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(30) Priority: **07.02.2019 BE 201905076 07.02.2019 DE 202019100706 U** (71) Applicant: **Technicel** 2260 Westerlo (BE)

(72) Inventor: MAES, Kurt 2260 Westerlo (BE)

(74) Representative: Gevers Patents Intellectual Property House Holidaystraat 5 1831 Diegem (BE)

(54) DRAINAGE CHANNEL FOR INSTALLATION IN A SCREED

(57) The invention provides a drainage channel (100) for installation in a screed (200). The drainage channel (100) comprises a collection tray (110) for collecting water to be drained. The drainage channel (100) comprises a flange (120) around the collection tray (110) for aligning the drainage channel (100) with the screed (200). The flange (120) extends laterally from a top edge (113) of the collection tray (110) up to an outer edge (122) of the

flange (120). The drainage channel (100) comprises a waterproof cloth (130) for forming a waterproof cover over the flange (120) and the screed (200). The waterproof cloth (130) is attached to a top side (121) of the flange (120) from the top edge (113) of the collection tray (110) up to a predetermined attachment edge (123) between the top edge (113) of the collection tray (110) and the outer edge (122) of the flange (120).

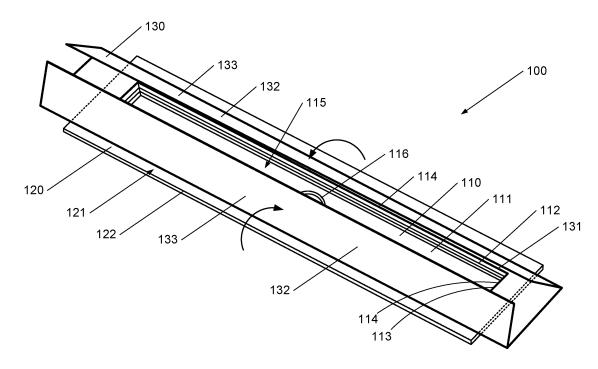


Fig. 2

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Description

Technical field

[0001] The present invention relates to a drainage channel for installation in a screed, for instance in the screed in a showering space for draining water. Furthermore, the present invention also relates to a floor where the drainage channel is installed in the screed. Furthermore, the present invention also relates to a method for installing the drainage channel in a screed. Furthermore, the present invention also relates to a method for manufacturing a drainage channel for installation in a screed.

Background art

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[0002] Drainage channels, for instance for draining water in a showering space, are usually installed in a screed, wherein a waterproof cover is then formed over the sides of the drainage channel and the screed, after which, finally, the floor above it is further finished, for instance with tiles.

[0003] A drainage channel known in the art comprises a collection tray for collecting water or any other liquid to be drained. The collection tray comprises a bottom wall with a drainage opening for draining the collected water. The collection tray further comprises an upright wall around the bottom wall extending upwards up to the top edge of the collection tray. The drainage channel further comprises a flange around the collection tray for aligning the drainage channel with the screed. The flange extends laterally from the top edge of the collection tray up to an outer edge of the flange. The drainage channel comprises a waterproof cloth for forming a waterproof cover on the flange and the screed. The waterproof cloth is attached to a top side of the flange over the entire top side of the flange, thus from the top edge of the collection tray up to the outer edge of the flange. Such a drainage channel is for instance known from NL2002843C, wherein the waterproof cloth is also attached to the flange over the entire bottom side of the flange.

[0004] Such a drainage channel is installed in a screed by first installing the drainage channel onto a supporting floor, which is arranged for applying the screed onto it. Here, the drainage channel is installed onto the supporting floor in such a way that the top side of the flange is located at a predetermined height relative to the supporting floor. Then, the screed is arranged onto the supporting floor and against the drainage channel, and the top side of the flange is aligned with the top side of the screed. Here, the waterproof cloth is held aside as much as possible. Finally, the unattached portion of the waterproof cloth is positioned over the surrounding part of the screed so as to form the waterproof cover over the flange and the screed.

[0005] Such a drainage channel has the disadvantage that, when installing the drainage channel in a screed, the waterproof cloth on the top side of the flange makes it more difficult to arrange the screed against the drainage channel, and also to align the top side of the flange and the top side of the screed. This is because the technician does not have both hands free for arranging the screed and aligning it with the flange, as the waterproof cloth needs to be held aside, and also because the waterproof cloth is obstructing at the outer edge of the flange while arranging the screed and aligning it with the flange. Thus, as a result, it is not that easy to install the drainage channel correctly in a screed, and to thereby achieve a proper fitting of the drainage channel onto the screed so that a correctly aligned waterproof cover can be formed over the flange and the screed by means of the waterproof cloth.

Description of the invention

[0006] The present invention aims to provide a drainage channel that is easier to install in a screed.

[0008] This aim is achieved by means of a drainage channel showing the characteristics of the first independent claim.
[0008] Therefore, the present invention provides a drainage channel for installation in a screed. The drainage channel comprises a collection tray for collecting water or any other liquid to be drained. The drainage channel comprises a flange around the collection tray for aligning the drainage channel with the screed. The flange extends laterally from a top edge of the collection tray up to an outer edge of the flange. Preferably, the flange is located in a plane. The drainage channel comprises a waterproof cloth for forming a waterproof cover over the flange and the screed. The waterproof cloth is attached to a top side of the flange from the top edge of the collection tray up to a predetermined attachment edge between the top edge of the collection tray and the outer edge of the flange. Preferably, the waterproof cloth is only attached to the top side of the flange from the top edge of the collection tray up to the predetermined attachment edge between the top edge of the collection tray and the outer edge of the flange. Preferably, the dimensions of the waterproof cloth are such that the waterproof cloth extends from the top edge of the collection tray to beyond the outer edge of the flange.

[0009] Attaching the waterproof cloth to the top side of the flange from the top edge of the collection tray up to the attachment edge between the top edge of the collection tray and the outer edge of the flange, thus at a certain distance from the outer edge of the flange, offers the advantage that a portion of the flange near the outer edge remains free, so

as to simplify arranging the screed against the drainage channel, and to simplify aligning the top side of the flange with the top side of the screed. This also allows the waterproof cloth to be laid aside far enough onto the drainage channel for a technician to have both hands free for arranging the screed against the drainage channel, and for aligning the top side of the screed with the top side of the flange.

- **[0010]** The position of the predetermined attachment edge is then preferably chosen so that a sufficiently large portion of the flange near the outer edge remains free, so as to simplify the installation of the drainage channel in the screed, and also to ensure that the waterproof cloth is attached from the top edge of the collection tray to the top side of the flange over a sufficiently large portion of the flange so that the waterproof cloth cannot be pulled loose from the flange by means of a small pulling force.
- 10011] The top edge of the collection tray may be at the same height as the top side of the flange. The top edge of the collection tray may, however, also comprise an upright part that extends upwards relative to the top side of the flange. Preferably, the upright part of the top edge of the collection tray has a predetermined height relative to the top side of the flange, so that the top side of elements such as for instance tiles that are arranged onto the waterproof cloth for finishing the floor may be aligned with the top of the upright part of the top edge.
- Freferably, the collection tray comprises a bottom wall. The bottom wall is provided with a drainage opening for draining the collected water. The collection tray comprises an upright wall that extends upwards around the bottom wall up to the top edge of the collection tray. The top edge of the collection tray surrounds the entire perimeter of the collection tray. The top edge of the collection tray defines an entrance opening of the collection tray.
 - **[0013]** In an embodiment of the drainage channel according to the present invention, the attachment edge is located at least at a predetermined first distance from the outer edge of the flange. This first distance is preferably 30%, more preferably 35%, even more preferably 40% and yet even more preferably 45% of the width of the flange, i.e., the distance between the top edge of the collection tray and the outer edge of the flange. The attachment edge is preferably located substantially midway of the width of the flange.
 - **[0014]** By providing the attachment edge at a sufficiently large first distance from outer edge of the flange, a sufficiently large portion of the flange near the outer edge is kept free to simplify arranging the screed against the drainage channel, and to simplify aligning the top side of the screed with the top side of the flange, and thus to simplify the installation of the drainage channel in the screed for a technician.
 - **[0015]** In an embodiment of the drainage channel according to the present invention, the attachment edge is located at least at a predetermined second distance from the top edge of the collection tray. This second distance is preferably 30%, more preferably 35%, even more preferably 40% and yet even more preferably 45% of the width of the flange, i.e., the distance between the top edge of the collection tray and the outer edge of the flange. The attachment edge is preferably located substantially midway of the width of the flange.

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- **[0016]** By providing the attachment edge at a sufficiently large second distance from the top edge of the collection tray, the waterproof cloth is attached to the top side of the flange over a sufficiently large portion of the flange so that the waterproof cloth cannot be pulled loose from the flange by means of a small pulling force. This embodiment is therefore advantageous for achieving a proper adhesion between the waterproof cloth and the flange.
- **[0017]** In an embodiment of the drainage channel according to the present invention, the waterproof cloth is attached to the top side of the flange by means of an adhesive. Preferably, the adhesive is a glue.
- **[0018]** In an embodiment of the drainage channel according to the present invention, the unattached portion of the waterproof cloth is located substantially entirely within the perimeter of the attachment edge.
- **[0019]** This embodiment offers the advantage that the waterproof cloth is already positioned as far as possible from the outer edge of the flange, and thus does not impede arranging the screed against the drainage channel and aligning the top side of the screed with the top side of the flange. This allows the drainage channel to be installed in a screed in a quick and efficient way.
- [0020] In an embodiment of the drainage channel according to the present invention, the unattached portion of the waterproof cloth is folded substantially entirely within the perimeter of the attachment edge.
 - **[0021]** By folding, the unattached portion can be positioned substantially entirely within the perimeter of the attachment edge in an orderly manner. This allows the unattached portion of the waterproof cloth, after arranging the screed against the drainage channel and aligning the top side of the screed with the top side of the flange, to be positioned over the flange outside of the attachment edge and the surrounding part of the screed in a quick and easy manner by unfolding the waterproof cloth. This allows the drainage channel to be installed in the screed in a quick and efficient way.
 - **[0022]** In an embodiment of the drainage channel according to the present invention, the parts of the unattached portion of the waterproof cloth positioned within the perimeter of the attachment edge are connected to each other by means of connection elements. Preferably, the connection elements are pieces of adhesive tape.
- [0023] The use of the connection elements is advantageous for keeping the unattached portion of the waterproof cloth within the perimeter of the attachment edge while arranging the screed against the drainage channel and aligning the top side of the screed with the top side of the flange, so that these do not hinder the technician during this operation.
 - [0024] In an embodiment of the drainage channel according to the present invention, the drainage channel further

comprises a cover element arranged onto the top side of the flange for covering the waterproof cloth. The cover element is preferably supported on the flange between the attachment edge and the outer edge of the flange, preferably substantially abutting the attachment edge, and from there domes over the waterproof cloth positioned within the perimeter of the attachment edge.

[0025] The cover element is advantageous for protecting the waterproof cloth, and thus preventing damage to the waterproof cloth, for instance during transport of the drainage channel or during storage of the drainage channel in a warehouse or on a building site prior to the installation in a screed, or during the installation of the drainage channel in a screed.

[0026] In an embodiment of the drainage channel according to the present invention, the cover element comprises a top wall. The cover element comprises a downward wall extending downwards around the top wall down to a bottom edge of the cover element. The cover element is supported with the bottom edge on the flange between the attachment edge and the outer edge of the flange, and preferably substantially abutting the attachment edge.

[0027] Furthermore, the present invention also provides a floor. The floor comprises a supporting floor. The floor comprises a screed on top of the supporting floor. The drainage channel according to an embodiment of the present invention is installed in the screed.

[0028] Furthermore, the present invention also provides a method for installing the drainage channel according to an embodiment of the present invention in a screed. The method comprises, if so required, the step of positioning the unattached portion of the waterproof cloth substantially entirely within the perimeter of the attachment edge. The method comprises the step of arranging the drainage channel onto a supporting floor. The supporting floor is arranged for applying the screed thereon. The drainage channel is placed in such a way onto the supporting floor that the top side of the flange is located at a predetermined height relative to the supporting floor. The method comprises the step of arranging the screed onto the supporting floor against the drainage channel. The method comprises the step of aligning the top side of the screed with the top side of the flange of the drainage channel. The method comprises the step of positioning the unattached portion of the waterproof cloth over the flange outside of the attachment edge and the surrounding part of the screed.

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[0029] In an embodiment of the method according to the present invention, the method further comprises the step of removing the cover element so as to release the waterproof cloth. Preferably, the cover element is not removed until just before the step of positioning the unattached portion of the waterproof cloth over the flange outside of the attachment edge and the surrounding part of the screed.

[0030] Furthermore, the present invention also provides a method for manufacturing a drainage channel for installation in a screed. The method comprises the step of providing a collection tray for collecting water to be drained. A flange is arranged around the collection tray for aligning the drainage channel with the screed. The flange extends laterally from a top edge of the collection tray up to an outer edge of the flange. The method comprises the step of providing a waterproof cloth for forming a waterproof cover over the flange and the screed. The method comprises the step of attaching a waterproof cloth to a top side of the flange from the top edge of the collection tray up to a predetermined attachment edge between the top edge of the collection tray and the outer edge of the flange.

[0031] In an embodiment of the method according to the present invention, the attachment edge is located at least at a predetermined first distance from the outer edge of the flange. This first distance is preferably 30%, more preferably 35%, even more preferably 40% and yet even more preferably 45% of the width of the flange, i.e., the distance between the top edge of the collection tray and the outer edge of the flange. The attachment edge is preferably located substantially midway of the width of the flange.

[0032] In an embodiment of the method according to the present invention, the attachment edge is located at least at a predetermined second distance from the top edge of the collection tray. This second distance is preferably 30%, more preferably 35%, even more preferably 40% and yet even more preferably 45% of the width of the flange, i.e., the distance between the top edge of the collection tray and the outer edge of the flange. The attachment edge is preferably located substantially midway of the width of the flange.

[0033] In an embodiment of the method according to the present invention, the waterproof cloth is attached to the top side of the flange by means of an adhesive. Preferably, the adhesive is a glue.

[0034] In an embodiment of the method according to the present invention, the method further comprises the step of positioning the unattached portion of the waterproof cloth substantially entirely within the perimeter of the attachment edge.

[0035] In an embodiment of the method according to the present invention, the unattached portion of the waterproof cloth is positioned substantially entirely within the perimeter of the attachment edge by folding the unattached portion of the waterproof cloth.

[0036] In an embodiment of the method according to the present invention, the method further comprises the step of connecting the parts of the unattached portion of the waterproof cloth positioned within the perimeter of the attachment edge to each other by means of connection elements. Preferably, the parts of the unattached portion of the waterproof cloth positioned within the perimeter of the attachment edge are connected to each other by means of adhesive tape.

[0037] In an embodiment of the method according to the present invention, the method further comprises the step of

providing a cover element for covering the waterproof cloth. The method further comprises the step of placing the cover element onto the top side of the flange for covering the waterproof cloth.

Brief description of the drawings

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[0038] The invention will hereafter be elucidated in further detail by means of the following description and the appended drawings.

Figure 1 shows a perspective view of a drainage channel according to an embodiment of the present invention with the waterproof cloth unfolded.

Figures 2 and 3 show the drainage channel of Figure 1 with the waterproof cloth partially folded.

Figure 4 shows the drainage channel of Figure 1 with the waterproof cloth fully folded.

Figure 5 shows the drainage channel of Figure 4 with the waterproof cloth covered by a cover element.

Figure 6 shows a cross section through the drainage channel of Figure 5 along line VI-VI.

Figures 7-11 show a schematic representation of different steps of a method according to an embodiment of the present invention for installing a drainage channel according to an embodiment of the present invention in a screed.

Embodiments of the invention

[0039] The present invention will hereafter be described with respect to particular embodiments and with reference to certain drawings, but the invention is not limited thereto and is limited only by the claims. The drawings shown here are only schematic and are non-limiting. In the drawings, the dimensions of some of the elements may be exaggerated, meaning that the elements in question are not drawn to scale, for illustrative purposes only. The dimensions and the relative dimensions do not necessarily correspond to actual reductions to practice of the invention.

[0040] Furthermore, terms such as "first", "second", "third" and the like are used in the description and in the claims for distinguishing between similar elements, and not necessarily for describing a sequential or chronological order. The terms in question are interchangeable under the appropriate circumstances and the embodiments of the invention can operate in other sequences than described or illustrated here.

[0041] Moreover, terms such as "top", "bottom", "over", "under" and the like are used in the description and the claims for descriptive purposes and not necessarily for describing relative positions. The terms so used are interchangeable under the appropriate circumstances and the embodiments of the invention described herein can operate in other orientations than described or illustrated herein.

[0042] The term "comprising" and derivative terms, as used in the claims, should not be interpreted as being restricted to the means listed respectively thereafter; the term does not exclude other elements or steps. It should be interpreted as specifying the stated features, integers, steps or components as referred to, without, however, precluding the presence or addition of one or more other features, integers, steps or components, or groups thereof. Thus, the scope of the expression such as "a device comprising means A and B" is not limited to devices consisting only of components A and B. What is meant, on the contrary, is that with respect to the present invention, the only relevant components of the device are A and B.

[0043] Figures 1-4 show a drainage channel 100 according to an embodiment of the present invention in a perspective view. The drainage channel 100 is arranged to be installed in the screed 200 of a space in which water or another liquid is to be drained, such as for instance a shower. Figures 1-4 show different phases of folding the waterproof cloth 130 of the drainage channel 100. In Figure 1, the waterproof cloth 130 fully unfolded; in Figures 2 and 3, the waterproof cloth 130 is already partially folded, and in Figure 4, the waterproof cloth 130 is fully folded. Unfolding the waterproof cloth 130 will be described in more detail below.

[0044] Figures 5 and 6 show a drainage channel 100 according to a further embodiment of the present invention, respectively in a perspective view, and a cross section through the line VI-VI shown in Figure 5. The drainage channel 100 according to this embodiment is the same drainage channel 100 as that of Figures 1-4, but further comprises for protection a cover element 140 for covering and protecting the waterproof cloth 130 in the fully folded state as shown in Figure 4.

[0045] The drainage channel 100, as shown for instance in Figures 1 and 6, comprises a collection tray 110 provided at the top side with an entrance opening 115 via which water to be drained can flow into the collection tray 110. At the bottom, the collection tray 110 is provided with a bottom wall 111, which is provided with a drainage opening 116 along which the water collected in the collection tray 110 can drain off, for instance into a drainage pipe (not shown) connected externally to the drainage opening 116, either directly or by means of a connector (not shown) provided for that purpose. Furthermore, the collection tray 110 comprises an upright wall 112 extending upwards around the bottom wall 111 up to a top edge 113 of the collection tray 110 that surrounds the entrance opening 115 of the collection tray 110.

[0046] The drainage channel 100 further also comprises a flange 120 around the entrance opening 115 of the collection

tray 110. The flange 120 is arranged to make the drainage channel 100 fit onto the screed 200. The flange 120 extends laterally from the top edge 113 of the collection tray 110 up to an outer edge 122 of the flange 120. The flange 120 and the collection tray 110 preferably form a whole.

[0047] The drainage channel 100 further also comprises the waterproof cloth 130 that is intended to form a waterproof cover over the flange 120 and the screed 200 around the drainage channel 100 during the installation of the drainage channel 110 in a screed 200. This, for protecting the underlying screed 200 against water or moisture seeping in. In order to protect the screed 200 in the wider area around the drainage channel 100 against water seeping in, a further waterproof cloth (not shown) can be used, which is fitted against or overlapped with the waterproof cloth 130 of the drainage channel 100.

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[0048] The waterproof cloth 130 is attached to a top side 121 of the flange 120 by means of an adhesive, such as a glue. The waterproof cloth 130 is not attached to the flange 120 over the entire top side 121, but only from the top edge 113 of the collection tray 110 up to a predetermined attachment edge 123 between the top edge 113 of the collection tray 110 and the outer edge 122 of the flange 120. The waterproof cloth 130 is thus divided into an attached portion 131 and an unattached portion 132. The attached portion 131 of the waterproof cloth 130 extends from the top edge 113 of the collection tray 110 up to the attachment edge 123. The unattached portion 132 extends from the attachment edge 123 to beyond the outer edge 122 of the flange 120, so as to allow a waterproof cover to also be formed on the screed 200 in the near surroundings of the drainage channel 100.

[0049] The position of the attachment edge 123 is preferably chosen so that it is located at least at a predetermined first distance d1 from the outer edge 122 of the flange 120, as shown in Figure 6. If the unattached portion 132 of the waterproof cloth 130 is then folded away from the outer edge 122 of the flange 120 to over the collection tray 110, then a portion of the flange 120 near the outer edge 122 is free, so that the waterproof cloth 130 cannot hinder a technician there during installation of the drainage channel 100 in a screed 200. The first distance d1 is preferably 30%, more preferably 35%, even more preferably 40% and yet even more preferably 45% of the width b of the flange, i.e., the distance between the top edge 113 of the collection tray 110 and the outer edge 122 of the flange 120.

[0050] The position of the attachment edge 123 is preferably also chosen so that it is located at least at a predetermined second distance d2 from the top edge 113 of the collection tray 110, as shown in Figure 6. This ensures that the waterproof cloth 130 is still attached to the flange 120 over a sufficiently large portion of the flange 120, to prevent unwanted detachment of the waterproof cloth 130 by a small pulling force. The second distance d2 is preferably 30%, more preferably 35%, even more preferably 40% and yet even more preferably 45% of the width b of the flange 120.

[0051] In the embodiment of the drainage channel 100 shown, the attachment edge 123 is for instance substantially midway of the width b of the flange 120.

[0052] The attached portion 131 of the waterproof cloth 130 fully surrounds the top edge 113, and thus the entrance opening 115 of the collection tray 110. In the unattached portion 132 of the waterproof cloth 130, four flaps 133 can be distinguished along each of four sides 114 of the rectangular shape of the top edge 113 of the collection tray 110. The different flaps 133 of the unattached portion 132 of the waterproof cloth 130 make it easy to fold the unattached portion 132 of the waterproof cloth 130 away from the outer edge 122 of the flange 120 over the collection tray 110, so that the unattached portion 132 of the waterproof cloth 130 is located substantially entirely within the perimeter of the attachment edge 123, as shown in Figure 4, and the portion of the flange 120 outside of the attachment edge 123 becomes free in order to simplify the installation of the drainage channel 100 in a screed 200. Thereby, the flaps 133 along the long sides 114 of the rectangular shape of the top edge 113 may be folded inwards first, as shown in Figure 2, and then the flaps 133 along the short sides 114 of the rectangular shape of the top edge 113, as shown in Figure 3, or in the reverse order. In order to keep the inwardly folded portions of the waterproof cloth 130, being the flaps 133, properly together, they may be connected to each other by means of connection elements 150, for instance pieces of adhesive tape 150, as shown in the Figures 3 and 4, among others.

[0053] The waterproof cloth 130 of the drainage channel 110 is preferably made from a flexible material that allows the waterproof cloth 130 to be folded into a desired position quickly and easily. This allows the unattached portion 132 of the waterproof cloth 130, prior to the installation of the drainage channel 100 in a screed 200, to be folded already into a position in which the unattached portion 132 of the waterproof cloth 130 is located substantially entirely within the perimeter of the attachment edge 123, in order to simplify the installation of the drainage channel 100 in a screed 200. The prior folding of the unattached portion 132 of the waterproof cloth 130 into the desired position may for instance already be carried out during manufacturing of the drainage channel 100, so that the drainage channel 100 is readymade for installation in a screed 200.

[0054] For protecting the waterproof cloth 130 against damage during storage or transport prior to the use of the drainage channel 100 in the installation in a screed 200, and/or during the installation of the drainage channel 100 in a screed 200, the waterproof cloth 130 may be covered by a cover element 140, as shown in Figures 5 and 6. At the top side, the cover element 140 comprises a top wall 141. Furthermore, the cover element 140 comprises a downward wall 142 extending downwards around the top wall 141 up to a bottom edge 143 of the cover element 140. The bottom edge 143 of the cover element 140 surrounds an opening 144 along which the cover element 140 is slid over the waterproof

cloth 130. In order to cover the waterproof cloth 130, the cover element 140 is supported with its bottom edge 143 on the flange 120 between the attachment edge 123 and the outer edge 122 of the flange 120, and thereby positioned substantially against the attachment edge 123.

[0055] Figures 7-11 show in a schematic representation the different steps of a method according to an embodiment of the present invention for installing a drainage channel 100 according to an embodiment of the present invention in a

[0056] In a first step, shown in Figure 7, the drainage channel 100 is placed onto a supporting floor 300 that is arranged for applying the screed 200 thereon. Here, the unattached portion 132 of the waterproof cloth 130 is folded substantially entirely within the perimeter of the attachment edge 123, and the waterproof cloth 130 is covered with the cover element

[0057] Next, as shown in Figure 8, the position of the drainage channel 100 relative to the supporting floor 300 is adjusted in the height direction so that the top side 121 of the flange 120 is located at a predetermined height h relative to the supporting floor 300. The predetermined height h is determined by the level up to which the screed 200 to be arranged onto the supporting floor 300 should reach in order to achieve a proper floor construction. Adjusting the position of the drainage channel 100 in the height direction may for instance be carried out by means of dedicated heightadjustable supporting feet 160 under the drainage channel 100. It should, however, be noted that other methods and/or devices known to the person skilled in the art and suitable for this purpose may also be used. To allow the top side 121 of the flange 120 to be positioned quickly and correctly at the predetermined height h, it is advantageous for the waterproof cloth 130 to be already positioned substantially entirely within the perimeter of the attachment edge 123, so that the outer portion of the flange 120, between the attachment edge 123 and the outer edge 122 of the flange 120, is free so as to allow the height of the top side 121 of the flange 120 to be correctly determined, without being hindered by the waterproof cloth 130.

[0058] Furthermore, in this step, the drainage opening 116 of the collection tray 110 is also connected to a drainage pipe (not shown) that is already provided above the supporting floor 300 to be embedded into the screed 200. Here, the drainage pipe may for instance be connected to the drainage opening 116 directly, or by means of a connector (not shown) provided for that purpose on the drainage channel 100.

[0059] In a next step, shown in Figure 9, the screed 200 is then arranged onto the supporting floor 300 up to the drainage channel 100. Here, the screed 200 is arranged up to the predetermined height h above the supporting floor 300, and the screed 200 is made to fit closely to the flange 120 so that the top side 201 of the screed 200 is aligned with the top side 121 of the flange 120. To allow the top side 201 of the screed 200 to be quickly and correctly aligned with the top side 121 of the flange 120, it is advantageous for the waterproof cloth 130 to be already positioned substantially entirely within the perimeter of the attachment edge 123, so that the outer portion of the flange 120 between the attachment edge 123 and the outer edge 122 of the flange 120 is free for aligning the screed 200 with the flange 120 without being hindered by the waterproof cloth 130. Here, it is also advantageous for the waterproof cloth 130 to be covered by the cover element 140 for protecting the waterproof cloth 130 against possible damages when arranging the screed 200.

[0060] In a next step, shown in Figure 10, the cover element 140 is then removed, and the unattached portion 132 of the waterproof cloth 130 is folded outwards over the free portion of the flange 120 between the attachment edge 123 and the outer edge 122 of the flange and over the screed 200 in the immediate vicinity of the drainage channel 100, as shown in Figure 11. Here, the unattached portion 132 of the waterproof cloth 130 is attached to the flange 120 and the screed 200 for forming a waterproof cover on the flange 120 and the screed 200.

[0061] For the further finishing of the floor, a further waterproof cloth (not shown) may, if so desired, be attached to the screed 200 in the wide vicinity of the drainage channel 100. This further waterproof cloth can be made to fit closely or overlap with the waterproof cloth 130 of the drainage channel 100. A further finish of the floor, such as for instance tiles, can then be arranged on top of the waterproof cloth 130 and the further waterproof cloth.

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References						
100	drainage channel	133	flaps			
110	collection tray	140	cover element			
111	bottom wall	141	top wall			
112	upright wall	142	downward wall			
113	top edge	143	bottom edge			
114	sides top edge	144	opening			
115	entrance opening	150	adhesive tape			
116	drainage opening	160	supporting feet			
120	flange	200	screed			
121	topside	201	topside			

(continued)

122	outer edge	300	supporting floor
123	attachment edge	d1	first distance
130	waterproof cloth	d2	second distance
131	attached portion	b	width
132	unattached portion	h	height

10 Claims

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- 1. A drainage channel (100) for installation in a screed (200), wherein the drainage channel (100) comprises:
 - a collection tray (110) for collecting water to be drained;
 - a flange (120) around the collection tray (110) for aligning the drainage channel (100) with the screed (200), wherein the flange (120) extends laterally from a top edge (113) of the collection tray (110) up to an outer edge (122) of the flange (120); and
 - a waterproof cloth (130) for forming a waterproof cover over the flange (120) and the screed (200), wherein the waterproof cloth (130) is attached to a top side (121) of the flange (120);
 - **characterized in that** the waterproof cloth (130) is attached to the top side (121) of the flange (120) from the top edge (113) of the collection tray (110) up to a predetermined attachment edge (123) between the top edge (113) of the collection tray (110) and the outer edge (122) of the flange (120).
- 2. The drainage channel (100) according to claim 1, wherein the attachment edge (123) is located at least at a predetermined first distance (d1) from the outer edge (122) of the flange (120), and/or wherein the attachment edge (123) is located at least at a predetermined second distance (d2) from the top edge (113) of the collection tray (110).
 - 3. The drainage channel (100) according to claim 1 or 2, wherein the waterproof cloth (130) is attached to the top side (121) of the flange (120) by means of an adhesive, preferably by means of a glue.
 - 4. The drainage channel (100) according to any of the claims 1-3, wherein the unattached portion (132) of the waterproof cloth (130) is positioned, preferably folded, substantially entirely within the perimeter of the attachment edge (123).
- 5. The drainage channel (100) according to claim 4, wherein the parts of the unattached portion (132) of the waterproof cloth (130) positioned within the perimeter of the attachment edge (123) are connected to each other by means of connection elements (150), preferably by means of adhesive tape (150).
 - **6.** The drainage channel (100) according to claim 5, wherein the drainage channel (100) further comprises a cover element (140) arranged onto the top side (121) of the flange (120) for covering the waterproof cloth (130).
 - **7.** A floor, wherein the floor comprises a supporting floor (300), wherein the floor comprises a screed (200) on top of the supporting floor (300), wherein the drainage channel (100) according to any of the claims 1-6 is installed in the screed (200).
- **8.** A method for installing the drainage channel (100) according to any of the claims 1-6 in a screed (200), wherein the method comprises the following steps:
 - positioning the unattached portion (132) of the waterproof cloth (130) substantially entirely within the perimeter of the attachment edge (123), if so required;
 - arranging the drainage channel (100) onto a supporting floor (300) so that the top side (121) of the flange (120) is located at a predetermined height (h) relative to the supporting floor (300);
 - arranging the screed (200) onto the supporting floor (300) against the drainage channel (100), wherein the top side (201) of the screed (200) is aligned with the top side (121) of the flange (120) of the drainage channel (100); and
 - positioning the unattached portion (132) of the waterproof cloth (130) over the flange (120) outside of the attachment edge (123) and the surrounding part of the screed (200).
 - 9. The method according to claim 8, at least combined with claim 6, wherein the method first comprises the step of

removing the cover element (140) so as to release the waterproof cloth (130).

10. A method for manufacturing a drainage channel (100) for installation in a screed (200), wherein the method comprises the following steps:

providing a collection tray (110) for collecting water to be drained, wherein a flange (120) is provided around the collection tray (110) for aligning the drainage channel (100) with the screed (200), wherein the flange (120) extends laterally from a top edge (113) of the collection tray (110) up to an outer edge (122) of the flange (120); providing a waterproof cloth (130) for forming a waterproof cover over the flange (120) and the screed (200); and attaching a waterproof cloth (130) to a top side (121) of the flange (120);

characterized in that the waterproof cloth (130) is attached to the top side (121) of the flange (120) from the top edge (113) of the collection tray (110) up to a predetermined attachment edge (123) between the top edge (113) of the collection tray (110) and the outer edge (122) of the flange (120).

- 11. The method according to claim 10, wherein the attachment edge (123) is located at least at a predetermined first distance (d1) from the outer edge (122) of the flange (120), and/or wherein the attachment edge (123) is located at least at a predetermined second distance (d2) from the top edge (113) of the collection tray (110).
 - 12. The method according to claim 10 or 11, wherein the waterproof cloth (130) is attached to the top side (121) of the flange (120) by means of an adhesive, preferably by means of a glue.
 - 13. The method according to any of the claims 10-12, wherein the method further comprises the step of positioning the unattached portion (132) of the waterproof cloth (130) substantially entirely within the perimeter of the attachment edge (123), preferably by folding the unattached portion (132) of the waterproof cloth (130).
 - 14. The method according to claim 13, wherein the method further comprises the step of connecting the parts of the unattached portion (132) of the waterproof cloth (130) positioned within the perimeter of the attachment edge (123) to each other by means of connection elements (150), preferably by means of adhesive tape (150).
- 30 15. The method according to claim 13 or 14, wherein the method further comprises the following steps:

providing a cover element (140) for covering the waterproof cloth (130); and arranging the cover element (140) onto the top side (121) of the flange (120) for covering the waterproof cloth (130).

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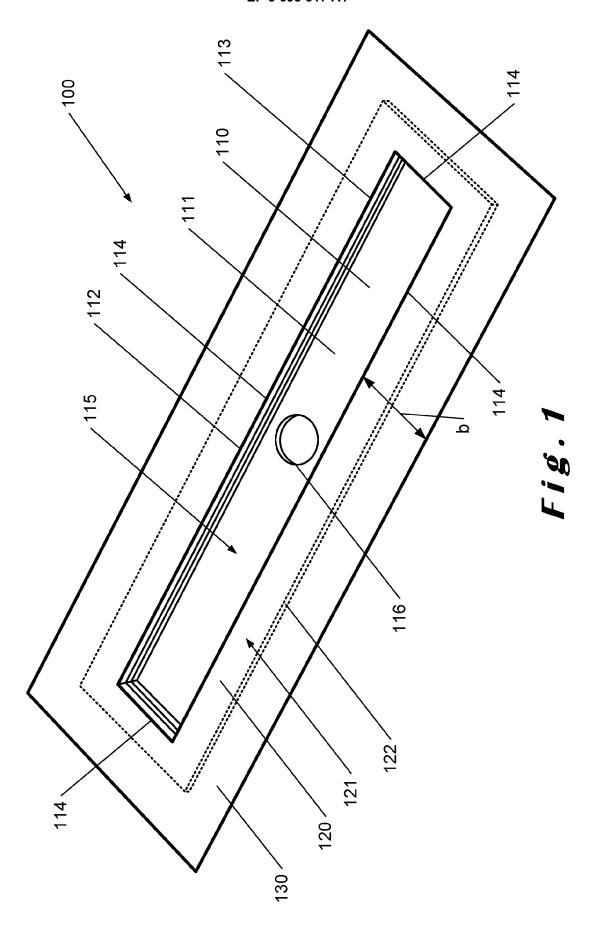
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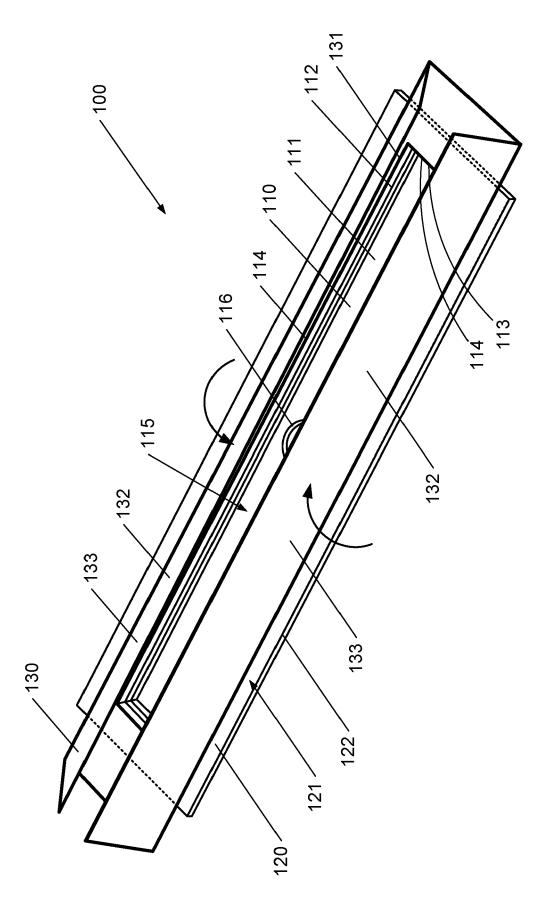
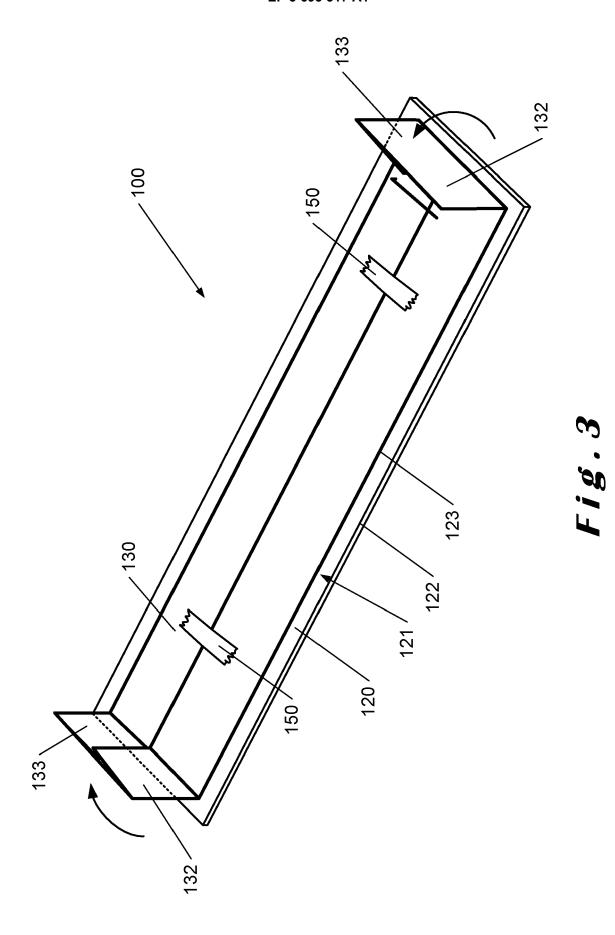
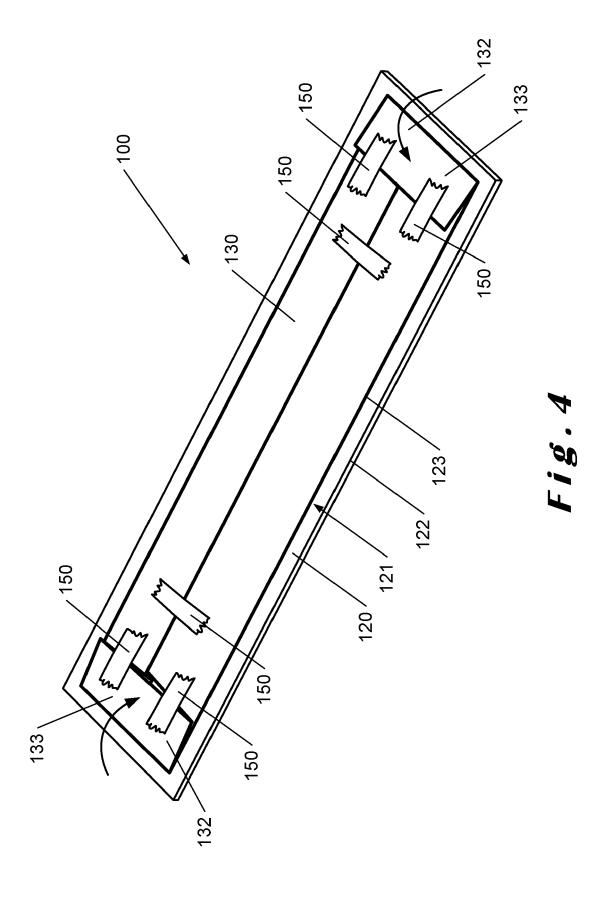
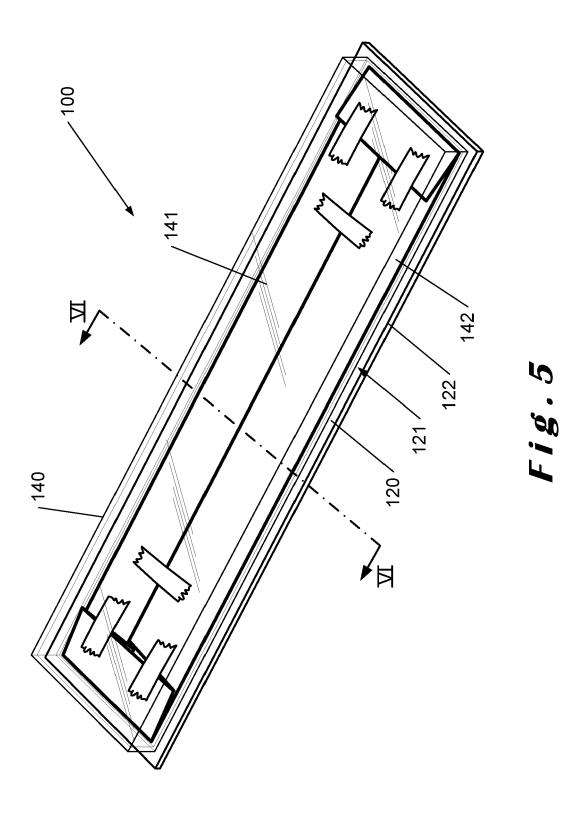
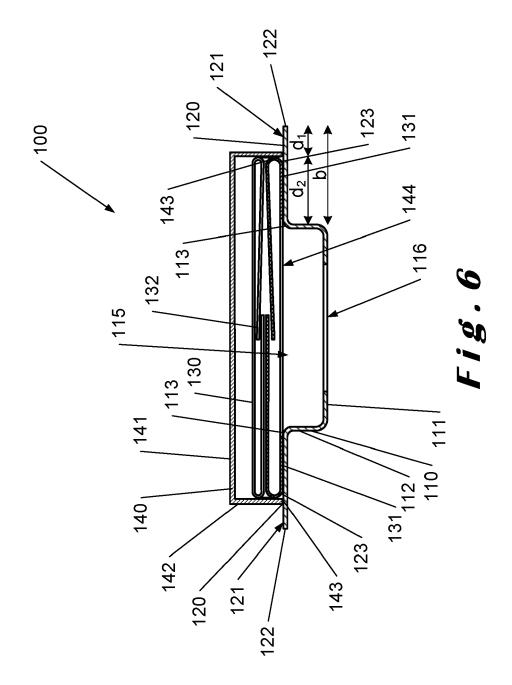


Fig. 2









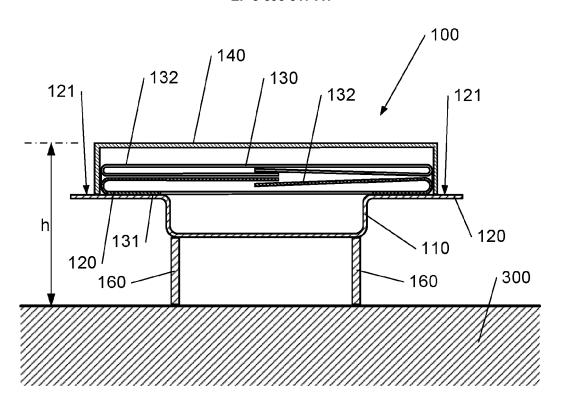


Fig.7

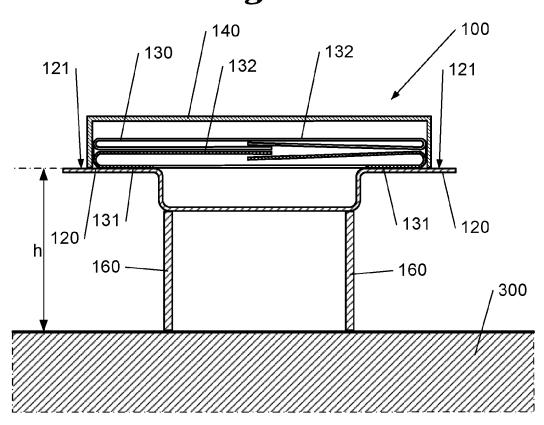
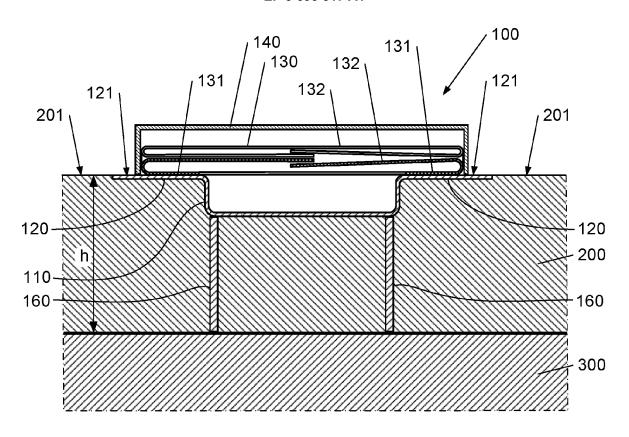


Fig.8



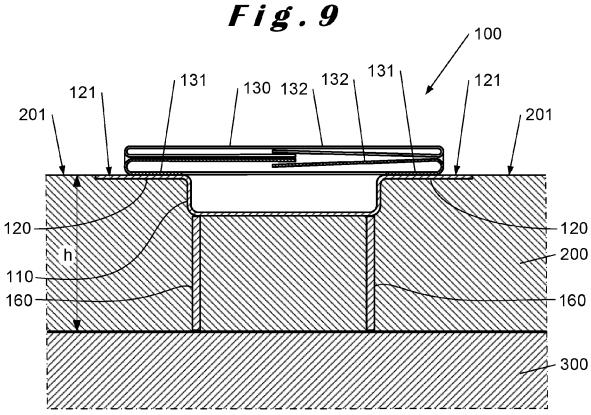
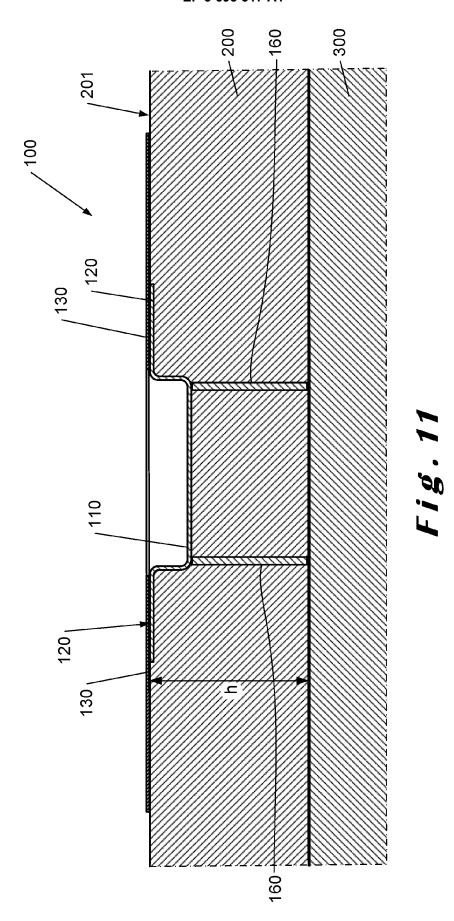


Fig. 10





EUROPEAN SEARCH REPORT

Application Number EP 20 15 5949

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