

Schedule & extraction system

106A Cowley Rd, Uxbridge UB8 2LX

1.0 Calculation & Pizza oven

2.0 Cleaning schedule / maintenance

3.0 Opening hours

4.0 Canopy type and margins

5.0 Ventilation and filtration buildup

1.1 Calculation for the pizza oven

Appliance, Coefficient and Temperature Schedule (Cont'd)			
Appliances	CANOPIES & VENTILATED CEILINGS		Surface Temp.
	GAS	ELECTRIC	
	(m ³ .s ⁻¹ .m ²)		(°C)



PIZZA COOKING & BAKING (gas or electric only. No solid fuel)			
Conveyor Pizza Oven			
Single Deck	0.30	0.25	90
Double Deck	0.60	0.50	90
Triple Deck	0.90	0.75	90

Canopy Factors			
Type	Open Both Ends	Open One End	Closed Both Ends
Low Level	1.15	1.10	1.05
Passover	1.15	1.10	1.05
Overhead Wall	1.25	1.20	1.15

Item	Plan size	Power	Area	Coefficient	Flow rate
Pizza oven	2032*1537	Gas	3.12	.30	.937
Canopy Factor	Open one end				1.20
			Flow rate required	Totals	1.12 m3/s

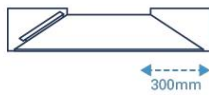
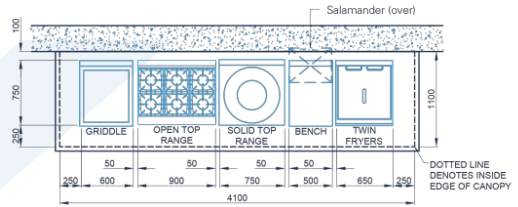
calculations based on

“All provisional methods such as face velocity, air change rates and linear extract are no longer permitted. The thermal convection method of calculation should be the ONLY method used to calculate the ventilation requirements of a kitchen canopy.”

Calculations - Thermal Convection Method

Item	Plan Size mm	Power kW	Area m ²	Coefficient	Flow Rate m ³ s ⁻¹
Griddle (mild steel)	600 x 750	gas	0.450	0.30	0.135
Open top range	900 x 750	gas	0.675	0.40	0.270
Solid Top Range	750 x 750	gas	0.562	0.60	0.338
Bench	500 x 750	-	0.375	0.03	0.011
Twin Fryers	650 x 750	Elec	0.487	0.45	0.219
Salamander Grill	500 x 400	gas	0.200	0.75	0.150
Theoretical extract flow rate required					1.123
Canopy Factor - overhead wall open both ends					x 1.25
Specific extract flow rate required					1.404

Typical Cooking Equipment Line-Up



Canopy must overhang open door position by 300mm (inside edge of channel)



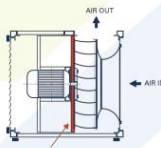
All canopies must incorporate some form of spark arrester



HE75 baffle separator – low initial cost, can become blocked with grease, do not reduce in-duct air temperature



Cold-water mist – most effective spark arrester, reduces in-duct air temperatures and as such, the risk of fire, higher initial capital and running costs



Fan motors outside airstream and metal impellers.

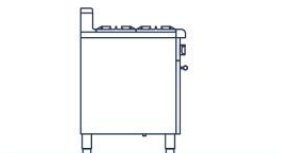


CO / CO₂ interlock must be fitted to stop ventilation being switched off whilst still burning.



Solid fuel systems may be considered as LEV and as such, mandatory requirement for 14 monthly inspection

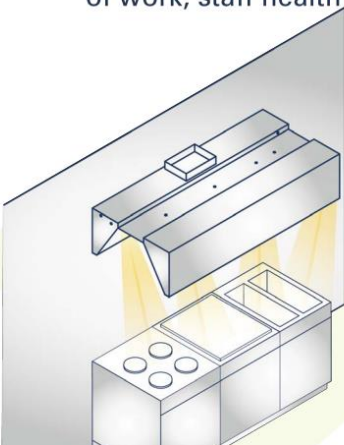
Canopy factors







Canopy Factors			
Type	Open Both Ends	Open One End	Closed Both Ends
Low Level	1.15	1.10	1.05
Passover	1.15	1.10	1.05
Overhead Wall	1.25	1.20	1.15
Overhead Wall, Island Mounted	1.60	1.50	1.40
Island	1.35	1.25	1.15

Lighting

“The type and quality of light in a commercial kitchen has a direct impact on quality of work, staff health & wellbeing and significantly affects energy efficiency.”



- LOW ENERGY RECESSED LED ONLY**
bulkhead light no longer permitted.
- 500 LUX**
minimum average illumination levels on the main working areas of the cookline.
- COLOUR TEMPERATURES**
3000K (warm white) or 4000K (neutral white) are acceptable for the primary light source.
- MIN. COLOUR RENDERING INDEX (CRI) 80**



Pizza Oven

Lincoln Impinger 1633-000-E - 32" Conveyor Oven



Belt Width: 32" (813mm)
Baking Zone: 40" (1016mm)
Output: 110 x 12" pizzas / hour (Estimated)

Dimensions: 2032mm x 1537mm x 1121mm (W x D x H)
Power Supply: Gas (110,000 BTU's) 3/4" connection
Warranty: 2 Years Parts and Labour

Price: £15,260 + VAT

Lease purchase available
[Find out more about leasing](#)

[Lincoln 1600 series Spec Sheet](#)

The electric version - Lincoln 1621-000-E - is available for the same price.

Power Supply: Electric (Three Phase)

There are 3 key differences between the 1400 series 32" and the 1600 series 32" Lincoln Impinger conveyor ovens:-

1. The 1600 series oven feature FastBake as standard. You can learn more about FastBake on our [Lincoln product page](#)
2. The 1600 series oven features both a right and left heat box rather than just the right heat box found on the 3240 ovens. Two heat boxes enable greater control over heat, enabling a greater variety of products to be cooked
3. The 1600 series oven is "low profile" so you can stack them 3 high. The 1400 series can be stacked 2 high

The 1600 series Lincoln Impinger conveyor oven is on a 10-12 week lead time and was developed with Pizza Hut. [Learn more here](#)

2.0 Maintenance

Daily Tasks:

1. **Opening Checklist:** Ensure the restaurant is clean, safe, and ready for customers.
2. **Appliance Checks:** Verify that all kitchen appliances (pizza ovens, mixers, coolers, etc.) are functioning correctly.
3. **Food Storage:** Check the temperature and organization of refrigerators and freezers.
4. **General Cleaning:** Clean and empty baffle filter grease filter tray and sanitize pizza prep surfaces, utensils, and equipment throughout the day.
5. **Bathroom Inspection:** Ensure restrooms are clean, stocked, and in working order.

Weekly Tasks:

1. **Deep Clean:** Perform a thorough cleaning of the entire kitchen, including floors, walls, and equipment and outside the kitchen where the customer serving area is.
2. **Inventory Management:** Take inventory of ingredients, supplies, and disposables i.e pizza boxes.
3. **Exhaust Hood Cleaning:** Arrange for a commercial grade cleaning products to clean the exhaust hood and ducts with removal filters. The filters should be cleaned once a day to max once every two days depending on the business of the pizza shop. A small canopy filter recommended hand washing:

This is also referred to as power washing. It is a very effective way of cleaning baffle filters.

The first step is to ensure the baffle filter is removed from the hood safely.

The filter is then placed in a sink full of warm soapy water.

Using a non-abrasive sponge or scrubber, the grease is then washed off the filter. It is important to ensure that no bleach or harsh chemicals are used in cleaning baffle filters as these can easily corrode the metal.

4. After the filter is thoroughly cleaned, it can then be dried and reinstalled for continued use.

5. **Sign sheet:** A clear sign sheet with scheduled maintenances to be signed and dated to prevent sanitary problems.

6. **Fine filters and Carbon filters:** Change fine filters every two weeks, Carbon filters every 4 to 6 months depending on visual inspection and usage.

Bi-Monthly Tasks:

1. **Pest Control:** Schedule pest control services to prevent infestations.
2. **HVAC Maintenance:** Check and replace air filters, and have HVAC systems inspected and serviced.
3. **Equipment Calibration:** Calibrate ovens, refrigerators, and other temperature-sensitive equipment.
4. **Fire Extinguishers:** Check and maintain fire extinguishers. Ensure they are easily accessible and properly tagged.

Quarterly Tasks:

1. **Deep Equipment Inspection:** Conduct a thorough inspection of all kitchen equipment. Address any issues promptly.
2. **Duct Cleaning:** Arrange for professional cleaning of the kitchen exhaust ducts.
3. **Exterior Maintenance:** Check for any building maintenance needs such as painting, roofing, or repairs.

Monthly exterior cleaning Tasks:

1. **Window Cleaning:** Have the windows and exterior cleaned for a welcoming appearance.

Annual Tasks:

1. **Health Inspection Preparation:** Prepare for annual health inspections by ensuring compliance with local health department regulations.
2. **Kitchen Equipment Service:** Schedule professional service for major kitchen appliances and equipment.
3. **Staff Training:** Update staff training on safety procedures and food handling.

3.0 Opening hours

Based on the local pizza shops, the main opening hours on Cowley road are

- Tuesday • 11 am–11 pm
- Wednesday • 11 am–11 pm
- Thursday • 11 am–11 pm
- Friday • 11 am–11 pm
- Saturday • 11 am–11 pm
- Sunday • 11 am–11 pm
- Monday • 11 am–11 pm

The shops with the above opening/closing time :

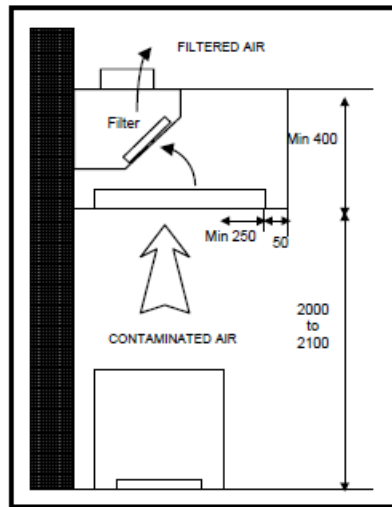
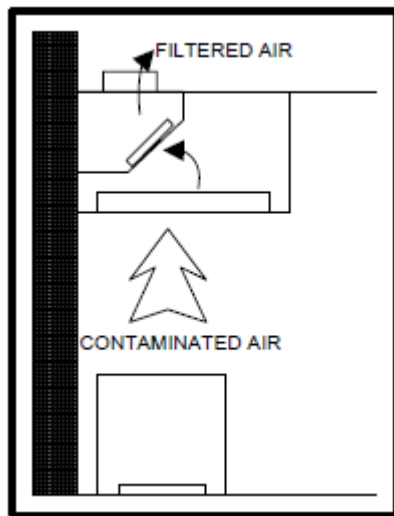
Hot Box Chicken
98 Cowley Rd, Uxbridge UB8 2LX

Papa Johns Pizza
102 Cowley Rd, Uxbridge UB8 2LX

Chutneys Indian Takeaway
116 Cowley Rd, Uxbridge UB8 2LX

4.0 Canopy buildup

Canopy design for the pizza shop is an overhead wall mounted



Fan type used:

Axial Fans (Metal Impellers)

-Compact

-Extensive duty range when operated in series, adequate for kitchen use

-Easy removal for cleaning and maintenance

-Axial Mid-range frequencies, Air enters and leaves the fan in a straight-through configuration.

5.0 Ventilation and filtration buildup

The pizza shop's ventilation and filtration have to effectively remove heat, smoke, grease, and odours from the cooking area while maintaining a safe and comfortable environment for staff and customers.

1. **Hood System:** A commercial kitchen exhaust hood, stainless steel, is installed above pizza ovens and grills. It captures and contains cooking byproducts, including grease, heat, and smoke. The baffle filters are installed here.
2. **Axial Fans (Exhaust Fan):** An exhaust fan is connected to the hood system to draw in air from the cooking area and expel it outdoors through the proposed duct system.
3. **Filters:**
 - **Baffle Filters:** Capture grease and smoke particles. Baffle filters, of stainless steel or aluminium, are designed to slow down and collect grease by filtering it into a tray.
 - **Fine Filters:** Positioned deeper within the ductwork, fine filters, made of aluminium mesh or similar materials, further trap grease particles.
 - **Carbon Filters:** Carbon filters, also known as charcoal filters, to remove cooking odours and additional particles from the air before it's expelled outside.
4. **Ductwork:** from the hood to the exhaust fan and then outdoors.
5. **Makeup Air System:** To maintain a balanced airflow, makeup air system is installed to introduce fresh air into the kitchen area. This prevents negative pressure and ensures proper ventilation.
6. **Fire Suppression System:** A fire suppression system, often required by local regulations, is installed in the hood and ductwork to quickly extinguish fires that may occur during cooking.
7. **Control Panel:** A control panel allows operators to regulate the exhaust fan's speed, ensuring it operates at the necessary level for different cooking processes.
8. **Cleaning Access Points:** Access panels and hatches are installed at various points in the ductwork for cleaning and maintenance purposes. This will be done by the installation company.