

## SECTION 23 38 13 - COMMERCIAL KITCHEN HOODS

### PART 1 - GENERAL

#### 1.1 SUMMARY

##### A. Section Includes

##### 1. **KROGER DIRECT BUY PROGRAM:**

- a. Owner supplied/Owner installed.
  - 1) The Kroger Company will supply and install the wet chemical fire suppression system for all kitchen hoods.
- b. Owner supplied/Contractor installed.
  - 1) The Kroger Company will supply the kitchen hoods and enclosures for installation by the Contractor.

##### c. Comply with requirements in Division 00 Section "General Conditions."

##### 2. Contractor supplied and installed items:

- a. Stainless steel enclosure from top of hoods to ceiling around hood perimeter where indicated on Drawings.
- b. Exhaust duct wrap.
- c. Fasteners, supports, and other items not provided by Owner necessary for a complete installation of Contractor installed items.
- d. Steel or stainless steel duct as indicated on Drawings.

#### 1.2 SUBMITTALS

##### A. The Owner will provide the following submittals for the Contractor's review. The Contractor shall review and return submittals as specified in Division 00 Section "General Conditions."

##### 1. Product Data: For the following:

- a. Filters/baffles.
- b. Fire-suppression systems.
- c. Lighting fixtures.

##### 2. Shop Drawings: Signed and sealed by a qualified professional engineer showing:

- a. Plan view, elevation view, sections, roughing-in dimensions, service requirements, duct connection sizes, and attachments to other work.
- b. Cooking equipment plan and elevation to confirm minimum code-required overhang.

- c. Performance, exhaust and makeup air airflow, and pressure loss at actual Project-site elevation.
- d. Equipment assemblies and dimensions, weights, loads, required clearances, method of field assembly, components, and location and size of each field connection.
- e. Design Calculations.
- f. Wiring Diagrams.
- g. Piping Diagrams.

### 1.3 QUALITY ASSURANCE

- A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.
- B. Equipment: Listed and labeled in accordance with the National Electric Code (NEC) and by an organization acceptable to the authority having jurisdiction.

## PART 2 - PRODUCTS

### 2.1 PRODUCTS

- A. Refer to Drawings for schedule of equipment and for additional information on installation requirements.
- B. Refer to Division 26 Sections for power wiring from junction box.

### 2.2 HOODS AND ENCLOSURES

- A. Kitchen Exhaust Hoods and Enclosures: Refer to Division 01 Section "Vendor Contact List."
- B. Hood Exhaust Ducts: Meet requirements of NFPA 96. Materials to be minimum **0.054-inch (1.4-mm)** (16 gauge) carbon steel welded liquid tight.
- C. Factory built commercial exhaust hoods shall be tested in accordance with UL 710 and NFPA Standard 96 and shall be listed with NSF.

### 2.3 EXHAUST DUCT WRAP

- A. Provide exhaust duct wrap as specified in Division 23 Section "HVAC Insulation."

### 2.4 WET-CHEMICAL FIRE-SUPPRESSION SYSTEM

- A. Wet-Chemical Fire-Suppression System: Refer to Division 01 Section "Vendor Contact List."

- B. Description: Engineered distribution piping designed for automatic detection and release or manual release of fire-suppression agent by hood operator. Fire-suppression system shall be listed and labeled for complying with NFPA 17A, "Wet Chemical Extinguishing Systems," by a qualified testing agency acceptable to authorities having jurisdiction.

### PART 3 - EXECUTION

#### 3.1 WET-CHEMICAL FIRE-SUPPRESSION SYSTEM INSTALLATION

- A. Wet-chemical fire-suppression system will be installed by the Owner and will be installed according to NFPA 17A, "Wet Chemical Extinguishing Systems."
- B. Coordinate installation with Owner's Representative.

#### 3.2 HOODS AND ENCLOSURES INSTALLATION

- A. Complete field assembly of hoods where required.
  - 1. Make closed butt and contact joints that do not require filler.
  - 2. Grind field welds on stainless-steel equipment smooth, and polish to match adjacent finish. Comply with welding requirements in Part 2 "General Hood Fabrication Requirements" Article.
- B. Install hoods and associated services with clearances and access for maintaining, cleaning, and servicing hoods, filters/baffles, grease extractor, and fire-suppression systems according to manufacturer's written instructions and requirements of authorities having jurisdiction.
  - 1. Where only one exhaust hood is indicated, install hood at elevation shown on Drawings.
- C. Make cutouts in hoods where required to run service lines and to make final connections, and seal openings according to UL 1978.
- D. Securely anchor and attach items and accessories to walls, floors, or bases with stainless-steel fasteners, unless otherwise indicated.
- E. Install hoods to operate free from vibration.
- F. Install trim strips and similar items requiring fasteners in a bed of sealant. Fasten with stainless-steel fasteners at **48 inches (1200 mm)** o.c. maximum.
- G. Install sealant in joints between equipment and abutting surfaces with continuous joint backing, unless otherwise indicated. Provide airtight, watertight, vermin-proof, sanitary joints.
- H. Install lamps, with maximum recommended wattage, in equipment with integral lighting.
- I. Set initial temperatures, and calibrate sensors.
- J. Set field-adjustable switches.

- K. Connect ducts according to requirements in Division 23 Section "Air Duct Accessories." Install flexible connectors on makeup air supply duct. Weld exhaust-duct connections with continuous liquid tight joint.

### 3.3 EXHAUST DUCT WRAP INSTALLATION

- A. Install duct wrap at exhaust hood ducts from top of hood to roof structure in strict accordance with the manufacturer's instructions.

### 3.4 FIELD QUALITY CONTROL

- A. Start and check operation of all equipment and demonstrate to the Owner's Representative that the installation is complete in every respect.

### 3.5 INSPECTION CERTIFICATE

- A. Inspection Authority Certificate of Approval shall be furnished to the Owner's Representative before final acceptance will be given.
- B. Provide any inspections and certificates required by local jurisdictional authorities to obtain acceptance of the specified equipment and the installation.

END OF SECTION 23 38 13