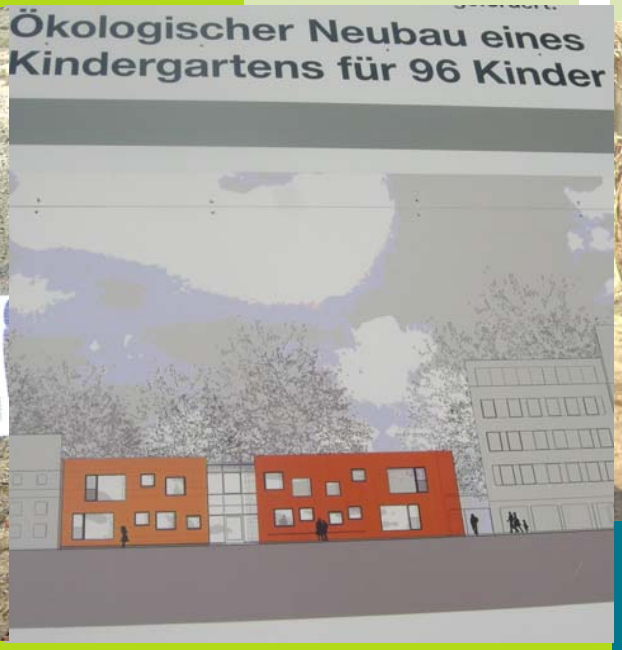
It is carried out when interior fittings are complete (windows, facades etc.). The craftsmen who should be involved in the building process have to be present during this test.

This visual proof is accepted by all affected companies which will readjust certain details after this test.

Around eight participants joined into this study visit. More information on passive houses can be obtained on the EnercitEE website.

On the construction site of the kindergarten build in passive house standard



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Good practice from Saxony

Study visit on passive houses

EnercitEE

European networks, experience and recommendations helping cities and citizens to become Energy Efficient

LANDESAMT FÜR UMWELT, LANDWIRTSCHAFT UND GEOLOGIE | Freistaat SACHSEN | INTERREG IVC | European Union European Regional Development Fund

Good practice from Saxony

STUDY VISIT ON PASSIVE HOUSES IN DRESDEN, GERMANY

Saxony has identified a large CO_2 reduction potential in the heat supply of buildings. The so-called passive houses consume around 15kWh/m²/year which is at least 3-5 times less than low energy houses and 7-20 times less than existing buildings.

Saxony started its first pilot project "Innovation and Practice Network Passive Houses" as early as 2002. Since then the number of passive houses has increased significantly. Saxony financially supports builders and provides a lot of information including on-site visits. This was the motivation for the study visit following the EnercitEE kick-off meeting when Working Group and Steering Group members could see and understand the quality requirements of building materials and quality checks being performed.

The passive house expert from the Saxon State Ministry for Economic Affairs, Labour and Transport, Dr. Bernd Wolters organised a tour starting from the Ministry passing several passive houses such as the main state archive of Saxony and ending at a kindergarten which was still under construction.

The technical issues of the passive house building approach can be understood much easier when seeing the process itself and the material used.

Bernd Wolters, passive house expert

What is EnercitEE?

EnercitEE is a European project that will contribute to the improvement of local and regional policies and provide assistance in the transfer of knowledge on energy efficiency and sustainable transport.

EnercitEE will identify and analyse good practices, foster the exchange of experience and carry out light pilot implementation to increase the level of energy efficiency of local authorities and their citizens as the new target group.

The tour through the construction site was guided by the architect, Guenther Rentzsch who explained the technical details and showed how waste heat from the discharged air will be used again in the passive house. He also pointed out the difficulties in testing if a building really meets the required standards.

Mr. Rentzsch introduced the participants to a special pressure test for passive houses that is called the ‘blower-door’. This test makes any air leakages immediately visible.

What is the passive house standard?

The passive house standard requires that the building fulfils certain requirements. These requirements are related to heating demand and primary energy consumption.

The annual heating demand should be calculated with the passive house Planning Package and should not exceed 15 kWh/m² (and 15 kWh/m² per year cooling) which corresponds to a peak heat load of 10W/m² per year.

Total primary energy consumption must not be more than 120 kWh/m² per year.

Furthermore, the building must not leak more air than 0.6 times the house volume per hour at 50 Pa as proved with airtightness measurement.

EnercitEE Working Group on the construction site, Dresden / Germany