

IBPSA

The International Building Performance Simulation Association

*"The professional association devoted to improve the built environment
through computer simulation and analysis"*

Mission The International Building Performance Simulation Association (IBPSA) was founded to advance and promote the science of building performance simulation in order to improve the design, construction, operation and maintenance of new and existing buildings worldwide.

Goals Along with building designers, owners, operators and developers, identify problems with the built environment that may be solved by improved simulation tools and techniques. Identify the performance characteristics of buildings on which simulation should be focused. Identify building performance simulation R & D needs and transfer new developments to the user. Promote standardization of the building simulation industry. Inform and educate its members and the public regarding the value and the state-of-the-art of building performance simulation.

MEMBERSHIP APPLICATION Effective date: January through December

- | | |
|-------------------|--|
| Sustaining member | US\$ 500/year. An individual, company, or institution in related practice. |
| Member | US\$ 75/year. A graduate from a college or university, or a registered professional engineer or architect. |
| Student Member | US\$ 25/year. An individual who is a full-time student (Include copy of current enrollment i.d.). |

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Street Address: _____

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Telephone: _____ Fax: _____ e-mail: _____

Please send Check or International M.O. to:
IBPSA c/o Larry Degelman,
College of Architecture,
Texas A&M University,
College Station, TX 77843-3137, USA.

[You may pay by credit card.
Fax this form to Larry Degelman
(409) 845-4491]

IBPSA: PUBLICATIONS

Proceedings of IBPSA's *Building Simulation* conferences are available from the Secretary as long as stocks last. Price list follows:

<i>Building Simulation</i> Proceedings	No. of Papers/Pages	Prices	
		Member *	Non-Member *
BS-85 (Xerox copy)	59 / 416	US\$ 40	US\$ 75
BS-89 (Xerox copy)	54 / 300	US\$ 40	US\$ 75
BS-91 (in stock)	85 / 675	US\$ 55	US\$ 90
BS-93 (in stock)	71 / 570	US\$ 55	US\$ 90
BS-95 (in stock)	81 / 717	US\$ 70	US\$ 105

* Orders for two or more sets of proceedings are US\$ 37.50 each for members or US\$ 70 each for non-members

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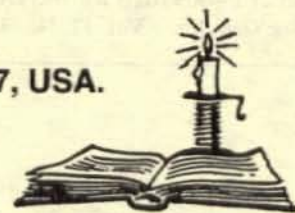
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IBPSA c/o Larry Degelman, College of Architecture,
Texas A&M University, College Station, TX 77843-3137, USA.
Tel:(409)845-1221, Fax:(409)845-4491
e-mail: larry@archone.tamu.edu.



Program Related Software and Services

Contact vendors of DOE-2 Related software for prices and ordering information

Mainframe and Workstation Versions of DOE-2

<p>DOE-2.1D and 2.1E (Source code, executable code and documentation) For 2.1E DEC-VAX, Order #000158-DOVAX-02 For 2.1E SUN-4, Order #000158-SUN-0000 For 2.1D DEC-VAX, Order #000158-D6220-01 For a complete listing of the software available from ESTSC order their "Software Listing" catalog ESTSC-2. [See <i>User News</i> Vol. 16, No. 3, p. 21]</p>	<p>Energy Science and Technology Software Center (ESTSC) P.O. Box 1020 Oak Ridge, TN 37831-1020 Phone: (615) 576-2606 FAX: (615) 576-2865 email: ESTSC@ADONIS.OSTI.GOV www: http://www.doe.gov/html/osti/estsc/estsc.html</p>
<p>FTI-DOEv2.1E (Source code and documentation) Combined source code package for both VAX and SUN versions of DOE-2.1E. Available on most distribution formats and for most operating systems (1/4" QIC tape, TK50 tape, 3.5" floppy, etc). Note: this is the distribution package only, no executables. Complete documentation for DOE-2.1E, digitally reproduced, spiral bound, and separated into multi-volume sets. [See <i>User News</i> Vol. 12, No. 4, p. 16]</p>	<p>Finite Technologies, Inc 3763 Image Drive Anchorage, AK 99504 Contact: Scott Henderson Phone: (907) 333-8933 FAX: (907) 333-4482 email: info@finite-tech.com www: http://www.finite-tech.com/fti/home.html</p>

PC Versions of DOE-2

<p>ADM-DOE2 ADM-DOE2 (DOE-2.1E) is compiled for use on 386/486 PCs with a math co-processor and 4MB of RAM. It runs in a DOS or Windows environment and is a highly reliable and tested version of DOE-2 which contains all of the 1994/95 enhancements to the program. The package contains everything needed to run the program: program files, utilities, sample input files, and weather files. More than 300 weather files are available (TMY, TRY, WYEC, CTZ formats) for the U.S. and Canada. [See <i>User News</i> Vol. 7, No. 2, p. 6]</p>	<p>ADM Associates, Inc. 3239 Ramos Circle Sacramento, CA 95827 Contact: Marla Sullivan, Sales Phone: (916) 363-8383 FAX: (916) 363-1788</p>
<p>CECDOEDC (Version 1.0A) A microcomputer version of DOE-2.1D integrated with a pre- and post-processing system designed strictly for compliance use within the State of California. It generates some of the standard compliance forms as output. Order P40091009 for the CECDOEDC Program with Manuals. Order P40091010 for the DOE-2.1 California Compliance Manual. [See <i>User News</i> Vol. 12, No. 4, p. 13]</p>	<p>MS: 13 -- Publication Office California Energy Commission P.O. Box 944295 Sacramento, CA 94244-2950 Phone: (916) 654-5106 www: http://agency.resource.ca.gov/cectext/ETEC.html</p>

Caveat: We list third-party DOE-2-related products and services for the convenience of DOE-2 users, with the understanding that the Simulation Research Group does not have the resources to check the DOE-2 program adaptations and utilities for accuracy or reliability.

PC Versions of DOE-2 (continued)

MICRO-DOE2™

MICRO-DOE2 (2.1E), which runs in a DOS or Windows environment, is a widely used, reliable, and tested PC version of DOE-2. It includes automatic weather processing, batch file creation, and a User's Guide with instructions on how to set up a RAM drive. System requirements: 386/486 PCs with 4 MB of RAM and math co-processor.

Also from Acrosoft International, Inc.:

NETPath, a network edition of MICRO-DOE2 allows you to store and run DOE-2 application files on one machine using input files from another machine. The result is improved space usage and project file management.

POWERPath, for single machines, allows you to keep MICRO-DOE2 application files in one directory and submit input from any other directory.

BDL Builder, is a pre-processor for DOE-2.1E that allows you to describe specific building and HVAC characteristics by preparing databases, or "building blocks", and then selecting records from the databases to assemble a complete input.

[See *User News* Vol. 7, No. 4, p. 2; Vol. 11, No. 1, p. 2; Vol. 15, No. 1, p. 8; Vol. 15, No. 3, p. 4; and Vol. 16, No. 2, p. 1.7]

Acrosoft International, Inc.
3435 South Yosemite St., #220
Denver, CO 80231

Contact: Gene Tsai
Phone: (303) 696-6888
FAX: (303) 696-0388
email: 102447.2611@compuserve.com

PRC-DOE2

A fast, robust and up-to-date PC version of DOE-2.1E. Runs in extended memory, is compatible with any VCPI compliant memory manager and includes its own disk caching. 377 weather data files available (TMY, TRY, WYEC, CTZ) for the U.S. and Canada

Also from the Partnership for Resource Conservation:

PRC-TOOLS, a set of PC programs that aids in extracting, analyzing and formatting hourly DOE-2 output. Determines energy use, demand, and cost for any number of end-uses and periods. Automatically creates 36-day load shapes. Custom programs also available.

[See *User News* Vol. 13, No. 4, p. 11, Vol. 14, No. 2, p. 9, and Vol. 15, No. 1, p. 5]

Partnership for Resource Conservation
140 South 34th Street
Boulder, CO 80303

Contact: Paul Reeves
Phone or FAX: (303) 499-8611
email: paulreeves@aol.com

VisualDOE for Windows™

VisualDOE, which uses DOE-2.1E as the calculation engine, enables architects and engineers to quickly evaluate the energy savings of HVAC and other building design options. Program is supported by context-sensitive on-line help. Program includes climate data for the 16 California weather zones. [See *User News* Vol. 15, No. 2, p. 10]

Eley & Associates
142 Minna Street
San Francisco, CA 94105

Contact: Charles Eley
or John Kennedy
Phone: (415) 957-1977
FAX: (415) 957-1381

PC Versions of DOE-2 (continued)

DOE-24/Comply-24

DOE-24 is a special DOE-2 release which is both a California-approved compliance program for the state's 1992 non-residential energy standards, and a stand-alone version of DOE-2.1E that includes a powerful yet easy-to-use input preprocessor. A demonstration program is available upon request. [See *User News* Vol. 12, No. 2, p. 2]

Gabel Dodd Associates
1818 Harmon Street
Berkeley, CA 94703-2416
Contact: Rosemary Howley
Phone: (510) 428-0803
FAX: (510) 428-0324

DOE-Plus™

DOE-Plus, a complete implementation of DOE-2.1D, is used to interactively input a building description, run DOE-2, and plot graphs of simulation results. Features include interactive error checking, context-sensitive help for all DOE-2 keywords, a 3-D view of the building that can be rotated, and several useful utilities.

Also from ITEM Systems:

Demand Analyzer™, uses templates of building types and vintages to simplify DOE-2 input requirements. Online help feature.

Prep™, a batch preprocessor, ideal for parametric studies, that enables conditional text substitution, expression evaluation, and spawning of other programs. [See *User News* Vol. 11, No. 4, p. 4 and Vol. 13, No. 2, p. 54, and Vol. 16, No. 1, p. 28-32]

ITEM Systems
1402 - 3rd Avenue, #901
Seattle, WA 98101
Contact: Steve Byrne
Phone: (206) 382-1440
FAX: (206) 382-1450
email: byrne@item.com

EZDOE

EZDOE is an easy-to-use PC version of DOE-2.1D. It provides full screen, "fill in the blank" data entry, dynamic error checking, context-sensitive help, mouse support, graphic reports, a 750-page user manual, extensive weather data, and comprehensive customer support. EZDOE integrates the full calculation modules of DOE-2 into a powerful, full implementation of DOE-2 on DOS-based 386 and 486 computers.

[See *User News* Vol. 14, No. 2, p. 10 and No. 4, p. 8-14]

Elite Software, Inc.
P.O. Drawer 1194
Bryan, TX 77806
Contact: Bill Smith
Phone: (409) 846-2340
FAX: (409) 846-4367
email: 76070,621@compuserve.com

FTI-DOEv2.1E

Highly optimized version of DOE-2.1E software, available for most computing systems. Current support: MSDOS and Windows 3.x, Windows NT, OS/2, RS/6000 (AIX), NeXT, SUN, UNIX (most systems). Call for platforms not listed. Documentation and weather files are available. Also FTI-DOEv2.1E source code, highly optimized and portable version; will compile for most systems.

[See *User News* Vol. 12, No. 4, p. 16]

Finite Technologies, Inc
821 N Street, #102
Anchorage, AK 99501
Contact: Scott Henderson
Phone: (907) 272-2714
FAX: (907) 274-5379
email: scott@finite-tech.com
www: <http://www.finite-tech.com/fti/home.html>

DOE-2.1E Bug Fixes via FTP

If you have Internet access you can now obtain the latest bug fixes to DOE-2.1E by anonymous ftp. The procedure is as follows:

ftp gundog@lbl.gov (or) ftp 128.3.254.10
login: anonymous
passwd: your email address

After logging on, go to directory "pub/21e-mods"; bug fixes are in files "*.mod". A description of the fixes is in file VERSIONS.txt in directory "pub". Each fix has its own version number, *nnn*, which is printed out as DOE-2.1E-*nnn* on the DOE-2.1E banner page and output reports when the program is recompiled with the fix.

You may direct questions about accessing or incorporating the bug fixes to Ender Erdem (ender@gundog.lbl.gov).



Pre- and Post-Processors for DOE-2

DOE 123

Uses Lotus 1-2-3 to graphically display DOE-2.1D output as barcharts, pie charts, and line graphs.

[See *User News* Vol. 10, No. 3, p. 5]

Ernie Jessup
4977 Canoga Avenue
Woodland Hills, CA 91364
Phone: (818) 884-3997

DrawBDL

DrawBDL, Version 2.02, is a graphic debugging and drawing tool for DOE-2 building geometry; it runs on PC's under Microsoft Windows. DrawBDL reads your BDL input and makes a rotatable 3-D drawing of your building with walls, windows and building shades shown in different colors for easy identification.

[See *User News* Vol. 14, No. 1, p. 5-7, Vol. 14, No. 4, p. 16-17, and Vol. 16, No. 1, p. 37]

Joe Huang & Associates
6720 Potrero Avenue
El Cerrito CA 94530-2248
Contact: Joe Huang
Phone/FAX: (510) 236-9238

Graphs for DOE-2

2-D, 3-D, hourly, daily, and psychrometric plots

[See *User News* Vol. 13, No. 1, p. 5]

Energy Systems Laboratory
Texas A&M University
College Station, TX 77843-3123
Contact: Jeff Haberl
Phone: (409) 845-6065
FAX: (409) 862-2762

Pre-DOE

A math pre-processor for BDL.

Nick Luick
19030 State Street
Corona, CA 91719
Phone: (714) 278-3131

London is famous for its "pea soup" fogs. Before modern air pollution controls, the fog was a witches' brew. In 1952, stagnant air over a 4 day period allowed sulfur dioxide and particulates to increase to unprecedented levels. As the air cleared, 4000 were left dead. Deaths from bronchitis increased 10 times, from influenza 7-fold and from pneumonia 5 times.



Help Wanted: Energy Engineer

Quantum Consulting of Berkeley, California, is looking for an **Energy Engineer** to provide support for engineers in the calculation of building energy consumption and peak demand. Candidates should have at least two years experience in the energy consulting industry. Knowledge of DOE-2 and experience in the UNIX environment a plus. When you write or fax, refer to job: HR/EE.

Quantum Consulting
2030 Addison Street
Berkeley, CA 94704
Fax (510) 540-7268

Personnel Changes at ESTSC

The Energy Science and Technology Software Center (ESTSC) at Oak Ridge National Laboratory distributes the mainframe and SUN workstation versions of DOE-2. Effective October 1, 1995, operation of the Energy Science and Technology Software Center changed from a contractor operation to operation by the U.S. Department of Energy's Office of Scientific and Technical Information (DOE/OSTI).

The new operations personnel are Walt Kelly, Director, with staff Delores Brabson, Wanda Parks, and Kim Buckner. The center address, phone, fax, Email, and URLs are listed below for your convenience.

P.O. Box 1020
Oak Ridge, TN 37831-1020
(423) 576-2606 Center phone
(423) 576-2865 Fax
(423) 576-1037 Director phone

email: estsc@adonis.osti.gov
WWW (ESTSC Info.) <http://www.doe.gov/html/osti/estsc/estsc.html>
WWW (ESTSC Catalog) <http://www.doe.gov/waisgate/estsc.html>

R E S O U R C E S

User News

Sent without charge to DOE-2 users, the newsletter prints documentation updates and changes, bug fixes, inside tips on using the program more effectively, and articles of special interest to program users.

Regular features include a directory of program-related software and services and an order form for documentation. In the summer issue an alphabetical listing is printed of all commands and keywords in DOE-2, and where they are found in the documentation. The winter issue features an index of articles printed in all the back issues.

Simulation Research Group
Bldg. 90, Room 3147
Lawrence Berkeley National Laboratory
Berkeley, CA 94720

Contact: Kathy Ellington
Phone: (510) 486-5711
FAX: (510) 486-4089
email: kathy@gundog.lbl.gov

Help Desk - Bruce Birdsall

Call or fax our DOE-2 expert, Bruce Birdsall, if you have a question about using DOE-2. If you need to fax an example of your problem to Bruce, please be sure to telephone him prior to sending the fax. This is a free service provided by the Simulation Research Group at Lawrence Berkeley National Laboratory.

Bruce Birdsall
Ph/Fx: (510) 829-8459
Monday through Friday
10 a.m. to 3 p.m. Pacific Time

Training

DOE-2 courses for beginning and advanced users.

DOE-2 training for small groups and individuals.

Energy Simulation Specialists
64 East Broadway, Suite 230
Tempe, AZ 85282
Contact: Marlin Addison
Phone: (602) 967-5278

Gary H. Michaels, P.E.
1512 Crain Street
Evanston, IL 60202
Phone: (708) 869-5859

Instructional DOE-2 Video and Manual

Takes you step-by-step in DOE-2.1D input preparation and output interpretation.

JCEM/U. Colorado
Campus Box 428
Boulder, CO 80309-0428
Contact: Prof. Jan Kreider
Phone: (303) 492-3915

Free Lighting Newsletter

The Rensselaer Polytechnic Institute is offering free subscriptions to their lighting research newsletter. The newsletter covers advances in the lighting industry, especially in technologies and techniques. The premier issue focuses on electrode-less lamps and examines their potential, background, performance characteristics, applications, and barriers to their use. Contact the Lighting Research Center, Rensselaer Polytechnic Institute, Troy, NY 1218-03590. Fax (518) 276-2999 or email lrc@rpi.edu.

Courtesy of the CADDET Energy Efficiency Newsletter, No. 3/1995.



You Never Call, You Never Write

P-L-E-A-S-E!!! Phone, FAX, email or drop us a note when you change your address. We use a special low mailing rate and the post office doesn't automatically forward the User News to your new address. Instead, they photocopy the back page and send it to us so we can correct our records. The newsletter itself, that precious beacon of light in the dark world of building simulation, is discarded!

R E S O U R C E S (continued)

Weather Data

TMY2 weather data for DOE-2. ENERGOS will provide TMY2 data for 239 cities converted for use with DOE-2 for PC versions of the program (DOE-2.1C through DOE-2.1E).

Kurmit Rockwell
ENERGOS
1705-14th Street, #401
Boulder, CO 80302
Phone: (303) 499-7907 / Fax: 449-7605

Comprehensive collection of weather files including the latest TRY, TMY and CTZ libraries from NCDC. All files can be used on all PC versions of DOE-2. Includes original source data and pre-formatted packed versions on a single IBM format CD. For Canadian users, the CD contains five weather files representing the five climate regions established by the Canadian energy codes. Individual sites available.

Jenny Latham or Martyn Dodd
EnergySoft
100 Galli Drive, Suite 1
Novato, CA 94949
Phone: (800) 467-4738 / Fax: (415) 883-5970

European Weather Files

Andre Dewint
Alpha Pi, s.a.
rue de Livourne 103/12
B-1050 BRUXELLES
Belgium
Phone: 32-2-649-8359 / Fax: 649-9437

TMY (Typical Meteorological Year)

TRY (Test Reference Year)

National Climatic Data Center
151 Patton Avenue, #120
Asheville, North Carolina 28801
Phone: (704) 271-4871 / Fax: 271-4876

CTZ (California Thermal Climate Zones)

California Energy Commission
Bruce Maeda, MS-25
1516-9th Street
Sacramento, CA 95814-5512
1-800-772-3300 Energy Hotline

WYEC (Weather Year for Energy Calculation)

ASHRAE
1791 Tullie Circle N.E.
Atlanta, GA 30329
(404)636-8400 / Fax: (404)321-5478

Canadian Weather Files in WYEC2 Format

Dr. Didier Thevenard
Watsun Simulation Laboratory
University of Waterloo
Waterloo, Ont., Canada N2L 3G1
Phone: (519) 888-4904 / Fax: 888-6197
watsun@helix.watstar.uwaterloo.ca

The original long-term data sets (up to 40 years of data) from which the CWEC files were derived can also be obtained directly from Environment Canada.

Contact Mr. Robert Morris
Phone: (416) 739-4361

*** * DOE-2 ENERGY CONSULTANTS * ***

Consulting Engineers Charles Fountain Burns & McDonnell Engineers 8055 E. Tufts Avenue, Suite 330 Denver, CO 80237 (303) 721-9292	Consultant Greg Cunningham Cunningham + Associates 512 Second Street San Francisco, CA (415) 495-2220
Consultant Philip Wemhoff 1512 South McDuff Avenue Jacksonville, FL 32205 (904) 632-7393	Consultant Jeff Hirsch 12185 Presilla Road Camarillo, CA 93012 (805) 532-1045
Consultants Charles Eley, John Kennedy Eley Associates 142 Minna Street San Francisco, CA 94105 (415) 957-1977	Computer-Aided Mechanical Engineering Mike Roberts Roberts Engineering Co. 11946 Pennsylvania Kansas City, MO 64145 (816) 942-8121
Consultant Steven D. Gates, P.E. Building HVAC Design/Performance Modeling 11608 Sandy Bar Court Gold River, CA 95670 (916) 638-7540	Consultant Donald E. Croy CAER Engineers, Inc. 814 Eleventh Street Golden, CO 80401 (303) 279-8136
Mechanical Engineers Chuck Sherman Energy Simulation Specialists 64 East Broadway, Suite 230 Tempe, AZ 85282 (602) 967-5278	Energy Engineering: Commercial & Institutional Michael W. Harrison, P.E. 139 Bluebird Lane Whitehall, MT 59759 (406) 287-5370
Consultants Shiva Subramanya Criterion, Inc. 5331 SW Macadam Ave., Suite 205 Portland, OR 97201 (503) 224-8606	Hourly Calibrated DOE-2 Analysis Jeff S. Haberl Energy Systems Laboratory Texas A&M University College Station, TX 77843-3123 (409) 845-6065
Consultant Martyn C. Dodd Gabel Dodd Associates 100 Galli Drive, Suite 1 Novato, CA 94949 (415) 883-5900	Consulting Engineers Prem N. Mehrotra General Energy Corporation 230 Madison Street Oak Park, IL 60302 (708) 386-6000
Energy Management Specialists Hank Jackson, P.E. P.O. Box 675 Weaverville, NC 28787-0675 (704) 658-0298	Consultant/Building Systems Analysis Robert H. Henninger, P.E. ElectroCom GARD Ltd. 2070 Maple Street Des Plaines, IL 60018-3019 (708) 699-3252

* * DOE-2 ENERGY CONSULTANTS (continued) * *	
Consulting Engineers/Computer Simulation Sciences Robert E. Gibeault A-TEC 5515 River Avenue, Suite 301 Newport Beach, CA 92663 (714) 548-6836	Energy Consultants Gene Tsai Acrosoft International, Inc. 3435 S. Yosemite, Suite 220 Denver, CO 80231 (303) 696-6888
Consulting Engineers Susan Reilly Enermodal Engineering 1554 Emerson Street Denver, CO 80218 (303) 861-2070	Technical Real World Analysis David J. Schwed Romero Management Associates 1805 West Avenue K, #202 Lancaster, CA 93534 (805) 940-0540
Energy Codes - DSM Doug Mahone The Heshong Mahone Group 4610 Paula Way Fair Oaks, CA 95628 (916) 962-7001	Consulting Engineers Gregory Banken, P.E. Q-Metrics, Inc. P.O. Box 3016 Woodinville, WA 98072 (205) 915-8590
Energy/DSM-Consultants Adrian Tuluca Steven Winter Associates 50 Washington Street Norwalk, CT 06854 (203) 852-0110	Consulting Energy Engineers Gary H. Michaels, P.E. 1512 Crain Street Evanston, IL 60202 (708) 869-5859
Consultant/Building Systems Engineering Ellen Franconi 1504 Grant Street Berkeley, CA 94703 (510) 559-8340	Consulting Engineer Robert Mowris, P.E. 606 Pelton Avenue Santa Cruz, CA 95060 (408) 454-0606
Consultant Engineers David A. Cohen Architectural Energy Corporation 2540 Frontier Avenue, #201 Boulder, CO 80301 (303) 444-4149	Modeling Specialist Norm Weaver Interweaver Consulting P.O. Box 775444 Steamboat Springs, CO 80477 (970) 870-1710
Energy Engineering and Analysis Leo Rainer Davis Energy Group, Inc. 123 C Street Davis, CA 95616 (916) 753-1100	Large Facility Modeling George Marton Consulting Engineer 1129 Keith Avenue Berkeley, CA 94708 (510) 841-8083
Consulting Engineers Chandra Shinde, P.E. ENVIRODESIGN GROUP 385 S. Lemon Ave., E-266 Walnut, CA 91789 (909) 598-1980	Energy Simulation Consultant Joel Neymark, P.E. 2140 Ellis Street Golden, CO 80401 (303) 384-0307

* DOE-2 ENERGY CONSULTANTS - INTERNATIONAL *

Mainframe DOE-2 for European Users Joerg Tscherry EMPA, Section 175 8600 Dubendorf Switzerland	Energy Consultant Philip Schluchter Institut fur Bauphysik Klein Urs Graf-Strasse 1 CH4052 Basel Switzerland
Consultant Werner Gygli Informatik Energietechnik Weiherweg 19 CH-8604 Volketswil Switzerland	Consultant, Distributor for FTI-DOEv2.1E Andre Dewint rue de Livourne 103/12 B-1050 BRUXELLES Belgium
Consultant Curt Hepting, P.Eng. EnerSys Analytics 3990 Lynn Valley Road North Vancouver, B.C. V7K 2S9 Canada	DOE-2 Simulation Specialist Rene' Meldem gb consult ag 30-A, Chemin de la Fauvette P.O. Box 106 CH-1012 Lausanne Switzerland
Consultant Jeff Blake 1010 Lincoln Gate Oakville Ontario L6H 2W9 Canada	<p style="text-align: center;">* Meetings *</p> <p>.....</p> <p>Dec 4-6 — <i>Thermal Performance of the Exterior Envelopes of Buildings VI</i></p> <p>.....</p> <p>To be held in Clearwater Beach, FL Contact: Mr. Pat Love, Bldg. 3147, Thermal Envelopes Conference, Oak Ridge National Laboratory, P.O. Box 2008 Oak Ridge, TN 37831-6070.</p> <p style="text-align: center;">* *</p>

Energy and the Economy

Energy and the Economy, the California Energy Commission's latest biennial report, is available free of charge. The report describes California's energy policy and provides a blueprint for state government policies. Topics covered include electricity, fuels, energy efficiency, and technical development. Since 1978, California's energy policy has been directed by these biennial reports which are the result of staff analyses, public workshops and hearings. Write to the California Energy Commission, Publications Dept/MS-13, P.O. Box 944295, Sacramento, CA 94244-2950. Be sure to include a self-addressed mailing label.

Courtesy of Conservation UPDATE, Kentucky Div. of Energy, Frankfort, KY

Feb 17-21, 1996 — *ASHRAE Winter Meeting*

To be held at the Georgia World Congress Center in Atlanta, GA.
 Contact: ASHRAE Meetings Department, 1791 Tullie Circle NE, Atlanta, GA 30329.
 Phone: (404) 636-8400, Fax (404) 321-5478.

* *

Jun 22-26, 1996 — *ASHRAE Annual Meeting*

To be held at the San Antonio Marriott River Center in San Antonio, TX.
 Contact: ASHRAE Meetings Department, 1791 Tullie Circle NE, Atlanta, GA 30329.
 Phone: (404) 636-8400, Fax (404) 321-5478.

* *

* * DOE-2 RESOURCE CENTERS * *

The people listed here have agreed to be primary contacts for DOE-2 program users in their respective countries. Each resource center has the latest program documentation, all back issues of the User News, and recent LBNL reports pertaining to DOE-2. These resource centers will receive copies of all new reports and documentation. Program users can then make arrangements to get photocopies of the new material for a nominal cost. We hope to establish resource centers in other countries; please contact us if you are interested in establishing a center in your area.

<p>South America Prof. Roberto Lamberts Universidade Federal de Santa Catarina Campus Universitario--Trindade Cx. Postal 476 88049 Florianopolis SC BRASIL Telephone: (55)482-31-9272 Fax: (55)48-231-9770 email: Lamberts@ecv.ufsc.BR</p>	<p>Australasia Dr. Deo K. Prasad/P. C. Thomas SOLARCH University of New South Wales P.O. Box 1 Kensington, N.S.W. 2033 AUSTRALIA Telephone: (61)-2-697-5783 (P.C. Thomas) Fax: (61) 2-662-4265 or -1378 email: PC.Thomas@unsw.EDU.AU</p>
<p>Portugal, Spain, Italy, and Greece Antonio Rego Teixeira ITIME Azinhaga dos Lameiros a Estrada do Paco do Lumiar 1699 Lisboa Codex PORTUGAL Telephone: (351) 1-716-4096 Fax: (351) 1-716-4305</p>	<p>Singapore, Malaysia, Indonesia, Thailand, and the Philippines WONG Yew Wah, Raymond Nanyang Technological University School of Mechanical and Production Engineering Nanyang Avenue Singapore 2263 REPUBLIC OF SINGAPORE Telephone: (65)799-5543 Fax: (65)791-1859 email: mywwong@ntuvax.ntu.ac.sg</p>
<p>Australia Murray Mason ACADS - BSG 16 High Street Glen Iris VIC. 3146 AUSTRALIA Telephone: (61) 885 6586 Fax: (61) 885 5974 email:</p>	<p>Germany B. Barath or G. Morgenstern BARATH and WAGNER Rudolf-Diesel-Strasse 2, 40670 Meerbusch GERMANY Telephone: (49) 2159 528041 Fax: (49) 2159 528043 email:</p>

Continued

*** * DOE-2 RESOURCE CENTERS * * (cont.)**

SWITZERLAND

Rene' Meldem
gb consult ag
30-A, Chemin de la Fauvette
P.O. Box 106
CH-1012 Lausanne
Switzerland
Telephone: (41) / 21 653-5677
Fax: (41) / 21 653-2884
Email: 100713.3072@compuserve.com



*** * DOE-2 PROGRAM DOCUMENTATION * ***

DOE-2 documentation is available from several sources. The National Technical Information Service offers a complete set of DOE-2 manuals, available for purchase separately. Kinko's Copy Center of Berkeley offers the DOE-2.1E updated documentation (BDL Summary, Sample Run Book, and Supplement) as a set; their price includes shipping within the U.S. [see the facing page for a faxable order form to Kinko's]. The Energy Science Technology Software Center at Oak Ridge, TN, offers the DOE-2.1E updated documentation at no charge but only when you purchase the mainframe or workstation version of DOE-2. And finally, many of the PC vendors of DOE-2 offer some or all of the documentation when you buy their version of DOE-2.

**National Technical Information Service
DOE-2 Program Documentation**

Document	Order Number	Price
DOE-2 Basics Manual (2.1E)	DE-940-13165	44.50
BDL Summary (2.1E)	DE-940-11217	27.00
Sample Run Book (2.1E)	DE-940-11216	91.00
Reference Manual (2.1A)	LBL-8706, Rev.2	126.00
Supplement (2.1E)	DE-940-11218	91.00
Engineers Manual (2.1A) [algorithm descriptions]	DE-830-04575	52.00

Order from:

National Technical Information Service
5285 Port Royal Road
Springfield, VA 22161

Phone (703) 487-4650
FAX (703) 321-8547

DOE-2 COMPUTER PROGRAM DOCUMENTATION ORDER FORM

FAX THIS PAGE TO KINKO'S COPY CENTER (510) 644-9704

Dani Aalfs
Kinko's Copy Center
901 University Avenue
Berkeley, CA 94710
USA

Date of Order _____

Phone (510) 204-0781

Fax: (510) 644-9704

Please ship me ____ set(s) of DOE-2.1E update documentation. The set includes BDL Summary, DOE-2 Supplement, and Sample Run Book. Cost of all three manuals is \$125.00 US, includes local tax, shipping, and handling. For foreign orders, please fax Ms. Dani Aalfs to ascertain extra shipping costs.

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World-Wide Web and Internet Sites for Building Energy Efficiency

Internet - sci.engrg.heat-vent-ac	HVAC discussion group.
Internet - eicbbs.wseo.wa.gov	Washington State Energy Office bulletin board.
Internet - sci.engrg.lighting	Lighting discussion group.
Web - http://energy.ca.gov/energy/cectext/ETEC.html	California Energy Commission's Energy Technology and Education Center. See <i>User News</i> , Vol. 16, No. 1, p. 42.
Web - http://www.hike.te.chiba-u.ac.jp/ikedai/CIE/publ/110-94.html	The International Commission on Illumination - CIE. See <i>User News</i> , Vol. 16, No. 1, p. 44.
Web - http://www.eren.doe.gov/	EREN: Energy Efficiency and Renewable Energy Network of the U.S. Department of Energy. See <i>User News</i> , Vol. 16, No. 1, p. 44.
Web - http://www.doe.gov/	U.S. Department of Energy. See <i>User News</i> , Vol. 15, No. 4, p. 1.
Web - http://www.whitehouse.gov/	The White House home page contains an <i>Interactive Citizens Handbook</i> that lists U.S. Government servers by agency. Use this site as a jumping-off point to explore other Federal agencies. See <i>User News</i> , Vol. 15, No. 4, p. 1.
Web - http://www.fedworld.gov/	FedWorld is the U.S. Government's Federal Information Network home page. It lists web servers, ftp, gopher, and telnet sites and is organized by subject categories.
Web - http://www.fedworld.gov/ntis/ntishome.html	National Technical Information Service NTIS is part of the U.S. Department of Commerce; it gathers and markets scientific, technical and business-related information and disseminates it electronically, on paper copy, on diskette, or on CD-ROM. NTIS has access to more than two million documents, reports, studies, computer programs, and databases; it adds an average of 1,300 titles each week. Call (703) 487-4650 for info.
Web - http://www.ornl.gov/CADDET/caddet.html	Center for the Analysis and Dissemination of Demonstrated Energy Technologies CADDET is an International Energy Agency program responsible for collecting and disseminating information on demonstrated, energy-efficient and renewable energy technologies. See <i>User News</i> , Vol. 16, No. 2, p. 23.
Web - http://solstice.crest.org/efficiency/aceee/index.html	American Council for an Energy-Efficient Economy ACEEE is a non-profit organization dedicated to advancing energy efficiency as a means of promoting both economic prosperity and environmental protection. See <i>User News</i> , Vol. 16, No. 2, p. 23.
Web - http://www.ashrae.org	American Society of Heating, Refrigeration and Air-Conditioning ASHRAE is an international membership organization operated for the exclusive purpose of advancing the arts and sciences of heating, refrigeration, air conditioning and ventilation. ASHRAE sponsors research, develops standards for industry, publishes technical and scientific data, and organizes conferences and educational activities. See <i>User News</i> , Vol. 16, No. 3, p. ?.
Web - http://www.cisti.nrc.ca:80/irc/irccontents/html	[Canadian] Institute for Research in Construction IRC is an integral part of the National Research Council, Canada's premier science and technology agency. IRC is the leader in research, technology and innovation for the Canadian construction industry through the development of national construction codes. See <i>User News</i> , Vol. 16, No. 3, p. ?.

***** Featured Sites This Issue *****
World-Wide Web and Internet Sites for Building Energy Efficiency

American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE)
<http://www.ashrae.org>

ASHRAE is an international membership organization operated for the exclusive purpose of advancing the arts and sciences of heating, refrigeration, air conditioning and ventilation. Since its founding in 1894 ASHRAE has helped shape the growth of the industry to which its members belong and has made important contributions to the public. Through volunteer effort, ASHRAE sponsors research, develops standards for industry, publishes technical and scientific data, and organizes conferences and educational activities. Call ASHRAE International in Atlanta, GA, at (404) 636-8400.

ASHRAE
1791 Tullie Circle N.E.
Atlanta, GA 30329-2305
Ph: 404-636-8400
Fx: 404-321-5487

Institute for Research in Construction [Canada]
<http://www.cisti.nrc.ca:80/irc/irccontents/html>

The Institute for Research in Construction (IRC) is the leader in research, technology and innovation for the Canadian construction industry, one of the country's largest industrial sectors. Through its research and in partnership with industry, IRC works with industry to develop innovative building materials and energy-efficient products. IRC coordinates the development of Canada's model construction code and works extensively with industry and the provincial and territorial governments to produce national building codes.

Institute for Research in Construction
National Research Council of Canada
Ottawa, K1A 0R6
Canada
Ph: 613-993-2607
Fx: 613-952-7673

New LBNL Software: RESFEN, Version 2.4

Description of the Program

RESFEN 2.4 is the latest version of a computer program for calculating the heating and cooling energy performance and costs of residential fenestration systems. This is a **prototype** and its form and content are currently being evaluated for possible use as part of a window rating system being developed by the National Fenestration Rating Council (NFRC). RESFEN 2.4 calculates annual heating and cooling energy use and cost and peak heating and cooling loads. The algorithms are based on multiple regressions that were derived from a database of DOE-2.1E building energy simulations of single- and two-story residences. Users can vary geographic location, electricity and gas cost, infiltration, HVAC, wall type and floor type, as well a window size, U-value, shading coefficient, window type. Results are given for two discrete sets of window orientations: north-east-south-west or northeast-southeast-southwest-northwest. Incremental changes due to obstructions, overhangs, and interior shades can also be calculated.

Hardware Requirements

IBM-PC compatibles with Windows 3.1, VGA or SVGA monitor, and mouse.

Distribution and Support Materials


The RESFEN software package includes one DS-HD 3.5" IBM formatted diskette and accompanying instructions. The program may be obtained free of charge from

NFRC
Suite 120
1300 Spring Street
Silver Spring, MD 20910

Phone: (301) 589-6372
Fax: (301) 588-0854


***** DISCLAIMER *****

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DOE-2.1E Documentation Update

- - Sample Run Book - -



Metric Input/Output Example

Recently, it was brought to our attention that Section 13 of the DOE-2.1E Sample Run Book was missing. Sure enough, due to an error on our part Section 13, the Metric I/O Example, was never sent to the printer. If you would like a copy of this example, please photocopy this page and fax it to Kathy Ellington at (510) 486-4089; be sure your mailing label is legible. You may also email me at KLEllington@lbl.gov

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