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(54) **Insulating tile for applying on roofs, galleries and such like.**

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- (73) Proprietor: **Commercial Roof Service B.V.**
NL-Eefde(NL)
- (72) Inventor: **Van Delzen, Jan Hendrik**
Oranjelaan 20
NL-7211 GK Eefde(NL)
- (74) Representative: **Lips, Hendrik Jan George, Ir.**
et al
HAAGSCH OCTROOIBUREAU Breitnerlaan
146
NL-2596 HG Den Haag(NL)

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Description

The invention relates to an insulating tile for applying on roofs, galleries and such like, said tile comprising a tray made of a synthetic material and consisting of a bottom plate and upstanding side walls, said bottom plate forming the upper surface of the tile when this is applied on a roof, a gallery and such like, said tray being filled with an insulating material.

Such an insulating tile is known from GB-A-2,005,326.

The object of the invention is to improve this known tile and to that end a tile according to the invention is characterized in that the surface of the insulating material lying opposite the bottom plate of said tray is closed by a layer or sheet extending to the upstanding side walls of the tray.

In this way it is prevented that water can reach the insulating material either during storage or afterwards when the tiles are applied on a roof. Said insulating material e.g. consisting of a foamed synthetic material and so being sensitive for moisture.

According to a first embodiment the free surface of the insulating material is covered with a layer of bituminous material and according to a second embodiment the insulating material is covered by a sheet of synthetic material being fixed to the side walls of the tray.

From NL-A-79 07201 it is known to connect tiles on a roof by means of an elastic layer of bituminous material. When tiles according to the above mentioned GB-A-2,005,326 are used the possibility exists that already during storage the insulating material is moistened or that this happens when the tiles are laid down on a not sufficiently flat surface.

From FR-A-1,482,969 a tile is known consisting of an inner supporting plate on the outer surfaces of which is applied a covering. So said plate must have a given strength and it is indicated that it can be made of wood fiber-board. So the construction of said known tile is different from that according to the present invention.

According to an embodiment of the invention the inner side of the tray can be provided with a metal coating or metal foil. By this an additional heat resistance can be obtained.

For a better understanding of the invention, as well as the above and other objects and the nature and advantages of the instant invention, some embodiments thereof will now be described with reference to the attached drawings, it being understood that these embodiments are intended as merely exemplary and in no way limitative.

Fig. 1 shows a plan view of some assembled tiles;

Fig. 2 shows a cross section of an embodiment of a tile according to the invention at an enlarged scale; and

Fig. 3 shows a cross section of another embodiment of a tile according to the invention.

Fig. 1 shows a plan view of two tiles 1 and of a "half" tile 2. By using such tiles 2 a straight edge can be obtained also when using profiled side edges.

In case of the shown embodiment one side of a tile 1 is provided with a recess 3 and at the opposite side is an extension 4. The shape of the recess 3 and of the extension 4 is such that a fixed bond between the tiles is obtained.

The upper surface of a tile can be provided with a not shown profile to prevent that a person will slip when walking on the tiles.

The tile shown in Fig. 2 comprises a tray 9 consisting of a bottom plate 10 and upstanding side walls 11, which tray is filled with the insulating material 12 and is closed by means of the bottom plate 13 which is fixedly connected to the side walls 11 as by means of an adhesive.

The inner surface of the tray 9 and of the bottom plate 13 are covered with a metallic foil or film 14 as indicated by the broken lines. The tray 9 can be filled with grains of perlite which are connected together and to the foil 14 by means of a binding agent.

It is, however, also possible that the insulating material is formed by a foamed synthetic material as e.g. polyurethane.

Fig. 3 shows a tile consisting of a tray 9 as corresponding to the tile of Fig. 2. In case of the tile of Fig. 3, however, the insulating material is covered by means of a layer 15 of a bituminous material. During the production of the tile the tray 9 will be positioned with the open side upwardly, then the tray 9 will be filled with insulating material and then a layer of a bituminous material will be rolled all over the tray and will be pressed against the edges of the side walls of the tray and against the insulating material. In this way an easy and so cheap production of the tiles according to the invention can be reached.

Claims

1. Insulating tile for applying on roofs, galleries and such like, said tile (1,2) comprising a tray (5,9) made of a synthetic material and consisting of a bottom plate (10) and upstanding side walls (11), said bottom plate (10) forming the upper surface of the tile (1,2) when this is applied on a roof, a gallery and such like, said tray (5,9) being filled with an insulating material (6,12), characterized in

that the surface of the insulating material (6,12) lying opposite the bottom plate (10) of said tray (5,9) is closed by a layer (15) or sheet (13) extending to the upstanding side walls (11) of the tray (9).

2. Insulating tile according to claim 1, characterized in that the insulating material (12) is covered by a layer (15) of bituminous material.
3. Insulating tile according to claim 1, characterized in that the insulating material (12) is closed by means of a sheet (13) of synthetic material being fixed to the side walls (11) of the tray (9).
4. Insulating tile according to one of the preceding claims, characterized in that the inner side of the tray (9) is provided with a metal coating or metal foil or film (14).

Revendications

1. Tuile isolante sur des toitures, des balcons et analogues, ladite tuile (1, 2) comprenant un coffre (5, 9) fabriqué en matière synthétique et comprenant une plaque inférieure (10) et des parois latérales verticales (11), ladite plaque inférieure (10) constituant la surface supérieure de la tuile (1, 2), quand celle-ci est posée sur une toiture, un balcon et analogues, ledit coffre (5, 9) étant rempli d'un matériau isolant (6, 12), caractérisée en ce que la surface du matériau isolant (6, 12) se trouvant opposée à la plaque inférieure (10) dudit coffre (5, 9) est fermée par une couche (15) ou feuille (13) s'étendant jusqu'aux parois latérales verticales (11) du coffre (9).
2. Tuile isolante selon la revendication 1, caractérisée en ce que le matériau isolant (12) est recouvert d'une couche (15) en matériau bitumineux.
3. Tuile isolante selon la revendication 1, caractérisée en ce que le matériau isolant (12) est fermé au moyen d'une feuille (13) en matière synthétique à fixer sur les parois latérales (11) du coffre (9).
4. Tuile isolante selon l'une des revendications précédentes, caractérisée en ce que la face intérieure du coffre (9) porte un revêtement métallique ou une feuille métallique ou un film métallique (14).

Patentansprüche

1. Isolierender Ziegel zum Auflegen auf Dächer, Galerien und dergleichen, welcher Ziegel (1,2) eine Mulde (5,9) umfasst, die aus Kunststoff hergestellt ist und aus einer Bodenplatte (10) und aufrechten Seitenwänden (11) besteht, wobei die genannte Bodenplatte (10) die obere Oberfläche des Ziegels (1,2) bildet, wenn dieser auf ein Dach, eine Galerie und dergleichen aufgelegt ist, wobei die genannte Mulde (5,9) mit einem isolierenden Material (6,12) gefüllt ist, dadurch gekennzeichnet, dass die Oberfläche des gegenüber der Bodenplatte (10) der Mulde (5,9) liegenden, isolierenden Materials (6,12) durch eine Schicht (15) oder Platte (13) geschlossen ist, die sich bis zu den aufrechten Seitenwänden (11) des Mantels (9) erstrecken.
2. Isolierender Ziegel gemäss Anspruch 1, dadurch gekennzeichnet, dass das isolierende Material (12) durch eine Schicht (15) aus bituminösem Material bedeckt ist.
3. Isolierender Ziegel gemäss Anspruch 1, dadurch gekennzeichnet, dass das isolierende Material (12) mittels einer Platte (13) aus Kunststoff geschlossen ist, die an den Seitenwänden (11) der Mulde (9) befestigt ist.
4. Isolierender Ziegel gemäss einem der vorhergehenden Ansprüche, dadurch gekennzeichnet, dass die Innenseite der Mulde (9) mit einer Metallverkleidung oder Metallfolie oder -film (14) versehen ist.

FIG. 1

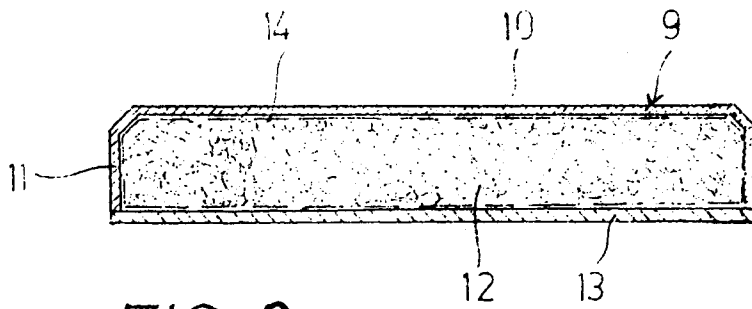
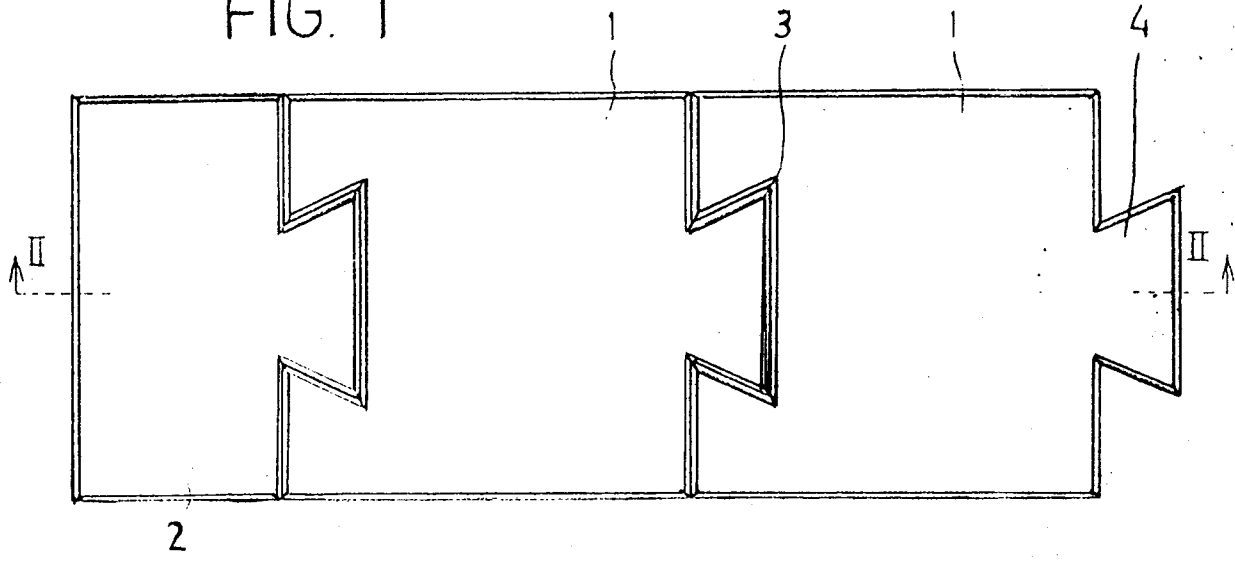


FIG. 2

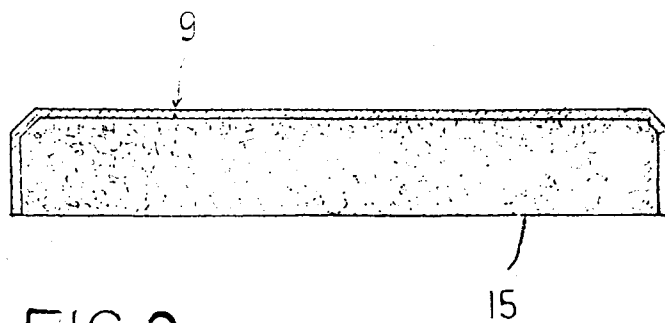


FIG. 3