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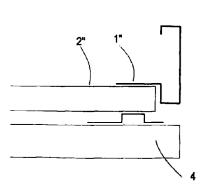
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#### (54)Base for skylights, smoke and heat ventilation systems and any uneveness of the pitch roof

Base for skylights, smoke and heat ventilation systems and any uneveness of the pitch roof, mainly made of fiberglass, with the aim to avoid the stagnation of rain water around said skylights, which are installed on the roofpitch. In fact, said base (1) creates a continuous surface with the insulating cover (2) normally used (corrugated sheet), being installed with the top below the cover and the bottom above it.



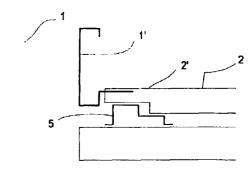


Fig. 3

# Description

#### Technical field

**[0001]** The present invention relates a base for skylights, smoke and heat ventilation systems and any uneveness of the pitch roof.

[0002] In the state of the technique, concerning the above mentioned applications, there are already several skylights and/or smoke and heat ventilation systems to be installed on the roofs of industrial and civil buildings. Said device, when used to light a flat by the daylight, allows uniform brightness, energy saving, resistance to atmospheric agents and a pleasant visual effect. In case of fire such device can be used as smoke and heat ventilation systems to remove dense smoke, toxic gases and heat. As for the manifacturing such device can be easily installed on flat surfaces or on the top of the sloping roofs.

**[0003]** The main drawback of known applications is that said skylights cannot be installed on the pitches of a roof or, more in general, on sloping surfaces, submitted to the rain.

[0004] In fact, the known bases for skylights are made of compressed and bended material, which covers the roof corrugated sheets, and are heavily exposed to the seepage of rain water. This problem cannot be remedied with silicon sealings and, for this reason, the skylights are installed on the top of the roof and not on the pitches.

## Disclosure of the invention

[0005] The invention solves the technical problems above mentioned because it is a base for skylights, heat and smoke ventilation systems, chimneys, etc, with the purpose of avoiding the stagnation of rain water around said skylights and/or other elements sited on the pitch of a roof. In fact, said base is characterised by the fact that it creates a continuous surface with the insulating cover normally used (corrugated sheet), being installed with the top below the cover and the bottom above it (in the lower part of the skylight.

**[0006]** Other aim of the invention is to provide a trampling that can bear the weight of people, for which reason fiberglass or other similar material is used.

[0007] These and other advantages will be pointed out in the detailed description of the invention, which will refer to the figures of the table 1/1 in which a practical example of the base for skylights and some constructive details are given. Both figures are examplifying and not restrictive.

# Way of carrying out the invention

[0008] With reference to the above mentioned tables:

Fig. 1 is the picture of a prototype of the base;

- Fig. 2 shows the section of a standard covering made of corrugated sheet;
- Fig. 3 shows a longitudinal section of the base and the roof:
- Fig. 4 shows, in axonometric projection, the trapezoidal shape of the cross section of the base.

[0009] With reference to Fig. 1 with 1 the base for skylights according to the invention is shown. It is used for skylights installed on the covering of a pitch roof; said cover is made of corrugated sheet 2, which is, as known, the simplest, the cheapest and most used method to make insulating panels. In fact, it does not need maintenance unlike the insulating sheathings. It is, therefore, easy to understand the interest in the installations of skylights on the pitches covered by corrugated sheet. Fig. 2 shows the section of this cover. The typical bending in the corrugated sheet allows to place the insulating material inside the space 3.

#### **Example**

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**[0010]** An example of carrying out the invention is given with the help of figures 3 and 4.

[0011] In Fig. 3 the longitudinal sections of the base 1 and of the roof cover 2 are schematized; as an example, the cover is placed on a roof made of reinforced concrete tiles 4. Once the slope of the pitch has been fixed, the base is placed below the cover 2 in the top part 1' and above the cover in the bottom part 1". The basic features which allow to realize this base (normally made of fiberglass, but also of other materials filled to bear the weight of people), are the following ones:

- the corrugated sheet is cut in the upper part and is replaced by a spacer 5, whose shape is shown in Fig. 3; said spacer replaces the missing sheet for about 40 mm; this height is sufficient for the insertion of the base in fiberglass. The base, the corrugated sheet and the spacer 5 are bolted together or otherwise fastened;
- in order to ensure a perfect continuity between the base and the corrugated sheet and an easy assembly of the base, the latter must have a different cross section between the top and the bottom part, that is, the bottom section must be grater than the top one. In fact, as shown in Fig. 4, the cross section of the base is tapered to the top. Of course, the different cross sections between the top and bottom of the base can be designed in different ways, for instance, a stepped variation.

## **Claims**

55 1. Base for skylights, smoke and heat ventilation systems and any uneveness of the pitch roof, with the purpose of avoiding the stagnation of rain water around said skylights and/or other elements sited

on the pitch of a roof and characterised by the fact that it creates a continuous surface with the insulating cover normally used (corrugated sheet), being installed with the top below the cover and the bottom above it.

2. Base according to the claim 1 characterized by the fact that it is made of fiberglass or other materials suitable to bear the weight of people.

3. Base according to the claim 1 or 2, characterized by the fact that the corrugated sheet is cut (in the upper part) and replaced by a spacer 5, with the shape shown in Fig. 3, for a height sufficient to allow the insertion of the fiberglass base.

4. Base according to one of the previous claims, characterised by a different cross section between the top and the bottom; in particular, being the bottom section greater than the top one.

**5.** Base according to claim 4, characterized by the fact that said cross section of the base is tapered to the top.

6. Base according to claim 4, characterized by the fact that said different cross section between the top and the bottom part can be made in stepped variation. 10

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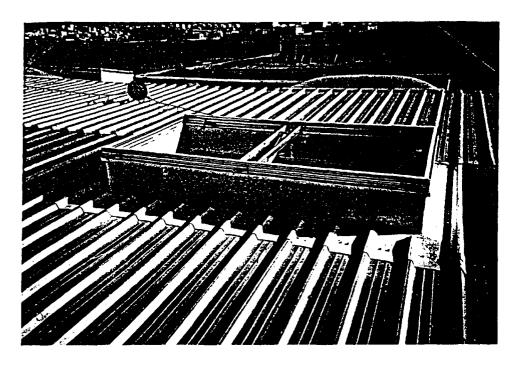


Fig. 1

