Model: UV-600-Induction Jet

CONSTRUCTION:
Construction facilitates the insertion of double row filters, baffle filters as wells as st/steel mesh filters, that extend from the left to the right across the canopy length to ensure an even flow of air over the entire length. Seams are continuous throughout the length and width (there are no upstanding or protruding joints). All the joints are welded together. Ground and polished to the original material texture. The use of bolts, nuts and rivets are avoided. All sharp edges and burs are cleaned and polished to ensure safety of cleaning personnel. Internal crevices between canopy joints are filled with a polyurethane or silicone sealer.

FILTERS:
Vortex baffle type filters manufactured of 0.7mm grade 430 st steel as well as St/steel mesh type filters are fitted to ensure a higher grease removal efficency. When fitted in position the filter also acts as a fire barrier. The filters are self draining and do not block with grease when used for prolonged periods without cleaning intervals.

WORKING PRINCIPAL:
Induction Jet Efficiency is the ability of the kitchen ventilation system to provide sufficient capture and containment at a minimal exhaust flow rate.
A curtain of air is induced along the hoods parameter to push the upward flowing thermals and fumes towards the filter bank and to act as a invisible air barier at the botom of the hood that aids in preventing fumes from spilling.
The induction jet canopies, have a 25 - 35% lower exhaust volume rate for extraction.

NOTE:
Increased energy savings can be realised with an intergrated system incorporating extraction and supply air for the kitchen. Supply and exhaust air systems are taken into account to create excellent working conditions. A combination of high-efficiency ,INDUCTION JET, hoods reduces the exhaust rate as well as the cooling capacity required, while maintaining appropriate temperatures in the kitchen.

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ULTRA VIOLET

Ultra violet technology is a non chemical approach to disinfection and cleaning. Through this method nothing is added which makes the process simple and inexpensive. Ultra violet purifiers use a UV-C germicidal lamp designed and calculated to produce the correct dosage of ultraviolet (usually 16000 microwatts per sq centimeter).

Ultra violet irradiation is a effective method of killing a broad range of microbes. In essence the UV radiation breaks down the molecular binds in a organisms DNA.

UV disinfects and cleans through a photochemical process. The contaminents that polute the air are almost entirely organic or carbon based compounds. These compounds break down when exposed to high intensity UV. Short wave ultraviolet light destroys DNA in living organisms and breaks down organic material found in the air.

In addition UV also produces ozone, which is a highly reactive form of oxygen, and is usefull as a deoderiser and cleaning agent. Because it is necessary to avoid exposing personel to high concentrations of ozone, it must be limited to 0.05 parts per million in an occupied space.

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Ultra Violet Induction Jet hood

FEATURES

Construction facilitates the insertion of filters that extend from the left to the right across the canopy length to ensure an even flow of air over the entire length. Seams are continuous throughout the length and width (there are no upstanding or protruding joints). All the joints are welded together. Ground and polished to the original material texture. The use of bolts, nuts and rivets are avoided. All sharp edges and burs are cleaned and polished to ensure safety of cleaning personnel. Internal crevices between canopy joints are filled with a polyurethane or silicone sealer.

FILTERS:

Impingement baffle type filters manufactured of 0.7mm grade 430 st steel. Filters are easily fitted without the use of tools. They slide into the position provided by the filter housing frame. When fitted in position the filter also acts as a fire barrier. The filters are self draining and do not block with grease when used for prolonged periods without cleaning intervals.

APPLICATION:

Induction Jet Efficiency is the ability of the kitchen ventilation system to provide sufficient capture and containment at a minimal exhaust flow rate. The induction jet canopy creates a negative pressure along the front edge and sides of the hood.

The hood delivers a small air jet (induction jet) to push the upward flowing thermals towards the filter bank. The induction jet canopies, have a 30-40% lower exhaust volume for extraction. The canopy is fitted with a unique mechanical filter which removes the majority of grease particals.

NOTE:

Important energy savings can be realised with various exhaust hood applications and their associated methods for distributing return air. However increase energy savings can be realised with an intergrated system incorporating both extraction and supply air for the kitchen. Supply and exhaust air systems are taken into account to create excellent working conditions. A combination of high-efficiency (induction jet) hoods and displacement ventilation reduces the cooling capacity required, while maintaining appropriate temperatures in the kitchen.

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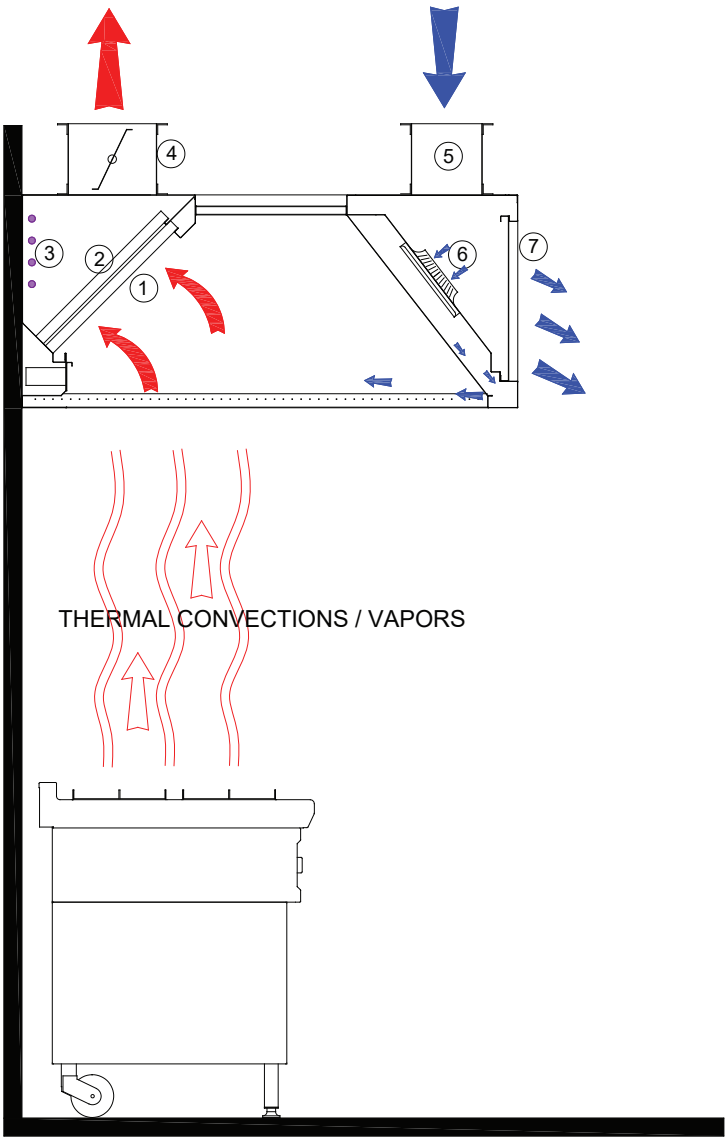
Canopy Length mm	Air Volume m3	Air Volume m3
1000	0.40	0.40
1200	0.48	0.48
1400	0.56	0.56
1600	0.64	0.64
1800	0.72	0.72
2000	0.80	0.80
2200	0.88	0.88
2400	0.96	0.96
2600	1.04	1.04
2800	1.12	1.12
3000	1.20	1.20
3200	1.28	1.28
3400	1.36	1.36
3600	1.44	1.44
3800	1.52	1.52
4000	1.60	1.60

Canopy size	Fire Damper size
1000 - 1300	300 x 250
1400 - 1800	400 x 250
1900 - 2200	500 x 250
2300 - 2500	600 x 250
2600 - 2800	700 x 250
2900 - 3400	800 x 250
3500 - 3800	900 x 250
4100 - 4400	1000 x 250

WORKING PRINCIPLES AND SCHEMATIC DRAWING

1. VORTEX BAFFLE TYPE FILTER
   First stage baffle impingement filter system.
2. ST/STEEL MESH TYPE FILTER
   Second stage grease filter
3. ULTRA VIOLET TUBES
   Highest watts UV-C irradiation of grease vapors (see ultra violet info)
4. FIRE DAMPER
   fusable link activated 140°C
5. INDUCTION FAN
   220v centrifugal high pressure fan to pressurize double skin cavity to induce air curtain



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