	6500	2134																
	6375																					6	6375	6375	2103	2															
	6250																						6250	6250	2071																
	6125																						6125	6125	2040																
	6000																					5	6030	6000	2195	2															
	5875																						5875	5875	2159																
	5750																						5750	5750	2124																
	5625																					4	5625	5625	2088	2															
	5500																						5500	5500	2052																
	5375																						5375	5375	2016																
	5250																					3	5280	5250	2193	2															
	5125																						5125	5125	2152																
	5000																						5000	5000	2110																
	4875																					2	4875	4875	2068	2															
	4750																						4750	4750	2027																
	4625																						4625	4625	1985																
	4500																					1	4540	4500	2191	2															
	4375																						4375	4375	2141																
	4250																						4250	4250	2091																
	4125																					0	4125	4125	2041	2															
	4000																						4000	4000	1991																
	3875																						3875	3875	1941																
	3750																					-1	3780	3750	2188	2															
	3625																						3625	3625	2125																
	3500																						3500	3500	2063																
	3375																					-2	3375	3375	2000	2															
	3250																						3250	3250	1938																
	3125																						3125	3125	1875																
	3000																					-3	3040	3000	2182	2															
	2875																						2875	2875	2096																
	2750																						2750	2750	2015																
	2625																					-4	2625	2625	1932	2															
	2500																						2500	2500	1848																
	2375																						2375	2375	2295																
	2250																					-5	2290	2250	2170	3	2430														
	2125																						2125	2125	2045																
	2000																						2000	2000	1920																
		3										4										5										Number of infills/fields per glazing frame									
		(Number of infills/fields - 1) × 2																														Number of ventilation grilles, ventilation cross-section 40 cm ² per grille									
		1750										2000										2250										2500									
		2750										3000										3250										3500									
		3750										4000										4250										4500									
		4750										5000										5250										5500									
		5750										6000										6250										6500									
		6750										7000										7250										7500									
		SPB 52										LZ																													

Note:
For versions with real glass infill in the wicket door, the threshold height SH₂ begins at LZ 4510 mm.

Note:

For versions with real glass infill in the wicket door, the threshold height SH₂ begins at LZ 4510 mm.

On request	DHS	Wicket door clear passage height	SH ₁	Threshold height (207)
Versions with glazing A3, B3, M3, S3, U3, LB, P, XU on request	DBS	Wicket door clear passage width	SH ₂	Threshold height (330)
Range change	DRH	Lever height	n ₁	Number of glazing frames
Range change with glazing A3, B3, M3, S3, U3, LB, P, XU	LZ	Clear frame dimensions (from 1500)	S _{n1}	Number of glazing frames in the wicket door
	RM	Grid height	TH	Door section height
	SPB	Rail width		

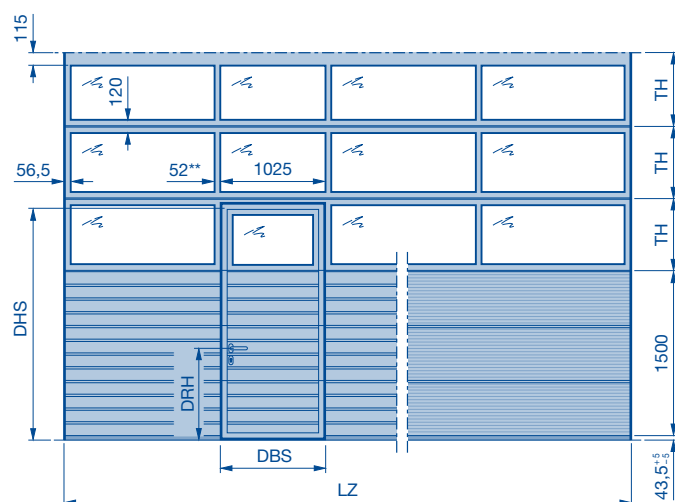
Sectional door APU F42

with wicket door and trip-free threshold

Glazed aluminium sectional door with steel bottom section

Bottom section height 1500

Viewed from outside



Lever height (DRH):

$LZ \leq 6000 = 1085,5$

$LZ > 6000 = 835,5$

Wicket door clear passage width (DBS) = 940 mm***

Clear passage height of wicket door (DHS) = $Sn_1 \times TH + (\text{bottom section height} - 45^*)$

Sn_1 Number of frames in the wicket door

* Attention: If there is no frame above the wicket door, then - 90 instead of - 45.

** Optionally with wide rail extrusions (91 mm)

*** For a door width of 1750 - 1840 mm, the clear passage width is 833 mm.

For door widths below 1750 mm, the clear passage width (DBS) depends on the door width and is much smaller than standard dimensions.

Note:

- When using a shaft operator (installation example 5), the door locking is always opposite the operator side.
- For a view of the matching appearance with doors without wicket doors see page 37 - 39.
- Number of glazings, matching view to series 40, see page 40.

Size range

The validity tables with the size range shown are based on the standard door type version (see product description). In case of deviations, the valid size ranges in the product configurator must be taken into account. Any door width in 10 mm increments possible.

		SH ₁										SH ₂					n ₁	Height	RM	DHS	Sn ₁																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
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Note:

For versions with real glass infill in the wicket door, the threshold height SH_2 begins at LZ 4510 mm.

- On request
- Versions with glazing A3, B3, M3, S3, U3, LB, P, XU on request
- Range change
- Range change with glazing A3, B3, M3, S3, U3, LB, P, XU

- DHS Wicket door clear passage height
- DBS Wicket door clear passage width
- LZ Clear frame dimensions (from 1500)
- RM Grid height
- SPB Rail width
- SH_1 Threshold height (rising from 5 to 10)
- SH_2 Threshold height (approx. 13)

- n_1 Number of glazing frames
- Sn_1 Number of glazing frames in the wicket door
- TH Door section height

Bottom section height 1500

- When using a shaft operator (installation example 5), the door locking is always opposite the operator side.
- From LZ > 5500 mm, the bottom door section consists of a 375/500 mm section and 2 × 125 mm aluminium bottom profile.
- For a view of the matching appearance with doors without wicket doors see page 37 – 39.
- Number of glazings, matching view to series 40, see page 40.

SH₁	Threshold height (207)
SH₂	Threshold height (330)
n₁	Number of glazing frames
Sn₁	Number of glazing frames in the wicket door
TH	Door section height

Glazed aluminium sectional door with thermal break, with steel bottom section

[illegible]

- * On request 115 mm in order to match the appearance of a sectional door with wicket door with trip-free threshold with the same door height.
- ** Optionally with wide rail extrusions (91 mm)

- When using a shaft operator (installation example 5), the door locking is always opposite the operator side.
- For a view of the matching appearance with doors with wicket doors see page 37–39.
- Number of glazings, matching view to series 40, see page 40.

[illegible]

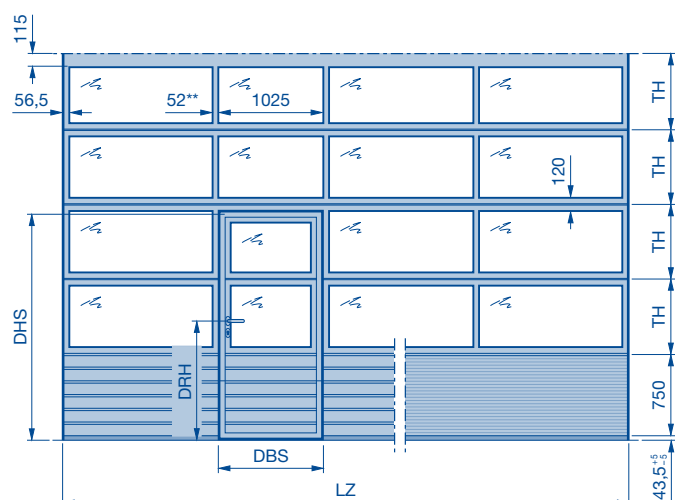
SO ₇₅₀	Bottom section height 750 mm (standard)
SO ₁₅₀₀	Bottom section height 1500 mm
RM	Grid height
LZ	Clear frame dimensions (from 1200)
SPB	Rail width
n ₁	Number of glazing frames
TH	Door section height

Sectional door APU F42 Thermo with wicket door and trip-free threshold

Glazed aluminium sectional door with thermal break, with steel bottom section

Bottom section height 750

Viewed from outside



Lever height on request

Wicket door clear passage width (DBS) = 940 mm***

Clear passage height of wicket door (DHS) = $S_{n1} \times TH$ + (bottom section height – 45*)

S_{n1} Number of frames in the wicket door
Attention: If there is no frame above the wicket door, then – 90 instead of – 45.
Optionally with wide rail extrusions (91 mm)
For a door width of 1750 – 1840 mm, the clear passage width is 833 mm.
For door widths below 1750 mm, the clear passage width (DBS) depends on the door width and is much smaller than standard dimensions.

Note:

- When using a shaft operator (installation example 5), the door locking is always opposite the operator side.
- For a view of the matching appearance with doors without wicket doors see page 37 – 39.
- Number of glazings, matching view to series 40, see page 40.

Size range

The validity tables with the size range shown are based on the standard door type version (see product description). In case of deviations, the valid size ranges in the product configurator must be taken into account. Any door width in 10 mm increments possible.

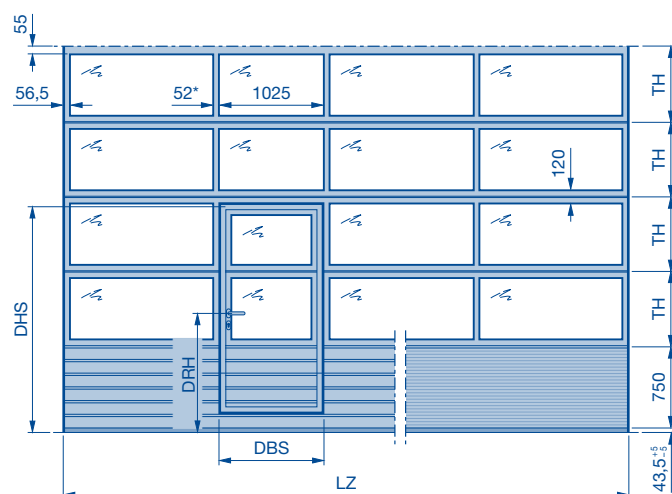
		SH ₁					SH ₂					n ₁	Height	RM	DHS	S _{n1}	Height																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
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		(Number of infills / fields - 1) × 2															Number of ventilation grilles, ventilation cross-section 40 cm ² per grille																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
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Sectional door APU F42 Thermo with wicket door and threshold rail

Glazed aluminium sectional door with thermal break, with steel bottom section

Bottom section height 750

Viewed from outside



Lever height on request

Wicket door clear passage width (DBS) = 940 mm**

Wicket door passage height (DHS) = $S_{n1} \times TH$ + (bottom section height - 45)

S_{n1} Number of frames in the wicket door

* Optionally with wide rail extrusions (91 mm)

** For a door width of 1750 - 1840 mm, the clear passage width is 833 mm.

For door widths below 1750 mm, the clear passage width (DBS) depends on the door width and is much smaller than standard dimensions.

Note:

- When using a shaft operator (installation example 5), the door locking is always opposite the operator side.
- For a view of the matching appearance with doors without wicket doors see page 37 - 39.
- Number of glazings, matching view to series 40, see page 40.

Size range

The validity tables with the size range shown are based on the standard door type version (see product description). In case of deviations, the valid size ranges in the product configurator must be taken into account. Any door width in 10 mm increments possible.

		SH ₁										SH ₂										n ₁	Height	RM	DHS	S _{n1}	Height																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
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Note:

For versions with real glass infill in the wicket door, the threshold height **SH₂** begins at LZ 4510 mm.

On request	DHS	Wicket door clear passage height
Versions with glazing A3, B3, M3, S3, U3, LB, P, XU on request	DBS	Wicket door clear passage width
Range change	DRH	Lever height
Range change with glazing A3, B3, M3, S3, U3, LB, P, XU	LZ	Clear frame dimensions (from 1500)
	RM	Grid height
	SPB	Rail width

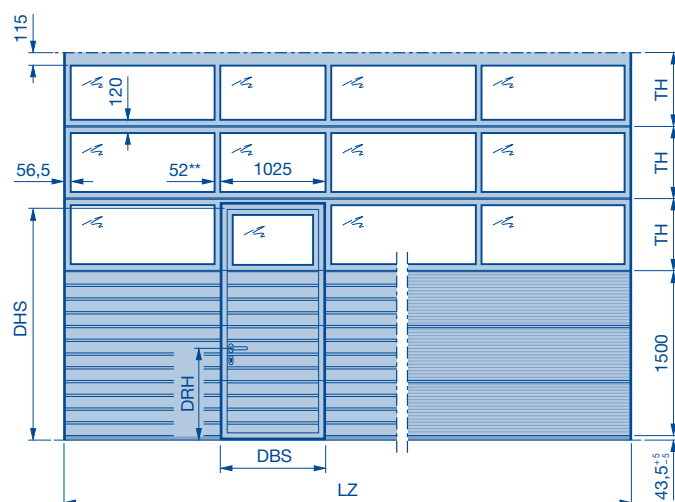
SH ₁	Threshold height (207)
SH ₂	Threshold height (330)
n ₁	Number of glazing frames
S _{n1}	Number of glazing frames in the wicket door
TH	Door section height

Sectional door APU F42 Thermo with wicket door and trip-free threshold

Glazed aluminium sectional door with thermal break, with steel bottom section

Bottom section height 1500

Viewed from outside



Lever height (DRH):

$LZ \leq 6000 = 1085,5$

$LZ > 6000 = 835,5$

Wicket door clear passage width (DBS) = 940 mm***

Clear passage height of wicket door (DHS) = $Sn_1 \times TH + (\text{bottom section height} - 45^*)$

Sn₁ Number of frames in the wicket door

* Attention: If there is no frame above the wicket door, then - 90 instead of - 45.

** Optionally with wide rail extrusions (91 mm)

*** For a door width of 1750 - 1840 mm, the clear passage width is 833 mm.

For door widths below 1750 mm, the clear passage width (DBS) depends on the door width and is much smaller than standard dimensions.

Note:

- When using a shaft operator (installation example 5), the door locking is always opposite the operator side.
- For a view of the matching appearance with doors without wicket doors see page 37 - 39.
- Number of glazings, matching view to series 40, see page 40.

Size range

The validity tables with the size range shown are based on the standard door type version (see product description). In case of deviations, the valid size ranges in the product configurator must be taken into account. Any door width in 10 mm increments possible.

		SH ₁										SH ₂										n ₁	Height	RM	DHS	Sn ₁																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
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Note:

For versions with real glass infill in the wicket door, the threshold height SH₂ begins at LZ 4510 mm.

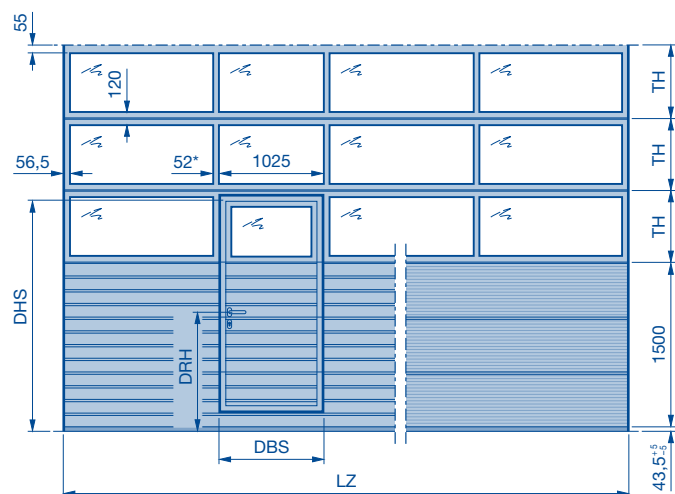
- On request
- Versions with glazing A3, B3, M3, S3, U3, LB, P, XU on request
- Range change
- Range change with glazing A3, B3, M3, S3, U3, LB, P, XU

- DHS Wicket door clear passage height
- DBS Wicket door clear passage width
- LZ Clear frame dimensions (from 1500)
- RM Grid height
- SPB Rail width
- SH₁ Threshold height (rising from 5 to 10)
- SH₂ Threshold height (approx. 13)

- n₁ Number of glazing frames
- Sn₁ Number of glazing frames in the wicket door
- TH Door section height

Bottom section height 1500

Viewed from outside



- When using a shaft operator (installation example 5), the door locking is always opposite the operator side.
- From LZ > 5500 mm, the bottom door section consists of a 375/500 mm section and 2 x 125 mm aluminium bottom profile.
- For a view of the matching appearance with doors without wicket doors see page 37–39.
- Number of glazings, matching view to series 40, see page 40.

Size range

The validity tables with the size range shown are based on the standard door type version (see product description). In case of deviations, the valid size ranges in the product configurator must be taken into account. Any door width in 10 mm increments possible.

RM	RM	SH ₁																SH ₂								n ₁	Height	RM	DHS	Sn ₁								
Range 3	7500																									8	7500	7500	2201	1								
	7375																										7375	2185										
	7250																										7250	2169										
	7125																										7125	2154										
	7000																									7000	2138	7										
	6875																									6875	2123											
	6750																									6750	2200											
	6625																									6625	2182											
	6500																									6500	2164	6										
	6375																									6375	2146											
	6250																									6250	2129											
	6125																									6125	2111											
	6000																									6000	2199	5										
	5875																									5875	2178											
	5750																									5750	2158											
	5625																									5625	2137											
5500																									5500	2116	4											
5375																									5375	2095												
5250																									5250	2198												
5125																									5125	2173												
Range 2	5000																									3	5000	2148	1									
	4875																										4875	2123										
	4750																										4750	2098										
	4625																										4625	2073										
	4500																									4500	2196	2										
	4375																									4375	2165											
	4250																									4250	2134											
	4125																									4125	2103											
	4000																									4000	2071	1										
	3875																									3875	2040											
	3750																									3750	2193											
	3625																									3625	2152											
	Range 1	3500																									1	3500	2110	1								
		3375																										3375	2068									
		3250																										3250	2027									
		3125																										3125	1985									
3000																										3000	2188	2										
2875																										2875	2125											
2750																										2750	2063											
2625																										2625	2000											
2500																										2500	1938	1										
2375																										2375	1875											
2250																										2250	2170											
2125																										2125	2045											
2000																										2000	1920											
		3																4								5								Number of infills / fields per glazing frame				
		(Number of infills / fields - 1) × 2																																Number of ventilation grilles, ventilation cross-section 40 cm ² per grille				
		1750	2000	2250	2500	2750	3000	3250	3500	3750	4000	4250	4500	4750	5000	5250	5500	5750	6000	6250	6500	6750	7000															
		SPB 52																																				
		LZ																																				

Note:
For versions with real glass infill in the wicket door, the threshold height **SH₂** begins at LZ 4510 mm.

For versions with real glass infill in the wicket door, the threshold height **SH₂** begins at LZ 4510 mm.

- On request
- Versions with glazing A3, B3, M3, S3, U3, LB, P, XU on request
- Range change
- Range change with glazing A3, B3, M3, S3, U3, LB, P XU

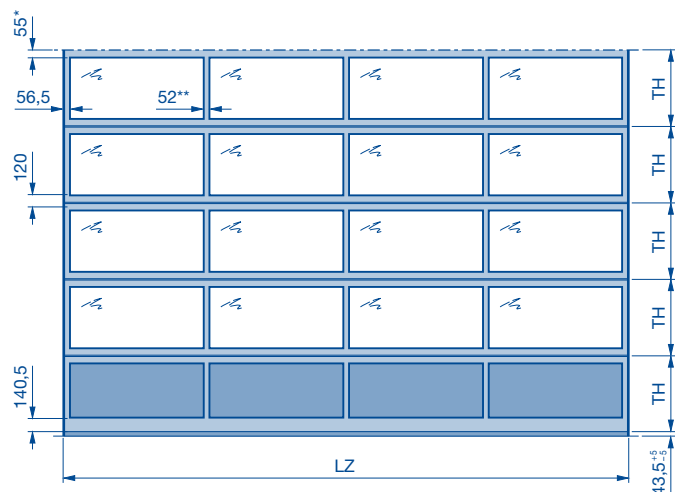
DHS	Wicket door clear passage height
DBS	Wicket door clear passage width
DRH	Lever height
LZ	Clear frame dimensions (from 1500)
RM	Grid height
SPB	Rail width

SH₁	Threshold height (207)
SH₂	Threshold height (330)
n₁	Number of glazing frames
Sn₁	Number of glazing frames in the wicket door
TH	Door section height

Sectional door ALR F42

Glazed aluminium sectional door

Viewed from outside



$$TH = \frac{\text{Door height} - 35}{\text{Number of glazing frames}}$$

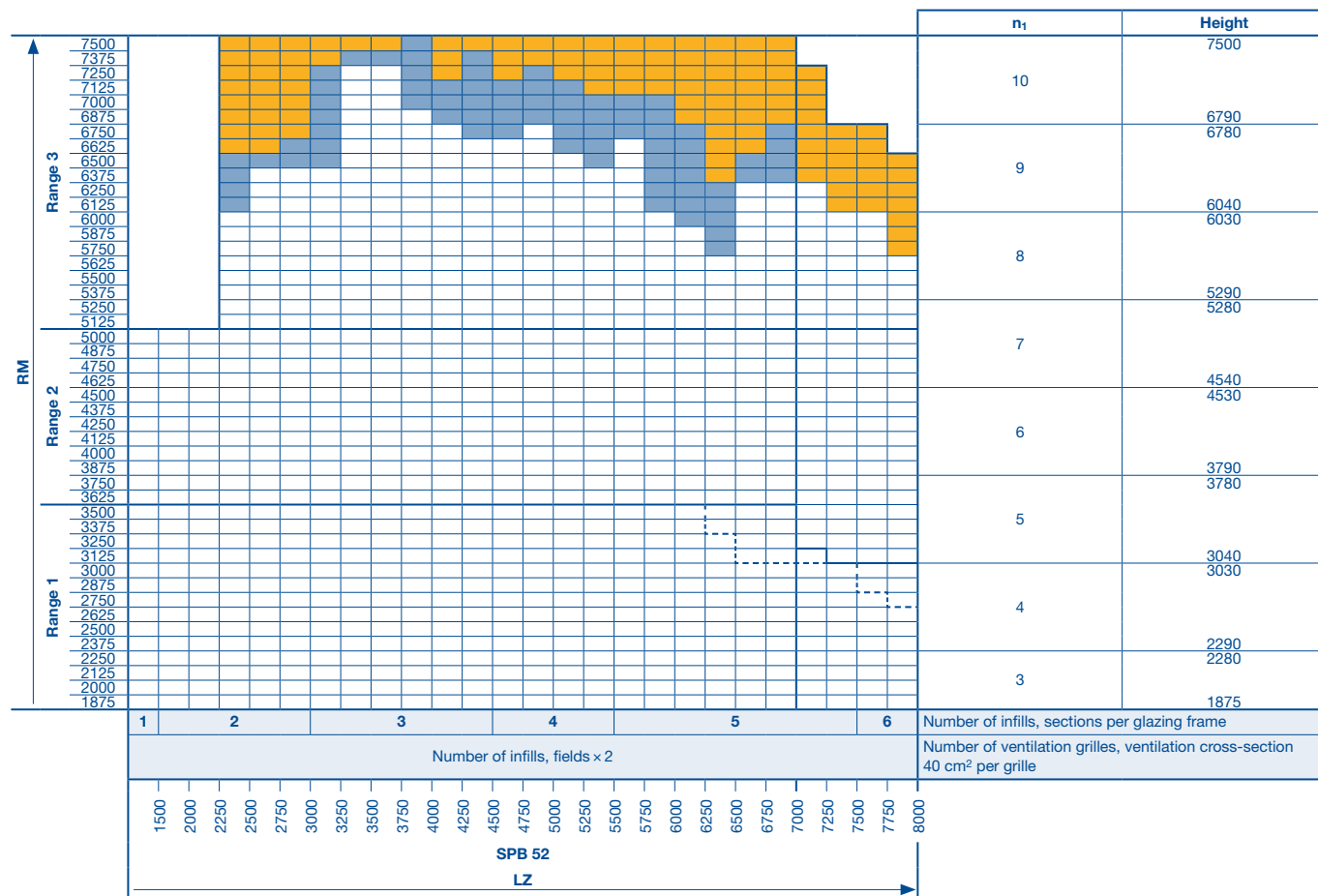
- * On request 115 mm in order to match the appearance of a sectional door with wicket door with trip-free threshold with the same door height.
- ** Optionally with wide rail extrusions (91 mm)

Note:

- When using a shaft operator (installation example 5), the door locking is always opposite the operator side.
- For door widths from 5510 mm, diagonal struts are fitted into the bottom door section (not visible with closed infills).
- For a view of the matching appearance with doors with wicket doors see page 37–39.
- Number of glazings, matching view to series 40, see page 40.

Size range

The validity tables with the size range shown are based on the standard door type version (see product description). In case of deviations, the valid size ranges in the product configurator must be taken into account. Any door width in 10 mm increments possible.



- On request
- Versions with glazing A3, B3, M3, S3, U3, LB, P, XU on request
- Range change
- Range change with glazing A3, B3, M3, S3, U3, LB, P, XU

- RM Grid height
- LZ Clear frame dimensions (from 1200)
- SPB Rail width
- n1 Number of glazing frames
- TH Door section height

Glazed aluminium sectional door

[illegible]

- When using a shaft operator (installation example 5), the door locking is always opposite the operator side.
- For door widths from 5510 mm (from 4510 mm with real glass infill in the wicket door), diagonal struts are fitted into the bottom door section – not visible with closed infills.
- For a view of the matching appearance with doors without wicket doors see page 37–39.
- Number of glazings, matching view to series 40, see page 40.

[illegible]

For versions with real glass infill in the wicket door, the threshold height **SH₂** begins at LZ 4510 mm.

SH ₁	Threshold height (rising from 5 to 10)
SH ₂	Threshold height (approx. 13)
n ₁	Number of glazing frames
Sn ₁	Number of glazing frames in the wicket door
TH	Door section height

Glazed aluminium sectional door

Technical drawing of a rectangular panel with dimensions and labels:

- Top edge:** Total width 54.5. A segment on the left is 56.5. A segment between two internal vertical lines is 52**. A segment between two internal vertical lines is 1025.
- Right edge:** Total height 43.5⁺⁵/₋₆. A segment on the right is 120.
- Internal labels:**
 - TH (Technical Hole) labels are present on the right side of the panel.
 - DRH (Drilling Hole) label is present near the bottom left corner.
 - DBS (Drilling Hole) label is present near the bottom center.
 - LZ (Length) label is present at the bottom right corner.
- Other labels:**
 - 54.5 (Total width)
 - 56.5 (Segment width)
 - 52** (Segment width)
 - 1025 (Segment width)
 - 120 (Segment height)
 - 43.5⁺⁵/₋₆ (Total height)
 - 140.5* (Segment width)
 - DRH (Drilling Hole)
 - DBS (Drilling Hole)
 - LZ (Length)

- When using a shaft operator (installation example 5), the door locking is always opposite the operator side.
- For a view of the matching appearance with doors without wicket doors see page 37 – 39.
- Number of glazings, matching view to series 40, see page 40.

[illegible]

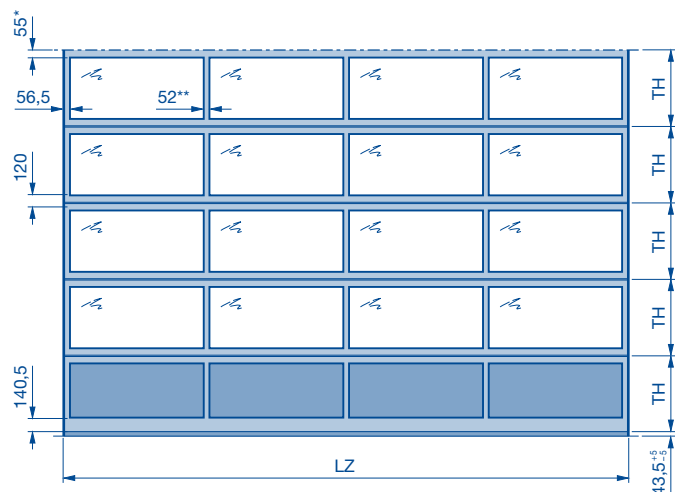
For versions with real glass infill in the wicket door, the threshold height **SH₂** begins at LZ 4510 mm.

SH₁	Threshold height (186)
SH₂	Threshold height (311)
n₁	Number of glazing frames
Sn₁	Number of glazing frames in the wicket door
TH	Door section height

Sectional door ALR F42 Thermo

Glazed aluminium sectional door with thermal break

Viewed from outside



$$TH = \frac{\text{Door height} - 35}{\text{Number of glazing frames}}$$

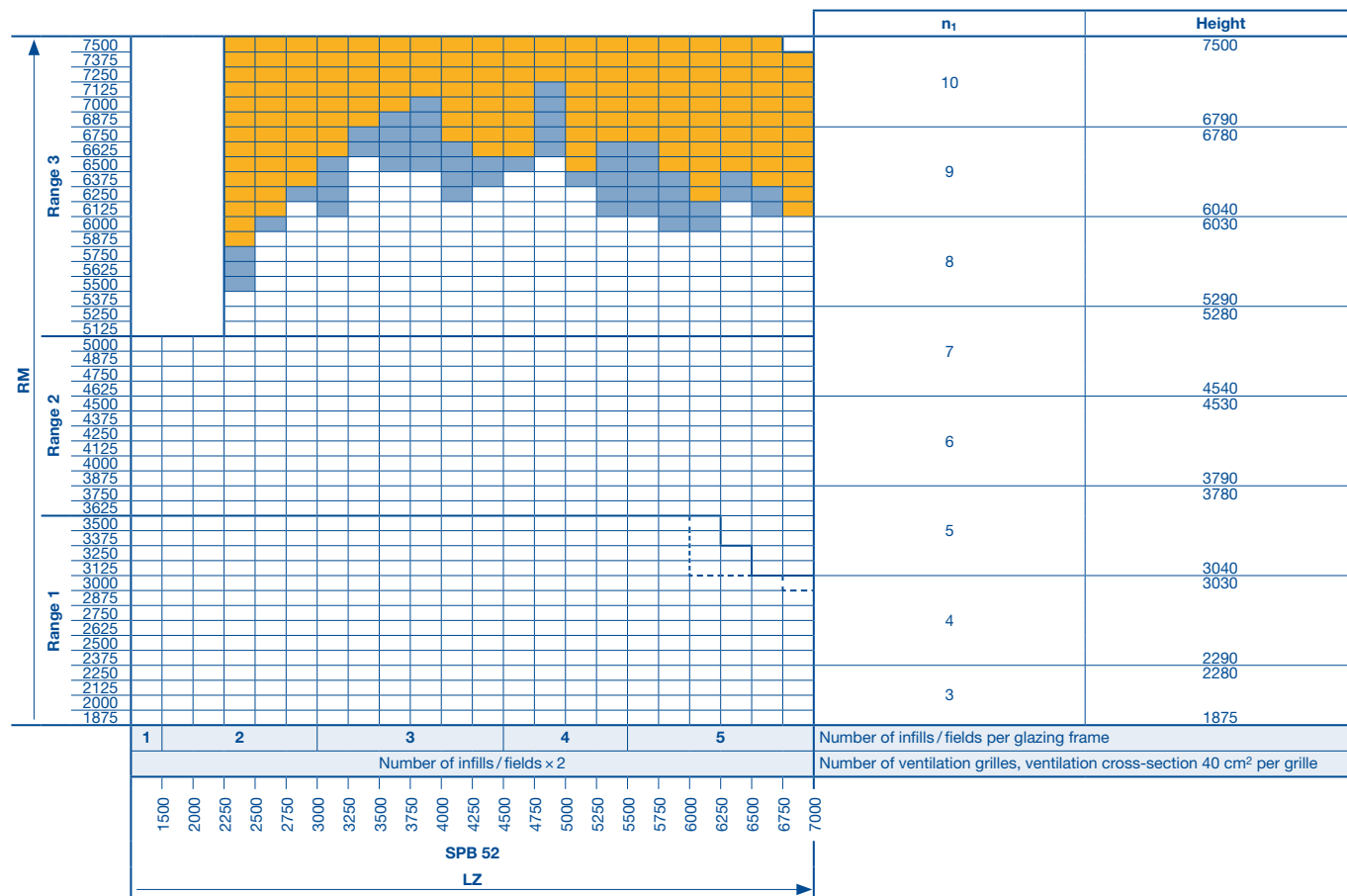
- * On request 115 mm in order to match the appearance of a sectional door with wicket door with trip-free threshold with the same door height.
- ** Optionally with wide rail extrusions (91 mm)

Note:

- When using a shaft operator (installation example 5), the door locking is always opposite the operator side.
- For door widths from 5510 mm, diagonal struts are fitted into the bottom door section (not visible with closed infills).
- For a view of the matching appearance with doors with wicket doors see page 37–39.
- Number of glazings, matching view to series 40, see page 40.

Size range

The validity tables with the size range shown are based on the standard door type version (see product description). In case of deviations, the valid size ranges in the product configurator must be taken into account. Any door width in 10 mm increments possible.



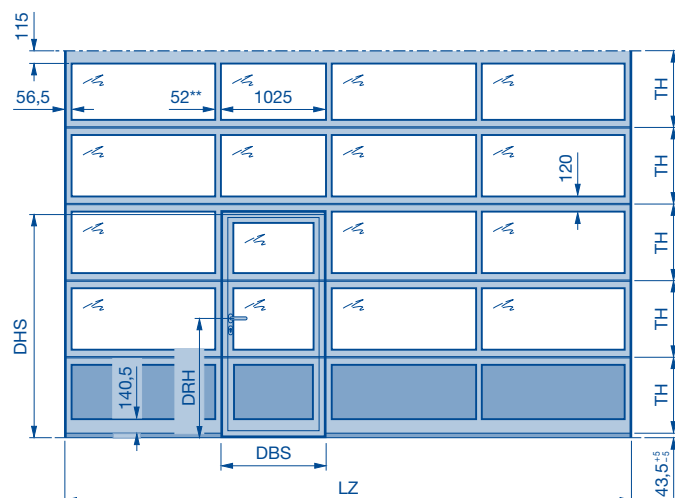
- On request
- Versions with glazing A3, B3, M3, S3, U3, LB, P, XU on request
- Range change
- Range change with glazing A3, B3, M3, S3, U3, LB, P, XU

- RM Grid height
- LZ Clear frame dimensions (from 1200)
- SPB Rail width
- n₁ Number of glazing frames
- TH Door section height

Sectional door ALR F42 Thermo with wicket door and trip-free threshold

Glazed aluminium sectional door with thermal break

Viewed from outside



Lever height on request

Wicket door clear passage width (DBS) = 940 mm***

Clear passage height of wicket door (DHS) = $Sn_1 \times TH - 45^*$

Sn_1 Number of frames in the wicket door

* Attention: If there is no frame above the wicket door, then - 90 instead of - 45.

** Optionally with wide rail extrusions (91 mm)

*** For a door width of 1750 - 1840 mm, the clear passage width is 833 mm.

For door widths below 1750 mm, the clear passage width (DBS) depends on the door width and is much smaller than standard dimensions.

Note:

- When using a shaft operator (installation example 5), the door locking is always opposite the operator side.
- For door widths from 5510 mm (from 4510 mm with real glass infill in the wicket door), diagonal struts are fitted into the bottom door section - not visible with closed infls.
- For a view of the matching appearance with doors without wicket doors see page 37 - 39.
- Number of glazings, matching view to series 40, see page 40.

Size range

The validity tables with the size range shown are based on the standard door type version (see product description). In case of deviations, the valid size ranges in the product configurator must be taken into account. Any door width in 10 mm increments possible.

		SH ₁										SH ₂										n ₁	Height	RM	DHS	Sn ₁	Height																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
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Glazed aluminium sectional door with thermal break

Technical drawing of a rectangular panel with dimensions and labels:

- Top edge:** Total width 54; inner width 56,5.
- Right edge:** Total height 43,5⁺⁵/₋₆; inner height 40.
- Internal dimensions:**
 - Horizontal spacing: 52** (between first two columns), 1025 (between second and third columns).
 - Vertical spacing: 120 (between second and third rows).
 - Bottom-left section: 140,5* (width of a sub-section), DRH (height of a sub-section).
 - Bottom center: DBS (width of a sub-section).
 - Bottom right: LZ (total width of the bottom section).
- Labels:** TH (top edge), TH (right edge), TH (bottom edge), DRH (bottom-left section), DBS (bottom center), LZ (bottom right).
- Other labels:** 54, 56,5, 52**, 1025, 120, 140,5*, DRH, DBS, LZ, 43,5⁺⁵/₋₆.

- When using a shaft operator (installation example 5), the door locking is always opposite the operator side.
- For a view of the matching appearance with doors without wicket doors see page 37 – 39.
- Number of glazings, matching view to series 40, see page 40.

[illegible]

For versions with real glass infill in the wicket door, the threshold height **SH₂** begins at LZ 4510 mm.

SH₁	Threshold height (186)
SH₂	Threshold height (311)
n₁	Number of glazing frames
Sn₁	Number of glazing frames in the wicket door
TH	Door section height

Aluminium sectional door with extensive glazing, real glass

Technical drawing of a rectangular panel, likely a door or window frame, showing five horizontal rows. The overall width is labeled LZ . The overall height is labeled $43,5 \pm 0,5$. The height of the top row is 55 . The height of the middle three rows is 120 . The height of the bottom row is $43,5 \pm 0,5$. The top row is labeled $56,5^\circ$. The rows are labeled OTH , TH , TH , TH , and UTH from top to bottom. The panel is divided into five horizontal sections, each containing a stylized logo or symbol.

$$TH = \frac{\text{Door height} - 119}{\text{Number of glazing frames}}$$

$$UTH = TH + 84 \leq 785$$

$$OTH = TH + 35$$

* 76 with optional wide rail extrusions (91 mm)

- When using a shaft operator (installation example 5), the door locking is always opposite the operator side.

		n ₁	Height
RM	Range 2		
	Range 1	6	4000
			3625 3620
		5	
			2930 2920
		4	
			2230 2220
		3	
			1875
1 → 3330		Number of infills, sections per glazing frame	
2			
	2250		
	2500		
	2750		
	3000		
	3250		
	3500		
	3750		
	4000		
	4250		
	4500		
	4750		
	5000		
	5250		
	5500		
	SPB 52**		
	LZ		

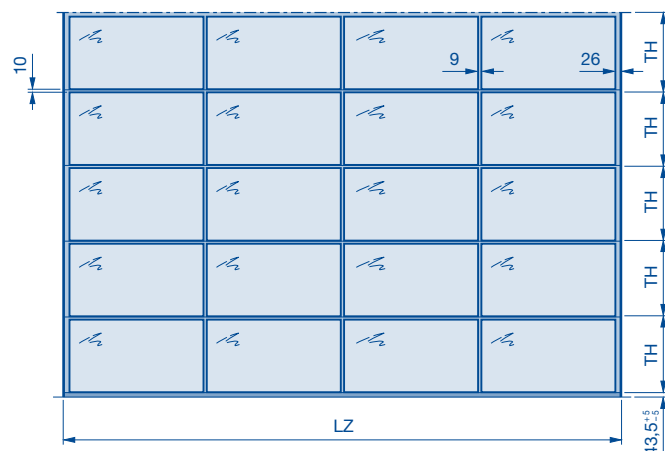
** Optionally with wide rail extrusions (91 mm)

→	up to LZ
SPB	Rail width
n ₁	Number of glazing frames
UTH	Bottom door section height
TH	Door section height
OTH	Upper door section height

Sectional door ALR F42 Vitraplan

Aluminium sectional door with exclusive glazing

Viewed from outside



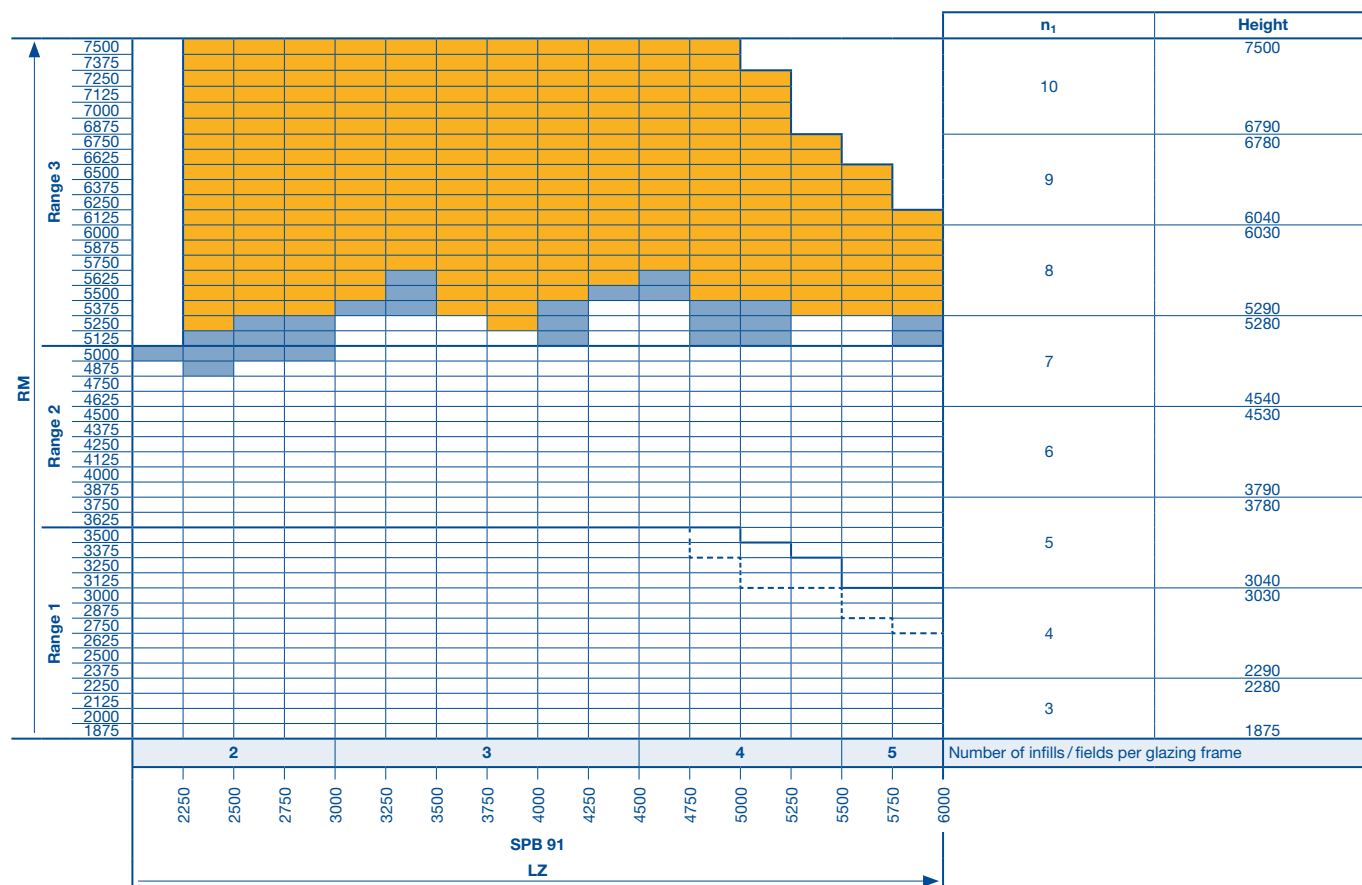
$$TH = \frac{\text{Door height} - 35}{\text{Number of glazing frames}}$$

Note:

- When using a shaft operator (installation example 5), the door locking is always opposite the operator side.
- For door widths from 5510 mm, diagonal struts are fitted into the bottom door section.

Size range

The validity tables with the size range shown are based on the standard door type version (see product description). In case of deviations, the valid size ranges in the product configurator must be taken into account. Any door width in 10 mm increments possible.



- On request
- Versions with glazing A3, S3, U3 on request
- Range change
- Range change with glazing A3, S3, U3

- RM Grid height
- LZ Clear frame dimensions (from 2000)
- SPB Rail width
- n₁ Number of glazing frames
- TH Door section height

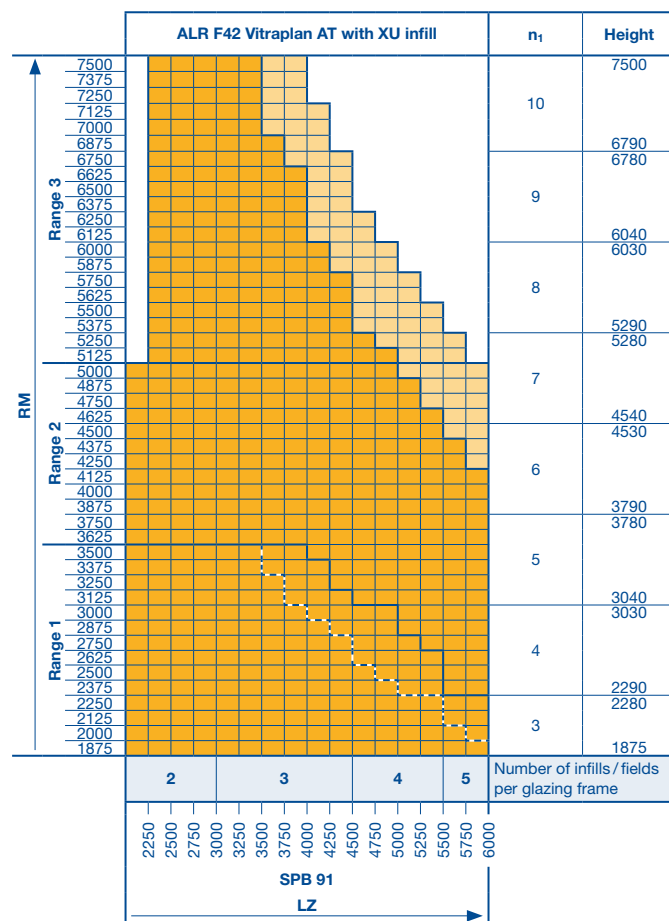
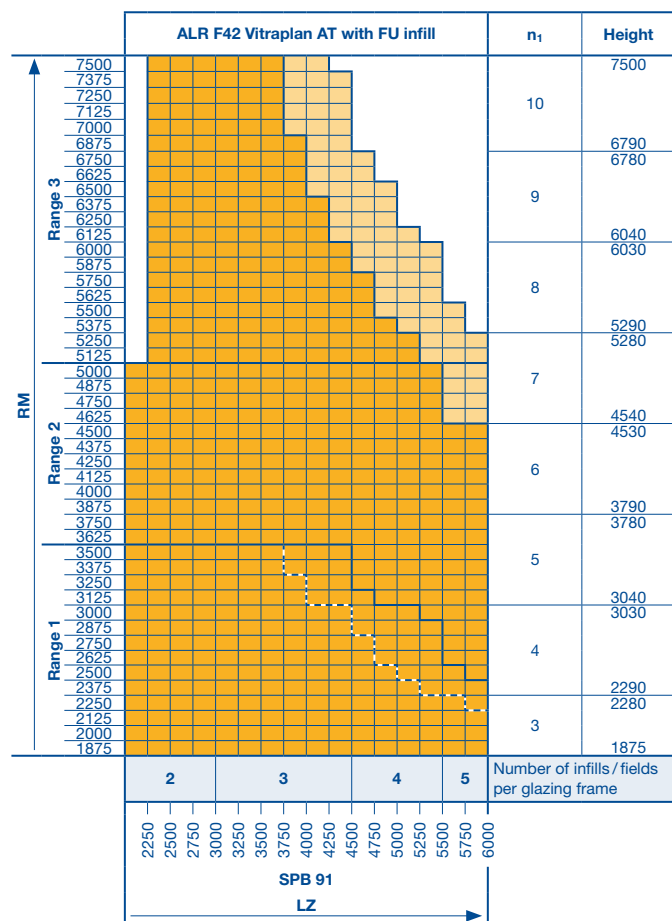
Aluminium sectional doors with exclusive facade panels


[illegible]

$$TH = \frac{\text{Door height} - 35}{\text{Number of glazing frames}}$$

- When using a shaft operator (installation example 5), the door locking is always opposite the operator side.
- For door widths from 5510 mm, diagonal struts are fitted into the bottom door section.

The validity tables with the size range shown are based on the standard door type version (see product description). In case of deviations, the valid size ranges in the product configurator must be taken into account. Any door width in 10 mm increments possible.



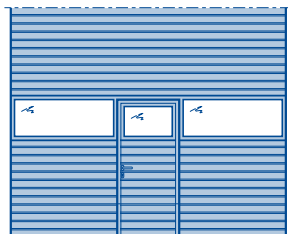
	On request	RM	Grid height
	Version with ALUCOBOND® must be requested	LZ	Clear frame dimensions (from 2000)
	Range change for version with ALUCOBOND®	SPB	Rail width
	Range change for version with TRESPA®	n₁	Number of glazing frames

Glazing and wicket door arrangements

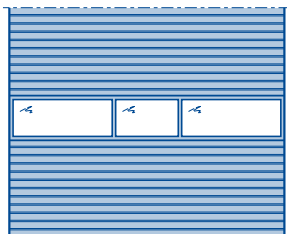
Sectional doors with 3 infills / fields

Glazing arrangements – external view

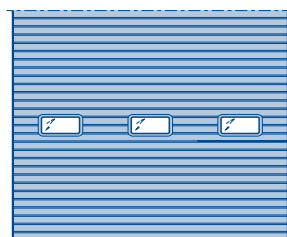
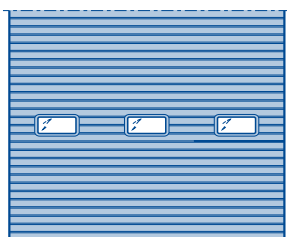
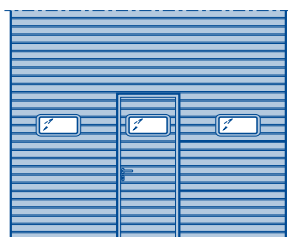
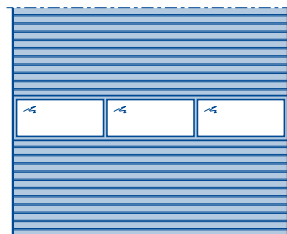
Sectional door SPU F42 with wicket door with trip-free threshold



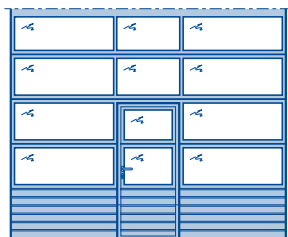
Sectional door SPU F42, matching the wicket door versions



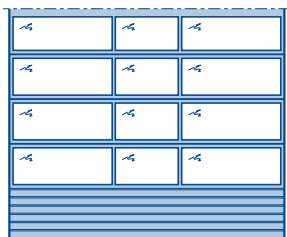
Sectional door SPU F42 with standard window division



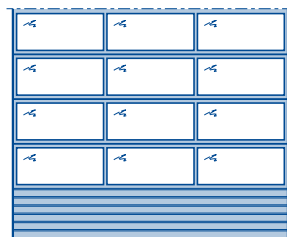
Sectional door APU F42 with wicket door with trip-free threshold



Sectional door APU F42, matching the wicket door versions



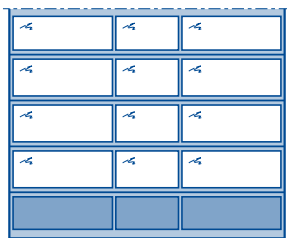
Sectional door APU F42 with standard window division



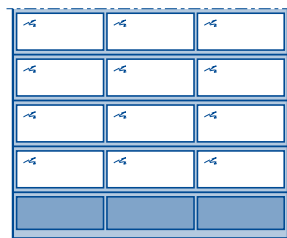
Sectional door ALR F42 with wicket door with trip-free threshold



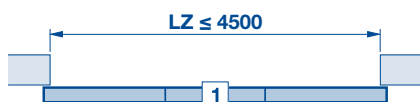
Sectional door ALR F42, matching the wicket door versions



Sectional door ALR F42 with standard window division



Arrangement of the wicket door



Notes:

- Wicket door clear passage width (DBS) = 940 mm.
- Wicket door only opening outwards.

Wicket door with short distance to outside door edge



The short distance to the outside door edge is optionally possible on the left or right.

Note:

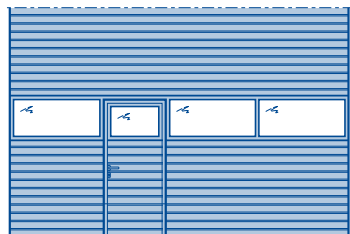
- Not possible for doors with real glass.

Glazing and wicket door arrangements

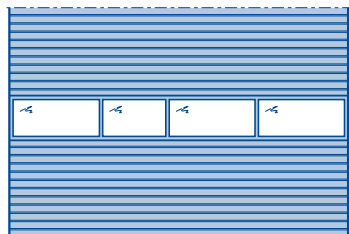
Sectional doors with 4 infills / fields

Glazing arrangements – external view

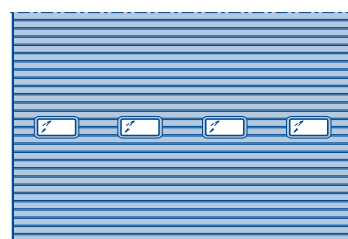
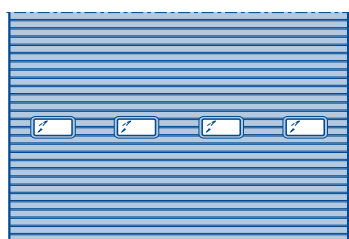
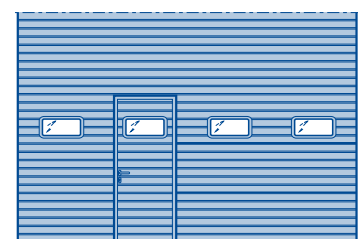
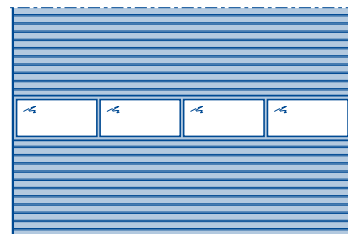
Sectional door SPU F42 with wicket door with trip-free threshold



Sectional door SPU F42, matching the wicket door versions



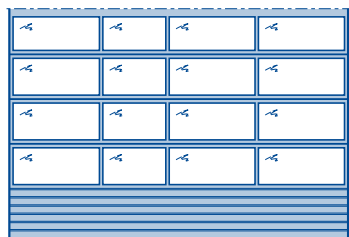
Sectional door SPU F42 with standard window division



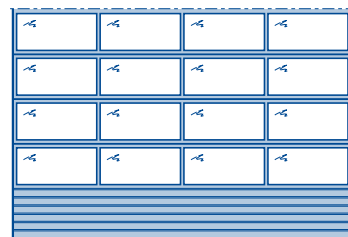
Sectional door APU F42 with wicket door with trip-free threshold



Sectional door APU F42, matching the wicket door versions



Sectional door APU F42 with standard window division



Sectional door ALR F42 with wicket door with trip-free threshold



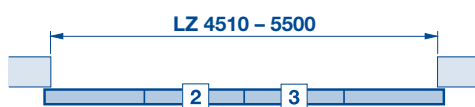
Sectional door ALR F42, matching the wicket door versions



Sectional door ALR F42 with standard window division



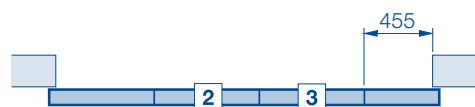
Arrangement of the wicket door



Notes:

- Wicket door clear passage width (DBS) = 940 mm.
- Wicket door only opening outwards.

Wicket door with short distance to outside door edge



The short distance to the outside door edge is optionally possible on the left or right.

Note:

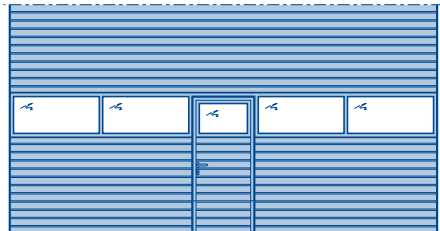
- Not possible for doors with real glass.

Glazing and wicket door arrangements

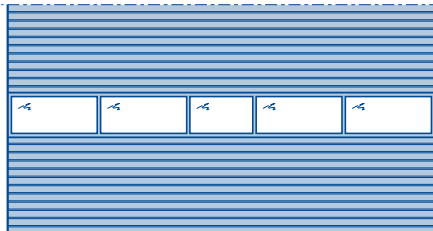
Sectional doors with 5 infills / fields

Glazing arrangements – external view

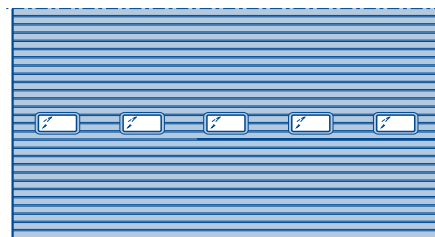
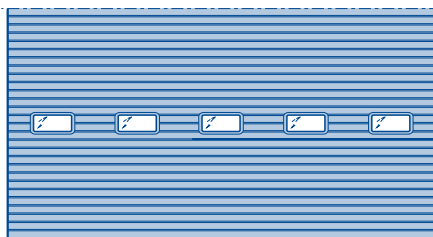
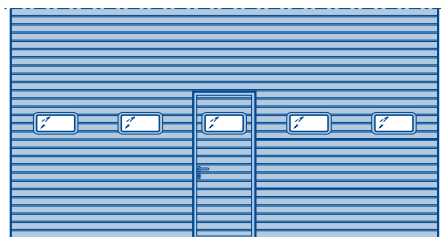
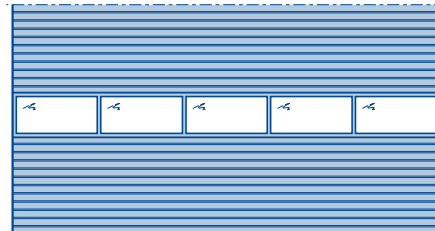
Sectional door SPU F42 with wicket door with trip-free threshold



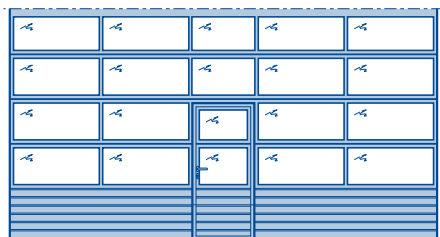
Sectional door SPU F42, matching the wicket door versions



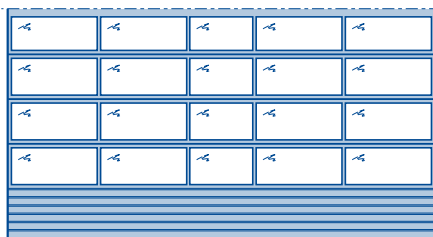
Sectional door SPU F42 with standard window division



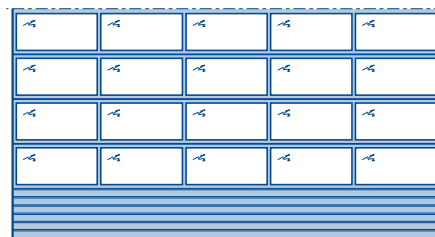
Sectional door APU F42 with wicket door with trip-free threshold



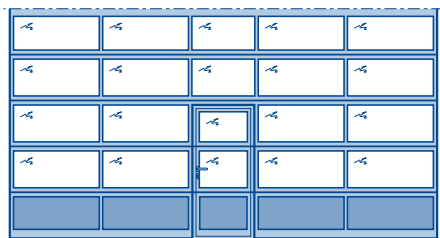
Sectional door APU F42, matching the wicket door versions



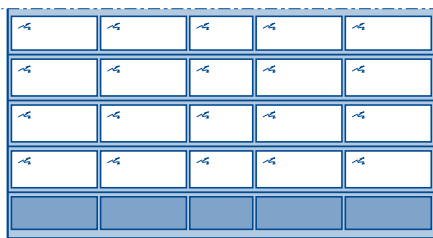
Sectional door APU F42 with standard window division



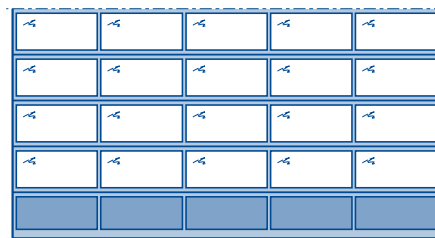
Sectional door ALR F42 with wicket door with trip-free threshold



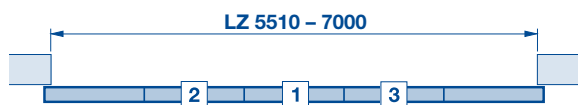
Sectional door ALR F42, matching the wicket door versions



Sectional door ALR F42 with standard window division



Arrangement of the wicket door



Notes:

- Wicket door clear passage width (DBS) = 940 mm.
- Wicket door only opening outwards.

Wicket door with short distance to outside door edge



The short distance to the outside door edge is optionally possible on the left or right.



Note:

- Not possible for doors with real glass.






Infills, fields and glazing

Series 40

Number of infills / sections per glazing frame

	Sectional door without wicket door																										
Glazing frame type N	1	2	3			4		5		6		7		8													
Glazing frame type B	1	2 → 3330					3				4 → 6670				5												
	Sectional door with wicket door																										
Glazing frame type N		3 → 1750-3500						4		5		6			7												
	1200	1500	2000	2250	2500	2750	3000	3250	3500	3750	4000	4250	4500	4750	5000	5250	5500	5750	6000	6250	6500	6750	7000	7250	7500	7750	8000
	LZ																										

Number of compound glazings per door section

	Sectional door without wicket door																										
Standard type A	1 → 1680		2		3			4			5			6			7			8							
Standard type D	1 → 1640		2		3			4			5			6			7			8							
Standard type E	1 → 1860		2 → 2750			3 → 3650			4 → 4540			5 → 5510			6												
	Sectional door with wicket door																										
Type A or type D			1 → 1750- 2650			3			4			5			6			7									
Type E			1 → 1840-2920				3 → 3880			4 → 4830			5 → 5780			6											
	1200	1500	2000	2250	2500	2750	3000	3250	3500	3750	4000	4250	4500	4750	5000	5250	5500	5750	6000	6250	6500	6750	7000	7250	7500	7750	8000
	LZ																										

LZ Clear frame dimension
→ up to LZ

Side door NT 60 and NT 80 Thermo

Possible handing options

Fitting in the opening

Fitting next to the garage door, opening inwards or outwards, RH or LH hinged

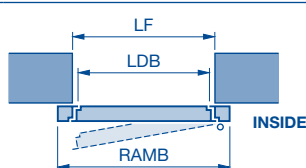


Fitting in the opening, opening inwards or outwards, RH or LH hinged



Fitting behind the opening

Only opening inwards, RH or LH hinged



Structural opening	Ordering size Overall frame dimensions RAMB × RAMH
875 × 2000	855 × 1990
875 × 2125	855 × 2115
1000 × 2000	980 × 1990
1000 × 2125	980 × 2115

Size range: width: RAMB 770 to 1300, height: RAMH 1865 to 2525 (indicate overall frame dimensions)

Doors with multiple-point locking: RAMH ≥ 1920 mm

Clear passage dimensions:

	Opening angle	Width	Height
NT 60	136°	RAMB – 149	RAMH – 70
	90°	RAMB – 194	
NT 80 Thermo	136°	RAMB – 164	RAMH – 70
	90°	RAMB – 215	

Note:

Side door version in ALR F42 Vitraplan with aluminium fascia profile opening inwards on request!

LF Structural opening
RAMB Overall frame width
RAMH Overall frame height
LDB Clear passage width

LDH Clear passage height
LZ Clear frame dimension

Side door NT 60

with S-ribbed Stucco-textured / L-ribbed Micrograin infills



Note:
Compound glazing with RC2 version not possible.

* See page 41
LF Structural opening
RAMB Overall frame width
RAMH Overall frame height

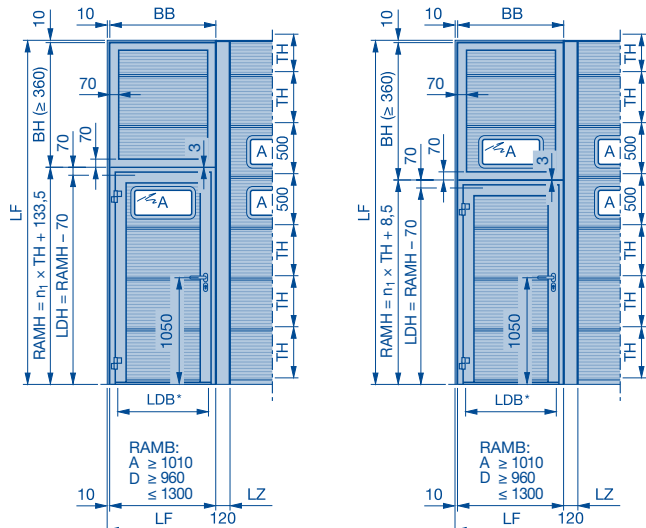
BH Panel height
BB Panel width
LDB Clear passage width
LDH Clear passage height

TH Door section height
SO Bottom section height
LZ Clear frame dimension
n₁ Number of door sections / glazing frames

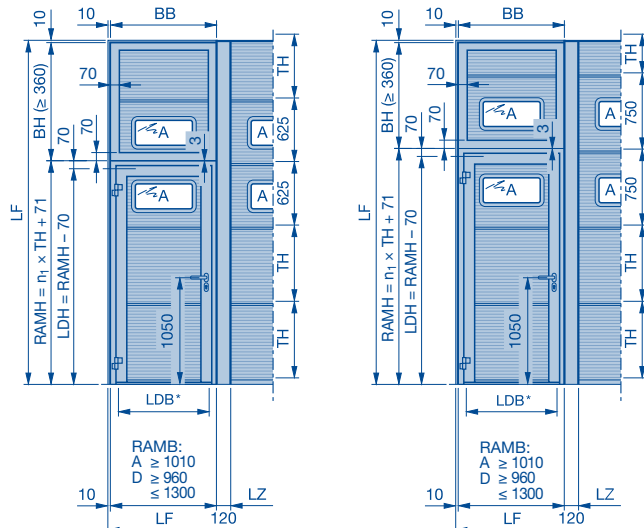
Side door NT 60

with L-ribbed Micrograin infills

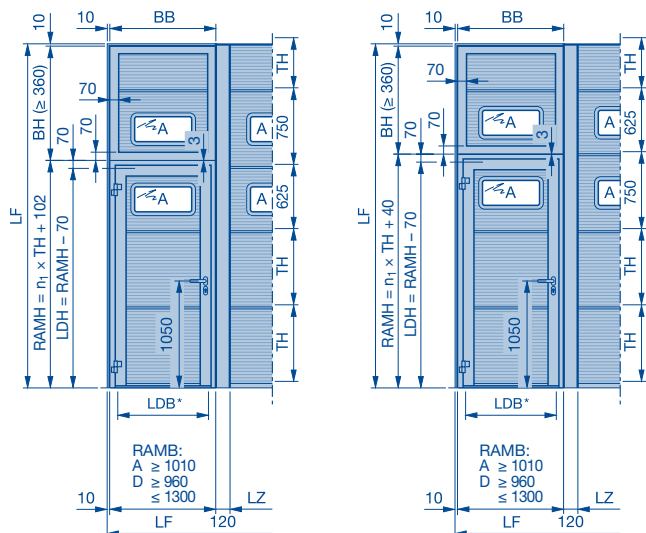
Compound glazing type A TH = 500



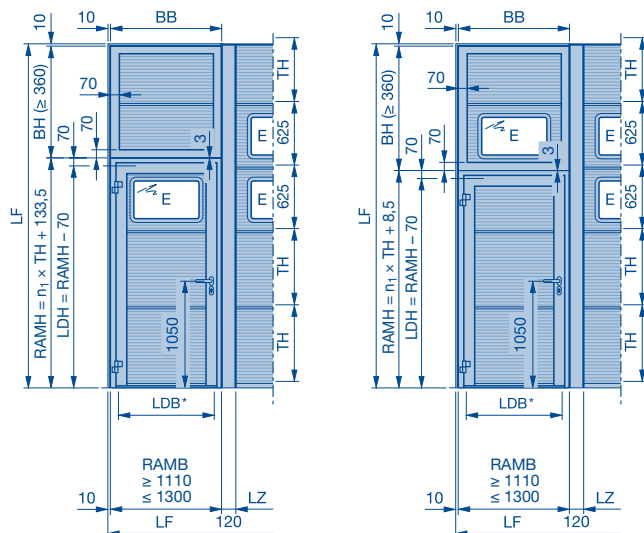
Compound glazing type A TH = 625 and 750



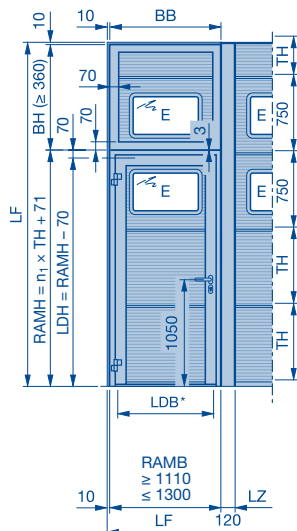
Compound glazing type A TH = 625 / 750 and 750 / 625



Compound glazing type E TH = 625



Compound glazing type E TH = 750



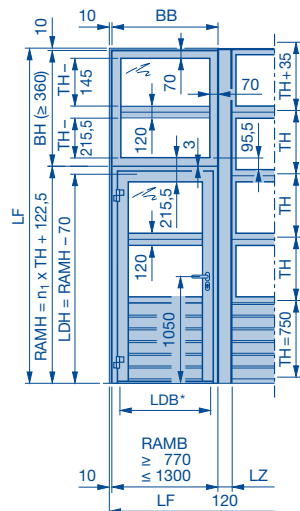
Note:
Compound glazing with RC2
version not possible.

(Legend see page 42)

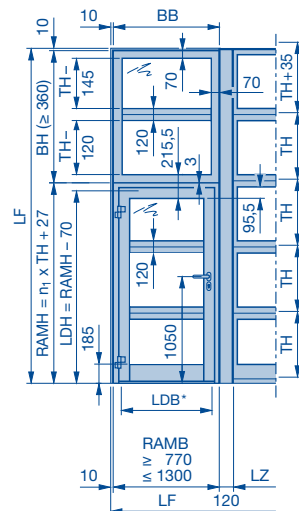
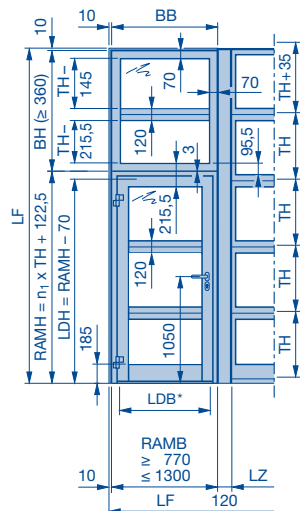
Side door NT 60

with S-ribbed Stucco-textured / L-ribbed Micrograin infills

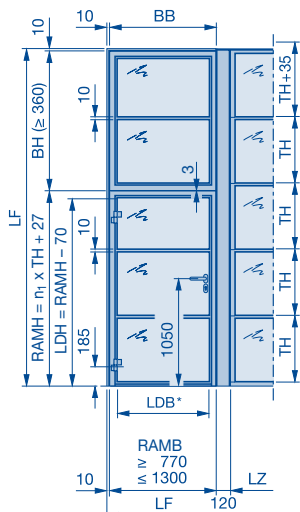
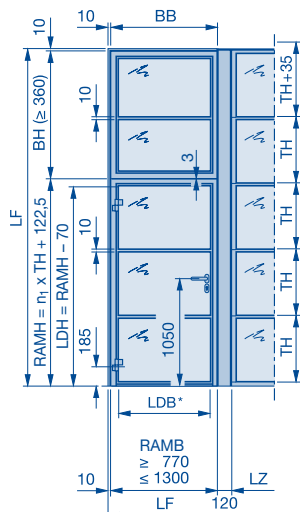
Side door NT 60 matching door type APU F42



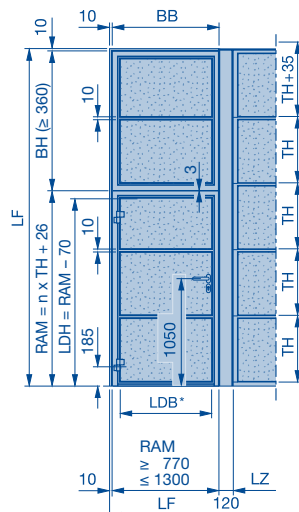
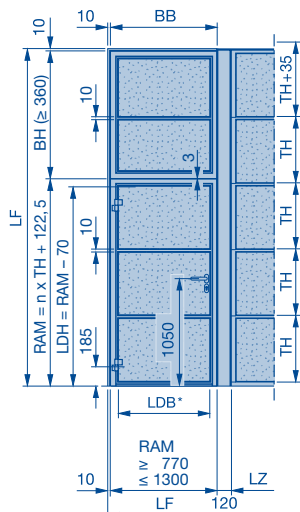
Side door NT 60 matching door type ALR F42



Side door NT Vitraplan



Side door NT Vitraplan AT



Note:

Side door NT Vitraplan not possible in RC 2 version.

* See page 41
LF Structural opening
RAMB Overall frame width
RAMH Overall frame height

BH Panel height
BB Panel width
LDB Clear passage width
LDH Clear passage height

TH Door section height
SO Bottom section height
LZ Clear frame dimension
n₁ Number of door sections / glazing frames

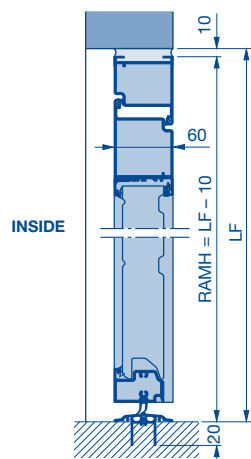
Side door NT 60

Possible fitting options

Possible fitting options

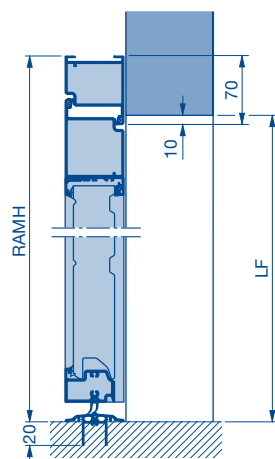
SPU in the opening

No window section, no compound glazing

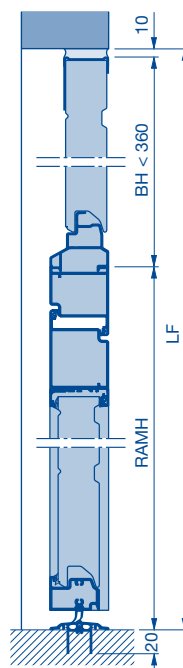


SPU behind the opening

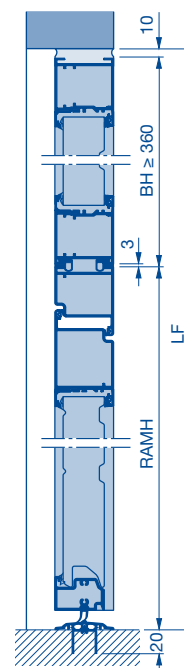
No window section, no compound glazing



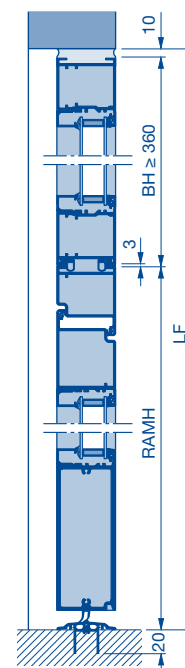
SPU with fascia panel in the opening



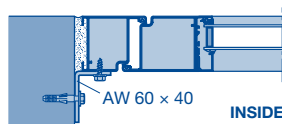
SPU, APU with fascia panel in the opening



ALR with fascia panel in the opening



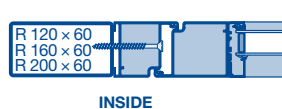
In the opening



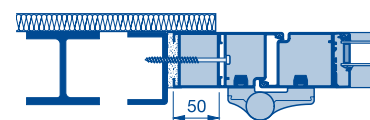
Plugs for metal frame



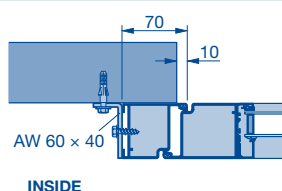
Tapping screw with countersunk head B 6.3 x 80



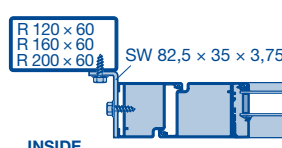
(Bottom illustration with 50 mm* extension profile for all-over insulation)
* Optionally with 25 mm



Behind the opening



Side door NT 60 flush with sectional door



R Box section
AW Aluminium angle
SW Steel angle

BH Panel height
RAMH Overall frame height
LDB Clear passage width

LF Structural opening

Side door NT 60 RC2

Possible fitting options

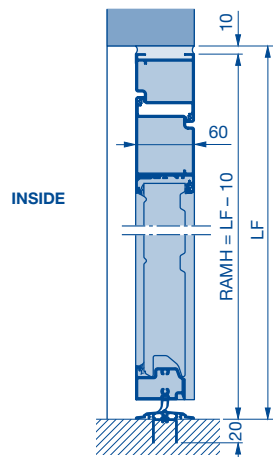
Possible fitting options

Note:

The side door and panel must be fitted in accordance with DIN EN 1627. Side door NT Vitraplan not possible in RC 2 version.

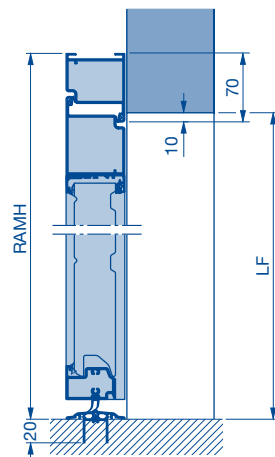
SPU in the opening

No window section, no compound glazing

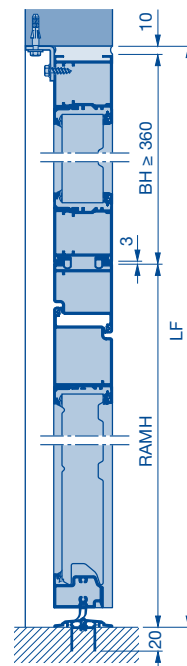


SPU behind the opening

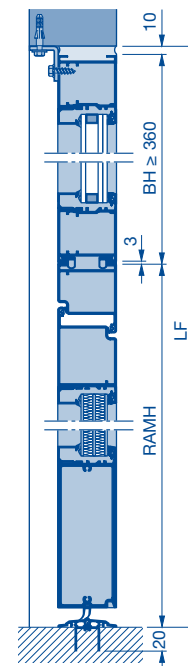
No window section, no compound glazing



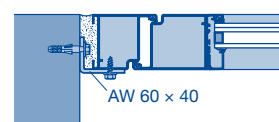
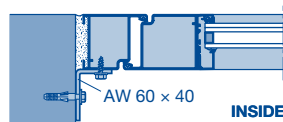
SPU, APU with fascia panel in the opening



ALR with fascia panel in the opening



In the opening



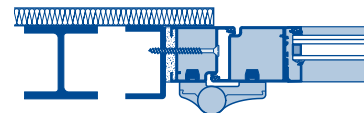
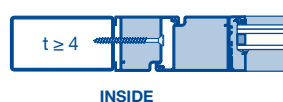
Plugs for metal frame



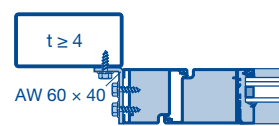
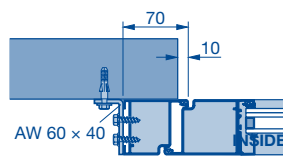
Tapping screw with countersunk head B 6.3 x 80

Note:

Only use plugs for metal frame and tapping screw with countersunk head when fitting the side door.



Behind the opening



Side door NT 60 flush with sectional door

AW Aluminium angle
t Fastening thickness
BH Panel height

RAMH Overall frame height
LDB Clear passage width
LF Structural opening

Side door NT 80 Thermo

with S-ribbed Stucco-textured / L-ribbed Micrograin infills



Note:
Compound glazing with RC2 version not possible.

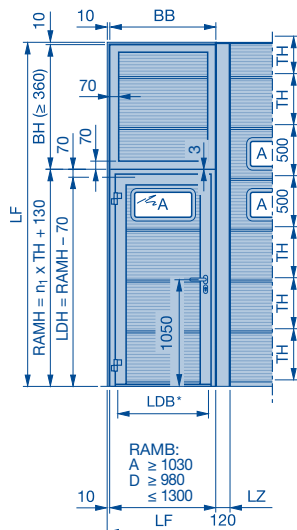
* See page 41
LF Structural opening
RAMB Overall frame width
RAMH Overall frame height

BH Panel height
BB Panel width
LDB Clear passage width
LDH Clear passage height

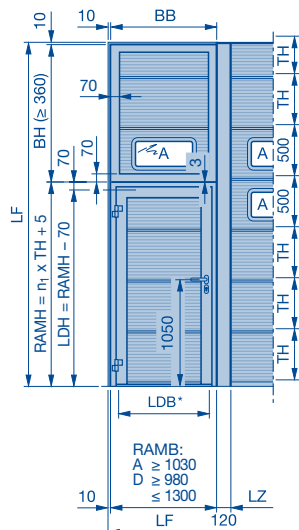
TH Door section height
SO Bottom section height
LZ Clear frame dimension
n₁ Number of door sections / glazing frames

with L-ribbed Micrograin infills

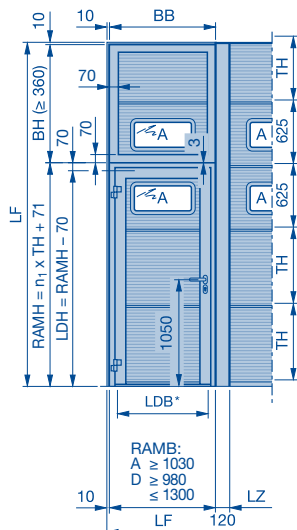
Compound glazing type A TH = 500



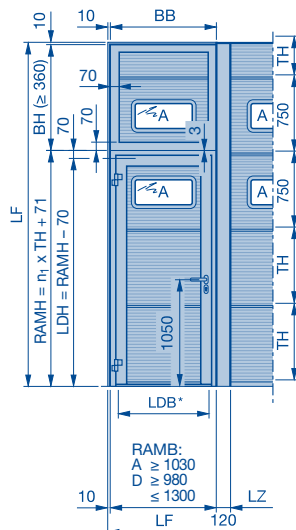
Compound glazing type A TH = 625 and 750



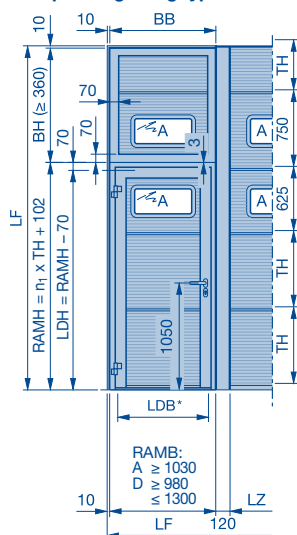
Compound glazing type A TH = 625 and 750



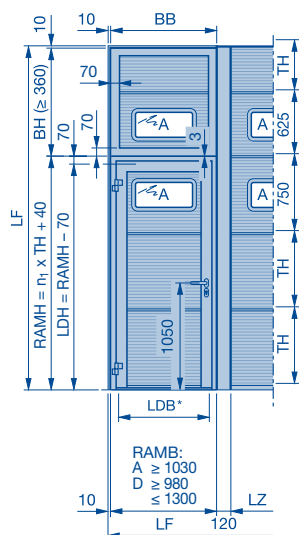
d 750



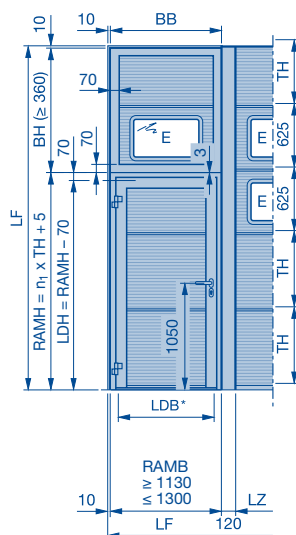
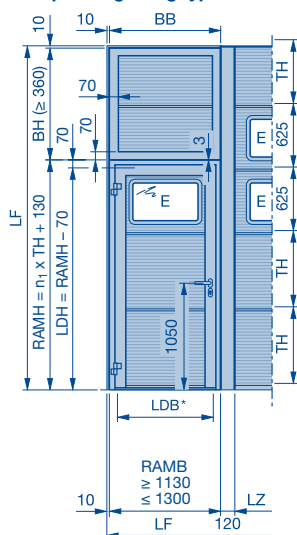
Compound glazing type A TH = 625 / 750 and 750 / 625



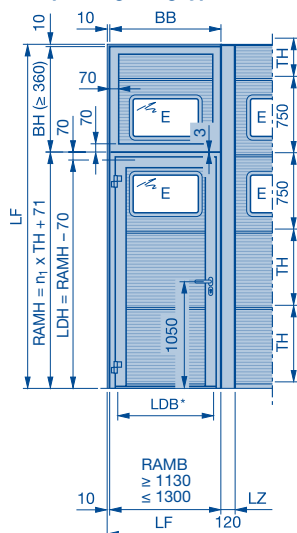
50 and 750 / 625 Compound glazing type E TH = 625



Compound glazing type E TH = 625



Compound glazing type E TH = 750



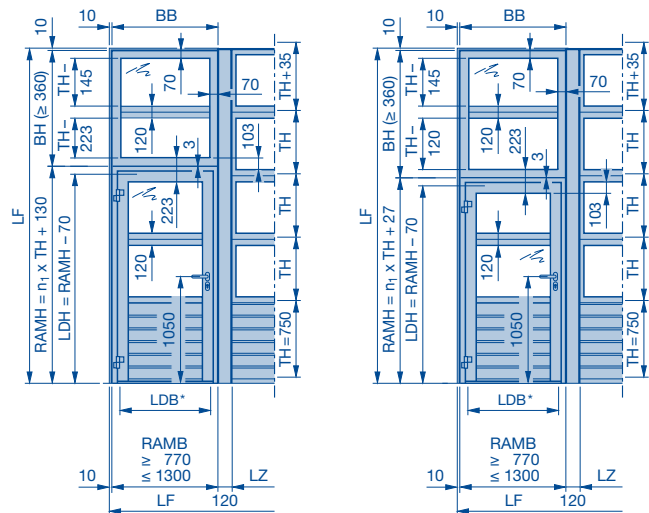
Note:

Compound glazing with RC2 version not possible.

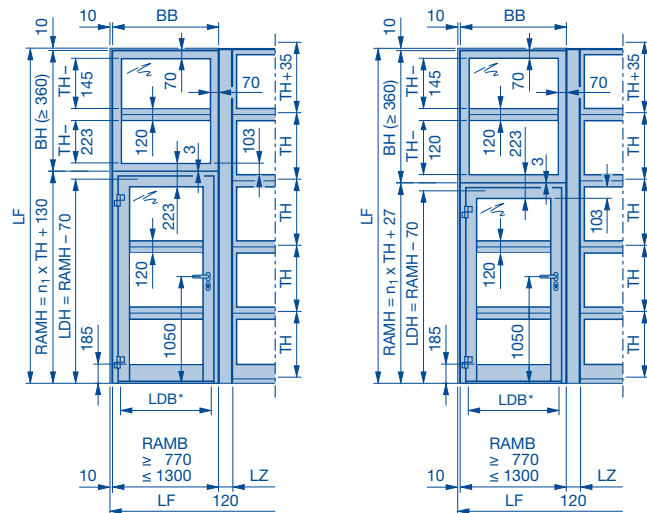
Side door NT 80 Thermo

with S-ribbed Stucco-textured / L-ribbed Micrograin infills

Side door NT 80 Thermo matching door type APU F42 Thermo



Side door NT 80 Thermo matching door type ALR F42 Thermo



* See page 41
LF Structural opening
RAMB Overall frame width
RAMH Overall frame height

BH Panel height
BB Panel width
LDB Clear passage width
LDH Clear passage height

TH Door section height
SO Bottom section height
LZ Clear frame dimension
n₁ Number of door sections/glazing frames

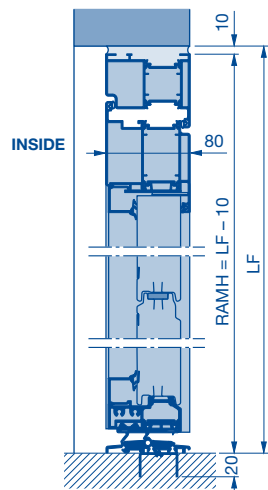
Side door NT 80 Thermo

Possible fitting options

Possible fitting options

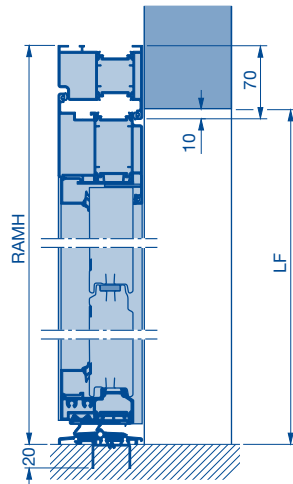
SPU in the opening

No window section, no compound glazing

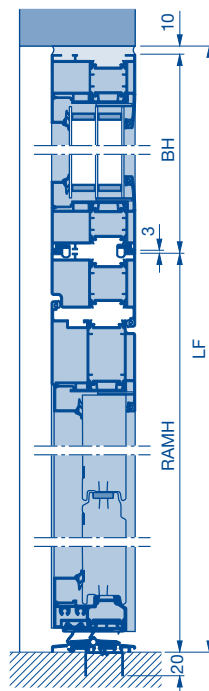


SPU behind the opening

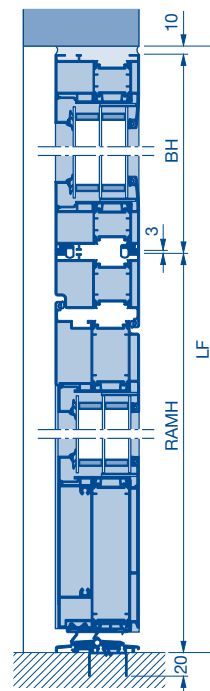
No window section, no compound glazing



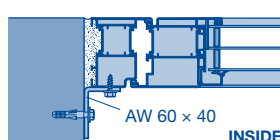
SPU, APU with fascia panel



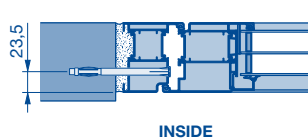
ALR with fascia panel



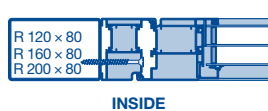
In the opening



Plugs for metal frame

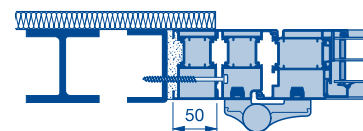


Tapping screw with countersunk head
B 6.3 x 80

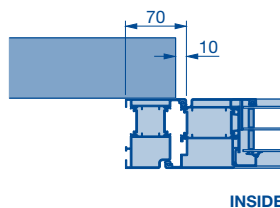


(Bottom illustration with 50 mm* extension profile for all-over insulation)

* Optionally with 25 mm



Behind the opening



Note:

Fitting with thermal break requires on-site preparations.

R Box section
AW Aluminium angle
SW Steel angle

BH Panel height
RAMH Overall frame height
LDB Clear passage width

LF Structural opening

Side door NT 80 Thermo RC2

Possible fitting options

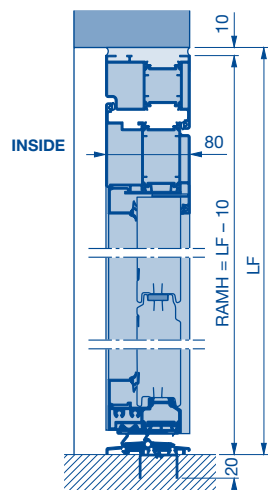
Possible fitting options

Note:

The side door and panel must be fitted in accordance with DIN EN 1627.

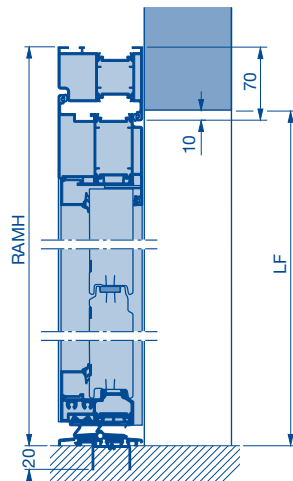
SPU in the opening

No window section, no compound glazing

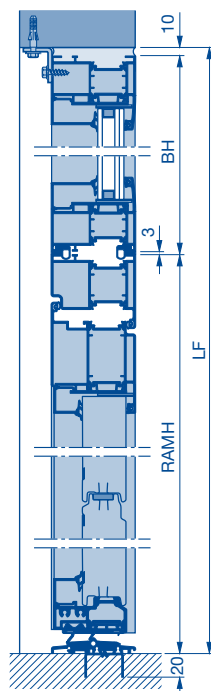


SPU behind the opening

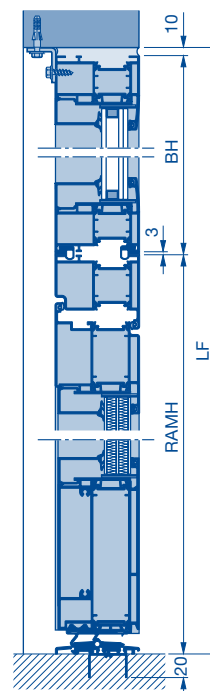
No window section, no compound glazing



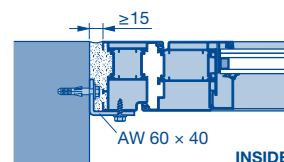
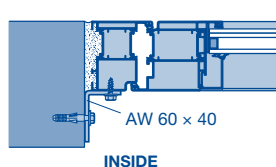
SPU, APU with fascia panel



ALR with fascia panel



In the opening



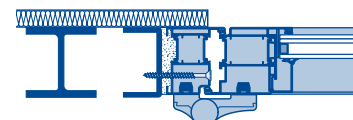
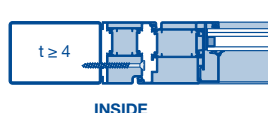
Plugs for metal frame



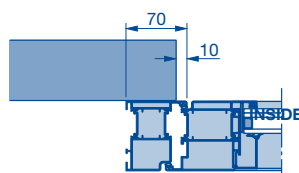
Tapping screw with countersunk head
B 6.3 x 80

Note:

Only use plugs for metal frame and tapping screw with countersunk head when fitting the side door.



Behind the opening



Note:

Fitting with thermal break requires on-site preparations.

R Box section
AW Aluminium angle
SW Steel angle

BH Panel height
RAMH Overall frame height
LDB Clear passage width

LF Structural opening

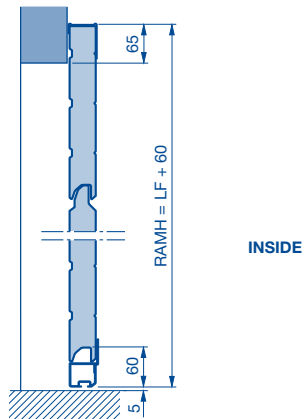
Fixed elements

Possible fitting options and fitting examples

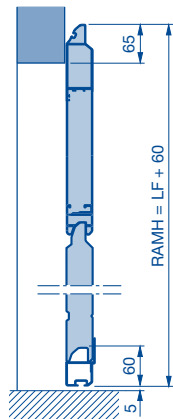
Possible fitting options

SPU F42 behind the opening

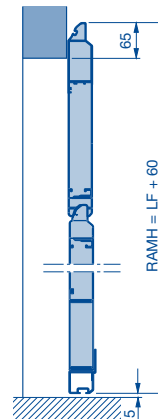
No window section, no compound glazing



APU F42 behind the opening

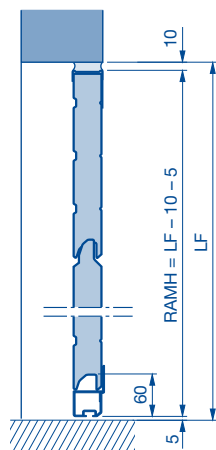


ALR F42, ALR F42 Thermo behind the opening

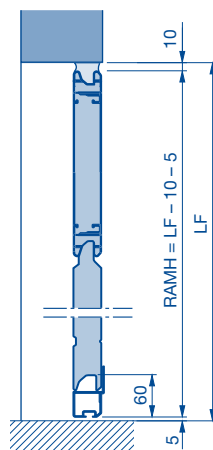


SPU F42 in the opening

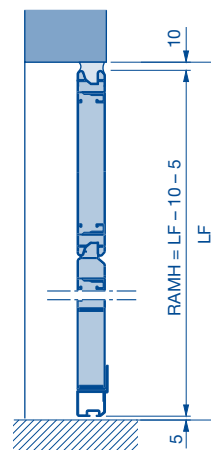
No window section, no compound glazing
INSIDE



APU F42 in the opening

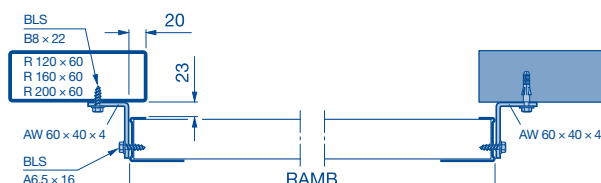
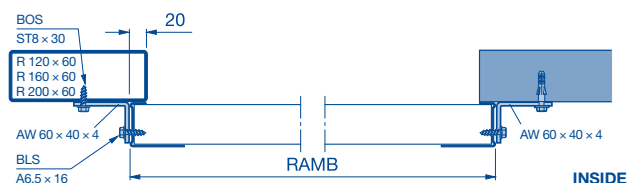


ALR F42, ALR F42 Thermo in the opening

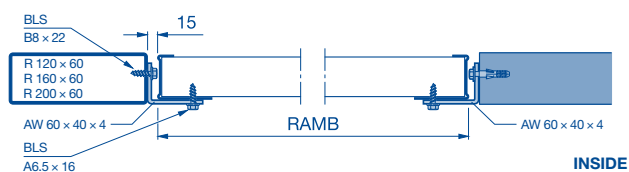


Fitting examples

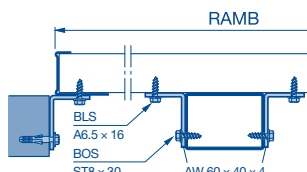
Behind the opening



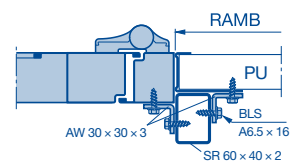
In the opening



In front of the opening



Side door



AW Aluminium angle
SR Support tube
AR Glazing frame

PU PU section
LF Structural opening
RAMB Overall frame width

RAMH Overall frame height
BOS drilling screw
BLS self-tapping screw

Clear passage

Series 60

Track application L with swivel mechanism

	without operator and without chain hoist	HKZ or WA 500 / 500 FU	WA 300	ITO / SupraMatic
LZ ≤ 5500				
Without wicket door*	–	RM	RM - 30	–
Wicket door with threshold rail	–	RM - 50	RM - 80	–
Wicket door without threshold rail	–	RM - 65	RM - 95	–
LZ > 5500				
Without wicket door	–	RM - 50	RM - 80	–
Wicket door with threshold rail	–	RM - 100	RM - 130	–
Wicket door without threshold rail	–	RM - 135	RM - 165	–

* For ALR F42 / ALR F42 Thermo with real glass infill VG, E2 and G2 and ALR F42 Vitraplan LZ > 3000;
ALR F42 Glazing LZ > 3330 and ALR F42 / ALR F42 Thermo LZ > 5000, the calculation applies to a wicket door with threshold rail

Track application L without swivel mechanism

	without operator and without chain hoist	HKZ or WA 500 / 500 FU	WA 300	ITO / SupraMatic
LZ ≤ 5500				
Without wicket door	RM - 325	RM - 190	RM - 220	RM - 50
Wicket door with threshold rail	RM - 375	RM - 210	RM - 240	RM - 100
Wicket door without threshold rail	RM - 440	RM - 255	RM - 305	RM - 135
LZ > 5500				
Without wicket door	RM - 375	RM - 240	RM - 270	RM - 50
Wicket door with threshold rail	RM - 375	RM - 260	RM - 290	RM - 100
Wicket door without threshold rail ***	RM - 475	RM - 325	RM - 355	RM - 165

Track application LD with swivel mechanism

	without operator and without chain hoist	HKZ or WA 500 / 500 FU		WA 300		ITO / SupraMatic
a°		< 6°	6° – 10°	< 6°	6° – 10°	
LZ ≤ 5500						
Without wicket door	–	RM		RM - 30		–
Wicket door with threshold rail	–	RM - 50	RM - 30	RM - 80	RM - 60	–
Wicket door without threshold rail	–	RM - 65		RM - 95		–
LZ > 5500						
Without wicket door	–	RM - 50		RM - 80		–
Wicket door with threshold rail	–	RM - 100	RM - 80	RM - 130	RM - 110	–
Wicket door without threshold rail	–	RM - 135		RM - 195		–

Track application LD without swivel mechanism

	without operator and without chain hoist	HKZ or WA 500 / 500 FU		WA 300		ITO / SupraMatic
a°		2° – 16°	> 16° – 30°	2° – 16°	> 16° – 30°	
LZ ≤ 5500						
Without wicket door	RM - 325	RM - 190 + (a° × 5,3)	RM - 155 + (a° × 3,2)	RM - 220 + (a° × 5,3)	RM - 185 + (a° × 3,2)	RM - 50
Wicket door with threshold rail	RM - 375	RM - 210 + (a° × 5,3)	RM - 175 + (a° × 3,2)	RM - 240 + (a° × 5,3)	RM - 205 + (a° × 3,2)	RM - 100
Wicket door without threshold rail	RM - 440	RM - 255 + (a° × 5,3)	RM - 220 + (a° × 3,2)	RM - 305 + (a° × 5,3)	RM - 270 + (a° × 3,2)	RM - 135
LZ > 5500						
Without wicket door	RM - 375	RM - 240 + (a° × 5,3)	RM - 205 + (a° × 3,2)	RM - 270 + (a° × 5,3)	RM - 235 + (a° × 3,2)	RM - 50
Wicket door with threshold rail	RM - 375	RM - 260 + (a° × 5,3)	RM - 225 + (a° × 3,2)	RM - 290 + (a° × 5,3)	RM - 255 + (a° × 3,2)	RM - 100
Wicket door without threshold rail ***	RM - 475	RM - 325 + (a° × 5,3)	RM - 295 + (a° × 3,2)	RM - 355 + (a° × 5,3)	RM - 320 + (a° × 3,2)	RM - 165

Track applications N / NA / ND / NS / NK

	without operator and without chain hoist	HKZ or WA 500 / 500 FU	WA 300	ITO / SupraMatic**
LZ ≤ 5500				
Without wicket door	RM - 100	RM	RM - 30	RM
Wicket door with threshold rail	RM - 120	RM - 20	RM - 50	RM - 20
Wicket door without threshold rail	RM - 165	RM - 65	RM - 95	RM - 65
LZ > 5500				
Without wicket door	RM - 150	RM - 50	RM - 80	RM - 50
Wicket door with threshold rail	RM - 170	RM - 70	RM - 100	RM - 70
Wicket door without threshold rail ***	RM - 185	RM - 135	RM - 165	RM - 135

** Track applications NS and NK not possible.

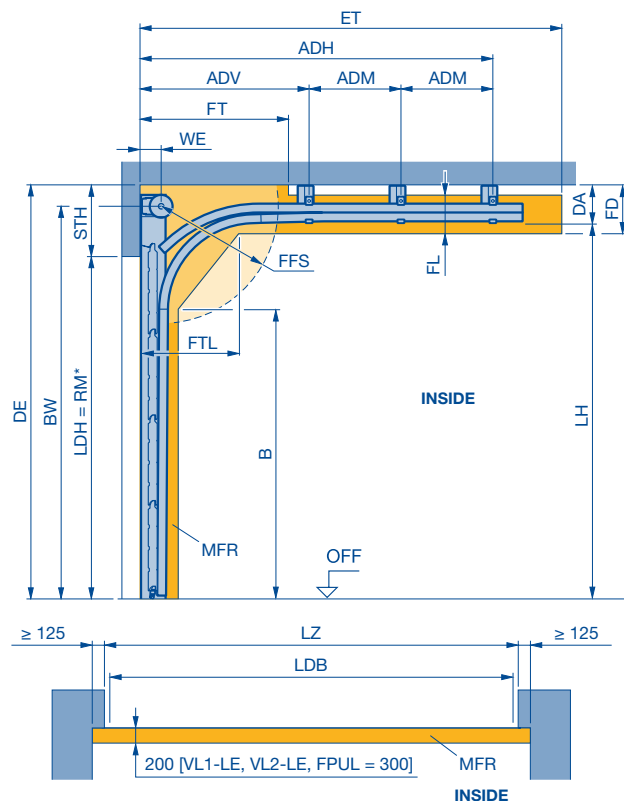
*** For versions with real glass infill LZ > 4500

–	Not possible	HKZ	Chain hoist	RM	Grid height
a°	Inclination	LZ	Clear frame dimension		

Track application: N

Normal track application

Detailed technical data can be found in the product configurator.



ADH	Distance to rear ceiling anchor	FTL	Clearance door section in the double radius
ADM	Distance to central ceiling anchor	LDB	Clear passage width with ThermoFrame (see page 80)
ADV	Distance to front ceiling anchor	LDH	Clear passage height
B	Start of double radius	LH	Track height
BW	Position of shaft support	LZ	Clear frame dimension
DA	Min. distance to ceiling	MFR	Space for fitting the door
DAL	Anchor length	OFF	Finished floor level
DE	Min. ceiling height	RM	Grid height
ET	Min. distance back	STH	Min. headroom
FD	Min. ceiling clearance	WE	Shaft centre from lintel
FFS	Spring compression clearance		
FL	Track clearance		
FPUL	Spring buffers below the track		
FT	Clearance for door operation		

Door weights for roof loads:

SPU F42 / APU F42 Thermo / ALR F42 Thermo	= 320 N/m ²
APU F42 / ALR F42	= 280 N/m ²
ALR F42 Glazing	= 560 N/m ²

Observe the min. sideroom, see page 80.

	STH	WE	DA	BW	FT
N 1	390	140	183	RM + 310	1250
N 2	440	160	233	RM + 335	
N 3	550	180	343	RM + 415	
with double spring shaft	760		543	RM + 415	

B	DE	FFS	FD	FL	FTL	LH
RM - 310	STH + RM	min 90° (745)	DA + 65	230	670	RM + 207

ET***		
N 1 / N 2	RM + 395	Manual operation with short spring buffer
	RM + 665	Shaft operator with long spring buffer
N 3	RM + 665	For manual operation and shaft operator with long spring buffer

*** Simplified calculation

Notes:

- Observe the permissible size ranges of the door types on pages 10 – 15 and 18 – 35 under all circumstances!
- The clearance required for fitting the door must be free of supply lines, heater fans, etc.
- If using the spring buffer below the track, the clear height under the track in the area of the spring buffer is reduced by 70 mm.
- For version with wicket door, manually operated: chain hoist recommended!

* Notice:

Observe clear passage height LDH, see page 53.

Min. headroom

Track size	Headroom	Track size	Headroom	Track size	Headroom
N 1, NS 1, NK 1	390	GS 1, GK 1	567	V 6	RM + 540
N 2, NS 2, NK 2	440	GS 1, GK 2	617	V 7	RM + 580
N 3	550	L 1, LD 1, L 2, LD 2	200	V 9	RM + 675
NA 1	400	H 4, HD 4	780	VA 6	RM + 550
NA 2	450	H 5, HD 5	840	VS 6, VS 7	**
ND 1	410	H 8, HD 8	880	VS 9	**
ND 2	440	HA 4	790	VU 6	RM + 310
ND 3	550	HU 4, HU 5, HU 8, RD 4, RD 5, RD 8	1750	VU 7	RM + 310
ND 6	490	HS 4, HK 4	808	VU 9	RM + 310
ND 7	510	HS 5, HK 5	835	WS 6, WS 7, WS 9	**
NH 1, GD 1	569	HS 8, HK 8	875	HP 4	1930
NH 2, GD 2	634	RS 4, RK 4, RS 5, RK 5	1477	HP 5	1960
NH 3	709				Dimensions in mm

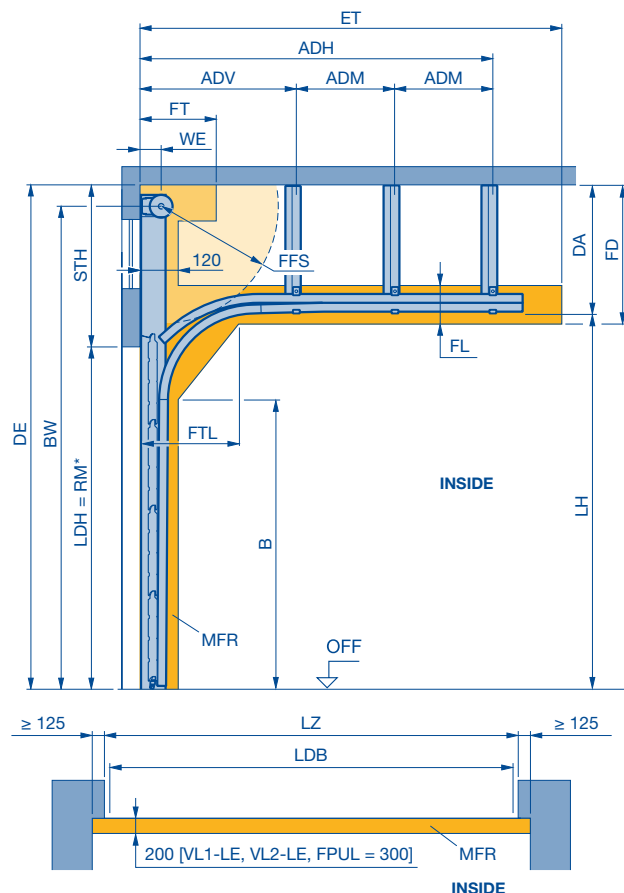
** Dimensions can be found in the product configurator.

Track application: NA

Normal track application

With high-mounted torsion spring shaft

Detailed technical data can be found in the product configurator.



ADH	Distance to rear ceiling anchor	FTL	Clearance door section in the double radius
ADM	Distance to central ceiling anchor	LDB	Clear passage width with ThermoFrame (see page 80)
ADV	Distance to front ceiling anchor	LDH	Clear passage height
B	Start of double radius	LH	Track height
BW	Position of shaft support	LZ	Clear frame dimension
DA	Min. distance to ceiling (depends on order)	MFR	Space for fitting the door
DE	Ceiling height (depends on order)	OFF	Finished floor level
ET	Min. distance back	RM	Grid height
FD	Ceiling clearance	STH	Max. headroom (depends on order)
FFS	Spring compression clearance	WE	Shaft centre from lintel
FL	Track clearance		
FPUL	Spring buffers below the track		
FT	Clearance for door operation		

Door weights for roof loads:

SPU F42 / APU F42 Thermo / ALR F42 Thermo	= 320 N/m ²
APU F42 / ALR F42	= 280 N/m ²
ALR F42 Glazing	= 560 N/m ²

Observe the min. sideroom, see page 80.

	STH	WE	DA	Min. BW	Max. BW
NA 1	400	140	(BW + 80) - (RM + 207)	RM + 320	7820, DE - 80
NA 2	450	160	(BW + 105) - (RM + 207)	RM + 345	7995, DE - 105

FT	DE	B	FFS
885	STH + RM	RM - 310	Min. 90° (745)

FD	FL	FTL	LH
DA + 65	230	670	RM + 207

ET**		
NA 1 / NA 2	RM + 395	Manual operation with short spring buffer
	RM + 665	Shaft operator with long spring buffer

** Simplified calculation

Notes:

- Observe the permissible size ranges of the door types on pages 10 – 15 and 18 – 35 under all circumstances!
- The clearance required for fitting the door must be free of supply lines, heater fans, etc.
- If using the spring buffer below the track, the clear height under the track in the area of the spring buffer is reduced by 70 mm.

* Notice:

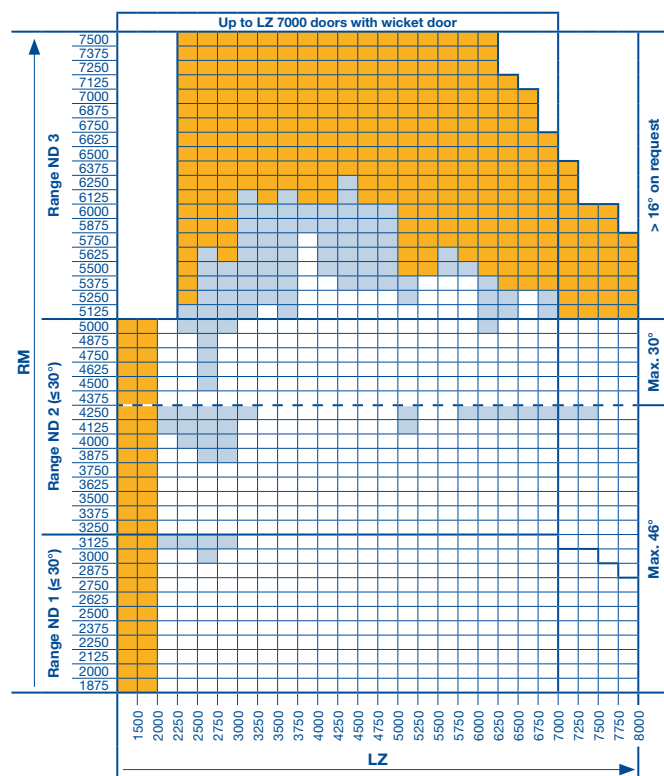
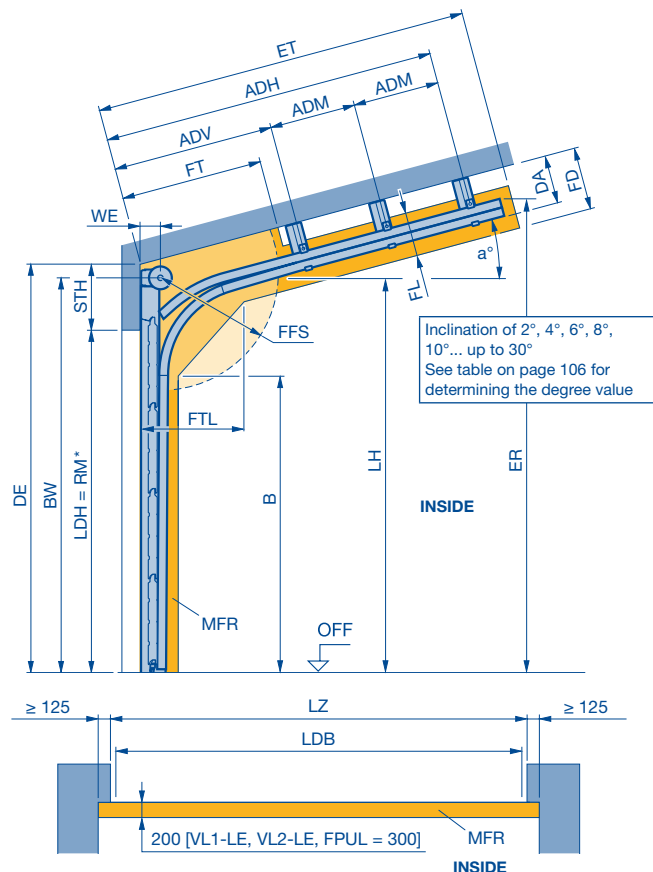
Observe clear passage height LDH, see page 53.

Track application: ND

Normal track application

with inclination up to max. 30

Detailed technical data can be found in the product configurator.



a°	Inclination	FTL	Clearance door section in the double radius
ADH	Distance to rear ceiling anchor	LDB	Clear passage width with ThermoFrame (see page 80)
ADM	Distance to central ceiling anchor	LDH	Clear passage height
ADV	Distance to front ceiling anchor	LH	Track height
B	Start of double radius	LZ	Clear frame dimensions (from 1200)
BW	Position of shaft support	MFR	Space for fitting the door
DA	Distance to ceiling on request	OFF	Finished floor level
DE	Ceiling height	RM	Grid height
ER	Corner point, top edge of track (depth and height)	STH	Min. headroom
ET	Min. distance back	WE	Shaft centre from lintel
FD	Ceiling clearance		
FFS	Spring compression clearance		
FL	Track clearance		
FPUL	Spring buffers below the track		
FT	Clearance for door operation		

Door weights for roof loads:

SPU F42 / APU F42 Thermo / ALR F42 Thermo	= 320 N/m ²
APU F42 / ALR F42	= 280 N/m ²
ALR F42 Glazing	= 560 N/m ²

Observe the min. sideroom, see page 80.

	STH	WE	BW	FT	FTL
ND 1, ≤ 30°	410	140	RM + 330	1250, < 16°	670, < 16°
ND 2, ≤ 30°	440	160	RM + 335	1000, ≥ 16°	500, ≥ 16°
ND 3, ≤ 30°	550		RM + 415	1250, < 16°	670, < 16°
With double spring shaft	760	180	RM + 415	1000, ≥ 16°	500, ≥ 16°

ET	DA	DE	FFS	FD	FL	LH	ER	B
**	**	STH + RM	Min. 90° (745)	DA + 65	230	**	**	**

** Dimensions can be found in the product configurator.

Note:

- The validity tables with the size range shown are based on the standard door type version (see product description). In case of deviations, the valid size ranges in the product configurator must be taken into account.
- The clearance required for fitting the door must be free of supply lines, heater fans, etc.
- If using the spring buffer below the track, the clear height under the track in the area of the spring buffer is reduced by 70 mm.

* Notice:

Observe clear passage height LDH, see page 53.

Note:

- Observe the permissible size ranges of the door types on pages 10 – 15 and 18 – 35 under all circumstances!
- ALR F42 Vitraplan and ALR F42 Glazing on request.
- To determine the roof slope see page 106.
- Door types APU F42, ALR F42, APU F42 Thermo and ALR F42 Thermo with glazing A3, B3, M3, S3, U3, LB, P, XU and wicket door on request.
- Inclination on request for RM ≤ 4250 and > 30° or RM > 4250 and > 16°.

All door types available in any version.

Versions with glazing A3, B3, M3, S3, U3, LB, P, XU and/or wicket door.

All door types and versions on request.

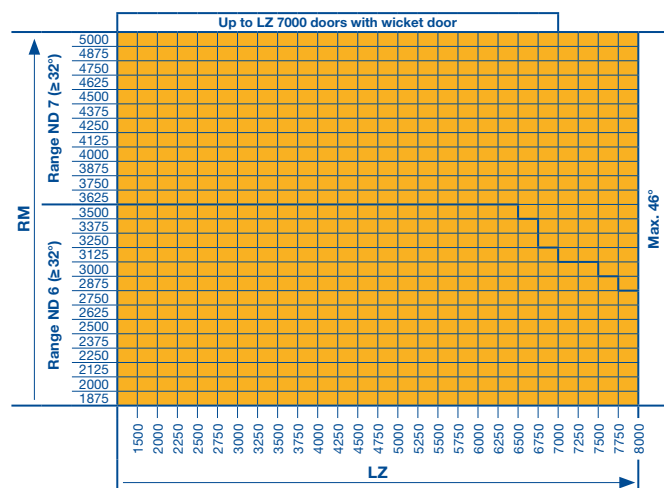
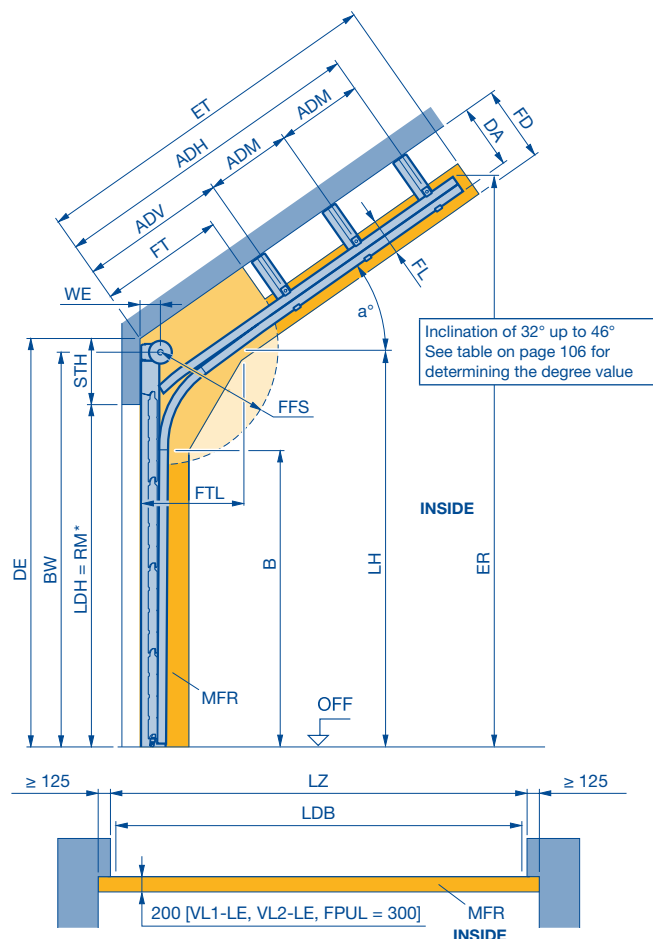
Dimensions in mm

Track application: ND

Normal track application

With inclination of 32° up to max. 46

Detailed technical data can be found in the product configurator.



a°	Inclination	FTL	Clearance door section in the double radius
ADH	Distance to rear ceiling anchor	LDB	Clear passage width with ThermoFrame (see page 80)
ADM	Distance to central ceiling anchor	LDH	Clear passage height
ADV	Distance to front ceiling anchor	LH	Track height
B	Start of double radius	LZ	Clear frame dimensions (from 1200)
BW	Position of shaft support	MFR	Space for fitting the door
DA	Distance to ceiling on request	OFF	Finished floor level
DE	Ceiling height	RM	Grid height
ER	Corner point, top edge of track (depth and height)	STH	Min. headroom
ET	Min. distance back	WE	Shaft centre from lintel
FD	Ceiling clearance		
FFS	Spring compression clearance		
FL	Track clearance		
FPUL	Spring buffers below the track		
FT	Clearance for door operation		

Door weights for roof loads:

SPU F42 / APU F42 Thermo / ALR F42 Thermo	= 320 N/m ²
APU F42 / ALR F42	= 280 N/m ²
ALR F42 Glazing	= 560 N/m ²

Observe the min. sideroom, see page 80.

	STH	WE	BW	FT	FTL
ND 6, ≥ 32°	490	160	RM + 385	885	500
ND 7, ≥ 32°	510		RM + 405		

ET	DA	DE	FFS	FD	FL	LH	ER	B
**	**	STH + RM	Min. 90° (745)	DA + 65	230	**	**	**

** Dimensions can be found in the product configurator.

Note:

- The validity tables with the size range shown are based on the standard door type version (see product description). In case of deviations, the valid size ranges in the product configurator must be taken into account.
- The clearance required for fitting the door must be free of supply lines, heater fans, etc.
- If using the spring buffer below the track, the clear height under the track in the area of the spring buffer is reduced by 70 mm.

* Notice:

Observe clear passage height LDH, see page 53.

Note:

- Observe the permissible size ranges of the door types on pages 10–15 and 18–35 under all circumstances!

All door types and versions on request.

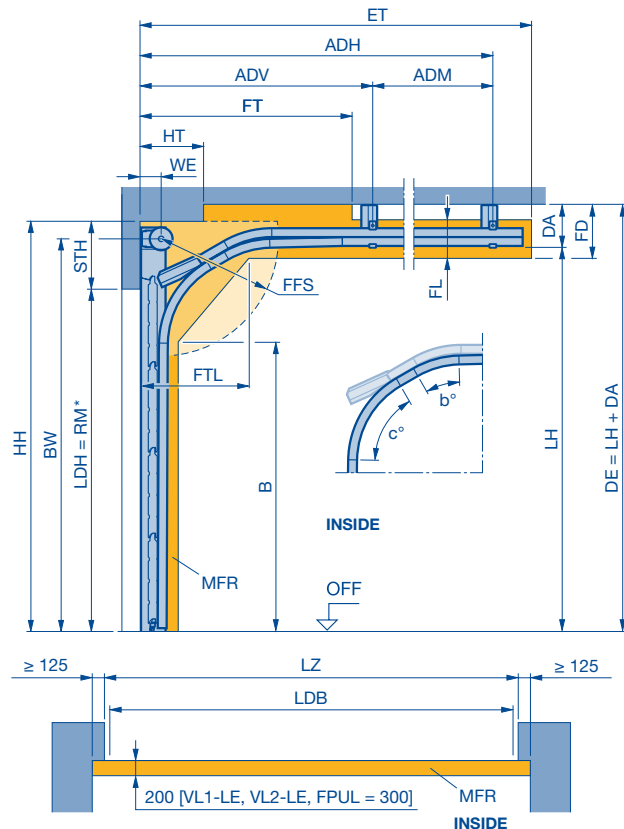
Dimensions in mm

Track application: NS

Normal track application

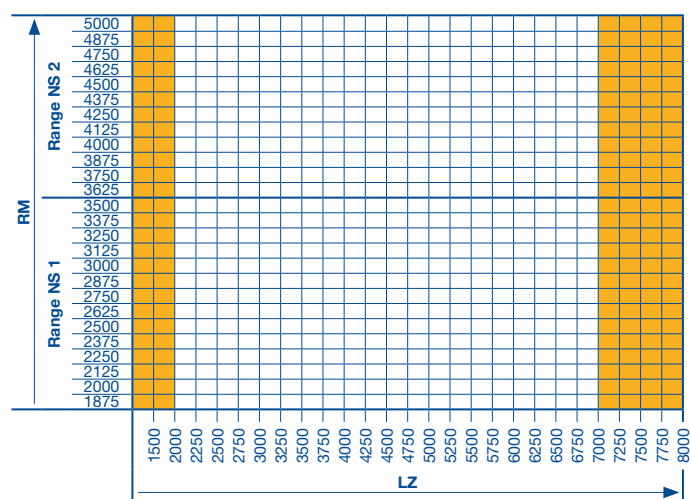
with double radius

Detailed technical data can be found in the product configurator.



Note:

- Observe the permissible size ranges of the door types on pages 10–15 and 18–35 under all circumstances!
- ALR F42 Vitraplan and ALR F42 Glazing on request



b°/c°	Contour angle	HH	Obstruction height
ADH	Distance to rear ceiling anchor	HT	Obstruction depth
ADM	Distance to central ceiling anchor	LH	Track height
ADV	Distance to front ceiling anchor	LDB	Clear passage width with ThermoFrame (see page 80)
B	Start of double radius	LDH	Clear passage height
BW	Position of shaft support	LZ	Clear frame dimensions (from 1200)
DA	Min. distance to ceiling	MFR	Space for fitting the door
DE	Ceiling height	OFF	Finished floor level
ET	Min. distance back on request	RM	Grid height
FD	Ceiling clearance	STH	Min. headroom (see page 54)
FFS	Spring compression clearance	WE	Shaft centre from lintel
FPUL	Spring buffers below the track		
FT	Clearance for door operation		
FTL	Clearance door section in the double radius		

Door weights for roof loads:

SPU F42 / APU F42 Thermo / ALR F42 Thermo	= 320 N/m ²
APU F42 / ALR F42	= 280 N/m ²
ALR F42 Glazing	= 560 N/m ²

Observe the min. sideroom, see page 80.

Note:

- A technical inspection is required!
- The validity tables with the size range shown are based on the standard door type version (see product description). In case of deviations, the valid size ranges in the product configurator must be taken into account.
- The clearance required for fitting the door must be free of supply lines, heater fans, etc.
- If using the spring buffer below the track, the clear height under the track in the area of the spring buffer is reduced by 70 mm.

* Notice:

Observe clear passage height LDH, see page 53.

	STH	WE	DA	BW
NS 1	390	140	185	RM + 310
NS 2	440	160		RM + 335

FT	DE	B	ET	FFS	FD	FL	FTL	LH
885	LH + 183	**	**	Min. 90° (745)	DA + 65	230	**	**

** Dimensions can be found in the product configurator.

All door types available in any version.

All door types and versions on request.

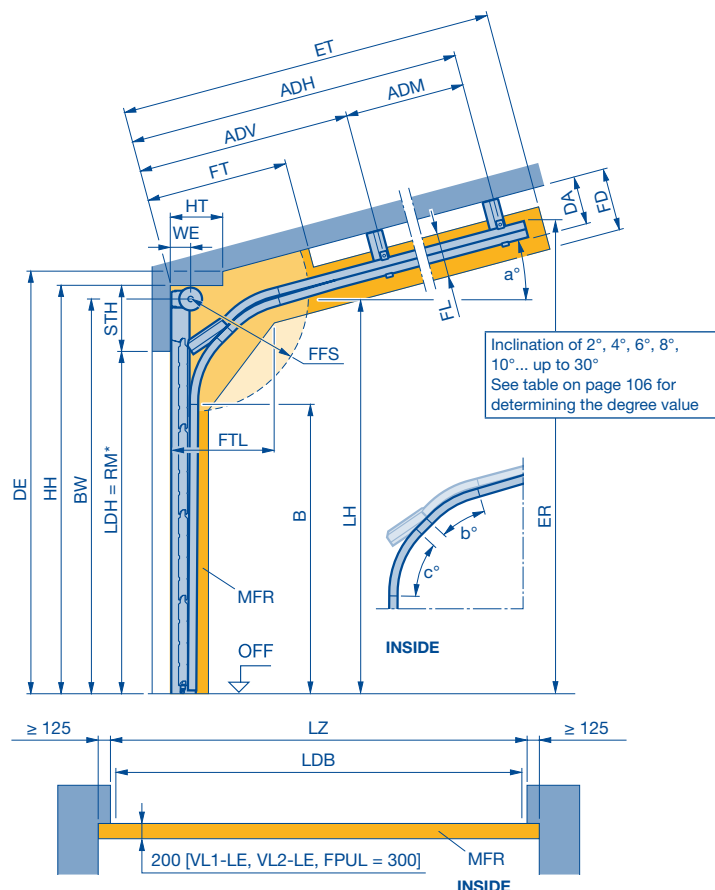
Dimensions in mm

Track application: NK

Normal track application

with double radius and inclination up to max. 30°

Detailed technical data can be found in the product configurator.



a°	Inclination	FT	Clearance for door operation
b°/c°	Contour angle	FTL	Clearance door section in the double radius
ADH	Distance to rear ceiling anchor	HH	Obstruction height
ADM	Distance to central ceiling anchor	HT	Obstruction depth
ADV	Distance to front ceiling anchor	LDB	Clear passage width with ThermoFrame (see page 80)
B	Start of double radius	LDH	Clear passage height
BW	Position of shaft support	LH	Track height
DA	Distance to ceiling on request	LZ	Clear frame dimensions (from 1200)
DE	Ceiling height	MFR	Space for fitting the door
ER	Top edge corner point	OFF	Finished floor level
ET	Min. distance back	RM	Grid height
FD	Ceiling clearance	STH	Min. headroom
FFS	Spring compression clearance	WE	Shaft centre from lintel
FL	Track clearance		
FPUL	Spring buffers below the track		

Door weights for roof loads:

SPU F42 / APU F42 Thermo / ALR F42 Thermo	= 320 N/m ²
APU F42 / ALR F42	= 280 N/m ²
ALR F42 Glazing	= 560 N/m ²

Observe the min. sideroom, see page 80.

Notes:

- A technical inspection is required!
- The validity tables with the size range shown are based on the standard door type version (see product description). In case of deviations, the valid size ranges in the product configurator must be taken into account.
- The clearance required for fitting the door must be free of supply lines, heater fans, etc.
- If using the spring buffer below the track, the clear height under the track in the area of the spring buffer is reduced by 70 mm.
- Observe the permissible size ranges of the door types on pages 10 – 15 and 18 – 35 under all circumstances!
- ALR F42 Vitraplan and ALR F42 Glazing on request.
- To determine the roof slope see page 106.

* Notice:

Observe clear passage height LDH, see page 53.

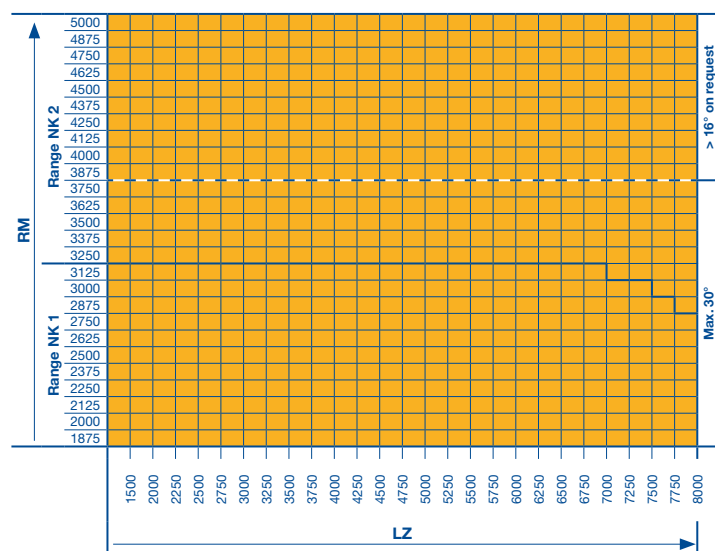
	STH	WE	DA	BW
NK 1	390	140	185	RM + 310
NK 2	440	160		RM + 335

FT	DE	B	ET	FFS	FD	FL	FTL	LH
885	LH + 183	**	**	Min. 90° (745)	DA + 65	230	**	**

** Dimensions can be found in the product configurator.

All door types and versions on request.

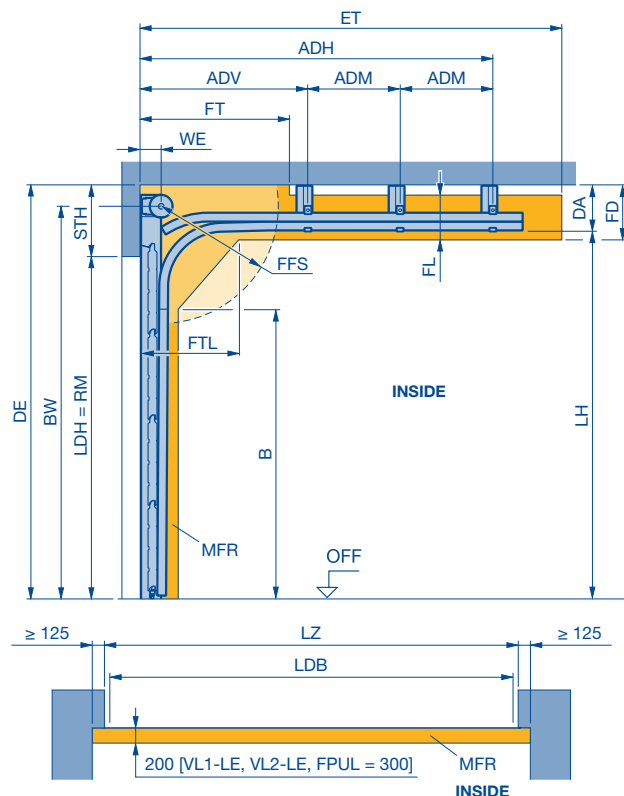
Dimensions in mm



Track application: NH

Normal track application with minimum high-lift

Detailed technical data can be found in the product configurator.



ADH	Distance to rear ceiling anchor	L	Anchor length
ADM	Distance to central ceiling anchor	LDB	Clear passage width with ThermoFrame (see page 80)
ADV	Distance to front ceiling anchor	LDH	Clear passage height
B	Start of double radius	LH	Track height
BW	Position of shaft support	LZ	Clear frame dimensions (from 1200)
DA	Min. distance to ceiling	MFR	Space for fitting the door
DE	Ceiling height	OFF	Finished floor level
ET	Min. distance back	RM	Grid height
FD	Ceiling clearance	STH	Min. headroom
FFS	Spring compression clearance	WE	Shaft centre from lintel
FL	Track clearance	RM	Grid height
FPUL	Spring buffers below the track	STH	Min. headroom
FT	Clearance for door operation	WE	Shaft centre from lintel
FTL	Clearance door section in the double radius		

Door weights for roof loads:

SPU F42 / APU F42 Thermo / ALR F42 Thermo	= 320 N/m ²
APU F42 / ALR F42	= 280 N/m ²
ALR F42 Glazing	= 560 N/m ²

Observe the min. sideroom, see page 80.

Notes:

- The validity tables with the size range shown are based on the standard door type version (see product description). In case of deviations, the valid size ranges in the product configurator must be taken into account.
- The clearance required for fitting the door must be free of supply lines, heater fans, etc.
- If using the spring buffer below the track, the clear height under the track in the area of the spring buffer is reduced by 70 mm.
- Observe the permissible size ranges of the door types on pages 10 – 15 and 18 – 35 under all circumstances!
- ALR F42 Vitraplan and ALR F42 Glazing on request

	STH	WE	DA	BW
NH 1	569	140	225	LH + 140
NH 2	634	160	290	LH + 180
NH 3	709		365	
with double spring shaft	760	180	565	LH + 225

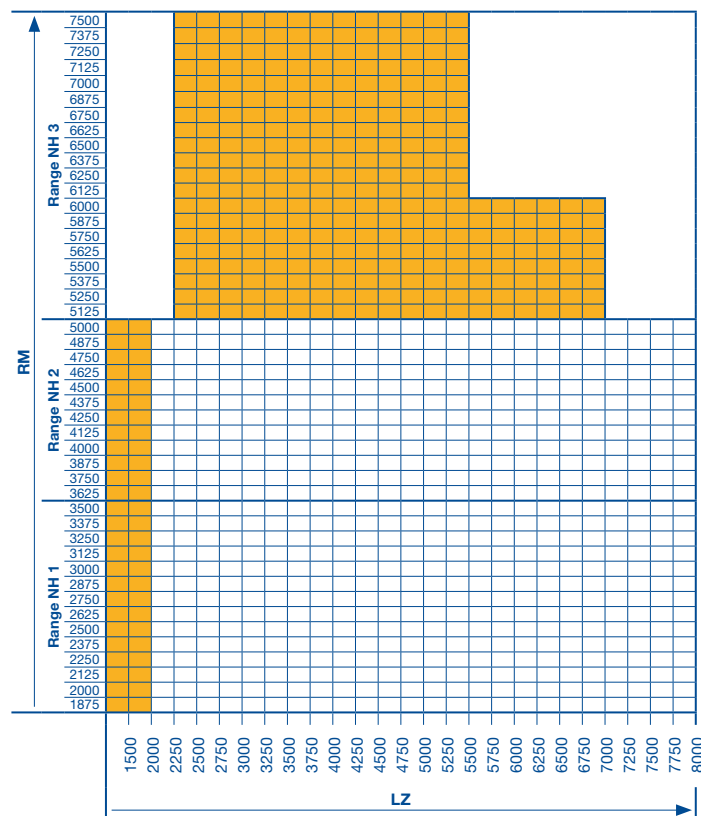
FT	DE	B	FFS	FD	FL	FTL	LH	ET
1150	STH + RM	LH - 366	Min. 90° (745)	DA + 65	250	645	Min. RM + 344 Max. RM + 490	**

** Dimensions can be found in the product configurator.

□ All door types available in any version.

■ All door types and versions on request.

Dimensions in mm



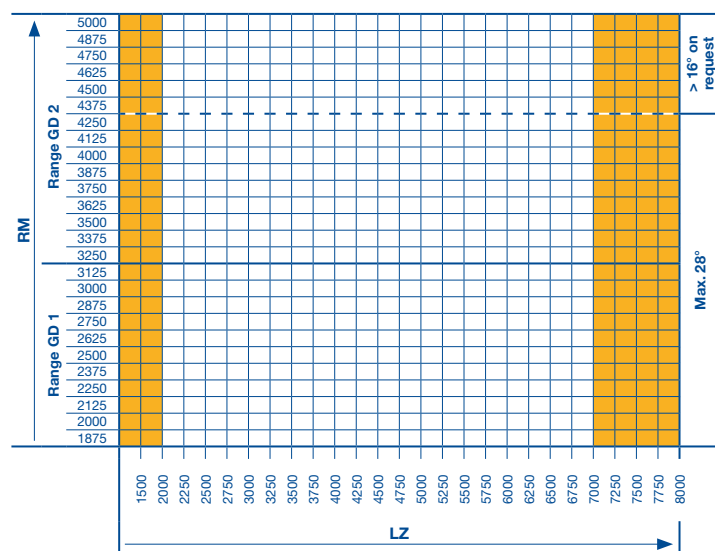
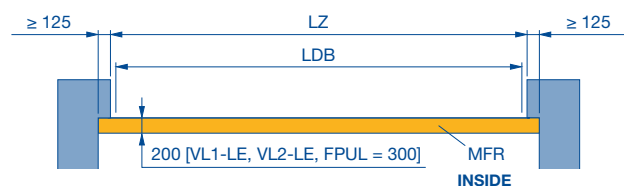
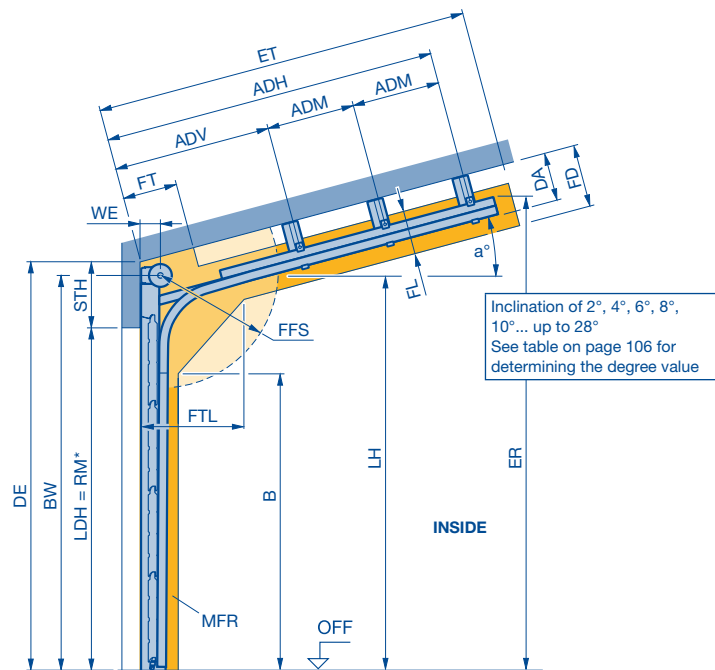
Track application: GD

Normal track application

with inclination up to max. 28

Minimum high-lift

Detailed technical data can be found in the product configurator.



a°	Inclination	FPUL	Spring buffers below the track
ADH	Distance to rear ceiling anchor	FT	Clearance for door operation
ADM	Distance to central ceiling anchor	FTL	Clearance door section in the double radius
ADV	Distance to front ceiling anchor	LDB	Clear passage width with ThermoFrame (see page 80)
B	Start of double radius, factory specification	LDH	Clear passage height
BW	Position of shaft support	LH	Track height
DA	Distance to ceiling on request	LZ	Clear frame dimensions (from 1200)
DE	Ceiling height	MFR	Space for fitting the door
ER	Top edge corner point	OFF	Finished floor level
ET	Min. distance back	RM	Grid height
FD	Ceiling clearance	STH	Min. headroom
FFS	Spring compression clearance	WE	Shaft centre from lintel
FL	Track clearance		

Door weights for roof loads:

SPU F42 / APU F42 Thermo / ALR F42 Thermo	= 320 N/m ²
APU F42 / ALR F42	= 280 N/m ²
ALR F42 Glazing	= 560 N/m ²

Observe the min. sideroom, see page 80.

Notes:

- The validity tables with the size range shown are based on the standard door type version (see product description). In case of deviations, the valid size ranges in the product configurator must be taken into account.
- The clearance required for fitting the door must be free of supply lines, heater fans, etc.
- If using the spring buffer below the track, the clear height under the track in the area of the spring buffer is reduced by 70 mm.
- Observe the permissible size ranges of the door types on pages 10–15 and 18–35 under all circumstances!
- ALR F42 Vitraplan and ALR F42 Glazing on request.
- To determine the roof slope see page 106.

	STH	WE	DA	BW	FT	DE
GD 1	569	140	**	LH + 140	2 × WE	STH + RM
GD 2	634	160		LH + 180		

ET	B	FFS	FD	FL	FTL	LH	ER
**	LH-366	Min. 90° (745)	DA + 65	250	645	Min. RM + 344 Max. RM + 490	**

** Dimensions can be found in the product configurator.

All door types available in any version.

All door types and versions on request.

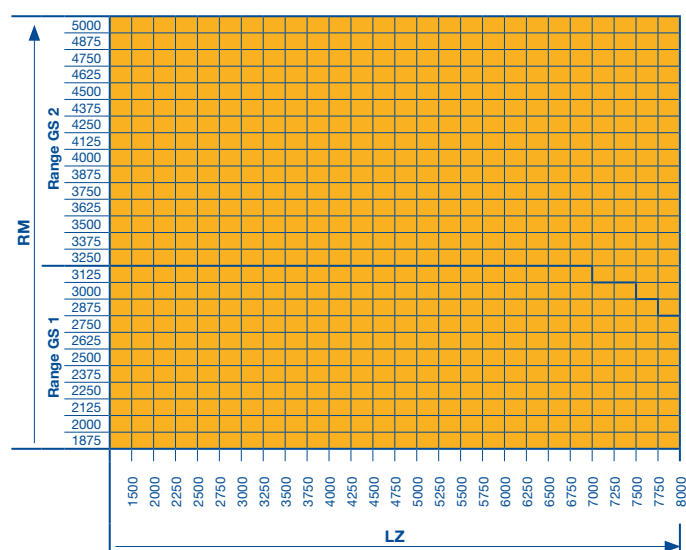
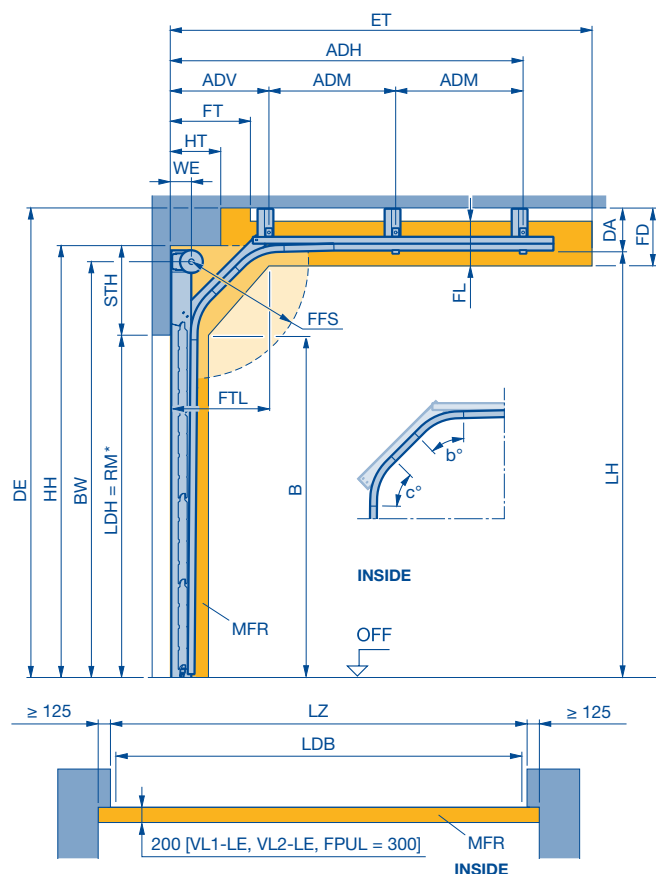
Dimensions in mm

Track application: GS

Normal track application

with double radius and minimum high-lift

Detailed technical data can be found in the product configurator.



b°/c°	Contour angle	FTL	Clearance door section in the double radius
ADH	Distance to rear ceiling anchor	HH	Obstruction height
ADM	Distance to central ceiling anchor	HT	Obstruction depth
ADV	Distance to front ceiling anchor	LDB	Clear passage width with ThermoFrame (see page 80)
B	Start of double radius, factory specification	LDH	Clear passage height
BW	Position of shaft support	LH	Track height
DA	Distance to ceiling on request	LZ	Clear frame dimensions (from 1200)
DE	Ceiling height	MFR	Space for fitting the door
ET	Min. distance back	OFF	Finished floor level
FD	Ceiling clearance	RM	Grid height
FFS	Spring compression clearance	STH	Min. headroom
FL	Track clearance	WE	Shaft centre from lintel
FPUL	Spring buffers below the track		
FT	Clearance for door operation		

Door weights for roof loads:

SPU F42 / APU F42 Thermo / ALR F42 Thermo	= 320 N/m ²
APU F42 / ALR F42	= 280 N/m ²
ALR F42 Glazing	= 560 N/m ²

Observe the min. sideroom, see page 80.

Notes:

- A technical inspection is required!
- The validity tables with the size range shown are based on the standard door type version (see product description). In case of deviations, the valid size ranges in the product configurator must be taken into account.
- The clearance required for fitting the door must be free of supply lines, heater fans, etc.
- If using the spring buffer below the track, the clear height under the track in the area of the spring buffer is reduced by 70 mm.
- Observe the permissible size ranges of the door types on pages 10 – 15 and 18 – 35 under all circumstances!
- ALR F42 Vitraplan and ALR F42 Glazing on request.
- To determine the roof slope see page 106.

	STH	WE	DA	BW	FT	DE
GS 1	567	140	185	B + 510	2 × WE	LH + 183
GS 2	617	160		B + 535		

FFS	FD	FL	FTL	LH	ET
Min. 90° (745)	DA + 65	250	**	**	**

** Dimensions can be found in the product configurator.

All door types and versions on request.

Dimensions in mm

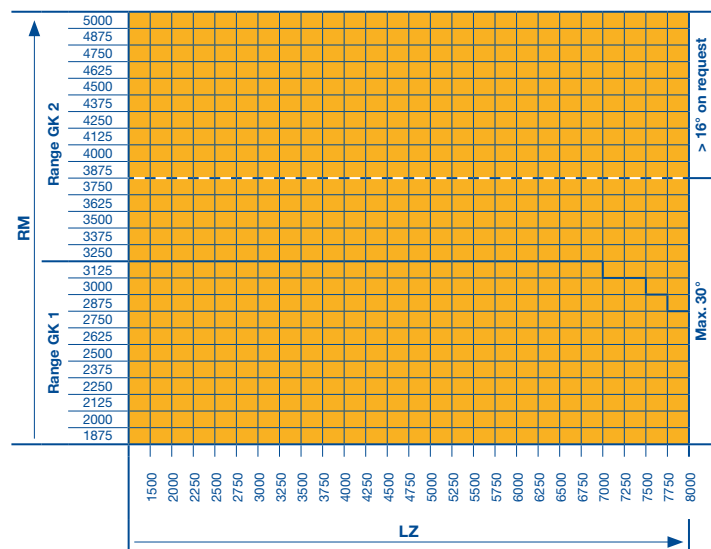
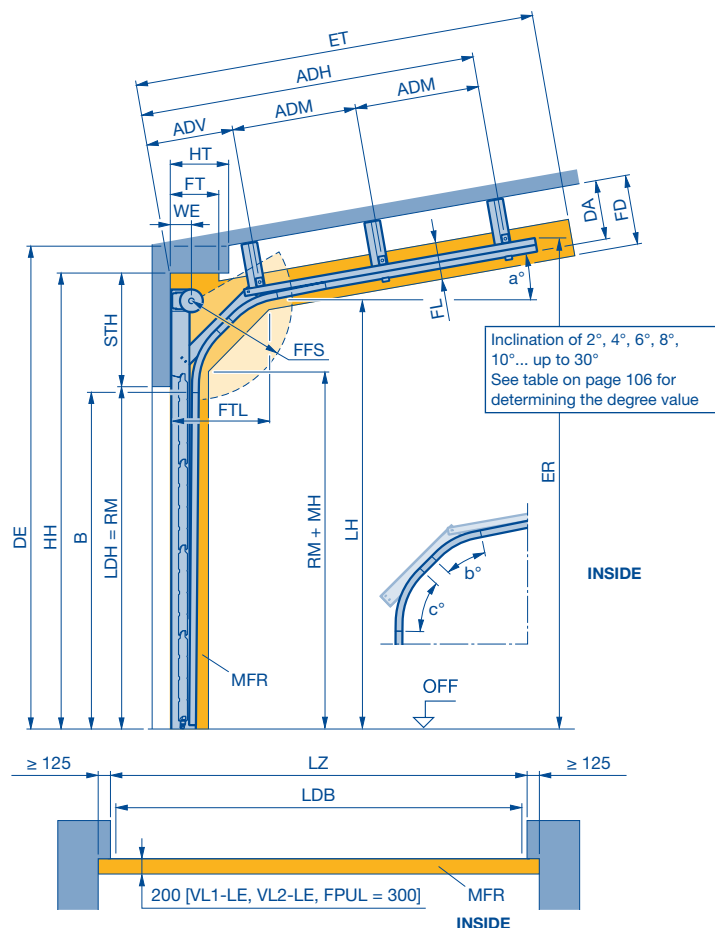
Track application: GK

Normal track application

with double radius and inclination up to max. 30°

Minimum high-lift

Detailed technical data can be found in the product configurator.



a°	Inclination	FPUL	Spring buffers below the track
b°/c°	Contour angle	FT	Clearance for door operation
ADH	Distance to rear ceiling anchor	FTL	Clearance door section in the double radius
ADM	Distance to central ceiling anchor	HH	Obstruction height
ADV	Distance to front ceiling anchor	HT	Obstruction depth
B	Start of double radius, factory specification	LDB	Clear passage width with ThermoFrame (see page 80)
BW	Position of shaft support	LDH	Clear passage height
DA	Distance to ceiling on request	LH	Track height
DE	Ceiling height	LZ	Clear frame dimensions (from 1200)
ER	Top edge corner point	MFR	Space for fitting the door
ET	Track height (depth and height)	OFF	Finished floor level
FD	Min. distance back	RM	Grid height
FFS	Ceiling clearance	STH	Min. headroom
FL	Spring compression clearance	WE	Shaft centre from lintel

Door weights for roof loads:

SPU F42 / APU F42 Thermo / ALR F42 Thermo	= 320 N/m ²
APU F42 / ALR F42	= 280 N/m ²
ALR F42 Glazing	= 560 N/m ²

Observe the min. sideroom, see page 80.

Notes:

- A technical inspection is required!
- The validity tables with the size range shown are based on the standard door type version (see product description). In case of deviations, the valid size ranges in the product configurator must be taken into account.
- The clearance required for fitting the door must be free of supply lines, heater fans, etc.
- If using the spring buffer below the track, the clear height under the track in the area of the spring buffer is reduced by 70 mm.
- Observe the permissible size ranges of the door types on pages 10 – 15 and 18 – 35 under all circumstances!
- ALR F42 Vitraplan and ALR F42 Glazing on request.
- To determine the roof slope see page 106.

	STH	WE	DA	BW	FT	DE
GK 1	567	140	185	B + 510	2 × WE	LH + 183
GK 2	617	160		B + 535		

FFS	FD	FL	FTL	LH	ET
Min. 90° (745)	DA + 65	250	**	**	**

** Dimensions can be found in the product configurator.

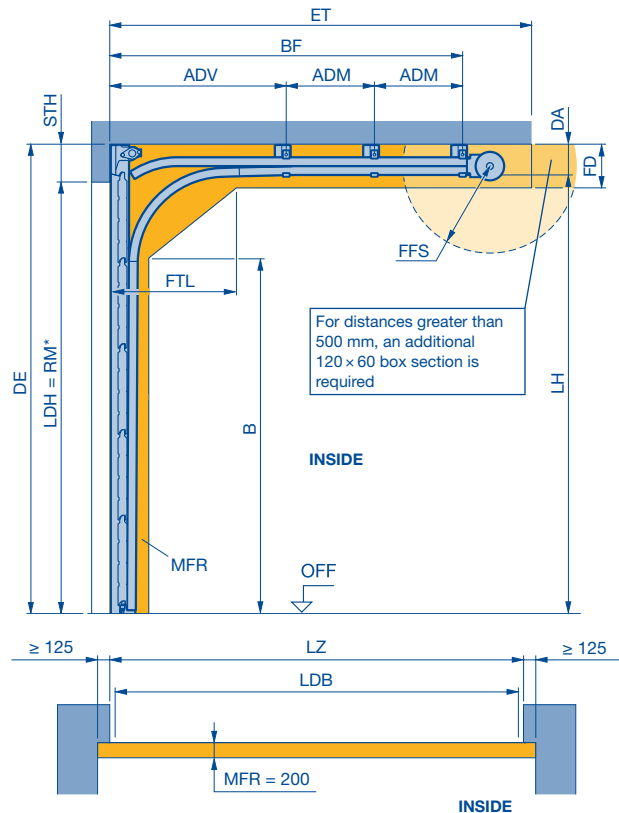
All door types and versions on request.

Dimensions in mm

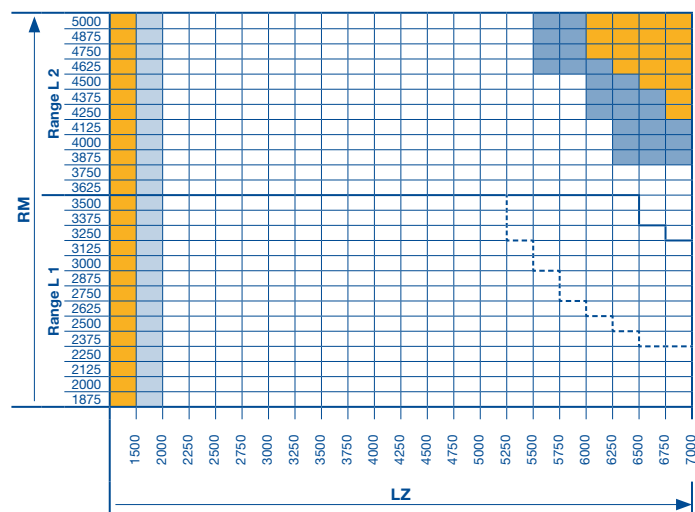
Track application: L

Low headroom track application

Detailed technical data can be found in the product configurator.



MFR = 260	Trap protection for swivel mechanism RM < 2800
MFR = 300	Leading photocell VL1/VL2



ADM	Distance to central ceiling anchor	LH	Track height
ADV	Distance to front ceiling anchor	LDB	Clear passage width with ThermoFrame (see page 80)
B	Start of double radius	LDH	Clear passage height
BF	Position of spring shaft	LZ	Clear frame dimensions (from 1200)
ET	Min. distance back	MFR	Space for fitting the door
DA	Min. distance to ceiling	OFF	Finished floor level
DE	Min. ceiling height	RM	Grid height
FD	Min. ceiling clearance	STH	Min. headroom
FFS	Spring compression clearance		
FTL	Clearance door section in the double radius		

Door weights for roof loads:

SPU F42 / APU F42 Thermo / ALR F42 Thermo	= 320 N/m ²
APU F42 / ALR F42	= 280 N/m ²
ALR F42 Glazing	= 560 N/m ²

Observe the min. sideroom, see page 80.

Door operation:

- Manually operated: rope or chain hoist (recommended for manual operation!)
- Power-driven: WA 500 / 500 FU only with chain box! ITO or SupraMatic HT only possible without swivel mechanism!
- When using the swing mechanism and door lock for outside and inside operation, there may be restrictions in the passage height of up to 40 mm in the area of the lock.

B	BF	DA	DE	ET
LH - 517	RM + 670	156	STH + RM	RM + 982
FD	FFS	FTL	LH	STH
DA + 65	Min. 90° (745)	650	RM + 45	200 210 (WA 300)

Notes:

- The validity tables with the size range shown are based on the standard door type version (see product description). In case of deviations, the valid size ranges in the product configurator must be taken into account.
- The clearance required for fitting the door must be free of supply lines, heater fans, etc.
- Observe the permissible size ranges of the door types on pages 10 – 15 and 18 – 35 under all circumstances!
- ALR F42 Vitraplan and ALR F42 Glazing on request

* Notice:

Observe clear passage height LDH, see page 53.

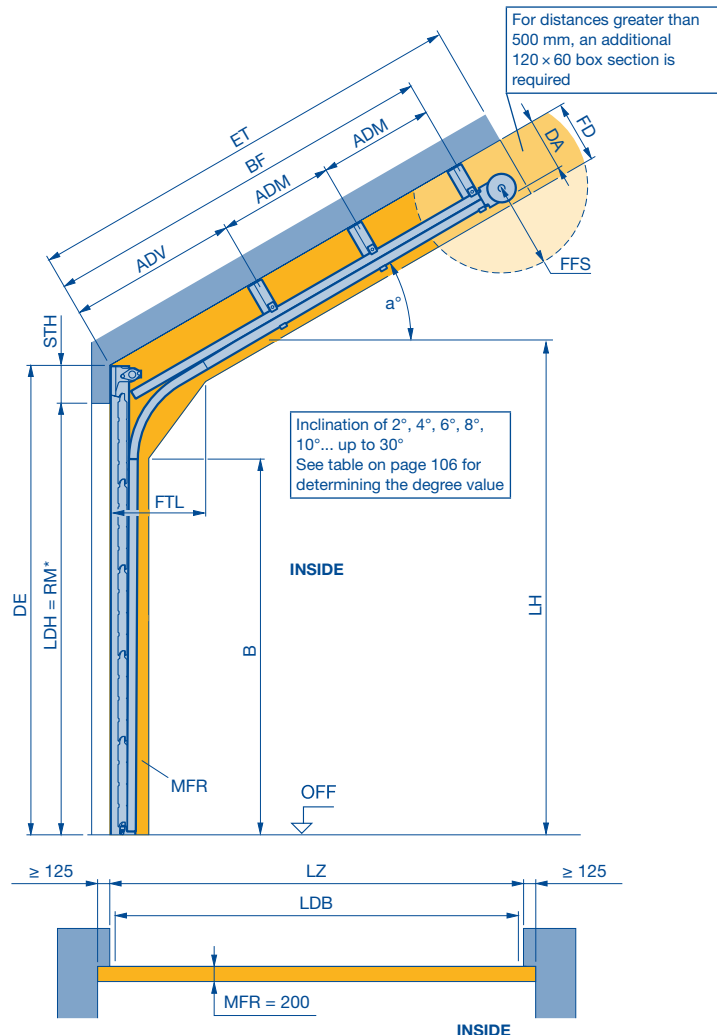
	All door types available in any version.
	All door types and versions on request.
	Door types APU F42, ALR F42, APU F42 Thermo, ALR F42 Thermo as well as versions with glazing A3, B3, M3, S3, U3, LB, P, XU and wicket door on request.
	Versions with glazing A3, B3, M3, S3, U3, LB, P, XU and/or wicket door.
	Track limit
	Track limit for door types APU F42 Thermo, ALR F42 Thermo as well as versions with glazing A3, B3, M3, S3, U3, LB, P, XU and wicket door

Dimensions in mm

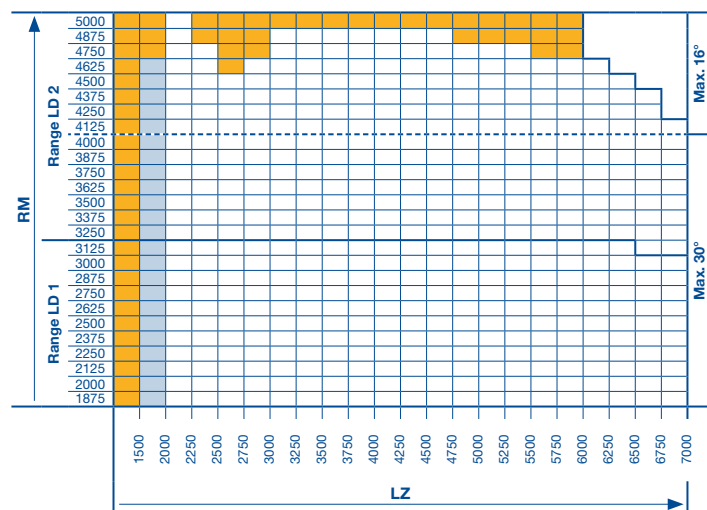
Track application: LD

Low headroom track application
with inclination up to max. 30

Detailed technical data can be found in the product configurator.



MFR = 260	Trap protection for swivel mechanism RM < 2800
MFR = 300	Leading photocell VL1/VL2



a°	Inclination	FTL	Clearance door section in the double radius
ADM	Distance to central ceiling anchor on request	LDB	Clear passage width with ThermoFrame (see page 80)
ADV	Distance to front ceiling anchor	LDH	Clear passage height
B	Start of double radius on request	LZ	Clear frame dimensions (from 1200)
BF	Position of spring shaft on request	MFR	Space for fitting the door
DA	Distance to ceiling on request	OFF	Finished floor level
DE	Min. ceiling height	RM	Grid height
ET	Min. distance back	STH	Min. headroom
FD	Min. ceiling clearance		
FFS	Spring compression clearance		

Door weights for roof loads:

SPU F42 / APU F42 Thermo / ALR F42 Thermo	= 320 N/m ²
APU F42 / ALR F42	= 280 N/m ²
ALR F42 Glazing	= 560 N/m ²

Observe the min. sideroom, see page 80.

Door operation:

- Manually operated: rope or chain hoist (recommended for manual operation!)
- Power-driven: WA 400 / 500 FU only with chain box! ITO or SupraMatic HT only possible without swivel mechanism!
- When using the swing mechanism and door lock for outside and inside operation, there may be restrictions in the passage height of up to 40 mm in the area of the lock.

Notes:

- The validity tables with the size range shown are based on the standard door type version (see product description). In case of deviations, the valid size ranges in the product configurator must be taken into account.
- The clearance required for fitting the door must be free of supply lines, heater fans, etc.
- Observe the permissible size ranges of the door types on pages 10 – 15 and 18 – 35 under all circumstances!
- ALR F42 Vitraplan and ALR F42 Glazing on request.
- To determine the roof slope see page 106.
- Door types APU F42, ALR F42, APU F42 Thermo, ALR F42 Thermo with glazing A3, B3, M3, S3, U3, LB, P, XU and wicket door on request.

* Notes:

- Observe clear passage height LDH, see page 53.
- The swivel mechanism is only possible up to 10°.

	DE	LH	STH	FD
LD 1 / LD 2	STH + RM	**	200	DA + 65

B	DA	FFS	FTL
**	**	Min. 90° (745)	650

** Dimensions can be found in the product configurator.

ET***		
LD 1 / LD 2	(RM + 990) - (8 x a°)	All versions

*** Simplified calculation

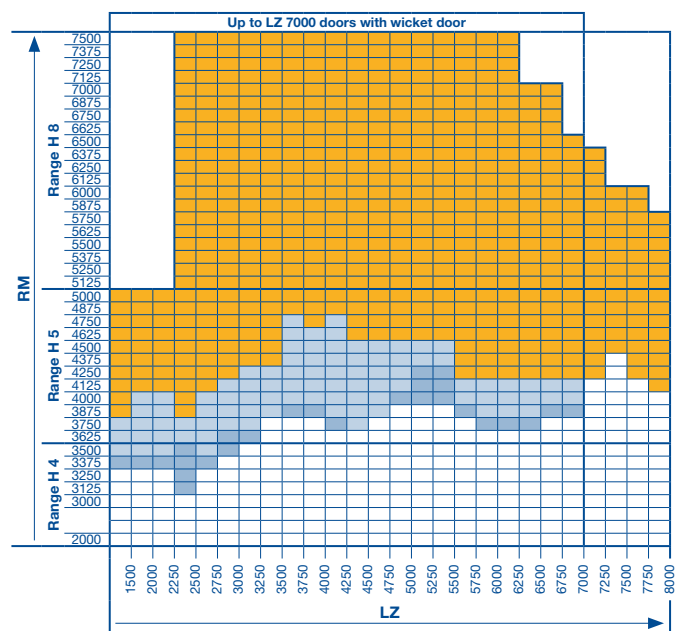
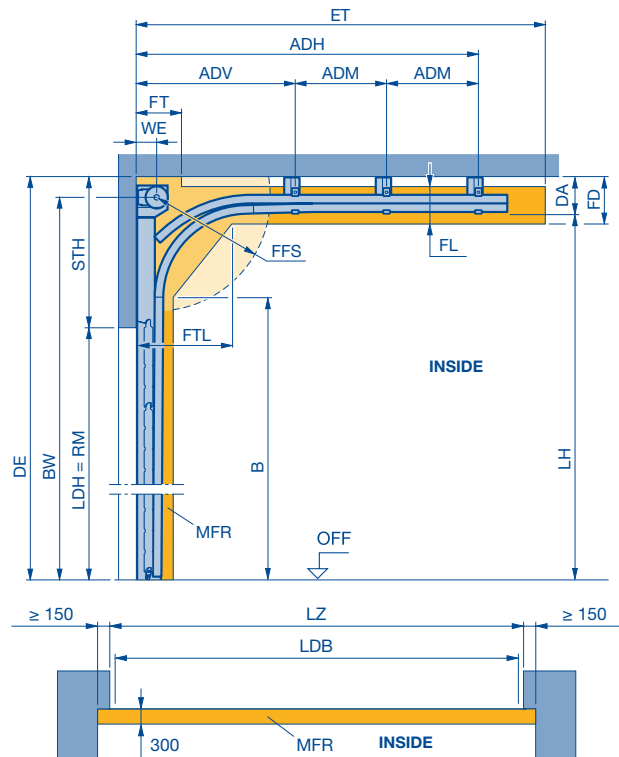
- All door types available in any version.
- All door types and versions on request.
- Versions with glazing A3, B3, M3, S3, U3, LB, P, XU and / or wicket door.
- Track limit

Dimensions in mm

Track application: H

High-lift track application

Detailed technical data can be found in the product configurator.



- All door types available in any version.
- All door types are available, versions with glazing A3, B3, M3, S3, U3, LB, P, XU and / or wicket door on request.
- Door types APU F42 and ALR F42 are available; APU F42 Thermo, ALR F42 Thermo and SPU F42 with thermo frames as well as versions with glazing A3, B3, M3, S3, U3, LB, P, XU and / or wicket door on request.
- All door types and versions on request.

Dimensions in mm

ADH	Distance to rear ceiling anchor	FTL	Clearance door section in the double radius
ADM	Distance to central ceiling anchor	LDB	Clear passage width with ThermoFrame (see page 80)
ADV	Distance to front ceiling anchor	LDH	Clear passage height
B	Start of double radius	LH	Track height
BW	Position of shaft support	LZ	Clear frame dimensions (from 1200)
DA	Min. distance to ceiling	MFR	Space for fitting the door
DE	Min. ceiling height	OFF	Finished floor level
ET	Min. distance back	RM	Grid height
FD	Min. ceiling clearance	STH	Min. headroom
FFS	Spring compression clearance	WE	Shaft centre from lintel
FL	Track clearance		
FT	Clearance for door operation		

Please note:

Select required track height according to the door height in table.

Note:

- The validity tables with the size range shown are based on the standard door type version (see product description). In case of deviations, the valid size ranges in the product configurator must be taken into account.
- The clearance required for fitting the door must be free of supply lines, heater fans, etc.
- If using the spring buffer below the track, the clear height under the track in the area of the spring buffer is reduced by 70 mm.

Notes:

- Observe the permissible size ranges of the door types on pages 10 – 15 and 18 – 35 under all circumstances!
- ALR F42 Vitraplan and ALR F42 Glazing on request

Observe the min. sideroom, see page 80.

	STH	WE	DA	BW
H 4	LH - RM + 290	160	290	LH + 150
H 5	LH - RM + 350 (525*)	180	350 (525*)	LH + 180
H 8	LH - RM + 390 (550*)	205	390 (550*)	LH + 205

* with double spring shaft

B	DE	FD	FFS	FL	FT	FTL
LH - 513	STH + RM	DA + 65	Min. 90° (745)	250	2 x WE	650

ET*	
H 4/H 5	2 x RM - LH + 962 + 297 For manual operation with long spring buffer (standard) 2 x RM - LH + 692 + 297 For shaft operator with long spring buffer LH - RM ≤ 1000 2 x RM - LH + 692 + 297 For shaft operator WA 300 with long spring buffer LH - RM > 1000 2 x RM - LH + 692 + 27 For shaft operator WA 500 / WA 500 FU with spring buffer, short LH - RM > 1000
H 8	2 x RM - LH + 692 + 297 All versions

* Simplified calculation

Table: track heights (LH)

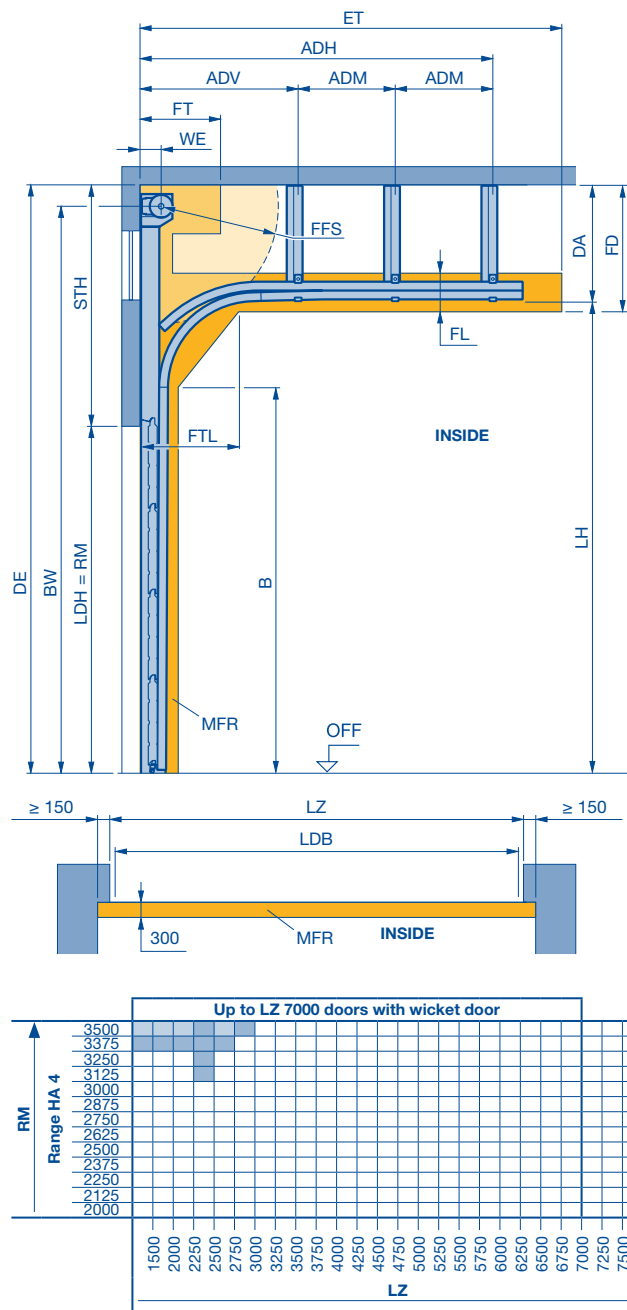
Door height RM	Min. LH	Max. LH	H 5	Door height RM	Min. LH	Max. LH	H 8
5000	5490	8350		7500	8595	10250	
4875	5365	8225	H 5	7375	8470	10250	All door types and versions available on request
4750	5240	8100		7250	8345	10250	
4625	5115	7975		7125	8220	10250	
4500	4990	7850		7000	8095	10250	
4375	4865	7725		6875	7970	10250	
4250	4740	7600		6750	7845	10200	
4125	4615	7475		6625	7720	10075	
4000	4490	7350		6500	7595	9950	
3875	4365	6985		6375	6865	9825	
3750	4240	6735		6250	6740	9700	
3625	4115	6485		6125	6615	9575	
3500	3990	6235		6000	6490	9450	
3375	3865	5985		5875	6365	9325	
3250	3740	5735		5750	6240	9200	
3125	3615	5485		5625	6115	9075	
3000	3490	5235	H 4	5500	5990	8950	
2875	3365	4985		5375	5865	8825	
2750	3240	4735		5250	5740	8700	
2625	3115	4485		5125	5615	8575	
2500	2990	4235					
2375	2865	3985					
2250	2740	3735					
2125	2615	3485					
2000	2490	3235					

Track application: HA

High-lift track application

With high-mounted torsion spring shaft

Detailed technical data can be found in the product configurator.



ADH	Distance to rear ceiling anchor	FTL	Clearance door section in the double radius
ADM	Distance to central ceiling anchor (see page 86)	LDB	Clear passage width with ThermoFrame (see page 80)
ADV	Distance to front ceiling anchor	LDH	Clear passage height
B	Start of double radius	LH	Track height
BW	Position of shaft support	LZ	Clear frame dimensions (from 1200)
DA	Min. distance to ceiling	MFR	Space for fitting the door
DE	Min. ceiling height	OFF	Finished floor level
ET	Min. distance back	RM	Grid height
FD	Ceiling clearance	STH	Min. headroom
FFS	Spring compression clearance	WE	Shaft centre from lintel
FL	Track clearance		
FT	Clearance for door operation		

Please note:
Select required track height according to the door height in table.

- Note:**
- The validity tables with the size range shown are based on the standard door type version (see product description). In case of deviations, the valid size ranges in the product configurator must be taken into account.
 - The clearance required for fitting the door must be free of supply lines, heater fans, etc.
 - If using the spring buffer below the track, the clear height under the track in the area of the spring buffer is reduced by 70 mm.

Observe the min. sideroom, see page 80.

	STH	DA	DE	B	Min. BW
HA 4	(BW + 140) - RM	(BW + 140) - LH	STH + RM	LH - 513	LH + 150

BW max.	WE	FT	FTL	FL	FFS	FD
8120, DE - 140	160	2 x WE	650	250	Min. 90° (745)	DA + 65

Table: track heights (LH)

Door height RM	Min. LH	Max. LH	HA 4
3500	3990	6215	
3375	3865	5965	
3250	3740	5715	
3125	3615	5465	
3000	3490	5215	
2875	3365	4965	
2750	3240	4715	
2625	3115	4465	
2500	2990	4215	
2375	2865	3965	
2250	2740	3715	
2125	2615	3465	
2000	2490	3215	

- Notes:**
- Observe the permissible size ranges of the door types on pages 10 – 15 and 18 – 35 under all circumstances!
 - ALR F42 Vitraplan and ALR F42 Glazing on request

ET*		
HA 4	2 x RM - LH + 962 + 297	For manual operation with long spring buffer (standard)
	2 x RM - LH + 692 + 297	For shaft operator with long spring buffer LH - RM ≤ 1000
	2 x RM - LH + 692 + 297	For shaft operator WA 300 with long spring buffer LH - RM > 1000
	2 x RM - LH + 692 + 27	For shaft operator WA 500 / WA 500 FU with spring buffer, short LH - RM > 1000

* Simplified calculation

All door types available in any version.

All door types are available, versions with glazing A3, B3, M3, S3, U3, LB, P, XU and / or wicket door on request.

Door types APU F42 and ALR F42 are available; APU F42 Thermo, ALR F42 Thermo and SPU F42 with thermo frames as well as versions with glazing A3, B3, M3, S3, U3, LB, P, XU and / or wicket door on request.

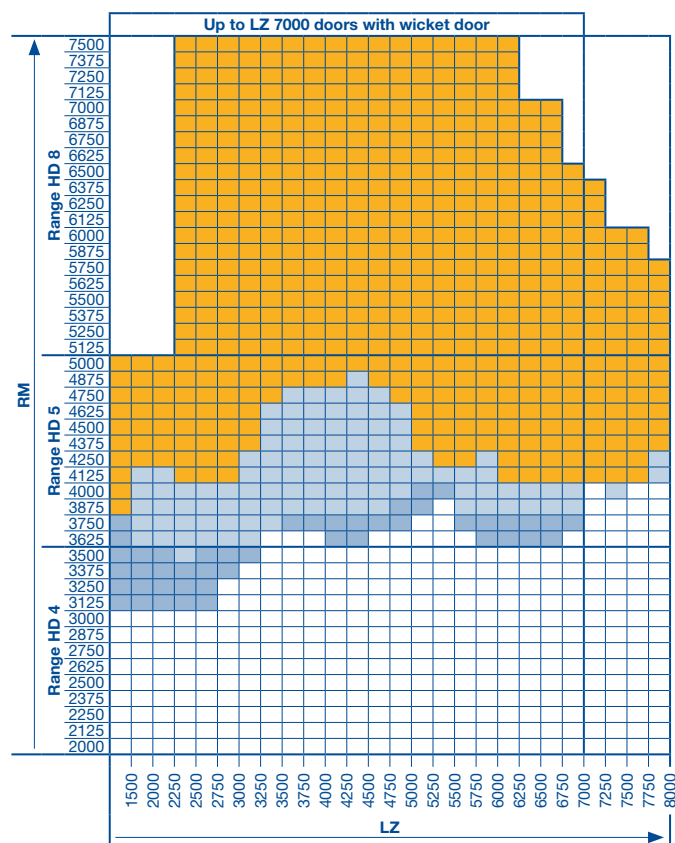
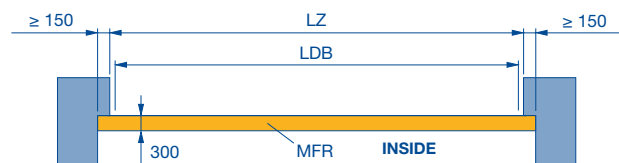
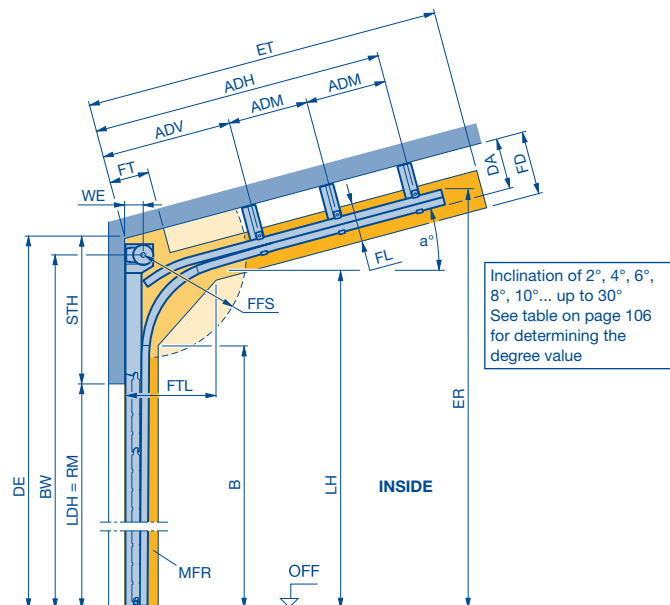
Dimensions in mm

Track application: HD

High-lift track application

with inclination up to max. 30

Detailed technical data can be found in the product configurator.



a°	Inclination	FT	Clearance for door operation
ADH	Distance to rear ceiling anchor	FTL	Clearance door section in the double radius
ADM	Distance to central ceiling anchor on request	HH	Obstruction height
ADV	Distance to front ceiling anchor	HT	Obstruction depth
B	Start of double radius	LDB	Clear passage width with ThermoFrame (see page 80)
BW	Position of shaft support	LDH	Clear passage height
DA	Distance to ceiling on request	LH	Track height
DE	Min. ceiling height	LZ	Clear frame dimensions (from 1200)
ER	Top edge corner point	MFR	Space for fitting the door
ET	Track height (depth and height)	OFF	Finished floor level
FD	Min. distance back	RM	Grid height
FFS	Ceiling clearance	STH	Min. headroom
FL	Spring compression clearance	WE	Shaft centre from lintel
FL	Track clearance		

Please note:

Select required track height according to the door height in the table on page 66.

Notes:

- The validity tables with the size range shown are based on the standard door type version (see product description). In case of deviations, the valid size ranges in the product configurator must be taken into account.
- The clearance required for fitting the door must be free of supply lines, heater fans, etc.
- If using the spring buffer below the track, the clear height under the track in the area of the spring buffer is reduced by 70 mm.
- Observe the permissible size ranges of the door types on pages 10 – 15 and 18 – 35 under all circumstances!
- ALR F42 Vitraplan and ALR F42 Glazing on request.
- To determine the roof slope see page 106.
- Inclination > 10° to 30° on request.

Observe the min. sideroom, see page 80.

	STH	BW	WE	DA	B
HD 4	780	LH + 150	160	**	LH - 513
HD 5	840	LH + 180	180		
HD 8	880	LH + 205	205		

FT	FL	FTL	FFS	FD	ET	ER
2 × WE	250	650, < 16° 550, ≥ 16°	Min. 90° (745)	DA + 65	**	**

** Dimensions can be found in the product configurator.

All door types available in any version.

All door types are available, versions with glazing A3, B3, M3, S3, U3, LB, P, XU and/or wicket door on request.

Door types APU F42 and ALR F42 are available; APU F42 Thermo, ALR F42 Thermo and SPU F42 with thermo frames as well as versions with glazing A3, B3, M3, S3, U3, LB, P, XU and/or wicket door on request.

All door types and versions on request.

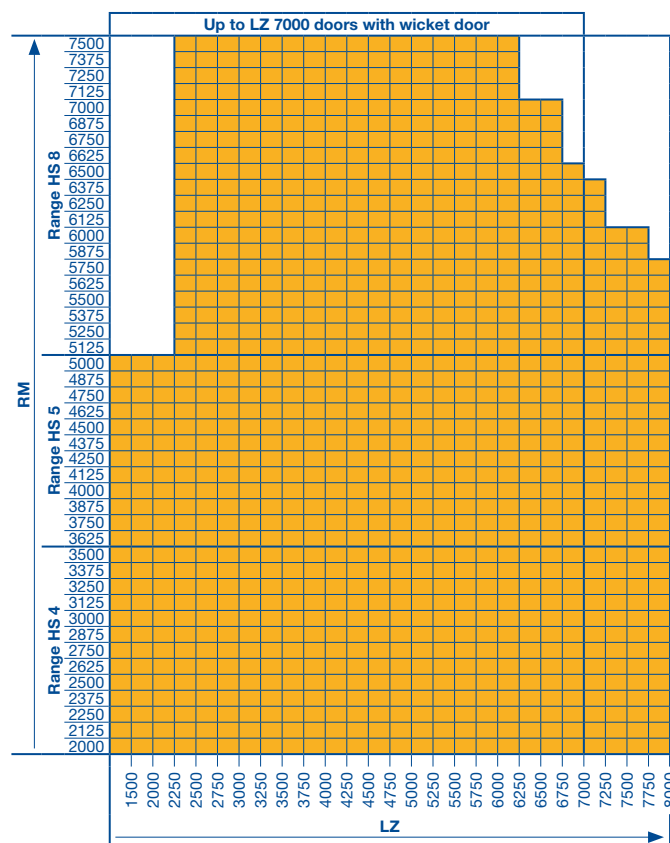
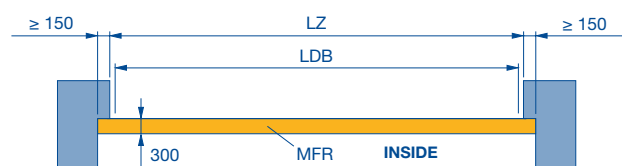
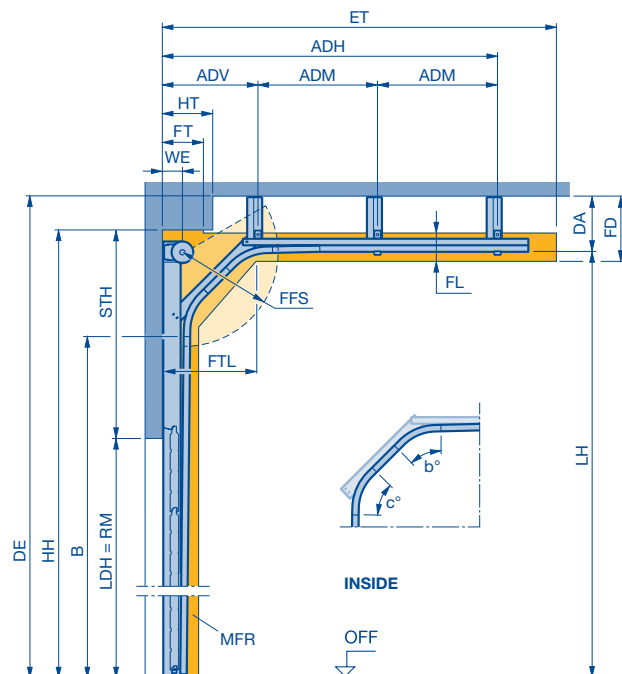
Dimensions in mm

Track application: HS

High-lift track application

with double radius

Detailed technical data can be found in the product configurator.



b°/c°	Contour angle	FTL	Clearance door section in the double radius
ADH	Distance to rear ceiling anchor	FFW	Spring shaft clearance
ADM	Distance to central ceiling anchor	HH	Obstruction height
ADV	Distance to front ceiling anchor	HT	Obstruction depth
B	Start of double radius, factory specification	LDB	Clear passage width with ThermoFrame (see page 80)
DA	Distance to ceiling on request	LDH	Clear passage height
DE	Min. ceiling height	LH	Track height
ET	Distance back	LZ	Clear frame dimensions (from 1200)
FD	Ceiling clearance	MFR	Space for fitting the door
FFS	Spring compression clearance	OFF	Finished floor level
FL	Track clearance	RM	Grid height
FT	Clearance for door operation, on request	STH	Min. headroom (see page 54)
		WE	Shaft centre from lintel

Please note:

Select required track height according to the door height in the table on page 66.

Note:

- A technical inspection is required!
- The validity tables with the size range shown are based on the standard door type version (see product description). In case of deviations, the valid size ranges in the product configurator must be taken into account.
- The clearance required for fitting the door must be free of supply lines, heater fans, etc.

Notes:

- Observe the permissible size ranges of the door types on pages 10 – 15 and 18 – 35 under all circumstances!
- ALR F42 Vitraplan and ALR F42 Glazing on request

Observe the min. sideroom, see page 80.

	STH	WE	DA	DE	B
HS 4	785	160	**	LH + 183	**
HS 5	812	180			
HS 8	852	205			

BW	FT	FL	FTL	FFS	FD	ET	ER
**	2 x WE	250	**	Min. 90° (745)	DA + 65	**	**

** Dimensions can be found in the product configurator.

All door types and versions on request.

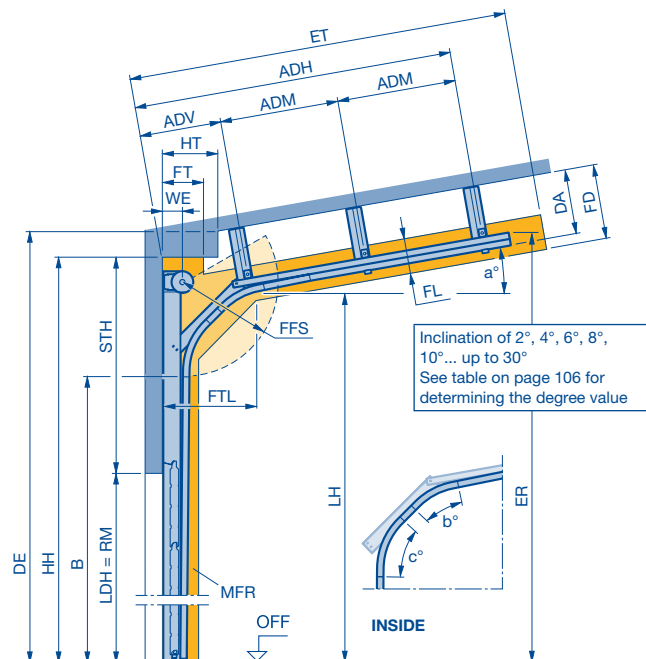
Dimensions in mm

Track application: HK

High-lift track application

with double radius and inclination up to max. 30°

Detailed technical data can be found in the product configurator.



a°	Inclination	FTL	Clearance door section in the double radius
b°/c°	Contour angle	FFW	Spring shaft clearance
ADH	Distance to rear ceiling anchor	HH	Obstruction height
ADM	Distance to central ceiling anchor	HT	Obstruction depth
ADV	Distance to front ceiling anchor	LDB	Clear passage width with ThermoFrame (see page 80)
B	Start of double radius, factory specification	LDH	Clear passage height
DA	Distance to ceiling on request	LH	Track height
DE	Min. ceiling height	LZ	Clear frame dimensions (from 1200)
ER	Top edge corner point	MFR	Space for fitting the door
FD	Track height (depth and height)	OFF	Finished floor level
FFS	Spring compression clearance	RM	Grid height
FL	Track clearance	STH	Min. headroom
FT	Clearance for door operation, on request	WE	Shaft centre from lintel

Please note:

Select required track height according to the door height in the table on page 66.

Note:

- A technical inspection is required!
- The validity tables with the size range shown are based on the standard door type version (see product description). In case of deviations, the valid size ranges in the product configurator must be taken into account.
- The clearance required for fitting the door must be free of supply lines, heater fans, etc.

Notes:

- Observe the permissible size ranges of the door types on pages 10 – 15 and 18 – 35 under all circumstances!
- ALR F42 Vitraplan and ALR F42 Glazing on request.
- To determine the roof slope see page 106.
- Roof slope > 10° to 30° on request.

Observe the min. sideroom, see page 80.

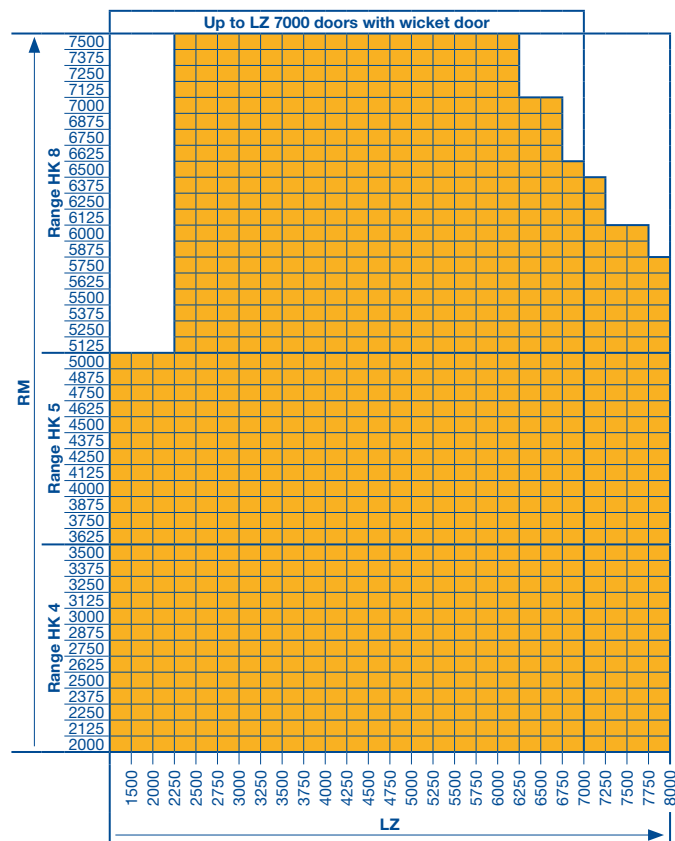
	STH	WE	DA	DE	B
HK 4	785	160	**	LH + 183	**
HK 5	812	180			
HK 8	852	205			

BW	FT	FL	FTL	FFS	FD	ET	ER
**	2 x WE	250	**	Min. 90° (745)	DA + 65	**	**

** Dimensions can be found in the product configurator.

All door types and versions on request.

Dimensions in mm

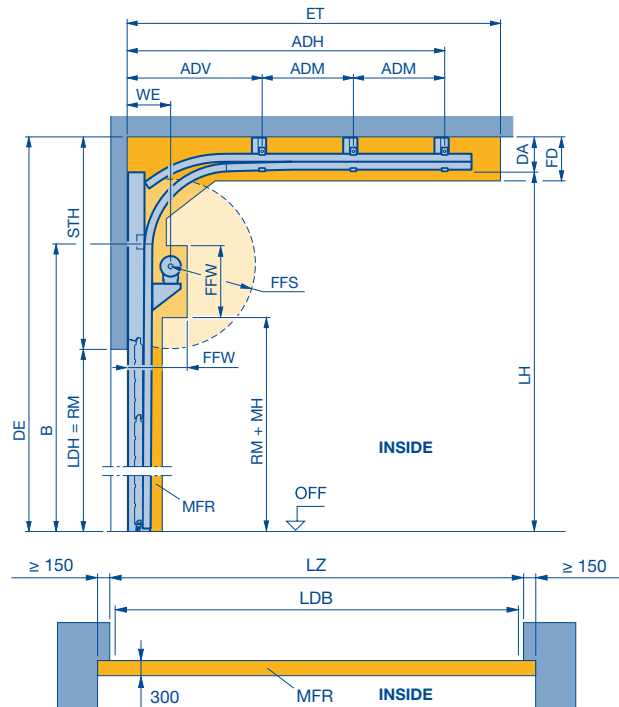


Track application: HU

High-lift track application

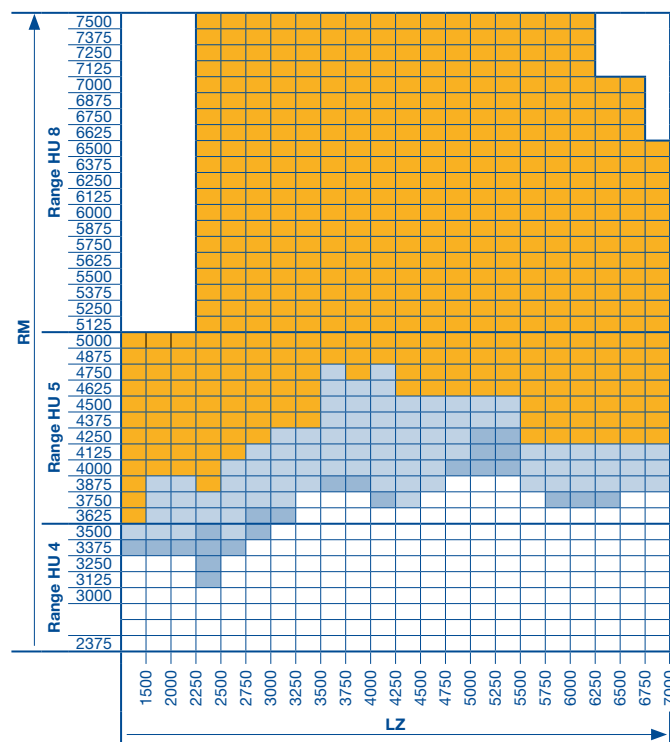
with low-mounted torsion spring shaft

Detailed technical data can be found in the product configurator.



ET*		
HU 4 / HU 5	2 × RM - LH + 962 + 297	For manual operation with long spring buffer (standard)
	2 × RM - LH + 692 + 297	For shaft operator WA 300 with long spring buffer
HU 4 / HU 5	2 × RM - LH + 692 + 27	For shaft operator WA 500 / WA 500 FU with short spring buffer
HU 8	2 × RM - LH + 692 + 297	All versions

* Simplified calculation.



ADH	Distance to rear ceiling anchor	LDB	Clear passage width with ThermoFrame (see page 80)
ADM	Distance to central ceiling anchor	LDH	Clear passage height
ADV	Distance to front ceiling anchor	LH	Track height
B	Start of double radius	LZ	Clear frame dimensions (from 1200)
DA	Min. distance to ceiling	MFR	Space for fitting the door
DE	Min. ceiling height	MH	Fitting height
ET	Min. distance back	OFF	Finished floor level
FD	Min. ceiling clearance	RM	Grid height
FFS	Spring compression clearance	STH	Min. headroom (see page 54)
FFW	Spring shaft clearance	WE	Shaft centre from lintel

Please note:

Select required track height according to the door height in table.

Note:

- The validity tables with the size range shown are based on the standard door type version (see product description). In case of deviations, the valid size ranges in the product configurator must be taken into account.
- The clearance required for fitting the door must be free of supply lines, heater fans, etc.

Observe the min. sideroom, see page 80.

	STH	WE	DA	FFW
HU 4	LH - RM + 190	315	190	460 × 850
HU 5		335		500 × 850
HU 8		375		580 × 850

B	DE	FD	FFS	MH
LH - 513	STH + RM	DA + 65	Min. 90° (745)	400

Table: track heights (LH)

Door height RM	Min. LH	Max. LH	Door height RM	Min. LH	Max. LH
5000	6560	8350	HU 5	7500	9060
4875	6435	8225		7375	8935
4750	6310	8100		7250	8810
4625	6185	7975		7125	8685
4500	6060	7850		7000	8560
4375	5935	7725		6875	8435
4250	5810	7600		6750	8310
4125	5685	7475		6625	8185
4000	5560	7350		6500	8060
3875	5435	7225		6375	7935
3750	5310	7100	HU 4	6250	7810
3625	5185	6975		6125	7685
3500	5060	6850		6000	7560
3375	4935	6725		5875	7435
3250	4810	6600		5750	7310
3125	4685	6475		5625	7185
3000	4560	6350		5500	7060
2875	4435	6225		5375	6935
2750	4310	6100		5250	6810
2625	4185	5975		5125	6685
2500	4060	5850	HU 8	5000	6560
2375	3935	5725		4875	6435

Notes:

- Observe the permissible size ranges of the door types on pages 10 – 15 and 18 – 35 under all circumstances!
- ALR F42 Vitraplan and ALR F42 Glazing on request

	All door types available in any version.
	All door types are available, versions with glazing A3, B3, M3, S3, U3, LB, P, XU and / or wicket door on request.
	Door types APU F42 and ALR F42 are available; APU F42 Thermo, ALR F42 Thermo and SPU F42 with thermo frames as well as versions with glazing A3, B3, M3, S3, U3, LB, P, XU and / or wicket door on request.
	All door types and versions on request.

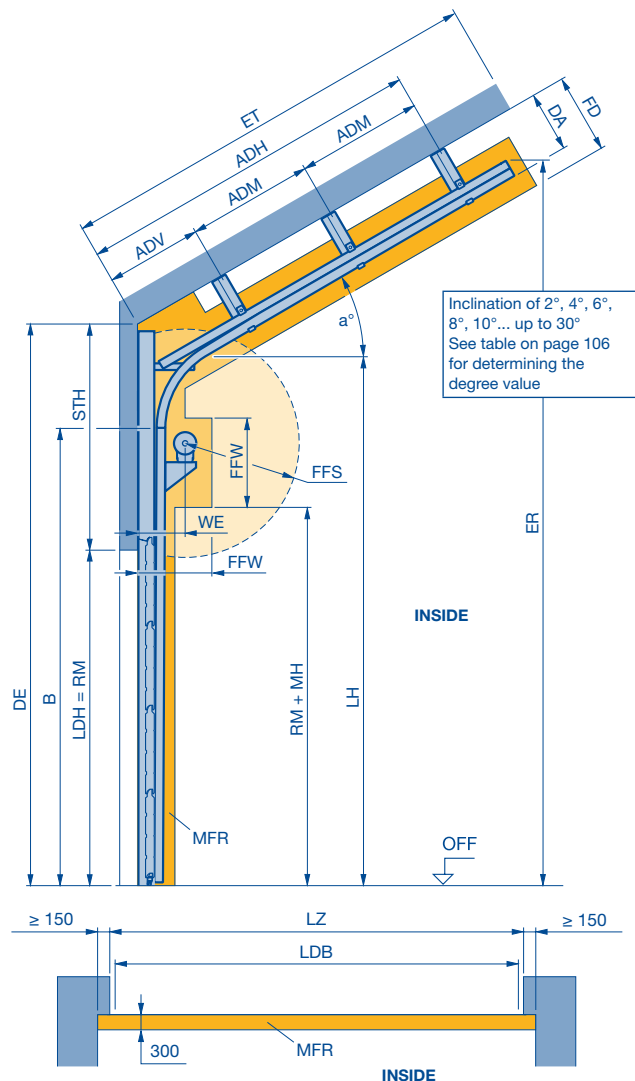
Dimensions in mm

Track application: RD

High-lift track application

with low-mounted torsion spring shaft and inclination up to max. 30°

Detailed technical data can be found in the product configurator.



a°	Inclination	LDB	Clear passage width with ThermoFrame (see page 80)
ADH	Distance to rear ceiling anchor	LDH	Clear passage height
ADM	Distance to central ceiling anchor	LH	Track height
ADV	Distance to front ceiling anchor	LZ	Clear frame dimensions (from 1200)
B	Start of double radius	MFR	Space for fitting the door
DA	Distance to ceiling on request	MH	Fitting height
DE	Min. ceiling height	OFF	Finished floor level
ER	Top edge corner point	RM	Grid height
	Track height (depth and height)	STH	Min. headroom
ET	Min. distance back	WE	Shaft centre from lintel
FD	Ceiling clearance		
FFS	Spring compression clearance		
FFW	Spring shaft clearance		

Please note:

Select required track height according to the door height in the table on page 71.

Note:

- The validity tables with the size range shown are based on the standard door type version (see product description). In case of deviations, the valid size ranges in the product configurator must be taken into account.
- The clearance required for fitting the door must be free of supply lines, heater fans, etc.

Notes:

- Observe the permissible size ranges of the door types on pages 10 – 15 and 18 – 35 under all circumstances!
- ALR F42 Vitraplan and ALR F42 Glazing on request.
- To determine the roof slope see page 106.
- Inclination > 10° to 30° on request.

Observe the min. sideroom, see page 80.

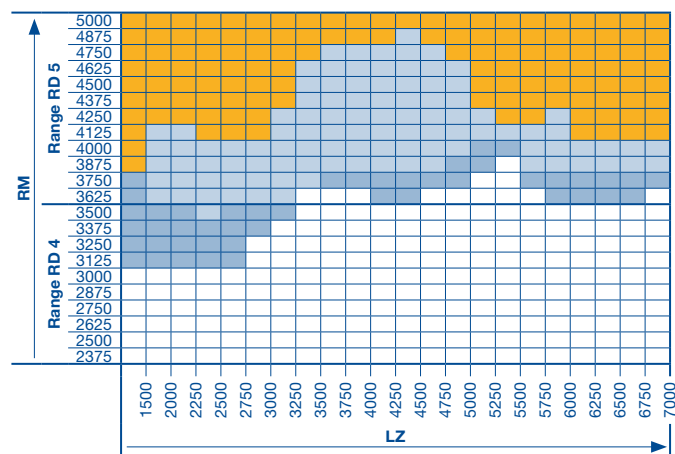
	WE	FFW	STH	DA	DE
RD 4	315	460 × 850	1750	**	STH + RM
RD 5	335	500 × 850			

B	FFS	FD	ET	ER	MH
LH - 513	Min. 90° (745)	DA + 65	**	**	400

** Dimensions can be found in the product configurator.

- All door types available in any version.
- All door types are available, versions with glazing A3, B3, M3, S3, U3, LB, P, XU and / or wicket door on request.
- Door types APU F42 and ALR F42 are available; APU F42 Thermo, ALR F42 Thermo and SPU F42 with thermo frames as well as versions with glazing A3, B3, M3, S3, U3, LB, P, XU and / or wicket door on request.
- All door types and versions on request.

Dimensions in mm

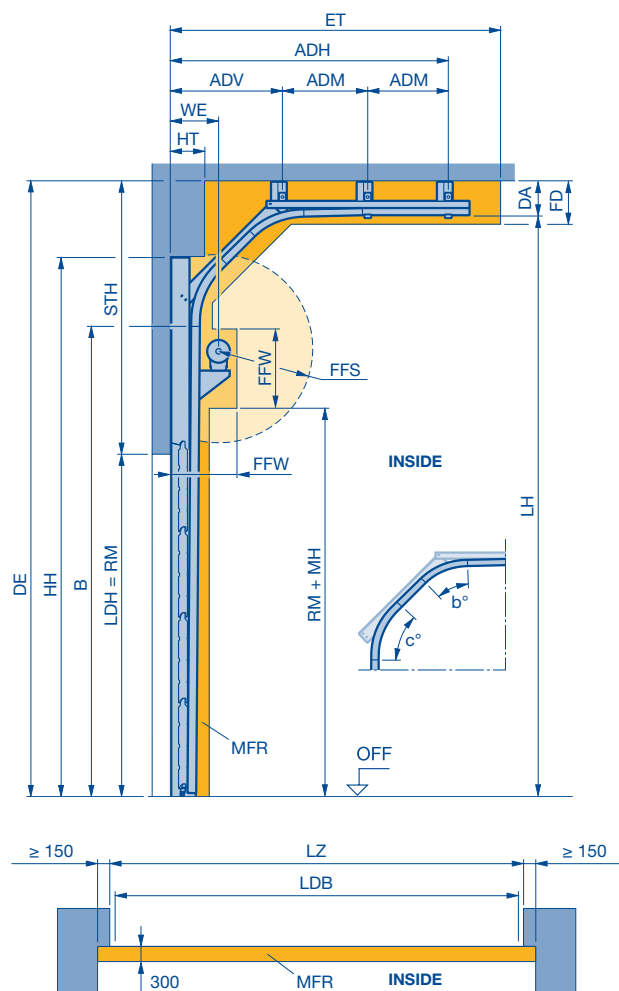


Track application: RS

High-lift track application

with double radius and low-mounted torsion spring shaft

Detailed technical data can be found in the product configurator.



b°/c°	Contour angle	HT	Obstruction depth
ADH	Distance to rear ceiling anchor	LDB	Clear passage width with ThermoFrame (see page 80)
ADM	Distance to central ceiling anchor	LDH	Clear passage height
ADV	Distance to front ceiling anchor	LH	Track height
B	Start of double radius, factory specification	LZ	Clear frame dimensions (from 1200)
DA	Distance to ceiling on request	MFR	Space for fitting the door
DE	Min. ceiling height	MH	Fitting height
ET	Distance back	OFF	Finished floor level
FD	Ceiling clearance	RM	Grid height
FFS	Spring compression clearance	STH	Min. headroom (see page 54)
FFW	Spring shaft clearance	WE	Shaft centre from lintel
HH	Obstruction height		

Please note:

Select required track height according to the door height in the table on page 71.

Note:

- A technical inspection is required!
- The validity tables with the size range shown are based on the standard door type version (see product description). In case of deviations, the valid size ranges in the product configurator must be taken into account.
- The clearance required for fitting the door must be free of supply lines, heater fans, etc.

Notes:

- Observe the permissible size ranges of the door types on pages 10–15 and 18–35 under all circumstances!
- ALR F42 Vitraplan and ALR F42 Glazing on request

Observe the min. sideroom, see page 80.

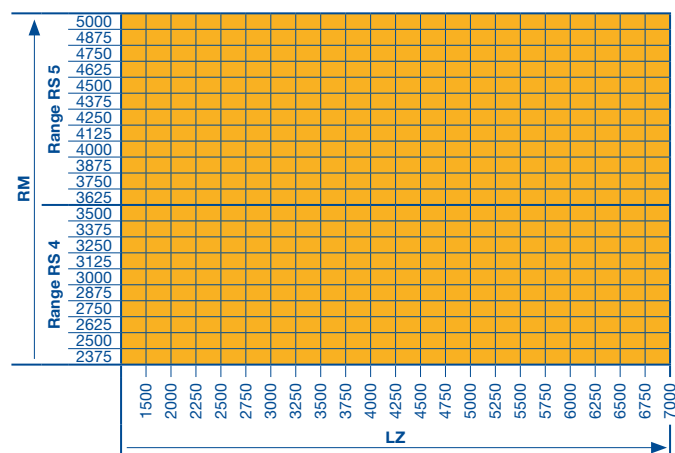
	WE	FFW	STH	DA	DE
RS 4	315	460 × 850	1477	183	LH + 183
RS 5	335	500 × 850			

B	FFS	FD	ET	ER	MH
**	Min. 90° (745)	DA + 65	**	**	400

** Dimensions can be found in the product configurator.

All door types and versions on request.

Dimensions in mm

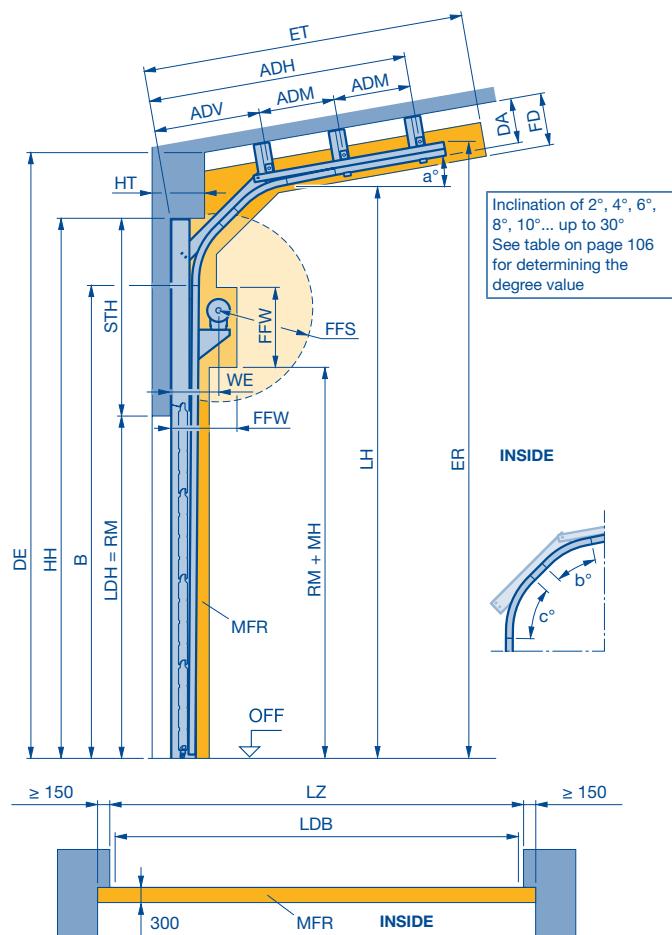


Track application: RK

High-lift track application

with double radius and inclination up to max. 30°

Detailed technical data can be found in the product configurator.



a°	Inclination	HH	Obstruction height
b°/c°	Contour angle	HT	Obstruction depth
ADH	Distance to rear ceiling anchor	LDB	Clear passage width with ThermoFrame (see page 80)
ADM	Distance to central ceiling anchor	LDH	Clear passage height
ADV	Distance to front ceiling anchor	LH	Track height
B	Start of double radius, factory specification	LZ	Clear frame dimensions (from 1200)
DA	Distance to ceiling on request	MFR	Space for fitting the door
DE	Min. ceiling height	MH	Fitting height
ER	Top edge corner point	OFF	Finished floor level
	Track height (depth and height)	RM	Grid height
FD	Ceiling clearance	STH	Min. headroom
FFS	Spring compression clearance	WE	Shaft centre from lintel
FFW	Spring shaft clearance		

Please note:

Select required track height according to the door height in Table 4 on page 71.

Note:

- A technical inspection is required!
- The validity tables with the size range shown are based on the standard door type version (see product description). In case of deviations, the valid size ranges in the product configurator must be taken into account.
- The clearance required for fitting the door must be free of supply lines, heater fans, etc.

Notes:

- Observe the permissible size ranges of the door types on pages 10 – 15 and 18 – 35 under all circumstances!
- ALR F42 Vitraplan and ALR F42 Glazing on request.
- To determine the roof slope see page 106.
- Inclination > 10° to 30° on request.

Observe the min. sideroom, see page 80.

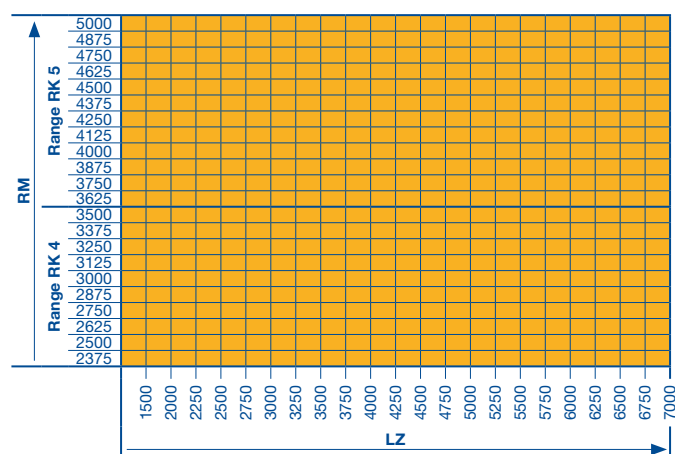
	WE	FFW	STH	DA	DE
RK 4	315	460 × 850	1477	183	LH + 183
RK 5	335	500 × 850			

B	FFS	FD	ET	ER	MH
**	Min. 90° (745)	DA + 65	**	**	400

** Dimensions can be found in the product configurator.

All door types and versions on request.

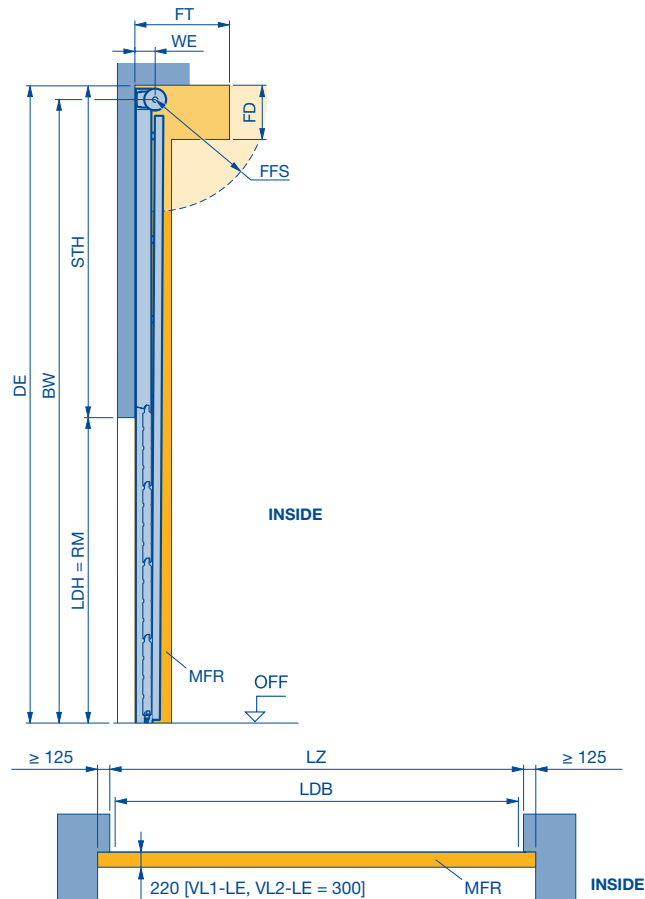
Dimensions in mm



Track application: V

Vertical track application

Detailed technical data can be found in the product configurator.



BW	Position of shaft support	LDH	Clear passage height
DE	Min. ceiling height	LZ	Clear frame dimensions (from 1200)
FD	Min. ceiling clearance	MFR	Space for fitting the door
FFS	Spring compression clearance	OFF	Finished floor level
FT	Clearance for door operation	RM	Grid height
LDB	Clear passage width with ThermoFrame (see page 80)	WE	Shaft centre from lintel
		STH	Min. headroom

Notes:

- The validity tables with the size range shown are based on the standard door type version (see product description). In case of deviations, the valid size ranges in the product configurator must be taken into account.
- The clearance required for fitting the door must be free of supply lines, heater fans, etc.
- Observe the permissible size ranges of the door types on pages 10 – 15 and 18 – 35 under all circumstances!
- ALR F42 Vitraplan and ALR F42 Glazing on request

Observe the min. sideroom, see page 80.

	STH	WE	DE	BW
V 6	RM + 540	160	2 × RM + 540	2 × RM + 400
V 7	RM + 580 (770*)	180	2 × RM + 580 (770*)	2 × RM + 425
V 9	RM + 675 (820*)	205	2 × RM + 675 (820*)	2 × RM + 475

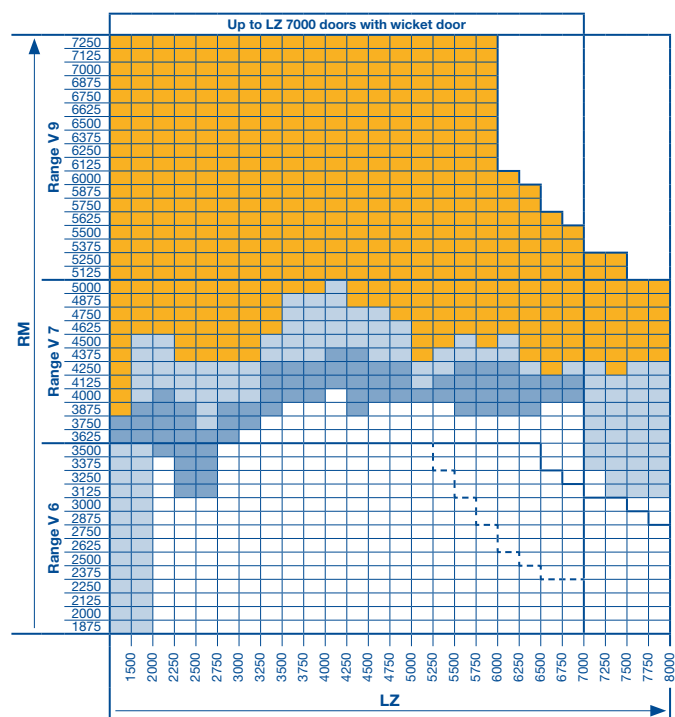
* with double spring shaft

FD	FFS	FT
500	Min. 90° (745)	2 × WE

- All door types available in any version.
- Versions with glazing A3, B3, M3, S3, U3, LB, P, XU and / or wicket door as well as versions LZ > 7000 with glazing A3, B3, M3, S3, U3, LB, P on request.
- Doors with wicket door as well as versions with thermo frames and glazing A3, B3, M3, S3, U3, LB, P and XU.
- All door types and versions on request.

- Track limit
- Track limit with thermo frames and glazing A3, B3, M3, S3, U3, LB, P, XU and / or wicket door.

Dimensions in mm

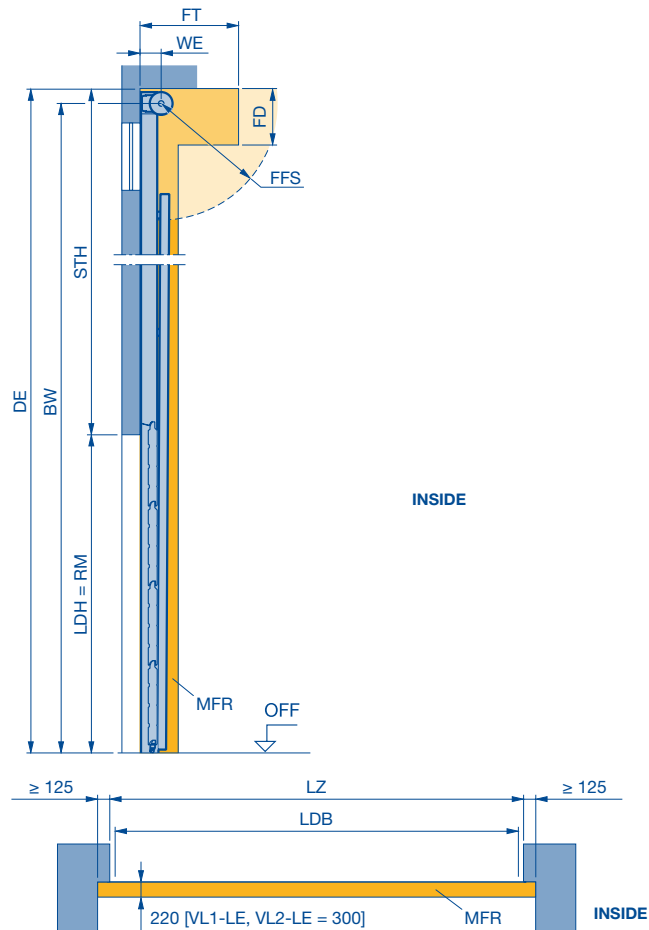


Track application: VA

Vertical track application

With high-mounted torsion spring shaft

Detailed technical data can be found in the product configurator.



BW	Position of shaft support	LDH	Clear passage height
DE	Min. ceiling height	LZ	Clear frame dimensions (from 1200)
FD	Ceiling clearance	MFR	Space for fitting the door
FFS	Spring compression clearance	OFF	Finished floor level
FT	Clearance for door operation	RM	Grid height
LDB	Clear passage width with ThermoFrame (see page 80)	STH	Min. headroom
		WE	Shaft centre from lintel

Notes:

- The validity tables with the size range shown are based on the standard door type version (see product description). In case of deviations, the valid size ranges in the product configurator must be taken into account.
- The clearance required for fitting the door must be free of supply lines, heater fans, etc.
- Observe the permissible size ranges of the door types on pages 10 – 15 and 18 – 35 under all circumstances!

Observe the min. sideroom, see page 80.

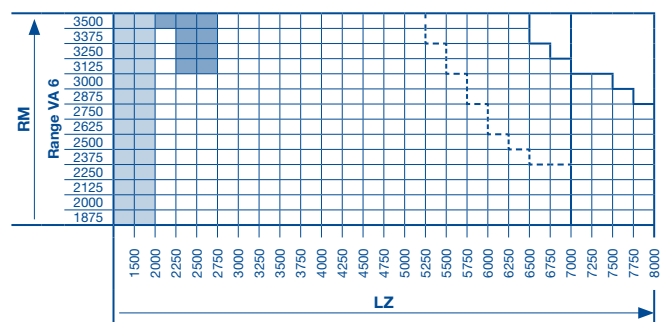
	STH	DE	BW	WE	FD	FFS	FT
VA 6	RM + 550	BW + 140	Min. 2 × RM + 410 max. DE – 140 (7895)	160	500	min. 90° (745)	2 × WE

Note:

ALR F42 Vitraplan and ALR F42 Glazing on request

- All door types available in any version.
- Versions with glazing A3, B3, M3, S3, U3, LB, P, XU and/or wicket door on request.
- Versions with thermo frames and glazing A3, B3, M3, S3, U3, LB, P, XU and wicket door.
- Track limit
- Track limit with thermo frames and glazing A3, B3, M3, S3, U3, LB, P, XU and/or wicket door

Dimensions in mm

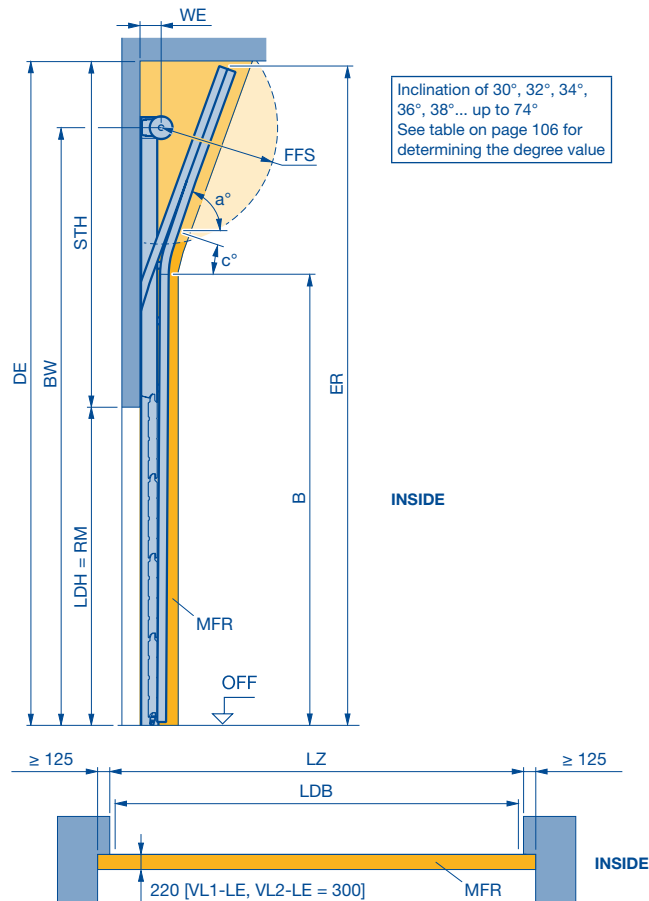


Track application: VS

Vertical track application

With inclination

Detailed technical data can be found in the product configurator.



a°	Inclination	LDH	Clear passage height
c°	Contour angle	LZ	Clear frame dimensions (from 1200)
B	Start of double radius	MFR	Space for fitting the door
BW	Position of shaft support	OFF	Finished floor level
DE	Min. ceiling height	RM	Grid height
ER	Top edge corner point	STH	Min. headroom
FFS	Spring compression clearance	WE	Shaft centre from lintel
LDB	Clear passage width with ThermoFrame (see page 80)		

Notes:

- The validity tables with the size range shown are based on the standard door type version (see product description). In case of deviations, the valid size ranges in the product configurator must be taken into account.
- The clearance required for fitting the door must be free of supply lines, heater fans, etc.
- Observe the permissible size ranges of the door types on pages 10 – 15 and 18 – 35 under all circumstances!

Observe the min. sideroom, see page 80.

	STH	DE	B	BW	WE	FFS	ER
VS 6	On request	On request	Min. RM + 20	**	160	min. 90°	auf Anfrage
VS 7			Max. 2 x RM – 1075		180	(745)	
VS 9					205		

** Dimensions can be found in the product configurator.

Note:

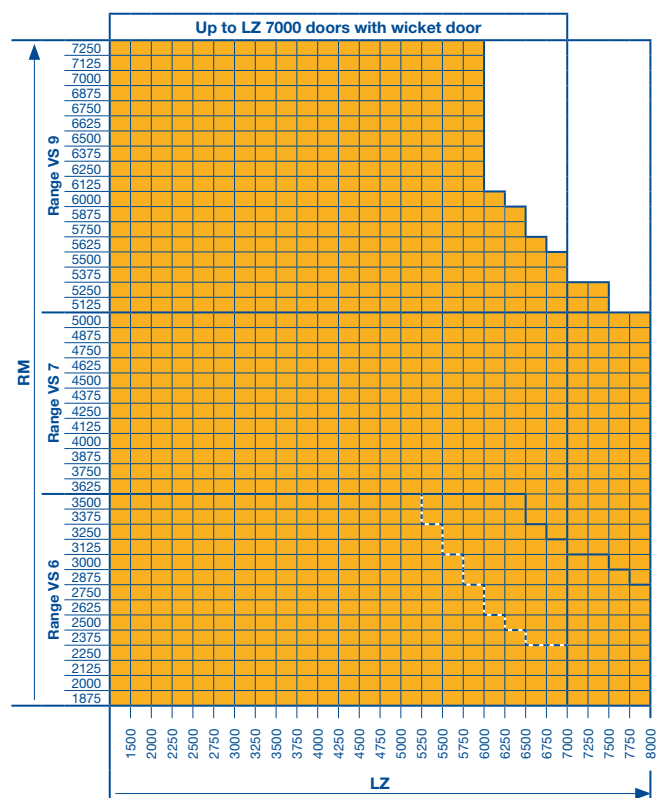
ALR F42 Vitraplan and ALR F42 Glazing on request

All door types and versions on request.

Track limit

Track limit with thermo frames and glazing A3, B3, M3, S3, U3, LB, P, XU and/or wicket door.

Dimensions in mm

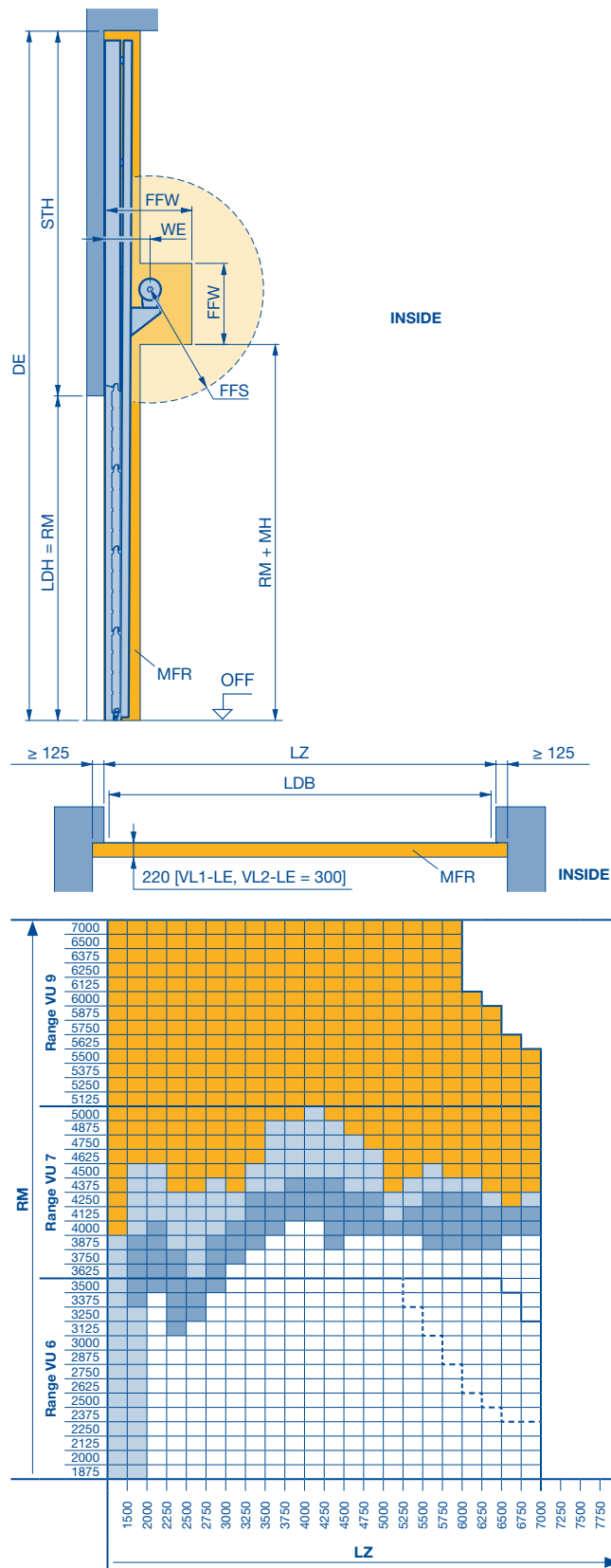


Track application: VU

Vertical track application

with low-mounted torsion spring shaft

Detailed technical data can be found in the product configurator.



DE	Min. ceiling height	MFR	Space for fitting the door
FFW	Spring shaft clearance	MH	Fitting height
FFS	Spring compression clearance	OFF	Finished floor level
LDB	Clear passage width with ThermoFrame (see page 80)	RM	Grid height
LDH	Clear passage height	STH	Min. headroom
LZ	Clear frame dimensions (from 1200)	WE	Shaft centre from lintel

Notes:

- The validity tables with the size range shown are based on the standard door type version (see product description). In case of deviations, the valid size ranges in the product configurator must be taken into account.
- The clearance required for fitting the door must be free of supply lines, heater fans, etc.
- Observe the permissible size ranges of the door types on pages 10–15 and 18–35 under all circumstances!

Observe the min. sideroom, see page 80.

	STH	DE	WE	FFS	MH	FFW
VU 6			315			460 × 850
VU 7	RM + 310	STH + RM	335	Min. 90° (745)	400	500 × 850
VU 9			375			580 × 850

Note:

ALR F42 Vitraplan and ALR F42 Glazing on request

- All door types available in any version.
- All door types are available, versions with glazing A3, B3, M3, S3, U3, LB, P, XU and /or wicket door on request.
- Door types APU F42 and ALR F42 are available; APU F42 Thermo, ALR F42 Thermo and SPU F42 with thermo frames as well as versions with glazing A3, B3, M3, S3, U3, LB, P, XU and /or wicket door on request.
- All door types and versions on request.
- Track limit
- Track limit with thermo frames and glazing A3, B3, M3, S3, U3, LB, P, XU and /or wicket door

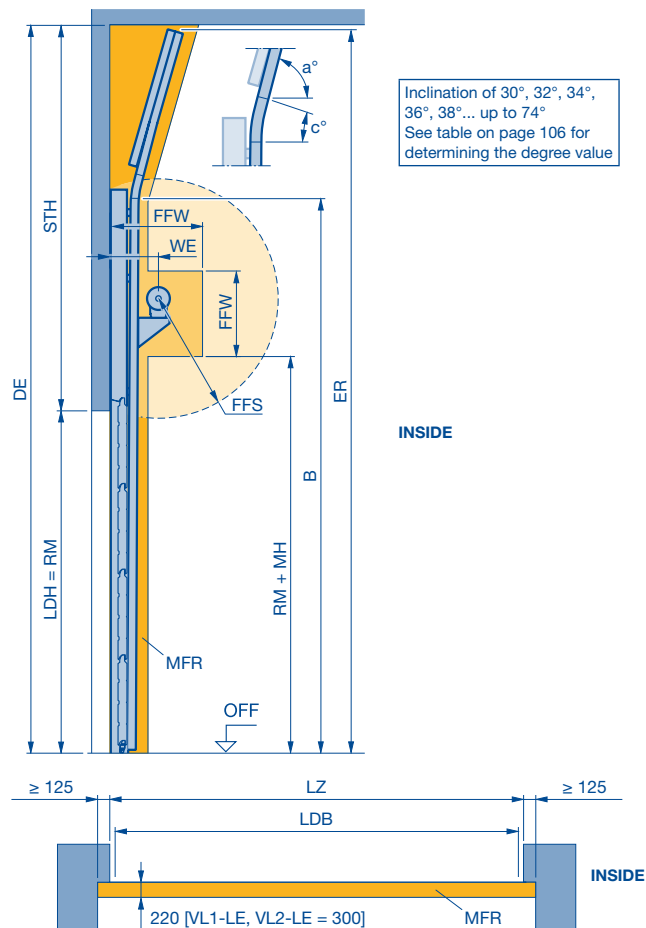
Dimensions in mm

Track application: WS

Vertical track application

with inclination and low-mounted torsion spring shaft

Detailed technical data can be found in the product configurator.



a°	Inclination	LDH	Clear passage height
c°	Contour angle	LZ	Clear frame dimensions (from 1200)
B	Start of double radius	MFR	Space for fitting the door
DE	Min. ceiling height	MH	Fitting height 400
ER	Top edge corner point	OFF	Finished floor level
FD	Track height (depth and height)	RM	Grid height
FFW	Ceiling clearance	STH	Min. headroom
FFS	Spring shaft clearance	WE	Shaft centre from lintel
LDB	Spring compression clearance		
	Clear passage width with ThermoFrame (see page 80)		

Notes:

- The validity tables with the size range shown are based on the standard door type version (see product description). In case of deviations, the valid size ranges in the product configurator must be taken into account.
- The clearance required for fitting the door must be free of supply lines, heater fans, etc.
- Observe the permissible size ranges of the door types on pages 10 – 15 and 18 – 35 under all circumstances!

Observe the min. sideroom, see page 80.

	WE	FFW	FFS	MH
WS 6	315	460 × 850	Min. 90° (745)	400
WS 7	335	500 × 850		
WS 9	375	580 × 850		

B	DE	ER	STH
Min. RM + 1200 Max. 2 × RM – 1000	On request	On request	On request

Note:

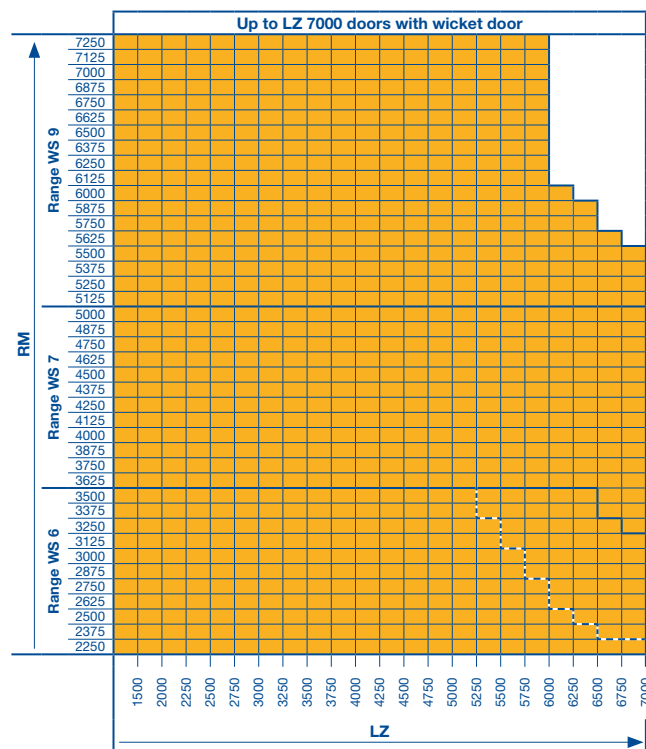
ALR F42 Vitraplan and ALR F42 Glazing on request

All door types and versions on request.

Track limit

Track limit with thermo frames and glazing A3, B3, M3, S3, U3, LB, P, XU and / or wicket door

Dimensions in mm



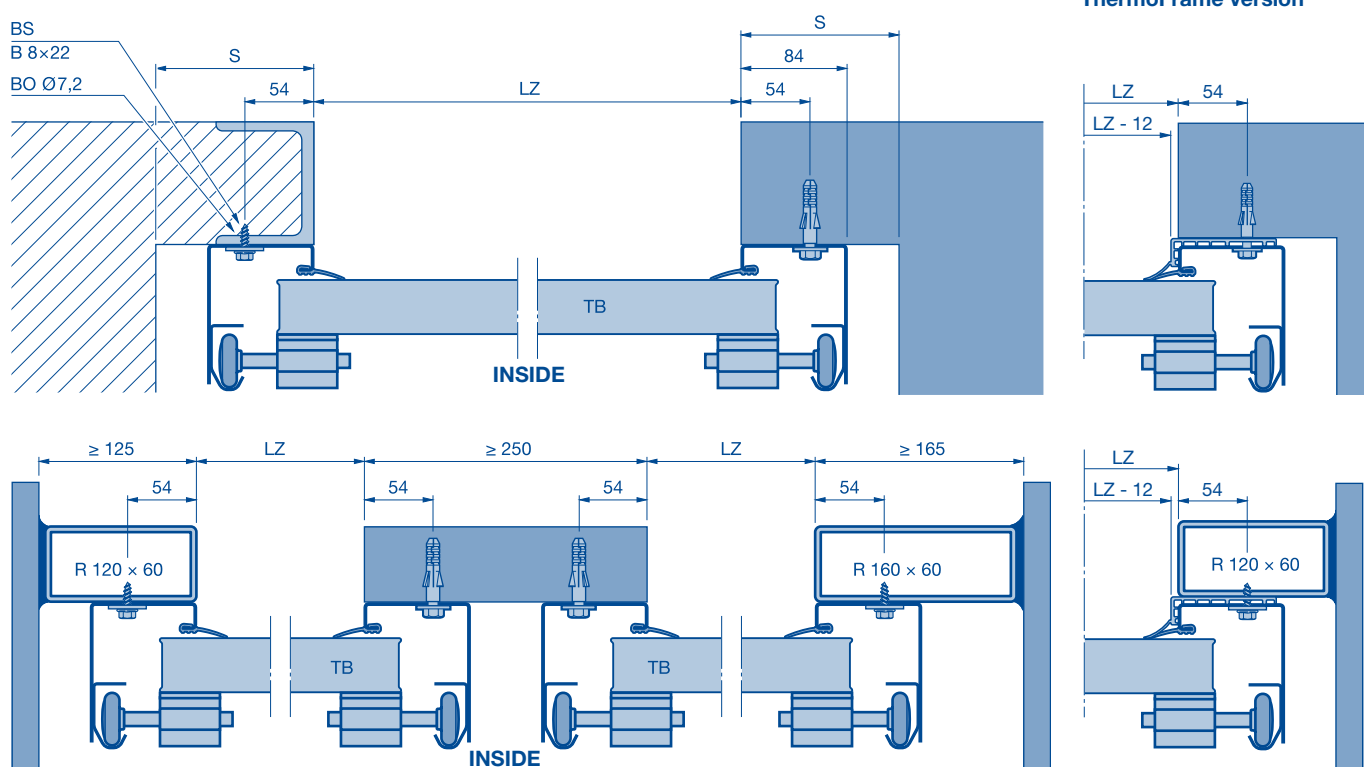
Sideroom

Required sideroom

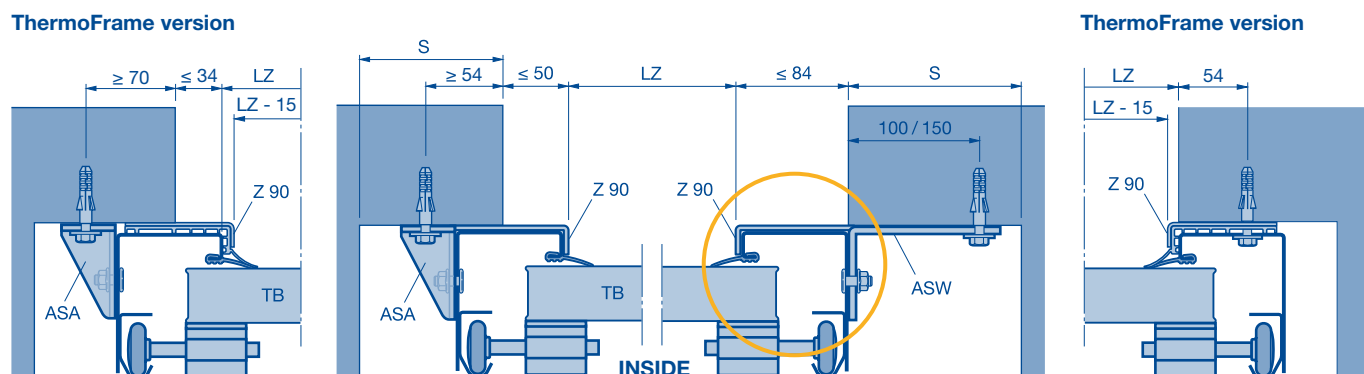
Track application / designation	SA	Track application / designation		SA
N*, NA, ND*, NH*, NS, NK, GD, V, VA, VU, GK, GS, VS, WS	125	Hand pulley	N, NA, ND, NH, NS, GD, NK, GS, GK	140
H, HA, HD, HU, RD, HK, HS, RS, RK	150		H, HA, HD, HU, RD, HK, HS, RS, RK	150
L, LD	125		V, VA, VU, VS,WS	125
With use of the C-rail (page 86 – 87)	170	Chain hoist		Page 84
		Shaft operators		Pages 89 – 96

* The sideroom changes due to the track application range.

Sideroom



Sideroom with frame covering



Note:
Clear frame in the opening is not possible with RC 2.

ASA Screw-on anchor 70 x 40
ASW Screw-on bracket 70 x 120 / 170
BO Hole
BOS drilling screw

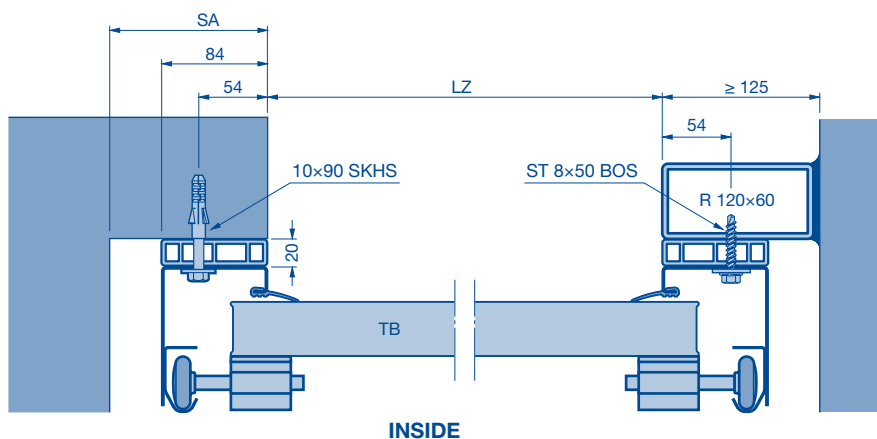
BLS self-tapping screw
LZ Clear frame dimension
R Box section
SA Sideroom

TB Door leaf
Z Frame covering

Spacer profile

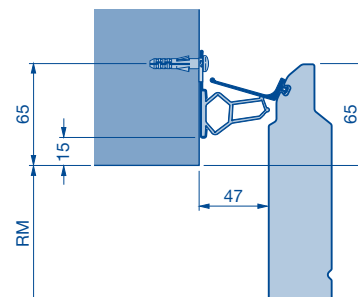
Clearance to the lintel

Sideroom

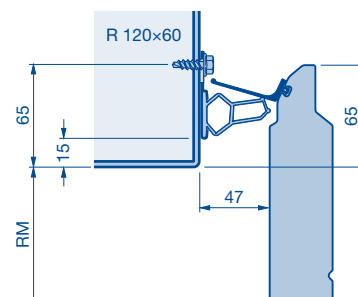


Lintel counter seal

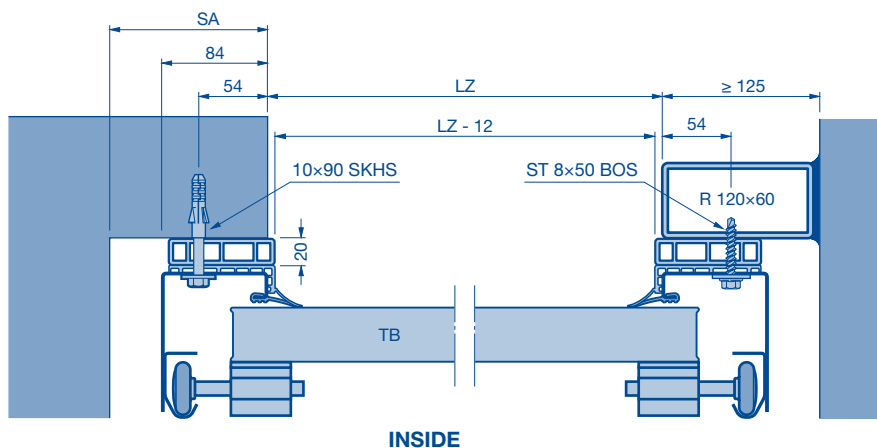
Fitting to brickwork



Box section fitting (120, 160, 200)

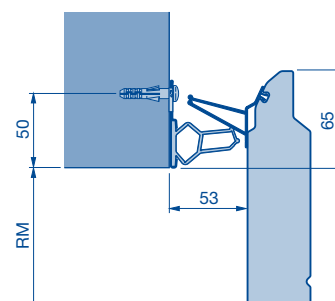


ThermoFrame sideroom

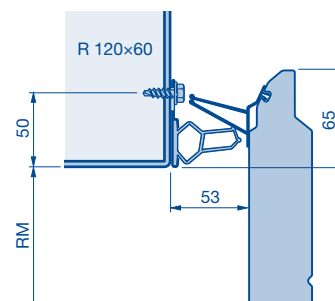


Thermoframe lintel counter seal

Fitting to brickwork



Box section fitting (120, 160, 200)



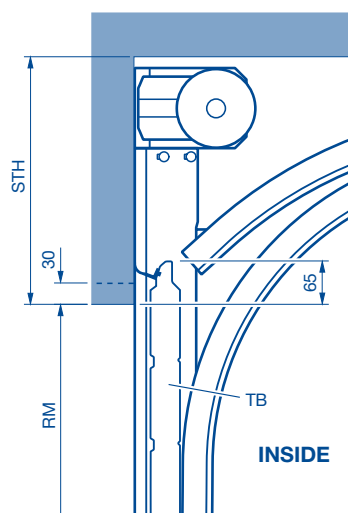
Note:

Door versions with facade door, panels or frame covering as well as frame fitting with screw-on bracket are not possible.

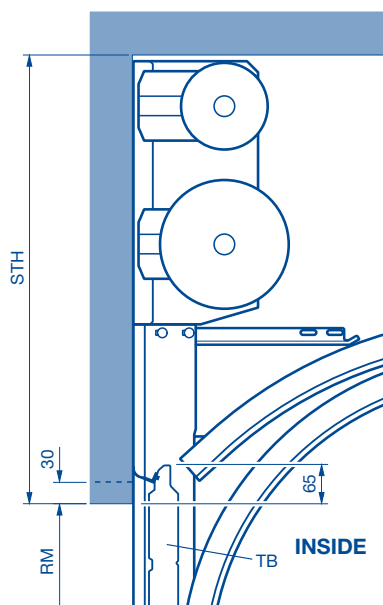
BOS	drilling screw	SA	Sideroom
LZ	Clear frame dimension	SKHS	Hexagon wood screw
R	Box section	TB	Door leaf
RM	Standard size		

Lintel fittings

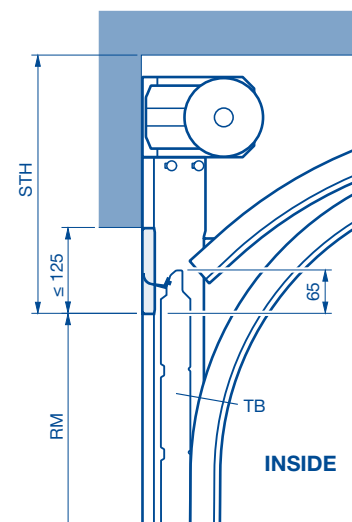
Normal lintel fitting
Insufficient headroom up to 30 mm high



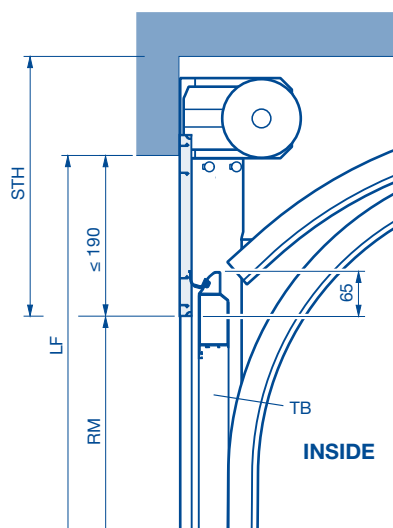
Normal lintel fitting
Double spring shaft



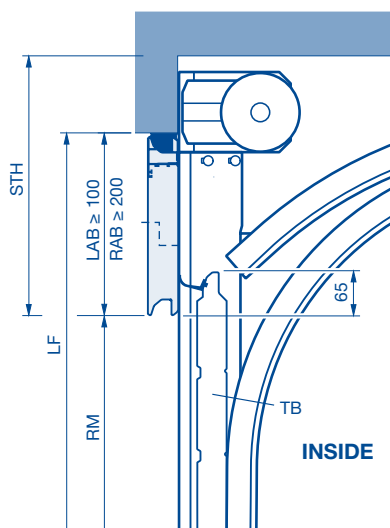
Single-skinned steel fascia for SPU F42 to make up for insufficient headroom up to 125 mm
(only for track applications N and L)



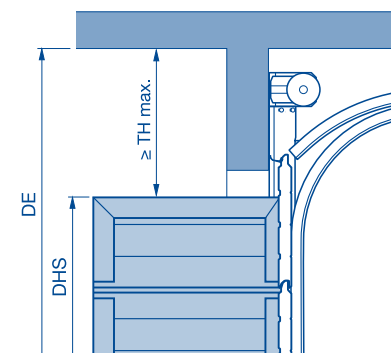
Smooth panel, anodised, for APU F42, ALR F42, ALR F42 Glazing, ALR F42 Vitraplan to make up for insufficient headroom from 31 to 190 mm height and LZ ≤ 7000 mm (only for track application N and L)



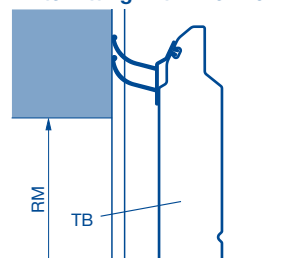
PU fascia panel to make up for insufficient headroom from 100 mm
Aluminium fascia profile to make up for insufficient headroom (see table)



Fitting clearance for multiple-point locking



Lintel fitting with ThermoFrame



Aluminium fascia panels	
Height	Infill type
≥ 200	FU, LB, S, SE, XU, FK, KR
≥ 245	S2, S3, U2, U3, C2, A2, A3, M2, M3

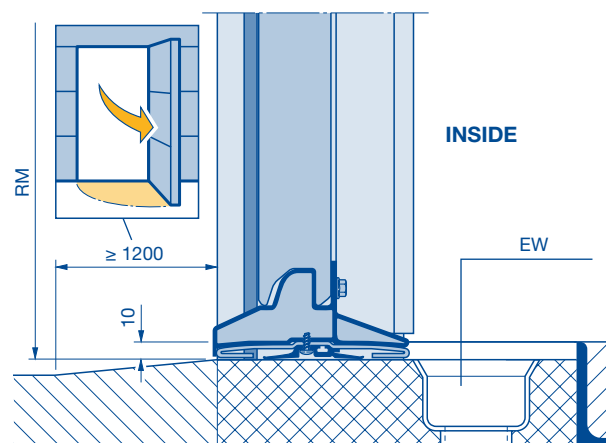
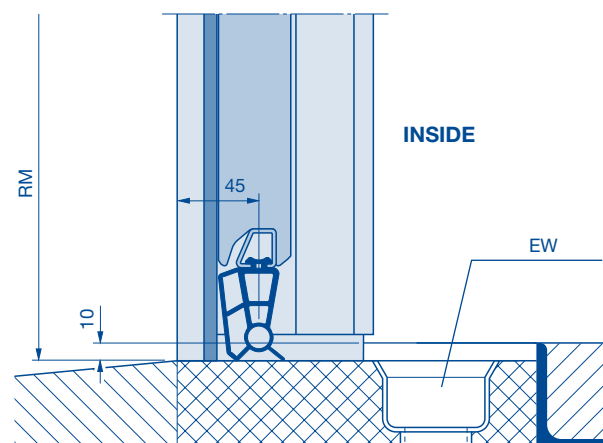
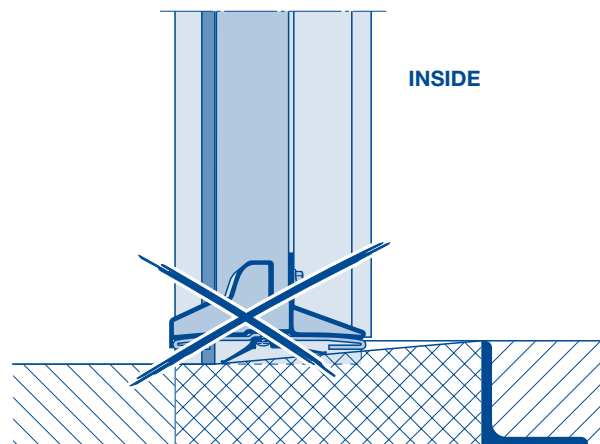
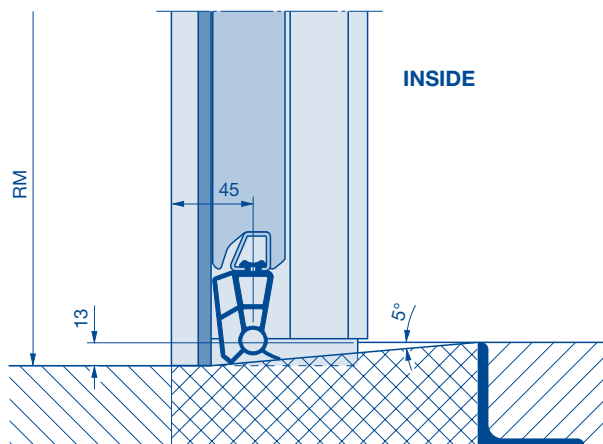
- Aluminium frame fascia panels with real glass infill VG, E2 and G2 on request.

DE	Ceiling height
DHS	Wicket door clear passage height
RAB	Frame fascia panel
LF	Structural opening
LAB	Fascia panel
RM	Standard size
STH	Min. headroom (see page 54)
TB	Door leaf

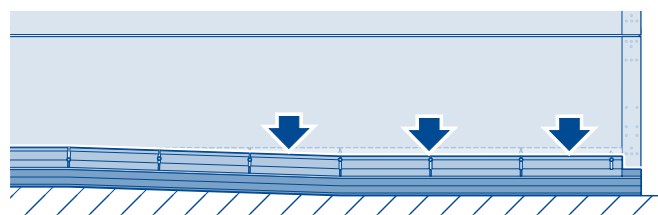
Bottom edge

without wicket door / with wicket door and threshold rail

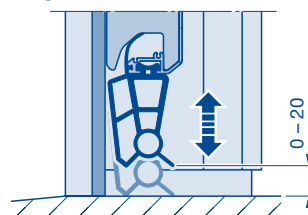
with wicket door and trip-free threshold



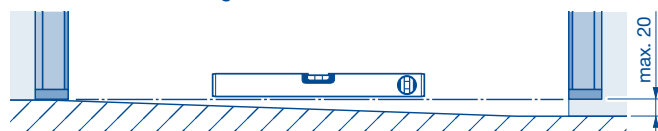
Adjustable bottom profile



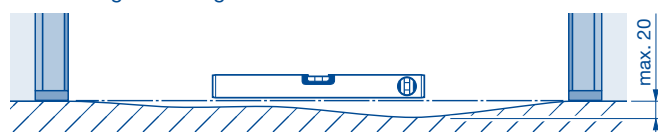
Height difference min. 0 mm / max. 20 mm



Chamfered bottom edge



Bottom edge following the contour



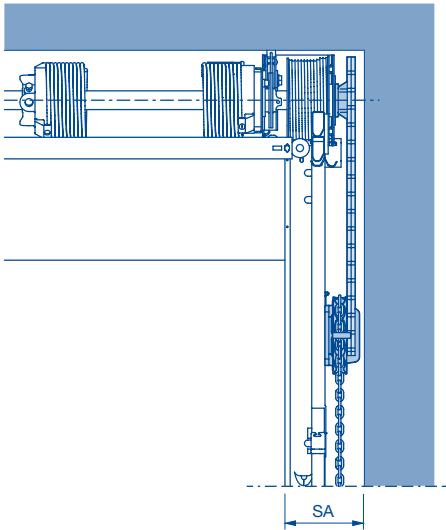
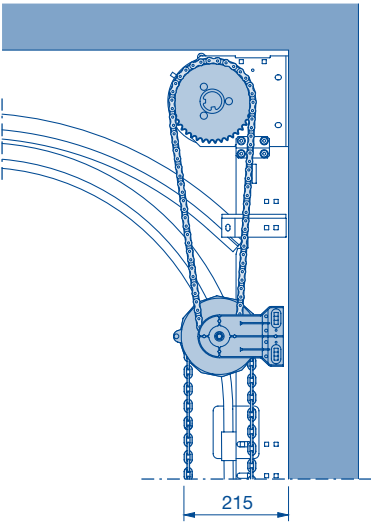
Notes:

- Version with door with wicket door, shortened bottom door section and bottom glazing frame not possible!
- Not possible for fixed elements, Parcel sectional door and doors for lowered section for dock leveller!
- Limitation of the passage height up to 20 mm possible!

EW Drainage
RM Standard size

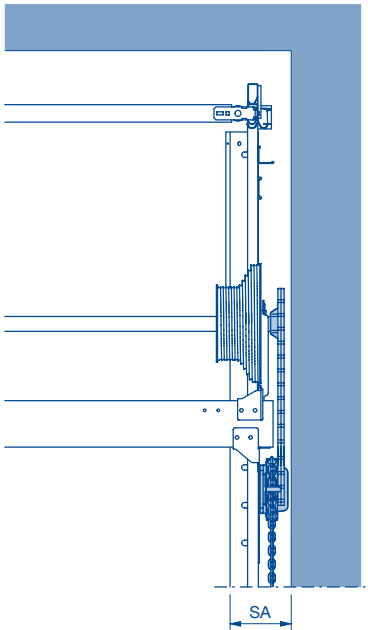
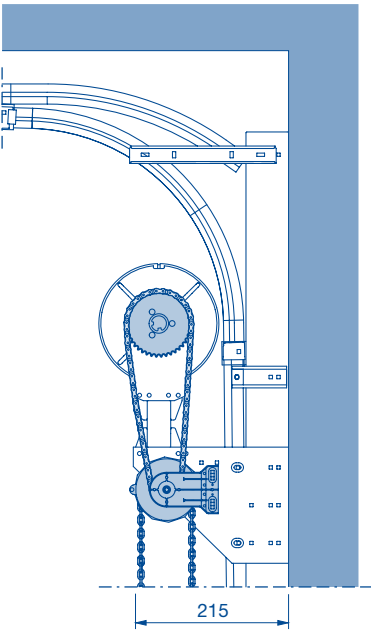
Chain hoist

Chain hoist for all track applications except HU, RD, RS, RK, VU, WS



Track application	N, NA, ND, NS, NK	NH, GD, GS, GK	L, LD	H, HA, HD, HS, HK	V, VA, VS
SA	165	165	165	185	165

Chain hoist for track applications HU, RD, RS, RK, VU, WS



Track application	HU, RD, RS, RK	VU, WS
SA	185	185

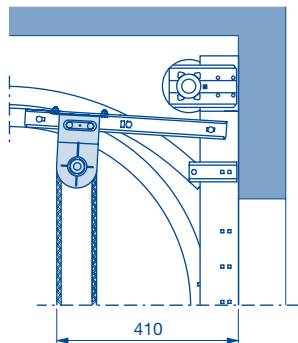
SA Sideroom

Hand pulley

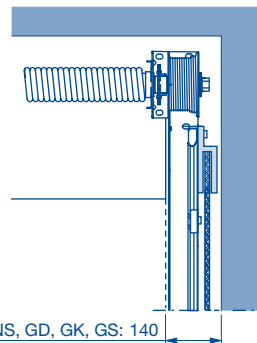
with rope or link steel chain

Track applications up to 20 m² door surface

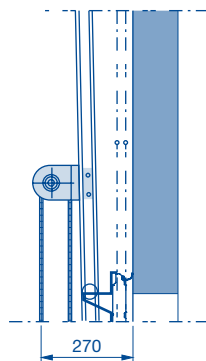
with rope or link steel chain



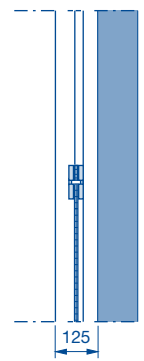
N, NA, ND, NH, NS, GD, H, HA, HD, HU, RD



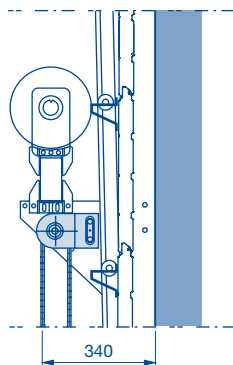
with rope or link steel chain



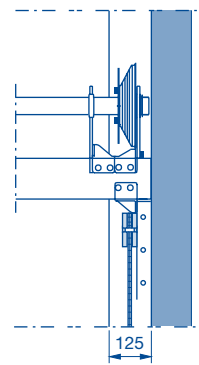
V, VA, VS



with rope or link steel chain



VU, WS



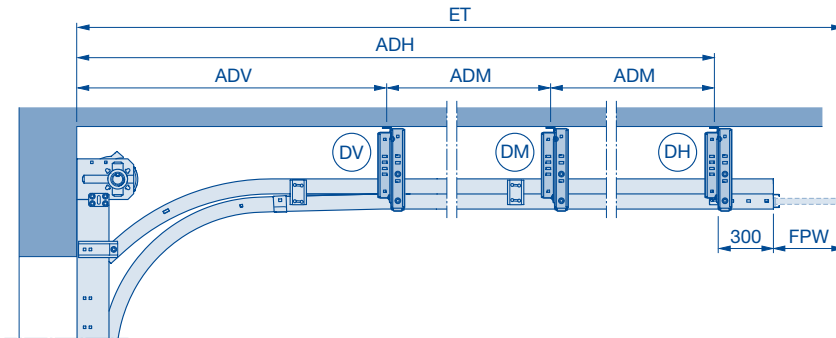
Ceiling anchors

Double track

Track suspensions for all track applications except V, VA, VU

Door weights for roof loads (see pages 54 – 65).

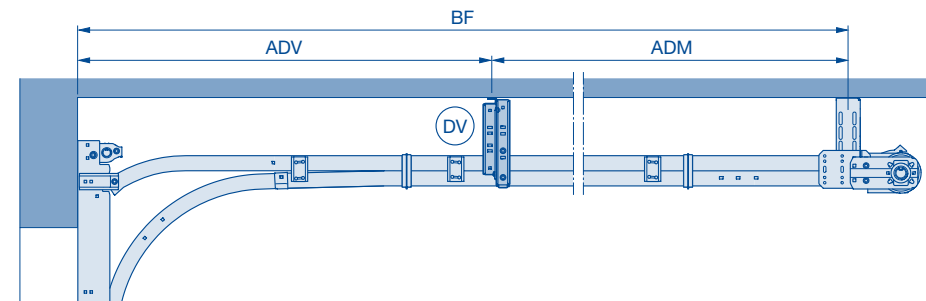
Double track (suspensions), door heights $RM \leq 5000$



Notes:

- Detailed technical data can be found in the product configurator.
- On-site fastening elements must be able to withstand forces of up to 1.5 kN per fixing point!
- Always obtain the permission of the structural engineer before fastening the door system to supporting structural elements.
- Deviations may occur due to the simplified calculation of the distance back. Detailed technical data can be found in the product configurator.

Double track (suspensions) for track application L



Track suspensions with double track

Track application	LZ	ET	Number of suspensions per side	DV	DM	DH / BF	ADV	ADM	ADH / BF	FPW
N, NA	≤ 7000	2264–3910	2	1	0	1	1400	–	ET - 597	Long
								ET - 327		Short
		3911–5660	3	1	1	1	1400	$(ET - ADV - 597) / 2$	ET - 597	Long
								$(ET - ADV - 327) / 2$	ET - 327	Short
	> 7000	2264–2910	2	1	0	1	1400	–	ET - 597	Long
								ET - 327		Short
		2911–4035	3	1	1	1	1400	$(ET - ADV - 597) / 2$	ET - 597	Long
								$(ET - ADV - 327) / 2$	ET - 327	Short
L	≤ 7000	4036–5660	4	1	2	1	1400	$(ET - ADV - 597) / 3$	ET - 597	Long
								$(ET - ADV - 327) / 3$	ET - 327	Short
		2857–3516	2	1	0	1	1400	–	RM + 670	–
		3517–5641	3	1	1	1	1400	$(BF - ADV) / 2$		
		5642–5982	4	1	2	1	1400	$(BF - ADV) / 3$		
H, HA, HU	≤ 7000	1890–2177	1	0	0	1	–	–	ET - 597	Long
								ET - 327		Short
		2178–3957	2	1	0	1	1400	–	ET - 597	Long
								ET - 327		Short
	> 7000	3958–5464	3	1	1	1	1400	$(ET - ADV - 597) / 2$	ET - 597	Long
								$(ET - ADV - 327) / 2$	ET - 327	Short
		5465–5694	4	1	2	1	1400	$(ET - ADV - 327) / 3$	ET - 327	Short
		1890–2177	1	0	0	1	1400	–	ET - 597	Long
								ET - 327		Short
		2178–2967	2	1	0	1	1400	–	ET - 597	Long
								ET - 327		Short
		2968–3839	3	1	1	1	1400	$(ET - ADV - 597) / 2$	ET - 597	Long
								$(ET - ADV - 327) / 2$	ET - 327	Short
		3840–5194	4	1	2	1	1400	$(ET - ADV - 597) / 3$	ET - 597	Long
								$(ET - ADV - 327) / 3$	ET - 327	Short
NH, ND, GD, LD, HD, RD, VS, WS	Dimensions can be found in the product configurator									

ADH Distance to rear ceiling anchor
ADM Distance to central ceiling anchor
ADV Distance to front ceiling anchor
BF Position of spring shaft
DA Distance to ceiling

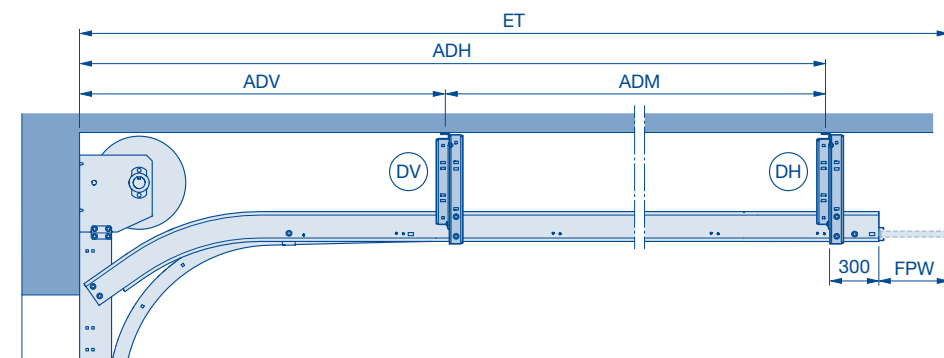
DAL Ceiling anchor length
DH Rear ceiling anchor
DM Centre ceiling anchor
DV Ceiling anchor front
ET Min. distance back

FPW Spring buffer travel
LZ Clear frame dimension

Ceiling anchors

C track

C-rail (suspensions) all track sizes, except NS, NK, GS, GK, V, VA



Note:

Deviations may occur due to the simplified calculation of the distance back. Detailed technical data can be found in the product configurator.

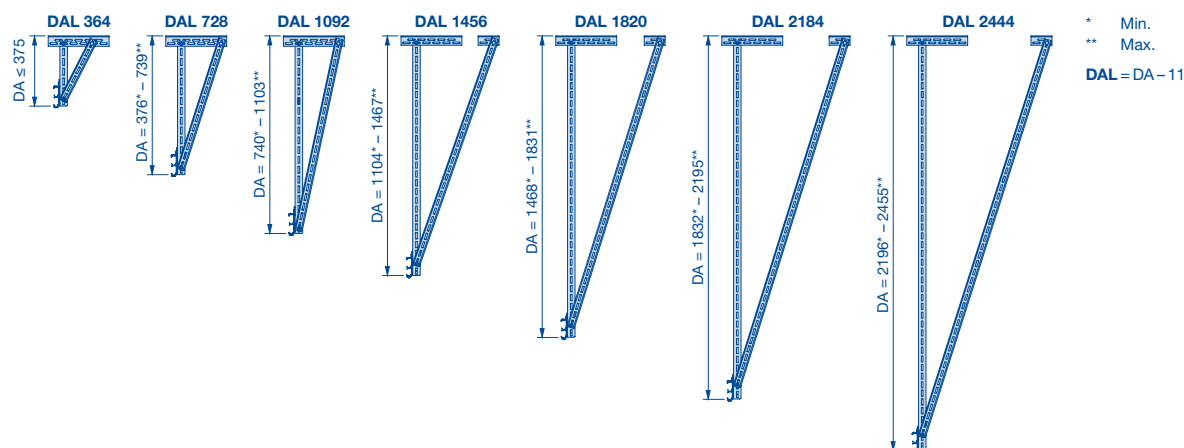
All door types RM > 4500 and LZ > 6250, all door types RM > 5000 except for track application L / LD doors with real glass RM > 3500 and LZ > 5000

Track application	LZ	ET	Number of suspensions per side	DV	DM	DH / BF	ADV	ADM	ADH / BF	FPW
N, NA	≤ 8000	≤ 6660	2	1	0	1	ADH / 2	–	ET - 597	Long
		> 6660	3	1	1	1	ADH / 3	ET - 327	Short	
								(ET - ADV - 597) / 2	ET - 597	Long
								(ET - ADV - 327) / 2	ET - 327	Short
L	≤ 7000	≤ 5982	2	1	0	1	BF / 2	–	RM + 670	–
H, HA, HU	≤ 8000	≤ 6714	2	1	0	1	ADH / 2	–	ET - 597	Long
		> 6714	3	1	1	1	ADH / 3	ET - 327	Short	
								(ET - ADV - 597) / 2	ET - 597	Long
								(ET - ADV - 327) / 2	ET - 327	Short
NH, ND, GD, LD, HD, RD, VS, WS	Dimensions can be found in the product configurator									

Use of C-rail to reduce suspensions

Track application	LZ	ET	Number of suspensions per side	DV	DM	DH / BF	ADV	ADM	ADH / BF	FPW
N, NA	≤ 5500	≤ 3785	1	0	0	1	–	–	ET - 597	Long
									ET - 327	Short
		> 3785	2	1	0	1	ADH / 2	–	ET - 597	Long
									ET - 327	Short
≤ 3516		1	0	0	1	–	–	–		
3517 – 5891		2	1	0	1	BF / 2	–	RM + 670	–	
> 5891		3	1	1	1	BF / 3	(BF - ADV) / 2	RM + 670		
H, HA, HU		≤ 3715	1	0	0	1	–	–	ET - 597	Long
									ET - 327	Short
		> 3715	2	1	0	1	ADH / 2	–	ET - 597	Long
								ET - 327	Short	
NH, ND, GD, LD, HD, RD, VS, WS	Dimensions can be found in the product configurator									

Track suspensions for distance to ceiling in seven lengths, standard length for DA = 375 mm



ADH	Distance to rear ceiling anchor	DAL	Ceiling anchor length	FPW	Spring buffer travel
ADM	Distance to central ceiling anchor	DH	Rear ceiling anchor	LZ	Clear frame dimension
ADV	Distance to front ceiling anchor (max. 3000)	DM	Centre ceiling anchor		
BF	Position of spring shaft	DV	Ceiling anchor front		
DA	Distance to ceiling	ET	Min. distance back		

Diagonal strut

Detailed technical data can be found in the product configurator.
Deviations may occur due to the simplified calculation of the distance back.

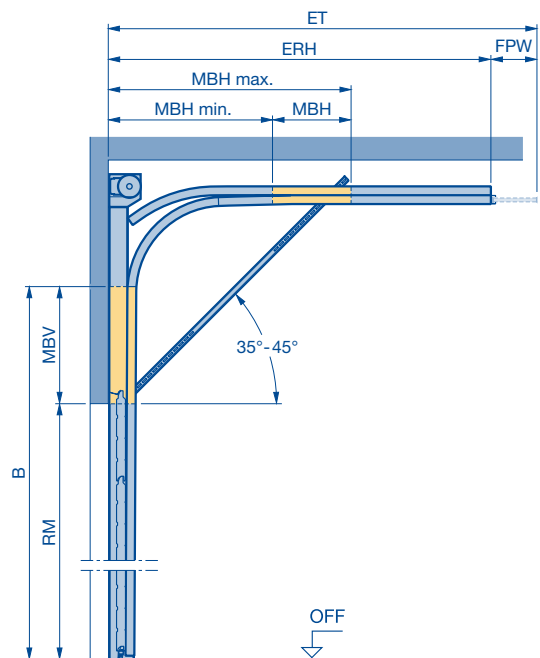
Please note:

A technical inspection is required!

Notes:

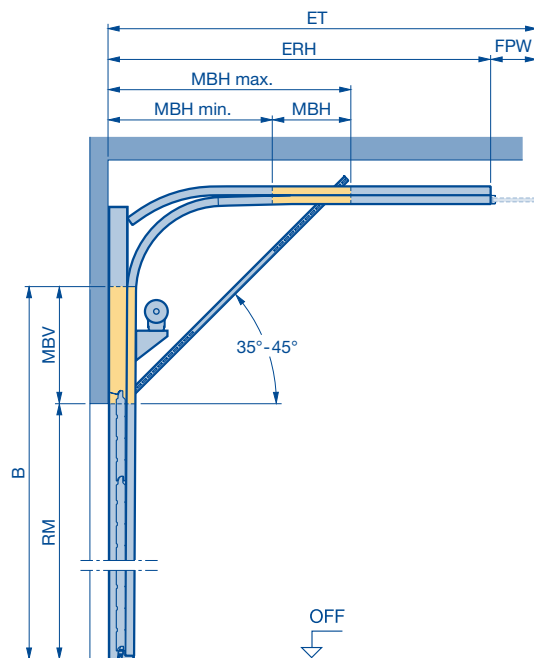
- Application range of LZ ≤ 3000 and RM ≤ 3250
- Max. distance back 2297
- Not for door type ALR F42 Glazing.

Track application H



Other required technical data for track application H must be observed (see page 66).

Track application HU

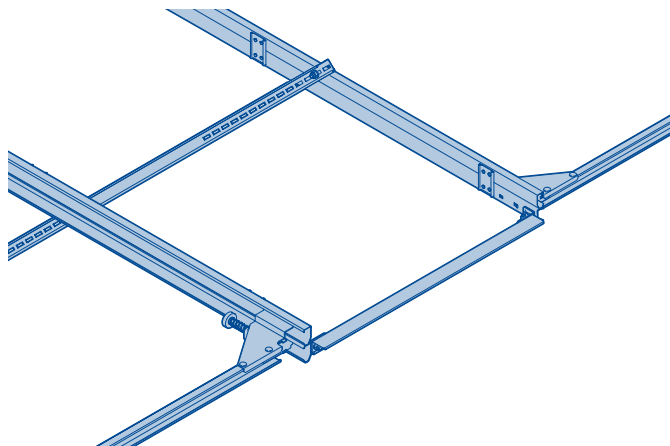


Further required technical data for track application HU must be observed (see page 71).

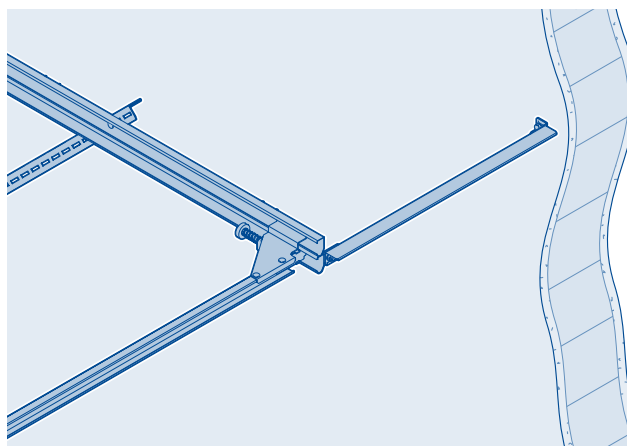
ET	ERH	Min. MBH	Max. MBH	FPW*		MBH	MBV		
				Min.	Max.		Track application H		Track application HU
Max. 2297	ET - FPW (max. 2000)	ERH / 2	3 × ERH / 4	27	297	Max. MBH - min. MBH	RM	B	On request
							Min. MBH	Max. MBH	

* Dimensions can be found in the product configurator.

Connection door - door



Connection door - wall



B Start of double radius
ET Min. distance back
ERH Corner point track horizontal

FPW Spring buffer travel
MBH Fitting area horizontal
MBV Fitting area vertical

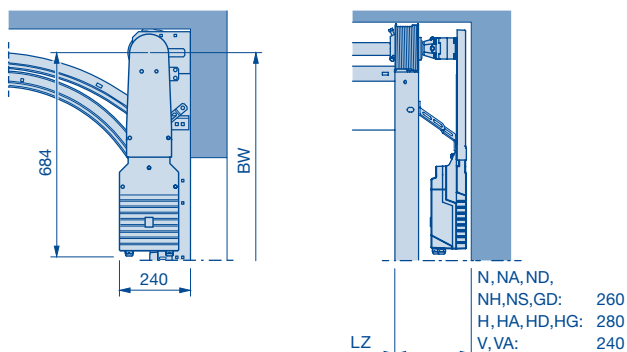
OFF Finished floor level
RM Grid height

Shaft operator WA 300

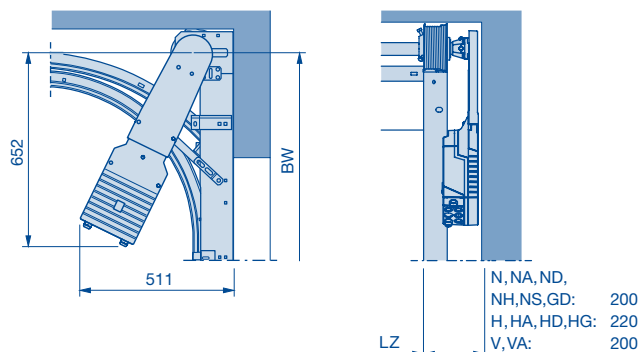
Shaft operator WA 300 for track applications N, NA, ND, NS, NH, NK, GD, GS, GK, H, HA, HD, HS, HK, V, VA and VS

As shown in the figure, the operator can be fitted either left or right, viewed from the inside.

Fitting example ⑧ right



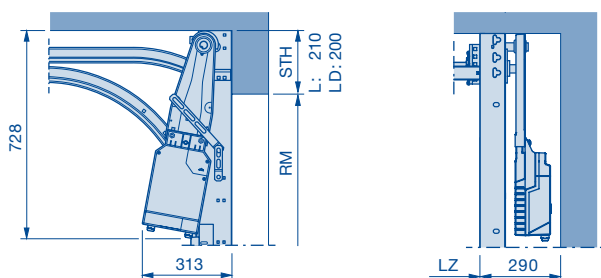
Fitting example ⑨ right



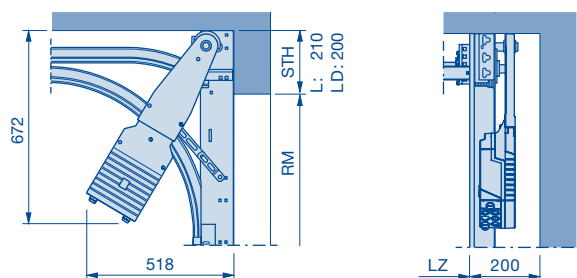
Shaft operator WA 300 for track applications L and LD

As shown in the figure, the operator can be fitted either left or right, viewed from the inside. In fitting example 9: on the side opposite the door lock.

Fitting example ⑧ right



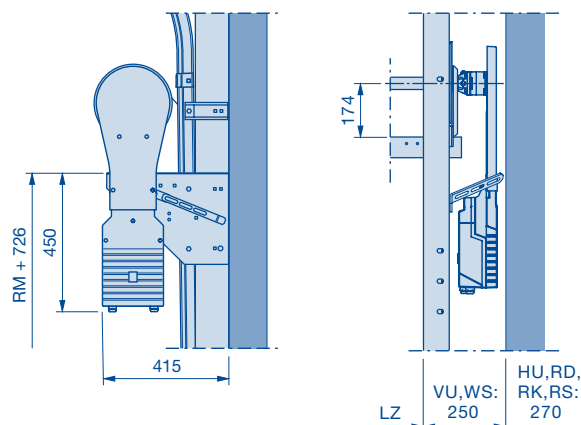
Fitting example ⑨ right



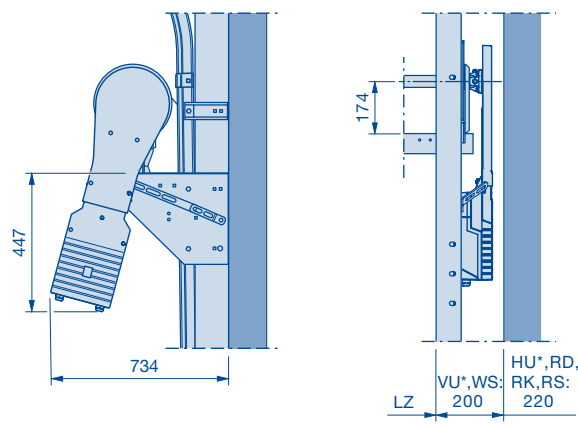
Shaft operator WA 300 for track applications HU, RD, RS, RK, VU and WS

As shown in the figure, the operator can be fitted either left or right, viewed from the inside.

Fitting example ⑧ right



Fitting example ⑨ right



* Notice:

In the door range $LZ \leq 3000$ and $RM \leq 3500$ the track applications VU and HU are not possible

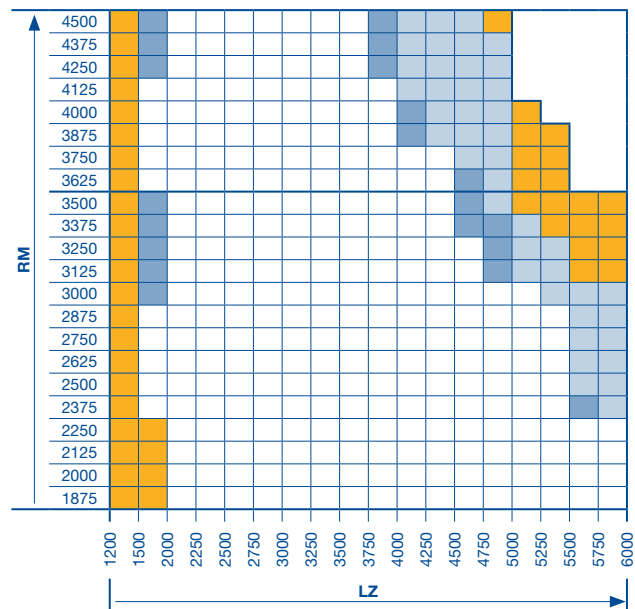
BW Position of shaft support
LZ Clear frame dimension

STH Min. headroom
RM Grid height

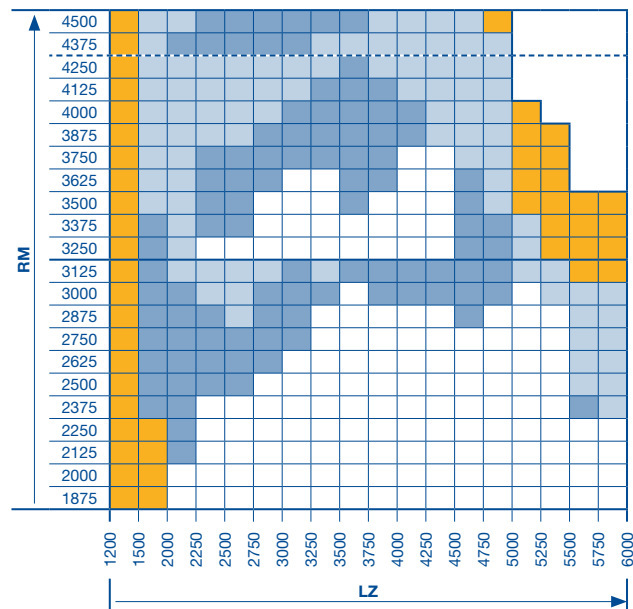
Shaft operator WA 300

Size range WA 300 (ALR F42 Vitraplan on request)

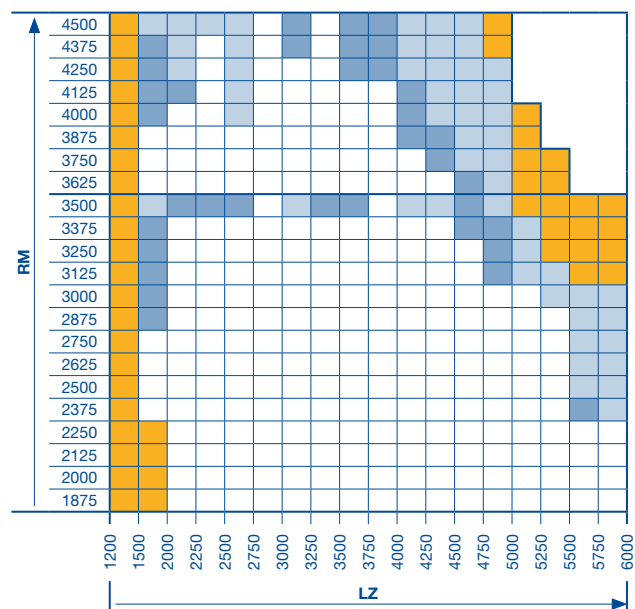
Track applications: N, NA and NH



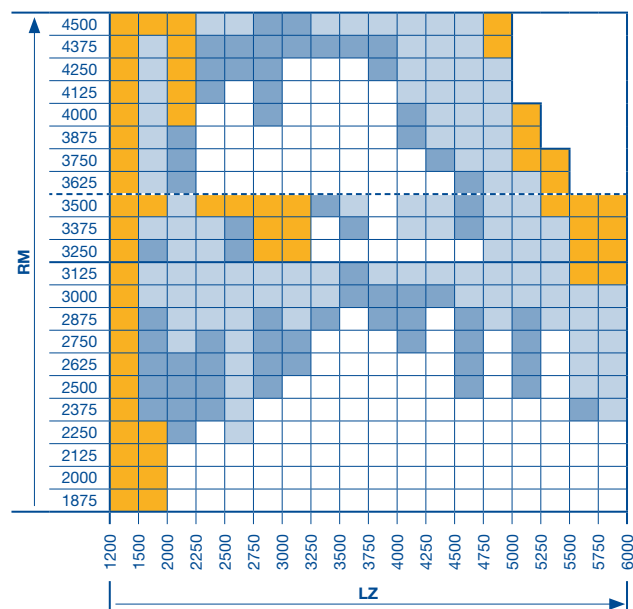
Track applications: ND and GD



Track application: L



Track application: LD



- All door types available in any version.
- All door types with thermo frames, glazing A3, B3, M3, S3, U3, LB, P, XU or wicket door on request.
- All door types with thermo frames with glazing A3, B3, M3, S3, U3, LB, P, XU and/or wicket door on request.
- All door types and versions on request.

Note:
Track application NS on request!

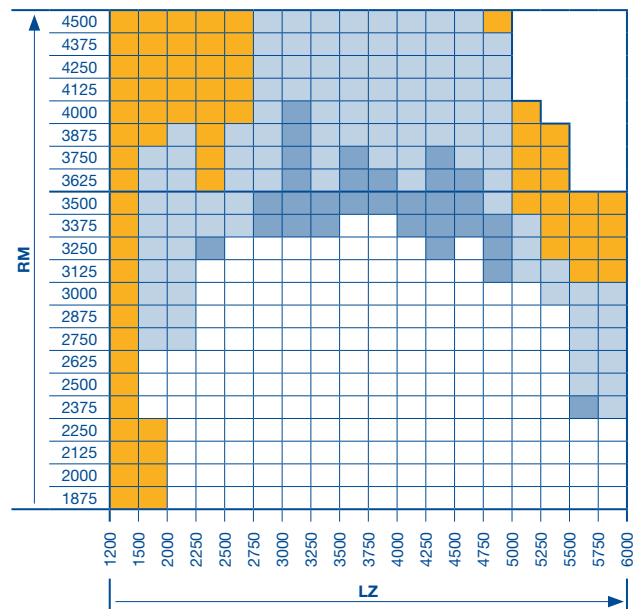
LZ Clear frame dimension
RM Grid height

Dimensions in mm

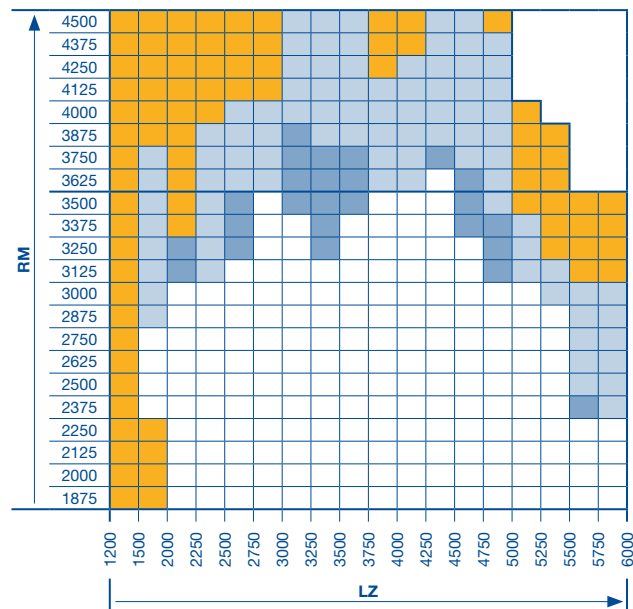
Shaft operator WA 300

Size range WA 300 (ALR F42 Vitraplan on request)

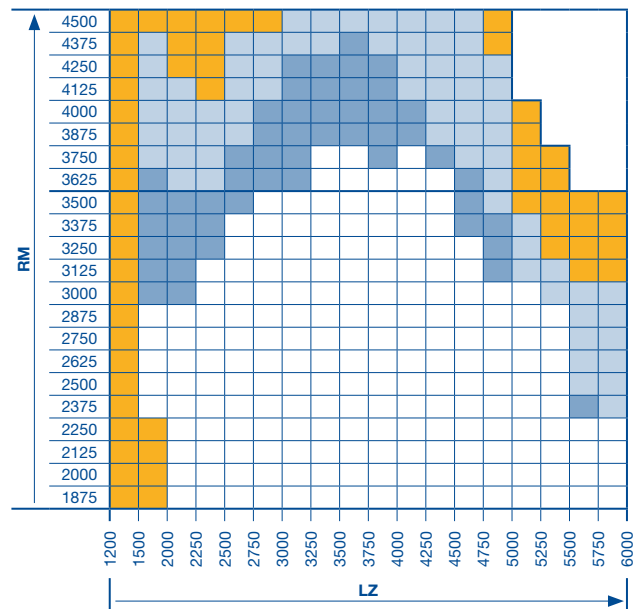
Track application: H, HA and HU



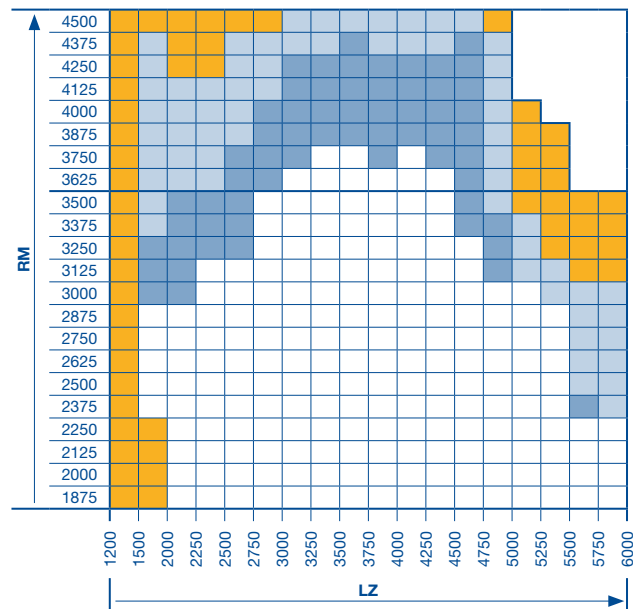
Track application: HD and RD



Track application: V and VA



Track application: VU



- All door types available in any version.
- All door types with thermo frames, glazing A3, B3, M3, S3, U3, LB, P, XU or wicket door on request.
- All door types with thermo frames with glazing A3, B3, M3, S3, U3, LB, P, XU and/or wicket door on request.
- All door types and versions on request.

LZ Clear frame dimension
RM Grid height

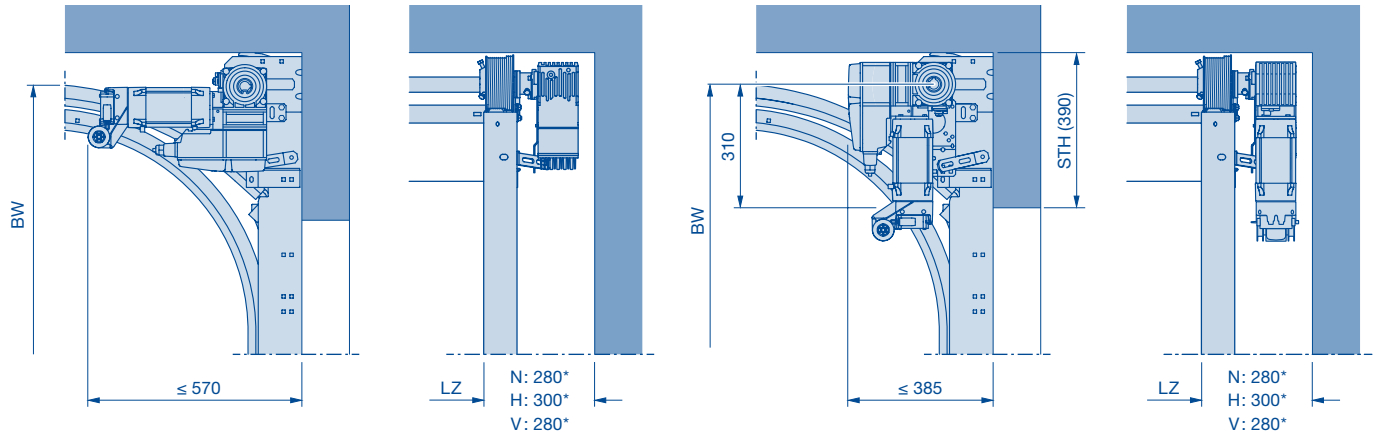
Dimensions in mm

Shaft operator WA 500 / 500 FU

As a frame-mounted operator

Shaft operator WA 500 / WA 500 FU for all track applications, except L, LD, HU, RD, RS, RK, VU and WS

As shown in the figure, the operator can be fitted either left or right, viewed from the inside.

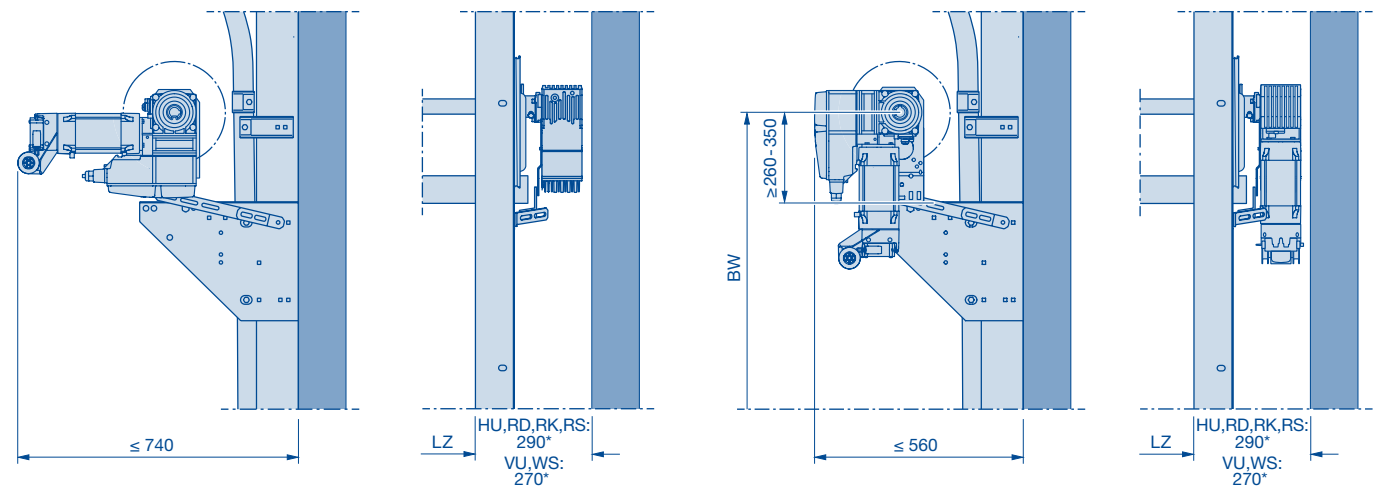


* Notice:

Dimension 75 mm if using a non-jointed emergency crank handle

Shaft operator WA 500 / WA 500 FU for track applications HU, RD, RS, RK, VU and WS

As shown in the figure, the operator can be fitted either left or right, viewed from the inside.



* Notice:

Dimension 75 mm if using a non-jointed emergency crank handle

** On request

BW Position of shaft support
LZ Clear frame dimension

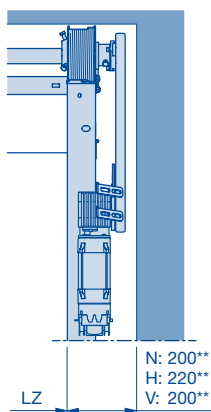
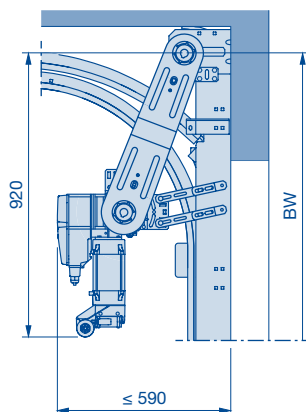
Shaft operator WA 500 / 500 FU

with chain box

Shaft operator WA 500 / WA 500 FU for all track applications, except L, LD, HU, RD, RS, RK, VU and WS

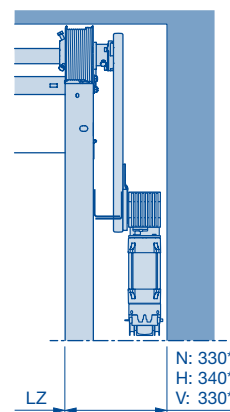
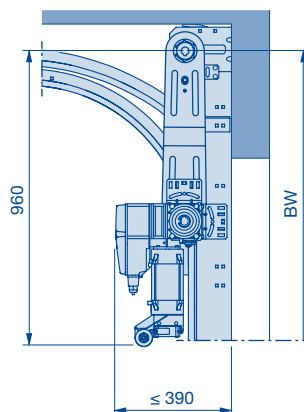
As shown in the figure, the operator can be fitted either left or right, viewed from the inside. **In fitting example 5: on the side opposite the door lock.**

Fitting example ⑤ right



N: 200**
H: 220**
V: 200**

Fitting example ⑥ right

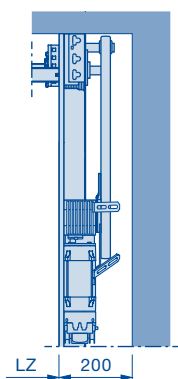
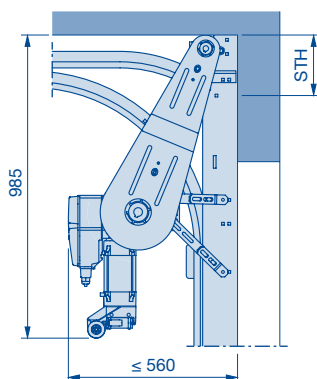


N: 330*
H: 340*
V: 330*

Shaft operator WA 500 / WA 500 FU for the track applications L and LD

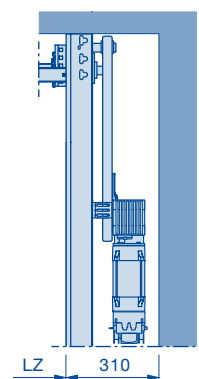
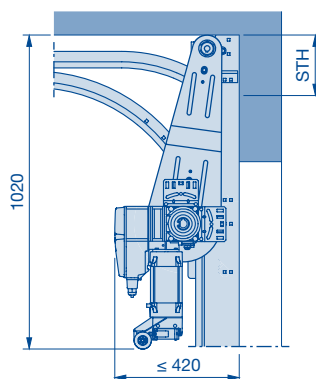
As shown in the figure, the operator can be fitted either left or right, viewed from the inside. **In fitting example 5: on the side opposite the door lock.**

Fitting example ⑤ right



LZ 200

Fitting example ⑥ right

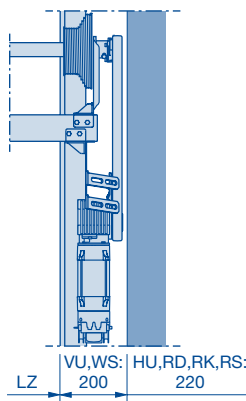
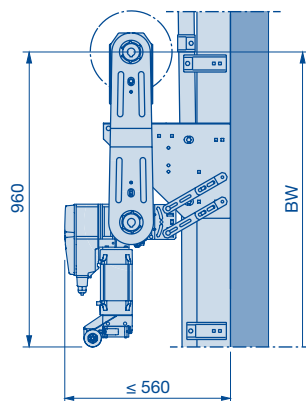


LZ 310

Shaft operator WA 500 / WA 500 FU for track applications HU, RD, RS, RK, VU and WS

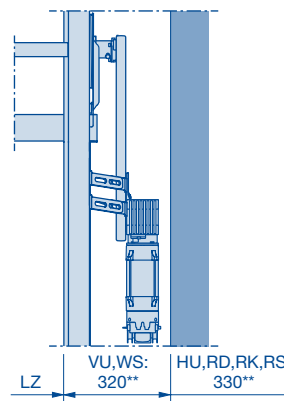
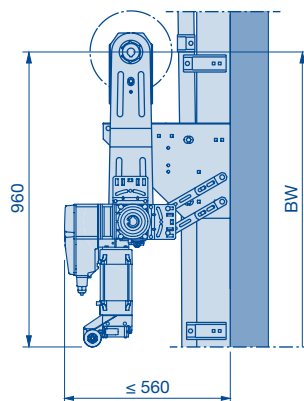
As shown in the figure, the operator can be fitted either left or right, viewed from the inside. **In fitting example 5: on the side opposite the door lock.**

Fitting example ⑤ right



VU,WS: 200
HU,RD,RK,RS: 220

Fitting example ⑥ right



VU,WS: 320**
HU,RD,RK,RS: 330**

* Notice:

Dimension 75 mm if using a non-jointed emergency crank handle

** Note:

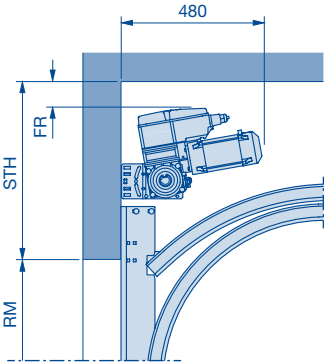
Dimension 40 mm if using a non-jointed emergency crank handle

BW Position of shaft support
LZ Clear frame dimension

Shaft operator WA 500 / 500 FU

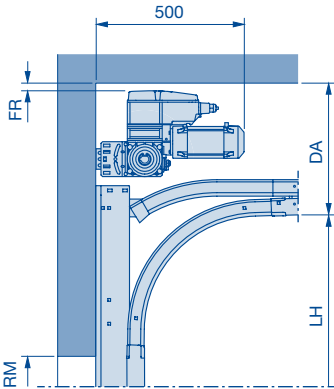
for central mounting

Shaft operator WA 500 / 500 FU for track applications: N and ND



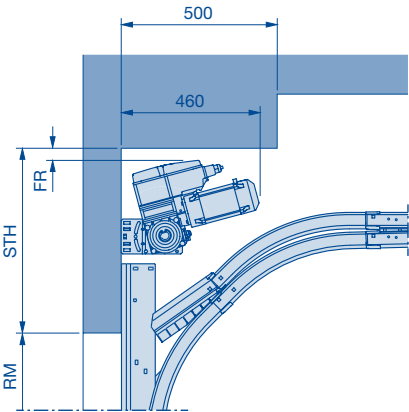
Track application	WA 500 / WA 500 FU	
	STH min.	FR min.
N 1	590	45
N 2	615	45
N 3	675	45
ND 1	550	48
ND 2	570	48
ND 3	675	48
ND 6	560	48
ND 7	640	48

Shaft operator WA 500 / 500 FU for track application: NH and GD



Track application	WA 500 / WA 500 FU	
	Min. DA	FR min.
NH 1 / GD 1	480	45
NH 2 / GD 2	485	45
NH 3	565	45

Shaft operator WA 500 / 500 FU for track applications: NS, NK, GS and GK



Track application	WA 500 / WA 500 FU	
	STH min.	FR min.
NS 1 / NK 1	615	45
NS 2 / NK 2	640	45
GS / GK	On request	

Note:
Centre motor in conjunction with double spring shaft on request!

DA

Distance to ceiling

LH

Track height

STH

Headroom

FR

Clearance ceiling / shaft operator

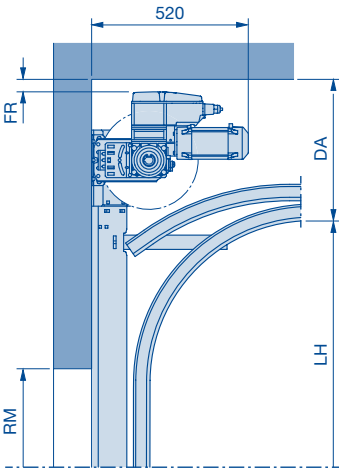
RM

Grid height

Shaft operator WA 500 / 500 FU

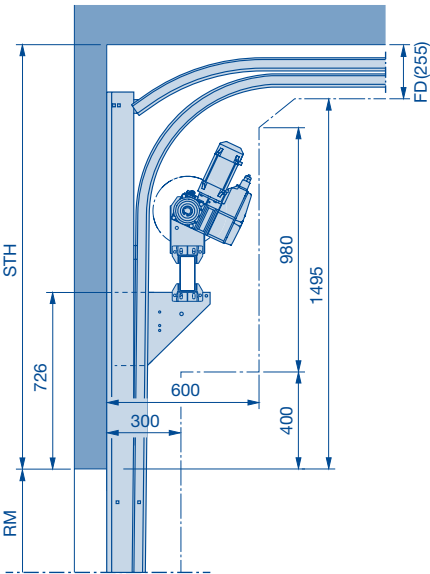
for central mounting

Shaft operator WA 500 / 500 FU for track applications: H, HD, HS and HK



Track application	WA 500 / WA 500 FU	
	Min. DA	FR min.
H 4	480	45
H 5	485	45
H 8	565	45
HD / HS / HK	On request	

Shaft operator WA 500 / 500 FU for track applications: HU, RD, RS and RK



Track application	WA 500 / WA 500 FU
RS / RK	On request

Note:
Centre motor in conjunction with double spring shaft on request!

DA
FR

Distance to ceiling
Clearance ceiling / shaft operator

LH
RM

Track height
Grid height

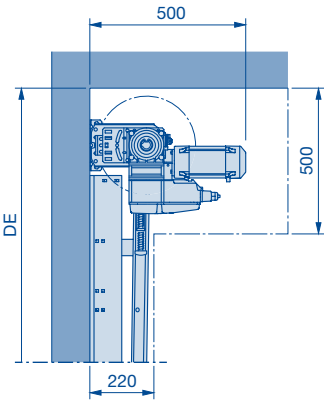
STH

Headroom

Shaft operator WA 500 / 500 FU

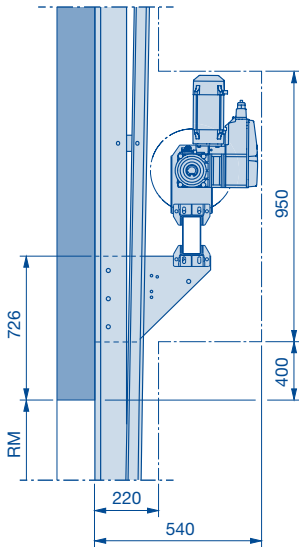
for central mounting

Shaft operator WA 500 / 500 FU for track applications: V and VS



Track application	WA 500 / WA 500 FU
VS	On request

Shaft operator WA 500 / 500 FU for track applications: VU and WS



Note:
Centre motor in conjunction with double spring shaft on request!

DA

Distance to ceiling

RM

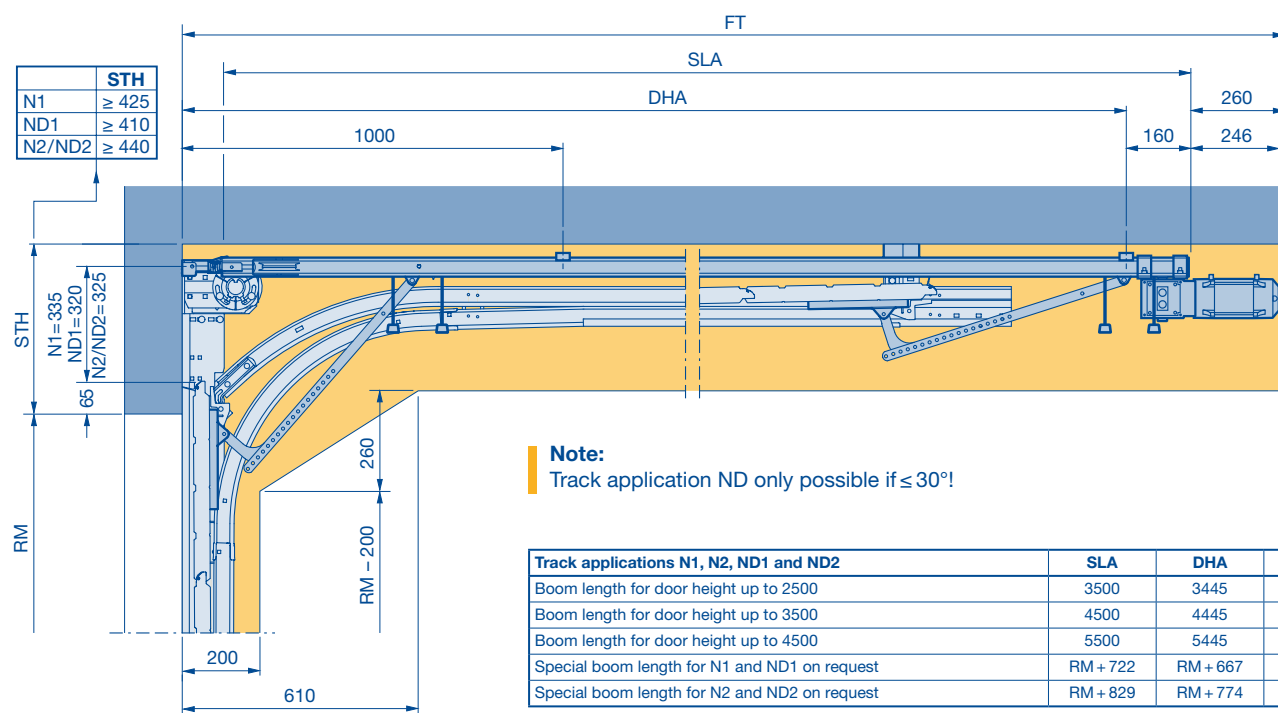
Grid height

LH

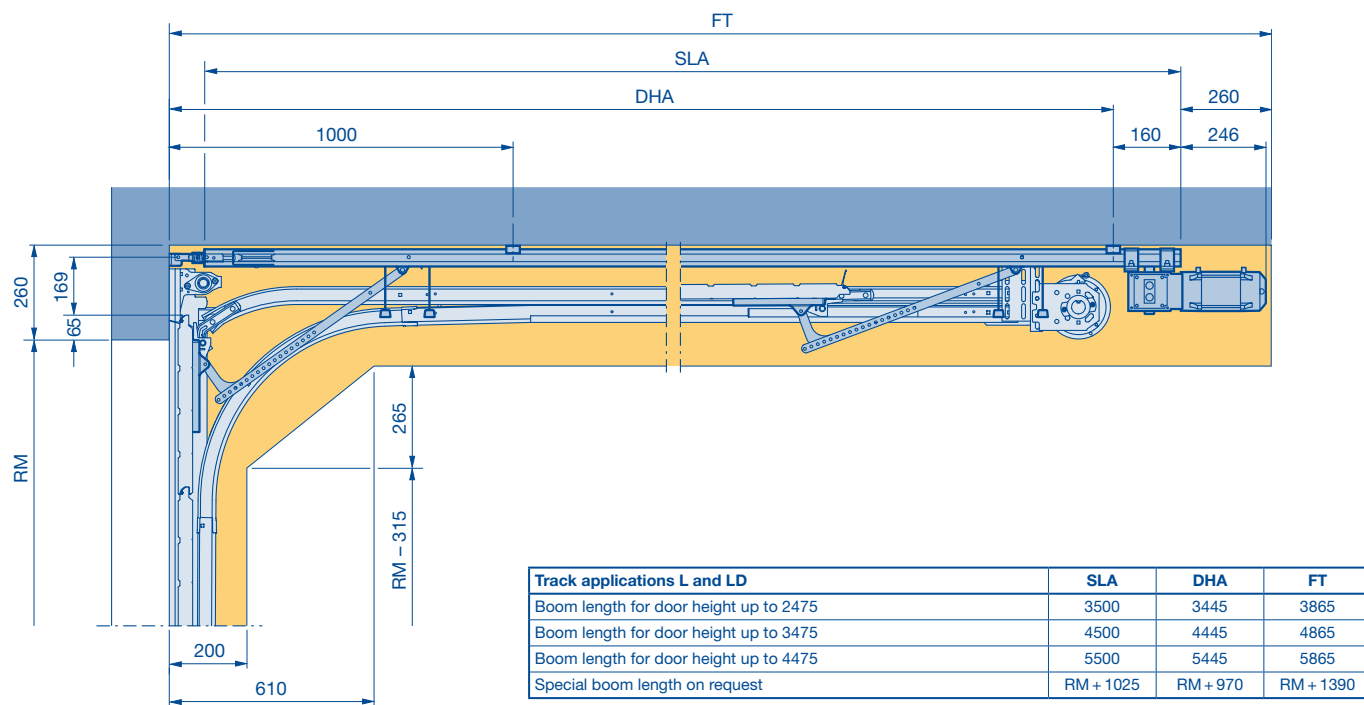
Track height

Chain drive operator ITO 500 FU

ITO 500 FU track applications N and ND (doors with wicket door on request)



ITO 500 FU track applications L and LD (doors with wicket door on request)

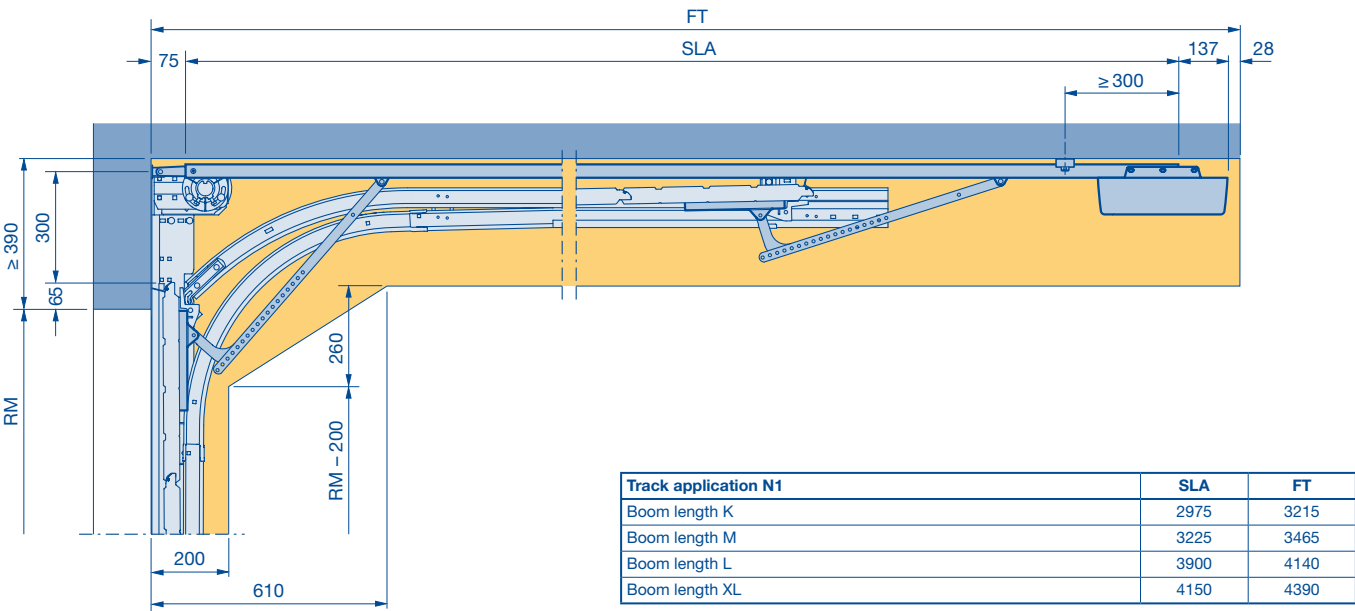


DHA Operator rear ceiling anchor
FT Clearance for door operator
RM Grid height
SLA Operator boom length

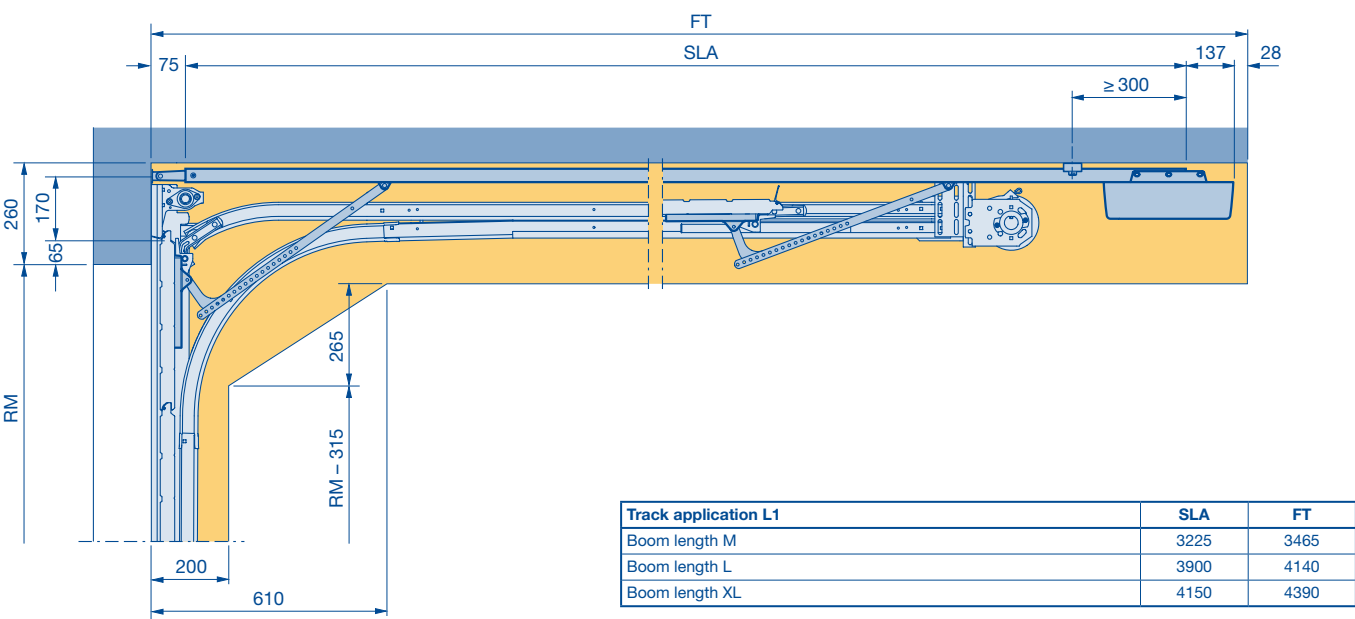
STH Headroom

SupraMatic HT operator

SupraMatic HT track application N
(doors with wicket door, ALR F42 Glazing, ALR F42 Vitraplan and doors with real glass infill on request)*



SupraMatic HT track application L
(doors with wicket door, ALR F42 Glazing, ALR F42 Vitraplan and doors with real glass infill on request)*



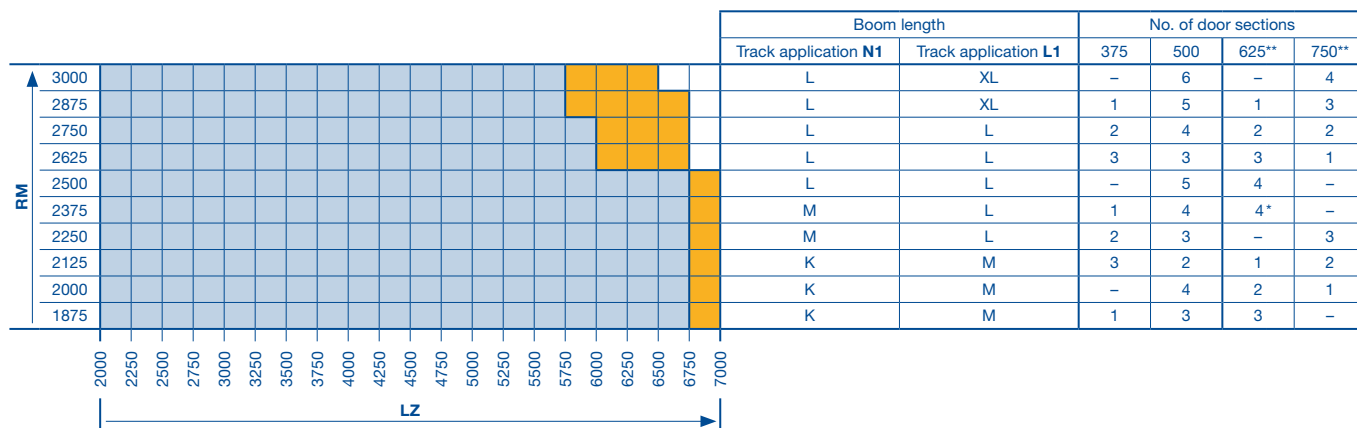
(See the next page for the size range for SupraMatic HT)

*** Notice:**
Operator not possible for doors with a depth of 67 mm!

DHA Operator rear ceiling anchor
FT Clearance for door operator
RM Grid height
SLA Operator boom length

SupraMatic HT operator

SupraMatic HT size range



SupraMatic HT not possible.

SupraMatic HT possible.

SupraMatic HT on request.

LZ Clear frame dimension
RM Grid height
 * Top door section 500 mm
 ** Only without wicket door

Dimensions in mm

Door leaf speeds

WA 300 / WA 500

(ATTENTION! The stated speeds can **only be achieved under optimum conditions** regarding door size and track size. More detailed information on request, as it is dependent on fitting, door and track heights.)

Track range	WA 300 S4		WA 500							
	Integrated / external control 360		Control 545 and 560							
	Optosensors-LE, 8k2 resistor strip VL1-LE, VL2-LE, HLG	Power limit	Flange operator / centre motor				Chain box operator			
			A / B control with optosensors and 8k2 resistor strip		A / B control VL 1-LE, VL 2-LE, HLG		A / B control with optosensors and 8k2 resistor strip		A / B control VL 1-LE, VL 2-LE, HLG	
	Max. speed in mm / s, open / close	Max. speed in mm/s, Close [3]	rpm [1]	Max. speed in mm / s, open / close	rpm [1]	Max. speed in mm / s, open / close	rpm [1]	Max. speed in mm / s, open / close	rpm [1]	Max. speed in mm / s, open / close
N1, NA1, NS1, ND1 ≤ 30°, NK1	190	95	30	190	30	190	30	190	30	190
GD1, GK1, GS1, NH1	190	95								
ND6 > 30°	160 / 190 [1]	80 / 95 [1]	16	170 [1]	24	300 [1]	16	170 [1]	24	300 [1]
N2, NA2, NS2, ND2 ≤ 30°, NK2	210	105	24	210	30	265	24	210	30	265
GD2, GK2, GS2, NH2	210	105								
ND7 > 30°	190 [1]	95 [1]	19 [2]	275 [1, 2]	19	275 [1]	13	180 [1]	19	275 [1]
N3, NH3, ND3 < 6°	-		-				-			
ND3 ≥ 6°							13	160	19	190
L1, LD1	210	105	-				24	150	24	150
L2, LD2										
H4, HA4, HK4, HS4, HU4, HD4, RD4, RK4, RS4	160 / 190 [1]	80 / 95 [1]	19 / 16	170 [1]	30 / 24	290 [1]	19 / 16	170 [1]	30 / 24	290 [1]
H5, HA5, HU5, HD5, RD5	210 [1]	105 [1]	24 / 19 [2]	290 [1, 2]	24 / 19		16 / 13		24 / 19	
H8, HD8, HK8, HS8, HU8	-		-				16 [2]	250 [2]	16	250
V6, VA6, VU6, VS6, WG6, WS6	160 / 190 [1]	80 / 95 [1]	16	170 [1]	24	300 [1]	16	170 [1]	24	300 [1]
V7, VU7, VS7, WG7, WS7	190 [1]	95 [1]	19 [2]	275 [1, 2]	19	275 [1]	13		19	275 [1]
V9, VU9, VS9, WS9	-		-				16 [2]	250 [2]	16	250

- [1] Max. door leaf speed depending on the high-lift / door height (RM) / door width (LZ)
 [2] Only possible with press-and-hold operation
 [3] From 2500 mm above FFL to FFL without closing edge safety device to comply with EN 13241

Notice
 Double spring shaft only possible in conjunction with WA 500 FU!

Door leaf speeds

WA 500 FU

(ATTENTION! The stated speeds can **only be achieved under optimum conditions** regarding door size and track size. More detailed information on request, as it is dependent on fitting, door and track heights.)

Track range	WA 500 FU											
	Control 545						Control 560					
	Flange operator / centre motor	Chain box operator	Max. speed in mm/s				Flange operator / centre motor	Chain box operator	Max. speed in mm/s			
			In "Open" direction	Optosensors, 8k2 resistor strip	VL1-LE, VL2-LE	HLG			In "Open" direction TopSpeed: 0 TopSpeed: 1	Optosensors, 8k2 resistor strip	VL1-LE, VL2-LE	HLG
			In "Open" direction	In "Close" direction	In "Close" direction	In "Close" direction			In "Open" direction TopSpeed: 0 TopSpeed: 1	In "Close" direction	In "Close" direction	In "Close" direction
N1, NA1, NS1, ND1 ≤30°, NK1	Yes	Yes	350	200	250		Yes	Yes	500 575 [5]	200	300	500
GD1, GK1, GS1, NH1							–	Yes [4]	700 [5]			
ND6 >30°							Yes	Yes	500			
							–	Yes [4]	700 [5]			
N2, NA2, NS2, ND2 ≤30°, NK2			500	500			Yes	Yes	500 825 [5]	500	500	500 825
GD2, GK2, GS2, NH2				–	Yes [4]	1000 [5]	1000					
ND7 >30°				200	300	500	Yes	Yes	500	200	300	500
				500			Yes	Yes	500 825 [5]	500	500	500 825
							–	Yes [4]	1000 [5]			1000
N3, ND3				500			Yes	Yes	1000 [5]	500	500	500 1000
NH3	200	300					500	Yes	Yes			500
L1, LD1	–	Yes	500	200	250		–	Yes	575 [5]	200	300	375 500
L2, LD2							Yes [4]	1000 [5]	500	500	1000	
				–	Yes	575 [5]	200	300	375 500			
							Yes [4]	1000 [5]	500	500	1000	
H4, HA4, HK4, HS4, HU4, HD4, RD4, RK4, RS4	Yes	Yes	350	200	250		Yes	Yes	500 700 [5]	200	300	500
H5, HA5, HU5, HD5, RD5			500	500			Yes	Yes	500 825 [5]	500	500	500 825
							–	Yes [4]	1000 [5]			1000
H8, HD8, HK8, HS8, HU8							Yes	Yes	500 1000 [5]			500 1000
V6, VA6, VU6, VS6, WS6	Yes	Yes	350	200	250		Yes	Yes	500 700 [5]	200	300	500
V7, VU7, VS7, WS7			500	500			Yes	Yes	500 825 [5]	500	500	500 825
							–	Yes [4]	1000 [5]			1000
V9, VU9, VS9, WS9							Yes	Yes	500 1000 [5]			500 1000

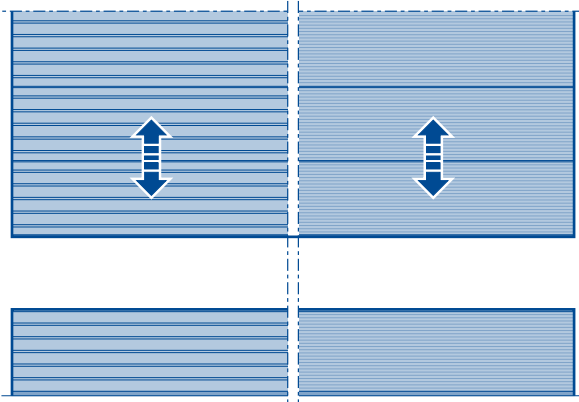
[4] Increased door travel speed up to 1 m/s required
 [5] Max. door leaf speed with door width (LZ) ≤ 6000 mm;
 For door width (LZ) > 6000 mm only after technical inspection; not possible with roller holder type S
 Max. door leaf speed from the Open end-of-travel position in the Close direction up to approx. 3200 mm above FFL

Max. door leaf speed from the Open end-of-travel position in the Close direction up to approx. 500 mm above FFL

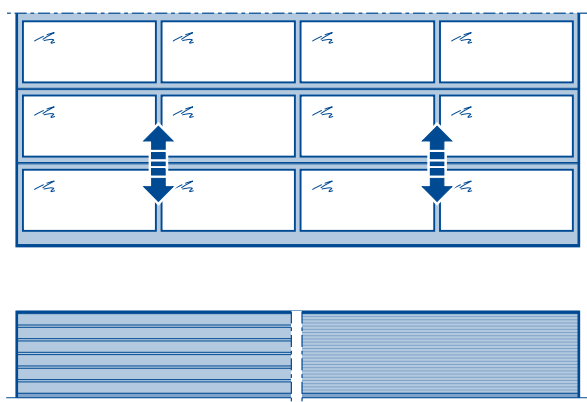
Notice
 Double spring shaft only possible in conjunction with control WA 500 FU!

Sectional Door Parcel

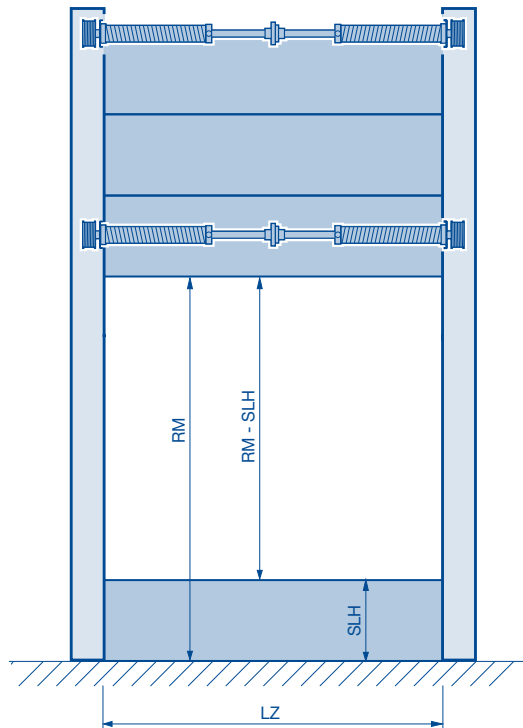
SPU F42



APU F42

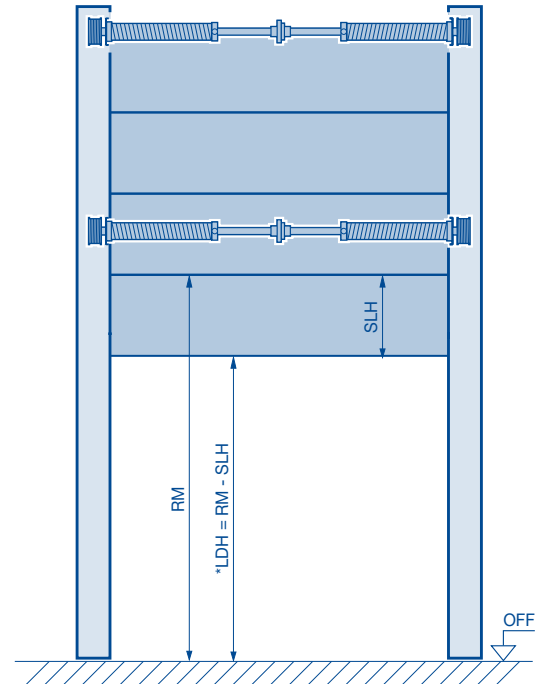


Functional principle



For loading lorries and swap trailers, the bottom section with the catwalk remains on the ground when the door is open.

*LDH = RM possible on request for Parcel



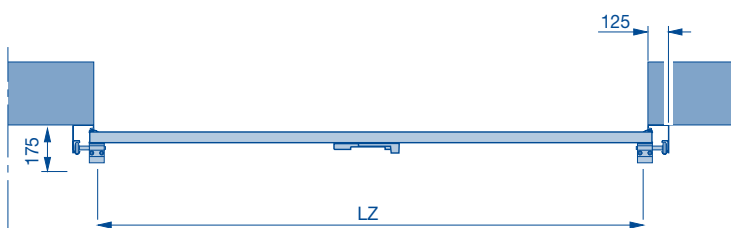
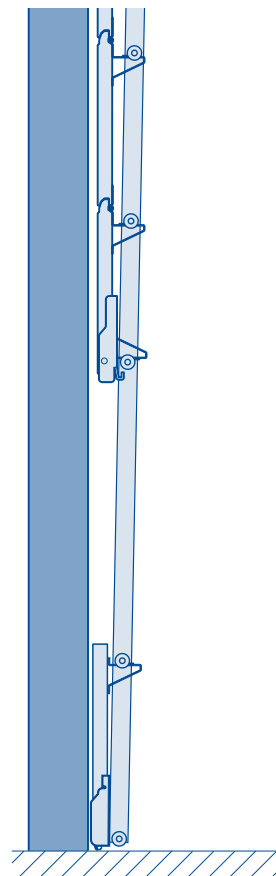
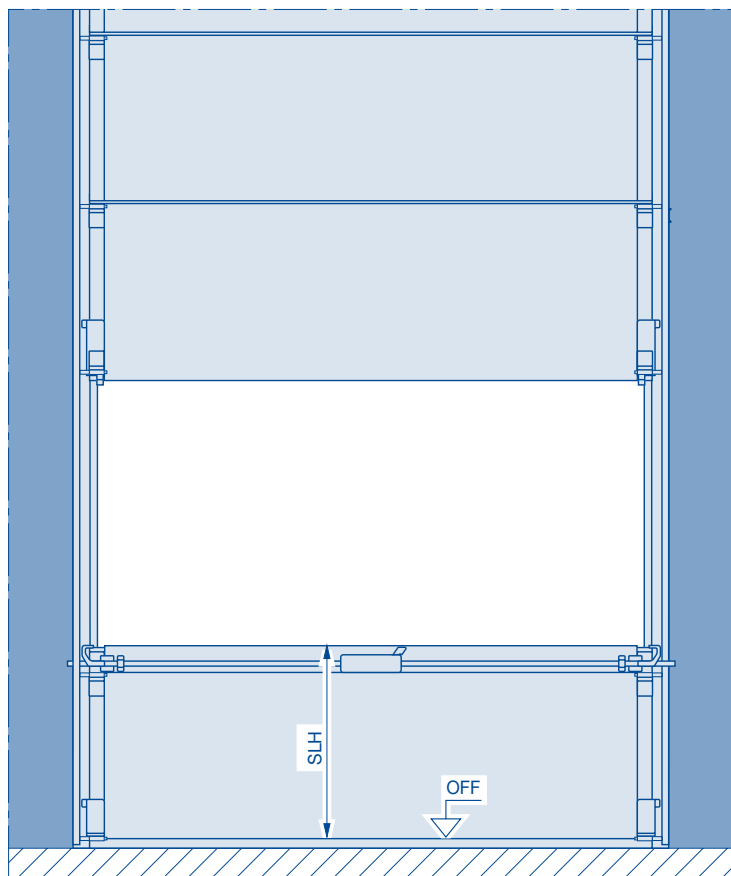
Vans are loaded at floor level. For this purpose, the door is opened completely including the bottom section. When the coupled door is open, the bottom section with the catwalk remains in the top part of the door opening.

LDH Clear passage height
LZ Clear frame dimension
RM Grid height
SLH Bottom section height

Dimensions in mm

Sectional Door

Parcel

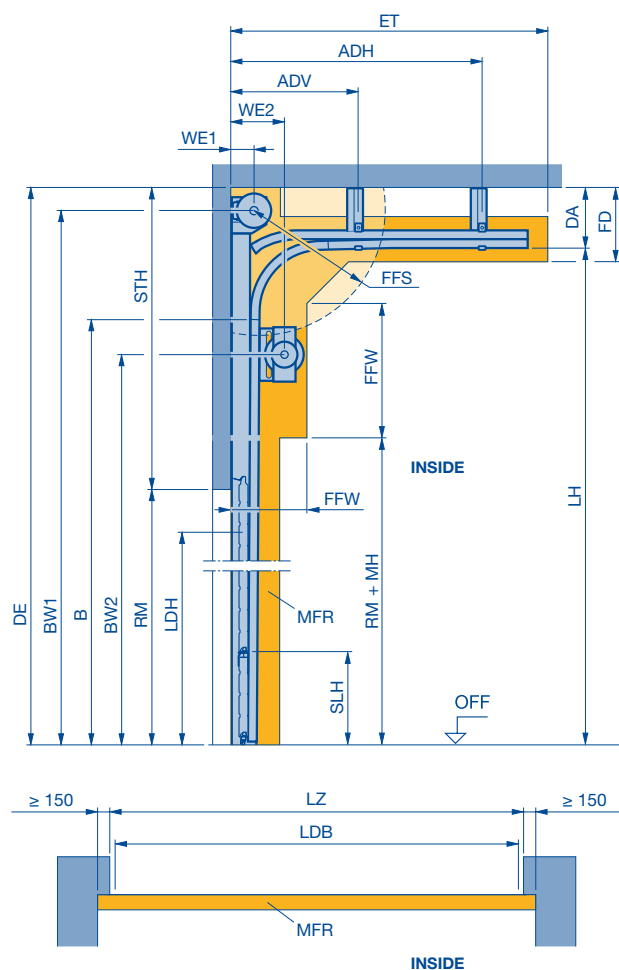


LZ Clear frame dimension
SLH Bottom section height
 Dimensions in mm

Track application: HP

High-lift track application

for sectional door Parcel with high- and low-mounted torsion spring shaft



ADH Distance to rear ceiling anchor on request
ADV Distance to front ceiling anchor
B Start of double radius
BW Position of shaft support
DA Distance to ceiling
DE Ceiling height
ET Distance back on request
FD Min. ceiling clearance
FFS Spring compression clearance
FFW Spring shaft clearance
LDB Clear passage width with ThermoFrame (see page 80)

LDH Clear passage height
 For Parcel, LDH = RM is available on request
LH Track height (see table)
LZ Clear frame dimensions (from 1500)
MFR Space for fitting the door on request
MH Fitting height
OFF Finished floor level
RM Grid height
SLH Bottom section height
STH Min. headroom (see page 54)
WE Shaft centre from lintel (see table)

Please note:

1. Select required track height according to the door height in table.
2. A technical inspection is required!

Notes:

- Only for door types SPU F42 and APU F42
- Operators WA 300 and WA 500 are only possible in press-and-hold operation.
- A frame below the door division is not possible
- Application range from LZ 1500–3000 mm and RM from 3125–4250 mm.
- Doors with wicket door are not possible.
- The clearance required for fitting the door must be free of supply lines, heater fans, etc.

Notes:

- Follow the instructions for the approved size ranges for door types SPU F42 and APU F42 from the table!

Table: track heights (LH)

Door height	Min. LH	Max. LH
RM		
4250	5810	On request
4125	5685	
4000	5560	
3875	5435	
3750	5310	
3625	5185	On request
3500	5060	
3375	4935	
3250	4810	
3125	4685	

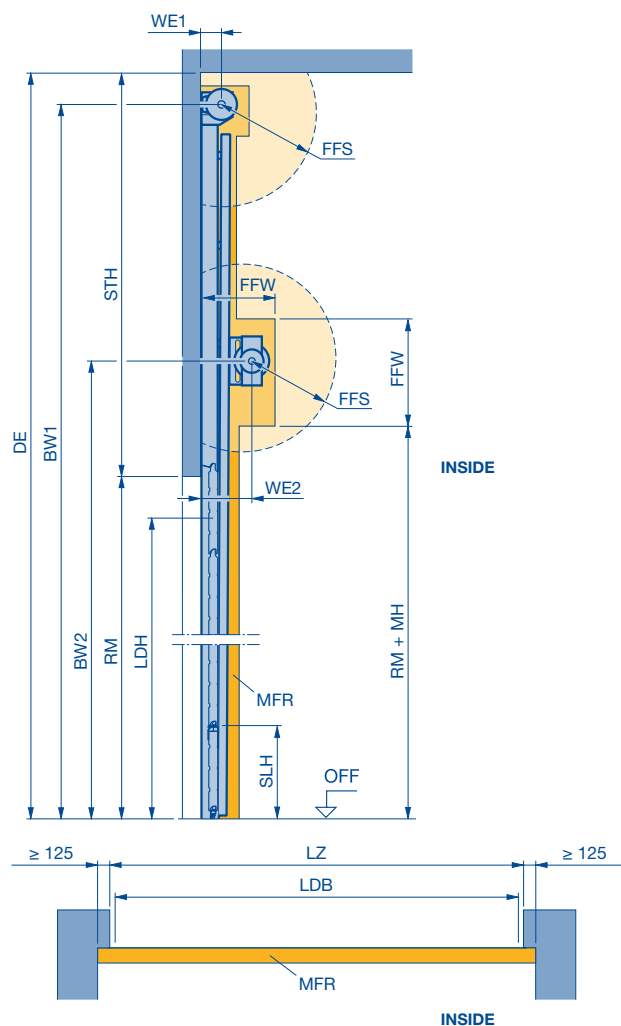
	B	BW1	BW2	DA	WE1	WE2
HP 4	LH - 366	LH + 231	RM + 940	Min. 370	160	315
HP 5				Min. 400	180	

DAL	FD	FFS	FFW	LDH	MH	SLH
DE - LH - 15	DA + 65	Min. 90° (745)	460 × 850	RM - SLH	400	500 – 1450

Track application: VP

Vertical track application

for sectional door Parcel with high- and low-mounted torsion spring shaft



BW	Position of shaft support, BW1 on request	LZ	Clear frame dimensions (from 1500)
DE	Ceiling height, on request	MFR	Space for fitting the door, on request
FFS	Spring compression clearance	MH	Fitting height
FFW	Spring shaft clearance	OFF	Finished floor level
LDB	Clear passage width with ThermoFrame (see page 80)	RM	Grid height
LDH	Clear passage height	SLH	Bottom section height
	For Parcel, LDH = RM is possible	STH	Headroom, on request
		WE	Shaft centre from lintel

Please note:

A technical inspection is required!

Notes:

- Only for door types SPU F42 and APU F42
- Operators WA 300 and WA 500 are only possible in press-and-hold operation.
- A frame below the door division is not possible
- Application range from LZ 1500–3000 mm and RM from 3125–4250 mm.
- Doors with wicket door are not possible.
- The clearance required for fitting the door must be free of supply lines, heater fans, etc.

Observe the min. sideroom, see page 80.

	BW2	FFS	FFW	LDH	MH	SLH	WE1	WE2
VP 6							160	
VP 7	RM + 940	Min. 90° (745)	460 x 850	RM - SLH	400	500 – 1450	180	315


Infill overview

Determination of the roof slope

Infill overview	SPU F42	APU F42	APU F42 Thermo	ALR F42	ALR F42 Thermo	ALR F42 Glazing	ALR F42 Vitraplan	ALR F42 Vitraplan AT
Infill type	Abbreviation							
Clear synthetic pane, 3 mm [1] [3]	FK	FK	–	FK	–	–	–	–
Crystal structure synthetic pane, 3 mm [1] [3]	KR	KR	–	KR	–	–	–	–
Clear polycarbonate pane, 6 mm [3]	P	P	–	P	–	–	–	–
Multiple moulded pane, 16 mm, $U_g = 1.9 \text{ W/m}^2\text{-K}$ [3]	S	S	S	S	S	–	–	–
PU infill, 26 mm with Stucco-textured aluminium sheet cover on both sides, $U_g = 1.0 \text{ W/m}^2\text{-K}$	–	FU	FU	FU	FU	–	–	FU
PU infill, 26 mm with smooth, anodised aluminium sheet cover on both sides, $U_g = 1.0 \text{ W/m}^2\text{-K}$	–	XU	XU	XU	XU	–	–	XU
PU infill, 26 mm with smooth, anodised aluminium sheet cover on both sides, $U_g = 1.2 \text{ W/m}^2\text{-K}$ [6]	TU	TU	TU	TU	TU	–	–	–
Clear synthetic double pane, 26 mm, $U_g = 2.6 \text{ W/m}^2\text{-K}$	S2	S2	S2	S2	S2	–	S2	–
Synthetic double pane, crystal structure, 26 mm, $U_g = 2.6 \text{ W/m}^2\text{-K}$	U2	U2	U2	U2	U2	–	U2	–
Synthetic double pane, grey tinted, 26 mm, $U_g = 2.6 \text{ W/m}^2\text{-K}$	A2	A2	A2	A2	A2	–	A2	–
Synthetic double pane, white tinted (opal), 26 mm, $U_g = 2.6 \text{ W/m}^2\text{-K}$	M2	M2	M2	M2	M2	–	–	–
Clear synthetic triple pane, 26 mm, $U_g = 1.9 \text{ W/m}^2\text{-K}$	S3	S3	S3	S3	S3	–	S3	–
Synthetic triple pane, crystal structure, 26 mm, $U_g = 1.9 \text{ W/m}^2\text{-K}$	U3	U3	U3	U3	U3	–	U3	–
Synthetic triple pane, grey tinted, 26 mm, $U_g = 1.9 \text{ W/m}^2\text{-K}$	A3	A3	A3	A3	A3	–	A3	–
Synthetic triple pane, white tinted (opal), 26 mm, $U_g = 1.9 \text{ W/m}^2\text{-K}$	M3	M3	M3	M3	M3	–	–	–
Clear polycarbonate double pane, 26 mm, $U_g = 2.7 \text{ W/m}^2\text{-K}$	C2	C2	C2	C2	C2	–	C2	–
Single pane made of laminated safety glass, 6 mm [2] [3]	VG	VG	–	VG	–	VG	–	–
Double pane made of single-pane safety glass, 26 mm, $U_g = 2.6 \text{ W/m}^2\text{-K}$ [2]	E2	E2	E2	E2	E2	E2	–	–
Double pane made of laminated safety glass P4A, 26 mm, $U_g = 1.3 \text{ W/m}^2\text{-K}$ [6]	W2	W2	W2	W2	W2	–	–	–
Climatic double pane made of single-pane safety glass, 26 mm, $U_g = 1.1 \text{ W/m}^2\text{-K}$ [2]	G2	G2	G2	G2	G2	G2	–	–
Stainless steel expanded mesh, 5 mm [1] [3] [4]	SE	SE	–	SE	–	–	–	–
Perforated stainless steel sheet, 1.5 mm, perforation 8 mm [1] [3] [4]	LB	LB	–	LB	–	–	–	–
Prepared for on-site infill [5]	BS	BS	BS	BS	BS	–	–	–

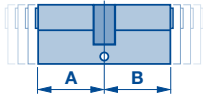
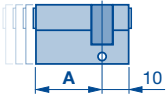
- [1] **Note:** max. field width 1230 mm, if required add an additional field
- [2] Only for door width up to 6000 mm; on request
- [3] Not possible for aluminium frames in Thermo version
- [4] No colour coating possible

- [5] On request; infill weight and thickness must be specified (anodised glazing beads required)
- [6] Only for NT 60 and N T80 Thermo with RC 2 version and door version with glazing type A

Determining the roof slope in increments of two degrees (a°)								
								
a°	%	X (mm)	a°	%	X (mm)	a°	%	X (mm)
2	3,49	34,9	16	28,67	286,7	30	57,74	577,4
4	6,99	69,9	18	32,49	324,9	32	62,49	624,9
6	10,51	105,1	20	36,40	364,0	34	67,46	674,6
8	14,05	140,5	22	40,40	404,0	36	72,66	726,6
10	17,63	176,3	24	44,52	445,2	38	78,13	781,3
12	21,26	212,6	26	48,77	487,7	40	83,91	839,1
14	24,93	249,3	28	53,17	531,7	42	90,05	900,5
						44	96,57	965,7
						46	103,55	1035,5

Overview

Profile cylinders

Product type			Glazing frame	Door lock		Wicket door	Optional extras	Operator accessories
	Double cylinder PC length (L): Interior (A) + exterior (B)	Half cylinder PC length (L): Closing side (A) + blind side	Infill	Standard	Recessed		Bolt lock	Key switch
SPU F42 APU F42 APU F42 Thermo	L = 35 + 30	—	—	—	—	●	●	—
	—	L = 30 + 10	—	—	●	●	—	●
	—	L = 35 + 10	—	—	—	—	●	—
	—	L = 70 + 10	—	●	—	—	—	—
ALR F42 ALR F42 Thermo	L = 35 + 30	—	—	—	—	●	●	—
	—	L = 30 + 10	—	—	—	●	—	●
	—	L = 35 + 10	—	—	—	—	●	—
	—	L = 55 + 10	FU and XU	●	—	—	—	—
NT 60	L = 40 + 40	L = 40 + 10	—	—	—	—	—	—
NT 80	L = 35 + 70	L = 35 + 10	—	—	—	—	—	—
NT 60 RC2	L = 35 + 40*	—	—	—	—	—	—	—
NT 80 RC2	L = 35 + 60*	—	—	—	—	—	—	—

* Profile cylinder in acc. with DIN 1303
(digit 7 = grade 5, digit 8 = grade 1)

Brand quality for residential and commercial construction

The family-owned company Hörmann offers all important construction components for building and renovating projects from a single source. We manufacture in highly-specialised factories using the latest production technologies. Furthermore, our employees work intensively on new products, continual further developments and improvements to details. The results are patents and one-of-a-kind products you can depend on.

