

MODEL GRZ SAMPLE SPECIFICATION:

RECTANGULAR, FACTORY BUILT, ZERO CLEARANCE, FIRE RESISTANT GREASE DUCT

PART 1 – GENERAL

1.1 SUMMARY

Provide factory built, double wall rectangular grease duct, listed for fire resistance and zero clearance to combustibles.

1.2 REFERENCE STANDARDS

- A. The latest published edition of a standard shall be applicable to this project unless identified by a specific edition date.
- B. All materials and installation shall comply with the applicable requirements and standards.
 - 1. Underwriters Laboratories, Inc. (UL):
 - a. Provide products which have been listed and labeled to the following UL standards:
 - 1. UL 1978 / ULC S662 – *Standard for Grease Ducts*
 - 2. UL 2221 / ULC S144 – *Standard for Safety – Test of Fire Resistive Grease Duct Enclosure Assemblies*
 - 2. National Fire Protection Association (NFPA):
 - a. Comply with NFPA 96 – *Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations*
 - 3. International Code Congress (ICC)
 - a. When applicable to the project site, comply with:
 - 1. International Mechanical Code
 - 2. International Building Code
 - 4. International Association of Plumbing and Mechanical Officials (IAPMO):
 - a. When applicable to the project site, comply with:
 - 1. Uniform Mechanical Code

1.3 QUALITY ASSURANCE

- A. Obtain listed system components from a single manufacturer.
- B. Comply with NFPA 96, unless otherwise indicated, or comply with local authority having jurisdiction.
- C. Grease duct system shall be installed in accordance with the manufacturer's listings and written instructions.

1.4 WARRANTY

- A. Listed grease duct shall have a one year limited warranty starting at the date of shipment.

PART 2 – PRODUCTS

2.1 AVAILABLE MANUFACTURERS

- A. Listed double wall insulated rectangular grease duct shall be Model GRZ, as manufactured by Van-Packer Co.

2.2 LISTED GREASE DUCT

- A. The rectangular grease duct shall be insulated, double wall factory built type for use with Type I kitchen hoods, as described in NFPA 96, for the transmission of grease laden vapors from commercial cooking operations.
- B. Product Description:

1. Zero Clearance, 2 hr. Fire Resistance rated model GRZ Rectangular Grease Duct by Van-Packer Co.
2. Factory pre-fabricated, double wall type, listed and labeled to UL 1978 and UL 2221 for the venting of grease laden vapors from Type 1 kitchen hoods requiring grease duct as described in NFPA 96.
3. Grease duct shall be rated for continuous operation at 500°F and for intermittent operation at 2000°F.
4. All components of the grease duct system, including duct supports, guides, fittings, cleanouts, and through penetration firestops, shall be provided by a single manufacturer to ensure the system meets the requirements of the listing.
5. The grease duct system, along with its supports and through penetration firestops, shall have an "F" rating of at least 2 hours and a "T" rating of at least 2 hours as proven by test to ASTM Standard E814.
6. Listed access doors shall be provided, and located in accordance with the requirements of NFPA 96.
7. The rectangular grease duct sections shall be constructed of a liner and shell with ceramic fiber insulation in the annular space.
 - a. The duct liner shall be constructed of 0.035" thick Type 430 stainless steel (Option: Type 304 or 316 stainless steel).
 - b. The duct shell shall be constructed of Aluminized Steel (Option: Type 304, 316 or 430 Stainless steel).
 1. Shell (outer wall) thickness, where all sides are 36" or less, is 0.025"
 2. Shell (outer wall) thickness, where any side exceeds 36", is 0.035"
 - c. The duct shall include a 3" thickness of ceramic fiber insulation between the liner and shell.
8. The grease duct assembly shall be tested and listed for 0 inches clearance to combustibles.

PART 3 – EXECUTION

3.1 INSTALLATION OF FACTORY BUILT GREASE DUCT

- A. Duct liner joints shall be held together by means of bolted flanges and sealed with P/N 101087A sealant. Liner joints shall be wrapped with insulation strips provided by duct manufacturer and shell to shell gap covered with formed draw band provided by duct manufacturer.
- B. Connection to hood shall be made with a rectangular hood collar provided by the duct manufacturer to the hood manufacturer to assure proper fit with duct.
- C. Connection to curb mounted fans shall be by means of a fan adapter plate provided by the duct manufacturer.
- D. Support duct in accordance with Van-Packer's installation instructions.
- E. All supports and guides shall be designed for installation with no required welding.
- F. Store grease duct components inside, or covered adequately to protect from weather or accidental damage.