

## DUCTWORK FOR REMOVAL OF GREASE AND SMOKE LADEN VAPORS

### PART 1- GENERAL

#### 1.1 SUMMARY

- A. Section Includes:
  - 1. Ductwork for removal of grease and smoke laden vapors.

#### 1.2 REFERENCES

- A. Underwriters Laboratories (UL):
  - 1. UL1978 Test Standard -Grease Ducts for Restaurant Cooking Appliances.
- B. National Fire Protection Association (NFPA):
  - 1. NFPA 96 - Ventilation Control And Fire Protection Of Commercial Cooking Operations

#### 1.3 QUALITY ASSURANCE

- A. Comply with NFPA 96 unless otherwise indicated.
- B. Must install duct in accordance to manufacturers listings and installation instructions.

#### 1.4 WARRANTY

- A. Listed grease duct shall have a limited lifetime warranty to begin at the date of installation

### PART 2- PRODUCTS

#### 2.1 AVAILABLE MANUFACTURERS

- A. Listed Double-Wall non-insulated grease duct shall be model PIC manufactured by Metal-Fab, Inc.

#### 2.2 LISTED DUCTWORK FOR REMOVAL OF GREASE AND SMOKE LADEN VAPORS

- A. The grease duct shall be non-insulated double-wall factory-built type for use with type I kitchen hoods, as described in NFPA-96 for the transportation of air and grease-laden vapors from commercial cooking operation.
- B. Product Description:
  - a. Metal-Fab Series PIC Grease Duct.
  - b. Factory prefabricated, double wall type, listed for venting of grease laden air from kitchen hoods requiring grease duct as described in NFPA 96.
  - c. Rated for continuous operation at 500 F and intermittent operation at 2000 F.
  - d. All components of the grease duct system shall be provided by the manufacturer to ensure the system meets the requirements of the listing including duct supports, guides, fittings, cleanouts, and expansion joints required to install the duct.
    - i. UL 1978 (File MH8251) - Grease Ducts for Restaurant Cooking Appliances.
  - e. The inner wall shall be constructed of stainless steel, 0.035 inch thickness for sizes 6 to 36 inch diameters and 0.048 inch thickness for sizes 38 to 48 inch diameters. The outer wall shall be constructed of aluminized steel, 304 or 316 stainless steel, at a minimum 0.024 inch thickness in diameters 6 to 24 inches, and 0.034 inch thickness in 26 to 48 inch diameters. The duct shall include a 1" air space between the inner and outer walls. The duct wall assembly shall be tested and Listed to 5 inches clearance to combustibles in 6 to 10 inch diameter, 7 inches clearance to combustibles in 12 inch diameter, 9 inch clearance to combustibles in 14 inch diameter 10inches clearance to combustibles in 16 inch diameter, 12 inch clearance to combustibles in diameter of 18 inches, 14 inches clearance to combustibles in 20 inch diameter and 18 inches clearance to combustibles in diameters of 22 to 48 inches.

### PART 3-EXECUTION

#### 3.1 CONSTRUCTION OF FACTORY BUILT GREASE DUCT

- A. Inner pipe joints shall be held together by means of formed vee bands and sealed with P080 Grease Duct Sealant.
- B. Connection to the hood will be made with a round hood collar or a square-to-round transition.
- C. Curb mounted fans will incorporate a fan adaptor plate
- D. All construction and supporting of the kitchen ventilation system will be in accordance with Metal-Fab, Inc. installation instructions.
- E. Store grease duct sections inside or covered adequately to protect from weather or accidental damage.