Tax Deduction Qualified Software

Tas version 9.3.1

On this page you'll find information about the Tas version 9.3.1 **Qualified Software for Calculating Commercial Building Tax Deductions | Department of Energy** http://energy.gov/eere/buildings/qualified-software-calculating-commercial-building-tax-deductions, which calculates energy and power cost savings that meet federal tax incentive requirements for commercial buildings.

Date Documentation Received by DOE: 19 May 2014

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;	Environmental Design Solutions Ltd. 13-14 Cofferidge Close Stony Stratford Milton Keynes Buckinghamshire MK11 1BY http://www.edsl.net
(2) The name, email address, and telephone number of the person to contact for further information regarding the software;	Michael Sawford michael@edsl.net +44 (0)1908261461
(3) The name, version, or other identifier of the software as it will appear on the list;	Tas Version 9.3.1
(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—	"On behalf of the Tas development team I certify the following:"
(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—	"Tas 9.3.1 Software is fully compliant with ASHRAE 90.1-2001 and meets all of the below requirements."
(i) 8,760 hours per year;	"Tas 9.3.1 Software complies."
(ii) Calculation methodologies for the building components being modeled;	"Tas 9.3.1 Software 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;	"Tas 9.3.1 Software complies."
(iv) Thermal mass effects;	"Tas 9.3.1 Software complies."
(v) Ten or more thermal zones;	"Tas 9.3.1 Software complies."
(vi) Part-load performance curves for mechanical equipment;	"Tas 9.3.1 Software complies."
(vii) Capacity and efficiency correction curves for mechanical heating and cooling equipment; and	"Tas 9.3.1 Software complies."
(viii) Air-side and water-side economizers with integrated control.	"Tas 9.3.1 Software complies."
(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.	"Tas 9.3.1 Software models this system."
(ii) Packaged Terminal Heat Pump (PTHP) (air source), single-zone package (through the wall), air-to-air DX coil heat/cool.	"Tas 9.3.1 Software 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.	"Tas 9.3.1 Software models this system."
(iv) Packaged Single Zone Heat Pump (PSZ-HP), single-zone air, air-to-air DX coil cool/heat, constant-speed fan.	"Tas 9.3.1 Software 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.	"Tas 9.3.1 Software 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.	"Tas 9.3.1 Software models this system."
(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.	"Tas 9.3.1 Software models this system."
(viii) Variable-Air-Volume with parallel fan powered boxes (VAV with PFP boxes), multi-zone air, air-	"Tas 9.3.1 Software models this system."

handling unit, chilled water coil, hot water coil, VAV fan, chiller, fan-powered induction boxes, electric reheat.	
(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	"Tas 9.3.1 Software complies."
(ii) Design load calculations to determine required HVAC equipment capacities and air and water flow rates.	"Tas 9.3.1 Software complies."
(e) The software can explicitly model:	
(i) Natural ventilation.	"Tas 9.3.1 Software models natural ventilation."
(ii) Mixed mode (natural and mechanical) ventilation.	"Tas 9.3.1 Software models mixed mode ventilation."
(iii) Earth tempering of outdoor air.	"Tas 9.3.1 Software models earth tempering of outdoor air."
(iv) Displacement ventilation.	"Tas 9.3.1 Software models displacement ventilation."
(v) Evaporative cooling.	"Tas 9.3.1 Software models evaporative cooling."
(vi) Water use by occupants for cooking, cleaning or other domestic uses.	"Tas 9.3.1 cannot model water use by occupants and shall not be used for projects with this requirement."
(vii) Water use by heating, cooling, or other equipment, or for on-site landscaping.	"Tas 9.3.1 cannot model water use by heating, cooling, and other equipment as well as for on-site landscaping and shall not be used for projects with this requirement."
(viii) Automatic interior or exterior lighting controls (such as occupancy, photocells, or time-clocks).	"Tas 9.3.1 Software models automatic interior and exterior lighting controls."
(ix) Daylighting (sidelighting, skylights, or tubular daylight devices).	"Tas 9.3.1 software models sidelighting, skylights, and tubular daylighting devices."
(x) Improved fan system efficiency through static pressure reset.	"Tas 9.3.1 software models improved fan system efficiency through static pressure reset."
(xi) Radiant heating or cooling (low or high temperature).	"Tas 9.3.1 software models low and high temperature radiant heating and cooling."
(xii) Multiple or variable-speed control for fans, cooling equipment, or cooling towers.	"Tas 9.3.1 software models multiple and variable-speed control for fans, cooling equipment, and cooling towers."

(xiii) On-site energy systems (such as combined heat and power systems, fuel cells, solar photovoltaic, solar thermal, or wind).	"Tas 9.3.1 software models on-site energy systems including combined heat and power, photovoltaic systems, and solar water and air systems."

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