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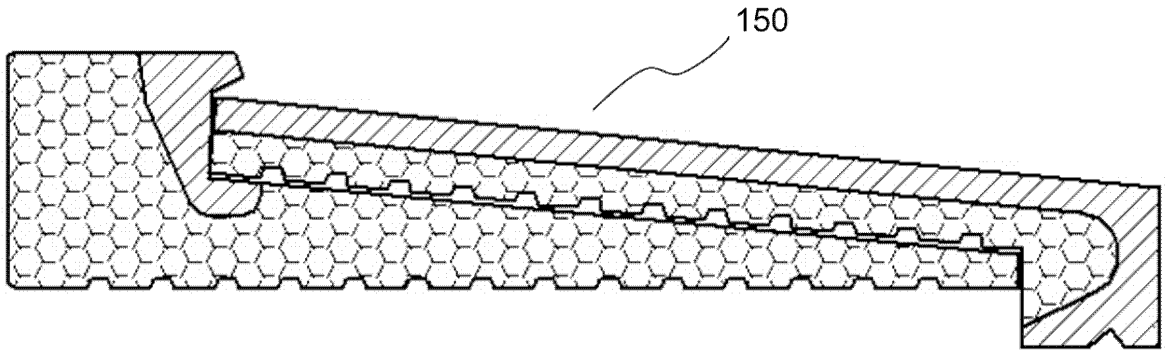
(54) **ADJUSTABLE WINDOW SILL**

(57) The invention relates to an adjustable window sill substructure, an adjustable window sill cover plate and an adjustable window sill assembly comprising said substructure and cover plate. The invention further relates to the use of substructure, cover plate and assembly for preparing a door step or parts thereof.

Fig. 3



EP 3 095 945 A1

Description

Field of the invention

[0001] The invention relates to an adjustable window sill substructure, an adjustable window sill cover plate and an adjustable window sill assembly comprising said substructure and cover plate. The invention further relates to the use of substructure, cover plate and assembly for preparing a door step or parts thereof.

Background of the invention

[0002] The prior art includes a variety of sill assemblies which have been designed to be installed as window sills. In order to take the different dimensions of the window reveal, adjustable multi-part window sills has been developed that can be adjusted at the time of fitting to the respective window reveal.

[0003] The adjustable window sills of prior art mostly have an elongated unitary body with an adjustable covering cap.

[0004] The EP 1 788 182 B1 teaches a window reveal part made from two parts that can be adjusted to form the basic structure of a window sill including inner window sill, window support frame and outer window sill. This window reveal part has to be complemented with several further elements in order to obtain the final window sill. Furthermore, only the inner window can be adjusted in its depth, and thereby the depth of the outer window sill is restricted to a predefined dimension.

[0005] The French patent FR 1 574 678 discloses an outer window sill made from two elements, whereby the two elements are lying one on another likes roof tiles. This window sill can be adjusted only in a limited way to the different depths of the window reveal. Furthermore, the window sill of said patent has poor insulation properties.

[0006] Hence, there is still a need for an improved adjustable window sill with good insulation properties and high adaptability. The objective of the present invention thus is to provide an adjustable window sill which overcomes at least one of the above mentioned disadvantages.

[0007] This problem is solved by provision of a window sill assembly and its constituent parts, namely the window sill substructure and the window sill cover plate. Specific embodiments are subject matter of further independent claims.

Summary of the invention

[0008] In a first aspect the invention provides an adjustable window sill substructure comprising a wedge shaped first portion associated with the window reveal and a cuboid second support portion for the window frame, wherein the first portion and the second portion have a common basis, and wherein the adjustable window sill structure is an insulating structure comprising at least one segment made from rigid insulation material and at least one segment made from water resistant hard construction material.

[0009] The window sill substructure of the invention has several advantages over the prior art equivalents.

[0010] The window sill substructure of the invention can be adjusted in three ways: At first the substructure can be cut lengthwise at the wedge shaped portion in order to adapt it to different depth of the window reveal. Secondly, the substructure can be cut laterally in order to adapt it to the different length of the respective window sill. Thirdly, also the cuboid second support portion can be cut at its back side in order to be adapted to a window sill use or even a door step use. As such it has an enormous flexibility of application.

[0011] Due to the presence of the light-weight insulation material, the overall weight of the window sill substructure is considerably reduced, so that it can be easily transported and installed.

[0012] Due to the segment made from rigid insulation material the window sill substructure has good insulation property.

[0013] Hereby, the skilled person can refer to a broad spectrum of foamed insulation materials, which can be selected on the specific requirements on site.

[0014] Due to its segment made from water resistant hard construction material, the substructure is protected in its uncovered parts from environmental influences, resulting in a durable window sill construction.

[0015] Also here, the broad spectrum of water resistant hard construction materials allows selecting the optimal material with regard to costs, aesthetic appearance and durability.

[0016] Since the two diverse demands, namely insulation and usability for exterior facings are combined within one structure, further parts and joining procedures are not necessary.

[0017] The adjustability for the window reveal depth is given by the wedge shaped first portion which can be cut lengthwise in order to accommodate for the required dimensions of the window sill. Hence, the prefabricated window sill substructures can be easily adjusted on the site of construction.

[0018] Since the window sill substructure is based on known building materials, it can be easily produced in a cost efficient manner.

Detailed description of the invention

[0019] Regarding the adjustable window sill substructure of the invention it is preferred that the at least one segment which is made from rigid insulation material and the at least one segment which is made from water resistant hard construction material are connected by a permanent and form-locking connection.

[0020] The term "rigid insulation material" is defined in the context of the invention as a single-piece solid insu-

lation material. Thus it is clearly distinct from loose-fill insulation materials such as perlite or cellulose and from the single-piece but highly compressive insulation materials such as the rock or slag wool.

[0021] In a preferred embodiment of the invention the window sill substructure consists of one segment which is made from rigid insulation material and of one segment which is made from water resistant hard construction material.

[0022] In one embodiment, this permanent and form-locking connection is performed by using a bonding agent such as an adhesive. Hereby, the two segments are produced separately and thereafter are joined together to yield the window sill substructure.

[0023] The optimal bonding agent is selected based on the distinct building materials of the two segments. For example, when using polystyrol in combination with concrete, a poly vinyl acetate glue might be used.

[0024] In a further preferred embodiment the connection between the rigid insulation material and the hard construction material is given without any further bonding agent but using the adhesive properties of the rigid insulation material and/or the hard construction material.

[0025] For this embodiment the connection is performed directly by the production process of the substructure. For example, when starting with a pre-shaped part made from porous insulation material such polystyrol foam, the flowable concrete as hard construction material can be poured onto the porous insulation material and will also penetrate into the porous insulation material. As a result the concrete and the porous insulation material, being preferably extruded or expanded polystyrol (XPS or EPS) will exhibit a firm connection.

[0026] In a preferred embodiment of the invention the adjustable window sill substructure is characterized in that at least the common basis of the first and the second portion and the backside of the second portion are made of a rigid insulation material, and furthermore at least the front side of the second portion is made of a water resistant hard construction material. Due to the fact that the common basis of the first and second portion is made from rigid insulation material, this insulating segment constitutes a continuous insulation strip that insulates the interior of the house from the exterior eliminating any thermal bridge effect.

[0027] In a preferred embodiment the cuboid second support portion for the window frame is build by the insulating foam (located at the back side of the substructure) and the hard construction material (located at the front side of the cuboid support function)

[0028] It is advantageous that for the substructure the upper surface of the wedge shaped first portion and its base form an angle of between 2.8° and 9°, preferably of between 3° and 7° and most preferably of 5.7°. Due to this angle, the water properly drains off the overlying cover plate to protect the window sill.

[0029] In one embodiment of the invention the adjustable window sill substructure has one or more lengthwise grooves within the common basis of the first and second portion. These grooves can fulfill two functions: At first they can retain any bonding agent which is used for joining the substructure to the underground, being preferably the bottom side of the window reveal. Secondly, the grooves can serve as orientation (or even as a predetermined breaking point) when cutting the substructure to the desired depth.

[0030] In a preferred embodiment the water resistant hard construction material covers the front side and possesses in its upper part a protruding nose or extension, which preferably is located in the upper front edge. Said nose or extension towers above the window sill cover plate and thereby prevents water penetrating between the cover plate and the substructure. Furthermore, it protects the window frame against water on the cover plate being blown by the wind towards the window.

[0031] In a preferred embodiment of the invention the first portion and the second portion of the adjustable window sill substructure are made of a rigid insulation material with only a C-shaped structure of the water resistant hard construction material covering the front side and the anterior upper side of the first portion and the interconnecting corner of the first and the second portion. This specific embodiment is useful for a combination with a window sill cover plate lying on the substructure and which is then reaching up to said C-shaped structure. By this means, the upper part of the C-shaped structure is given by the above described nose or extension towering over the cover plate.

[0032] In a more preferred embodiment said C-shaped structure as made from the hard construction material comprises a feet-like enlargement. This increases the stability of the overall construction, since the load of the window, which sits on top of said C-shaped structure is shared on a bigger surface.

[0033] It is further preferably that the C-shaped structure comprises a backside which at least in its lower part is inclined rearwards. This reduces the formation of entrapped air when casting the C-shaped structure with a flowable construction material such as concrete.

[0034] In a special embodiment the C-shaped structure comprises both, the feet-like enlargement and the backside being inclined rearwards.

[0035] In this combination, the hard construction material is confined to only those parts of the substructure that are oriented outwardly. Thereby the insulation properties are maximized, and the more costly hard construction material minimized with out loosing durability and weather-resistance.

[0036] The window sill substructure can be combined with various window sill cover plates of the prior art. This plate can be made from e.g. plastics, wood, stone or concrete. Furthermore, a multilayer cover plate could be used, which is preferably a cover plate with a water resistant hard layer as upper layer and an insulation layer as lower layer.

[0037] In the most preferred embodiment of the inven-

tion the window sill substructure is combined with the window sill cover plate of the invention as described in the following.

Window sill cover plate

[0038] In the second aspect the invention provides an adjustable window sill cover plate comprising a plate shaped portion and an angular portion, wherein the adjustable window sill structure is an insulating structure comprising at least one segment made from rigid insulation material and at least one segment made from water resistant hard construction material.

[0039] With regard to the use of the rigid insulation material and the water resistant construction material, the advantages as described for the substructure of the invention also apply here.

[0040] Also the window sill cover plate of the invention can be adjusted in two ways: At first the cover plate can be cut lengthwise in order to adapt it to different depth of the window reveal. Furthermore, the cover plate can be cut in cross to adapt it to the different length of the respective window sill. As such it has an enormous flexibility of application.

[0041] Due to the presence of the light-weight insulation material, the overall weight of the window sill cover plate is considerably reduced, so that it can be easily transported and installed.

[0042] For a preferred combination with the window sill substructure of the invention, the insulating cover plate is configured as an adjustable cover plate. Due to a lengthwise cut, it can be adjusted to the required depth of the outer window sill.

[0043] In a preferred embodiment of the invention the window sill cover plate consists of one segment which is made from rigid insulation material and of one segment which is made from water resistant hard construction material.

[0044] Also here, the at least one segment made from rigid insulation material and the at least one segment made from water resistant hard construction material are preferably connected by a permanent and form-locking connection.

[0045] In one embodiment, this permanent and form-locking connection is performed by using a bonding agent such as an adhesive. Hereby, the two segments are produced separately and thereafter are joined together to yield the window sill cover plate.

[0046] The optimal bonding agent is selected based on the distinct building materials of the two segments. For example, when using polystyrol foam in combination with concrete, a poly vinyl acetate glue might be used.

[0047] As described above for the window sill substructure said connection can also be performed without any adhesive agent. The respective embodiments as taught for the window sill substructure also apply here.

[0048] In a preferred embodiment of the invention, the adjustable window sill cover plate is configured in a way that the at least the bottom side of the plate shaped portion is made of a rigid insulation material, and the at least the upper side of the plate shaped portion and the front side of the angular portion are made of a water resistant hard construction material. As a result, the window sill combines durability and weather-resistance based on the construction of the outer surface and insulating properties based on the foamed bottom segment.

[0049] In a further preferred embodiment of the invention the angular portion of the window sill which is made from water resistant hard construction material has a rear cavity also filled with the rigid insulation material. This has the advantage of further reducing the weight of the cover plate without loosing the required firmness of the cover plate.

[0050] In a specific embodiment of the invention the rear cavity is filled in one or more segments with the hard construction material giving rise to a massive angular portion, with the remaining cavity being filled with the rigid insulation material. Hereby, it is preferred that only the lateral sides of the rear cavity are filled with the hard construction material, such as concrete. This has the advantage that the lateral surfaces which protrude the window reveal present the hard construction material as outer surface. In case of a cavity filled completely with insulation material these lateral sides would otherwise constitute a vulnerable point of the window sill with the necessity for a further covering.

[0051] In one embodiment of the invention the adjustable window sill cover plate has one or more lengthwise grooves within the bottom side of the plate shaped portion. These grooves can fulfill two functions: At first they can retain any bonding agent which is used for joining the cover plate to the underground or an substructure, being preferably the window sill substructure of the invention. Secondly, the grooves can serve as orientation (or even as a predetermined breaking point) when cutting the cover plate to the desired depth.

[0052] In a preferred embodiment the grooves are rectangular or trapezoid. The grooves preferably have a depth of between 3 and 10 mm and a width of between 5 and 20 mm, and more preferably a depth of 5 mm and a width of 12 mm. Grooves of these dimensions are particularly suited for retaining the bonding agent and for an easy positioning during the installation.

[0053] In a preferred embodiment of the invention the bottom side of the angular portion of the cover plate comprises a drip nozzle, preferably formed by a lengthwise groove in the bottom side. This drip nozzle prevents the water which is draining off the window sill cover plate from running down the facade.

[0054] In a specific embodiment of the invention the adjustable window sill cover plate has a drip nozzle with a distance between the drip nozzle and the back side of the angular portion being at least 30 mm, and a depth of the drip nozzle being at least 15 mm. These minimum distances ensure the proper function of the drip nozzle.

[0055] In another embodiment the cover plate further

comprises on or two coverings on one or both lateral sides, respectively. These coverings can cover one or both lateral sides of the underlying substructure and thereby provides an improved protection of the substructure.

[0056] With regard to both structures of the invention, namely the adjustable window sill substructure or the adjustable window sill cover plate, the rigid insulation material as used therefore is selected from the group consisting of expanded or extruded polystyrol hard foam (EPS or XPS), polyurethane foam, polymethacrylimide (PMI) foam, polyethylene foam, polyethylene terephthalate (PET) foam, polyisocyanurate, (PIC) foam, urea-formaldehyde foam, fiber glass and foam glass.

[0057] In a preferred embodiment of the invention, the rigid insulation material of the substructure and/or the cover plate should have a compression strength measured according the standard ASTM D 1621 of at least 150 kPa, preferably at least 200 kPa and more preferably at least 300 kPa.

[0058] In order to constitute a durable and load-bearing window sill, the EPS insulation material should have a density of more than 24 kg/m^3, preferably of more than 30 kg/m^3 and more preferably of more than 40 kg/m^3.

[0059] Furthermore the water resistant hard construction material as used for both structures of the invention is selected from the group consisting of nature stone, brick, concrete, terrazzo, wood and metal.

[0060] In a specific embodiment of the invention the window sill substructure and the window sill cover plate consists of EPS or XPS as rigid insulation material and of concrete as hard construction material.

Adjustable window sill assembly

[0061] In a third aspect the invention provides an adjustable window sill assembly which comprises the window sill substructure according to the invention and the window sill cover plate according to the invention. These two individual structures as described above can be combined in an appropriate manner to a window sill assembly whereby the insulating segment and the water resistant hard segment ideally complement one another.

[0062] For the adjustable window sill assembly it is preferred that the angle between the plate shaped portion and the bottom site of the angular part of the window sill cover plate is equal to the angle formed by the wedge shaped portion of the window sill substructure and its base. As a result the angular part is oriented perpendicular to the window sill base with proper arrangement of the drip nozzle.

[0063] Expediently, the window sill substructure and the window sill cover plate, when forming the window sill assembly, lie on one another in a displaceable manner. By this means the components can be easily readjusted or substituted.

[0064] The displacement capability of the substructure and the cover plate is preferably continuously, which means that these two parts can be arranged in any position in the width direction of extension to one another so that the window sill assembly can be adjusted optimally. However, it is also conceivable that the substructure and the cover plate can be arranged, for example, only in a certain number of predefined positions to each other. This can be done by means of a locking of the two parts to one another. Thereby, a predefined arrangement is given wherein the two parts are preferably aligned parallel to one another. It is also possible to use a kind of toothed surfaces for the locking of the two parts. Thus, a plurality of predefined positions of the parts to one another is possible. Hereby, the teeth are preferably situated in a region of overlap of the substructure and the cover plate.

[0065] In a preferred embodiment of the invention the window sill substructure and the window sill cover plate are installed and lie on one another in a way, that the outside surfaces of the window sill assembly consists of the water resistant hard construction material.

[0066] In a further embodiment of the invention the sill assembly is construed by the window sill substructure and the window sill cover plate which are adjusted to a length to accommodate the depth of the window reveal.

[0067] In a preferred embodiment the adjustable sill assembly is composed of the window sill substructure and the window sill cover plate being adjusted to a length so that the wedge shaped portion of the window sill substructure and the plate shaped portion of the window sill cover plate have the same length. By this means there is a maximal overlap of these two parts, ensuring an optimal insulating property.

[0068] Due to the use of a rigid insulation material with improved compression strength, the final window sill assembly is step-resistant. As such it complies with the regulation on fire protection.

[0069] The preferable length of the window sill substructure and the complementary cover plate is 1.5 m. These parts can then cut in cross in order to comply with the dimensions of the window reveal. A substructure with said length has a weight of less than 30 kg and can be therefore easily transported and mounted.

[0070] In one embodiment of the invention, the substructure exhibits at the upper front side of its cuboid portion a nose or extension which helps to protect the window frame from water. Preferably, this nose has an inclined side. The distance between the upper side of said nose or extension and the surface of the underlying cover plate should be at least 15 mm. This distance together with the inclined face allows the easily filling of the gap between substructure and cover plate with a sealing agent, as normally injected via a cartridge gun.

[0071] In a preferred embodiment of the invention, the adjustable sill assembly is an assembly for an outer window sill.

[0072] In another aspect the invention pertains to the use of the window sill substructure according to the invention as a door step substructure and/or the window

sill cover according of the invention as a door step cover, and/or the use of the window sill assembly of the invention as a door step assembly.

[0073] When used for preparing the door step the wedge shaped first portion of the substructure is associated with the door reveal and the cuboid second support portion of the substructure supports the door frame.

[0074] In another embodiment of the invention the window sill assembly further comprises one or two elements covering one or both of the lateral surfaces of the window sill assembly. This is recommended for the cases where the insulating segments of the window sill assembly are not completely covered by the window reveal. These element(s) could be made of any construction material such as e.g. wood, plastics, metal, stone or concrete.

[0075] It is preferred that the window sill substructure and/or the window sill cover are produced by a casting process. This enables the cost-efficient production of these parts as "yard goods" which can be cut into the desired length.

Brief description of the drawings:

[0076] These and other aspects of the invention will be apparent from and elucidated with reference to the embodiments described hereinafter.

[0077] The invention will now be described, by way of example, based on embodiments with reference to the accompanying drawings.

[0078] In the drawings:

Fig. 1 shows a principal sketch of the window sill substructure according to the invention in a cross section (A) and in a perspective view (B).

Fig. 2 shows a principal sketch of the window sill cover plate of the invention in a cross section (A) and in a perspective view (B).

Fig. 3 shows a principal sketch of the window sill assembly according to the invention in a cross section.

[0079] In the Figures, like numbers refer to like objects throughout. Objects in the Figures are not necessarily drawn to scale.

Detailed description of embodiments:

[0080] Various embodiments of the invention will now be described by means of the Figures.

[0081] The Figure 1 shows a window sill substructure according to the invention **10** comprising an wedge shaped first portion **20** and an cuboid second support portion **30.** These portions are made from a rigid insulation material **40** whereby only a C-shaped structure at the front side of the cuboid portion is made from a hard construction material **50.** The first and the second portion possess a common base for putting the substructure on the ground surface of the window reveal. The common base comprises several lengthwise grooves which retain the adhesive during installation and furthermore function as a mark that facilitates the precise cutting of the substructure. The angle of the wedge shaped portion dictates the final angle of the window sill, being preferably 2.8° or 5.7°. The C-shaped structure exhibits a nose or extension **80** protecting the assembly and the window frame from water. After installation the window frame will sit on the upper part of the cuboid portion with partially or completely sitting on the C-shaped portion. Being made from hard construction material said C-shaped portion can accommodate the load. As a further measure for load distribution, the C-shaped portion possesses an enlarged feet **60.** When casting the hard construction materials, being preferably concrete, on the pre-shaped segment of rigid insulation material it is advantageously that said C-shaped structure exhibits a backside which is inclined rearwards **70** so that no air bubbles are entrapped during the casting process.

[0082] Fig. 2 shows a window sill cover plate **100** according to the invention comprising a plate shaped portion **110** and an angular portion **120.** The upper layer of the cover plate and the outermost part of the angular portion are made from the hard construction material 50, being preferably concrete. The lower layer of the plate shaped portion and the cavity of the angular portion are made from the rigid insulation material **40.** The angle between the plate shaped portion and the base of the angular portion equals the angle of the wedge shaped portion of the window sill substructure. As a consequence, the angular portion has a horizontal lower end with optimal positioning of the drip nozzle **140.** In the disclosed embodiment the drip nozzle is formed by a lengthwise groove in the bottom side of the angular portion. The bottom side of the plate shaped portion comprise several regularly arranged lengthwise grooves **90** exhibiting the same functions as described for the grooves of the substructure (see description of Fig. 1 above). In the disclosed embodiment the grooves of the substructure and the grooves of the cover plate possess the same intervals so that they function as marks that allow an identical shortening of these two parts.

[0083] Fig. 3 shows a window sill assembly **150** according the invention consisting of the window sill substructure **10** and the window sill cover plate **100.** The cover plate lies on the substructure whereby the front end of the wedge shaped portion of the substructure reaches up to the angular portion of the cover plate and the plate shaped portion of the cover plate reaches up to the C-shaped structure of the substructure. In this way, the window sill assembly possesses optimal insulation properties and maximal solidity. Notably the angular portion **120** is configured to yield an overhang thereby further protecting the window reveal and the inside of the window sill assembly from weather influences.

[0084] While the invention has been illustrated and de-

scribed in detail in the drawings and the foregoing description, such illustration and description are to be considered illustrative or exemplary and not restrictive.

[0085] From reading the present disclosure, other modifications will be apparent to persons skilled in the art. Such modifications may involve other features which are already known in the art and which may be used instead of or in addition to features already described herein.

[0086] Variations to the disclosed embodiments can be understood and effected by those skilled in the art, from a study of the drawings, the disclosure and the appended claims. In the claims, the word "comprising" does not exclude other elements or steps, and the indefinite article "a" or "an" does not exclude a plurality of elements or steps. The mere fact that certain measures are recited in mutually different dependent claims does not indicate that a combination of these measures cannot be used to advantage.

[0087] Any reference signs in the claims should not be construed as limiting the scope thereof.

List of the reference signs:

[0088]

10	Window sill substructure
20	Wedge shaped first portion
30	Cuboid second support portion
40	Segment made from rigid insulation material
50	Segment made from hard construction material
60	Enlarged feet of the C-shaped structure
70	Backside of the C-shaped structure inclined rearwards
80	Nose/Extension
90	Groove
100	Window sill cover plate
110	Plate shaped portion
120	Angular portion
130	Rear cavity of the angular portion
140	drip nozzle
150	Window sill assembly

Claims

1. Adjustable window sill substructure (10) comprising a wedge shaped first portion (20) associated with the window reveal and a cuboid second support portion (30) for the window frame, wherein the first portion and the second portion have a common basis, and wherein the adjustable window sill structure is an insulating structure comprising at least one segment made from rigid insulation material (40) and at least one segment made from water resistant hard construction material (50).

2. Adjustable window sill substructure (10) according claim 1, **characterized in that** the at least one segment made from rigid insulation material (40) and the at least one segment made from water resistant hard construction material (50) are connected by a permanent and form-locking connection.

3. Adjustable window sill substructure (10) according claim 1 or 2, **characterized in that** at least the common basis of the first and the second portion and the backside of the second portion are made of a rigid insulation material (40), and wherein at least the front side of the second portion is made of a water resistant hard construction material (50).

4. Adjustable window sill substructure (10) according to any of the above claims, **characterized in that** the common basis of the first and second portion has one or more lengthwise grooves (90).

5. Adjustable window sill substructure according to any of the above claims, **characterized in that** the first portion and the second portion are made of a rigid insulation material (40) with only a C-shaped structure of the water resistant hard construction material (50) covering the front side and the anterior upper side of the first portion and the interconnecting corner of the first and the second portion.

6. Adjustable window sill cover plate (100) comprising a plate shaped portion (110) and an angular portion (120), wherein the adjustable window sill structure is an insulating structure comprising at least one segment made from rigid insulation material (40) and at least one segment made from water resistant hard construction material (50).

7. Adjustable window sill cover plate (100) according claim 6, **characterized in that** the at least one segment made from rigid insulation material (40) and the at least one segment made from water resistant hard construction material (50) are connected by a permanent and form-locking connection.

8. Adjustable window sill cover plate (100) according to claim 6 or 7, **characterized in that** the at least the bottom side of the plate shaped portion (110) is made of a rigid insulation material (40), and the at least the upper side of the plate shaped portion (110) and the front side of the angular portion (120) are made of a water resistant hard construction material (50).

9. Adjustable window sill cover plate (100) according to any of claims 6 to 8, **characterized in that** the angular portion (120) made from water resistant hard construction material (50) has a rear cavity (130) also filled with the rigid insulation material (40).

10. Adjustable window sill cover plate (100) according to any of claims 6 to 9, **characterized in that** the bottom side of the plate shaped portion (110) has one or more lengthwise grooves (90).

11. Adjustable window sill cover plate (100) according to any of claims 6 to 10, **characterized in that** the bottom side of the angular portion (120) comprises a drip nozzle (140), preferably formed by a lengthwise groove in the bottom side.

12. Adjustable window sill substructure (10) according to any of claims 1 to 5 or adjustable window sill cover plate (100) according to any of claims 6 to 11, **characterized in that** the rigid insulation material is selected from the group consisting of expanded or extruded polystyrol hard foam (EPS or XPS), polyurethane foam, polymethacrylimide (PMI) foam, polyethylene foam, polyethylene terephthalate (PET) foam, polyisocyanurate, (PIC) foam, urea-formaldehyde foam, fiber glass, mineral wool and foam glass.

13. Adjustable window sill substructure (10) according to any of claims 1 to 5 or adjustable window sill cover plate (100) according to any of claims 6 to 11, **characterized in that** the water resistant hard construction material is selected from the group consisting of nature stone, brick, concrete, terrazzo, wood and metal.

14. Adjustable window sill assembly (150) comprising a window sill substructure (10) according to any of claims 1 to 5, 12 and 13 and a window sill cover plate (100) according to any of claims 6 to 13.

15. Adjustable window sill assembly (150) according to claim 14, **characterized in that** the angle between the plate shaped portion (110) and the bottom site of the angular part (120) of the window sill cover plate (100) is equal to the angle formed by the wedged-shape portion (20) of the window sill substructure (10) and its base.

16. Adjustable window sill assembly (150) according to claim 14 or 15, **characterized in that** the window sill substructure (10) and the window sill cover plate (100) are adjusted to a length so that the wedge shaped portion (20) of the window sill substructure (10) and the plate shaped portion (110) of the window sill cover plate (100) have the same length.

17. Kit for construction of an outer window sill comprising:

(a) at least one window sill substructure (10) according to any of claims 1 to 5, 12 and 13;
(b) at least one window sill cover plate (100) according to any of claims 6 to 13;
(c) optionally an adhesive agent for connecting the window sill substructure (10) and the window sill cover plate (100).

18. Use of the window sill substructure (10) according to any of claims 1 to 5, 12 and 13 as a door step substructure and/or the window sill cover plate (100) according to any of claims 6 to 13 as a threshold cover, and/or the window sill assembly (150) of any of claims 14 to 16 as a door step assembly, wherein for the substructure (10) the wedge shaped first portion (20) is associated with the door reveal and has a cuboid second support portion for the door frame.

Fig. 1

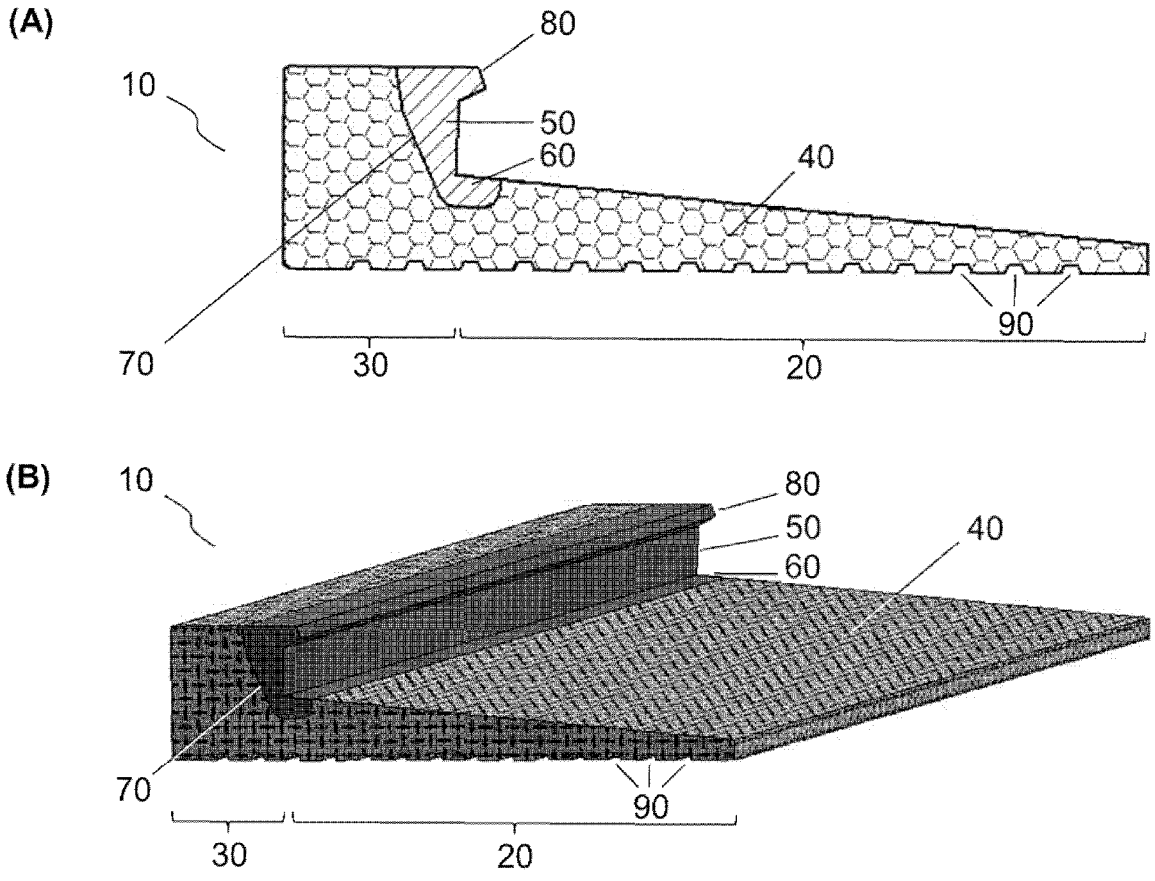


Fig. 2

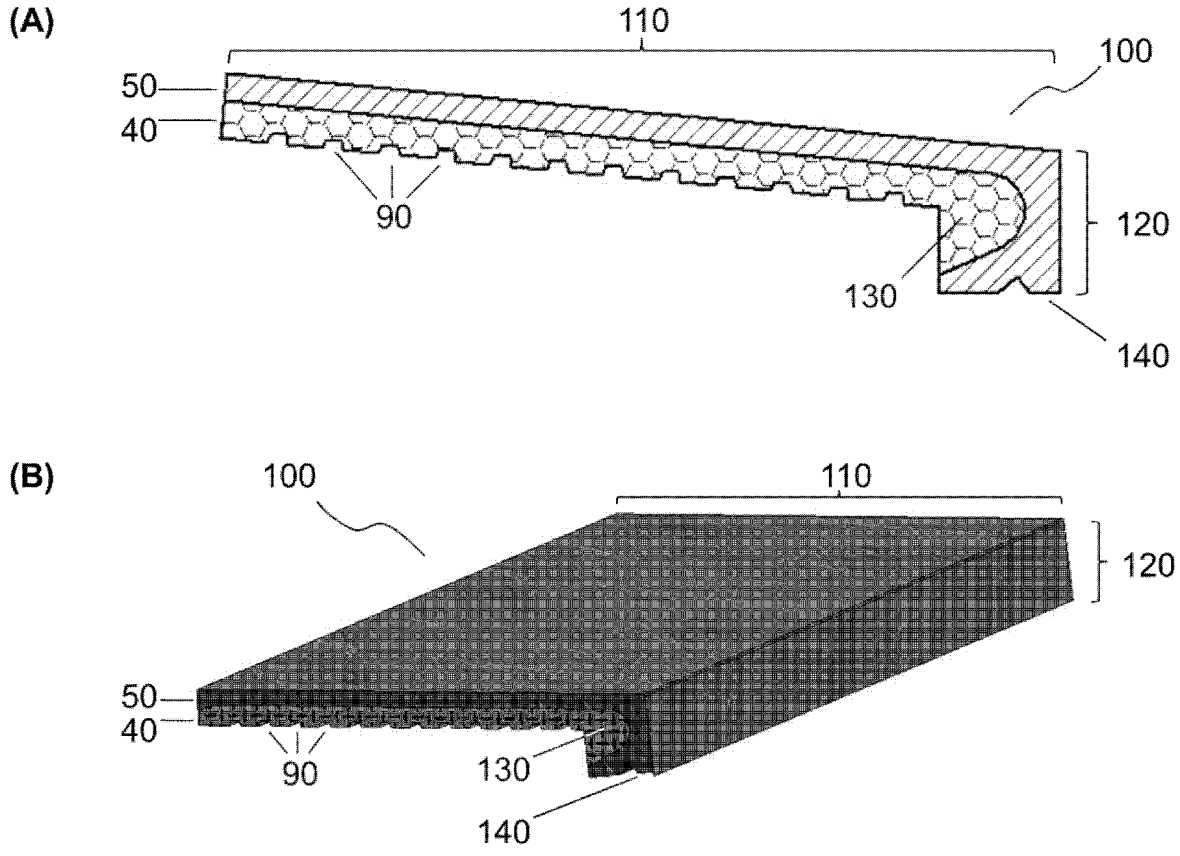
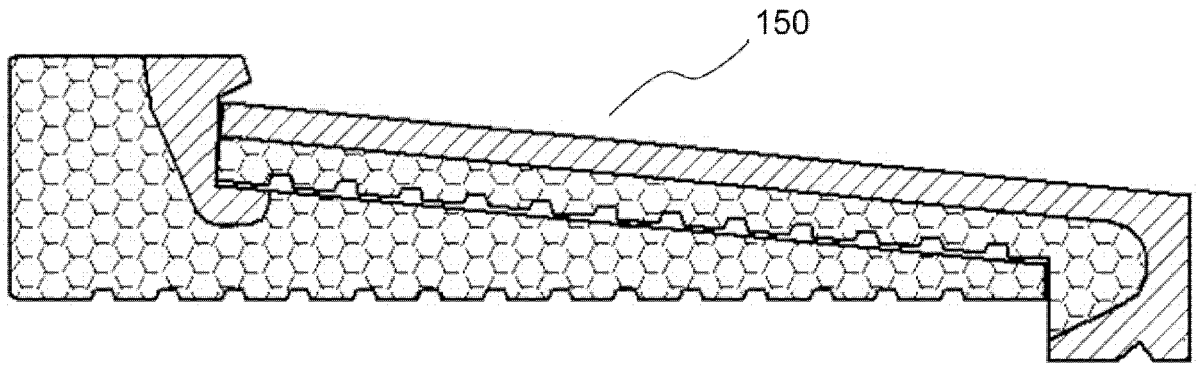


Fig. 3



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EUROPEAN SEARCH REPORT

Application Number
EP 15 16 7977

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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
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TECHNICAL FIELDS SEARCHED (IPC)

E06B

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
The Hague	4 November 2015	Hellberg, Jan

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