advantageous with regard to the sound insulation properties, if the sheet material of the carrier profile exhibits a knurling on at least a part of its surface.

The special embodiment proposed here for the carrier profiles has proved in practice to be entirely advantageous in respect of the sound insulation properties. Nevertheless, the sound insulation values which can be achieved with this are, as before, no more than adequate with regard to today's requirements for such dry construction systems.

The invention is therefore based on the object of further improving the sound insulation properties of generic dry construction systems.

This object is solved by a dry construction system with the features of claim 1. This is characterised in particular by the fact that the base section of the carrier profile also exhibits an embossing with regularly distributed elevations and depressions, that the centre-to-centre spacing between two adjacent elevations of the embossing on one side of the sheet material is less than six times the rated sheet thickness, and that the base section is connected with the adjacent limb section by way of a curved section with an outer radius which amounts to at least three times the rated sheet thickness.

According to the invention, it has therefore been recognised that a further improvement in sound insulation properties can be achieved in that, as a departure from the structural design solutions according to WO 2006/105825 A1 and WO 2006/105826 A1, not only the limb sections, but also the base section of the carrier profiles is provided with an embossing of regularly distributed elevations and depressions, and in this situation a specific centre-to-centre distance between two adjacent elevations is selected which is less than a predetermined value. In interaction with the minimum radius specified in the claim for a curved section at the connection between the base section and the adjacent limb section in each case, this results in a favourable sound technology behaviour of the carrier profiles inside the system as a whole, due to the particularly advantageous sound insulation properties. The rated sheet thickness is the thickness or material thickness of the rough sheet before the embossing step in accordance with DIN 18182-1, 2007-12.

As practical tests have shown, as a result of this, in particular, the conducting of sound specifically in the curved section between the base section and the adjacent limb section is advantageously influenced according to the invention. In this situation, this takes place in interaction with the embossing. The minimum radius specified according to the invention in the curved section

CLAIMS

1. Dry construction system for making partition walls (1), suspended ceilings or the like, with:

a support structure (2) in the form of a metal load-bearing structure,

a cladding (3) arranged on at least one side thereof, and

an insulation layer (4), which is arranged in the region of the support structure (2),

in which the support structure (2) comprises a plurality of carrier profiles (22), to which at least one cladding (3) is secured,

in which the carrier profiles (22) are formed from a sheet material and comprise in the cross-section a base section (22a) as well as two limb sections (22b, 22b') arranged perpendicular thereto, and

in which the limb sections (22b, 22b') of the carrier profiles (22) comprise an embossing with regularly distributed elevations and depressions,

characterised in that

the base section (22a) of the carrier profile (22) comprises an embossing with elevations and depressions regularly distributed into an orthogonal array, such that regions of the carrier profile comprise elevations with four neighbouring depressions and in which

the centre-to-centre distance between two adjacent elevations of the embossing on one side of the sheet material is less than six times the rated sheet thickness, and

that the base section (22a) is connected to the adjacent limb section (22b, 22b') in each case by means of a curved section (22c) with an outer radius (R_1) which amounts to at least three times the rated sheet thickness.

2. Dry construction system according to Claim 1, characterised in that the centre-to-centre distance between two adjacent elevations of the embossing on one side of the sheet material amounts to at least three times the rated sheet thickness, and in particular lies between four times and 5.5 times the rated sheet thickness.

3. Dry construction system according to Claim 1 or 2, characterised in that the base section (22a) is connected to the adjacent limb section (22b, 22b') in each case by means of a curved section (22c) with an outer radius (R_1), which amounts as a maximum to ten times the rated

sheet thickness, and in particular lies between six times and seven times the rated sheet thickness.

4. Dry construction system according to Claim 1, 2 or 3, characterised in that the base section (22a) comprises at least one beading (22e) running longitudinally, in which preferably precisely one beading (22e) is arranged in the middle in the base section (22a).

5. Dry construction system according to any preceding claim, characterised in that the two limb sections (22b, 22b') comprise in each case a beading (22f) running longitudinally, in which preferably in each case precisely one beading (22f) is arranged in the middle in each beading section.

6. Dry construction system according to Claim 4 or 5, characterised in that the beading (22e, 22f) projects to the inner side of the profile cross-section.

7. Dry construction system according to Claim 4, 5 or 6, characterised in that a depth of the beading (22e, 22f) amounts to one to six times the rated sheet thickness.

8. Dry construction system according to any of Claims 4 to 7, characterised in that the beading (22e) exhibits an essentially triangular cross-section and at the apex encloses an inner angle of some 90°.

9. Dry construction system according to any preceding claim, characterised in that the embossing in the carrier profiles (22) is applied on both sides.

10. Dry construction system according to any preceding claim, characterised in that the carrier profiles (22) at the free ends of the limb sections (22b, 22b') in each case comprise inclinations (22d) facing inwards.

11. Dry construction system according to any preceding claim, characterised in that a total thickness (D) of the profiled base section (22a) and of the profiled limb sections (22b, 22b') respectively is 1.2 times to 3 times the rated sheet thickness and, in particular, amounts to about 1.6 times the rated sheet thickness.

12. Carrier profile (22) for a dry construction system according to any preceding claim, which is formed from a sheet material and in cross-section comprises a base section (22a) as well as two limb sections (22b, 22b') arranged perpendicular thereto, in which the limb

sections (22b, 22b') comprise an embossing with regularly distributed elevations and depressions,

characterised in that

the base section (22a) of the carrier profiles (22) also comprises an embossing with elevations and depressions regularly distributed into an orthogonal array, such that regions of the carrier profile comprise elevations with four neighbouring depressions and in which

that the centre-to-centre distance between two adjacent elevations of the embossing on one side of the sheet material is less than six times the rated sheet thickness, and

that the base section (22a) is connected to the adjacent limb section (22b, 22b') in each case by a curved section (22c) with an outer radius (R_1) which amounts to at least three times the rated sheet thickness.

13. Carrier profile according to Claim 12, characterised in that it is further formed by at least one of the features from Claims 2 to 11.