

SECTION 233813
COMMERCIAL-KITCHEN HOODS

PART 1 - GENERAL

1.1 SUMMARY - NOT USED

1.2 ACTION SUBMITTALS

A. Product Data: For the following:

1. Fire-suppression systems.
2. Lighting fixtures.

1.3 QUALITY ASSURANCE

- A. Welding: Qualify procedures and personnel according to AWS D1.1/D 1.1M, "Structural Welding Code - Steel," for hangers and supports; and AWS D9.1/D9.1M, "Sheet Metal Welding Code," for joint and seam welding.
- B. 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.

PART 2 - PRODUCTS

2.1 EXHAUST HOOD FABRICATION

- A. Basis-of-Design Product: Subject to compliance with requirements, provide Accurex Model XRRS or a comparable product by one of the following:
 1. Greenheck Model GRRS.
- B. Hood System shall be constructed with 304 stainless steels, having a fire suppression system pre-engineered into the design of the hood. Actuation of the fire suppression system shall be mechanically based on industry standard "fail safe" fusible link technology.
- C. The system shall have an Advanced Programmable Logic Control Driven Self-Monitoring System that interacts with the cooking environment to minimize the risk of a fire event while also monitoring the suppression system for continuity.

2.2 FIRE-SUPPRESSION SYSTEM

- A. System shall be fully integrated, self-contained Fire Suppression Range Hood for Residential Appliances for use in protecting Residential-grade appliances when used in public or otherwise commercial spaces. The system shall use a wet chemical agent, tested and demonstrated to conform to UL subject 300A.

PART 3 - EXECUTION

3.1 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.
- 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.
- 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 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 Section 23330 "Air Duct Accessories." Install flexible connectors on makeup air supply duct(s). Weld exhaust-duct connections with continuous liquid-tight joint.

- L. Install fire-suppression piping for remote-mounted suppression systems according to NFPA 17A, "Wet Chemical Extinguishing Systems."

3.2 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. Perform hood performance tests required by authorities having jurisdiction.
 - 4. Perform fire-suppression system performance tests required by authorities having jurisdiction.
- D. Prepare test and inspection reports.

END OF SECTION 233813