City of Puyallup
Development & Permitting Services
ISSUED PERMIT
Building | Planning
Engineering | Public Works
Fire | Traffic
PRCTI20260049

Model ND-2 Specification

The model ND-2 is an exhaust only canopy hood rated for all types of cooking equipment. The hood shall have the size, shape and performance specified on drawings.

Construction shall be type 430 stainless steel, with a #3 or #4 polish where exposed. The manufacturer, ETL and NSF shall determine the individual component construction. Construction shall be dependent on the structural application to minimize distortion and other defects. All seams, joints and penetrations of the hood enclosure to the lower outermost perimeter that directs and captures grease-laden vapor and exhaust gases shall have a liquid-tight continuous external weld in accordance with NFPA 96. The hood shall be wall type with a minimum of four connections for hanger rods. Connectors shall have 9/16" holes pre-punched in 1 ½" x 1 ½" angle iron at the factory to allow for hanger rod connection by others.

The hood shall be furnished with U.L. classified filters, supplied in size and quantity as required by ventilator.

The hood manufacturer shall supply complete computer generated submittal drawings including hood sections view(s) and hood plan view(s). These drawings must be available to the engineer, architect and owner for their use in construction, operation and maintenance.

Exhaust duct collar to be 4" high with 1" flange. Duct sizes, CFM and static pressure requirements shall be as shown on drawings. Static pressure requirements shall be precise and accurate; air velocity and volume information shall be accurate within 1-ft increments along the length of the ventilator.

U.L. incandescent light fixtures and globes shall be installed and pre-wired to a junction box. The light fixtures shall be installed with a maximum of 4’0" spacing on center and allow up to a 100 watt standard light bulb.

The hood shall have:

- A double wall insulated front to eliminate condensation and increase rigidity. The insulation shall have a flexural modulus of 475 EI, meet UL 181 requirements and be in accordance with NFPA 90A and 90B.
- An integral front baffle to direct grease laden vapors toward the exhaust filter bank.
- A built-in wiring chase provided for outlets and electrical controls on the hood face and shall not penetrate the capture area or require an external chase way.
- Removable grease cup for easy cleaning.

The hood shall be ETL Listed as "Exhaust Hood Without Exhaust Damper", NSF Listed and built in accordance with NFPA 96. The hood shall be listed for 450°F cooking surfaces at 150 CFM/ft, 600°F cooking surfaces at 200 CFM/ft, and 700°F cooking surfaces at 250 CFM/ft. The hood shall be ETL Listed as "Exhaust Hood Without Exhaust Damper".

Optional Features

- Utility Cabinet
- ETL Listed Exhaust Fire Damper
- End Panels
- Enclosure Panels
- Fully Integrated Self Cleaning Options

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Suggested Specifications

Integrated Suggested Specifications:

Aerodynamic Grease Trough
Fully welded grease sub-assembly and a deep grease trough allows for easy cleaning. Grease trough shall be integrated into the hood to ensure smooth effluent transition from appliance to filter.

Clearance Reduction System
Hood shall be provided with an integral front and rear clearance to combustibles reduction system.

Insulated Hood Front
Hood shall be fabricated with a double-wall, insulated front for increased rigidity and reduced condensation.

Riser
Hood shall accommodate up to a 16" riser.

Filter Options
The filters shall be constructed of stainless steel and shall be NSF and UL or ETL classified. Various types of filters are available based on cooking application. For lower grease applications, filters should extract up to 85% of grease particles over 8 microns. For heavy grease applications, filters should extract up to 90% of grease particles at 2 microns.

Wiring Chase
A built-in wiring chase shall be provided for optimal positioning of electrical controls and outlets on the front face of the hood without penetrating the capture area or requiring an external chase way.

Exhaust Rates
ETL Listed for 450°F, 600°F and 700°F cooking surfaces (File 3054804-001 without exhaust damper; File 3054804-002 with exhaust damper), NSF Listed and built in accordance with NFPA Standard 96.

Optional Suggested Specifications:

Compact Fluorescent Lights
Fitted with UL Listed, pre-wired, incandescent light fixtures and tempered glass to hold up to a standard 100-watt bulb. Factory pre-wired lighting shall be accessible from the bottom of the hood. Factory installed energy efficient fluorescent bulbs to illuminate cooking surface.

CORE Protection
Hood to ship with UL-300 integral plenum and duct fire system.

Factory Installed Energy Management System
Factory will install the energy management system (EMS) in the hood's integral end utility cabinet. Includes factory wiring of duct temperature sensor, and pre-set timers. EMS shall be capable of reducing exhaust and supply airflow quantities by 20% using variable frequency drives.

Integral Automatic Self-Cleaning System
Factory will install the self-cleaning system, which automatically washes down the exhaust plenum and up to 6 feet of grease duct upon fan deactivation. Cleaning cycle frequency and duration are fully adjustable.

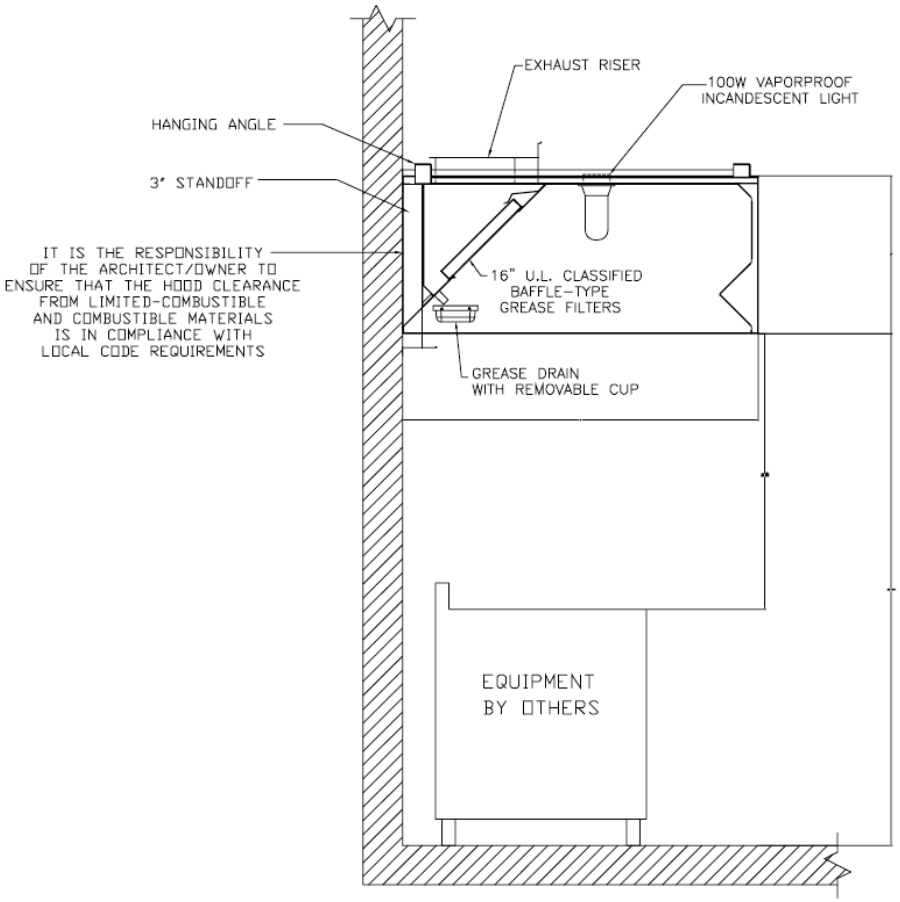
End Panels
Factory supplied end panels will reduce dynamic effects from cross drafts and enhance the capture and containment of the hood. Exhaust CFM can be reduced by up to 30 percent of the normal exhaust rate.

AC-PSP
Factory will install the AC-PSP accessory which will delivers up to 80% make-up air while providing a termination point for AC air in a separate insulated plenum. Make-up air plenum shall be located closest to hood. Both the make-up air plenum and AC plenum shall contain two layers of perforated stainless steel diffuser plates to provide even air distribution.

ND-2 Performance Values

Max Cooking Surface Temp (°F)	Minimum Exhaust CFM/Ft
450 Ovens, Steamers, Kettles, Ranges, Griddles, and Fryers	150
600 Gas Char-broilers, Electric Char-broilers, and Woks	200
700 Mesquite Grills, Charcoal Char-broilers, Wood Burning Appliances	250

Section View of Model ND-2



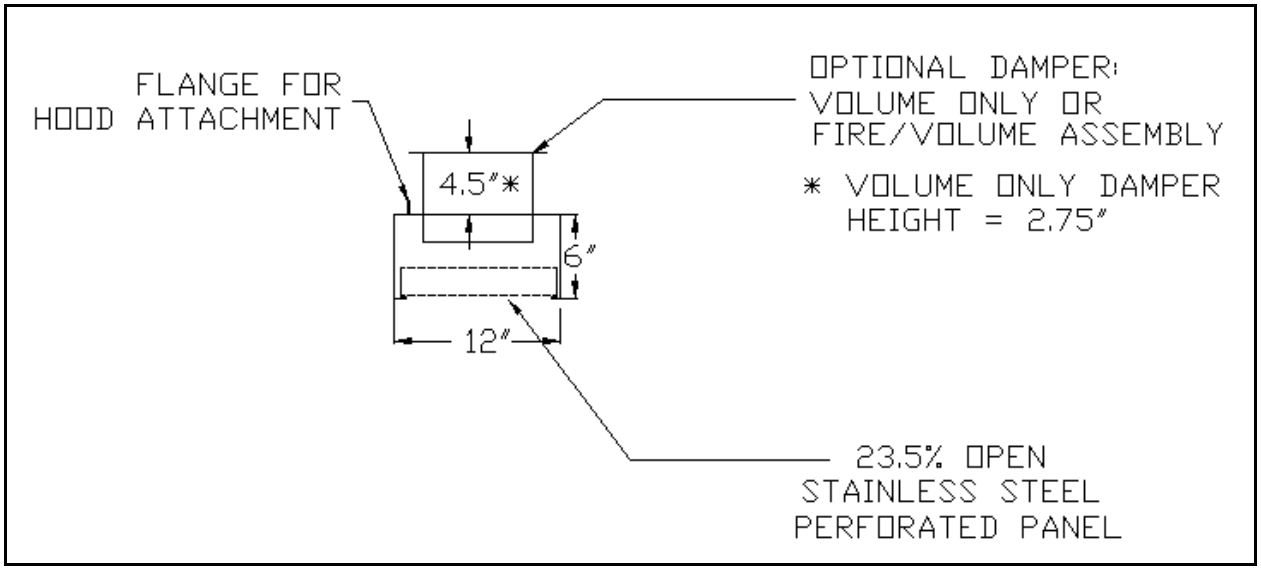
OPTIONAL
Perforated Supply Plenum Specification

The Perforated Supply Plenum (PSP) shall provide make-up air through perforated stainless steel panels. All seams shall be welded and have stainless steel on exposed surfaces. Unexposed surfaces shall be constructed of aluminized steel. Perforated diffuser plates shall be included in the design and to provide even air distribution and the plenum shall be insulated to prevent condensation (optional).

Features and Benefits:

- Provides up to 80% make-up air
- Stainless steel construction to match the ventilation hood
- Delivers make-up air where it is needed most while minimizing the amount of air that diffuses to space
- Decreases HVAC load, thus lowering operating costs
- Directs make-up air into the hood's capture area
- Evenly distributes make-up air along the length of the hood
- Low make-up air discharge velocities, typical velocity is 140 to 160 ft. / min.
- Assists in exceptional capture and containment of cooking vapors
- Easy installation

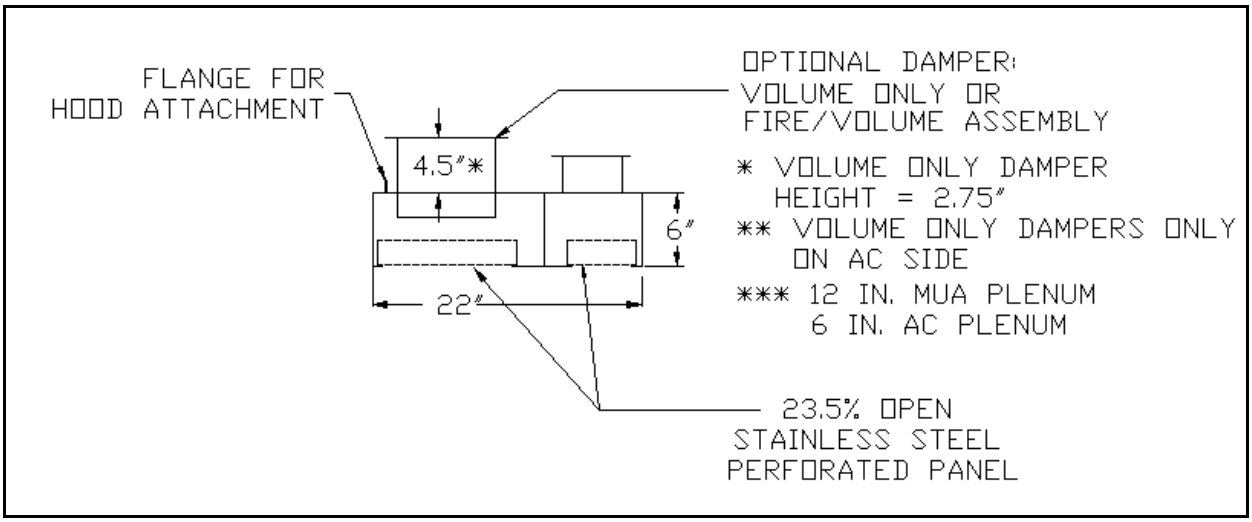
Section View Drawing for 12" PSP



OPTIONAL
AC Perforated Supply Plenum Specification

The AC Perforated Supply Plenum (ACPSP) shall provide make-up air through a dual stream perforated stainless steel plenum. All seams shall be welded and have stainless steel on exposed surfaces. Unexposed surfaces shall be constructed of aluminized steel. Perforated diffuser plates shall be included in the design and to provide even air distribution. The air-conditioned portion of the plenum shall be insulated to prevent condensation. The make-up air plenum shall be located nearest the hood and the air-conditioned plenum away from the hood. The make-up air stream and the air-conditioned stream shall not be permitted to mix until leaving the dual plenum.

Features and Benefits:

- Provides up to 80% make-up air
- Delivers AC where it is needed most
- AC air does not interfere with hood's capture and containment
- Convenient termination for AC ductwork in kitchen
- Stainless steel construction to match the ventilation hood
- Insulated to prevent condensation

Section View Drawing for 22" ACPSP