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AMERICAN SOCIETY OF HEATING AND VENTILATING ENGINEERS

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PREFACE

THE growth of THE GUIDE in its sixth year of service is impressive as more than 100 pages of additional data are to be found in the edition for 1928 prepared for engineers, architects, contractors and others who are desirous of having a complete knowledge of the heating and ventilating art.

Developments in heating and ventilating engineering during the past year have made many changes in THE GUIDE necessary and these are reflected in both the Technical Data Section, in which new Chapters are to be found, and also in the Catalog Data of Manufacturers which announce many new products. In this sixth edition of THE GUIDE an important contribution has been made in the preparation of Chapter I on "Calculating Heat Losses from Buildings" and comprehensive tables are given for ordinary building constructions which will permit the engineer, architect or contractor to determine the heat losses quickly, not only for the constructions given but for any combination of materials which he may decide upon. Heat loss factors are also given for insulated constructions and it is hoped that the standard tables will be generally adopted by men who figure heating requirements for buildings.

Another notable section is that on "Steam Heating Systems and Piping" which is recommended jointly by the AMERICAN SOCIETY OF HEATING AND VENTILATING ENGINEERS and the *Heating and Piping Contractors' National Association* having been based on the research investigations at the A. S. H. & V. E. Research Laboratory at the U. S. Bureau of Mines, Experiment Station, Pittsburgh, Pa. Tables for sizing both large and small, one and two-pipe vapor and vacuum systems have been given with adequate examples to assist the user in laying out his piping in the most effective manner.

Entirely new data are given for Hot Water Heating Systems, Oil and Gas Heating, Automatic Heat Control and Insulation of Pipes and Surfaces.

The Ventilation Section has been completely revised and new data have been given on the Use of the Synthetic Air Chart, Systems of Ventilation, Air Cleaners, Air Conditioning and Motive Power for Fans. Extensive revisions and additions have been made to the other sections of the book and all of this material has been cross-indexed in a comprehensive manner to make it easier for the reader to use.

In every case the various Chapters are the product of one or more specialists and in practically all cases, members of the Society. All data have been drawn from the best available sources and great care has been taken to maintain a logical arrangement of data in order to make the presentation simple, convenient and practical for ready reference.

As in the case of the first edition issued in 1922, the second edition published in 1923 and the third designated 1924-25, the fourth in 1925-26, the fifth edition for 1926-27 and this sixth edition for 1928, has extended