

**CITY OF VANCOUVER Office of the CHIEF BUILDING OFFICIAL**

This form is required to be provided by Mechanical Engineer for installations where it is proposed to use a Class 4 cooking operation. The following confirmation is given to the City.

<b>BUSINESS NAME:</b>	<b>PROJECT ADDRESS:</b>
	<b>BUILDING PERMIT NUMBER:</b>

Class 4 Cooking Operations are defined in the City of Vancouver’s Kitchen Ventilation Guidelines (**Bulletin 2007-005-BU/PL/EL/EV/AD**) as follows:

“A Class 4 Cooking Operation is defined as cooking equipment listed by an accredited certification organization such as ULC, cUL or ETL to ventilate into the room. These devices typically have their own fire suppression and grease filtering systems.

Listed equipment is required to demonstrate that ventilation equipment or appliances have compliance with ANSI/UL710B which was identified by NFPA 96. Underwriters Laboratories (UL) has a number of different product categories for kitchen equipment, three of which are classified as recirculating systems under NFPA 96, but which often collectively referred to as “recirculating”, “ventless”, or “ductless” systems. (**Bulletin 2023-002-BU/FI**)

These are as follows:

- **KNKG** - Recirculating System - Commercial Cooking Appliances with Integral Recirculating Ventilation Systems
- **YZCT** - Recirculating Hood Assembly - Hoods/ Recirculating Systems, For Use with Specified Commercial Cooking Appliances
- **KNLZ** - Grease-Limiting Appliances - Appliances with Integral Systems for Limiting the Emission of Grease-laden Air

**Proposed SYSTEM or APPLIANCE that are listed under the above UL product categories:**

Name of Product (Manufacturer, Model) <i>*Specification sheet to be provided</i>	Appliance Power Input (kW or Btu/h)	UL Category
EXAMPLES of <b>KNKG</b> PRODUCTS (Hood and cooking appliance)	<ul style="list-style-type: none"> <li>● Wells Ventless Cooking System, WV2HGRW</li> <li>● GILES Ventless Electric Kettle Fryer, GEF-400-VH</li> </ul>	
EXAMPLES of <b>YZCT</b> PRODUCTS (Hood only)	<ul style="list-style-type: none"> <li>● Halton Free-standing Ductless Hood, KSH-6</li> <li>● GILES Free-Standing Ventless Recirculating Hood, FSH-2</li> <li>● Wells Universal Ventless Hood, WVU-48</li> </ul>	
EXAMPLES of <b>KNLZ</b> PRODUCTS* (Appliance only)	<ul style="list-style-type: none"> <li>● Rational AG, Combi Oven, iCombi Pro 6 (9 kW steam)</li> <li>● TurboChef, Oven, Bullet (6.7 kW) / Encore (6.7 kW)</li> <li>● Alto-Shaam, Multi-Cook Oven, Converge CMC-H2H (6.7 kW)</li> <li>● MerryChef, High Speed Oven, eikon e4s (6.2kW)</li> </ul>	

\* City of Vancouver accepts the following measures as meeting the intent of the VBBL and VFBL for a recirculating system if an appliance listed under category KNLZ is proposed without a separate Type I hood and duct above the appliance, or without a fire extinguishing system for the hood and duct:

1. The cooking compartment must be of robust construction (e.g. enclosed oven of brick or steel construction, or an enclosed deep fat fryer of steel construction).
2. Where a hood and duct is provided for extraction of heat and steam, and the duct is enclosed in a required fire-rated enclosure, the hood and duct shall be of Type II construction.

## Confirmation of Ventilation Design for Recirculation System cont'd

### K2 Form items to be confirmed and initialed by the mechanical engineer:

All fields are required to be completed. The professional's initials in the right-hand column indicate that the project is designed in compliance with this item. If any item is not applicable, please mark "N/A".

No.	Item	Professional's initials signifying project complies (or mark N/A)
1	All cooking equipment producing smoke or grease-laden vapours is under a hood complying with applicable NFPA 96 or is listed under UL Product category KNLZ.	
17	The fire suppression complies with NFPA 96, the manufacturer's specifications, and one of the following: UL300 or ULC/ORD 1254.6 or UL197.	
18	The manual activation of the fire extinguisher is located in the egress path in a familiar location for kitchen staff to use and is $\geq 42"$ & $\leq 48"$ above the floor.	
19	<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;">                     If there is a fire alarm system, the kitchen fire suppression select one below:                      Annunciates as a separate zone on the building's fire alarm system and annunciates separately from other kitchen fire suppression system(s) that are on different storey(s).                 </div> <div style="width: 45%;">                     Shares activation with the local fire alarm zone since there are no other available zones in the existing panel.                 </div> </div>	

- Schedule B - Fire Suppression has been signed-off if **KNKG and YZCT** products are proposed.
- Specification sheet indicating UL Product category has been provided.
- If the appliances (such as Combi Oven) have a drain, they must be connected to grease interceptor and be included in the flow calculation for grease interceptor sizing.

**This Letter is to confirm that the undersigned has designed/modified the HVAC system to mitigate the excessive heat and moisture generated by the proposed recirculating system and/or appliance.**

If there are any discrepancies between this document and the drawings, this document will be deemed correct as to what will be provided.

**Mechanical Engineer:**

Name \_\_\_\_\_

Company \_\_\_\_\_

Permit to Practice Number \_\_\_\_\_

Date \_\_\_\_\_, \_\_\_\_\_

(Month)      (Day)      (Year)

**Professional's seal:**