

PART 1 – BREECHING, CHIMNEY & STACK**1.1 SCOPE: DOUBLE WALL GAS VENT, TYPE L VENT, & PRESSURE STACK**

- A. Manufacturer shall provide a factory-built, double-wall, modular, vent system for gas and oil fired appliances. Such system shall be tested and listed by Underwriters Laboratories Inc. (UL) for use on Category I, II, III, and IV Appliances, appliances approved for Type B Gas Vent, appliances approved for Type L Vents (gas and oil), and use as a Chimney for building heating equipment and appliances as required by NFPA-54, NFPA-31, and NFPA-211. The vent system shall be listed in accordance with:
- a. UL 1738 Standard for Venting Systems for Gas-Burning Appliances, Categories II, III, and IV, with operating flue gas exhaust temperatures up to 550°F continuous, and/or 480°F continuous.
 - b. UL 441 Standard for Gas Vents, for appliances listed for use with Type B Gas Vent, with operating flue gas exhaust temperatures up to 480°F continuous.
 - c. UL 641 Standard for Type L Low-Temperature Venting Systems, suitable for use with appliances approved for use with Type L Venting Systems, with operating flue gas exhaust temperatures up to 570°F continuous.
 - d. UL 103 Standard for Building Heating Appliance Chimneys, with optional Positive Pressure Listing, which may produce exhaust gas at temperatures not exceeding 1000°F under continuous operating conditions when burning gaseous or liquid fuel.
- B. Vent system shall be listed for positive internal pressure applications up to 90 inches W.C. and for temperatures from ambient up to the maximum 1000°F continuous temperatures.

1.2 CONSTRUCTION

- A. The double-wall, insulated vent system shall be constructed of stainless steel inner flue, fiber insulation and stainless steel outer jacket. The materials and construction of modular sections and accessories shall be as specified by the terms of the product's UL listing.
- a. 444 stainless steel inner liner (3" - 16" I.D.)
 - b. Minimum 1.25" thick fiber insulation.
 - c. 304 stainless steel outer jacket (3" - 16" I.D.)
- B. Inner flue shall have steel to steel male/female conical joints that do not require sealant. The joints shall be secured and sealed by means of a locking band.
- C. Double-wall vent system shall be constructed so the installed joint does not incorporate any intermittent or continuous steel bridge between the inner and outer walls that conducts heat and causes hot spots in the assembled system.

- D. Vent system shall be designed to compensate for all temperature induced thermal expansion, installed to be gastight, and thus prevent leakage of combustion products into a building.
- E. Vent and Stack is based upon Jeremias Model DWKL-Vt. Detailed manufacturer's submittal drawings shall be provided for approval prior to installation of the vent system.

PART 2 – EXECUTION

2.1 INSTALLATION

- A. Roof and wall penetrations shall be factory insulated and UL listed in a manner not to require air ventilation for safe installation in the proximity of combustible materials.
- B. Entire vent system from the appliance outlet to the termination point, including accessories shall be from one manufacturer, except where noted.

PART 3 – WARRANTY

3.1 WARRANTY

- A. The factory-built modular vent system shall be warranted against functional failure for Twenty-Five (25) years.
- B. Manufacturer shall provide ASHRAE flue sizing calculations, or certificate of vent equivalent feet, confirming the inner diameter is in complete compliance with appliance manufacturers installation instructions.
- C. Manufacturer shall provide certificate of code compliance for all required local and national codes for the installation with the scheduled appliances.