OTTAWA KITCHEN RENOS

Range Hoods & Ventilation

The Building Code kitchen exhaust fan rule, range hood ducts to the outdoors, backdraft dampers and when make-up air applies

5 Expert Answers from Kitchen Reno IQ

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Q1

What does Ontario's Building Code require for a kitchen exhaust fan?

Ontario's Building Code (clause 9.32.3.7) requires a supplemental exhaust fan with a rated capacity of not less than 50 L/s to be installed in each kitchen. Two exceptions apply: one where the only exhaust air intake for the principal ventilation fan is already in that kitchen, and one where the principal fan can be switched to not less than 2.5 times its minimum normal rate by a manual switch in the kitchen labelled "KITCHEN EXHAUST".

These are minimums for new work; ask the City how they apply to your renovation.

Controls and placement

The fan must be controlled by a manual switch in the room it serves, and that manual switch overrides any automatic control (9.32.3.7.(6)). A kitchen fan intake that is not a cooktop hood must be in the ceiling or on a wall at least 2 m above the floor (9.32.3.7.(5)). The Code sets no sone rating for kitchen fans.

For the duct that carries the air outside, clause 9.32.3.11 sets out the material and routing rules. The duct must be noncombustible and corrosion-resistant, must lead directly to the outdoors with no connections to other exhaust fans or ducts, and must have a grease filter at the intake end (9.32.3.11.(6)). The duct cannot discharge into any heated or unheated enclosed space (9.32.3.11.(2)). Where the duct passes through unheated space it must be insulated to at least RSI 0.5 (9.32.3.11.(3)). Joints are sealed with mastic, metal foil duct tape or the manufacturer's specified sealants (9.32.3.11.(8)). The exhaust outlet on the exterior must have a backdraft damper, and the bottom of the outlet must sit at least 100 mm above the ground or any lower horizontal surface (9.32.3.13.(11) and 9.32.3.13.(8)).

A note on recirculating (ductless) hoods: we did not find whether one meets the requirements of 9.32.3.7 either way. Ask the City or your designer before choosing one.

On make-up air, clause 9.32.3.8 applies only in dwelling units that have a fuel-fired space-heating appliance or fuel-fired water-heating appliance of other than a direct-vented or mechanically vented type. Whether that condition exists in your home is something your designer or contractor checks by looking at your heating and water-heating appliances. The Code gives no CFM figure and no hood size that triggers the make-up air requirement.

A new duct through an exterior wall is not named on either the City's exempt or permit list; ask the City's Building Code Services before the work starts. The electrical connection for the fan is an ESA matter, not a City permit: the Electrical Safety Authority requires a notification to be filed before the work starts, and if you hire someone for that wiring, Ontario law requires them to be a Licensed Electrical Contractor.

Make sure your quote spells out which duct route is planned, what the outlet termination looks like, and how the fan switch is wired, all in writing before any work begins.

Q2

Venting a kitchen hood duct into the attic of an Ottawa house: allowed?

No. Ontario's Building Code, clause 9.32.3.11.(2), states that exhaust ducts "shall not discharge into heated or unheated enclosed spaces." An attic is an unheated enclosed space, which is the clause's own wording, so the Code text does not allow a cooking exhaust duct to end there. These are minimums for new work; ask the City how they apply to your renovation.

The Code is specific about where the duct must go. Clause 9.32.3.11.(6) says ductwork for cooking appliance exhaust fans shall "lead directly to the outdoors with no connections to other exhaust fans or ducts" and have a grease filter at the intake end. That means the duct needs a continuous, sealed run that exits through an exterior wall or the roof and terminates outside the building envelope entirely.

A few other Code requirements bear on how that exterior termination is done. The duct itself is of noncombustible, corrosion-resistant material (9.32.3.11.(6)), and any section running through unheated space, such as an attic, must be insulated to at least RSI 0.5 (9.32.3.11.(3)). The exterior outlet requires a backdraft damper (9.32.3.13.(11)), and the bottom of the outlet must sit at least 100 mm above the ground or any lower horizontal surface (9.32.3.13.(8)). Joints are sealed with mastic, metal foil duct tape or the manufacturer's specified sealants (9.32.3.11.(8)). Again, these are minimums for new work; ask the City how each applies to your renovation.

Whether cutting a new penetration through an exterior wall or the roof requires a City of Ottawa building permit is not named on the City's standard exempt or permit lists for this type of work. Ask the City's Building Code Services before the work starts.

The contractor doing the installation should provide a written contract that sets out the full scope, the route the duct will take, the exterior termination location, the insulation specification, the price and the start and completion dates. Have that on paper before any work begins.

Q3

When does Ontario's Code call for make-up air with a range hood?

Ontario's Building Code ties make-up air to the home's heating and water-heating appliances, not to the size of the range hood. Article 9.32.3.8 applies to dwelling units that contain "a fuel-fired space-heating appliance or fuel-fired water-heating appliance of other than direct-vented or mechanically vented types". The Code text gives no hood size or airflow that triggers it.

Where the article applies, any mechanical air exhausting device other than the principal ventilation fan is provided with outdoor make-up air supplied by a fan rated "not less than the exhaust capacity of the device, and not greater than that exhaust capacity plus 10%". The make-up air fan is wired so it runs whenever the device runs, and the air is delivered to a normally unoccupied area or "tempered to at least 12°C".

The article lists exemptions, including homes with solid-fuel appliances where all other fuel-fired appliances are direct- or mechanically vented, and a CAN/CGSB-51.71 depressurization test showing the limits are not exceeded.

These are minimums for new work; ask the City how they apply to your renovation. Which kind of furnace and water heater your house has is the question to put to your designer or contractor before the hood is chosen.

Two related Code rules apply to the hood itself. A kitchen exhaust fan is rated at not less than 50 L/s unless one of two exceptions tied to the house's principal fan applies (9.32.3.7), and a cooking exhaust duct leads directly to the outdoors (9.32.3.11.(6)).

We did not find two independent published prices for range hood or make-up air work, so ask each quote to list:

- the hood and its rated exhaust capacity
- whether a make-up air fan is included, and why
- the duct route to the outdoors
- who files the ESA notification for any new wiring

Ask the contractor to write down which appliances in your house they checked before saying whether make-up air is in the scope.

Q4

What does the 50 L/s kitchen fan rule mean for my Kanata reno?

Ontario's Building Code (clause 9.32.3.7) requires a supplemental exhaust fan rated at not less than 50 L/s to be installed in each kitchen. That is the minimum capacity the fan must carry; ask the City's Building Code Services how that clause applies to your specific renovation, because these are minimums written for new work.

There are two situations where the 50 L/s fan is not required. The first is where the only exhaust air intake for the principal ventilation fan in the dwelling is already located in the kitchen. The second is where the principal fan can be switched by a manual switch in the kitchen, labelled "KITCHEN EXHAUST", to run at not less than 2.5 times its normal minimum rate. If neither of those conditions applies to your Kanata home, the supplemental fan is what the Code requires.

A few other Code details from the same section that bear on how the fan is installed. The fan is controlled by a manual switch in the room it serves (9.32.3.7.(6)), and a manual switch overrides any automatic control (9.32.3.7.(8)). A kitchen fan intake other than a range hood serving the cooktop goes in the ceiling or on the wall at least 2 m above the floor (9.32.3.7.(5)). The ductwork must be noncombustible and corrosion-resistant, lead directly outdoors with no connections to other ducts, and carry a grease filter at the intake end (9.32.3.11). The exterior outlet needs a backdraft damper, and its bottom must sit at least 100 mm above the ground or any lower horizontal surface (9.32.3.13). Any duct running through unheated space is insulated to at least RSI 0.5. All of these are Code minimums for new work; ask the City how they apply to your renovation.

Whether a new duct through an exterior wall needs a City building permit is not named on the City's exempt or permit lists. Ask the City's Building Code Services before the work starts.

When you have two written quotes in front of you, set them side by side and check that each one names the fan's rated capacity, the full duct path to the exterior, who supplies and installs the backdraft damper, whether a new exterior wall penetration is included, and which party is responsible for pulling any permit the City requires.

Q5

Recirculating range hood in an Ottawa condo kitchen: does it meet the fan rule?

We did not find whether a recirculating (ductless) hood meets Ontario's kitchen fan rule, either way. Ask the City or your designer before you choose one.

What the Code text does say: Ontario's Building Code calls for a supplemental exhaust fan rated at not less than 50 L/s in each kitchen (9.32.3.7). It is not required where the only exhaust air intake for the house's principal ventilation fan is in that kitchen, or where the principal fan can be switched to at least 2.5 times its minimum rate by a manual switch in the kitchen labelled "KITCHEN EXHAUST". A required kitchen fan is controlled by a manual switch in the room it serves.

For cooking exhaust fans, ductwork shall be of noncombustible, corrosion-resistant material, lead directly to the outdoors with no connections to other exhaust fans or ducts, and have a grease filter at the intake end (9.32.3.11.(6)). Exhaust ducts shall not discharge into heated or unheated enclosed spaces. These are minimums for new work; ask the City how they apply to your renovation.

Condominium rules were not part of what we checked, so ask your condominium corporation as well.

If a duct to the outside is part of the plan, a new opening through an outside wall is not named on either of the City of Ottawa's permit lists, so ask the City's Building Code Services. Any new wiring for the hood is an Electrical Safety Authority notification, not a City permit.

We did not find two independent published prices for range hood or duct work, so ask each quote to name the hood, its rated capacity, whether it is ducted or recirculating, and, if ducted, the duct material and its route to the outdoors.

The one line to get on paper: whether the hood being quoted is ducted to the outdoors or recirculating.

Disclaimer: This guide is provided for informational purposes only by Ottawa Kitchen Renos. It does not constitute professional advice. Always consult qualified contractors and your local building authority (the City of Ottawa) before starting any kitchen renovation. Some of this work needs a City building permit, electrical work is filed with the Electrical Safety Authority, and gas work is regulated by TSSA. Information is current as of November 15, 2026 and may change. Visit **ottawakitchenrenos.ca** for the latest answers.