

Title: All-glass door assembly**Description**

- 5 The invention relates to an all-glass door assembly having an all-glass door, which is supported by means of an upper and a lower pivotal fitting, as well as having a lateral panel adjoining the all-glass door in the area of the axis of rotation.
- 10 It is known from the state-of-the-art to utilize a pivotal fitting with all-glass doors, in which the door leaf of the all-glass door rotates about a vertical axis. On account of the construction type of the pivotal fitting, in particular in the floor area and in particular also when utilizing a floor door closer, the axis of
- 15 rotation of the door leaf can not be disposed exactly at the vertical edge of the door leaf. This means the axis of rotation is offset in the direction of the centre of the door leaf. Thus, when pivoting the door, a secondary closing edge is created. When opening the door, a free space is thus created between the
- 20 door and the lateral panels, with the risk, especially for playing children, to reach with their hands into this free space and to grasp the lateral panel or the door leaf. When closing the door, a considerable risk of injury is given by pinching the hands or fingers.

The object of the invention is to create an all-glass door assembly of the type mentioned in the introduction, which is safe to operate and excludes the risk of injury.

5 According to the invention, the problem is solved with the combined features of the claim 1, the dependent claims representing further advantageous developments of the invention.

10 According to the invention, it is thus intended the vertical edge of the lateral panel be disposed in an area between the pivotal fittings and adjoining the axis of rotation.

According to the invention, the lateral panel thus protrudes in an
15 area between the two pivotal fittings. The lateral panel therefore has a protruding area, which, compared to the solutions of the state-of-the-art, would have been covered by the door leaf of the all-glass door. As the edge of the lateral panel is now located adjacent to or on the axis of rotation, when opening the
20 all-glass door, no gap is created into which one could possibly reach. Therefore, there is no secondary closing edge, such that, except for the pivotal fittings, the entire structure is jam-free. As the pivotal fittings are located only in the uppermost and the lowermost areas of the door and respectively have only a very
25 low vertical height, it can be excluded that individuals reach into these areas, because, as for the upper pivotal fitting, they can

not reach that high up, and as for the lower pivotal fitting, they would have first to lie down or kneel on the floor. Therefore, the entire all-glass door assembly is configured to be jam-free and safe.

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The inventive solution is simple and can be realized in a cost-effective manner. In this case, depending on the structure, it is simply required to shorten the door glass over the entire length by a predefined measure on the side of the fitting and/or to
10 widen the lateral glass panel by a defined value between the upper and lower pivotal fittings.

According to the invention, the secondary closing edge is thus located on the axis of rotation or, depending on the thickness of
15 the door leaf of the all-glass door, directly adjoining the axis of rotation.

The invention will now be described in more detail, reference being made to one embodiment.

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The Figures show:

Figure 1: a diagrammatical lateral view of the inventive all-glass door assembly,

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Figure 2: a view analogously to Figure 1 without pivotal fittings, and

5 Figure 3: shows a top view on the assembly according to Figures 1 and 2, in a partially opened condition of the all-glass door.

In the illustrated embodiment of the inventive all-glass door assembly, an all-glass door 4 is provided, which is supported by
10 means of an upper pivotal fitting 2 and a lower pivotal fitting 3. A floor door closer, to which the lower pivotal fitting 3 is operatively connected, is diagrammatically illustrated by the reference numeral 9. The upper pivotal fitting 2 is connected to a lateral panel 5 and an overpanel 10.

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As can be seen in particular in Figure 2, at its vertical edge 6 oriented towards the all-glass door 4, the lateral panel 5 has a projecting or protruding area 7, which (refer to Figure 1) extends between the two pivotal fittings 2, 3. Therefore, the
20 vertical axis of rotation 1 is located on or directly adjacent to the vertical edge 6, such as to result in the configuration shown in Figure 3, in which the secondary closing edge of the door leaf of the all-glass door 4 is jam-free.

25 In particular Figure 2 shows furthermore that the lateral panel 5 has an upper and a lower recess 8, in order to be able to

accommodate the respective parts of the pivotal fittings 2, respectively 3.

It should be understood that in particular the configuration of the
5 lateral panel 5, as well as of the pivotal fittings 2, 3 can be adapted to the respective installation conditions. The inventive solution may be provided with or without overpanel.

List of reference numerals

	1	vertical axis of rotation
	2	upper pivotal fitting
5	3	lower pivotal fitting
	4	all-glass door
	5	lateral panel
	6	vertical edge
	7	area
10	8	recess
	9	floor door closer
	10	overpanel

Patent claims

1. An all-glass door assembly having an all-glass door (4) supported by means of an upper (2) and a lower pivotal fitting (3) which form a vertical axis of rotation (1), and
5 having at least one lateral panel (5), wherein a vertical edge (6) of the lateral panel (5) is disposed in an area between the pivotal fittings (2, 3) and adjoining the axis of rotation (1).
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2. An all-glass door assembly according to claim 1, characterized in that, between the pivotal fittings (2, 3), the lateral panel (5) is provided with an area (7) extending in the direction of the all-glass door (4).
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3. An all-glass door assembly according to claim 1 or 2, characterized in that the pivotal fittings (2, 3) are disposed to protrude beyond the vertical edge of the all-glass door (4).
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4. An all-glass door assembly according to any of the claims 1 to 3, characterized in that, in the area of the pivotal fittings (2, 3), the lateral panel (5) is provided with a recess (8).
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