

Our Service

The DVGW-Test Laboratory Energy features the technical requirements and competences to perform the additional fire safety tests.

Our skills, expertise for many years and technical potentials can help to prepare your products for future challenges.

We help you to answer your questions.



Room heater in the trihedron



Use our DBI test mark for your products. Do not hesitate to ask us about this topic.

Contact / Directions

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Your contact person



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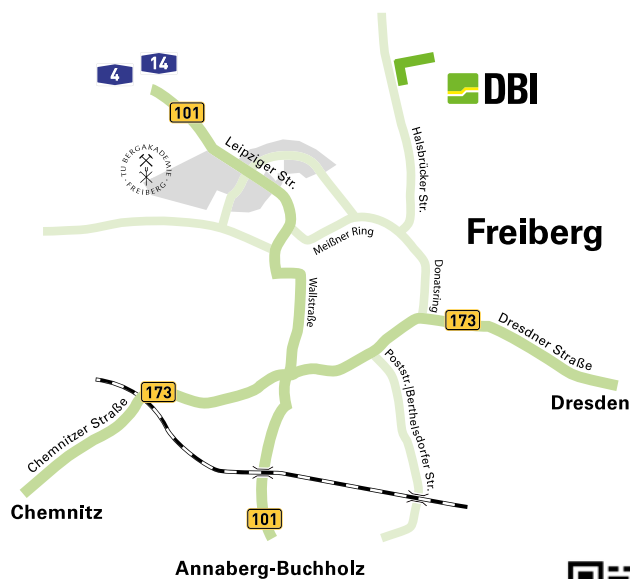
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pictures: DVGW – Roland Horn

TESTS ON HIGH THERMAL INSULATED WALLS

www.dbi-gruppe.de



CE 1721



Background

In the context of the Initial Type Test (ITT) of local space heaters for solid fuels one essential part is the fire safety test. This kind of test is performed in the trihedron with defined test walls (k-value 0,73 W/m²K) under test conditions. But newer and therefore better insulation standards of buildings are not considered during the fire safety tests.

The insulation standards, especially the exterior insulation of buildings have evolved significantly during the last years. Due to the constant adaptation of the Energy Saving Ordinance (EnEV) and the increasing requirements for insulation standards within the framework of promotion and incentive programs for new buildings, passive and energy-efficient houses have prevailed.

Therefore the technical guidelines of the stove and air heating construction (TROL) and the DIN 18896 were also updated within the standardization process according to fire protection and installing requirements of local space heaters.

A possible alternative to the TROL and/or DIN 18896 is the performance of a separate fire safety test to ensure the installing requirements of local space heaters in connection with high thermal insulated walls and reduced distances if necessary.



Safety test of a room heater in the trihedron with high thermal insulated walls

Scope of testing

For this reason we offer tests to confirm the manufacturer's specifications on high thermal insulated walls as an additional service.

According to this service we can realize test walls with a k-value up to 0,1 W/m² K (relates to passive house standard) to ensure a highest safety standard possible.

Tests can be performed for free standing as well as integrated / inset appliances for solid fuels in accordance with the state of the art e.g. by

- DIN EN 13240:2005,
- DIN EN 13229:2005 and / or
- DIN EN 16510-1:2018

The tests can be done in the context of our accreditation acc. to DIN EN ISO/IEC 17025, either as a single test or as an additional test as part of the initial type test.



Calibration of measuring equipment

Assembly of the trihedron



The installation setup can be designed flexible according to the client's specification.