



LABORATÓRIO NACIONAL  
DE ENGENHARIA CIVIL

TESTING  
and METROLOGY

UIT

Thermal Insulation  
Laboratory

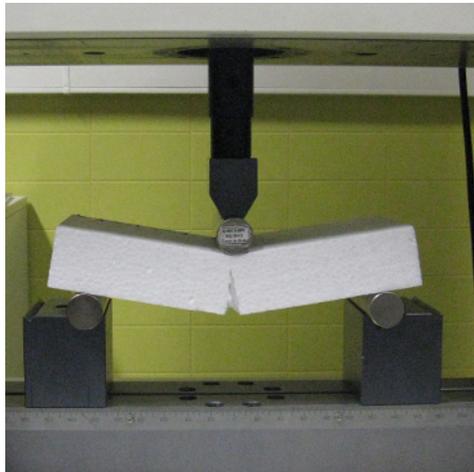
BUILDINGS DEPARTMENT

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## Scope

The Thermal Insulation Laboratory (UIT) of LNEC-EM is integrated in the Buildings Department/ Building Finishes and Thermal Insulation Unit of LNEC . It is equipped with the appropriate technical and qualified human resources for the evaluation of thermal insulators and systems within the field of hygrothermics . This laboratory has been accredited by IPAC since 1995, with the certificate no. L0109 and carries out the tests for which LNEC has been notified by IPQ, within the framework of RPC.



UIT as part of LNEC-EM Quality Management System conducts its laboratory activity, aimed to characterise the main features of thermal insulators, in compliance with the requirements of standard NP EN ISO/IEC 17025.

The tests performed by this laboratory are essential for providing support to the industry, namely as regards the technical evaluation of thermal insulation products and systems and the achievement of EC marking.



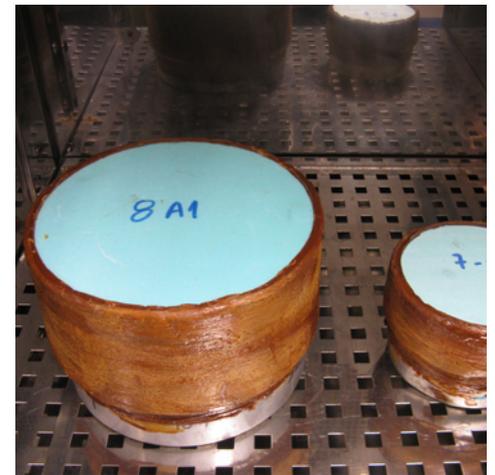
## Field of expertise

UIT conducts laboratory activity for characterising the main features of thermal insulators and thermal insulation solutions, namely those related with the hygrothermal and mechanical performance of constituent materials.

Apart from the tests performed by UIT in support to the technical activities related with (European) appraisal and evaluation, as well as certification of thermal insulation materials, products and systems, it also presents the possibility of carrying out tests in support to the development of new products and to the regular production control.



This laboratory also offers the industry the possibility of carrying out test programs aimed at supporting the development of either indirect or simplified test methods for the factory production control.



## Highlights

UIT interacts with the market in various areas of activity, including the dissemination of knowledge and the development of new thermal insulation solutions for buildings. Special reference is made below to some relevant actions:

- Participation in DED/LNEC initiatives geared towards the dissemination of knowledge and training of bodies within the framework of the thermal rehabilitation of buildings with a view to improve the internal thermal comfort of the latter;
- Evaluation of the performance of new construction solutions within the framework of the participation in research projects.