



Building Technologies Program

Tax Deduction Qualified Software

TRACE 700 version 6.1.1.0

On this page you'll find information about the TRACE 700 version 6.1.1.0 [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;	TRANE, A Division of American Standard 3600 Pammel Creek Road LaCrosse, Wisconsin 54601 www.tranecds.com
(2) The name, email address, and telephone number of the person to contact for further information regarding the software;	C.D.S. Help Desk CDSHelp@trane.com +1 (608) 787-3926
(3) The name, version, or other identifier of the software as it will appear on the list;	TRACE 700 version 6.1.1
(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	"The TRACE software has been tested in accordance with ANSI/ASHRAE Standard 140-2004. All of the information and results are posted at http://www.trane.com/CPS/uploads/userfiles/cds_files/trace/std_140_results_v6.1.1_final.pdf ."
(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 140-2004 Standard Method of Test for the Evaluation of Building Energy Analysis Computer Programs;	"The software has been tested in accordance with ANSI/ASHRAE Standard 140-2004."
(b) The software can model explicitly—	"The TRACE software is fully compliant with ASHRAE 90.1-2001 and meets all of the below requirements."
(i) 8,760 hours per year;	"The TRACE 700 software complies."
(ii) Calculation methodologies for the building components being modeled;	"TRACE 700 contains eight different methodologies that a user can choose from. The contain: 1) TETD-TA1, 2) CLTD-CLF (ASHRAE TFM), 3) TETD-TA2, 4) TETD-PO, 5) CEC-DOE-2, 6) 359-RP, 7) RTS (ASHRAE Tables), 8) RTS (Heat Balance)."

(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;	"The TRACE 700 software complies."
(iv) Thermal mass effects;	"The TRACE 700 software complies."
(v) Ten or more thermal zones;	"The TRACE 700 software complies."
(vi) Part-load performance curves for mechanical equipment;	"The TRACE 700 software complies."
(vii) Capacity and efficiency correction curves for mechanical heating and cooling equipment; and	"The TRACE 700 software complies."
(viii) Air-side and water-side economizers with integrated control; and	"The TRACE 700 software complies."
(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	"The TRACE 700 software complies."
(ii) Design load calculations to determine required HVAC equipment capacities and air and water flow rates.	"The TRACE 700 software complies."

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