PART 1 GENERAL

1.1 SCOPE
A. All work in this Section shall comply with the Mechanical General Specifications for this job, if any.
B. This Section includes specifications for furnishing and installing of a UL1738 & ULC-S636 Listed Double Wall Stainless Steel Vent for Category I, II, III, IV Gas Fired Appliances.

1.2 SUBMITTALS
Submit the following for the Vent System in accordance with this Section:
A. Layout Drawings
B. Sizing Calculations
C. Product Catalog
D. Installation Instructions
E. Product Warranty

1.3 CODES AND APPLICABLE STANDARDS
Gas Vent System furnished under this Section shall be listed to UL1738 & ULC-S636 Vent Standards and installed in accordance with all applicable local, state and national and provincial codes, ordinances, regulations and laws such as The National Fuel Gas Code, ANSI Z223.1/NFPA-54 (USA) or Natural Gas and Propane Installation Code, B149.1 (Canada) or such codes as BOCA National Mechanical Code, the Standard Mechanical Code, the Uniform Mechanical Code where applicable.

1.4 WARRANTIES
The manufacturer shall warrant the Vent System against defects in material and workmanship for a period of 15 years from the date of the purchase. 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

2.1 UL1738 & ULC-S636 Listed Double Wall Stainless Steel Vent for Category I, II, III, IV Gas Fired Appliances
A. The factory built double wall vent shall be engineered for use with category I, II, III or IV gas fired appliances or as specified by the gas fired appliance manufacturer.
B. Inner vent shall be constructed of UL Listed UNS S44735 (i.e. AL 29-4C®) superferritic stainless steel or UL Listed alternate.
C. Inner vent shall include a factory installed Double Fail Safe FKM (fluoroelastomer) gasket in the female end of vent yielding an air and water tight joint when the overlapping male/female ends are assembled per the vent manufacturer's instructions.
D. The outer double wall shall be constructed of 304 or 316 stainless steel and have a 1" insulating air space around the inner vent to outer double wall.
E. The outer double wall shall incorporate a joint closure system which includes a snap lock or flanges with ZV-Clamp.
F. Double wall vent shall be compatible to single wall & smoothcore flexible vents with an adaptor all from the same vent manufacturer.
G. Maximum UL rated vent gas temperature shall not exceed 550°F for up to 12" diameter vents and 480°F for 14" to 24" diameter vents.
H. Vent shall be UL rated for a maximum pressure of 8” w.c. and shall have passed UL leakage test at 20”w.c.
I. The vent system shall be continuous from the appliance’s flue outlet to the vent termination outside the building. All systems components such as vent supports, roof or wall penetrations, terminations, appliance connectors and drain fittings shall be UL/cUL listed and supplied by the same vent manufacturer.
J. Vent components in direct contact with products of combustion must include a UL/cUL label.

2.2 MANUFACTURER
Vent shall be Z-Vent® Double Wall manufactured by Z-Flex U.S. or Flexmaster Canada.
PART 3 EXECUTION

3.1 VENT SYSTEM LAYOUT
A. The vent system and breachings shall be cleaned and inspected before connecting to appliance.
B. The vent system shall maintain air space clearances to combustibles as specified by the manufacturer.
C. Vent layout shall be designed and installed in compliance with manufacturer’s installation instructions including vent category, vent diameter, maximum equivalent length and/or allowable vent pressures, number of elbows, condensate drains, terminations, slope, clearances, support, etc.
D. Vent system installation shall conform to the manufacturer’s installation instructions, its UL/cUL listing and state/local codes.

3.2 MECHANICAL EQUIPMENT
A. Support any dampers or fans installed in the vent system to prevent any twisting or movement of vent system from fan torque or vibration.