

FOREWORD

The primary content of this procedural guide was taken from Chapters 12 through 16 of SMACNA's *HVAC Systems Testing, Adjusting & Balancing* – Third Edition. This was done to provide the experienced testing and balancing (TAB) technician a condensed version of the larger manual that can be used as an on-site procedural guide.

This abbreviated guide will provide any SMACNA contractor already familiar with mechanical system operation basics, with the information necessary to balance most heating, ventilation, and air conditioning (HVAC) systems. Chapters on both air- and water-side HVAC system adjusting and balancing are included.

Most of today's newest HVAC systems are being designed with many more individually controlled temperature zones to improve occupant comfort, and variable-speed fans and pumps are becoming more commonplace to provide the exact amount of heating and cooling system capacity necessary to minimize energy usage. New occupant air ventilation codes are much more restrictive, at the same time building envelopes are becoming much tighter. The combination of constantly changing HVAC flow rates and increased demand for fresh- and filtered-ventilation air for all occupants is placing much more emphasis on proper HVAC system operation and balancing.

SHEET METAL AND AIR CONDITIONING CONTRACTORS'
NATIONAL ASSOCIATION, INC.

