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(12) # EUROPEAN PATENT SPECIFICATION

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(54) **ELEMENT FOR THE CONSTRUCTION OF ROOFS.**

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GB-A- 816 447
US-A- 3 247 631

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Description

The present invention relates to a roofing element and a transport package of such elements of the kind stated in the precharacterising part of claim 1.

In roof building a support of plywood, moisture resistant paper pulp sheet or roof boarding is usually mounted and is then covered with shingle or a similar water proof coating.

American Patent Specification US-A-3 247 631 reveals a roofing shingle having an adhesive strip on one side and a corresponding groove on the other side. In a shingle stack the adhesive strip of one shingle is accomodated in the groove of the adjacent shingle.

All shingles of the shingle stack face the same way, and the adhesive strip on one shingle of the stack is exposed. Further, the shingle is a roof covering element only with no load supporting capability.

From British Patent Specification GB-A-816 447 a roofing sheet is known, comprising a supporting plate of a thin fibrous or other substantially rigid material, and the roofing felt is attached along one or more lines parallel to the longitudinal sides of the supporting plate. By means of such a roofing sheet it is possible to obtain a roof covering offering considerable advantages in that the roofing sheet is self-supporting and hence may be nailed directly to the battens of the roof without using shutter boards.

In fig. 5 of said British Patent Specification a rectangular fibrous plate is shown, the width of which corresponds to the distance between the battens of the roof to be covered and which is provided with a shingle-like roofing felt provided with crenellations in order to simulate roofing slates. The invention as claimed is intended to savetime by mounting the supporting roof. An advantage of the present invention is that a roofing operation can be carried out in one step by the utilization of roofing elements comprising support plates that are completely or partly covered by a waterproof and weather resistant material. The length, thickness and width of the support plate can be adapted within the scope of claim 1 so as to provide a finished roof that corresponds to prevailing regulations when said elements have been laid on the roof supporting framework.

An especially suitable material for the portion of the roof element forming the support is plywood having a thickness of e. g. approximately 10 mm and a length of approximately 3 m. The width of the supporting plates may vary with the shingle or covering used and its thickness. For elements that are e. g. covered with a shingle layer the width will be in the order of 13-15 cm. The length of the shingle or covering may be larger than that of the support plate.

The roofing elements, thus, consist of a plate onto which a conventional roofing sheet, e. g. shingle, has been attached by adhesion and/or stitching. If desired, said roofing sheet may be crenellated in a conventional manner.

The roofing element and transport package arrangement thereof according to the present invention will be disclosed in detail with reference to the accompanying drawings, wherein fig. 1 shows a roofing element according to the invention in perspective, fig. 2 is a section along line II-II in fig. 1, and fig. 3 shows the element from below. Fig. 4 shows a transport package of two roofing elements.

In the figures 1 is the portion of the element that forms the supporting roof and 2 is the shingle attached to said support. Reference number 3 shows the portion of the sheet that projects from the element and especially shows a lap that will partly cover an element below. A recess 4 extends in the entire lower side of the element and 5 shows suitably arranged adhesive strips of a conventional kind.

Fig. 4 shows how the roofing elements are combined in pairs when packed for transport and storage. Since said elements are provided with the longitudinal recess 4, the adhesive strip 5 that is suitably provided on the underside of shingle 2 will be received within recess 4, so that said two elements will not adhere. In this manner an old problem in connection with such elements is avoided. The roofing element is, thus, characterized by the features stated in the characterizing part of the claim.

The present invention has considerable advantages due to the fact that time is saved by mounting the supporting roof and e. g. the shingle covering in one operation. The manner of mounting the elements will now be disclosed. After mounting the roof frame, the lowermost row of the elements to form the support and covering is provided and secured by clips. Then the next row of elements is mounted in such a manner that the projecting portions 3 e. g. of shingle 2 will partly cover and protect the previously mounted elements. Said second row is also secured by clips.

To facilitate the mounting and securing operation H-shaped clips may be used, wherein the elements are inserted.

In connection with the above indicated method considerable advantages are achieved, namely :

Considerable time is saved due to the fact that the supporting roof and the covering shingle are mounted simultaneously.

Also, safety is enhanced, since the elements can be mounted from « inside », that is a construction worker need not stand on the lowermost part of a smooth and slippery roof as is usual in conventional shingle roofing. It is only necessary to walk on the roof for mounting the ridge of the roof. Then the roof will already be covered by e. g. sand strewn shingles which ensures an excellent foothold.

A delay between the mounting of the support-

ing roof and e. g. shingles is eliminated, which means that the material of the supporting layer will not be moistened due to rain. Such moistening is most unfavourable when conventional shingles are to be mounted on a supporting roof. When there is a time interval between the mounting of the supporting roof and the shingles, the supporting roof is usually covered with felt for protection against rain, and this is avoided by the use of the roofing elements.

It is, thus, possible to carry out the roofing even in rainy weather without any hazard worth mentioning that those portions of the elements that form the support will be exposed to rain, since the elements comprise a protecting layer of shingle.

The buyer is also guaranteed securely attached shingles or the like, since the operation of attaching shingles or the like to the roof support is carried out under controlled conditions in the factory.

The roofing elements are provided with a longitudinal recess 4 as mentioned above. The location of said recess 4 in the rigid board 1 ensures that the adhesive strips 5 will not form an adhering contact between two elements combined as shown in fig. 4. Thus, elements can be packed in a space-saving and rational manner without any hazard of binding together. The recess 4, thus, contributes to make the elements practical and to the afore-said advantages.

Claims

1. A roofing element comprising a plate-like, rigid support (1), which on the side which in use is uppermost is completely or partly covered by a waterproof and weather resistant material (2) that is attached to the support and the width of which is larger than that of the support, so that a projecting, longitudinal lap (3) is formed at least along one longitudinal edge of the support and where the material (2) is provided with at least one suitable adhesive strip, characterized in that the strip is located on the surface of the material (2) facing the support (1), and in that the side of the rigid support (1) which in use is lowermost is provided with a longitudinal recess (4), which when two elements are stacked for transport with their sides which in use are lowermost facing each other, can be arranged to receive the adhesive strip of the other element.

2. A roofing element according to claim 1, characterized in that the length of the material (2) is greater than that of the support.

3. A roofing element according to claim 1 or 2 characterized in that a further adhesive strip (5) is located on the lap (3) in such a position that it faces a cavity defined by the laps and supports of two elements when overlappingly stacked for transport with their supports (1) arranged in a common plane.

4. A transport package of two roofing elements according to any one of claims 1-3, characterized in that the surfaces of the elements which in use are lowermost face each other with the lap of one element overlying the support of the other element and vice versa, and in that an adhesive strip on the lap of one element is received in the recess in the support (1) of the other element and vice versa.

Ansprüche

1. Dachelement mit einem plattenartigen starren Träger (1), der auf der Seite, die bei der Verwendung die oberste ist, vollständig oder teilweise mit einem wasserabstoßenden und wetterbeständigem Material (2) bedeckt ist, das auf dem Träger befestigt ist und dessen Breite größer als jene des Trägers ist, so daß eine vorspringende Längslasche (3) wenigstens entlang einer Längskante des Trägers gebildet wird, und wobei das Material (2) mit wenigstens einem geeigneten Klebstreifen versehen ist, dadurch gekennzeichnet, daß der Streifen auf der Oberfläche des Materials (2) auf der zu dem Träger (1) hinblickenden Seite angeordnet ist und daß die Seite des starren Trägers (1), die bei der Verwendung die unterste ist, mit einer Längsvertiefung (4) versehen ist, die, wenn zwei Elemente für den Transport mit ihren Seiten, die bei der Verwendung die untersten sind, gegeneinander gelegt gestapelt werden, so angeordnet werden kann, daß sie den Klebstreifen des anderen Elementes aufnimmt.

2. Dachelement nach Anspruch 1, dadurch gekennzeichnet, daß die Länge des Materials (2) größer als jene des Trägers ist.

3. Dachelement nach Anspruch 1 oder 2, dadurch gekennzeichnet, daß ein weiter Klebstreifen (5) auf der Lasche (3) in einer solchen Lage angeordnet ist, daß er zu einem Hohlraum hingerichtet ist, der von den Laschen und Trägern zweier Elemente gebildet wird, wenn diese für den Transport mit ihren Trägern (1) in einer gemeinsamen Ebene angeordnet überlappend übereinander gestapelt sind.

4. Transportpackung von zwei Dachelementen nach einem der Ansprüche 1 bis 3, dadurch gekennzeichnet, daß die Oberflächen der Elemente, die bei der Verwendung die untersten sind, gegeneinander liegen, wobei die Lasche eines Elementes über dem Träger des anderen Elementes liegt und umgekehrt, und daß ein Klebstreifen auf der Lasche eines Elementes von der Vertiefung in dem Träger (1) des anderen Elementes aufgenommen ist und umgekehrt.

Revendications

1. Elément de toiture comprenant un support rigide (1) en forme de plaque qui sur le côté d'utilisation supérieur est complètement ou partiellement recouvert par une matière (2) étanche et résistant aux intempéries, fixée au support et dont la largeur est supérieure à celle du support si bien qu'un pan (3) longitudinal, faisant saillie

est formé au moins le long d'un bord longitudinal du support et dans lequel la matière (2) comprend au moins une bande adhésive appropriée, caractérisé en ce que la bande est disposée sur la surface de la matière (2) tournée vers le support (1) et en ce que le côté du support rigide (1) qui en service est le plus bas est pourvu d'un évidement longitudinal (4) qui lorsque deux éléments sont empilés pour le transport avec leurs côtés d'utilisation inférieurs en vis-à-vis, peut être agencé pour recevoir la bande adhésive de l'autre élément.

2. Elément de toiture selon la revendication 1, caractérisé en ce que la longueur de la matière (2) est supérieure à celle du support.

3. Elément de toiture selon l'une des revendications 1 ou 2, caractérisé en ce qu'une autre bande adhésive (5) est disposée sur le pan (3) dans une position telle qu'elle se trouve en face d'une cavité définie par les pans et supports des deux éléments lorsqu'ils sont empilés en se recouvrant pour le transport, leurs supports (1) étant disposés dans un plan commun.

4. Emballage pour le transport de deux éléments de toiture selon l'une quelconque des revendications 1 à 3, caractérisé en ce que les surfaces des éléments qui en service sont le plus bas se trouvent en vis-à-vis, le pan d'un élément recouvrant le support de l'autre élément et vice versa et en ce qu'une bande adhésive sur le pan d'un élément est reçue dans l'évidement du support (1) de l'autre élément et vice versa.

Fig. 1.

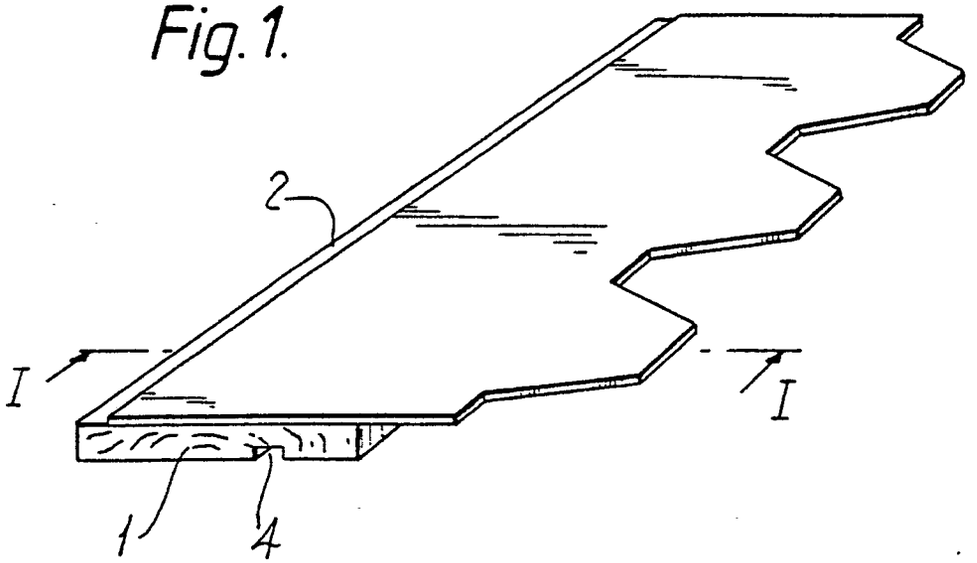
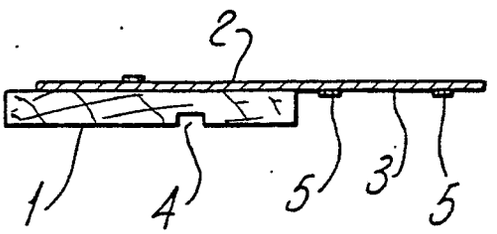


Fig. 2.



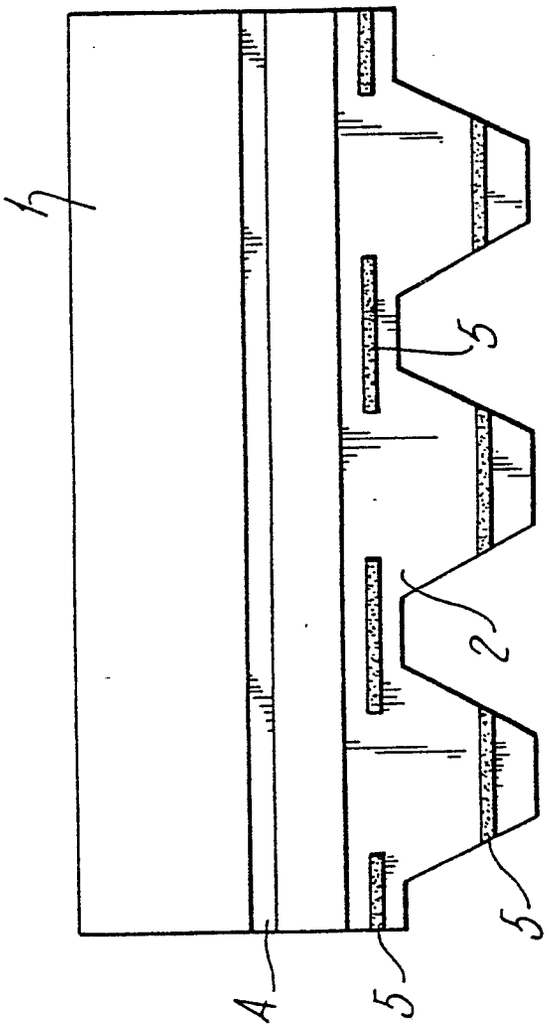


Fig.3.

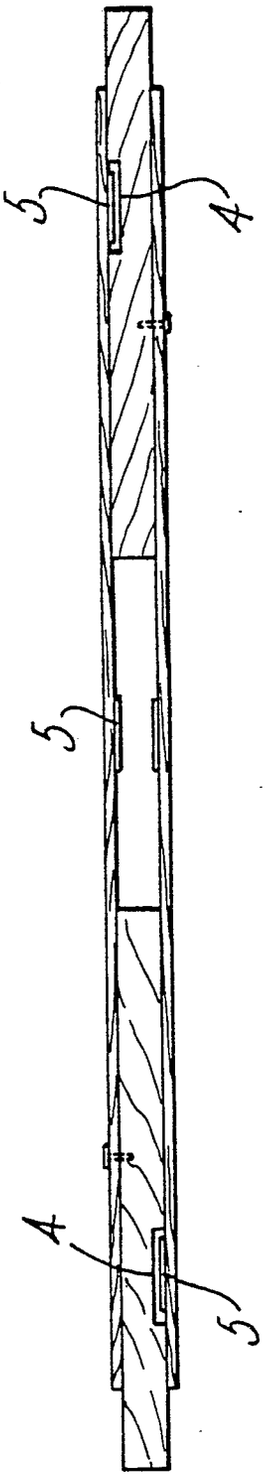


Fig.4.