

SolarVenti®

SolarVenti Professional



Installation manual



sept. 2016

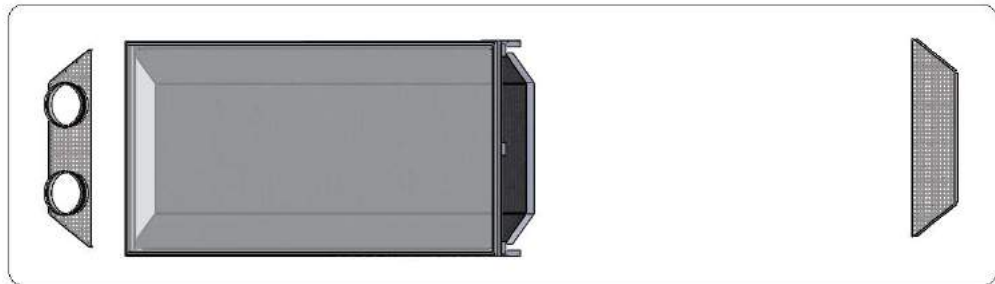
1. GENERAL INFORMATION	1
1.1. Modularity.....	1
1.2. The needed angle.....	1
2. ASSEMBLY	2
3. CONNECTING THE MODULES ON THE SUPPORTS	6
4. INSTALLING THE SUPPORTS	7
5. FURTHER INFORMATION	8
5.1. Lightning protection.....	8
5.2. Pressure losses.....	8

1. GENERAL INFORMATION

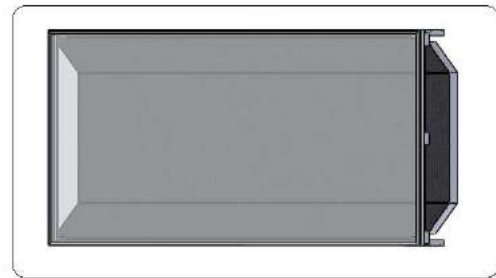
1.1. Modularity

In all the configurations, each row has one **Base module** and as many **Add-on modules** as necessary - up to a maximum of 9 **Add-on modules** in each row. In bigger installations (>10 modules) the necessary amount of extra rows is added.

BASE MODULE
Ref. 001020

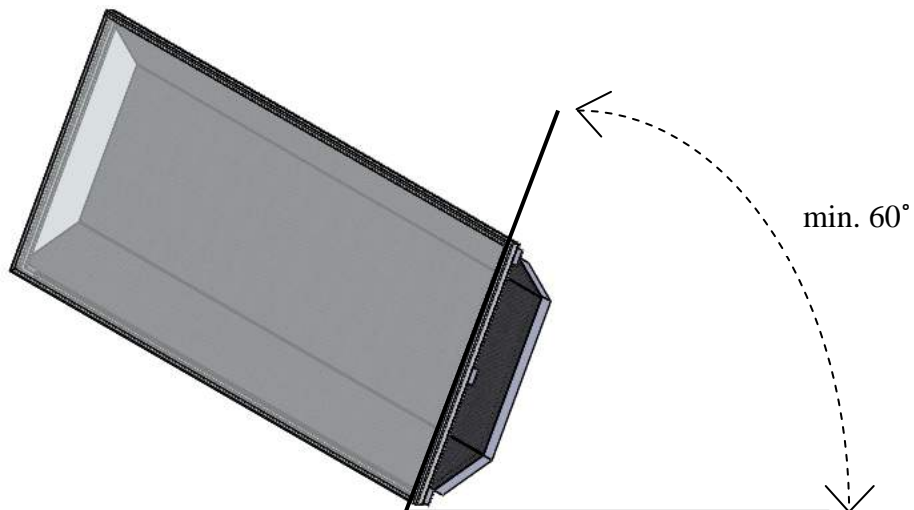


ADD-ON MODULE
Ref. 001021



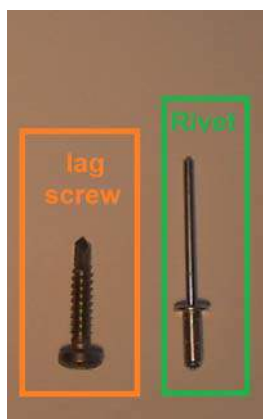
1.2. The needed angle

The modules need a min. angle of 60°.

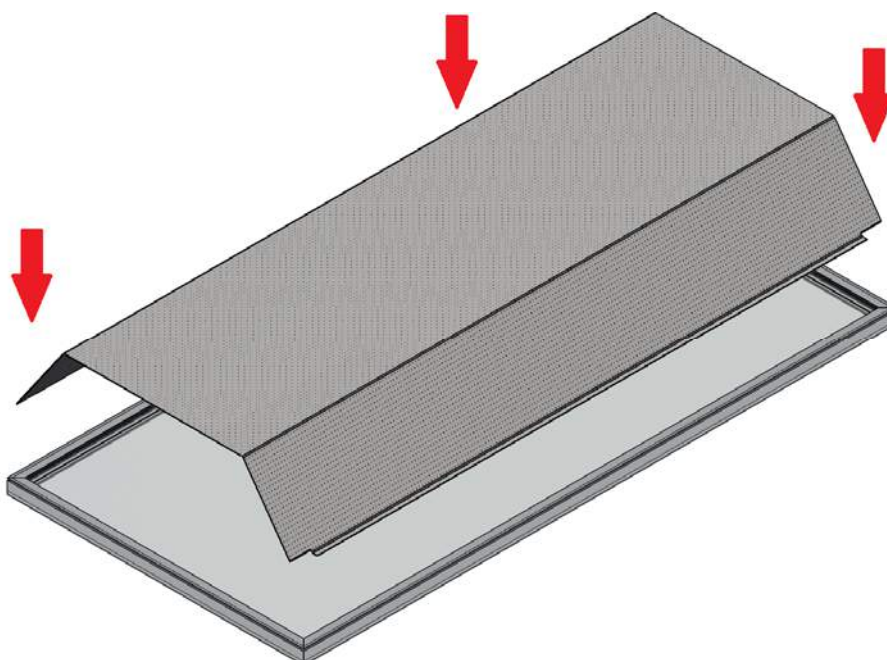


2. ASSEMBLY

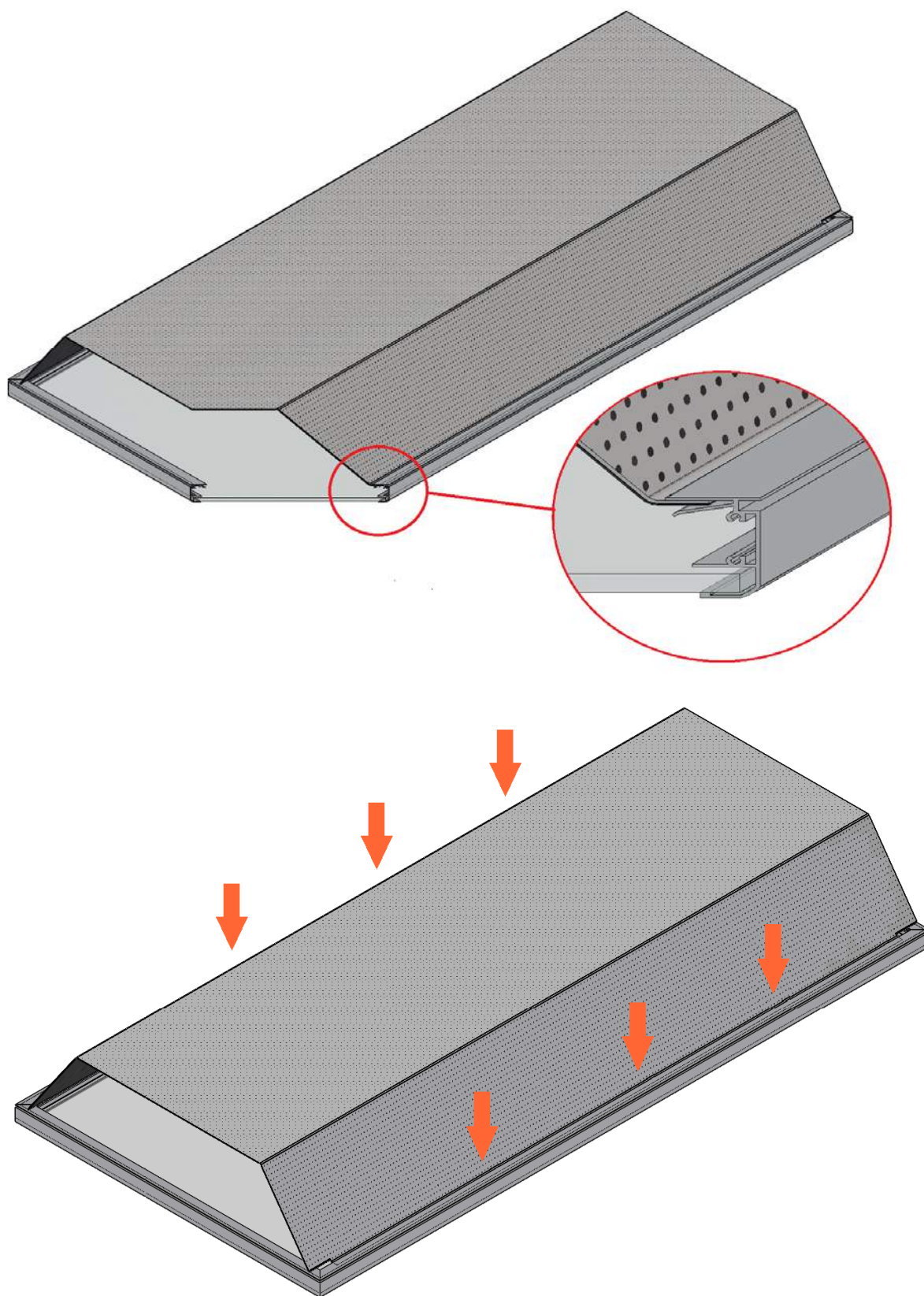
The **red arrows** in the drawings represent the direction of the assembly and the orange and green arrows represent connections with **lag screws** and **rivets**.



With the frame on a flat surface, mate the back plate and screw it with **lag screws** (see next page for more details).

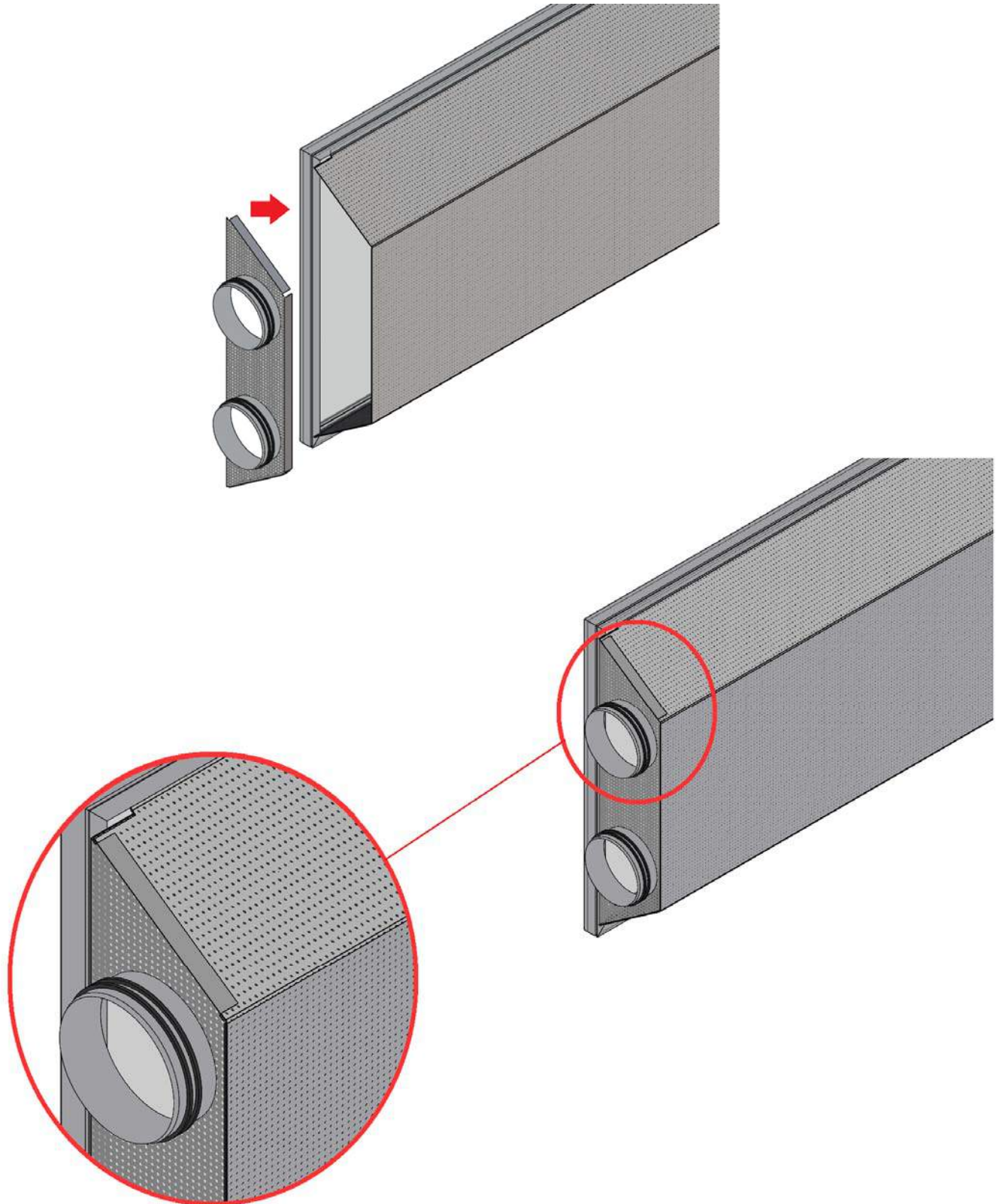


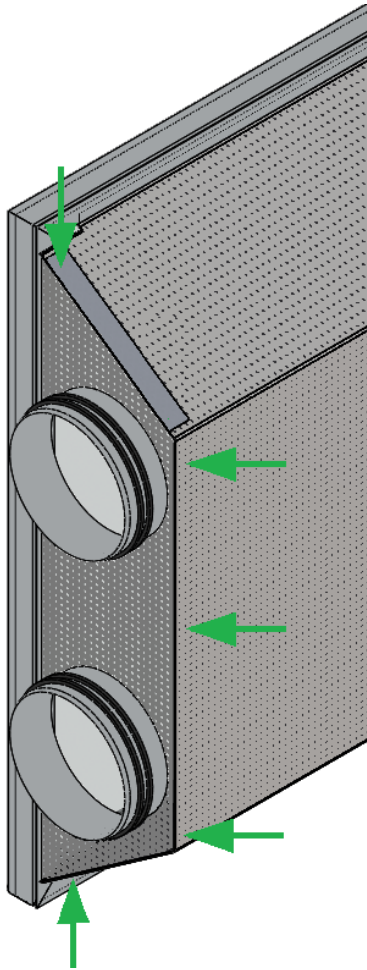
The flap of the back plate must be under the frame (detail in the drawing).



The first and the last module have one lateral cover each. The covers are mounted in opposite sides in the two modules.

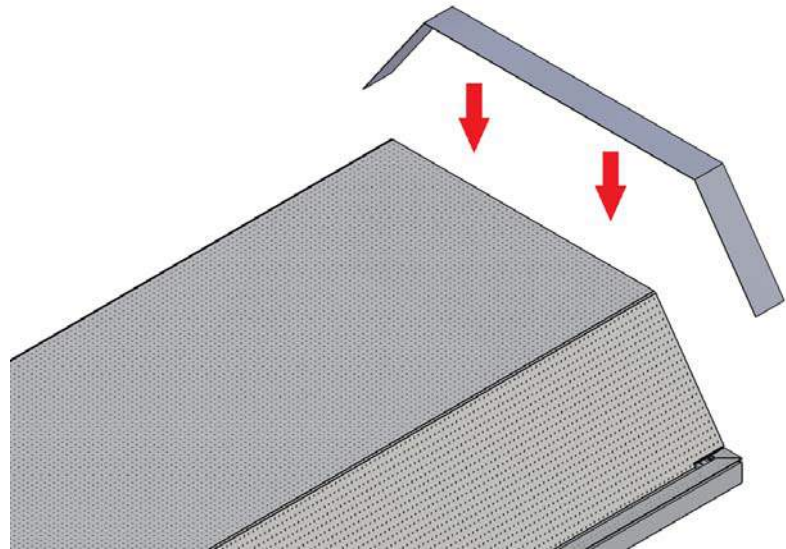
The two lateral flaps of the cover must be mounted ON the back plate while the back flap must finish UNDER the back plate (see picture).



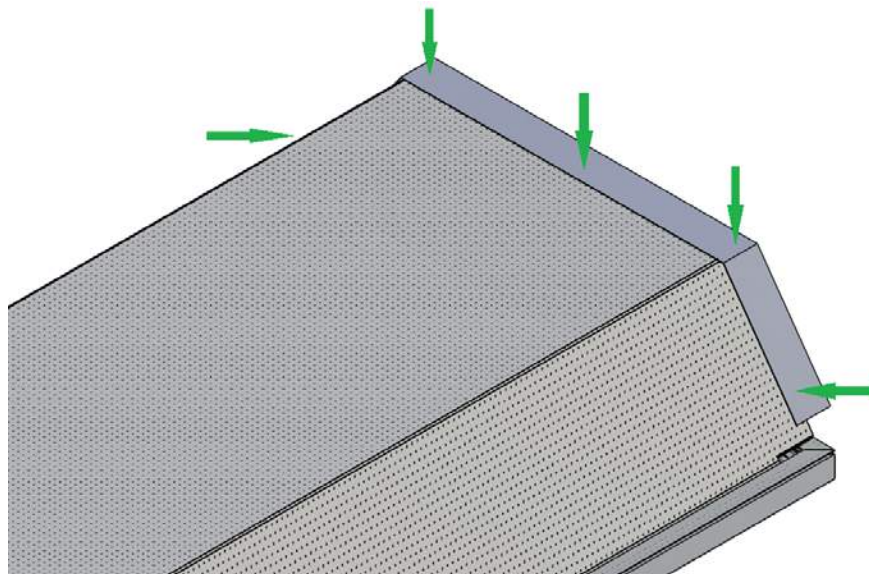


Once the cover is in the right position, the assembly is fixed with **rivets**.

The plate that fixes the back sheet of two consecutive modules (belt) must be installed before mounting the modules on the supports.



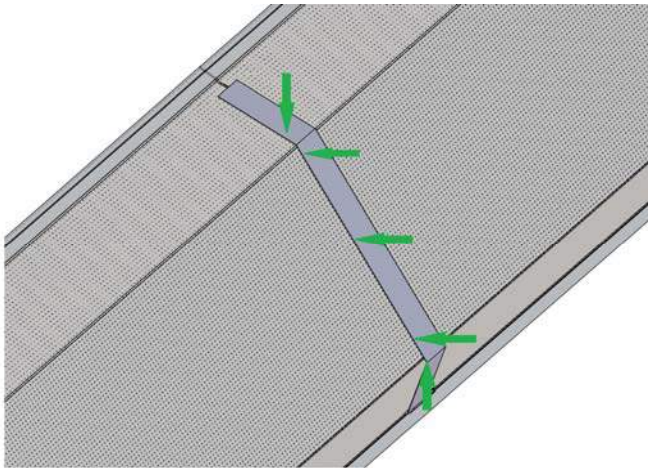
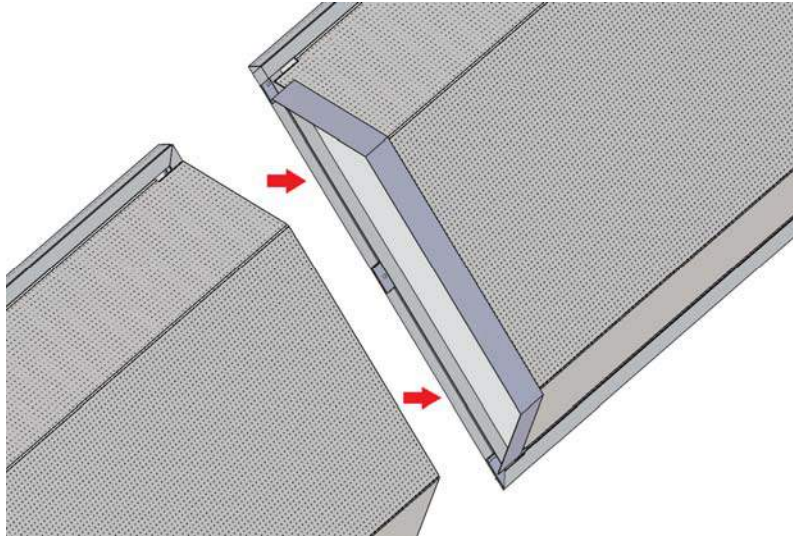
Fix the belt and the back sheet with **rivets**.



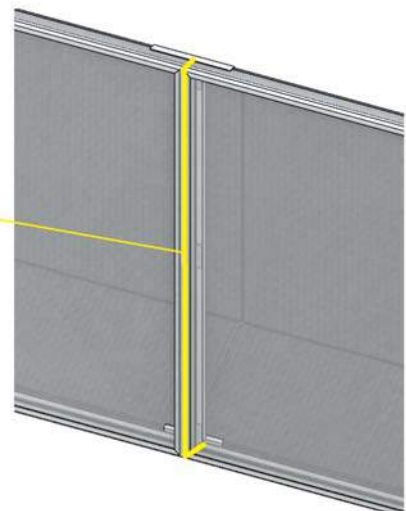
*** DO NOT install the belt in the LAST MODULE**

3. CONNECTING THE MODULES ON THE SUPPORTS

First when the modules are mounted on the supports, the modules are connected and the slot between them is sealed with silicon.



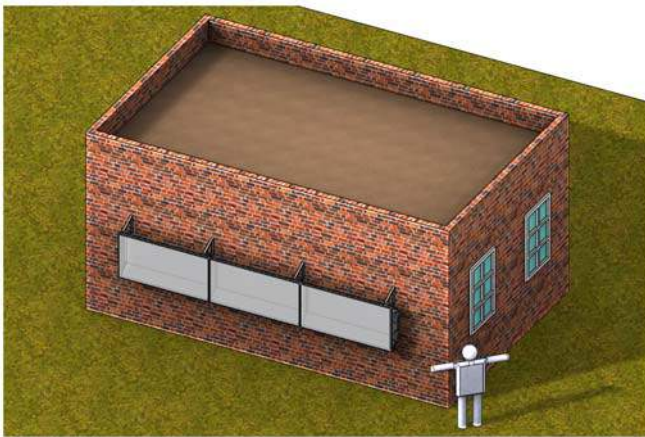
Silicon for water proofing



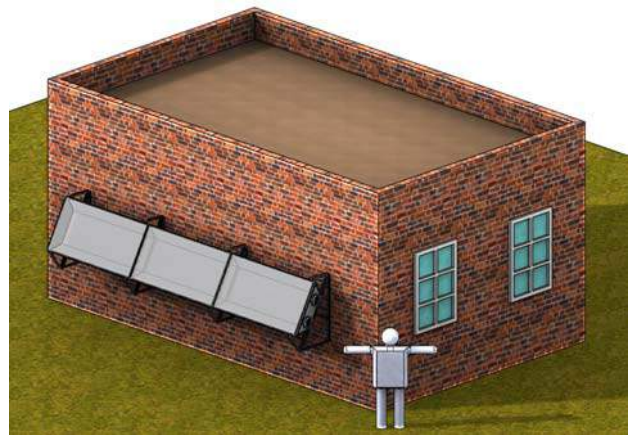
4. INSTALLING THE SUPPORTS

See mounting instructions of the support.
Remember to angle the modules with min.60°.

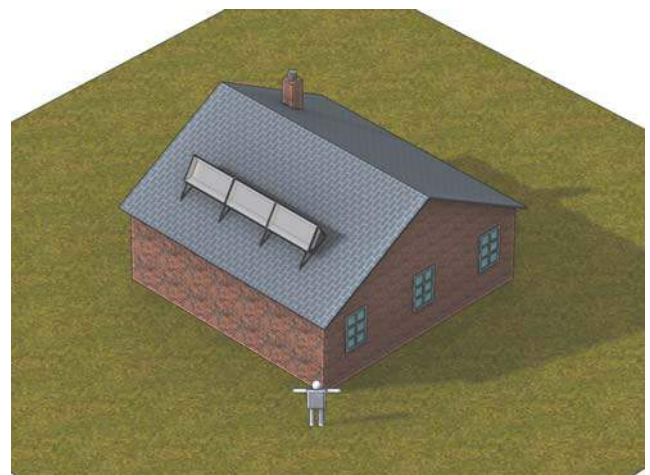
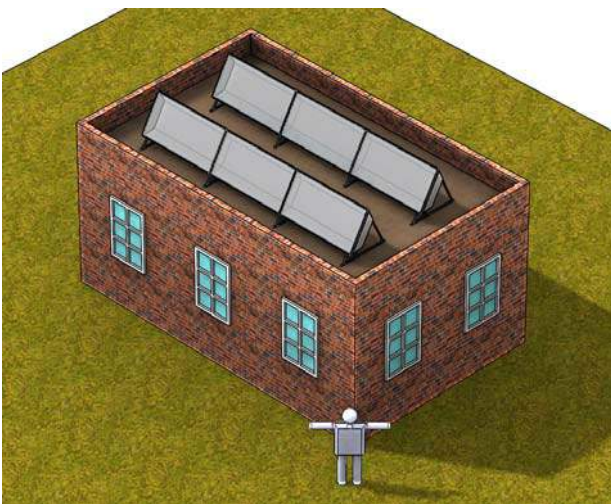
PW90



PW60



PR10/ PR20/ PR30/ PR40



NB: It is really important to create a perfectly straight base where the brackets will be fixed. If the brackets do not form a perfect line it will create problems when installing the modules and the stability of the whole system will be compromised.

A good recommendation for a straight base is to mark and level the surface (wall, ground or roof) before starting the installation.

5. FURTHER INFORMATION

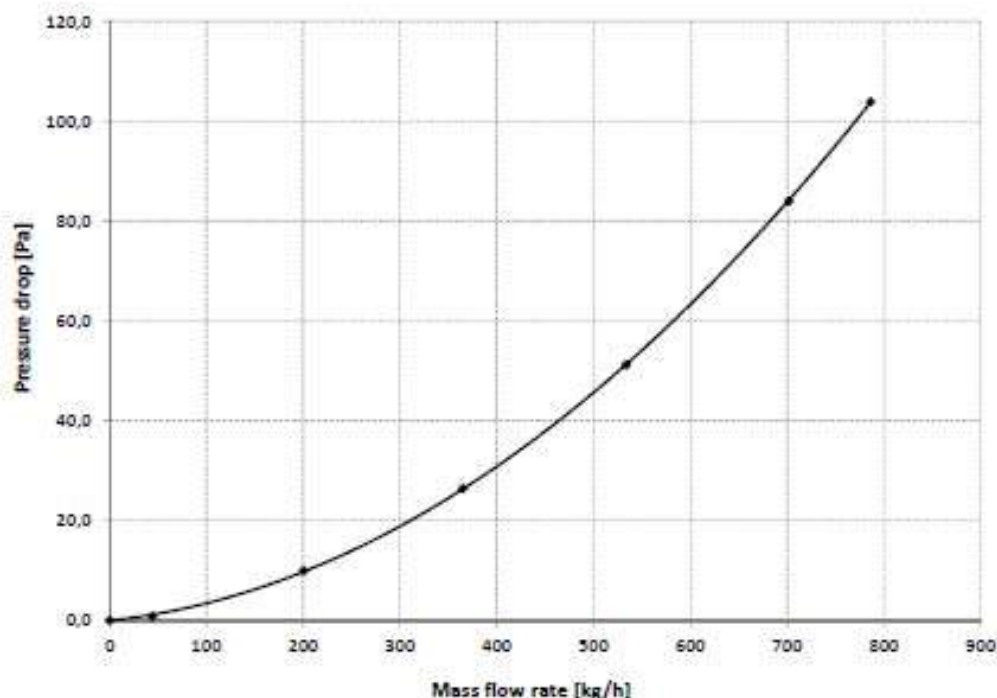
5.1. Lightning protection

In order to have protection against possible lightning, the installation should be carried on according to the norm **EN 62305**. The SV-Pro collectors are basically made of aluminium. Aluminium is a material that can attract lightning. For that reason it is advisable to connect the SV-Pro to the ground following **EN 62305**. If the location of the installation already has a lightning protection system, a case study should be carried out, in order to reveal, if the existing lightning protection has to be modified.

For more detailed information it is recommended to consult an expert company in lightning protection.

5.2. Pressure losses

The pressure losses in the SV-Pro are proportional to the air flow per m^2 collector. The graph below shows this relation.



Notice that this pressure loss only refers to the collectors and not to the total pressure loss (SV-Pro plus installation). The pressure loss of the specific installation (incl. pipes, modules etc.) is calculated by adding the losses of the SV-Pro modules and the losses of the specific installation. The losses in the specific installation should be calculated individually for each case.

