

2. Moisture vapor transmission: ASTM E 96; 0.02 perm.
  3. Secure with pressure sensitive tape.
- F. Vapor Barrier Tape:
1. Kraft paper reinforced with glass fiber yarn and bonded to aluminized film, with pressure sensitive rubber based adhesive.

## PART 3 EXECUTION

### 3.1 INSTALLATION

- A. Install in accordance with manufacturer's instructions.
- B. General
1. Duct sizes indicated are inside clear dimensions. For lined ducts, maintain sizes inside lining.
  2. Provide 45 degree entry on all tees used for branch duct to main duct connections. Splitters and extractors shall not be used unless specifically called for on drawings.
  3. Use spin-in fittings (no scoop) with manual volume dampers for all diffuser and grille connection takeoffs, unless otherwise indicated on drawings.
  4. Install flexible duct connections to diffusers and grilles with a minimum of 1" before fastening. Support flexible duct from building structure to minimize bends and sags. Duct shall be fully extended. Do not lay on light fixtures or ceiling.
  5. Make all duct work connects to air handler units, including fan terminal units, with flexible connectors.
  6. During construction provide temporary closures of metal or taped polyethylene on open ductwork to prevent construction dust from entering ductwork system.
  7. Provide air foil turning vanes for all rectangular elbows where indicated on drawings. Where acoustical lining is indicated, provide turning vanes of perforated metal with glass fiber insulation. Construct T's, bends, and elbows with radius of not less than 1-1/2 times width of duct on centerline where radiused fittings are called for in drawings.
  8. Increase duct sizes gradually, not exceeding 15 degrees divergence wherever possible; maximum 30 degrees divergence upstream of equipment and 45 degrees convergence downstream.
- C. Metal Duct
1. Fabricate and support in accordance with SMACNA HVAC Duct construction standards - Metal and Flexible, and as indicated. Provide duct material, gauges, reinforcing, and sealing for operating pressures indicated on equipment schedules.

### 3.2 INSULATION