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(54) METHOD FOR ATTACHING BRICK SLIPS

VERFAHREN ZUR BEFESTIGUNG VON KLINKERN

PROCÉDÉ POUR LA FIXATION DE BRIQUETTES

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(73) Proprietor: **Easylotionwall B.V.
5661 NG, GELDROP (NL)**

(72) Inventor: **VAN DE NOSTRUM, Robertus Adrianus
Maria
NL-5071 VW Udenhout (NL)**

(74) Representative: **Jacobs, Bart et al
Arnold & Siedsma
Bezuidenhoutseweg 57
2594 AC The Hague (NL)**

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Description

[0001] The present invention relates to a method for attaching brick slips. The invention is particularly suitable for attaching thin brick slips.

[0002] The use of so-called brick slips to create a wall with the appearance of a brick-built wall is not new. Covering a wall with brick strips, other brick slips or half bricks is less labour-intensive than building a wall from whole bricks. Brick slips are therefore used regularly, both for building of new houses and for renovation, and for both inside and outside walls.

[0003] The prior art brick slips generally have a thickness of about 20 to 25 mm, while half bricks are about 45 to 50 mm thick. Brick slips and half bricks are sawn mechanically from original facing bricks with hand-moulded finish. They therefore have the same properties and qualities as whole bricks but are much lighter and, consequently, easier to process. Brick slips are already often used in outside walls which have to be provided with an additional insulation layer. Arranging a layer of insulating material against an existing wall and subsequently erecting a wall from whole bricks results in very thick walls and furthermore in an unnecessarily heavy structure.

[0004] Known therefore for the purpose of insulating outside walls are special prior art insulating plates provided with a profile consisting of standing edges or ridges with a height of generally about 5-7 mm and a width corresponding to the width of a usual joint for a wall erected from bricks. These carriers are attached to a wall for insulating, for instance using hammer-drive screws, after which the brick slips are adhered to the carrier in the desired bond.

[0005] The standing edges ensure that the brick slips cannot slip downward and that a uniform width of the horizontal joint is guaranteed.

[0006] The person arranging the brick slips will him/herself have to ensure that the vertical joints between the bricks have a uniform width.

[0007] As already stated, the brick slips according to the prior art generally have a thickness of 20 to 25 mm. In an attempt to take additional measures for saving weight and wall thickness, a brick slip supplier offers brick slips with a thickness of only 10 mm, which results in a weight-saving of 50% or more on the brick slips to be arranged.

[0008] When brick slips with a thickness of 10 mm are arranged on the prior art carriers provided with edges or ridges, because of the small difference between the thickness of the brick slip and the height of the horizontal edges or ridges on the carrier there is an insufficiently deep groove for arranging joint material. The usual joint materials require a joint thickness of at least 5 mm, wherein the joint must generally also be recessed to some extent relative to the front surface of the brick slips. The prior art carriers are not therefore suitable for processing brick slips with a thickness of only about 10

mm.

[0009] A method for attaching brick slips is known from US4947600A. A further method is known from GB2391024A.

[0010] It is an object of the invention to provide a solution to the above problem. It is a further object of the invention to provide a solution with which brick slips can be placed in simpler manner.

[0011] According to a first aspect of the invention, at least one of the above stated objects is at least partially achieved by means of the method as defined in claim 1.

[0012] The invention provides a device that is provided with a plate-like carrier, preferably consisting of heat-insulating material, the carrier serving as substrate for attaching rows of brick slips to the device. The carrier comprises a groove here between two successive strips which are intended for the purpose of arranging rows of brick slips. The width of the strips corresponds to a width of the brick slips to be arranged on the carrier.

[0013] The device provides a substrate on which thin brick slips can be arranged and wherein a wall made from these thin brick slips can be provided with a joint seam which has sufficient thickness to enable compliance with the requirements in respect of the joint thickness.

[0014] The groove preferably has a width substantially corresponding to the desired width of the joint between the rows of brick slips. The groove has for instance a width of at least 1 mm and at most 30 mm, and a depth of at least 1 mm and at most 20 mm. The groove can be given several forms, such as a dovetail.

[0015] The invention also provides an assembly comprising the above stated device and a support lath suitable for placing in releasable manner in the groove, wherein the support lath forms a support for the brick slips and/or serves to align the brick slips during attachment of the brick slips to the carrier. The support lath forms a support for the brick slips during attachment of the brick slips to the carrier in order to prevent the brick slips slipping downward during attachment of the brick slips, for instance during adhesion and/or curing of the adhesive.

[0016] The support lath can be placed slidably in the groove.

[0017] It is also advantageous for the support lath to be provided with a scale division.

[0018] The method of the invention, as defined in claim 1, comprises the steps of providing the assembly as defined above, placing the support lath in a groove in the carrier, attaching a row of brick slips to the carrier, for instance by means of adhesion, wherein the support lath forms a support for the brick slips and/or serves to align the brick slips during attachment of the brick slips to the carrier.

[0019] The method further comprises the steps of taking the support lath out of the groove and placing the support lath at a further position in the groove or sliding the support lath to the further position in the groove and subsequently placing a further row of brick slips on the

carrier, for instance by means of adhesion, wherein the support lath forms a support for the brick slips and/or serves to align the brick slips during attachment of the brick slips to the carrier.

[0020] The method preferably comprises the steps of placing a plurality of parallel rows of brick slips and pointing the placed brick slips for the purpose of at least partially filling the grooves and a space between the brick slips.

[0021] The device according to the invention will now be discussed and elucidated with reference to several figures. Herein:

Figure 1 is a schematic front view of an embodiment of the device according to the invention, which is partly provided with brick slips;

Figure 2 is a schematic cross-section of the embodiment of the device shown in front view in figure 1;

Figure 3 shows a detail of a schematic cross-section of an exemplary embodiment of the device according to the invention.

[0022] In the figures and in this description the same or similar parts have the same or similar reference numerals.

[0023] Figure 1 is a schematic front view of an embodiment of the device according to the invention, which is partly provided with brick slips. In view of the desired heat-insulating effect of the device, in a preferred embodiment the device comprises a plate-like carrier 1 comprising for instance polystyrene or other insulating material, wherein the device, and therefore the material applied as carrier 1, must have sufficient strength and stiffness to be able to bear the weight of brick slips adhered thereto. Figure 1 also shows schematically that in this embodiment the device comprises, in the vicinity of the lower edge of carrier 1, two substantially horizontal rows of brick slips 2 arranged on the carrier.

[0024] In the embodiment shown schematically in figure 1 the carrier is provided with horizontal grooves 3, wherein between two successive grooves is situated a strip for attaching brick slips which has a width or height (both terms refer here to the shortest distance between two successive grooves 3) which is substantially equal to the width of a brick slip.

[0025] The width of the grooves is substantially equal to the width of the joint desired between the brick slips. In some current embodiments of the device the groove 3 has a width of 8 to 10 mm.

[0026] Figure 2 is a schematic cross-section along the line A-A of the embodiment of the device shown in front view in figure 1. For the sake of clarity of the drawing the two brick slips 2 shown in cross-section are not hatched.

[0027] Owing to the fact that the device according to the invention comprises grooves 3, by making use of this device brick slips can also be applied with a thickness for instance of only about 10 mm. Owing to the groove 3 present at the position of the horizontal joint to be ar-

ranged between the brick slips, a joint can be created with a joint thickness which is even greater than the thickness of the brick slip, and in any case meets the requirements set by the suppliers of pointing agents in respect of the minimum joint thickness.

[0028] Figure 3 shows a detail of a schematic cross-section of an exemplary embodiment of the device according to the invention, wherein brick slips 2 which have been attached to carrier 1 of the device on the lowest and the lowest strip but one of the device are shown in cross-section. Figure 3 also shows that in the joint located between the two brick slips an object of rectangular cross-section is arranged in groove 3.

[0029] In an embodiment this object comprises an aid for use during arranging of brick slips, further referred to as support lath 4. In a preferred embodiment of the method for use of the device according to the invention support lath 4 fulfils two functions, i.e. functioning as support rail or support on which the brick slips to be arranged on the device, for instance by means of adhesion, can rest, whereby the brick slips are horizontally aligned at least substantially as well as possible and do not slip downward. The second function which can be fulfilled by support lath 4 is simple positioning of brick slips by arranging one or more scale divisions and/or other markings on the support lath so as to obtain the correct bond.

[0030] The invention has the provision that support lath 4 has a thickness such that the support lath preferably fits with some clamping force into a groove 3 and that the groove is sufficiently deep that the support lath cannot unintentionally come out of the groove while brick slips are being arranged. In an exemplary embodiment groove 3 has a depth of about 7 mm. The invention however has the provision that groove 3 can have any width and thickness that is desirable or considered useful.

[0031] In the simplest embodiment support lath 4 can comprise a wooden lath. Support lath 4 can have any length that is desirable or useful from a practical viewpoint. When use is made of a support lath with a length shorter than the width of carrier 1 of the device, the support lath will at some point have to be pushed through the groove to a new position. The support lath can however also be taken out of the groove and subsequently re-placed at a different position in the groove.

[0032] Since it is inherent to the object of the invention that brick slips are attached to the device using an adhesive, for instance a cement-bound adhesive or a hybrid polymer adhesive, the invention has the provision that support lath 4, which can come into contact with the adhesive used during the arranging of brick slips, is manufactured in a preferred embodiment from a material, for instance a type of plastic, to which the usual adhesives for attaching the brick slips to a carrier 1 do not adhere.

[0033] In addition to creating depth for the joints and providing the option of temporarily arranging a support lath, grooves 3 in the device according to the invention also provide the option of being able to arrange the device on a wall in simple manner. This can be achieved by

laying in a groove a strip with a width substantially corresponding to the width of a groove 3 and with a length greater than the width of carrier 1 of the device and providing the strip extending directly beyond carrier 1 of the device with holes through which screws can be arranged in order to attach the brick slips, and therefore the device, to a wall. It is however also possible for the strip to be no longer than the width of carrier 1 of the device. The strip can in this case function as a support for a screw and/or anchoring which is arranged through the strip and carrier 1 and with which the device is attached to a wall.

[0034] In an embodiment the substrate is manufactured from expanded polystyrene (EPS), extruded polystyrene (XPS), rockwool or other insulating materials. It is also possible to use a cement-bound plate. The size of the substrate preferably corresponds to a multiple of the size of the brick slips for placing, also allowing for the joints.

[0035] In a further or alternative embodiment the brick slips are ceramic brick slips, natural stone slips, plastic brick slips or composite brick slips. The dimensions can be chosen from 200 x 50 mm, 210 x 70 mm or 200 x 100 mm.

[0036] In a further or alternative embodiment the support lath is manufactured from wood, high-pressure laminate, iron, aluminium, plastic or a type of composite. The support lath can have many dimensions, from 1 mm in thickness to the thickness of the desired joint. Any length of support lath can be applied, although a multiple of the length of the brick slip plus joint is recommended. The width of the support lath can vary, although in most cases it is usual to give the support lath the groove depth plus the thickness of the brick slip.

[0037] The exemplary embodiments of the device according to the invention shown in this description and in the figures are only several of the many embodiments possible within the scope of the invention and must therefore be deemed non-limitative.

Claims

1. Method for placing brick slips, comprising of:

providing an assembly, said assembly comprising:

a device provided with a plate-like carrier (1), preferably consisting of heat-insulating material, the carrier serving as substrate for attaching rows of brick slips (2) to the device, wherein the carrier (1) comprises a groove (3) between two successive strips which are intended for the purpose of arranging rows of brick slips, wherein the width of the strips substantially corresponds to a width of the brick slips to be arranged on the carrier; and

a support lath (4) suitable for placing in releasable manner in the groove, wherein the support lath, when placed in the groove, forms a support for the brick slips and/or serves to align the brick slips during attachment of the brick slips to the carrier, wherein the support lath forms a support for the brick slips during attachment of the brick slips to the carrier in order to prevent the brick slips slipping downward during attachment of the brick slips, for instance during adhesion and/or curing of the adhesive, wherein the support lath can be placed slidably in the groove;

placing the support lath in a groove in the carrier; attaching a row of brick slips to the carrier, for instance by means of adhesion, wherein the support lath forms a support for the brick slips and/or serves to align the brick slips during attachment of the brick slips to the carrier, **characterized by** taking the support lath out of the groove and placing the support lath at a further position in the groove or sliding the support lath to the further position in the groove; and placing a further row of brick slips on the carrier, for instance by means of adhesion, wherein the support lath forms a support for the brick slips and/or serves to align the brick slips during attachment of the brick slips to the carrier.

2. Method as claimed in claim 1, further comprising of:

placing a plurality of parallel rows of brick slips; pointing the placed brick slips for the purpose of at least partially filling the grooves and a space between the brick slips.

3. Method as claimed in claim 1 or 2, wherein the groove (3) has a width substantially corresponding to the desired width of the joint between the rows of brick slips.

4. Method as claimed in any of the preceding claims, wherein the groove has a width of at least 1 mm and at most 30 mm, and a depth of at least 1 mm and at most 20 mm.

5. Method as claimed in any of the previous claims, wherein the support lath is provided with a scale division.

Patentansprüche

1. Verfahren zum Anbringen von Ziegelflachverblender, umfassend:

Bereitstellen einer Anordnung, wobei die Anordnung umfasst:

eine Vorrichtung, die mit einem plattenförmigen Träger (1) versehen ist, der vorzugsweise aus wärmeisolierendem Material besteht, wobei der Träger als Substrat zum Befestigen von Reihen von Ziegelflachverblendern (2) an der Vorrichtung dient, wobei der Träger (1) eine Nut (3) zwischen zwei aufeinanderfolgenden Streifen umfasst, die zum Anordnen von Reihen von Ziegelflachverblendern vorgesehen sind, wobei die Breite der Streifen im Wesentlichen einer Breite der Ziegelflachverblender entspricht, die an dem Träger angeordnet werden sollen; und
 eine Stützleiste (4), die zum lösbaren Anordnen in der Nut geeignet ist, wobei die Stützleiste, wenn sie in der Nut angeordnet ist, eine Stütze für die Ziegelflachverblender bildet und/oder dazu dient, die Ziegelflachverblender bei Befestigung der Ziegelflachverblender an dem Träger auszurichten, wobei die Stützleiste bei Befestigung der Ziegelflachverblender an dem Träger eine Stütze für die Ziegelflachverblender bildet, um zu verhindern, dass die Ziegelflachverblender bei Befestigung der Ziegelflachverblender nach unten rutschen, zum Beispiel beim Kleben und/oder Härten des Klebstoffs, wobei die Stützleiste verschiebbar in der Nut anbringbar ist;
 Anbringen der Stützleiste in einer Nut in dem Träger;
 Befestigen einer Reihe von Ziegelflachverblendern an dem Träger, zum Beispiel mittels Kleben, wobei die Stützleiste eine Stütze für die Ziegelflachverblender bildet und/oder dazu dient, die Ziegelflachverblender bei Befestigung der Ziegelflachverblender an dem Träger auszurichten, **gekennzeichnet durch**,
 Entnehmen der Stützleiste aus der Nut und Anbringen der Stützleiste an einer weiteren Position in der Nut oder Schieben der Stützleiste zu der weiteren Position in der Nut; und
 Anbringen einer weiteren Reihe von Ziegelflachverblendern an dem Träger, zum Beispiel mittels Kleben, wobei die Stützleiste eine Stütze für die Ziegelflachverblender bildet und/oder dazu dient, die Ziegelflachverblender bei Befestigung der Ziegelflachverblender an dem Träger auszurichten.

2. Verfahren nach Anspruch 1, ferner umfassend:

Anbringen einer Mehrzahl von parallelen Reihen von Ziegelflachverblendern;
 Ausrichten der angebrachten Ziegelflachverblender, um die Nuten und einen Raum zwischen den Ziegelflachverblendern wenigstens teilweise zu füllen.

3. Verfahren nach Anspruch 1 oder 2, wobei die Nut (3) eine Breite aufweist, die im Wesentlichen der angestrebten Breite der Verbindung zwischen den Reihen der Ziegelflachverblender entspricht.
4. Verfahren nach einem der vorstehenden Ansprüche, wobei die Nut eine Breite von wenigstens 1 mm und höchstens 30 mm aufweist und eine Tiefe von wenigstens 1 mm und höchstens 20 mm.
5. Verfahren nach einem der vorstehenden Ansprüche, wobei die Stützleiste mit einer Skaleneinteilung versehen ist.

Revendications

1. Procédé destiné à placer des briques de revêtement mural, comprenant les étapes consistant à :

fournir un ensemble, ledit ensemble comprenant :

un dispositif doté d'un support similaire à une plaque (1), constitué de préférence d'un matériau isolant thermique, le support servant de substrat destiné à fixer des rangées de briques de revêtement mural (2) sur le dispositif, dans lequel le support (1) comprend une rainure (3) située entre deux bandes successives qui sont prévues de façon à agencer des rangées de briques de revêtement mural, dans lequel la largeur des bandes correspond sensiblement à la largeur des briques de revêtement mural à agencer sur le support ; et
 une latte de support (4) appropriée afin d'être placée de manière libérable dans la rainure, dans lequel la latte de support, une fois placée dans la rainure, forme un support pour les briques de revêtement mural et / ou sert à aligner les briques de revêtement mural au cours de la fixation des briques de revêtement mural sur le support, dans lequel la latte de support forme un support pour les briques de revêtement mural au cours de la fixation des briques de revêtement mural sur le support de façon à empêcher les briques de revêtement mural de glisser vers le bas au cours de la fixation des briques de revêtement mural, par

exemple au cours de la prise et / ou du durcissement de l'adhésif, dans lequel la latte de support peut être placée de manière coulissante dans la rainure ;

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placer la latte de support dans une rainure dans le support ;

fixer une rangée de briques de revêtement mural sur le support, par exemple par adhérence, dans lequel la latte de support forme un support pour les briques de revêtement mural et / ou sert à aligner les briques de revêtement mural au cours de la fixation des briques de revêtement mural sur le support, **caractérisé par** les étapes consistant à :

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sortir la latte de support de la rainure et placer la latte de support au niveau d'une autre position dans la rainure, ou faire glisser la latte de support vers l'autre position dans la rainure ; et

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placer une autre rangée de briques de revêtement mural sur le support, par exemple par adhérence, dans lequel la latte de support forme un support pour les briques de revêtement mural et / ou sert à aligner les briques de revêtement mural au cours de la fixation des briques de revêtement mural sur le support.

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2. Procédé selon la revendication 1, comprenant en outre les étapes consistant à :

placer une pluralité de rangées parallèles de briques de revêtement mural ;
jointoyer les briques de revêtement mural de façon à remplir en partie au moins les rainures et l'espace entre les briques de revêtement mural.

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3. Procédé selon la revendication 1 ou la revendication 2, dans lequel la rainure (3) présente une largeur qui correspond sensiblement à la largeur souhaitée du joint entre les rangées de briques de revêtement mural.

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4. Procédé selon l'une quelconque des revendications précédentes, dans lequel la rainure présente une largeur au moins égale à 1 mm et tout au plus égale à 30 mm, et une profondeur au moins égale à 1 mm et tout au plus égale à 20 mm.

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5. Procédé selon l'une quelconque des revendications précédentes, dans lequel la latte de support est dotée d'une graduation.

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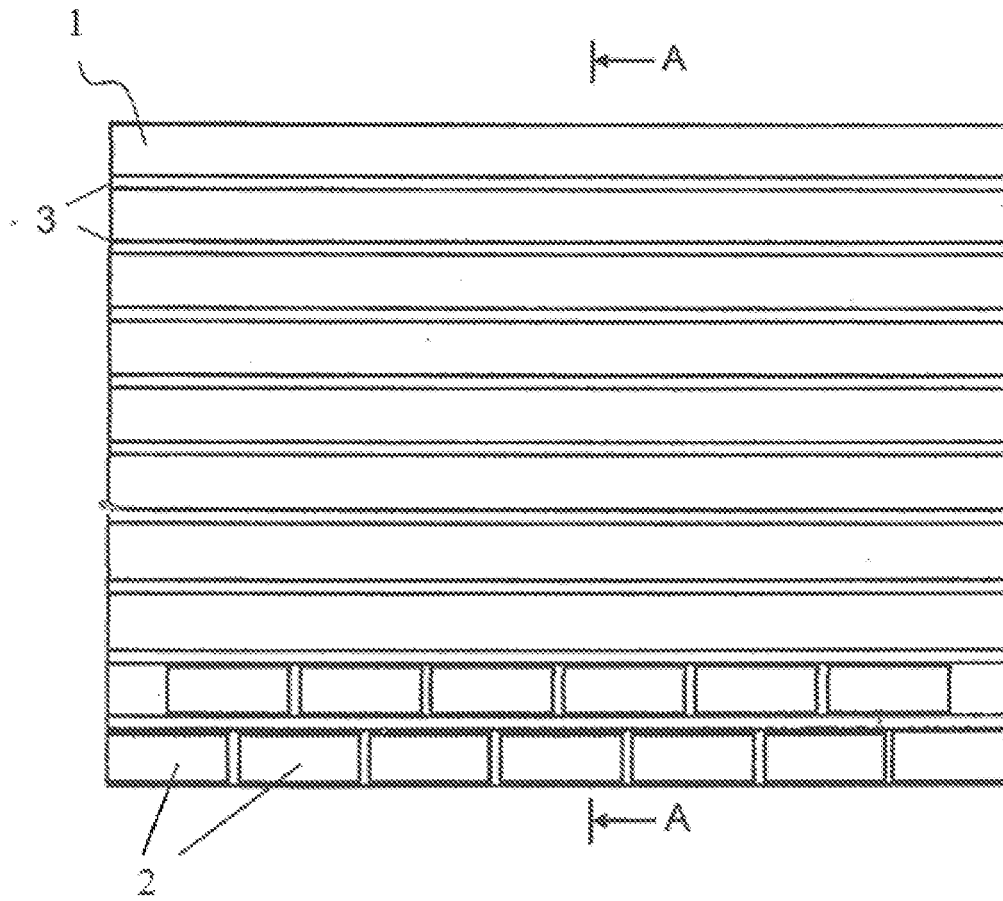


Fig.1

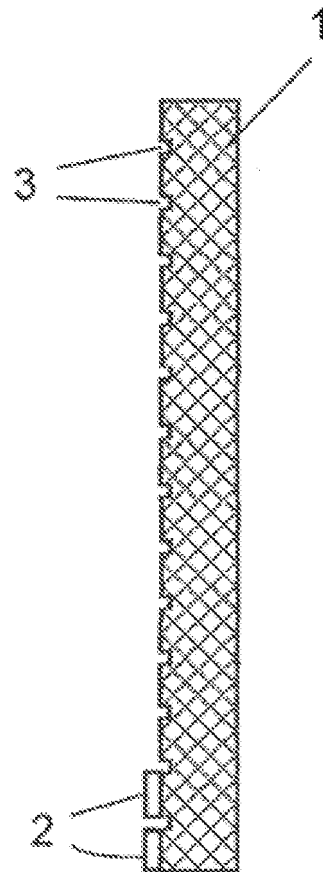


Fig.2

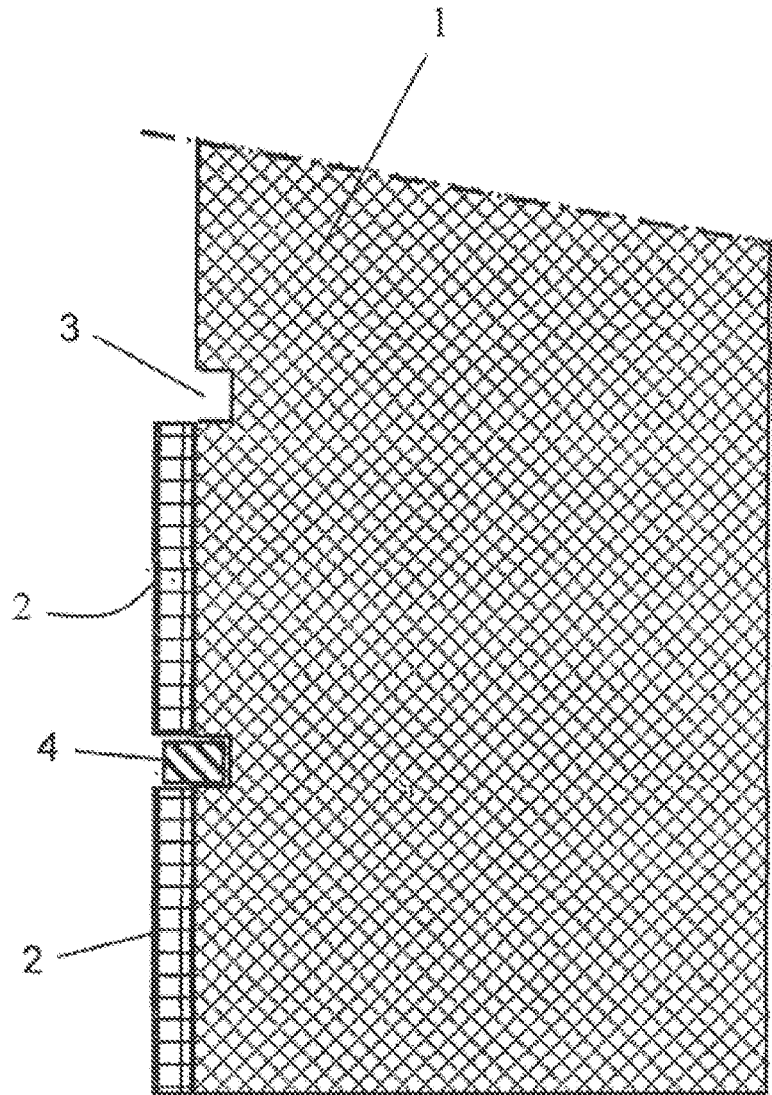


Fig.3

REFERENCES CITED IN THE DESCRIPTION

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