

3. Externally visible position indicators with wing nut lock device.
- C. Single Blade Manual Volume Dampers
 1. Round: Ruskin MDRS25 or equal.
 2. Rectangular: Ruskin MD25 or equal.
- D. Splitter Dampers:
- E. Opposed blade balancing dampers shall be 16 gauge minimum galvanized steel with zinc-plated hardware and bronze or nylon bearings. Blades shall not be over 8" wide. Maximum leakage shall be less than 1% at a static pressure of 4" w.g.

PART 3 EXECUTION

3.1 INSTALLATION

- A. Install accessories in accordance with manufacturer's instructions, NFPA 90A, and follow SMACNA HVAC Duct Construction Standards. Refer to Section 15810 for duct construction and pressure class.
- B. Provide backdraft dampers on exhaust fans or exhaust ducts where indicated.
- C. Provide duct test holes where required for testing and balancing purposes.
- D. Provide fire dampers at locations indicated, where ducts and outlets pass through fire rated components, and where required by authorities having jurisdiction. Prior to bidding, review architectural plans for last minute changes on locations of fire rated walls. Install with required perimeter mounting angles, sleeves, breakaway duct connection, corrosion resistant springs, bearings, bushings and hinges.
- E. Demonstrate re-setting of fire dampers to Owner's representative.
- F. At fans and motorized equipment associated with ducts, provide flexible duct connections immediately adjacent to the equipment.
- G. Provide balancing dampers at points on supply, return, and exhaust systems where branches are taken from larger ducts as required for air balancing. Install minimum 2 duct widths from duct take-off.
- H. Use splitter dampers only where indicated.
- I. Provide opposed blade dampers as necessary to supplement multiple speed air handling units to obtain scheduled total airflow.
- J. Provide single blade balancing dampers at duct take-off to diffusers, grilles, and registers, unless included in diffuser or register schedule. If impractical due to space limitations, an opposed blade damper shall be provided as an accessory to the diffuser, grille or register.

END OF SECTION