

PART 1 – BREECHING, CHIMNEY & STACK**1.1 SCOPE: DOUBLE WALL ALL-IN-ONE EXHAUST SYSTEM**

- A. Provide factory-built exhaust for use with building heating equipment and appliances, which may produce exhaust gas at temperatures not exceeding 1400°F under continuous operating conditions, 1800°F under intermittent conditions, and 2100°F for 10 minutes when burning gaseous, solid, or liquid fuels as described in NFPA-211. Grease Duct that is tested and listed by the Underwriters Laboratories Inc. (UL) for use with commercial cooking equipment, as described in NFPA-96. UL Listings shall include:
- a. UL 103 Building Heating Appliance Chimney.
 - b. Additional UL 103 Type HT 2100°F burnout test for Solid Fuel.
 - c. UL 2561 1400°F Chimney.
 - d. Additional UL 103 pressure testing for positive pressure applications up to 90 inches W.C. at 1400°F continuous (UL 2561 test conditions).
 - e. UL 1978 Grease Duct.
- B. When installed as a Grease Duct, provide required insulation to achieve a minimum 2" or 3" clearance to combustibles depending on diameter. The stainless steel anchor plates shall not protrude more than 3" out from the pipe outer jacket.
- C. When installed as a Grease Duct, UL Instructions shall permit further reduced clearance to combustibles as permitted in NFPA-96.

1.2 CONSTRUCTION

- A. The double wall insulated exhaust 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, continuous seam welded.
 - b. Insulation: minimum 1.5" Ceramic Fiber compressed into a 1.25" space.
 - c. 304 stainless steel outer jacket, continuous seam welded (3"- 16" I.D.).
 - d. The entire exhaust system, including all accessories (connectors, access doors, hardware, anchor plate supports, angle guides, drains, and terminals), shall be of stainless steel construction.
- B. Inner exhaust shall have steel to steel 2.2" wide male/female conical joints that do not require silicone sealant. The joints shall be secured and sealed by means of a locking band.

- C. Double-wall exhaust 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. Exhaust system shall be designed to compensate for all temperature induced thermal expansion, and shall be designed and installed to be liquid tight and thus prevent leakage of grease and/or grease laden vapors into a building.
- E. Exhaust system shall be designed to provide access for inspection and cleaning of each change of duct direction, permit drainage of grease residue through a duct section, enable the system to allow for the thermal expansion and allow various types of fire suppression equipment to be integrated into the grease ductwork, as necessary per local code.
- F. Manufacturer shall provide transitions to hoods that do not require field welding as outlined in NFPA-96.
- G. Exhaust system and Stack is based upon Jeremias Model DWKL-Lt. Detailed manufacturer's submittal drawings shall be provided for approval prior to installation of the vent system.

3.1 WARRANTY

- A. Provide manufacturers lifetime warranty for the entire duration the product is incorporated and used in its original installation.
- B. Manufacturer shall provide sizing calculations confirming the inner diameter is in complete compliance with NFPA-96.
- C. Manufacturer shall provide certificate of code compliance for all required local and national codes for the installation with the scheduled appliances.