

COPYRIGHT, 1935
BY
AMERICAN SOCIETY OF HEATING AND VENTILATING ENGINEERS
AND BY IT
DEDICATED
TO THE ADVANCEMENT OF
THE PROFESSION
AND
ITS ALLIED INDUSTRIES

TEXT AND ILLUSTRATIONS ARE FULLY PRO-
TECTED BY COPYRIGHT AND NOTHING THAT
APPEARS MAY BE REPRINTED EITHER WHOLLY
OR IN PART WITHOUT SPECIAL PERMISSION.

Printed and Bound by
THE HORN-SHAFER COMPANY
BALTIMORE :--: MARYLAND

Ref. 628.8

Contents

TITLE PAGE.....	Page
CONTENTS.....	i
PREFACE.....	iii
EDITORIAL ACKNOWLEDGMENT.....	iv
CODE OF ETHICS FOR ENGINEERS.....	v
CHAPTER 1. Fundamentals of Heating and Air Conditioning.....	vi
CHAPTER 2. Ventilation and Air Conditioning Standards.....	1
CHAPTER 3. Industrial Air Conditioning.....	33
CHAPTER 4. Natural Ventilation.....	65
CHAPTER 5. Heat Transmission Coefficients and Tables.....	77
CHAPTER 6. Air Leakage.....	91
CHAPTER 7. Heating Load.....	119
CHAPTER 8. Cooling Load.....	131
CHAPTER 9. Central Air Conditioning Systems.....	145
CHAPTER 10. Cooling Methods.....	155
CHAPTER 11. Humidification and Dehumidification.....	165
CHAPTER 12. Unit Air Conditioners and Conditioning Systems.....	183
CHAPTER 13. Unit Heaters, Ventilators, and Coolers.....	197
CHAPTER 14. Automatic Control.....	219
CHAPTER 15. Air Pollution.....	239
CHAPTER 16. Air Cleaning Devices.....	259
CHAPTER 17. Fans and Motive Power.....	271
CHAPTER 18. Sound Control.....	281
CHAPTER 19. Air Distribution.....	299
CHAPTER 20. Air Duct Design.....	317
CHAPTER 21. Industrial Exhaust Systems.....	325
CHAPTER 22. Fan Systems of Heating.....	345
CHAPTER 23. Mechanical Warm Air Furnace Systems.....	359
CHAPTER 24. Gravity Warm Air Furnace Systems.....	375
CHAPTER 25. Boilers.....	389
CHAPTER 26. Chimneys and Draft Calculations.....	405
CHAPTER 27. Fuels and Combustion.....	423
CHAPTER 28. Automatic Fuel Burning Equipment.....	443
CHAPTER 29. Fuel Utilization.....	457
CHAPTER 30. Radiators and Gravity Convectors.....	479
CHAPTER 31. Steam Heating Systems.....	491
CHAPTER 32. Piping for Steam Heating Systems.....	503
CHAPTER 33. Hot Water Heating Systems and Piping.....	527
CHAPTER 34. Pipe, Fittings, Welding.....	559
CHAPTER 35. Water Supply Piping.....	579
CHAPTER 36. Insulation of Piping.....	599
CHAPTER 37. District Heating.....	621
CHAPTER 38. Radiant Heating.....	639
CHAPTER 39. Electrical Heating.....	657
CHAPTER 40. Test Methods and Instruments.....	667
CHAPTER 41. Terminology.....	675
INDEX TO TECHNICAL DATA.....	685
CATALOG DATA SECTION.....	707
INDEX TO MODERN EQUIPMENT.....	723
INDEX TO ADVERTISERS.....	947
ROLL OF MEMBERSHIP.....	959
	1-57