

Technical and Test Institute for Constructions Prague

Branch 0100 - Prague

Prosecká 811/76a, CZ 190 00 Prague 9, Czech Republic

Issues

CERTIFICATE

No. 010-033223

to the company:

OBNOVA servis, s.r.o., IČ: 25929151 Address: Kamenice 113, 547 01 Náchod

Product description:

Spatula AERO-THERM

for application on interior walls and ceilings

This certificate confirms performed measurements to determine the thermal properties of the product and its effects on the environment inside a building, under the following conditions:

The measurements were carried out during winter season 2014 in two identical buildings, developed on one floor each approx. 18m², equipped with the same heating and ventilation system. In one building AERO-THERM (manufacturer THERMO INDUSTRY, a.s., Pardubice) has been applied on the inner walls, floor and ceiling with a thickness of 1mm. In the other building no AERO-THERM was applied

with the following conclusion:

a) Comparison of the measured variables - temperature curve, determination of the time to reach 23°C

In the building in which AERO-THERM (the product) has been applied, the internal air temperature measured at 0.2 m below the ceiling and 0.2m above the floor gives a difference of 7 K. The same measurement in the ambient where AERO-THERM has not been applied shows a difference up to 10 K. Consequently this shows a higher thermal comfort if living in the room treated with AERO-THERM.

Furthermore set temperature of 23°C reaches faster with AERO-THERM as in the building where the material has not been applied.

b) Comparison of power consumption while maintaining the same internal temperature

Measuring the energy consumption for heating in both identical buildings, under the same climate conditions, was showing an energy saving on the building treated with AERO-THERM. The total Energy saving after 4 days testing period corresponds to 5.97 kWh.

The daily energy savings in the building treated with AERO-THERM measure min. 12.5%. This value refers to specific climatic conditions during the measurements.

c) Comparison internal temperature decrease of 3°C at reduced heating activity

Set down of room temperature behaves slower having AERO-THERM applied. In the building with the material the reduction of 3°C was showing after 55 minutes. The same reduction of 3°C in the building without AERO-THERM was reduction of 3°C was showing after 55 minutes. The server reduction of 5 C in the building that out of the measured after 30 minutes. Consequently, the solution of the server with AERO-THERM presents a higher thermal stability. This certificate is issued on the basis of the reduction of 33222: Measurement of properties of AERO-THERM

II.phase of 30.04.2014; issued by the Institute

al Inspection for Construction Prague, branch 0100 – Prague, 76a Jague 9

Stamp of TZÚS Praha, s.p. Prague, April 30, 2014

Ing. Iveta Jiroutova Director of the Prague branch