SECTION 23 0713
DUCT INSULATION

PART 1 - GENERAL

1.1 SUMMARY
A. Includes But Not Limited To:
   1. Furnish and install thermal wrap duct insulation as described in Contract Documents.

B. Related Work:
   1. Section 23 3113: Low-Pressure Metal Ducts.
   2. Section 23 3300: Acoustic duct liner.

1.2 REFERENCES
A. American Society for Testing and Materials:
   1. ASTM B 209-01, 'Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate.'

PART 2 - PRODUCTS

2.1 MATERIALS
A. Thermal Wrap Duct Insulation:
   1. 1-1/2 inch 38 mm thick fiberglass with factory-laminated, reinforced aluminum foil scrim kraft facing and density of one lb/ per cu ft.
   2. Thermal Conductivity: 0.27 BTU in/HR SF deg F at 75 deg F 24 deg C maximum.
   3. Type One Acceptable Products:
      a. Type 100 standard duct insulation by Certainteed St Gobain, Valley Forge, PA www.certainteed.com.
      e. FRK by Owens-Corning, Toledo, OH www.owenscorning.com.
      f. Equal as approved by Architect before bidding. See Section 01 6000.

PART 3 - EXECUTION

3.1 INSTALLATION
A. Thermal Wrap Duct Insulation:
   1. Install insulation as follows:
      a. On outside air ducts and combustion air ducts within building insulation envelope.
      b. On other air ducts where indicated on Drawings.
   2. Wrap insulation tightly on ductwork with circumferential joints butted and longitudinal joints overlapped minimum 2 inches 50 mm.
      a. Do not compress insulation except in areas of structural interference. Minimum thickness at corners shall be one inch 25 mm thick.
      b. Remove insulation from lap before stapling.
      c. Staple seams at approximately 16 inches 400 mm on center with outward clenching staples.
d. Seal seams with foil vapor barrier tape or vapor barrier mastic. Seal penetrations of facing to provide vapor tight system.

B. Insulate outside of ceiling diffusers, diffuser drops, and duct silencers same as ductwork.

END OF SECTION