PART 1 – BREECHING, CHIMNEY & STACK

1.1 SCOPE: DOUBLE WALL ALL-IN-ONE FLANGED SYSTEM

A. Manufacturer shall provide factory-built modular universal stack/vent system tested and listed by Underwriters Laboratories Inc. (UL) for use with seven (7) different UL Duct/Chimney/Vent Standards ranging from building heating appliances chimneys (pressure stacks), gas vents for condensing appliances, low temperature oil fired equipment, and kitchen exhaust (grease duct). UL Listings shall include:
   a. UL 103 Standard for Building Heating Appliance Chimneys which may produce exhaust gas at temperatures not exceeding 1000˚F under continuous operating conditions and 1400˚F under intermittent condition when burning gaseous, solid, or liquid fuels as described in NFPA-211
   b. UL 2561 1400˚F Chimney for appliances which may produce exhaust gas at temperatures not exceeding 1400˚F under continuous operating conditions and 1800˚F under intermittent conditions.
   c. Additional UL 103 pressure testing for positive pressure applications up to 90 inches W.C.
   d. 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.
   e. 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.
   f. 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.
   g. UL 1978 Grease Duct for use with commercial cooking equipment, as described in NFPA-96, which may produce temperatures not exceeding 500˚F under continuous operation and 2000˚F for 30 minutes.

1.2 CONSTRUCTION

A. The double wall air-space insulated exhaust system shall be constructed of all-stainless steel. The materials and construction of modular sections and accessories shall be as specified by the terms of the product's UL listing.
   a. Type 444 stainless steel inner liner.
   b. Minimum 1.25" insulating air space.
   c. Type 304 BA stainless steel outer jacket.
   d. The entire exhaust system, including all accessories (connectors, hardware, anchor plate supports, guides, drains, and terminals), shall be Type 304 stainless steel.

B. Inner flue shall have an overlapping male/female socket that protects the rolled flange with sealant against condensate and high-pressure cleaning. The joints shall be secured with overlapping vee band on the inner and overlapping locking band on the outer jacket.

C. Double-wall exhaust system shall be constructed so the outer jacket is floating and not welded to the inner liner.

D. Exhaust 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. Exhaust system is based upon Jeremias Model DWFL that is also available in different insulation thicknesses. Detailed manufacturer's submittal drawings shall be provided for approval prior to installation of the exhaust system.

PART 2 – EXECUTION

2.1 INSTALLATION

A. Roof and wall penetrations shall be factory insulated and UL listed as not to require air ventilation for safe installation around combustible materials.

B. Entire exhaust 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 exhaust 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 manufacturer's installation instructions.

C. Manufacturer shall provide certificate of code compliance for all required local and national codes for the installation with the scheduled appliances.