



Non-protruding Up-and-over Door for Collective Garages ET 500 and Sliding Door ST 500

Technical manual: as of 01.03.2012



Contents

Contents	Page
Non-protruding up-and-over door for collective garages ET 500 and sliding door ST 500	
Infill style 402 with surface-mounted vertical ribbed sheet	03
Infill style 412 and 413 with perforated sheet steel	04
Infill style 432 and 433 with aluminium perforated sheet	05
Infill style 412 and 413 with perforated sheet steel and wicket door	06
Infill style 432 and 433 with aluminium perforated sheet and wicket door	07
Infill style 420 with aluminium sheet inside the frame	08
Infill style 420 with aluminium sheet inside the frame and wicket door	09
Infill style 422 with surface-mounted aluminium sheet	10
Infill style 422 with surface-mounted aluminium sheet and wicket door	11
Infill style 480 with sections	12
Infill style 480 with sections and wicket door	13
Style 405 for on-site infill overlapping the frame	14
Style 405 for on-site surface-mounted infill with wicket door	15
Style 400 for on-site infill inside the frame	16
Style 400 for on-site infill inside the frame with wicket door	17
Fixing points for non-protruding up-and-over door for collective garages ET 500 – standard	18–19
Fitting types for non-protruding up-and-over door for collective garages ET 500 – standard	20–21
Fixing points for non-protruding up-and-over door for collective garages ET 500 – flush-fitting	22–23
Fitting types for non-protruding up-and-over door for collective garages ET 500 – flush-fitting	24
Fixing points for non-protruding up-and-over door for collective garages ET 500 – driveway / inclination	25–26
Fitting types for non-protruding up-and-over door for collective garages ET 500 – driveway / inclination	27
Fitting types for non-protruding up-and-over door for collective garages ET 500 – wicket door with surface-mounted hinges – standard	28
Fitting types for non-protruding up-and-over door for collective garages ET 500 – wicket door with concealed hinges – optional	29
Bottom edge for non-protruding up-and-over door for collective garages ET 500	30
Garage door operators for non-protruding up-and-over door for collective garages ET 500	
SupraMatic H / SupraMatic T	31
ITO 400 / ITO 400 FU	32
Fixing points for collective garage sliding door ST 500	33
Fitting types for collective garage sliding door ST 500	34–38
Garage door operators for collective garage sliding door ST 500	
SupraMatic H / SupraMatic T / ITO 400 FU	39
Side doors for collective garage doors	
Styles 402, 412, 413, 420, 422, 480, 405 and 400	40
Position of anchors / clear passage width	41
Fitting dimensions	42–44

Door leaf constructions and track applications as well as fitting examples are provided in this manual.

The door opening and garage floor must be finished before fitting the garage doors.

No part may be reproduced without our prior permission.

All rights reserved.

All dimensions in mm.

Subject to design changes.

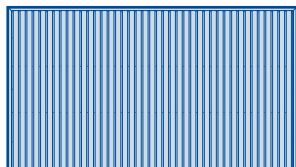
Non-protruding Up-and-over Door for Collective Garages ET 500 and Sliding Door ST 500

Infill style 402 with surface-mounted vertical ribbed sheet

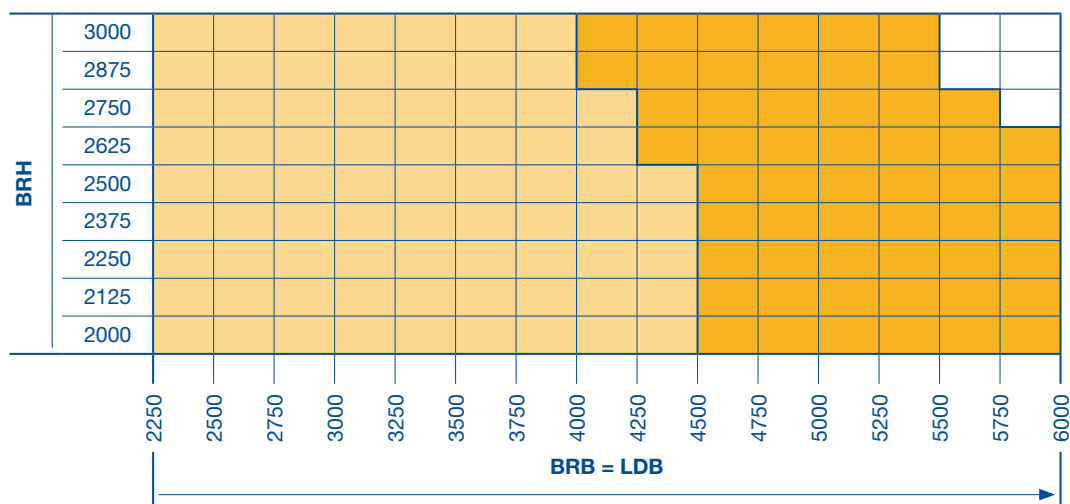
External views

(The illustrations correspond to size 4500 x 2125 mm. Deviations may occur with other door sizes.)

Style 402 – with vertically ribbed sheet
infill overlapping the frame



Size range



- ET 500 L – lightweight version and ST 500
- ET 500 S – heavy version and ST 500
- BRH** Nominal height
- BRB** Nominal width

- LDH** Clear passage height:
 $< \text{BRB } 4500 \text{ mm} = \text{BRH} - 20$
 $\geq \text{BRB } 4500 \text{ mm} = \text{BRH} - 60$
- LDB** Clear passage width

Note:
Non-protruding up-and-over door ET 500 with driveway / inclination, max. BRH 2500 mm

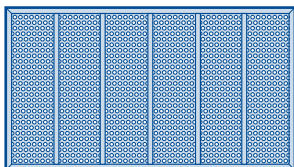
Non-protruding Up-and-over Door for Collective Garages ET 500 and Sliding Door ST 500

Infill style 412 and 413 with perforated sheet steel

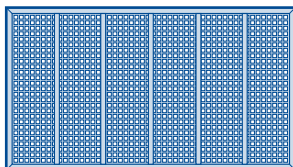
External views

(The illustrations correspond to size 4500 x 2125 mm. Deviations may occur with other door sizes.)

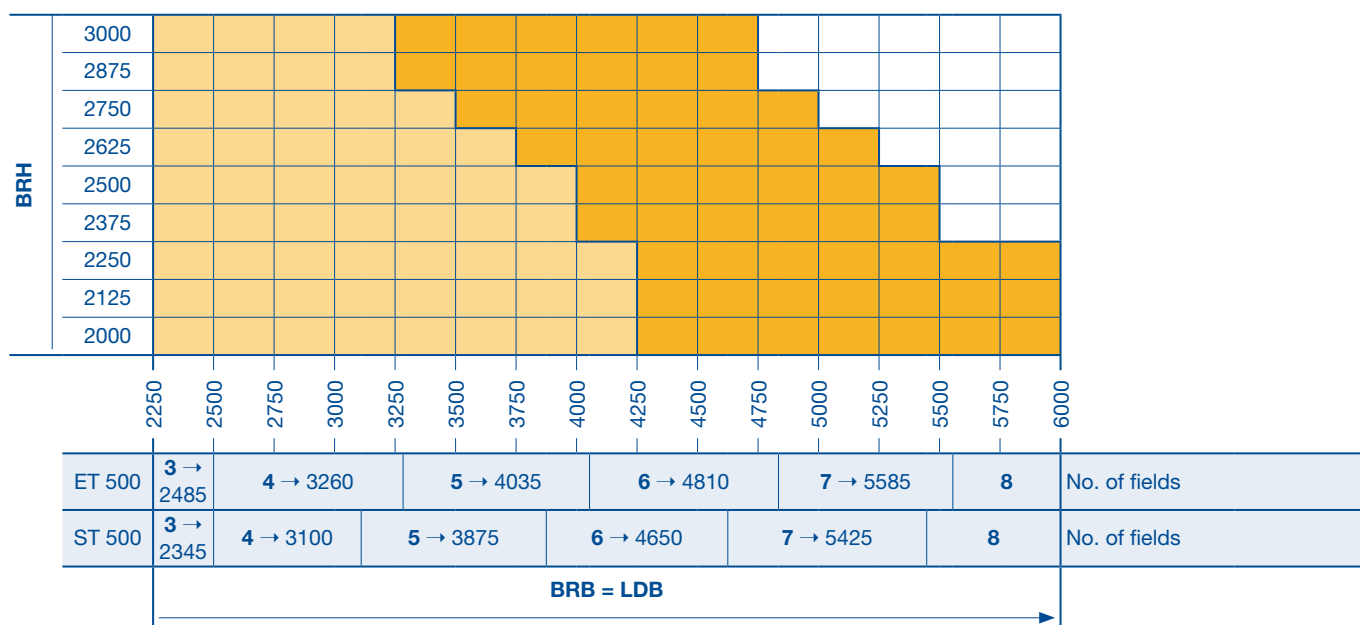
Style 412 – perforated steel sheet, round



Style 413 – perforated steel sheet, square



Size range



- ET 500 L – lightweight version and ST 500
- ET 500 S – heavy version and ST 500
- BRH** Nominal height
- BRB** Nominal width

- LDH** Clear passage height:
< BRB 4500 mm = BRH – 20
≥ BRB 4500 mm = BRH – 60
- LDB** Clear passage width

Note:
Non-protruding up-and-over door ET 500 with driveway / inclination, max. BRH 2500 mm

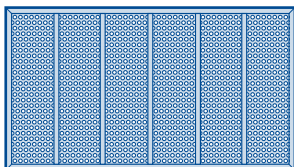
Non-protruding Up-and-over Door for Collective Garages ET 500 and Sliding Door ST 500

Infill style 432 and 433 with aluminium perforated sheet

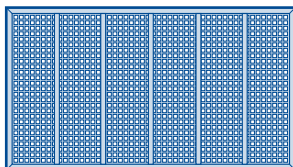
External views

(The illustrations correspond to size 4500 x 2125 mm. Deviations may occur with other door sizes.)

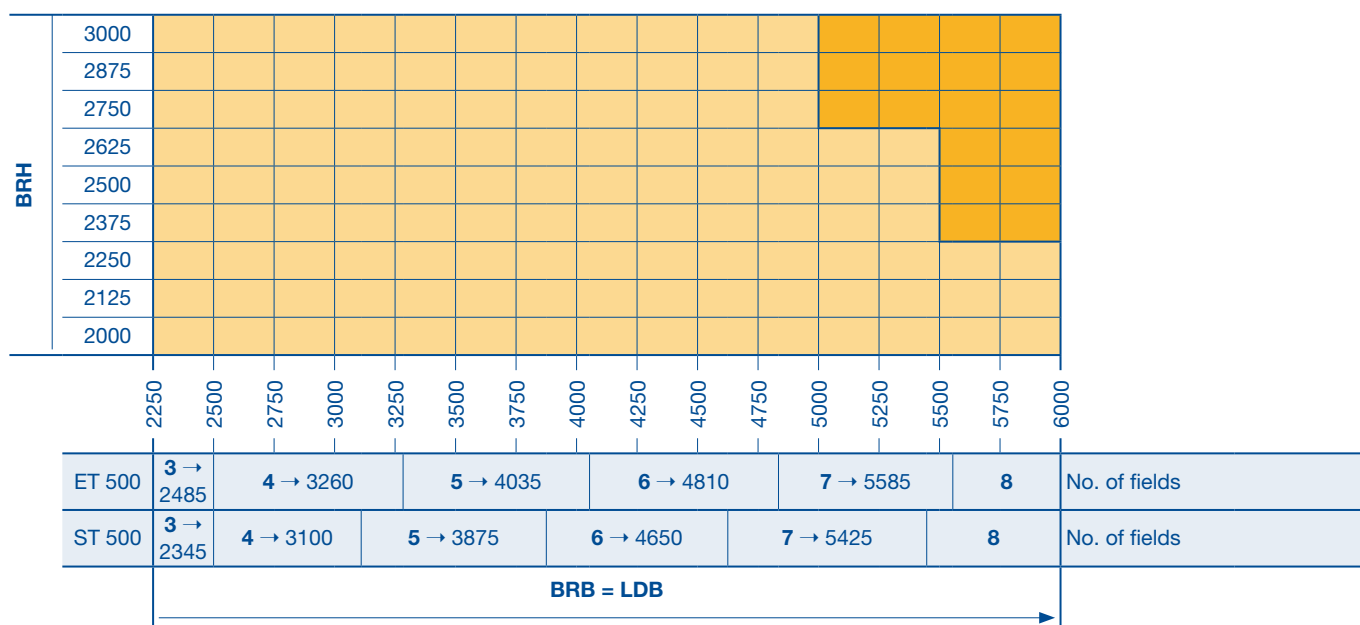
Style 432 – perforated steel sheet, round



Style 433 – perforated steel sheet, square



Size range



- ET 500 L – lightweight version and ST 500
- ET 500 S – heavy version and ST 500
- BRH** Nominal height
- BRB** Nominal width

- LDH** Clear passage height:
< BRB 4500 mm = BRH – 20
≥ BRB 4500 mm = BRH – 60
- LDB** Clear passage width

Note:
Non-protruding up-and-over door ET 500 with driveway /inclination, max. BRH 2500 mm

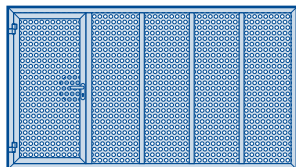
Non-protruding Up-and-over Door for Collective Garages ET 500 and Sliding Door ST 500

Infill style 412 and 413 with perforated sheet steel and wicket door

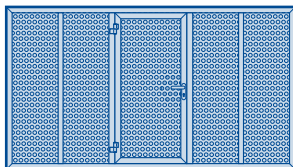
External views

(The illustrations correspond to size 4500 x 2125 mm. Deviations may occur with other door sizes.)

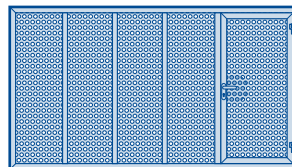
Style 412 – perforated steel sheet, round
Style 413 – perforated steel sheet, square
with left-hand wicket door, LH hinged



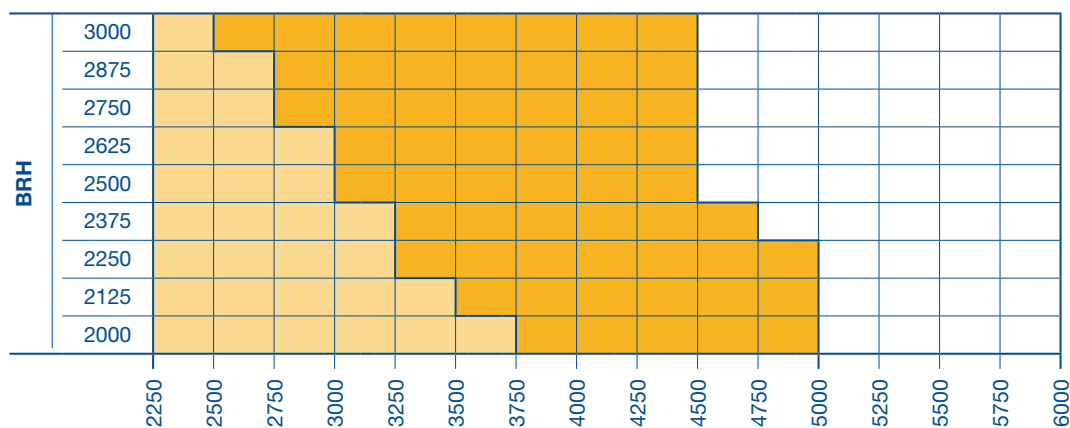
Style 412 – perforated steel sheet, round
Style 413 – perforated steel sheet, square
with centre wicket door, LH or RH hinged





Style 412 – perforated steel sheet, round
Style 413 – perforated steel sheet, square
with right-hand wicket door, RH hinged



Size range



ET 500	1 → 2475	2 → 3095	3 → 3715	4 → 4335	5	No. of fields without door field for LH/ RH wicket door	
	2 → 3735			4			No. of fields without door field for centre wicket door
ST 500	1 → 2315	2 → 2935	3 → 3555	4 → 4180	5 → 4955	6	No. of fields without door field for LH/ RH wicket door
	2 → 3180		4				No. of fields without door field for centre wicket door
BRB = LDB							

 ET 500 L – lightweight version and ST 500
 ET 500 S – heavy version and ST 500
BRH Nominal height
BRB Nominal width

LDH Clear passage height:
Doors with wicket door = BRH – 70
LDB Clear passage width

Note:
Non-protruding up-and-over door ET 500 with driveway/ inclination, max. BRH 2500 mm

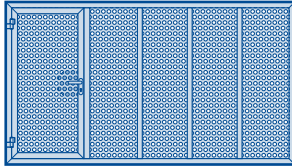
Non-protruding Up-and-over Door for Collective Garages ET 500 and Sliding Door ST 500

Infill style 432 and 433 with aluminium perforated sheet and wicket door

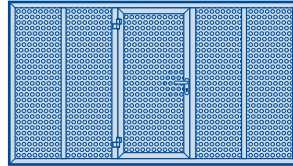
External views

(The illustrations correspond to size 4500 x 2125 mm. Deviations may occur with other door sizes.)

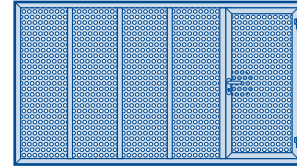
Style 432 – perforated steel sheet, round
Style 433 – perforated steel sheet, square
with left-hand wicket door, LH hinged



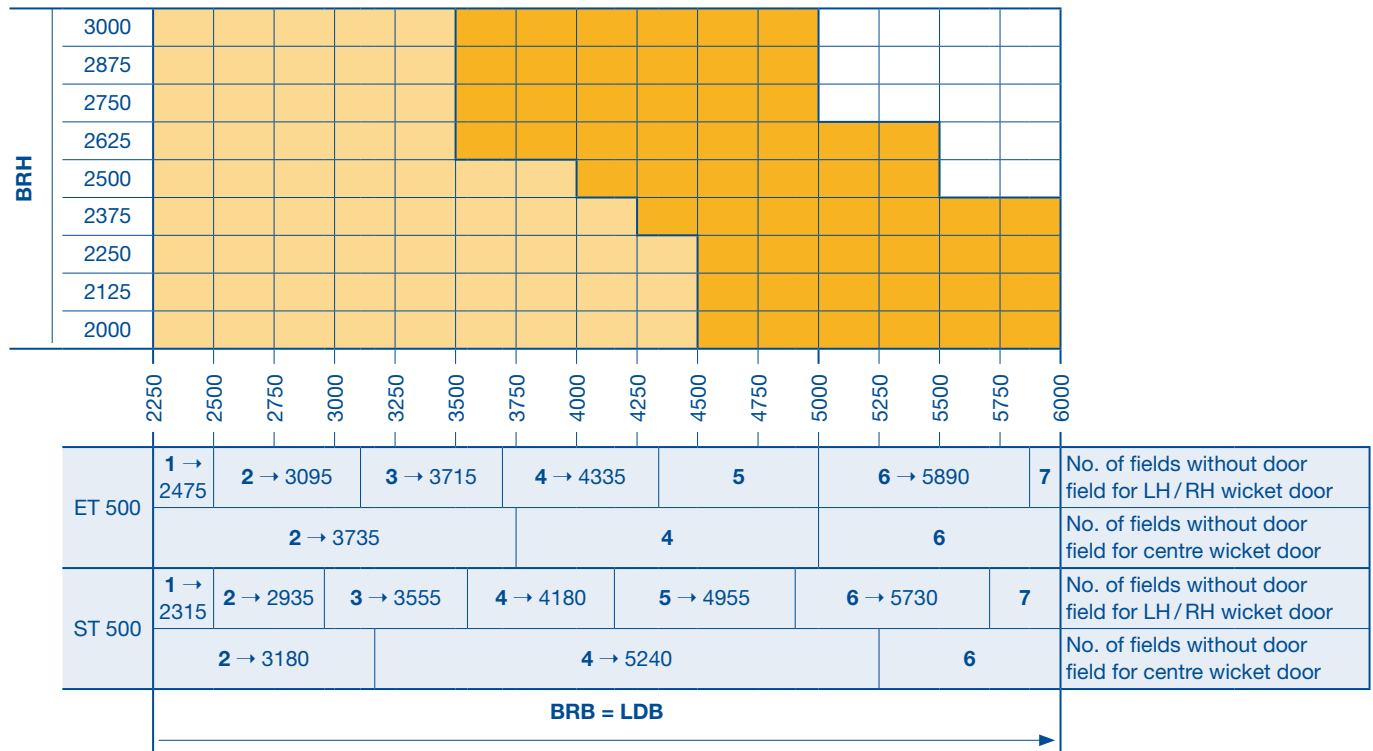
Style 432 – perforated steel sheet, round
Style 433 – perforated steel sheet, square
with centre wicket door, LH or RH hinged



Style 432 – perforated steel sheet, round
Style 433 – perforated steel sheet, square
with right-hand wicket door, RH hinged



Size range



ET 500 L – lightweight version and ST 500
 ET 500 S – heavy version and ST 500
BRH Nominal height
BRB Nominal width

LDH Clear passage height:
Doors with wicket door = BRH – 70
LDB Clear passage width

Note:
Non-protruding up-and-over door ET 500 with driveway/ inclination, max. BRH 2500 mm

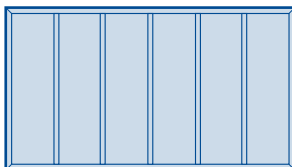
Non-protruding Up-and-over Door for Collective Garages ET 500 and Sliding Door ST 500

Infill style 420 with aluminium sheet inside the frame

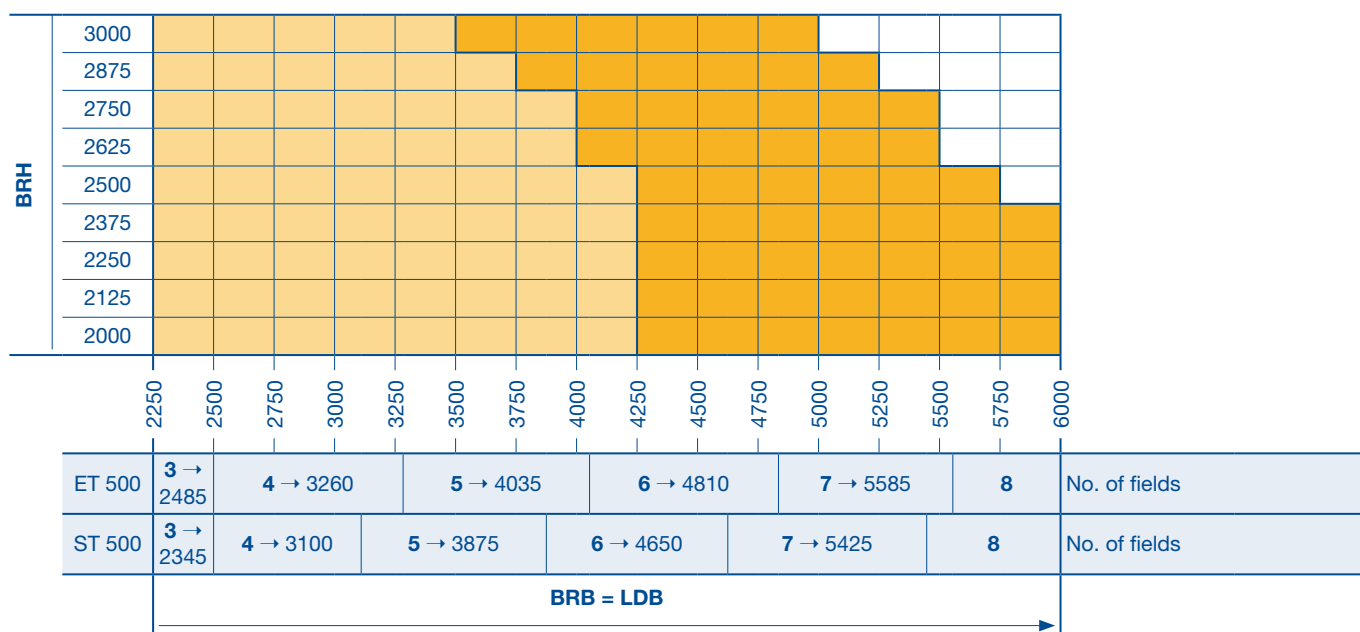
External views

(The illustrations correspond to size 4500 x 2125 mm. Deviations may occur with other door sizes.)

Style 420 – aluminium sheet



Size range



- ET 500 L – lightweight version and ST 500
- ET 500 S – heavy version and ST 500
- BRH** Nominal height
- BRB** Nominal width

- LDH** Clear passage height:
< BRB 4500 mm = BRH – 20
≥ BRB 4500 mm = BRH – 60
- LDB** Clear passage width

Note:
Non-protruding up-and-over door ET 500 with driveway/inclination, max. BRH 2500 mm

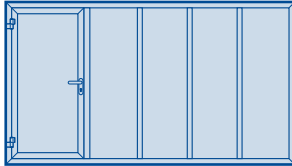
Non-protruding Up-and-over Door for Collective Garages ET 500 and Sliding Door ST 500

Infill style 420 with aluminium sheet inside the frame and wicket door

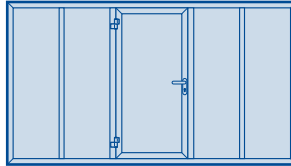
External views

(The illustrations correspond to size 4500 x 2125 mm. Deviations may occur with other door sizes.)

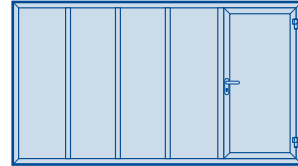
Style 420 – aluminium sheet with left-hand wicket door, LH hinged



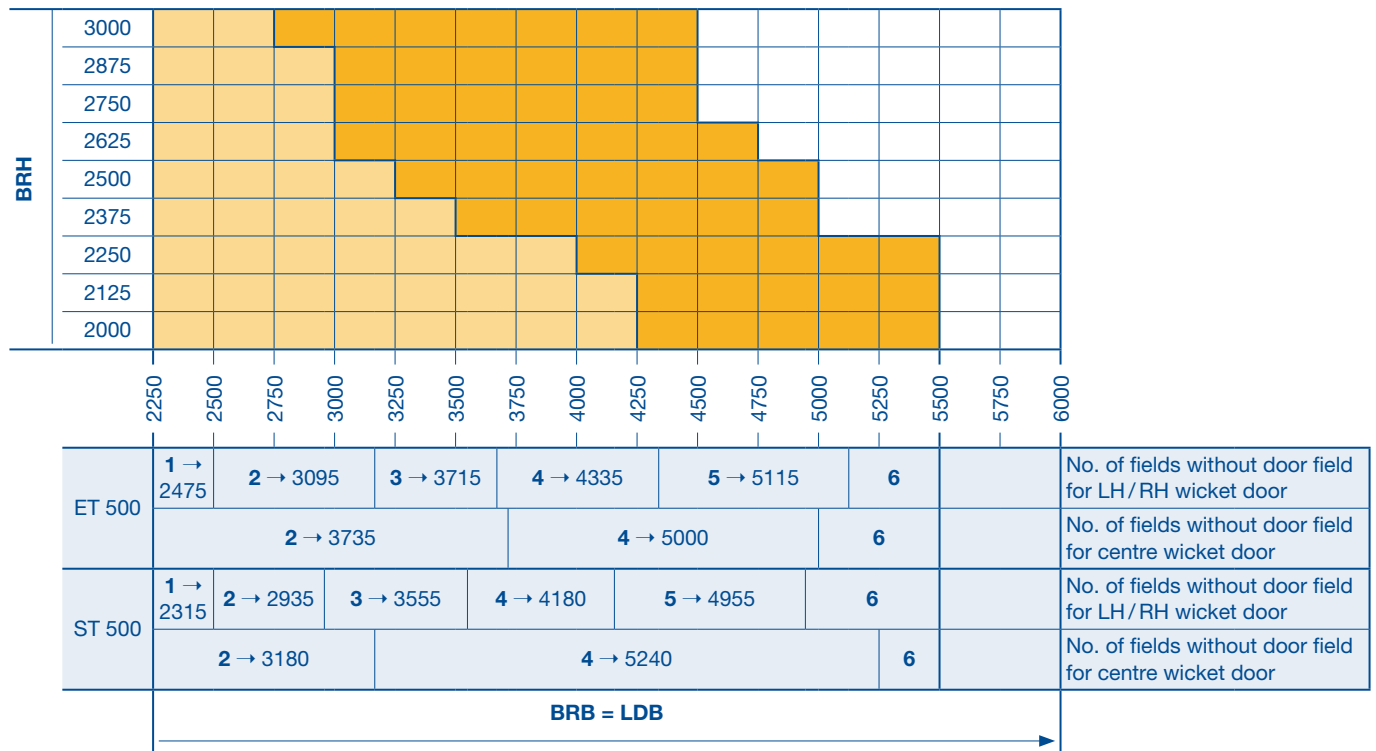
Style 420 – aluminium sheet with centre wicket door, LH or RH hinged



Style 420 – aluminium sheet with right-hand wicket door, RH hinged



Size range



- ET 500 L – lightweight version and ST 500
- ET 500 S – heavy version and ST 500
- BRH** Nominal height
- BRB** Nominal width

- LDH** Clear passage height:
Doors with wicket door = BRH – 70
- LDB** Clear passage width

Note: Non-protruding up-and-over door ET 500 with driveway/ inclination, max. BRH 2500 mm

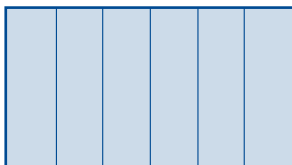
Non-protruding Up-and-over Door for Collective Garages ET 500 and Sliding Door ST 500

Infill style 422 with surface-mounted aluminium sheet

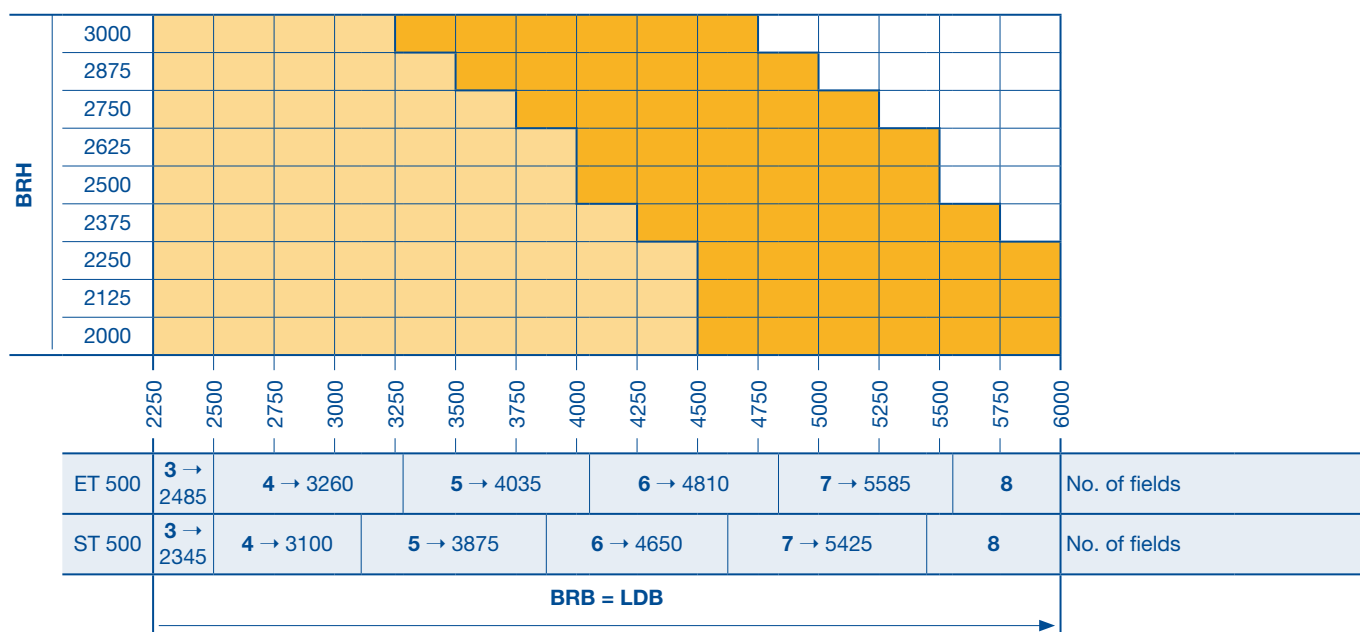
External views

(The illustrations correspond to size 4500 x 2125 mm. Deviations may occur with other door sizes.)

Style 422 – aluminium sheet



Size range



- ET 500 L – lightweight version and ST 500
- ET 500 S – heavy version and ST 500
- BRH** Nominal height
- BRB** Nominal width

- LDH** Clear passage height:
< BRB 4500 mm = BRH – 20
≥ BRB 4500 mm = BRH – 60
- LDB** Clear passage width

Note:
Non-protruding up-and-over door ET 500 with driveway/inclination, max. BRH 2500 mm

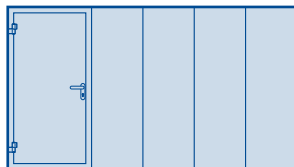
Non-protruding Up-and-over Door for Collective Garages ET 500 and Sliding Door ST 500

Infill style 422 with surface-mounted aluminium sheet and wicket door

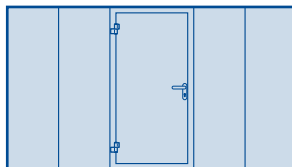
External views

(The illustrations correspond to size 4500 x 2125 mm. Deviations may occur with other door sizes.)

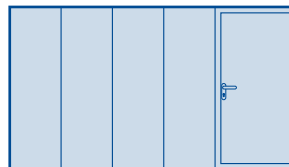
Style 422 – aluminium sheet with left-hand wicket door, LH hinged



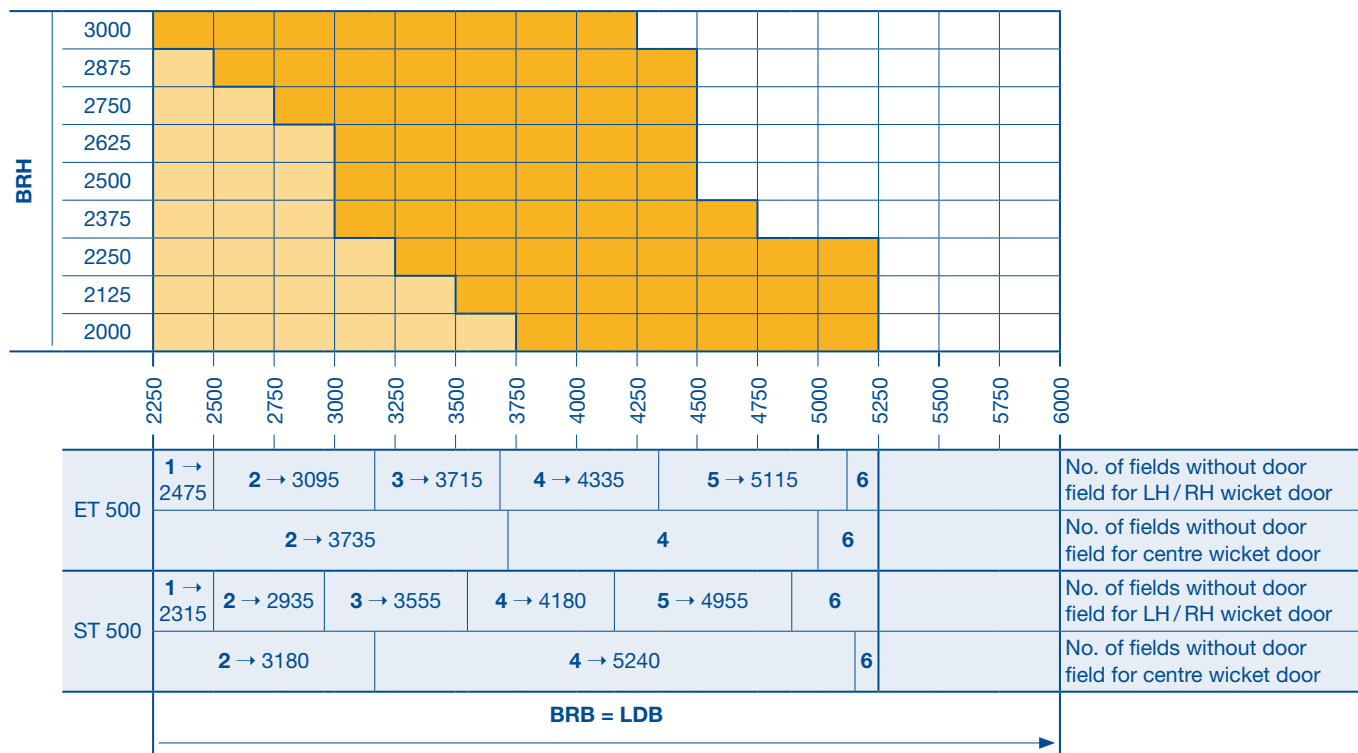
Style 422 – aluminium sheet with centre wicket door, LH or RH hinged



Style 422 – aluminium sheet with right-hand wicket door, RH hinged



Size range



- ET 500 L – lightweight version and ST 500
- ET 500 S – heavy version and ST 500
- BRH** Nominal height
- BRB** Nominal width

- LDH** Clear passage height:
Doors with wicket door = BRH – 70
- LDB** Clear passage width

Note: Non-protruding up-and-over door ET 500 with driveway/ inclination, max. BRH 2500 mm

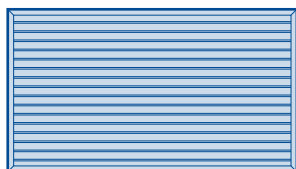
Non-protruding Up-and-over Door for Collective Garages ET 500 and Sliding Door ST 500

Infill style 480 with sections

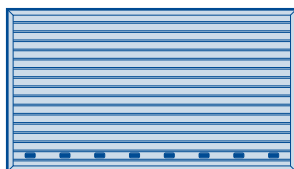
External views

(The illustrations correspond to size 4500 x 2125 mm. Deviations may occur with other door sizes.)

Style 480 – Steel sections



Style 480 – steel sections with ventilation grille

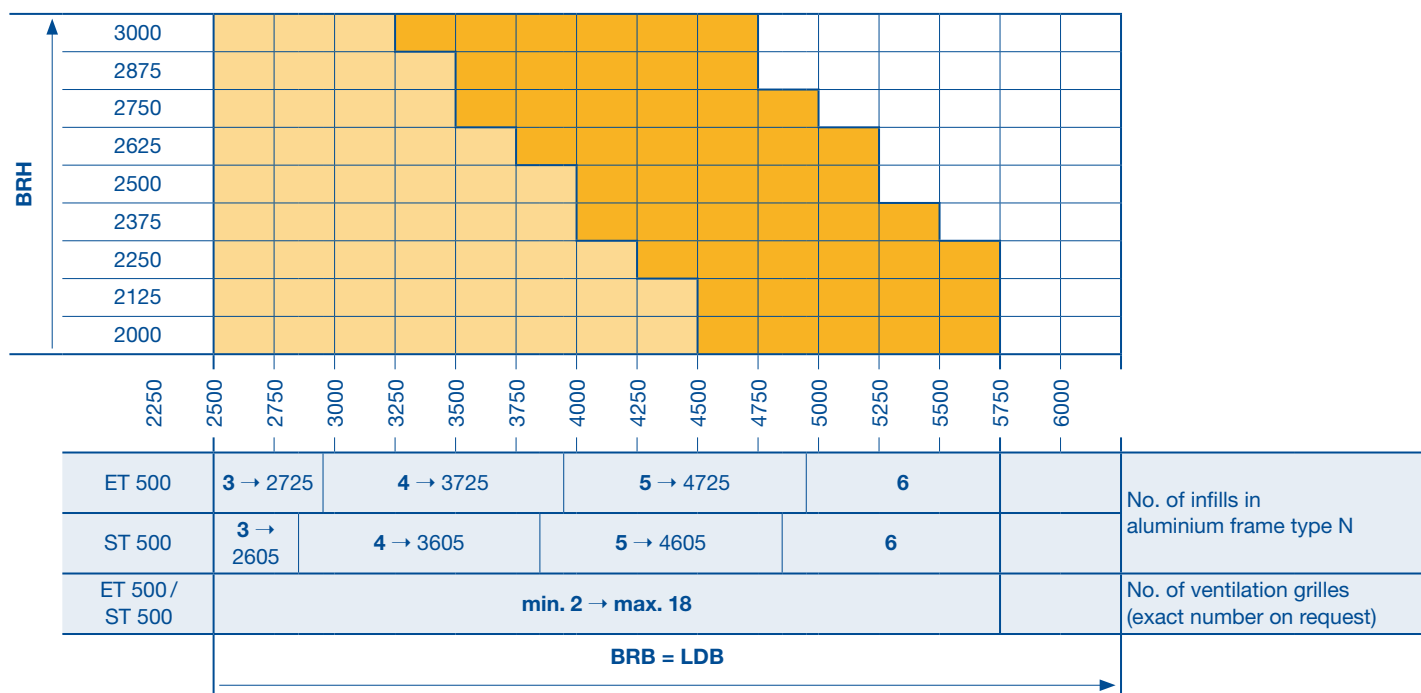


Style 480 – with aluminium frame type N with DURATEC synthetic double pane



Note:
Top section not possible as an aluminium frame!

Size range



ET 500 L – lightweight version and ST 500
ET 500 S – heavy version and ST 500
BRH Nominal height
BRB Nominal width

LDH Clear passage height:
< BRB 4500 mm = BRH – 20
≥ BRB 4500 mm = BRH – 60
LDB Clear passage width

Note:
Non-protruding up-and-over door ET 500 with driveway/inclination, max. BRH 2500 mm

Alternative infills

Anodised aluminium frame type N

- With DURATEC synthetic double pane, clear, 26 mm
- With expanded mesh, ventilation cross section = 58 % of infill surface
- With perforated stainless sheet steel, perforation: 8 mm, ventilation cross section = 40 % of infill surface

Ventilation

- Ventilation grille, black plastic, ventilation cross section: 40 cm² per grille

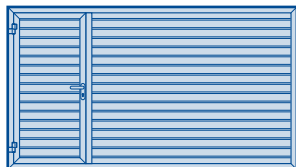
Non-protruding Up-and-over Door for Collective Garages ET 500 and Sliding Door ST 500

Infill style 480 with sections and wicket door

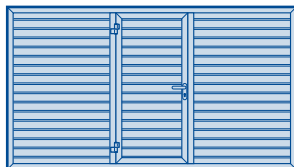
External views

(The illustrations correspond to size 4500 x 2125 mm. Deviations may occur with other door sizes.)

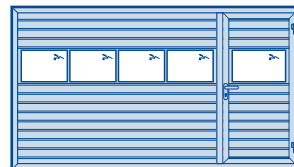
Style 480 – steel sections
with left-hand wicket door,
LH hinged



Style 480 – steel sections
with centre wicket door,
LH or RH hinged



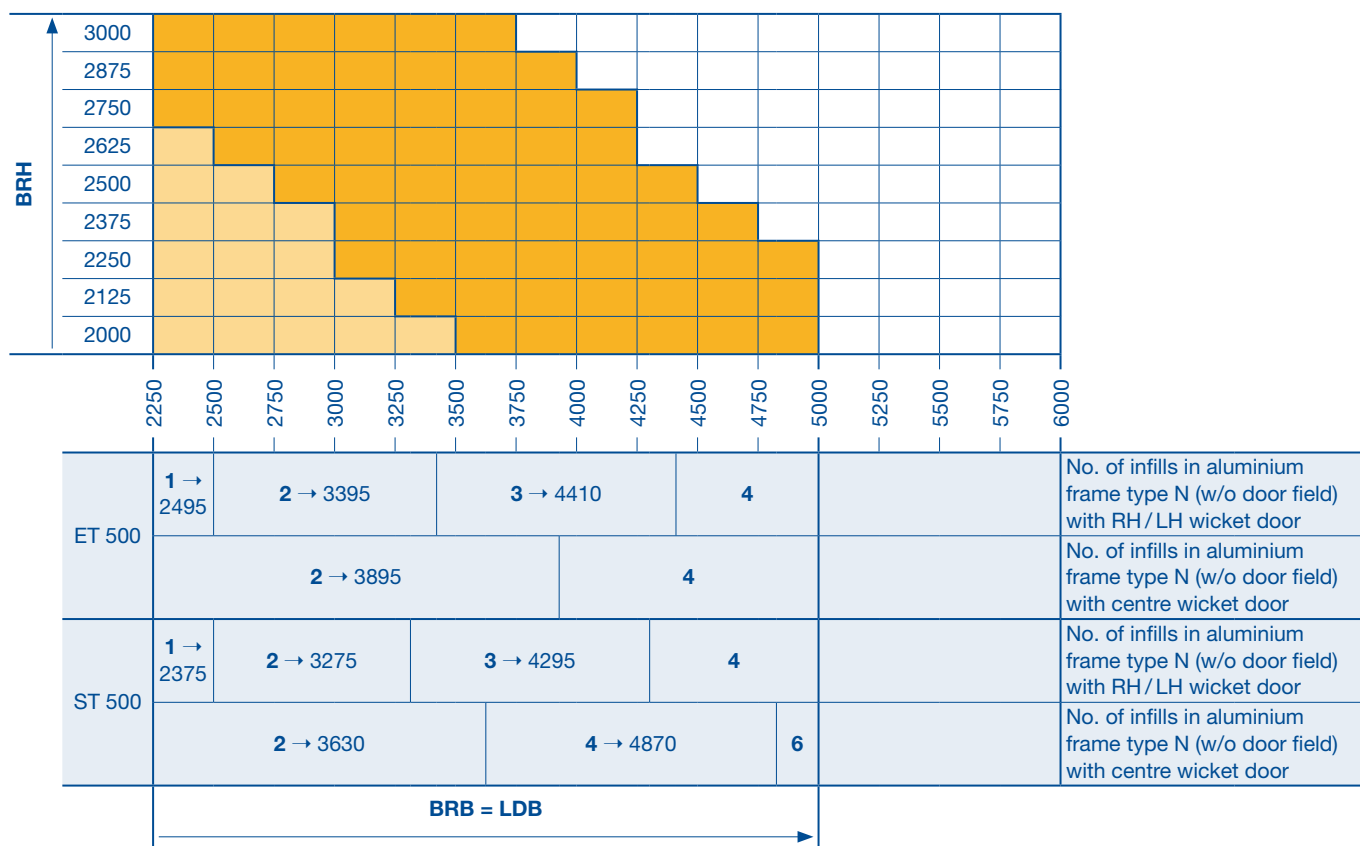
Style 480 – with aluminium
frame type N and right-hand
wicket door, RH hinged



Note:

Top section not possible as an aluminium frame!

Size range



- ET 500 L – lightweight version and ST 500
- ET 500 S – heavy version and ST 500
- BRH** Nominal height
- BRB** Nominal width

- LDH** Clear passage height:
Doors with wicket door = BRH – 70
- LDB** Clear passage width

Note:

Non-protruding up-and-over door ET 500 with driveway/inclination, max. BRH 2500 mm

Alternative infills

Anodised aluminium frame type N

- With DURATEC synthetic double pane, clear, 26 mm
- With expanded mesh, ventilation cross section = 58% of infill surface
- With perforated stainless sheet steel, perforation: 8 mm, ventilation cross section = 40% of infill surface

Ventilation

- Ventilation grille, black plastic, ventilation cross section: 40 cm² per grille

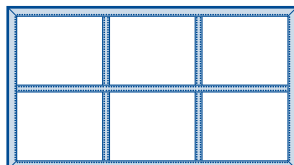
Non-protruding Up-and-over Door for Collective Garages ET 500 and Sliding Door ST 500

Style 405 for on-site infill overlapping the frame

External views

(The illustrations correspond to size 4500 x 2125 mm. Deviations may occur with other door sizes.)

Style 405 – for on-site infill overlapping the frame



Size range

		Maximum infill weights in kg/m ²																
BRH	3000	2250	10	8	6	6	6											
		2500	18	16	14	12	12	10	8	8								
	2875	2750	10	8	8	6	6											
		3000	20	18	16	14	12	10	10	8	8							
	2750	3250	10	10	8	6	6											
		3500	20	18	16	14	14	12	10	10	8	6						
	2625	3750	12	10	8	8	6	6										
		4000	22	18	16	16	14	12	10	10	8	6	6					
	2500	4250	14	12	10	10	8	6	6									
		4500	24	22	20	18	16	14	12	12	10	8	6	6	6			
	2375	4750	14	12	12	10	8	8	6	6								
		5000	26	22	20	18	16	14	14	12	10	8	8	6	6	6		
	2250	5250	16	14	12	10	10	8	6	6								
		5500	28	24	22	20	18	16	14	14	12	8	8	8	6	6	6	
	2125	5750	16	14	12	12	10	8	8	6								
		6000	28	26	22	20	20	16	16	14	12	10	8	8	8	6	6	
2000		18	16	14	12	12	10	8	8									
		32	28	24	22	22	18	16	16	14	10	10	8	8	8	6		
		BRB = LDB																

- ET 500 L – lightweight version and ST 500
- ET 500 S – heavy version and ST 500
- BRH** Nominal height
- BRB** Nominal width

- LDH** Clear passage height:
< BRB 4500 mm = BRH – 20
≥ BRB 4500 mm = BRH – 60
- LDB** Clear passage width

Note:
Non-protruding up-and-over door ET 500 with driveway/inclination, max. BRH 2500 mm

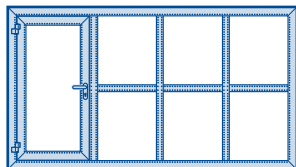
Non-protruding Up-and-Over Door for Collective Garages ET 500 and Sliding Door ST 500

Style 405 for on-site surface-mounted infill with wicket door

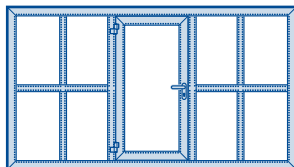
External views

(The illustrations correspond to size 4500 x 2125 mm. Deviations may occur with other door sizes.)

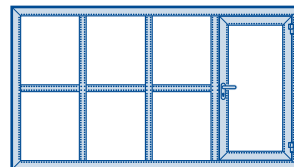
Style 405 with left-hand wicket door,
LH hinged
– for on-site surface-mounted infill



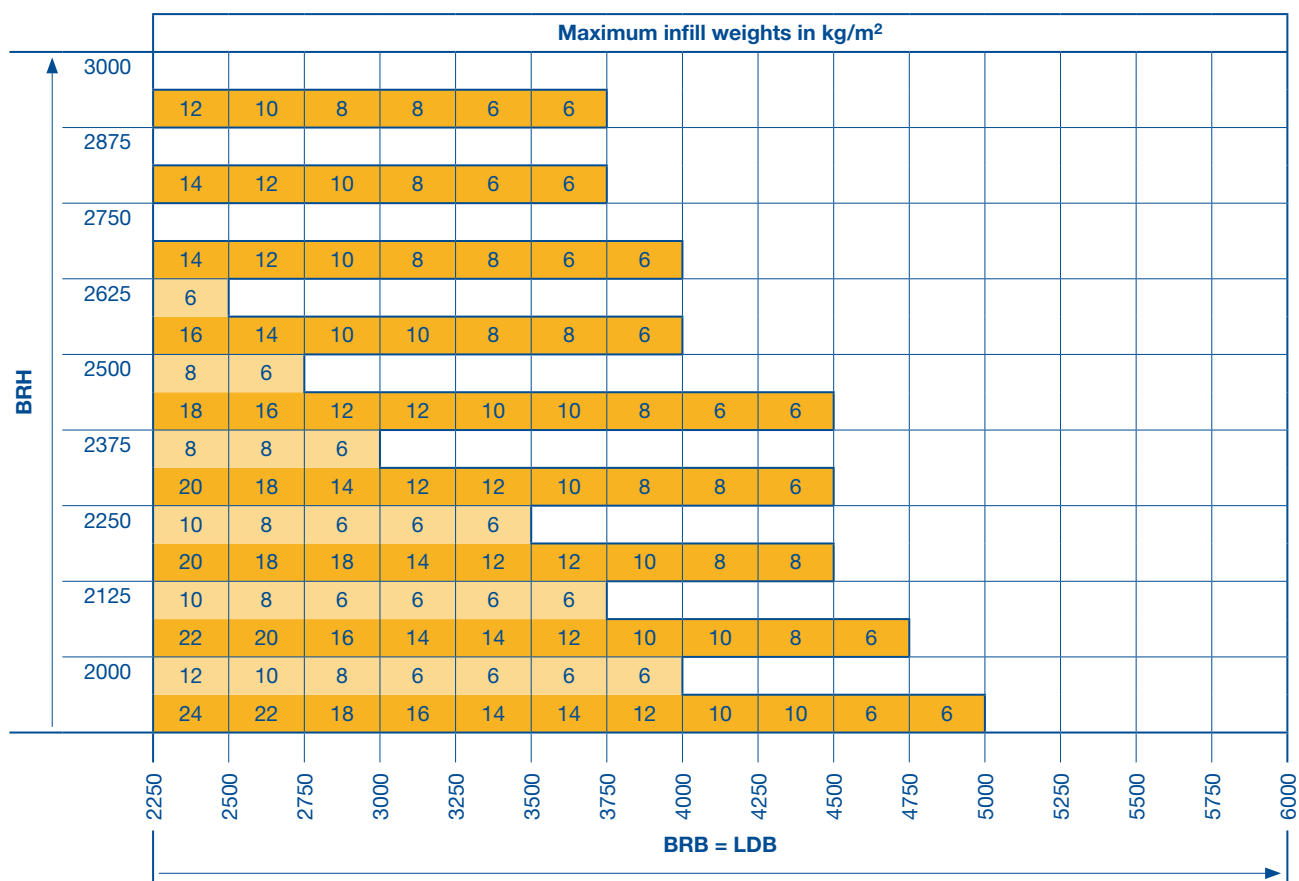
Style 405 with centre wicket door,
LH hinged or RH hinged
– for on-site surface-mounted infill



Style 405 with right-hand wicket door,
RH hinged
– for on-site surface-mounted infill



Size range



ET 500 L – lightweight version and ST 500
ET 500 S – heavy version and ST 500
BRH Nominal height
BRB Nominal width

LDH Clear passage height:
Doors with wicket door = BRH – 70
LDB Clear passage width

Note:
Non-protruding up-and-over door ET 500 with
driveway / inclination, max. BRH 2500 mm

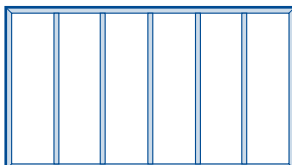
Non-protruding Up-and-over Door for Collective Garages ET 500 and Sliding Door ST 500

Style 400 for on-site infill inside the frame

External views

(The illustrations correspond to size 4500 x 2125 mm. Deviations may occur with other door sizes.)

Style 400 – For on-site
infill inside the frame



Size range

		Maximum infill weights in kg/m ²																
BRH	3000	10	10	8	6	6												
		20	18	16	14	12	10	10	8	8	6							
	2875	12	10	8	8	6	6											
		22	18	16	14	14	12	10	10	8	6							
	2750	12	10	10	8	6	6	6										
		22	20	18	16	14	12	12	10	10	6	6						
	2625	14	12	10	10	8	6	6										
		24	22	20	18	14	14	12	10	10	8	6	6					
	2500	14	12	12	10	8	8	6	6									
		26	24	20	18	16	14	14	12	10	8	6	6	6				
	2375	16	14	12	10	8	8	8	6									
		28	24	22	20	18	16	14	12	12	8	8	6	6	6			
	2250	18	14	14	12	10	8	8	6	6								
		30	26	24	22	18	18	16	14	12	10	8	8	6	6	6		
	2125	18	16	14	12	10	10	8	8	6								
		32	28	26	24	20	18	18	16	14	10	10	8	8	6	6		
	2000	20	18	16	14	12	10	10	8	8								
		34	32	28	26	22	20	18	16	16	12	10	10	8	8	8	6	
		2250	2500	2750	3000	3250	3500	3750	4000	4250	4500	4750	5000	5250	5500	5750	6000	
ET 500		3 → 2485	4 → 3260			5 → 4035			6 → 4810			7 → 5585			8		No. of fields	
ST 500		3 → 2485	4 → 3100		5 → 3875			6 → 4650			7 → 5425			8				
		BRB = LDB																

- ET 500 L – lightweight version and ST 500
- ET 500 S – heavy version and ST 500
- BRH** Nominal height
- BRB** Nominal width

- LDH** Clear passage height:
< BRB 4500 mm = BRH – 20
≥ BRB 4500 mm = BRH – 60
- LDB** Clear passage width

Note:
Non-protruding up-and-over door ET 500 with driveway/inclination, max. BRH 2500 mm

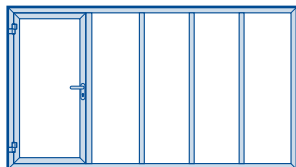
Non-protruding Up-and-over Door for Collective Garages ET 500 and Sliding Door ST 500

Style 400 for on-site infill inside the frame with wicket door

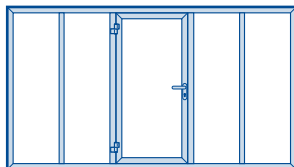
External views

(The illustrations correspond to size 4500 x 2125 mm. Deviations may occur with other door sizes.)

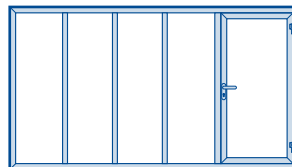
Style 400 with left-hand wicket door,
LH hinged
– for on-site infill inside the frame



Style 400 with centre wicket door,
LH hinged or RH hinged
– for on-site surface-mounted infill



Style 400 with right-hand wicket door,
RH hinged
– for on-site surface-mounted infill



Size range

		Maximum infill weights in kg/m ²															
BRH	3000	6	6	6													
		16	14	12	10	10	8	6	6	6							
	2875	6	6	6													
		18	16	14	12	10	8	8	6	6							
	2750	8	6	6													
		20	16	14	12	12	10	8	8	6							
	2625	8	6	6	6												
		22	18	16	14	12	10	10	8	8							
	2500	10	8	6	6												
		22	20	18	14	14	12	10	10	8	6						
	2375	10	8	8	6	6											
		24	22	20	16	14	12	12	10	8	6	6					
	2250	12	10	8	6	6	6	6									
		28	24	20	18	16	14	12	12	10	6	6					
	2125	14	12	10	8	6	6	6	6								
		30	26	22	20	18	16	14	12	10	8	6					
	2000	16	14	12	8	8	6	6	6	6							
		32	28	26	22	20	18	16	14	12	8	8					
		2250	2500	2750	3000	3250	3500	3750	4000	4250	4500	4750	5000	5250	5500	5750	6000

ET 500	1 → 2475	2 → 3095	3 → 3715	4 → 4335	5	No. of fields without door field for LH/RH wicket door
	2 → 3735			4		No. of fields without door field for centre wicket door
ST 500	1 → 2315	2 → 2935	3 → 3555	4 → 4180	5	No. of fields without door field for LH/RH wicket door
	2 → 3180			4		No. of fields without door field for centre wicket door
BRB = LDB						

ET 500 L – lightweight version and ST 500
ET 500 S – heavy version and ST 500
BRH Nominal height
BRB Nominal width

LDH Clear passage height:
Doors with wicket door = BRH – 70
LDB Clear passage width

Note:
Non-protruding up-and-over door ET 500 with driveway/inclination, max. BRH 2500 mm

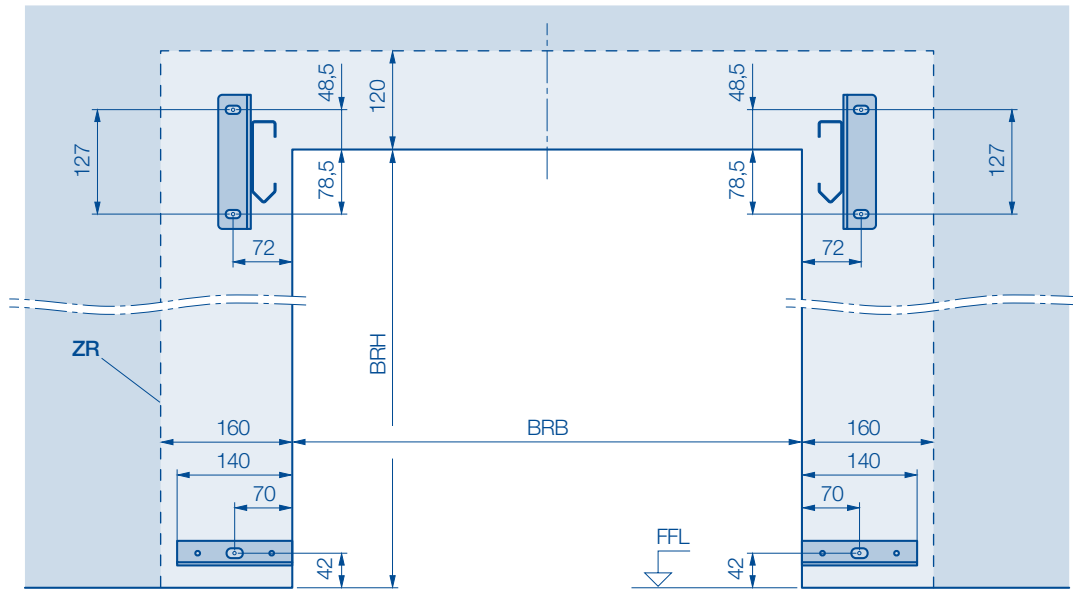
Fixing Points

For non-protruding up-and-over door for collective garages ET 500

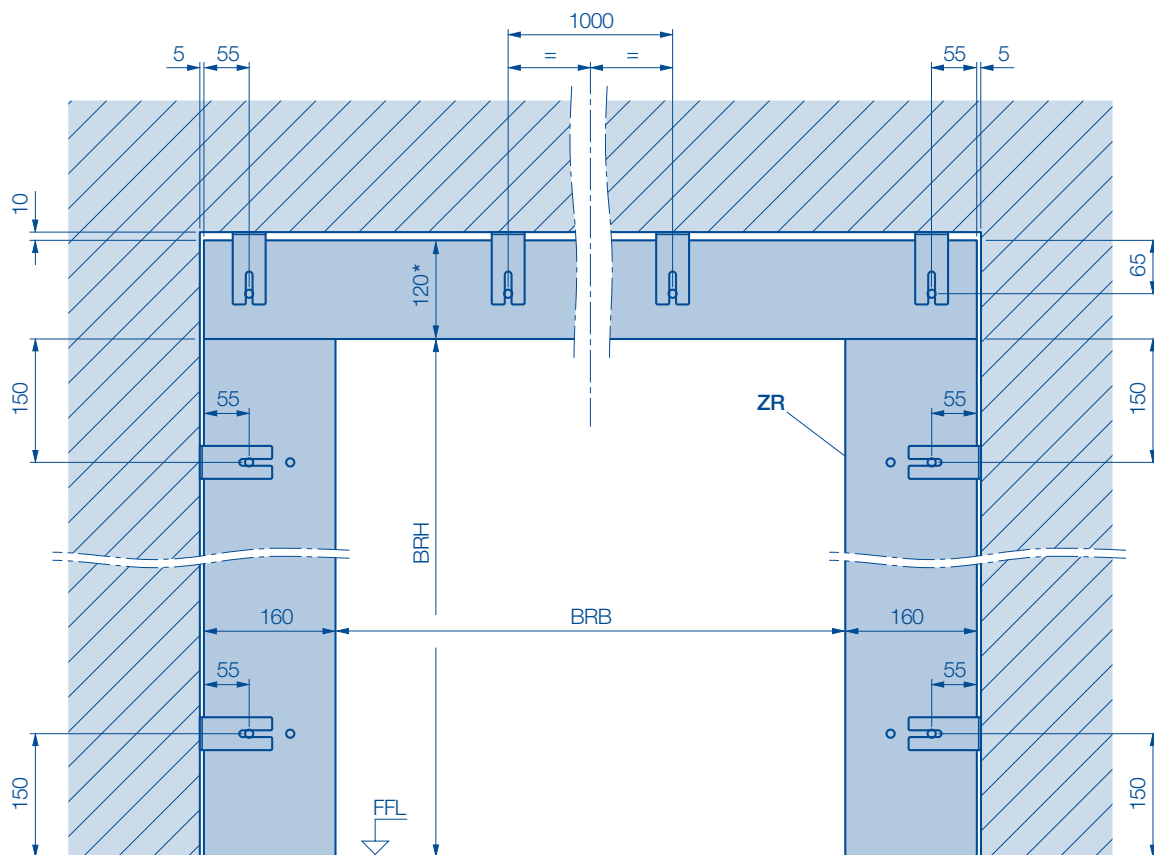
Standard

Lightweight version

Door fixing points on reveal



Subframe anchoring diagram



BRB Nominal width

BRH Nominal height

ZR Subframe

* 160 mm for door with ITO 400 operator and style 405

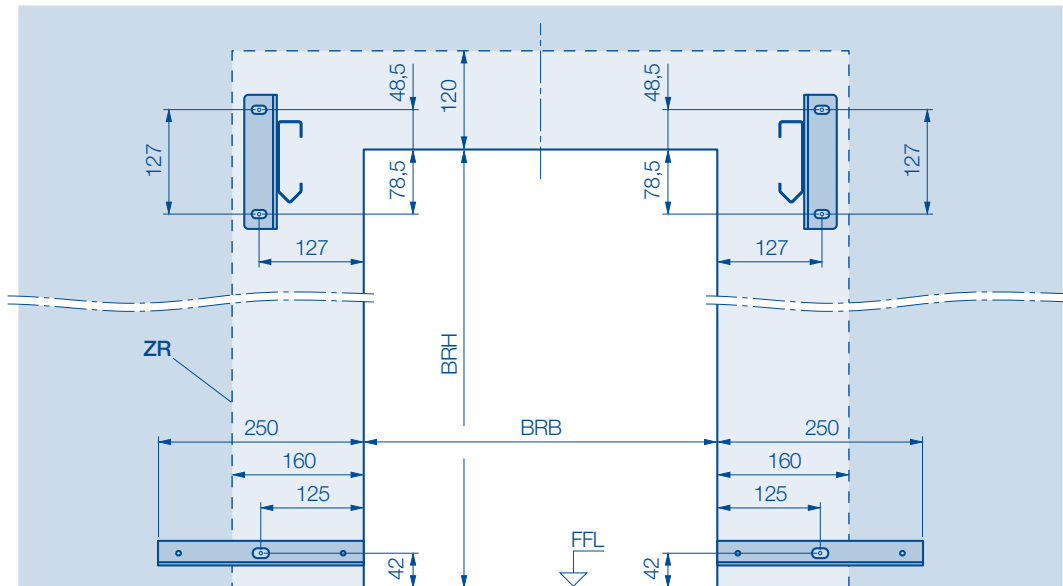
Fixing Points – heavy version

For non-protruding up-and-over door for collective garages ET 500

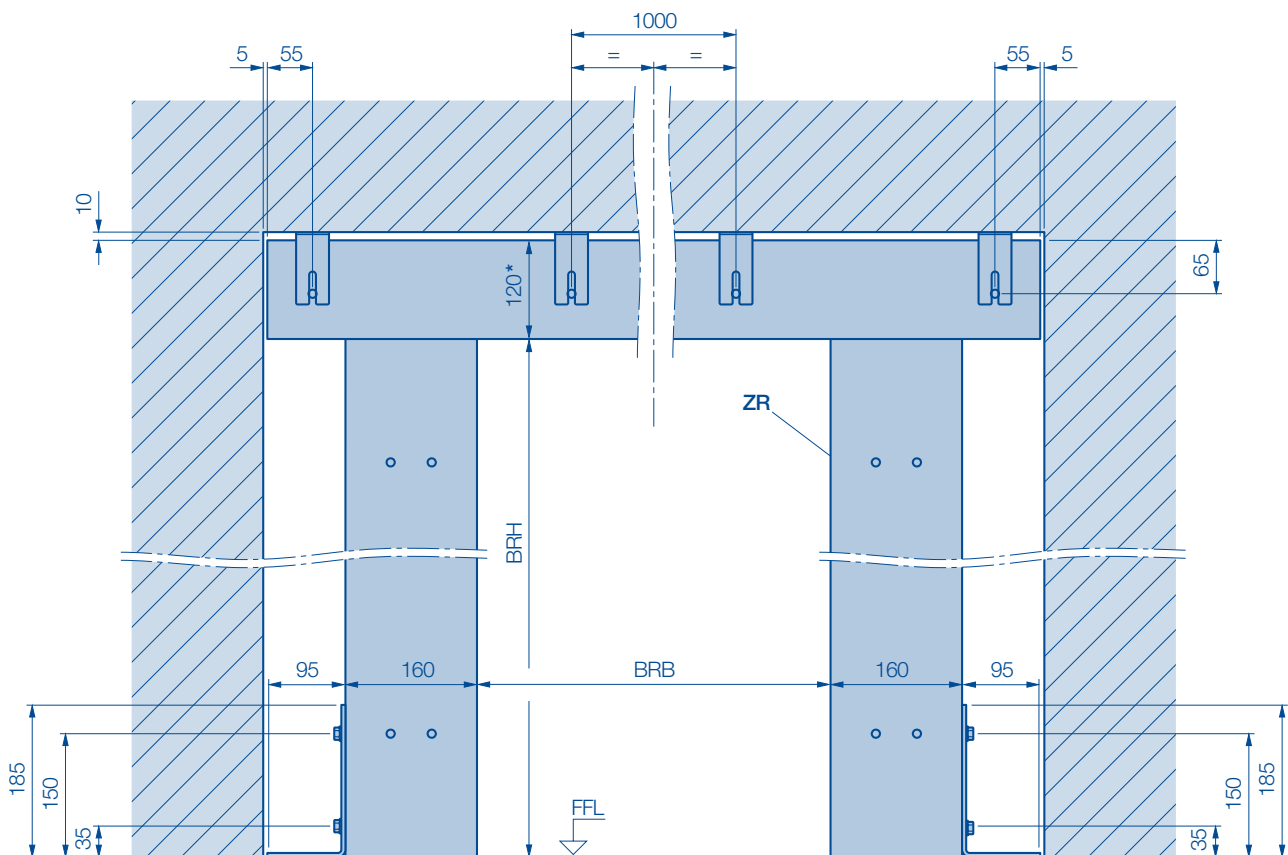
Standard

Heavy version

Door fixing points on reveal



Subframe anchoring diagram



BRB Nominal width

BRH Nominal height

ZR Subframe

* 160 mm for door with ITO 400 operator and style 405

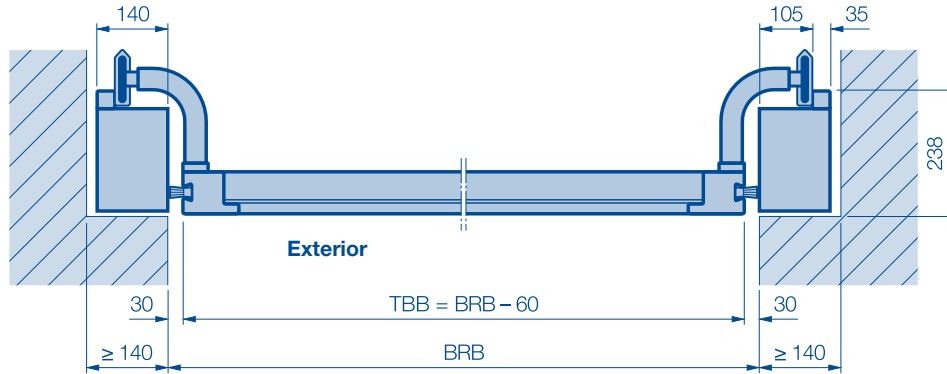
Fitting Types

For non-protruding up-and-over door for collective garages ET 500

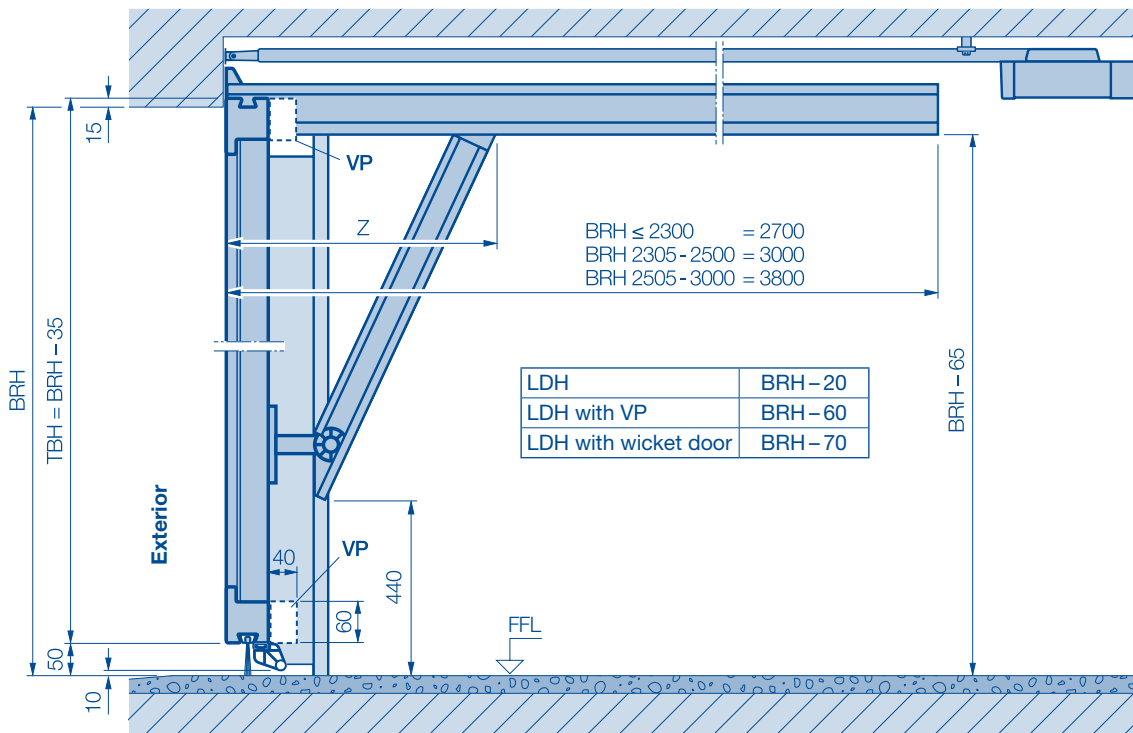
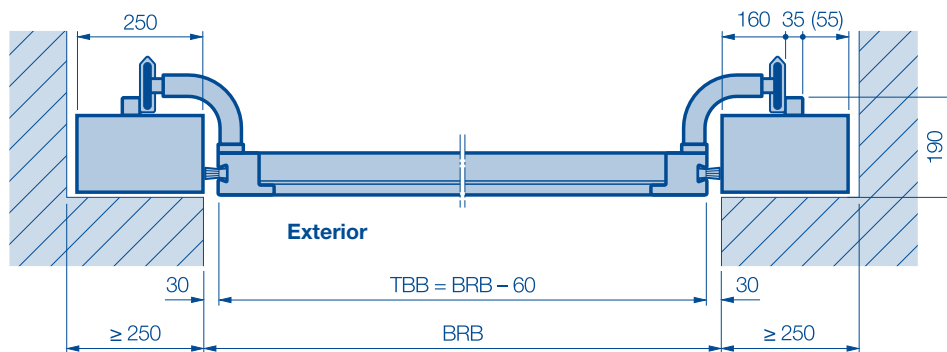
Standard

Fitting behind the opening

Lightweight version



Heavy version



BRB Nominal width = ordering size
BRH Nominal height = ordering size
TBB Door leaf width
TBH Door leaf height

LDH Clear passage height
VP Reinforcement profile with BRB ≥ 4500

Z Lightweight version =
 $(BRH - 615) \times \tan(25^\circ) + 284$
 Heavy version =
 $(BRH - 615) \times \tan(25^\circ) + 236$

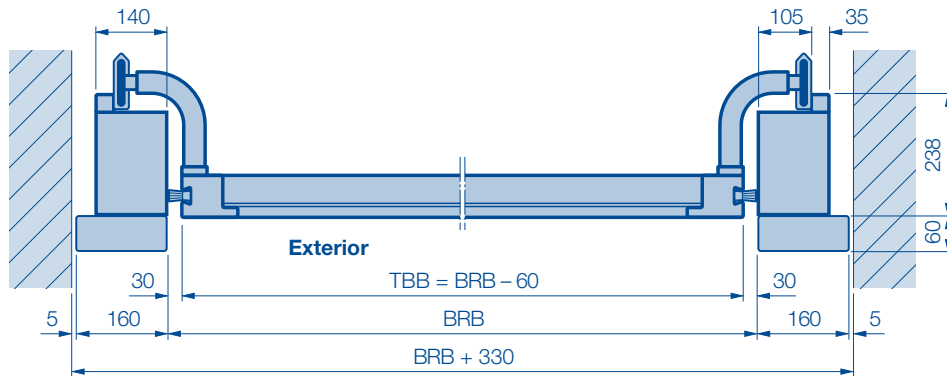
Fitting Types

For non-protruding up-and-over door for collective garages ET 500

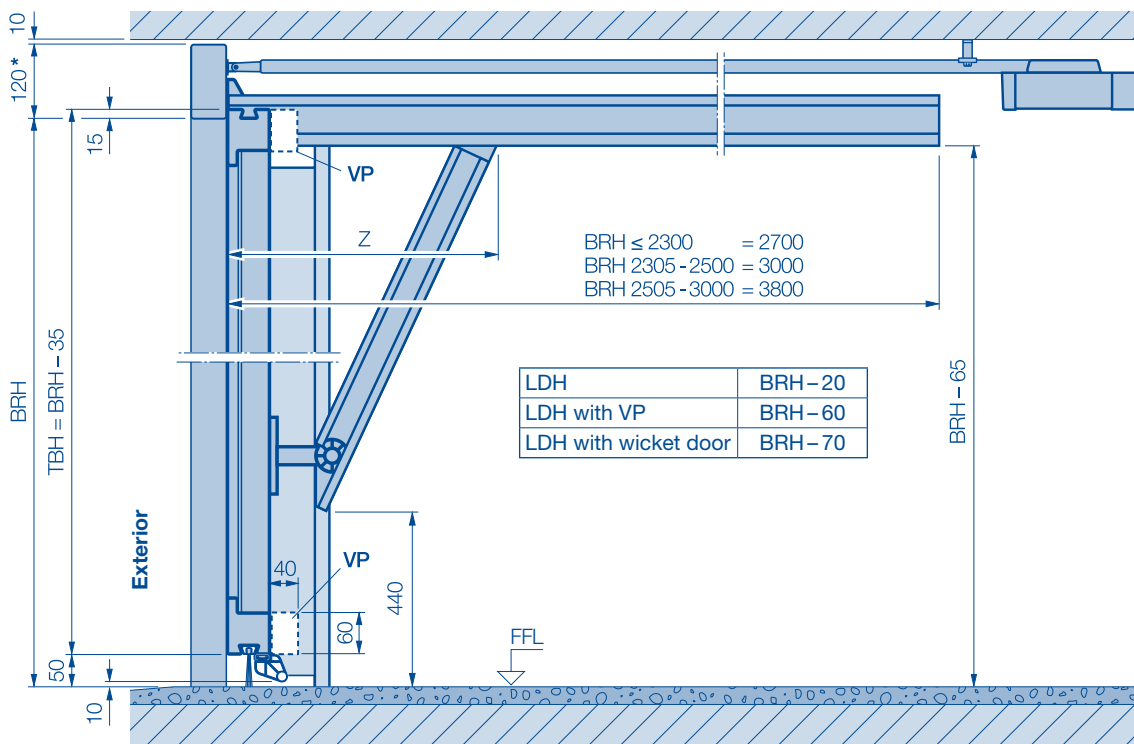
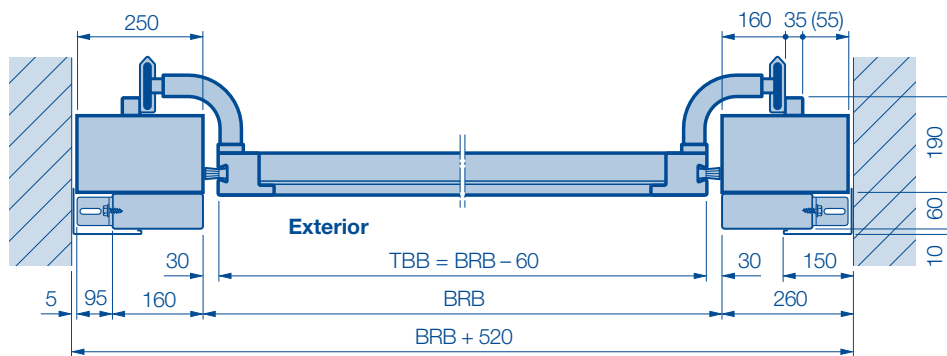
Standard

Fitting in the opening with subframe

Lightweight version



Heavy version



BRB Nominal width = ordering size
BRH Nominal height = ordering size
TBB Door leaf width
TBH Door leaf height

VP Reinforcement profile with BRB ≥ 4500
 * 160 mm for door with ITO 400 operator and style 405

Z Lightweight version =
 $(BRH - 615) \times \tan(25^\circ) + 284$
 Heavy version =
 $(BRH - 615) \times \tan(25^\circ) + 236$

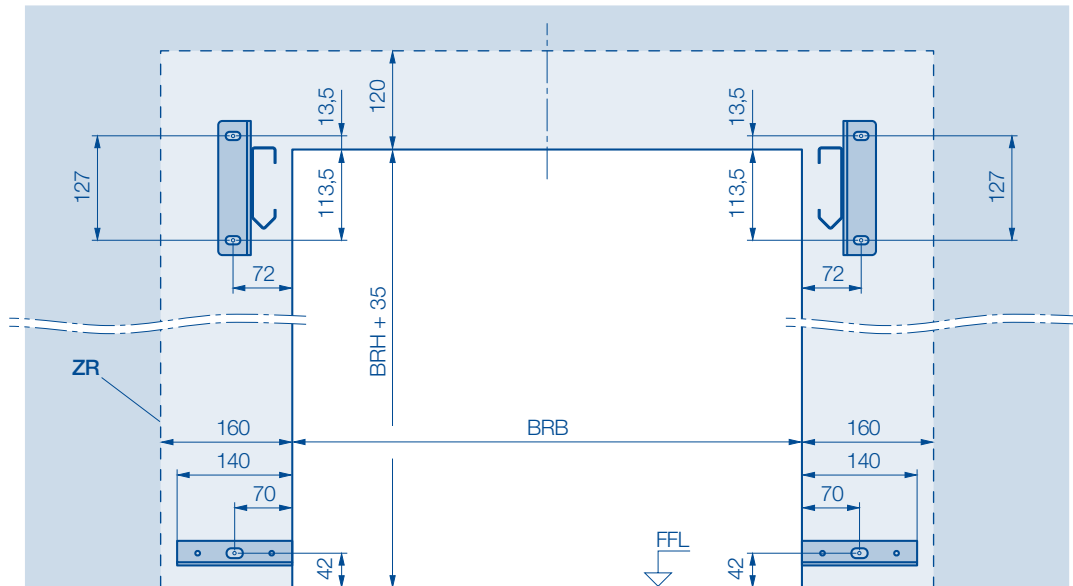
Fixing Points

For non-protruding up-and-over door for collective garages ET 500

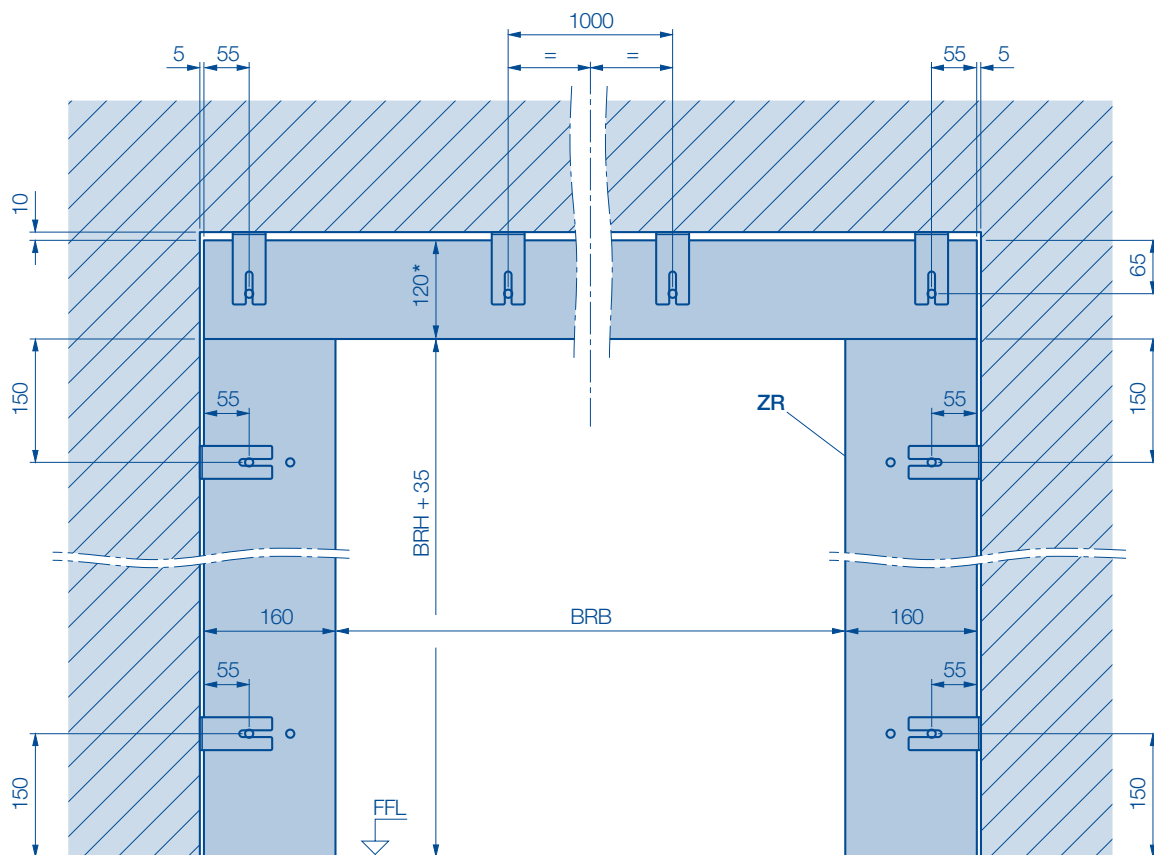
Flush-fitting

Lightweight version

Door fixing points on reveal



Subframe anchoring diagram



BRB Nominal width

BRH Nominal height

ZR Subframe

* 160 mm for door with ITO 400 operator and style 405

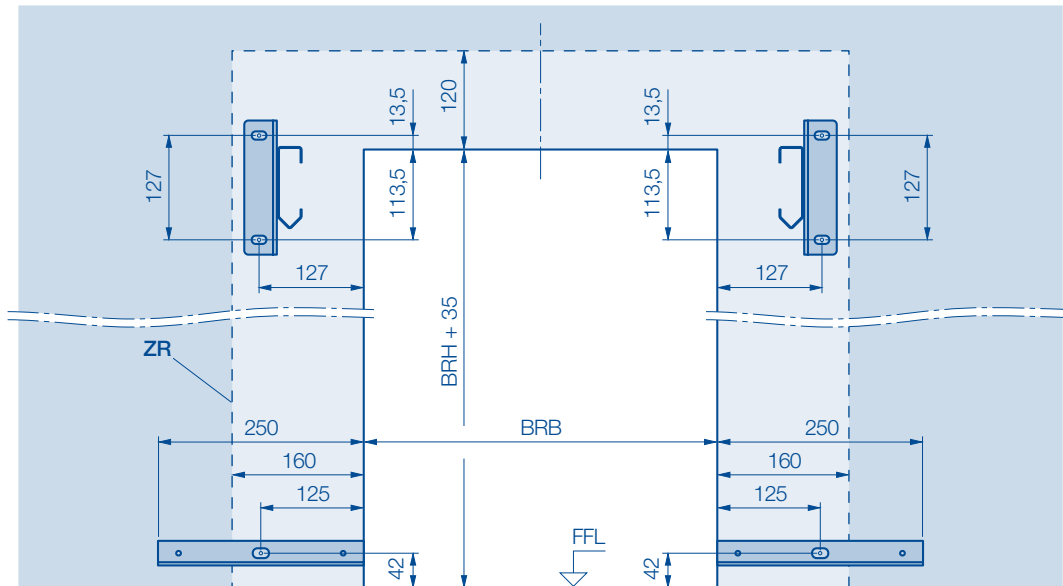
Fixing Points

For non-protruding up-and-over door for collective garages ET 500

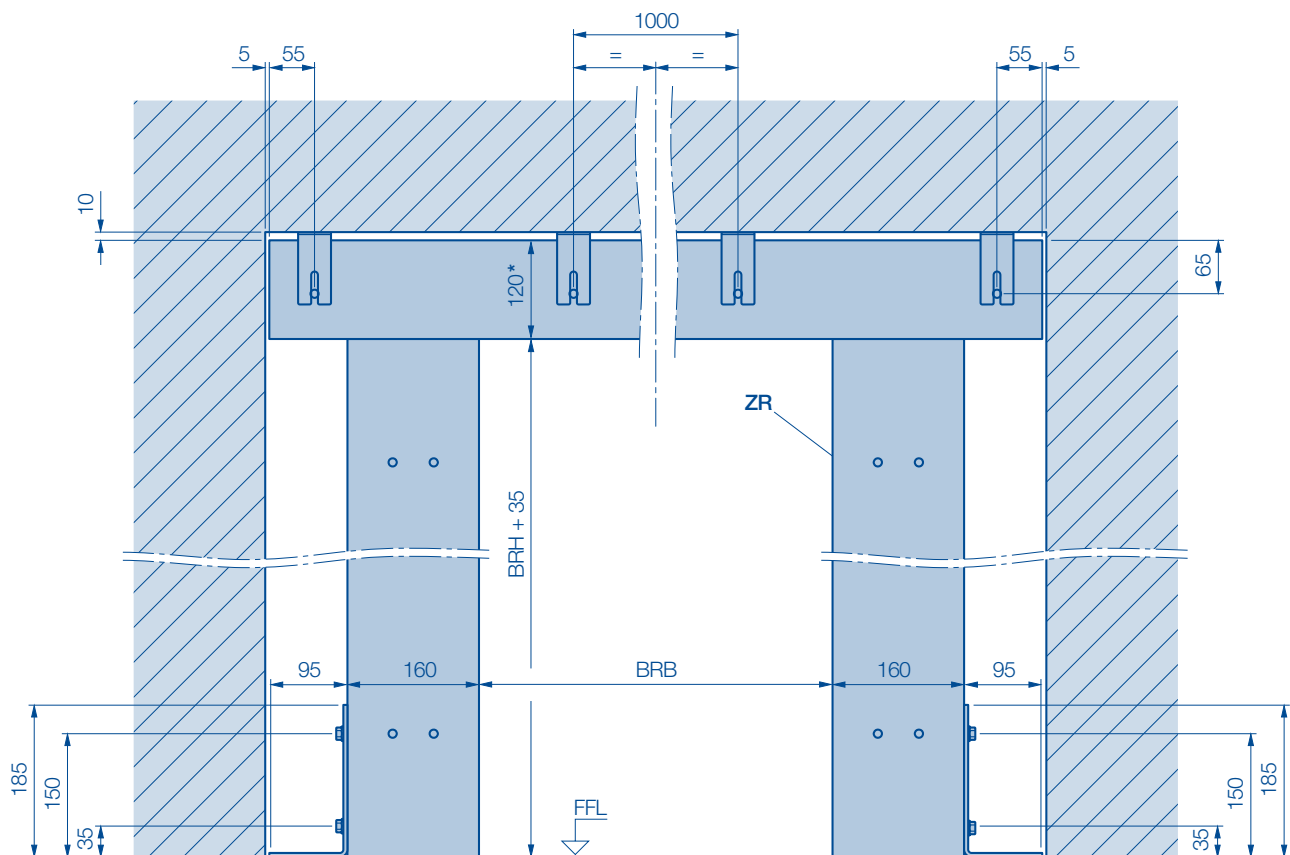
Flush-fitting

Heavy version

Door fixing points on reveal



Subframe anchoring diagram



BRB Nominal width

BRH Nominal height

ZR Subframe

* 160 mm for door with ITO 400 operator and style 405

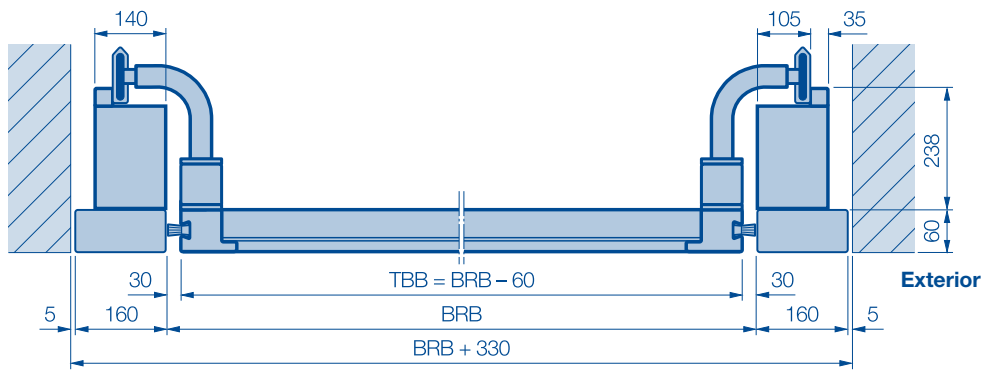
Fitting Types

For non-protruding up-and-over door for collective garages ET 500

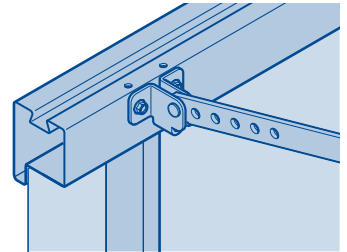
Flush-fitting

Fitting in the opening with subframe – flush-fitting

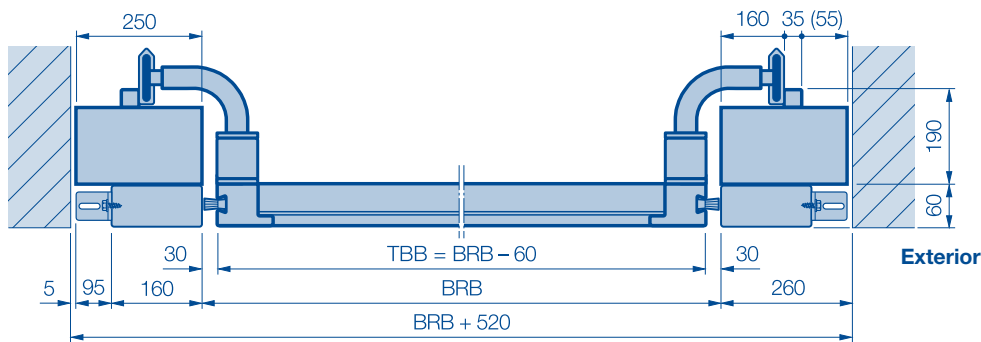
Lightweight version



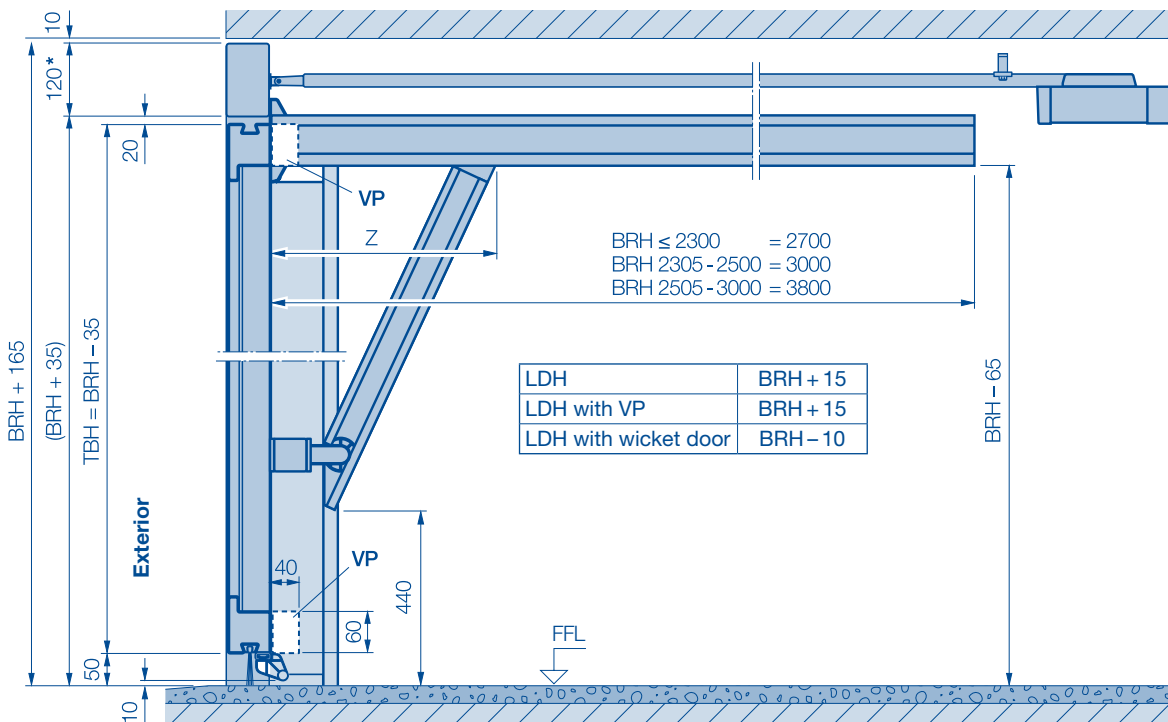
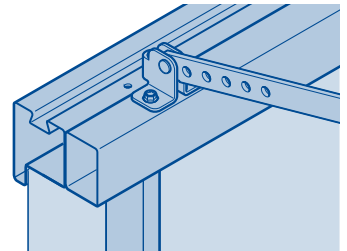
Fitting bracket fastening with SupraMatic H/T



Heavy version



Fitting bracket fastening for doors with VP with SupraMatic H/T



BRB Nominal width = ordering size
BRH Nominal height = ordering size
TBB Door leaf width
TBH Door leaf height

VP Reinforcement profile with BRB ≥ 4500
 * 160 mm for door with ITO 400 operator and style 405

Z Lightweight version =
 $(BRH - 615) \times \tan(25^\circ) + 284$
 Heavy version =
 $(BRH - 615) \times \tan(25^\circ) + 236$

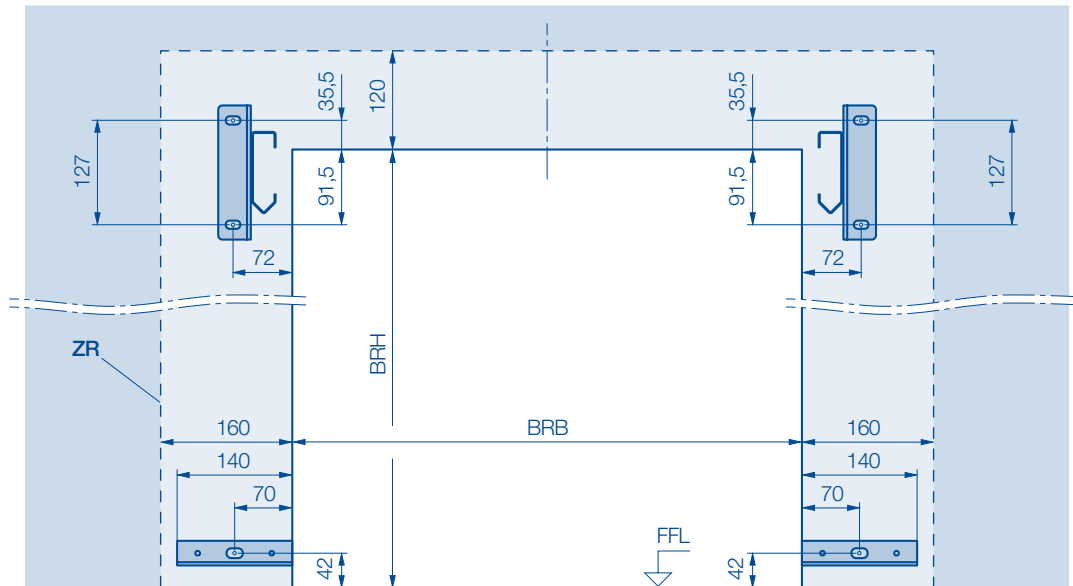
Fixing Points

For non-protruding up-and-over door for collective garages ET 500

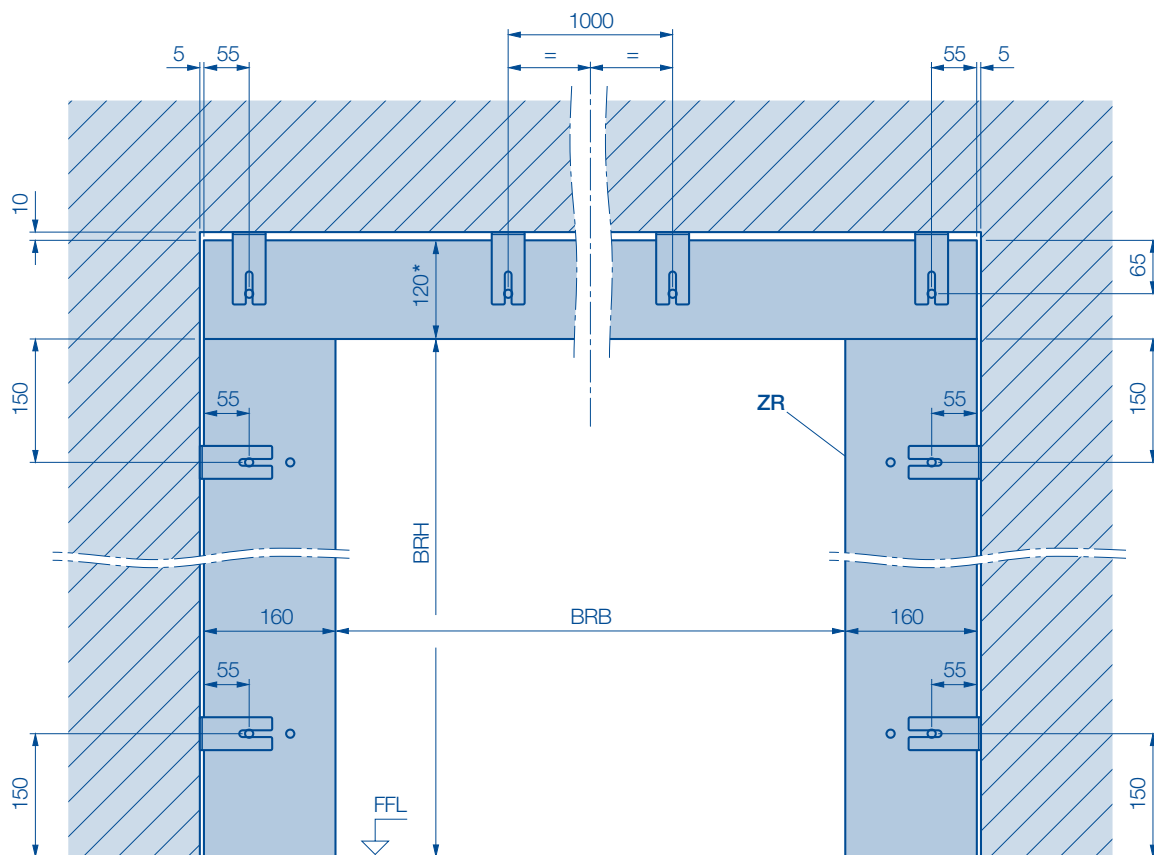
Driveway / inclination

Lightweight version

Door fixing points on reveal



Subframe anchoring diagram



BRB Nominal width

BRH Nominal height (max. 2500 mm)

ZR Subframe

* 160 mm for door with ITO 400 operator and style 405

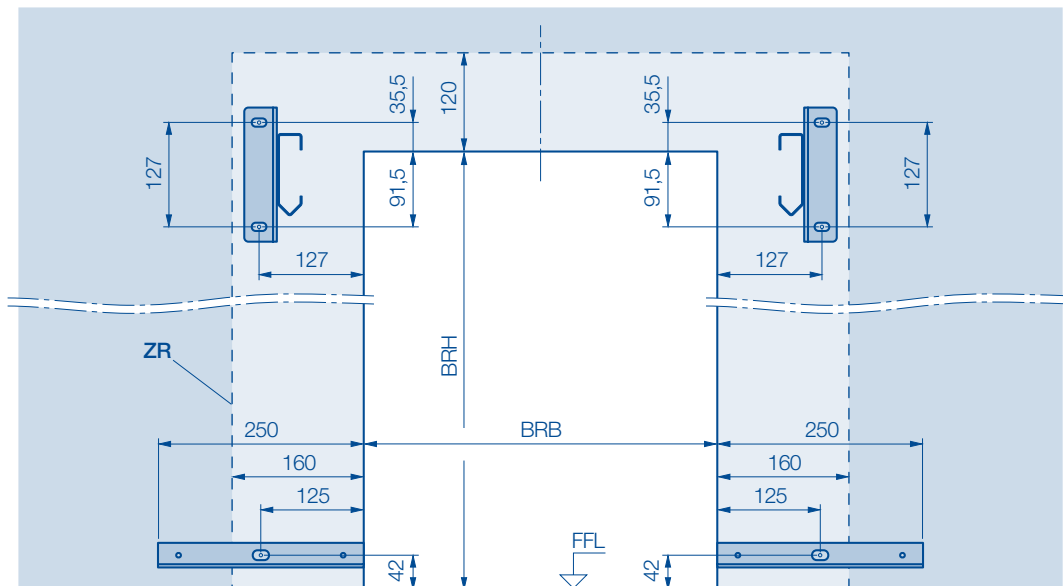
Fixing Points

For non-protruding up-and-over door for collective garages ET 500

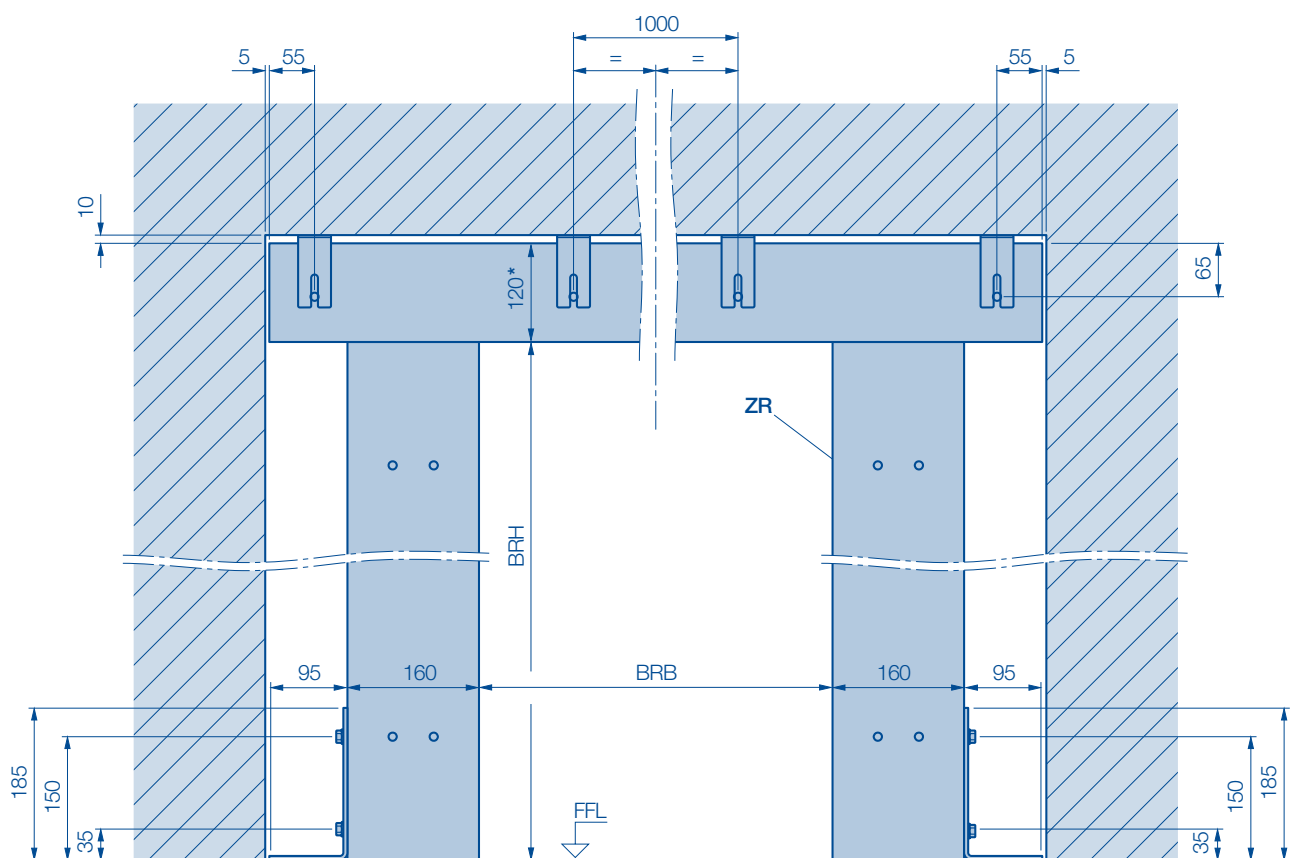
Driveway / inclination

Heavy version

Door fixing points on reveal



Subframe anchoring diagram



BRB Nominal width

BRH Nominal height (max. 2500 mm)

ZR Subframe

* 160 mm for door with ITO 400 operator and style 405

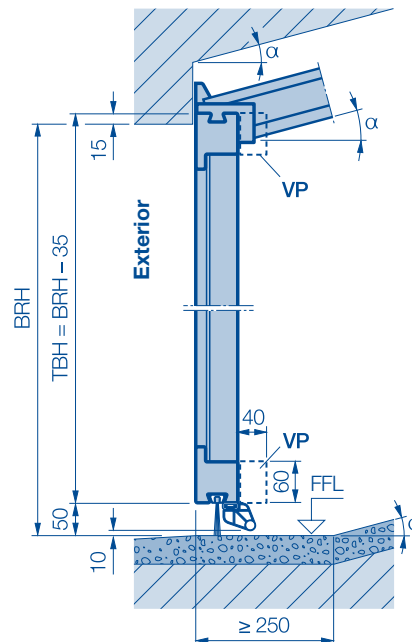
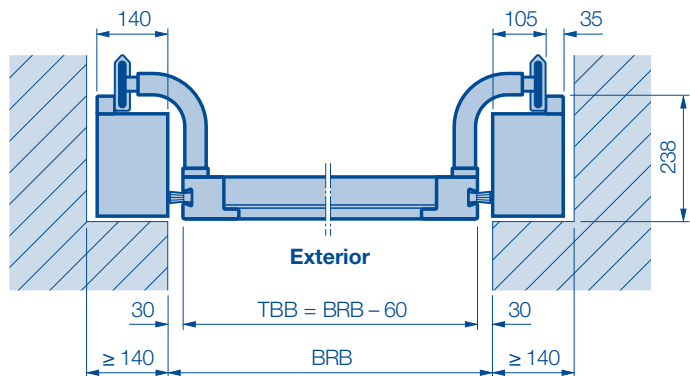
Fitting Types

For non-protruding up-and-over door for collective garages ET 500

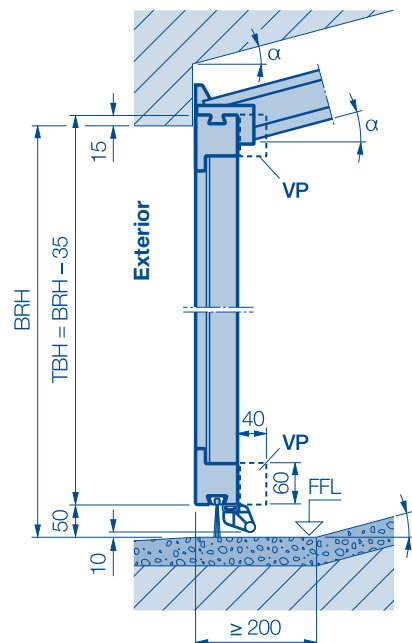
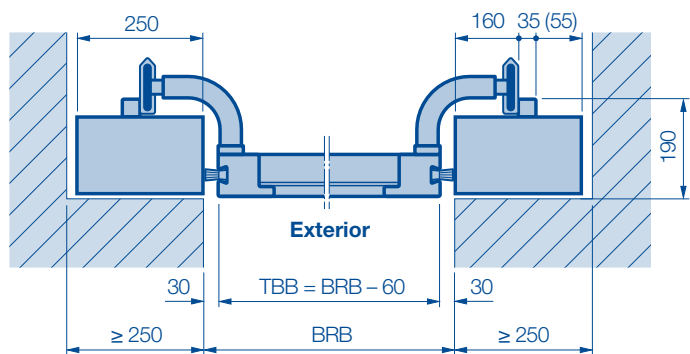
Driveway / inclination

Fitting behind the opening with driveway / inclination

Lightweight version



Heavy version



BRB Nominal width = ordering size
BRH Nominal height = ordering size (max. 2500 mm)
TBB Door leaf width
TBH Door leaf height

VP Reinforcement profile with BRB ≥ 4500
LDH Clear passage height = technical clarification required!

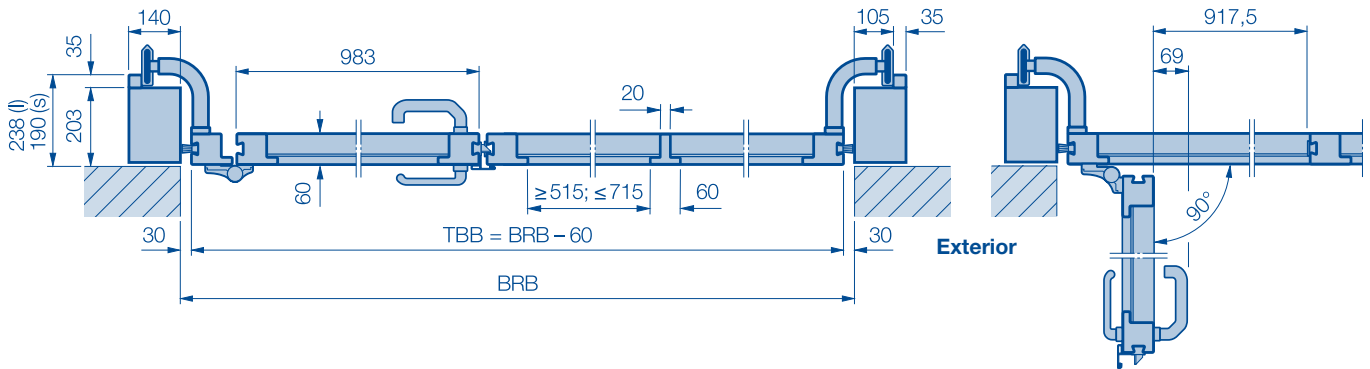
Fitting Types

For non-protruding up-and-over door for collective garages ET 500

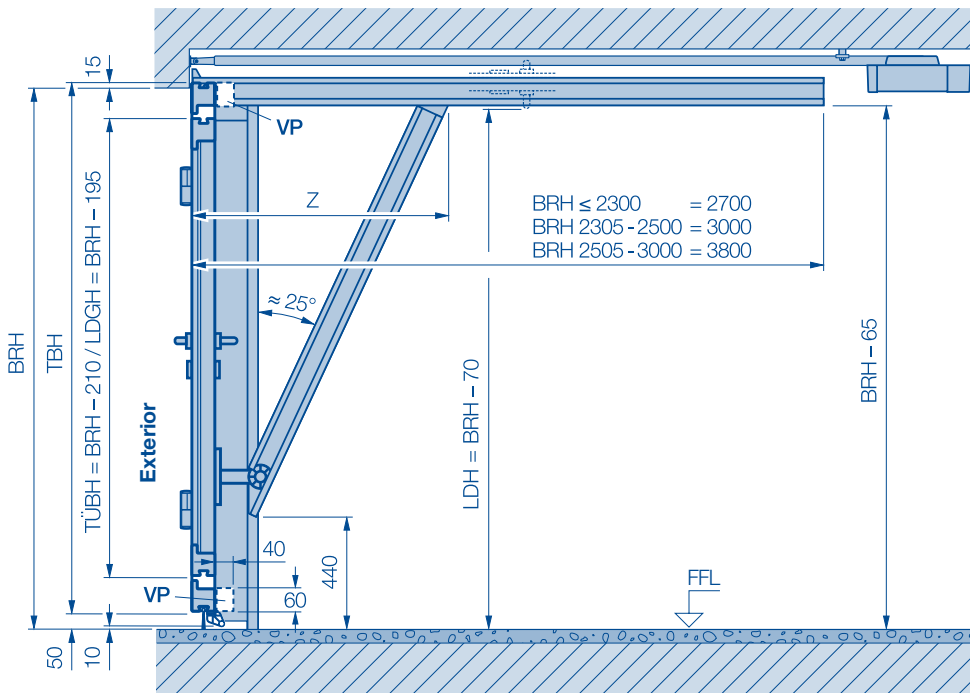
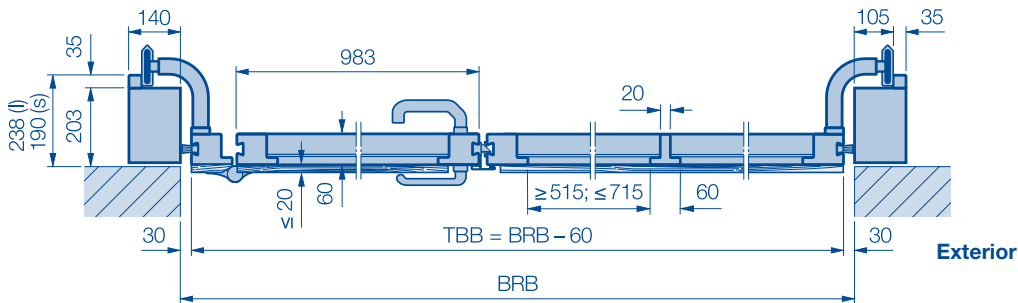
Wicket door with surface-mounted hinges – standard

Fitting behind the opening

Standard with wicket door



On-site surface-mounted infill with wicket door



BRB Nominal width = ordering size
BRH Nominal height = ordering size
LDH Clear passage height
LDGH Clear passage height
TBB Door leaf width

TBH Door leaf height
TUBH Door leaf height
VP Reinforcement profile with BRB ≥ 4500

Z Lightweight version =
 $(BRH - 615) \times \tan(25^\circ) + 284$
 Heavy version =
 $(BRH - 615) \times \tan(25^\circ) + 236$

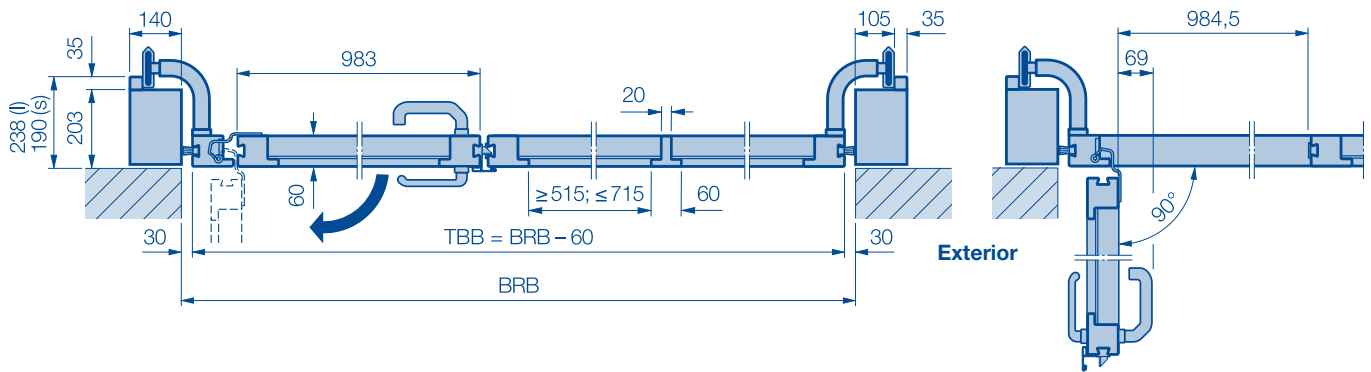
Fitting Types

For non-protruding up-and-over door for collective garages ET 500

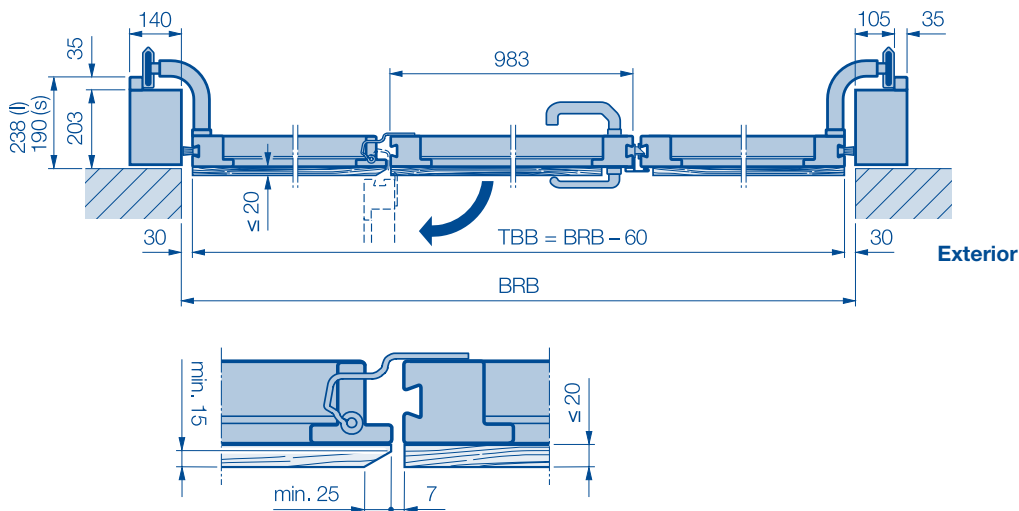
Wicket door with concealed hinges – optional

Fitting behind the opening

Standard with wicket door



On-site surface-mounted infill with wicket door



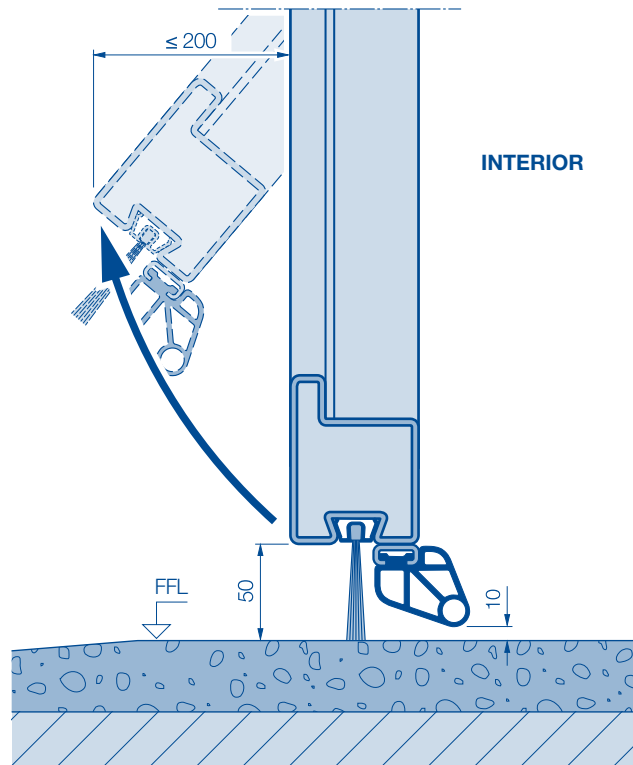
BRB Nominal width = ordering size

TBB Door leaf width

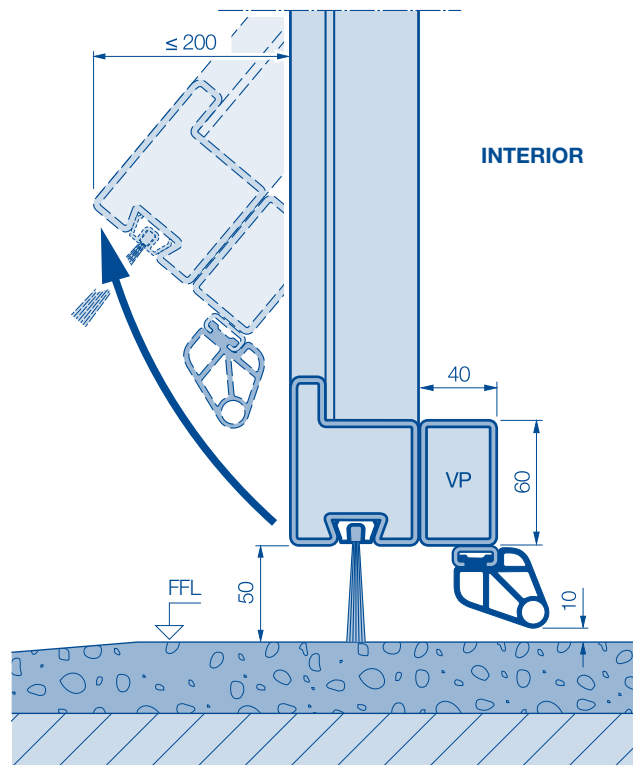
Bottom Edge

For non-protruding up-and-over door for collective garages ET 500

Doors with BRB < 4500



Doors with BRB ≥ 4500 , with reinforcement profile

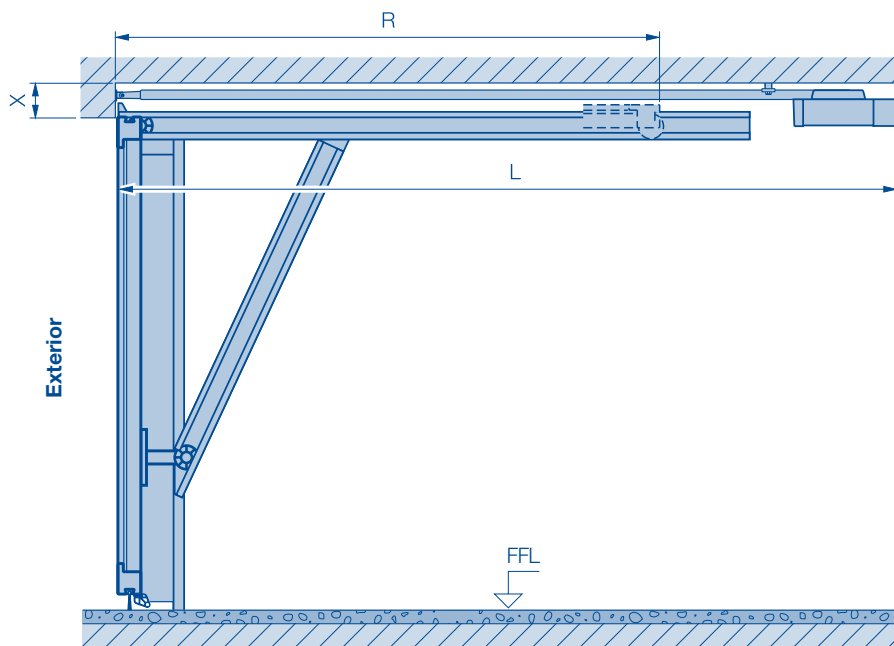


VP Reinforcement profile with BRB ≥ 4500

Garage Door Operators

For non-protruding up-and-over door for collective garages ET 500

SupraMatic H / SupraMatic T



R = measurements to determine operator boom length					
BRH	R	SupraMatic H/ SupraMatic T	L = distance back with operator	Min. operator boom length = R + 515	L = min. distance back with operator = R + 740
3000	3696	XL boom (4150)	4375	4211	4436
2950	3623			4138	4363
2900	3550			4065	4290
2850	3477			3992	4217
2800	3403			3918	4143
2750	3330	L boom (3900)	4125	3845	4070
2700	3257			3772	3997
2650	3183			3698	3923
2600	3110			3625	3850
2550	3037			3552	3777
2500	2963			3478	3703
2450	2890			3405	3630
2400	2817			3332	3557
2350	2743	M boom (3225)	3450	3258	3483
2300	2670			3185	3410
2250	2597			3112	3337
2200	2524			3039	3264
2150	2450			2965	3190
2125	2414	K boom (2975)	3200	2929	3154
2050	2304			2819	3044
2000	2230			2745	2970

X = required headroom*		
SupraMatic H / SupraMatic T	100 mm	120 mm
Doors with wicket doors	100 mm	120 mm
Doors with surface-mounted infill	Y + 100 mm	Y + 120 mm

* An optional subframe is available for fitting situations without a lintel and/or sideroom

L = overall length of door operator			
Up to opening height (BRH)			
2125 mm	K boom	3200 mm	
2130 – 2300 mm	M boom	3450 mm	
2305 – 2750 mm	L boom	4125 mm	
2755 – 3000 mm	XL boom	4375 mm	

Note:

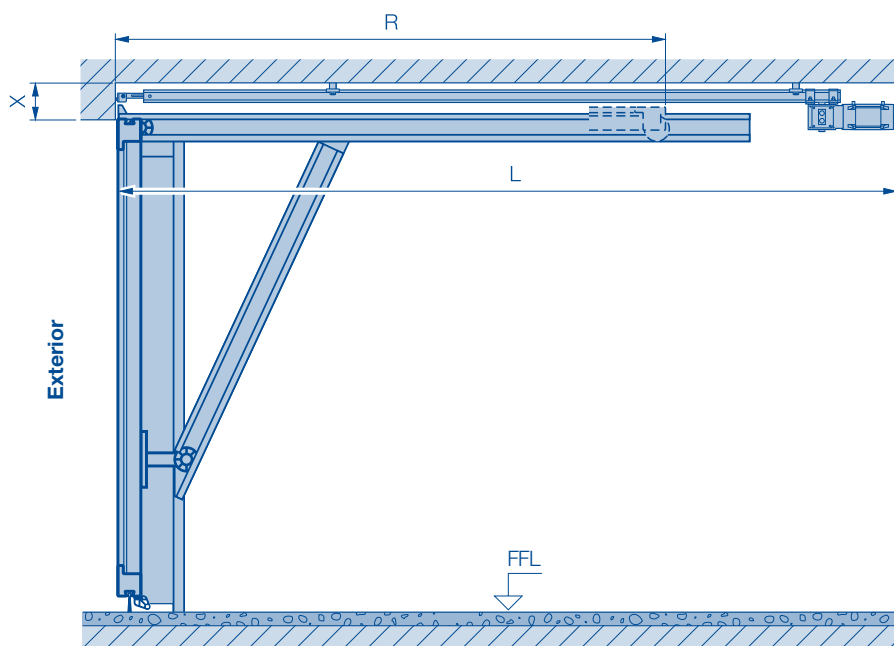
Doors with BRH > 2500 mm can only be combined with SupraMatic H series 3 or ITO 400 operators!

Y Thickness of surface-mounted infill

Garage Door Operators

For non-protruding up-and-over door for collective garages ET 500

ITO 400 / ITO 400 FU



R = measurements to determine operator boom length					
BRH	R	ITO 400/ ITO 400 FU	L = distance back with operator	Min. operator boom length = R + 585	L = min. distance back with operator = R + 925
3000	3696	M boom (4605)	4840	4281	4621
2950	3623			4208	4548
2900	3550			4135	4475
2850	3477			4062	4402
2800	3403			3988	4328
2750	3330			3915	4255
2700	3257			3842	4182
2650	3183			3768	4108
2600	3110			3695	4035
2550	3037			3622	3962
2500	2963	K boom (3605)	3840	3548	3888
2450	2890			3475	3815
2400	2817			3402	3742
2350	2743			3328	3668
2300	2670			3255	3595
2250	2597			3182	3522
2200	2524			3109	3449
2150	2450			3035	3375
2125	2414			2999	3339
2050	2304			2889	3229
2000	2230	2815	3155		

X = required headroom*		
ITO 400 / ITO 400 FU	120 mm	140 mm
Doors with wicket doors	120 mm	140 mm
Doors with surface-mounted infill	Y + 120 mm	Y + 140 mm

L = overall length of door operator			
Up to opening height (BRH)			
2500 mm	K boom	3840 mm	
3000 mm	M boom	4840 mm	

Note:
Doors with BRH > 2500 mm can only be combined with SupraMatic H series 3 or ITO 400 operators!

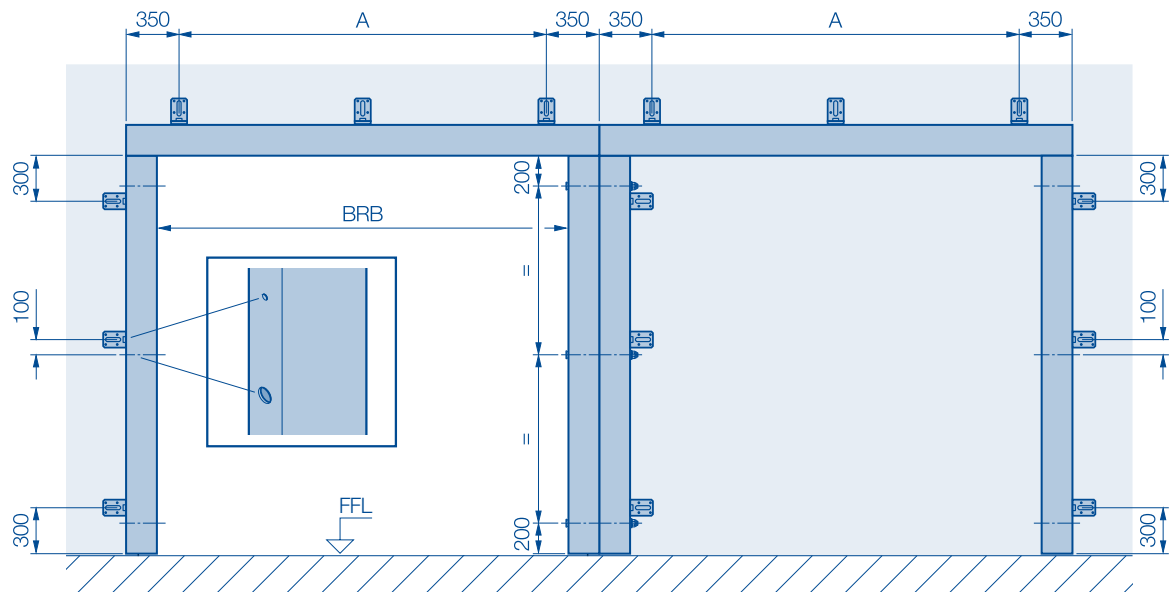
* An optional subframe is available for fitting situations without a lintel and/or sideroom

Y Thickness of surface-mounted infill

Fixing Points

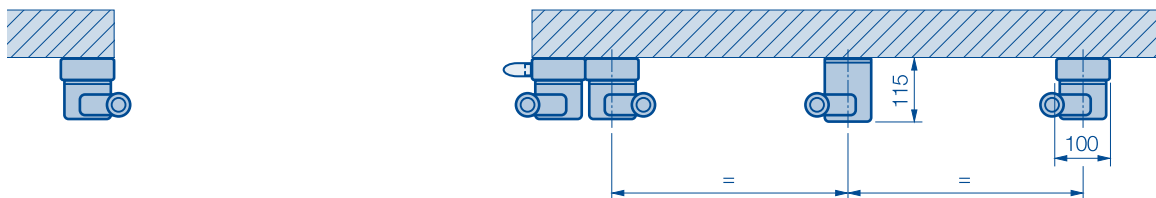
For collective garage sliding door ST 500

Subframe anchoring diagram



A	BRB
3 units	2250 - 2735
4 units	2740 - 3840
5 units	3845 - 4940
6 units	4945 - 6000

Roller guide on reveal



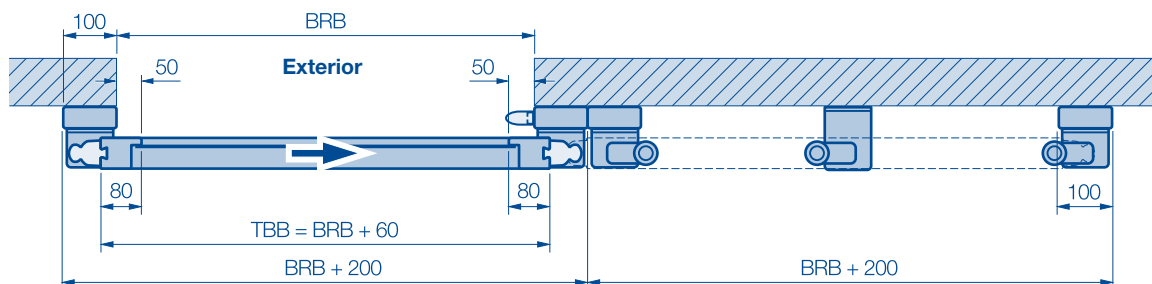
A Anchor
BRB Nominal width

Fitting Types

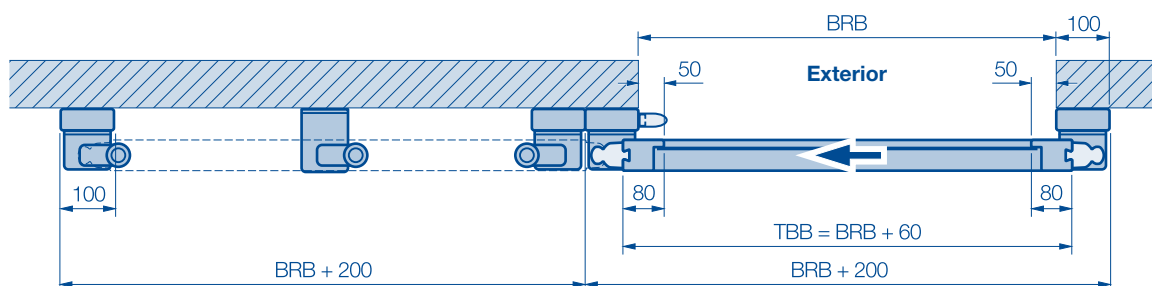
For collective garage sliding door ST 500

Fitting behind the opening

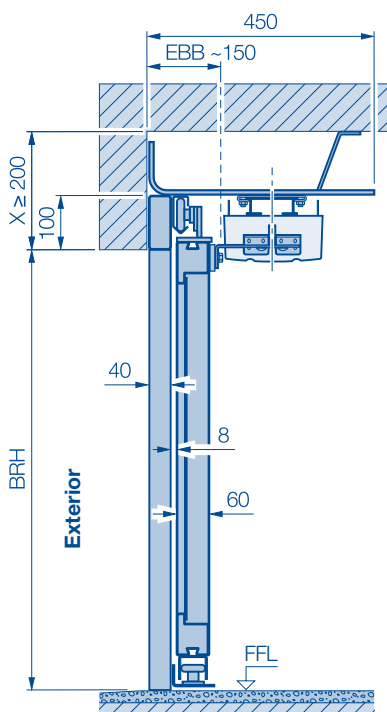
Door opening to the right



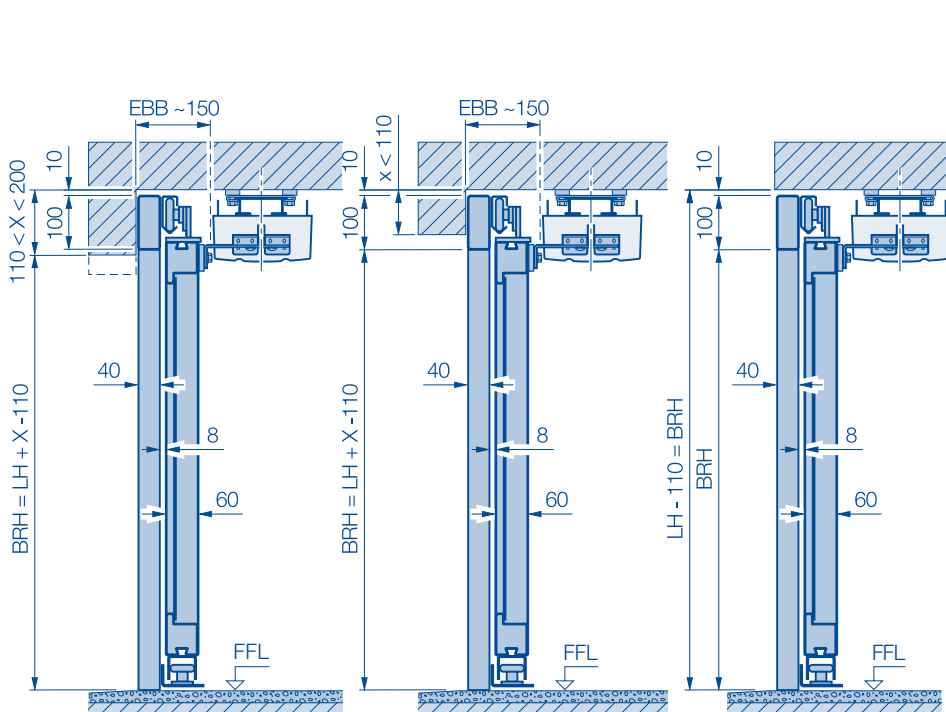
Door opening to the left



Lintel fixing



Ceiling fixing



BRB Nominal width = ordering size
BRH Nominal height = ordering size
EBB Fitting requirement
TBB Door leaf width

LH Clear height
X Headroom

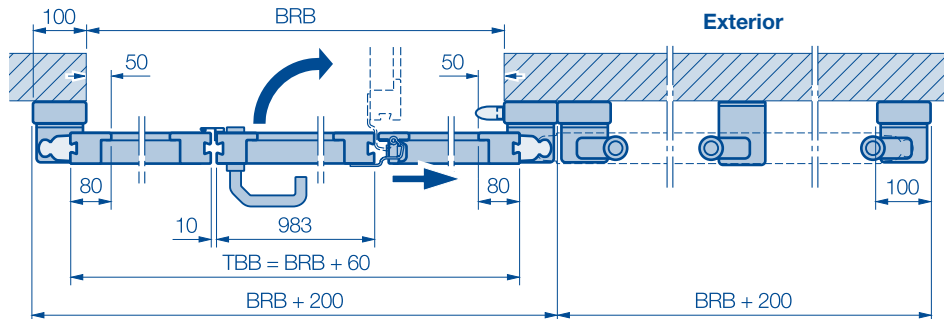
Fitting Types

For collective garage sliding door ST 500

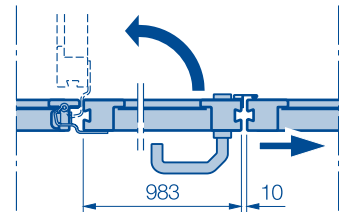
With centre wicket door

Fitting behind the opening

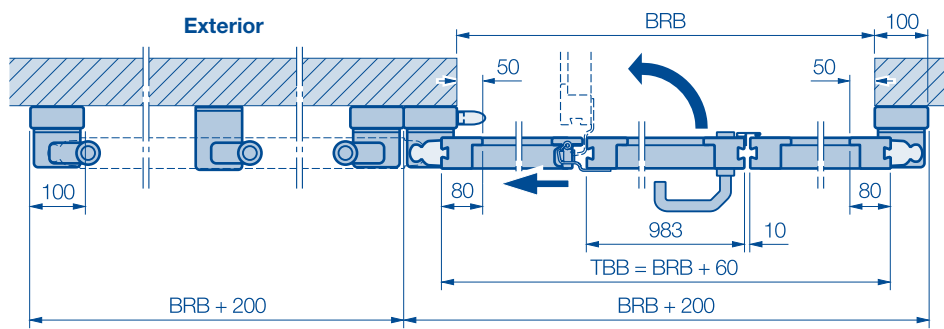
Door opening to the right, with centre wicket door, LH hinged



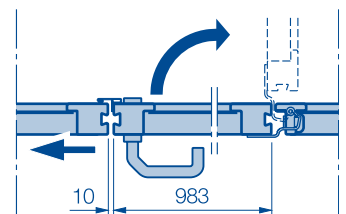
Centre wicket door, RH hinged



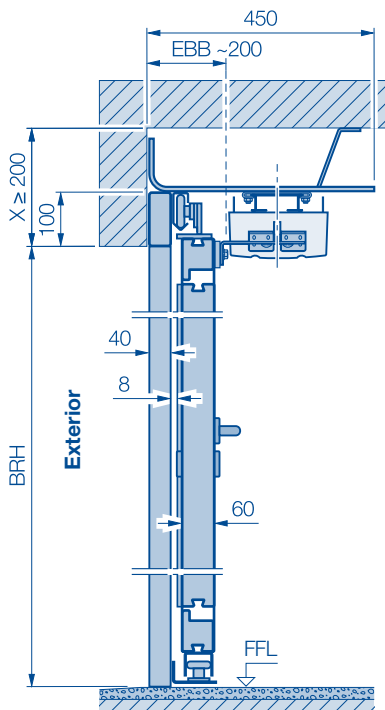
Door opening to the left, with centre wicket door, RH hinged



Centre wicket door, LH hinged



Lintel fixing



- BRB** Nominal width = ordering size
- BRH** Nominal height = ordering size
- EBB** Fitting requirement
- TBB** Door leaf width

X Headroom

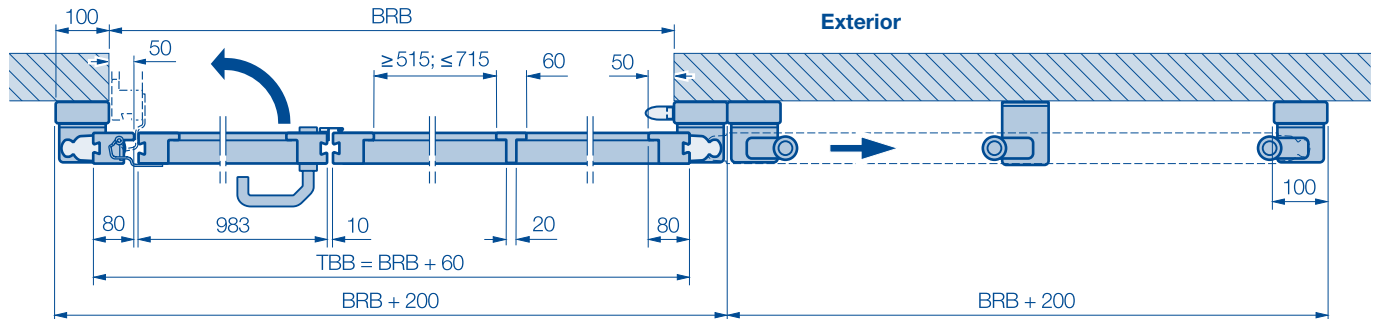
Fitting Types

For collective garage sliding door ST 500

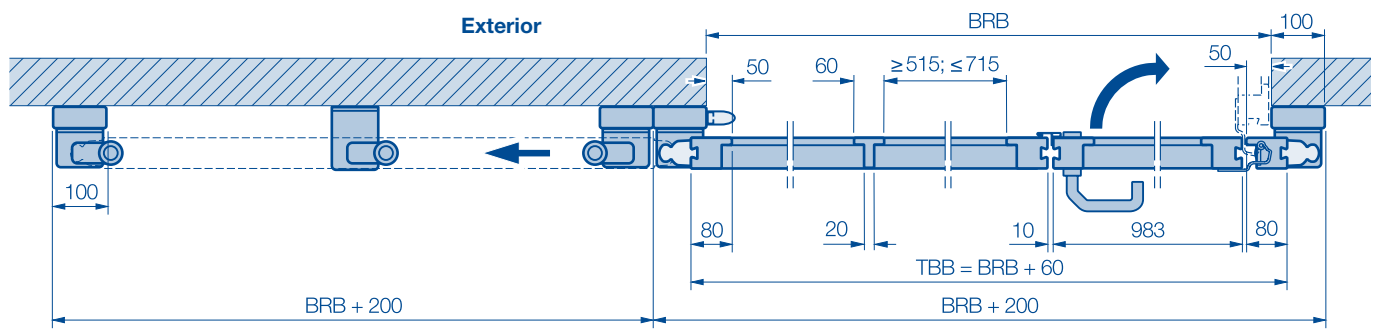
With side wicket door

Fitting behind the opening

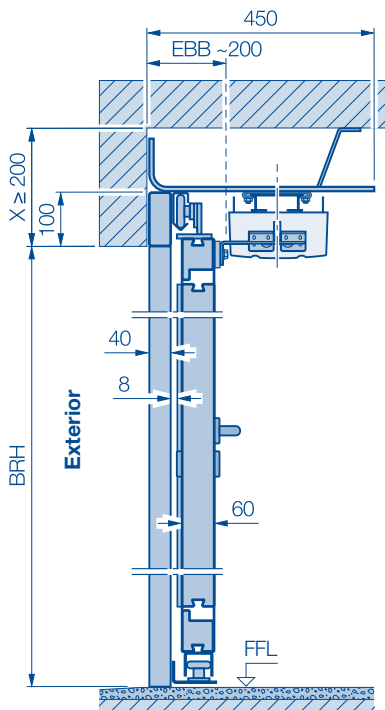
Door opening to the right, with side wicket door, RH hinged



Door opening to the left, with side wicket door, LH hinged



Lintel fixing



BRB Nominal width = ordering size
BRH Nominal height = ordering size
EBB Fitting requirement
TBB Door leaf width

X Headroom

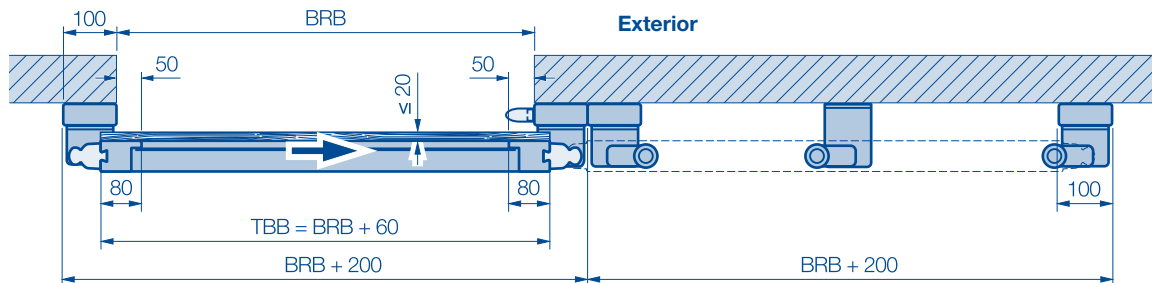
Fitting Types

For collective garage sliding door ST 500

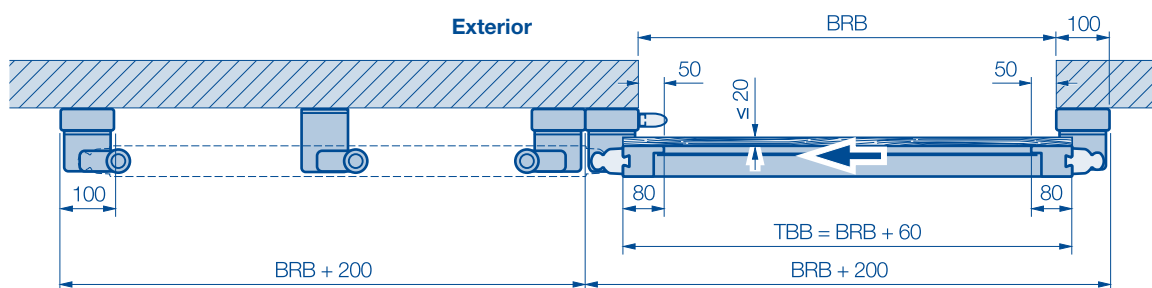
With on-site surface-mounted infill

Fitting behind the opening

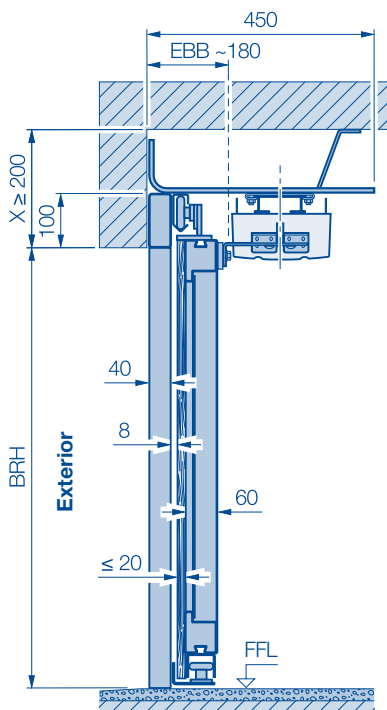
Door opening to the right



Door opening to the left



Lintel fixing



BRB Nominal width = ordering size
BRH Nominal height = ordering size
EBB Fitting requirement
TBB Door leaf width

X Headroom

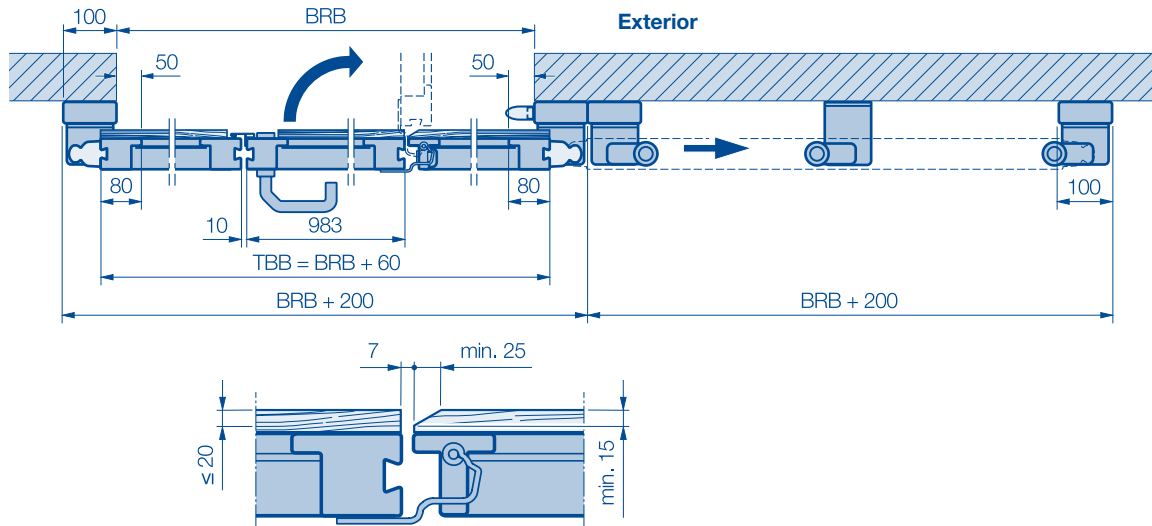
Fitting Types

For collective garage sliding door ST 500

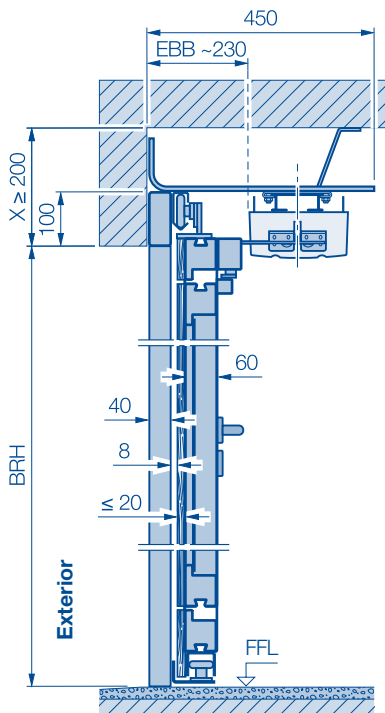
With on-site surface-mounted infill and wicket door

Fitting behind the opening

Door opening to the right, with centre wicket door, LH hinged



Lintel fixing



BRB Nominal width = ordering size
BRH Nominal height = ordering size
EBB Fitting requirement
TBB Door leaf width

X Headroom

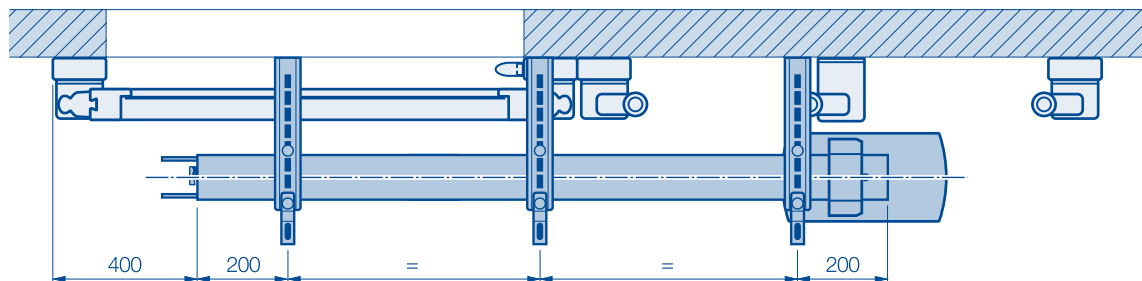
Garage Door Operators

For collective garage sliding door ST 500

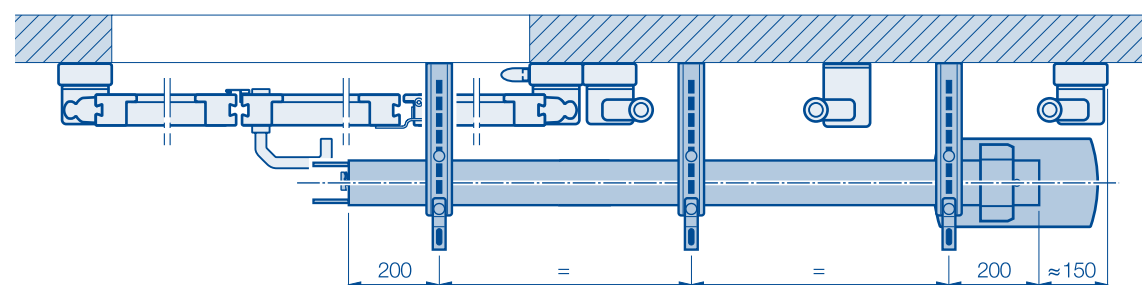
SupraMatic H / SupraMatic T / ITO 400 FU

SupraMatic H / SupraMatic T operator

Standard



Operator for door with centre wicket door

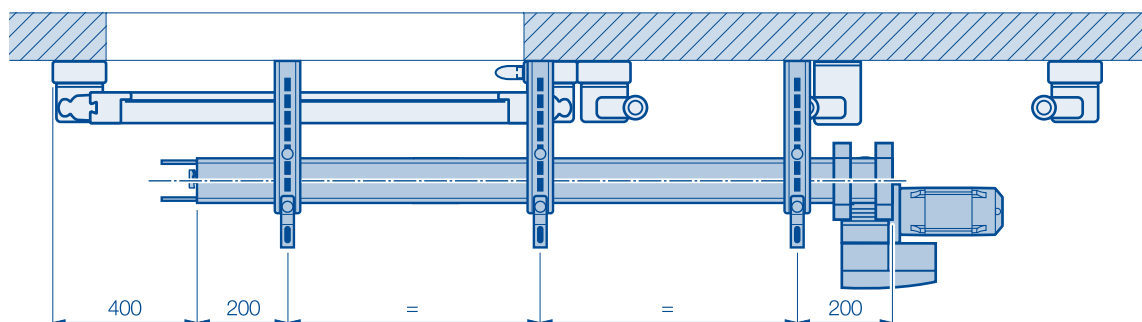


SupraMatic operator boom length

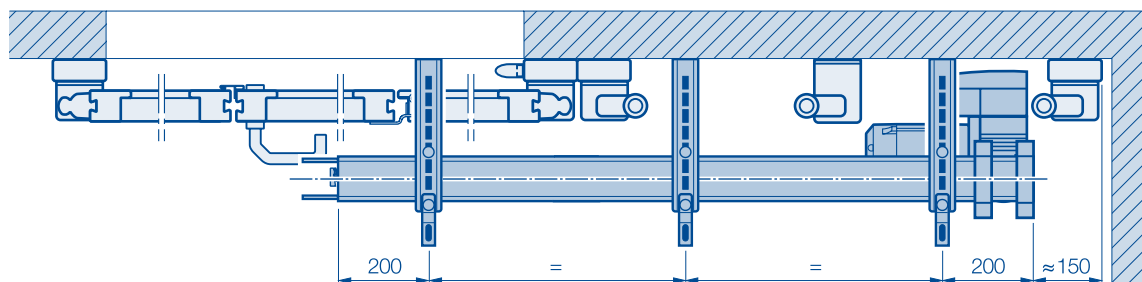
Up to BRB 3100	Boom: FS 60 L
Up to BRB 4700	Boom: FS 60 – 5500
Up to BRB 6000	Boom: FS 60 – 7000

Operator ITO 400 FU

Standard



Operator for door with centre wicket door – rotated (with limited space)



Side Doors

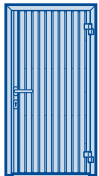
For collective garage doors

Styles 412, 413, 420, 422, 480, 405 and 400

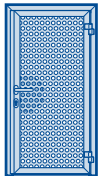
External views

(The illustrations correspond to size 1000 x 2125 mm. Deviations may occur with other door sizes.)

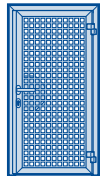
Style 402
Ribbed sheet



Style 412
Round perforated sheet steel



Style 413
Square perforated sheet steel



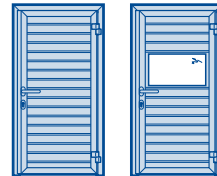
Style 420
Smooth aluminium sheet on the inside



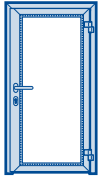
Style 422
Surface-mounted smooth aluminium sheet



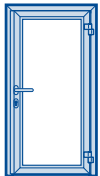
Style 480
Steel sections (or with aluminium frame type N)



Style 405
On-site infill overlapping the frame

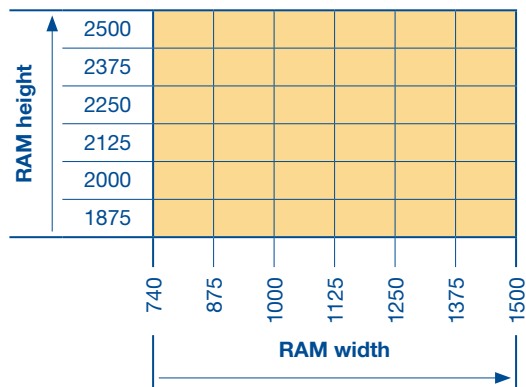


Style 400
On-site infill inside the frame



Size range

Single-leaf door elements, max. RAM width 1500 mm, max. RAM height 2500 mm.



Available dimensions
RAM Overall frame dimension

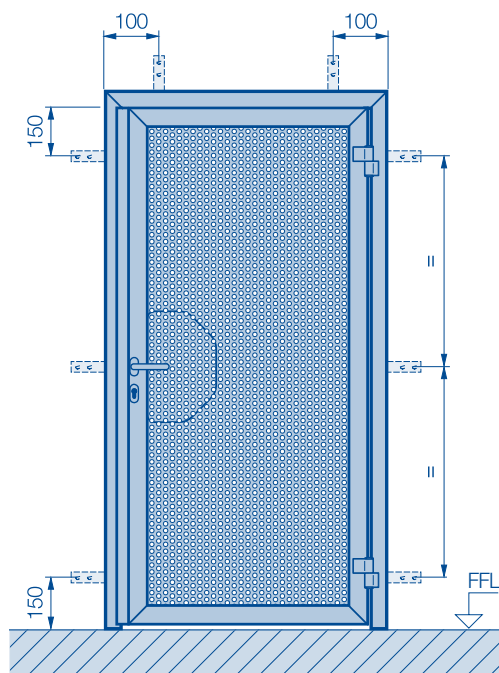
Side Doors

For collective garage doors

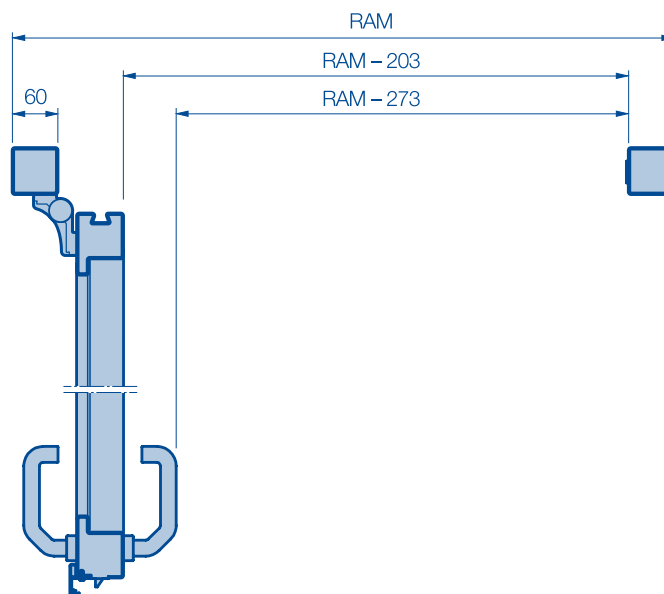
Position of anchors

Clear passage width

Position of anchors



Passage width for side door with an opening angle of 90°



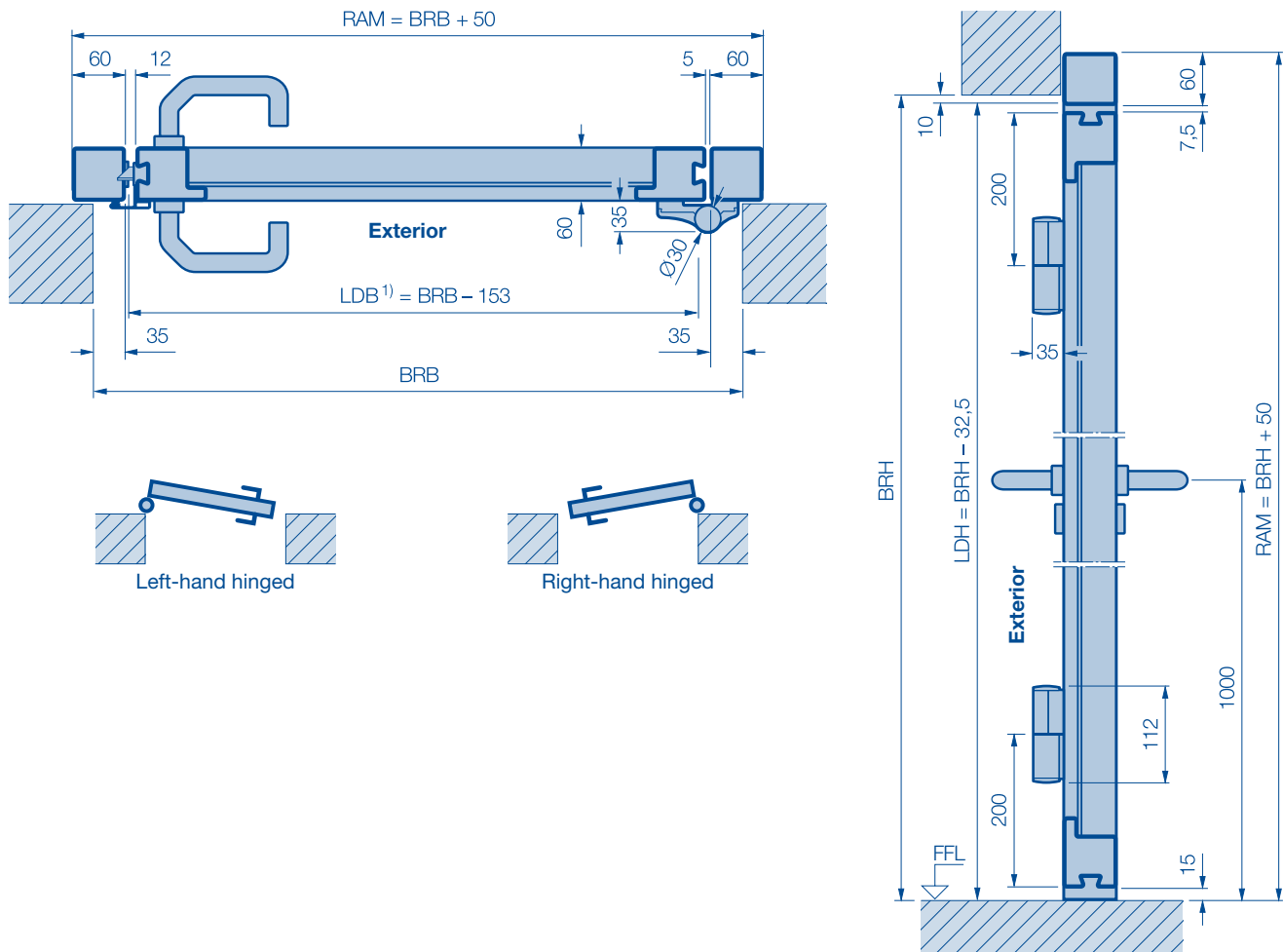
BRB Nominal width
BRH Nominal height
RAM Overall frame dimension = ordering size

Side Doors

For collective garage doors

Fitting dimensions

Fitting behind the opening, opening outwards



BRB Nominal width
BRH Nominal height
LDB Clear passage width
LDH Clear passage height

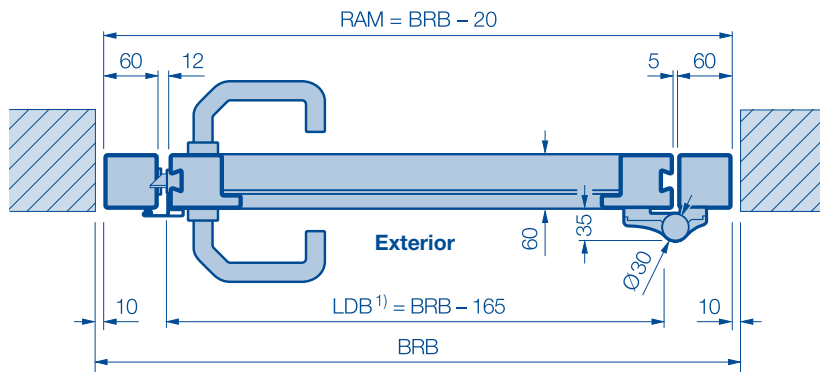
RAM Overall frame dimension = ordering size
1) LDB with an opening angle of 90°

Side Doors

For collective garage doors

Fitting dimensions

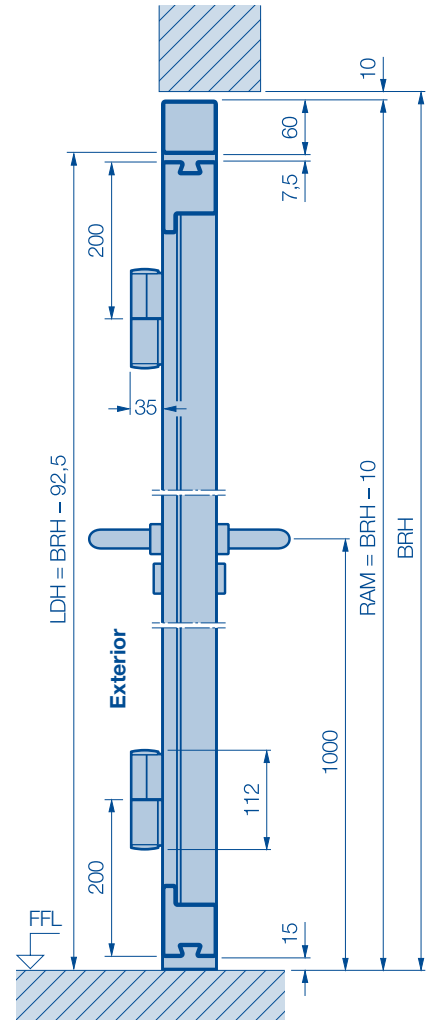
Fitting in the opening, opening outwards



Left-hand hinged



Right-hand hinged



BRB Nominal width
BRH Nominal height
LDB Clear passage width
LDH Clear passage height

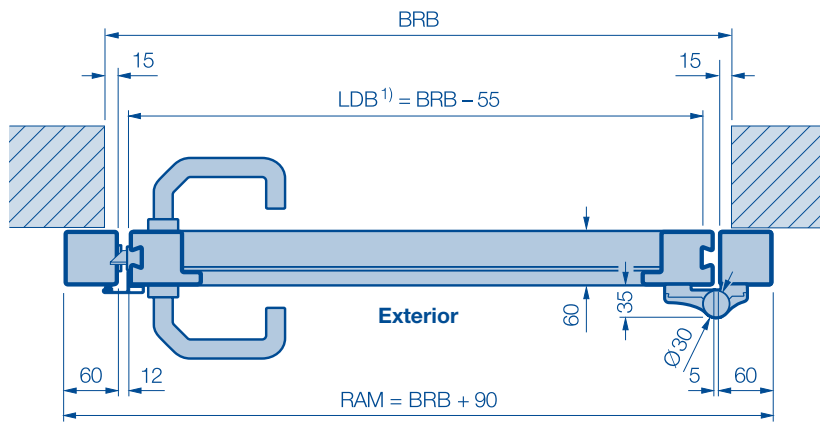
RAM Overall frame dimension = ordering size
1) The clear passage width is reduced if the opening angle is less than 180°.

Side Doors

For collective garage doors

Fitting dimensions

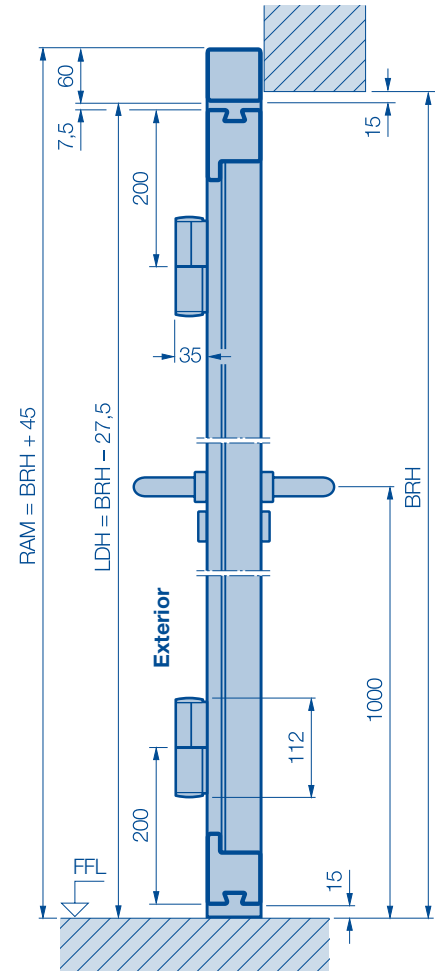
Fitting in front of the opening, opening outwards



Left-hand hinged



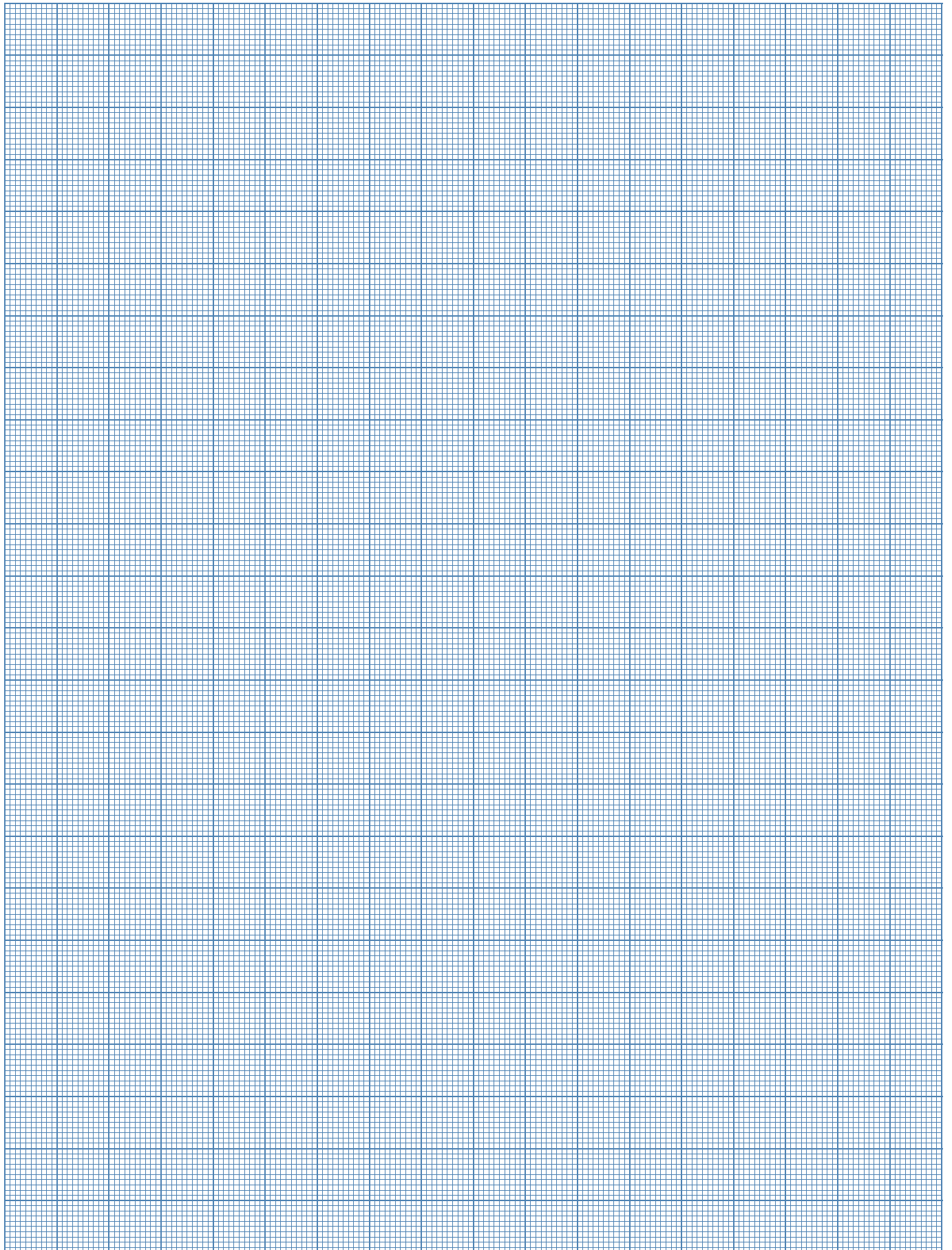
Right-hand hinged



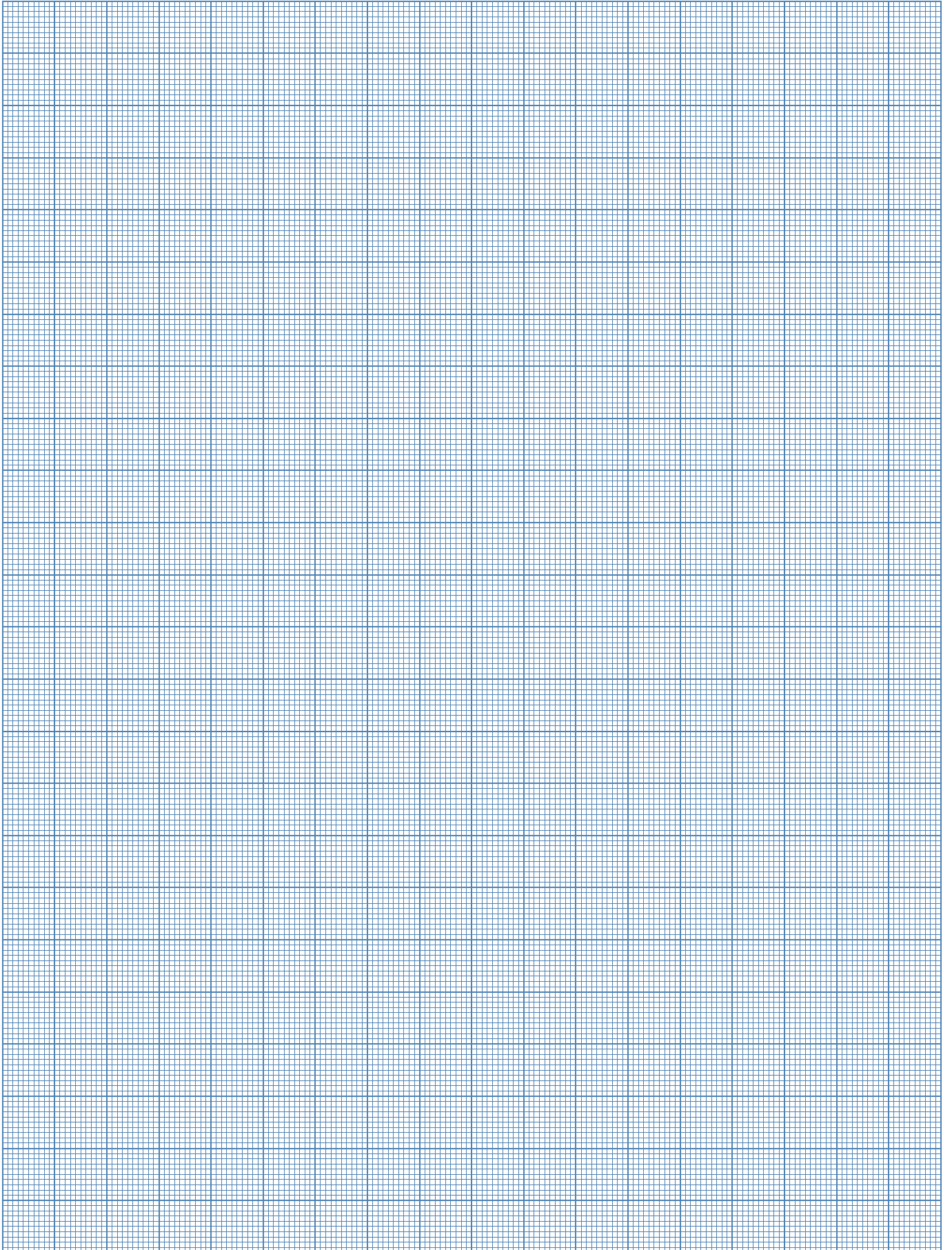
BRB Nominal width
BRH Nominal height
LDB Clear passage width
LDH Clear passage height

RAM Overall frame dimension = ordering size
1) The clear passage width is reduced if the opening angle is less than 180°.

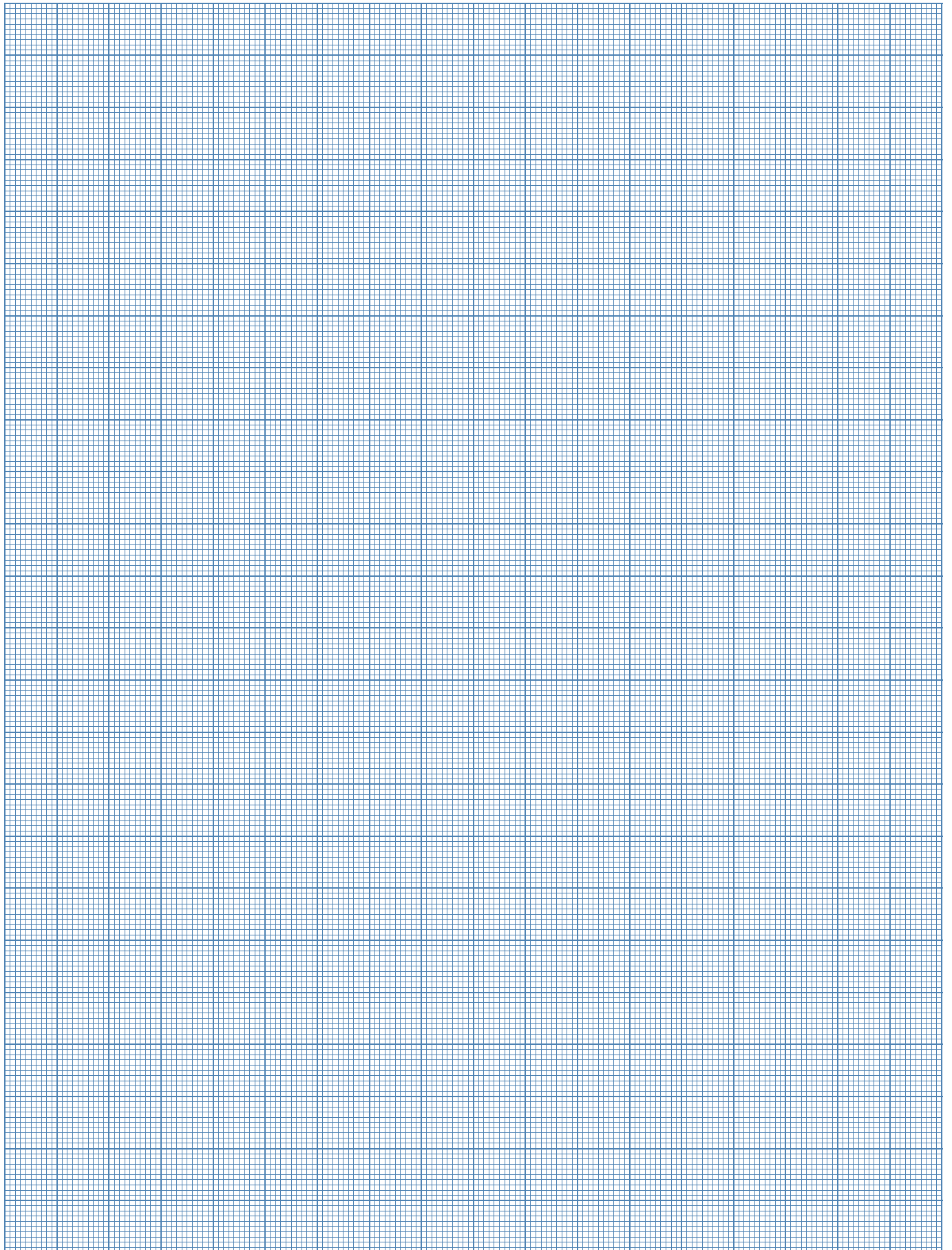
Notes



Notes



Notes



Hörmann: Quality without Compromise



Hörmann KG Amshausen, Germany



Hörmann KG Antriebstechnik, Germany



Hörmann KG Brandis, Germany



Hörmann KG Brockhagen, Germany



Hörmann KG Dissen, Germany



Hörmann KG Eckelhausen, Germany



Hörmann KG Freisen, Germany



Hörmann KG Ichtershausen, Germany



Hörmann KG Werne, Germany



Hörmann Genk NV, Belgium



Hörmann Alkmaar B.V., Netherlands



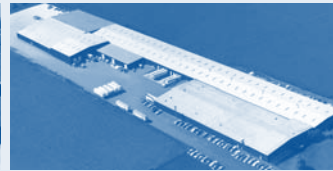
Hörmann Legnica Sp. z o.o., Poland



Hörmann Beijing, China



Hörmann Tianjin, China



Hörmann LLC, Montgomery IL, USA



Hörmann Flexon, Leetsdale PA, USA

Hörmann is the only manufacturer worldwide that offers you a complete range of all major building products from one source. We manufacture in highly-specialised factories using the latest production technologies. The close-meshed network of sales and service companies throughout Europe, and activities in the USA and China, make Hörmann your strong partner for first-class building products, offering “Quality without Compromise”.

GARAGE DOORS

OPERATORS

INDUSTRIAL DOORS

LOADING EQUIPMENT

HINGED DOORS

DOOR FRAMES

Hörmann (UK) Ltd, Gee Road, Coalville, Leicestershire LE67 4JW
Phone (01530) 513000, Fax (01530) 513001

