



Z-DENS® Single Wall

www.z-flex.com

ULC-S636 Listed Category II, IV Polypropylene Gas Vent

1-800-654-5600

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 ULC-S636 Listed Single Wall Polypropylene Vent for Category II, 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 ULC-S636 Vent Standard 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 10 years from the date of 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

2.1 ULC-S636 Listed Single Wall Polypropylene Vent for Category II, IV Gas Fired Appliances

- A. The factory built single wall vent shall be engineered for use with category II, IV gas fired appliances or as specified by the gas fired appliance manufacturer.
- B. Vent shall be constructed of fire retardant polypropylene with a wall thickness of:

Outside Diameter		Min. Wall Thickness		Max. Wall Thickness	
mm	Inch	mm	Inch	mm	Inch
60	2.36	1.8	0.07	2.2	0.09
80	3.15	2.0	0.08	2.4	0.09
110	4.33	2.6	0.10	3.0	0.12
125	4.92	3.1	0.12	3.7	0.15
160	6.30	3.9	0.15	4.5	0.18
200	7.87	4.9	0.19	5.3	0.21

- C. Vent shall include a factory installed Double Fail Safe 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. Single wall vent shall be compatible to flexible & concentric vents with an adaptor all from the same vent manufacturer.
- E. Maximum Intertek rated vent gas temperature shall not exceed 230°F.
- F. Vent shall be Intertek rated for a maximum pressure of 20" w.c.
- G. The vent system shall be continuous from the appliance's flue outlet to the vent termination outside the building. Components located outdoors must be UV rated. All systems components such as vent supports, roof or wall penetrations, terminations, appliance connectors and drain fittings shall be Intertek listed and supplied by the same vent manufacturer.
- H. Vent components in direct contact with products of combustion must include a Intertek label.

2.2 MANUFACTURER

Vent shall be Z-DENS® Single Wall manufactured by Z-Flex U.S. or Flexmaster Canada.



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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 Intertek 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.