

AMERICAN SOCIETY *of* HEATING *and* VENTILATING ENGINEERS GUIDE 1926-27

PART I HEATING

ALTHOUGH there are many ways of heating buildings the results required are the same no matter what method is used, namely to provide enough heat to compensate for the losses from the structure and maintain an adequate temperature for healthful living or working conditions.

Recognizing that uniform practice in the design of heating systems and some standards in the installation of the necessary piping and equipment are desirable the Society has undertaken the compilation of the most practical information available on the subject for the use of architects, engineers, contractors, students, etc., and for this data has drawn upon the experience of its members, the results of its Research Laboratory investigations, reports of its technical committees, the TRANSACTIONS and other reliable sources.

Heating, like any other service, depends largely upon conditions to be met and the quality of service required. The capacity of a heating system is generally based upon the most severe conditions of outside temperatures and wind velocities to be found in a particular locality. Its design should be governed by the character of the building, the purpose to which it is devoted, the period during which it is to be occupied and the reasonable and most practical methods for operating the heating system should be taken into consideration by the engineer.

Attention is called in this connection to the following:

That the average winter requirements (extending over a period of about 200 days in the colder climates and 150 days in the milder climates) are about 40 per cent, in the colder climates and about 60 per cent in the milder climates, of the requirements generally estimated for the most severe winter conditions, also that these severe conditions exist for just a few days each season. The load factor of a heating system averages from 40 to 60 per cent of the maximum and is considerably below this during a large part of the heating season. Then a heating system designed for maximum conditions will be