



Building Technologies Program

Tax Deduction Qualified Software

EnergyPro version 5.1

On this page you'll find information about the EnergyPro version 5.1 [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.

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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 as amplified by Notice 2008-40, Section 4 requirements.

(1) The name, address, and (if applicable) web site of the software developer;	EnergySoft, LLC 1025 5th Street Novato, CA 94954 www.energysoft.com
(2) The name, email address, and telephone number of the person to contact for further information regarding the software;	Martyn Dodd EnergySoft, LLC 415.897.6400 ext 306 mart@energysoft.com
(3) The name, version, or other identifier of the software as it will appear on the list;	EnergyPro version 5.1
(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—	
(a) The software has been tested according to ANSI/ASHRAE Standard 140-2007 Standard Method of Test for the Evaluation of Building Energy Analysis Computer Programs;	" The software has been tested according to ANSI/ASHRAE Standard 140-2007 Standard Method of Test for the Evaluation of Building Energy Analysis Computer Programs."
(b) The software can model explicitly—	"EnergyPro version 5.1 is fully compliant with ASHRAE 90.1-2001 and meets all of the below requirements"
(i) 8,760 hours per year;	" EnergyPro v5.1 Complies."
(ii) Calculation methodologies for the building components being modeled;	" EnergyPro v5.1 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;	" EnergyPro v5.1 Complies."
(iv) Thermal mass effects;	" EnergyPro v5.1 Complies."
(v) Ten or more thermal zones;	" EnergyPro v5.1 Complies."

(vi) Part-load performance curves for mechanical equipment;	" EnergyPro v5.1 Complies."
(vii) Capacity and efficiency correction curves for mechanical heating and cooling equipment; and	" EnergyPro v5.1 Complies."
(viii) Air-side and water-side economizers with integrated control.	" EnergyPro v5.1 complies with the air-side economizer requirements. EnergyPro v5.1 cannot model water-side economizers with integrated control and cannot be used for projects with that technology."
(c) The software can explicitly model each of the following HVAC systems listed in Appendix G of Standard 90.1-2004:	
(i) Packaged Terminal Air Conditioner (PTAC) (air source), single-zone package (through the wall), multi-zone hydronic loop, air-to-air DX coil cooling, central boiler, hot water coil.	"EnergyPro v5.1 models this system."
(ii) Packaged Terminal Heat Pump (PTHP) (air source), single-zone package (through the wall), air-to-air DX coil heat/cool.	"EnergyPro v5.1 models this system."
(iii) Packaged Single Zone Air Conditioner (PSZ-AC), single-zone air, air-to-air DX coil cool, gas coil, constant-speed fan.	"EnergyPro v5.1 models this system."
(iv) Packaged Single Zone Heat Pump (PSZ-HP), single-zone air, air-to-air DX coil cool/heat, constant-speed fan.	"EnergyPro v5.1 models this system."
(v) Packaged Variable-Air-Volume (PVAV) with reheat, multi-zone hydronic loop, air-to-air DX coil, VAV fan, boiler, hot water VAV terminal boxes.	"EnergyPro v5.1 models this system."
(vi) Packaged Variable-Air-Volume with parallel fan powered boxes (PVAV with PFP boxes), multi-zone air, DX coil, VAV fan, fan-powered induction boxes, electric reheat.	"EnergyPro v5.1 can model all requirements except the fan-powered induction box."
(vii) Variable-Air-Volume (VAV) with reheat, multi-zone air; multi-zone hydronic loop, air-handling unit, chilled water coil, hot water coil, VAV fan, chiller, boiler, hot water VAV boxes.	"EnergyPro v5.1 models this system."
(viii) Variable-Air-Volume with parallel fan powered boxes (VAV with PFP boxes), multi-zone air, air-handling unit, chilled water coil, hot water coil, VAV fan, chiller, fan-powered induction boxes, electric reheat.	"EnergyPro v5.1 models this system."
(d) 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	"EnergyPro V5.1 Models this system."
(ii) Design load calculations to determine required HVAC equipment capacities and air and water flow rates.	"EnergyPro V5.1 Models this system."
(e) The software can explicitly model:	

(i) Natural ventilation.	"EnergyPro V5.1 cannot model natural ventilation and shall not be used for projects with this technology."
(ii) Mixed mode (natural and mechanical) ventilation.	"EnergyPro v5.1 cannot model mixed mode ventilation and shall not be used for projects with this technology."
(iii) Earth tempering of outdoor air.	"EnergyPro v5.1 cannot model earth tempering of outdoor air and shall not be used for projects with this technology."
(iv) Displacement ventilation.	"EnergyPro v5.1 cannot model displacement ventilation and shall not be used for projects with this technology."
(v) Evaporative cooling.	"EnergyPro v5.1 models this system explicitly."
(vi) Water use by occupants for cooking, cleaning or other domestic uses.	"EnergyPro v5.1 can model water use for cooking, cleaning, or other domestic uses."
(vii) Water use by heating, cooling, or other equipment, or for on-site landscaping.	"EnergyPro v5.1 cannot model water use for heating, cooling, or other equipment, or for on-site landscaping and shall not be used for projects with this technology."
(viii) Automatic interior or exterior lighting controls (such as occupancy, photocells, or time-clocks).	"EnergyPro v5.1 cannot explicitly model automatic controls for interior or exterior lighting and shall not be used for projects with this technology."
(ix) Daylighting (sidelighting, skylights, or tubular daylight devices).	"EnergyPro v5.1 cannot explicitly model daylighting controls and shall not be used for projects with this technology."
(x) Improved fan system efficiency through static pressure reset.	"EnergyPro v5.1 cannot model static pressure reset and shall not be used for projects with this technology."
(xi) Radiant heating or cooling (low or high temperature).	"EnergyPro v5.1 cannot explicitly model radiant heating or cooling and shall not be used for projects with this technology."
(xii) Multiple or variable-speed control for fans, cooling equipment, or cooling towers.	"EnergyPro v5.1 models this system explicitly."
(xiii) On-site energy systems (such as combined heat and power systems, fuel cells, solar photovoltaic, solar thermal, or wind).	"EnergyPro v5.1 cannot model on-site energy systems and shall not be used for projects with this technology."

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