Placement

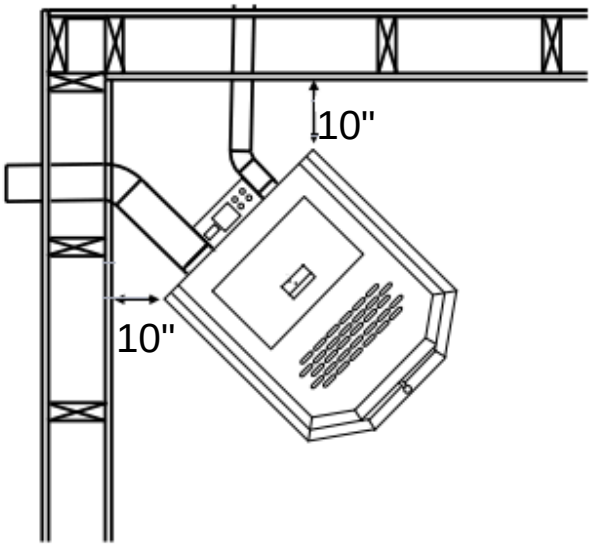
The proper location for your ComfortBilt HP41 pellet stove is crucial for its safe and efficient operation. Consider the following factors when choosing a suitable location.

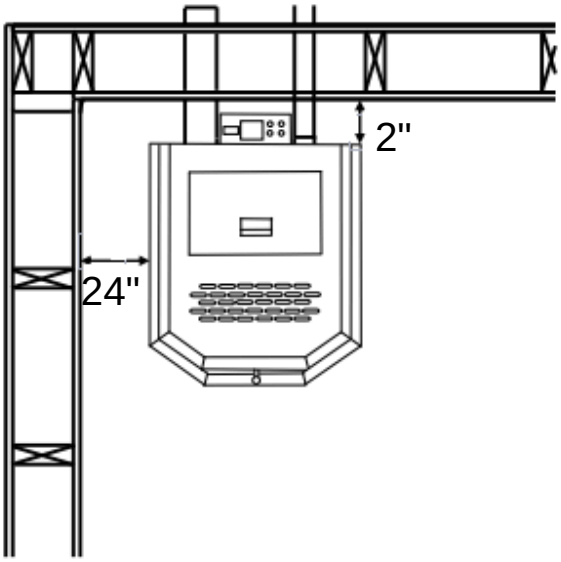
1. **Efficiency:**
   - Proper airflow is crucial for efficient combustion in a pellet stove. Installing the stove in a spacious main floor living room allows for better air circulation and ventilation, optimizing combustion and heat production. In contrast, a tighter space or basement with limited air can lead to inadequate oxygen supply, incomplete combustion, and reduced efficiency.
2. **Clearance requirements:**
   - Check the manufacturer's recommendations and local building codes to determine the required clearances from combustible materials, such as walls, furniture, curtains, and other objects.
   - Ensure that there is ample space around the stove for proper airflow and maintenance access.
   - Maintain the specified clearances to prevent the risk of fire and ensure optimal performance.
3. **Floor suitability:**
   - Place the pellet stove on a stable, non-combustible floor surface that can support its weight.
   - Consider the floor's ability to withstand the heat generated by the stove, especially if it is a combustible flooring material.
   - Use a non-combustible hearth pad or floor protector under the stove, as required by local regulations.
4. **Ventilation:**
   - Place the stove in an area with adequate ventilation to allow for proper combustion and venting of the pellet stove's byproducts.
   - Avoid installing the stove in tightly enclosed spaces or areas with poor airflow, as it may lead to inefficient operation or indoor air quality issues.
   - Ensure that the chosen location allows for the installation of venting components according to the manufacturer's instructions and local building codes.
5. **Accessibility to a power source:**
   - Ensure that the chosen location has access to a suitable electrical power source.
   - Avoid using extension cords or power strips as a primary power connection.
   - If necessary, consult a qualified electrician to ensure proper wiring and adherence to electrical safety codes.
6. **Safety considerations:**
   - Avoid installing the stove in high-traffic areas or places where children or pets can easily access it.
   - Ensure that the stove is positioned away from flammable materials, such as curtains, rugs, and furniture.
   - Take into account any local regulations or guidelines related to stove placement, especially in terms of proximity to combustible materials and heat exposure.

Be sure to refer to local building codes and regulations to ensure compliance and safety. If you are unsure about any aspects of the installation, seek professional assistance from a qualified installer or contact ComfortBilt customer support for guidance.

Clearances to Combustibles

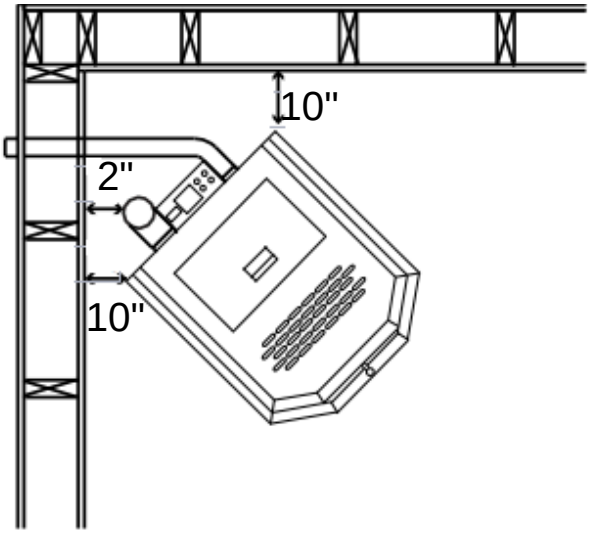
- Confirm required clearances to combustibles (Combustibles include wood, drywall, etc...)

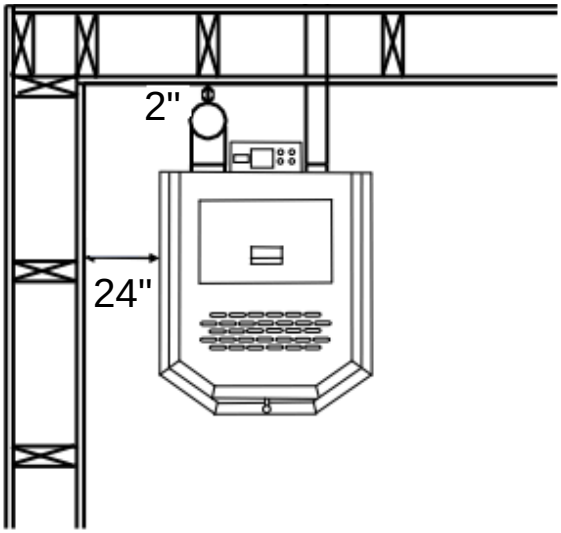




Horizontal installation

- Back walls to Stove rear corners: **10" (26cm)**
- Back wall to Stove back: **2" (5cm)**
- Side wall to Stove: **24" (61cm)**





Vertical installation

- Back walls to Stove rear corners: 10**" (26cm)**
- Back wall to pellet pipe: **2" (5cm)**
- Side wall to Stove: 24**" (61cm)**

Notice: When interior vent is installed vertically, the clearance to the back wall is determined by the vent size used. Install vent at clearance specified by the vent manufacturer. Take into consideration any upward turning elbows or tees.

Scan the QR Code to explore our complete range of Hearth Pads.

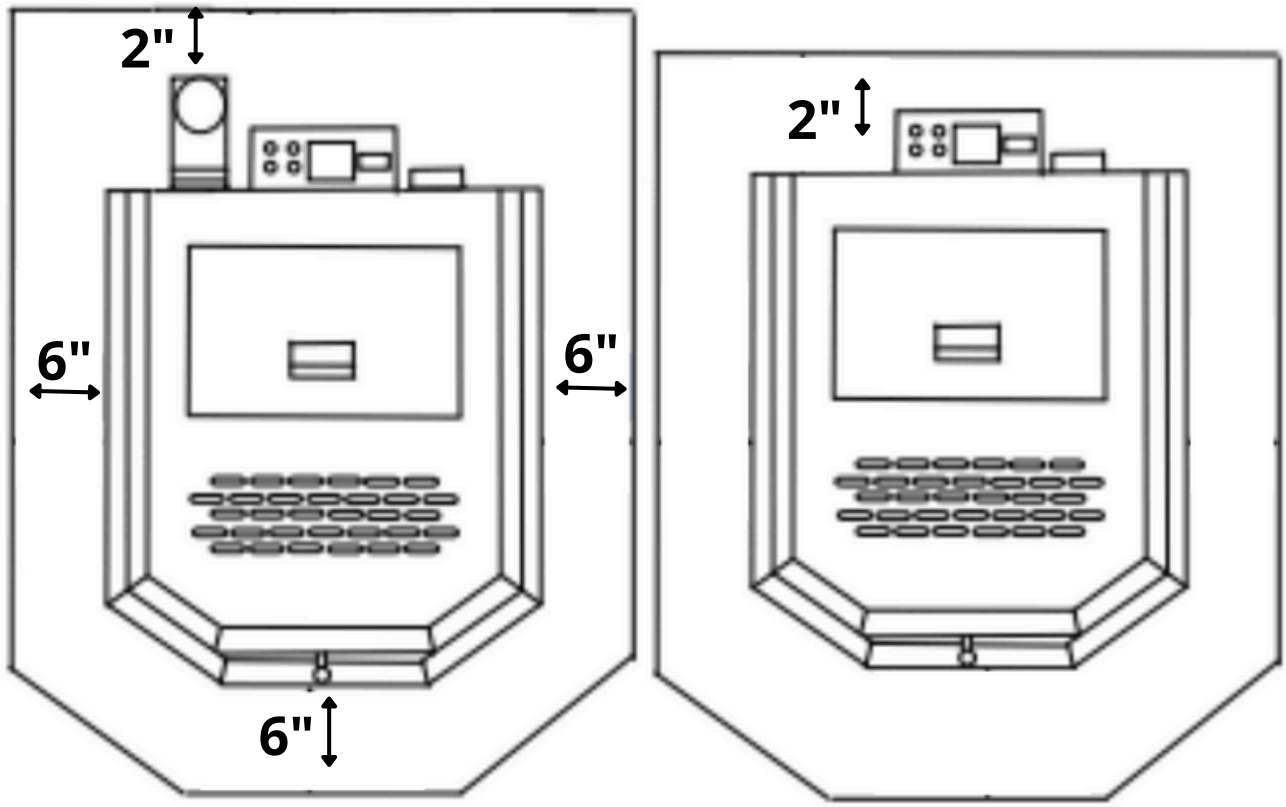
Floor Protection

Floor Protection
Non-combustible material (such as a hearth pad) is required underneath your stove.

Notice: Be careful to protect the bottom of the stove and floor surfaces when moving the stove. Bottom edges of the stove may be sharp and can scratch surfaces.

To ensure safe installation of the stove, please follow these guidelines for floor protection:

1. The stove should be placed on a noncombustible floor or a masonry hearth.
2. If a clean out T-vent is installed inside the home, the floor protector must extend 2 inches beyond the rear of the T-vent.
3. When venting the stove straight through the wall with the clean out T-vent on the exterior, maintain a minimum clearance of 2 inches between the back of the stove and the wall.
4. Install Ember Protection, which is a type 1 floor protector specifically designed for this stove.
5. The floor protector should be made of non-combustible material and extend beneath the stove. It should have a minimum of 6 inches (152mm) in front of the glass and 6 inches (152mm) on both sides of the stove.
6. For horizontal venting, the non-combustible floor protection must extend 2 inches (51mm) beneath the flue pipe. For vertical installation with a top vent adapter, the floor protection should be placed under the adapter. (*Please note that this guideline is required in Canada and recommended in the USA.)*



*This will satisfy safety standards for both USA and Canada

Notice: Clearances may only be reduced by means approved by the regulatory authority having jurisdiction.

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Venting

Required: Only use a 3" or 4" type "L" or "PL" pellet venting system *(such as DuraVent or Selkirk)*.

Follow these steps for proper venting installation:

1. Contact local building or fire officials about restrictions and installation inspection requirements in your area.
2. Contact your local authority (such as municipal building department, fire department, fire prevention bureau, etc.) to determine the need for a permit.
3. Mark and cut the exterior wall if necessary for venting penetration.
4. Use a 3" appliance adapter as the first connection to the stove's exhaust port as required.
5. Secure the appliance adapter to the stove's exhaust port using a high-temperature (500°F+) sealant, such as RTV silicone.
    - The connection to the stove should be secured with at least 3 screws. (Check with your piping manufacturer's specifications, as you may also be required to secure each joint with screws and/or sealant as well).
    - If venting horizontally, joints should be made gas tight by using a high temperature sealant, or inner gaskets within the piping, as specified by the piping manufacturer's specifications.
6. Install a wall thimble if necessary according to the manufacturer's specifications.
    - Use an approved wall thimble when passing the vent through walls.
    - Use a ceiling support/fire stop spacer when passing the vent through ceilings. (Make sure to maintain minimum clearances to combustibles).
    - Use a sealant, such as silicone, to create an effective vapor barrier where the chimney or any component penetrates the structure's exterior.
7. Install pellet venting through the wall and connect the vent/pipe to the stove.
    - The pellet venting pipe, also known as L vent, consists of two layers with air space in between. This design acts as insulation, reducing the outside surface temperature to allow clearance from combustibles.
    - For elevations above 5,000 feet, it is recommended to use 4" venting.
    - Some venting manufacturers offer pellet stove adapters for easier installation.
    - If using more than one T-vent or exceeding 180° of elbows, the use of 4" venting pipe is recommended. *(See EVL calculations on following page)*
    - Horizontal sections of vent pipe should always maintain a 1/4 inch rise per foot. We recommend using the shortest venting and fewest elbows possible when venting horizontal.
    - Due to the potential for fly ash accumulation in horizontal venting sections, the maximum permissible horizontal venting length is 4 ft.
    - When the venting is on the exterior of the structure, use a support bracket every 5' of vertical pellet vent.
8. Follow the pipe manufacturer's instructions to seal all pipe joints securely.
9. Install the termination cap.
10. Ensure all required clearances to combustibles are met for the stove.

Pro Tip: When it comes to vertical movement of the stove, utilize the bottom adjustable leveling feet. These feet allow you to make vertical adjustments of up to 3/4", ensuring proper positioning and stability.

Pro Tip: Consider installing a clean-out "T" (sold separately) when venting the stove vertically. This additional component can greatly assist in the periodic cleaning and maintenance process, saving you time. However, please be cautious about the potential for leaks when installing an interior Tee**.**

⚠CAUTION!

- Do **NOT** connect to any air distribution duct or system.
- Do **NOT** install a flue damper in the exhaust venting system of this stove.
- Do **NOT** Connect this stove to a chimney flue serving another appliance.

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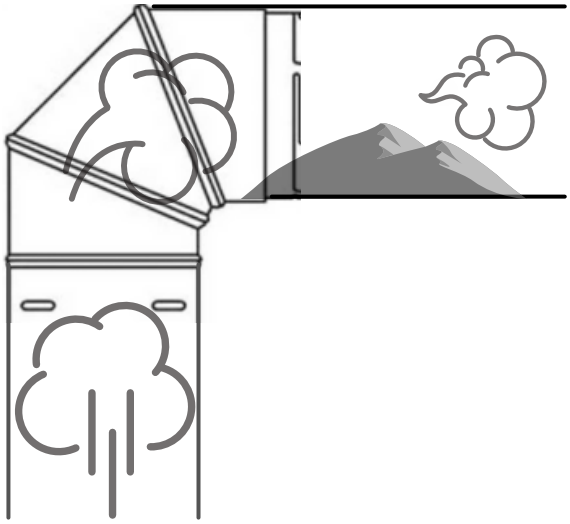
Venting (Continued)



To ensure optimal performance of Comfortbilt pellet stoves, it is crucial to consider the equivalent vent length (EVL) and the impact of exhaust bends. The combustion fan relies on unrestricted airflow for efficient combustion. However, adding bends in the exhaust path restricts air flow, reduces stove performance, and creates a collection point for ash deposits, requiring more frequent cleaning. Therefore, when selecting a location for the appliance, prioritize a venting system with the shortest EVL and minimize the use of bends. This will maximize combustion efficiency, enhance performance, and reduce the need for frequent cleanings.

The following chart shows the maximum allowable equivalent vent length for a 3" and 4" venting system as well as the EVL for common pellet vent components.

Maximum allowable equivalent vent length:

- **15** EVL for 3” pellet vent pipe or liner
- **25** EVL for 4” pellet vent pipe or liner
- When connecting 2 elbows consecutively, with no piping separation between them, add +2 EVL Units.

Equivalent Vent Length:

- 90° Elbows or Tee: (Each) **5** EVL Units
- 45° elbow: (Each) **3** EVL Units
- Horizontal Pipe or liner: (Per Ft) **1** EVL Units
- Vertical Pipe or Liner: (Per Ft.) **½** EVL Units

Outside Air Intake (available separately):

- Connecting the intake pipe (2" diameter pipe at the rear of the stove) to the exterior of the house is REQUIRED for mobile home installations. It is also recommended for tightly sealed homes with exhaust fans, such as kitchen or bathroom fans, or for basement installations. This is important to eliminate poor stove performance caused by negative pressure.
- Please note that only noncombustible pipe with a diameter of 2" or greater is approved for outside air connections. It is crucial to avoid connecting PVC pipe to the stove, as it is NOT approved and should NEVER be used.
- When connecting the air inlet to the outside, it is imperative to terminate it with a vertical 90° bend down or with a wind hood, and a rodent screen.. Failure to do so may result in a burn-back if high winds blow directly into the air inlet during a power outage.
- To ensure sufficient combustible air supply to the stove, it is important to avoid blockages, excessive length (over 8 ft.), or excessive bends in the air intake pipe. These factors could lead to inadequate airflow and result in the stove not receiving enough combustible air.
- During the off-season, to prevent excessive moisture from entering the stove, remember to remove and/or cap the intake.
- Use an air intake kit, available for purchase from Comfortbilt, or attach intake piping to the rear of the stove with a clamp, and install a weather hood and rodent screen outside to help protect the stove's internals.

Notice: The operation of exhaust fans, such as bathroom and attic fans, could create a negative pressure in the room, causing the stove to be starved of combustible air. Be sure to provide adequate ventilation in the room the pellet stove is located. If not, the vacuum pressure switch may shut off the operation of the pellet stove. Consider using an outside air intake for optimal performance.

Special Note: You can find examples of different types of installations on the following pages:

- Page 16 illustrates simple installation styles that are typically installed using a 3" venting system.
- Page 17 showcases more complex installations typically done using a 4" venting system.

These examples will provide visual references and help you understand the varying configurations and setups that can be utilized for your pellet stove installation.

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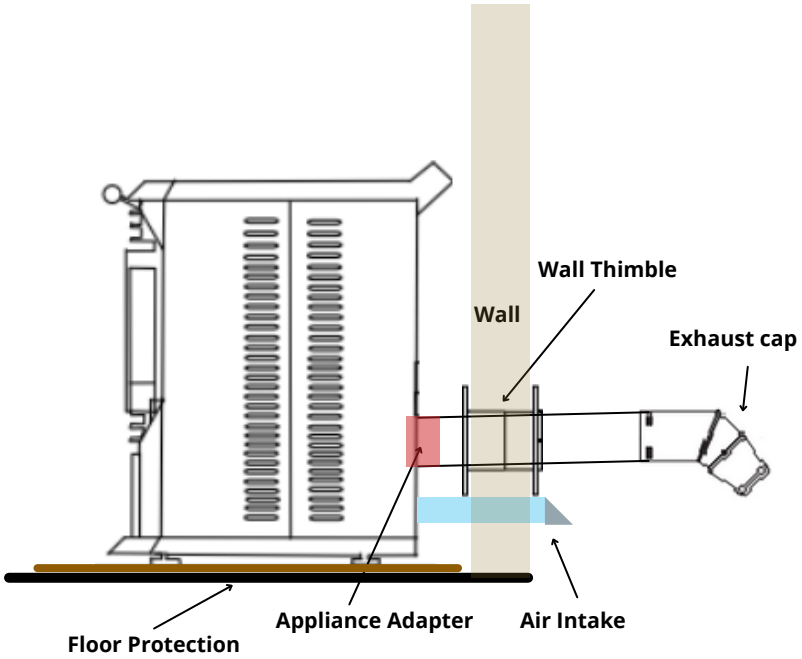
Simple Horizontal Installation



Notice: Please ensure that you use an exhaust cap that is approved and equipped with a spark arrestor. This will help restrict the release of embers through the venting system and enhance overall fire safety measures.

Mobile Home Installation

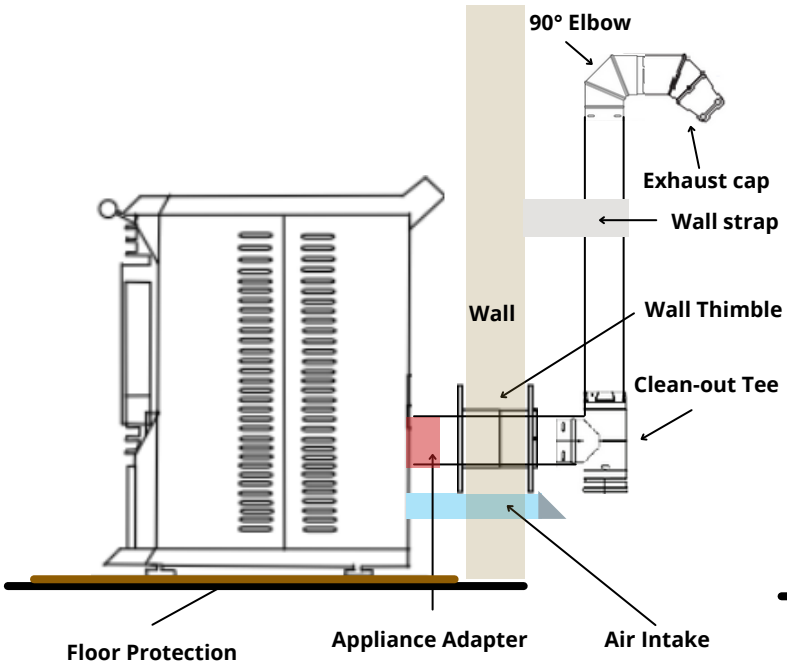
Installation in a mobile home should be in accordance with the manufactured home and safety standard (HUD), CFR 3280, Part 24. This stove must be vented to the outside. In addition to the standard installation instructions, the following requirements are mandatory for installation in a mobile home:

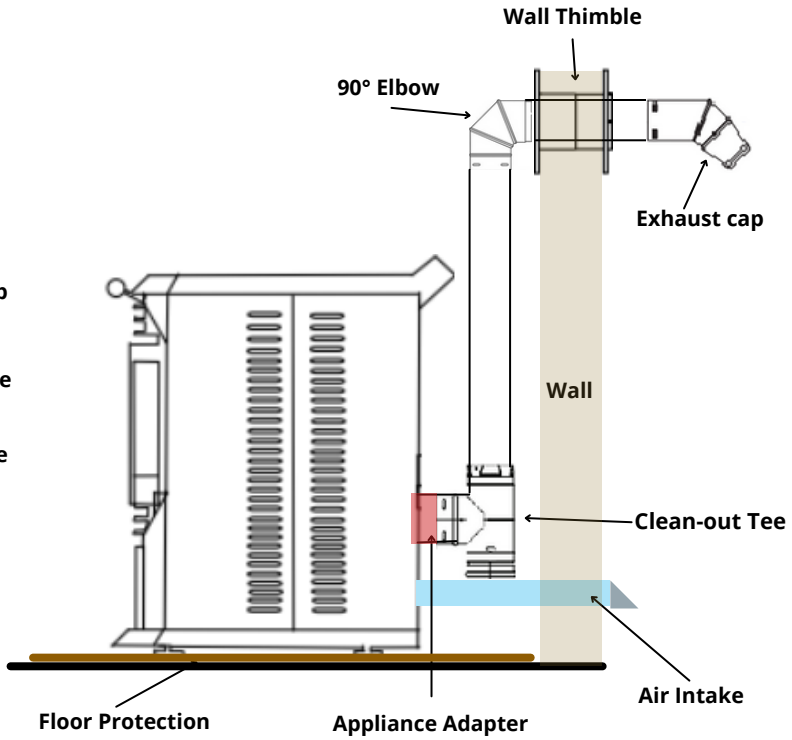
- The stove must be permanently attached to the floor.
- Stove must have an outside air source.
- Stove must be electrically grounded to the steel chassis of the mobile home, unless properly grounded outlets are provided.
- All vertical chimney vents must have wall supports.
- All exhaust systems must have a spark arrestor.
- Check with local building officials to see if other codes may apply.

⚠WARNING!
DO NOT INSTALL IN A SLEEPING ROOM.

⚠CAUTION!
The structural integrity of the manufactured home floor, wall, and ceiling/roof must be maintained.

Simple Vertical Installation





Notice: For Canada, the installation must conform to CAN/CSA-B365

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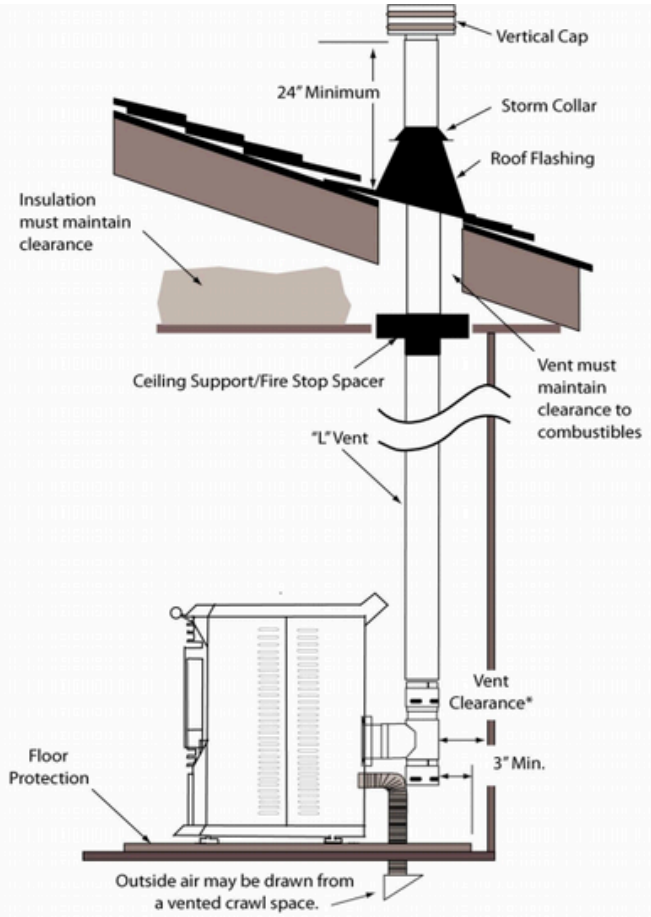
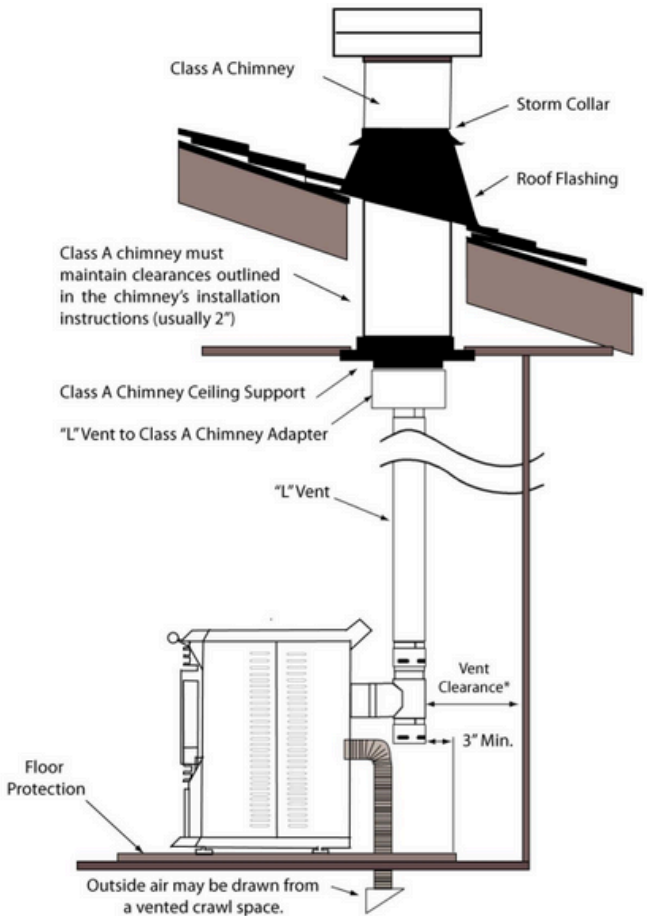
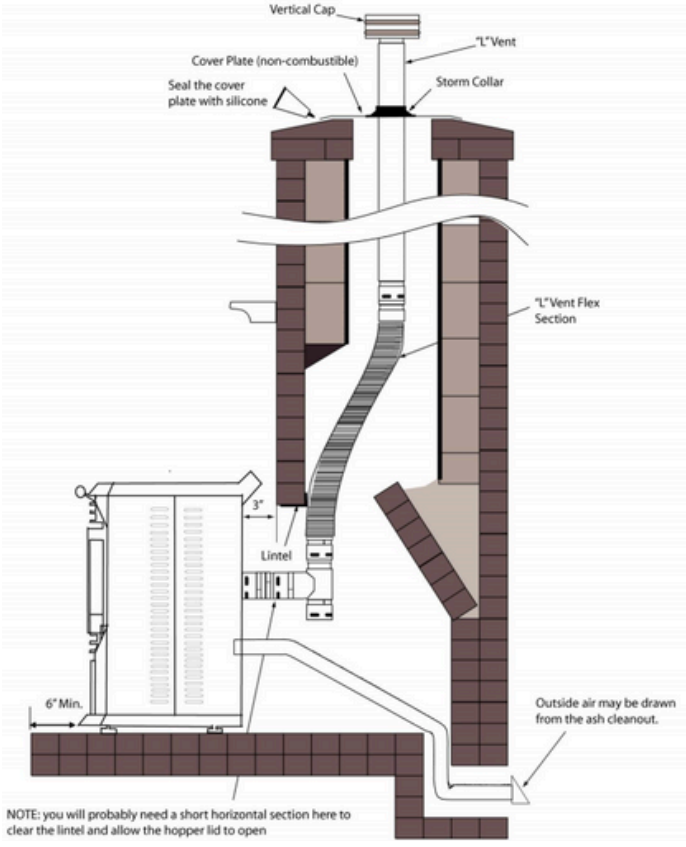
Through Roof Vertical Installation



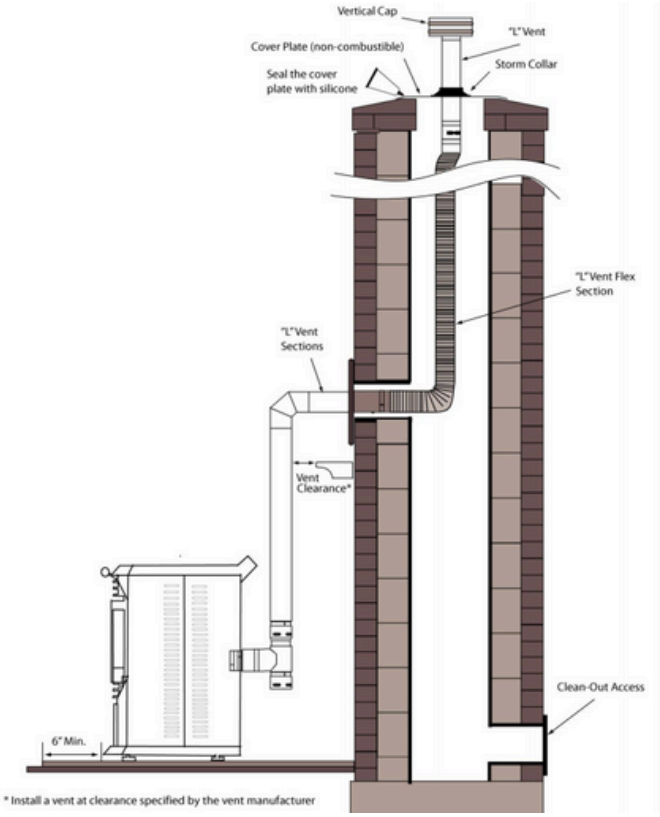
Class A Chimney Retrofit Installation



Masonry Fireplace Hearth Install



Freestanding Masonry Chimney install



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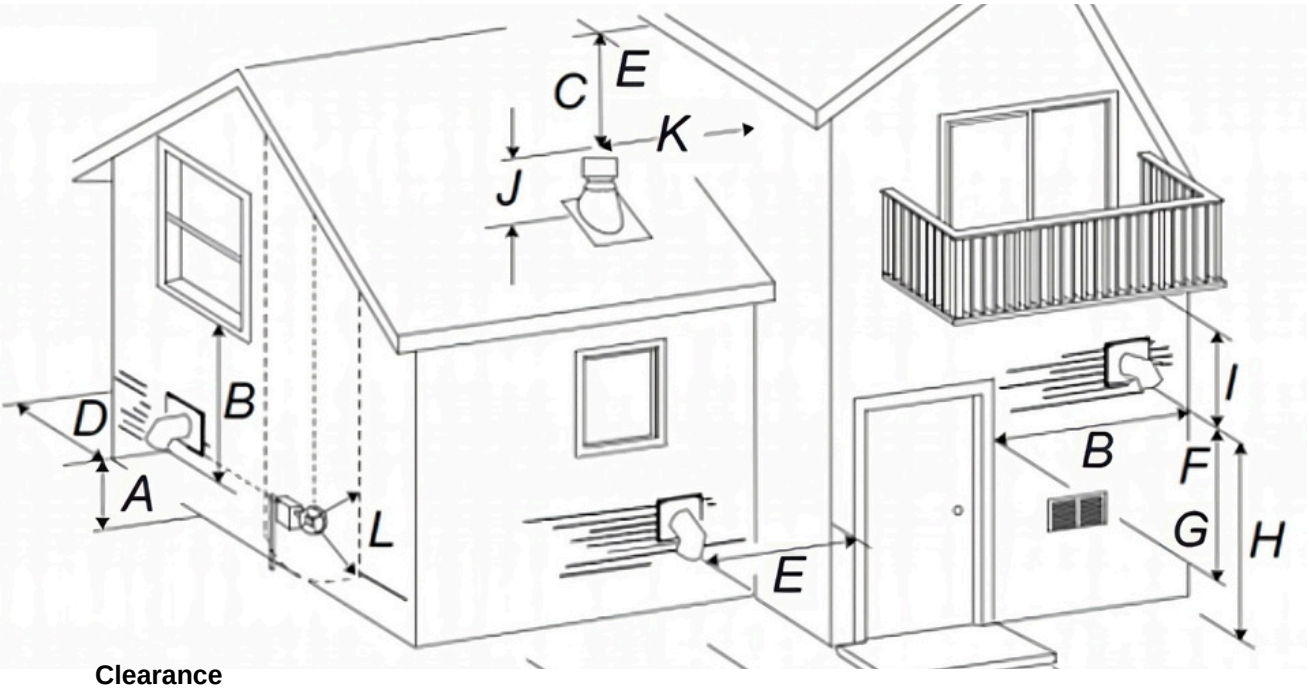
Vent Termination Clearances



Clearance		
A	24 Inches	Clearance above grade, porch, deck, or balcony. (including Vegetation.
B	48 Inches	Clearance beside or below any windows or doors that open.
	12 Inches*	Clearance above any windows or doors that open.
	18 Inches*	Clearance below windows and doors if outside intake air is used.
C	18 Inches	Vertical clearance to ventilated soffit located above the terminal within a horizontal distance of 2 feet from the centerline of the terminal.
D	0 Inches	Clearance to an outside corner wall.
E	12 Inches	Clearance to an inside combustible corner wall or combustible obstructions.
F & G	48 Inches	Clearance to an air supply inlet or intake of another appliance.
H	7 Feet**	Clearance above a paved sidewalk or driveway located on public property.
I	24 Inches**	Clearance under a veranda, porch, deck, or balcony.
J	24 Inches	Clearance above the roof.
K	24 Inches	Clearance from an adjacent wall, including neighboring buildings.
L	3 Feet within a height of 15 feet above the meter	Clearance to each side of center line, extended above natural gas or propane meter/regulator assembly or mechanical vent.

* Recommended to prevent condensation on windows and thermal breakage

** This is a recommended distance. Check local codes for additional requirements.

Vent Termination (Continued)

NOTICE:
To ensure proper venting of the stove, follow these guidelines for termination clearances:

- The stove vent must terminate outside the building.
- Horizontal terminations should extend at least 12" from the wall, while vertical terminations must protrude at least 24" from the roof surface.
- Use an approved cap or a 45-degree downturn with a rodent screen to prevent water from entering.
- If the termination is on a windy side of the house, consider using an approved house shield to prevent soot buildup on the house.
- Avoid locations where the vent can be blocked by snow or other materials.
- Do not terminate the vent in a way that allows flue gases or soot to enter or stain the building.
- Avoid terminating the vent in enclosed or semi-enclosed areas such as carports, garages, attics, crawl spaces, sun decks, porches, narrow walkways, or areas that can accumulate fumes.
- Do not terminate the vent below the air inlet.
- When venting directly through a wall, it's recommended to install at least 3 ft of vertical pipe to create a natural draft, preventing smoke or odor from venting into the home during a power outage.
- Maintain a minimum of 18" separation between the exhaust termination and the intake vent, keeping the exhaust termination at a higher point.

Adhering to these guidelines will ensure proper ventilation and prevent potential hazards or nuisances.

⚠CAUTION!
Ensure that your stove venting terminates above the stove and that the venting always follows a 1/4" rise per foot or the follow may occur:

- Improper drafting.
- Smoke may seep into the house.
- Excessive soot.

Smoke and Fire Safety Review

1. Heat radiation:
   - The surface of the pellet stove can become hot during operation. Take precautions to prevent accidental contact and burns.
   - Keep flammable materials, such as curtains, furniture, and decorations, at a safe distance from the stove to avoid heat-related hazards.
2. Carbon monoxide (CO) and smoke detectors:
   - Install carbon monoxide (CO) detectors and smoke detectors in the vicinity of the pellet stove.
   - Regularly test and maintain these detectors according to the manufacturer's instructions to ensure their proper functioning.
3. Fire safety:
   - Keep a fire extinguisher nearby in case of emergencies.
   - Develop and practice a fire escape plan with all occupants of the building, ensuring everyone knows how to exit safely in the event of a fire.
4. Regular inspections and maintenance:
   - Routinely inspect the pellet stove for any signs of wear, damage, or malfunction.
   - Clean the stove and venting system as recommended by the manufacturer to maintain optimal performance and reduce the risk of fire.
5. Children and pet safety:
   - Supervise children and pets around the pellet stove to prevent accidental contact or burns.
   - Use safety gates or barriers to restrict access to the stove when it is in operation.

Connecting to a Power source

Proper electrical connection is essential for the safe and reliable operation of your ComfortBilt HP41 pellet stove. Follow these guidelines for connecting the stove to a power source:

Outlet / breaker selection:

- It is recommended to use a dedicated 15A (or more) breaker for the electrical circuit powering the pellet stove.
- This dedicated breaker helps ensure that the stove receives sufficient power and reduces the risk of overloading the circuit.
- Choose a dedicated electrical outlet near the stove for connection.
- Ensure that the outlet provides the required 115V 60Hz power output and is easily accessible.
- Adhere to local electrical codes and regulations when selecting the outlet location.
- To ensure uninterrupted service for your pellet stove, please avoid using GFCI outlets or outlets equipped with dimmer or variation controls.
- The wiring should be capable of handling the power load of the stove without overloading the circuit.
- Ensure that the electrical outlet used for connection is grounded or consult an electrician to ensure proper grounding if needed.

Pure sine wave power output:

- The HP41 requires a pure sine wave power output signature.
- Certain power backup systems, such as generators, may not provide a pure sine wave and may not work properly with the stove.

Surge protector:

- To protect the sensitive electronics of the pellet stove, a surge protector is required.
- A surge protector helps prevent voltage spikes and fluctuations, reducing the risk of damage to the stove's electronics.
- Choose a surge protector with appropriate voltage and joule rating for the stove's power requirements.

Power cord:

- Inspect the power cord of the stove for any signs of damage, such as cuts or frays.
- Route the power cord in a manner that avoids kinks, sharp bends, or excessive strain.
- Keep the power cord away from heat sources, sharp objects, or areas where it may be tripped over.
- Never use extension cords or power strips as a primary power connection for the stove.

Testing:

- After connecting the stove to the power source, perform a test to ensure proper electrical connection.
- Turn on the stove and verify that all control panel functions and indicators are operational.
- If any issues or abnormalities are observed, immediately disconnect the power and consult the manufacturer or a qualified technician for assistance.

Safety precautions:

- It is important to adhere to local electrical codes at all times, and if you have any uncertainties, consult a certified electrician for guidance.
- Always exercise caution when working with electricity.
- Avoid modifying or tampering with the electrical components of the stove.

Electrical Ratings: 115 Volts AC, 60 Hz

- **Startup:**
  - 4.01 Amps / 481W
- **Running on High:**
  - 1.43 Amps / 172W

Final Install Checklist

Before proceeding with the first burn, it is important to perform a final installation checklist to ensure that all components of the ComfortBilt HP41 pellet stove are properly aligned and in place. The installation process may cause some components to shift out of alignment, so it is crucial to ensure everything is properly aligned before proceeding.
Physically inspect and verify the following components:

☐ **Venting System:**
- Inspect the venting system to ensure it is correctly connected, sealed, and free from any blockages or restrictions.

☐ **Flooring:**
- Verify that the stove is placed on a non-combustible floor or appropriate floor protection, following the recommended guidelines.

☐ **Clearances to Combustibles:**
- Double-check all clearances to combustibles, including walls, furniture, and other potential fire hazards, as specified in the manual.

☐ **Electrical Connections:**
- Ensure that all electrical connections, such as power supply and control panel connections, are securely and correctly made.

☐ **Door Security:**
- Confirm that all doors, including the front door and hopper lid are able to be closed tightly and securely.

☐ **Hopper Inspection:**
- Check that no foreign materials, debris, or obstructions have fallen into the hopper, which could impede pellet flow.

☐ **Igniter Position:**
- Verify that the igniter is in a good position, properly aligned, and securely mounted. The igniter should be centered in the tube and recessed no more than ½". *(This distance can vary between igniter styles)*

☐ **Fan Functionality:**
- Carefully spin the combustion and convection blower fans by hand to ensure they rotate freely without any resistance or unusual noises.

☐ **Boot Up:**
- Flip the main power switch at the back of the stove to the "On" position (- is on, 0 is off).
- The panel will boot up, displaying the logo screen and the current program being used. It should read: "HP41_U01 115V 60Hz" quickly before displaying the home screen.