

# -UL 1738 / ULC-S636 Positive Pressure Vent-

### PART 1 - GENERAL

#### 1. SCOPE

- 1.1. The provisions of Section \_\_\_\_\_, Mechanical General specifications apply to all work in this Section.
- 1.2. This Section includes all specifications relating to the furnishing and installing of Double Wall Positive Pressure Vent Systems.

### 2. SUBMITTALS

- 2.1. Submit the following items in accordance with Section :
  - 2.1.1. Catalogue cuts / Diagrams / Descriptions
  - 2.1.2. Sizing calculations
  - 2.1.3. Installation Instructions
  - 2.1.4. Installation Drawings
  - 2.1.5. Copy of product warranties

### 3. CODES AND APPLICABLE STANDARDS

3.1. All products furnished under this Section shall conform to the requirements of The National Fuel Gas Code, ANSI Z223.1 / NFPA-54 where applicable and shall comply with and be listed to UL 1738, the U.S. Standard for Venting Systems for Gas –Burning Appliances, Category II, III and IV and ULC-S636, the Canadian Standard for Type BH gas vent systems. Components coming in direct contact with products of combustion shall carry the appropriate listing.

### 4. WARRANTIES

4.1. The Manufacturer shall warrant the Positive Pressure Vent System against defects in material and workmanship for a period of 15 years from the date of original installation. Any portion of the vent repaired or replaced under the warranty shall be warranted for the remainder of the original warranty period.

### **PART 2 - PRODUCTS**

## 5. POSITIVE PRESSURE VENT

- 5.1. The vent shall be of double wall, factory built type, designed for use in conjunction with Category I, II, III or IV condensing or non-condensing gas fired appliances or as specified by the heating equipment manufacturer.
- 5.2. Maximum continuous flue gas temperature shall not exceed 480°F (249°C).
- 5.3. Vent shall be listed for a minimum positive pressure rating of 6" W.C. and shall have passed at 35" W.C.
- 5.4. The vent system shall be continuous from the appliance's flue outlet to the vent termination outside the building. All system components shall be Intertek ETL and supplied from the same manufacturer.
- 5.5. The vent shall be constructed with an inner and outer tube, where the annular space between the tubes is 1-inch.
  - 5.5.1. The inner tube (flue gas conduit) shall be constructed from either AL29-4C® or 316L stainless steel. The AL29-4C stainless steel will have a wall thickness of .015" for 3" through 9" diameter vents, .020" for 10" through 16" and .024" for 18" through 24" diameter vents. The 316L stainless steel will have a minimum wall thickness of .015" for 3"-9" diameter vents, .019" for 10"-16" diameter vents and .024" for 18"-24" diameter vents.
  - 5.5.2. The outer tube (jacket) shall be constructed from 441 stainless steel with a minimum wall thickness of .024" for 26" through 36" diameter vents.
- 5.6. All system components such as vent supports, roof or wall penetrations, terminations, appliance connectors and drain fittings require to install the vent system shall be Intertek ETL listed and provided by the vent manufacturer.
- 5.7. Vent layout shall be designed and installed in compliance with manufacturer's installation instructions and all applicable local codes.



# **PART 3 - EXECUTION**

### 6. VENT SYSTEM LAYOUT

- 6.1. The vent system shall be routed to maintain minimum clearance to combustibles as specified by the manufacturer.
- 6.2. Vent installation shall conform to the manufacturer's installation instructions, its listing and state / local codes.
- 6.3. The vent system and breechings shall be inspected and cleaned before the final connection to the appliances.

## 7. MECHANICAL EQUIPMENT

7.1. If dampers or fans are installed in conjunction of the vent system, such equipment shall be supported independently from the vent system. Protect the vent system from twisting or movement due to fan torque or vibration.

### **PART 4 - PRODUCTS**

### 8. MANUFACTURERS

**8.1.** Specification requirements shall be met by using Security Chimneys Secure Seal LDCD double-wall exhaust flue or equivalent as approved by the engineer. Equivalent submittals shall demonstrate that the alternate material is in compliance with all specification requirements.