



Building Technologies Program

Tax Deduction Qualified Software DOE-21.E version 119

On this page you'll find information about the DOE-21.E version 119 [qualified computer software](http://www.buildings.energy.gov/qualified_software.html) (www.buildings.energy.gov/qualified_software.html), which calculates energy and power cost savings that meet federal tax incentive requirements for [commercial buildings](http://www.buildings.energy.gov/commercial/) (www.buildings.energy.gov/commercial/).

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Statements in quotes are from the software developer.

Internal Revenue Code §179D (c)(1) and (d) Regulations Notice 2006-52, Section 6 requirements	
(1) The name, address, and (if applicable) web site of the software developer;	Software developed by LBNL. Software tested and documentation submitted by The Weidt Group 5800 Baker Road Minnetonka, MN 55345
(2) The name, email address, and telephone number of the person to contact for further information regarding the software;	Jason Steinbock jasons@twgi.com +1 (952) 938-1588
(3) The name, version, or other identifier of the software as it will appear on the list;	DOE-2.1E version 119
(4) All test results, input files, output files, weather data, modeler reports, and the executable version of the software with which the tests were conducted; and	Provided to DOE.
(5) A declaration by the developer of the software, made under penalties of perjury, that—	"DOE-2.1E version 119 developed by LBNL meets the following requirements:"
(a) The software has been tested according to ANSI/ASHRAE Standard 140-2004 Standard Method of Test for the Evaluation of Building Energy Analysis Computer Programs;	"The software has been tested according to ANSI/ASHRAE Standard 140-2004 Standard Method of Test for the Evaluation of Building Energy Analysis Computer Programs."
(b) The software can model explicitly—	"DOE-2.1E version 119 is fully compliant with ASHRAE 90.1-2001 and meets all of the below requirements."
(i) 8,760 hours per year;	"DOE-2.1E version 119 complies."
(ii) Calculation methodologies for the building components being modeled;	"DOE-2.1E version 119 complies."
(iii) Hourly variations in occupancy, lighting power, miscellaneous equipment power, thermostat setpoints, and HVAC system operation, defined separately for each day of the week and holidays;	"DOE-2.1E version 119 complies."
(iv) Thermal mass effects;	"DOE-2.1E version 119 complies."
(v) Ten or more thermal zones;	"DOE-2.1E version 119 complies."

(vi) Part-load performance curves for mechanical equipment;	"DOE-2.1E version 119 complies."
(vii) Capacity and efficiency correction curves for mechanical heating and cooling equipment; and	"DOE-2.1E version 119 complies."
(viii) Air-side and water-side economizers with integrated control; and	"The DOE-2.1E software complies with the air-side economizer requirements. The DOE-2.1E software cannot model water-side economizers with integrated control and cannot be used for projects with that technology."
(c) The software can—	
(i) Either directly determine energy and power costs or produce hourly reports of energy use by energy source suitable for determining energy and power costs separately; and	"DOE-2.1E version 119 complies."
(ii) Design load calculations to determine required HVAC equipment capacities and air and water flow rates.	"DOE-2.1E version 119 complies."

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