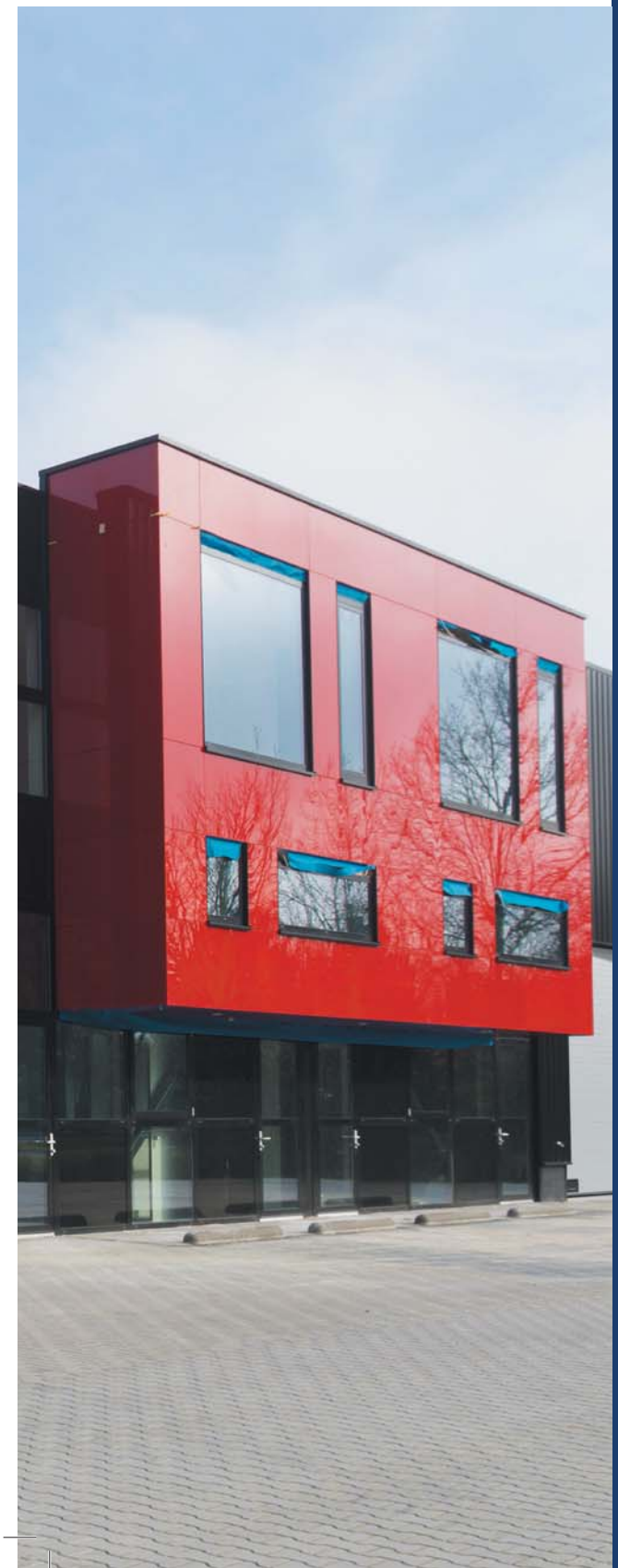
CATO

INDUSTRIAL SECTIONAL DOORS






CATO industrial sectional doors are designed specifically for operation in a variety of industrial buildings comprising warehouses, workshops, transport terminals and any facilities with smooth flow of materials requirements. To ensure long-term operation without failures, they have increased strength characteristics due to their sturdiness. CATO sectional doors can be equipped with safety systems. Resistant to corrosion are able to withstand the effects of aggressive environments. CATO industrial doors are reliable, and have fulfilled in many years the quality expectancy of the most demanding customers.



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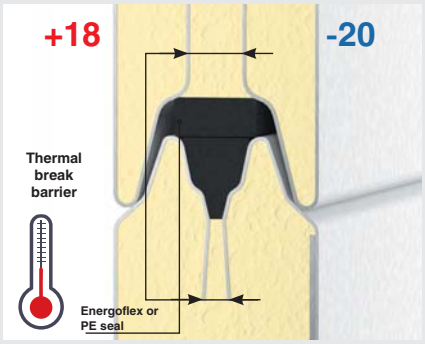
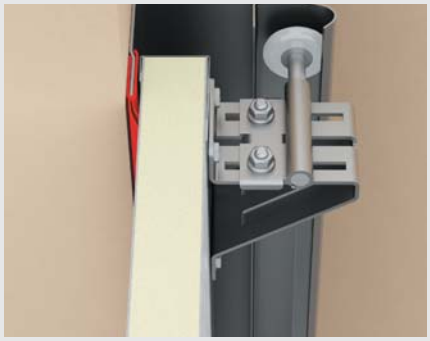
High energy-saving characteristics



Thermal break barrier
Front and back steel sheets are not connected to each other, as a result heat or cold transmission is minimized. Ideal in cold storage application.

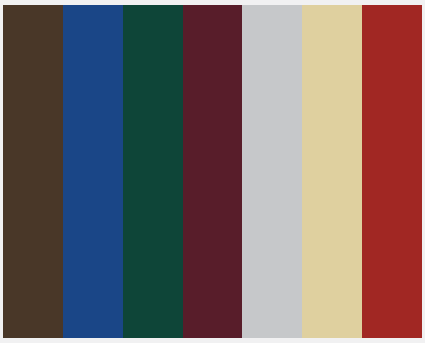
Bottom weather seal
Bottom weather seal fitted on the bottom aluminium profile (the embedded profile for door width up to 4 750 mm).



Side weather seal
Effective side seals fitted on the vertical mounting angles of the door ensure a tight overlap of both sides of the door panel. In conjunction with the top and bottom seals they form a perfect perimeter sealing protecting against drafts, wind and rain water. The perimeter sealing has effective noise reduction properties.

Top weather seal
Top weather seal fitted on the top aluminium profile.

Design



Paint to any colour.

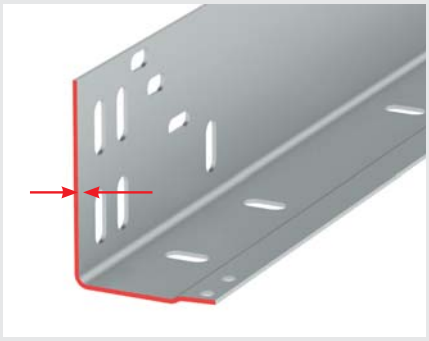
Powder coated springs.

Exclusive accessories.

Durability

Zink-coated double roller carrier for big doors.

Sturdy design of panels.



Thickness of profiles 2 mm.

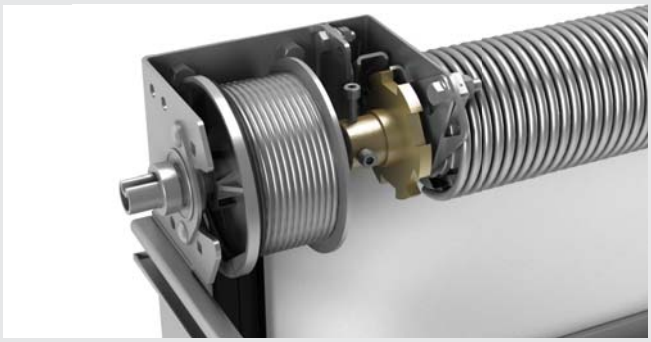
Convenience

Space-saving.

Optional windows and pass doors.

Automatic operation.

Safety

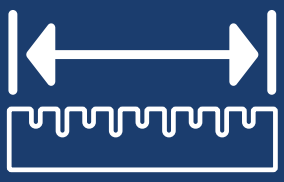


Spring break safety device.

Cable break safety device.

SECTIONAL DOORS SERIES

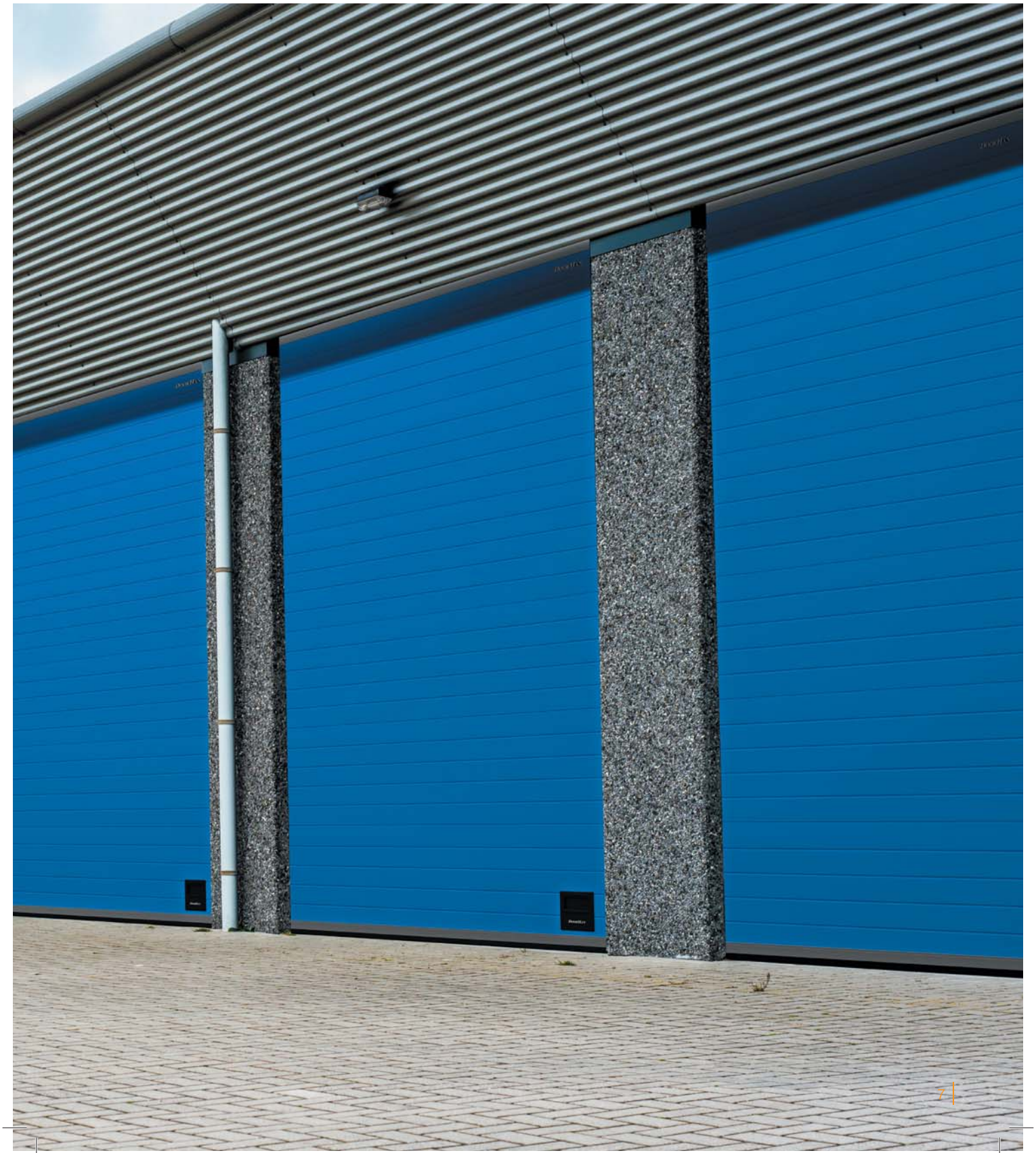
ISD01



WIDTH:
2 000–8 000 MM

HEIGHT:
2 000–8 000 MM

- Production: tailored to customer’s opening size.
- Advantages: sturdy panels, safety features, ease of installation, thermal break, perimeter sealing.
- Torsion spring mechanism: painted springs designed for minimum 25 000 cycles operation.



D-line
Standard design for Inside surface.

S-line

V-line

RAL 9003

RAL 9006

RAL 7004

RAL 1014

RAL 6005

RAL 5005

RAL 7016

RAL 3000

RAL 3005

RAL 8017

RAL 8014

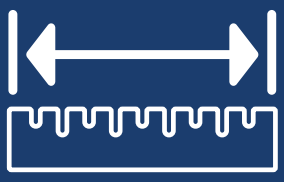
Woodgrain

Stucco

It's possible to have doors painted according to any national or international colour within the Colorbond or RAL range. The colours in this catalogue may be distorted because of printing. Please refer to the original colour chart when ordering your door.

FULL VISION SECTIONAL DOORS SERIES

ISD02



WIDTH:
2 000–6 000 MM

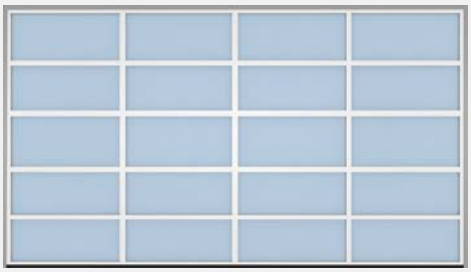
HEIGHT:
2 000–6 000 MM

- Production: tailored to customer’s opening size.
- Advantages: maximum internal and external visibility; modern design; corrosion resistant; possibility to mix full vision and sandwich panels.
- Torsion spring mechanism: painted springs and minimum 25000 cycles operation.

Types of panoramic panels

TECHNICAL SPECIFICATIONS	
Wind load	2 class (EN12424:2000)
Water proof	3 class (EN12425:2000)
Weight of door leaf	17 kg/m^2

Design of panoramic panels

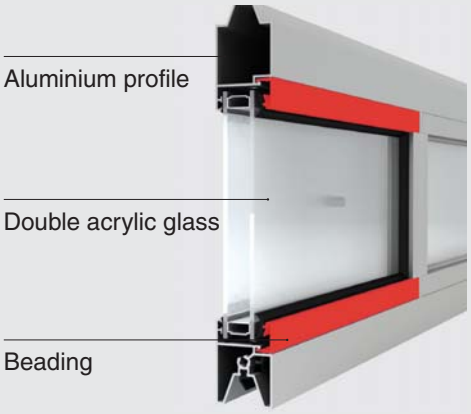


Standard vision
Doors with standard vision.

Full vision
Doors with full vision (up to 3 190 mm).

Materials for panoramic panel

TECHNICAL SPECIFICATIONS	ACRYLIC GLAZING
Thickness of each acrylic glass, mm	3
Weight, kg/m^3	3.28
Light transmission TD65, %	80
Heat insulation, m^2·C/W	0.20



Panoramic panel with double acrylic glass and beading details.

Mix of panoramic and insulated panels Bottom insulated panels offer additional rigidity.

Acrylic glass

RAL 9003

RAL 9006

RAL 7004

RAL 1014

RAL 6005

RAL 5005

RAL 7016

RAL 3000

RAL 3005

RAL 8017

RAL 8014

Woodgrain

Stucco

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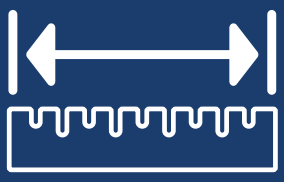
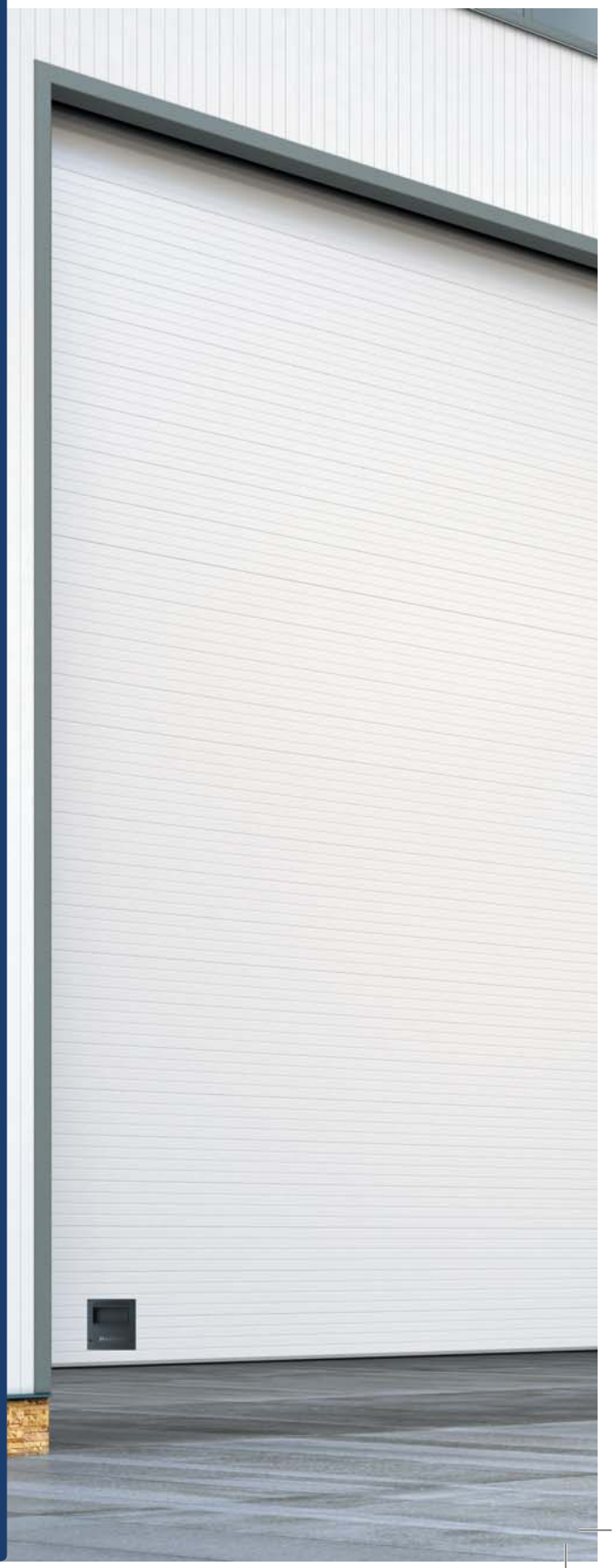
SECTIONAL DOORS SERIES

ISD03

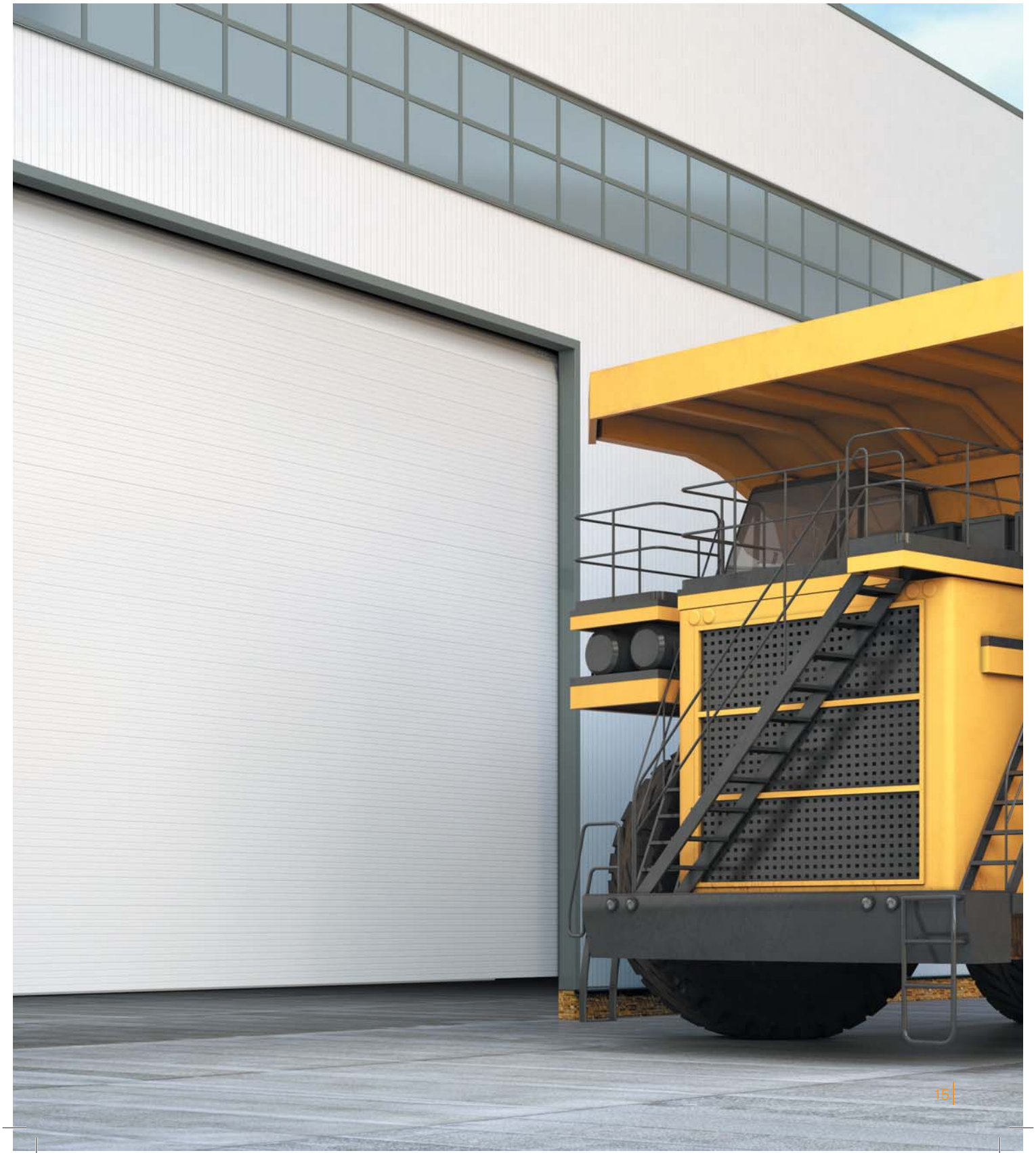


WIDTH:
2 000–10 000 MM

HEIGHT:
2 000–9 500 MM



- Production: tailored to customer’s opening size.
- Advantages: aluminium panels, stainless steel door components, panels are reinforced inside with a horizontal aluminium strut for resistance to wind load.
- Torsion spring mechanism: painted springs designed for minimum 25 000 cycles operation.



Aluminium panel design

S-line

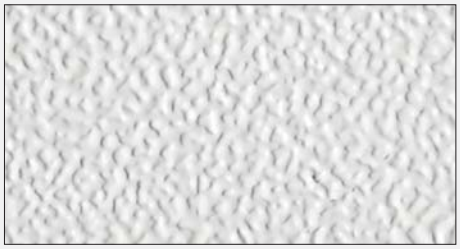
RAL 9003 (white)

Stucco

Inside surface texture and colour

S-line

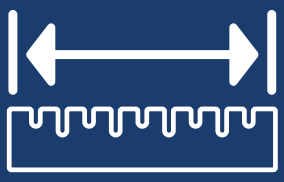
RAL 9003 (white)



Stucco

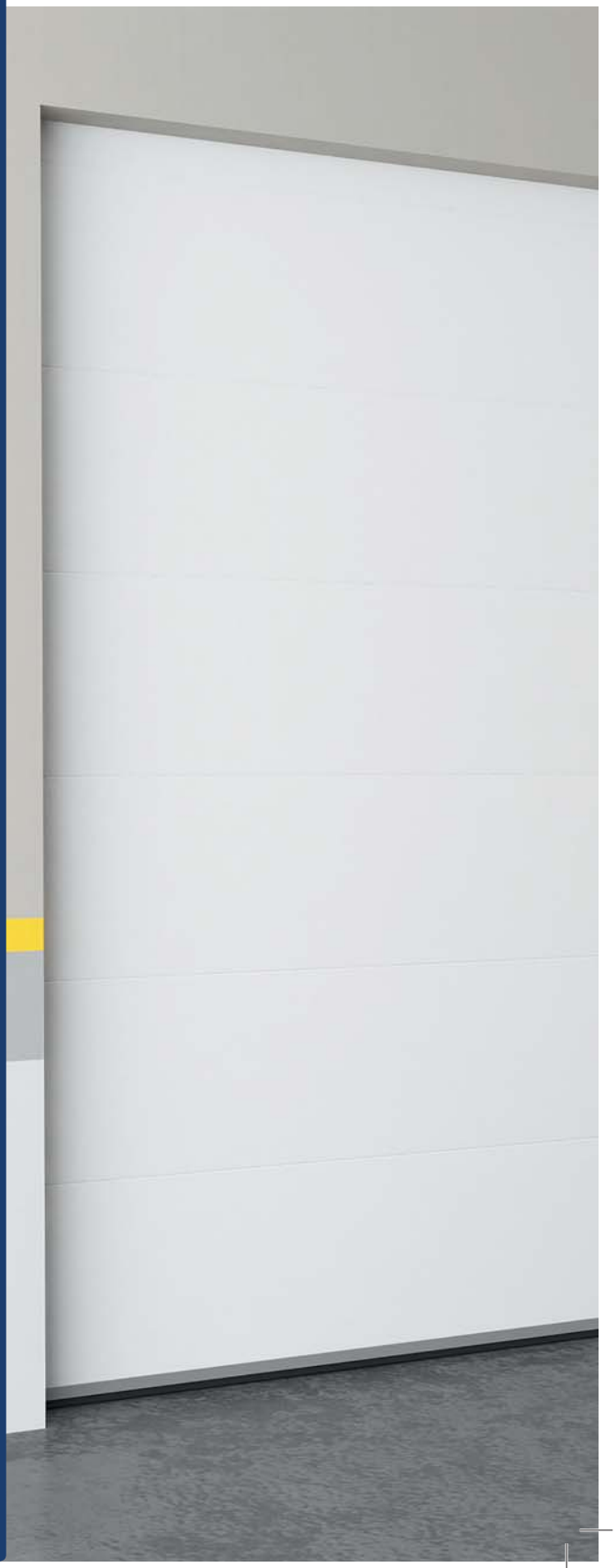
SECTIONAL DOORS SERIES

ISD THERMALPRO



WIDTH:
2 000–6 000 MM

HEIGHT:
2 000–5 000 MM

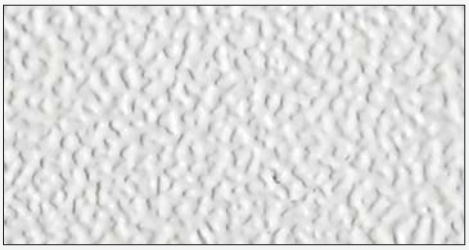


- Production: tailored to customer’s opening size.
- Advantages: 80 mm steel panels, thermal break top and bottom aluminium profile, heating perimeter aluminium profiles and heating cable (optional).
- Torsion spring mechanism: painted springs designed for minimum 25 000 cycles operation.

80 mm panel design

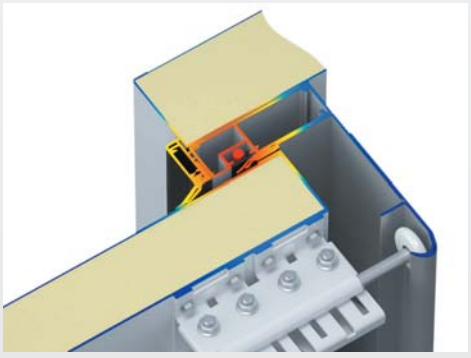
S-line
Standard design for Inside surface

RAL 9003 (white)



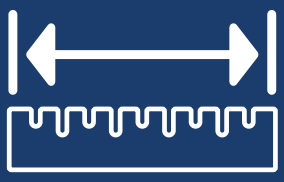
Stucco

80-mm panel with thermal break top and bottom aluminium profiles



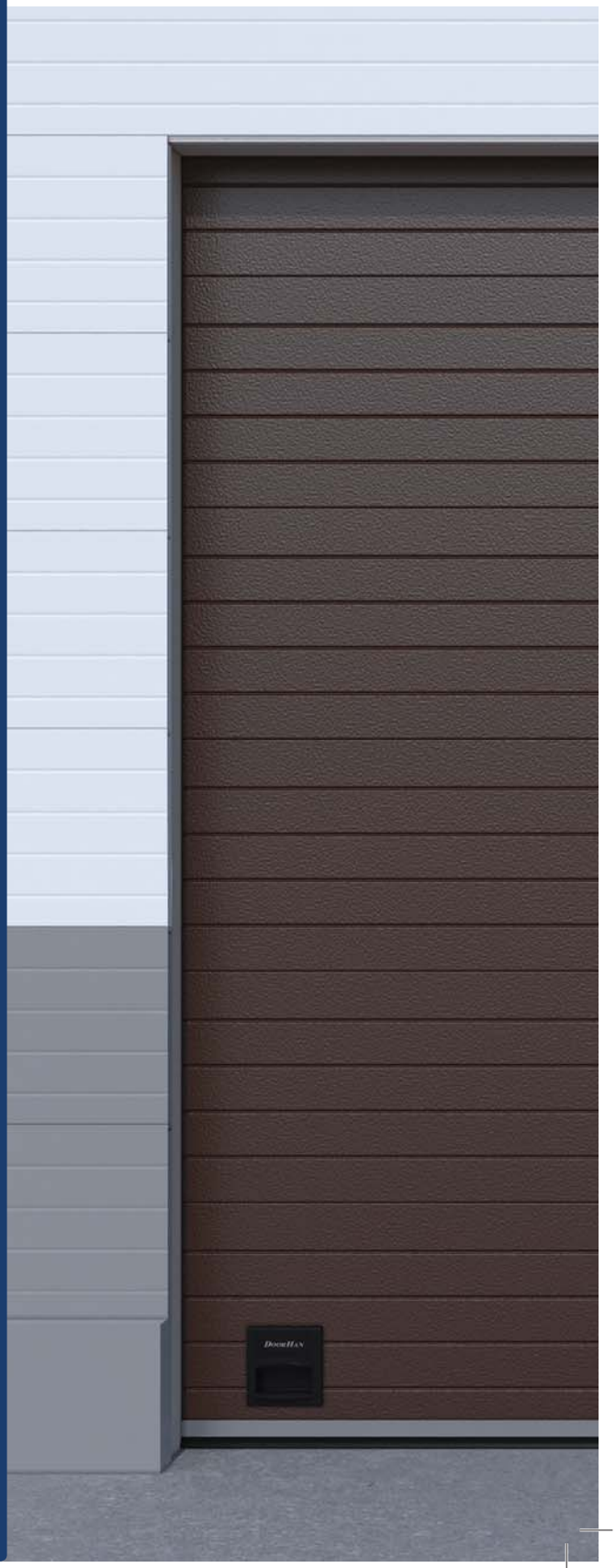
Aluminium heating perimeter profiles with heating cable (optional)

PASS DOORS FOR SECTIONAL DOORS
ISD01

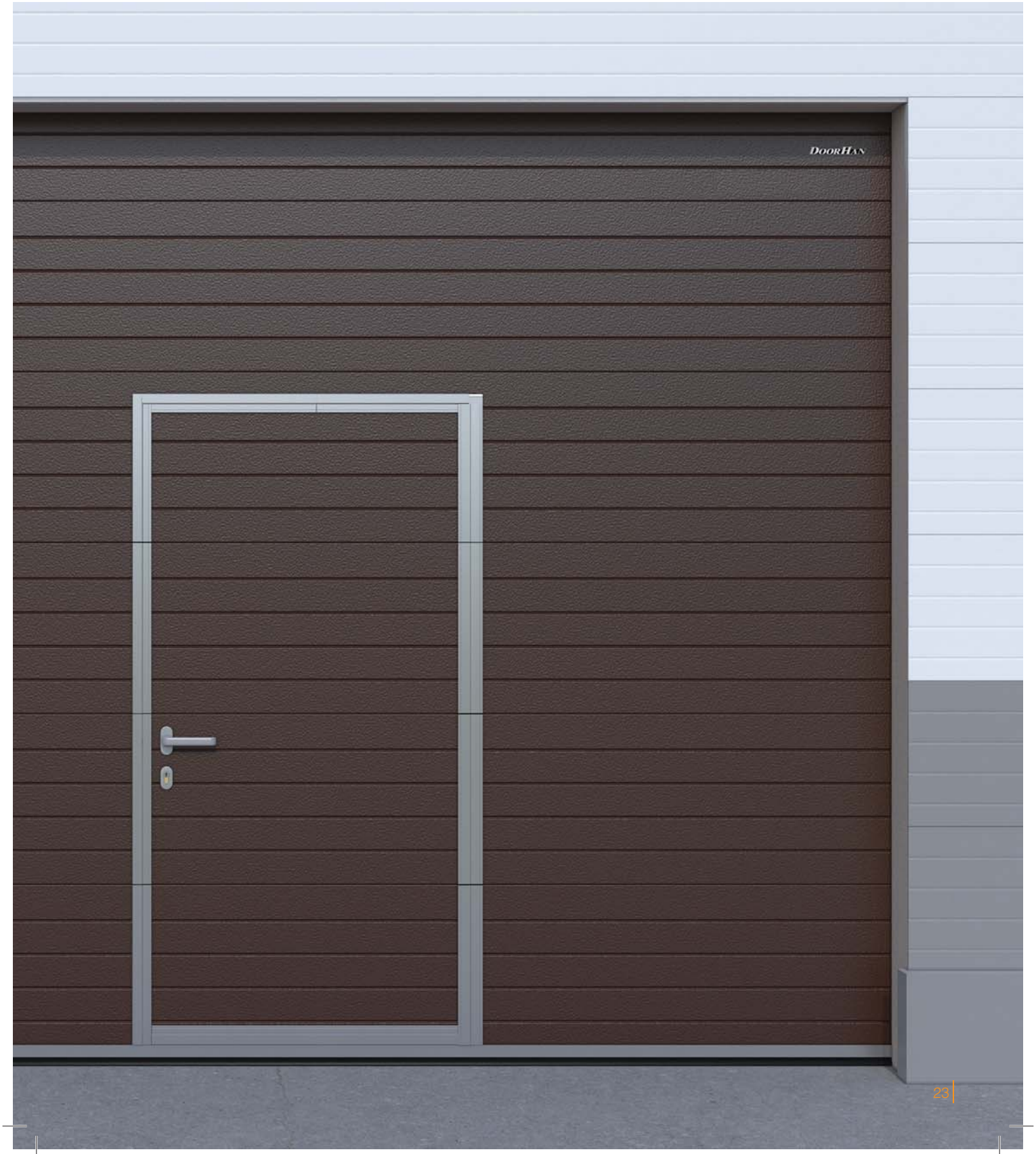


WIDTH:
900 MM

HEIGHT:
1 800–2 100 MM



- Production: available for sectional doors ISD01.
- Advantages: special newly designed aluminium profiles provide high door leaf stability.
- Design: a variety of panels available. The maximum opening width for door installation is 6 m.



HANDLES AND ACCESSORIES

Handles

CATO handles are aesthetic and provide easy grip for manual operation.
Pass door handle made of stainless steel.

Footstep handle for ISD

Pass door lock

Locking systems

Mechanical lock automatically blocks when you close the door leaf.

Standard for doors ISD01

Optional for doors ISD01

Windows

All CATO ISD doors can be equipped optionally with double glazed acrylic windows.
See below the choice of industrial windows.

Dimensions: 635 × 330 mm; frame colour: black

Dimensions: 607 × 202 mm; frame colour: black

SHAFT-50/85 PROKIT

TECHNICAL SPECIFICATIONS	SHAFT-50PROKIT	SHAFT-85PROKIT
Supply voltage, V	220-240	220-240
Power frequency, Hz	50/60	50/60
Maximum power consumption, W	370	480
Torque, Nm	50	85
Shaft speed, RPM	24	21
Degree of protection	IP54	IP54
Intensity, %	65	65
Temperature range, °C	-25...+50	-25...+50
Maximum door area, m²	25	35
Chain length, m	8	8
Smooth start and stop	yes	yes

SHAFT-30/60 IP65KIT

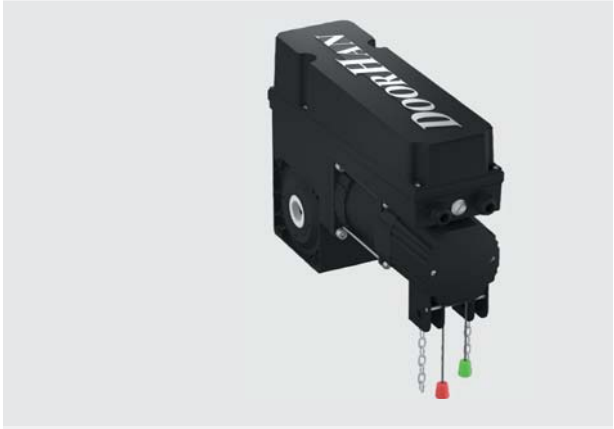
TECHNICAL SPECIFICATIONS	SHAFT-30 IP65KIT	SHAFT-60 IP65KIT
Supply voltage, V	220-240	380-400
Power frequency, Hz	50/60	50/60
Maximum power consumption, W	300	350
Torque, Nm	30	60
Shaft speed, RPM	32	32
Degree of protection	IP65	IP65
Intensity, %	50	60
Temperature range, °C	-40...+55	-40...+55
Maximum door area, m²	18	28
Chain length, m	8	8
Smooth start and stop	no	no

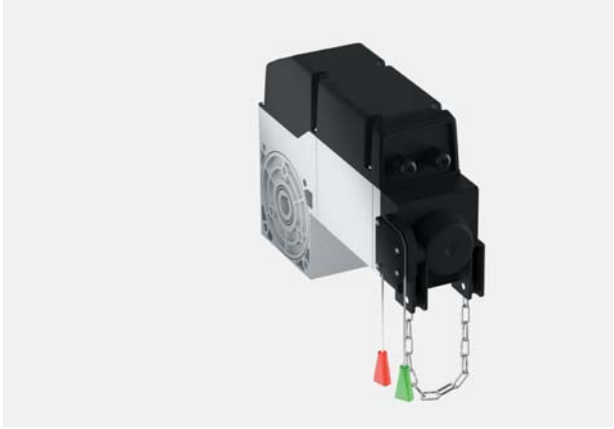
SHAFT-50KIT

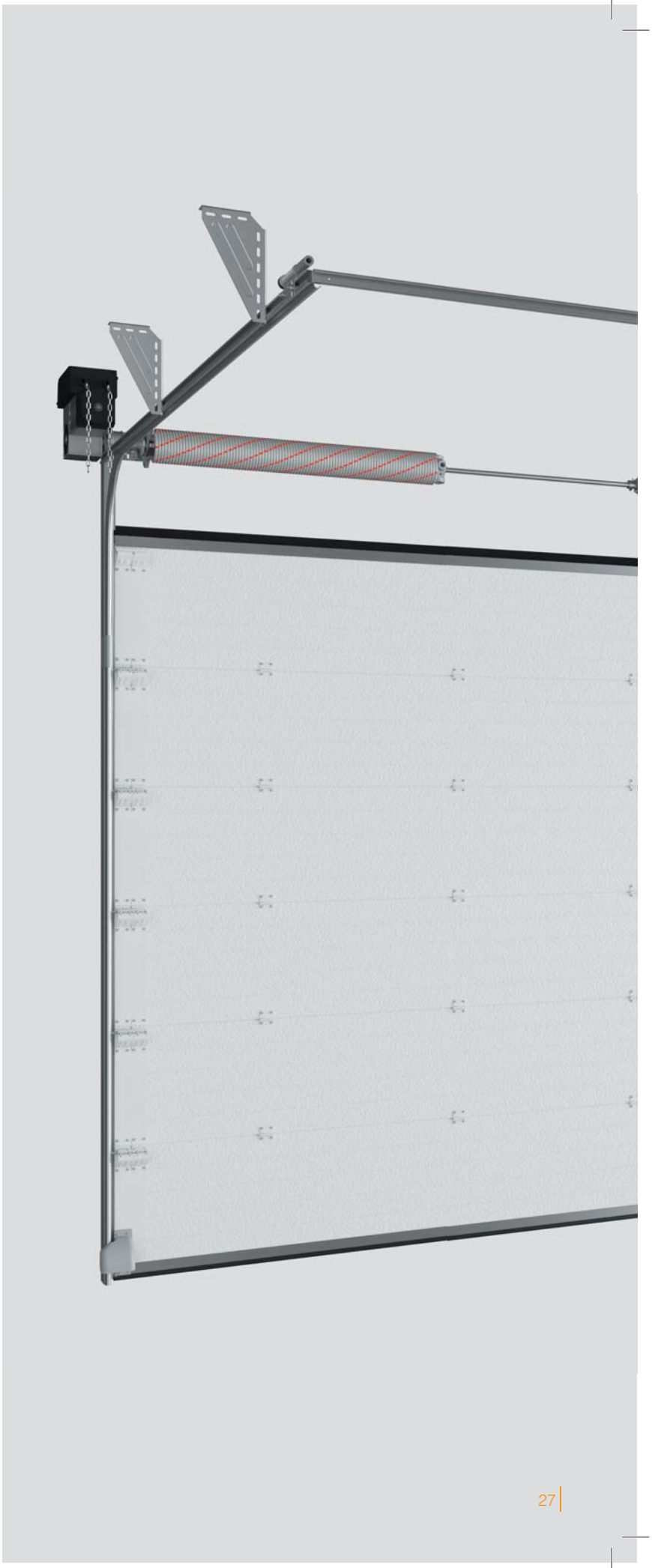
TECHNICAL SPECIFICATIONS	SHAFT-50KIT
Supply voltage, V	220-240
Power frequency, Hz	50/60
Maximum power consumption, W	370
Torque, Nm	50
Shaft speed, RPM	24
Degree of protection	IP54
Intensity, %	65
Temperature range, °C	-25...+50
Maximum door area, m²	25
Chain length, m	8
Smooth start and stop	no

SHAFT-120KIT

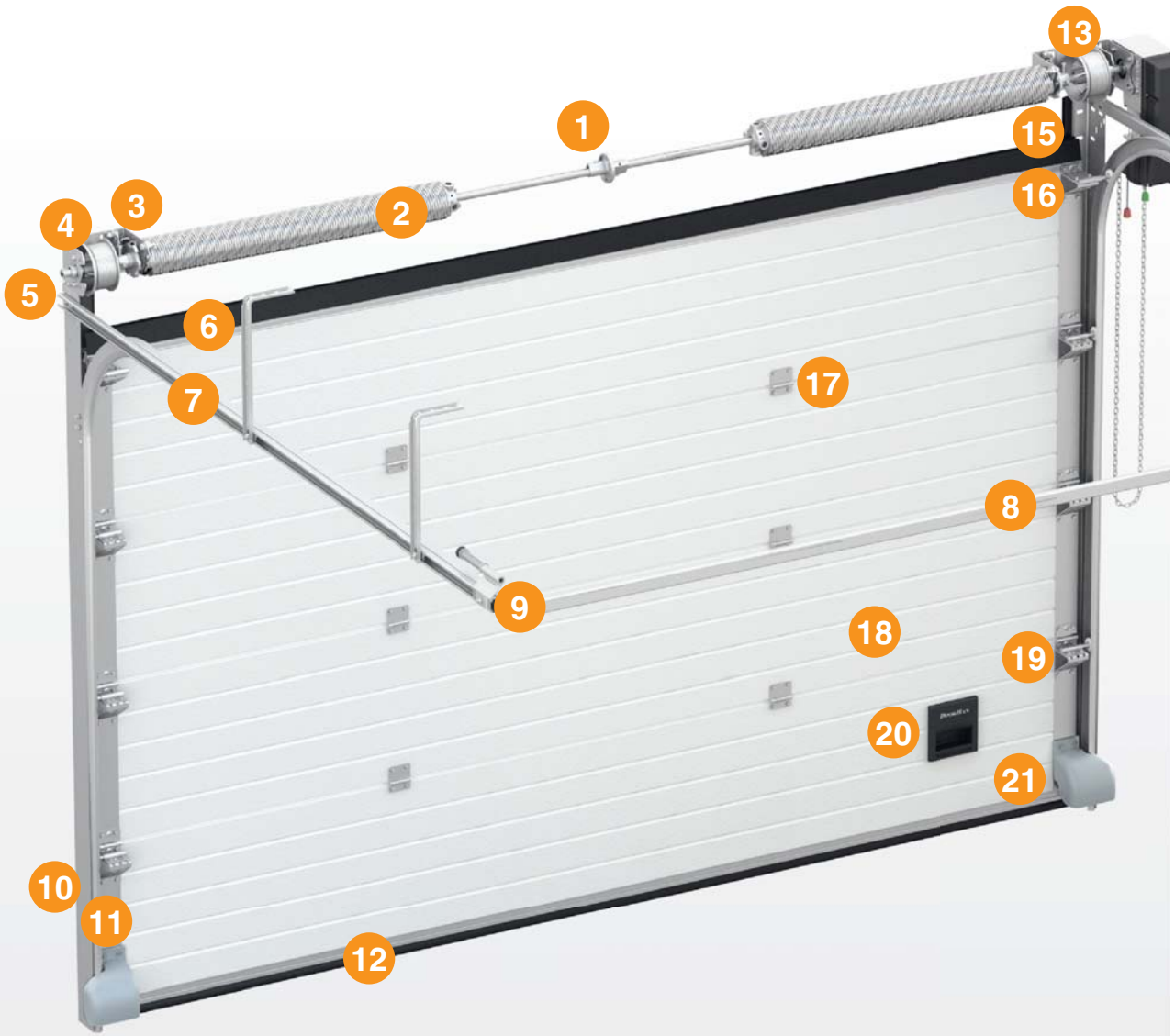
TECHNICAL SPECIFICATIONS	SHAFT-120KIT
Supply voltage, V	380-400
Power frequency, Hz	50/60
Maximum power consumption, W	700
Torque, Nm	120
Shaft speed, RPM	22
Degree of protection	IP44
Intensity, %	65
Temperature range, °C	-40...+55
Maximum door area, m²	40
Chain length, m	12
Smooth start and stop	no







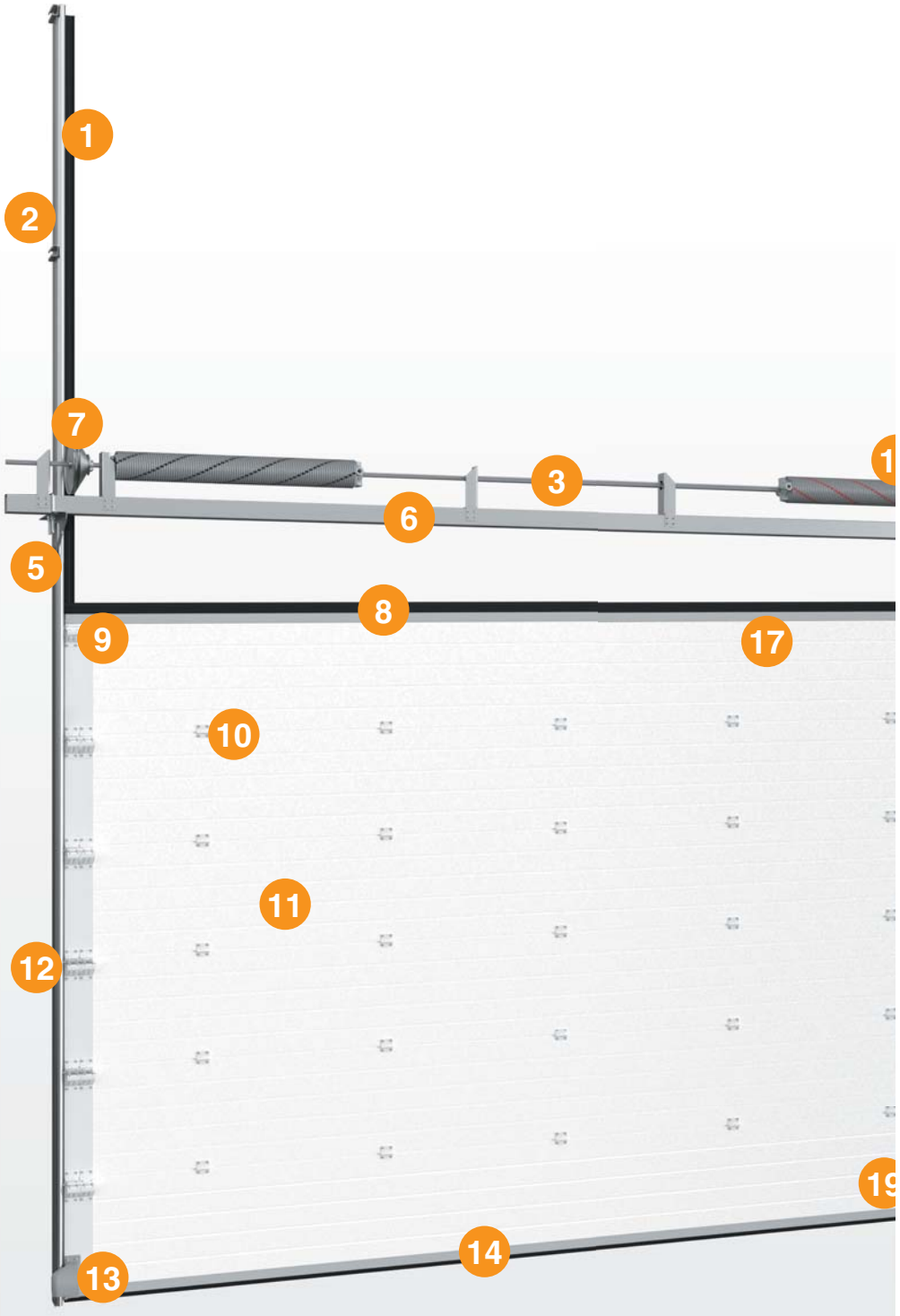
HARDWARE SPECIFICATIONS | Standard Lift



1. Coupler
2. Torsion spring mechanism
3. Spring break safety device
4. Drum
5. End bracket
6. Top profile with seal
7. Horizontal track
8. C-profile
9. Spring bumper
10. Vertical angle
11. Vertical track
12. Bottom aluminium profile with seal
13. Bracket for shaft operator
14. Shaft operator
15. Side seal
16. Top roller carrier
17. Hinges
18. Panel
19. Side roller carriers
20. Footstep handle
21. Cable break safety device

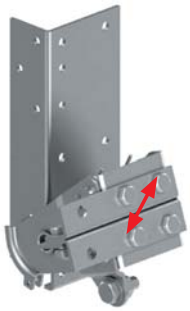
HARDWARE SPECIFICATIONS

Vertical lift,
shaft below



1. Vertical track
2. Vertical angle
3. Shaft
4. Spring break safety device
5. Bracket for remote system
6. Pipe 100 × 100 × 4 mm
7. Drum
8. Top rubber seal
9. Top roller support
10. Hinges
11. Panel
12. Side roller carriers
13. Cable break safety device
14. Bottom aluminium profile
15. Side seal
16. Torsion spring mechanism
17. Top profile with seal
18. End cap
19. Footstep handle

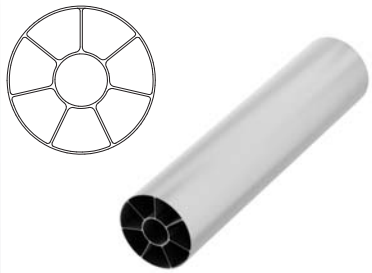
Zink-coated double roller carrier for big doors.



Cable break safety device for prevention of accidental door drop.

Powder coated spring in colour RAL 7004.

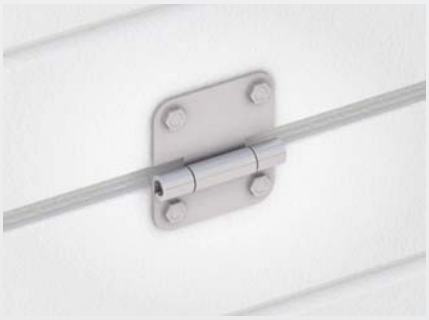
Updated spring break safety device.

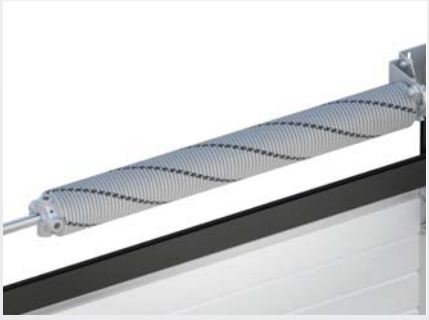


High density spring filler for noise reduction and increased working life performance.

Quick fix system. Position shaft in the bracket and fasten nuts.

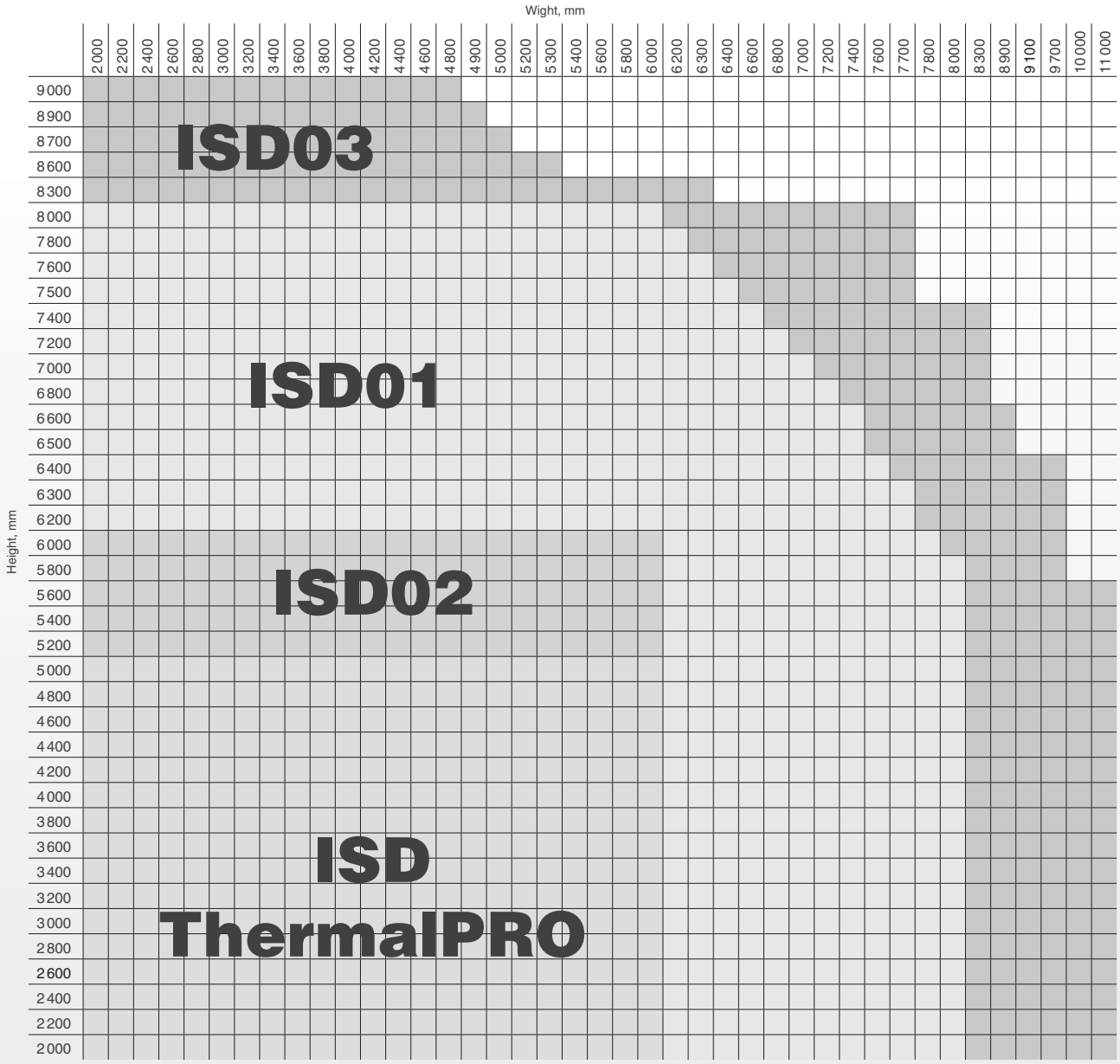
Anti corrosion set





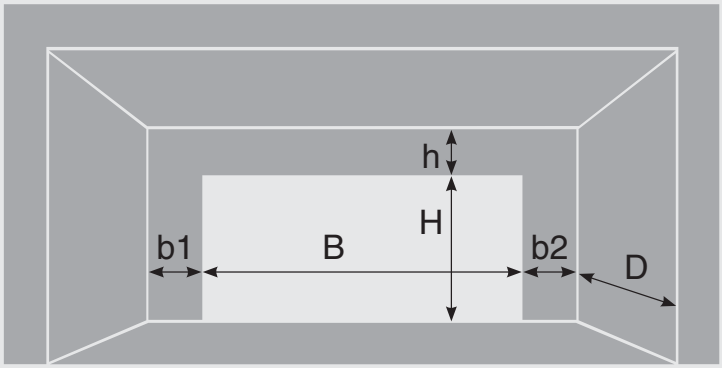
Anti corrosion set: for use in aggressive environment.
Note: Not all the hardware can be made of Stainless Steel. Some hardware can be powder coated like the tracks for example. Our sales department can supply full details.

Door sizes chart
ISD01, ISD02, ISD03, ISD ThermalPRO



The maximum door sizes are approximate and depend on the type of door lift and other parameters. Contact the manager to clarify the possibility of manufacturing a door.

Opening clearances. General specifications



Description:

H — height of opening
(distance from floor to top of opening);

B — width of opening
(distance from left side of opening to right side);

h — torsion spring mechanism for minimum 25 000 cycles operation;

b1 and b2 — distance from edge of opening to side wall;

D — depth of room
(distance from front to back wall).

Description	Value
R-value (ISD01, ISD03), m²·ºC/W*	1.13
R-value (ISD ThermalPro), m²·ºC/W*	2.3
R-value (ISD ThermalPro with heating perimeter), m²·ºC/W*	3.3
Thermal conductivity (ISD01, ISD03), W/m²·ºC (DIN4108)	0.88
Thermal conductivity (ISD ThermalPro), W/m²·ºC (DIN4108)	0.43
Thermal conductivity (ISD ThermalPro with heating perimeter), W/m²·ºC (DIN4108)	0.3
Wind load	2 class (EN12424:2000)
Airtightness	4 class (EN12426:2000)
Watertightness	3 class (EN12425:2000)
Acoustic insulation, dB	<35
Necessary lifting force, kg	to 22.5
Door panel weight (ISD01), kg/m²	10.9
Door panel weight (ISD03), kg/m²	8.8
Door panel weight (ISD ThermalPro), kg/m²	16.3
Panel thickness (ISD01, ISD03), mm	40
Panel thickness (ISD ThermalPro), mm	80
Thickness of steel (ISD01), mm	0.35
Thickness of aluminium (aluminium panel ISD03), mm	0.4
Thickness of steel (ISD ThermalPro), mm	0.35

* For a 4 000 × 4 000 mm door

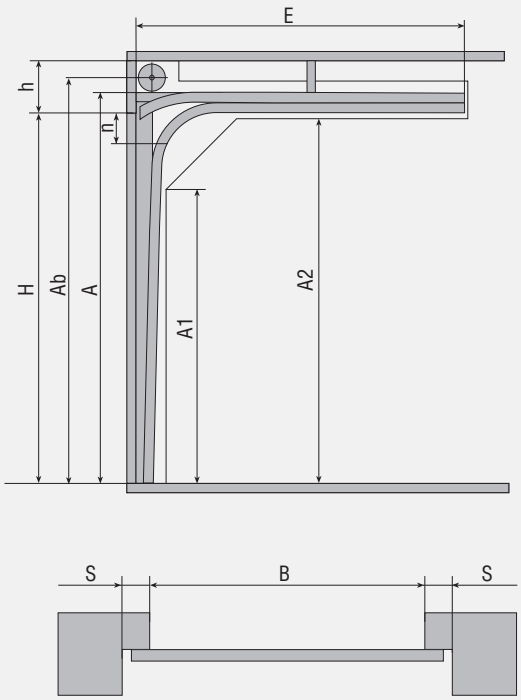
Basic hardware and options

Standard components:
- Torsion spring mechanism for minimum 25 000 cycles operation
- Spring break safety device
- Cable break safety device
- Spring bumpers (if operator on shaft)
- Handle
- Latch
- Technical data
- Stainless steel hardware (for ISD03)

Optional components:
- Torsion spring mechanism for 50 000, 75 000, 100 000 cycles operation
- Windows
- Pass door
- Key lock
- Automation
- Anticorrosion set
- Heating perimeter aluminium profiles and heating cable (optional)

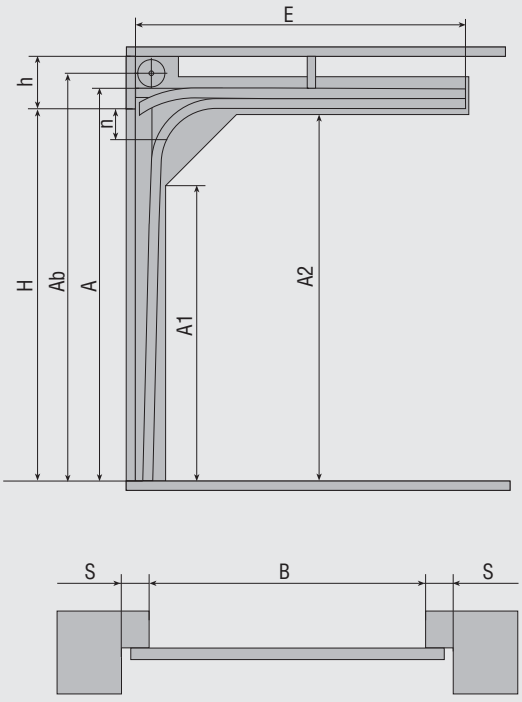
Low lift front drum

Parameter	Description	Space requirements
H, mm	Height of opening	H
h, mm	Headroom height	h ≥ 230 manual (260 mm operator)
B, mm	Opening width	B
A, mm	Vertical angle height	H + 110
Ab, mm	Shaft axis height and drum height	≥ A + 59
A1, mm	Vertical track height	A - 543
A2, mm	Door working space at horizontal angle height	A - 106
E, mm	Door operating space horizontal track length	H + 300
	Points of attachment of the horizontal track to the ceiling (depends of door size)	2/4
Db, mm	Torsion spring mechanism operating space	depends of door size and weight
S, mm	Minimum side room	120



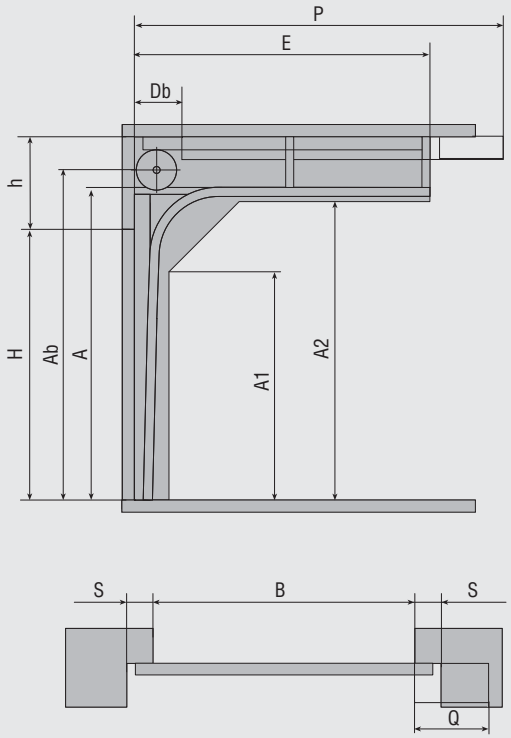
Low lift front drum (RKTN)

Parameter	Description	Space requirements
H, mm	Opening height	H
h, mm	Headroom height	h ≥ 160 manual (200 mm operator)
B, mm	Opening width	B
A, mm	Vertical angle height	H + 54
Ab, mm	Shaft axis height and drum height	≥ A + 59
A1, mm	Vertical track height	A - 552
A2, mm	Door working space at horizontal angle height	A - 115
E, mm	Door operating space horizontal track length	H + 440
	Points of attachment of the horizontal track to the ceiling (depends of door size)	2/4
Db, mm	Torsion spring mechanism operating space	depends of door size and weight
S, mm	Minimum side room	120



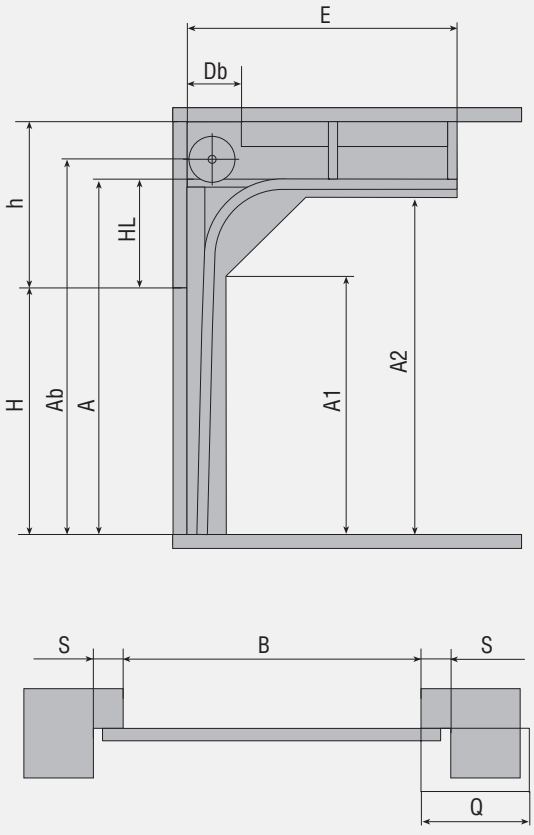
Standard Lift

Parameter	Description	Space requirements
H, mm	Opening height	H
h, mm	Headroom height	R381 h ≥ 420; R305 h ≥ 350
B, mm	Opening width	B
A, mm	Vertical angle height	R381 A — H + 235; R305 A — H + 165
Ab, mm	Shaft axis height and drum height	A + 97
A1, mm	Vertical track height	R381 A — 580; R305 A — 490
A2, mm	Door working space at horizontal angle height	A - 110
E, mm	Door operating space horizontal track length	R381 — H + 200; R305 — H + 250
	Points of attachment of the horizontal track to the ceiling (depends of door size)	2/4
Db, mm	Torsion spring mechanism operating space	depends of door size and weight
S, mm	Minimum side room	120
Q, mm	Side room for shaft when electric operation	300



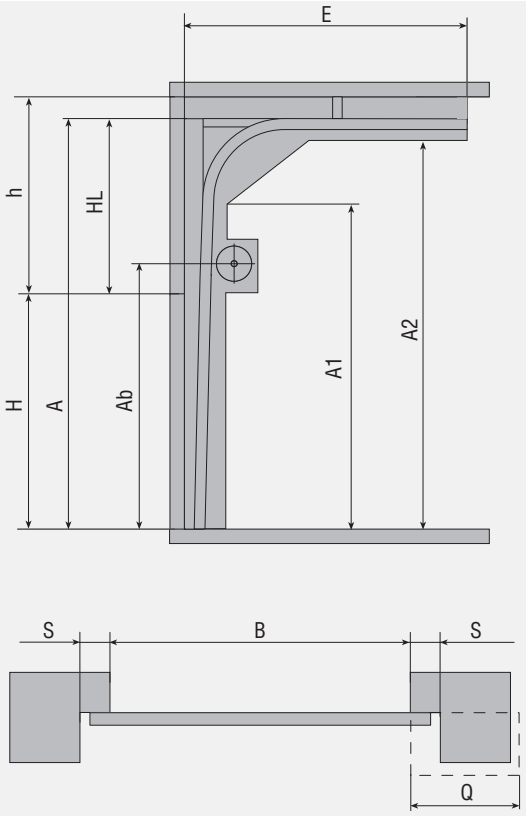
High Lift

Parameter	Description	Space requirements
H, mm	Opening height	H
h, mm	Headroom height	h > 520
B, mm	Opening width	B
HL, mm	Distance from the top of the opening to the horizontal track	h - 330
A, mm	Vertical angle height	H + HL
Ab, mm	Shaft axis height and drum height	A + 86/97
A1, mm	Vertical track height	A - 580
A2, mm	Door working space at horizontal angle height	A - 53
E, mm	Door operating space horizontal track length	H - HL + 470...600
	Points of attachment of the horizontal track to the ceiling (depends of door size)	2/4
Db, mm	Torsion spring mechanism operating space	depends of door size and weight
S, mm	Minimum side room	120
Q, mm	Side room for shaft when electric operation	300



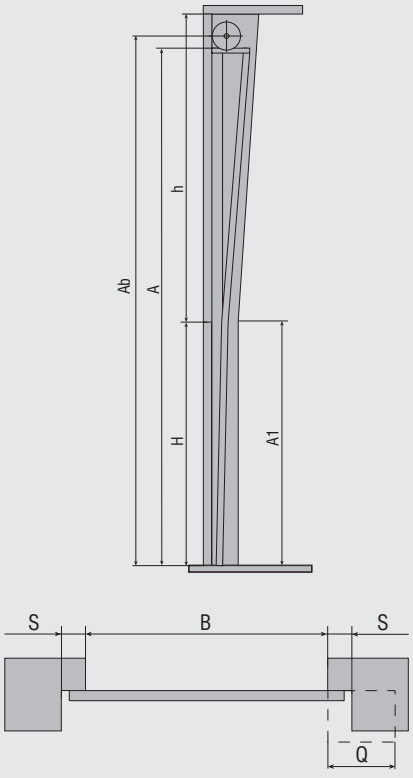
High Lift, Shaft below

Parameter	Description	Space requirements
H, mm	Opening height	H
h, mm	Headroom height	h ≥1600
B, mm	Opening width	B
HL, mm	Distance from the top of the opening to the horizontal track	1330 ≤ HL ≤ h - 150
A, mm	Vertical angle height	H + HL
Ab, mm	Shaft axis height and drum height	H + 400...600 + 280 (tube); H + 1 203 (octagonal shaft)
A1, mm	Vertical track height	A - 580
A2, mm	Door working space at horizontal angle height	A - 53
E, mm	Door operating space horizontal track length	H - HL + 470...600
	Points of attachment of the horizontal track to the ceiling	depends of door size and weight
S, mm	Minimum side room	300 min
Q, mm	Side room for shaft when electric operation	≥ 500



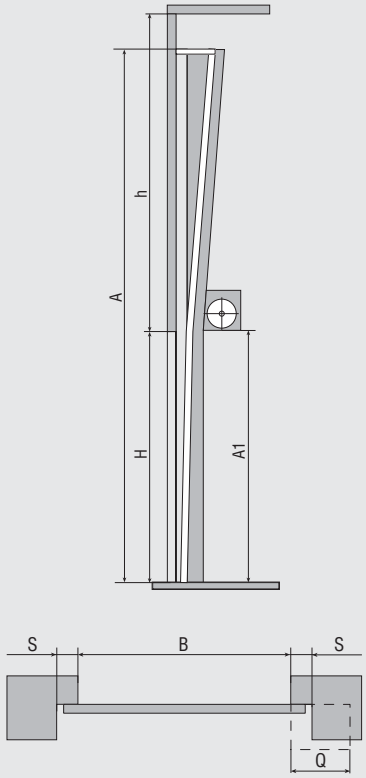
Vertical Lift

Parameter	Description	Space requirements
H, mm	Opening height	H
h, mm	Headroom height	> H + 500
B, mm	Opening width	B
A, mm	Vertical angle height	2H + 120
Ab, mm	Shaft axis height and drum height	A + 166
A1, mm	Vertical track height	H
S, mm	Minimum side room	120
Q, mm	Side room for shaft when electric operation	300



Vertical Lift, Shaft below

Parameter	Description	Space requirements
H, mm	Opening height	H
h, mm	Headroom height	> H + 120
B, mm	Opening width	B
A, mm	Vertical angle height	2H + 120
Ab, mm	Shaft axis height and drum height	H + 680 (tube); H + 1 203 (octagonal shaft)
A1, mm	Vertical track height	H + 850
S, mm	Minimum side room	500 min
Q, mm	Side room for shaft when electric operation	≥ 650



NOTES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