

**Part 1 General**

**1.1 PRODUCT DATA**

- .1 Submit product data in accordance with Section 01 33 00 – Submittal Procedures.
- .2 Indicate the following:
  - .1 Thermal properties.
  - .2 Friction loss.
  - .3 Acoustical loss.
  - .4 Leakage.
  - .5 Fire rating.

**1.2 CERTIFICATION OF RATINGS**

- .1 Catalogue or published ratings to be those obtained from tests carried out by manufacturer or independent testing agency signifying adherence to codes and standards.

**1.3 SAMPLES**

- .1 Submit samples with product data of different types of flexible duct being used in accordance with Section 01 33 00 – Submittal Procedures.

**1.4 WASTE MANAGEMENT AND DISPOSAL**

- .1 Separate and recycle waste materials in accordance with Section 01 74 21 – Construction/Demolition Waste Management and Disposal.
- .2 Collect and separate plastic, paper packaging and corrugated cardboard in accordance with Waste Management Plan.

**Part 2 Products**

**2.1 GENERAL**

- .1 Factory fabricated to CAN/ULC S110.
- .2 Pressure drop coefficients listed below are based on relative sheet metal duct pressure drop coefficient of 1.00.
- .3 Flame spread rating not to exceed 25. Smoke developed rating not to exceed 50 for any portion of flexible duct including jacket.

## **2.2 METALLIC - UNINSULATED**

- .1 Type 1: spiral wound flexible aluminum.
- .2 Performance:
  - .1 Factory tested to 3.0 kPa without leakage.
- .3 Acceptable material: Flexmaster T/L, Thermaflex, UniFlex.

## **2.3 METALLIC - INSULATED**

- .1 Type 2: spiral wound flexible aluminum with factory applied, 25 mm thick flexible glass fibre thermal insulation with vapour barrier and vinyl jacket.
- .2 Performance:
  - .1 Factory tested to 3.0 kPa without leakage.
- .3 Acceptable material: Flexmaster TL-VT, ThermaFlex, UniFlex.

## **Part 3 Execution**

### **3.1 DUCT INSTALLATION**

- .1 Install in accordance with: SMACNA.
- .2 Do not allow turns tighter than 1.5 diameter radius.
- .3 Do not allow accumulated turns greater than 90°. Install duct elbows where greater turn angle is required.

**END OF SECTION 23 33 46**