

MEMORANDUM OF UNDERSTANDING
Between
THE AMERICAN INSTITUTE OF ARCHITECTS
And
**THE AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR-
CONDITIONING ENGINEERS**

I. Purpose:

The purpose of this Memorandum of Understanding (MOU) is to create the general working understanding between The American Institute of Architects (AIA) and the American Society of Heating, Refrigerating and Air-conditioning Engineers (ASHRAE) (herein jointly "Parties") to work jointly in the research and development of the next generation of energy efficiency guidelines. This concept proposal is to provide analytical support and research for the development of the next generation's advanced energy efficiency design guidance.

II. Background:

The Parties recognize that residential and commercial communities are a major focal point for energy consumption and that buildings, forming a large part of the built environment, account for approximately 35 percent of total energy consumption in the United States.

The Parties and their respective memberships have an essential role to play in achieving energy-efficiency improvements in all types of buildings, and routinely develop strategic relationships with professional organizations, industry trade associations and other groups in order to establish a cooperative basis to promote "smart" design practices regarding energy usage, as well as energy-efficient and environmentally responsive buildings.

The Parties wish to work jointly on energy use and energy-efficiency issues related to the built environment, including the following:

- Improving quality of the indoor environment through the use of advanced systems techniques and environmentally responsible building;
- Expanding the diversity of energy use and energy conservation measures; and
- Promoting quality of life and global economic opportunities through internationally recognized high performance design and energy-efficient structures.

III. Understandings:

The Parties have identified areas of interest that lend themselves to collaborative activities, the most notable of which are professional development and public outreach, and research and development.

1. Professional Development and Public Outreach

The Parties have developed and delivered workshops featuring energy-efficient architecture, building codes and standards, and sustainable design workshops to practitioners. The education and training, often offered within accredited continuing education programs, have helped architects, engineers, public officials, and building owners to integrate energy efficiency and renewable/clean energy in the design process, giving them the tools to construct better buildings.

This MOU anticipates the establishment of new standards of excellence in understanding and implementing energy use and environmental considerations in the built environment. The spectrum is intended to be broad based, including integrated design, regional and urban planning and design implications, and energy efficiency. It would embody reduced energy use; selection of environmentally responsible materials and recycling; indoor air quality issues; operation and maintenance; and renovation, adaptive re-use, historic preservation and related issues. The Parties will support continued efforts to enhance energy and environmental design standards, and the development of advanced modeling tools such as the Department of Energy's (DOE) *Energy-10*, DOE 2/Energy Plus. The Parties will undertake activities to encourage integration of these design tools and standards into professional practices.

Since the Parties require continuing education for their members, this requirement will continue to provide an expanded audience for the Parties' workshops and other educational programs and tools. The Parties also believe that additional opportunity for integrating energy and environmental strategies is extant within other professional interest areas. The Parties expect to introduce these strategies to a larger body of building design professionals over the course of this MOU. The Parties recognize that the development of reliable metrics will be central to maintaining the design leadership of these professionals, and will work cooperatively to identify and collect metrics that affirm results and attribution to this collaborative effort.

2. Research and Development

Both Parties have a history of successful research and development initiatives addressing energy efficiency and renewable energy issues, and plan to continue this work. Critical research is still needed to support knowledge development and distribution. To support this effort, the Parties will collaborate on the development of demonstration projects and design tools and will disseminate the results.

The Parties will continue to support energy efficiency and renewable energy issues for research, development, and distribution of design tools. This envisions refinement and distribution of tools and best practices for the implementation of energy-efficient and environmentally superior design. This includes energy simulations, environmental material assessment and specification, construction waste reduction, and performance-based auditing and contracting to address the specific needs of architects, engineers and facility owners/operators throughout the building lifecycle.

IV. Conditions:

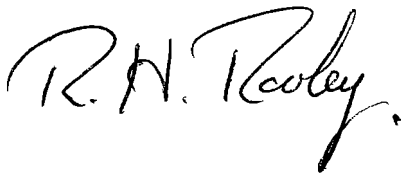
This MOU is neither a contractual nor a financial obligation instrument, nor does it create any legal obligations of any kind. Rather, it broadly states basic understandings between the two Parties about tasks they seek to undertake and the methods for performing them. It cannot be used

to obligate or commit funds or other resources, nor may it be cited as the basis for the promise or transfer of funds. Activities undertaken between the Parties requiring the obligation or transfer of financial or other resources shall be subject to separate agreements between the Parties. Any such separate agreements will provide for the management of the work involved and will set forth specific arrangements for program implementation. Collaboration under this MOU shall be in accordance with the statutes, regulations and governance requirements that apply to the respective Parties.

V. Effective Date and Administration:

This MOU will become effective upon signature by the duly authorized representatives of ASHRAE and of The American Institute of Architects. It may be modified or amended only by written agreement between both parties, and such amendments shall become part of, and shall be attached to this MOU. This MOU shall terminate at the end of three (3) years unless revised or extended at that time by written agreement of the parties. Either Party, upon 90 days written notice to the other, may terminate this MOU at any time. Its provisions will be reviewed annually and amended/supplemented if mutually agreed upon in writing.

Signed:



Mr. Richard H. Rooley, FREng.
President, ASHRAE
**For American Society of Heating,
Refrigerating and Air-Conditioning
Engineers**



Mr. Norman L. Koonce, FAIA
Executive Vice President/CEO,
The American Institute of Architects
For The American Institute of Architects

(Date) 01-28-04

(Date) 01-21-04