

Title: Shower partitioning with illumination**Description**

The invention relates to a shower partitioning, consisting of at least one plate-shaped element, which, on at least one
5 face edge, is provided with a seal.

Shower partitionings of the aforementioned species are well known. They generally consist of a plurality of plate-shaped elements, which, when assembled, form a shower stall. In this case, the face edges of plate-shaped elements
10 are provided with seals, which form the transition to an adjoining element. The elements are made, for example, from glass or plastic material and they may be transparent or they may be optionally stained. In each instance, the individual elements have a large surface, which does not
15 always fit harmoniously into the surroundings.

Moreover, a shower partitioning has been described in DE 39 07 607 C2, which additionally presents a multi-purpose module mounted on the side of the frame, which, among other things, on the one hand illuminates the shower from
20 the inside and on the other hand from the outside.

Therefore, it is an object of the present invention to provide a shower partitioning, which is improved with regard to the visual aspect thereof.

This problem is solved with the characteristics specified in patent claim 1. Advantageous embodiments of the object of patent claim 1 will become apparent in the dependent claims.

- 5 The fact of providing luminous means in the seal results in visual effects, which animate the large-surfaced elements of the shower partitioning and allow for an improved adaptation to various room situations. For example, when using an appropriate material for the seal, the light may
10 radiate through the seal.

According to one advantageous further development, it is intended that the light enters into the plate-shaped element via the face edge of the plate-shaped elements. This is not only creating an imaginative effect, which may even be
15 intensified, if the elements are provided with patterns such as stripes, bubbles or the like, but increases the visual effect, if the light is allowed to not only emerge via the seals, but also via the surface of the plate-shaped elements.

- 20 It is particularly easy to introduce the light into the plate-shaped elements, if the luminous means are located in front of the face edge of the plate-shaped elements. Thus, the light can be directly introduced into the plane of the plate-shaped element.

In order to protect the luminous means from exterior influences such as water, humidity, etc., according to one advantageous further development, the seal presents a hollow space, in which the luminous means, preferably
5 formed as LEDs, are located. Instead of LEDs, another luminous means with low energy consumption may be used.

Protecting the luminous means from exterior influences may even be further improved, if, in one advantageous
10 further development, the hollow space is at least partially filled with a casting compound. This is a safe and reliable way to prevent humidity from penetrating and thus from damaging the luminous means or even from harming the user.

15 According to one preferred embodiment, the luminous means extend at least over a partial length of the plate-shaped element, however, it preferably extends over the total vertical length of the plate-shaped element. Thus, the luminous means are preferably provided only at the vertical
20 face edges of the plate-shaped elements.

However, it is possible to additionally illuminate the horizontal face edges of the plate-shaped elements.

An advantageous further development guarantees visually inconspicuous power supply to the luminous means in that

the plate-shaped elements are preferably provided with a lower seal at the underside thereof, in which the power supply cables for the LEDs are located.

Arranging the cables in the lower seal can be realized in two ways. According to a first variant, the cables are cast into the lower seal. According to an alternative embodiment, the cable space is provided within the lower seal for the reception of the cables. In both instances, not only an almost invisible power supply is realized, but the power supply is also safely housed, protected against exterior influences.

If the seal is formed for receiving two plate-shaped elements, for example, for realizing a 90° corner, according to one preferred embodiment, the seal presents two rows of LEDs, which radiate light into different directions.

Further details, characteristics and advantages of the invention will become apparent in the following description of preferred embodiments, reference being made to the figures, in which:

Figure 1: is a complete view of an inventive shower partitioning;

Figure 2: is a lateral view of the plate-shaped elements forming the shower partitioning;

- Figure 3: is a section according to line A–A in Figure 2 through a plate-shaped element in the lower region according to a first embodiment variant;
- 5 Figure 3a: is a section according to line A–A in Figure 2 through a plate-shaped element in the lower region according to a second embodiment variant;
- 10 Figure 4: is a first embodiment of a plate-shaped element, formed according to the invention, in the region of the face edge;
- Figure 5: is a second embodiment of a plate-shaped element, formed according to the invention, in the region of the face edge;
- 15 Figure 6: is a third embodiment of a plate-shaped element, formed according to the invention, in the region of the face edge;
- Figure 7: is a fourth embodiment of a plate-shaped element, formed according to the invention, in the region of the face edge.
- 20

Figure 1 shows a shower partitioning which is located on a shower pan 1. The shower partitioning consists of a plurality of plate-shaped elements 3, 4, which are formed,

as illustrated, partially plane, partially curved, or they may be formed only curved, respectively only plane. The plate-shaped elements 3, 4 present at least one stationary lateral element 3, which is attached at a wall 2 and at least one
5 displaceable leaf 4. Instead of a displaceable leaf there may be provided a pivotable leaf.

Figure 2 shows in a lateral view a stationary lateral element 3 and a displaceable leaf 4. A lower seal 5 is provided at the underside, which seal may be mounted at both the
10 stationary lateral element 3 and at the displaceable leaf 4. The seal 5 is provided with a floor sealing lip 9, which leans against the floor 10 of the shower pan 1 and serves as a sealing.

This lower seal 5 is illustrated in Figures 3 and 3a in two
15 different embodiment variants.

According to the embodiment of Figure 3, the lower seal 5 presents two lateral lips 8, which sit close to the lateral surfaces of the elements 3, 4, such that a cable space 6 is created, between the lips 8 and below the element 3, 4,
20 within the lower seal 5, in which the cables 7 can be guided. The cable space 6 may be additionally filled with a casting compound to protect the cables 7.

A second embodiment of the lower seal 5 is illustrated in Figure 3a, in which the cables 7 are directly enclosed in the

sealing material. The seal 5, together with the cable 7, may be attached at the element 3, 4 for example by gluing or by another suitable technique.

Several embodiment variants of the inventive shower partitioning are illustrated in Figures 4 to 7. In this case, the element 3, 4 may be both a stationary lateral element 3 and a pivotable or displaceable leaf 4, which is movable in the travel directions 19, 20, respectively 21, 22.

At the elements 3, 4 of the shower partitioning, shown in Figures 4 to 6, a seal 15, 23, 25 is provided at the face edge 11. This seal 15, 23, 25, with the lateral lips 8 thereof, sits close to the element 3, 4, such that a hollow space is formed in front of the face edge of element 3, 4. Luminous means are located in this hollow space, which means preferably consist of LEDs 12 or of another luminous means with low energy consumption. The LEDs 12 are placed such that the light thereof is directed onto the face edge 11 of the element 3, 4 and may enter into the element 3, 4 via this face edge 11 and will be then radiated over the lateral surfaces. Depending on the execution of the seal 15, 23, 25, the light of the LEDs 12 may simultaneously emerge more or less intensively through the seal 15, 23, 25. The LEDs 12 are located in a box-shaped clearance zone 18 within the seal 15, 23, 25. On the side of the clearance zone 18 opposite to the face edge 11, a circuit

board 13 is connected to the LEDs 12. The LEDs 12 may be provided on at least one of the face edges 11 of at least one of the elements 3, 4 and they may extend over at least the partial length of the face edges 11. However, it is particularly impressive, if the LEDs 12 are arranged over the total vertical length of the face edges 11 of the elements 3, 4. The hollow space in the seal 15, in which the luminous means 12 are located, is completely or partially filled with a casting compound 14 as protection against penetrating humidity.

Various embodiments of seals 15, 23, 25 are shown in Figures 4 to 7, which are used depending on the execution of the shower stall.

A hollow space 17 is provided on the side opposite of the face edge 11 in the seal 15, shown in Figure 4, in which space a magnetic insert 16 is located, which may serve as an impervious connection to another element 3, 4 of the shower partitioning.

Another embodiment of the seal 23 is illustrated in Figure 5, in which a locating lip 24 is provided on the side opposite of the face edge 11. Furthermore, in this embodiment only the leaf 4 is provided with a luminous means 12, whereas the stationary lateral element 3, at least on the side oriented toward leaf 4, does not present any luminous means 12.

Figure 6 shows an embodiment similar to Figure 5, in this case, however, a seal 25, including the LEDs 12, is arranged at the stationary lateral element 3 as well.

Figure 7 shows a corner execution, in which two elements
5 3, 4 are combined at an angle of 90°. Here, the seal 25 consists of a 90° elbow, which interconnects both elements 3, 4. The LEDs 12, the light thereof radiating into different directions, are located within the seal 25. Part of the LEDs
12 is arranged at the face edge 11 of one element 3, 4, the
10 other LEDs 12 being arranged at the face edge 11 of the other element 3, 4. The cables 7 for connecting the LEDs 12 are guided in the seal 25 within the hollow space existing between both elements 3, 4. The hollow space may be moreover filled with a casting compound.

15 The LEDs 12 may be provided with an additional circuit, which allows for varying the light transmitted by the LEDs 12 with regard to the connecting time thereof, intensity thereof and/or the colour mixture thereof. Furthermore, the LEDs 12 may be controlled depending on the incident day
20 light, depending on the presence of a person or depending on any other optional program.

The above description of the shower partitioning according to the present invention serves for illustrative purposes only and is not intended to limit the invention. Various changes
25 and modifications are possible within the range of the

invention without leaving the scope of the invention or the equivalents thereof.

References

	1	shower pan
	2	wall
	3	stationary lateral element
5	4	displaceable leaf
	5	lower seal
	6	cable space
	7	cable
	8	lip
10	9	floor sealing lip
	10	floor of shower pan
	11	face edge
	12	LED
	13	circuit board
15	14	casting compound
	15	seal
	16	magnetic insert
	17	hollow space
	18	clearance zone
20	19	direction of movement
	20	direction of movement
	21	direction of movement
	22	direction of movement
	23	seal
25	24	locating lip
	25	seal

Patent claims

1. A shower partitioning consisting of at least one plate-shaped element, which, on at least one face edge, is provided with a seal, characterized in that
5 luminous means (12) are provided within the seal (15, 23, 25).
2. A shower partitioning according to claim 1, characterized in that the light of the luminous means (12) enters via the face edge of the plate-shaped element (3, 4) into the plate-shaped
10 element (3, 4).
3. A shower partitioning according to one of the preceding claims, characterized in that the luminous means are located in front of the face
15 edge of the plate-shaped element (3, 4).
4. A shower partitioning according to one of the preceding claims, characterized in that the seal (15, 23, 25) presents a hollow space, in which the luminous means, preferably formed as LEDs (12),
20 are located.
5. A shower partitioning according to one of the preceding claims, characterized in that the hollow

space is completely or partially filled with a casting compound (14).

- 5 6. A shower partitioning according to one of the preceding claims, characterized in that the luminous means (12) extend over at least part of the length of the plate-shaped element (3, 4), however, preferably extend over the total vertical and/or horizontal length of the plate-shaped element (3, 4).
- 10 7. A shower partitioning according to one of the preceding claims, characterized in that the plate-shaped elements (3, 4) are provided with a lower seal (5) preferably at the underside thereof, seal in which the cables (7) are arranged for the power supply to the LEDs (12).
- 15 8. A shower partitioning according to one of the preceding claims, characterized in that the cables (7) are cast into the lower seal (5).
- 20 9. A shower partitioning according to one of the preceding claims, characterized in that a cable space (6) for the reception of the cables (7) is provided within the lower seal (5).
10. A shower partitioning according to one of the preceding claims, characterized in that the seal

(25) presents two rows of LEDs (12), the light thereof radiating into different directions.