

Heat Dissipation of Floors according to DIN 52 614

to determine the heat dissipation levels I - III:

I: especially foot warm

- II: sufficiently foot warm
- III: not sufficiently foot warm

Fraunhofer Institute for Building Physics

Nobelstrasse 12 70569 Stuttgart Germany

Department of Hygrothermics Test laboratories of thermal characteristics www.ibp.fraunhofer.de/pruefstellen

Dipl.-Ing. (FH) Andreas Zegowitz Phone +49(0)711/970-3333 Fax +49(0)711/970-3340 andreas.zegowitz@ibp.fraunhofer.de

Test facility

The measurement method is applicable to homogeneous and approximately homogeneous as well as layered test specimens (floor structures and coverings).

Test procedure

The foot of the heat test specimen operated by constant temperature is placed on the floor covering or structure to be tested and the film heat flow meter. Due to the flexible rubber base the foot perfectly adjusts even to surfaces with slight unevenness. The heat flow through the test specimen is recorded by the film heat flow meter and added by the calorimeter over a period of one and ten minutes. It is also possible to carry out testing over longer or shorter periods, if desired. The test equipment is transportable and therefore it is suited for tests outside of the laboratory.

- dimensions of the test specimen: 500 mm x 500 mm
- floor coverings made of PVC, cork, parquet, linoleum, textile fibers, tiles, industrial floor coverings, polyester resin sheets etc.



Figure: "Artificial Foot " with heat flow meter and calorimeter.

Test Results

Test report including classification in standardized classes:

heat	heat dissipation	
dissipation	W ₁	W ₁₀
level	kJ/m²	kJ/m²
I	38	190
I	38 to 50	190 to 290
	more than 50	more than 290