

Research project MA 39:

“Integration of a heat pump module, the primary energy requirement and CO₂-emissions into the Excel-instruction tool”

Aim of the research project:

Within the project a prototype of a heat pump module to calculate the energy requirement of the energy supply by means of heat pumps is developed. Main component of the research project is the creation of a temperature model and the programming of the technical functionality of several heat pump types in Excel.

Abstract:

In the course of issuing energy performance certificates the MA 39 – VFA is concerned with the design of software modules to calculate energy performance figures. All these software modules didn't cover energy supply by means of heat pumps so far. The need for improvement occurred during the integration of the heat pump module into the existing Excel-tools.

Fundamental need for improvement occurred in programming temperature statistics. In order to close this gap the MA 39 designed a half-synthetic temperature model for the ÖNORM B 8110-5:2010. The groundwork for that model was financed by this research project.

In addition ÖNORM H 5056:2010 was revised in the field of heat pumps. The programmed heat pump module is the first programmed form of this part of ÖNORM H 5056:2010.

Comment: The designed Excel-tool is a prototype and isn't validated yet.