



INSTALLATION MANUAL

GARAGE DOOR

Torsion spring - front

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Important before installation

General warning

Mounting the product yourself is at your own risk. Only use this instruction as a tool and for the mounting of this specific product. If you cannot mount the product yourself, you can always opt for professional mounting. The mounting team is pleased to help you.

Be careful for damages

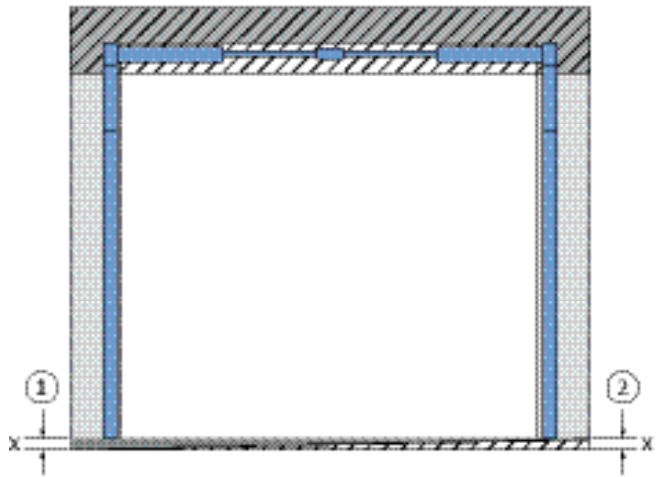
Don't use a knife or any other sharp object when opening the packing. This may cause damage to the content of the package. Put the content of the package on a soft surface.

Be careful when drilling, falling drill cuttings can cause damages.

Check the height of the floor

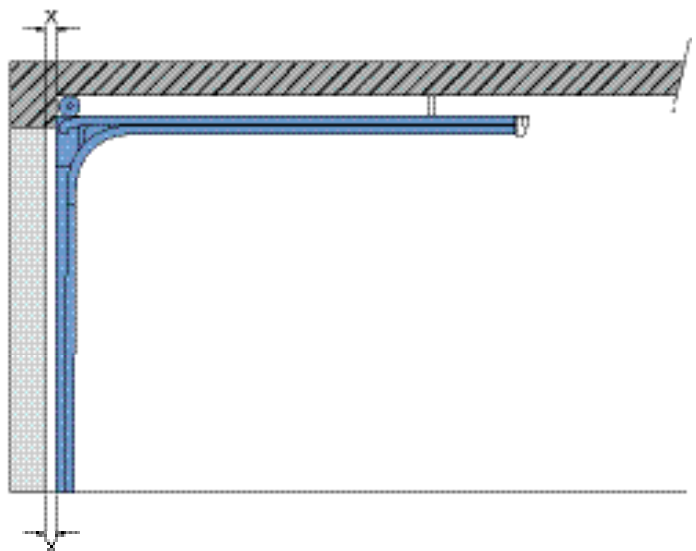
Use a measuring beam or the lintel profile and a level to make sure that the floor is perpendicular. The wall rails need to stand perpendicular and vertical relative to the floor, so that the door can close properly.

- ① When the floor is lower on one side, the difference (x) needs to be filled before mounting.
- ② An other solution is to grind away the difference (x) on the other side.



Check the mounting surface

A sectional door is placed against the opening from the inside. The opening must be even with both sides and the upper side. When the upper side differs relative to both sides, the difference (x) needs to be filled before mounting.



Content

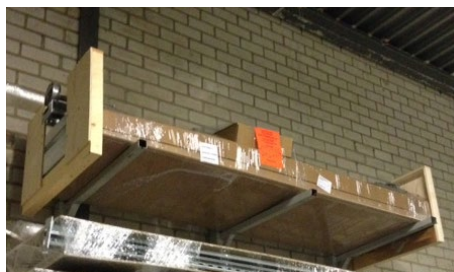
Package 1

1. Vertical rail set
2. Horizontal rail set
3. Rubber closure
4. Lintel
5. Floor bracket (optional)
6. Connection sleeve
7. Connection profile
8. Corner piece
9. Spring package complete
10. Ball-bearing
11. Tension bar
12. Rollers
13. Hinge set
14. Ceiling bracket set
15. Doorstop
16. Lifting cable
17. Lacquer pen
18. Bag with fastening material



Package 2

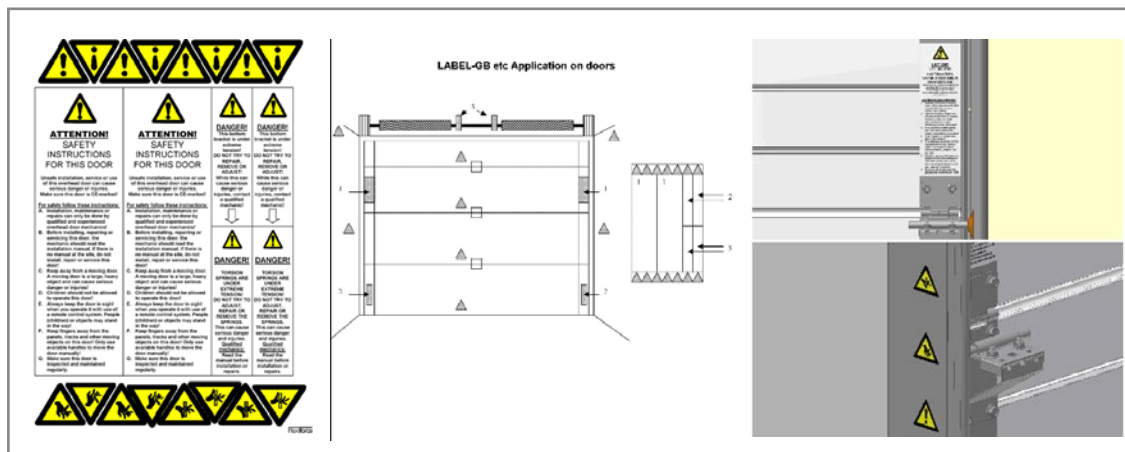
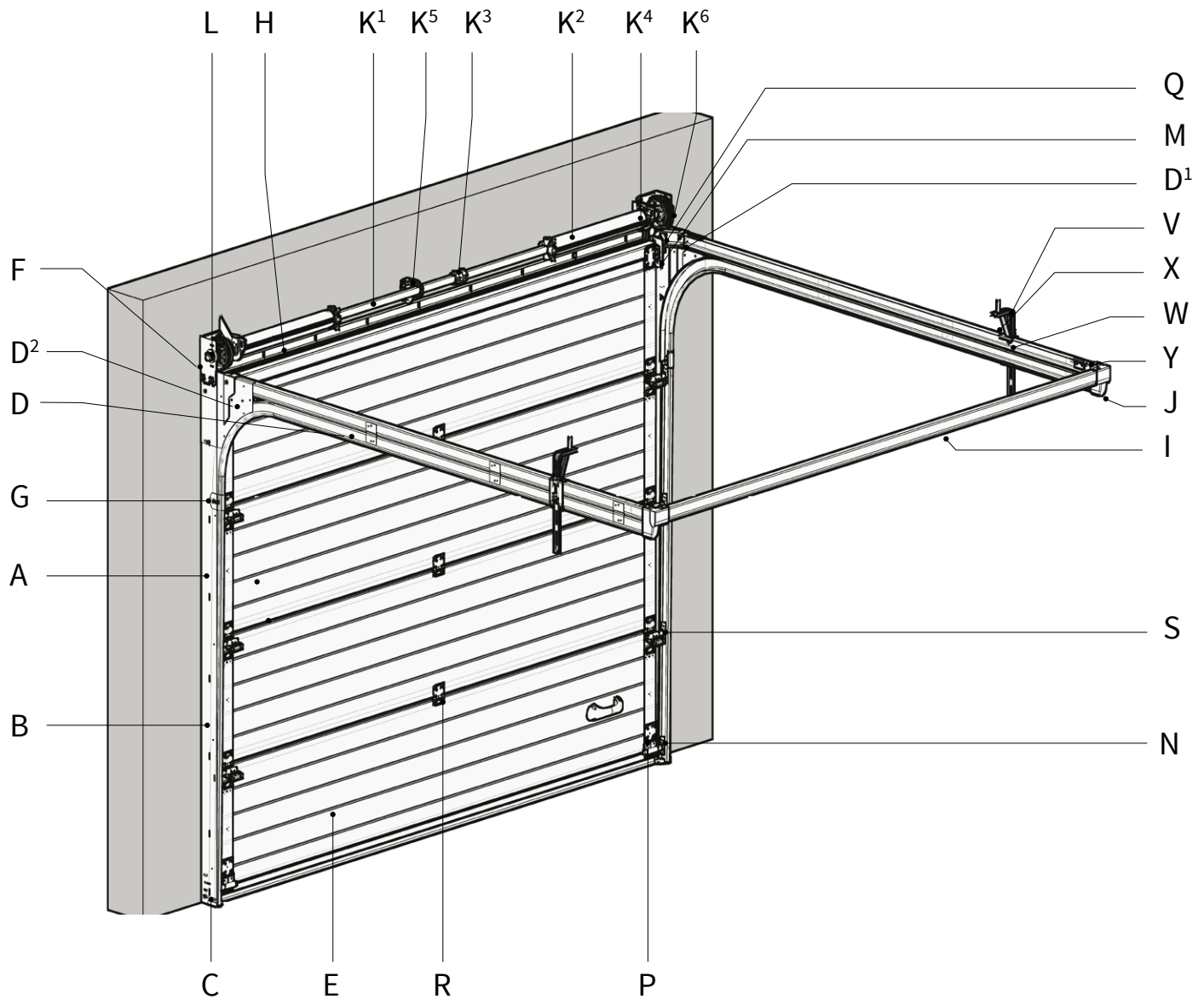
1. Panels



Benodigd gereedschap

- Drilling machine
- Cordless drill with crosshead screw
- Stone drill 10 mm
- Clack with shell 10/13 mm
- Allen key 4 mm
- Ring-/ wrench 10/13 mm
- Crosshead screw driver
- Tape measure
- Folding ruler
- Level
- Pencil
- Glue pliers
- Adhesion pliers
- Oil / lubricant
- Installation manual

Construction overview



Type Model
Ordernummer Order no.
Datum productie Date of production
Afmeting B x H Measure W x H
Gewicht Weight
Railtype Type of track
Kleur Color
Bediening Operation
Aantal veren Number of springs
Lengte veer 1 Length of spring 1
Lengte veer 2 Length of spring 2
Aantal slagen Number of springs

XX-XXXXXX(s)

Parts list

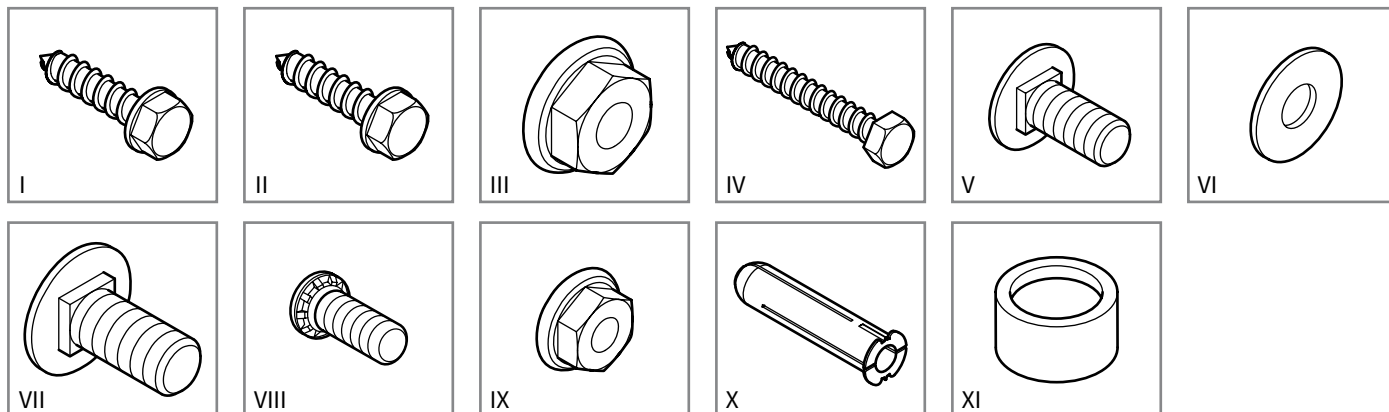


A - vertical rail set
 B - side sealing profile
 C - floor bracket (optional)
 D - horizontal rail set complete
 D¹ - upper curve
 D² - reinforced side plate
 E - panels
 F - wall bracket
 G - connection sleeve
 H - lintel profile
 I - connection profile
 J - corner piece

K - spring package complete
 K¹ - axle with keyway
 K² - torsion spring with spring plug
 K³ - coupling
 K⁴ - spring break safety
 K⁵ - bearing plate for central axle support
 K⁶ - cable tin (FFNL12)
 L - ball-bearing
 M - upper roller
 N - roller
 O - tension bar
 P - bottom hinge

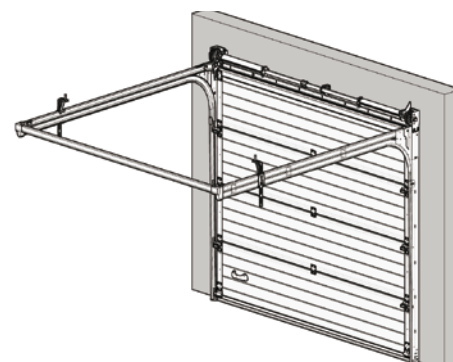
Q - upper roller holder
 R - intermediate hinge
 S - side hinge
 T - lifting cable set
 U - lacquer pen RAL (optional)
 V - corner bracket
 W - rail bracket
 X - reinforcement strip
 Y - rubber doorstop
 Z - angle profile for extra ceiling support

Fastening material

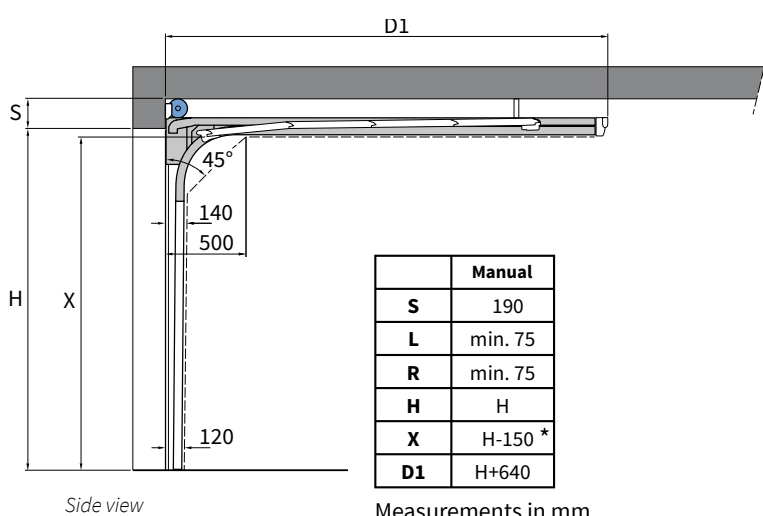


I	Sheet metal screw hexagon $\varnothing 6,3 \times 16$	38 x
II	Sheet metal screw hexagon $\varnothing 6,3 \times 16$	38 x
III	Flange nut M8	12 x
IV	Mounting screw $\varnothing 6 \times 50$	18 x
V	Carriage bolt M6 $\times 16$	33 x
VI	Setting rings M6	18 x
VII	Carriage bolt M8 $\times 20$	4 x
VIII	Press bolt M6 $\times 12$	20 x
IX	Flange nut M6	53 x
X	Nylon mounting plug 8 $\times 40$	18 x
XI	Spacer	6 x

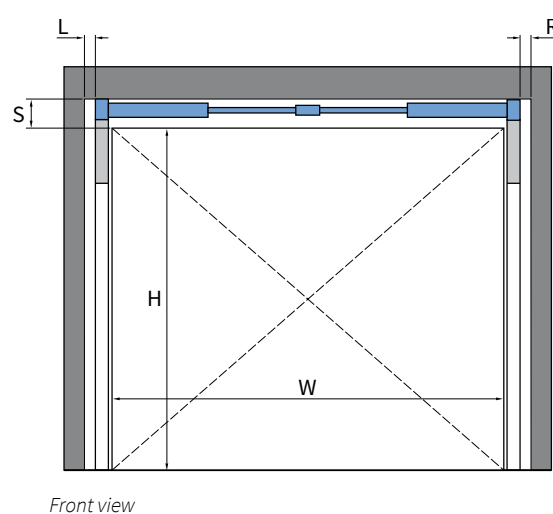
Specifications



Manual control

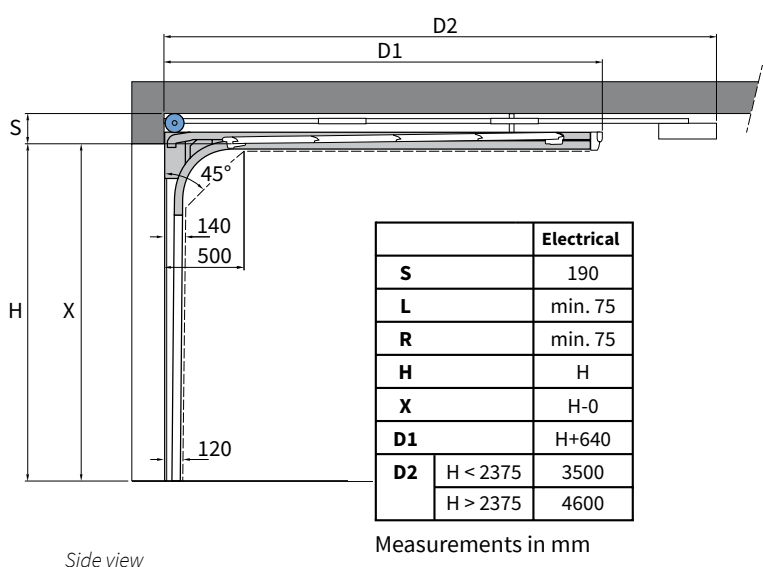


Measurements in mm

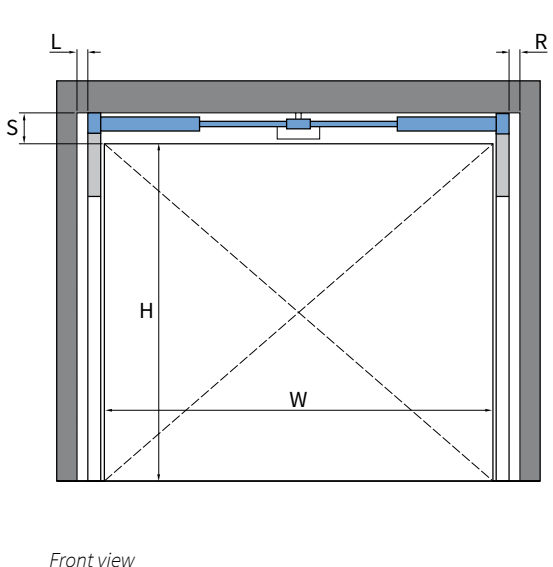


*** Attention!** In a situation with manual operation, the bottom section stays 100 to 150 [mm] in the door opening height (H). Clear drive through height (X) = H - 150 [mm]

Elektrische bediening



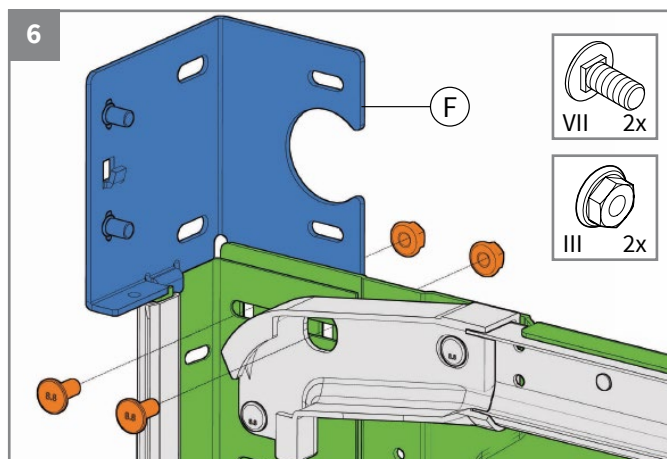
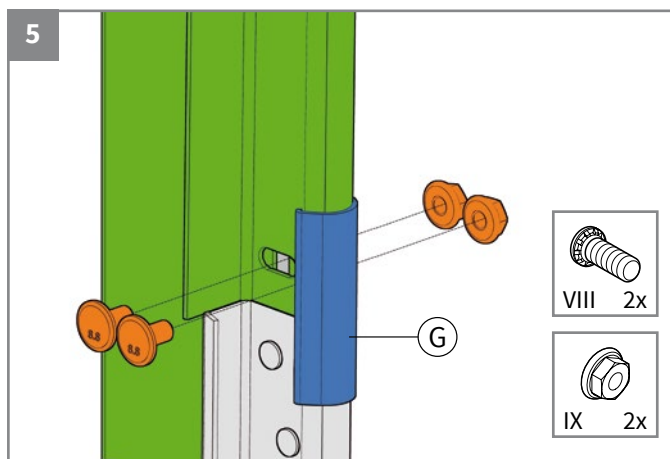
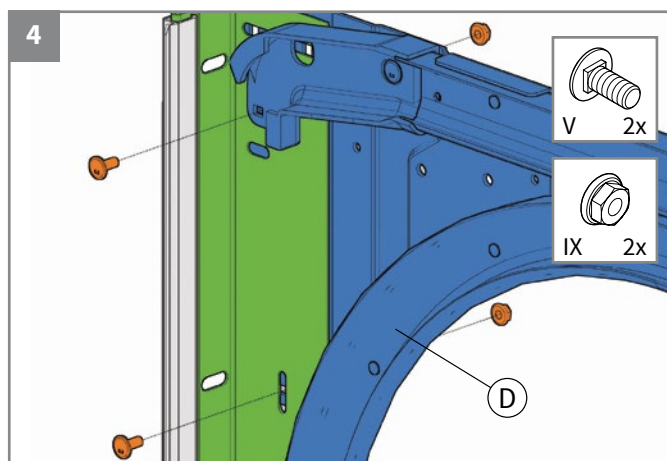
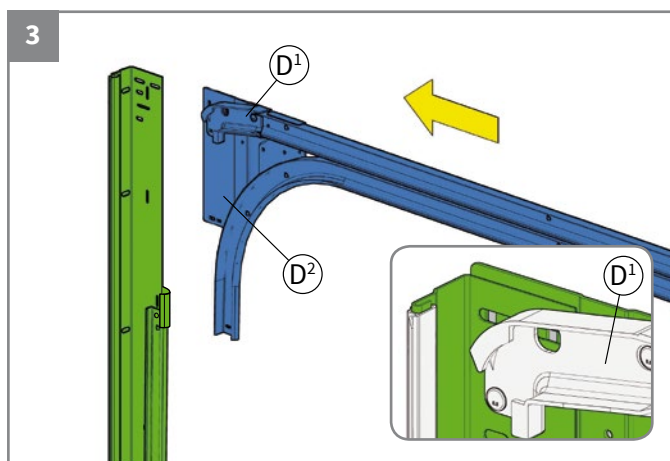
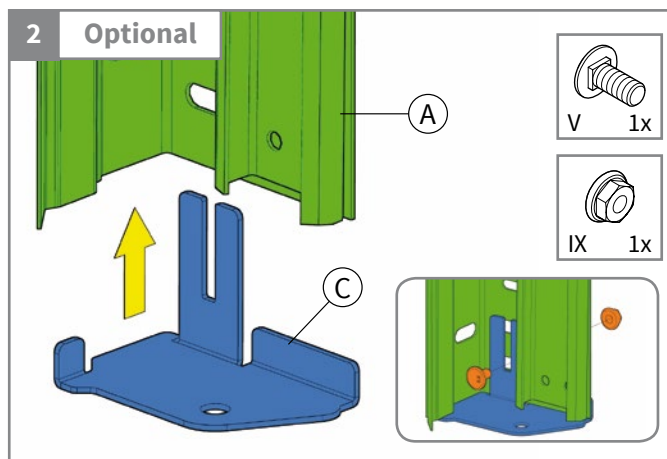
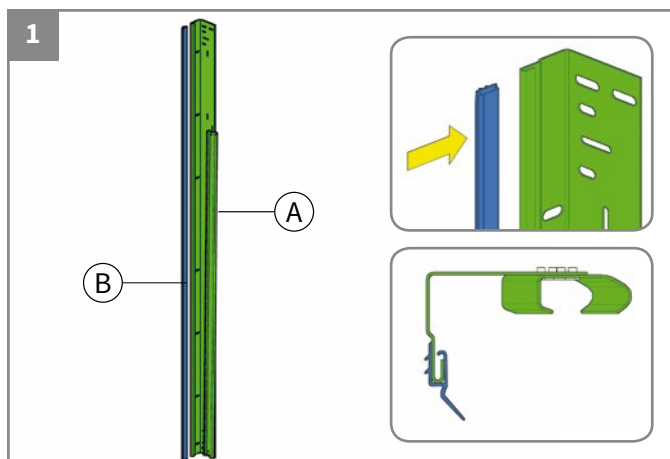
Measurements in mm



Mounting the horizontal and vertical rail set

In many cases, the side space in the garage is limited. For this reason, you need to assemble the vertical and horizontal rail sets on the floor before mounting them on the wall. Follow the steps below for a correct installation:

1. Slide the rubber side sealing strip (B) over the vertical rail (A).
2. Optional: mount the floor bracket (C) on the lower side of the vertical rail (A). This bracket serves for burglar safety.
3. Place the horizontal rail on the vertical rail. Attention! The side plate (D²) falls behind the vertical rail, the upper curve (D¹) in front.
4. Mount the horizontal rail (D) on the vertical rail with two bolts, one in the upper curve and one in the side plate.
5. Mount the horizontal rail on the connection sleeve (G) with two bolts. Make sure that the rails connect nicely so that the rollers smoothly role through. If necessary bend the rails a little.
6. Mount the wall bracket (F) on the upper side of the vertical rail. Make sure that this runs equal to the rails.



Placing the rails on the wall - 1

When the vertical and horizontal rail sets are mounted, these can be put up against the wall.

7. Place the first rail on the wall. If necessary, use a rope for support of the horizontal rail.

8. Use two glue pliers for fastening the vertical rail against the wall. Place one plier at the top and one at the bottom.

Make sure that the lintel profile is level and connects to the door opening.

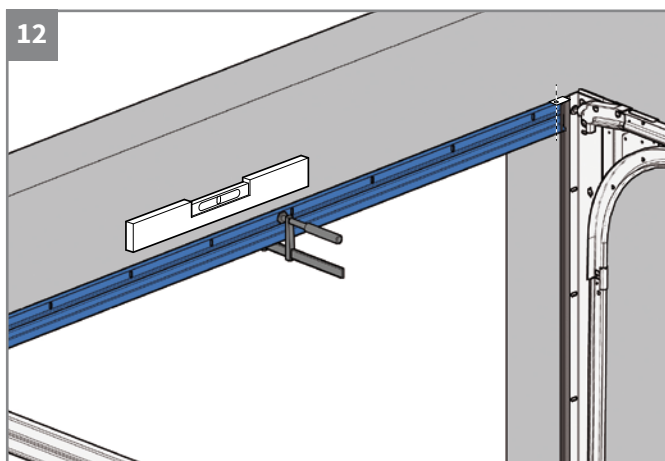
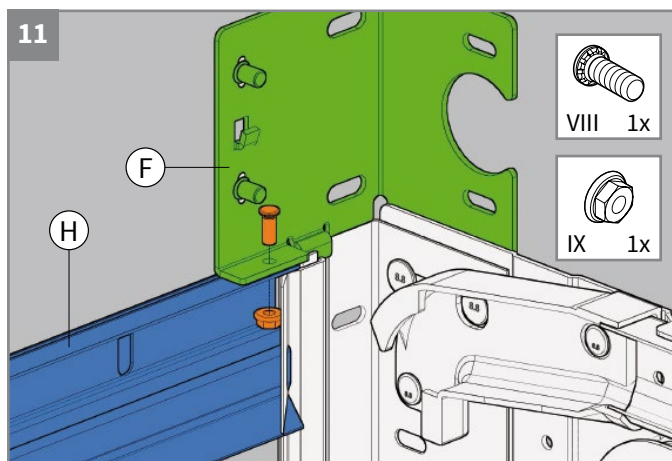
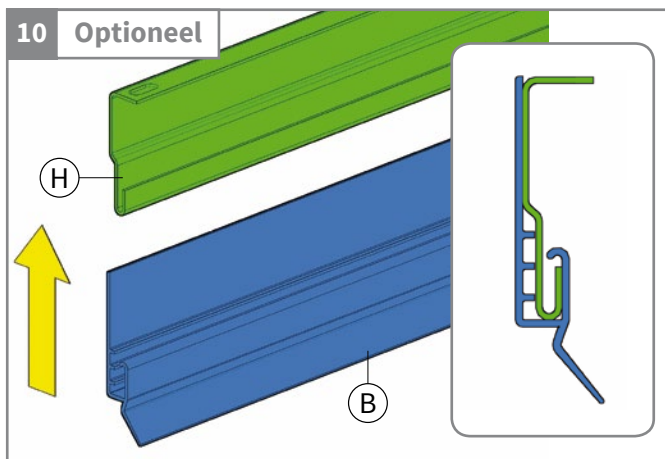
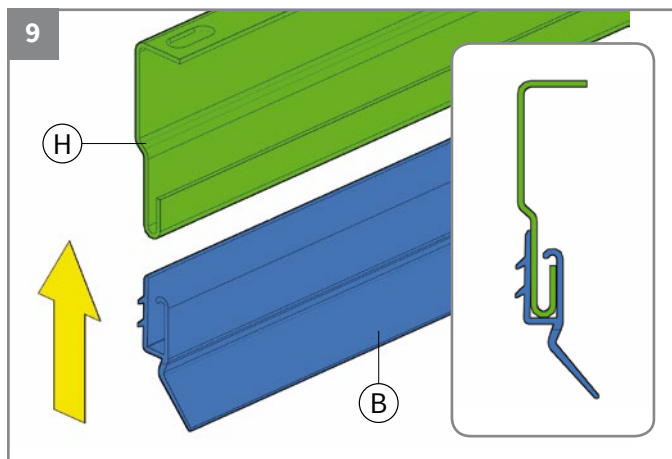
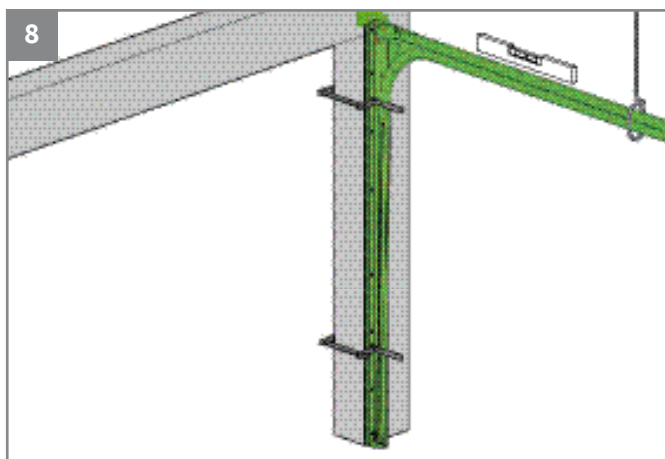
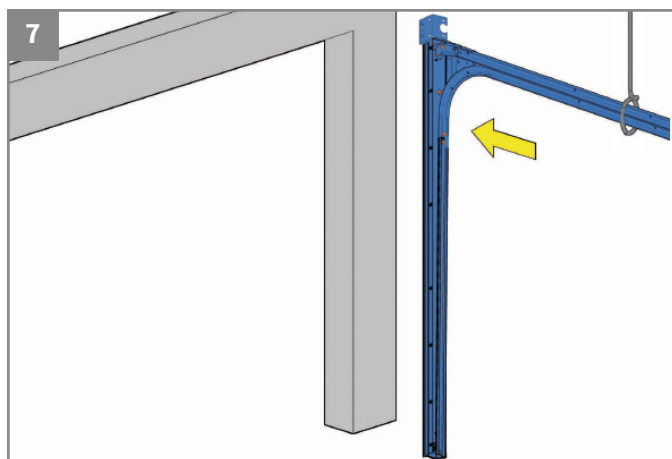
You need to use the lintel profile (H) to place the second rail horizontal and level relative to the first rail.

9. Slide the rubber top-cover strip (B) over the lintel profile (H).

10. Optional: a wider rubber top-cover strip for thermal break (B).

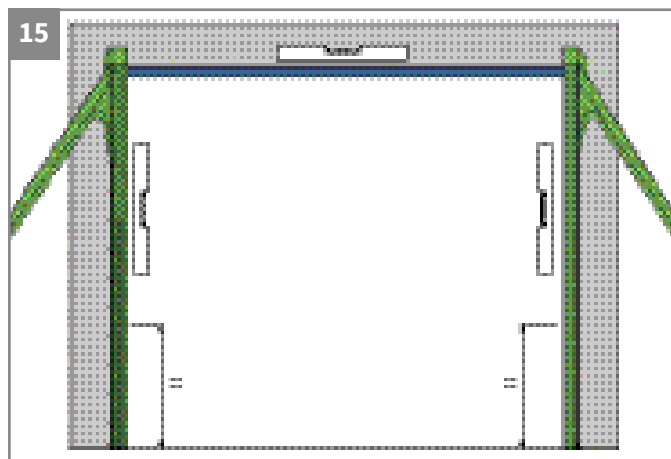
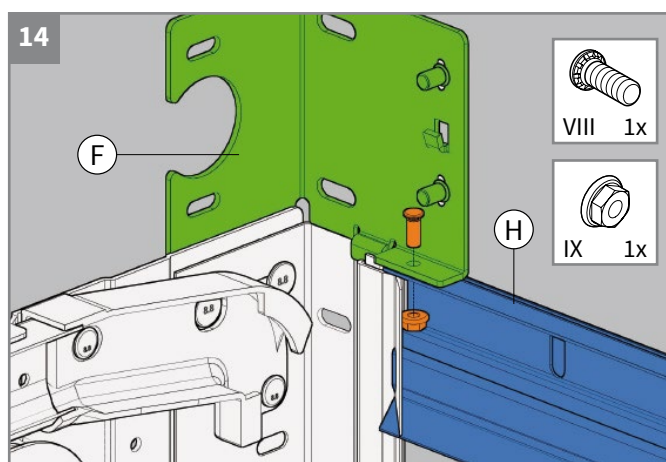
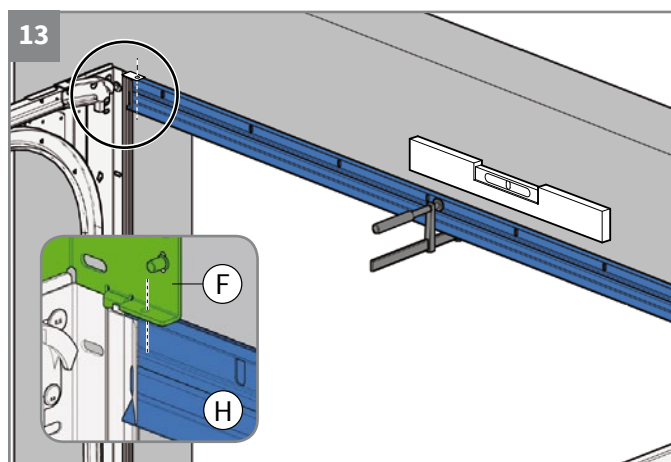
11. Mount the lintel profile (H) to the wall bracket (F) on the upper side of the vertical rail.

12. Fasten the lintel profile to the wall with a glue plier. Make sure that the lintel profile is level.



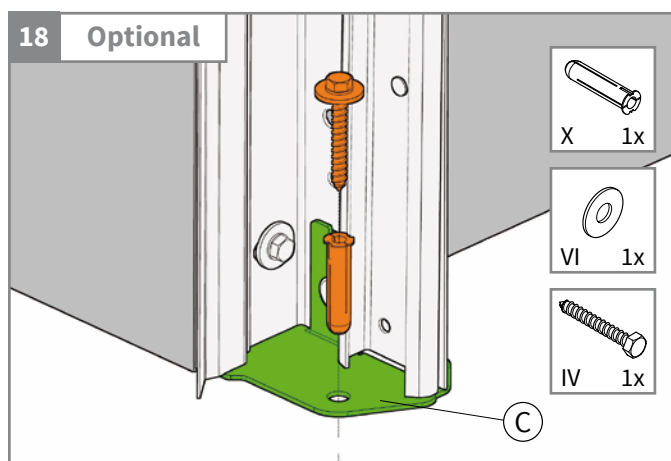
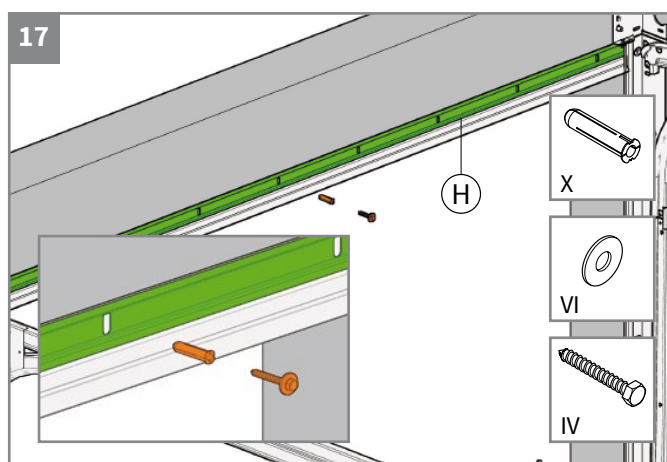
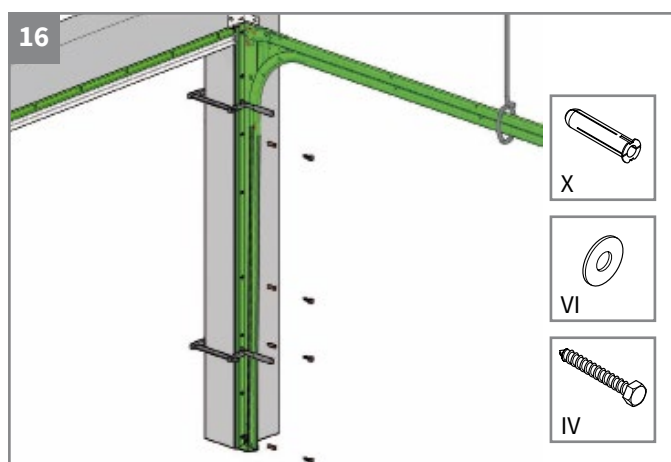
Placing the rails on the wall - 2

13. Place the second rail on the other side against the wall. Make sure that the wall bracket (F) is positioned in the right way above the lintel profile (H). Place so, that the screw holes are exactly above each other. Use at the bottom and at the top a glue plier to fasten the vertical rail against the wall.
14. Mount the lintel profile (H) to the wall bracket (F) of the second vertical rail.
15. Make sure that the vertical rail and the lintel profile are level.



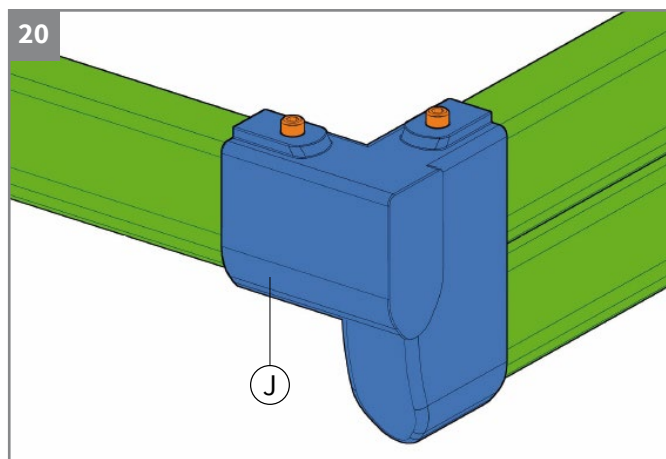
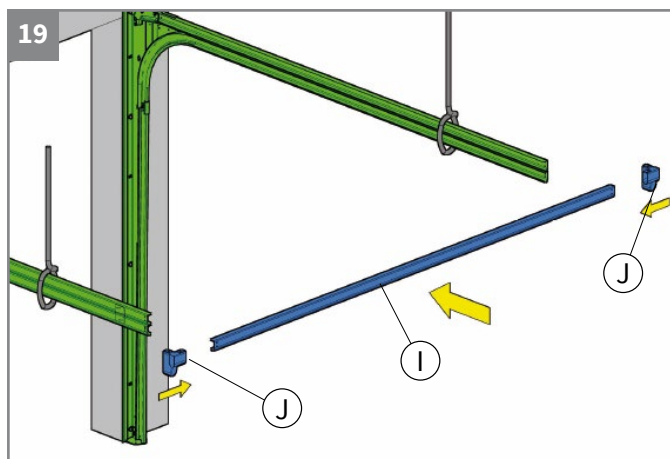
Fastening the rails against the wall

16. Fasten the left and right rail against the wall. The amount of screws depends on your own situation.
17. Fasten the lintel profile (H) against the wall with a few screws. Please drill the drill holes in a stone in stead of a seam.
18. Optional: fasten the floor bracket (C) to the floor.



Mounting the connection profile

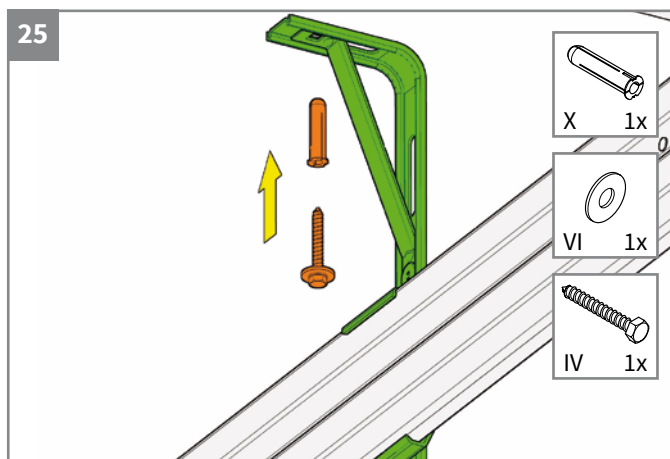
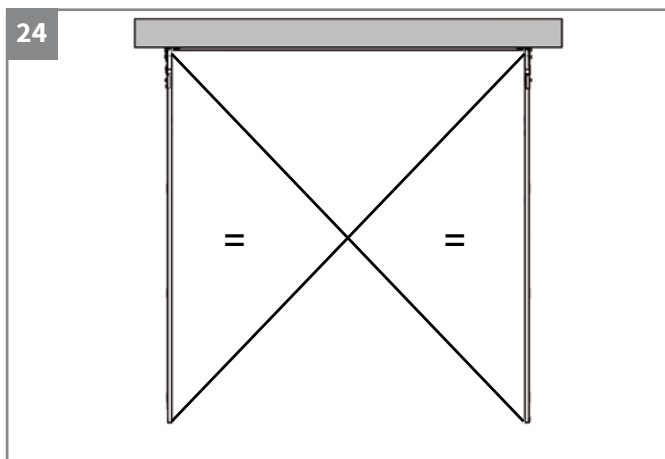
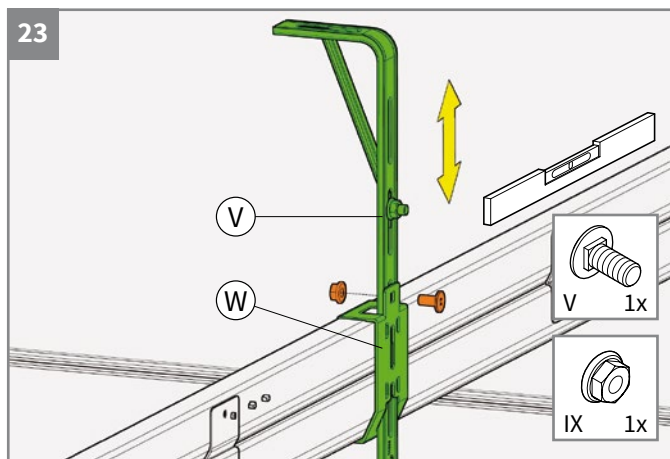
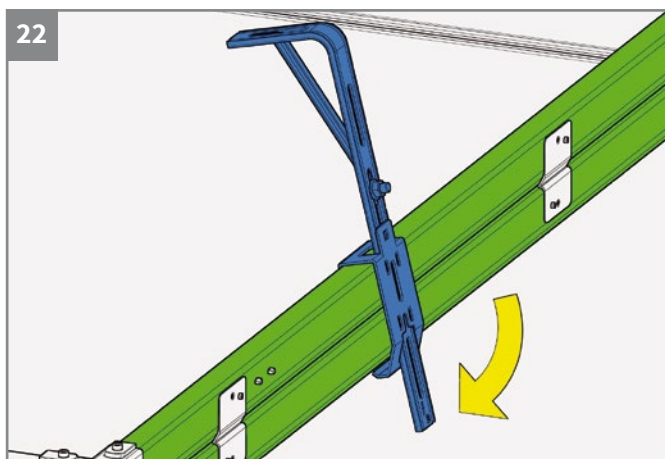
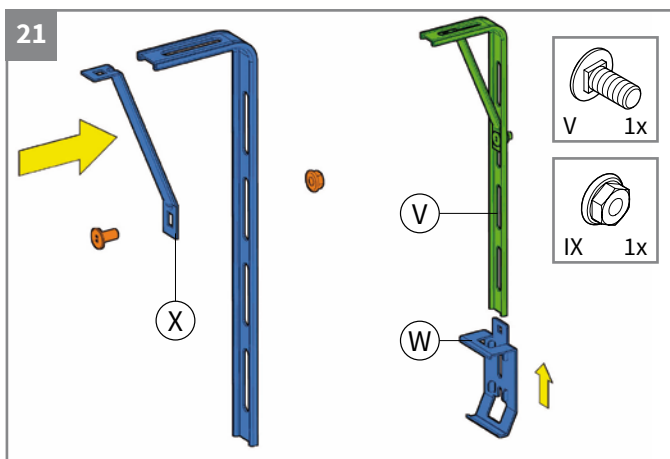
19. Mount the connection profile (I) using two corner pieces (J).
20. Fasten the corner pieces with two hex nuts.



Mounting the ceiling brackets

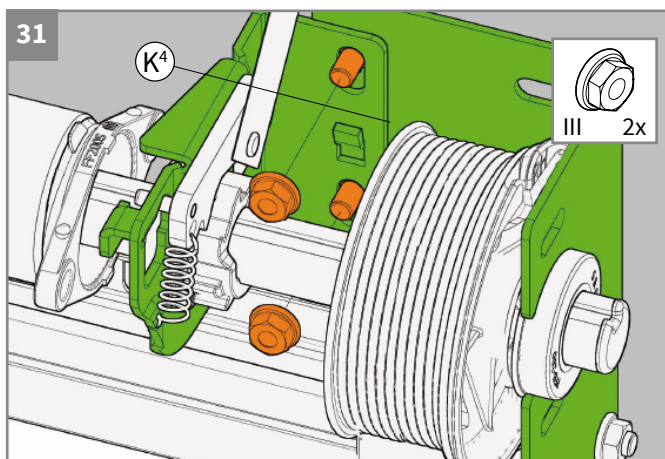
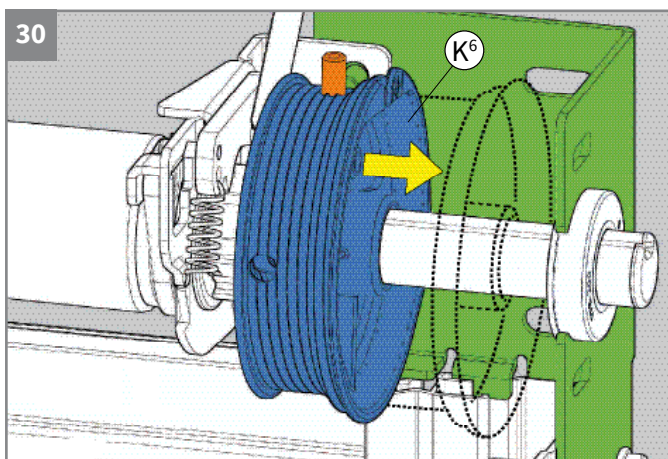
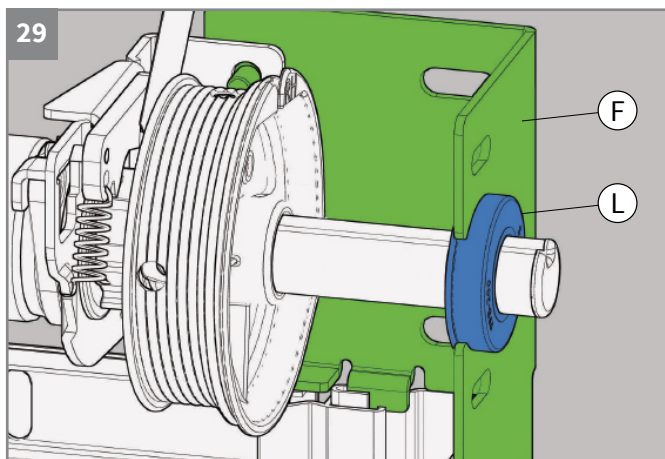
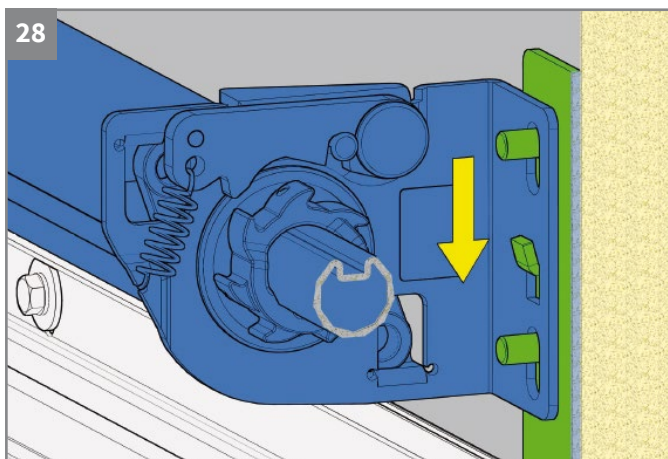
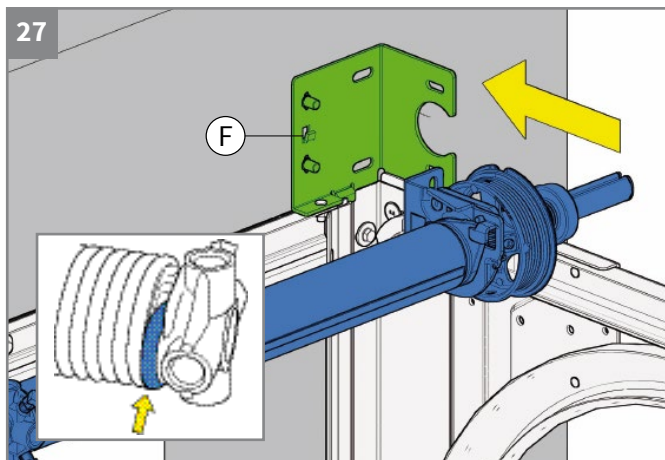
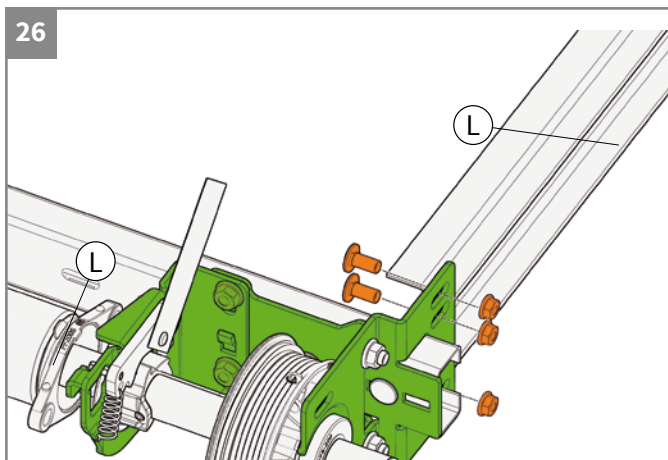
21. Mount the reinforcement strip (X) and the rail bracket (W) to the corner bracket (V).
22. Slide the ceiling brackets on both sides over the horizontal rail.
23. Bring the corner bracket (V) to the right height so that the horizontal rail is level. Fasten the rail bracket (W) on the corner bracket. Do this even with the second bracket.
24. Before the ceiling brackets are mounted to the ceiling it is very important to first measure diagonal. When the measurements are not the same the door will not function properly.
25. Mount the brackets to the ceiling.

(If extra ceiling brackets are desired, you can saw them custom with the included corner profiles (Z).)



Mounting the spring package complete – 1

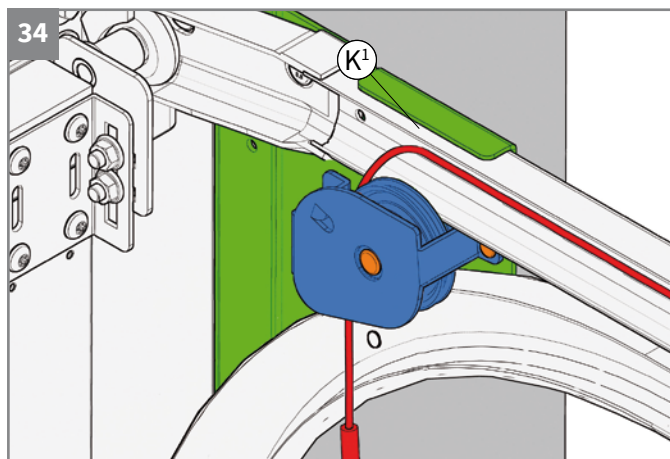
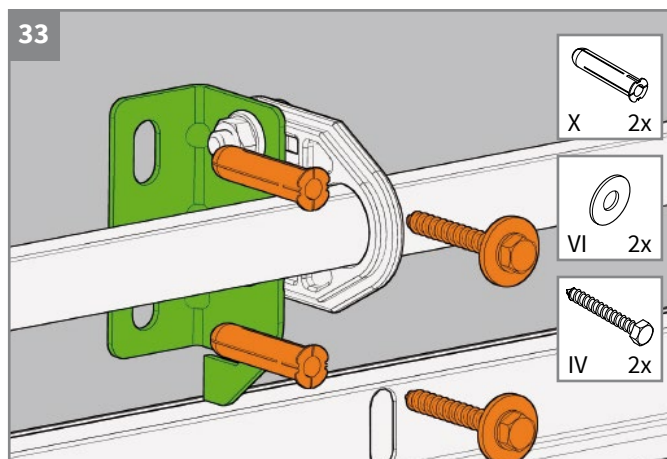
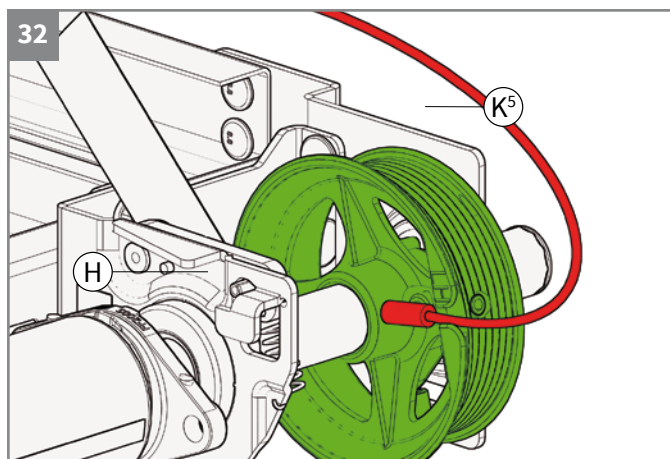
26. Place the ball-bearing (L) left and right over the axle.
27. Place the axle in the recess of the left and right wall bracket (F). Make sure that you place the spring package in the correct way. The last ring of the spring goes up in the spring plug!
28. Slide the bracket over the tab.
29. Slide the ball-bearing (L) left and right in the recess of the wall bracket (F).
30. The cable tin (K6) needs to be mounted to the ball-bearing. When this is not the case, unscrew the allen bolt. Slide the cable tin against the ball-bearing and fasten the allen bolt in the keyway. Make sure that the square pen is in the keyway. Do this on both sides.
31. Mount the bracket of the spring break safety (K4), left and right, to the wall bracket.



Mounting the spring package complete - 2 - central axle support

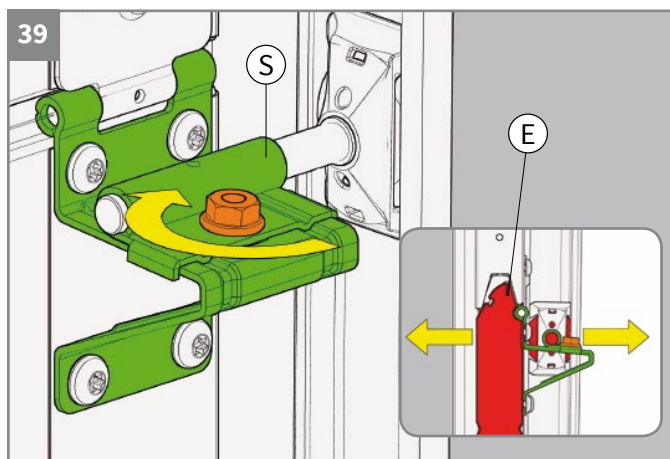
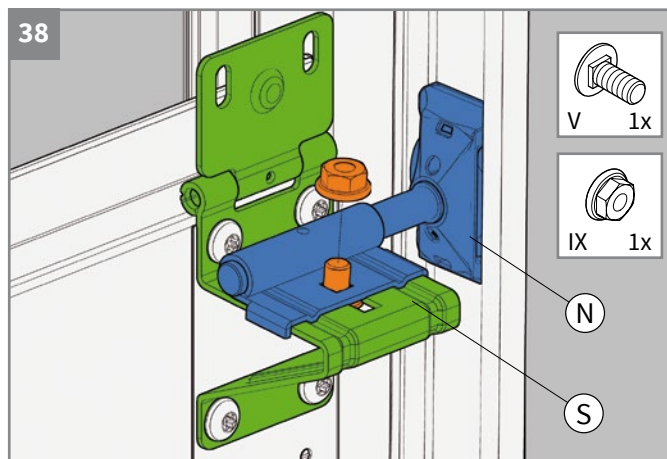
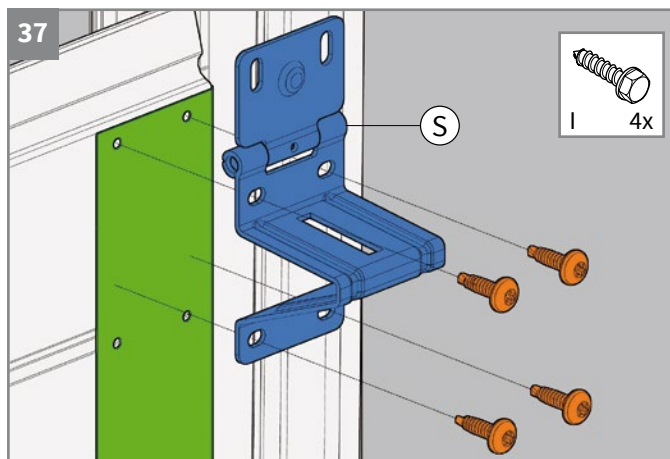
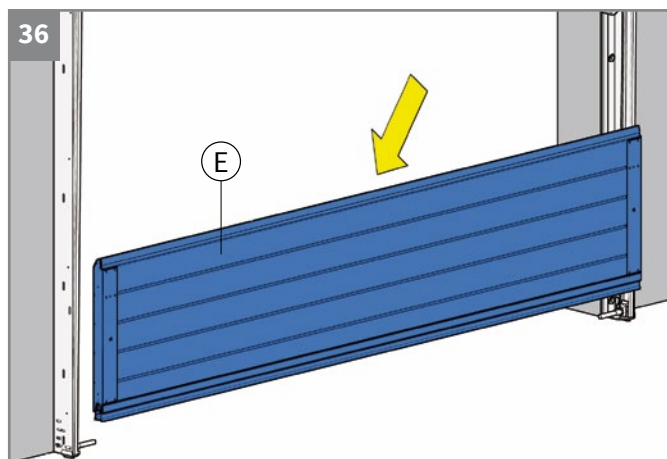
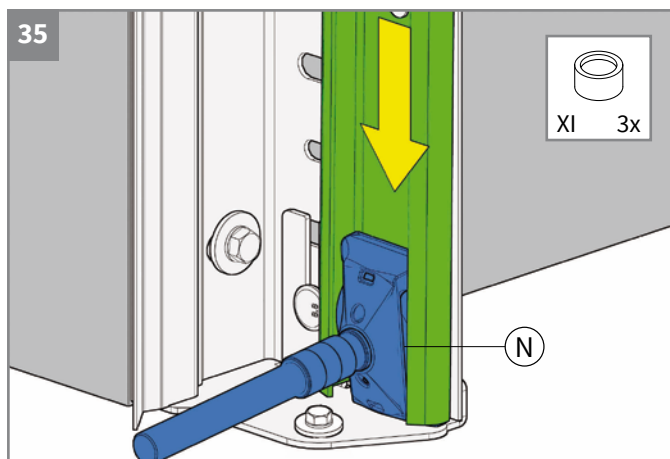
Mounting the bearing plate for central axle support

32. Slide the bearing plate (K5) as far as possible to the middle of the axle.
Make sure that the recess is slide over the lintel profile (H).
33. Mount the bearing plate against the wall.
34. Fasten the part witch supports the axle in the right position.



Placing the panels - 1 - *placing the first panel*

35. Place the first roller (N) at the very bottom of the vertical rail. Slide three spacers (XI) over the roller. Do this on both sides.
36. Place the bottom panel (E) behind the bottom roller.
37. Mount the side hinge (S) on the upper side of the first panel. Do this on both sides.
38. Place the second roller (N) with the roller holder at the height of the side hinge (S). Do this on both sides.
39. a/ Determine the right position of the roller holder on the side hinge (S). Push the panel (E) softly to the rubber side cover. Keep 1 mm backlash.
- b/ Fasten the screw on the roller holder of the side hinge. Do this on both sides.

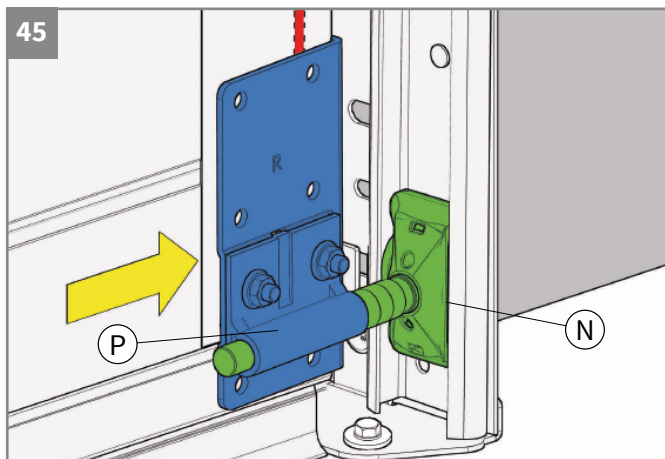
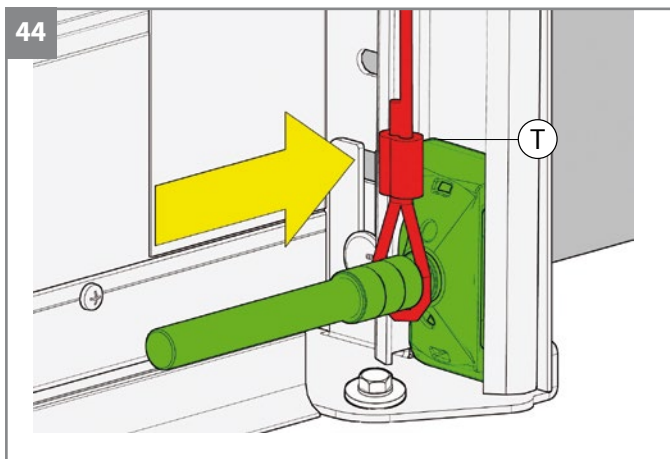
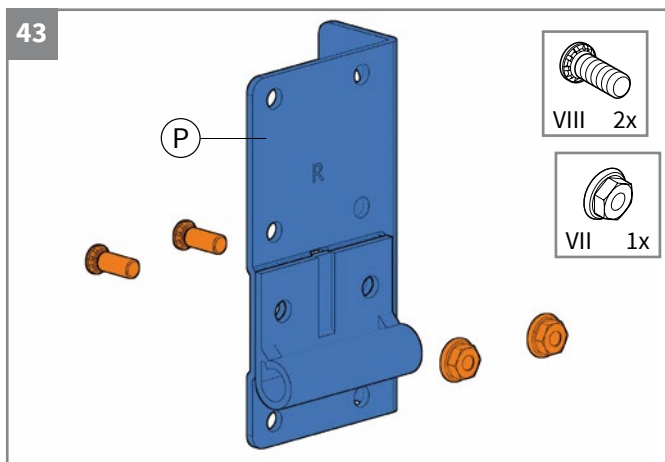
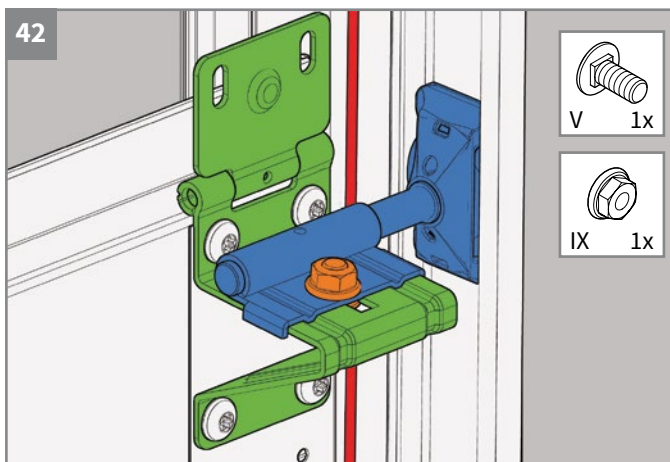
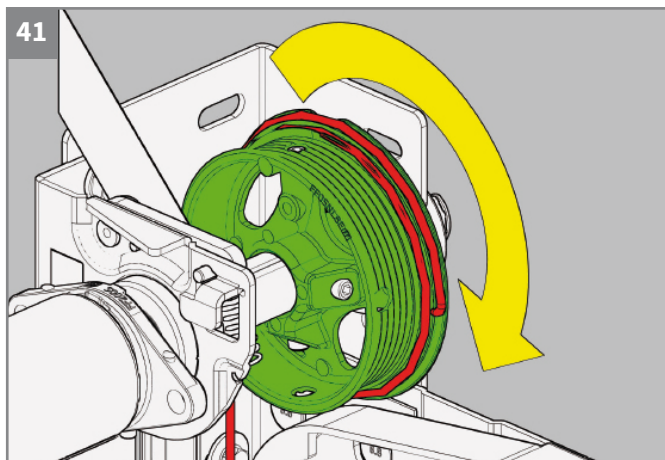
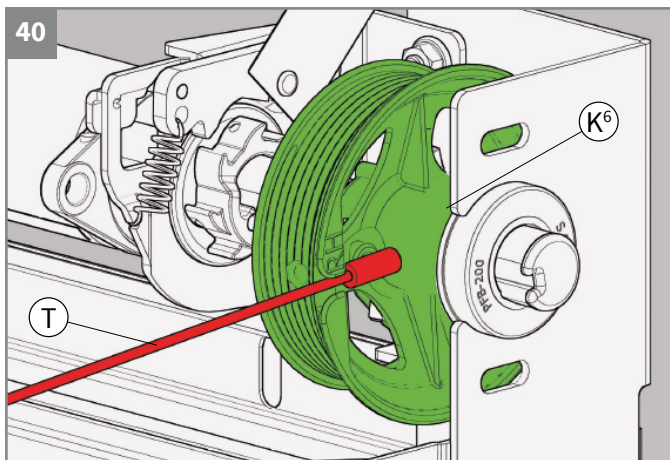


Remark:

The rollers are not provided with plastic caps.

Placing the panels - 2 - mounting the lifting cable

40. Mount the beginning of the lifting cable (T) in the recess of the cable tin (K6). Do this on both sides.
41. Wind the cable over the cable tin by winding this some rotations to the front. Make sure that the cable passes on the backside of the cable tin. Do this on both sides and make left and right the same amount of rotations.
42. Guide the lifting cable down behind the roller through the vertical rails.
43. Mount the holder of the bottom roller to the bottom hinge (P).
44. Mount the loop at the end of the lifting cable (T) over the wheel on the side of the bottom hinge.
45. Slide the bottom hinge (P) over the bottom roller (N).



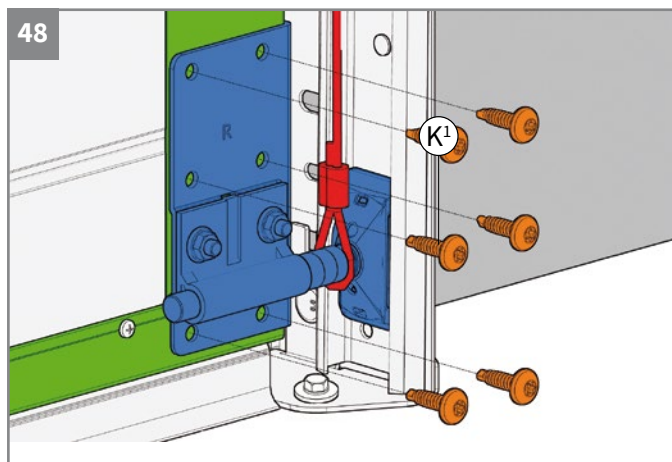
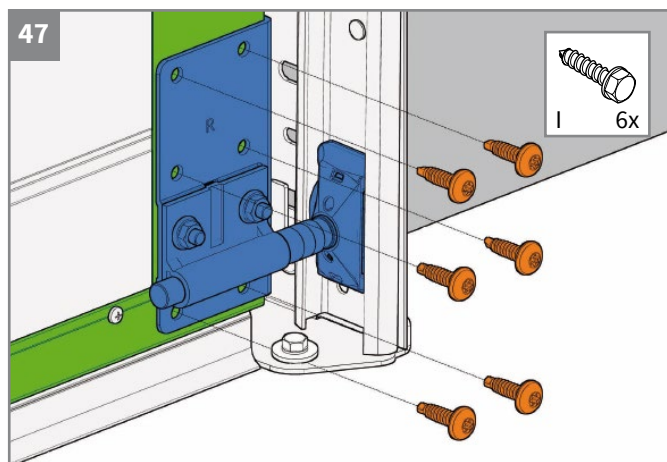
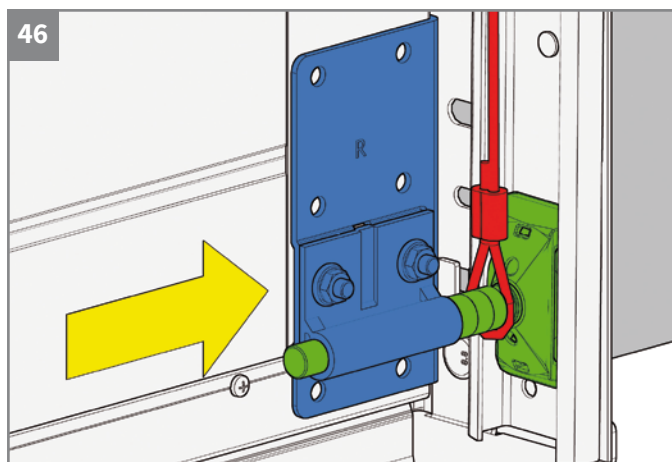
Placing the panels - 3 - mounting the lifting cable

46. Bring the bottom hinge and the roller to the right height.

47. Mount the bottom hinge on the bottom panel.

Repeat step 42 up to and including 47 on the other side.

48. Wind the axle towards you until the lifting cable is tightened at both sides. Place the adhesion plier on the keyway (K1) to keep it in place.



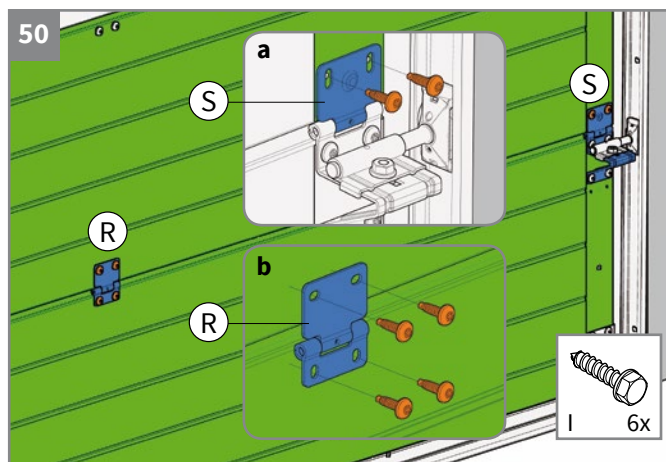
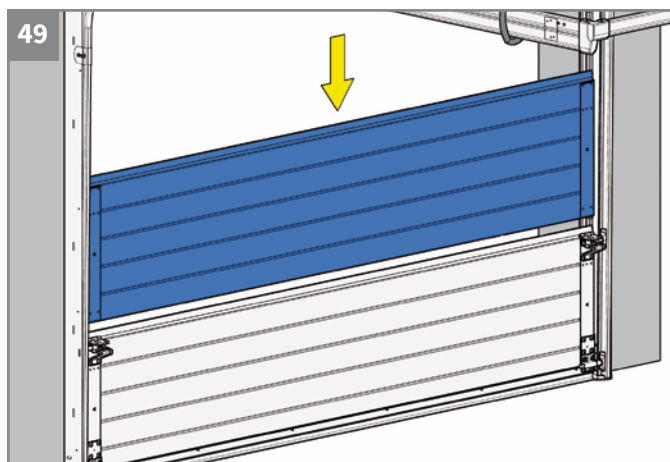
Placing the panels – 4 – *placing the second and third panel*

49. Place the second panel.

Repeat step 37 up to and including 39: mounting and adjusting the side hinge and roller. Do this on both sides.

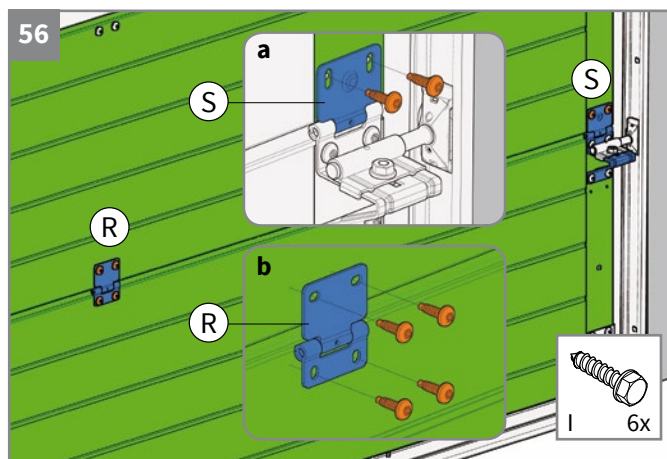
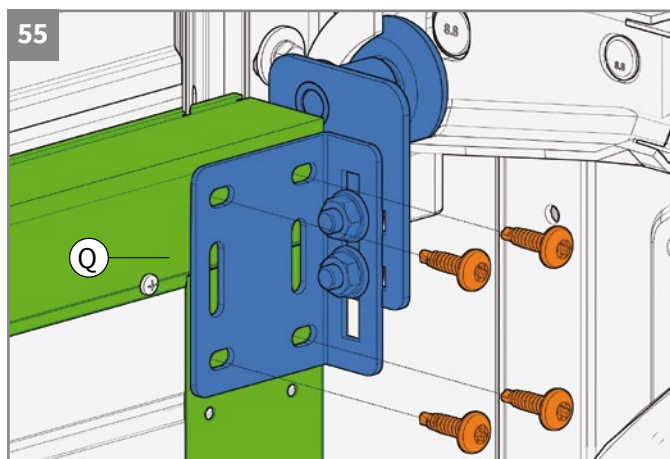
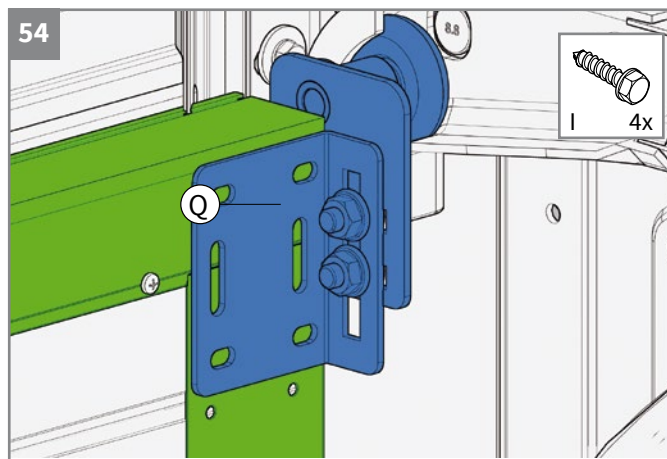
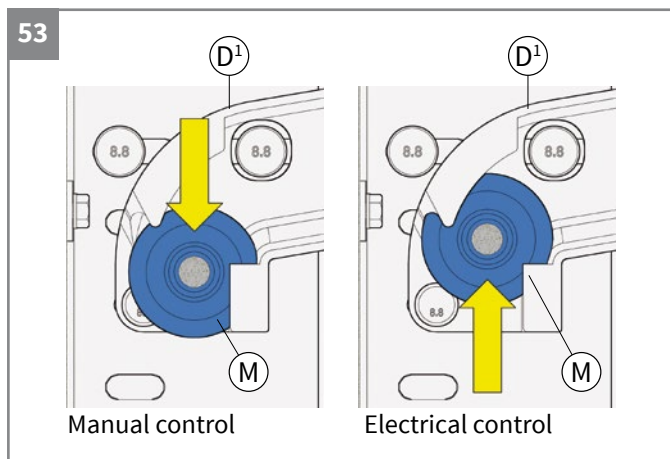
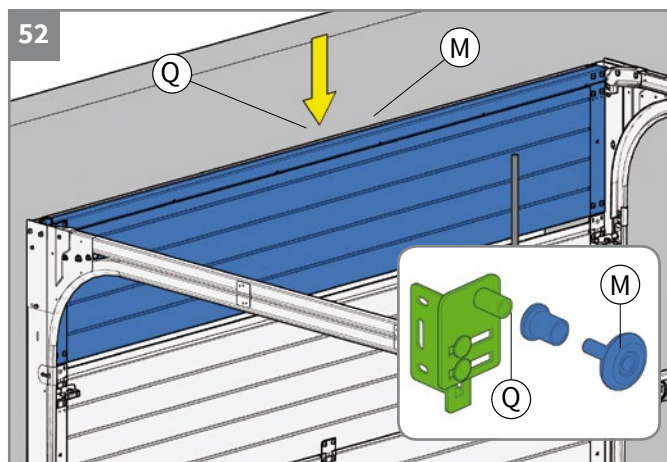
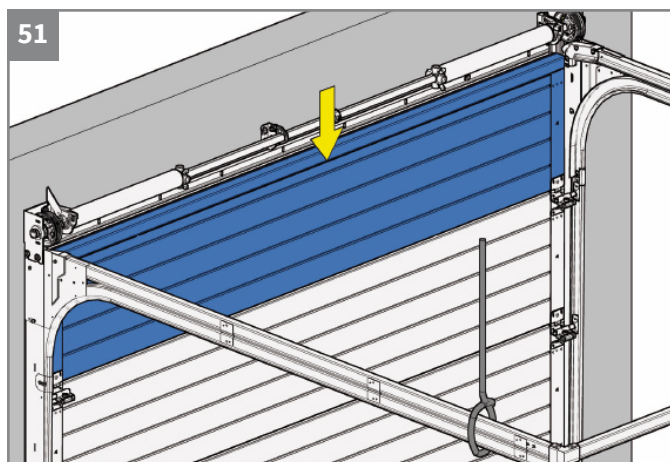
50. a/ Mount the upper part of the side hinge (S).
b/ Mount the intermediate hinge (R).

Place the third panel the same way.



Placing the panels - 5 - *placing the last panel*

51. Place the top and also the last panel.
52. Place the upper roller (M) with the Nylon ring on the upper roller holder (Q).
Place the upper roller in the upper curve and the bracket on the top panel.
53. a/ Manual control: place the upper roller at the very bottom of the upper curve (D1).
b/ Electrical control: place the upper roller a little higher and to the back in the upper curve (D1).
54. Mount the upper roller holder (Q) on the panel.
55. When the upper roller is positioned at the right height, the screws can be fastened.
56. Repeat step 50. a/ Mount the upper part of the side hinge (S).
b/ Mount the intermediate hinge (R).



Adjusting the spring package – 1 – *tensioning of the spring*

57. a/ Slide the torsion spring (K2) outside against the spring break safety (K4).
b/ Wind the torsion spring up so that the bracket falls behind the tab.
58. Untwist the bolts so that you can bring tension to the spring. Place the tension bar (O) in the spring plug (K2).
59. View the sticker for the amount of layers (slagen) you need for tensioning the spring. You can find the sticker (view page 4) on the inside of one of the panels.

⚠ It is very important to place the second tension bar before pulling out the first!

Turn up a quarter each time. Tension the spring so alternately.

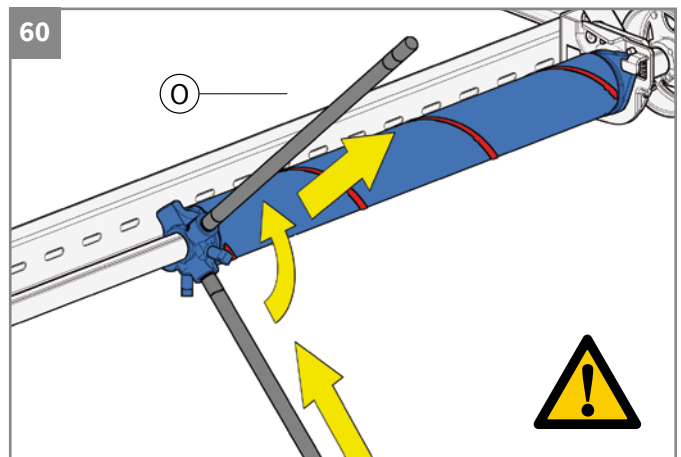
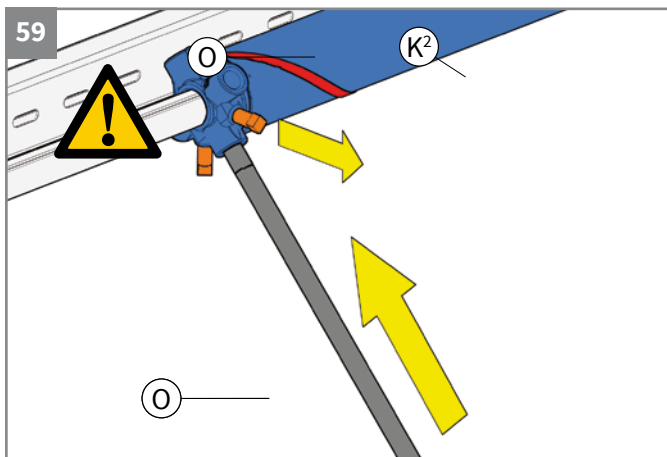
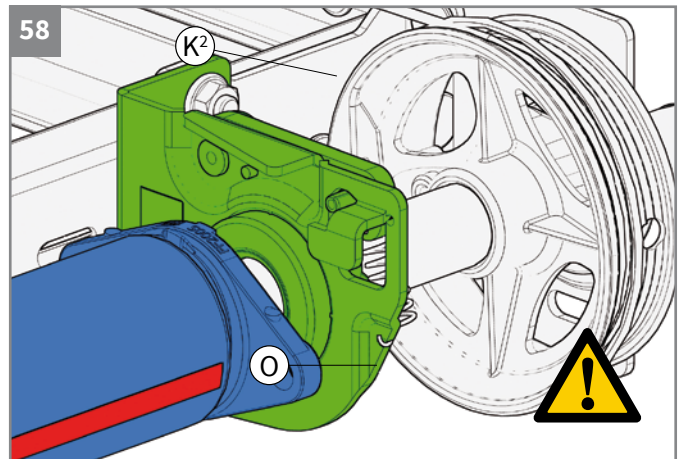
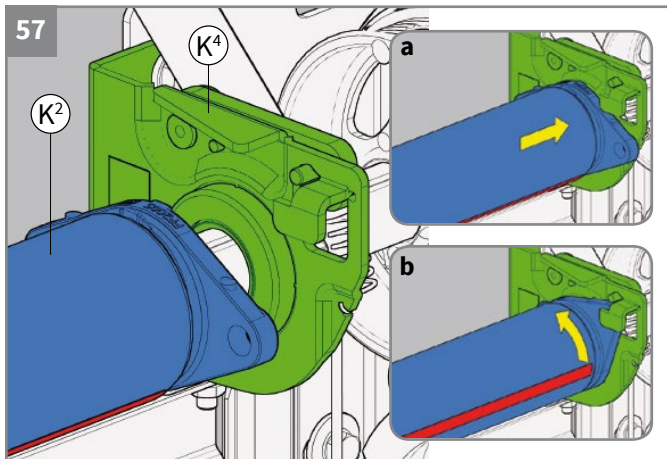
⚠ It is very important that there is always a tension bar in the spring plug! When the tension bar springs out, the spring springs back with an enormous power that can cause a lot of damage!

60. Is the spring at the right tension?

⚠ Make sure that one bolt always falls in the keyway!

If necessary, you need to finalize the amount of rotations for the right tension. Fasten the bolts.

Repeat step 57 up to and including 60 for the spring on the other side.

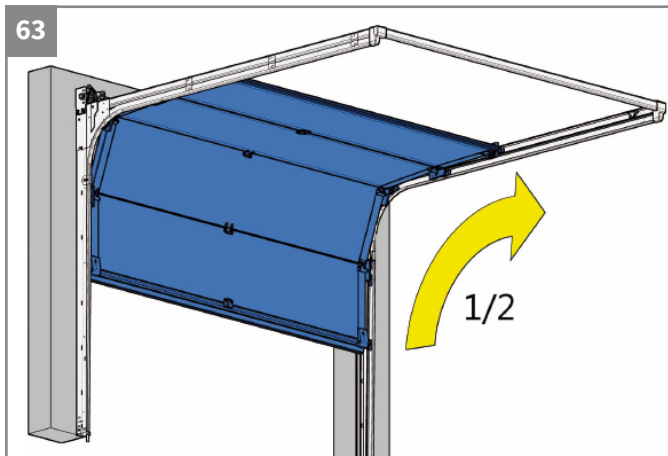
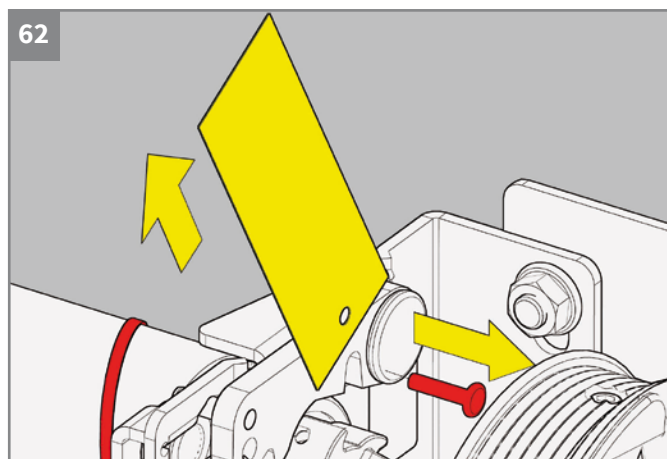
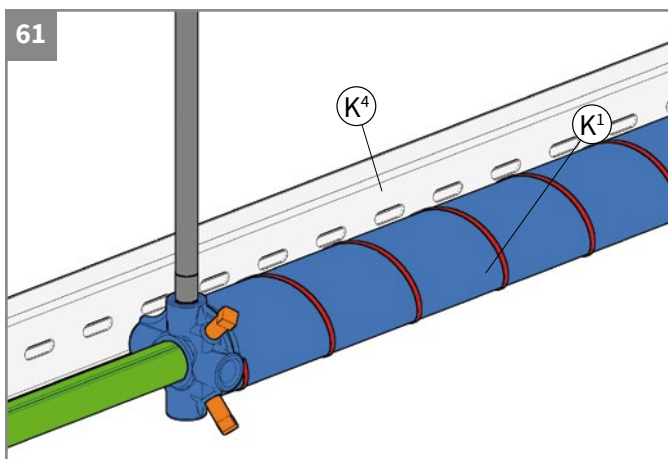


Adjusting the spring package - 2 - *spring break safety*

61. Turn, left and right, the allen of the spring break safety (K⁴) on the axle (K¹).
62. Remove, left and right, the nail and the label of the spring break safety before moving the door.
63. Slide the panel door half way up. When the tension on the spring is right, the door hangs in place.

If the door lowers: slide the door down and tension the spring more on both sides with a maximum of three quarters.

If the door is going up: slide the door down and tension the spring less on both sides with a maximum of three quarters.



Last actions

64. Slide the panel door all the way up to determine where the rubber doorstop (Y) needs to be mounted.
Drill a hole in the upper horizontal rail and fasten the doorstop. Do this on both sides.
65. Tip: drop a little oil in the holes of the impellers and the hinges and drop a little oil on the spring.
66. You finished the installation of your garage door.

