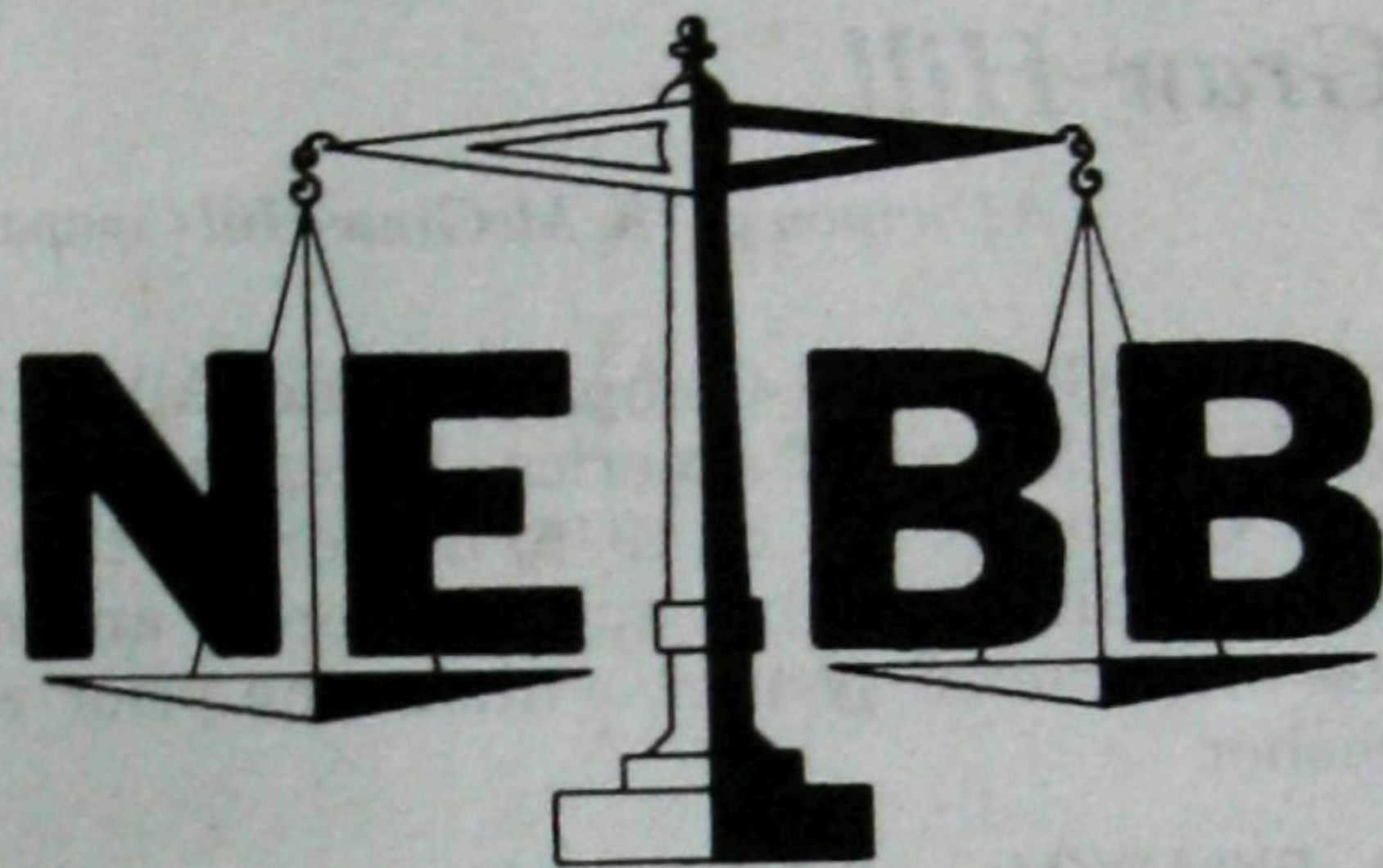


694.7
GLA
1997

HVAC TESTING, ADJUSTING, AND BALANCING MANUAL

Third Edition



Sponsored by National
Environmental Balancing Bureau

GIFT OF THE ASIA FOUNDATION
NOT FOR RE-SALE

QUÀ TẶNG CỦA QUỸ CHÂU Á
KHÔNG ĐƯỢC...

John Gladstone, B.S., M.A.
W. David Bevirt, P.E., CMS

Mc
Graw
Hill

ĐẠI HỌC QUỐC GIA HÀ NỘI
TRUNG TÂM THÔNG TIN THƯ VIỆN

AV-D1/ 2159

Boston, Massachusetts Burr Ridge, Illinois
Dubuque, Iowa Madison, Wisconsin New York, New York
San Francisco, California St. Louis, Missouri

Contents

Foreword	v
References	vii
Introduction	ix
Chapter 1	Standard TAB Procedures 1
Chapter 2	Airflow Measurement Equations 9
Chapter 3	Fan Equations 17
Chapter 4	Fan and System Curves 23
Chapter 5	Fan Drives and Equations 35
Chapter 6	Duct System Pressure Losses 49
Chapter 7	Use of TAB Instruments (Airflow) 65
Chapter 8	Use of TAB Instruments (Hydronic, Thermal, Rotational, Electrical) 87
Chapter 9	HVAC Unit Air Measurements 109
Chapter 10	Effects of Air Densities 117
Chapter 11	Heat Transfer 127
Chapter 12	Psychrometrics 145
Chapter 13	Indoor Air Quality 167
Chapter 14	Energy Recovery 179
Chapter 15	Pumps and System Curves 195

Chapter 16	Pump and Hydronic Equations	211
Chapter 17	Flow Measurements of Hydronic Systems	219
Chapter 18	Recording TAB Data	239
Chapter 19	Basic Electrical Data	253
Chapter 20	HVAC Control Systems	273
Chapter 21	Cleanroom Testing	287
Chapter 22	Sound and Vibration	309
Chapter 23	Troubleshooting	349
Chapter 24	TAB Cost Estimating	367
Chapter 25	TAB Mathematics	375
Appendix	A. Duct Design Data	391
	B. Hydronic Design Data	427
	C. HVAC Equations—U.S. Units	443
	D. HVAC Equations—Metric Units	447
	E. Metric Units and Equivalents	451
	F. Sound Design Equations	455
	G. Logarithms	459
Index	461	