

INDEX

HEATING VENTILATING AIR CONDITIONING

GUIDE 1949

Technical Data Section

Chapters 1-52 and Pages 1-992

A

Abatement
air pollution, 179
smoke, 8, 179

Abbreviations, 11
Absolute
humidity, 5
pressure, 6
temperature, 9
zero, 1

Absorbents, 740
process, 740
temperature, pressure, concentration, 741

Absorbers
duct sound, 843
outlet, 847
plate cells, 846
plenum, 845

Absorption systems, 740, 762
Acceleration, 1

Acclimatization, 220

Acoustics, 837

Activated alumina, 736

Activated carbon, 655, 929

Activated bauxite, 737

Adiabatic, 1

mixing
injected water, 59
two air streams, 57
saturation, 59

Adsorbents, 735
process, 737
temperature, pressure, concentration, 738

Adsorption, odor, vapor, 183,
655, 735
Aerosol, 1

Air
change measurements, 204
chemical vitiation of, 213
circulation, 929
circulation in drying, 913

Air (continued)

classification of impurities,
179, 648
dust, 648
lint, 648
cleaner, 243, 648, 928
viscous impingement type,
648

cleaning devices, 647
classification of, 647
installation, 654
maintenance, 653
performance, 651
safety requirements, 655
selection, 653
testing, 651, 660
vapor adsorption, 655
combustion, 333, 334
conditioning process, 65
contaminants, 179, 213, 215
cooled

condensers, 769
cooling, tropics, 236
current measurement, 204
dehumidification, 735
distribution, 433, 443, 783, 807,
857, 927, 937

air entrainment, 785
application of methods, 798
balancing the system, 800
ceiling outlets, 796
definitions, 784
duct approaches to outlets,
800

flow patterns, 799
furnace systems, 433, 443
guide vanes, 791
induction, 785
jet pattern, 786
mechanics, 785
momentum theory, 785
outlet location, 797
outlet performance, 793
outlets, 795
parallel slots, 787
railway car, 928
recommended velocity, 444,
822

return and exhaust intakes,
803
room air motion, 793
spread, 790
standards for, 783
throw, 788
vanes, 791
velocity, 801, 904

Air (continued)

velocity across jets, 786
vertical drop and rise, 792
volume control, 800
wall outlets, 796
duct design, 435, 446, 807
duct friction loss, 808, 906
dust concentrations, 182, 185,
186

excess, 335, 361
filter, 647
flow resistance of coils, 637
impurities, 179, 180, 215, 647
infiltration, 161
causes of, 161
due to wind pressure, 161
through walls, 162
leakage, 162, 263, 354
moist, 23, 24
motion, 222, 227, 793
movement, influence of, 222
movement, measurement of,
199

outdoor, 179, 857
physical impurities in, 179, 215
pollution, 179, 647
abatement, 183, 896
quantity required, 214, 334
refrigeration cycle, 760
room motion, 444, 793
saturated, 1
secondary, 342
space conductance, 123
standard, 1

sterilization of, 190, 233, 239
supply and return openings,
783
supply opening noise, 795,
849
temperature requirements,
223, 229, 233, 250, 938
theoretical requirements, 215,
241, 333, 939
thermodynamics of, 23
unit cleaning devices, 647
washers, 1, 709

Air change method
computing infiltration, 161,
263

Air Conditioning, 1
aircraft, 933
automobiles in summer, 933
central system, 857