CLAIMS

1. Structural sliding bearing (1) having at least one sliding surface (2) with a sliding plate (3) and a mating surface which are in sliding contact so that the sliding plate (3) can move relative to the at least one mating surface, and the mating surface is arranged on a backing plate (4), wherein the mating surface is formed as a sliding sheet (5),
characterized in that
the sliding sheet (5) has a sliding sheet protrusion (6) by which the sliding sheet (5) hangs or stands at its edge over the backing plate (4), such that the sliding sheet (5) is not completely supported by the backing plate (4),
and that
at least one sliding surface (2) is spherically curved.

2. Structural sliding bearing (1) according to claim 1,
characterized in that
the structural sliding bearing (1) is formed as an earthquake protection device and has at least two spherically curved sliding surfaces (2).

3. Structural sliding bearing (1) according to claim 1 or 2,
characterized in that
the backing plate (4) is dimensioned so large that, in the serviceability limit state of the structural sliding bearing (1), the sliding plate (3) is in full-surface contact with a portion of the sliding sheet (5) in the event of a maximum lateral displacement, in which portion the sliding sheet (5) is still fully-surfaced supported by the backing plate (4).

4. Structural sliding bearing (1) according to one of the preceding claims,
characterized in that
the backing plate (4) is dimensioned so large that the sliding plate (3), in the ultimate limit state of the load-bearing capacity, in particular a limit state of the load-bearing capacity from an earthquake load case, is partially located on a sliding sheet protrusion (6) with a maximum lateral displacement.

5. Structural sliding bearing (1) according to claim 4,
characterized in that
the backing plate (4) is dimensioned so large that the sliding sheet (5) is supported by the backing plate (4) at the position of a resulting vertical load.

6. Structural sliding bearing (1) according to one of the preceding claims,
characterized in that
at least one lateral projection (7) is provided on a backing plate (4) to support one of the sliding sheet protrusions (6), preferably one projection (7) for each sliding sheet protrusion (6).

7. Structural sliding bearing (1) according to claim 6,
characterized in that
the projection (7) is connected to the backing plate (4) by an expansion joint, a screw connection and/or by means of welding.

8. Structural sliding bearing (1) according to one of the preceding claims,
characterized in that
the structural sliding bearing (1) has a slider (8), in particular a slider (8) which is rigid or jointed in itself.

9. Structural sliding bearing (1) according to one of the preceding claims,
characterized in that
at least one sliding surface (2) has a limiting means for limiting the displacement capacity of the structural sliding bearing (1).

10. Structural sliding bearing (1) according to one of the preceding claims,
characterized in that
a sliding surface (2) has a coefficient of friction that differs from at least one other sliding surface (2).

11. Structural sliding bearing (1) according to one of the preceding claims,
characterized in that
a sliding surface (2) has a radius of curvature that differs from at least one other sliding surface (2).

12. Structural sliding bearing (1) according to one of the preceding claims,
characterized in that
at least one sliding surface (2) has a coefficient of friction which varies from the inside to the outside along the surface of the sliding plate (3).

13. Structural sliding bearing according to claim 11,
characterized in that
at least one sliding surface (2) has a radius of curvature that varies from the inside to the outside.

14. Structural sliding bearing (1) according to one of the preceding claims,
characterized in that
at least one sliding plate (3) has a circular shape in plan view.

15. Structural sliding bearing (1) according to one of the preceding claims,
characterized in that
a sliding plate (3) has a radius which is different from at least one other sliding plate (3).

16. Structural sliding bearing (1) according to one of the preceding claims,
characterized in that
the sliding plate (3) has an inner sliding disc (9) and an outer sliding ring (10) at least partially surrounding this sliding disc (9).

17. Structural sliding bearing (1) according to claim 16,
characterized in that
the outer sliding ring (10) is spaced apart from the inner sliding disc (9).

18. Structural sliding bearing (1) according to claim 16 or 17,
characterized in that
the inner sliding disc (9) has a different coefficient of friction than the outer sliding ring (10).

19. Structural sliding bearing (1) according to one of the preceding claims,
characterized in that
the sliding sheet (5) is dimensioned so large that an additional edge of the sliding sheet (5) results when the sliding plate (3) is displaced up to the maximum displacement capacity.

20. Structural sliding bearing (1) according to one of the preceding claims,
characterized in that
the sliding sheet (5) is linked to the backing plate (4) by force-fit and/or form-fit.

21. Structural sliding bearing (1) according to one of the preceding claims,
characterized in that
the sliding sheet (5) is partially recessed into the backing plate (4).

22. Structural sliding bearing (1) according to claim 20 or 21,
characterized in that
the sliding sheet (5) is fastened to the backing plate (4) by means of at least one fastening means such as nails, welded connections, screws, adhesive connections, retaining bolts and/or by a bolt which projects into a recess of the backing plate (4), the recess preferably being as accurately as possible.