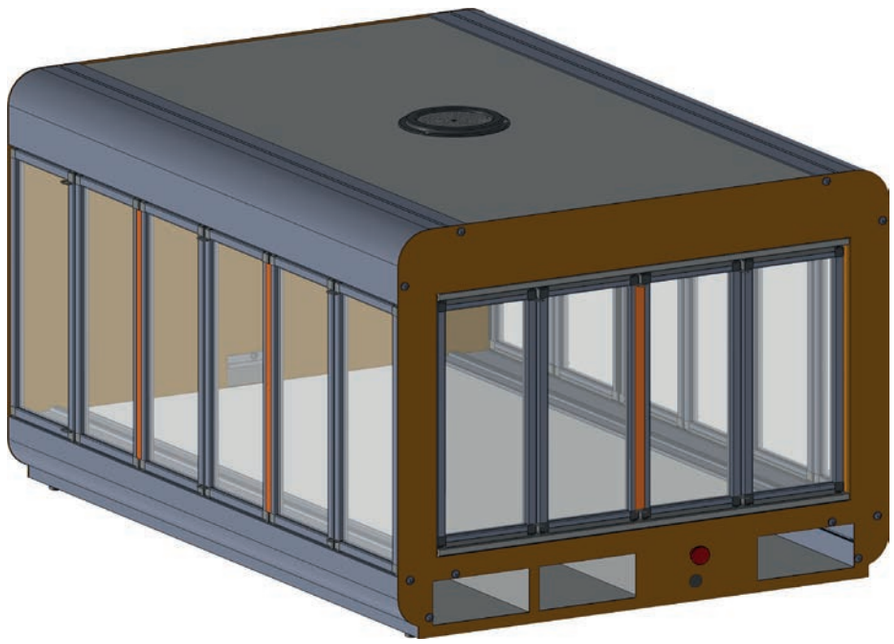
EasyBuild-Assembly Manual

Enclosure for Desktop CNC /3D Systems
STEPCRAFT 600/ 840



Original assembly manual
date of 10.03.2017

Dear customer,

thank you very much for purchasing our high-quality kit of an enclosure of your STEPCRAFT Desktop CNC /3D System. This manual will take you through every step of the assembly.

Please read the entire manual carefully before starting assembly. This way, you obtain an overview of the steps require which will help you avoid unneccessary mistakes. Please take care to use the the correct parts in the correct orientation as some parts differ only minimally. Please let a second person assist you in the assembly.

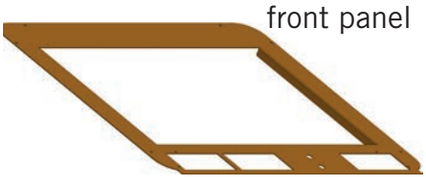
Before beginning the assembly process, please verify that you have all of the required parts in your kit using the list below. STEPCRAFT provides video support with certain assembly steps. Simply scan the related QR code with your smartphone. If you do not have a smartphone, please enter the following URL in your web browser:
www.stepcraft-systems.com/enclosure/xx-xx (replace xx-xx with the number under the QR code).

STEPCRAFT has taken extreme care to ensure the correctness of the information contained in this manual. We accept no liability for damage in materials or injury to persons caused by assembling the enclosure. You are responsible for the safe operation of your STEPCRAFT Desktop CNC /3D System and its accessories.

Content of the construction kit (illustrations are not true to scale)

1

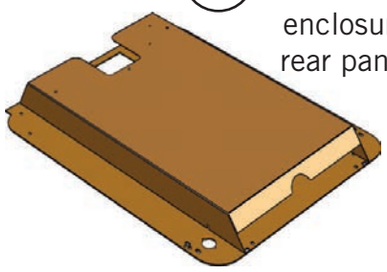
enclosure
front panel



1x

2

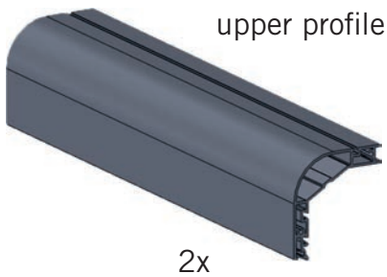
enclosure
rear panel



1x

3

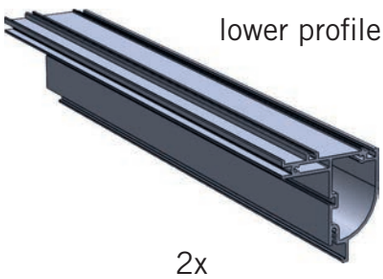
upper profile



2x

4

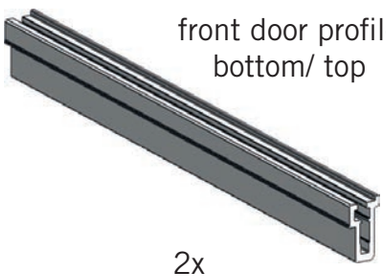
lower profile



2x

5

front door profile
bottom/ top



2x

6

lateral pane profile
vertical without handle
413 mm

18x

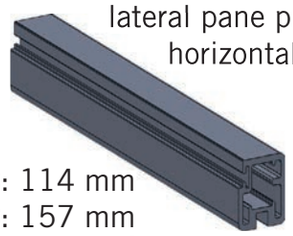
7

lateral pane profile
vertical with handle
411 mm

6x

8

lateral pane profile
horizontal



600: 114 mm
840: 157 mm

24x

9

front pane profile
vertical without handle
374 mm

6x

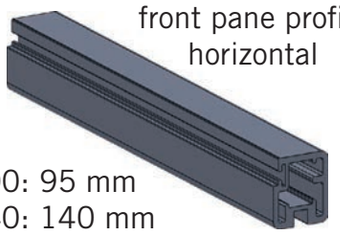
10

front pane profile
vertical with handle
372 mm

2x

11

front pane profile
horizontal

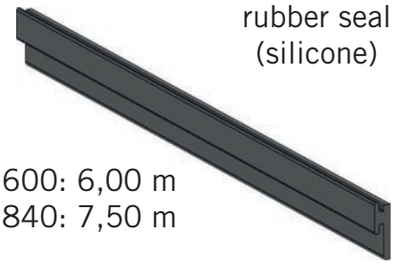


600: 95 mm
840: 140 mm

8x

12

rubber seal
(silicone)

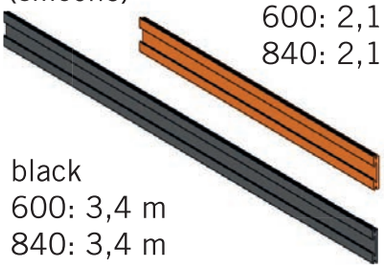


600: 6,00 m
840: 7,50 m

connection
profile
(silicone)

13

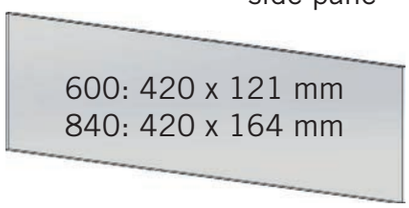
orange
600: 2,1 m
840: 2,1 m



black
600: 3,4 m
840: 3,4 m

14

side pane

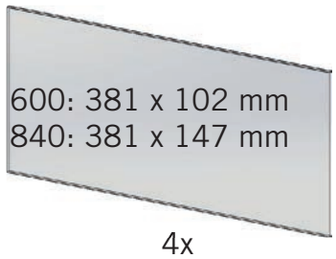


600: 420 x 121 mm
840: 420 x 164 mm

12x

15

front pane

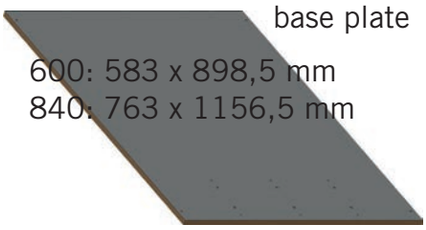


600: 381 x 102 mm
840: 381 x 147 mm

4x

16

base plate

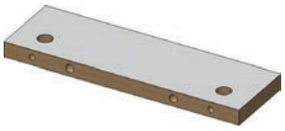


600: 583 x 898,5 mm
840: 763 x 1156,5 mm

1x

17

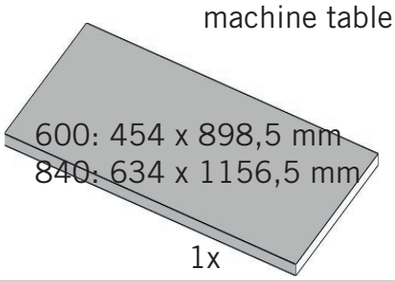
base plate partition



600: 2x
840: 3x

18

machine table

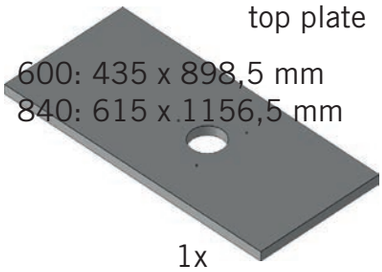


600: 454 x 898,5 mm
840: 634 x 1156,5 mm

1x

19

top plate



600: 435 x 898,5 mm
840: 615 x 1156,5 mm

1x

20

plastic corner

70x

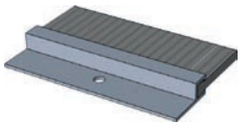
21

circular brush

1x

22

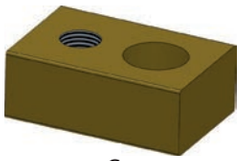
strip brush
cable outlet



1x

23

slot nut,
lockable



6x

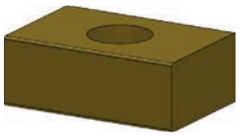
24

slot nut,
loose

10x

25

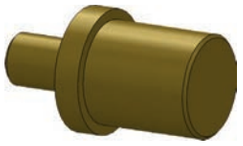
slot nut, loose
external



6x

26

pivot pin



32x

27

door handle

16x

28

pressure pin

16x

29

plastic foot

4x

30

socket head screw,
M6 x 30 mm

4x

31

socket head screw,
M5 x 30 mm

6x

32

flange screw,
M5 x 12 mm

2x

33

flange screw,
M6 x 20 mm

20x

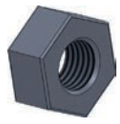
34

set screw,
M4 x 5 mm

6x

35

locking nut,
M5



6x

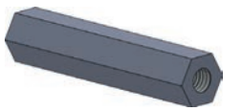
36

spacer
M3 x 10 mm

2x

37

spacer,
M5 x 50 mm



1x

38

button head
cap screw,
M3 x 6 mm

4x

39

wooden dowel

600: 4x
840: 6x

40

cam lock screw

600: 4x
840: 6x

41

cam screw

600: 4x
840: 6x

42

end switch with
cable supply

3x

43

cable conduit
6/4 mm

600: 3,30 m
840: 4,30 m

44

emergency switch

1x

45

emergency switch
cable

600: 1,11 m
840: 1,35 m

46

controller board

1x

47

hole plug
8 mm

1x

48

hole plug
36 mm

1x

49

15 pin Sub-D
cable

1x

50

wood screw
3,5 x 15 mm

3x

51

grounding cable
set incl. serrated
lock washer

1x

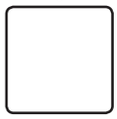
Explanation of symboles and details:

= assembly phase

= assembly group

= work step

= view of assembly phase



= required parts for this work step

= larger detailed view/ pre-assembly of parts

= Tighten the screw.

= Engage the screw, but do not tighten.

= Caution! Work particularly careful.

= Tighten clockwise.

= Remove protection film and affix self-adhesive part.

= Fasten part with superglue, use sparingly, must not get on bearing or running surface.

= Deburring.

= Apply dish liquid as shown in picture.

Required tools and materials:

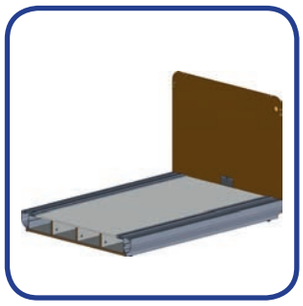
- Needle file (supplied)
- Allen wrench 2,0 mm
- Allen wrench 3,0 mm
- Allen wrench 4,0 mm
- Allen wrench 5,0 mm
- Spanner 5,5 mm
- Spanner 8 mm
- Rubber mallet
- Crosstip screwdriver
- Superglue

Differences in the assembly size 300 and 420:

The illustrations in this assembly manual are exemplary and are based on the enclosure for size 840.

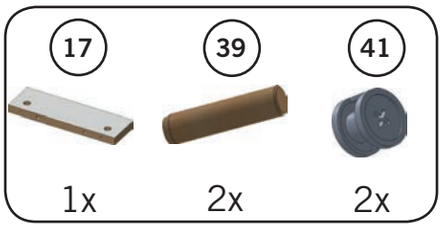
Please pay attention to the different dimensions of the individual parts!

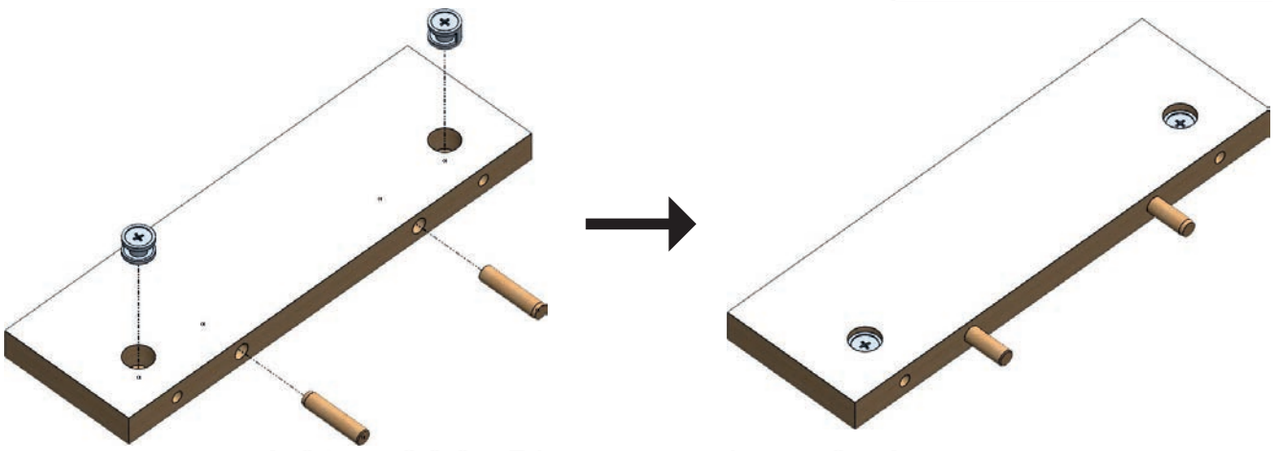
1



Base frame

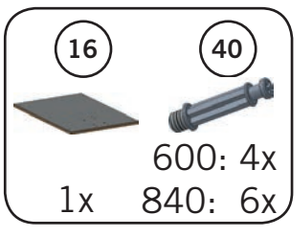
A

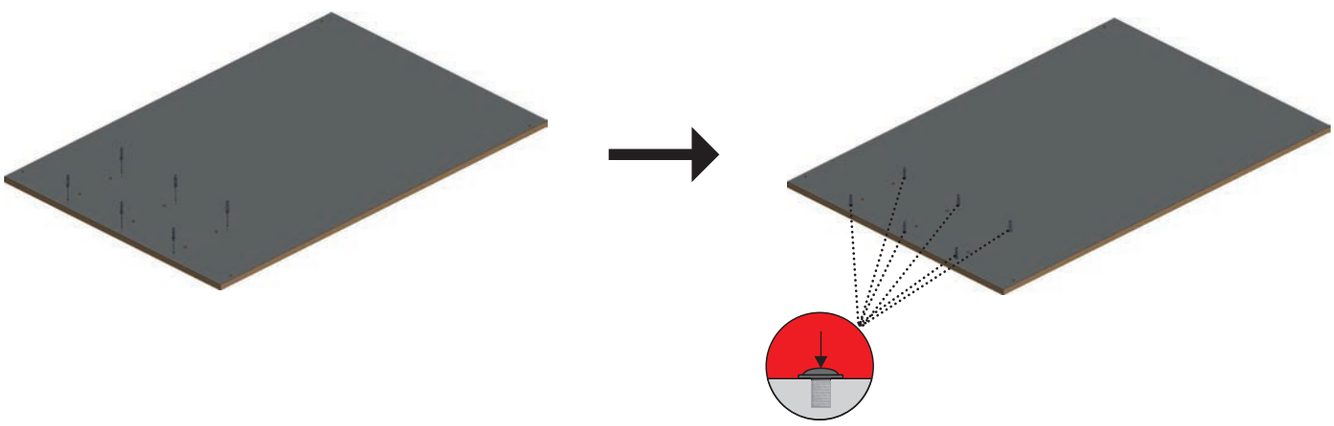




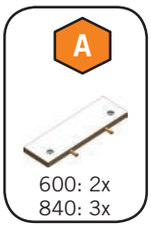
! Size 600: Please produce 2x !
! Size 840: Please produce 2x !

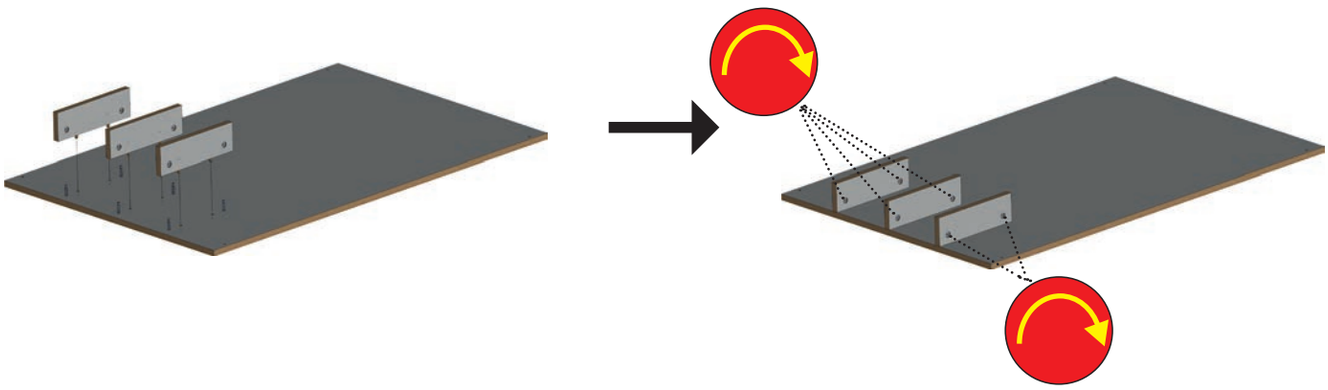
1.1



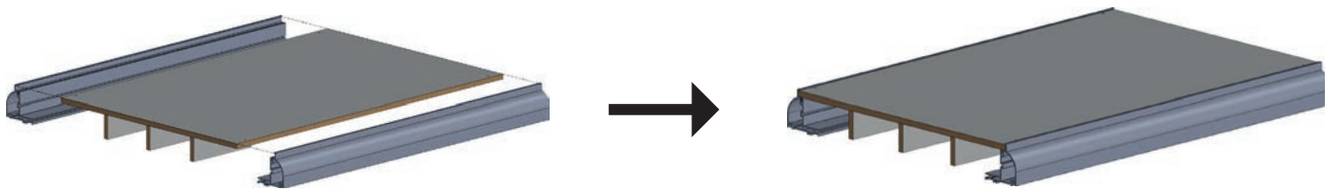


1.2

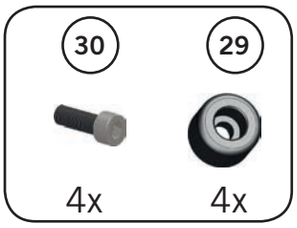




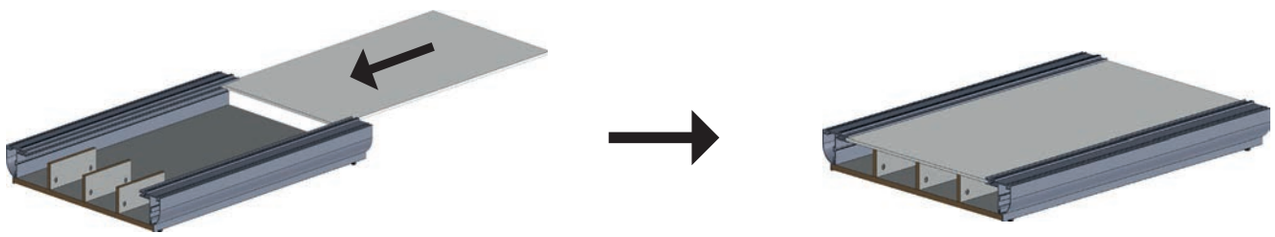
1.3



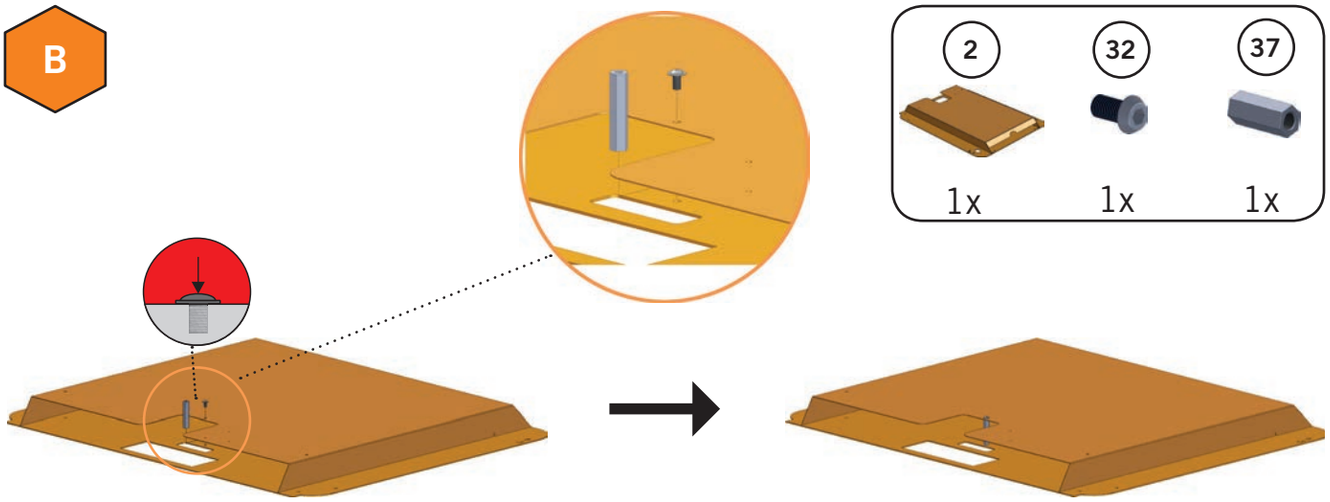
1.4



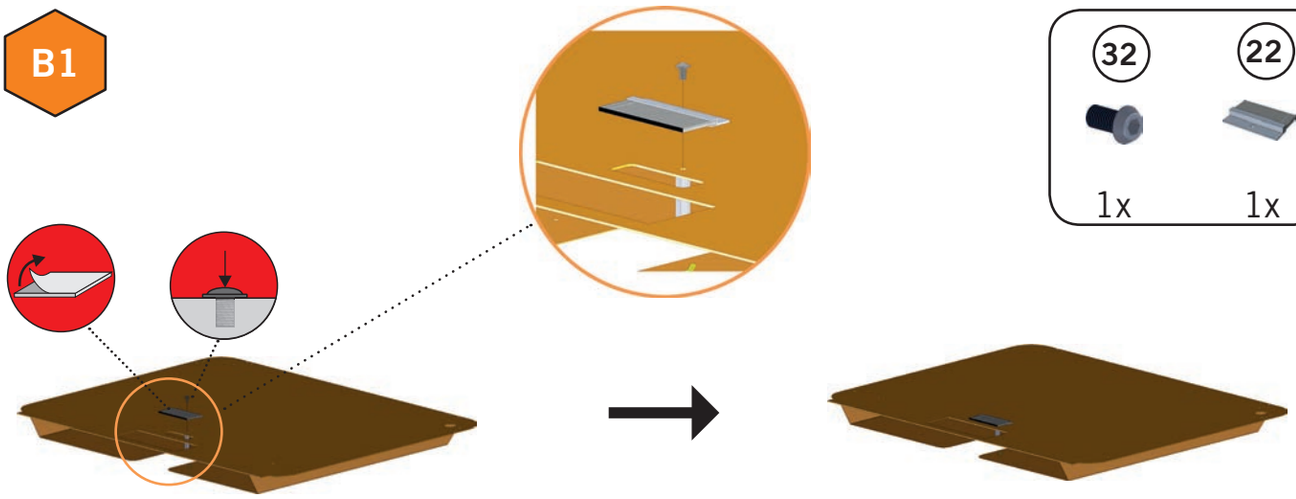
1.5



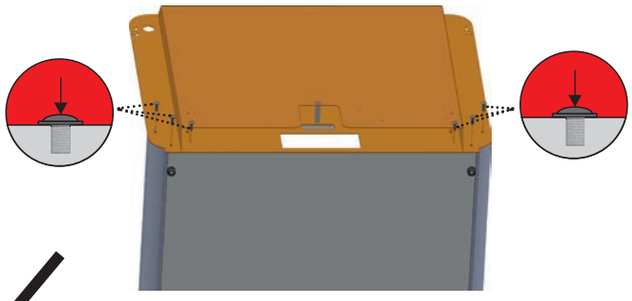
B

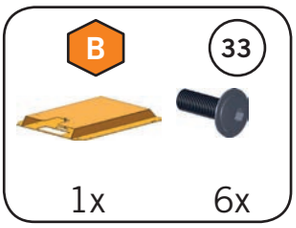


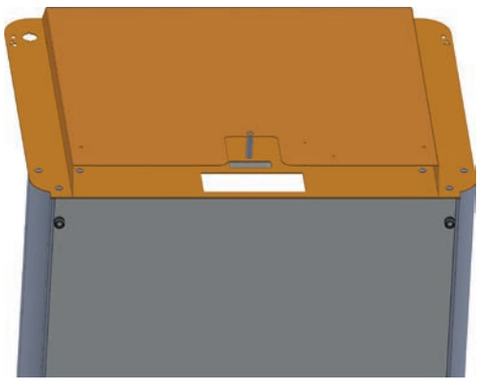
B1

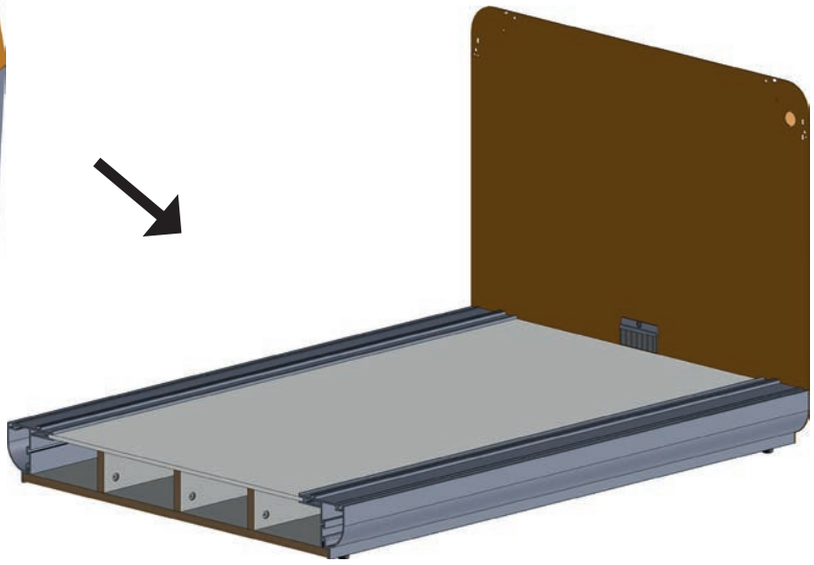


1.6



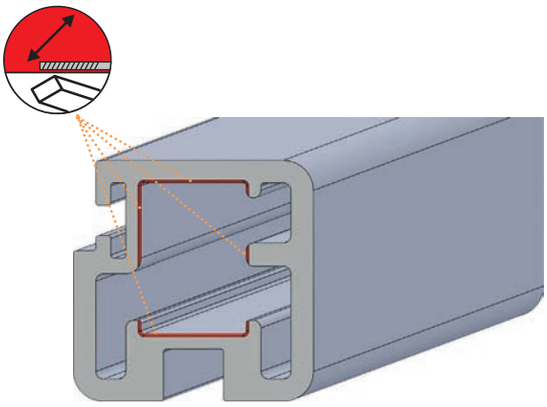




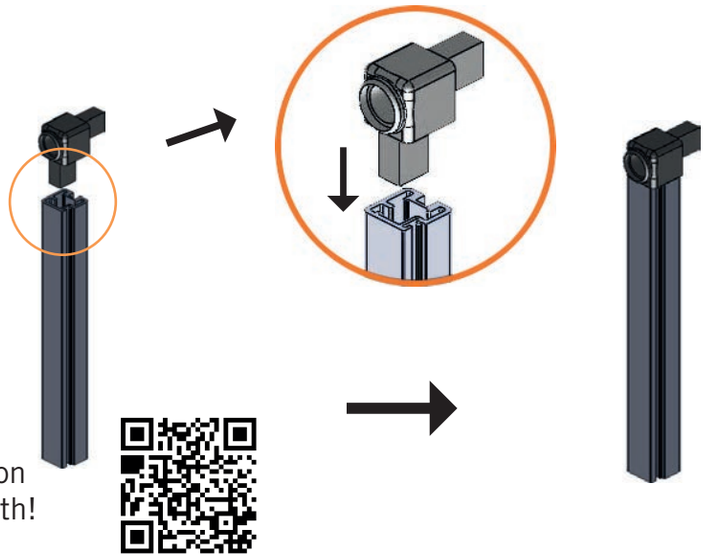


Preparatory steps for all doors:

Before attaching the plastic corners it is especially important that the leading edges of all profiles are deburred with the supplied needle file in order to avoid blocking due to plastic chips.



C



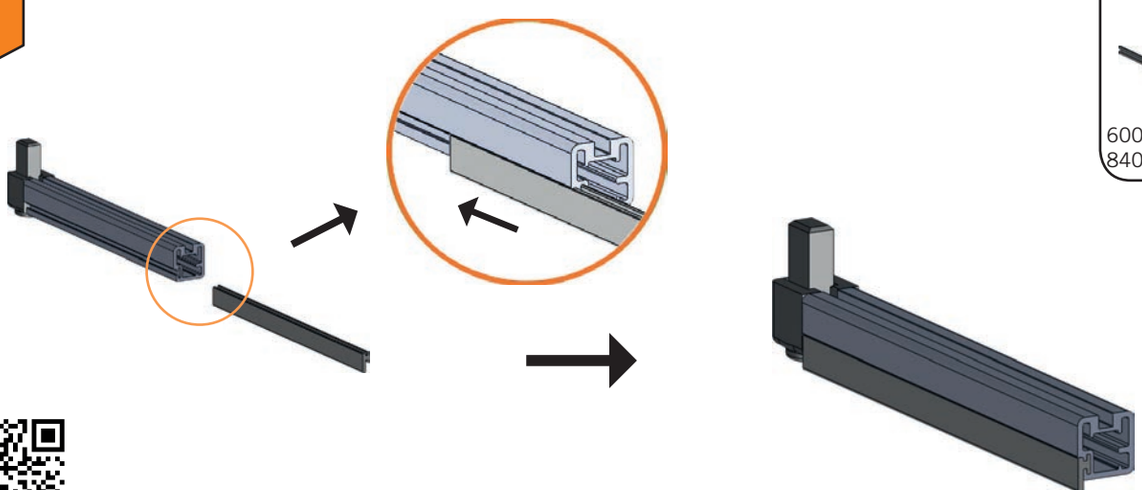
8 — 1x — 600: 114 mm / 840: 157 mm

20 — 1x

Please pay attention to the correct length!
114/ 157 mm !

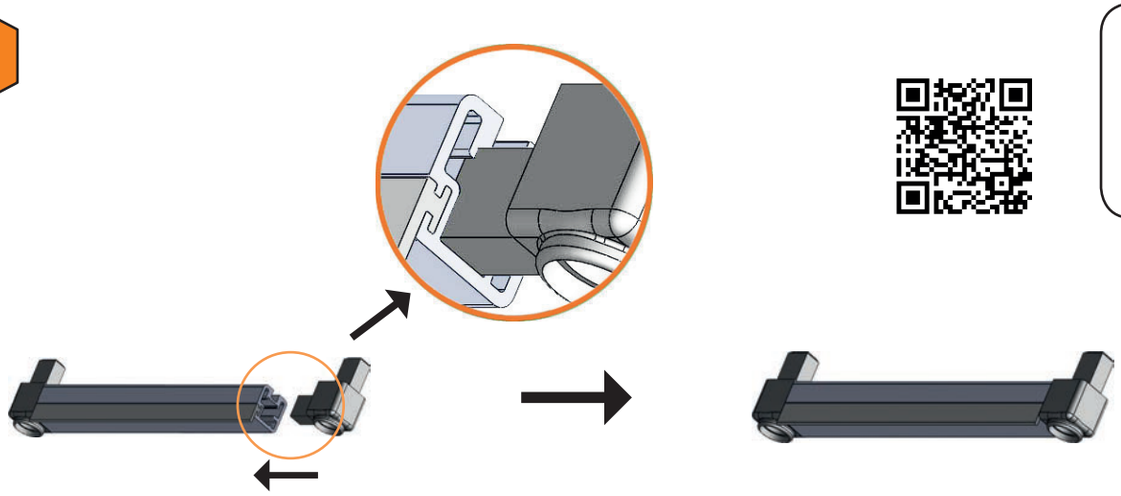
For an easier assembly of the plastic corners, please turn the profile and use the rubber mallet to fix it to the corner!

C1



12 — 600: 114 mm / 840: 157 mm

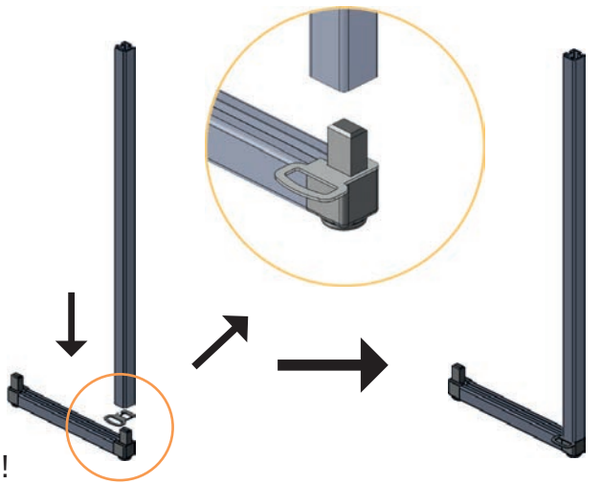
C2



20 — 1x

! Please produce 24x !

D



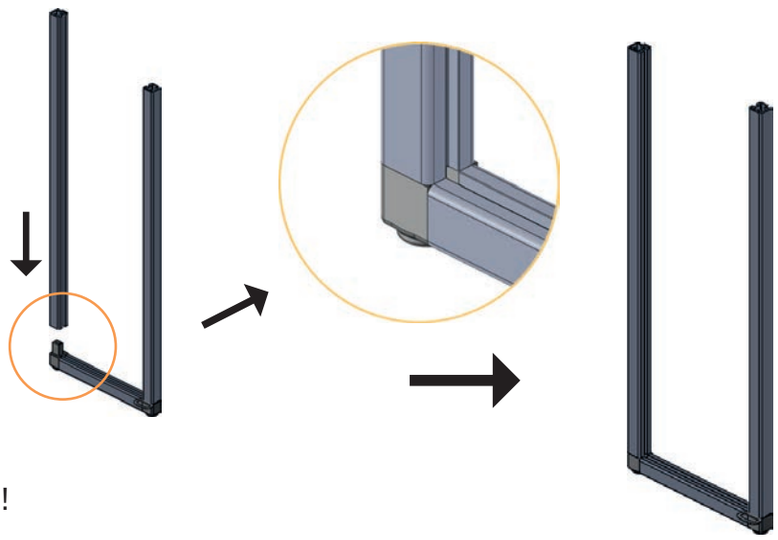
27 — 1x

C — 1x

7 — 1x — 411 mm

Please pay attention
to the correct length!
411 mm !

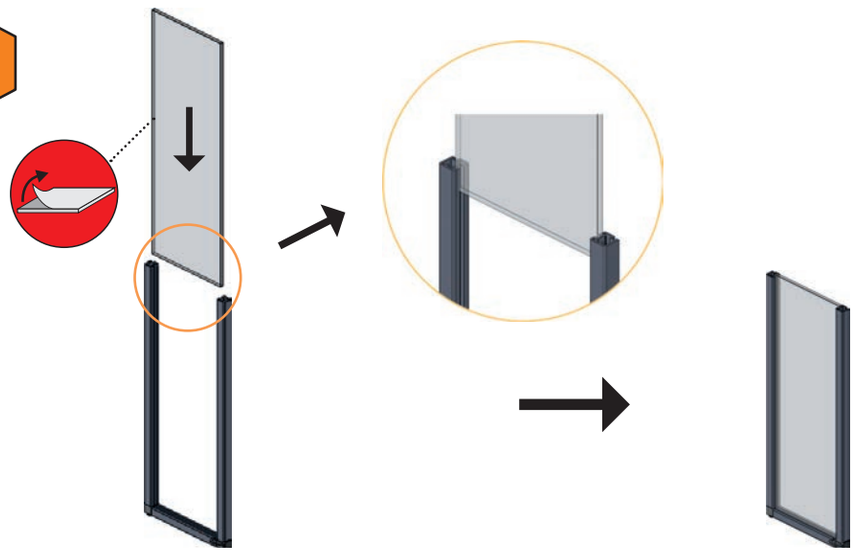
D1



6 — 1x — 413 mm

Please pay attention
to the correct length!
413 mm !

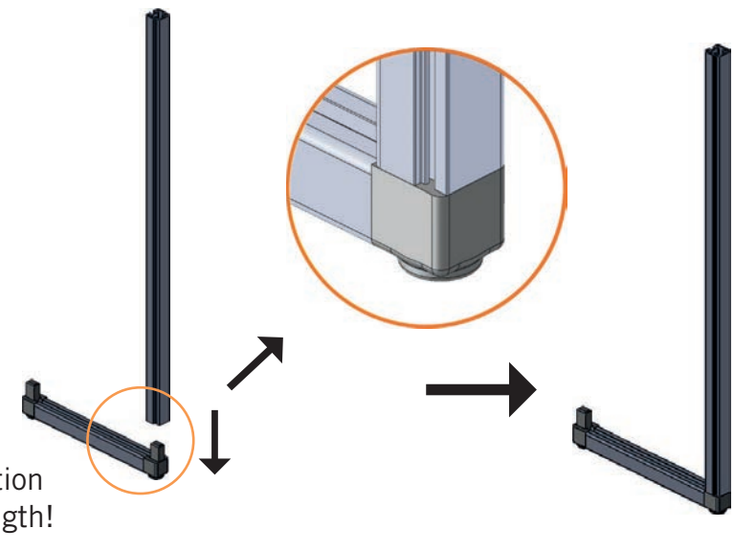
D2



14 — 1x

! Please produce 2x !

E

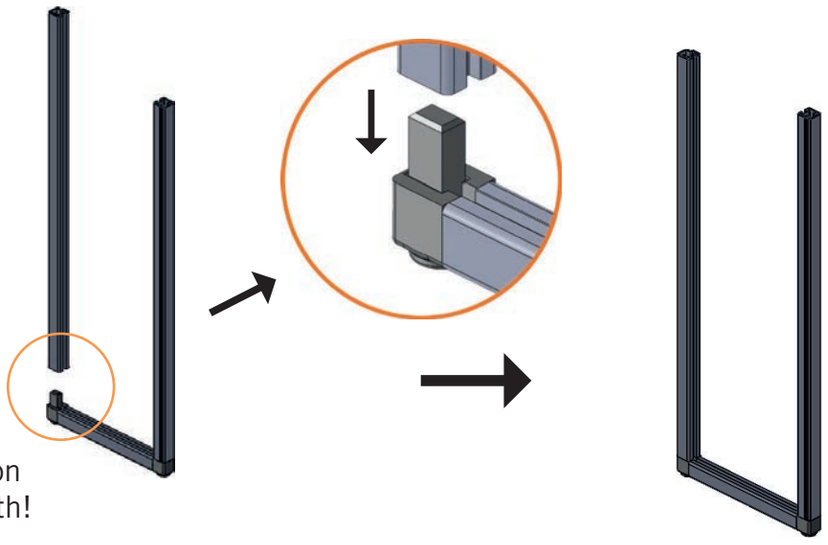


C 1x

6 1x 413 mm

Please pay attention
to the correct length!
413 mm !

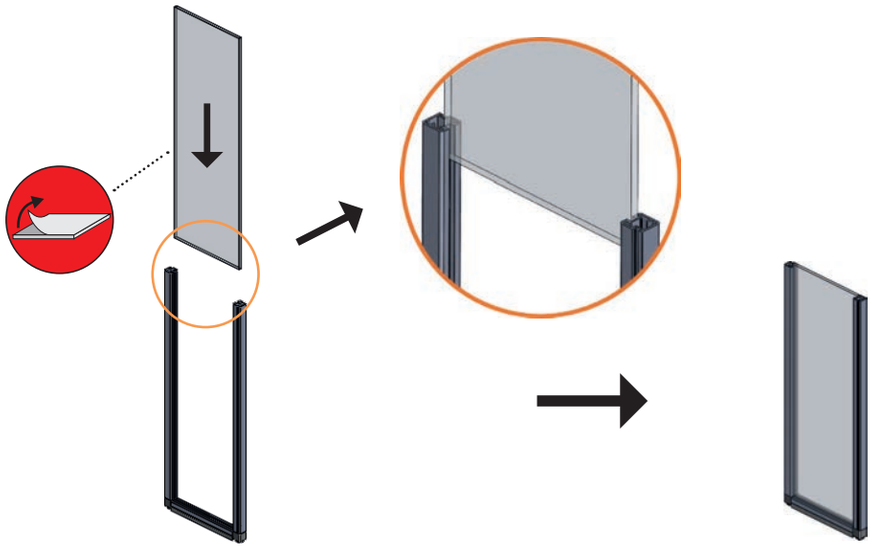
E1



6 1x 413 mm

Please pay attention
to the correct length!
413 mm !

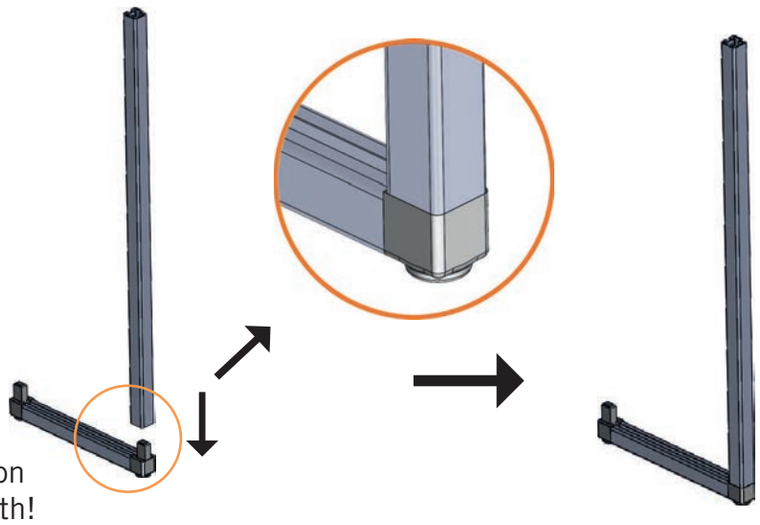
E2



14 1x

! Please produce 2x !

F

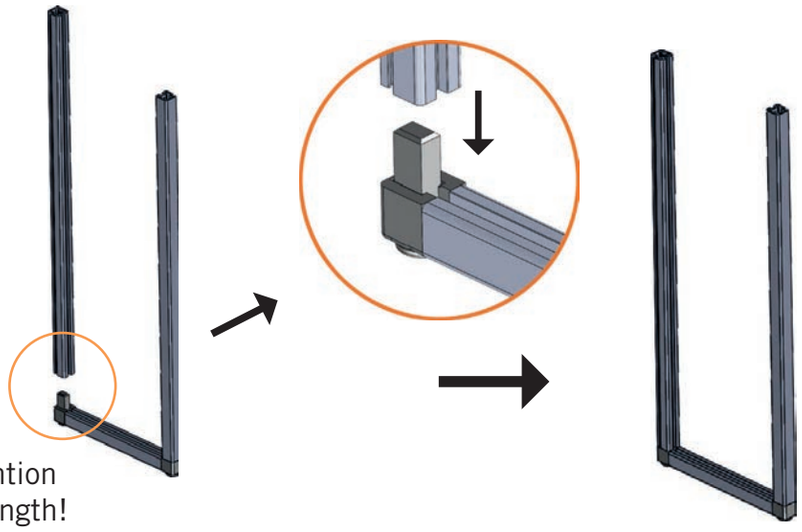


C 1x

6 1x 413 mm

Please pay attention
to the correct length!
413 mm !

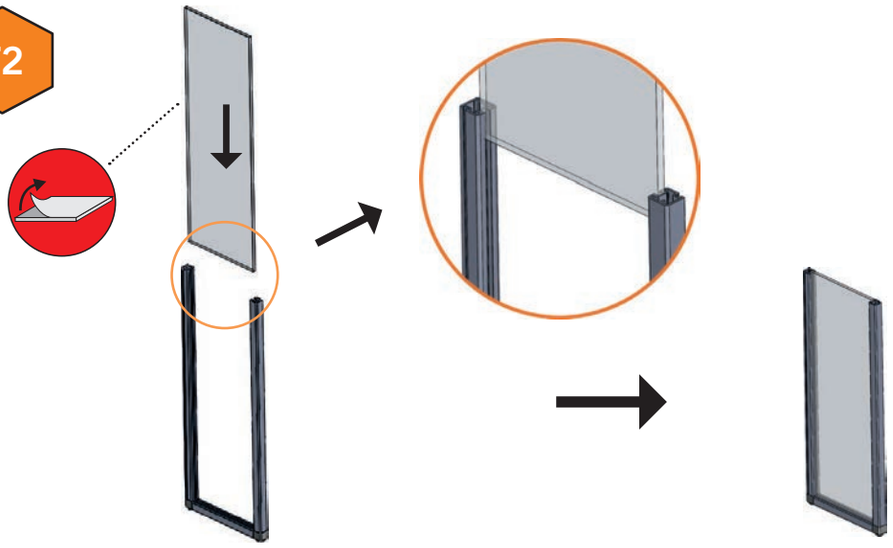
F1



6 1x 413 mm

Please pay attention
to the correct length!
413 mm !

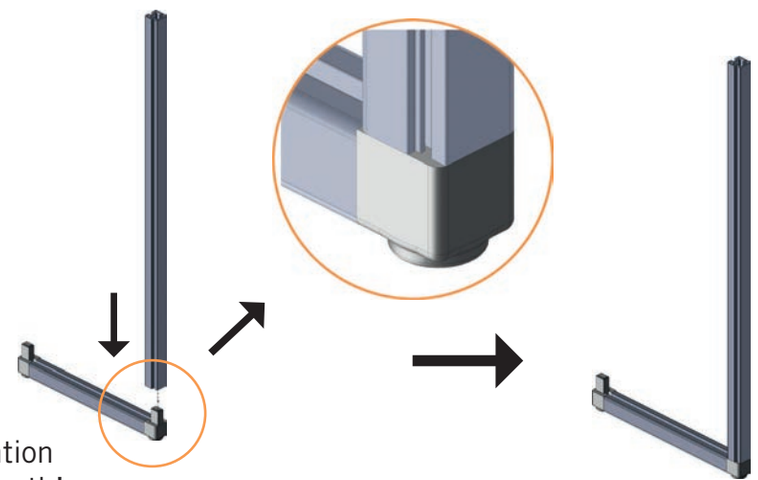
F2



14 1x

! Please produce 2x !

G

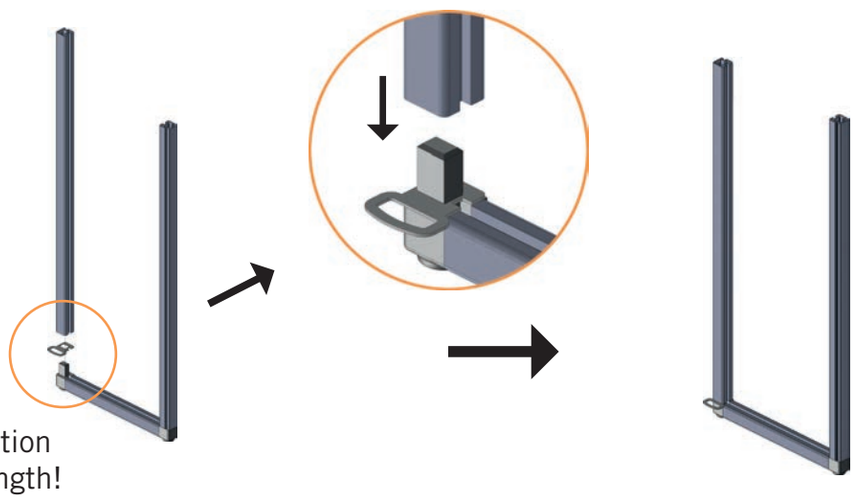


C 1x

6 1x 413 mm

Please pay attention
to the correct length!
413 mm !

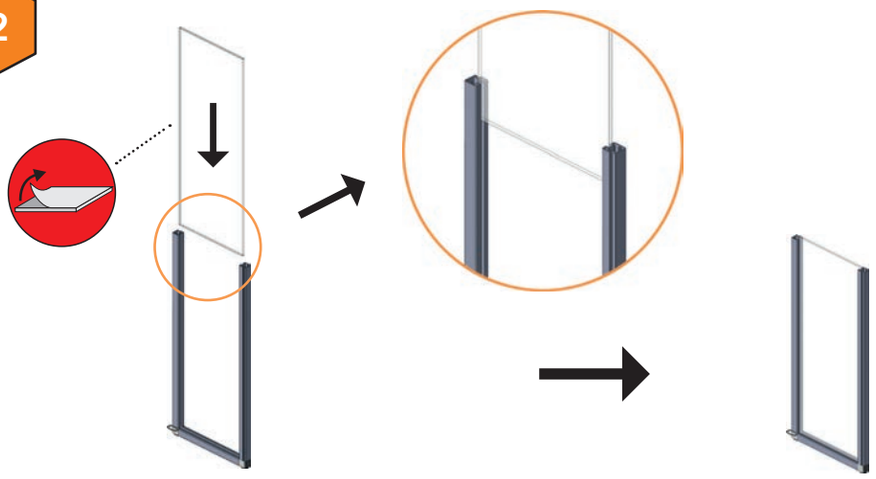
G1



7 1x 411 mm

Please pay attention
to the correct length!
411 mm !

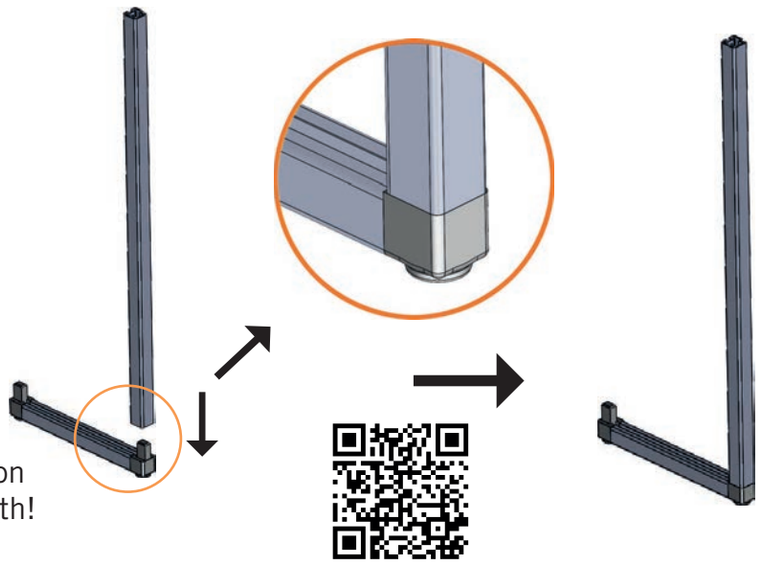
G2



14 1x

! Please produce 2x !

H

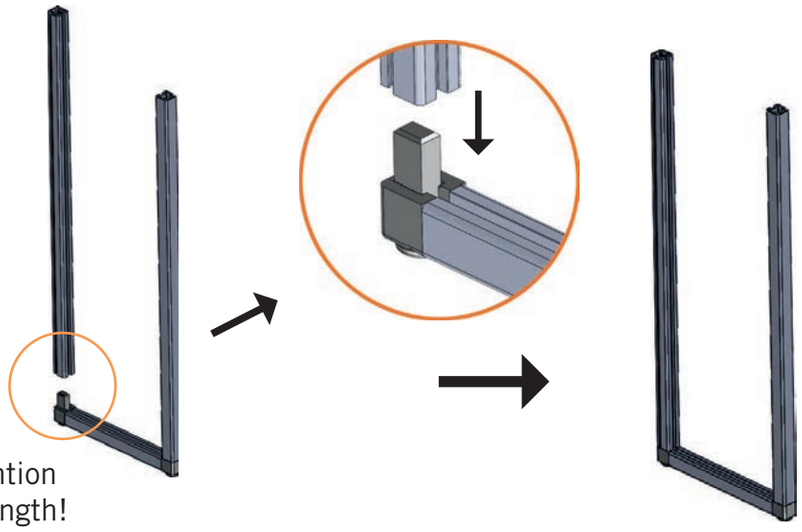


C 1x

6 1x 413 mm

Please pay attention
to the correct length!
413 mm !

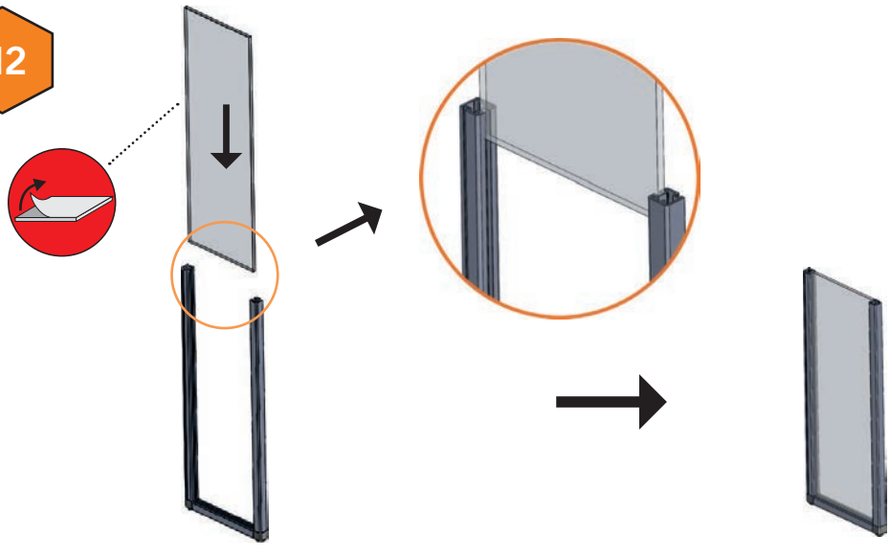
H1



6 1x 413 mm

Please pay attention
to the correct length!
413 mm !

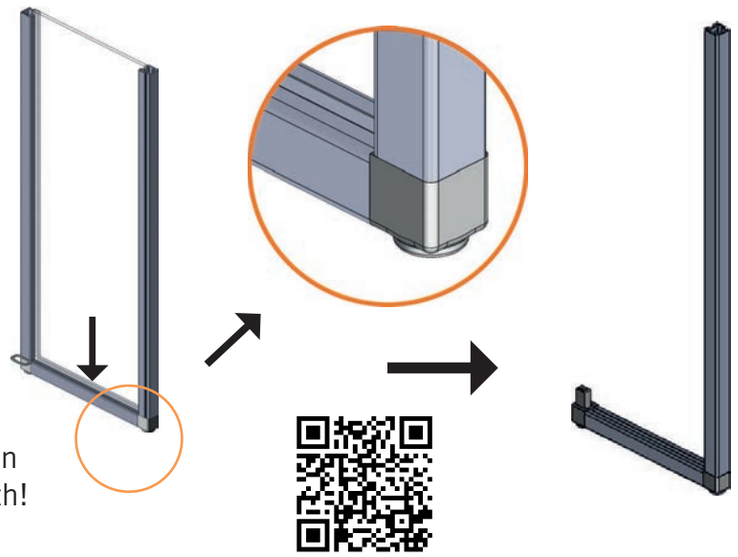
H2



14 1x

! Please produce 2x !

I

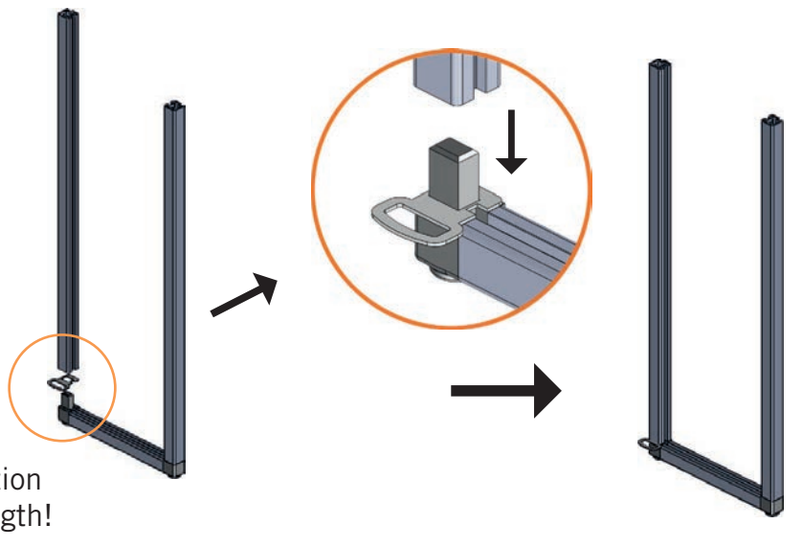


C 1x

6 1x 413 mm

Please pay attention
to the correct length!
413 mm !

I1

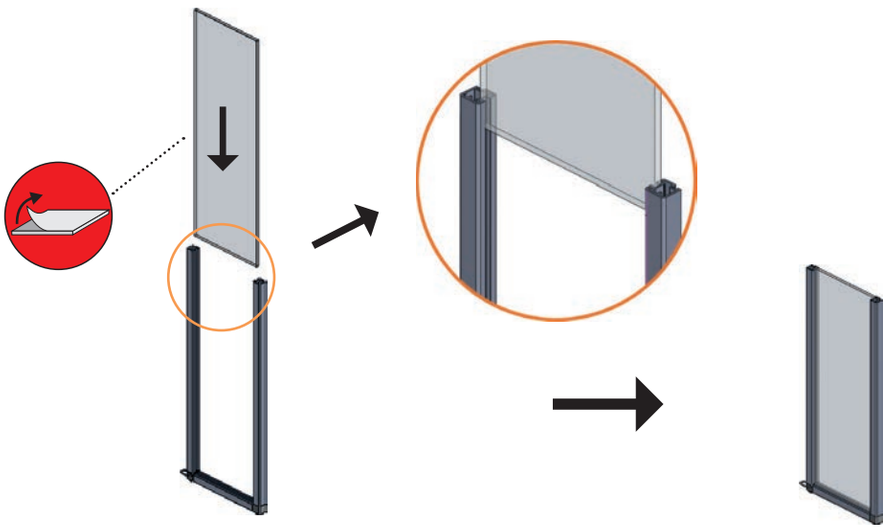


7 1x 411 mm

27 1x

Please pay attention
to the correct length!
411 mm !

I2

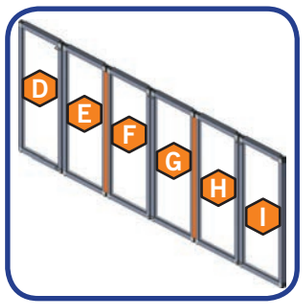


14 1x

! Please produce 2x !

2

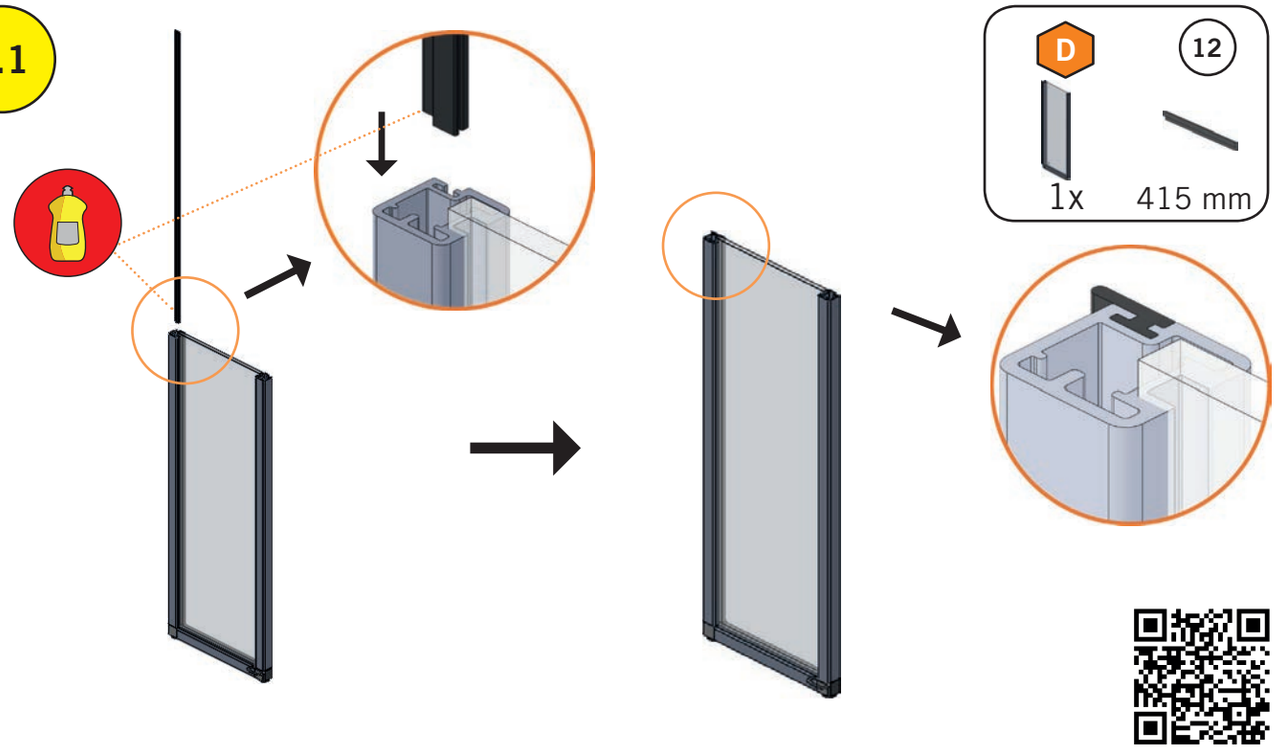
2 x



Side doors

(produce 2x)

2.1



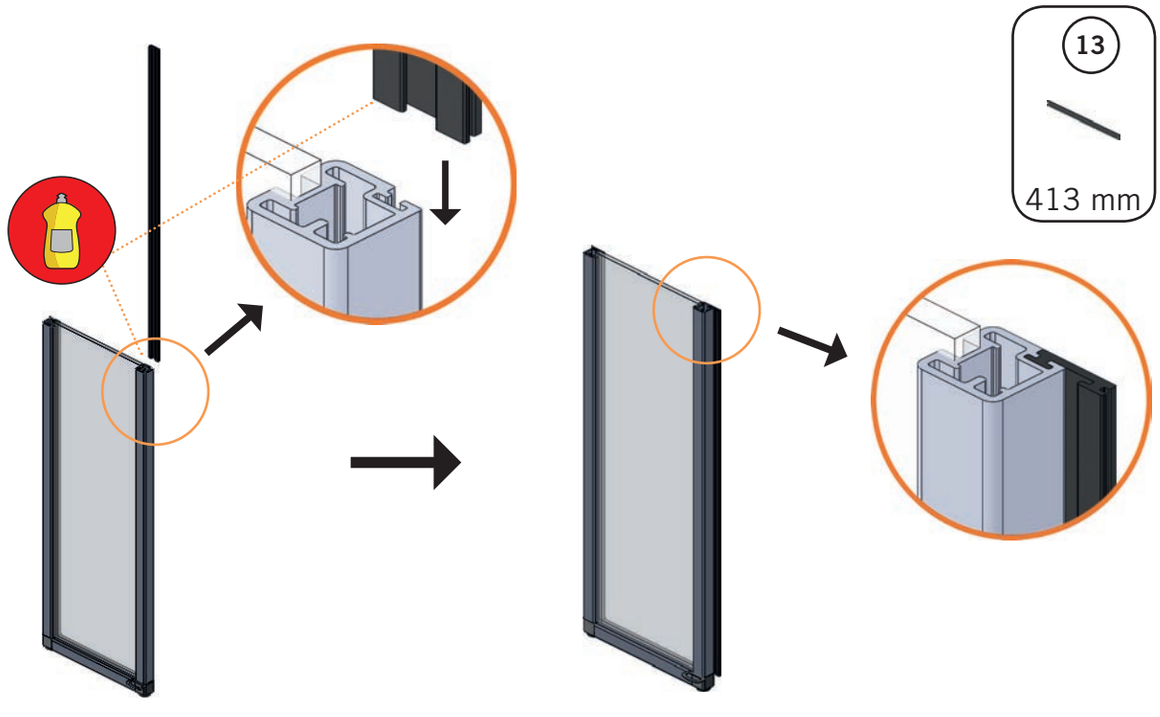
D

1x

12

415 mm

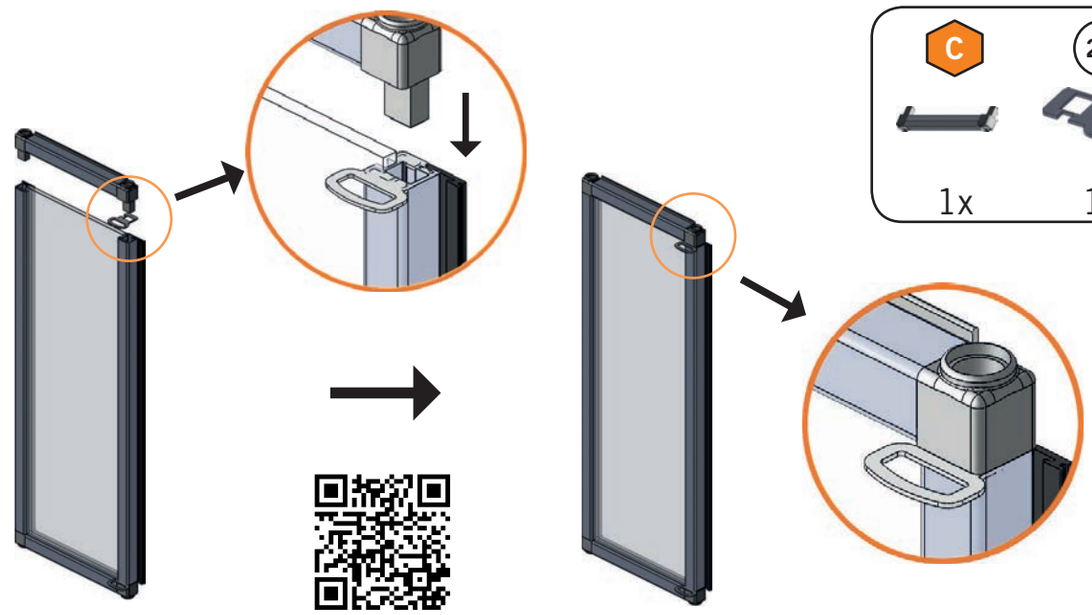
2.2



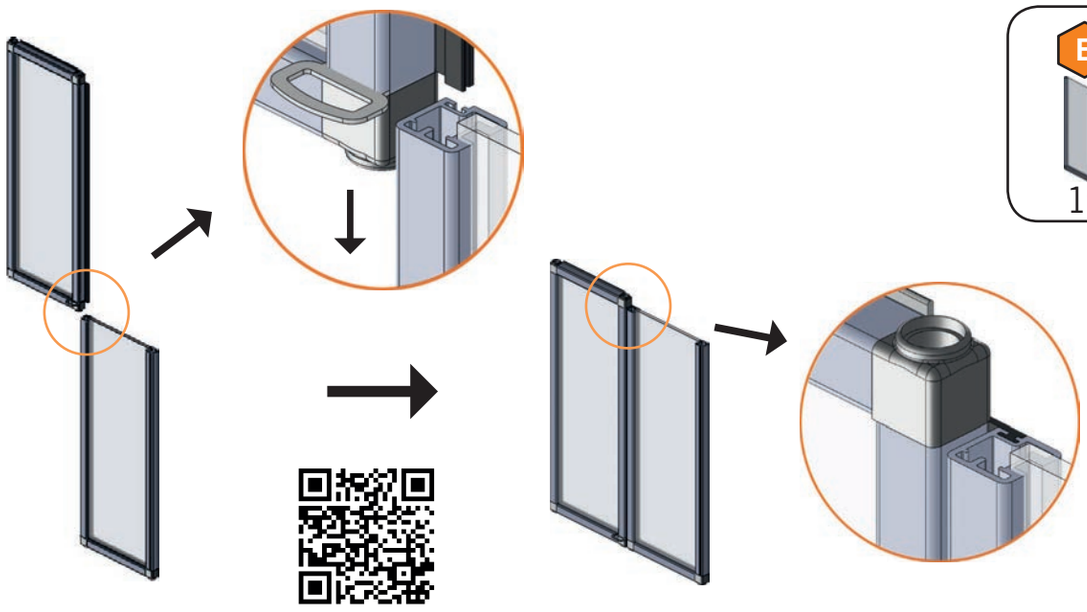
13

413 mm

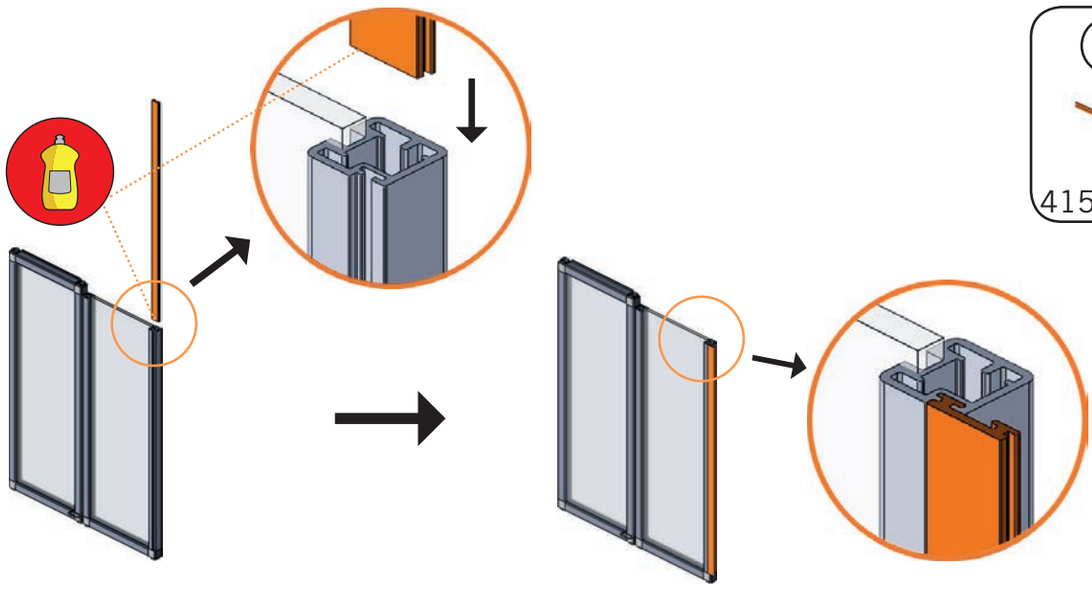
2.3



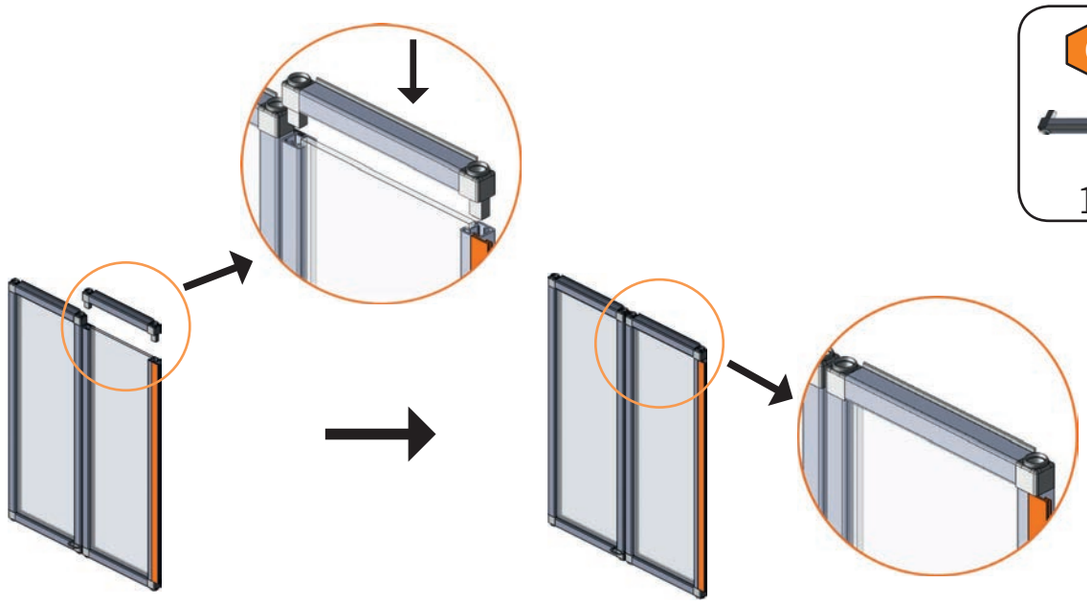
2.4



2.5



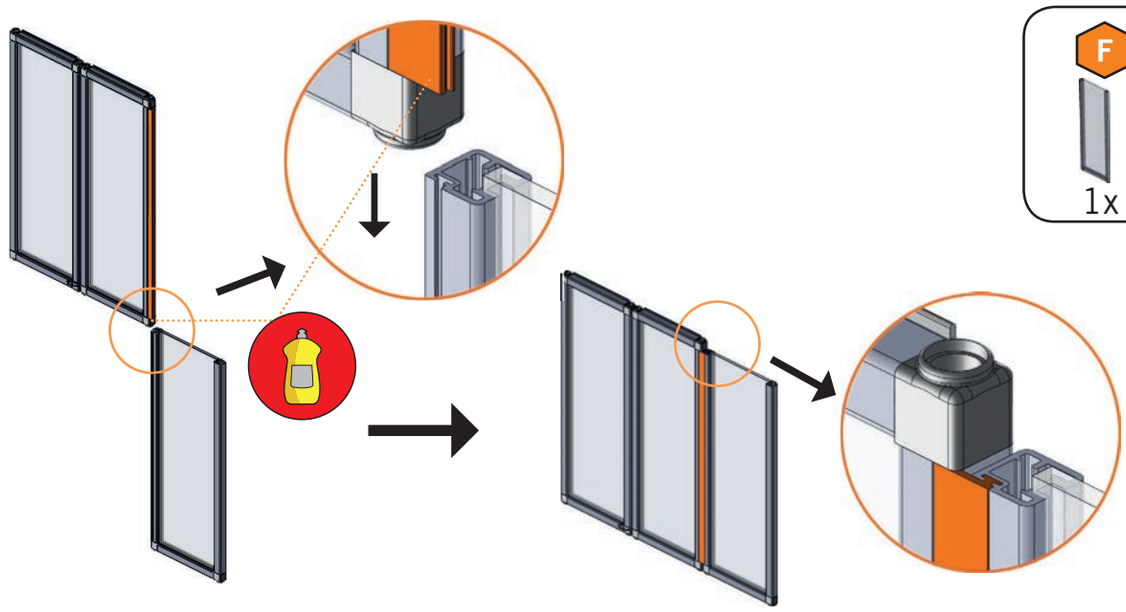
2.6



C

1x

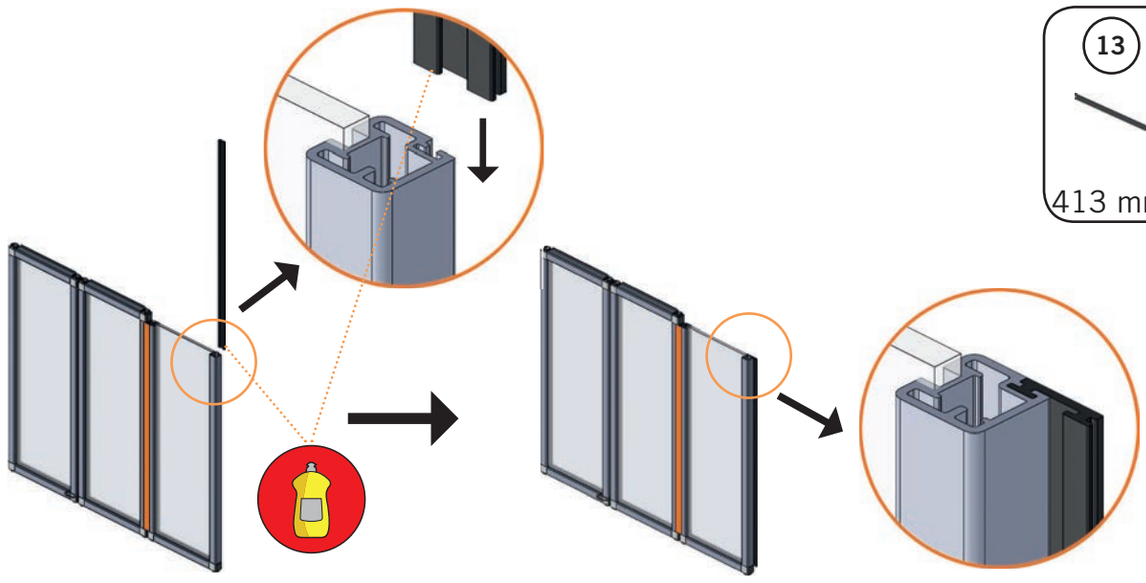
2.7



F

1x

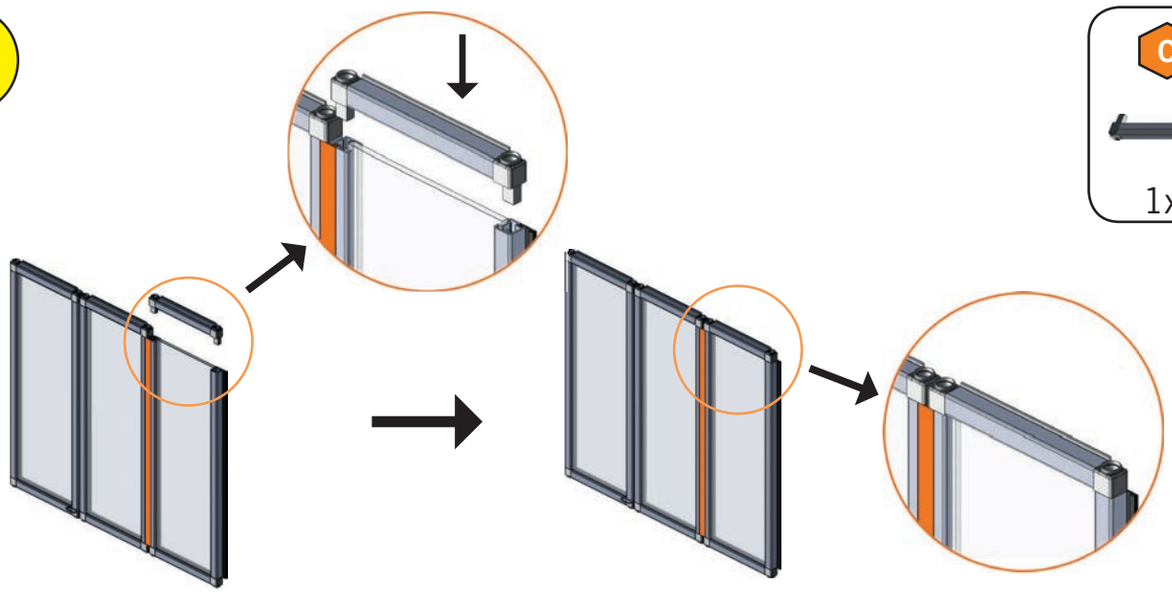
2.8



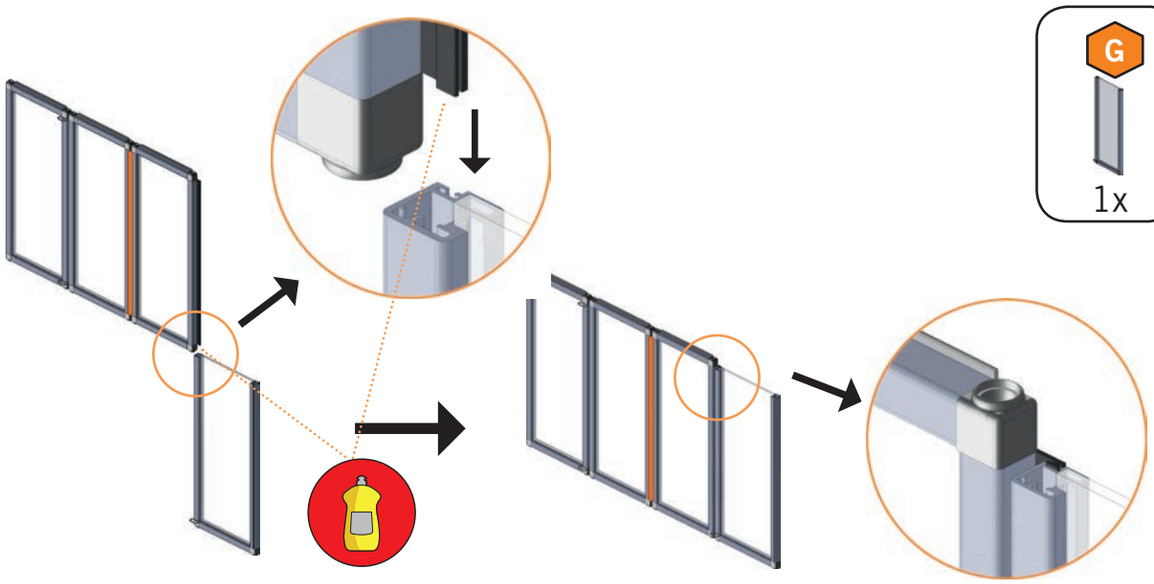
13

413 mm

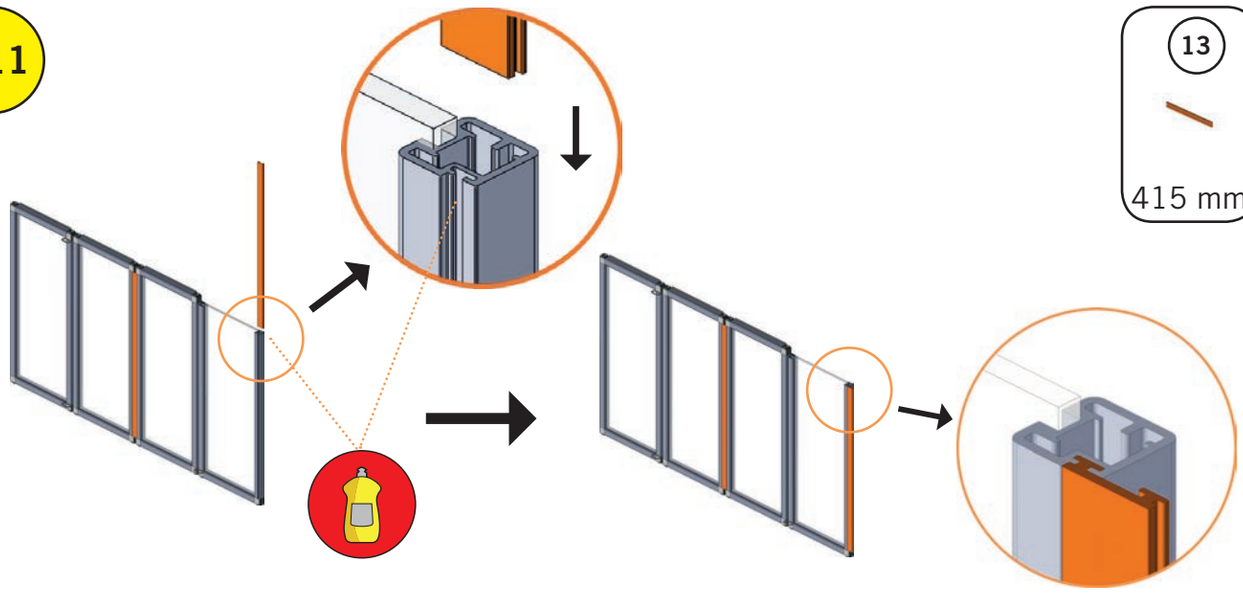
2.9



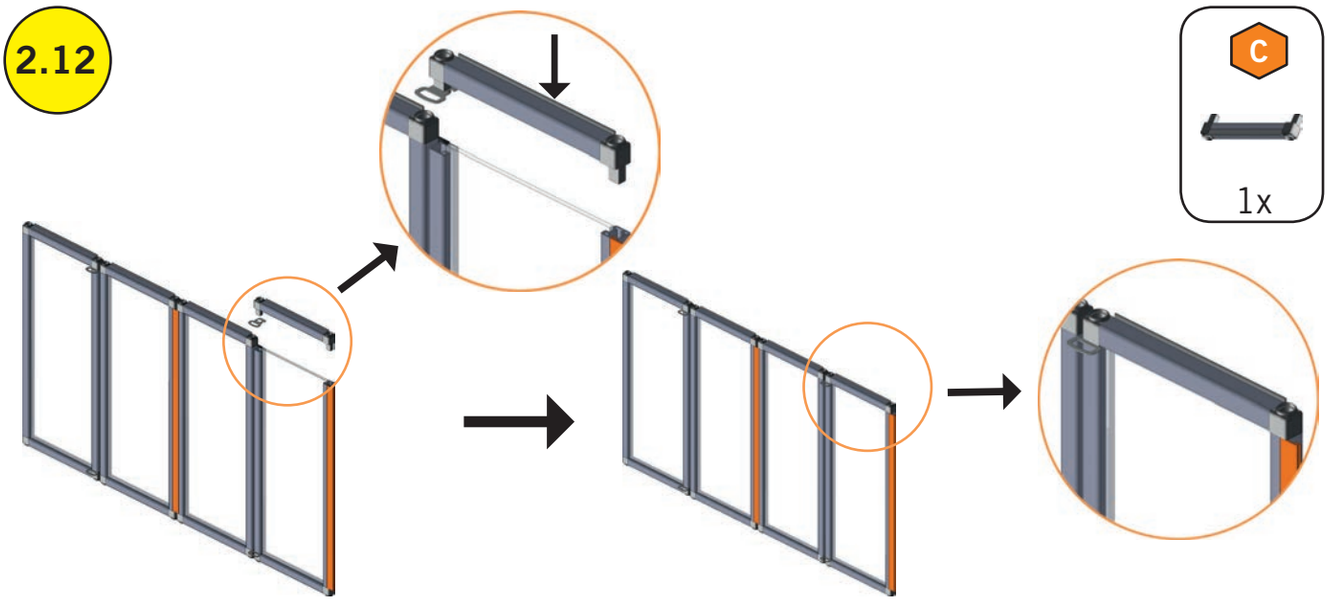
2.10



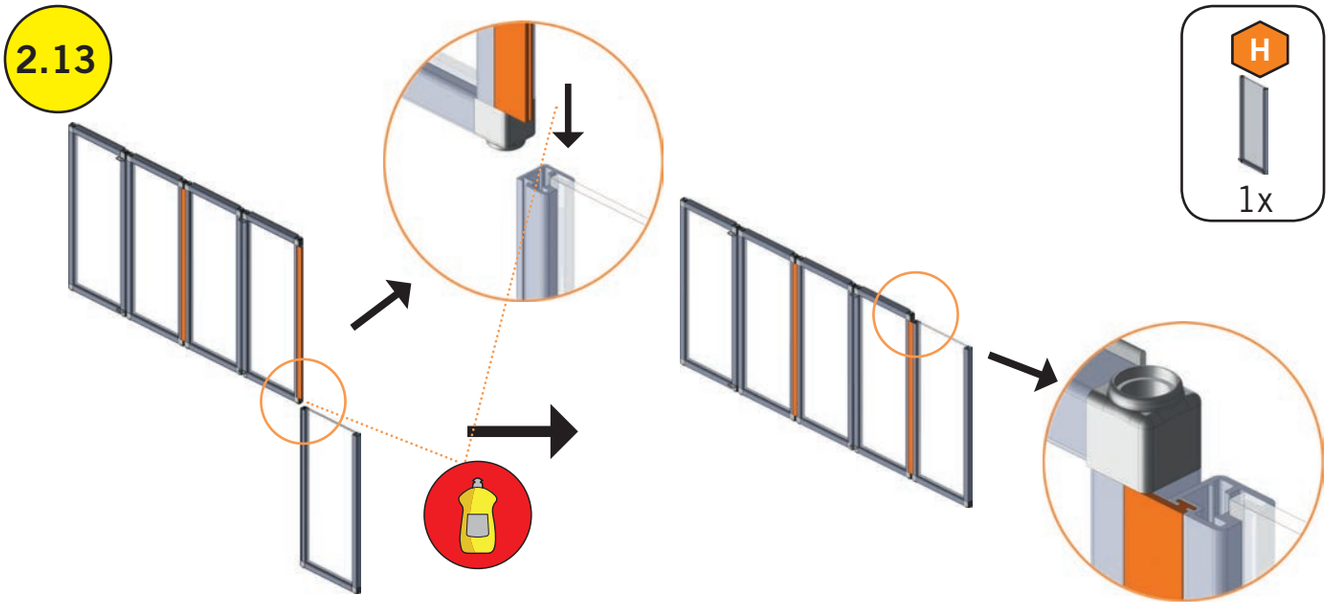
2.11



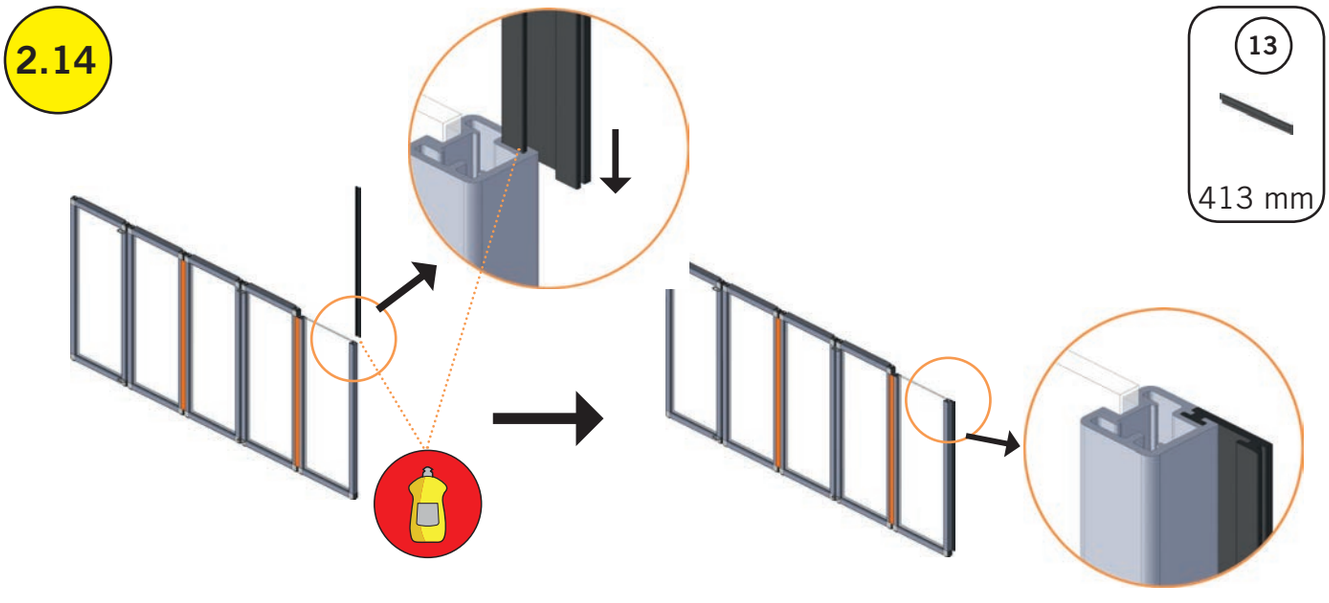
2.12



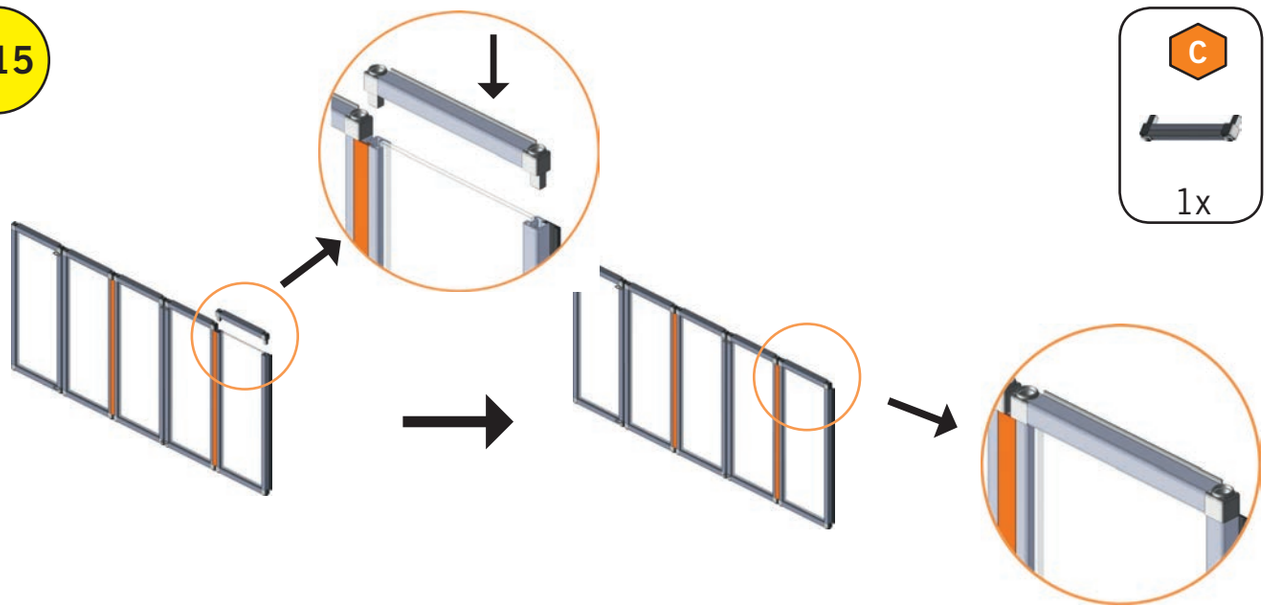
2.13



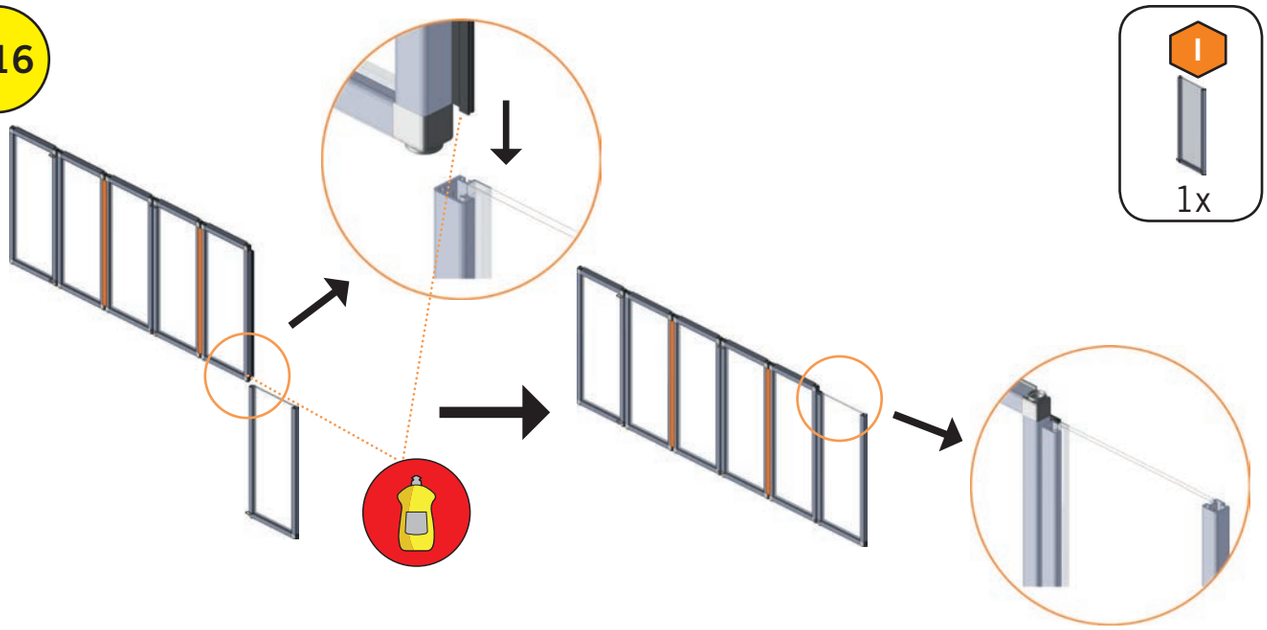
2.14



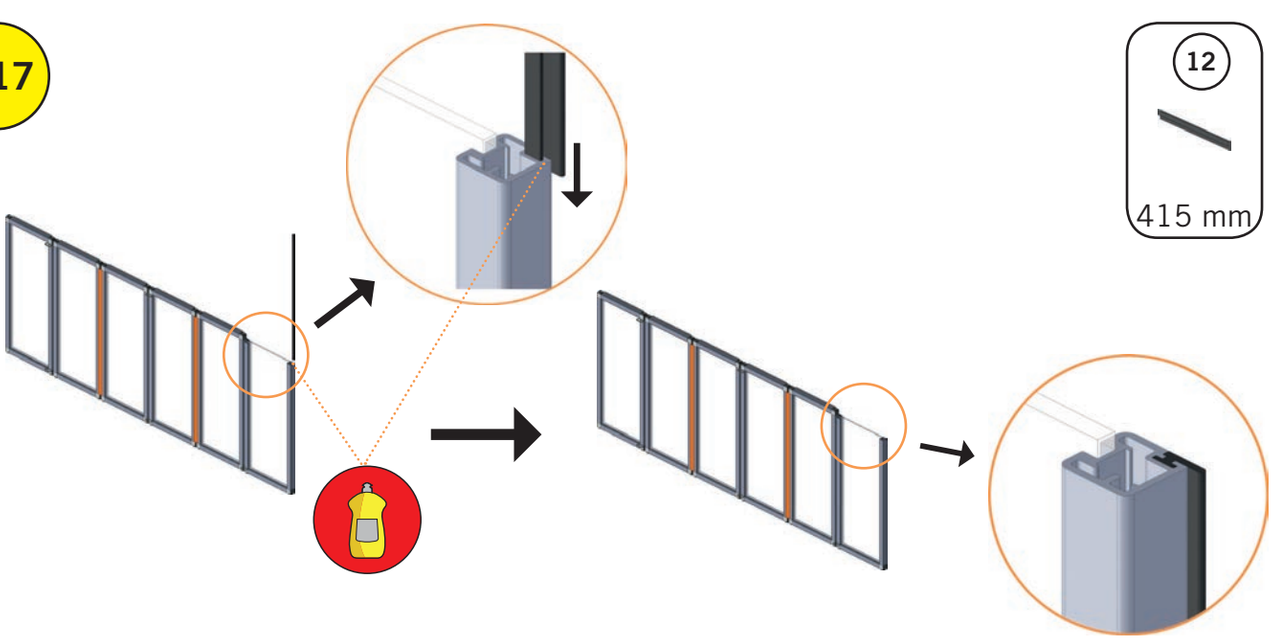
2.15



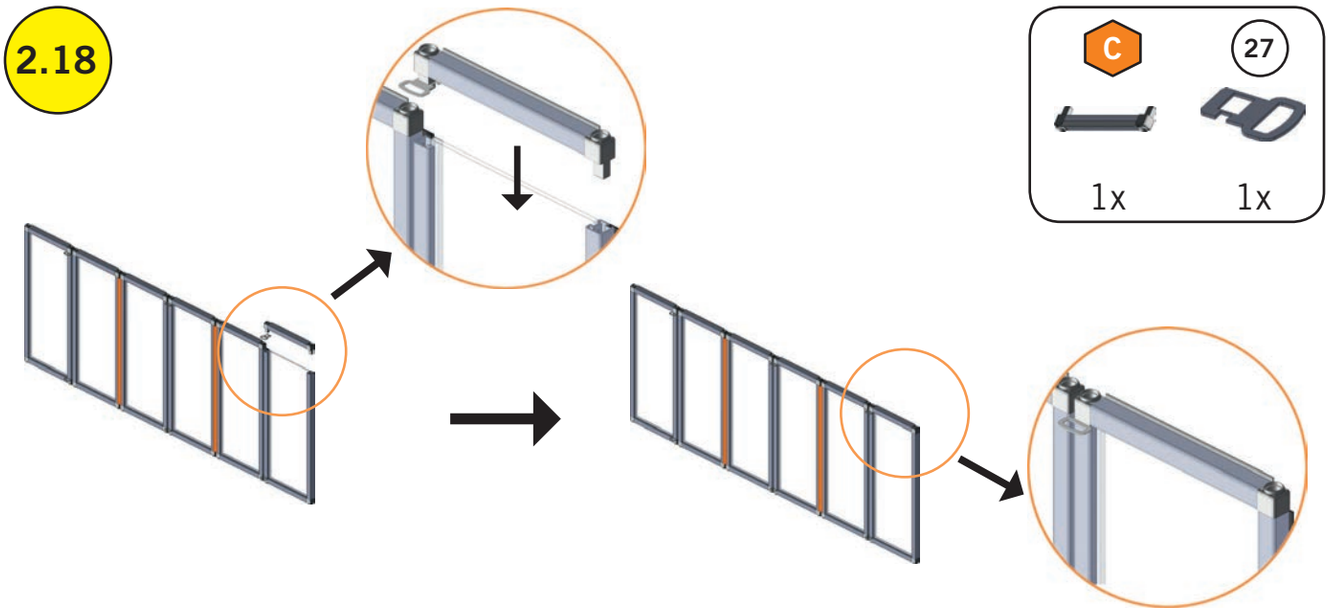
2.16



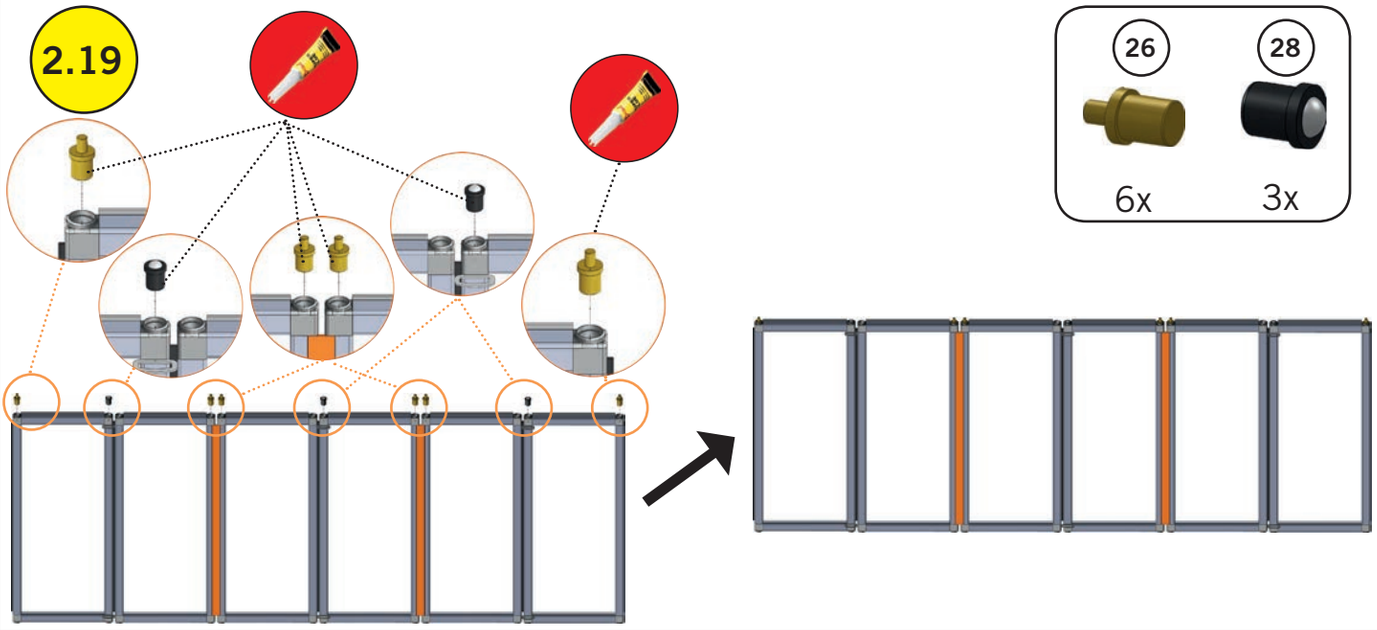
2.17



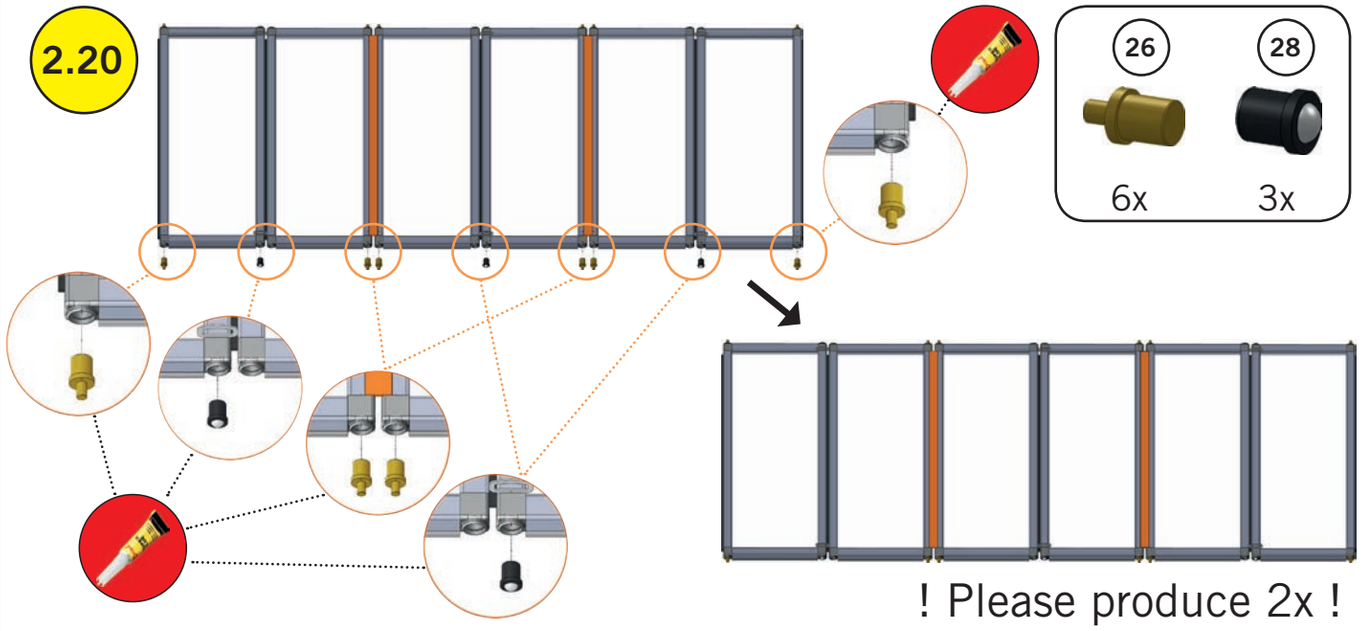
2.18



2.19

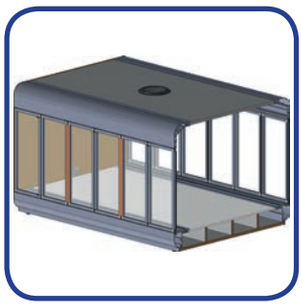


2.20



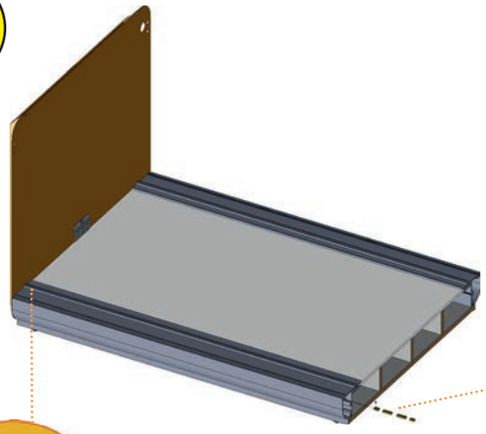
! Please produce 2x !

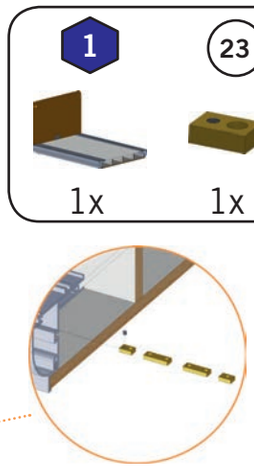
3

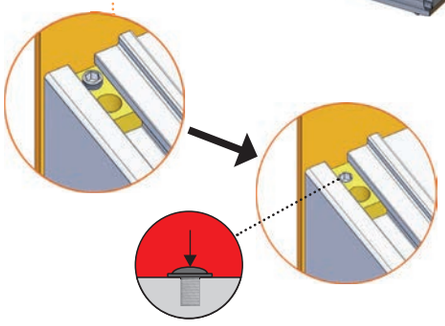


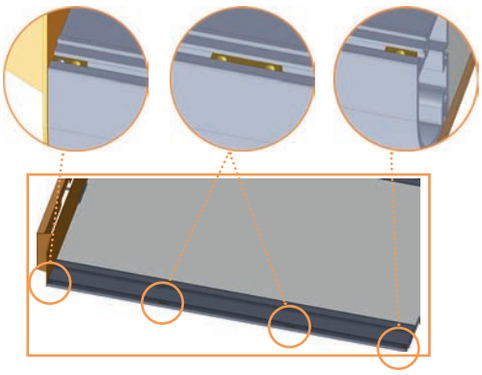
Upper frame

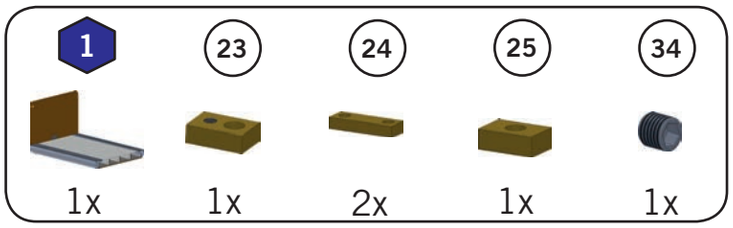
3.1



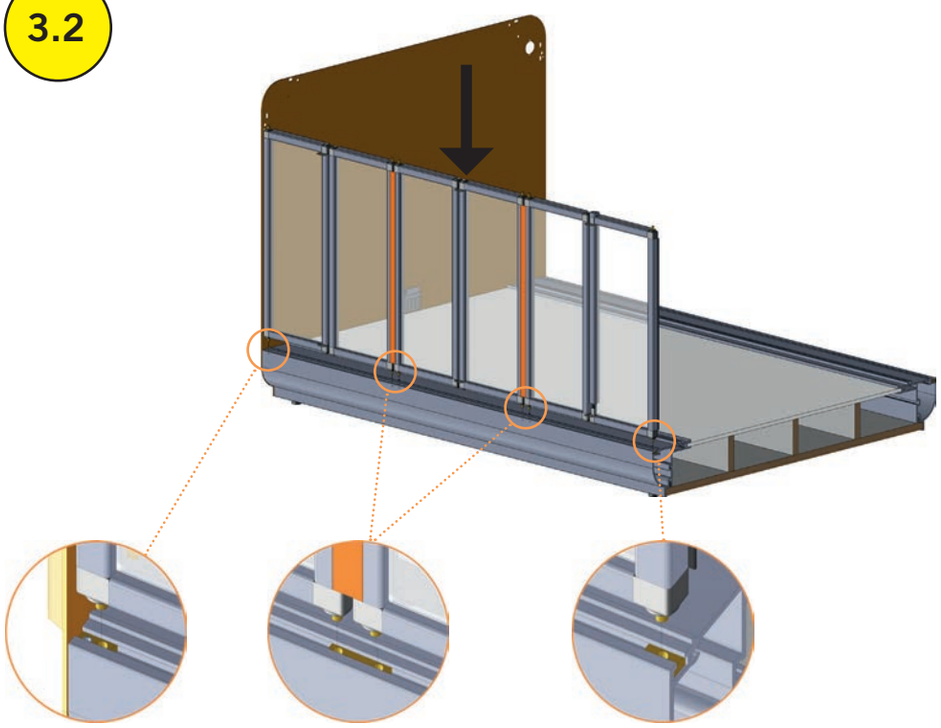


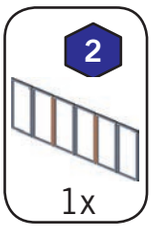




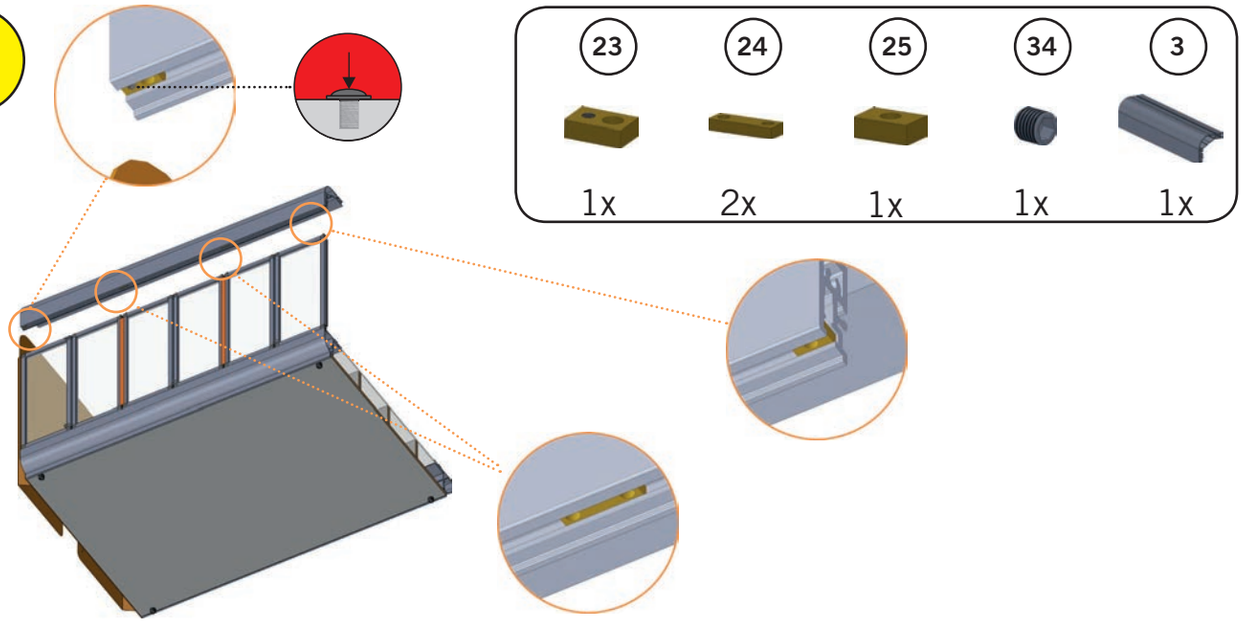


3.2

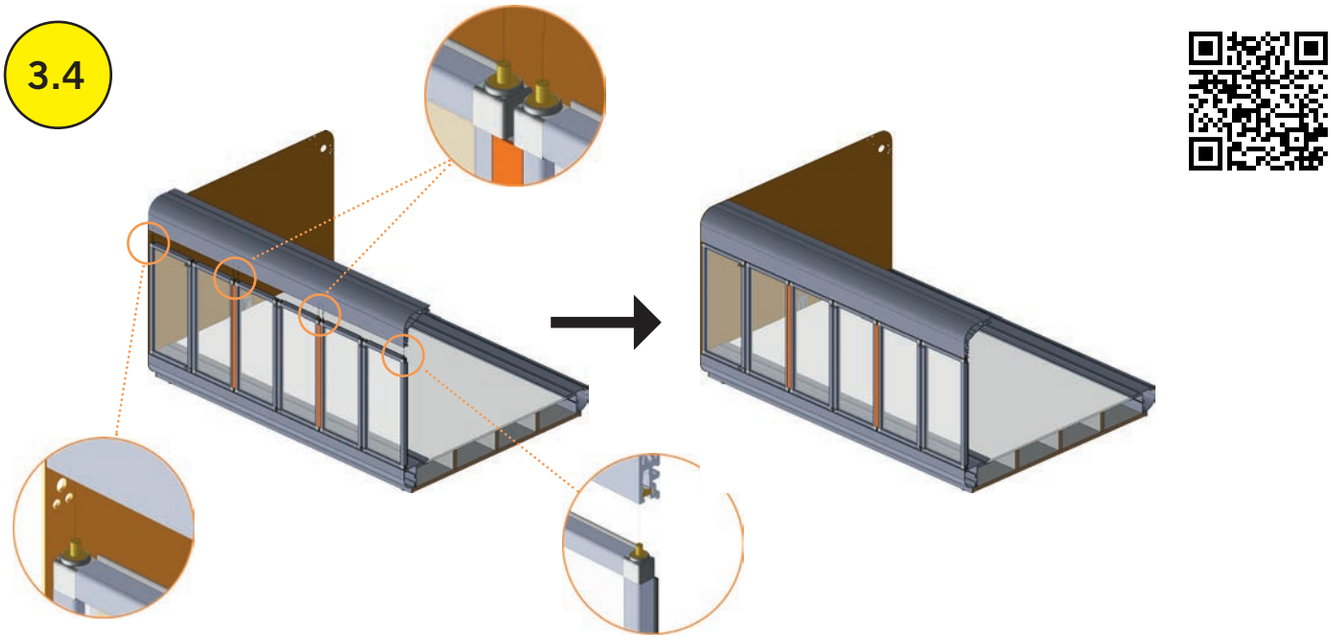




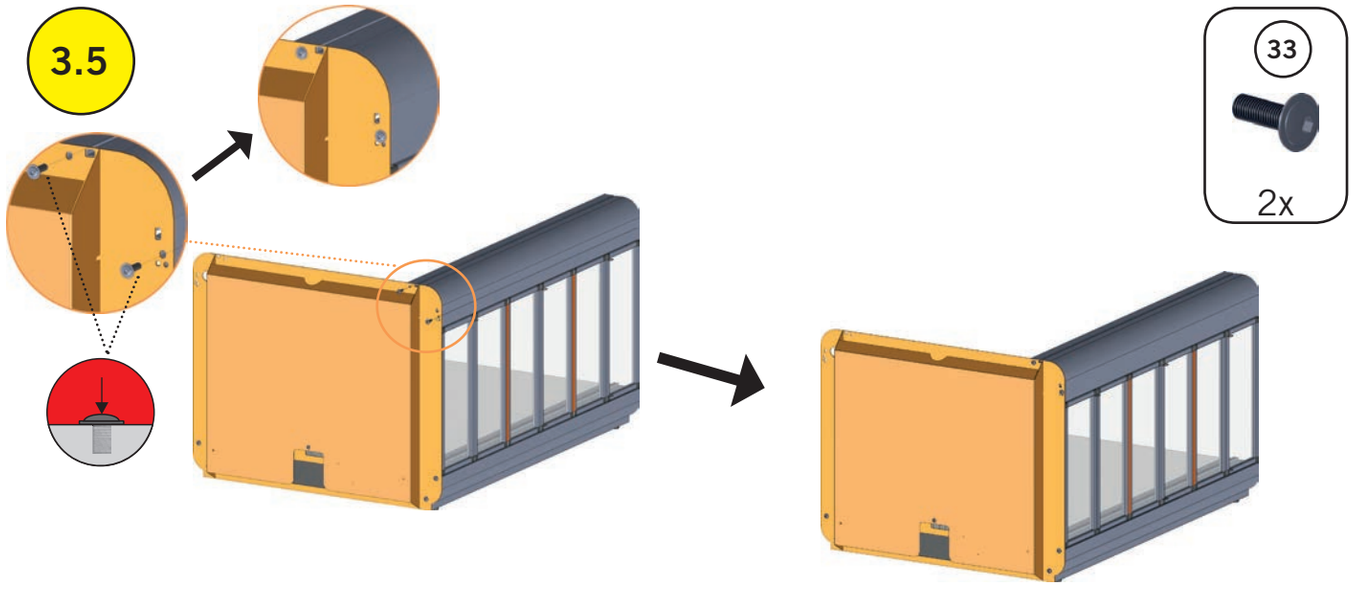
3.3



3.4

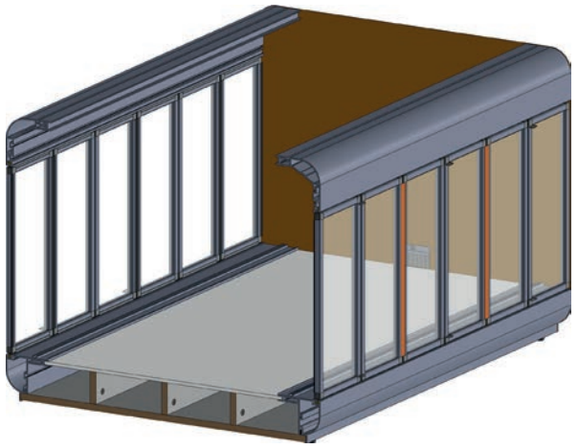


3.5

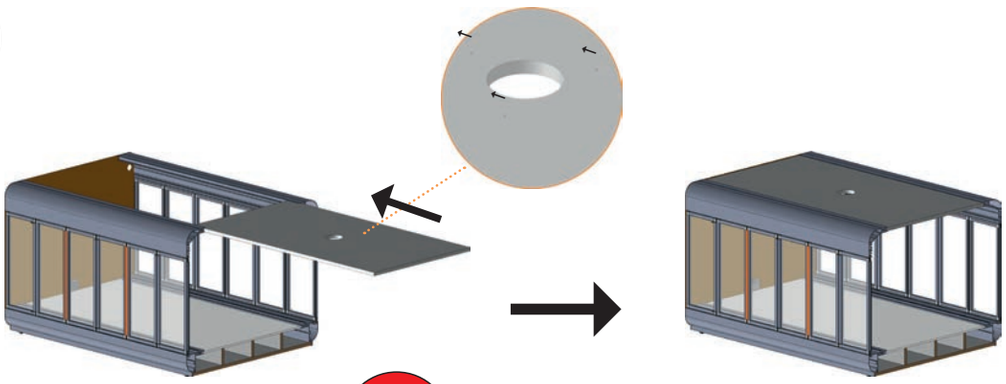


3.6

Please repeat worksteps 3.1 to 3.5 for the right of the enclose in a mirror-inverted way!



3.7

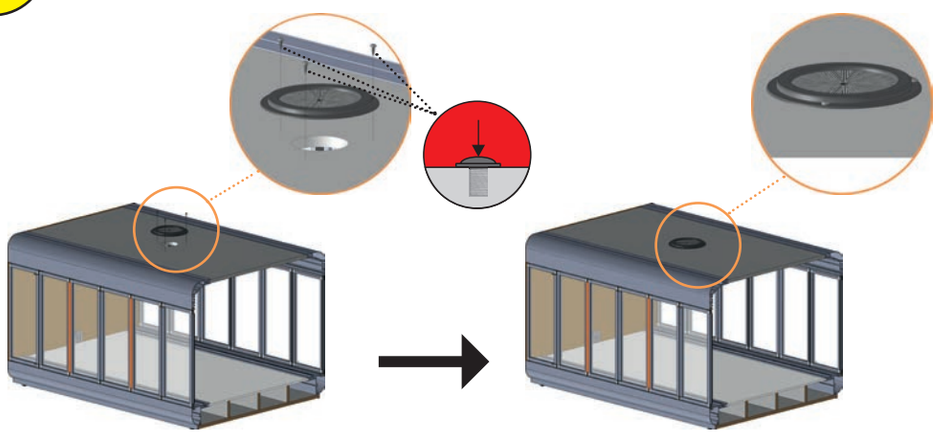


19

1x

Please pay attention to the dimension of the top plate!

3.8



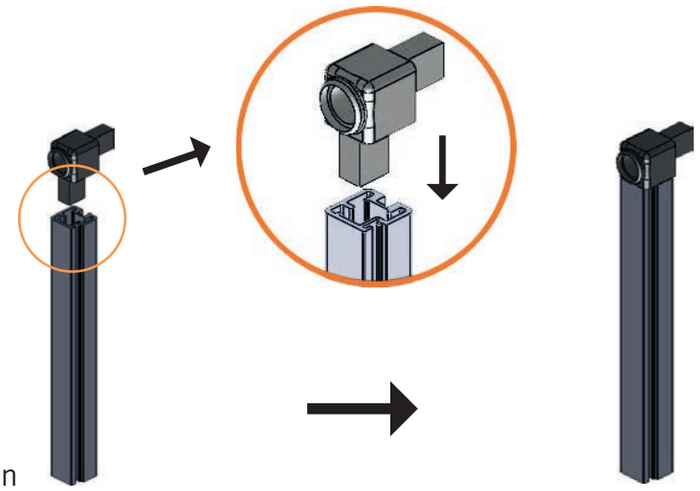
21

1x

50

3x

J



11 — 1x

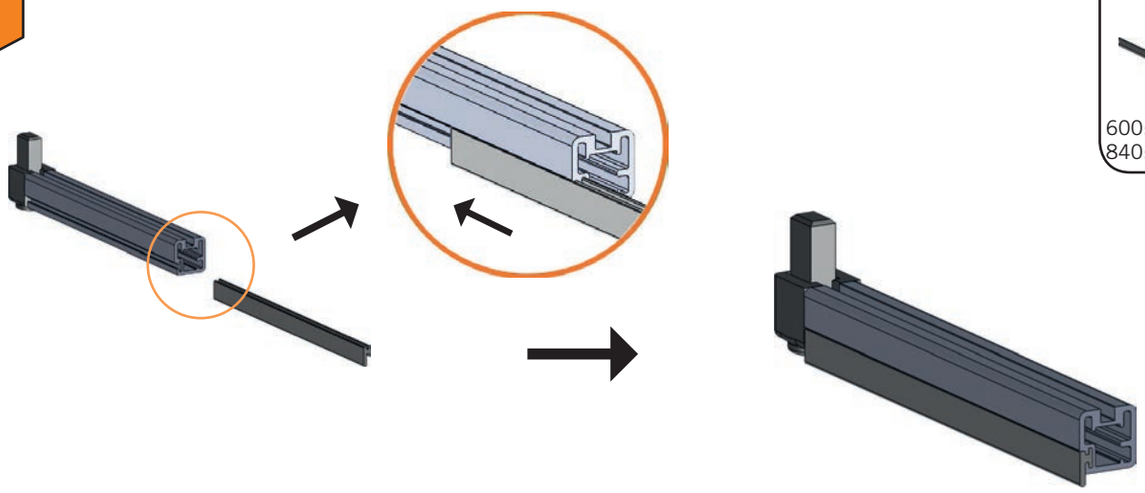
600: 95 mm
840: 140 mm

20 — 1x

Please pay attention to the correct length!
95/ 140 mm !

For an easier assembly of the plastic corners, please turn the profile and use the rubber mallet to fix it to the corner!

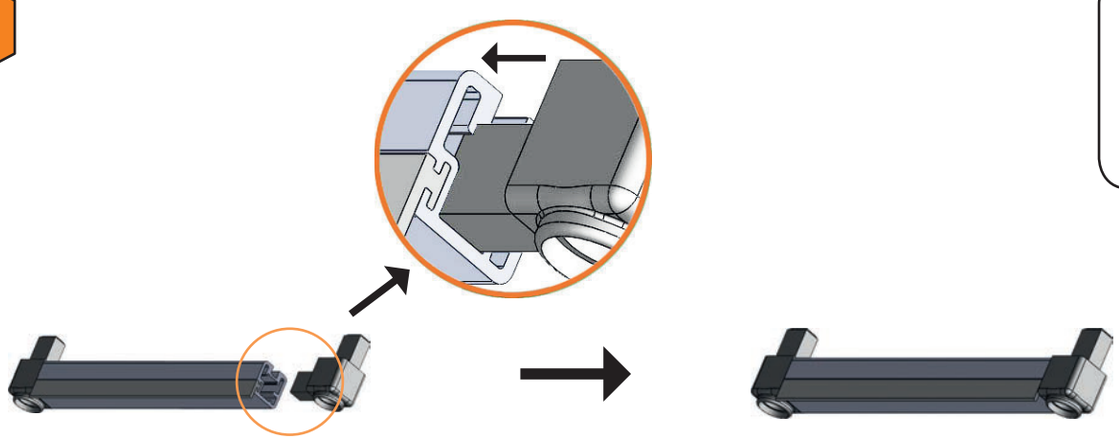
J1



12

600: 96 mm
840: 141 mm

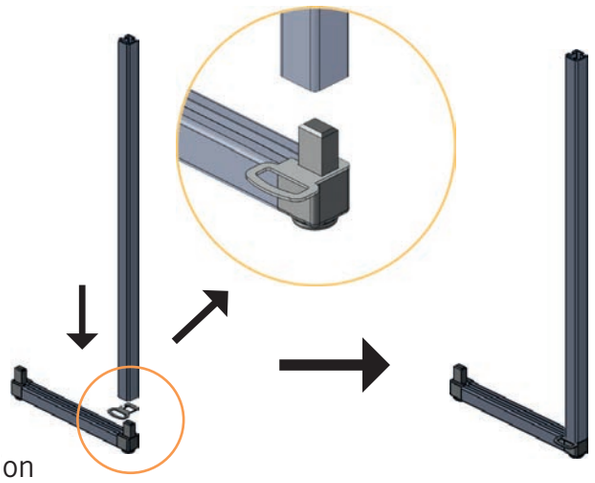
J2



20 — 1x

! Please produce 8x !

K



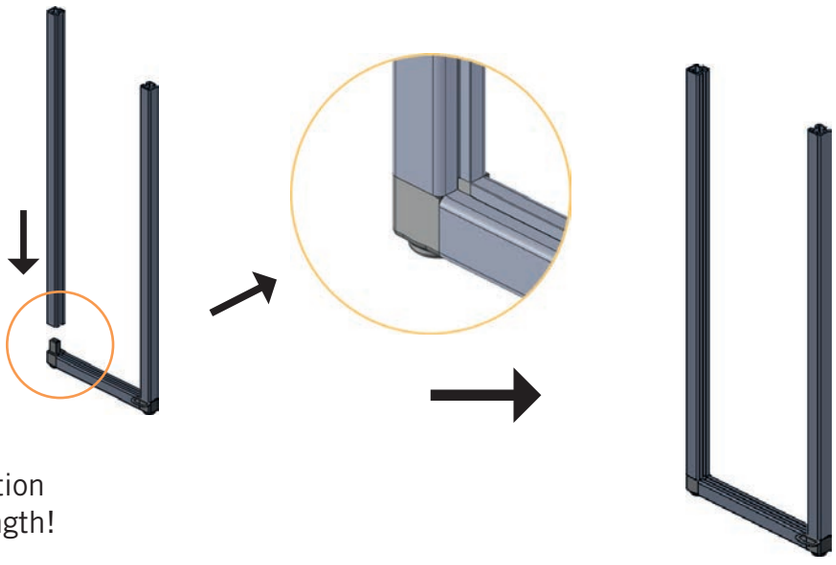
27 1x

J 1x

10 1x 372 mm

Please pay attention
to the correct length!
372 mm !

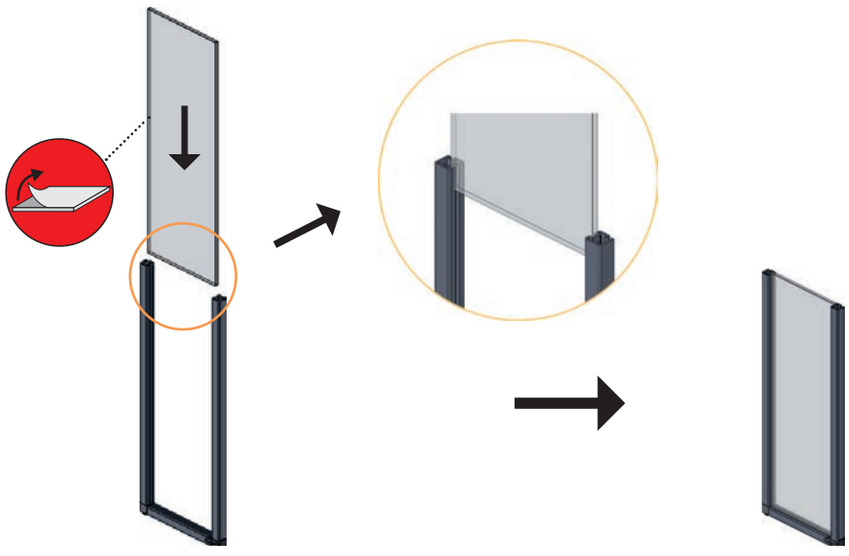
K1



9 1x 374 mm

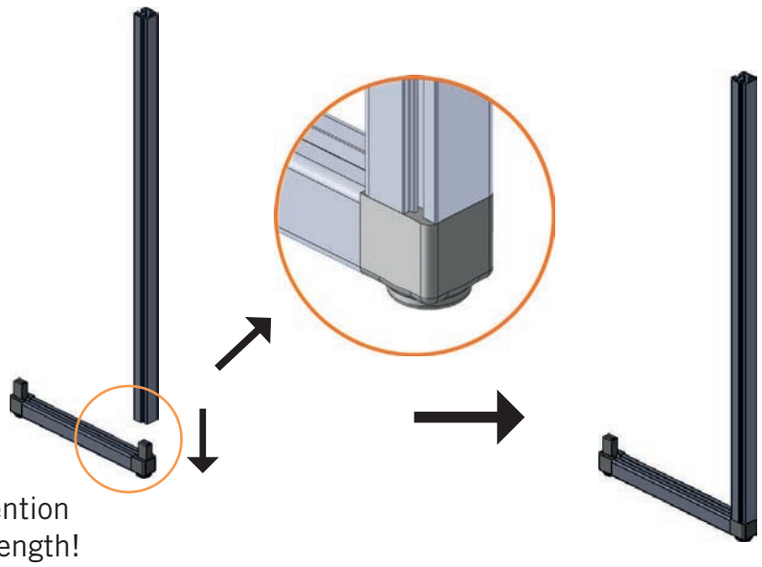
Please pay attention
to the correct length!
374 mm !

K2



14 1x

L

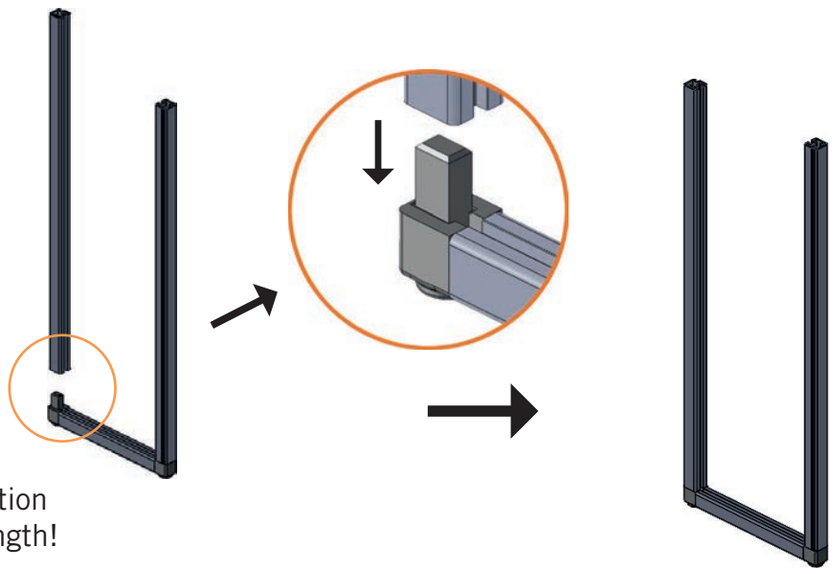


J 1x

9 1x 374 mm

Please pay attention
to the correct length!
374 mm !

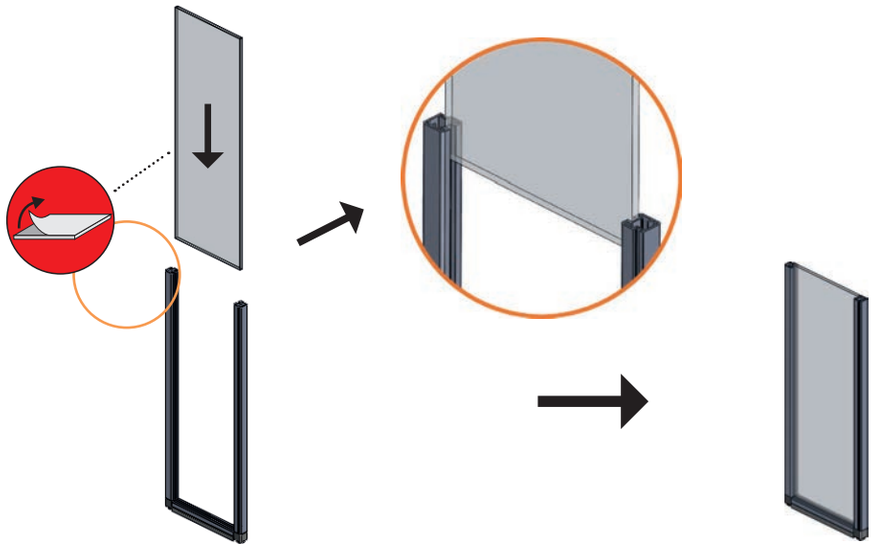
L1



9 1x 374 mm

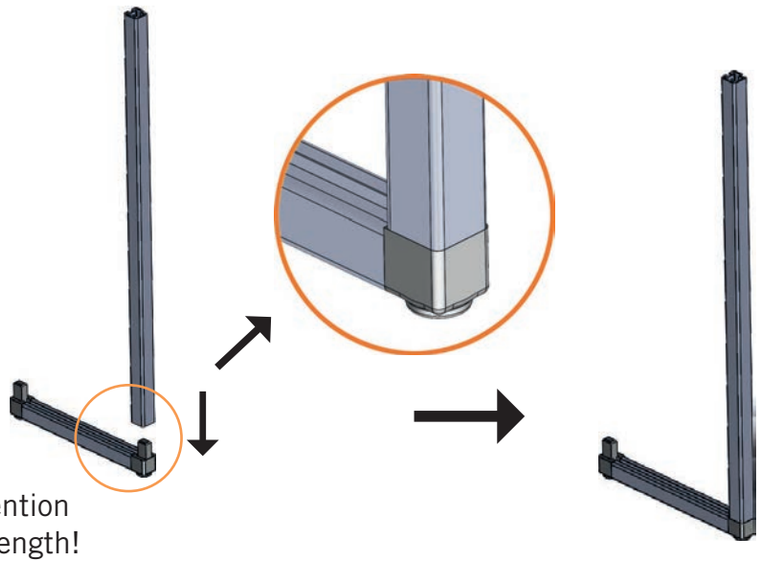
Please pay attention
to the correct length!
374 mm !

L2



14 1x

M

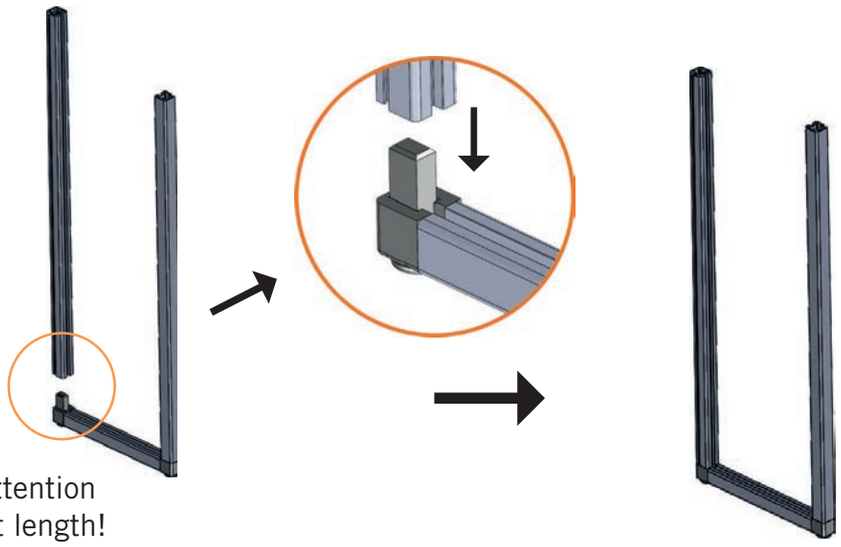


J 1x

9 1x 374 mm

Please pay attention
to the correct length!
374 mm !

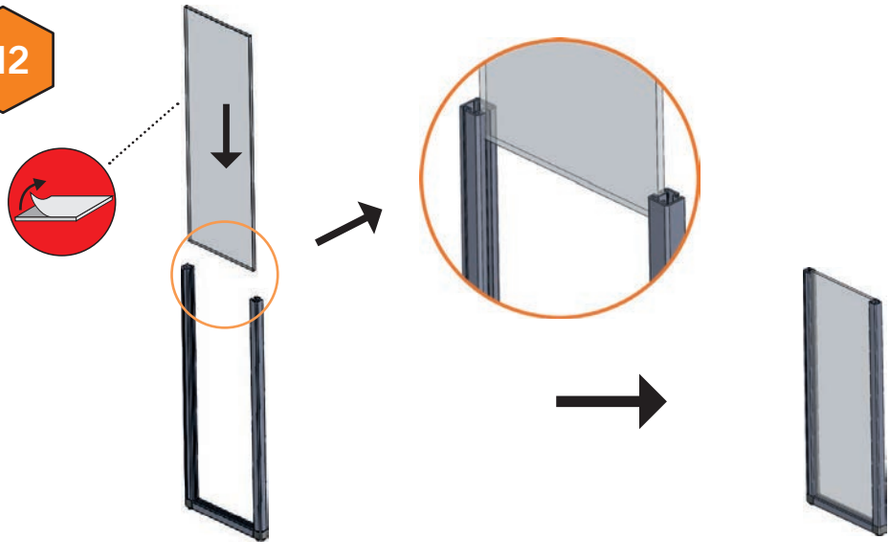
M1



9 1x 374 mm

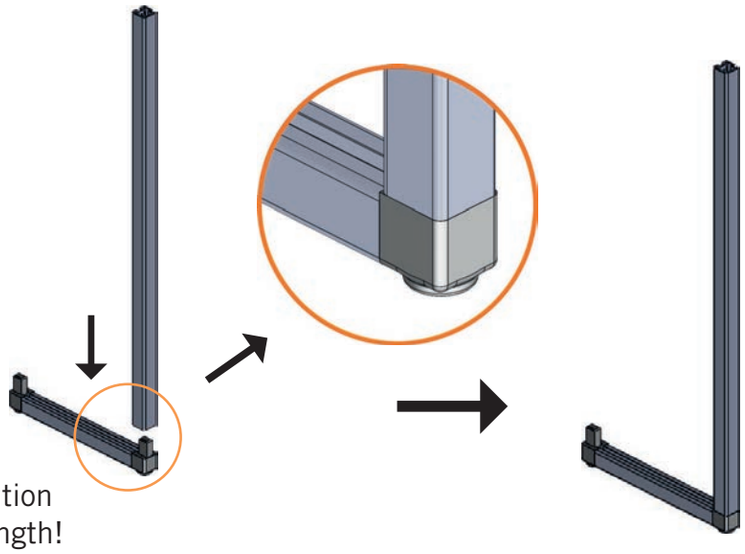
Please pay attention
to the correct length!
374 mm !

M2



14 1x

N

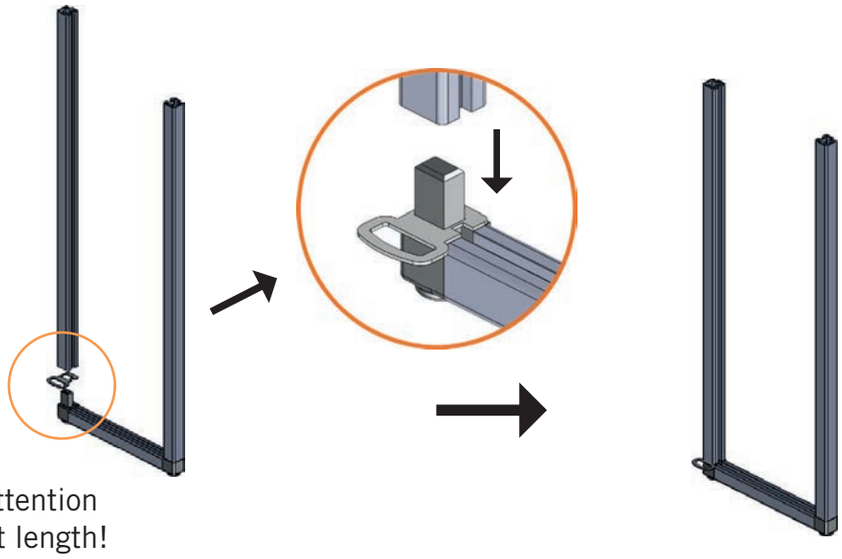


J 1x

9 1x 374 mm

Please pay attention
to the correct length!
374 mm !

N1

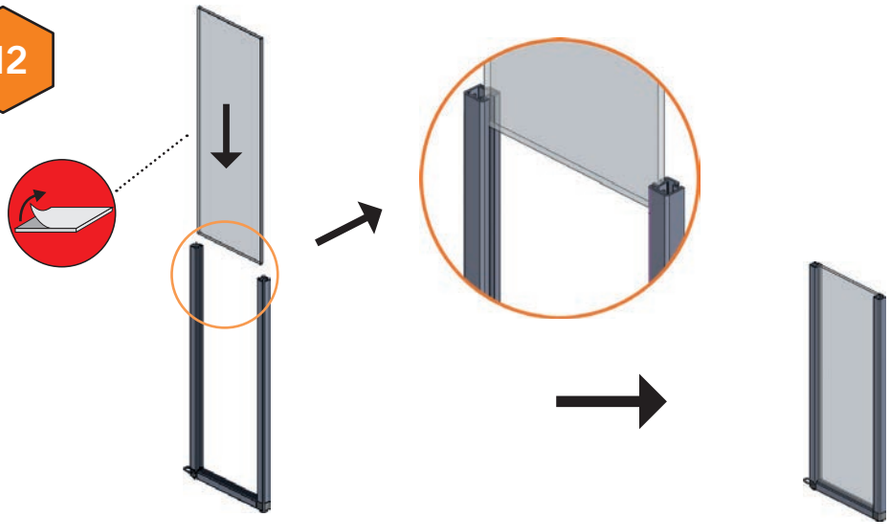


10 1x 372 mm

27 1x

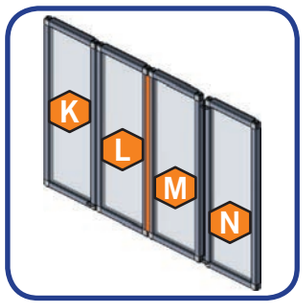
Please pay attention
to the correct length!
372 mm !

N2



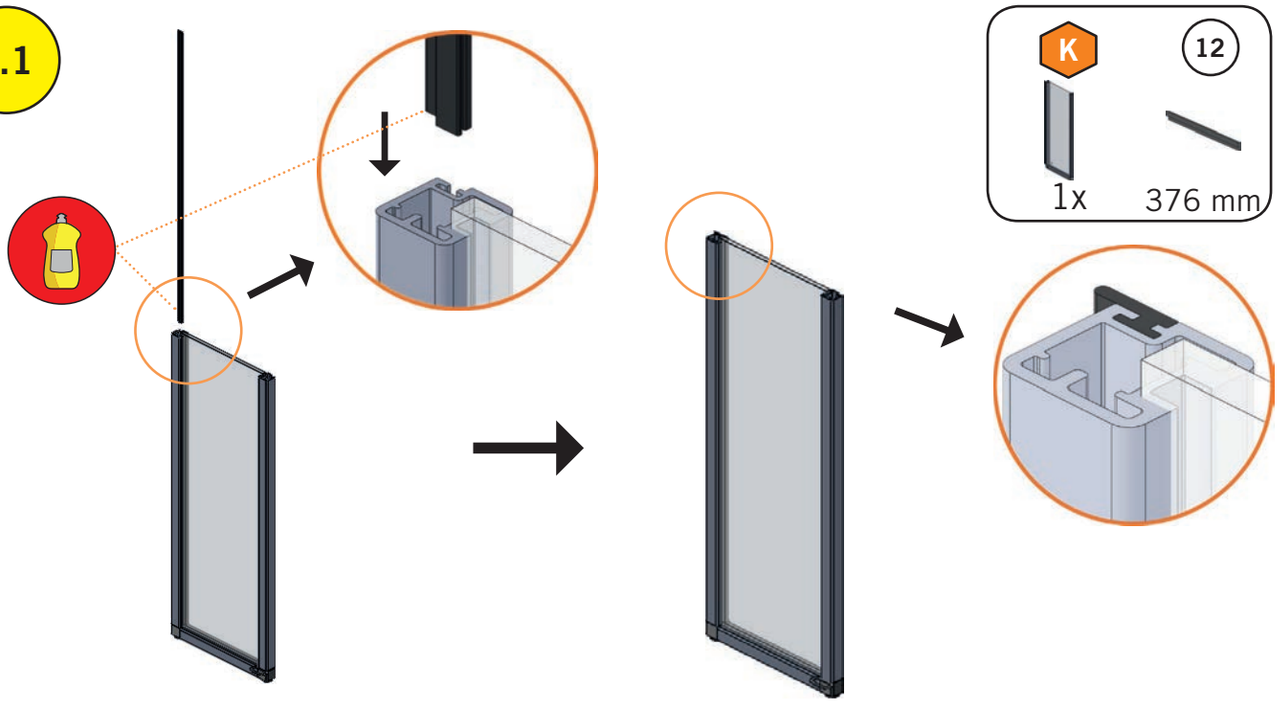
14 1x

4

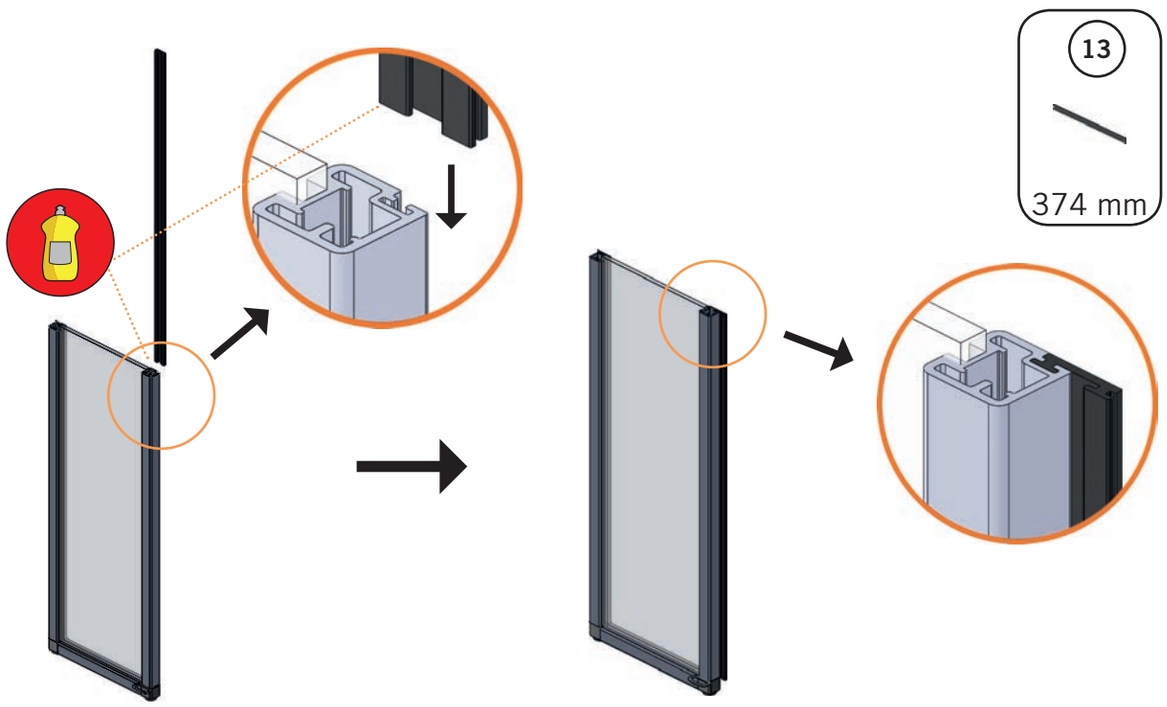


Front door

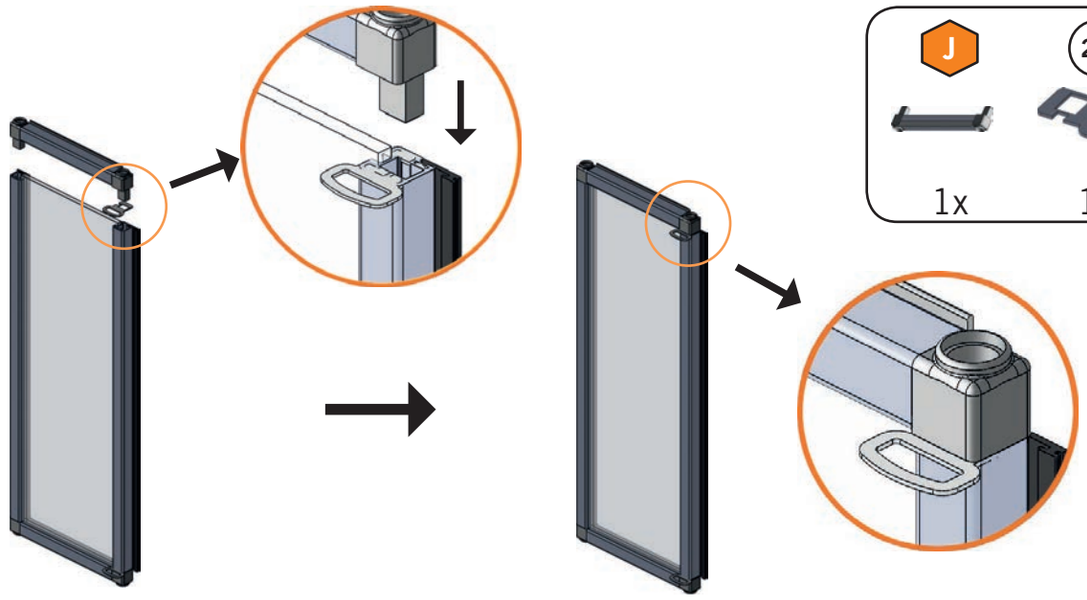
4.1



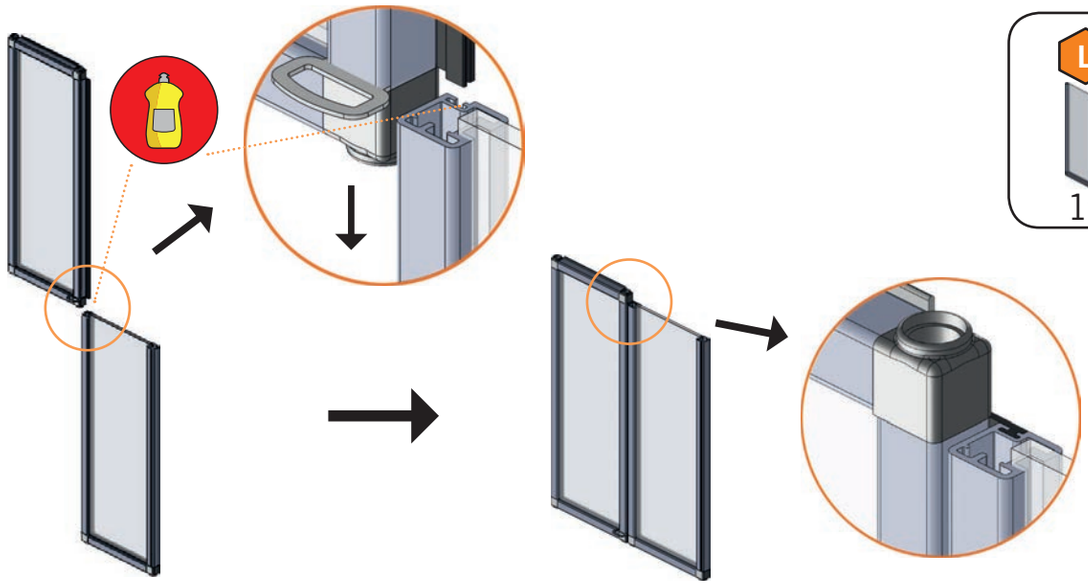
4.2



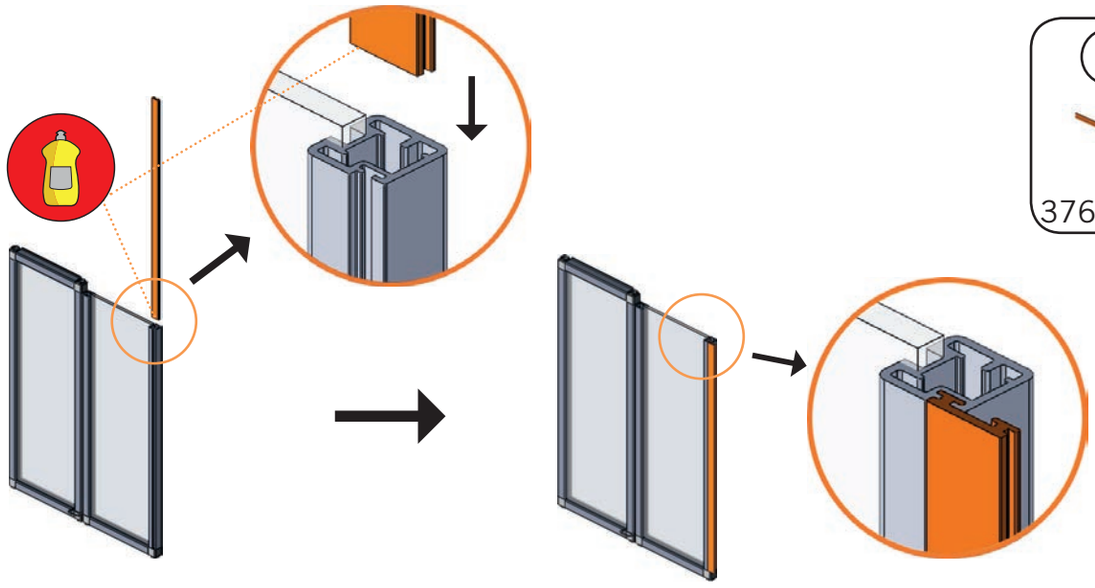
4.3



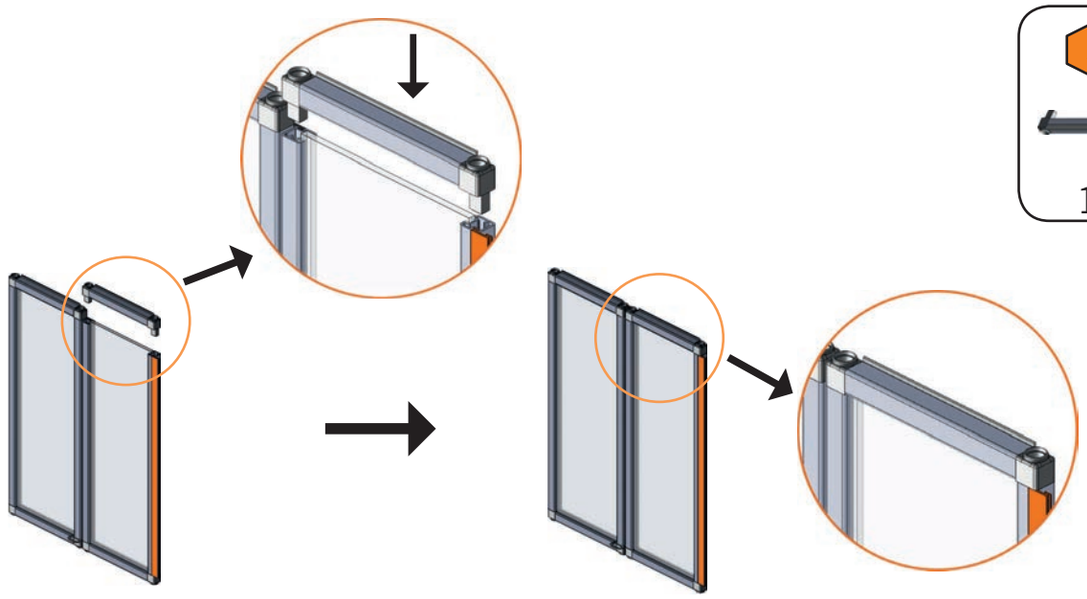
4.4



4.5



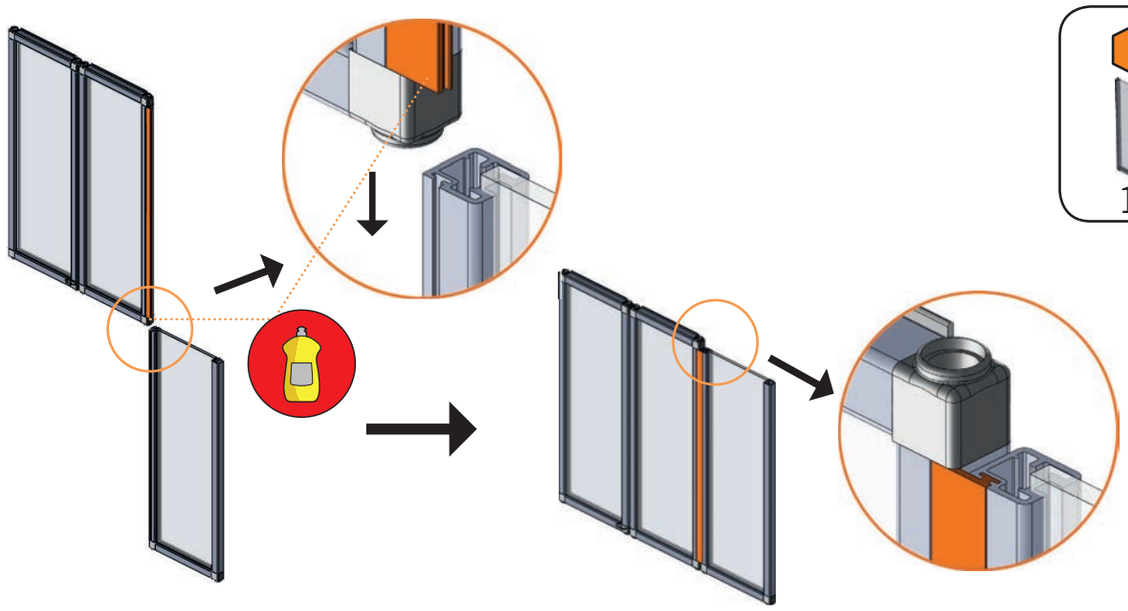
4.6



J

1x

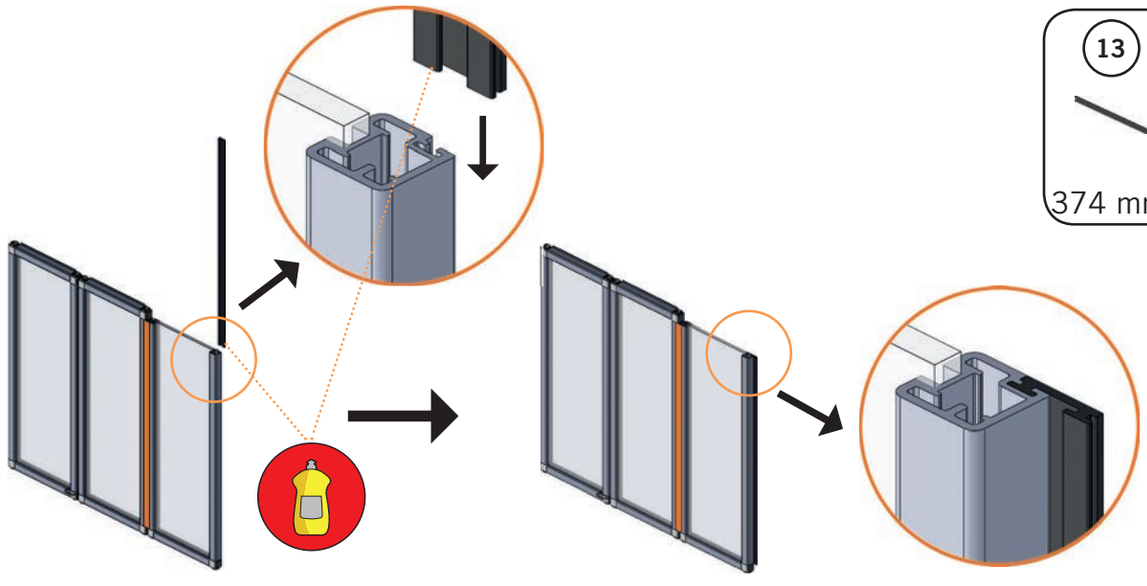
4.7



M

1x

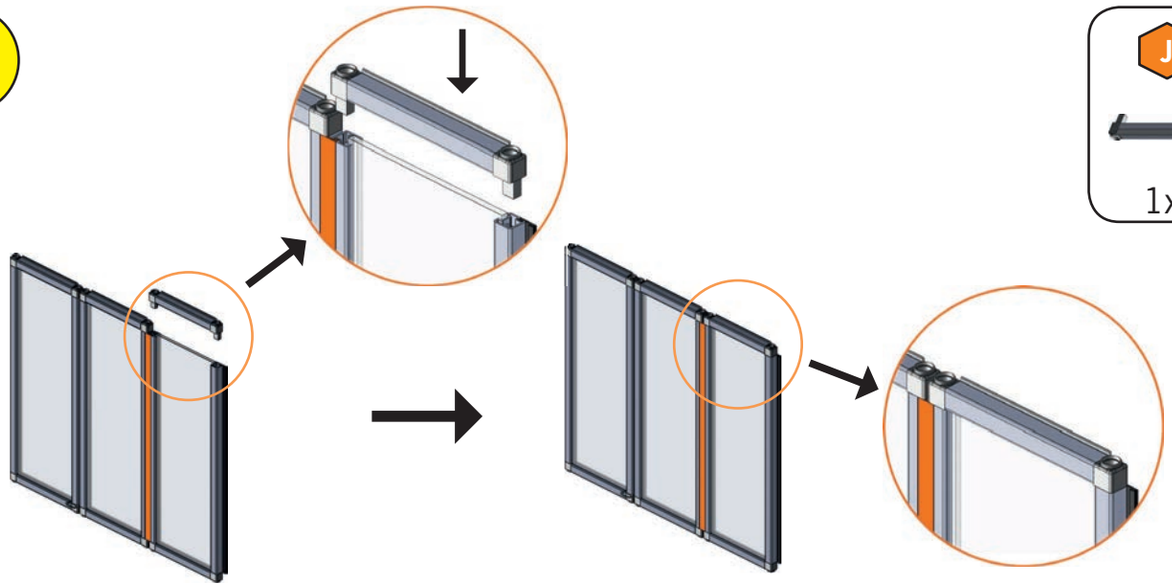
4.8



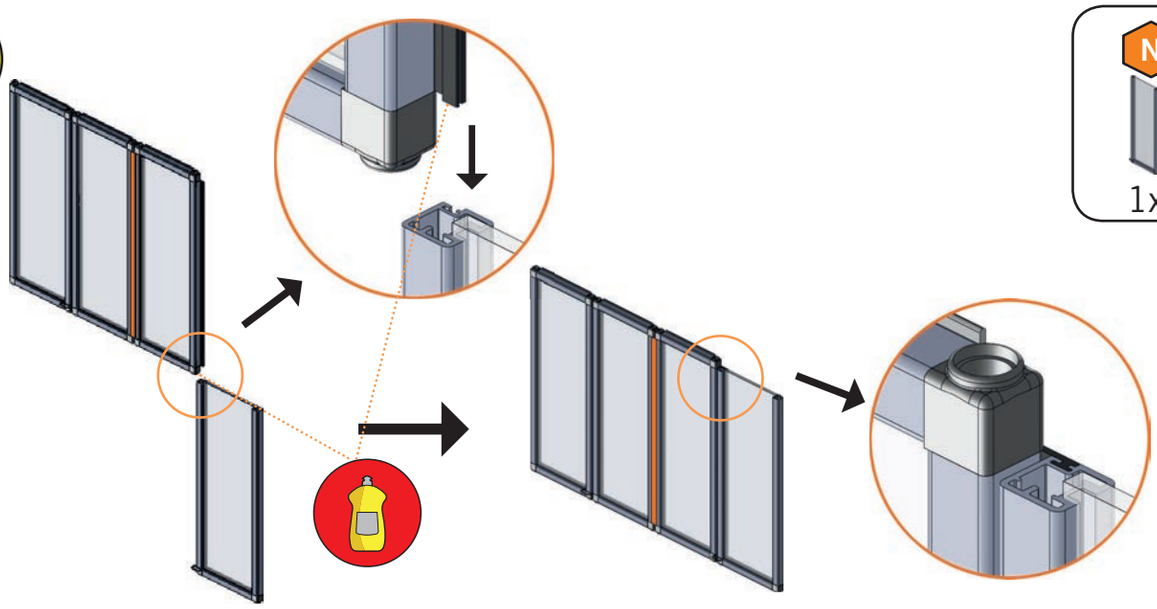
13

374 mm

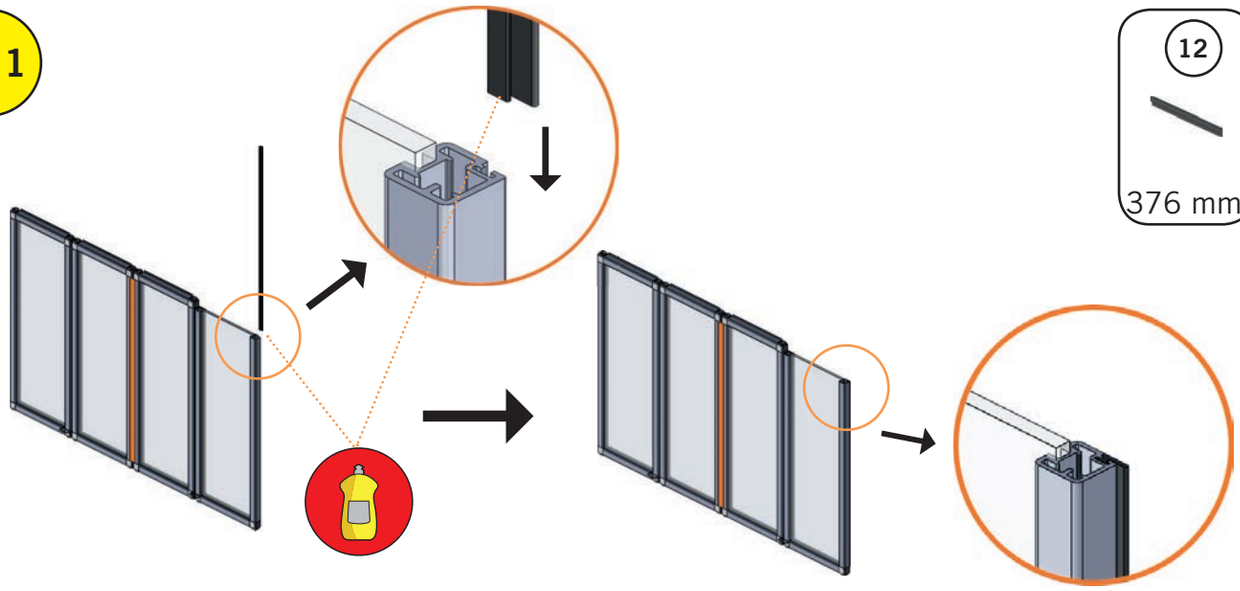
4.9



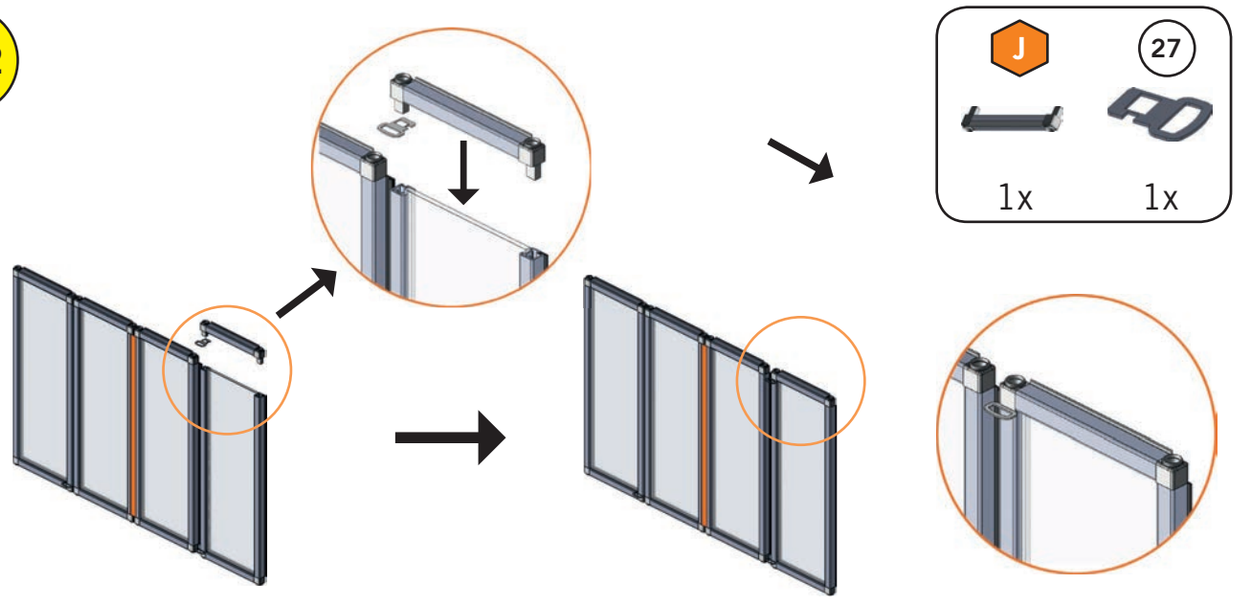
4.10



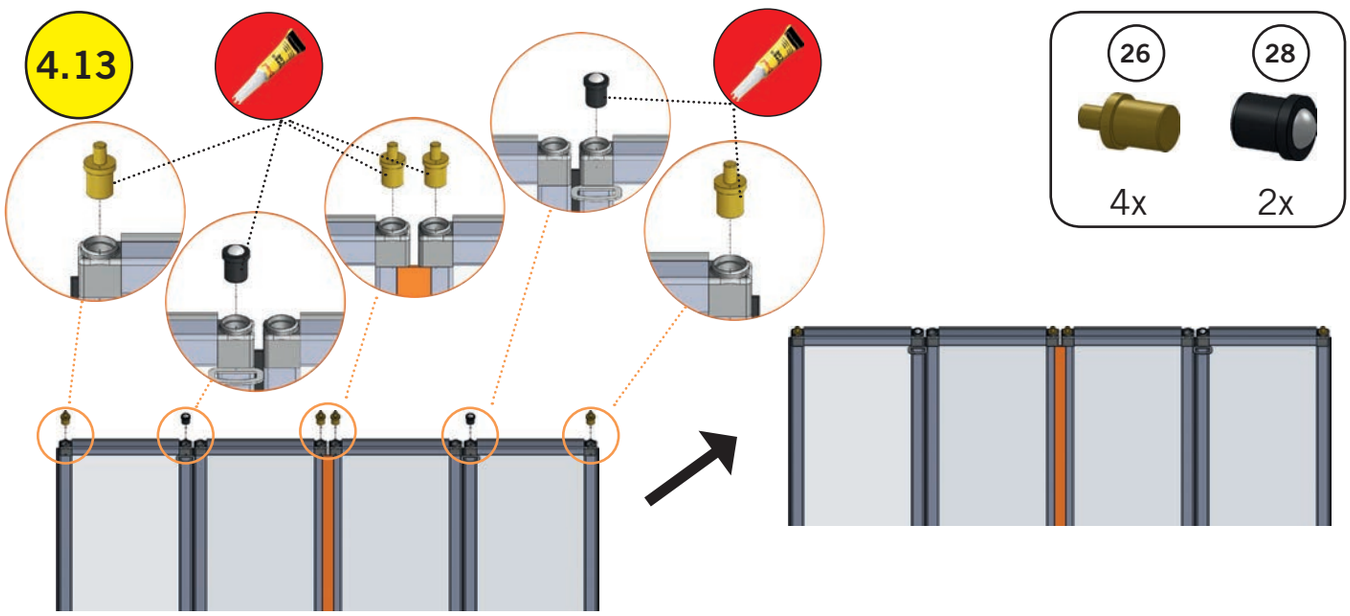
4.11



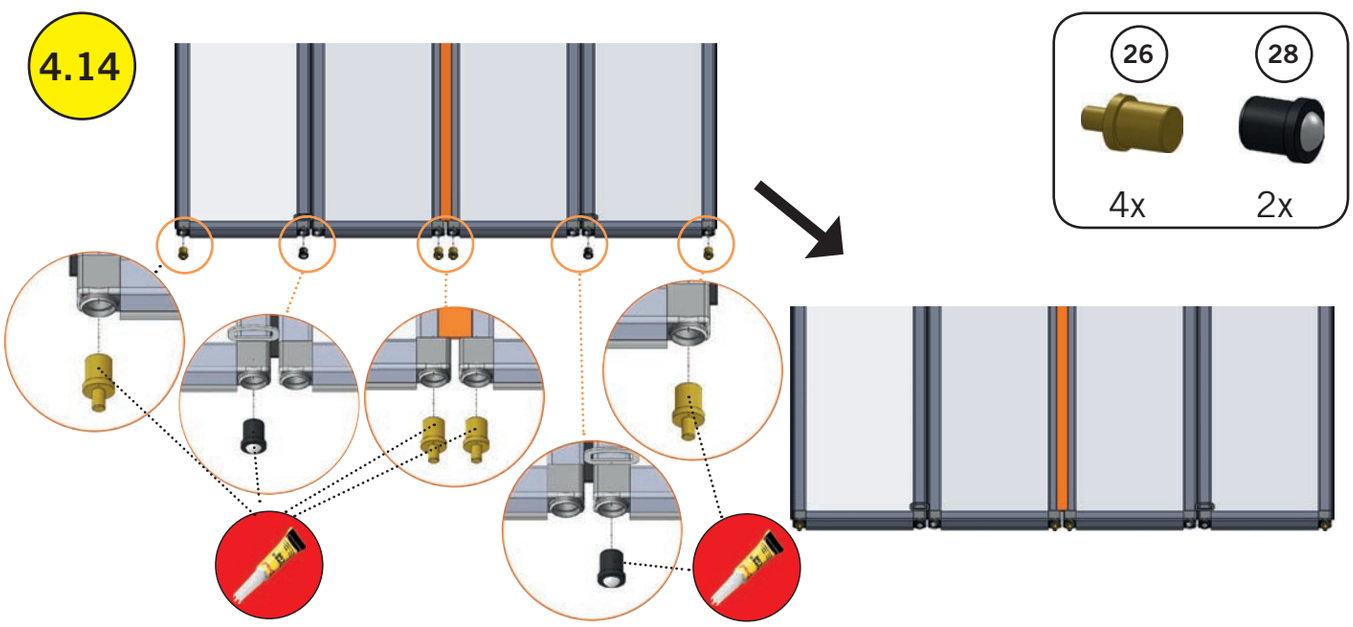
4.12



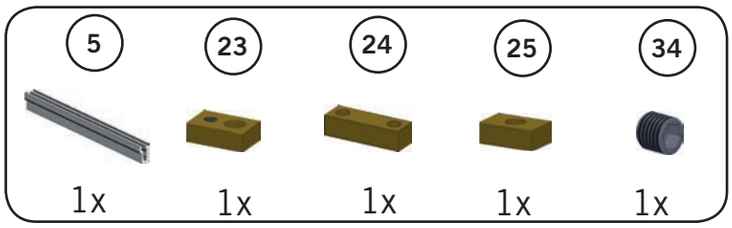
4.13

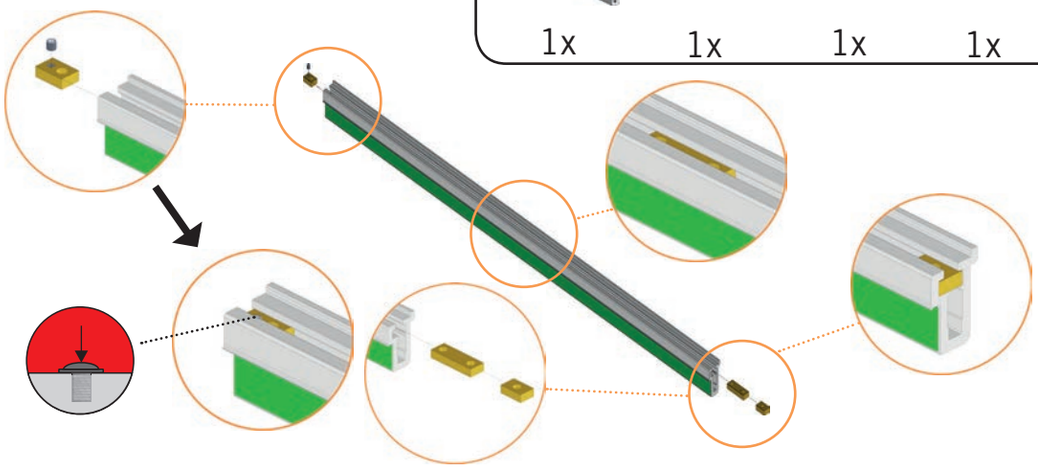


4.14



O





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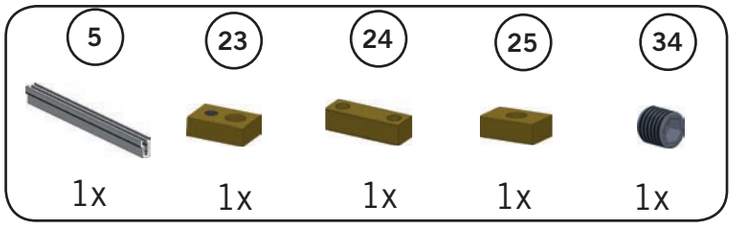
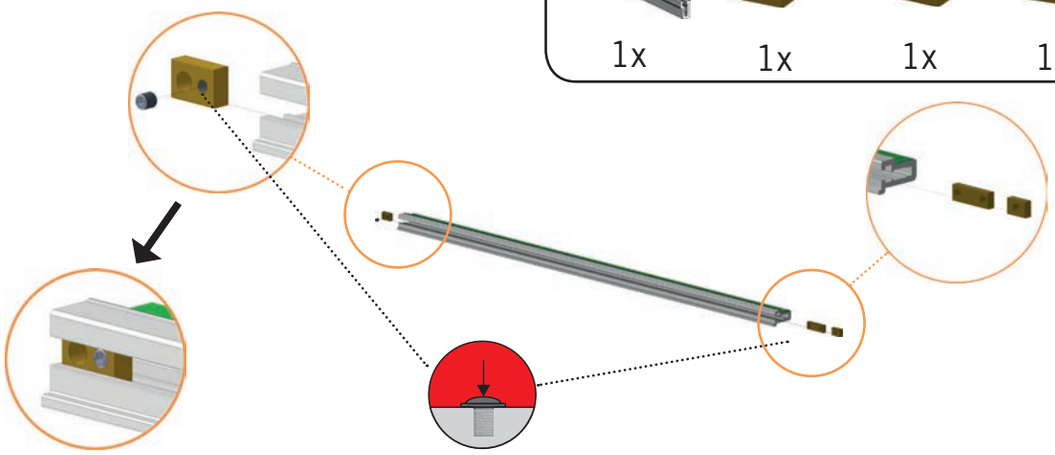
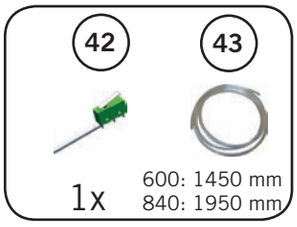
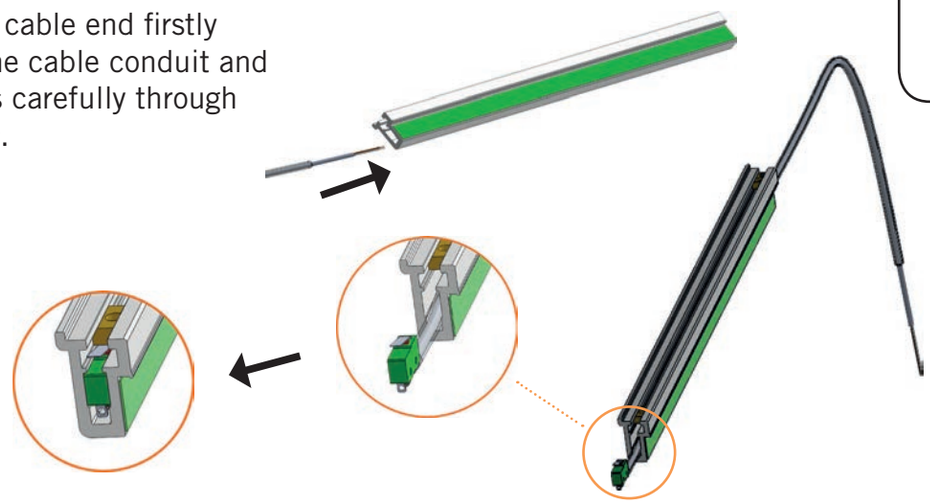




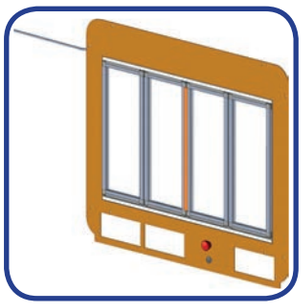
P1

Guide the cable end firstly through the cable conduit and afterwards carefully through the profile.



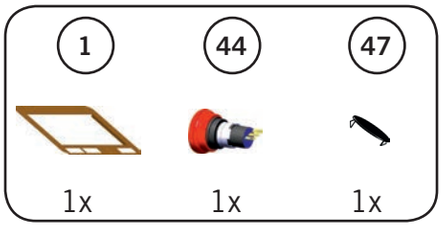


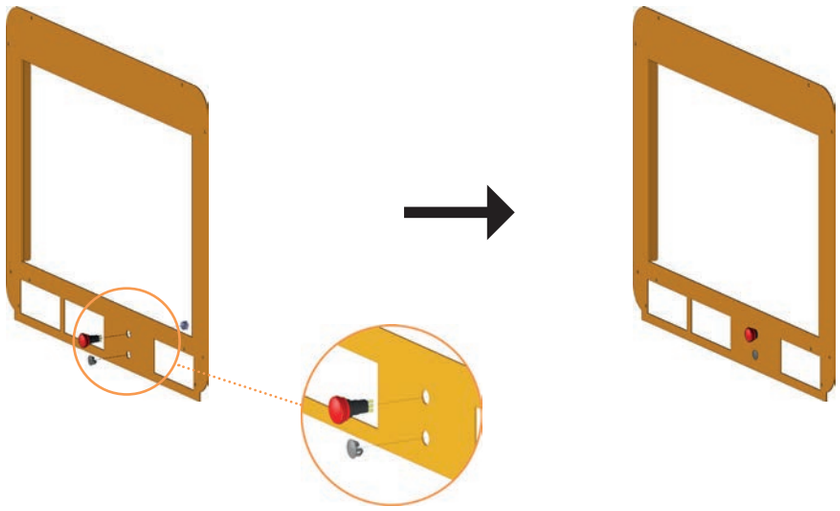
5



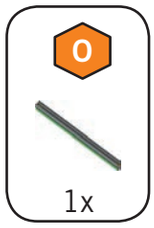
Enclosure front

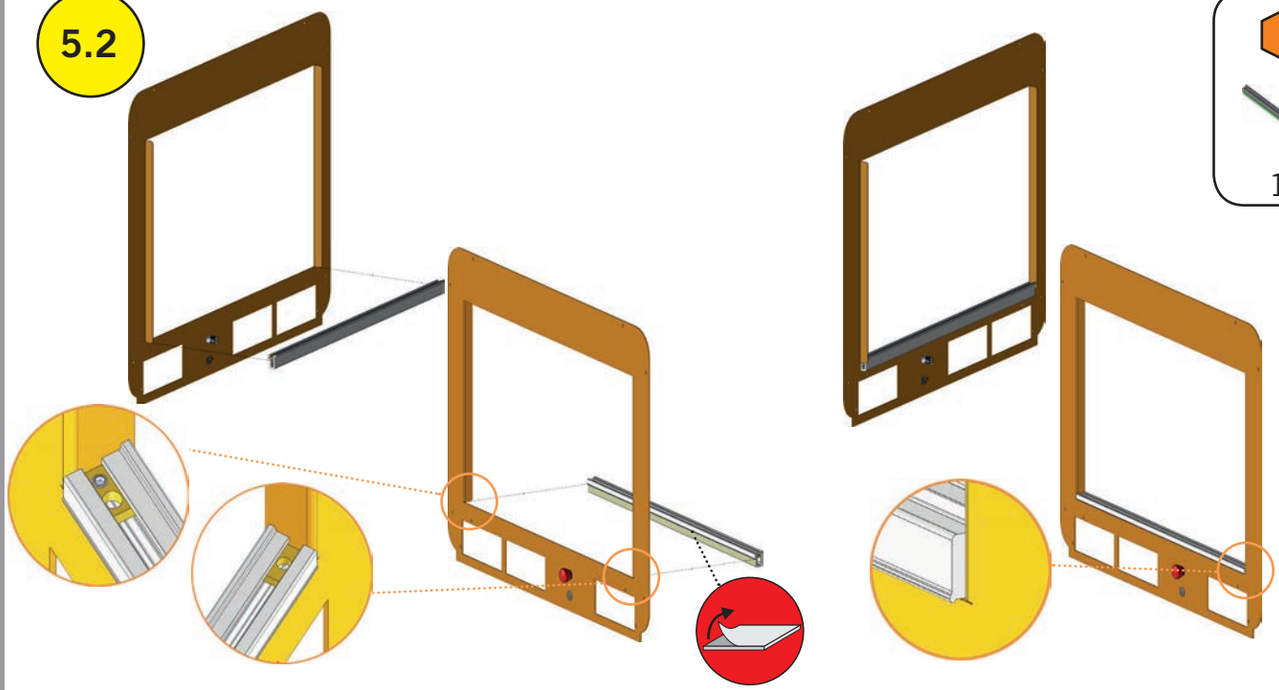
5.1





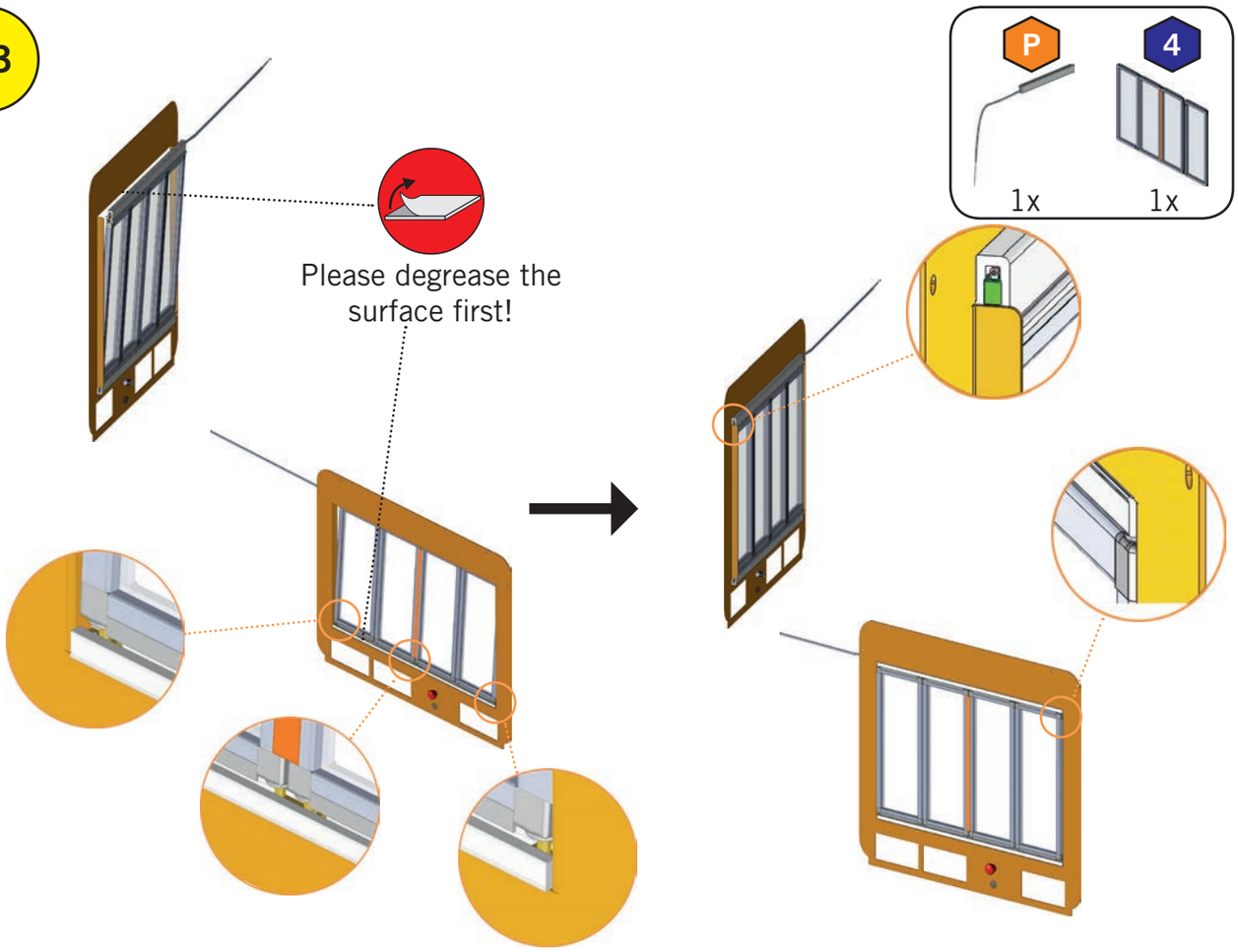
5.2



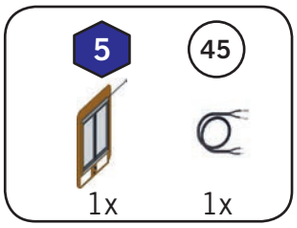


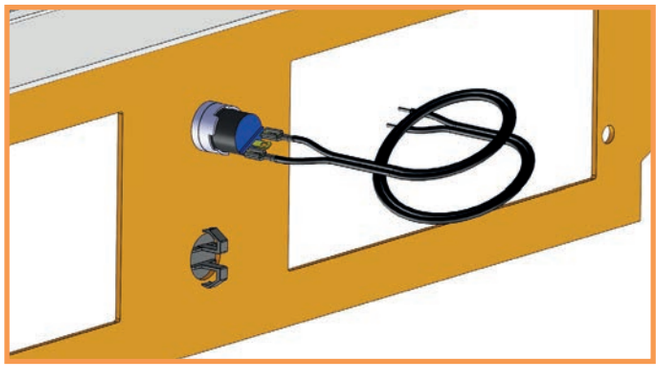
Please degrease the surface first!

5.3



5.4

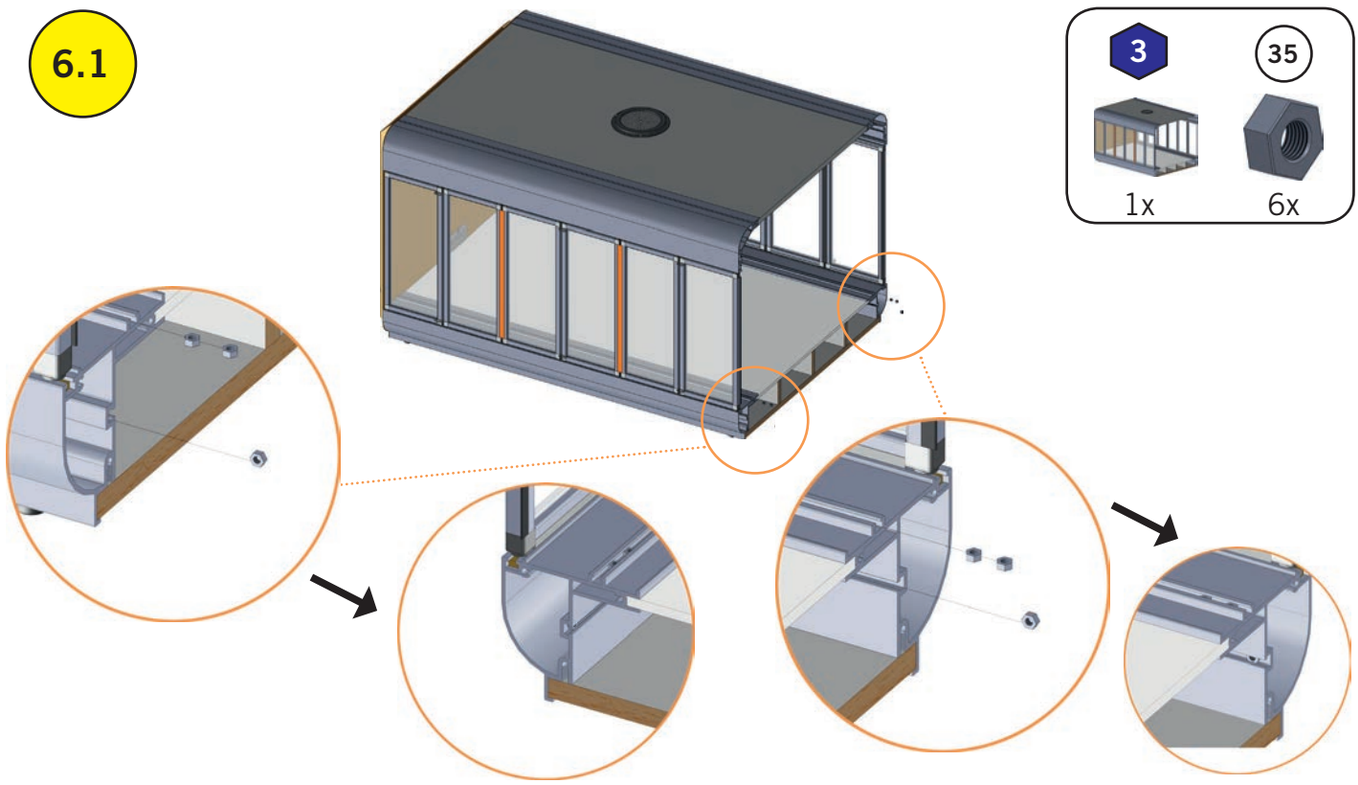




6

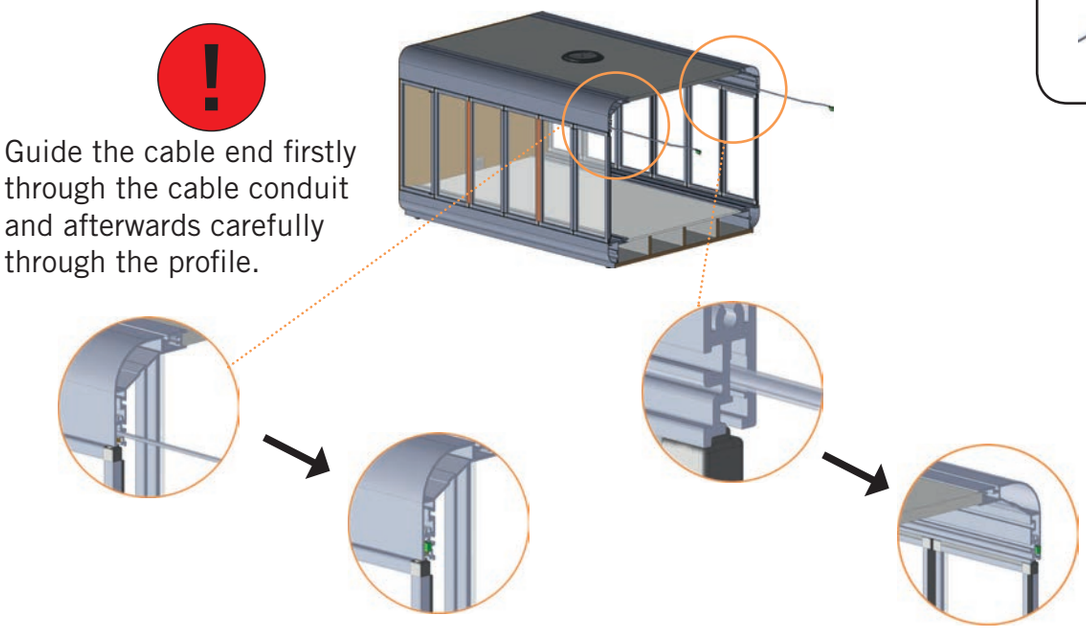
Final assembly

6.1



3	35
1x	6x

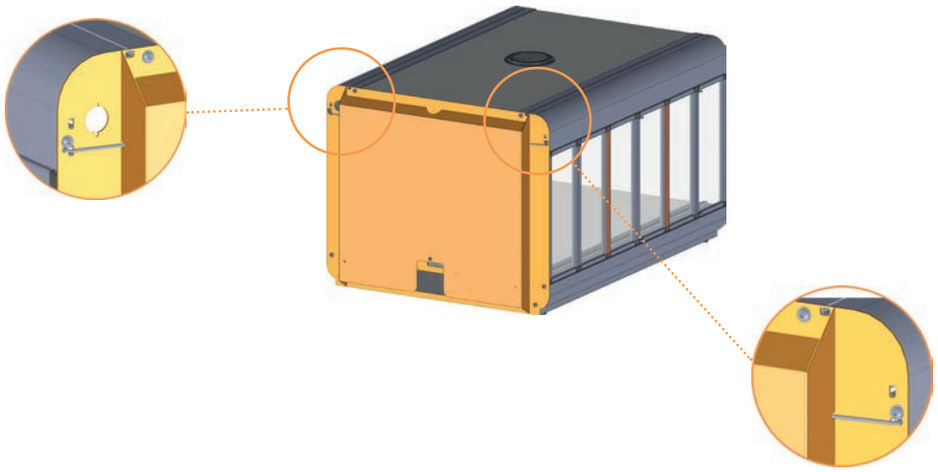
6.2



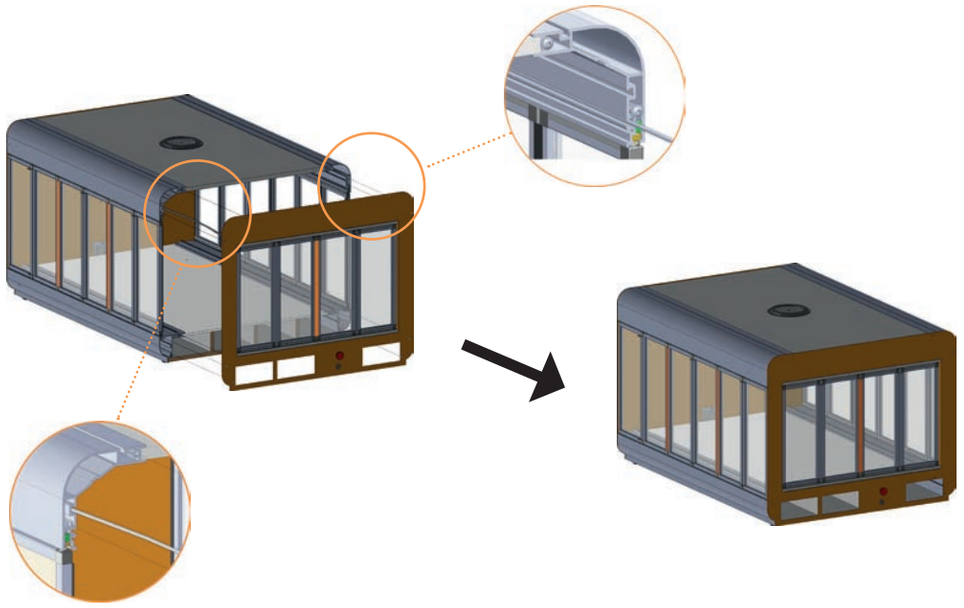
42	43
2x	600: 898 mm 840: 1156 mm

Guide the cable end firstly through the cable conduit and afterwards carefully through the profile.

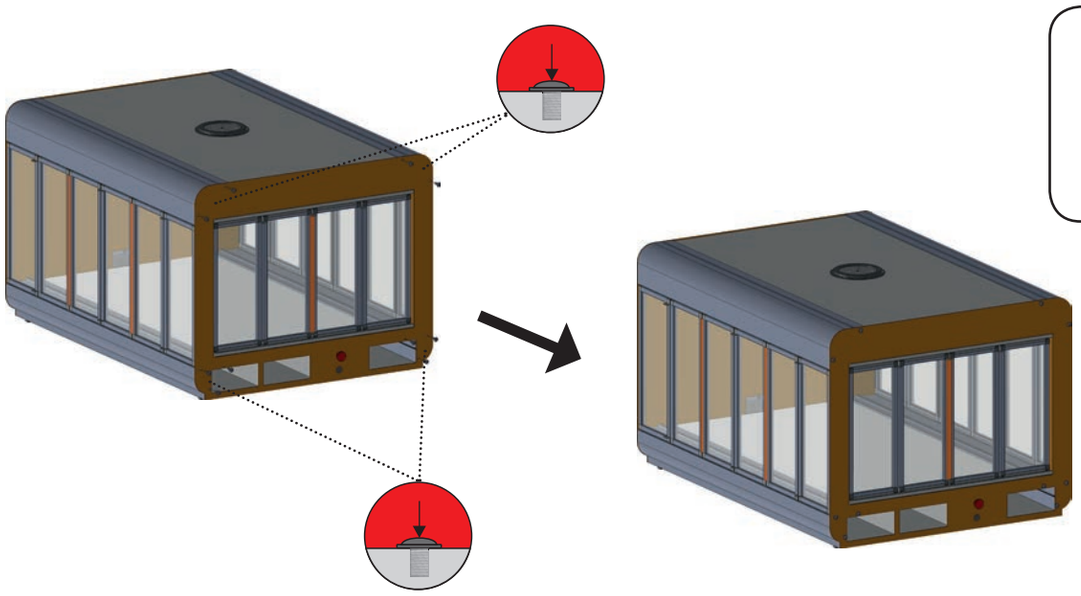
6.3

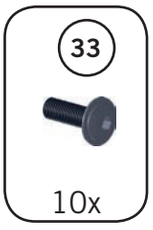


6.4

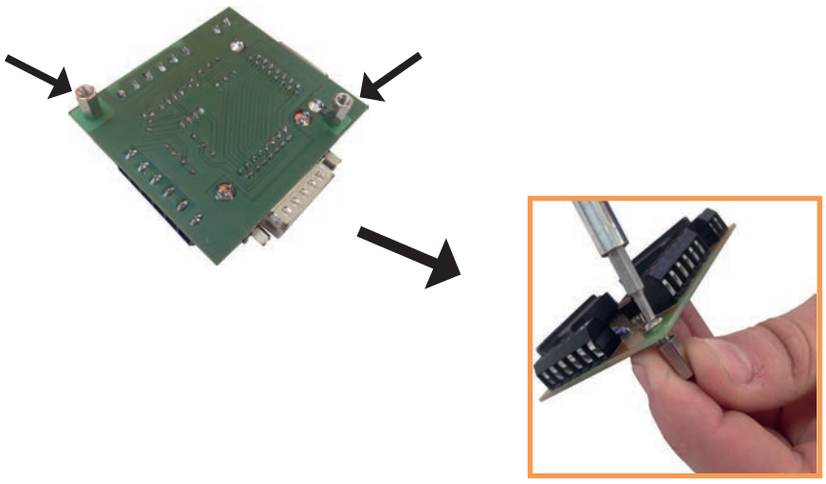


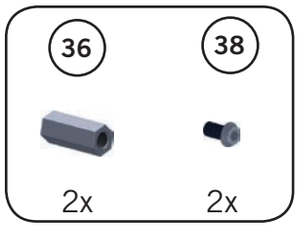
6.5



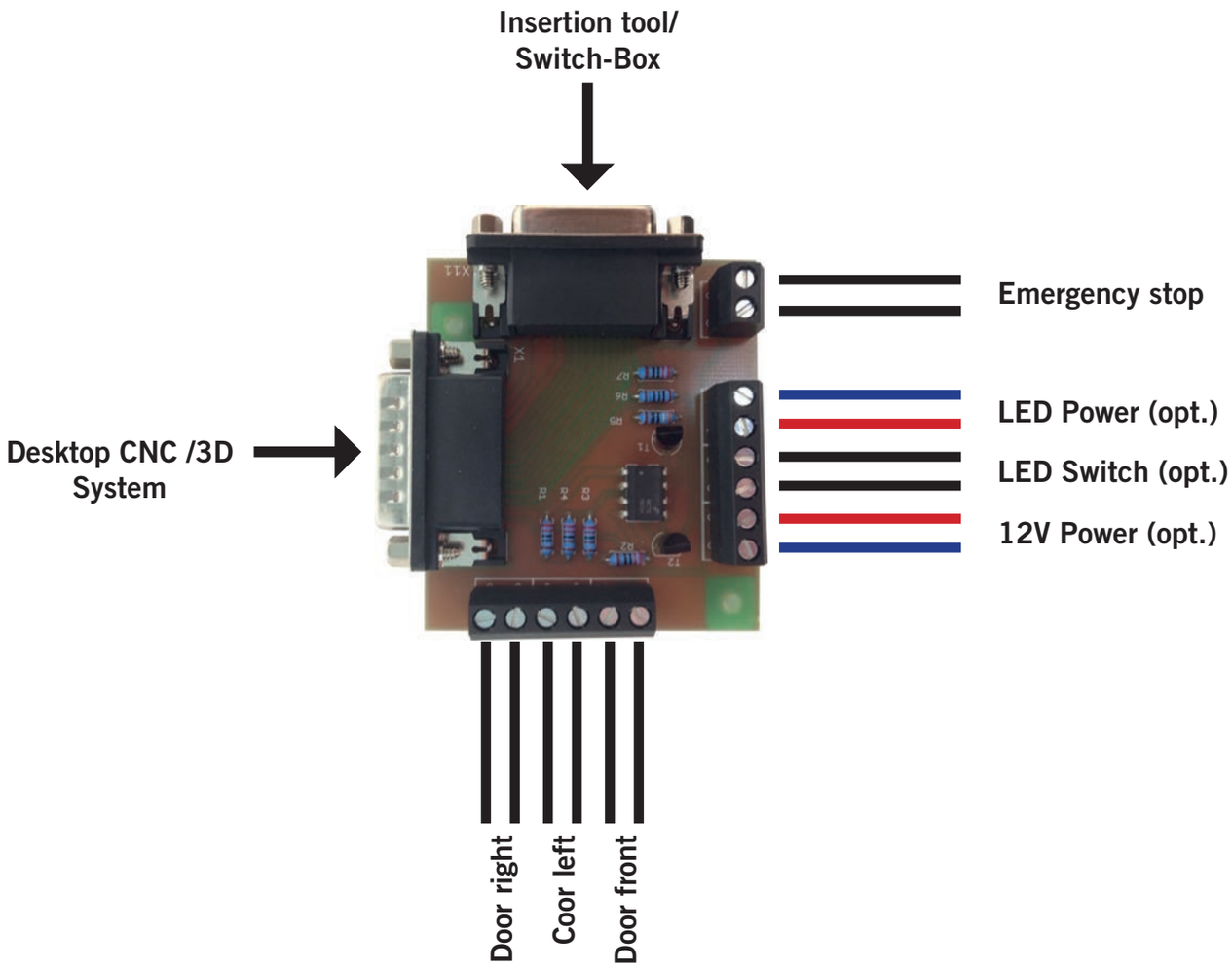


6.6

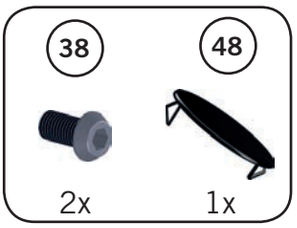


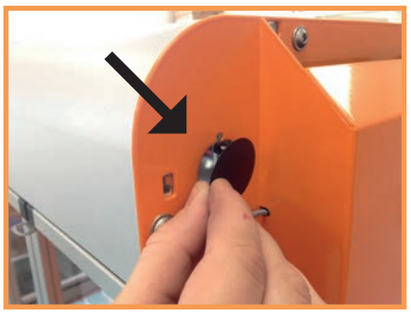

36
38
2x
2x

6.7

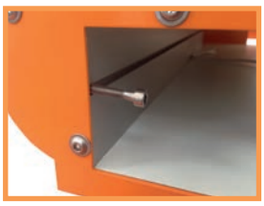

Insertion tool/
Switch-Box
Desktop CNC /3D
System
Emergency stop
LED Power (opt.)
LED Switch (opt.)
12V Power (opt.)
Door right
Coor left
Door front

6.8

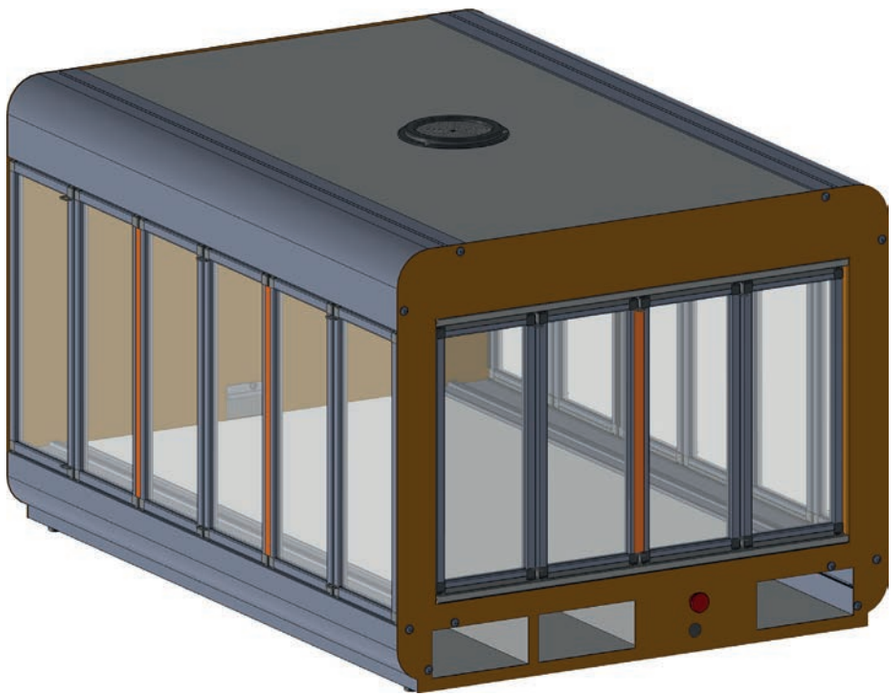




6.9



With the socket head screws M5 x 30 mm the **STEPCRAFT** Desktop CNC /3D System, control units or the Switch-Box and drawers can be fixed in their final position in the enclosure.



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info@stepcraft-systems.com