

ING ENGINEERS, thousands of the real leaders of thought and action in heating, ventilating, and air conditioning have gathered about that standard and carried it proudly before them far along the way of outstanding accomplishment. They may be identified among engineering groups by the distinctive emblem which was adopted by the Charter Members.

The first Annual Meeting was held in New York, N. Y., January 22-24, 1895, and the organization was incorporated that same year, under the laws of the State.

A. S. H. V. E. RESEARCH LABORATORY

Since 1919 THE AMERICAN SOCIETY OF HEATING AND VENTILATING ENGINEERS has maintained a permanent research staff and facilities devoted solely to the study of fundamental problems in the field of heating, ventilating and air conditioning. During the past quarter century much has been done to advance the art by establishing scientifically sound data which the engineer can apply in the design, operation, and maintenance of heating, ventilating, and air conditioning systems and equipment.

For twenty-five years the Society's Research Laboratory was located at the U. S. Bureau of Mines Building, Pittsburgh, Pa. The Laboratory was moved to Cleveland in 1944, and early in 1946 the Society purchased premises at 7218 Euclid Avenue. In addition to work at the Society's Laboratory, a substantial part of the research program has been carried on through the medium of cooperative agreements with leading educational institutions of the United States and Canada.

All research activities are planned and supervised by the Committee on Research of 15 elected members, assisted by various Technical Advisory Committees of the Society. The research activities are financed from Society funds, of which a portion comes from membership dues and from its publications, and these funds are amplified by contributions from friends in the industries engaged in the general field of heating, ventilating, and air conditioning.

The new Environment Laboratory is an important addition to the Society's facilities for fundamental research. It has been constructed for the development of authentic data for the design and installation of panel heating and cooling.

The room is the result of a conference in early 1947 of more than 100 representative engineers from consulting firms, technical societies, universities, trade associations and industry leaders. The group agreed that the Society should take the initiative in acquiring data for panel heating and cooling which were lacking at the time. In June 1947 the A.S.H.V.E. Committee on Research formed a Technical Advisory Committee on Panel Heating and Cooling to advise on technical details of this research. The work was divided into four spheres of activity:

1. Heat distribution within and behind the panel.
2. Heat transfer between the panel and the space in the room.
3. Comfort conditions.
4. Controls.

In order to accomplish parts 2 and 3 of the proposed program, it was decided to construct a full-sized room wherein the temperatures of all the room surfaces might be controlled independently. So that the room could also be used for a study of the relationship between human comfort and radiation, it was designed to permit divi-

sion into two rooms when desired. After two years of planning, construction began in 1950 and was completed in November 1951.

The room itself is 25 ft-by 12 ft with a ceiling adjustable in height from 7 to 12 ft. It can be divided into two separate rooms each 12 ft by 12 ft. The room is housed in the main A.S.H.V.E. Laboratory and is 3 ft above the main laboratory floor. The interior surfaces of the room are aluminum panels backed by $\frac{3}{8}$ in. copper coils on 3 in. centers. Outside wall temperatures as low as 0 F can be simulated. Floor and ceiling surfaces can be kept at temperatures as high as 180 F.

The instrumentation provided, permits readings of surface temperatures within the room (400 thermocouples attached to back of panels), air temperatures, rate and temperature of infiltration air, and heat picked up or given off by all surfaces. It is intended to add more equipment which will permit maintaining air temperatures within the room, independent of surface temperatures. This will allow human comfort studies under varying internal dry bulb temperatures, relative humidities and air change rates.

It is expected that some of the practical results of the use of this room will be:

1. To measure the rate of the exchange of heat between surfaces of the room and air in the room as they are affected by temperature, humidity, ventilation, etc.
2. To determine the influence of radiation on human comfort, and using this to improve the A.S.H.V.E. Comfort Chart.
3. The use of the room to study the removal of heat by heat absorbing panels.
4. An evaluation of different types and colors of paint and wallpaper on panel performance.

In addition to these projects, the room also provides the A.S.H.V.E. Laboratory with a flexible research tool that should be extremely valuable for many years to come.

THE GUIDE

A distinctly new service was inaugurated by the Society in 1922 when it established THE GUIDE. Now in 1952, as the 30th Edition of the HEATING VENTILATING AIR CONDITIONING GUIDE makes its appearance, it is notable that THE GUIDE has served effectively not only the membership but the entire profession and the allied industries, and has received world wide recognition as a reliable and authoritative compendium of useful heating, ventilating and air conditioning data.

Throughout the 30 years of its service THE GUIDE has become a reference book of unchallenged position in its special field of engineering. The intention of its founders, to provide an instrument of service containing reference material on the design and specification of heating, ventilating and air conditioning systems and containing essential and reliable information concerning modern equipment, has been carefully safeguarded by those responsible for the compilation of each Edition.

THE GUIDE exerts today one of the most positive influences tending to elevate, improve and extend the whole Art and Industry of Heating, Ventilating and Air Conditioning. It is universally recognized as the most useful and authoritative work in its field, being used by practicing engineers, educators and manufacturers in all parts of the world, and as a text-book by a growing number of the world's principal engineering institutions.