

DENLAR D1000 PACKAGED KITCHEN EXHAUST HOOD

PART 1 - GENERAL

1.1 SUBMITTALS

- A. Submit product data and shop drawings on packaged exhaust hood.

PART 2 – PRODUCTS

2.1 GENERAL

- A. Pre-Engineered fire suppression hoods shall be Denlar D1000 Series.
- B. Hood system shall be installed as ETL tested and UL300A compliant.
- B. NFPA 101 compliance is an available option on the Denlar D1000.
- C. The Hood shall be operating at a minimum of 500 CFM when NFPA101 compliant.
- D. The Hood shall be installed with an integral fire extinguishing system that is mechanically activated by heat.
- E. D1000 Hoods shall be installed over a like sized residential range or cooktop.

2.2 STANDARDS OF CONSTRUCTION

- A. Hood shall be constructed of 18 gauge minimum, 300 Series stainless steel outer shell.
- B. Hood shall be either 30 inches wide (to cover 30-inch range) or 36 inches wide (to cover 36-inch range).
- C. Hood shall be manufactured and assembled with no visible outer welds or weld marks.
- D. All internal seams shall be sealed with NSF-approved caulk, standard. A metal baffle filter shall be provided.
- E. One (1) 60W Incandescent Shatterproof bulb or equivalent LED Hood light shall provide lighting on the range below.
- F. The Hood shall integrate with the cooking equipment to deactivate the cooking equipment in the event of a discharge or system fault code.
- G. Kitchen ventilation Hood shall be recirculating or exhaust only and cover a domestic range in commercial environments used for light duty cooking purposes only.
- H. The Hood shall be ICC evaluated and certified as compliant with International Mechanical Code (IMC), International Fire Code (IFC), and Uniform Mechanical Code (UMC).
- I. If provided with a fan, the fan shall be UL 507 listed or equivalent.
- J. The Fire Suppression Hood shall be listed by ETL to the standards of the UL Subject 300A. Hood shall be configured as wall style (supplied with wall mounting bracket).
- K. Hood shall include factory-installed UL Subject 300A fire suppression system, including environmental monitoring, wire rope, fail-safe fusible links and mechanical actuation. No electronic detection or actuation shall be accepted.
- L. Fire suppression shall be a fail-safe, mechanical, method and consist of three fusible links (212° for 30", 280° for 36"), temperature switches that monitor the cooking surface and upon reaching the first set-point, send a signal to turn the fan ON, at the second set point sends a signal to maintain the fan ON, while also sending a signal to shut OFF power to the range and sounding a local alarm. When the set point of the fusible links is reached, the tension on the actuator paddle releases pushing down on the actuator of the suppression tank; expelling the wet chemical agent from the pre-charged tank, a signal is sent to shut OFF power to the range and a local and building fire alarm (when connected) will be activated.
- M. Tank pressure shall be monitored using tank pressure switch and a fault will cause the system alarm to sound and the LED status light will simultaneously flash four times. Pressure gauge indicating the tank pressure will be visible on the front of the hood. Mirrors to access the gauge shall not be acceptable.
- N. All fire suppression and control components must be easily accessible by dropping the Hood into a service position to allow for service without removing the Hood from the wall. Thumb screws shall be utilized to hold the Hood into place for normal operation. No latches are acceptable.
- O. Hood system shall be provided with a gas (3/4 inch), electric, or dual fuel disconnect supplied with plug and play cable that will shut down the power to the stove in the event of a system monitored condition occurring.

P. Fuel disconnect shall be field connected directly to the Hood via factory-provided plug and play cables. Prior to a fire suppression release, the shut off device shall be responsible for disabling the range upon detecting a high temperature. Gas disconnect (if provided) shall include a 3/4-inch gas valve supplied with plug and play cable and a 120VAC control receptacle is available upon request. Other electric disconnect receptacle types are also available upon request.

Q. When governed by NFPA101 compliance Hood must include: a minimum of 500 CFM fan, interlocked (password protected) appliance disconnect with timed-automatic range deactivation and manual pull station.

1. Pull station shall be a mechanical pull station. Electronic pull station is not acceptable.
2. Password protected access will be mounted remotely. Hood mounted password access is not acceptable.

R. User controls shall be provided to control fan and lights. A Hood mounted touchscreen is not acceptable. The Hood or System status LED and audible alarm may be used to determine any faults within the system. All Hood controls must be accessed by switches and potentiometers on the Hood itself unless supplied with an ADA Switch with factory provided plug and play cable or controlled in conjunction with a touchscreen that is mounted remotely.

S. The Hood system shall be equipped with either a factory-supplied integral fan, factory-supplied external fan, or fan by others with manufacturer provided relay. Integral fan options include either front recirculating or rear discharge.

- Front recirculating style shall include an easily accessible charcoal filter and opening in the front of the Hood for filtering the exhaust air before discharging back into the space. Rear discharge style shall direct the air to exit the back of the hood, to discharge through a wall to the outside.
- External fan options include either a factory-provided inline fan (with plug and play cable), wall mount fan, roof fan or fan by others option with a top discharge Hood configuration. Top discharge style shall direct the air to exit the top of the hood, to discharge through a roof or wall to the outside. All factory provided fan options shall be listed to UL 507 standards.

T. Fire alarm dry contacts shall be provided.

U. Check, Test and Balance:

1. The kitchen exhaust system shall be inspected, tested and balanced by a qualified contractor. The contractor shall ensure proper and satisfactory operation of the kitchen exhaust system and shall provide a written and detailed report of this check, test and startup to the Engineer and Owner.

V. Design Make: DENLAR D1000.

W. Warranty: Hood shall have a three-year product only warranty. Warranty does not include labor.

PART 3 - EXECUTION

3.1 GENERAL

A. The entire packaged kitchen exhaust hood shall be installed by qualified contractors meeting any licensing criteria in the jurisdiction they are installing.