

## WETT INSPECTION

Here is some of the information I am looking for when I inspect a wood stove for WETT standard compliance. Some of these items you can check prior to calling. The more information I have the more information I can give you regarding what has to be done before I can provide you with the WETT letter for your insurance or a prospective home buyer. Having this information from you may decrease the number of trips to the home and in turn decrease the overall cost of the inspection.

**Is the stove a certified stove?**

Stove certification is done by an accredited laboratory the most common being CSA, Underwriters Laboratory (ULC), Warnock-Hersey and OMNI Testing Laboratories. A certified stove will have a sticker on the appliance (usually the back) that specifies the required clearances for the stove.

These clearances must be met for the stove to meet WETT standards.

If there is a certification sticker and the sticker is dirty very gently and carefully wipe the label off. Do not use any chemical products as this can wipe the ink off. Taking a couple of close of pictures which you can email to me will help. You can check the clearances yourself if you feel comfortable doing so and we can discuss if the clearances are acceptable or how you might make them acceptable. I will confirm these measurements on my visit to the home. Clearances are listed on this sticker for different models so ensure you know your model number and are looking at the correct clearances.

If no certification sticker is present larger clearances will need to be met and heat shielding may be necessary. We can discuss this over the phone prior to the visit.

Another question I would ask is if you have single or double wall flue pipe which you may or may not know the answer to. Single wall flue pipe has a clearance of 18 inches and double wall flue pipe has a clearance of 6 inches.

There are requirements the chimney must meet. The chimney must be at least 3ft high and 2ft above the peak or 10ft away from the peak.

Floor protection around the stove has requirements that must be met as well.

There are two aspects to floor protection. One is thermal protection - protecting the floor from radiant heat from the bottom of the stove. The other is ember protection for any pieces of burning material that could fall out of the stove when you open the door. For ember protection, you need to have continuous, non-combustible flooring under your appliance, extending 8" beyond it at the rear and sides and extending 18" in front of the wood loading door. Continuous means there can be no cracks where embers could get down to combustible material. So, patio stones or bricks won't work unless you grout between them.

Wall shields must extend at least 450 mm (18 ") beyond each edge of the appliance and 500 mm (20") above the appliance. To allow air to flow behind the shield, there must be a space of at least 25 mm (1 in.) at the bottom of the shield and a 21 mm (7/8 in.) space between the shield and the wall. (If the shield must extend up the wall to shield the flue pipe, a 75 mm (3 in.) space must be left at the top so the cooling air can escape.) The shield should be permanently mounted on the wall using screws through non-combustible spacers

## Shield Construction Rules

1. Minimum space between shield and combustibles: 21 mm (7/8 in.).
2. Minimum clearance along the bottom of shield: 25 mm (1 in.).
3. Maximum clearance along the bottom of shield: 75 mm (3 in.).
4. Minimum clearance along the top of shield at ceiling: 75 mm (3 in.).
5. Shield extension beyond each side of appliance: 450 mm (18 in.).
6. Shield extension above appliance: 500 mm (20 in.).
7. Edge clearance for ceiling shields: 75 mm (3 in.).
8. Adhesives used in shield construction must not ignite or lose adhesive qualities at temperatures likely to be encountered.
9. Mounting hardware must allow full vertical ventilation.
10. Mounting hardware must not be located closer than 200 mm (8 in.) from the vertical centre line of the appliance.
11. Mounting hardware which extends from the shield surface into combustibles may be used only at the lateral extremities of the shield.

Air-cooled shields for ceilings should have a 75 mm (3 in.) clearance from adjacent walls.

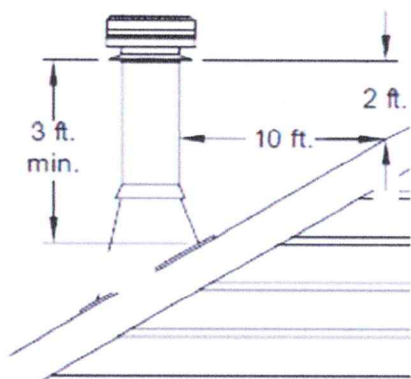
## Certified Commercial Shields

If you do not want to build an air-cooled radiation shield, several different styles of metal and brick or stone commercial shields are available. Be sure that any commercial shield you buy has been certified and labeled by one of the three recognized testing agencies. The manufacturer's instructions will specify how to install the shields, and the clearance reductions that can be achieved.

Wood stoves in garage areas have different rules and regulations. It is generally not recommended to have a wood burning appliance where there may be flammable, or combustible items stored. It is permissible if the wood burning appliance is raised 18" off the floor. In raising the stove that often puts the stove too close to the ceiling so heat shield may be needed. The stove must be protected from impact (driving a vehicle into it) if in a garage area. The regulations are somewhat vague regarding this, usually one or two steel posts well anchored into the floor will suffice.

#### Heat Shields and Diagram for chimney clearances

Type of protection (shield)	Clearances may be reduced by these percentages	
	Sides & rear %	Top %
Sheet metal, a minimum of 29 gauge in thickness spaced out at least 21 mm (7/8 in.) by non-combustible spacers	67	50
Ceramic tiles, or equivalent non-combustible material on non-combustible supports spaced out at least 21 mm (7/8 in.) by non-combustible spacers	50	33
Ceramic tiles, or equivalent non-combustible material on non-combustible supports with a minimum of 29 gauge sheet metal backing spaced out at least 21 mm (7/8 in.) by non-combustible spacers	67	50
Brick spaced out at least 21 mm (7/8 in.) by non-combustible spacers	50	N/A
Brick with a minimum of 29 gauge sheet metal backing spaced out at least 21 mm (7/8 in.) by non-combustible spacers	67	N/A



This will get you started many other rules apply but these are the most obvious ones I see all the time.

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