***WETT Certified Inspectors***

WETT (Wood Energy Technology Transfer) are the governing body who work with insurance underwriters and government bodies, to ensure safe installations and provide standards for inspections and insurability of wood burning appliances, such as wood stoves and open fireplaces. Timmins Fire Department **does not have** any WETT certified inspectors. To find WETT certified inspectors in Timmins and area, search on the following link: <https://www.wettinc.ca/search.cfm>

***The following is an overview of wood stove installations.***

For the purpose of this post, we will be looking at free standing uncertified wood stoves, as they are common installations, and require the greatest clearances. Wood stove installations have three components: wood stove, flue pipe, and chimney.

***Woodstove***

 A wood stove is considered uncertified if it does not have a sticker or tag affixed to it. If the stove was purchased as a certified wood stove, but the sticker has been removed, that stove is no longer a certified wood stove. If any alterations were made to the stove, that is not a part of the original design, the stove will no longer be certified. An example of this would be if you removed the glass from the door and welded steel plate where the glass used to be. A certified wood stove will have clearances that are much less than an uncertified appliance.

**Shielding** - CSA B365 is the Installation code for solid-fuel-burning appliances and equipment. This standard requires that there be a minimum clearance of 48” between the stove and any combustible walls. A non-combustible wall must be made of non-combustible materials throughout the wall assembly (no wood framing) This distance may be reduced with proper shielding. Side and rear clearances may be reduced by as much as 67% with shielding constructed of minimum 28 gauge sheet metal. For proper shielding requirements, see diagram below.

**Floor Protection** – An ember pad must extend at least 18” in front of the door, and 8” on all other sides. Material for the ember pad may be minimum 28 gauge sheet metal, or grouted tile. If the tiles or bricks are not grouted, then a sheet metal pad is required under the tiles.

**Ceiling Clearance** – Clearance above the stove is minimum 60” from top of stove to ceiling.

***Flue Pipe***

Flue pipes must not pass through any wall or ceiling space. At the point where the flue pipe meets a wall or ceiling, it must connect to a thimble, which in turn connects to a chimney.

Flue pipes can be either single wall or double walled. Single walled flue pipe is generally uncertified, and requires a clearance of 18” in all directions. Double walled flue pipe may be certified, and will have a sticker indicating clearances. Clearances will be considerably less than single wall flue pipe.

* flue pipe must be made of mild steel – galvanized steel must never be used
* horizontal runs must be supported at intervals of no more than 36”
* total length of flue pipe, including elbows, must not exceed 10’
* total number of elbows must not exceed combined total of 180 degrees
* horizontal flue pipe must slope back towards stove
* joints are to be connected with three screws
* joints must have male end oriented to face towards stove
* pipe seams should not be on bottom side of the installation

***Chimney***

Chimneys are either factory built stainless steel units, or site built masonry structures. Chimneys must be installed as per manufacturers’ instructions, to ensure proper installation clearances. The chimney installation kit will include items such as thimble, ceiling kit, rain cap, brackets, etc. Again, manufacturers’ instructions will dictate which components must be used in the installation.

***Conclusion***

Make sure to always follow manufactures’ instructions, and allowable clearances when installing your wood stove. Only burn clean, dry wood, and ensure a proper burning cycle. Try to keep the temperature of the stove between 250F – 450F, to minimize creosote buildup. Burning slower to try to make the wood last longer will lower the exhaust gas temperatures. Over time, this will create a heavy build-up of creosote, inevitably resulting in a chimney fire. To ensure your safety, and that your woodstove installation meets compliance, have a WETT certified inspector inspect the installation prior to starting any burns.

Note that some insurance companies will only insure certified wood stoves. Check with your insurance company before purchasing or installing an uncertified appliance.

