



## Installation - Manual

HM - Acoustic Housing

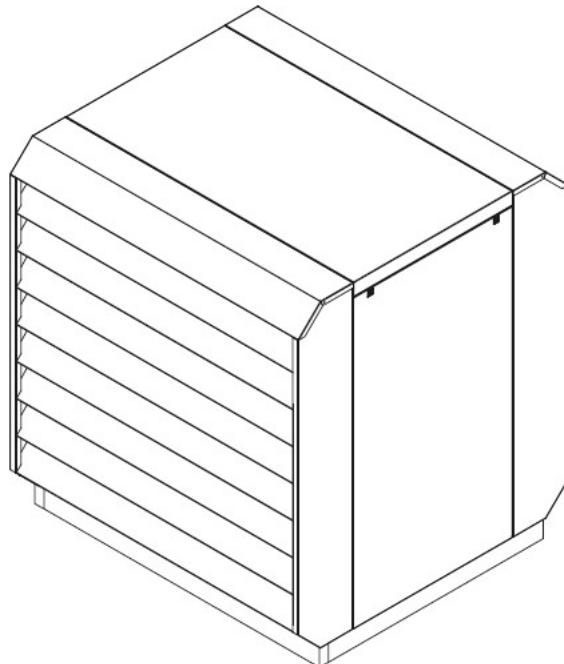
## 2 General information

Sonasafe Acoustic enclosures are used for various refrigeration, air conditioning and air conditioning systems Heat pump outdoor equipment produced.

This manual is applicable to the following series of soundproof enclosures:

**HM\* Serie**

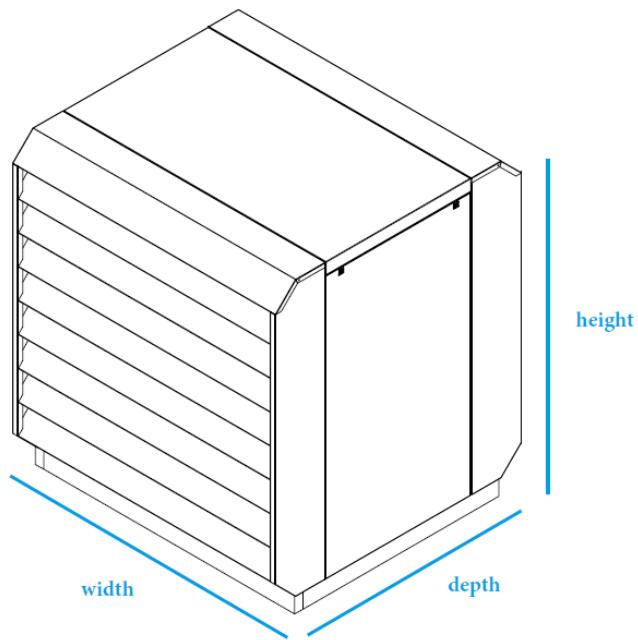
## 3 Technical data



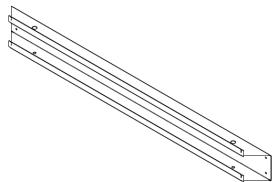
Robust acoustic housing with fully detachable construction. All components of the construction are made of galvanized steel. Precise separation of the airflow between the suction and pressure side via an air separation section, which is operated by the installation company by means of a Velcro fastener on the fan side of the external unit. The panels at the top left and right can be used with screw connections removed from the housing for servicing and maintenance work on the external device. The entire design is optimized for operation of the heat pump.

Manuel HM acoustic housing

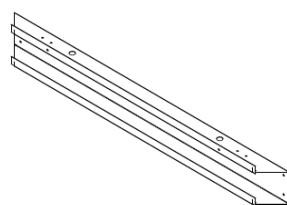
concept	SonaSafe type	material	dimensions [mm]			weight [kg]	Max. device dimension [mm]		
			h	w	d		h	d	d
Suction in the rear, blowout in the front	HM100NP	galvanized steel sheet	1060	1200	1250	123	990	1060	650
	HM200NP		1420	1200	1250	159	1350	1060	650
	HM200NP-I		1420	1400	1400	185	1350	1260	800
	HM200NP-XL		1420	1600	1500	209	1350	1460	900
	HMY200NP		1740	1200	1250	195	1670	1060	650
	HMY200NP-L		1710	1400	1400	227	1670	1060	650
	HMY200NP-XL		1740	1600	1500	255	1670	1460	900



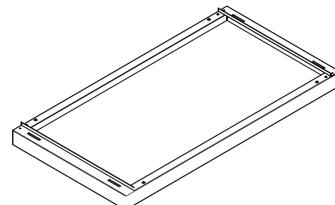
Manuel HM acoustic housing



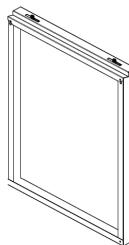
**2x**  
basic framework profile 1  
NR. 101



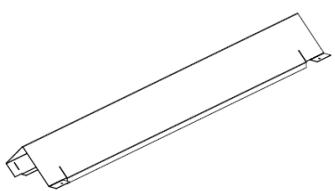
**2x**  
basic framework profile 2  
NR. 102



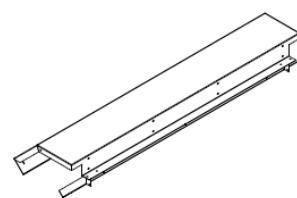
**1x**  
roof panel  
NR. 401



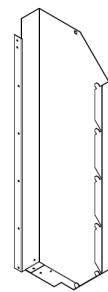
**2x**  
side part  
NR. 501



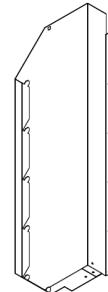
**2x**  
lowest blade  
NR. 201



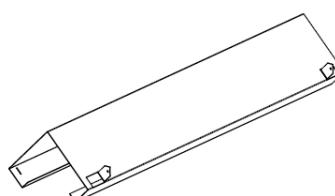
**2x**  
top blade  
NR. 203



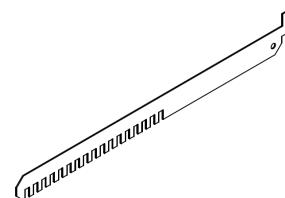
**2x**  
corner piece 1  
NR. 601



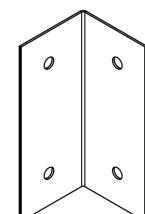
**2x**  
corner piece 2  
NR. 602



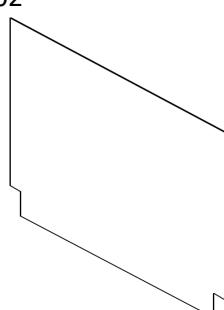
spacer blade  
NR. 202



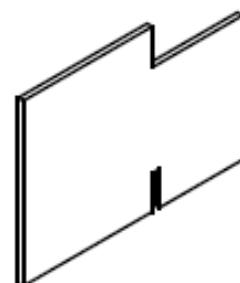
**3x**  
profil  
NR. 701



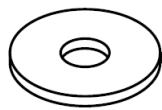
**4x**  
angle section  
NR. 801



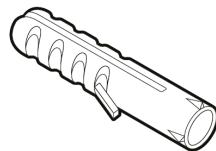
**1x**  
recirculation blade  
NR. 301



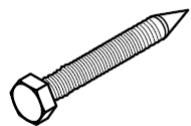
**2x**  
separating part 170x124  
NR. 902



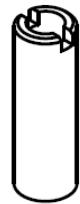
**4x**  
washer 6mm  
NR. 901



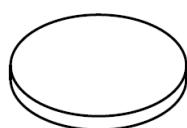
**4x**  
dowel 8x40  
NR. 904



**4x**  
studbolt 6x50  
NR. 903



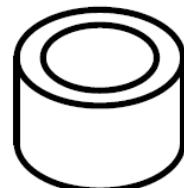
**13x**  
synthetic insert nut 8x25  
NR. 906



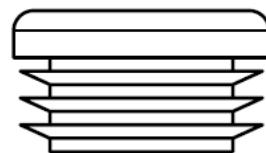
**20x**  
velcro  
NR. 905



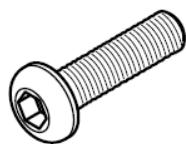
**5x**  
plastic ring 5,3x15x3  
NR. 908



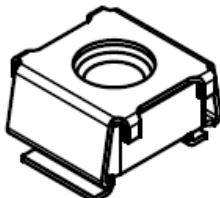
**5x**  
plastic ring 8,2x12x7,5  
NR. 907



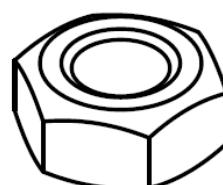
**5x**  
synthetic spacer  
19 mm  
NR. 909



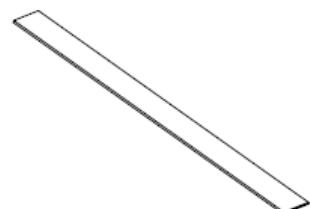
**100x**  
M5x20 zylinder bolt  
NR. 910



**9x**  
M5 captive nut  
NR. 911



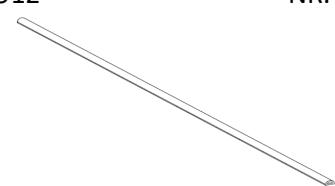
**100x**  
M5 nut  
NR. 912



**10m**  
draught strip 20x4 mm  
NR. 914

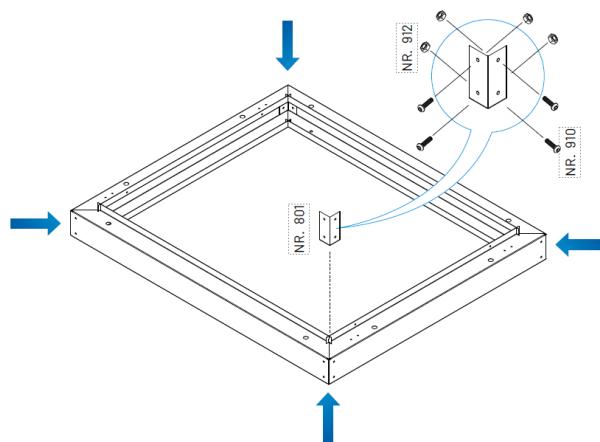
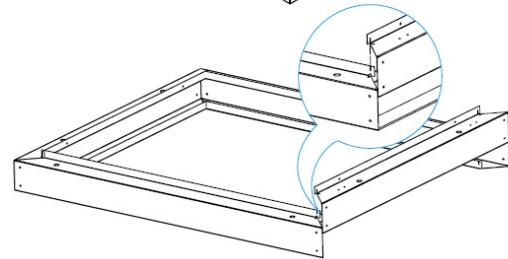
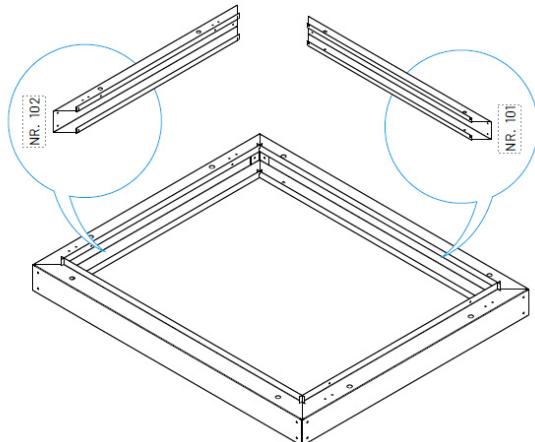


**2x**  
key  
NR. 915



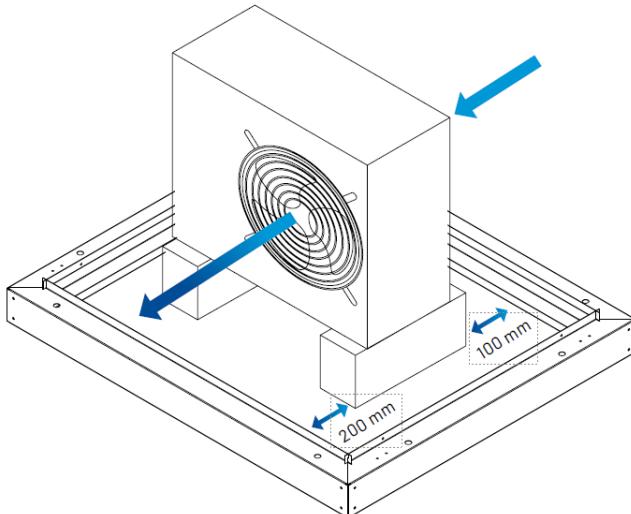
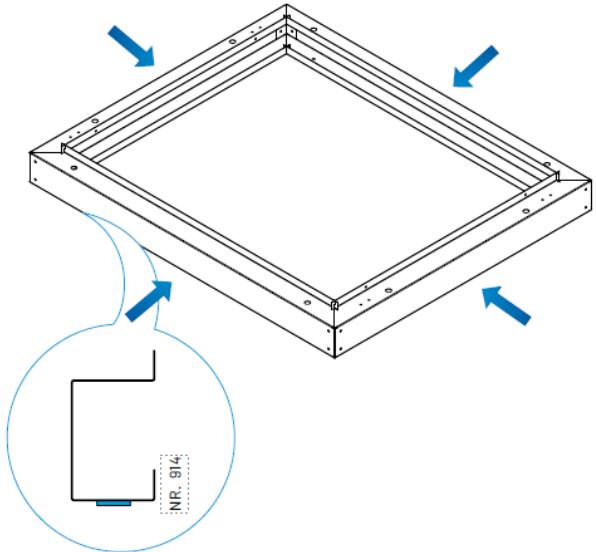
**16m**  
rubber D-profil 12x10 mm  
NR. 913

First place the floor frame, which consists of four straight-ground frame profiles (NR. 101 & 102) and four corner angles (No. 801). The profiles have recesses that glide into each other.



Attach the corner brackets (NO 801) with four M5 screws and nuts (No. 910 & 912). The nuts should be on the inside of the frame.

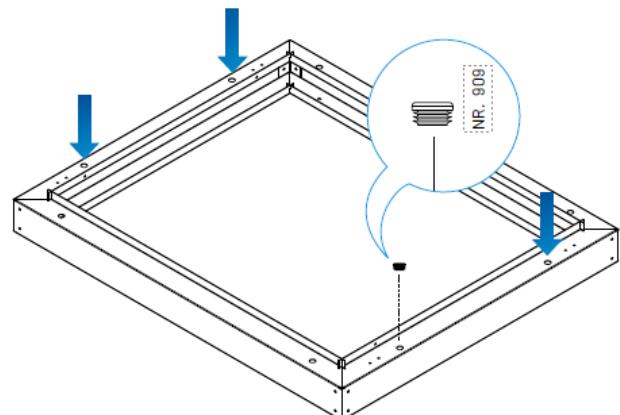
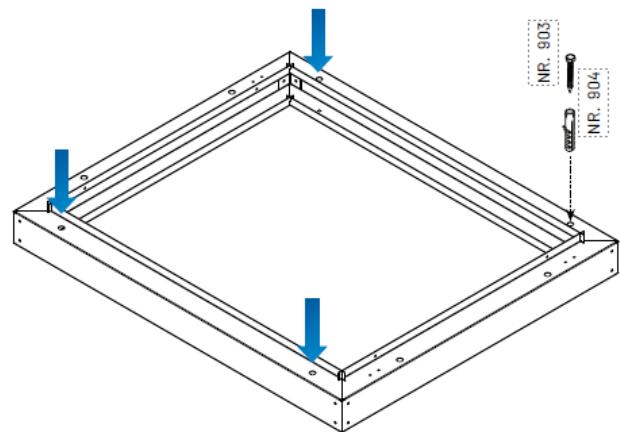
Apply a strip of sealing tape (NR. 914) to the bottom of the entire frame, which is glued in the middle of all four floor frame profiles.

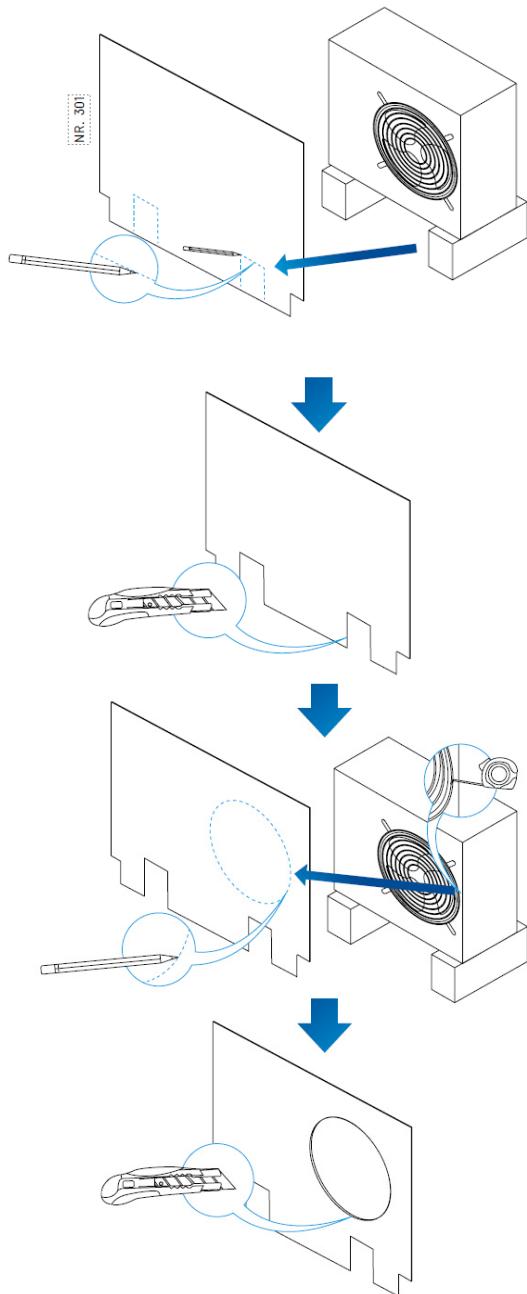


Put the frame on the floor. It is recommended that a minimum distance of 200 mm be maintained between the inside of the frame and the pressure side of the heat pump and a minimum distance of 100 mm be maintained between the suction side and the inside of the frame. If there is enough space, it is advisable to leave more space on the outlet side (ratio of 2/3). Air outlet and 1/3 air inlet). A symmetrical distribution is recommended in the width direction. This also depends on the pipe connection.

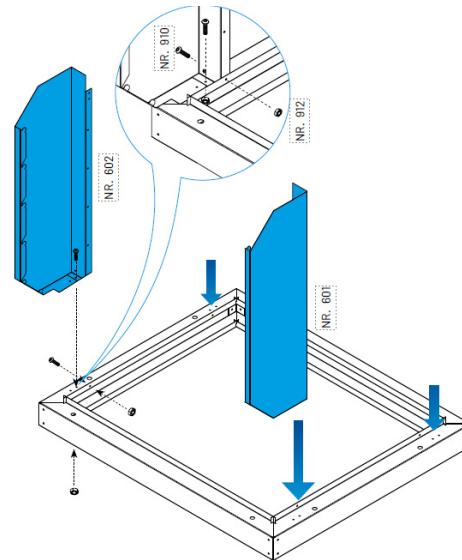
Now attach the frame to the bottom with four threaded bolts (NR. 903 plug use (NR. 904) for stony substrates.

Fill the floor frame with four plastic spacer holders (NR. 909), which are pressed into the holes at the top, where the side parts are later attached.

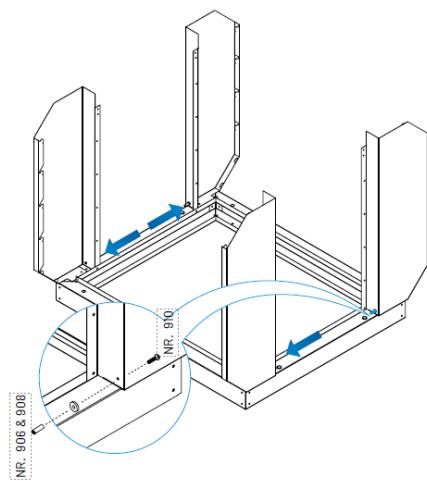
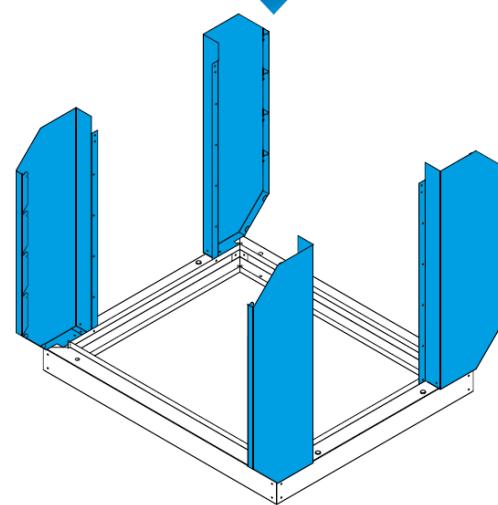




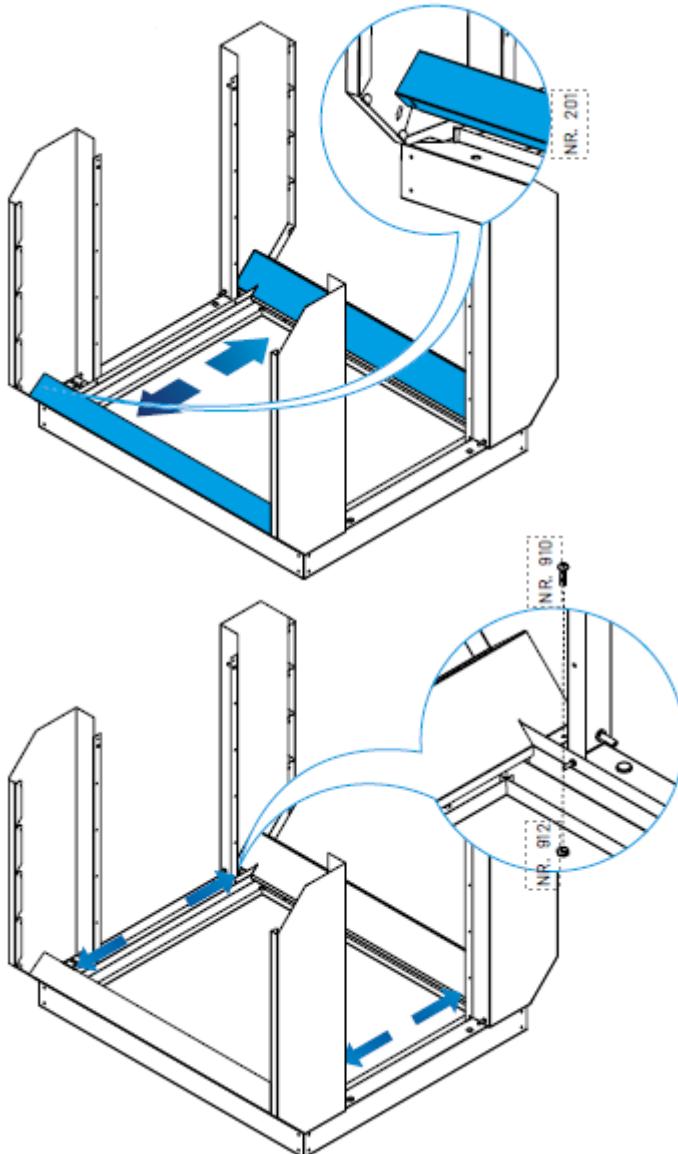
Now the recirculation plate (NR. 301) will be made to measure. Use a tape measure, a pencil and a Stanley knife. Start by marking the cut-outs for the heat pump track. The plate must reach down to the ground to avoid recirculation. Then mark the opening of the fan of the heat pump. Cut out the notches with a Stanley knife. The recirculation plate does not need to be mounted yet.



Now place the four corner pieces (NR. 601 & 602). These are attached to the base frame with two M5 screws and nuts (NR. 910 & 912) per corner piece, see enclosures.

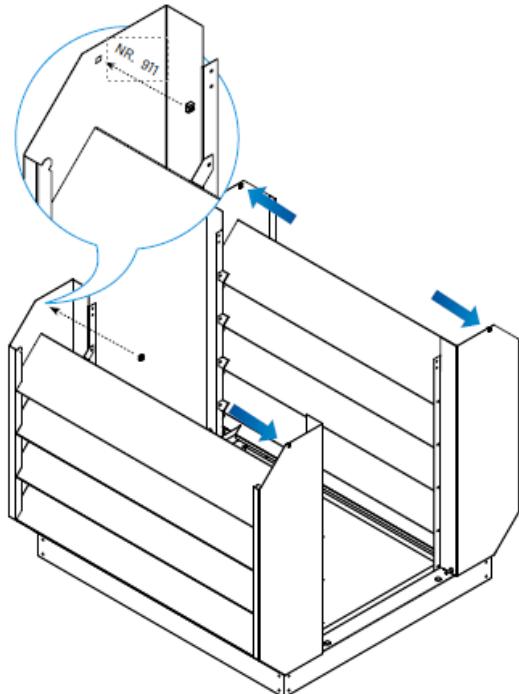
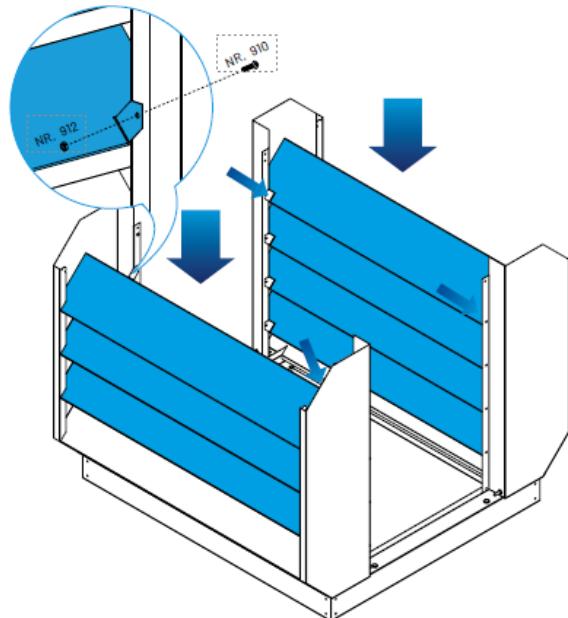


Fit the four corner pieces at the bottom with the plastic threaded sleeve with M5 pin and plastic washer (NR. 906, 910 & 908).

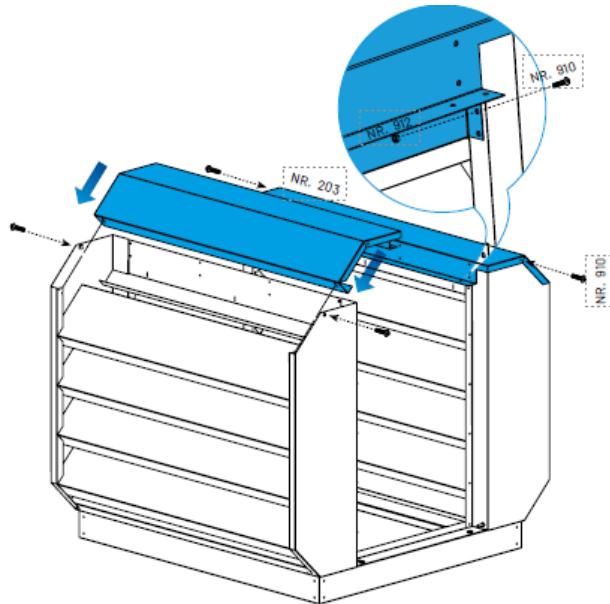


The lower lamella (NR. 201) can now be tilted and fixed in between. The moulding is fixed at each end with an M5 screw and a nut (No. 910 and 912).

Fold the flaps at the ends of the interlocking flaps out of the door. Now insert the intermediate strips (NR. 202) by tilting them one after the other so that they fall into the corner pieces. Then secure each slat at the ends with an M5 screw and nut (NR. 910 & 912) in the corner piece, see enclosures.

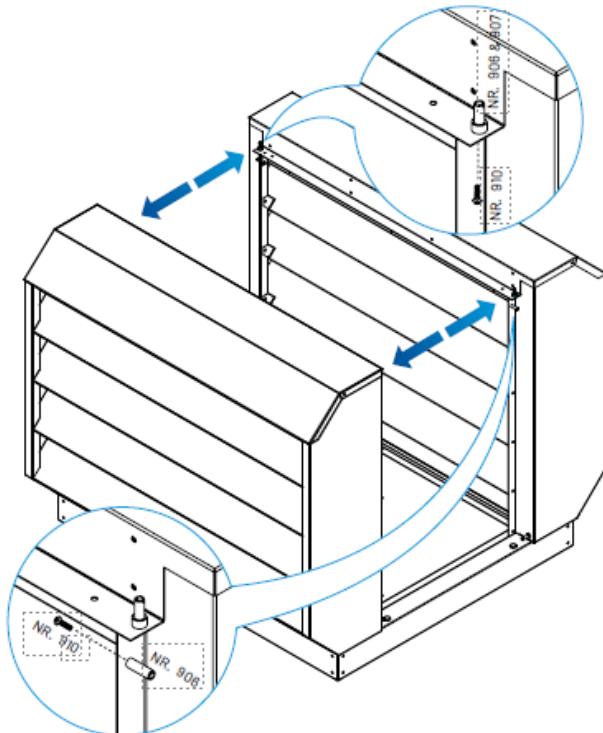


Before the upper slat can be placed, a special cage nut (NR. 911) must be clicked from the inside into the corner piece. Push in the cage nut with the help of the spring system and release it after inserting it into the hole.

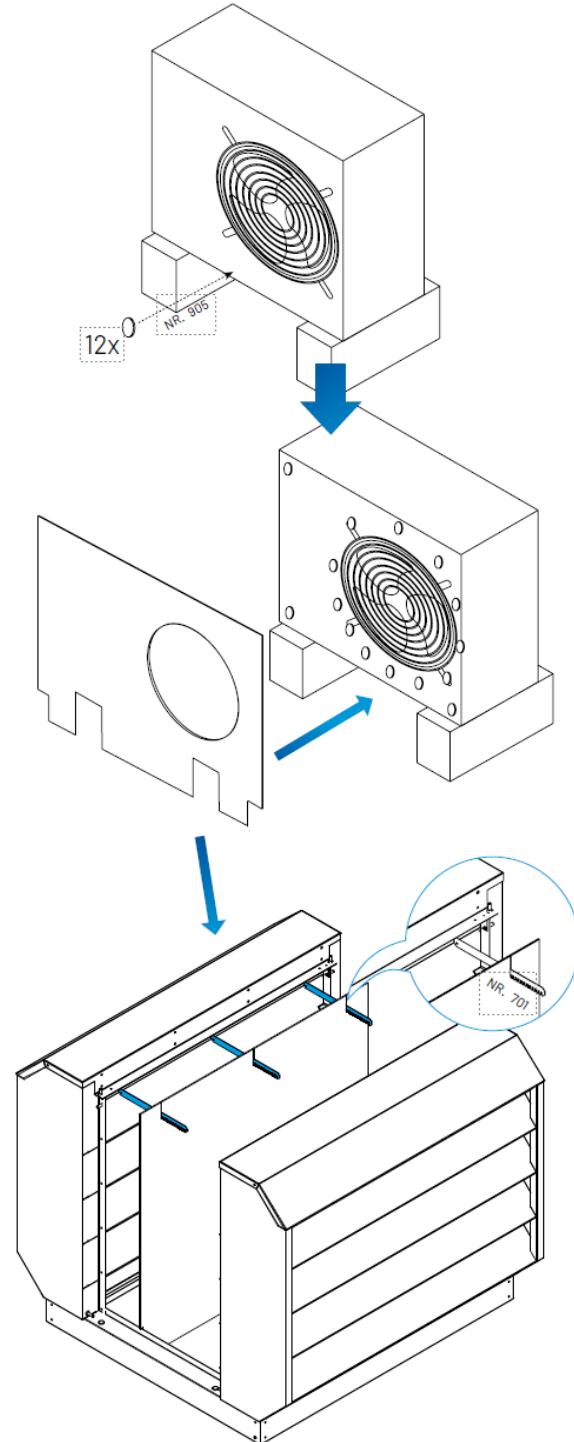


Then insert the upper lamella (No. 203) and screw it to each outside corner with an M5 screw (No. 910) that fits into the cage nut (No. 911). Attach the upper lamella to the corner pieces with an M5 screw and a nut (NR. 910 & 912), see insert.

Place a threaded socket with screw (No. 906 and 910) perpendicular to the inner corners of the upper knife. Slide of the plastic containers (No. 907) the threaded bushing (No. 906). Then insert a threaded jack with screw (NR. 906 & 910) horizontally, see insert.



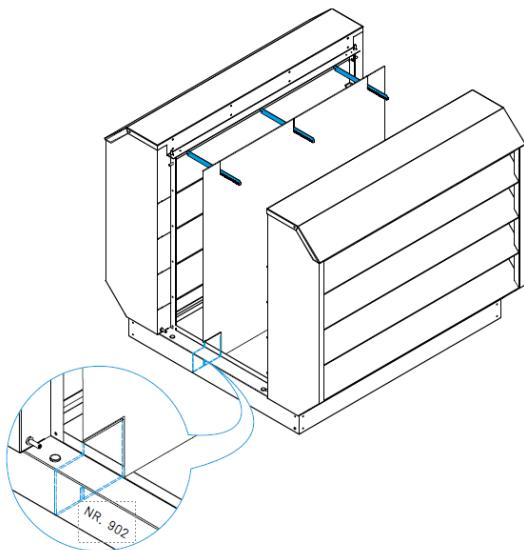
Now mount the recirculation plate (No. 301). Place twelve self-adhesive Velcro loops (No. 905) on the heat pump housing. Do this around the fan opening and in the corners of the heat pump housing. Remove the adhesive from the Velcro loops and press the recirculation plate against the housing.



At the top of the base frame are three jagged profiles (NR. 701), which are pressed into the return plate to keep it in place.

To do this, first tilt the knurled profiles in the upper bar to the place of the three slots in the bar. Then press the jagged profiles into the sheet or cut the sheet with a Stanley knife.

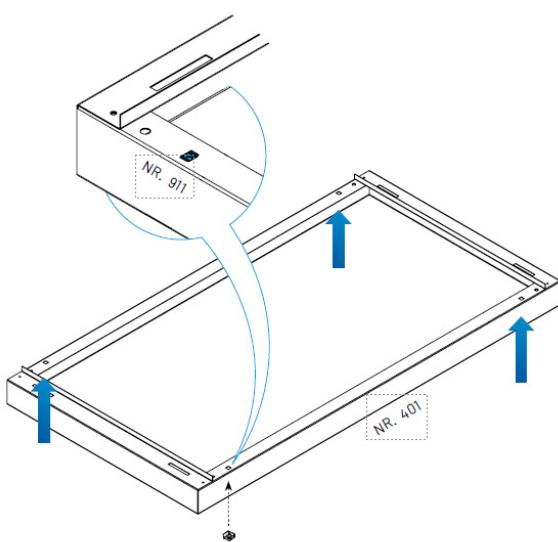
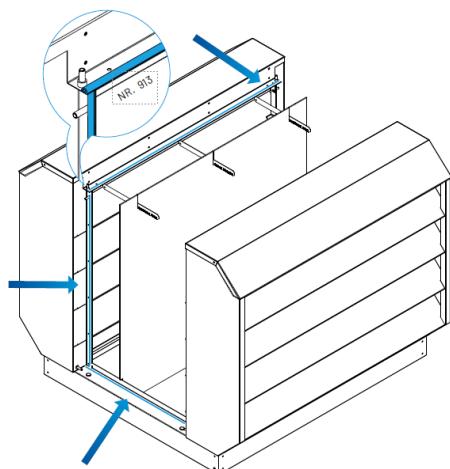
The protruding parts of the prong profiles can be bent by hand so that they no longer protrude.



The two small spacers (No. 902) can then be tilted in the base frame and attached to the plate with three to four Velcro fasteners (No. 905).

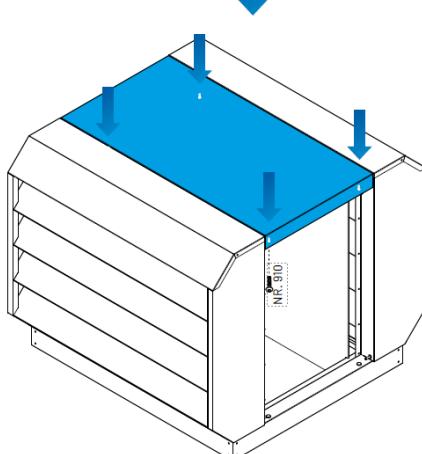
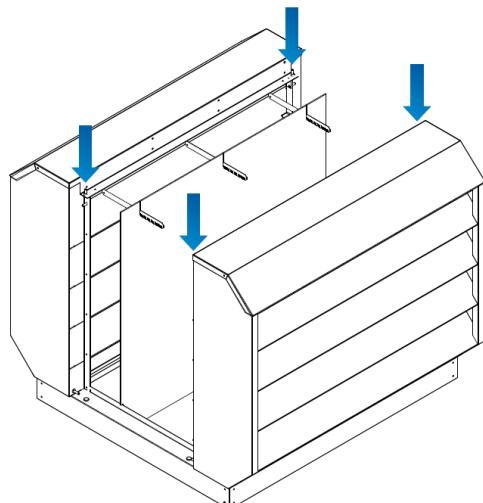
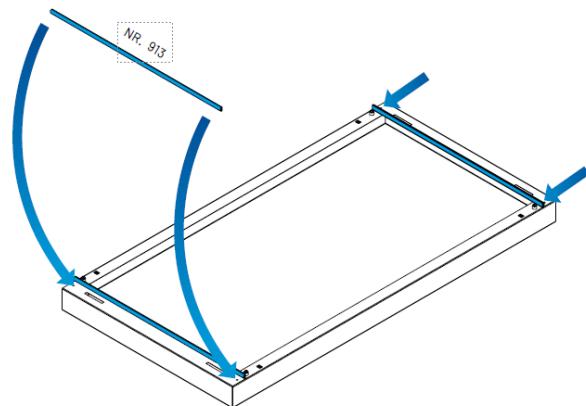
Now coat the edges (see picture) with the self-adhesive rubber-D-profile (NR. 913). Before applying, make the steel plate dry and free of grease so that the adhesion is good.

Mount the rubber-D-profile at the edge of the plate (see insert). The rubber profile can be cut to the right length with scissors.



Place the roof plate (No. 401) 1) on the inside of the four cage nuts (No. 911). The cage nuts must be clicked into the roof panel.

Mount the rubber D-profile (NR. 913) on the inside of the roof panel (NR. 401). Apply it to the outside of the raised edge on the short sides of the roof panel.



The roof panel (No. 401) can now be placed. When installing, make sure that the holes in the corners of the roof panel are located exactly above the four threaded bushes. The roof plate is secured with four M5 screws (No. 910). These are screwed into the cage nut from below.

Insert the two side panels (NR. 501) by first lifting them into the bottom of the recess. Then push it and lock it by tightening the two bolts in each plate with the supplied key (NR. 915). Keep this key as it is needed for maintenance and inspection of the system by opening the locks on the side panels.

