

PARASOL Zenith a

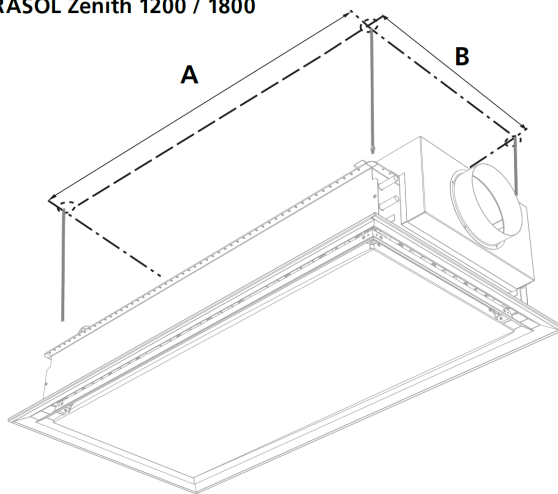
Installation – Commissioning – Maintenance

20170809

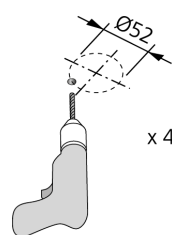
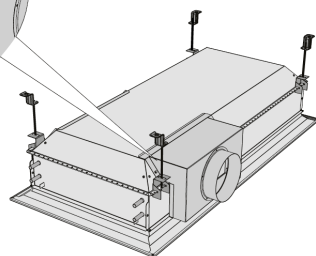
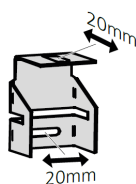
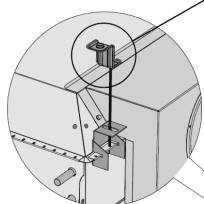
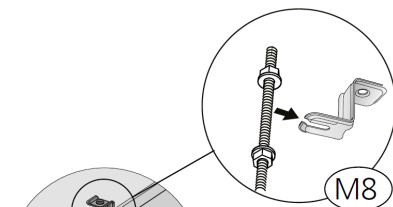
Installation / Montering

To mount the unit in the ceiling with standard mounting bracket/
Att montera produkten i taket med standard-upphängningsfäste

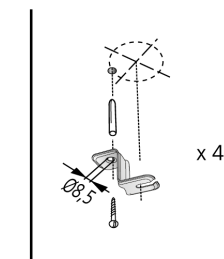
PARASOL Zenith 1200 / 1800



c - c dimensions / c - c mått		
Bracket placement at delivery/ Fästets placering vid leverans		
Enhetens längd/ Unit length	c - c (mm) A	c - c (mm) B
1200	900 ±20	508 ±20
1800	1528 ±20	508 ±20
Alternative placement of the mounting bracket Alternativ placering av upphängningsfästet		
Enhetens längd/ Unit length	Out towards the corner /Ut mot hörnet	Towards the center /In mot centrum
	c - c (mm) A1	c - c (mm) A2
1200	968 ±20	832 ±20
1800	1528 ±20	508 ±20



x 4

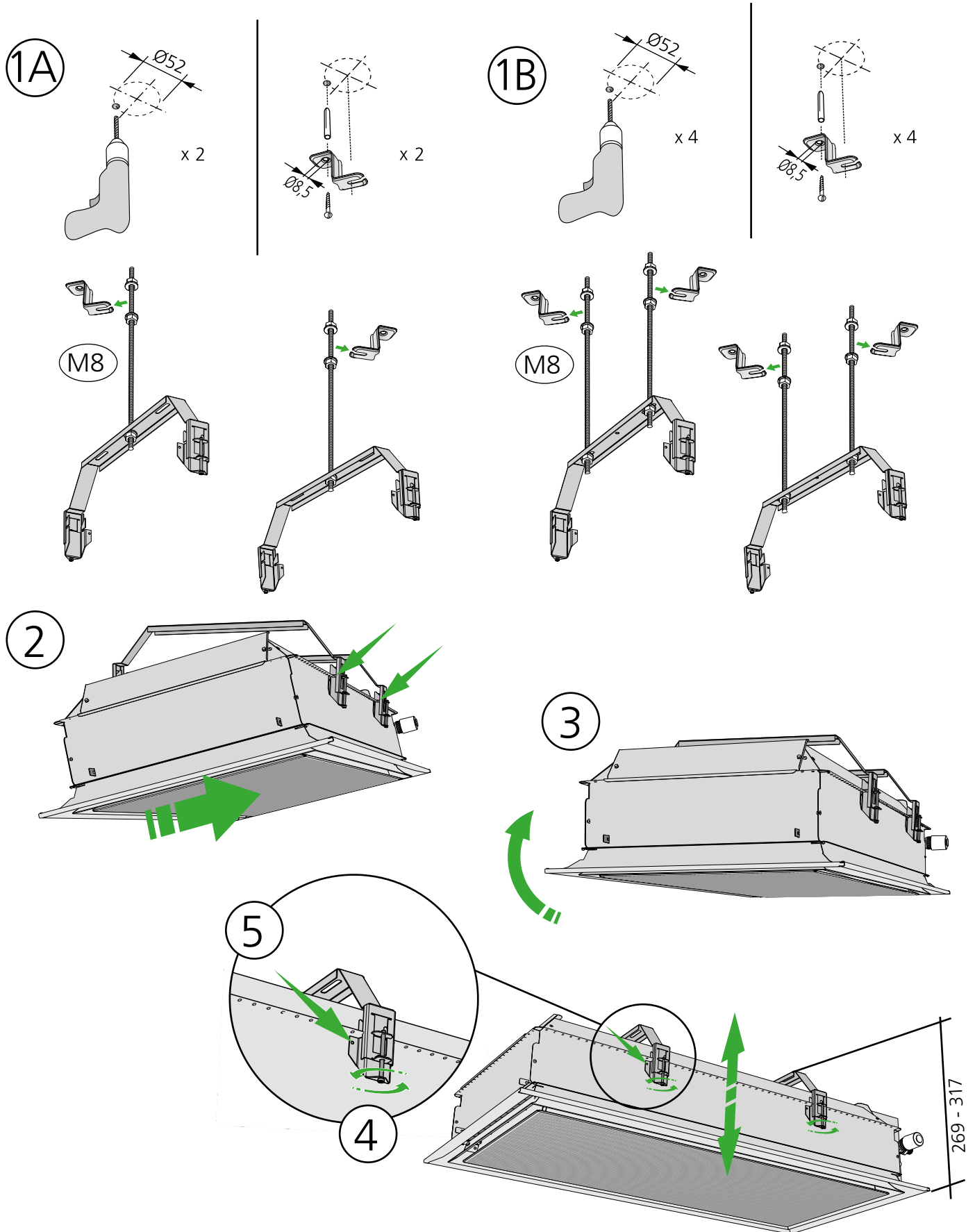


x 4

Swegon

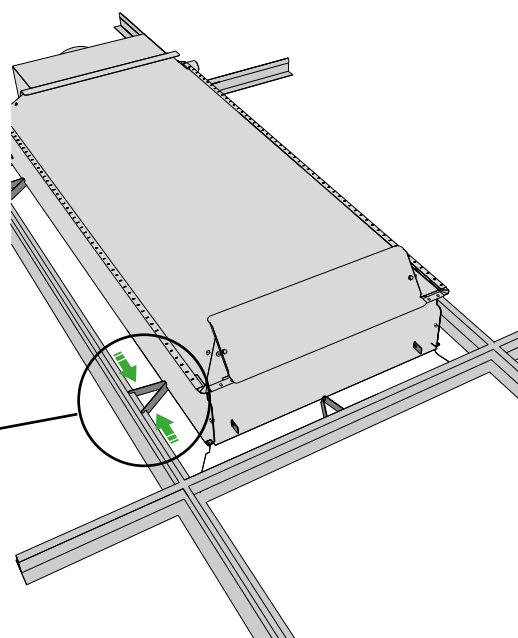
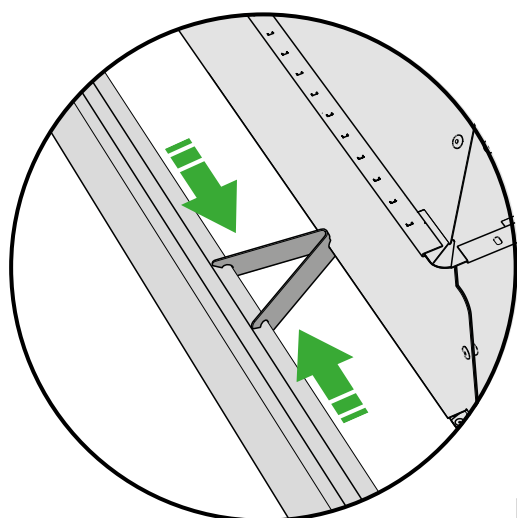
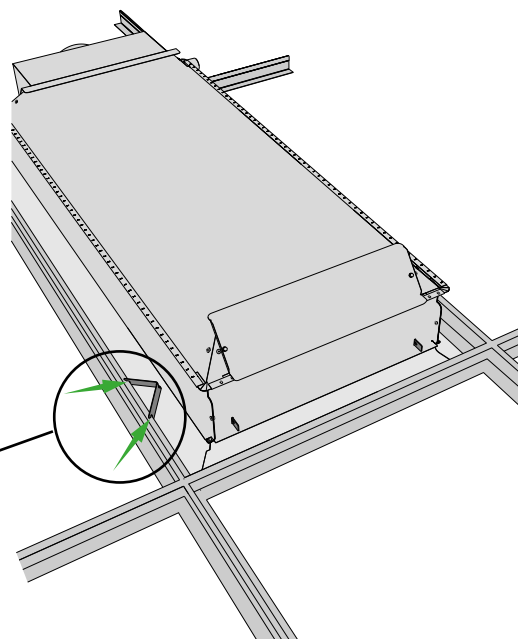
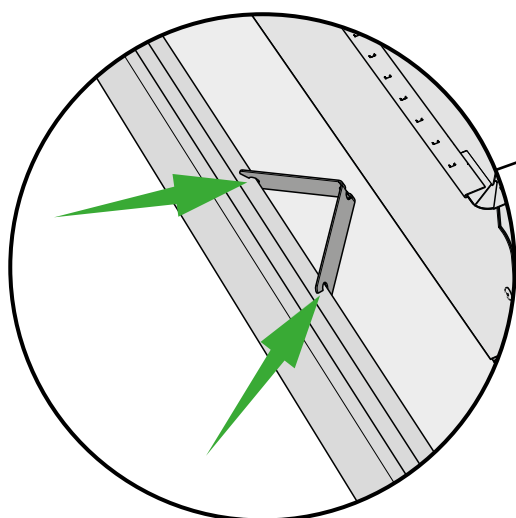
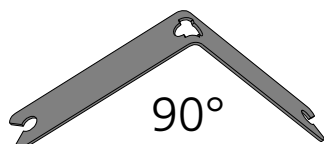
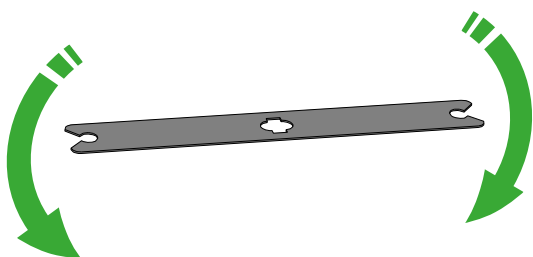
To mount the unit in the ceiling usig PARASOL Zenith accessory mounting bracket/
 Att montera produkten i taket med PARASOL Zeniths tillbehörs-upphängningsfäste


PARASOL Zenith 1200 / 1800



To center the product when mounting the product in hidden T-grid systems.

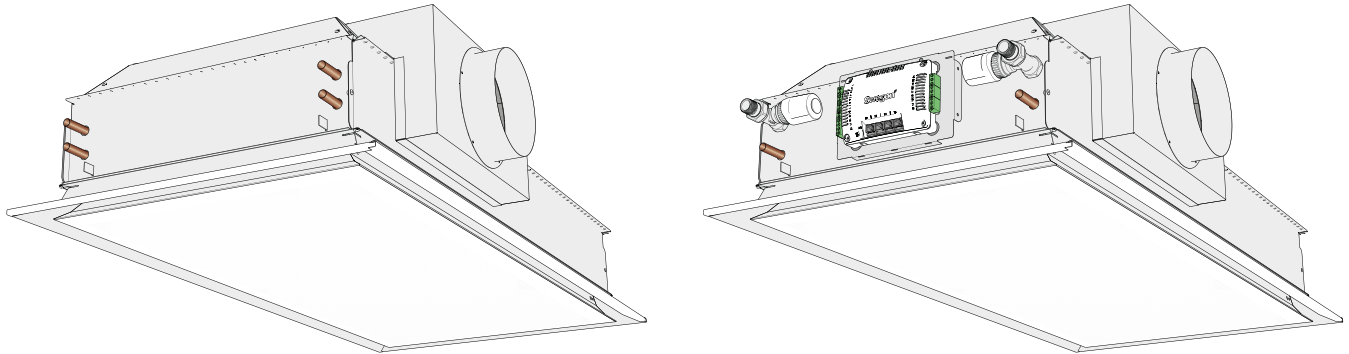
Att centrera produkten vid montering i dolt T-bärverk.



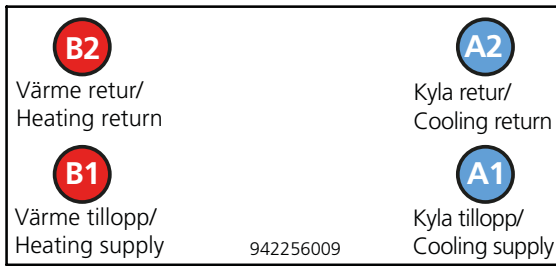
Recommended number of plates per product / Rekommenderat antal plåtar per produkt.	
Enhetens längd/ Unit length	
1200	6
1800	6-8

Water connections / Vattenanslutning

PARASOL Zenith 1200 / 1800



PARASOL Zenith 1200 / 1800



PARASOL Zenith 1200 / 1800



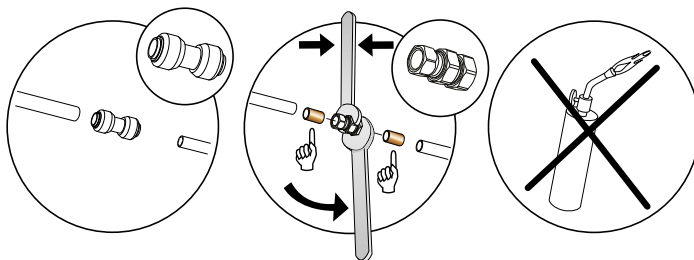
Connection dimensions / Anslutningsdimensioner:

Water connections without valves Vattenanslutning utan ventiler

A1	Inlet, chilled water/ Tillopp kylvatten	ø 12 × 1.0 mm (Cu)
A2	Return, chilled water/ Retur kylvatten	ø 12 × 1.0 mm (Cu)
B1	Inlet, heated water/ Tillopp värmevatten	ø 12 × 1.0 mm (Cu)
B2	Return, heated water/ Retur värmevatten	ø 12 × 1.0 mm (Cu)

Water connections with factory fitted valves Vattenanslutning med fabriksmonterade ventiler

A1	Inlet, chilled water/ Tillopp kylvatten	ø 12 × 1.0 mm (Cu)
A2	Return, chilled water/ Retur kylvatten	male threads, DN (1/2") / utvändig gänga, DN (1/2")
B1	Inlet, heated water/ Tillopp värmevatten	ø 12 × 1.0 mm (Cu)
B2	Return, heated water/ Retur värmevatten	male threads, DN (1/2") / utvändig gänga, DN (1/2")



N.B!

Use support sleeves inside the pipes together with compression ring couplings.

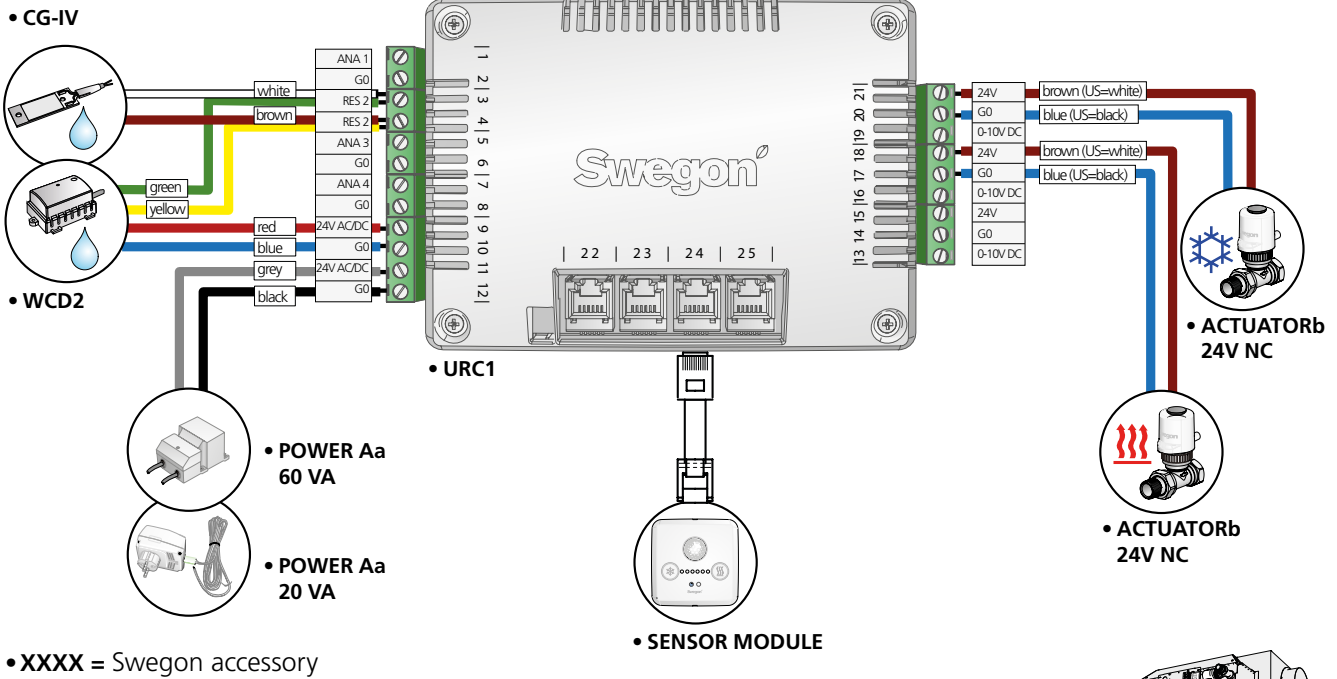
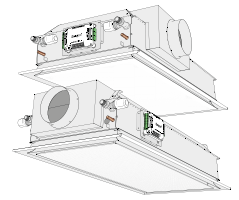
OBS!

Använd stödhylsor i rören tillsammans med klämringsskopplingar.

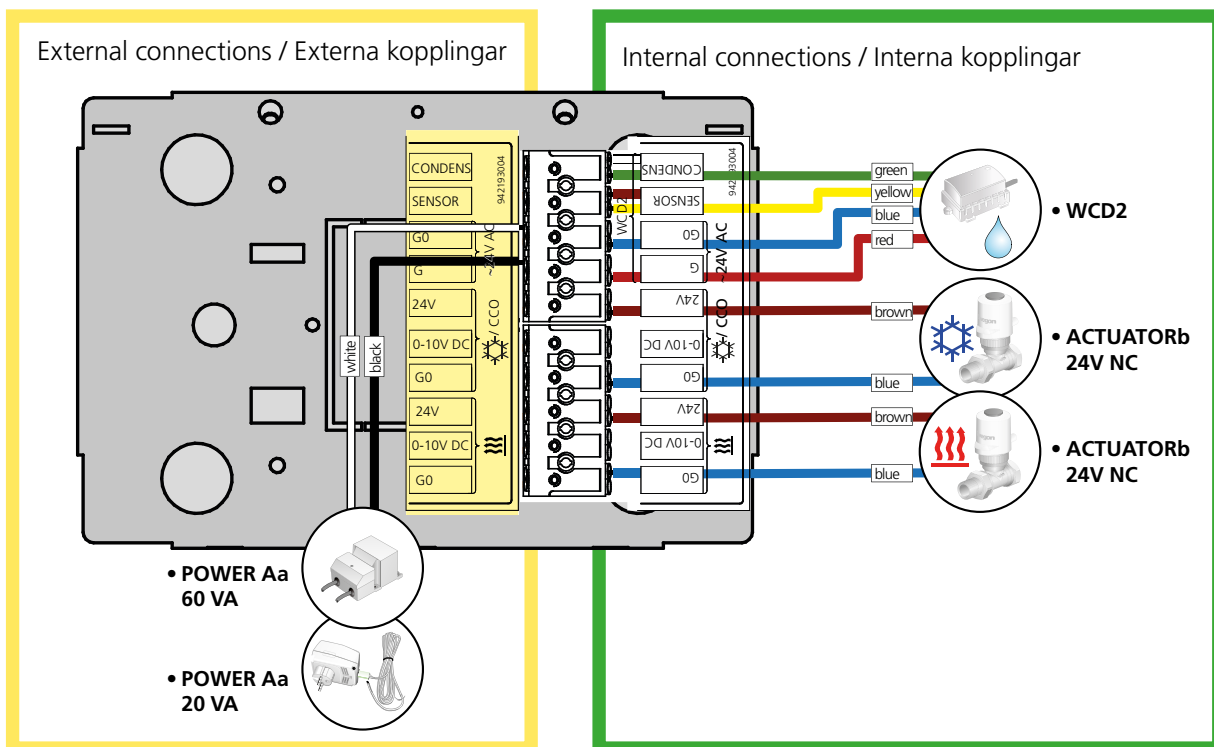
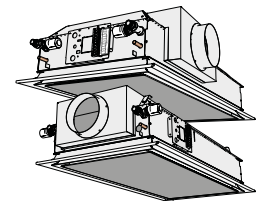
Wiring diagram with factory mounted accessory URC1 Controller/ Inkopplingschema för fabriksmonterat tillbehör URC1 Rumsregulator

For factory mounted accessory WISE IORE, see information for WISE, available for download from ww.swegon.com: WISE IORE Instructions for Use, WISE System Guide, WISE Function Guide, WISE Project Planning Guide - VS & Cooling, Electric & Control and Ventilation. /

För fabriksmonterat tillbehör WISE IORE, se information för WISE, som finns för nedladdning från ww.swegon.se: WISE IORE Bruksanvisning, WISE Systemguide, WISE Funktionsguide, WISE Projekteringsguide: - VS & Kyla, El & styr samt Ventilation.



Wiring diagram for accessories (without URC1 Controller)/ Inkopplingschema för tillbehör (utan URC1 Rumsregulator)





Menu:

To reach the menu, hold the left-hand and right-hand buttons down for five seconds.

With the left-hand button (*) you advance through the menus. With the right-hand button (≡) you confirm your selection.

Press the left-hand button and select:

1. Alarm list
2. Commissioning air
3. Commissioning water
6. Return to menu



Press the right-hand button to confirm your selection

1. Alarm list: See the complete alarm list to the right. In the commissioning menus:

- Navigate between the menus by pressing the left-hand button
- Confirm selections by pressing the right-hand button
- When a selection has been confirmed, the blue LED will flash for about 60 seconds.
- In order to return to normal operation, select "no adjustment"

3. Commissioning, Water:

- | | |
|-----------------------------------|-------------|
| 3.1. Open the chilled water valve | ● ● ● ● ● ● |
| 3.2. Open heated water valve | ○ ○ ○ ● ● ● |
| 3.3. No adjustment | ○ ○ ○ ○ ○ ○ |

6. Return to menu

2, 4 and 5 are not used



Meny sensormodul:

Genom att hålla ned vänstra och högra knappen i fem sekunder når man menyn.

Med vänster knapp (*) stegar man sig igenom menyerna. Med höger knapp (≡) bekräftar man sitt val.

Tryck vänster knapp och välj:

1. Alarmlista
2. Injustering luft
3. Injustering vatten
6. Återgå till meny



Bekräfta val med högerknappen

1. Alarmlista:

Se komplett alarmlista till höger. I injusteringsmenyerna:

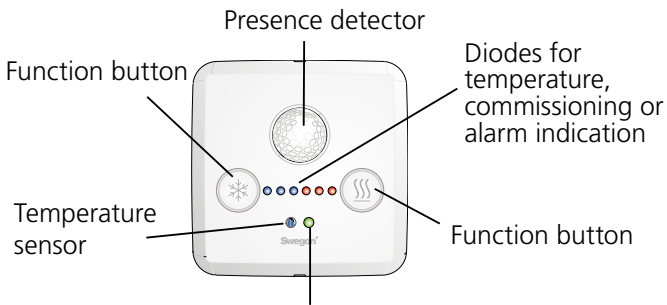
- Stega mellan menyer med vänster knapp
- Bekräfta val med höger knapp
- När ett val bekräftats blinkar blå diod i ca 60 s.
- För att återgå till normaldrift, välj "ingen injustering"

3. Injustering vatten:

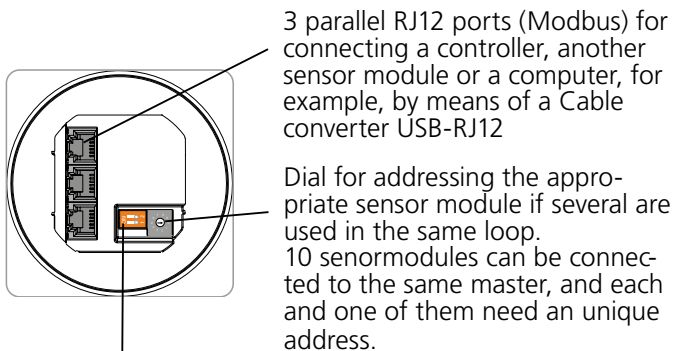
- | | |
|------------------------|-------------|
| 3.1. Öppna kylventil | ● ● ● ● ● ● |
| 3.2. Öppna värmeventil | ○ ○ ○ ● ● ● |
| 3.3. Ingen injustering | ○ ○ ○ ○ ○ ○ |

6. Återgå till meny

2, 4 och 5 används ej



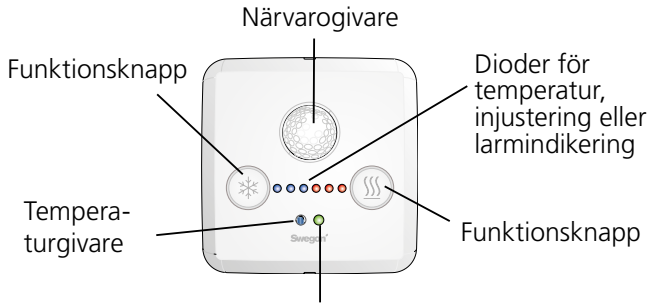
Diode-indicating function
 - Green = Ok
 - Flashing Green = Condensation alarm
 - Yellow = Alarm
 - Green/Yellow = Comfort alarm, (not acute)



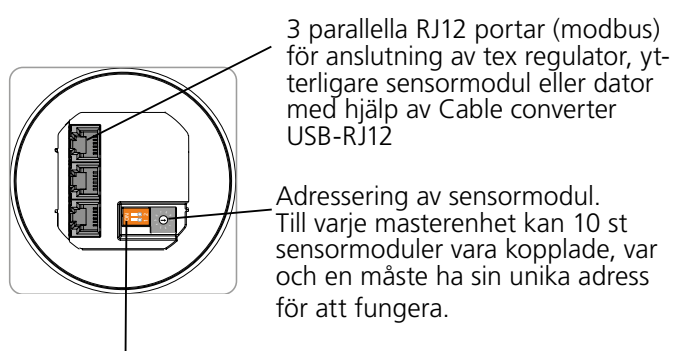
3 parallel RJ12 ports (Modbus) for connecting a controller, another sensor module or a computer, for example, by means of a Cable converter USB-RJ12

Dial for addressing the appropriate sensor module if several are used in the same loop. 10 sensor modules can be connected to the same master, and each and one of them need a unique address.

Switch/Termination resistance. Switch 1 should be "on" for the last sensor module in the loop.



Diod indikerande funktion
 - Grön = Ok
 - Blinkande Grön = kondenslarm
 - Gul = Larm
 - Grön/Gul = Komfortlarm (ej akut)



3 parallella RJ12 portar (modbus) för anslutning av tex regulator, ytterligare sensormodul eller dator med hjälp av Cable converter USB-RJ12

Adressering av sensormodul. Till varje masterenhet kan 10 st sensormoduler vara kopplade, var och en måste ha sin unika adress för att fungera.

Switch för termineringsmotstånd. Switch 1 sätts till on på sista sensormodulen i slingan.

Alarm list for the sensor module

Alarmlista för sensormodulen

Alarm no.	Type of alarm	32	16	8	4	2	1
Alarm nr.	Typ av alarm	32	16	8	4	2	1
Alarm 1	Supply voltage low						●
Alarm 2	Supply voltage critically low					●	
Alarm 3	Ext temp missing					●	●
Alarm 4	Ext temp error				●		
Alarm 5	Condensation sensor error				●		●
Alarm 6	SM temp sensor error				●	●	
Alarm 7	SM button error				●	●	●
Alarm 8	CO ₂ sensor missing			●			
Alarm 9	VOC Error			●			●
Alarm 10	Low pressure			●		●	
Alarm 17	SM comm error		●				●
Alarm 18	Slave comm error		●			●	
Alarm 19	Pressure sensor comm error		●			●	●
Alarm 20	VOC sensor comm error		●		●		
Alarm 21	No master request (slave)		●		●		●
Alarm 22	Slave incompatible version		●		●	●	
Alarm 25	Heating comfort alarm		●	●			●
Alarm 26	Cooling comfort alarm		●	●		●	
Alarm 27	Temp. Set point overlap alarm		●	●		●	●
Alarm 28	Air quality comfort alarm		●	●	●		
Alarm 29	Condensation		●	●	●		●
Alarm 33	24 V Out 1 overload error	●					●
Alarm 34	24 V Out 2 overload error	●					●
Alarm 35	24 V Out 3 overload error	●				●	●
Alarm 41	Slave input common alarm	●		●			●
Alarm 42	Slave output common alarm	●		●		●	



The alarm is displayed by a number of diodes when you have selected Alarm list (1) in the menu.

Each diode represents a number as shown in the table above and the numbers should be added up to form an alarm number.

Ex. The centremost blue and the two last red diodes are lit (xoxoo)

The centremost blue one corresponds to 16, the penultimate red one to 2 and the last red one to 1. The sum of these is 19, which is the alarm number.

Return to normal operation by pressing the right-hand button.



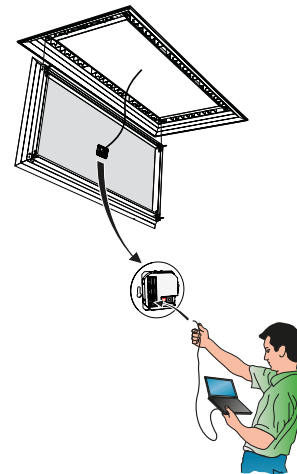
Larmet visas med ett antal dioder när man valt Alarmlista (1) i menyn.

Varje diod representerar ett tal enligt tabell ovan och talen summeras till ett larmnummer.

Ex. Mittersta blå och de två sista röda lyser (xoxoo)

Mittersta blå motsvarar 16, näst sista röda 2 och sista röda 1. Summan blir 19 vilket är larmets nummer.

Återgå till normaldrift genom att trycka höger knapp.



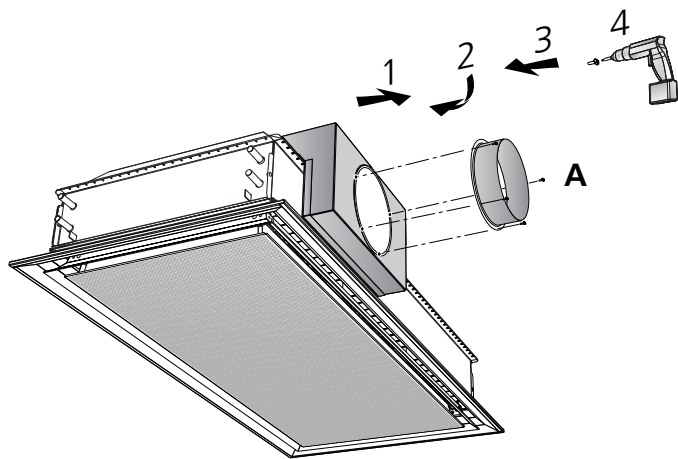
You can easily update the software by connecting a computer either to a socket on the rear of the Sensor module as illustrated, or directly to the controller.

How this is done is described in the SWICCT user's manual.

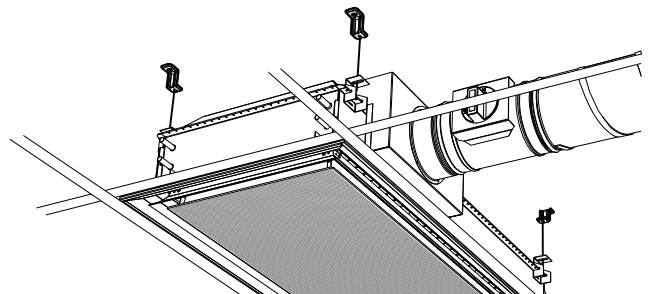
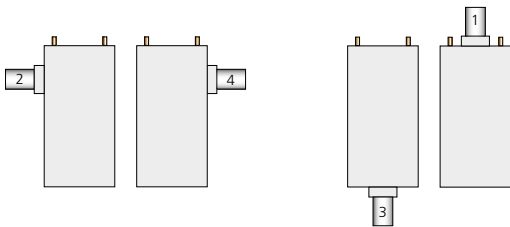
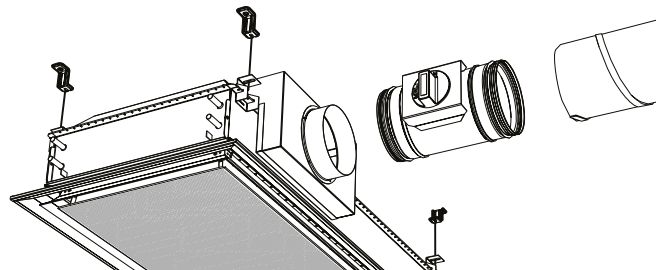
För att uppdatera mjukvaran kan man enkelt ansluta en dator, antingen mot baksidan av Sensormodulen, alternativt direkt mot regulatorn.

Hur detta görs beskrivs i manualen för SWICCT.

Air connection / Luftanslutning

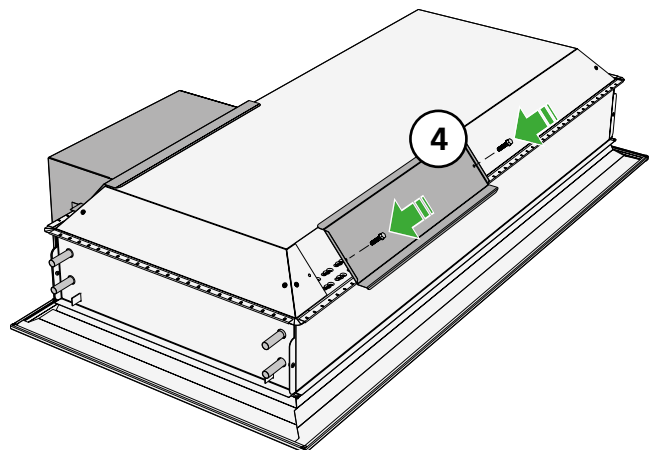
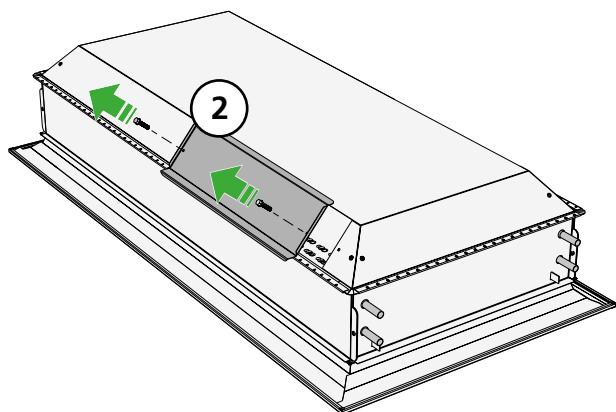
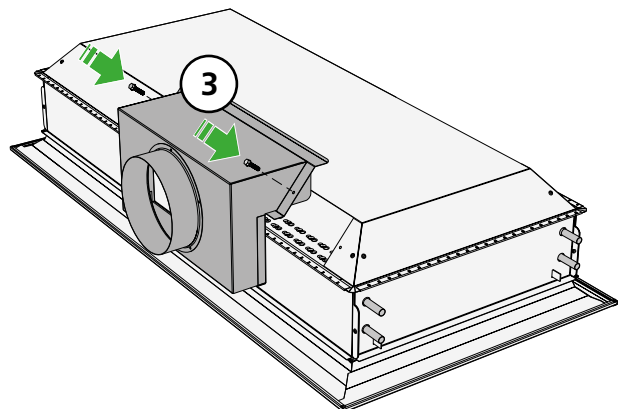
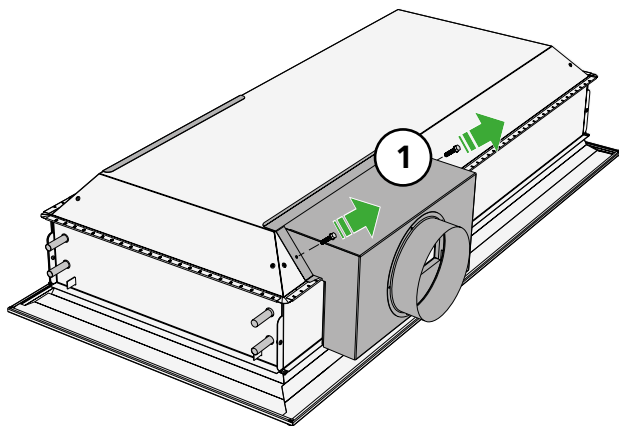


Enhet / Unit	A =	🔩
PARASOL Zenith 1200	Ø 125	4
PARASOL Zenith 1200	Ø 160	5
PARASOL Zenith 1800	Ø 160	5



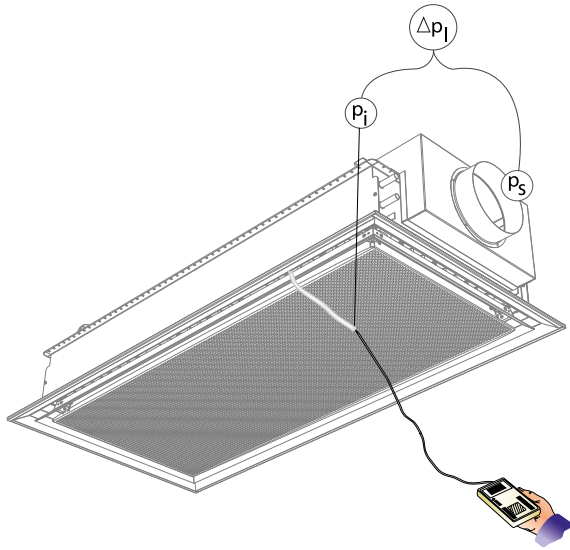
Change air connection side / Ändra luftanslutningssida

Change between side 2 and 4, or 1 and 3 / Ändra mellan sida 2 och 4, eller 1 och 3.



Commissioning / Injustering

Measurement of airflows / Mätning av luftflöden

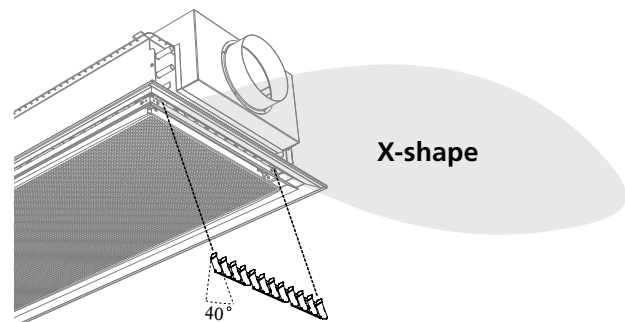
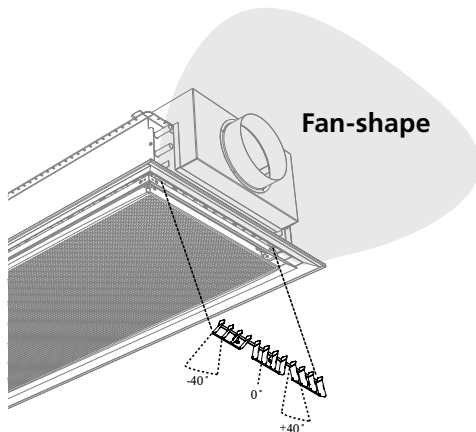
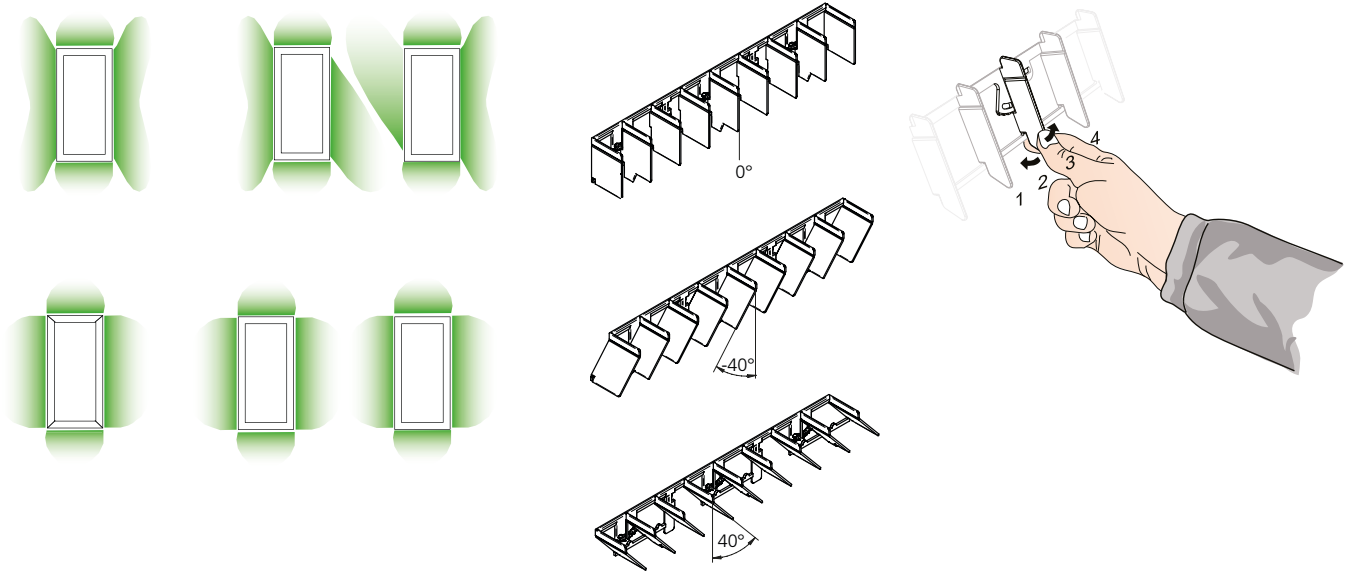


$$p_i = \left(\frac{q}{k}\right)^2 \text{ [Pa]}$$

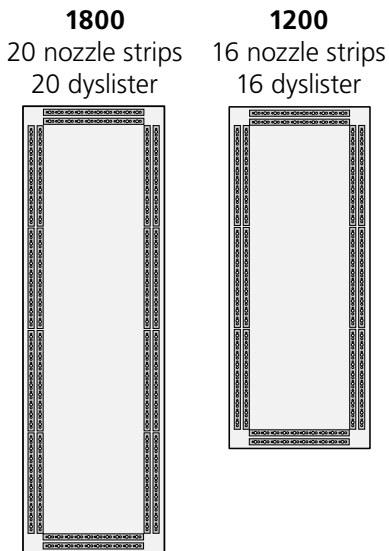
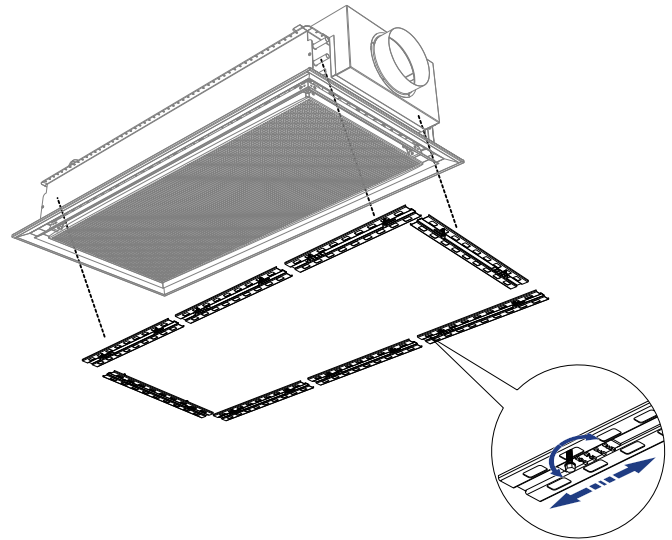
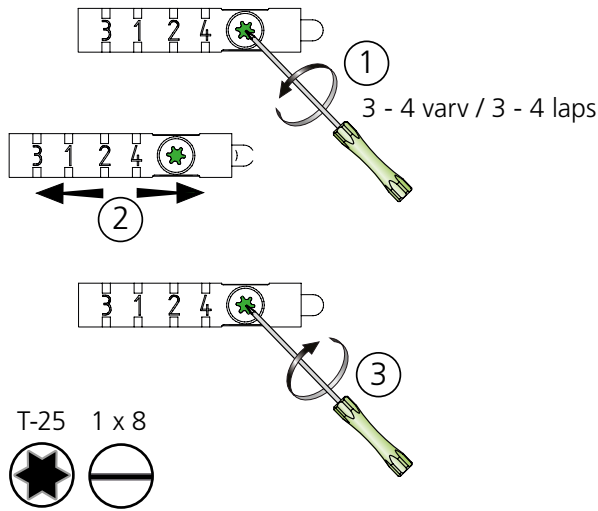
$$q = k \cdot \sqrt{p_i} \text{ [l/s]}$$

[p_i Pa]
q [l/s]
k = k-factor/-factor

ADC

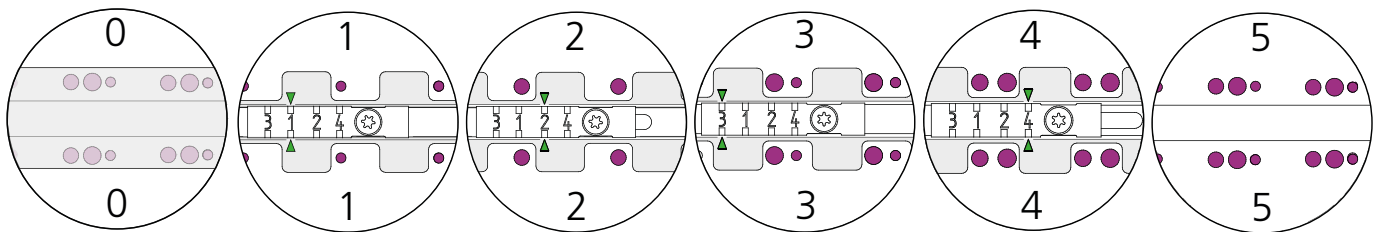


Nozzle configuration / Dysinställning

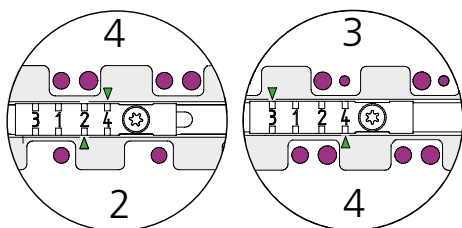


0	
1	
2	
3	
4	
5	

Examples of the six different nozzle settings. / Exempel på de sex olika dysinställningarna.



Examples if you chose to have different nozzle setting on the nozzle strip/
Exempel där man väljer att ha olika dysinställning på dyslisten



k-factor / k-faktor

Nozzle setting / Dysinställning	Nozzle strip / Dyslist	k-factor / k-faktor	PARASOL Zenith	
		per nozzle strip / per dyslist	Length/Längd: 1200 (16 strips/lister)	Length/Längd: 1800 (20 strips/lister)
0		0	0	0
1		0,118	0,118x16=1,89	0,118x20=2,36
2		0,284	0,284x16=4,54	0,284x20=5,68
3		0,450	0,450x16=7,20	0,450x20=9,00
4		0,616	0,616x16=9,86	0,616x20=12,32
5		0,730	0,730x16=11,68	0,730x20=14,60

$$p_i = \left(\frac{q}{k}\right)^2 [Pa]$$

$$q = k \cdot \sqrt{p_i} [l/s]$$

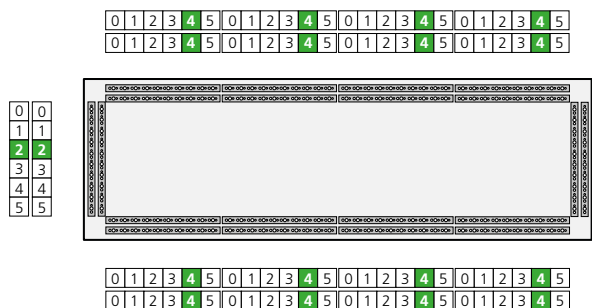
[p_i Pa]
q [l/s]
k = k-faktor/-factor

Examples at different nozzle settings / Exempel vid olika dysinställningar.

Example/Exempel: PARASOL Zenith 1800.

Different settings of the twenty nozzle stripes. The long sides have setting No. 4 on all 16 nozzle stripes and short sides have setting No. 2 on all four nozzle stripes.

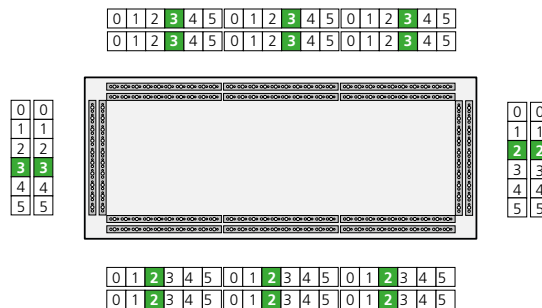
Olika inställning på de tjugo dyslisterna. Långsidorna har inställning 4 på samtliga sexton dyslister och kortsidorna ha inställning 2 på samtliga fyra dyslister



Exempel: PARASOL Zenith 1200.

Different settings of the sixteen nozzle stripes. One long side and one short side have setting No. 3 and one long side and one short side have setting No. 2.

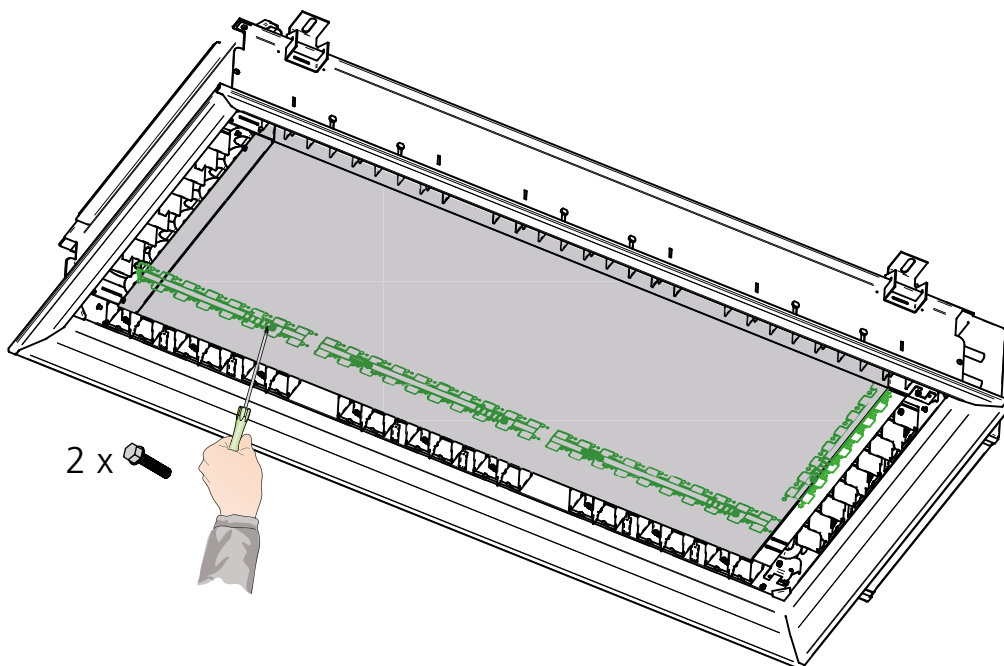
Olika inställning på de sexton dyslisterna. En långsida och en kortsida har inställning 3 och en långsida och en kortsida har inställning 2.



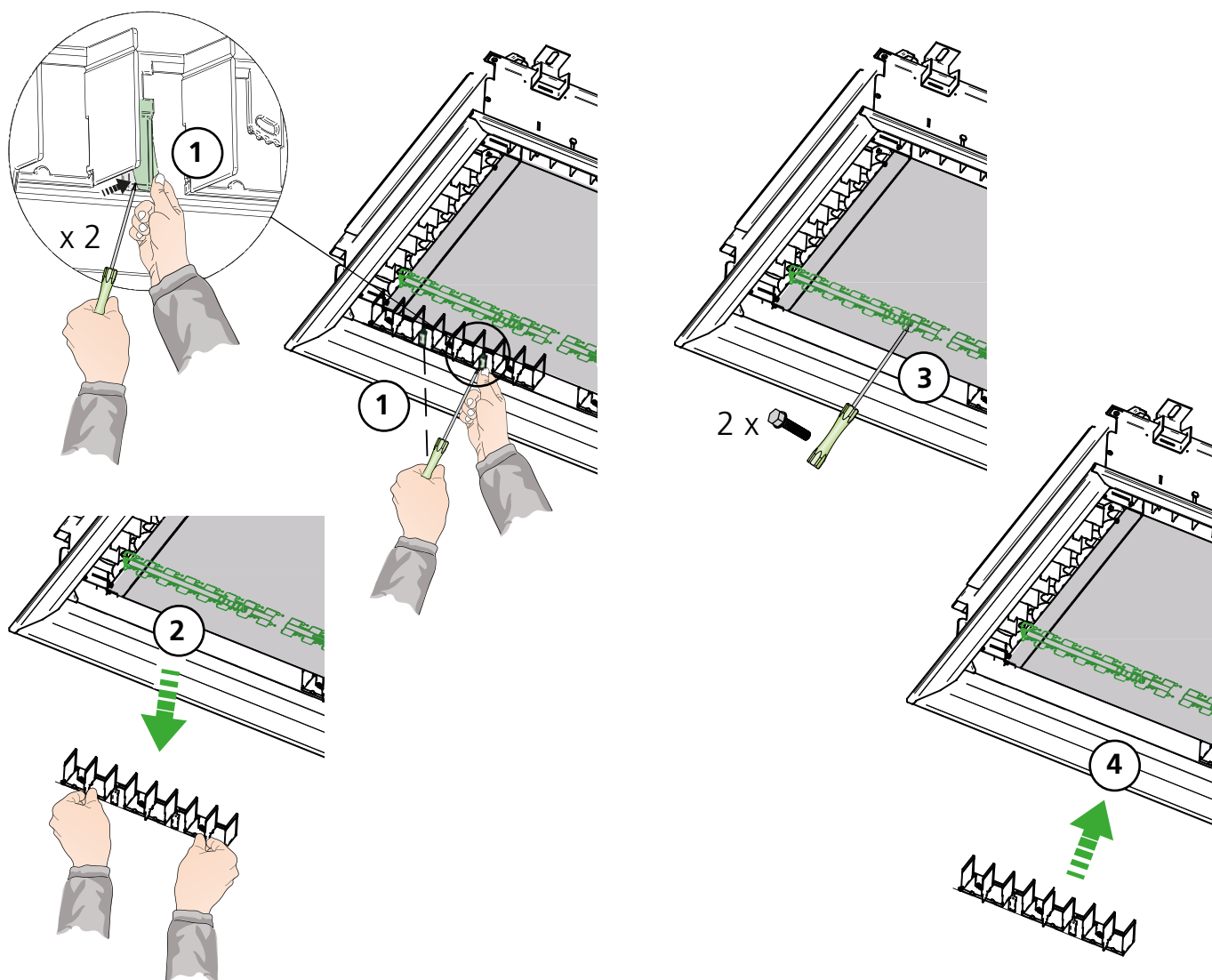
PARASOL Zenith Length 1800		
Nozzle setting/ Dysinställning	k-factor/nozzle strip/ k-faktor/dyslist	k-factor in total/ k-faktor totalt (20 strips/lister)
2	0,284	0,284 x 4 = 1,136
4	0,616	0,616 x 16 = 9,856
		In total/Totalt: 10,992

PARASOL Zenith Length 1200		
Nozzle setting/ Dysinställning	k-factor/nozzle strip/ k-faktor/dyslist	k-factor in total/ k-faktor totalt (16 strips/lister)
2	0,284	0,284 x 8 = 4,54
3	0,450	0,450 x 8 = 3,6
		In total/Totalt: 5,872

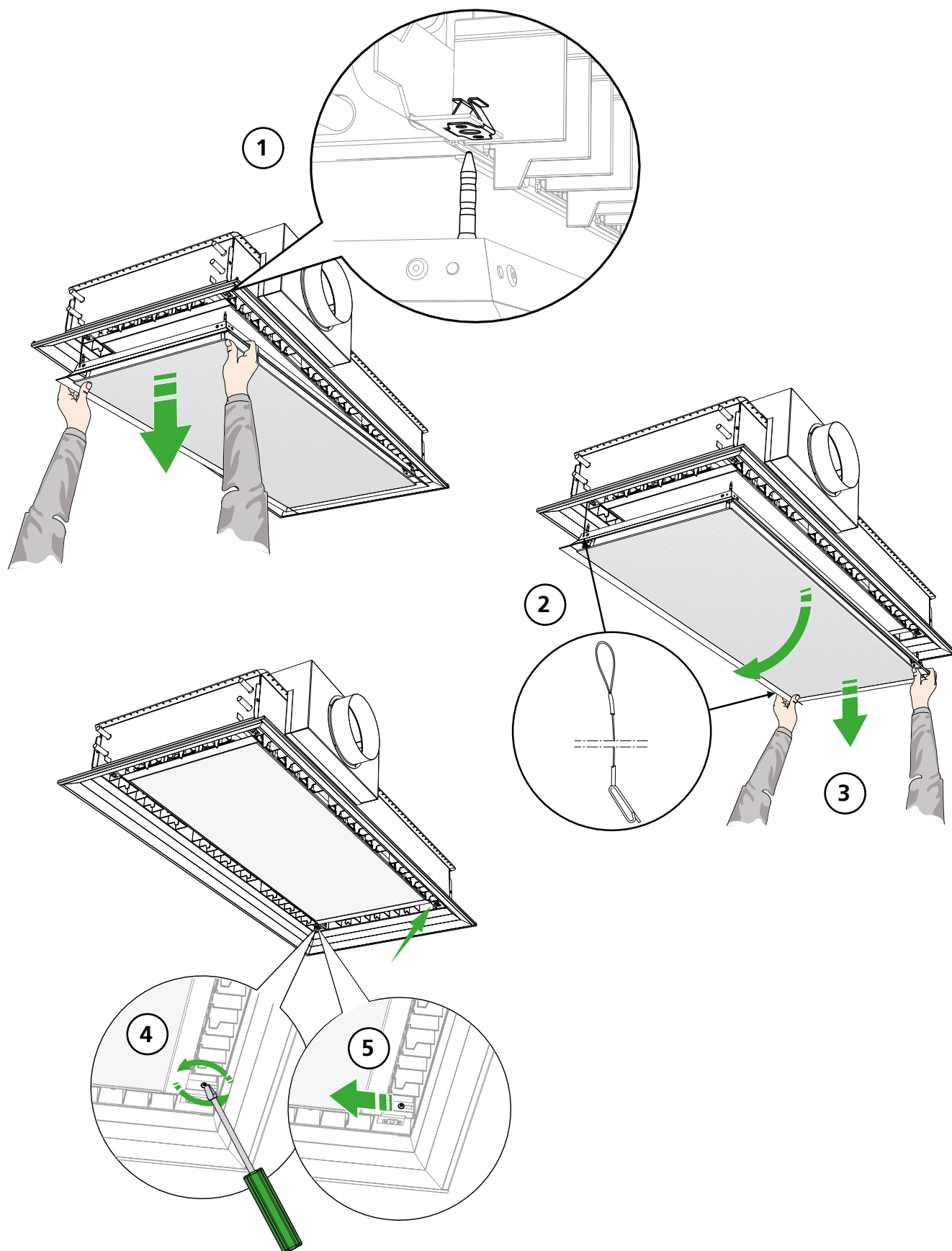
To change nozzle configuration / Att ändra dysinställning



To change or remove the nozzle strip / Att byta eller ta bort dyslisten

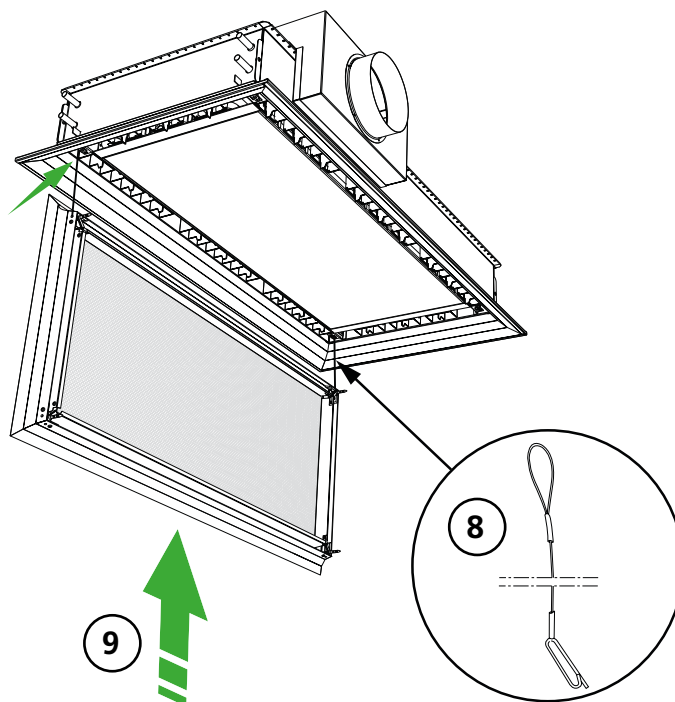
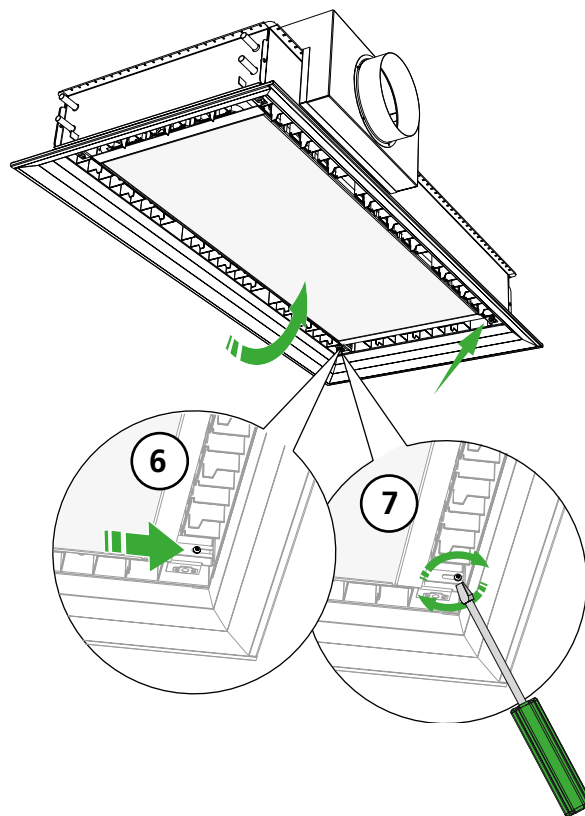
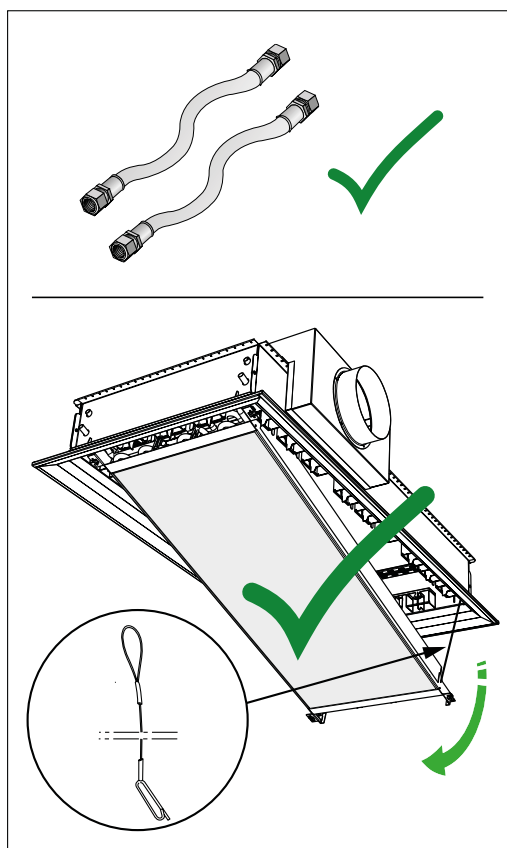
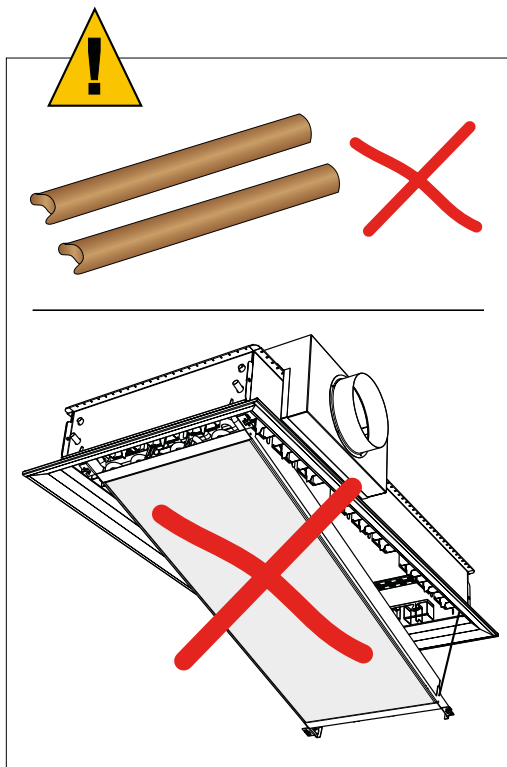


PARASOL Zenith with fold-out coil (option) for easy access and cleaning of the complete coil when stringent demands are made on hygiene / PARASOL Zenith med fällbart batteri (tillbehör) för enkel åtkomst och rengöring när det sälls höga krav på hygien.

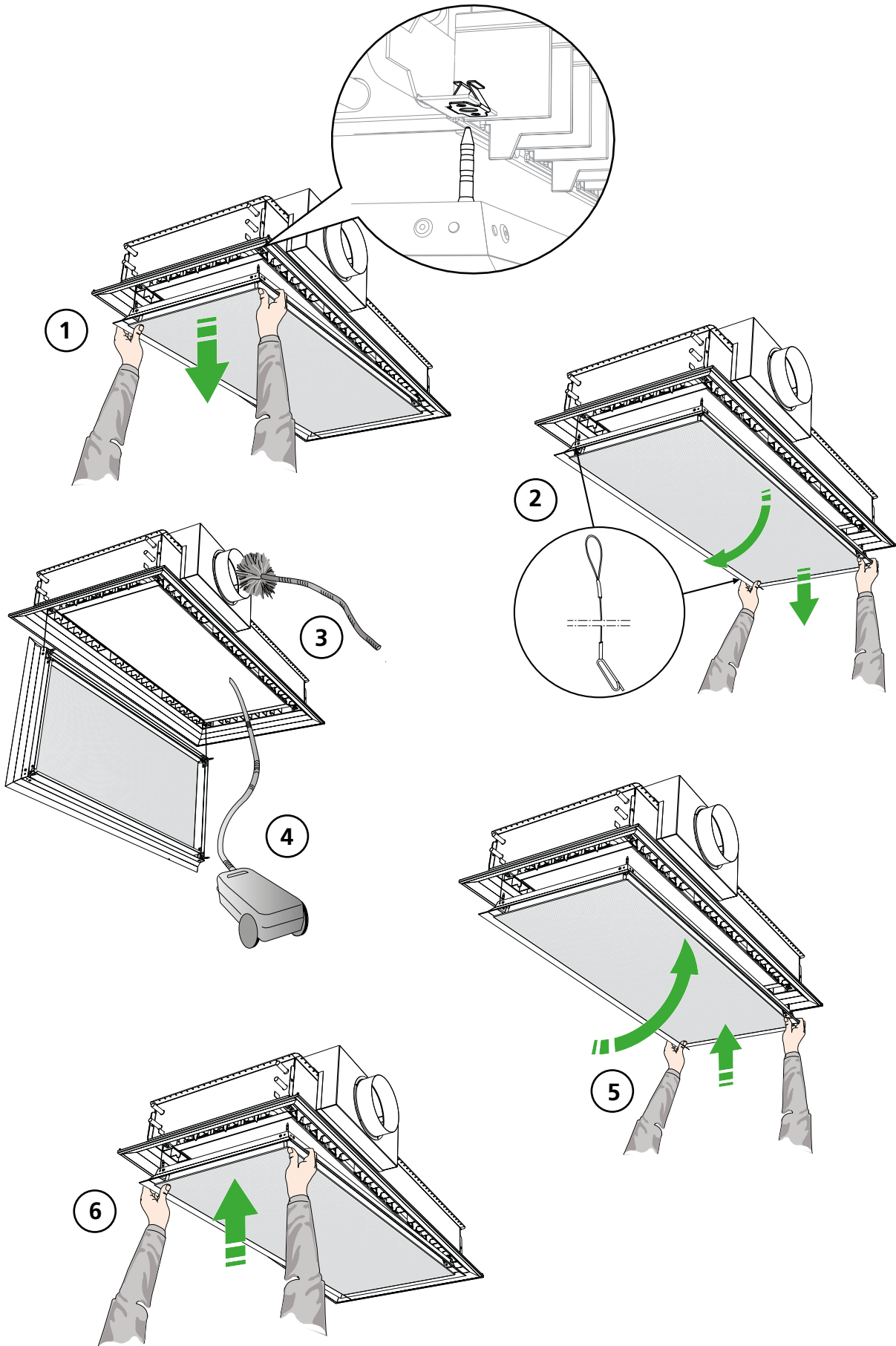


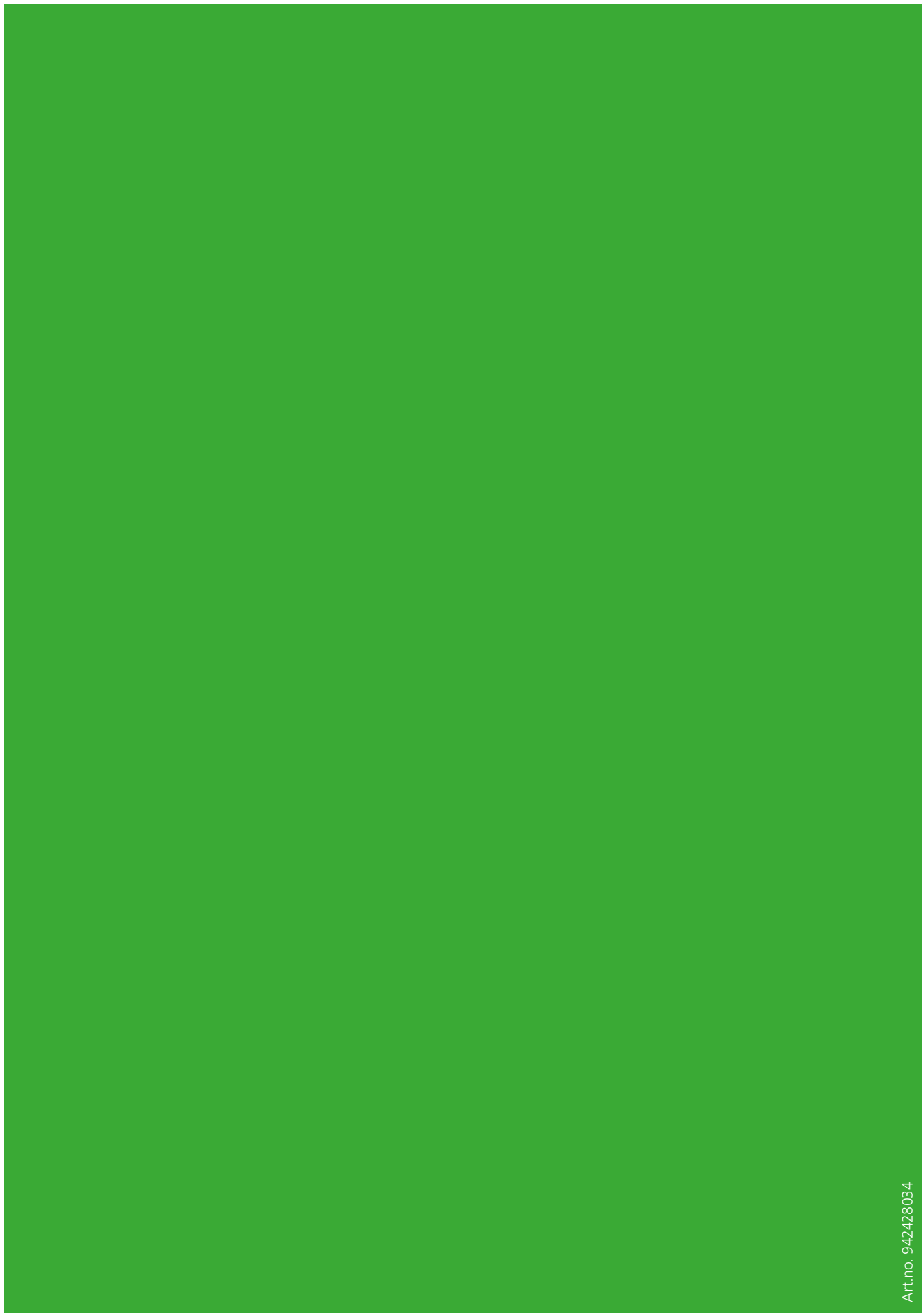
The accessory fold-out coil, requires flexible hose connections on the water side.

Tillbehöret, fällbart batteri kräver flexibla anslutnings slangar på vattensidan.



Maintenance / Skötsel





Art.no. 942428034