

Loss Prevention

Take a proactive approach to loss prevention!



Wood Burning Appliances

Wood burning appliances and chimneys are now more technologically advanced. However, losses arising from wood burning appliance installations still take place as a result of appliances being improperly installed by untrained people.

Five basic aspects to look for when assessing a wood burning appliance installation:

1. The Appliances

To determine if the appliance meets requirements, the appliance should always have a manufacturer's label clearly showing if the appliance is certified to Canadian standards. Certified testing agencies in Canada are CSA, Warnock Hersey (or ITS), OTL and ULC. This is important because Canadian standards typically require two inches more clearance from combustible construction than American standards do.

The manufacturer's label will list all required clearances between the unit and combustibles. Therefore, you can compare the existing clearances with those required by the manufacturer.

2. Floor Pad

The floor pad provides protection from embers falling out of the stove onto the floor. The floor pad must consist of a durable, continuous, and fire proof material. It must extend 18" from any side with a door and 8" on all other sides.

3. Wall and Ceiling Shielding

The B365 code requirements allow for reduced clearances from the manufacturer's requirements as long as shielding is properly installed and acceptable materials are used. Materials such as sheet metal, Duralock, ceramic, brick and concrete are used for proper shielding. All shielding must:

- be installed with a one inch airspace that is open at the top, sides and bottom of the shield;
- extend 18" beyond either side of the appliance;
- extend a minimum of 20" above the top of the unit; and
- end no closer to the ceiling than 1" and no closer than 1" to 3" from the floor level.

If shielding is properly installed, clearances will be reduced by certain percentages depending on the composition of the shield used. For example, ceramic, Duralock and brick will result in a 50% reduction; sheet metal will have a 67% reduction; and solid masonry of at least 6" in thickness will reduce the clearance to zero.





4. Flue Pipe

There are four types of flue pipes in use today; only three are acceptable for use with solid fuel burning appliances:

- single wall 24 and 26 gauge steel,
- black stainless steel lined, and
- double walled flue pipes.

Galvanized flue pipe is not permitted for use.

The minimum clearance to combustibles for single wall fluepipe is 18"; however, the required clearance can be reduced to 9" provided the flue pipe or wall are properly shielded with sheet metal. Shielding must be properly installed on the wall or flue pipe with an inch of airspace. Requirements for double walled flue pipe ranges between four and nine inches from combustible construction.

Flue pipes are not permitted to pass through a ceiling or floor. Flue pipe joints are required to have three metal screws installed in each joint to prevent separating. Configurations are not permitted to change direction more than 180 degrees in total, so there should not be more than two 90 degree elbows in the configuration. The flue pipe runs must be sloped upwards toward the chimney connection ¼" for every horizontal foot of flue pipe run. The crimped (bevelled) ends must face towards the appliance and the connection between the pipe and the chimney must be secure.

5. Wall and Ceiling Shielding

The appliance must be connected to a chimney that is acceptable for use with a solid fuel burning appliance.

Chimney requirements for wood burning appliances include:

- Chimneys must consist of either masonry or metal.
- Masonry
 - must be lined with clay, concrete, fire brick or metal.
- Metal
 - must be a wood rated chimney.
 - must have a tight fitting weather cap (metal liners must as well).
 - those that pass through living space must be enclosed to avoid contact with combustibles and impact from people.
- With a fireplace insert, the chimney must be lined with metal.
- Chimneys should be cleaned on an annual basis by a certified WETT chimney sweep.
- Chimneys must
 - extend a minimum of three feet above the roof line.
 - when the top of the chimney is within 10 feet of the roof line, or other obstruction, the chimney must extend another 2 feet until the top of the chimney clears the roof line/obstruction.
 - once the chimney reaches five feet in height, it must be braced to the roof for stability.

Talk to a Loss Prevention Consultant - your best source for information and advice.

Interested in learning more about what you can do to protect your business? Visit intact.ca/business-loss-prevention

