

INDUSTRIAL SECTIONAL DOORS

SECTIONAL DOORS

FOAM PANELS

"Insulated closures"

- **GENERAL INFORMATION**

Description	3
Parts list	6

- **TECHNICAL INFORMATION**

Types of discharge	7
Shutter	12
Sealing	16
Types of operation	17
Operators	18
Operating modes	20

- **FURTHER INFORMATION**

Options	24
Some of our projects	36



- For industrial premises or workshops
- Made-to-measure design suitable for all types of building
- Closes a building
- Manual or motorised operation
- Can be used in complete safety
- Insulated steel or glazed aluminium shutter
- 180 colors to choose from

DESCRIPTION

Limits of use

	OD / OSD	HD / HSD	VD
PASSAGE WIDTH (PW) MIN.	1,500 mm	1,500 mm	1,500 mm
PASSAGE WIDTH (PW) MAX.	6,000 mm*	5,800 mm*	6,000 mm*
PASSAGE HEIGHT (PH) MIN.	1,560 mm	1,560 mm	1,560 mm
PASSAGE HEIGHT (PH) MAX.	5,500 mm	5,000 mm	4,500 mm

* For raised panels and single-groove shutters → PW max. = 5,000 mm

Types of discharge

- **Overhead discharge (OD):** Overhead height (OH) min. = 450 mm, for the manual or motorised version.
- **Overhead sloped discharge (OSD):** Overhead height (OH) min. = 460 mm, for the manual or motorised version. The maximum angle for an overhead sloped discharge is 15° or 26%. The minimum angle for an overhead sloped discharge is 5° or 3%.
- **High discharge / high sloped discharge (HD / HSD):** Overhead height (OH) min. = 600 mm, for the manual or motorised version and OH max. = 3,250 mm. The maximum angle for an overhead sloped discharge is 15° or 26%. The minimum angle for an overhead sloped discharge is 5° or 3%.
- **Vertical discharge (VD):** Overhead height (OH) min. = PH + 420 mm, for the manual or motorised version. Max. PH = 4,500 mm.



All our doors comply with the requirements of designated standard EN 13241+A2



For lower overhead heights, a false header (cladding) is available.

Shutter

INSULATED SHUTTERS:

- **Double-sided steel panels with finger-guard joint (FG).**
- **Outer side finish:**
 - Grooved woodgrain, Raised panel woodgrain, Smooth, Woodgrain, Mono grooved smooth and woodgrain, and Micro grooved smooth and textured without groove and high groove.
- **Inner side finish:**
 - Grooved Stucco (orange peel) white.
- **Panel thickness:**
 - 40 mm.
- **Insulation:**
 - Panel U-value: 0.51W/m²K.
 - Polyurethane foam (CFC-free).
- **Panel protection:**
 - Galvanised using the Sendzimir process.
 - 10-micron polyester primer.
 - 25-micron polyester lacquer (White).
 - UV-resistant protective film on all oak panels.
- **Finishes:**
 - White, 9006 (micro-grooved), 7016 (smooth and grooved), Textured 7016 (without grooves) or 180 RAL to choose from (optional).
- **Locking system:**
 - Side lock (optional lock).
- **Wind resistance classification (EN 13241 + A2):**
 - Industrial sectional without wicket door: Class 2 to 4, depending on dimensions.
 - Industrial sectional with wicket door: Class 2.



Compensation and guides

- **Guides:**

- Galvanized steel vertical rails (Z275).
- Galvanized steel horizontal rails (Z275).
- Nylon rollers with ball bearings.
- Door driven by 2 Ø4 mm cables (aviation type 6x19 with metal core).

- **Compensation system:**

- Full or hollow galvanized grooved steel shaft Ø25.4 mm.
- From 1 to 4 springs (internal diameter Ø95 mm or Ø152 mm) 25,000 cycles.
- Each spring is fitted with an anti-fall guard (EN 13241+A2).
- Attachment to the header.



All our industrial doors are fitted with anti-fall guards, cables and springs (EN 13241+A2)

Sealing

- **2 Lip seal**, on vertical rails.
- **1 Lip seal** on the header (if Overhead Discharge or Overhead sloped discharge).
- **1 Double Lip seal**, under bottom panel.

Types of operation

- **Manual operation** by direct pull or winch.
- **Motorised operation** (at shaft end) by Industrial operator or "OP'DRIVE 3.0 operator".



Operating modes

- **Sustained pressure operation:**

Control device that requires continuous manual operation to perform a manoeuvre on the door (up, stop, down).

- **Pulse operation for ascent and sustained pressure operation for descent:**

This type of operation corresponds to the former mixed operation of the French standard NFP 25362; it is related to pulse operation in the current EN 13241+ A2 standard.

- **Pulse operation:**

Control device that requires a brief manual action to initiate movement: open, stop or close.

- **Automatic operation:**

The door moves without any deliberate manual action (time delay or magnetic loop that triggers movement, for example).

Two additional factors must be taken into consideration:

- The user: trained or untrained
- The installation site: whether or not it is in a public area.

The two above points determine the safety protocol to be followed.



A user is considered to have been "trained" if the installer has given them instructions on how to use the product. The designated standard EN 13241 + A2 requires that a user guide and a maintenance logbook be provided with each installation.

- **Standard:**

All our doors have been inspected by a notified body and are CE marked (EN 13241+A2).

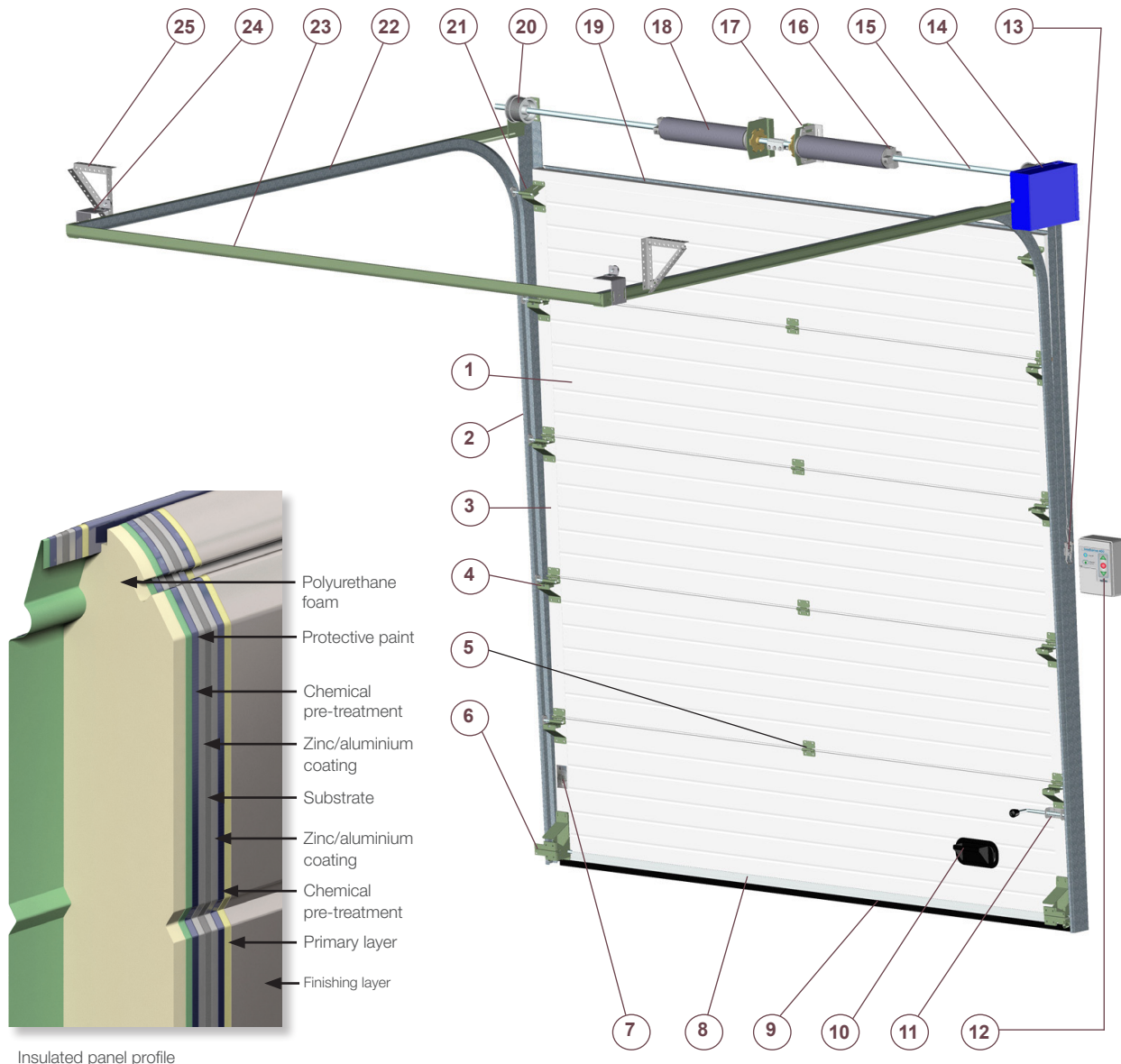
Options

- Wicket doors, windows, colours (180 RAL), locks, ventilation grilles, signage, etc.
- False header and false reservations (cladding).
- Glazed panels for insulated industrial sectional doors.



PARTS LIST

Industrial Sectional Door



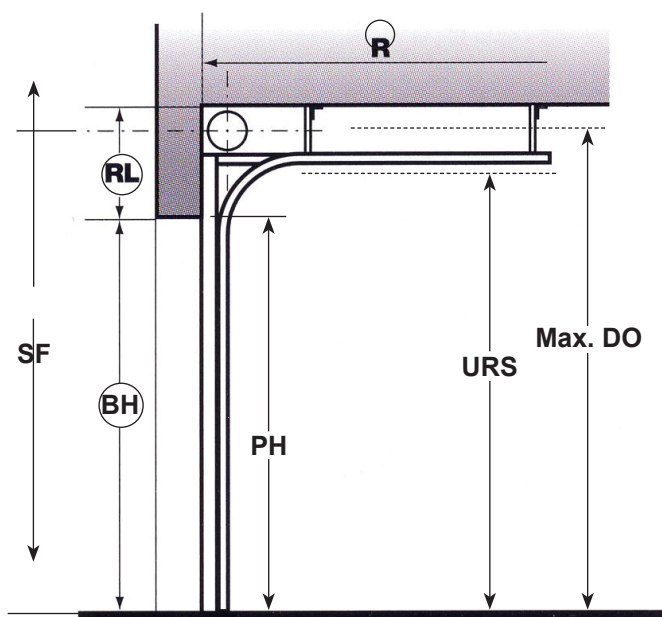
- 1. Insulated double-wall panels with finger guard
- 2. Vertical rail
- 3. Edged column
- 4. Lateral hinge
- 5. Intermediate hinge
- 6. Cable anti-fall guard
- 7. CE Label
- 8. Profile Bottom door seal
- 9. Bottom seal
- 10. Foot-operated pedal
- 11. Side lock
- 12. Control box or control unit
- 13. Manual repair maneuver device (if OP'DRIVE 3.0 operator)

- 14. "OP'DRIVE 3.0" operator or Industrial operator
- 15. Solid or hollow grooved shaft
- 16. Spindle
- 17. Spring anti-fall guard
- 18. Spring
- 19. U-shaped top cap with lip seal
- 20. Drum
- 21. Top roller support
- 22. Horizontal rail
- 23. Spacer back bar
- 24. Rubber stop (OP'DRIVE 3.0 operator) or spring stop (Industrial operator)
- 25. Hanger for horizontal rails (corners)



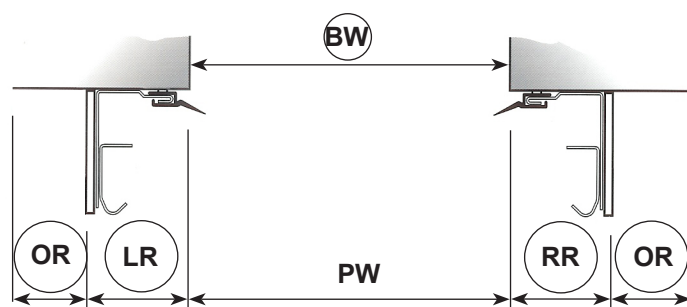
TYPES OF DISCHARGE

Overhead discharge (OD)



BW = Bay width
BH = Bay height
PW = Passage width
PH = Passage height
OH = Overhead height
SF = Shaft/floor distance

DO = Max. height with door open
URS = Dimensions under roller supports
LR = Left reservation
RR = Right reservation
OR = Winch or operator reservation
C = Overhead clearance



If the OH or LR or RR are not large enough, a false header or false reservations (cladding) can be fitted.



The dimensions in green are those we need to prepare a quote or order.



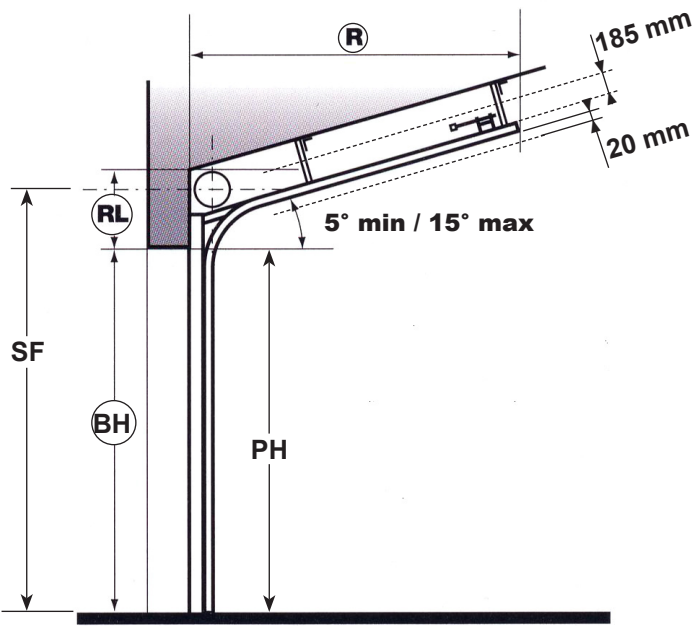
Installation layouts are always illustrated from the inside.

	MANUAL, WINCH OR MOTORISED DOOR
MIN. OVERHEAD HEIGHT (OH)	450 mm
MIN. RIGHT (RR) OR LEFT (LR) RESERVATION	100 mm (at vertical rails) 130 mm (at compensation line)
WINCH OR OPERATOR RESERVATION (OR)	120 mm
PASSAGE HEIGHT (PH)	PH = BH
DIMENSIONS UNDER ROLLER SUPPORTS (URS)	PH + 184 mm
DOOR OPEN (DO)	PH + 442 mm
SHAFT/FLOOR DISTANCE (SF)	PH + 341 mm

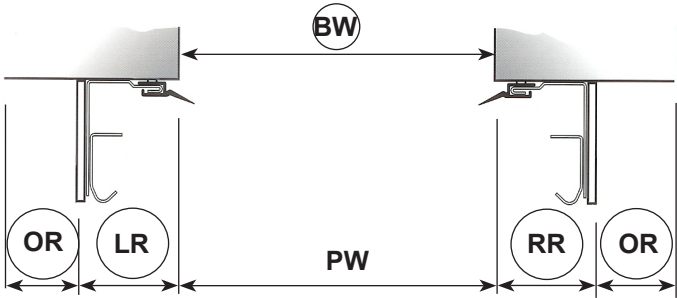
	MANUAL DOOR	WINCH OR MOTORISED DOOR
CLEARANCE (C)	PH + 636 mm	PH + 856 mm (winch or industrial operator) PH + 636 mm (OP'DRIVE 3.0 operator)



Overhead sloped discharge (OSL)



- BW = Bay width
- BH = Bay height
- PW = Passage width
- PH = Passage height
- OH = Overhead height
- SF = Shaft/floor distance
- LR = Left reservation
- RR = Right reservation
- OR = Winch or operator reservation
- C = Overhead clearance



If the OH or LR or RR are not large enough, a false header or false reservations (cladding) can be fitted.



The dimensions in green are those we need to prepare a quote or order.



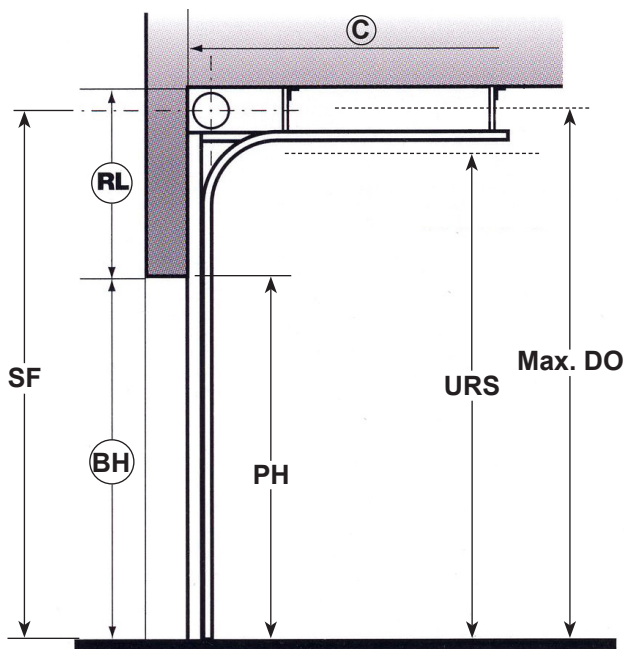
Installation layouts are always illustrated from the inside.

	MANUAL, WINCH OR MOTORISED DOOR	
Min. Overhead Height (OH)	If $PH \leq 3,680 \text{ mm}$ ► $OH = 460 \text{ mm}$ If $3,680 \text{ mm} \leq PH \leq 5,500 \text{ mm}$ ► $OH = 490 \text{ mm}$	
Min. Right (RR) or Left (LR) Reservation	100 mm (at vertical rails) 130 mm (at compensation line)	
Winch or Operator Reservation (OR)	120 mm	
Passage Height (PH)	$PH = BH$	
Shaft/Floor Distance (SF)	$PH + 381 \text{ mm}$	

	MANUAL DOOR	WINCH OR MOTORISED DOOR
Clearance (C)	$PH + 636 \text{ mm}$	$PH + 856 \text{ mm}$ (winch or industrial operator) $PH + 636 \text{ mm}$ (OP'DRIVE 3.0 operator)

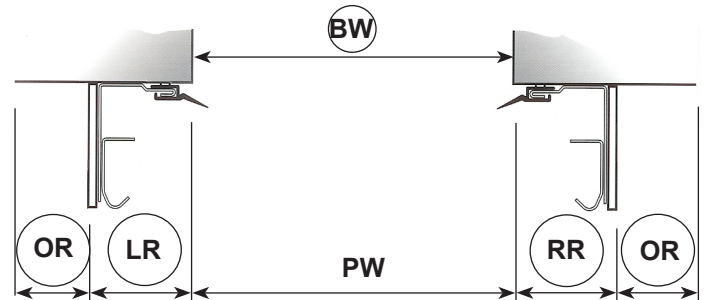


High discharge



BW = Bay width
BH = Bay height
PW = Passage height
PH = Passage height
OH = Overhead height
SF = Shaft/floor distance

DO = Max. height with door open
URS = Dimensions under roller supports
LR = Left reservation
RR = Right reservation
OR = Winch or operator reservation
C = Overhead clearance



If the OH or LR or RR are not large enough, a false header or false reservations (cladding) can be fitted.



The dimensions in green are those we need to prepare a quote or order.



Installation layouts are always illustrated from the inside.



The overhead height used to calculate the rails and springs must not exceed the passage height
 Max. OH = 3,250 mm

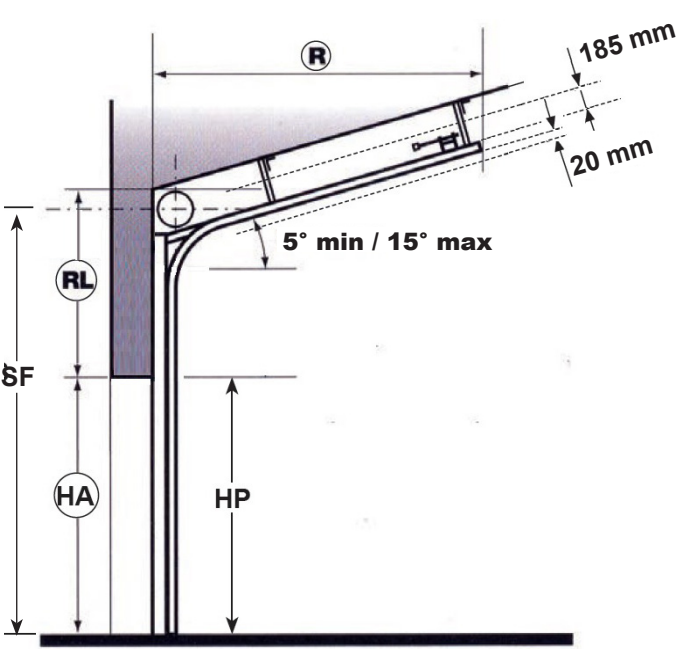
	MANUAL, WINCH OR MOTORISED DOOR
Min. OVERHEAD HEIGHT (OH)	Min. 600 mm Max. 3,250 mm
Min. RIGHT (RR) OR LEFT (LR) RESERVATION	100 mm (at vertical rails) 130 mm (at compensation line)
WINCH OR OPERATOR RESERVATION (OR)	120 mm
PASSAGE HEIGHT (PH)	PH = BH

	URS	DO	C	SF
PH ≤ 5,000 mm AND OH ≤ 1,640 mm	PH + OH - 290 mm	PH + OH - 32 mm	1 PH - OH + 1,170 mm	PH + OH - 99 mm
			2 PH - OH + 1,410 mm	
PH ≤ 5,000 mm AND 1,641 ≤ OH ≤ 3,250 mm	PH + OH - 330 mm	PH + OH - 72 mm	1 PH - OH + 1,210 mm	PH + OH - 123 mm
			2 PH - OH + 1,450 mm	
5,001 ≤ PH ≤ 5,500 mm	PH + OH - 380 mm	PH + OH - 122 mm	1 PH - OH + 1,260 mm	PH + OH - 148 mm
			2 PH - OH + 1,500 mm	

- 1 OP'DRIVE 3.0 manual or motorised
 2 Industrial operator or winch

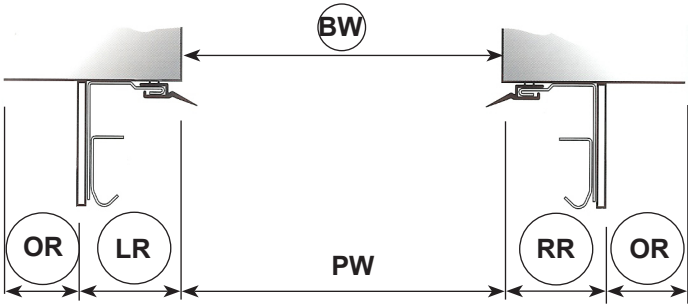


High sloped discharge



BW = Bay width
BH = Bay height
PW = Passage height
PH = Passage height
OH = Overhead height
SF = Shaft/floor distance

DO = Max. height with door open
URS = Dimensions under roller supports
LR = Left reservation
RR = Right reservation
OR = Winch or operator reservation
C = Overhead clearance



If the OH or LR or RR are not large enough, a false header or false reservations (cladding) can be fitted.

The dimensions in green are those we need to prepare a quote or order.

Installation layouts are always illustrated from the inside.

The overhead height used to calculate the rails and springs must not exceed the passage height
Max. OH = 3,250 mm

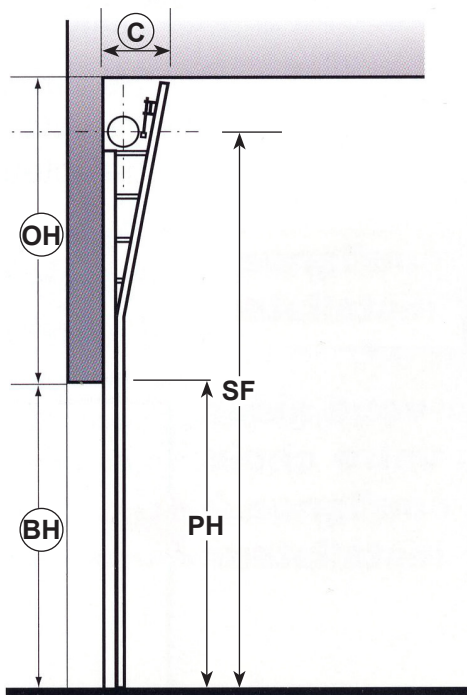
	MANUAL, WINCH OR MOTORISED DOOR
MIN. OVERHEAD HEIGHT (OH)	Min. 600 mm Max. 3,250 mm
MIN. RIGHT (RR) OR LEFT (LR) RESERVATION	100 mm (at vertical rails) 130 mm (at compensation line)
WINCH OR OPERATOR RESERVATION (OR)	120 mm
PASSAGE HEIGHT (PH)	PH = BH

	C	SF
PH ≤ 5,000 mm AND OH ≤ 1,640 mm	1 PH - OH + 1,220 mm	PH + OH - 99 mm
	2 PH - OH + 1,460 mm	
PH ≤ 5,000 mm AND 1,641 ≤ OH ≤ 3,250 mm	1 PH - OH + 1,260 mm	PH + OH - 123 mm
	2 PH - OH + 1,500 mm	
5,001 ≤ PH ≤ 5,500 mm	1 PH - OH + 1,310 mm	PH + OH - 148 mm
	2 PH - OH + 1,550 mm	

1 OP'DRIVE 3.0 manual or motorised
2 Industrial operator or winch



Vertical discharge (VD)

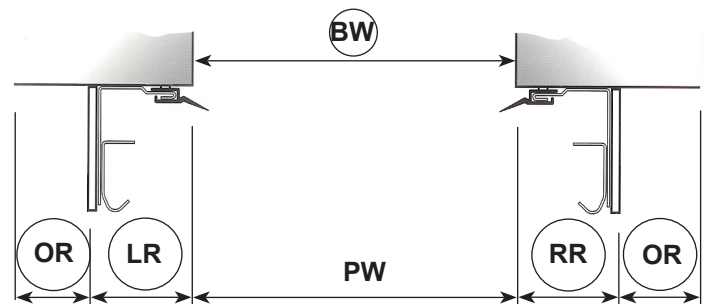


BW = Bay width
BH = Bay height
PW = Passage width
PH = Passage height
OH = Overhead height

SF = Shaft/floor distance
LR = Left reservation
RR = Right reservation
OR = Winch or operator reservation
C = Overhead clearance



Max. PH = 4,500 mm



If the OH or LR or RR are not large enough, a false header or false reservations (cladding) can be fitted.



The dimensions in green are those we need to prepare a quote or order.



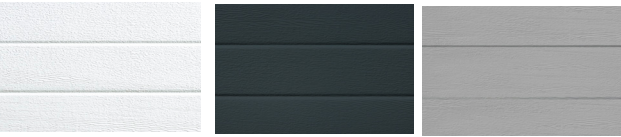

Installation layouts are always illustrated from the inside.

	MANUAL OR MOTORISED DOOR
MIN. OVERHEAD HEIGHT (OH)	PH + 420 mm
MIN. RIGHT (RR) OR LEFT (LR) RESERVATION	100 mm (at vertical rails) 130 mm (at compensation line)
WINCH OR OPERATOR RESERVATION (OR)	120 mm
PASSAGE HEIGHT (PH)	PH = BH with BH ≤ 4,500 mm
SHAFT/FLOOR DISTANCE (SF)	If PH ≤ 3,300 mm ► SF = 2 x PH + 297 mm If 3,301 ≤ PH ≤ 4,500 mm ► SF = 2 x PH + 322 mm
CLEARANCE (C)	PH x 0.06 + 170 mm



SHUTTER

Grooved FG (Finger-Guard) panels

<ul style="list-style-type: none">• White, 7016 and 9006 as standard or 180 Ral as an option<ul style="list-style-type: none">• Grooved woodgrain exterior finish in white, 7016, 9006 or 180 Ral as an option.• Stucco grooved (orange peel) interior finish, White only.• Panel heights: 500 and 610 mm.	 <div>WhiteRAL 7016RAL 9006</div>
<ul style="list-style-type: none">• Medium oak<ul style="list-style-type: none">• Medium oak grooved woodgrain exterior finish.• Stucco grooved (orange peel) interior finish, White only.• Panel heights: 500 and 610 mm.• Panel with lacquered exterior.	 <div>Medium oak</div>



You can combine the 500 mm and 610 mm panels to achieve your desired door height.





To make installation easier, the panels are pre-drilled.



You can choose any Ral, but its interior will always be white.

FG (Finger-guard) raised panels

<ul style="list-style-type: none">• Standard white or 180 Ral as an option<ul style="list-style-type: none">• Exterior finish: White woodgrain or 180 Ral as an option.• Stucco grooved (orange peel) interior finish, White only• Panel heights: 500 mm	 <div>White</div>
<ul style="list-style-type: none">• Medium oak<ul style="list-style-type: none">• Medium oak woodgrain exterior finish.• Stucco grooved (orange peel) interior finish, White only• Panel heights: 500 mm	 <div>Medium oak</div>

<ul style="list-style-type: none">• Number of raised panels	
PANEL DIMENSIONS	NUMBER OF RAISED PANELS
$2,000 \leq PW \leq 2,560$	3
$2,560 < PW \leq 3,500$	4
$3,500 < PW \leq 4,000$	5
$4,000 < PW \leq 5,000$	6



For all door heights, the bottom and top of the shutter can be raised with a piece of woodgrain panel.



You can choose any Ral, but its interior will always be white.



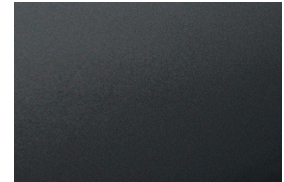
FG (Finger-guard) smooth panels

- **White and 7016 as standard or 180 Ral as an option**
 - Exterior finish: Smooth white or 180 Ral as an option.
 - Stucco grooved (orange peel) interior finish, White only.
 - Panel heights: 500 and 610 mm.



White

- **Textured without groove or high groove**
 - Granular appearance, Ral Textured 7016 as standard.
 - Stucco grooved (orange peel) interior finish, White only.
 - Panel heights: 500 and 610 mm.



Textured 7016 (granular)



If you choose a dark exterior colour (including Textured) for a door that will be exposed to direct sunlight (and in particular used in an unheated room), we strongly recommend using the Omega stiffener kit to limit the bimetal effect.



You can combine the 500 mm and 610 mm panels to achieve your desired door height.



To make installation easier, the panels are pre-drilled.



You can choose any Ral, but its interior will always be white.


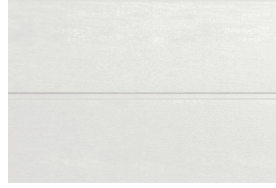

**Available sandblasted paints:**

- Black (100 / 2100 / 2200)
- Blue (2700)
- Grey (2900)
- Green (2500)
- Mars (2525)

Other paints (not sanded) available: Canon blue (2525)



Finger-Guard (FG) single-groove panels

<ul style="list-style-type: none"> • Smooth standard white or 180 Ral as an option <ul style="list-style-type: none"> • Exterior finish: Smooth white or 180 Ral as an option. • Stucco grooved (orange peel) interior finish, White only. • 22 mm-wide central groove. • Panel heights: 500 mm 	
<ul style="list-style-type: none"> • Wood-grained standard white or 180 Ral as an option <ul style="list-style-type: none"> • Exterior finish: White woodgrain or 180 Ral as an option. • Stucco grooved (orange peel) interior finish, White only. • 22 mm-wide central groove. • Panel heights: 500 mm 	
<ul style="list-style-type: none"> • Medium oak <ul style="list-style-type: none"> • Medium oak woodgrain exterior finish. • Stucco grooved (orange peel) interior finish, White only. • 22 mm wide central groove. • Panel heights: 500 mm • Panel with lacquered exterior 	



If PW < 5,000 mm } No possibility of single-grooved panels.
If PH ≥ 3,500 mm }



To make installation easier, the panels are pre-drilled.



You can choose any Ral, but its interior will always be white.



Sandblasted paints available on SMOOTH single-groove panels:

- Black (100 / 2100 / 2200)
- Blue (2700)
- Grey (2900)
- Green (2500)
- Mars (2525)

Other paints (not sanded) available: Canon blue (2525)



FG (Finger-Guard) micro-grooved panels

- **White and 9006 as standard or 180 Ral as an option**

- Smooth micro-grooved white exterior, Ral 9006 or 180 Ral as an option.
- Stucco grooved (orange peel) interior finish, White only.
- Grooves with 16 mm pitch.
- Panel heights: 500 and 610 mm.



RAL 9006



You can combine the 500 mm and 610 mm panels to achieve your desired door height.



To make installation easier, the panels are pre-drilled.



You can choose any Ral, but its interior will always be white.



Sandblasted paints:

- Black (100 / 2100 / 2200)
- Blue (2700)
- Grey (2900)
- Green (2500)
- Mars (2525)

Other paints (not sanded) available: Canon blue (2525)

FG (Finger-guard) woodgrain panels

- **Standard white or 180 Ral as an option**

- Exterior finish: White woodgrain or 180 Ral as an option.
- Stucco grooved (orange peel) interior finish, White only
- Panel heights: 500 and 610 mm.

White



- **Medium oak**

- Medium oak woodgrain exterior finish.
- Stucco grooved (orange peel) interior finish, White only
- Panel heights: 500 and 610 mm.
- Panel with lacquered exterior.

Medium oak



You can combine the 500 mm and 610 mm panels to achieve your desired door height.



To make installation easier, the panels are pre-drilled.



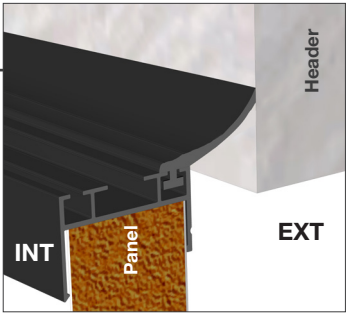
You can choose any Ral, but its interior will always be white.

SEALING

- Sealing is ensured by 4 types of joints:

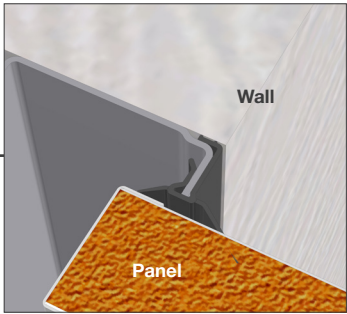
INSULATION
PROTECTION
ELASTICITY
RESISTANCE

01
HEADER SEAL



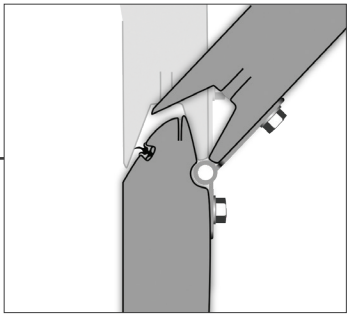
Exterior view

02
VERTICAL SEAL



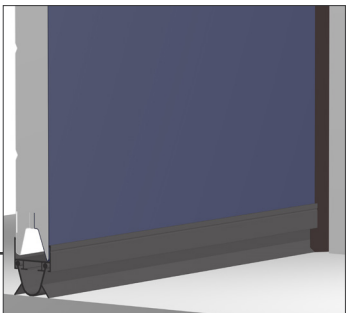
Lip seal (on vertical rails)

03
INTERMEDIATE SEAL

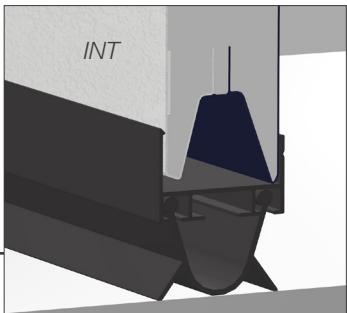


Finger guard joint

04
BOTTOM SEAL



Double lip seal (bottom panel)



Bottom seal door profile with unequal flanges

* For door without wicket door



TYPES OF OPERATION

MANOEUVRES	LIMITS OF USE
DIRECT PULL	<ul style="list-style-type: none"> Max. shutter surface = 16 m² Max. PH = 4,000 mm
CHAIN WINCH	<ul style="list-style-type: none"> Overhead discharge, High discharge or Vertical discharge: winch 1/3 Doors with PW > 5,000 mm: winch 1/3 Max. shutter surface = 25 m²
MOTORISED OPERATOR	<ul style="list-style-type: none"> OP'DRIVE 3.0 operator (150 cycles/day*, max. shutter surface = 25 m² or PW max. = 5,000 mm and PH max. = 5,000 mm) INDUSTRIAL 230V operator (40 cycles/day*, max. shutter surface = 25 m²) INDUSTRIAL 400V operator (100 cycles/day*, max. shutter surface = 33 m²)

*1 cycle = 1 ascent + 1 descent - Non-consecutive cycles



All our doors are CE marked, in compliance with designated standard EN 13241+A2.

They can be operated manually or by operator. Fitting a motorised operator to a manually operated door is the sole responsibility of the installer.

OP' DRIVE 3.0 OPERATOR	CHAIN WINCH 1/3	230V OR 400V INDUSTRIAL OPERATOR
<p>OPERATOR</p> <p>CONTROL BOX</p>	<p>CHAIN WINCH 1/3</p>	<p>Pull cord release</p> <p>Chain winch release</p> <p>Chain winch release</p>



OPERATORS

Our quotation service automatically determines the optimum operator based on the characteristics of the door and your requirements.

• Technical characteristics of operators:

	TRIPLE-PHASE INDUSTRIAL OPERATOR	SINGLE-PHASE INDUSTRIAL OPERATOR	OP' DRIVE 3.0 OPERATOR*
VOLTAGE	400V	230 V	24V**
POWER SUPPLY (OPERATOR OR BOX)	4 wires***	3 wires	2 wires
OPERATOR POWER	0.5 Kw	0.5 Kw	54 w
PROTECTION CLASS OPERATOR	IP 54	IP 54	IP 30
CURRENT	2 A	3.45 A	6 A
OPERATOR RELEASE SYSTEM	Yes	Yes	Yes

* The OP'DRIVE 3.0 operator must be used with its 230 V control box.

** Low-voltage direct current 24V.

*** 5 wires if flashing lights (230V).

• Technical specifications of the OP'DRIVE 3.0 operator control box:



- **Integrated operating buttons** on the front panel with indicator light.

LCD display inside the box with drop-down setting buttons (rotating codes).

Setting examples: Teach-in, operating modes, re-closing delay, remote control programming, error reading, cycle counter reading and deletion.

- **Force management**
- **Voltage:** Single-phase 230 V
- **Power supply :** 2 wires
- **Box housing:** class II double insulated
- **Max. power:** 750 W
- **Protection class:** IP 56
- **230 V, 500 W output:** area lighting (optional)
- **24V, 15W output:** traffic light (optional) with 3 sec. advance warning
- **Transmitter/receiver** cell connection terminal block (optional)
- Additional **controller terminal block**
- Emergency battery **connection terminal block (optional)**
- **Operating modes:** sustained pressure, mixed, pulse, automatic ***, partial opening.

*** With 2 sets of compulsory cells



The box is fitted as standard with a cycle counter, a remote control receiver (transmitter optional) and an integrated battery charger (battery optional).



Motor operating principle "OP'DRIVE 3.0"

- **Sustained pressure:**
 - + Pre-programmed version, automatic-learning required for commissioning.
 - + Operation with integrated anti-crushing and anti-lifting safety devices.
- **Pulse operation for ascent / Sustained pressure for descent:**
 - + Automatic learning of end positions and operating forces.
 - + Automatic control and management of door forces during use (anti-lift, anti-crush).
 - + Partial opening function (adjustable height).
 - + Automatic search for end positions in case of manual door release.
 - + Automatic door slow-down at the end of the movement.
 - + LED information on front panel or error message on LCD display.
- **Pulse:**
 - + Automatic reopening in case of obstruction while closing.
 - + Cell self-test functions.
- **Automatic:**
 - + Adjustable closing time delay.
 - + 3 automatic operating modes:
 - **Sequential Mode:** Although closing is timed, 1 pulse is enough to control movement (open, stop or close).
 - **Auto Mode:** Priority is given to opening and no pulse can interrupt the opening command (except the stop button on the front panel).
 - **Block Mode:** Priority is given to opening and no pulse can interrupt the opening command (except the stop button on the front panel). Automatic reduction of the closing delay when passing in front of the safety cells.
 - + **2 sets of compulsory bottom cells** (EN 13241+A2).



In pulse or automatic operation mode, OP'DRIVE 3.0 manages forces automatically without the need for a safety edge..



2 sets of bottom cells are systematically supplied for pulse control in public areas, out of sight of the door or in automatic mode (EN 13241+A2).

Troubleshooting

The operator release lever, factory-fitted on the vertical rail, allows the door to be opened immediately with a direct pull in case of a power cut, for example.



The battery option allows the door to operate at reduced speed for 15 to 20 cycles in the absence of mains power. During normal door operation, the battery charge is maintained automatically by the control box (this operator's battery is housed in the control box).



OPERATING MODES

Sustained pressure (trained users)

This operating mode can be used for all door locations. It requires a control unit that allows constant user controle (continuous action on the controller and within sight of closing).



Please note: In public areas, the control unit must be customised, such as with a key box.

Necessary safeguards

OUTSIDE PUBLIC AREAS / IN PUBLIC AREAS (WITHIN SIGHT OF DOOR)	
INDUSTRIAL OR COMMERCIAL PREMISES OR GARAGES	<ul style="list-style-type: none">No safety device required

CONTROL UNIT	
BCA	Wall-mounted key switch box
BCE	Flush-mounted key switch box
BBA2	2-button box
BBA3i	Smart 3-button box



For more technical information, refer to the "Operators & Accessories" chapter and the "Control Accessories" section.



Comment: Although the front of the OP'DRIVE 3.0 box is fitted with control buttons, it is strongly recommended that you use a button box or key box for industrial use.



Pulse on ascent / sustained pressure on descent (trained users) _____

This operating mode allows opening by pulse operation and closing by sustained pressure (formerly mixed operation under French standard NFP 25362). This mode of operation is similar to pulse mode in standard EN 13241+A2.



Please note: In public areas, the control unit must be customised, such as with a key box.

• Necessary safeguards

	INDUSTRIAL OPERATOR	
	OUTSIDE PUBLIC AREAS	IN PUBLIC AREAS
INDUSTRIAL OR COMMERCIAL PREMISES OR GARAGES	<ul style="list-style-type: none"> Smart 3-button box (Pic 53 BP) 	<ul style="list-style-type: none"> Box adapted to operator 1 set of top cells *

*If overhead discharge with clearance height < 2,900 mm

	OP' DRIVE 3.0 OPERATOR	
	OUTSIDE PUBLIC AREAS	IN PUBLIC AREAS
INDUSTRIAL OR COMMERCIAL PREMISES OR GARAGES	<ul style="list-style-type: none"> OP' DRIVE 3.0 box ** 	

** See the operating modes of the OP'DRIVE 3.0 control box (p.19)



OP'DRIVE 3.0 automatically manages forces and has an anti-lift and anti-crush function.

CONTROL UNIT	
BCA	Wall-mounted key switch box
BCE	Flush-mounted key switch box
BBAS	Box with stop button
BBA3	Wall-mounted 3-button box
BBA3i	Smart 3-button box



For more technical information, refer to the "Operators & Accessories" chapter and the "Control Accessories" section.



Pulse (trained users)

In pulse operation mode, the user is required to perform a brief action on the controller which triggers the movement of the shutter: open or stop or close.



Precautions when working;
2 flashing spots + compulsory road markings in accordance with the French decree of 21 December 1993.

• Necessary safeguards

	INDUSTRIAL OPERATOR		
	OUTSIDE PUBLIC AREAS	IN PUBLIC AREAS	
		WITHIN SIGHT OF DOOR	OUT OF SIGHT OF DOOR
INDUSTRIAL OR COMMERCIAL PREMISES OR GARAGES	<ul style="list-style-type: none"> Box adapted to operator Safety edge 	<ul style="list-style-type: none"> Box adapted to operator Safety edge 1 set of top cells* 	<ul style="list-style-type: none"> Box adapted to operator Safety edge 1 set of top cells* 2 sets of bottom cells

* If overhead discharge with passage height < 2,900 mm

	OP' DRIVE 3.0 OPERATOR			
	OUTSIDE PUBLIC AREAS		IN PUBLIC AREAS	
	WITHIN SIGHT OF DOOR	OUT OF SIGHT OF DOOR	WITHIN SIGHT OF DOOR	OUT OF SIGHT OF DOOR
INDUSTRIAL OR COMMERCIAL PREMISES OR GARAGES	<ul style="list-style-type: none"> OP'DRIVE 3.0 box ** 		<ul style="list-style-type: none"> OP' DRIVE 3.0 box ** 	<ul style="list-style-type: none"> OP' DRIVE 3.0 box ** 2 sets of bottom cells

** See the operating modes of the OP'DRIVE 3.0 control box (p.19)



OP'DRIVE 3.0 manages forces automatically without a safety edge

CONTROL UNIT	
BBAI	Wall-mounted pulse button box
BCA	Wall-mounted key switch box
BCE	Flush-mounted key switch box
BBA3	Wall-mounted 3-button box
Receiver	Separate 2- or 4-function receiver
CCA	Wall-mounted, wired key pad
Transmitter	4-function transmitter



For more technical information, refer to the "Operators & Accessories" chapter and the "Control Accessories" section.



Automatic (trained or untrained users)

In automatic operating mode, the shutter moves automatically. It can be used for commercial, industrial and garage premises, but is not suitable for houses.



Precautions when working;
2 flashing spots + compulsory road markings in accordance with the French decree of 21 December 1993.



Precautions for automatically-operated doors in multi-family residences:

Collective residential buildings must meet specific requirements (acoustics/traffic, etc.) not covered by the designated standard NF 13241 + A2. These specific requirements are not included in our quotes.

In the case of a collective residence, signage and lighting (area lighting + flashing lights with 2 seconds warning + ground marking) are legally required (Decree of 09 August 2006 relating to the application of Article R.125-3-1 of the Construction and Housing Code).

• Necessary safeguards

INDUSTRIAL OPERATOR		
	OUTSIDE PUBLIC AREAS	IN PUBLIC AREAS
INDUSTRIAL OR COMMERCIAL PREMISES OR GARAGES	<ul style="list-style-type: none"> Box adapted to operator Safety edge 2 sets of bottom cells 	<ul style="list-style-type: none"> Box adapted to operator Safety edge 2 sets of bottom cells 1 set of top cells for overhead discharge with a passage height < 2,900 mm

OP' DRIVE 3.0 OPERATOR		
	OUTSIDE PUBLIC AREAS	IN PUBLIC AREAS
INDUSTRIAL OR COMMERCIAL PREMISES OR GARAGES	<ul style="list-style-type: none"> OP' DRIVE 3.0 box* 2 sets of bottom cells 	<ul style="list-style-type: none"> OP' DRIVE 3.0 box* 2 sets of bottom cells

* See the operating modes of the OP'DRIVE 3.0 control box (p.19)



OP'DRIVE 3.0 manages forces automatically without a safety edge

CONTROL UNIT	
BBAI	Wall-mounted pulse button box
BCA	Wall-mounted key switch box
BCE	Flush-mounted key switch box
TR	Road tube
Transmitter	4-function transmitter
CCA	Wall-mounted, wired key pad
Receiver	Separate 2- or 4-function receiver
BM	Magnetic Loop



For more technical information, refer to the "Operators & Accessories" chapter and the "Control Accessories" section.

OPTIONS

Wicket door

The LA TOULOUSAINE wicket door is designed and manufactured to ensure easy pedestrian access for all industrial sectional doors except those with a ‘single-grooved’ ‘raised’ or ‘glazed’ shutter.

• SIZE OF INDUSTRIAL DOOR WITH WICKET DOOR

MIN. PW	2,400 mm
MAX. PW	5,000 mm
MIN. PH	2,200 mm
MAX. PH	5,000 mm



PW = Passage width
PH = Passage height



Wind-resistance classification:
Class 2 (EN 13241+A2)

• OPERATORS

- OP'DRIVE 3.0 (sustained pressure, mixed, pulse and automatic)
- Industrial operator (sustained pressure, mixed)

• PARTS LIST



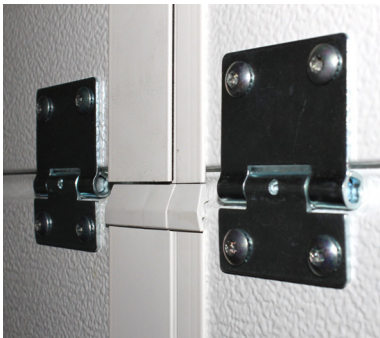
Door closure with integrated locking system



Door closure with integrated locking system



Concealed hinge



Galvanised steel hinges



There are two thresholds:
- Default: 60 mm / Optional: 35 mm reduced threshold

- 1. Door closure
- 2. Concealed hinges
- 3. Multi-point lock
- 4. Centralizer

- 5. Threshold
- 6. Handle
- 7. Hinge

OPTIONS

REDUCED THRESHOLD:



A new scored bottom seal.

Available for RT200, RE100 and Grande Villa.
Can be used with the L, XL and XXL 900 wicket doors.

2 colors: Black and white.
All bottom seals are assembled on the threshold.

New bottom seal

Cutting the lip can solve various issues:

- Water tightness
- Protection of people and property
- Protection of the lower part of the threshold stiffener.

Slide or clip the seal.
The lips can compensate for ground defects of a few millimeters.

Thickness of compressed seal: **5 mm → Reduced 35 mm threshold.**

INFO

- The reduced threshold is not PRM (persons with reduced mobility) compatible.
- We keep both threshold heights. 60 and reduced (35 mm). By default, we quote a threshold of 60 mm.
- New designs for doors with a reduced threshold

CAUTION

- Thresholds on all doors equipped with a reduced threshold are black, except lacquered doors!



Wicket door

• Lock



- **Multi-point lock**
1 point per wicket door panel
- **Stainless-steel effect aluminum handle**



Centralisers



Centering strike

- The hinged part is fitted with two **centralisers** to ensure it is always correctly **repositioned**.
- These **centering devices** ensure the multi-point lock is properly **locked**.



The external lever handle is always reduced

• SAFETY SWITCHES



Radio **switch** (wireless)



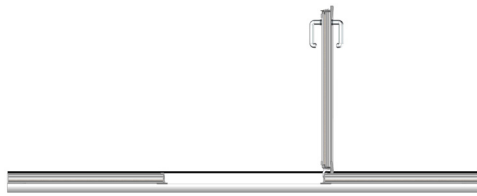
Micro Switch (with built-in wire)

- Power-operated doors with wicket door are equipped with:
 - a surface-mounted wireless **switch** for doors fitted with an **OP'DRIVE 3.0 operator**.
 - a **micro-switch** with built-in wire, placed on the edge of the wicket door, for doors fitted with an **Industrial operator**.

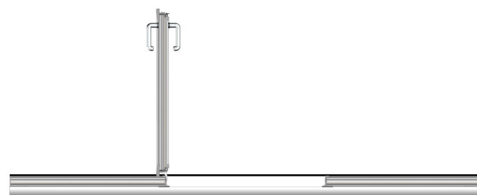


Wicket door

• DIRECTION OF OPENING (ALWAYS OUTWARDS)



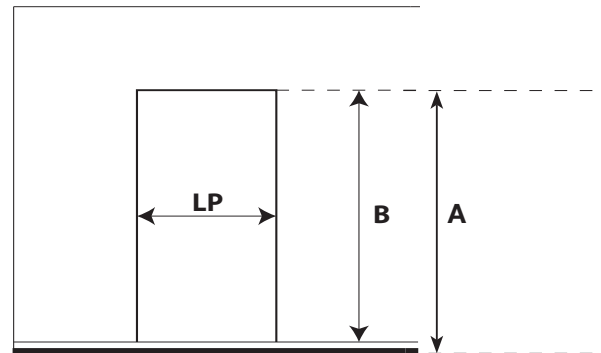
Opening to the right



Opening to the left



A = from 2,115 mm to 2,365 mm
B = A - 60 mm
LP (passage width) = 790 mm

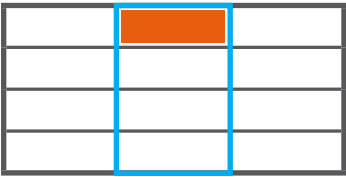
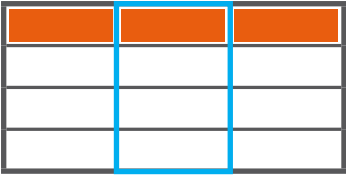
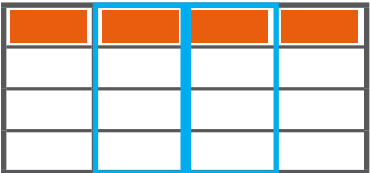


WICKET DOOR PASSAGE DIMENSIONS

• POSITION OF WICKET DOOR AND WINDOWS

- **SHUTTER:** all panels **except** raised and single-groove
- **WICKET DOOR WIDTH:**
 - XL: 790 mm
 - XXL: 900 mm
- **WINDOWS:**
 - All types of window, **except square windows in rhomboid position and those with rounded corners**, can be installed on a door fitted with a wicket door.
- The Industrial wicket door is always made up of **4 panels**.
The **bottom panel** is always **whole**.

XL 790 WICKET DOOR

	$2,400 \leq PW < 3,000$ (inside view)
	$3,000 \leq PW < 4,000$ (inside view)
	$4,000 \leq PW < 5000$ (inside view)

Industrial Door

Position of wicket door

Window position possible





Wicket door

XXL 900 WICKET DOOR

• POSITION OF WICKET DOOR AND WINDOWS

- **SHUTTER:** all panels **except raised and single-groove**
- **WICKET DOOR WIDTH:**

	$2,140 \leq PW < 2,700$ (inside view)
	$2,700 \leq PW < 4,550$ (inside view)
	$4,550 \leq PW < 5,000$ (inside view)

- **WINDOWS:**
 - All types of windows, **except square windows in rhomboid position and those with rounded corners**, can be installed on a door fitted with a wicket door.
- The Industrial wicket door is always made up of **4 panels**.
The **bottom panel** is always **whole**.

• NUMBER OF ROWS OF WINDOWS POSSIBLE (depending on door height)

1 ROW	2 ROWS
<ul style="list-style-type: none">• On wicket door top panel (4th panel) only• If $2,200\text{ mm} \leq PW < 3,250\text{ mm}$	<ul style="list-style-type: none">• On the top wicket door panel (4th panel) and on the panel above it.• If $3,250\text{ mm} < PH < 5,000\text{ mm}$



No windows in vertical position with the Industrial wicket door.



The Mixing (glazed) option is not compatible with the industrial wicket door.



The panels above the wicket door are 500 mm or 610 mm or a combination of the two.



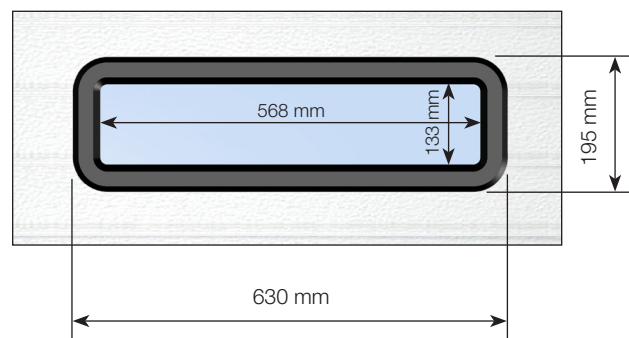
Wicket door not possible if door is in public area.



Windows

• DOUBLE-SKINNED GLAZED WINDOW (ACRYLIC) WITH ROUNDED CORNERS (2 mm thick):

PASSAGE WIDTH	NUMBER OF WINDOWS/ PANEL
PW < 2,000 mm	1
2,000 ≤ PW ≤ 3,000 mm	2
3,000 ≤ PW ≤ 4,000 mm	3
4,000 ≤ PW ≤ 5,000 mm	4
5,000 ≤ PW ≤ 6,000 mm	5



The window frames are always black.



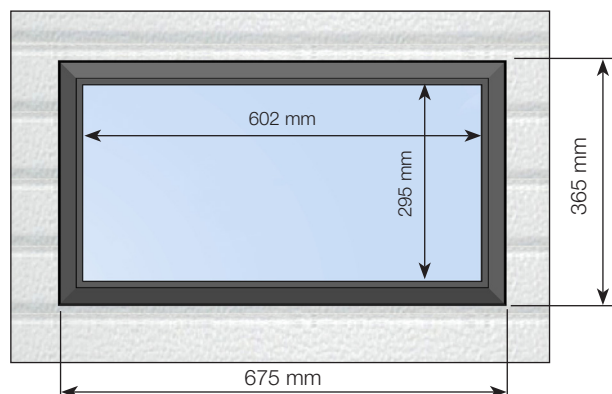
If PW > 5,000 mm, 2 rows of windows maximum.



These windows are designed for grooved, smooth, wood-veined, micro-grooved and Textured doors (without grooves).

• DOUBLE-SKINNED GLAZED WINDOW (ACRYLIC) WITH SQUARE CORNERS (2 and 3 mm thick):

PASSAGE WIDTH	NUMBER OF WINDOWS/ PANEL
PW < 2,000 mm	1
2,000 ≤ PW ≤ 3,000 mm	2
3,000 ≤ PW ≤ 4,000 mm	3
4,000 ≤ PW ≤ 5,000 mm	4
5,000 ≤ PW ≤ 6,000 mm	5



The window frames are always black.



If PW > 5,000 mm, 1 row of windows maximum.

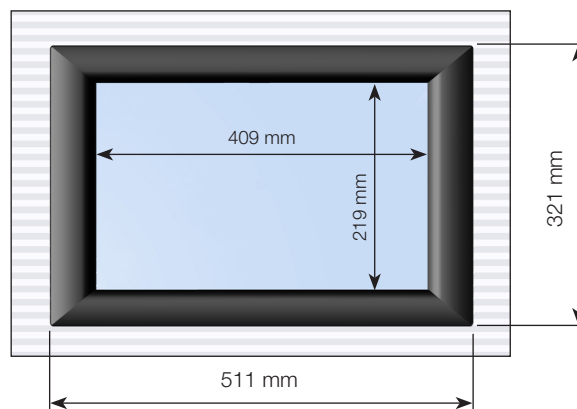


These windows are designed for grooved, smooth, wood-veined, micro-grooved and Textured doors (without grooves).



• DOUBLE-GLAZED RAISED WINDOW (PLEXIGLAS®):

PASSAGE WIDTH	NUMBER OF WINDOWS/ PANEL
2,000 mm ≤ PW ≤ 2,560 mm	3
2,560 mm < PW ≤ 3,500 mm	4
3,500 mm < PW ≤ 4,000 mm	5
4,000 mm < PW ≤ 6,000 mm	6



The exterior of the windows will match the color of the door:

White door: **White**

Micro-grooved door White aluminium: **Ral 9006**

"Anthracite grey" door: **Ral 7016**

Medium oak door: **Ral 8003**

The colour of the door for the Choice of RAL' option.



If PW > 5,000 mm, 1 row of windows maximum.



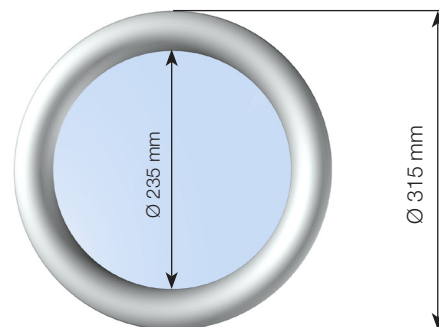
These windows are designed for raised, grooved, smooth, wood-veined, micro-grooved, single-grooved (double-glazed only) and textured doors without grooves.



For double-glazed windows with safety films, the windows are screwed.

• DOUBLE-GLAZED ROUND WINDOW (PLEXIGLAS®):

PASSAGE WIDTH	NUMBER OF WINDOWS
1,500 mm ≤ PW < 2,000 mm	2
2,000 mm ≤ PW ≤ 2,400 mm	3
2,400 mm ≤ PW ≤ 3,000 mm	4
3,000 mm < PW ≤ 4,000 mm	5
4,000 mm < PW ≤ 5,000 mm	6
5,000 mm < PW ≤ 6,000 mm	7



The exterior frame of the windows matches the colour of the door:

White door: **white**

Micro-grooved door White aluminium: **Ral 9006**

'Anthracite grey' door: **Ral 7016**

Medium oak door: **Ral 8003**

The colour of the door for the Choice of RAL' option.



If PW ≤ 5,000 mm, 3 row of windows maximum.

If PW > 5,000 mm, 1 row of windows maximum.



These windows are designed for grooved, smooth, wood-veined, micro-grooved, mono-grooved and Textured doors (without grooves). Window **incompatible** with the Industrial wicket door option.



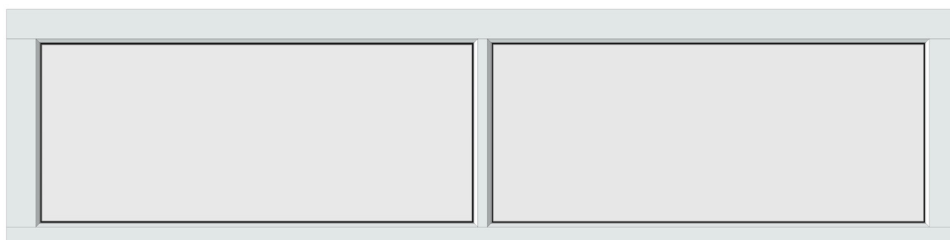
The round windows are screwed in.



- **GLAZED PANELS ON INDUSTRIAL DOORS** (Max. PW 6,000 mm)
 - Glazed panels on an industrial door: 3 max.
 - Full panels on a glazed door: 2 max. (in addition to the bottom panel).





Not compatible with the wicket door.



Outer side finish: White lacquered aluminium.
Inner side finish: White lacquered aluminium, except for an RAL 7016 door where the frame is in RAL 7016.

Glazing

For the window option, you can choose the glazing:

ACRYLIC GLAZING (ROUNDED CORNER WINDOWS)		
	TRANSPARENT GLAZING	<ul style="list-style-type: none"> • Clear glazing on the inside and outside (2 mm and 2 mm thick)
ACRYLIC GLAZING (ROUNDED CORNER WINDOWS)		
	TRANSPARENT GLAZING	<ul style="list-style-type: none"> • Clear glazing on the inside and outside (2 mm and 3 mm thick)

RAISED PANEL WINDOWS:





PMMA GLAZING (PLEXIGLAS®)		
	TRANSPARENT GLAZING	<ul style="list-style-type: none"> • Clear glazing on the inside and outside (3 mm and 3 mm thick)
	GRANITE GLAZING	<ul style="list-style-type: none"> • Clear glazing on the outside and granite glazing on the inside (3 mm and 3 mm thick)



The glazing is made of Plexiglas® (PMMA). This material is UV-resistant and offers excellent light transmission.


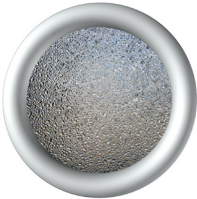


RAISED PANEL WINDOWS:


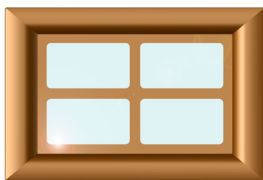
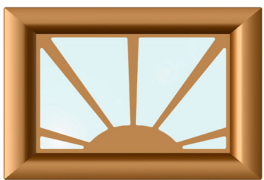
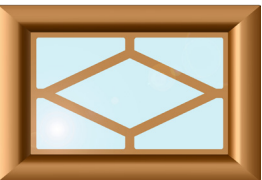
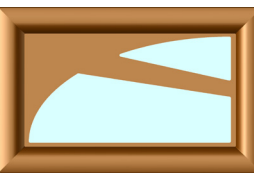
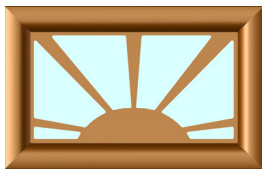
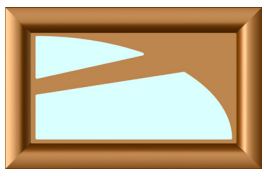
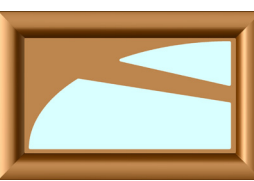
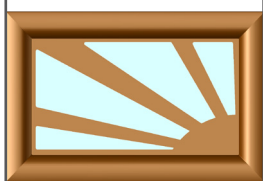
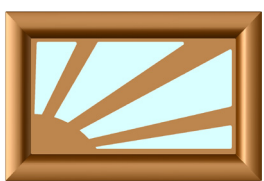
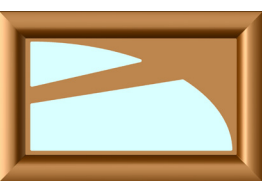
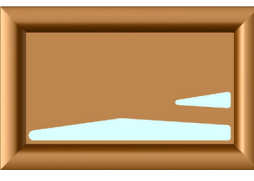
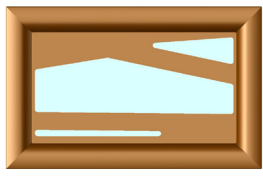
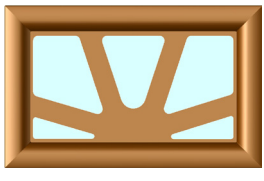
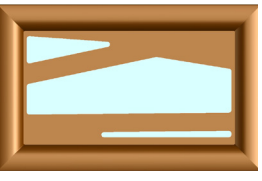
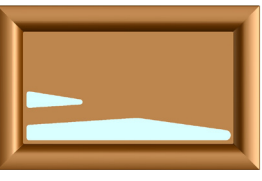
DOUBLE-GLAZED GLASS WITH 2 SECURITY FILMS ON THE INSIDE:		
	TRANSPARENT GLAZING	<ul style="list-style-type: none">• Transparent glazing on the outside and inside (pane thickness: 21 mm = 33/2 Clear 6.8 mm + empty + Clear 4 mm)
DOUBLE-GLAZED GLASS WITH 2 SECURITY FILMS ON THE INSIDE:		
	TRANSPARENT GLAZING	<ul style="list-style-type: none">• Frosted glazing on the outside and transparent glazing on the inside (pane thickness: 21 mm = 33/2 Clear 6.8 mm + empty + Frosted 4 mm)
	GLAZING WITH BRASS CROSS	<ul style="list-style-type: none">• Transparent glazing on the outside and inside + Brass cross between (pane thickness: 21 mm = 33/2 Clear 6.8 mm + empty with Brass cross + Clear 4 mm)
	OPAL GLAZING WITH BRASS CROSS	<ul style="list-style-type: none">• Transparent glazing on the outside and inside + Brass cross between (pane thickness: 21 mm = 33/2 Clear 6.8 mm with opal film + empty with Brass cross + Clear 4 mm)



ROUND WINDOWS:

PMMA GLAZING (PLEXIGLAS®)		
	TRANSPARENT GLAZING	<ul style="list-style-type: none"> • Transparent glazing on the inside and outside (3 mm and 3 mm thick)
	RANDOM GRANITE GLAZING	<ul style="list-style-type: none"> • Random granite glazing on the inside and outside (3 mm and 3 mm thick)

Patterns (for panel windows, PMMA glazing)

FURTHER					
	HALF-CIRCLE	CROSS	SUN	DIAMOND	
					
	3 RAISED PANELS				
SUNSET					
	4 RAISED PANELS				
					
	5 RAISED PANELS				



The patterns are created from aluminum, for greater sunlight and UV resistance..



The exterior of the pattern will match the color of the door:

White door: **White**

Medium oak door: **Ral 8003**

The colour of the door for the 'Choice of RAL' option



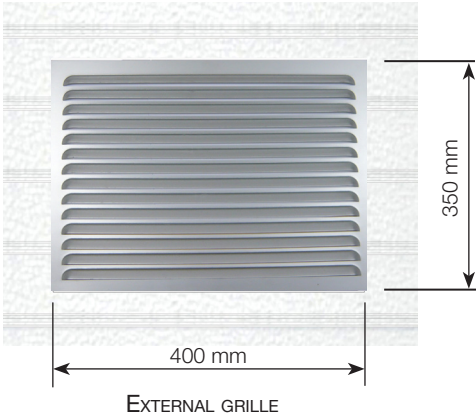
Aluminium ventilation grilles

Ventilation grilles help to ventilate your building (323 cm² air passage cross-section).

• DOORS WITHOUT WICKET DOOR

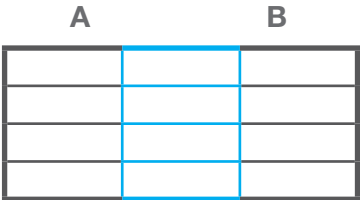
Panel dimensions	Number of ventilation grilles / panel
PW < 2,000 mm	1
2,000 ≤ PW ≤ 3,000 mm	2
3,000 ≤ PW ≤ 4,000 mm	3
4,000 ≤ PW ≤ 5,000 mm	4
5,000 ≤ PW ≤ 6,000 mm	5

These grilles are only used on grooved, smooth, wood-veined, micro-grooved and High groove doors.



• DOORS WITH WICKET DOORS

2,400 ≤ PW ≤ 3,000	3,000 ≤ PW ≤ 4,000	4000 ≤ PW ≤ 5000
Number = 1 Position = A if handle on right Position = B if handle on Left	Number = 1 or 2 If number = 2 --> Position A and B If number = 1 --> Position = A if handle on right --> Position = B if handle on Left	Number = 1, 2 or 3 If number = 1 --> Position = A if handle on right --> Position = B if handle on Left If number = 2 --> Position A and B If number = 3 --> Their positions frame the wicket door



Industrial Door

Position of wicket door

Positioning the ventilation grilles:

- The ventilation grilles are always positioned on the bottom panel.
- No ventilation grille in the opening of the wicket door.



False headers and false reservations (cladding)

If the reservations or overheads are insufficient, one or two false overheads or false reservations (cladding) will be required.

FALSE RESERVATIONS OR FALSE OVERHEADS > 200 MM



Regardless of the type of shutter panel, the false reservations (cladding) are **always manufactured with a smooth panel** positioned vertically.

- The frames will be **20 mm "U"** profiles (20 mm x 40 mm x 20 mm).
- They should be **white or lacquered to match the colour of the shutter**.

DOORS	RAL FALSE HEADERS
Grey (white aluminum)	RAL 9006
Medium oak	RAL 8003

DOORS	RAL FALSE HEADERS
Textured (plain)	RAL 7016

FALSE RESERVATIONS OR FALSE OVERHEADS ≤ 200 MM

- False reservations or false overheads will be made of **aluminium tubes** available in:
 - 40 x 40
 - 60 X 40
 - 80 X 40
 - 100 X 40
 - 150 X 40
 - 200 X 40
- By default, the aluminium tubes will be **lacquered white** or **lacquered in the colour of the shutter** (your choice).

DOORS	RAL FALSE HEADERS
Grey (white aluminum)	RAL 9006
Medium oak	RAL 8003

DOORS	RAL FALSE HEADERS
Textured (plain)	RAL 7016

Locks

- For a standard sectional door without a wicket door, you can order a 1-point lock instead of the bolt.

Choice of RAL

- Doors can be customized by choosing a Ral from the 180 in the range.

Omega stiffener kit (3,500 mm ≤ PW < 6,000 mm)

- If you choose a dark exterior colour for a door that will be exposed to direct sunlight (and in particular used in an unheated room), we strongly recommend using this kit to limit the bimetal effect.





SOME OF OUR PROJECTS



Industrial sectional doors with Ral options to choose from, Windows, Wicket door



Industrial sectional doors with window option
With high discharge



Industrial sectional doors with Ral options to choose from: Ral 1003 lacquering



Industrial sectional doors with Ral options to choose from:
Ral 1003 lacquering



Industrial sectional doors with Ral options to choose from and window options



Industrial sectional doors with window options



Industrial sectional door with RAL option and square corner windows



Industrial sectional doors - Square corner window option Overhead discharge



Grooved sectional door, lacquered in Ral 7015



Grooved sectional door in Ral 3020 lacquered with square corner windows (options)



Industrial sectional door Ral option of your choice and wicket door



Grooved Industrial sectional door Ral option to choose from, with windows

INDUSTRIAL SECTIONAL DOORS

SECTIONAL DOORS

GLAZED PANELS

"Choose clarity"

- **GENERAL INFORMATION**

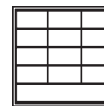
Description	40
Parts list	43

- **TECHNICAL INFORMATION**

Types of discharge	44
Shutter	49
Sealing	52
Types of operation	53
Operators	54
Operating modes	56

- **FURTHER INFORMATION**

Options	60
Some of our projects	62



- For industrial premises or workshops
- Made-to-measure design suitable for all types of building
- Closes a building
- Manual or motorised operation
- Can be used in complete safety
- Insulated steel or glazed aluminium shutter
- 180 colors to choose from

DESCRIPTION

Limits of use

	OD	OSD	HD	VD
PASSAGE WIDTH (PW) MIN.	1,500 mm	1,500 mm	1,500 mm	1,500 mm
PASSAGE WIDTH (PW) MAX.	6,000 mm	6,000 mm	6,000 mm	6,000 mm
PASSAGE HEIGHT (PH) MIN.	1,560 mm	1,560 mm	1,560 mm	1,560 mm
PASSAGE HEIGHT (PH) MAX.	5,500 mm	5,500 mm	5,000 mm	4,500 mm

Types of discharge

- **Overhead discharge (OD):** Overhead height (OH) min. = 450 mm, for the manual or motorised version.
- **Overhead sloped discharge (OSD):** Overhead height (OH) min. = 460 mm, for the manual or motorised version.
The maximum angle for an overhead sloped discharge is 15° or 26%.
The minimum angle for an overhead sloped discharge is 5° or 3%.
- **High discharge / high sloped discharge (HD / HSD):** Overhead height (OH) min. = 600 mm, for the manual or motorised version and OH max. = 3,250 mm. The maximum angle for an overhead sloped discharge is 15° or 26%.
The minimum angle for an overhead sloped discharge is 5° or 3%.
- **Vertical discharge (VD):** Overhead height (OH) min. = PH + 420 mm, for the manual or motorised version.
Max. PH = 4,500 mm.



All our doors comply with the requirements of designated standard BS EN 13241:2003+A2:2016.



For indoor overhead heights, a false header is available.

Shutter

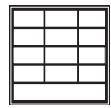
Element-R sectional door
with transoms



Line-R sectional door*
without transom



*With optional low glazed panel



GLAZED PANELS:

- Panels framed with white lacquered aluminium profiles (finger-guard joint).
- Infill:

Choice of infill:	Element-R	Line-R
Triple-walled alveolar polycarbonate glazing, 16 mm thick 2 Colors: - Opal white - 48% light transmission - Tinted - 35% light transmission	X	X
Single-glazed PMMA* Shock 25 3 mm - Transparent - 92% light transmission	X	X
Double-glazed PMMA* Shock 25 2 x 3 mm - Transparent - 92% light transmission	X	

* PMMA : Polymethyl methacrylate (plexiglass®)

- **40 mm double-sided insulated steel low panels** (External finish: Grooved and microgrooved).
- **Finishes:** The outside of the bottom panel is lacquered white as standard or a choice of 180 RAL (optional).
- **Locking system:** side bolt (lock optional).
- **Wind resistance classification (EN 13241+A2):** class 4 (class 5 on request).

BOTTOM PANELS:

- **Double-sided steel panels with finger-guard joint (FGJ)**
- **Glazed bottom panel available**
- **Outer side finish:**
 - Grooved woodgrain, Cassette woodgrain, Smooth, Woodgrain, Mono grooved smooth and woodgrain, and Micro grooved smooth and textured without groove and high groove.
- **Inner side finish**
 - Grooved Stucco (orange peel) white.
- **Panel thickness:**
 - 40 mm.
- **Insulation:**
 - Panel U-value: 0.51W/m²K.
 - Polyurethane foam (CFC-free).
- **Panel protection:**
 - Galvanised using the Sendzimir process.
 - 10-micron polyester primer.
 - 25-micron polyester lacquer (White).
 - UV-resistant protective film on all oak panels.

Finishes:

- white, 9006 (micro-grooved), 7016 (smooth and grooved), textured 7016 without grooves or 180 RAL to choose from (optional).
- **Locking system:**
 - Side lock (optional lock).
- **Wind resistance classification (EN 13241 + A2):**
Industrial Sectional Shutter with glazed panes: Class 2 to 4, depending on dimensions.



- Wicket door option not available



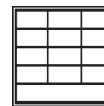
- Max. passage width 6,000 mm

Compensation system and guides

- **Guides:**
 - Galvanized steel vertical rails (Z275).
 - Galvanized steel horizontal rails (Z275).
 - Nylon rollers with ball bearings.
 - Door driven by 2 Ø4 mm cables (aviation type 6x19 with metal core).
- **The compensation system:**
 - Full or hollow galvanized grooved steel shaft Ø25.4 mm.
 - From 1 to 4 springs (internal diameter Ø95 mm or Ø152 mm) 25,000 cycles.
 - Each spring is fitted with an anti-fall guard (BS EN 13241:2003+A2:2016).
 - Attachment to the header.



All our industrial doors are fitted with anti-fall guards, cables and springs (EN 13241+A2)



Sealing

- **2 Lip seal**, on vertical rails.
- **1 Lip seal**, on vertical top panel.
- **1 Double Lip seal**, under bottom panel.

Types of operation

- **Manual operation** by direct pull or winch.
- Motorised operation (at shaft end) by Industrial operator or OP'DRIVE 3.0 operator.

Operating modes

- **Sustained pressure operation:**
Control device that requires continuous manual operation to perform a manoeuvre on the door (up, stop, down).
- **Pulse operation for ascent and sustained pressure operation for descent:**
This type of operation corresponds to the former mixed operation of the French standard NFP 25362; it is related to pulse operation in the current EN 13241+ A2 standard.
- **Pulse operation:**
Control device that requires a brief manual action to initiate movement: open, stop or close.
- **Automatic operation:**
The door moves without any deliberate manual action (time delay or magnetic loop that triggers movement, for example).

Two additional factors must be taken into consideration:

- The user: trained or untrained
- The installation site: whether or not it is in a public area.

The two above points determine the safety protocol to be followed.



A user is considered to have been "trained" if the installer has given them instructions on how to use the product. The European standard EN 13241 + A2 requires that a user guide and a maintenance logbook be provided with each installation.

- **Standard:**
All our doors have been inspected by a notified body and are CE marked (BS EN 13241:2003+A2:2016).

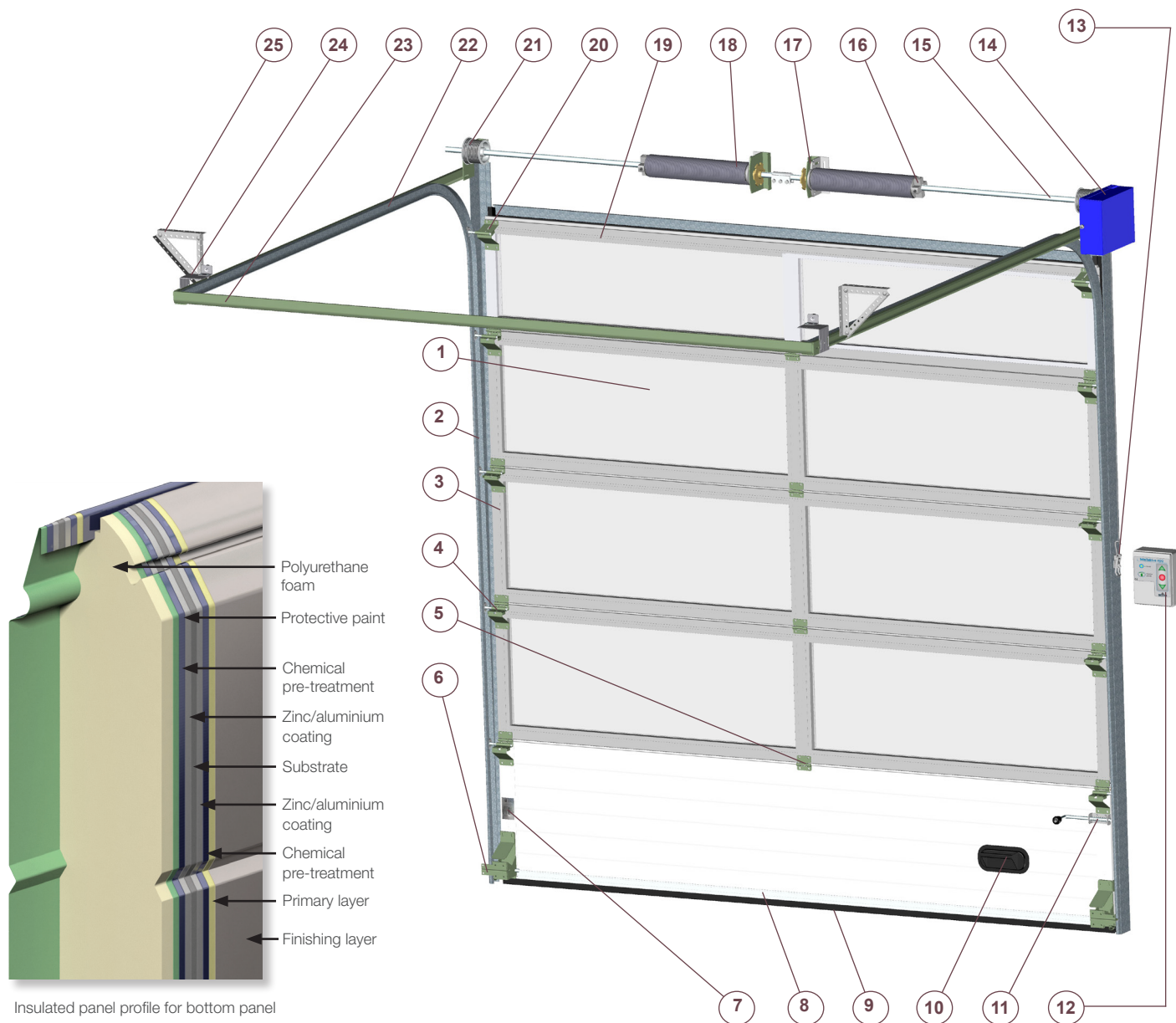
Options

- Windows, colours (180 RAL), locks, ventilation grilles, signage, etc.
- False header and false reservations (cladding).
- Solid panels for insulated industrial sectional doors.



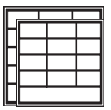
PARTS LIST

Glazed Sectional door



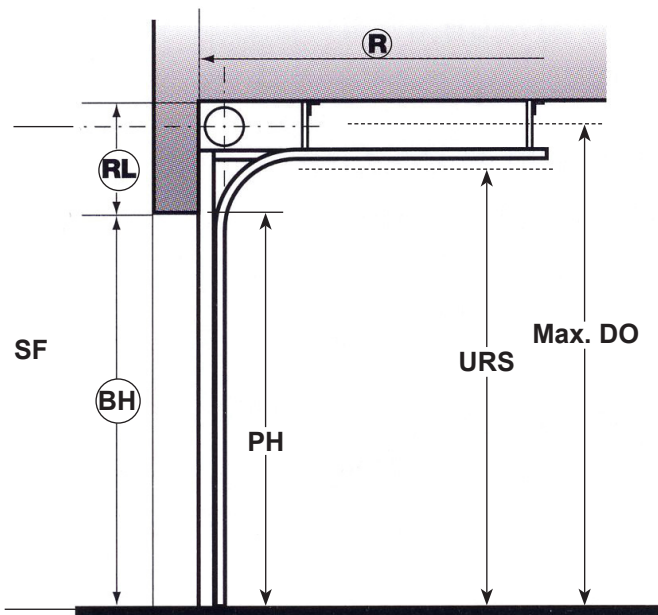
1. Double-pane PMMA SHOCK (2x3mm) with or without transom
2. Vertical rail
3. Aluminum profile
4. Lateral hinge
5. Intermediate hinge
6. Cable anti-fall guard
7. UKCA Label
8. Bottom door seal
9. Bottom seal
10. Foot-operated pedal
11. Side lock
12. Control box or control unit
13. Manual repair maneuver device (if OP'DRIVE 3.0)

14. "OP'DRIVE 3.0" operator or Industrial operator
15. Solid or hollow grooved shaft
16. Spindle
17. Spring anti-fall guard
18. Spring
19. Top panel seal
20. Top roller support
21. Drum
22. Horizontal rail
23. Spacer back bar
24. Rubber stop (OP'DRIVE 3.0 operator) or spring stop (Industrial operator)
25. Hanger for horizontal rails (corners)



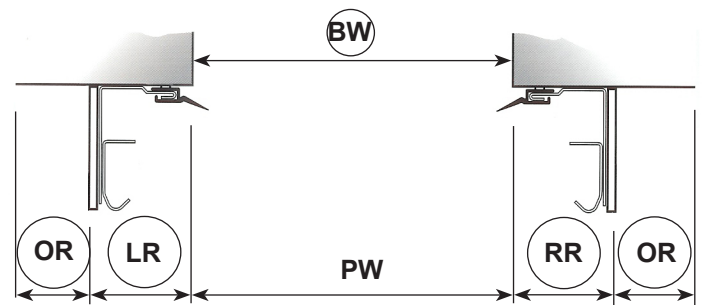
TYPES OF DISCHARGE

Overhead discharge (OD)



BW = Bay width
BH = Bay height
PW = Passage width
PH = Passage height
OH = Overhead height
SF = Shaft/floor distance

DO = Max. height with door open
URS = Dimensions under roller supports
LR = Left reservation
RR = Right reservation
OR = Winch or operator reservation
C = Overhead clearance



If the OH or LR or RR are not large enough, a false header or false reservations (cladding) can be fitted.



The dimensions in green are those we need to prepare a quote or order.



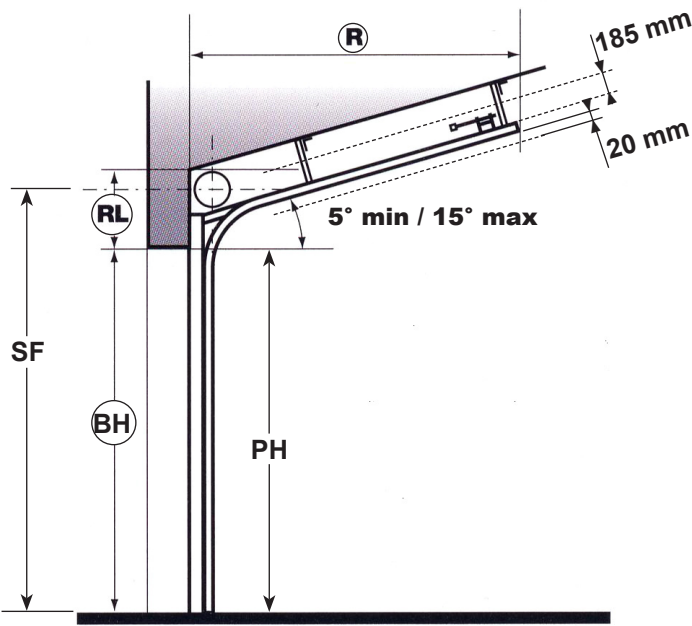
Installation layouts are always illustrated from the inside.

	MANUAL, WINCH OR MOTORISED DOOR
MIN. OVERHEAD HEIGHT (OH)	450 mm
MIN. RIGHT (RR) OR LEFT (LR) RESERVATION	100 mm (at vertical rails) 130 mm (at compensation line)
WINCH OR OPERATOR RESERVATION (OR)	120 mm
PASSAGE HEIGHT (PH)	PH = BH
DIMENSIONS UNDER ROLLER SUPPORTS (URS)	PH + 184 mm
DOOR OPEN (DO)	PH + 442 mm
SHAFT/FLOOR DISTANCE (SF)	PH + 341 mm

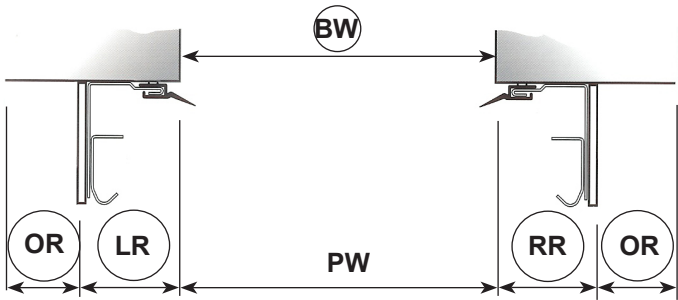
	MANUAL DOOR	WINCH OR MOTORISED DOOR
CLEARANCE (C)	PH + 636 mm	PH + 856 mm (winch or industrial operator) PH + 636 mm (OP'DRIVE 3.0 operator)



Overhead sloped discharge (OSL)



- BW = Bay width
- BH = Bay height
- PW = Passage width
- PH = Passage height
- OH = Overhead height
- SF = Shaft/floor distance
- LR = Left reservation
- RR = Right reservation
- OR = Winch or operator reservation
- C = Overhead clearance



If the OH or LR or RR are not large enough, a false header or false reservations (cladding) can be fitted.



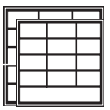
The dimensions in green are those we need to prepare a quote or order.



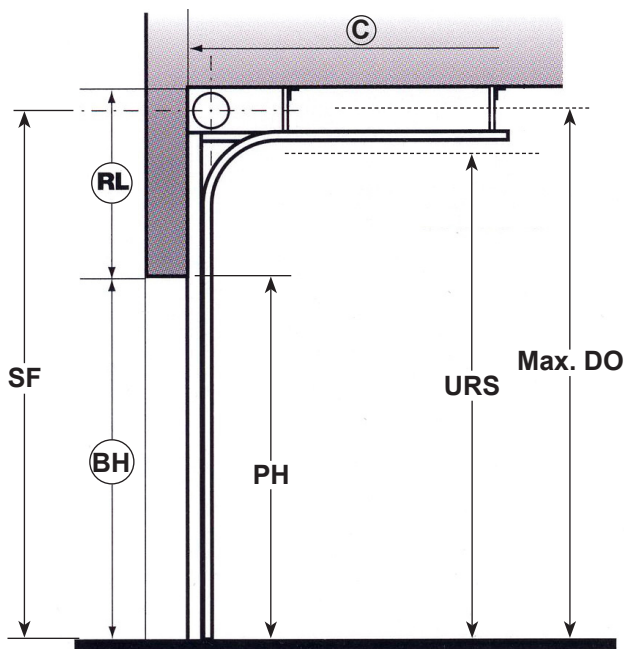
Installation layouts are always illustrated from the inside.

	MANUAL, WINCH OR MOTORISED DOOR
MIN. OVERHEAD HEIGHT (OH)	If PH ≤ 3,680 mm ► OH = 460 mm If 3,680 mm < PH ≤ 5,500 mm ► OH = 490 mm
MIN. RIGHT (RR) OR LEFT (LR) RESERVATION	100 mm (at vertical rails) 130 mm (at compensation line)
WINCH OR OPERATOR RESERVATION (OR)	120 mm
PASSAGE HEIGHT (PH)	PH = BH
SHAFT/FLOOR DISTANCE (SF)	PH + 381 mm

	MANUAL DOOR	WINCH OR MOTORISED DOOR
CLEARANCE (C)	PH + 636 mm	PH + 856 mm (winch or industrial operator) PH + 636 mm (OP'DRIVE 3.0 operator)

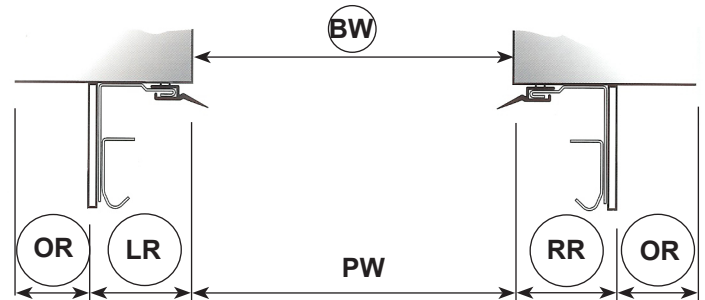


High discharge



BW = Bay width
BH = Bay height
PW = Passage width
PH = Passage height
OH = Overhead height
SF = Shaft/floor distance

DO = Max. height with door open
URS = Dimensions under roller supports
LR = Left reservation
RR = Right reservation
OR = Winch or operator reservation
O = Overhead clearance



If the OH or LR or RR are not large enough, a false header or false reservations (cladding) can be fitted.



The dimensions in green are those we need to prepare a quote or order.



Installation layouts are always illustrated from the inside.



The overhead height used to calculate the rails and springs must not exceed the passage height
 Max. OH = 3250 mm.

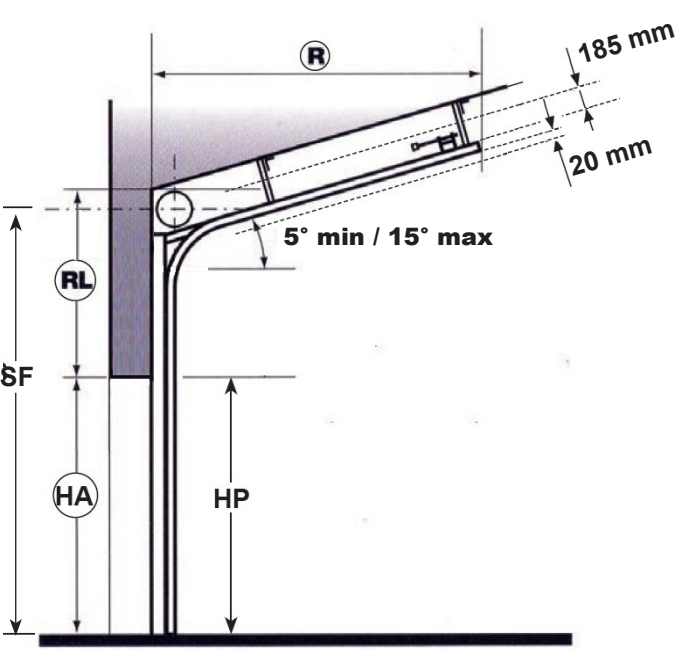
	MANUAL, WINCH OR MOTORISED DOOR
MIN. OVERHEAD HEIGHT (OH)	Min. 600 mm Max. 3,250 mm
MIN. RIGHT (RR) OR LEFT (LR) RESERVATION	100 mm (at vertical rails) 130 mm (at compensation line)
WINCH OR OPERATOR RESERVATION (OR)	120 mm
PASSAGE HEIGHT (PH)	PH = BH

	URS	DO	C	SF
PH ≤ 5,000 mm AND OH ≤ 1,640 mm	PH + OH - 290 mm	PH + OH - 32 mm	1 PH - OH + 1,170 mm	PH + OH - 99 mm
			2 PH - OH + 1,410 mm	
PH ≤ 5,000 mm AND 1,641 ≤ OH ≤ 3,250 mm	PH + OH - 330 mm	PH + OH - 72 mm	1 PH - OH + 1,210 mm	PH + OH - 123 mm
			2 PH - OH + 1,450 mm	
5,001 ≤ PH ≤ 5,500 mm	PH + OH - 380 mm	PH + OH - 122 mm	1 PH - OH + 1,260 mm	PH + OH - 148 mm
			2 PH - OH + 1,500 mm	

- 1 OP'DRIVE 3.0 manual or motorised
- 2 Industrial operator or winch

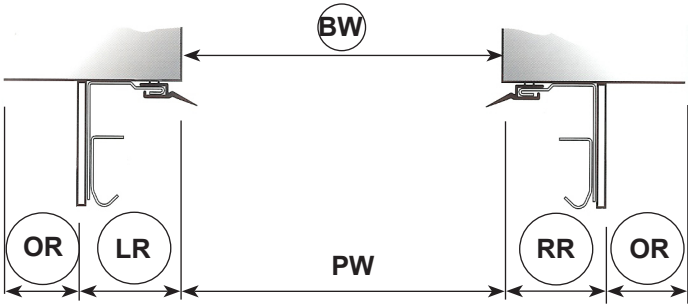


High sloped discharge



BW = Bay width
BH = Bay height
PW = Passage width
PH = Passage height
OH = Overhead height
SF = Shaft/floor distance

DO = Max. height with door open
URS = Dimensions under roller supports
LR = Left reservation
RR = Right reservation
OR = Winch or operator reservation
O = Overhead clearance



If the OH or LR or RR are not large enough, a false header or false reservations (cladding) can be fitted.

The dimensions in green are those we need to prepare a quote or order.

Installation layouts are always illustrated from the inside.

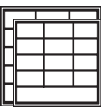
The overhead height used to calculate the rails and springs must not exceed the passage height
Max. OH = 3250 mm.

	MANUAL, WINCH OR MOTORISED DOOR
MIN. OVERHEAD HEIGHT (OH)	Min. 600 mm Max. 3,250 mm
MIN. RIGHT (RR) OR LEFT (LR) RESERVATION	100 mm (at vertical rails) 130 mm (at compensation line)
WINCH OR OPERATOR RESERVATION (OR)	120 mm
PASSAGE HEIGHT (PH)	PH = BH

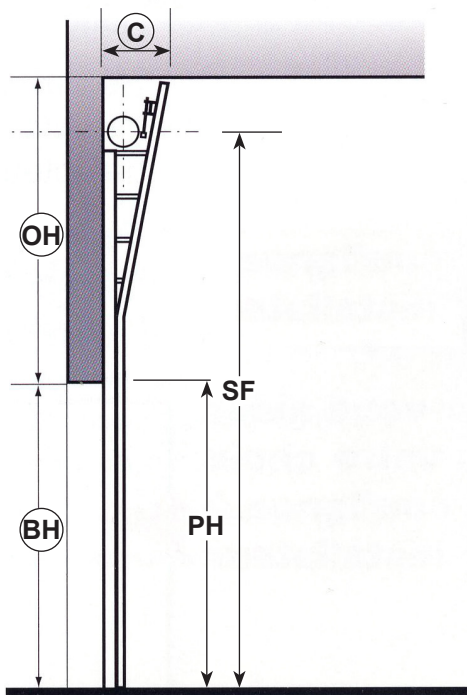
	C	SF
PH ≤ 5,000 mm AND OH ≤ 1,640 mm	1 PH - OH + 1,220 mm	PH + OH - 99 mm
	2 PH - OH + 1,460 mm	
PH ≤ 5,000 mm AND 1641 ≤ OH ≤ 3,250 mm	1 PH - OH + 1,260 mm	PH + OH - 123 mm
	2 PH - OH + 1,500 mm	
5,001 ≤ PH ≤ 5,500 mm	1 PH - OH + 1,310 mm	PH + OH - 148 mm
	2 PH - OH + 1,550 mm	

1 OP'DRIVE 3.0 manual or motorised

2 Industrial operator or winch



Vertical discharge (VD)

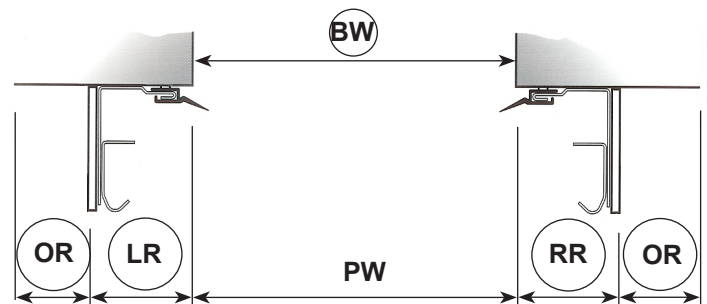


BW = Bay width
BH = Bay height
PW = Passage width
PH = Passage height
OH = Overhead height

SF = Shaft/floor distance
LR = Left reservation
RR = Right reservation
OR = Winch or operator reservation
C = Overhead clearance



Max. PH = 4,500 mm



If the OH or LR or RR are not large enough, a false header or false reservations (cladding) can be fitted.



The dimensions in green are those we need to prepare a quote or order.



Installation layouts are always illustrated from the inside.

	MANUAL OR MOTORISED DOOR
MIN. OVERHEAD HEIGHT (OH)	PH + 420 mm
MIN. RIGHT (RR) OR LEFT (LR) RESERVATION	100 mm (at vertical rails) 130 mm (at compensation line)
WINCH OR OPERATOR RESERVATION (OR)	120 mm
PASSAGE HEIGHT (PH)	PH = BH with BH ≤ 4,500 mm
SHAFT/FLOOR DISTANCE (SF)	If PH ≤ 3,300 mm ► SF = 2 x PH + 297 mm If 3,301 ≤ PH ≤ 4,500 mm ► SF = 2 x PH + 322 mm
CLEARANCE (C)	PH x 0.06 + 170 mm



SHUTTER (GLAZED PANELS)

Glazed panels with FG (finger-guard) joint

Can be combined with solid leaf industrial doors **PW ≤ 6,000 mm**

- **Framed with aluminium profiles**
 - **Outer side finish:** White lacquered aluminium.
 - **Inner side finish:** White lacquered aluminium, except for an RAL 7016 door where the frame is in RAL 7016.
 - **Choice of 180 Ral** on the outside only.
- **Panel heights:** 500 and 610 mm.

Choice of infill:	Element-R	Line-R
Triple-walled alveolar polycarbonate glazing, 16 mm thick 2 Colors: - Opal white - 48% light transmission - Tinted - 35% light transmission	X	X
Single-glazed PMMA* Shock 25 3 mm - Transparent - 92% light transmission	X	X
Double-glazed PMMA* Shock 25 2 x 3 mm - Transparent - 92% light transmission	X	

* PMMA : Polymethyl methacrylate (plexiglass®)



With the Ral option, the inside of the shutter always remains in white lacquered aluminium, except in the case of an RAL 7016 door for which the inside frame is in RAL 7016.



PW Passage width	NUMBER OF PANES
without transom	1
1,500 to 2,550	2
2,551 to 3,750	3
3,751 to 5,000	4
5,001 to 6,000	5



To make installation easier, the panels are pre-drilled.



The glazing is made of PMMA Shock. This material is UV-resistant, offers excellent light transmission and is more impact-resistant than conventional PMMA.



You can combine the 500 mm and 610 mm panels to achieve your desired door height.

SHUTTER (LOWER PANELS)

Grooved FG (finger-guard) panels

- **White and 9006 as standard or 180 Ral as an option**
 - Grooved woodgrain exterior finish in white, 7,016, 9,006 or optional 180 Ral as an option.
 - Stucco grooved (orange peel) interior finish, White only
 - Panel heights: 500 and 610 mm.
- **Medium oak**
 - Medium oak grooved woodgrain exterior finish.
 - Stucco grooved (orange peel) interior finish, White only
 - Panel heights: 500 and 610 mm



Medium oak



You can combine the 500 mm and 610 mm panels to achieve your desired door height.



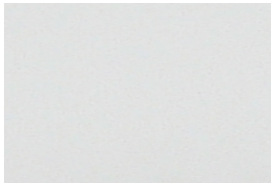
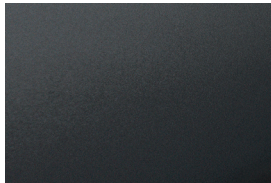
To make installation easier, the panels are pre-drilled.



You can choose any Ral, but its interior will always be white.



Smooth FG (Finger-guard) panels

<ul style="list-style-type: none"> • White and 7016 as standard or 180 Ral as an option <ul style="list-style-type: none"> • Exterior finish: Smooth white or 180 Ral as an option. • Stucco grooved (orange peel) interior finish, White only. • Overhead height: 500 and 610 mm. 	 <p>White</p>
<ul style="list-style-type: none"> • Textured without groove or high groove <ul style="list-style-type: none"> • Granular appearance, Ral 7016 as standard. • Stucco grooved (orange peel) interior finish, White only. • Overhead height: 500 and 610 mm. 	 <p>Textured 7016 (granular)</p>



If you choose a dark exterior colour (including Textured) for a door that will be exposed to direct sunlight (and in particular used in an unheated room), we strongly recommend using the Omega stiffener kit to limit the bimetal effect.



You can combine the 500 mm and 610 mm panels to achieve your desired door height.



To make installation easier, the panels are pre-drilled.



You can choose any Ral, but its interior will always be white.



Available sandblasted paints:

- Black (100 / 2100 / 2200)
- Blue (2700)
- Grey (2900)
- Green (2500)
- Mars (2525)

Other paints (not sanded) available: Canon blue (2525)



Micro-grooved finger-guard panels

- **White and 9006 as standard or 180 Ral as an option**

- Exterior finish: Smooth microgrooved white, Ral 9006. or 180 Ral as an option.
- Stucco grooved (orange peel) interior finish, White only.
- Grooves with 16 mm pitch.
- Panel heights: 500 and 610 mm.

Ral 9006



You can combine the 500 mm and 610 mm panels to achieve your desired door height.



To make installation easier, the panels are pre-drilled.



You can choose any Ral, but its interior will always be white.



Available sandblasted paints:

- Black (100 / 2100 / 2200)
- Blue (2700)
- Grey (2900)
- Green (2500)
- Mars (2525)

Other paints (not sanded) available: Canon blue (2525)

FG (Finger-guard) woodgrain panels

- **Standard white or 180 Ral as an option**

- Exterior finish: White woodgrain or 180 Ral as an option.
- Stucco grooved (orange peel) interior finish, White only.
- Panel heights: 500 and 610 mm.

White



- **Medium oak**

- Medium oak woodgrain exterior finish.
- Stucco grooved (orange peel) interior finish, White only.
- Overhead height: 500 and 610 mm.

Medium oak



You can combine the 500 mm and 610 mm panels to achieve your desired door height.



To make installation easier, the panels are pre-drilled.

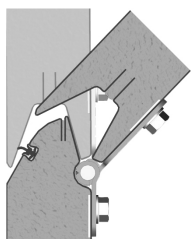


You can choose any Ral, but its interior will always be white.

General comments

All standard components for mounting the shutter are made of galvanised steel.

Standard EN 13241:2003+A2



The shutter panels are equipped with hinged "finger guard" (FG) joints in order to protect users.

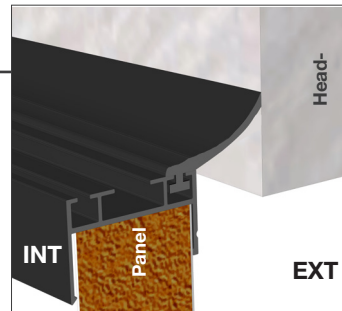


SEALING

- Sealing is ensured by 4 types of joints:

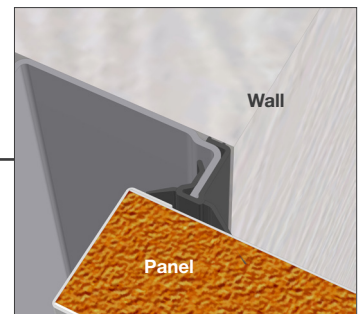
INSULATION
PROTECTION
ELASTICITY
RESISTANCE

01 HEADER SEAL



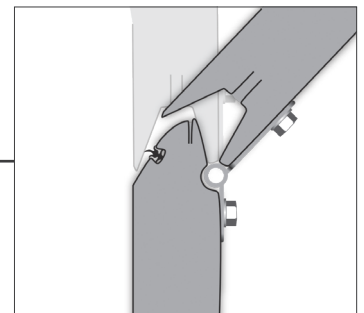
Exterior view

02 VERTICAL SEAL



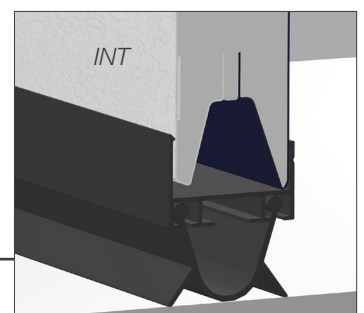
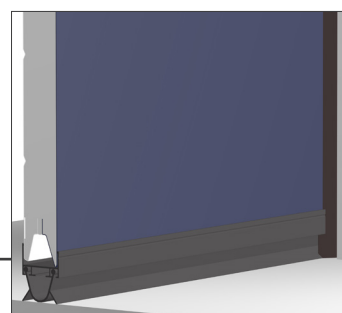
Lip seal (on vertical rails)

03 INTERMEDIATE SEAL



Finger guard joint

04 BOTTOM SEAL



Double lip seal (bottom panel) - Bottom seal door profile with unequal flanges

* For door without wicket door



TYPES OF MANOEUVRES

MANOEUVRES	LIMITS OF USE
DIRECT PULL	<ul style="list-style-type: none"> Max. shutter surface = 16 m² Max. PH = 4,000 mm
CHAIN WINCH	<ul style="list-style-type: none"> Overhead discharge, High discharge or Vertical discharge : winch 1/3 Doors with PW > 5000 mm: winch 1/3 Max. shutter surface = 25 m²
MOTORISED OPERATOR	<ul style="list-style-type: none"> OP'DRIVE 3.0 operator (150 cycles/* day, max. shutter surface = 20 m² or PW max. = 2,000 mm and PH max. = 2,000 mm) INDUSTRIAL 230V operator (40 cycles/* day, max. shutter surface = 25 m²) INDUSTRIAL 400V operator (100 cycles/* day, max. shutter surface = 33 m²)

* 1 cycle = 1 ascent + 1 descent - Non-consecutive cycles



All our doors are CE marked, in compliance with designated standard BS EN 13241:2003+A2:2016. They can be operated manually or by operator. Fitting a motorised operator to a manually operated door is the sole responsibility of the installer.

OP' DRIVE 3.0 OPERATOR	CHAIN WINCH 1/3	230V OR 400V INDUSTRIAL OPERATOR
<p>Diagram illustrating the OP' DRIVE 3.0 operator system components: the main operator unit, a control box, and a remote control.</p>	<p>Diagram illustrating the Chain Winch 1/3 system components: the winch mechanism, the chain, and the gear.</p>	<p>Pull cord release</p> <p>Chain winch release</p> <p>Diagram illustrating the Pull cord release and Chain winch release systems for the 230V or 400V Industrial Operator.</p>



OPERATORS

Our quotation service automatically determines the optimum operator based on the characteristics of the door and your requirements.

• Technical characteristics of operators:

	TRIPLE-PHASE INDUSTRIAL OPERATOR	SINGLE-PHASE INDUSTRIAL OPERATOR	OP' DRIVE 3.0 OPERATOR*
VOLTAGE	400V	230 V	24 V**
POWER SUPPLY (OPERATOR OR BOX)	4 WIRES***	3 wires	2 wires
OPERATOR POWER	0.5 Kw	0.5 Kw	54 x
PROTECTION CLASS OPERATOR	IP 54	IP 54	IP 30
CURRENT	2 A	3.45 A	6 A
OPERATOR RELEASE SYSTEM	Yes	Yes	Yes

* The OP'DRIVE 3.0 operator must be used with its 230 V control box.

** Low-voltage direct current 24V.

*** 5 wires if flashing lights (230V).

• Technical specifications of the OP'DRIVE 3.0 operator control box:



• **Integrated operating buttons** on the front panel with indicator light.

• **LCD display** inside the box with drop-down setting buttons (rotating codes).

Setting examples: Teach-in, operating modes, re-closing delay, remote control programming, error reading, cycle counter reading and deletion.

• **Force management**

• **Voltage:** single-phase 230 V

• **Power supply :** 2 wires

• **Box housing:** class II double insulated

• **Max. power:** 750 W

• **Protection class:** IP 56

• **230 V, 500 W output:** area lighting (optional)

• **24V, 15W output:** traffic light (optional) with 3 sec. advance warning

• **Transmitter/receiver cell connection terminal block** (optional)

• **Additional controller terminal block**

• **Emergency battery connection terminal block** (optional)

• **Operating modes:** sustained pressure, mixed, pulse, automatic ***, partial opening.

*** With 2 sets of compulsory cells



The box is fitted as standard with a cycle counter, a remote control receiver (transmitter optional) and an integrated battery charger (battery optional).



OP'DRIVE 3.0 operating principle

- **Sustained pressure:**
 - + Pre-programmed version, no settings required.
 - + Operation with integrated anti-crushing and anti-lifting safety devices.
- **Pulse operation for ascent / Sustained pressure for descent:**
 - + Automatic learning of end positions and operating forces.
 - + Automatic control and management of door forces during use (anti-lift, anti-crush).
 - + Partial opening function (adjustable height).
 - + Automatic search for end positions in case of manual door release.
 - + Automatic door slow-down at the end of the movement.
 - + LED information on front panel or error message on LCD display.
- **Pulse:**
 - + Automatic reopening in case of obstruction while closing.
 - + Cell self-test functions.
- **Automatic:**
 - + Adjustable closing time delay.
 - + 3 automatic operating modes:
 - **Sequential Mode:** Although closing is timed, 1 pulse is enough to control movement (open, stop or close).
 - **Auto Mode:** Priority is given to opening and no pulse can interrupt the opening command (except the stop button on the front panel).
 - **Block Mode:** Priority is given to opening and no pulse can interrupt the opening command (except the stop button on the front panel). Automatic reduction of the closing delay when passing in front of the safety cells.
 - **+ 2 sets of compulsory bottom cells** (EN 13241+A2).



In pulse or automatic operation mode, OP'DRIVE 3.0 manages forces automatically without the need for a safety edge..



2 sets of bottom cells are systematically supplied for pulse control in public areas, out of sight of the door or in automatic mode (EN 13241+A2).

Troubleshooting

The operator release lever, factory-fitted on the vertical rail, allows the door to be opened immediately with a direct pull in case of a power cut, for example.



The battery option allows the door to operate at reduced speed for 15 to 20 cycles in the absence of mains power. During normal door operation, the battery charge is maintained automatically by the control box (this operator's battery is housed in the control box).



OPERATING MODES

Sustained pressure (trained users)

This operating mode can be used for all door locations. It requires a controller that allows constant user control (continuous action on the controller and within sight of closing).



Please note: In public areas, the controller must be customised, such as with a key box.

• Necessary safeguards

OUTSIDE PUBLIC AREAS / IN PUBLIC AREAS (WITHIN SIGHT OF DOOR)	
INDUSTRIAL OR COMMERCIAL PREMISES OR GARAGES	<ul style="list-style-type: none"> No safety device required

CONTROLLER	
BCA	Wall-mounted key switch box
BCE	Flush-mounted key switch box
BBA2	2-button box
BBA3i	Smart 3-button box



For more technical information, refer to the "Operators & Accessories" chapter and the "Control Accessories" section.



Comment: Although the front of the OP'DRIVE 3.0 box is fitted with control buttons, it is strongly recommended that you use a button box or key box for industrial use.



Pulse on ascent / sustained pressure on descent (trained users)

This operating mode allows opening by pulse operation and closing by sustained pressure (formerly mixed operation under French standard NFP 25362). This mode of operation is similar to pulse mode in standard EN 13241+A2.

Please note: In public areas, the controller must be customised, such as with a key box.

Necessary safeguards

INDUSTRIAL OR COMMERCIAL PREMISES OR GARAGES	INDUSTRIAL OPERATOR	
	OUTSIDE PUBLIC AREAS	IN PUBLIC AREAS
	<ul style="list-style-type: none">Smart 3-button box (Pic 53 BP)	<ul style="list-style-type: none">Box adapted to operator1 set of top cells *

* If overhead discharge with passage height < 2,900 mm

INDUSTRIAL OR COMMERCIAL PREMISES OR GARAGES	OP' DRIVE 3.0 OPERATOR	
	OUTSIDE PUBLIC AREAS	IN PUBLIC AREAS
	<ul style="list-style-type: none">OP' DRIVE 3.0 box **	

** See the operating modes of the OP'DRIVE 3.0 control box (p.18)

OP'DRIVE 3.0 manages forces automatically without a safety edge

CONTROLLER	
BCA	Wall-mounted key switch box
BCE	Flush-mounted key switch box
BBAS	Box with stop button
BBA3	Wall-mounted 3-button box
BBA3i	Smart 3-button box

For more technical information, refer to the "Operators & Accessories" chapter and the "Control Accessories" section.



Pulse (trained users)

In pulse operation mode, the user is required to perform a brief action on the controller which triggers the movement of the shutter: open or stop or close.



Precautions when working;
2 flashing spots + compulsory road markings in accordance with the French decree of 21 December 1993.

• Safety devices required

	INDUSTRIAL OPERATOR		
	OUTSIDE PUBLIC AREAS	IN PUBLIC AREAS	
		WITHIN SIGHT OF DOOR	OUT OF SIGHT OF DOOR
INDUSTRIAL OR COMMERCIAL PREMISES OR GARAGES	<ul style="list-style-type: none"> Box adapted to operator Safety edge 	<ul style="list-style-type: none"> Box adapted to operator Safety edge 1 set of top cells * 	<ul style="list-style-type: none"> Box adapted to operator Safety edge 1 set of top cells * 2 sets of bottom cells

* If overhead discharge with passage height < 2,900 mm

	OP' DRIVE 3.0 OPERATOR			
	OUTSIDE PUBLIC AREAS		IN PUBLIC AREAS	
	WITHIN SIGHT OF DOOR	OUT OF SIGHT OF DOOR	WITHIN SIGHT OF DOOR	OUT OF SIGHT OF DOOR
INDUSTRIAL OR COMMERCIAL PREMISES OR GARAGES	<ul style="list-style-type: none"> OP'DRIVE 3.0 box ** 		<ul style="list-style-type: none"> OP' DRIVE 3.0 box ** 	<ul style="list-style-type: none"> OP' DRIVE 3.0 box ** 2 sets of bottom cells

** See the operating modes of the OP'DRIVE 3.0 control box (p.18)



OP'DRIVE 3.0 manages forces automatically without a safety edge

CONTROLLER	
BBAI	Wall-mounted pulse button box
BCA	Wall-mounted key switch box
BCE	Flush-mounted key switch box
BBA3	Wall-mounted 3-button box
Receiver	Separate 2- or 4-function receiver
CCA	Wall-mounted, wired key pad
Transmitter	4-function transmitter



For more technical information, refer to the "Operators & Accessories" chapter and the "Control Accessories" section.



Automatic (trained or untrained users)

In automatic operation, the shutter moves without the need for manual operation by the user (for example, closing with time delay, opening by magnetic loop, etc.). This operating mode can be used for commercial and industrial premises and garages but it is not suitable for houses.



Precautions when working;
2 flashing spots + compulsory road markings in accordance with the French decree of 21 December 1993.



Precautions for automatically-operated doors in multi-family residences:

Collective residential buildings must meet specific requirements (acoustics/traffic, etc.) not covered by the designated standard NF 13241 + A2. These specific requirements are not included in our quotes.

In the case of a collective residence, signage and lighting (area lighting + flashing lights with 2 seconds warning + ground marking) are legally required (Decree of 09 August 2006 relating to the application of Article R.125-3-1 of the Construction and Housing Code).

• Necessary safeguards

INDUSTRIAL OPERATOR		
	OUTSIDE PUBLIC AREAS	IN PUBLIC AREAS
INDUSTRIAL OR COMMERCIAL PREMISES OR GARAGES	<ul style="list-style-type: none"> Box adapted to operator Safety edge 2 sets of bottom cells 	<ul style="list-style-type: none"> Box adapted to operator Safety edge 2 sets of bottom cells 1 set of top cells *

* If overhead discharge with passage height < 2,900 mm

OP'DRIVE 3.0 OPERATOR		
	OUTSIDE PUBLIC AREAS	IN PUBLIC AREAS
INDUSTRIAL OR COMMERCIAL PREMISES OR GARAGES	<ul style="list-style-type: none"> OP'DRIVE 3.0 box ** 2 sets of bottom cells 	<ul style="list-style-type: none"> OP'DRIVE 3.0 box ** 2 sets of bottom cells

** See the operating modes of the OP'DRIVE 3.0 control box (p.18)



OP'DRIVE 3.0 manages forces automatically without a safety edge

CONTROLLER	
BBAI	Wall-mounted pulse button box
BCA	Wall-mounted key switch box
BCE	Flush-mounted key switch box
TR	Road tube
Transmitter	4-function transmitter
CCA	Wall-mounted, wired key pad
Receiver	Separate 2- or 4-function receiver
BM	Magnetic Loop:



For more technical information, refer to the "Operators & Accessories" chapter and the "Control Accessories" section.



Aluminium ventilation grilles

Ventilation grilles help to ventilate your building (323 cm² air passage cross-section).

Panel dimensions	Number of ventilation grilles / panel
PW < 2,000 mm	1
2,000 ≤ PW ≤ 3,000 mm	2
3,000 ≤ PW ≤ 4,000 mm	3
4,000 ≤ PW ≤ 5,000 mm	4
5,000 ≤ PW ≤ 6,000 mm	5

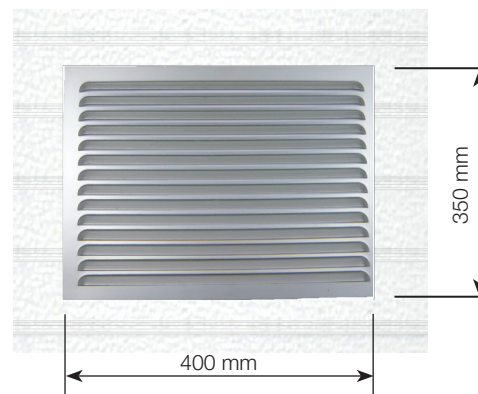


These grilles are only used on grooved, smooth, wood-veined, micro-grooved and Textured (no groove) doors.



Positioning the ventilation grilles:

- The ventilation grilles are always positioned on the bottom panel.



EXTERNAL GRILLE



False headers and false reservations (cladding)

If the reservations or overheads are insufficient, one or two false overheads or false reservations (cladding) will be required.

FALSE RESERVATIONS OR FALSE OVERHEADS > 200 MM



Regardless of the type of shutter panel, the false reservations (cladding) are always manufactured with a smooth panel positioned vertically.

- The frames will be **20 mm "U"** profiles (20 mm x 40 mm x 20 mm).
- They should be **white or lacquered to match the colour of the shutter**.

DOORS	RAL FALSE HEADERS
Grey (white aluminum)	RAL 9,006
Medium oak	RAL 8,003

DOORS	RAL FALSE HEADERS
Textured (plain)	RAL 7,016

FALSE RESERVATIONS OR FALSE OVERHEADS ≤ 200 MM

- False reservations or false overheads will be made of **aluminium tubes** available in:
 - 40 x 40
 - 60 X 40
 - 80 X 40
 - 100 X 40
 - 150 X 40
 - 200 X 40
- By default, the aluminium tubes will be **lacquered white** or **lacquered in the colour of the shutter** (your choice).

DOORS	RAL FALSE HEADERS
Grey (white aluminum)	RAL 9,006
Medium oak	RAL 8,003

DOORS	RAL FALSE HEADERS
Textured (plain)	RAL 7,016

Locks

- For a standard sectional door without a wicket door, you can order a 1-point lock instead of the bolt.

Choice of RAL

- Doors can be customized by choosing a Ral from the 180 in the range.



Combinations

- Combinations are only possible between insulated panels and glazed panels:
 - Not compatible with Wicket Door option
 - Maximum 3 glazed panels on an industrial door
 - 2 solid panels maximum on glazed doors (bottom panels not included)
 - Other combinations on request



SOME OF OUR PROJECTS



Line-R glazed industrial sectional door



Element-R glazed industrial sectional door bottom panel Ral lacquered according to your choice



Grooved sectional door with glazed panel mix option



Element-R glazed industrial sectional door, bottom panel lacquered Ral 9005 and additional panel lacquered Ral 1018 (optional)



Element-R glazed industrial sectional door bottom panel Ral lacquered according to your choice

OPERATORS & ACCESSORIES

OPERATORS & ACCESSORIES

*"A specialist operator
for every use"*

- **OPERATORS**

Chain winch	65
Industrial operator	66
OP'DRIVE 3.0	67

- **CONTROL ACCESSORIES**

Sustained pressure	69
Pulse / sustained pressure	70
Pulse	71
Automatic	72



OPERATORS


"A specialist operator for every use"

MANOEUVRES	LIMITS OF USE
DIRECT PULL	<ul style="list-style-type: none"> Max. shutter surface = 16 m² PH max. = 4,000 mm
CHAIN WINCH	<ul style="list-style-type: none"> Overhead discharge, High discharge or Vertical discharge: winch 1/3 Doors with PW > 5,000 mm: winch 1/3 Max. shutter surface = 25 m²
MOTORISED OPERATOR	<ul style="list-style-type: none"> OP'DRIVE 3.0 operator (150 cycles/day, max. shutter surface = 25 m² or PW max = 5,000 mm and PH max = 5,000 mm) INDUSTRIAL 230V operator (40 cycles/day, max. shutter surface = 25 m²) INDUSTRIAL 400V operator (100 cycles/day, max. shutter surface = 33 m²)



As all of our products are **custom-made**, our quotation team will determine the most suitable operator according to the characteristics of your door, the layout and the types of manoeuvre.

Chain winch 1/3

 <p>Chain winch 1/3</p>	<p>MANUAL OPERATION</p> <ul style="list-style-type: none"> Overhead discharge High or Vertical discharge Doors with PW > 5,000 mm
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All our doors are CE marked, in compliance with designated standard BS EN 13241:2003+A2:2016. They can be operated manually or by operator. Fitting a motorised operator to a manually operated door is the sole responsibility of the installer.



“Industrial” Operators



INDUSTRIAL OPERATOR (single-phase and three-phase)

- **INDUSTRIAL 230V** operator
(40 cycles/day, max. shutter surface = 25 m²)
- **INDUSTRIAL 400V** operator
(100 cycles/day, max. shutter surface = 33 m²)

Pull cord release



Chain winch release



TYPE OF OPERATOR	VOLTAGE (V)	POWER (Kw)	CURRENT (A)	POWER SUPPLY (OPERATOR OR BOX)	PROTECTION CLASS	OPERATOR RELEASE SYSTEM	No. OF CYCLES* PER DAY
SINGLE-PHASE INDUSTRIAL OPERATOR	230	0.5	3.45	3 wires	IP54	Yes	40
TRIPLE-PHASE INDUSTRIAL OPERATOR	400	0.5	2	4 wires**	IP54	Yes	100

* One cycle = 1 ascent + 1 descent - Non-consecutive cycles

** 5 wires, if flashing lights (230V)



“OP'DRIVE 3.0” operator



OP' DRIVE 3.0 OPERATOR

- OP'DRIVE 3.0 operator (150 cycles/day, max. shutter surface = 20 m² or PW max. = 2,000 mm and PH max. = 2,000 mm)

TYPE OF OPERATOR	VOLTAGE (V)	POWER (KW)	CURRENT (A)	POWER SUPPLY (OPERATOR OR BOX)	PROTECTION CLASS	OPERATOR RELEASE SYSTEM	NO. OF CYCLES* PER DAY
SINGLE-PHASE INDUSTRIAL OPERATOR	24**	0.054	6	2 wires	IP 30	Yes	150

* 1 cycle = 1 ascent + 1 descent - Non-consecutive cycles

** Low-voltage direct current

• Technical specifications of the OP'DRIVE 3.0 operator control box:



- **Integrated operating buttons** on the front panel with indicator light.

- **LCD display** inside the box with drop-down setting buttons (rotating codes).

Setting examples: Teach-in, operating modes, re-closing delay, remote control programming, error reading, cycle counter reading and deletion.

- **Force management**
- **Voltage:** Single-phase 230 V
- **Power supply:** 2 wires
- **Box housing:** class II double insulated
- **Max. power:** 750 W
- **Protection class:** IP 56
- **230 V, 500 W output:** area lighting (optional)
- **24V, 15W output:** traffic light (optional) with 3 sec. advance warning
- Transmitter/receiver cell connection **terminal block** (optional)
- Additional **controller terminal block**
- Emergency battery **connection terminal block** (optional)
- **Operating modes:** sustained pressure, mixed, pulse, automatic ***, partial opening.

*** With 2 sets of compulsory cells



The box is fitted as standard with a cycle counter, a remote control receiver (transmitter optional) and an integrated battery charger (battery optional).



Operating principle "OP'DRIVE 3.0"

- **Sustained pressure:**
 - + Pre-programmed version, no settings required.
 - + Operation with integrated anti-crushing and anti-lifting safety devices.
- **Pulse operation for ascent / Sustained pressure for descent:**
 - + Automatic learning of end positions and operating forces.
 - + Automatic control and management of door forces during use (anti-lift, anti-crush).
 - + Partial opening function (adjustable height).
 - + Automatic search for end positions in case of manual door release.
 - + Automatic door slow-down at the end of the movement.
 - + LED information on front panel or error message on LCD display.
- **Pulse:**
 - + Automatic reopening in case of obstruction while closing.
 - + Cell self-test functions.
- **Automatic:**
 - + Adjustable closing time delay.
 - + 3 automatic operating modes:
 - **Sequential Mode:** Although closing is timed, 1 pulse is enough to control movement (open, stop or close).
 - **Auto Mode:** Priority is given to opening and no pulse can interrupt the opening command (except the stop button on the front panel).
 - **Block Mode:** Priority is given to opening and no pulse can interrupt the opening command (except the stop button on the front panel). Automatic reduction of the closing delay when passing in front of the safety cells.
 - **Plus 2 sets of compulsory bottom cells** (EN 13241+A2).



In pulse or automatic operation mode, OP'DRIVE 3.0 manages forces automatically without the need for a safety edge.



2 sets of bottom cells are systematically supplied for pulse control in public areas, out of sight of the door or in automatic mode (EN 13241+A2).

Troubleshooting

The operator release lever, factory-fitted on the vertical rail, allows the door to be opened immediately with a direct pull in case of a power cut, for example.



The battery option allows the door to operate at reduced speed for 15 to 20 cycles in the absence of mains power. During normal door operation, the battery charge is maintained automatically by the control box (this operator's battery is housed in the control box).



OPERATING MODES

Sustained pressure (trained users)





This operating mode can be used for all door locations. It requires a controller that allows constant user control (continuous action on the controller and within sight of closing).



Please note: In public areas, the controller must be customised, such as with a key box.

• Necessary safeguards

	OUTSIDE PUBLIC AREAS / IN PUBLIC AREAS (WITHIN SIGHT OF DOOR)
INDUSTRIAL OR COMMERCIAL PREMISES OR GARAGES	<ul style="list-style-type: none"> No safety device required

CONTROLLERS	
BBA2 	2-button box: <ul style="list-style-type: none"> wall-mounted dimensions: 105×66×55 mm protection class: IP 66
BBA3i 	Smart 3-button box: <ul style="list-style-type: none"> wall-mounted dimensions: 130×67×55 mm for Industrial operators protection class: IP 54
BCA 	Wall-mounted key switch box: <ul style="list-style-type: none"> protruding dimensions: 74×74×55 mm Protections class: IP 54 number of keys: 2
BCE 	Flush-mounted key switch box: <ul style="list-style-type: none"> protruding dimensions: 90×100×6 mm built-in dimensions: 74×74×45 mm protection class: IP 54 number of keys: 2



Comment: Although the front of the OP'DRIVE 3.0 box is fitted with control buttons, it is strongly recommended that you use a button box or key box for industrial use.



Pulse on ascent / sustained pressure on descent (trained users)

This operating mode allows opening by pulse operation and closing by sustained pressure (formerly mixed operation under French standard NFP 25362). This mode of operation is similar to pulse mode in standard EN 13241+A2.



Please note: In public areas, the controller must be customised, such as with a key box.






Necessary safeguards

INDUSTRIAL OPERATOR		
	OUTSIDE PUBLIC AREAS	IN PUBLIC AREAS
INDUSTRIAL OR COMMERCIAL PREMISES OR GARAGES	<ul style="list-style-type: none"> Smart 3-button box (Pic 53 BP) 	<ul style="list-style-type: none"> Box adapted to operator 1 set of top cells *

* If overhead discharge with passage height < 2,900 mm

OP' DRIVE 3.0 OPERATOR		
	OUTSIDE PUBLIC AREAS	IN PUBLIC AREAS
INDUSTRIAL OR COMMERCIAL PREMISES OR GARAGES	<ul style="list-style-type: none"> OP' DRIVE 3.0 box ** 	

** See the operating modes of the OP'DRIVE 3.0 control box (p.6)

CONTROLLERS			
BBAS 	Box with stop button: <ul style="list-style-type: none"> • wall-mounted • dimensions: 66×66×54 mm • for use with BCE2 or BCA1 key boxes • protection class: IP 66 	BCA 	Wall-mounted key switch box: <ul style="list-style-type: none"> • protruding dimensions: 74×74×55 mm • protection class: IP 54 • number of keys: 2
BBA3 	Wall-mounted 3-button box: <ul style="list-style-type: none"> • dimensions: 130×67×55 mm • protection class: IP 66 	BCE 	Flush-mounted key switch box: <ul style="list-style-type: none"> • protruding dimensions: 90×100×6 mm • built-in dimensions: 74×74×45 mm • protection class: IP 54 • number of keys: 2
BBA3i 	Smart 3-button box: <ul style="list-style-type: none"> • wall-mounted • dimensions: 130×67×55 mm • for Industrial operators • protection class: IP 54 		



Pulse Operation (trained users)

In pulse operation mode, the user is required to perform a brief action on the controller which triggers the movement of the shutter: open or stop or close.



Precautions when working:
2 flashing spots + compulsory road markings in accordance with the French decree of 21 December 1993.

Necessary safeguards

	INDUSTRIAL OPERATOR		
	OUTSIDE PUBLIC AREAS	IN PUBLIC AREAS	
		WITHIN SIGHT OF DOOR	OUT OF SIGHT OF DOOR
INDUSTRIAL OR COMMERCIAL PREMISES OR GARAGES	<ul style="list-style-type: none"> Box adapted to operator Safety edge 	<ul style="list-style-type: none"> Box adapted to operator Safety edge 1 set of top cells * 	<ul style="list-style-type: none"> Box adapted to operator Safety edge 1 set of top cells * 2 sets of bottom cells

* If overhead discharge with passage height < 2,900 mm

	OP' DRIVE 3.0 OPERATOR			
	OUTSIDE PUBLIC AREAS		IN PUBLIC AREAS	
	WITHIN SIGHT OF DOOR	OUT OF SIGHT OF DOOR	WITHIN SIGHT OF DOOR	OUT OF SIGHT OF DOOR
INDUSTRIAL OR COMMERCIAL PREMISES OR GARAGES	<ul style="list-style-type: none"> OP'DRIVE 3.0 box ** 		<ul style="list-style-type: none"> OP' DRIVE 3.0 box ** 	<ul style="list-style-type: none"> OP' DRIVE 3.0 box ** 2 sets of bottom cells

** See the operating modes of the OP'DRIVE 3.0 control box (p.6)



OP'DRIVE 3.0 manages forces automatically without a safety edge

CONTROLLERS			
BBAI 	Wall-mounted pulse button box: <ul style="list-style-type: none"> dimensions: 66×66×54 mm protection class: IP 66 	BBA3 	Wall-mounted 3-button box: <ul style="list-style-type: none"> dimensions: 130×67×55 mm protection class: IP 66
BCA 	Wall-mounted key switch box: <ul style="list-style-type: none"> protruding dimensions: 74×74×55 mm protection class: IP 54 number of keys: 2 	Transmitter 	4-function transmitter: <ul style="list-style-type: none"> frequency 868 MHz dimensions: 87×24×17 mm protection class: IP (ND)
BCE 	Flush-mounted key switch box: <ul style="list-style-type: none"> protruding dimensions: 90×100×6 mm built-in dimensions: 74×74×45 mm protection class: IP 54 number of keys: 2 	Receiver 	Separate 2- or 4-function receiver: <ul style="list-style-type: none"> for a 4-function transmitter frequency 868 MHz protection class: IP 65



A specific receiver is integrated into the OP'DRIVE 3.0 box



Automatic operation (trained or untrained users)

In automatic operation, the shutter moves without the need for manual operation by the user (for example, closing with time delay, opening by magnetic loop, etc.). This operating mode can be used for commercial and industrial premises and garages but it is not suitable for houses.



Precautions for automatically-operated doors in multi-family residences:

Collective residential buildings must meet specific requirements (acoustics/traffic, etc.) not covered by the designated standard NF 13241 + A2. These specific requirements are not included in our quotes.

In the case of a collective residence, signage and lighting (area lighting + flashing lights with 2 seconds warning + ground marking) are legally required (Decree of 09 August 2006 relating to the application of Article R.125-3-1 of the Construction and Housing Code).

• Necessary safeguards

	INDUSTRIAL OPERATOR	
	OUTSIDE PUBLIC AREAS	IN PUBLIC AREAS
INDUSTRIAL OR COMMERCIAL PREMISES OR GARAGES	<ul style="list-style-type: none"> Box adapted to operator Safety edge 2 sets of bottom cells 	<ul style="list-style-type: none"> Box adapted to operator Safety edge 2 sets of bottom cells 1 set of top cells *

* If overhead discharge with passage height < 2,900 mm

	OP' DRIVE 3.0 OPERATOR	
	OUTSIDE PUBLIC AREAS	IN PUBLIC AREAS
INDUSTRIAL OR COMMERCIAL PREMISES OR GARAGES	<ul style="list-style-type: none"> OP'DRIVE 3.0 box ** 2 sets of bottom cells 	<ul style="list-style-type: none"> OP'DRIVE 3.0 box ** 2 sets of bottom cells

** See the operating modes of the OP'DRIVE 3.0 control box (p.6)



OP'DRIVE 3.0 manages forces automatically without a safety edge

CONTROLLERS			
BBAI 	Wall-mounted pulse button box: <ul style="list-style-type: none"> dimensions: 66x66x54 mm protection class: IP 66 	Transmitter 	4-function transmitter: <ul style="list-style-type: none"> frequency 868 MHz dimensions: 87x24x17 mm protection class: IP (ND)
BCA 	Wall-mounted key switch box: <ul style="list-style-type: none"> protruding dimensions: 74x74x55 mm protection class: IP 54 number of keys: 2 	Magnetic loop 	Magnetic Loop: <ul style="list-style-type: none"> Loop perimeter: 6 m protection class: IP 54
BCE 	Flush-mounted key switch box: <ul style="list-style-type: none"> protruding dimensions: 90x100x6 mm built-in dimensions: 74x74x45 mm protection class: IP 54 number of keys: 2 	Receiver 	Separate 2- or 4-function receiver: <ul style="list-style-type: none"> for a 4-function transmitter frequency 868 MHz protection class: IP 65
Road tube 	Road tube: <ul style="list-style-type: none"> max. length: 6 m protection class: IP (ND) 	<p>A specific receiver is integrated into the OP'DRIVE 3.0 box</p>	



Automatic operation (trained or untrained users)

In automatic operation, the shutter moves without the need for manual operation by the user (for example, closing with time delay, opening by magnetic loop, etc.). This operating mode can be used for commercial and industrial premises and garages but it is not suitable for houses.



Precautions for automatically-operated doors in multi-family residences:

Collective residential buildings must meet specific requirements (acoustics/traffic, etc.) not covered by the designated standard NF 13241 + A2. These specific requirements are not included in our quotes.

In the case of a collective residence, signage and lighting (area lighting + flashing lights with 2 seconds warning + ground marking) are legally required (Decree of 09 August 2006 relating to the application of Article R.125-3-1 of the Construction and Housing Code).

Necessary safeguards

	INDUSTRIAL OPERATOR	
	OUTSIDE PUBLIC AREAS	IN PUBLIC AREAS
INDUSTRIAL OR COMMERCIAL PREMISES OR GARAGES	<ul style="list-style-type: none"> Box adapted to operator Safety edge 2 sets of bottom cells 	<ul style="list-style-type: none"> Box adapted to operator Safety edge 2 sets of bottom cells 1 set of top cells *

* If overhead discharge with passage height < 2,900 mm

	OP'DRIVE 3.0 OPERATOR	
	OUTSIDE PUBLIC AREAS	IN PUBLIC AREAS
INDUSTRIAL OR COMMERCIAL PREMISES OR GARAGES	<ul style="list-style-type: none"> OP'DRIVE 3.0 box ** 2 sets of bottom cells 	<ul style="list-style-type: none"> OP'DRIVE 3.0 box ** 2 sets of bottom cells

** See the operating modes of the OP'DRIVE 3.0 control box (p.6)



OP'DRIVE 3.0 manages forces automatically without a safety edge

CONTROLLERS			
BBAI 	Wall-mounted pulse button box: <ul style="list-style-type: none"> dimensions: 66x66x54 mm protection class: IP 66 	Transmitter 	4-function transmitter: <ul style="list-style-type: none"> frequency 868 MHz dimensions: 87x24x17 mm protection class: IP (ND)
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Road tube 	Road tube: <ul style="list-style-type: none"> max. length: 6 m protection class: IP (ND) 	<p>A specific receiver is integrated into the OP'DRIVE 3.0 box</p>	

STANDARDS

STANDARDS

- **STANDARDS IN FORCE
NF EN 13241 + A2**

Important points 75

Certificates of conformity 81



IMPORTANT POINTS

Date _____

On 2 May 2005, standard NFP 25362 was superseded by designated standard NF EN 13241-1, amended in 2011 to NF EN 13241-1 + A1, then in 2016 to NF EN 13241 + A2.

Why standard NF EN 13241 + A2? _____

Standard NF EN 13241 + A2 has made it possible to standardise national regulations to facilitate, among other things, the free movement of goods and merchandise, and also to guarantee the safety of equipment.

Standard NF EN 13241 + A2 covers _____

NF EN 13241 + A2 PRODUCT STANDARD

TECHNOLOGY STANDARDS

NF EN 12433 -1
TYPES OF DOORS

NF EN 12433 - 2
DOOR COMPONENTS

ENVIRONMENTAL STANDARDS

NF EN 12424
WIND RESISTANCE

NF EN 12444
TESTS AND CALCULATIONS

NF EN 12425
WATER PENETRATION

NF EN 12489
TEST METHODS

NF EN 12426
AIR PERMEABILITY

NF EN 12427
TEST METHODS

NF EN 12428
THERMAL TRANSMITTANCE

SAFETY STANDARDS

NF EN 12604
MECHANICAL ASPECTS

NF EN 12605
TEST METHODS

NF EN 12453
SAFETY OF USE

NF EN 12445
TEST METHODS

NF EN 12978
SAFETY DEVICES

NF EN 12635
INSTALLATION AND USE

ELECTRICAL STANDARDS

EN 60335 -1
GENERAL REQUIREMENTS

EN 60335 - 2 - 95
RESIDENTIAL GARAGES

EN 60335 - 2 - 103
NON-RESIDENTIAL DOORS



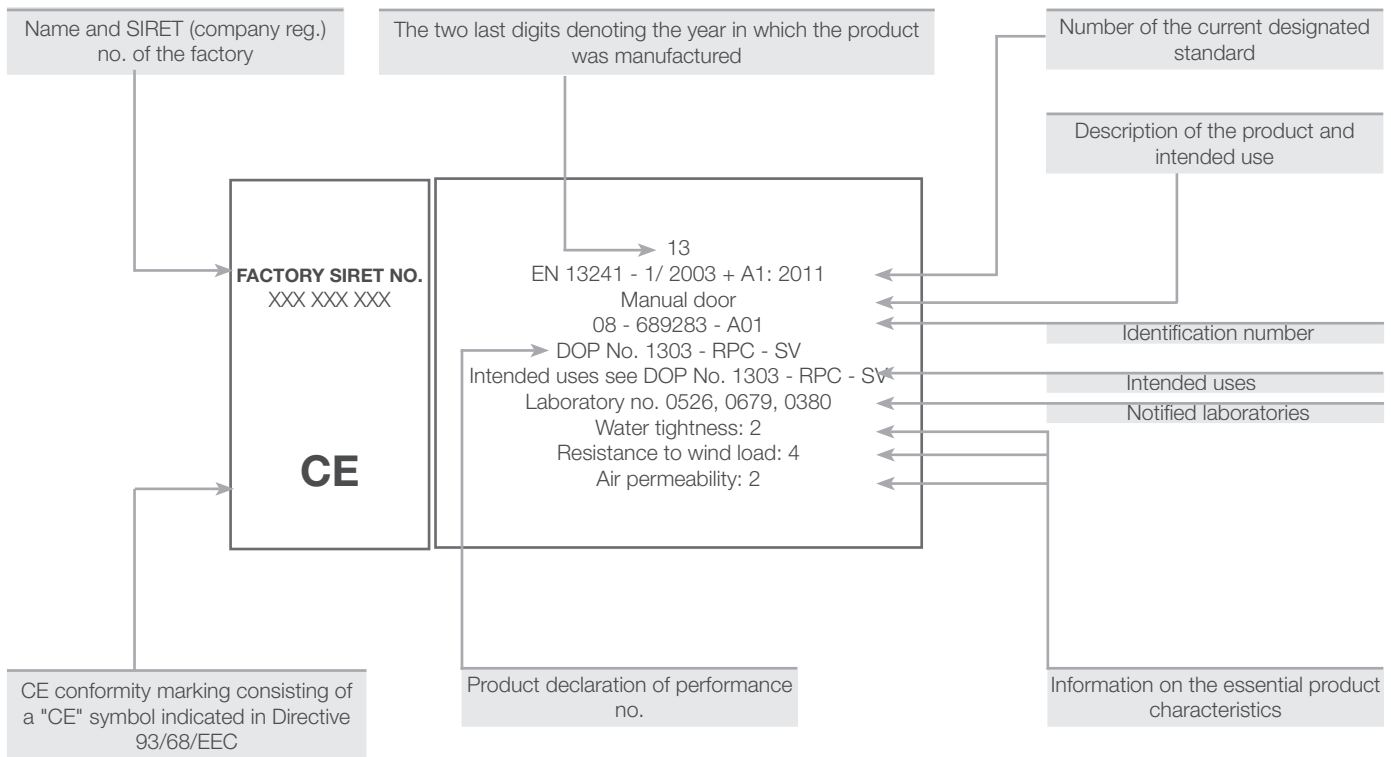
CE marking

- **CE marking demonstrates the manufacturer's compliance with standard NF EN 13241 + A2:**
 - Risk analysis carried out by manufacturer.
 - Production control in factories.
 - Initial testing by a notified body (Cetim, FCBA, CSTB).
 - Test carried out by manufacturer.
- **The manufacturer must provide the following:**
 - Installation and removal instruction leaflet.
 - User guide.
 - Maintenance logbook.
 - Declaration of conformity.
 - Declarations of performance (DOP).
- **The manufacturer must affix the CE Label and, in doing so, assumes responsibility for the product.**



The installer must provide a user guide and maintenance logbook to the end customer who is thus considered a trained user.

CE Labeling



Characteristics checked by notified bodies

- Operating forces
- Safety when opening
- Wind resistance
- Emission of dangerous substances
- Air permeability
- Water tightness

Reminder of operating modes

- Manual operation
- Motorised operation

DEPENDING ON THE CONTROL SYSTEM



SUSTAINED PRESSURE
Control by continuous action and within sight of closing

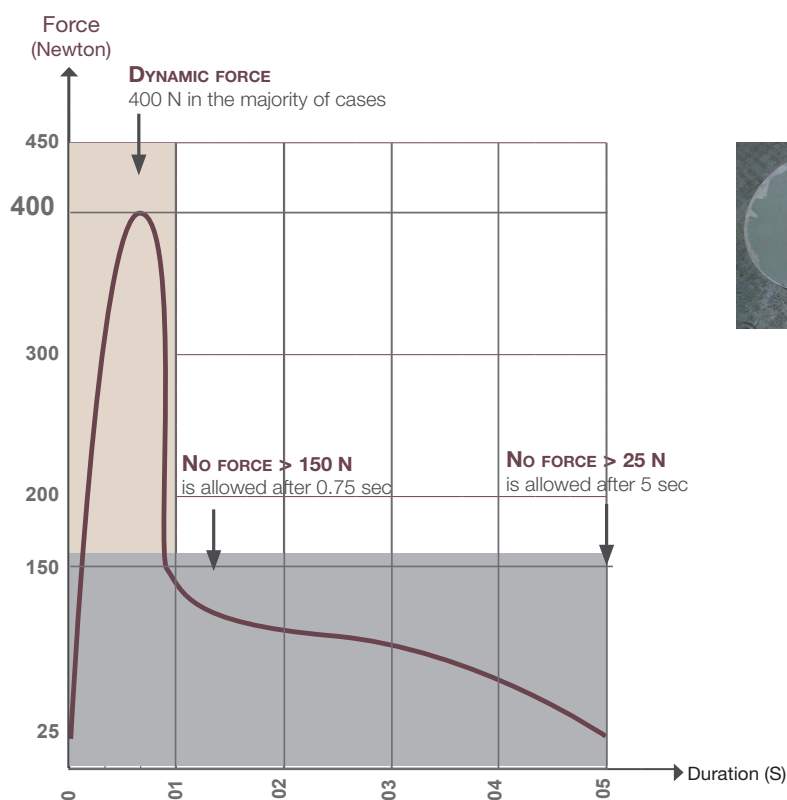


PULSE
Control device that requires a brief manual action to initiate one movement (open, stop or close)



AUTOMATIC
One of the door movements (opening or closing) is not activated by the user (e.g. time delay)

Limitation of forces



Torque measurement device*

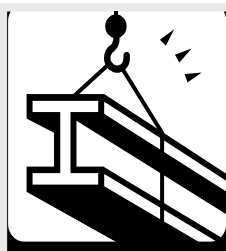
* Device for measuring dynamic and static forces and their duration during the closing of automatic gates and doors.



To remain in accordance with the values described in the diagram, use either:

- A safety edge (Grilles / Shutters / Indus Sectio with Indus operator)
- The OP' DRIVE 3.0 concept (Indus Sectio)
- Operators TD 500, 650, etc. (Villa Sectio)
- Axovia operators (Gates)

Anti-lifting protection



A closure with vertical opening must not be able to lift loads of more than **20 kg**.



Choice of 1 set of cells or 1 safety edge at the header or use of OP' DRIVE 3.0 TD 500, etc.
(operators equipped with torque limiter)

Otherwise, a **sensitive protective device** must detect the lifted part to prevent it from coming into contact with the header or other fixed parts.



Please note: Protection is mandatory for 1 Dentel grille, for example.

The detector must be positioned at least **2,500 mm** from the ground.

Protection to prevent the shutter from falling

Protection must be installed to prevent the shutters of vertically opening doors from **falling or from moving in an uncontrolled, unbalanced way** in the event of a fault with one of the suspension system components, including the drive gear.



The shutter must stop within a maximum distance of **300 mm**.



The above requirement can be ignored if the maximum static unbalance force at the primary edge of the closure does **not exceed 200 N**.

Safety equipment

		SUSTAINED PRESSURE	PULSE		AUTOMATIC
			WITHIN SIGHT OF DOOR	OUT OF SIGHT OF DOOR	
TRAINED USERS	TYPE 1 OUTSIDE PUBLIC AREAS	Button box	Limitation of forces* (Safety edge or similar)		Limitation of forces* (Safety edge or similar) AND Detection of presence (Cells)
	TYPE 2 IN PUBLIC AREAS	Key switch box mandatory	Limitation of forces* (Safety edge or similar)	Limitation of forces* (Safety edge or similar) AND Detection of presence (Cells)	
UNTRAINED USERS	TYPE 3 ALL PEOPLE ALL LOCATIONS	Not possible	Limitation of forces* (Safety edge or similar) AND Detection of presence (Cells)		

* A safety light curtain replaces the limitation of forces and presence detection device.

Maintenance



A professional must carry out regular maintenance checks.



The frequency of maintenance checks must be scheduled according to the manufacturer's specifications.



If the unit has been approved according to standard **NF EN 13241 + A2**, any change of one or more components is made under the sole responsibility of the person who carries it out (they may request the original manufacturer's authorisation).



Replacement of components under NF EN 13241 + A2:
When different and/or additional components are incorporated which may affect the door's characteristics, the initial conformity of the door is no longer valid.



The professional who carries out the maintenance visits is bound by a duty of **responsibility**. They must ensure that:

- the electromechanics are functioning correctly.
- the door is in good general condition.
- the safety devices are effective.



Replacement of closure components covered by standard NF 25362:
Standard NF EN 13241 + A2 does not apply retroactively. The replacement of certain components with identical components is covered by the French standard and does not result in compliance with the European standard.



Déclaration des performances

N°1305-RPC-SI

Nous, soussignés, FTFM LA TOULOUSAINE, sise à Escalquens (31676 Labège Cedex), déclarons que les produits cités ci-dessous sont conformes à l'annexe ZA de la norme NF EN 13241 + A2. Portes et portails industriels, commerciaux et de garage. (Produits sans caractéristiques coupe-feu, ni pare-fumée).

L'utilisation principale prévue est de donner un accès sûr à des marchandises et des véhicules accompagnés ou conduits par des personnes dans des locaux industriels commerciaux, publics ou résidentiels.

- Les produits concernés : Le CETIM n°0526, FCBA (CTBA) n°0380, CSTB n°0679 ont réalisés les essais exigés par la norme selon le système 3.

- Rapports d'essai n°BV13-1045 délivré par CSTB (Sectio Indus 3000x3400 mm).
- Rapports d'essai n°05/CTBA-IBC/PHY/3148/3 délivré par CTBA (Sectio Indus 5000x3000 mm).
- Rapports d'essai n°05/CTBA-IBC/PHY/3148/4 délivré par CTBA (Sectio Indus 3500x3000 mm).
- Rapports d'essai n°781395/150080 partiel 8 délivré par CETIM (Sectio Indus 5800x5000 mm).

Caractéristiques essentielles	Performances	Spécifications techniques
Étanchéité à l'eau	2	
Dégagement de substances dangereuses	Réussite	Conforme au § 4.2.9 de la norme NF EN 13241 + A2
Résistance à la charge due au vent	De 2 à 4	Classe 4 : 3500x3000 avec hublots
Résistance thermique (le cas échéant)		1,41W/m².K : 3500x3000 sans hublot 1,58W/m².K : 3500x3000, 3 hublots Indus 1,37W/m².K : 5000x3000 sans hublot 1,53W/m².K : 5000x3000, 4 hublots Indus
Perméabilité à l'air	2	
Ouverture en toute sécurité	Réussite	Conforme au § 4.3.3 de la norme NF EN 13241 + A2
Définition de la géométrie des composants du verre	NPD	
Résistance mécanique et stabilité	Réussite	Conforme au § 4.2.3 de la norme NF EN 13241 + A2
Efforts de fonctionnement (pour les portes motorisées)	Réussite	Conforme au § 4.3.3 de la norme NF EN 13241 + A2
Durabilité de l'étanchéité à l'eau, de la résistance thermique et de la perméabilité à l'air par rapport à la dégradation	NPD	

Le 30 Mai 2018

Pascal SOLA
Chef produits





DÉCLARATION DE CONFORMITÉ



Nous, soussignés, FTFM LA TOULOUSAIN, sise à Escalquens (31676 Labège Cedex), déclarons que le produit désigné ci-après satisfait les prescriptions de la norme harmonisée NF EN 13241 + A2, pour des produits livrés en fourniture seule.

En conséquence, nous déclarons la conformité du produit mentionné ci-dessous aux dispositions des directives européennes suivantes :

305/2011/CE : directive Produits de Construction (portes manuelles et motorisées)
 2006/42/CE : directive Machines (portes motorisées)
 2014/35/UE : directive Basse Tension (portes motorisées)
 2014/30/UE : directive Compatibilité Électromagnétique (portes motorisées)

Niveaux de performances du produit :

Étanchéité à l'eau	Classe : 2 (si porte vitrée ou portillon : PND*)
Résistance à la charge due au vent	Classe : 1 à 5 selon les caractéristiques de la porte
Transmission thermique	Classe : PND*
Perméabilité à l'air	Classe : 2 (si portillon : PND*)
Durabilité de l'étanchéité à l'eau, de la résistance thermique et de la perméabilité à l'air	Classe : PND*
	(*) PND : Performance non déterminée

DESCRIPTION DU PRODUIT	
Lieu de fabrication	31750 ESCALQUENS - FRANCE
Modèle	Portes Sectionnelles Industrie.
Classe d'utilisation	Portes industrielles, commerciales et de garage manuelles ou motorisées.
Organismes notifiés	CETIM - 7, rue de la presse - 42952 ST-ÉTIENNE CTBA - Allée de Boutaut - 33028 BORDEAUX

Escalquens, le 30 Mai 2018

Mr Pascal SOLA
Responsable Produits



