2.4 DUCT TEST HOLES

A. Temporary Test Holes: Cut or drill in ducts as required. Cap with neat patches, neoprene plugs, threaded plugs, or threaded or twist-on metal caps.

2.5 FIRE DAMPERS

A. Manufacturers:
   1. Ruskin Company: www.ruskin.com.
   2. Substitutions: As allowed by Section 15001.

B. Ceiling Dampers: Galvanized steel, 22 gauge frame and 16 gauge flap, two layers 0.125 inch ceramic fiber on top side and one layer on bottom side for round flaps, with locking clip.

C. Horizontal Dampers: Galvanized steel, 22 gage frame, stainless steel closure spring, and lightweight, heat retardant non-asbestos fabric blanket.

D. Curtain Type Dampers: Galvanized steel with interlocking blades. Provide stainless steel closure springs and latches for horizontal installations. Configure with blades out of air stream except for 1.0 inch pressure class ducts up to 12 inches in height.

E. Multiple Blade Dampers: 16 gauge galvanized steel frame and blades, oil-impregnated bronze or stainless steel sleeve bearings and plated steel axles, 1/8 x 1/2 inch plated steel concealed linkage, stainless steel closure spring, blade stops, and lock.

F. Fusible Links: UL 33, separate at 160 degrees F with adjustable link straps for combination tire/balancing dampers.

2.6 FLEXIBLE DUCT CONNECTIONS

A. Fabricate in accordance with SMACNA HVAC Duct Construction standards - Metal and Flexible, and as indicated.

B. Flexible duct connections: Fabric crimped into metal edging strip.
   1. Fabric: UL listed fire-retarded neoprene coated woven glass fiber fabric to NFPA 90A, minimum density 30 oz. per sq. yd.
   2. Metal: 3 inches wide, 24 gauge thick galvanized steel.

2.7 VOLUME CONTROL DAMPERS

A. Manufacturers:
   1. Ruskin Company: www.ruskin.com.
   2. Substitutions: As allowed by Section 15001.

B. As a minimum, all dampers shall have the following features:
   1. Molded synthetic sleeve type bearings, corrosion resistant.
   2. Square or hexagonal axles positively locked into the damper blade.