

SECTION 233813 - COMMERCIAL KITCHEN HOODS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes commercial kitchen hoods.

1.3 SUBMITTALS

- A. Product Data: For the following:
 - 1. Standard hoods.
 - 2. Fire-suppression systems.
 - 3. Show plan view, elevation view, sections, roughing-in dimensions, service requirements, duct connection sizes, and attachments to other work.
 - 4. Show fire-protection cylinders, piping, actuation devices, and manual control devices.
 - 5. Detail equipment assemblies and indicate dimensions, weights, loads, required clearances, method of field assembly, components, and location and size of each field connection.
 - 6. Wiring Diagrams: Power, signal, and control wiring.
 - 7. Piping Diagrams: Detail fire-suppression piping and components and differentiate between manufacturer-installed and field-installed piping. Include roughing-in requirements for drain connections. Show cooking equipment plan and elevation to illustrate fire-suppression nozzle locations.
- B. Welding certificates.
- C. Field quality-control test reports.

1.4 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.

1.5 COORDINATION

- A. Coordinate equipment layout and installation with adjacent Work, including lighting fixtures, HVAC equipment, plumbing, and fire-suppression system components.

PART 2 - PRODUCTS

2.1 HOOD MATERIALS

- A. Hood shall be D1000 Series by DENLAR Fire Protection (sold by HVAC Products, Inc), or approved equal.
- B. Unit shall be wall mounted so that the bottom of the mounting bracket sits 18” to 26” above the cook top.
- C. Unit shall be of stainless steel construction (#18 & #20 GA, polished 304) w/ no sharp edges and brushed finish.
- D. Unit shall have fire suppression system factory installed. Activation of the mechanical fire suppression system shall be by a fusible link.
- E. Wet chemical extinguishing agent: Low PH Amerex 660 (pressurized potassium citrate / potassium acetate mix).
- F. Unit shall be ETL listed, tested to UL300A standards, fan motor shall be permanently lubricated and meet UL507
- G. Unit shall include a fuel shut-off device for electric appliances, activated at suppression system discharge
- H. Unit shall also automatically disconnect range element once a certain pre-set temperature is reached.
- I. Unit shall have multiple alarm contacts pre-installed (local, remote & trouble alarms) and an audible buzzer
- J. Lighting shall be by 60w shatter-proof bulb
- K. Provide Options:
 - 1. Manual pull station kit
 - 2. NSF Compliance
 - 3. NFPA 101 Compliance

2.2 EXAMINATION

- A. Examine substrates and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance.
- B. Examine roughing-in for piping systems to verify actual locations of piping connections before equipment installation.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

2.3 INSTALLATION

- A. 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.
- B. Securely anchor and attach items and accessories with stainless-steel fasteners, unless otherwise indicated.
- C. Install hoods to operate free from vibration.
- D. Set field-adjustable switches.

2.4 CONNECTIONS

- A. Connect ducts according to requirements in Division 23 Section "Ductwork."

2.5 FIELD QUALITY CONTROL

- A. Manufacturer's Field Service: Engage a factory-authorized service representative to inspect, test, and adjust components, assemblies, and equipment installations, including connections. Report results in writing.
- B. Perform tests and inspections.
 - 1. Manufacturer's Field Service: Engage a factory-authorized service representative to inspect components, assemblies, and equipment installations, including connections, and to assist in testing.
- C. Tests and Inspections:
 - 1. Test each equipment item for proper operation. Repair or replace equipment that is defective, including units that operate below required capacity or that operate with excessive noise or vibration.
 - 2. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.
 - 3. Test piping and components for leaks. Repair or replace leaking components.
 - 4. Perform hood performance tests required by authorities having jurisdiction.
 - 5. Perform fire-suppression system performance tests required by authorities having jurisdiction.
- D. Prepare test and inspection reports.

2.6 DEMONSTRATION

- A. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain commercial kitchen hoods.

END OF SECTION 233813