

City of Cranbrook Building Department
Public Information Handout:
Wood Burning Appliances

Wood Burning Appliance - Information Sheet

If you are installing a WBA - Wood Burning Appliance in your home or if you are having a professional install the appliance then, here are a few additional items that you need to know.

Do you have a Smoke Alarm in your home? The 2018 BC Building Code requires every single family dwelling to have at least one smoke alarm on every floor level including basements. On a floor level that also contains a sleeping room then, a smoke alarm must be installed in each sleeping room and, in a location between the sleeping room and the remainder of the storey, and if the sleeping room(s) are served by a hallway, the smoke alarm shall be located in the hallway. These smoke alarms are required to be interconnected and hardwired as part of the electrical system so that in the event one smoke alarm is initiated than all alarms will emit an audible alarm sound to notify all occupants of the potential hazard. Smoke alarms shall conform to CAN/ULC-S531 "Standard for Smoke-Alarms". Installation requirements to conform to CAN/ULC-S553 "Installation of Smoke-Alarms".

Do you have a Carbon Monoxide (CO) Alarm in your home? Carbon Monoxide (CO) alarms conforming to CAN/CSA-6.19 "Residential Carbon Monoxide Alarming Devices" shall be installed in every sleeping room or outside each sleeping room within 5m/16.4ft of all bedroom door openings where a residential occupancy contains a fuel-burning appliance or an attached storage garage. These CO alarms may be battery operated, combined plug-in type with battery backup or hardwired and interconnected to the electrical system with no disconnect switch between the over-current device and the alarm. Combination Smoke/Co alarms provide a convenient option and are becoming more of an industry standard.

Does your house contain a Large Volume Exhaust Fan? High capacity (cfm) exhaust fans, typically kitchen range-hood fans, can counteract the natural draft action of the Wood Burning Appliance chimney posing a risk to potential Carbon Monoxide poising. Therefore, additional active and tempered make-up air typically will be required to be introduced into the home when any appliance discharges air to the exterior at a rate exceeding 0.5 ARC (Air-Change-Per-Hour measured in conjunction with interior volume of the dwelling unit).

◯ Is there a Fresh Air Supply to the appliance? All wood burning appliances require fresh air to operate efficiently. A general rule of thumb for sizing the "non-combustible" fresh air supply duct is - half the size of the appliance flue collar. In other words, if the flue pipe is 6in diameter then the fresh air non-combustible supply duct may be 3in diameter.

▶ Is your wood burning appliance Certified? Every wood burning appliance installation within the City of Cranbrook to be ULC, UL or CSA certified and it is encouraged that additional EPA (Environmental Protection Agency) emissions standards of CAN/CSA-B415.1 "Performance testing of Solid Fuel Burning Heating Appliances" are also satisfied. Installation compliance will be verified by the limitations identified on the approved listing label — generally on the back of the appliance. It is these parameters that will dictate the location of your appliance with respect to clearances from combustibles on all sides, required non-combustible floor protection distances, combustible mantle clearances from the fire box opening etc. B.C.'s <u>Solid Fuel Burning Domestic Appliance Regulation</u> requires that wood stoves sold in the province after November 1, 1994 meet particulate-matter emission limits equivalent to the U.S. EPA wood stove standards. The regulation also specifies labeling and testing requirements for wood stoves.

⇒Is your Chimney and Flue Pipe Certified? Factory built chimneys serving solid fuel burning appliances, and their installation, shall conform to CAN/ULC-S629-M, "650°C Factory Built Chimneys". Flue pipes serving solid fuel burning appliances shall be constructed of steel or other approved non-combustible material with a melting point not less than 1100°C (2000°F) Note: flue pipe clearances and appliance clearances are regulated as to whether the flue pipe is single wall or double wall – see the listing label for confirmation.

■ Please contact the City of Cranbrook Building Department at 250 489 0207 for any questions related to the installation of your Wood Burning Appliance