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(54) **ROOF EDGE WITH SPRING-LOADED INTERMEDIATE PROFILE**

(57) The invention concerns a roof edge which comprises a decor panel and a sub-profile. The decor panel is clicked-mounted onto the sub-profile. The sub-profile comprises a recess which is configured to receive a spring-loaded intermediate profile. A flexible sealing piece is arranged between the intermediate profile and the decor panel. A related roof seal, method and kit with parts are also provided..

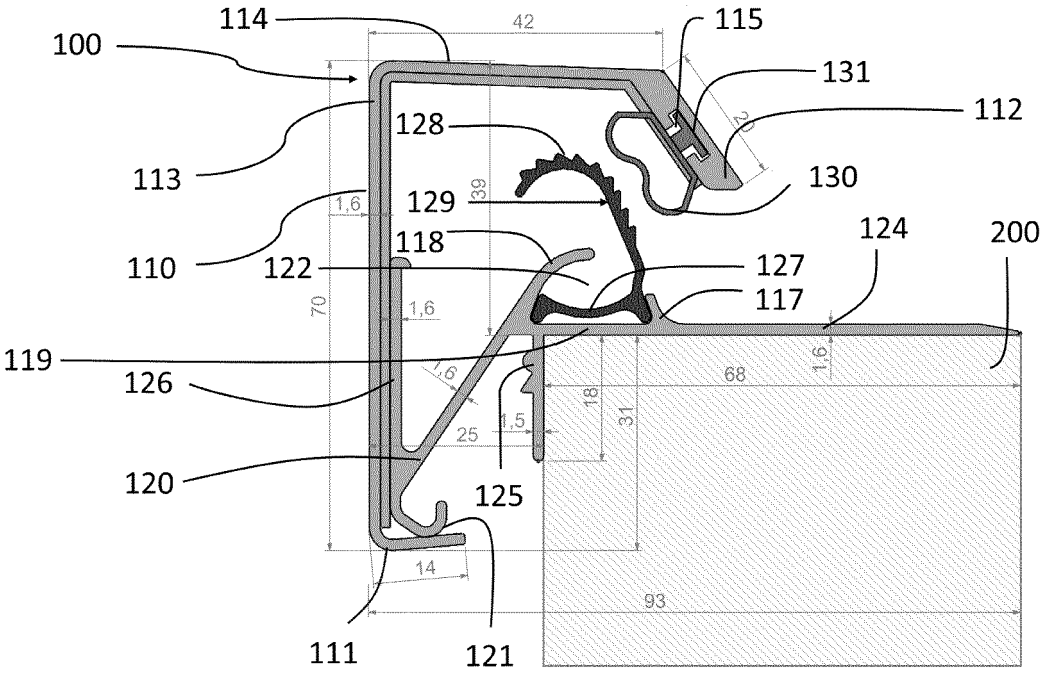

Fig. 1

EP 4 174 247 A1

Description

TECHNICAL FIELD

[0001] The invention concerns roof edges, roof seals, related methods and a related kit of parts.

TECHNOLOGICAL BACKGROUND OF THE INVENTION

[0002] Roof edges are a common construction element. They are used amongst others to protect walls against rainwater. Some existing roof edges comprise a sub-profile and a decor panel which can be click-mounted to one another. The sub-profile fixes the decor panel to the roof, and the decor panel determines the appearance of the roof edge. Such roof edges are simple to produce and easy to install. However, such roof edges have the disadvantage that they are not necessarily splash-water-tight. Also, these roof edges do not absorb vibrations well. Also, the design of the roof edge must be adapted to the thickness of the roof covering in which it is used. Furthermore, small unevennesses may mean an uneven clamping of the decor panel on the sub-profile. Furthermore, the installation of roof edges may be complex and time-consuming. Often, the roof edge can only be applied once (using glue and/or screws) and thereafter cannot easily be removed and/or be refitted.

[0003] After installation, the roof covering is also exposed to many different forces, for example from expansion or shrinkage (both in thickness and in length), due to temperature fluctuations or other weather factors. Therefore over the course of time, the roof covering may loosen, especially at the roof edge. Finally, this allows the ingress of water. Modern systems need gluing or heating, which is time-consuming.

SUMMARY

[0004] The invention and preferred embodiments thereof provide a roof edge which is watertight, which efficiently absorbs vibrations, which is suitable for use with a roof covering of different thicknesses, which allows uniform clamping even in the presence of small unevennesses, need not be anchored to the wall, and can be mounted and removed without the need for anchoring means. Thus there are no weak points during mounting which could reduce the stability and water-tightness of the roof edge. In addition, the roof edge may thus easily be installed and removed, and there is less chance of damaging components. In addition, the present invention ensures that when tensile forces are exerted on the roof covering, this becomes secured even more firmly.

[0005] The roof edge can also be installed more quickly. The roof edge also allows a reduction in or the complete omission of the step of gluing and/or heating.

[0006] In a first aspect, the invention concerns a roof edge comprising a decor panel, a sub-profile, and a spring-loaded intermediate profile. The decor panel is click-mounted on the sub-profile. The sub-profile comprises a horizontal contact face, wherein the horizontal contact face comprises a recess. The recess is configured to receive the spring-loaded intermediate profile. Preferably, a flexible sealing piece is arranged on the decor panel, and is configured to clamp a roof covering between the spring-loaded intermediate profile and the flexible sealing piece.

[0007] In some preferred embodiments, the spring-loaded intermediate profile comprises a polymer, preferably ABS plastic.

[0008] In some preferred embodiments, the decor panel and/or the sub-profile comprises aluminium.

[0009] In some preferred embodiments, the recess comprises a recess base, preferably in the extension of the contact face. Preferably, the recess comprises at least two recess edges, an inside edge and an outside edge. Preferably, the two recess edges are configured for receiving the spring-loaded intermediate profile.

[0010] In some preferred embodiments, at least one of the two recess edges, preferably both, comprises a curved part. Preferably the curved part is curved towards the recess base.

[0011] In some preferred embodiments, the outside recess edge is higher than the inside recess edge.

[0012] In some preferred embodiments, the spring-loaded intermediate profile comprises an intermediate profile base, wherein the intermediate profile base is configured to fit in the recess. Preferably, the intermediate profile comprises an intermediate profile shoulder, wherein the intermediate profile shoulder is configured to come into clamping contact with a roof covering on fixing of the roof edge; wherein the clamping is preferably provided by the flexible sealing piece.

[0013] In some preferred embodiments, the intermediate profile shoulder has a sawtooth pattern.

[0014] In some preferred embodiments, the intermediate profile shoulder has a hook form, preferably a curved hook form, preferably parallel with a top end of the decor panel.

[0015] In some preferred embodiments, the decor panel comprises the following components: a bottom end, a vertical part, a horizontal part, and a top end. Preferably, the top end comprises a decor panel recess. Preferably, the bottom end is connected to the vertical part and preferably makes an angle of 45° to 135°. Preferably, the vertical part is connected to the horizontal part and preferably makes an angle of 80° to 100°. Preferably, the horizontal part is connected to the top end of the decor panel and preferably makes an angle of 30° to 60°.

[0016] In some preferred embodiments, the decor panel comprises a decor panel recess, and the sealing piece comprises a sealing piece base, and the sealing piece base is configured to fit in the decor panel recess. Preferably, the sealing piece is configured to come into clamping contact in at least two places with a roof covering which is arranged on the intermediate profile; pref-

erably on an intermediate profile shoulder.

[0017] In some preferred embodiments, the horizontal contact face is connected to the recess and the two recess edges by means of the recess base. In some preferred embodiments, the sub-profile furthermore comprises a bottom end and a vertical support face. Preferably the bottom end is connected to a vertical part; wherein the vertical part is preferably connected to the recess by means of the recess base with the horizontal contact face. Preferably, the horizontal contact face is connected to the vertical support face.

[0018] In some preferred embodiments, the horizontal contact face is connected to the vertical part by means of a sloping part; preferably wherein the sloping part lies in the extension of the outer recess edge.

[0019] In a second aspect, the invention comprises a method for applying a roof covering and a roof edge on a roof, preferably a roof edge according to the first aspect of the invention and (preferred) embodiments thereof. The method preferably comprises one or more, preferably all of the following steps:

- placing a sub-profile on a wall, the sub-profile comprising a horizontal contact face and a recess, the sub-profile comprising a spring-loaded intermediate profile in the recess;
- placing a roof covering on the horizontal contact face and the spring-loaded intermediate profile;
- providing a decor panel; preferably comprising a bottom end, a vertical part, a horizontal part and/or a top end;
- optionally, fixing a flexible sealing piece to the decor panel; preferably to the top end of the decor panel; and
- click-mounting the decor panel on the sub-profile, wherein the roof covering is preferably clamped between the flexible sealing piece and the spring-loaded intermediate profile.

[0020] In a third aspect, the invention concerns a kit of parts for producing a roof edge according to the first aspect of the invention and (preferred) embodiments thereof. Preferably, the kit comprises a decor panel, a sub-profile, a spring-loaded intermediate profile, and a flexible sealing piece. Preferably, the decor panel and the sub-profile can be connected to one another by click-mounting. Preferably, the sub-profile comprises a recess configured to receive the spring-loaded intermediate profile. Preferably, the flexible sealing piece can be attached by clamping to the decor panel. Optionally the kit comprises a roof covering. Optionally the kit comprises instructions, for example instructions for carrying out a method according to the second aspect of the invention and (preferred) embodiments thereof.

[0021] In a fourth aspect, the invention concerns a roof seal comprising a roof edge according to the first aspect of the invention and (preferred) embodiments thereof, and a roof covering. Preferably, the roof covering is attached using a method according to the first aspect of the invention and (preferred) embodiments thereof.

DESCRIPTION OF THE FIGURES

[0022] In order to better present the features, structures or characteristics of the present invention, the appended figures show, without restrictive character, some preferred embodiments of the present invention. The following description of these appended figures is purely explanatory in nature and is not intended to restrict the present material, its application and/or use. The numbering used in the appended figures serves for easier identification of specific elements, without restricting the elements shown and/or embodiments of the present invention thereto.

[0023] **FIG. 1** illustrates a roof edge (100) which is installed on a wall (200) according to an embodiment of the invention.

[0024] Throughout the figures, the following numbering is used: 100 - roof edge; 110 - decor panel; 111 - bottom end of decor panel; 112 - top end of decor panel; 113 - vertical part of decor panel; 114 - horizontal part of decor panel; 115 - decor panel recess; 117 - inside recess edge; 118 - outside recess edge; 119 - recess base; 120 - sub-profile; 121 - bottom end of sub-profile; 122 - sub-profile recess; 124 - horizontal contact face; 125 - vertical support face; 126 - vertical part of sub-profile; 127 - intermediate profile base; 128 - intermediate profile shoulder; 129 - intermediate profile; 130 - flexible sealing piece; 131 - flexible sealing piece base; 200 - wall.

DETAILED DESCRIPTION

[0025] Before the aspects and embodiments of the present invention are described, it must be understood that this invention is not restricted to specific roof edges, roof devices, kits, methods and/or combinations as described herein, since such aspects and embodiments may naturally vary. It should also be clear that specific aspects and embodiments described herein are not intended to be restrictive, since the scope of the present invention is determined solely by the appended claims. Reference signs in the present description and in the appended claims are also not restrictive for the scope of the present invention.

[0026] The terms "comprise", "comprises", "comprising" as used below are synonymous with "inclusive", "include", "including", or "contain", "contains", "containing", and are inclusive or open and do not exclude additional unnamed parts, elements, components and/or method steps. Where reference is made to specific parts, elements, components and/or method steps in a specific embodiment of the present invention, the possible presence of other parts, elements, components and/or method steps is not excluded.

[0027] The singular forms "a " and "the" comprise both the singular and the plural unless the context clearly in-

dicates otherwise.

[0028] Sequential terms such as "first", "second", "third" etc. are used in the present description and in the appended claims to distinguish between comparable elements, and not necessarily to describe a sequential or chronological order unless clearly indicated to the contrary. It is clear that these terms are interchangeable under the correct circumstances and that the embodiments of the invention described in this application are able to function in orders other than that described or explained in this application.

[0029] The term "approximate" in the present description and in the appended claims is used to offer flexibility to a numerical range by determining that a specific value may lie "a bit above" or "a bit below" a stated value or numerical range. For example, if reference is made to a measurable value such as a parameter, a quantity, a time duration etc., it is intended to include variations of +/- 10% or less, preferably +/- 5% or less, more preferably +/- 1% or less, and even more preferably +/- 0.1% or less, of and from the specified value, insofar as these variations are able to function in the invention described herein. It should be understood that the value to which the term "approximate" refers is also disclosed in itself. The listing and/or summary of numerical values using a digit range includes all numbers and fractions which fall within the associated ranges, including the specified end points.

[0030] The terms "substantially", "mainly" or "roughly" refer to the complete or almost complete scope or degree of an action, feature, property, state, structure, object and/or result. For example, an object which is "mainly" enclosed means for example that the object is completely or almost completely enclosed. For example, an object which stands "roughly" perpendicularly means for example that the object stands completely or almost completely perpendicularly to a reference plane. The exact permissible extent of deviation from absolute completeness may in some cases depend on the specific context. In general however, the extent of fulfilment is such that the general result is the same as with absolute and total fulfilment. The use of "mainly" is equally applicable if used in a negative connotation to refer to the complete or almost complete absence of an action, feature, property, state, structure, object or result. For example, a composition which is "roughly free" from particles may be completely free from particles or almost free from particles, such that the effect would be the same as if the composition were completely free from particles. In other words, a composition which is "roughly free from" an ingredient or element may still contain such an ingredient or element if there is no measurable effect thereof.

[0031] Relative terms such as "left", "right", "in front of", "behind", "above", "below" etc. are used in the present description and in the appended claims for descriptive purposes and not necessarily to describe permanent positions or orientations, depending on the context in which these terms are used. It is understood that the terms used may, under suitable circumstances, be mutually interchangeable, so that the embodiments described herein may for example also be used in positions or orientations other than those shown. The terms "adjacent to", "next to" or "against" one another are used in the present description and in the appended claims for descriptive purposes and not necessarily to describe permanent positions, depending on the context in which these terms are used. For example, objects which are described as "adjacent to" each other may be in physical contact with each other, or in each other's immediate vicinity, or in the same general region or area, depending on the context in which the term is used.

[0032] In the following passages, various aspects of the invention are defined in more detail. Each aspect so defined may be combined with another aspect or aspects unless the contrary is clearly indicated. In particular, a feature described as "preferred" or "advantageous" may be combined with other features or properties which are described as "preferred" and/or "advantageous". A reference in this description to "one embodiment" or "an embodiment" means that a particular function, structure or characteristic described in connection with the embodiment is applicable in at least one embodiment of the present invention. Where the phrases "in one embodiment" or "an embodiment" appear at different points in this specification, they do not necessarily refer to the same embodiment, although this is not excluded. Also, the described features, structures or characteristics may be combined in any suitable fashion, as will be clear to the person skilled in the art on the basis of this description. The embodiments described and claimed in the claims may be used in any combination.

[0033] In the present description, reference is made to the appended drawings which form part thereof and which illustrate specific embodiments of the invention. References in brackets or in bold linked to specific elements illustrate the elements concerned as examples, without thereby restricting the elements. It must be understood that other embodiments may be used, and structural or logical changes may be made, without leaving the scope of the present invention. The following detailed description should not be regarded as restrictive, and the scope of the present invention is defined by the appended claims.

[0034] Unless defined otherwise, all terms as used in the present description and in the appended claims, including technical and scientific terms, have the meaning usually understood by the person skilled in the art. As a further guidance, definitions are included for further explanation of terms which are used in the description of the invention. All documents which are mentioned in the present description are hereby included as a whole by reference.

[0035] In a first aspect, the invention comprises a roof edge comprising a decor panel, a sub-profile, and a spring-loaded intermediate profile. The decor panel is preferably click-mounted on the sub-profile. The sub-pro-

file comprises a horizontal contact face; wherein the horizontal contact face comprises a recess. The recess is configured to receive the spring-loaded intermediate profile. Preferably, a flexible sealing piece is arranged on the decor panel, and is configured to clamp a roof covering between the spring-loaded intermediate profile and the flexible sealing piece.

[0036] Alternatively or additionally, the roof edge as provided herein can be described as follows: the roof edge comprises a decor panel and a sub-profile, wherein the sub-profile has a recess which is suitable for receiving an intermediate profile. The decor panel is click-mounted onto the sub-profile. A flexible sealing piece is preferably arranged on the decor panel. In other words, the roof covering is clamped between the intermediate profile and the flexible sealing piece, and thus indirectly clamped between the sub-profile and the decor panel. Preferably, the roof covering is clamped directly between (i.e. in direct contact with) the intermediate profile and the flexible sealing piece. If there is no flexible sealing piece, the roof covering is clamped directly between the intermediate profile and the decor panel, and in this way indirectly clamped between the sub-profile and the decor panel. Preferably, there is no intermediate layer between the intermediate profile and the decor panel, or between the intermediate profile and the flexible sealing piece.

[0037] The decor panel and the sub-profile are click-mounted together. The roof edge preferably comprises a flexible sealing piece which makes the click connection splash-watertight.

[0038] Furthermore, the flexible sealing piece has the advantage that it absorbs vibrations, improves the clamping of the click connection, and that it allows a single roof edge design to be suitable for use with roof coverings of various thicknesses. In addition, the spring-loaded intermediate profile ensures an excellent clamping between the flexible sealing piece and the roof covering. Because of the structure selected, this clamping is also secure when tensile forces are exerted on the roof covering. This ensures an improved water-tightness.

[0039] In addition, the clamping is fully removable and refittable. The assembly can be removed and reused, and fits into a circular concept.

[0040] Such a roof edge has the important advantage that a bituminous roof seal can be successfully clamped therein. The spring-loaded element in the sub-profile can thus absorb great differences in the thickness of the roof seal.

[0041] Furthermore, related kits with parts and related methods are provided herein.

[0042] The roof edge comprises a spring-loaded intermediate profile. In combination with the other elements, this provides a better closure, vibration-damping and clamping. The spring-loaded intermediate profile preferably has a high elastic deformability and is water-resistant.

[0043] In some preferred embodiments, the spring-loaded intermediate profile comprises a polymer, preferably ABS plastic or rubber. Such intermediate profiles are durable, offer good flexibility and are easy to recycle. Plastic and ABS plastic in particular has the advantage of having good elastic properties. Rubber has the advantage that the shear hardness can be controlled by adding fibres.

[0044] In some embodiments, the spring-loaded intermediate profile is placed in the recess before delivery and/or installation of the sub-profile, for example in the production environment. Optionally, the spring-loaded intermediate profile is arranged in the recess after positioning of the sub-profile, for example on site.

[0045] The spring-loaded intermediate profile is preferably arranged over the entire length of the sub-profile. This ensures a better seal. The spring-loaded intermediate profile is preferably produced by plastic extrusion.

[0046] The roof edge comprises a decor panel and a sub-profile. In some preferred embodiments, the decor panel and/or the sub-profile comprises aluminium. In some embodiments, both the decor panel and the sub-profile are made of aluminium. Such decor panels and sub-profiles have excellent weather resistance. Aluminium is also a lightweight metal, recyclable and extrudable, and can be powder-coated, whereby an aesthetic finish is possible.

[0047] In addition or alternatively, the decor panel and the sub-profile comprise zinc and/or PVC. In some embodiments, both the decor panel and the sub-profile are made of PVC.

[0048] Preferably, the decor panel and/or the sub-profile are produced by extrusion.

[0049] The roof edge preferably comprises a sealing piece. In combination with the other elements, this provides an improved closure, vibration-damping and clamping. Various materials are suitable for production of the flexible sealing piece. Preferably, rubbers and/or plastics are used. These substances are preferably deformable, rot-free and moisture-resistant. In some preferred embodiments, the flexible sealing piece comprises rubber, preferably elastomer rubber. Such material has a high deformability and is water-resistant. Since the element is situated below the decor strip, where it is protected from the sun, UV-resistance is of secondary importance. In some embodiments, the flexible sealing piece comprises a rot-free adhesive tape of PVC foam.

[0050] Such flexible sealing pieces are durable and easily recyclable. Such sealing pieces absorb the unevennesses in the seal.

[0051] The flexible sealing piece is preferably produced by plastic extrusion.

[0052] In some preferred embodiments, the recess comprises a recess base, preferably in the extension of the contact face. Preferably, the recess comprises at least two recess edges, an inside edge and an outside edge. Preferably, the two recess edges are configured for receiving the spring-loaded intermediate profile.

[0053] Preferably, the recess thus forms a gully or channel. Such a shape has the advantage that the as-

sembly can easily be installed, removed and refitted. The intermediate profile can be introduced into the recess in a sliding movement.

[0054] In some preferred embodiments, at least one of the two recess edges, preferably both, comprises a curved part. Preferably, the curved part is curved towards the recess base. In this way, the intermediate profile can be held in place and unintentional movements of the intermediate profile can be avoided. Thus the stability of the intermediate profile may be increased. This also makes installation (or removal) easier and more user-friendly. The curved parts also ensure that plastic corner pieces can be inserted more easily. Preferably, the corner pieces and methods for mounting corner pieces are as described in the description and figures of EP 3 467 229 and EP 3 822 424, included herein by means of reference.

[0055] In some preferred embodiments, the outside recess edge is higher than the inside recess edge. Such a long lip ensures easy installation of the intermediate profile. In addition, the outside edge may serve as a stop function which ensures that the spring-loaded intermediate profile does not bend too far and snap. This ensures a safer and stiffer roof edge, even in the long term.

[0056] In some preferred embodiments, the spring-loaded intermediate profile comprises an intermediate profile base, wherein the intermediate profile base is configured to fit in the recess. Preferably, the intermediate profile comprises an intermediate profile shoulder, wherein the intermediate profile shoulder is configured to come into clamping contact with a roof covering on fixing of the roof edge; wherein the clamping is preferably provided by the flexible sealing piece which also clamps against the roof covering.

[0057] In some preferred embodiments, the intermediate profile shoulder has a sawtooth pattern. This ensures a even better clamping. Above all if a tensile force is exerted on the roof covering (for example, because of thermal expansion and/or shrinkage), the sawtooth pattern ensures that the clamping becomes even firmer. The sawtooth pattern preferably has teeth which are directed towards the outside relative to the roof covering. This ensures better clamping and a self-closing system.

[0058] In some preferred embodiments, the intermediate profile shoulder has a hook form, preferably a curved hook form, preferably parallel with a top end of the decor panel. Such a form simultaneously ensures springing and clamping, whereby a variable thickness of the roof covering can still be successfully clamped.

[0059] The form of the spring-loaded intermediate profile allows the shape of the bituminous seal to be followed as closely as possible, and on the other hand allows maximum clamping to be guaranteed as soon as a tensile force is applied to seal. The contact area between the intermediate profile and the applied seal is thereby maximised.

[0060] In some preferred embodiments, the decor panel comprises the following components: a bottom end, a vertical part, a horizontal part, and a top end. Preferably, the top end comprises a decor panel recess.

[0061] Preferably, the bottom end is connected to the vertical part and preferably makes an angle of 45° to 135°, for example an angle of 80° to 100°, for example an angle of around 90° with the vertical part.

[0062] Preferably, the vertical part is connected to the horizontal part and preferably makes an angle of 80° to 100°, for example an angle of around 90° with the horizontal part.

[0063] Preferably, the horizontal part is connected to the top end of the decor panel and preferably makes an angle of 30° to 60°, for example an angle of around 45° with the top end. This ensures better clamping of the roof covering between the spring-loaded intermediate profile on one side and the decor panel and/or the sealing piece on the other. This allows an efficient click-connection to be formed between the decor panel and sub-profile, and improves the splash-watertightness and also the water drainage of the roof edge.

[0064] The preferred angles ensure an optimum balance between clamping force and handling of the clamps. If the angles deviate therefrom, it is more difficult to clamp the profiles. If the angles are too wide, the profiles will not be firmly connected.

[0065] In this way, the horizontal part and/or the top end of the decor panel form a structure which, in cooperation with the bottom end of the decor panel, allows the decor panel to be clicked-mounted on the sub-profile.

[0066] In some preferred embodiments, the decor panel comprises a decor panel recess, and the sealing piece comprises a sealing piece base, and the sealing piece base is configured to fit in the decor panel recess. Preferably, the sealing piece is configured to come into clamping contact in at least two places with a roof covering which is arranged on the intermediate profile; preferably on an intermediate profile shoulder.

[0067] The sealing piece base which fits in the decor panel recess ensures that the sealing piece can easily absorb the vibrations of the roof edge, which maintains the stability of the combinations between the sealing piece, intermediate profile and sub-profile.

[0068] In some embodiments, the horizontal part of the decor panel has a height of 30 to 400 mm, for example a height of 60 to 70, or 70 to 300 mm. The height of the vertical part of the decor panel is the distance between the first end of the decor panel and the horizontal part of the decor panel.

[0069] In some embodiments, the horizontal part of the decor panel has a length of 5 to 50 mm, for example 20 to 42 mm. Preferably, the length of the horizontal part of the decor panel is determined from the thickness of the roof covering, for example a longer horizontal part of the decor panel is used for thicker roof coverings. The length of the horizontal part of the decor panel is the distance between the vertical part of the decor panel and the top end of the decor panel.

[0070] In some embodiments, the top end of the decor

panel has a length from 10 to 20 mm.

[0071] The sub-profile comprises a horizontal contact face. The horizontal contact face allows the efficient positioning of the sub-profile.

[0072] In some preferred embodiments, the horizontal contact face is connected to the recess and the two recess edges by means of the recess base.

[0073] In some preferred embodiments, the sub-profile furthermore comprises a bottom end and a vertical support face. Preferably, the bottom end is connected to a vertical part; wherein the vertical part is preferably connected to the recess by means of the recess base with the horizontal contact face. Preferably, the horizontal contact face is connected to the vertical support face.

[0074] In some preferred embodiments, the horizontal contact face is connected to the vertical part by means of a sloping part; preferably, wherein the sloping part lies in the extension of the outside recess edge.

[0075] Preferably, the sloping part forms an angle from 30° and 60°, for example an angle of around 45° with the contact face. This ensures a better force effect during clamping of the decor panel to the sub-profile.

[0076] The sloping part also forms a gully in which the seal rests. If water or condensation moisture penetrates below the decor strip, it is captured in the gully and discharged to the outside via the joints of the roof edge.

[0077] In a second aspect, the invention comprises a method for applying a roof covering and a roof edge on a roof, preferably a roof edge according to the first aspect of the invention and (preferred) embodiments thereof. The method preferably comprises one or more, preferably all of the following steps:

- placing a sub-profile on a wall, the sub-profile comprising a horizontal contact face and a recess, the sub-profile comprising a spring-loaded intermediate profile in the recess;
- placing a roof covering on the horizontal contact face and the spring-loaded intermediate profile;
- providing a decor panel; preferably comprising a bottom end, a vertical part, a horizontal part, and/or a top end;
- optionally, fixing a flexible sealing piece to the decor panel; preferably to the top end of the decor panel; and
- click-mounting the decor panel of the sub-profile, wherein the roof covering is clamped between the flexible sealing piece and the spring-loaded intermediate profile.

[0078] The method has the advantage that mounting is easy and quick. The method also has the advantage that removal is easy and quick. The method also has the advantage that after removal, refitting is easy and quick.

[0079] In some embodiments, the method comprises the step of:

- placing a spring-loaded intermediate profile in the recess.

[0080] Preferably, this step is carried out before delivery and/or positioning of the sub-profile, for example in the production environment. Optionally, this step is carried out after positioning of the sub-profile, for example on site.

[0081] The decor panel is preferably click-mounted from top to bottom in a pivot movement. More particularly, the decor panel (or the sealing piece) is first brought into contact with the roof covering, and the decor panel is then rotated until the bottom end of the decor panel click-mounts onto the bottom end of the sub-profile.

[0082] In some embodiments, the method comprises the step of:

- placing a fixing base on a wall, the fixing base comprising an edge.

[0083] In some embodiments, the method comprises the step of:

- placing a sub-profile on the edge of the fixing base or on a wall, the sub-profile comprising a horizontal contact face.

[0084] In some embodiments, the method comprises the step of:

- placing a roof covering on the top of the fixing base or on the top of the wall and on the top of the horizontal contact face.

[0085] In a third aspect, the invention comprises a kit of parts for producing a roof edge according to the first aspect of the invention and (preferred) embodiments thereof. Preferably, the kit comprises a decor panel, a sub-profile, a spring-loaded intermediate profile, and a flexible sealing piece. Preferably, the decor panel and the sub-profile can be connected to one another by click-mounting. Preferably, the sub-profile comprises a recess configured to receive the spring-loaded intermediate profile. Preferably, the flexible sealing piece can be attached to the decor panel by clamping. Optionally, the kit comprises a roof covering. Optionally, the kit comprises instructions, for example instructions for carrying out a method according to the second aspect of the invention and (preferred) embodiments thereof.

[0086] In a fourth embodiment, the invention comprises a roof seal, comprising a roof edge according to the first aspect of the invention and (preferred) embodiments thereof, a roof covering, and optionally a fixing base. Preferably, the roof seal is attached using a method according to the first aspect of the invention and (preferred) embodiments thereof.

[0087] In some embodiments, corner pieces are arranged in the corners as described in the description and figures of EP 3 467 229 and EP 3 822 424, preferably

via a method for installing corner pieces as described in the description and figures of EP 3 467 229 and EP 3 822 424.

[0088] An example of a suitable roof covering is roofing. In some embodiments, the roof covering is made of bitumen, ethylene propylene diene monomer (EPDM), thermoplastic olefins (TPO), or polyvinylchloride (PVC). In some preferred embodiments, the cover layer comprises bitumen or bituminous materials.

[0089] In some embodiments, the roof covering has a thickness of 0.5 mm to 4.0 mm.

[0090] In some embodiments, the fixing base is a plywood panel. In some embodiments, the horizontal contact face rests on the fixing base, and the roof covering is arranged on the top of the horizontal contact face and on the top end of the sub-profile. Optionally, the contact face is attached to the fixing base. This fixing comprises screws for example. Thus the roof edge is efficiently made splash-watertight. Furthermore, with this way of working, no extra sealing strips need be used.

[0091] In some embodiments, the roof edge furthermore comprises a joint covering which is click-mounted onto two adjacent decor panels. Thus the seam between the two adjacent decor panels can be efficiently covered, which improves the water-tightness of the roof edge.

EXAMPLES

Example 1

[0092] By way of a first example, reference is made to **Fig. 1. Fig. 1** illustrates a cross-section of a roof edge (100) according to an embodiment of the present invention.

[0093] The roof edge (100) comprises a decor panel (110) and a sub-profile (120). The decor panel (110) comprises a bottom end (111), a vertical part (113), a horizontal part (114), and a top end (112) which are successively connected to one another. The bottom end (111) is connected to the vertical part (113) and the bottom end makes an angle of around 90° with the vertical part (113). The vertical part (113) is furthermore connected to the horizontal part (114), and the vertical part (113) makes an angle of around 90° with the horizontal part (114). The horizontal part (114) is connected to the top end (112) of the decor panel (110) of the roof edge (100).

[0094] The sub-profile (120) comprises a bottom end (121), a vertical part (126), a recess (122) having two edges (117, 118) and a base (119) suitable for receiving the intermediate profile, a horizontal contact face (124), and a vertical support face (125). The bottom end (121) is connected to the vertical part (126). The vertical part (126) is connected to the recess edges (117, 118) by means of the recess base (119) and the horizontal contact face (124). The horizontal contact face (124) is connected to the vertical support face (125). An intermediate profile (129) is placed in the recess (122).

[0095] The sub-profile (120) of the roof edge (100) is placed on a wall (200). An example of a suitable roof covering is roofing. The end of the roof covering is situated in a space which is created between the decor panel (110) and the sub-profile (120), more specifically clamped between the sealing piece (130) and the intermediate profile (129). In particular, the decor panel (110) is click-mounted on the sub-profile (120). In particular, the click-connection is formed firstly by mechanical interaction between the bottom end (111) of the decor panel and the bottom end (121) of the sub-profile, and by mechanical interaction between the horizontal part (114) and the top end (112) of the decor panel (110) and the top end (122) of the sub-profile (120).

[0096] A roof covering (not shown in **Fig. 1),** which is placed between the spring-loaded intermediate profile (129) and the flexible sealing piece (130), is completely securely clamped once the decor panel (110) is click-mounted on the sub-profile (120). Because of the shape of the spring-loaded intermediate profile (129), the roof covering cannot become loose. The roof edge (100) however remains completely removable and refittable, screws and glue not being required.

Claims

1. Roof edge (100) comprising a decor panel (110), a sub-profile (120), and a spring-loaded intermediate profile (129); wherein the decor panel (110) is click-mounted on the sub-profile (120); wherein the sub-profile (120) comprises a horizontal contact face (124); wherein the horizontal contact face (124) comprises a recess (122), wherein the recess (122) receives the spring-loaded intermediate profile (129); optionally wherein a flexible sealing piece (130) is arranged on the decor panel (110), wherein a roof covering is clamped between the spring-loaded intermediate profile (129) and the decor panel (110) or between the spring-loaded intermediate profile (129) and the flexible sealing piece (130).

2. Roof edge (100) according to Claim 1, wherein the spring-loaded intermediate profile (129) comprises a polymer, preferably ABS plastic.

3. Roof edge (100) according to Claim 1 or 2, wherein the decor panel (110) and/or the sub-profile (120) comprises aluminium.

4. Roof edge (100) according to any of the preceding claims, wherein the recess (122) comprises a recess base (119), preferably in the extension of the contact face (124); and wherein the recess (122) comprises at least two recess edges (117, 118), an inside edge (117) and an outside edge (118); wherein the two recess edges (117, 118) are configured for receiving the spring-loaded intermediate profile (129).

5. Roof edge (100) according to Claim 4, wherein at least one of the two recess edges (117, 118), preferably both, comprises a curved part; preferably wherein the curved part is curved towards the recess base (119).

6. Roof edge (100) according to Claim 4 or 5, wherein the outside recess edge (118) is higher than the inside recess edge (117).

7. Roof edge (100) according to any of the preceding claims, wherein the spring-loaded intermediate profile (129) comprises an intermediate profile base (127), wherein the intermediate profile base (127) is configured to fit in the recess (122);
and wherein the intermediate profile (129) preferably comprises an intermediate profile shoulder (128), wherein the intermediate profile shoulder (128) is configured to come into clamping contact with a roof covering on fixing of the roof edge (100); wherein the clamping is provided by the flexible sealing piece (130).

8. Roof edge (100) according to Claim 7, wherein the intermediate profile shoulder (128) has a sawtooth pattern.

9. Roof edge (100) according to Claim 7 or 8, wherein the intermediate profile shoulder (128) has a hook form, preferably a curved hook form, preferably parallel with a top end (112) of the decor panel (110).

10. Roof edge (100) according to any of the preceding claims, wherein the decor panel comprises the following components: a bottom end (111), a vertical part (113), a horizontal part (114), and a top end (112); wherein the top end (112) preferably comprises a decor panel recess (115); preferably wherein the bottom end (111) is connected to the vertical part (113) and makes an angle of 45° to 135°; wherein preferably the vertical part (113) is connected to the horizontal part (114) and makes an angle of 80° to 100°; and wherein preferably the horizontal part (114) is connected to the top end (112) of the decor panel (110) and makes an angle of 30° to 60°.

11. Roof edge (100) according to any of the preceding claims, wherein the decor panel (110) comprises a decor panel recess (115); wherein the sealing piece (130) comprises a sealing piece base (131), wherein the sealing piece base (131) is configured to fit in the decor panel recess (115); and preferably wherein the sealing piece (130) is configured to come into clamping contact in at least two places with a roof covering which is arranged on the intermediate profile (129); preferably on an intermediate profile shoulder (128).

12. Roof edge (100) according to any of the preceding claims, wherein the horizontal contact face (124) is connected to the recess (122) and the two recess edges (117, 118) by means of the recess base (119); wherein the sub-profile (120) furthermore comprises a bottom end (121) and a vertical support face (125); wherein the bottom end (121) is preferably connected to a vertical part (126);
wherein the vertical part (126) is preferably connected to the recess (122) by means of the recess base (119) with the horizontal contact face (124); and wherein the horizontal contact face (124) is connected to the vertical support face (125).

13. Roof edge (100) according to Claim 12, wherein the horizontal contact face (124) is connected to the vertical part (126) by means of a sloping part; preferably wherein the sloping part lies in the extension of the outer recess edge (118).

14. Method for applying a roof covering and a roof edge (100) on a roof, preferably a roof edge (100) according to any of Claims 1 to 13, the method comprising the following steps:

- placing a sub-profile (120) on a wall (200), the sub-profile comprising a horizontal contact face (124) and a recess (122), the sub-profile comprising a spring-loaded intermediate profile (129) in the recess (122);
- placing a roof covering on the horizontal contact face (124) and the spring-loaded intermediate profile (129);
- providing a decor panel (110);
- optionally, fixing a flexible sealing piece (130) to the decor panel (110); and
- click-mounting the decor panel (110) on the sub-profile (120), wherein the roof covering is clamped between the spring-loaded intermediate profile (129) and the decor panel (110) or between the flexible sealing piece (130) and the spring-loaded intermediate profile (129).

15. Kit of parts for producing a roof edge according to any of Claims 1 to 13, the kit comprising a decor panel (110), a sub-profile (120), a spring-loaded intermediate profile (129), and a flexible sealing piece (130); wherein the decor panel (110) and the sub-profile (120) can be connected to one another by click-mounting; and wherein the sub-profile (120) comprises a recess (122) configured to receive the spring-loaded intermediate profile (129); and wherein the flexible sealing piece (130) can be attached by clamping to the decor panel (110); optionally, wherein the kit comprises a roof covering; optionally, wherein the kit comprises instructions for carrying out a method for attaching a roof covering, and a roof edge (100) according to claim 14.

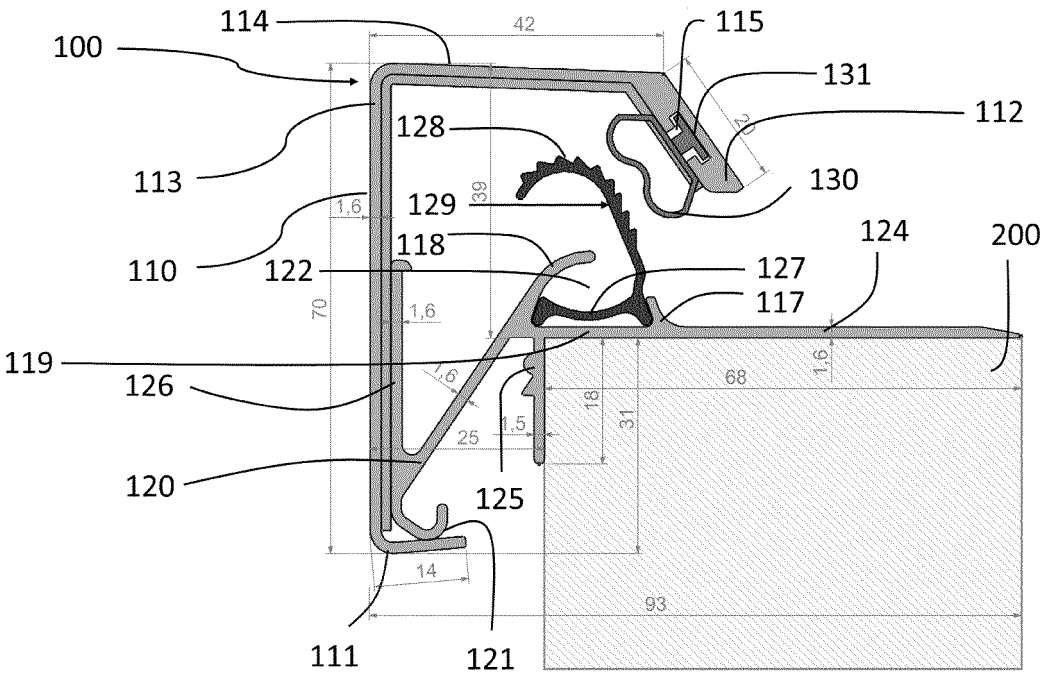
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Fig. 1

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EUROPEAN SEARCH REPORT

Application Number
EP 22 20 3993

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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)

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The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
The Hague	27 February 2023	Leroux, Corentine

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REFERENCES CITED IN THE DESCRIPTION

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