

INDUSTRY NEWS



New Standard 90.1 Approved

SEATTLE—ASHRAE's new Standard 90.1-1999, *Energy Standard for Buildings Except Low-Rise Residential Buildings*, is expected to reduce energy use in new buildings by as much as 16%.

The standard, approved at ASHRAE's annual meeting, is the fourth edition of the standard first adopted in 1975.

The new version reflects the many advances in design and technology since it was last published 10 years ago, said Ron Jarnagin, Member ASHRAE, a staff scientist at Pacific Northwest National Laboratory and chair of the 90.1 committee. More efficient heating and cooling equipment has reached the market, glazing products have advanced and new lighting technologies have been developed.

A key issue has been the establishment of a single set of building envelope requirements. Standard 90.1-1999 uses a single set of efficiency requirements based on a theoretical building using 90% natural gas and 10% electricity for heating, a ratio derived from U.S. Energy Information Administration

(EIA) data, said Jarnagin.

When Standard 90.1 is applied in plans for office or retail buildings, it should produce site (where the fuel is used) energy savings of about 16% and source (where the fuel is produced) energy savings of about 20% above the 1989 standard, said Jarnagin, citing a preliminary study.

"The cost estimate for what a business should save would be around 20%," he said.

ASHRAE Standard 90.1-1999 is written in mandatory, enforceable language, which federal, state and local government agencies can adopt into their building codes.

Designers planning buildings less than 25,000 ft² (2300 m²) and no taller than two stories should find the new standard much easier to use, according to Jarnagin.

"We're trying to make the mechanical section simple for simple buildings," he said. "We've consolidated the technical data for those buildings to about a page."

ASHRAE Standard 90.1-1999 includes both Inch-Pound (I-P) units and Interna-

tional System of Units (SI). Test procedures have been updated and weather data has been added, including information for locations worldwide.

Several actions on ASHRAE Standard 90.1 will immediately take place:

- The standard will be submitted to the Illuminating Engineering Society of North America, a co-writer of the standard, for approval as a co-sponsor of the standard.

- The standard will be submitted to the American National Standards Institute for approval as an American National Standard.

- A user's manual will be developed to accompany the published standard.

- A separate guideline will be written to provide a higher level of efficiency beyond the standard's minimum requirements, allowing incentive programs to recognize the use of more efficient equipment in new buildings.

The approval of ASHRAE Standard 90.1-1999 is subject to a 45-day appeal period of the Board's decision. ■

'Moderate Amount of Smoking' Deleted From Standard 62-1989

SEATTLE—ASHRAE has dropped mention of a "moderate amount of smoking" from its standard on ventilation for acceptable indoor air quality. It also is drafting design guidance for ventilating areas where smoking occurs.

ASHRAE deleted the smoking phrase through the approval of an addendum in January. An appeal to reverse approval of that addendum was denied by an ASHRAE appeals panel and by the ASHRAE Board at the annual meeting here. Next, that adden-

dum and three other addenda will be sent to the American National Standards Institute (ANSI) for approval.

"Since ANSI/ASHRAE Standard 62-1989 was published, a number of prominent health organizations have identified environmental tobacco smoke as a significant health risk," said Andrew Persily, newly appointed chairman of the Standard 62 committee. "When they make pronouncements like that, ASHRAE has to listen."

Also, guidelines for separating non-smoking spaces from spaces where smok-

ing is allowed were approved for public review by the Standard 62 committee with addenda setting minimum requirements for filtering particles from air and outlining requirements for outdoor air cleaning.

The committee will review comments from a third set of addenda later this year. Those addenda:

- Refine requirements for determining design ventilation rates.

- Revise the IAQ procedure and clarify when to use it.

- Describe how the standard applies to new buildings and to additions and modifications to existing buildings.

See *Smoking*, Page 12