

Claims

1. A spacer for fixation to a construction element, for maintaining a relative distance to another construction element, and for restricting at the maintained distance a movement about a position that is relative to another construction element, the spacer having a structure that:
  - a) provides resiliency and generates a force for enhancing a distance relative to another nearby construction element when distance to that other construction element is reduced to a predetermined distance, and
  - 10 b) provides restriction of a movement of the structure in at least one direction that is different from the direction of predetermined distance, wherein preferably the spacer is configured such that in use of the spacer the force for enhancing a distance to that other construction element is predominantly directed across the direction of gravity.
2. A spacer according to claim 1, wherein the structure comprises a resilient element, 15 wherein the resilient element preferably has a shape that differs from a coil-shape.
3. A spacer according to claim 1 and/or 2, wherein the structure comprises a restrictor for restricting the movement.
4. A spacer according to claim 2 and 3, wherein the restrictor and the resilient element are spatially separated different elements of the structure, or wherein the restrictor and the resilient element are directly connected to each other and each 20 embodied in one and the same single element of the structure.
5. A spacer according to any one of the previous claims 3 or 4, wherein the restrictor is provided on the resilient element.
6. A spacer according to claim 5, wherein the restrictor is provided with an abutment 25 surface for abutting a part of another construction element, and wherein the abutment surface is provided with a suction cup or a high-friction surface for firmly fixing the restrictor relative to another construction element whilst abutting that other construction element.

7. A spacer according to any one of the previous claims as far as dependent on each of claim 2 and 3, wherein the structure is provided with at least one resilient element and at least one restrictor which are each spatially separated different parts of the structure.

8. A spacer according to claim 7, wherein the structure is provided with a plurality of  
5 resilient elements and a plurality of restrictors.

9. A spacer according to claim 8, wherein the resilient elements and the restrictors have positions in the structure which alternate each other along a dimension of the structure.

10. A spacer according to any one of the previous claims, wherein the structure is  
10 fixed or fixable to a slab-shaped construction element having two main surfaces and a rim between the two main surfaces, wherein the structure is positioned or positionable at the rim for maintaining a relative distance to a rim of an adjacent slab-shaped construction element, and for reducing at the maintained distance a movement of the rim about a position that is relative to a rim of an adjacent slab-shaped construction element.

11. A spacer according to any one of claims 2-10, wherein at least one of the resilient  
15 elements is pawl-shaped, and wherein preferably each resilient element is pawl-shaped.

12. A spacer according to claim 10 and 11, wherein the resilient element has a free end at or close to a part of the structure that is in use of the structure at the rim at or close to one of the main surfaces.

13. A spacer according to claim 2 and 12, wherein the free end is at the  
20 predetermined distance.

14. A spacer according to claim 12, wherein the free end is a trailing end of the pawl-shaped element for placing the slab-shaped construction element adjacent to an end-positioned other slab-shaped construction element such that the trailing end is a part of  
25 the structure that is in time only toward the end of the placement adjacent to the end-positioned other slab-shaped construction element, as opposed to a part of the resilient element that is away from the free end and that is in time already at the beginning of the placement adjacent to the end-positioned other slab-shaped construction element.

15. A spacer according to any one of claims, 3-14, and according to claim 10, wherein  
30 the restrictor is designed for blocking movement of a free end of a pawl-shaped resilient

element of a structure that is fixed to a rim of an adjacent slab-shaped construction element.

16. A spacer according to claim 15, wherein the blocking element is a trailing end of the structure for placing the slab-shaped construction element adjacent to another  
5 already end-positioned slab-shaped construction element such that the trailing end is a part of the structure that is in time only toward the end of the placement adjacent to the other slab-shaped construction element, as opposed to a part of the structure that is away from the trailing end and that is in time already at the beginning of the placement adjacent to the end-positioned other slab-shaped construction element.

10 17. A spacer according to any one of the previous claims, wherein the spacer is one of the spacers of an assembly having at least two of such spacers.

18. A spacer according to claim 17, wherein the structure of each spacer is provided with a plurality of resilient elements and a plurality of restrictors for restricting the movement, wherein the resilient elements and the restrictors of a respective structure  
15 alternate each other in a longitudinal direction of that structure.

19. A spacer according to claim 17 or 18, wherein the structure of each spacer is such that it allows for positioning the structure in a mating condition with the structure of another spacer of the assembly.

20. A spacer according to claim 19, wherein in the mating condition, the resilient  
20 element of the structure of one spacer is opposite and interacting with the restrictor of the structure of another spacer of the assembly.

21. A spacer according to claim 20, wherein the structure is provided with a guiding track and with a counter track for interacting with the guiding track, such that on bringing the structure of one spacer into the mating position with the structure of another spacer,  
25 the structure first can be put under an angle relative to the other structure and be put in contact, to then let the counter track interact with the guiding track for reaching the mating condition.

22. A spacer according to any one of the claims 19-21, wherein the structure is such that in the mating position the structure of one of the spacers is locked into the mating  
30 position with the structure of another one of the spacers.

23. A spacer according to any one of the claims 19-22, wherein the structure is such that in the mating position the structure is in a mechanically releasable condition.
24. A spacer according to any one of the claims 19-23, wherein the structure is provided with a plate-shaped element that in the mating condition extends from a trailing  
5 end of the structure and that in the mating condition at least to an extent covers a gap formed by distance between the mating structures.
25. A spacer according to any one of the claims 19-23, wherein the plate- shaped element has an outer surface, and wherein in the mating condition a restricted movement is possible parallel to the outer surface.
- 10 26. A spacer according to claim 25, wherein in the mating condition, the outer surfaces of the plate-shaped elements as part of the mating structures remain in the same plane.
27. A spacer according to claim 10, wherein the structure is fixed to the slab-shaped construction element.
- 15 28. A spacer according to any one of the previous claims, wherein the slab-shaped construction element is one of a concrete slab, a wall panel, a floatable plastic element, an infiltration unit, a road-deck element.