

PART 1 – BREECHING, CHIMNEY & STACK**1.1 SCOPE: DOUBLE WALL GREASE DUCT FOR ZERO CLEARANCE AND FIRE-RATED ENCLOSURE**

- A. Provide factory-built modular grease duct that is tested and listed by the Underwriters' Laboratories, Inc. for use with commercial cooking equipment, as described in NFPA-96. UL Listings shall include:
 - a. UL 1978 Grease Duct for use with commercial cooking equipment, which may produce temperatures not exceeding 500°F under continuous operation and 2000°F for 30 minutes.
 - b. UL 2221 insulated grease duct with zero clearance to combustible, a 2-hour fire rating, and use of factory fire stops at necessary floor/wall penetrations.

1.2 CONSTRUCTION

- A. The double wall fiber 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. 3.25" minimum thick ceramic fiber insulation.
 - 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 and installed to be liquid tight and thus prevent leakage of grease and/or grease laden vapors into a building.
- E. Each 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. Exhaust system is based upon Jeremias Model DWFL-ZC. Detailed manufacturer's submittal drawings shall be provided for approval prior to installation of the exhaust system.

PART 2 – EXECUTION

2.1 INSTALLATION

- A. Inner pipe joints shall be sealed by use of factory supplied overlapping vee bands (protected by an overlapping inner extension) and sealant as specified in the manufacturer's installation instructions.
- B. Roof and wall penetrations shall be factory insulated and UL listed as not to require air ventilation for safe installation around combustible materials.
- C. 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.