

# Alpha Heating

PO Box 200  
6 Winding Way  
Standish, Me 04084

HVAC Service Order

Invoice Number

Name: Sallie Rich	Method Of Payment
Street: 39 Hall St	Cash Check Drivers Lic. Number
City: Portland, Maine	Credit Card
Cel: 2529468	Mc Visa Amex CV
Work Phone: 8313583	Exp
Technician: Gary Wilkins	
Work to be performed:	

*Bosch 100 greenstar Combi  
Gas Fired & hung on outside  
concrete basement wall  
conforming to manufacturer  
instructions*

*air handler  
Suspended by  
METAL RAIL FROM JOISTS*

Work Described in revised scope 6.10.15 will be completed to the approval of project manager with City of Portland, Cumberland County Housing Rehabilitation Program in compliance to all local, state and national codes.

Work will be completed in timely manner that will have the least impact upon the homeowner and in a timely manner. All labor is warranted and manufacturers warranties apply. Any necessary replacement of warranted material replaced within the manufacturers warranty period will be done with no additional labor charged.

Major components listed will be installed as per manufactures recommendations. Positioning of heating system is designed to accommodate a solar auxiliary panel on the rear portion of roof facing the south not included in this bid.

Materials and Services	
Removal of oil tank, furnace & water heater with components as specified and install a <del>HTP/Phoenix PH100-55</del> & Hydronic air handler conversion with new components spec. in 6.10.15	
Install 1" gas piping from meter with disconnect & shut off.	
Install line voltage input by licensed electrician	
Abandon chimney flue and seal as 4.2.3.2 requires	
Vent new heater through box sill as specified	
Install FirstCo. <b>FWA50-AQ[3]</b> LH return, 60,000 BTUH @ 140 deg. Hydronic Air Handler [non air conditioning] with humidifier, filter, circulating pump and freeze protect and all components to create a complete working	
Hot water heater intigated/hydronic air handler heating system	
New return ducts to be installed and connected to existing	
Insulate supply ducts with silver bubble wrap and seal with silver foil tape. Retape all duct joints then insulate.	
Install a new TCI and continous flow sprinkler head as spec.	
Thermostat- Honeywell RTH221B1021/A 1 week programmable	

All material and labor provided by Alpha Heating and will comply to the scope of work required in 6.10.15 revised		
Labor	rate	Amount

Recommendations:

use existing duct work

*Gary Wilkins  
June 22 2015*

Terms

### 5.8.2 Approved examples of horizontal and vertical venting installation

**NOTICE:**

- ▶ Place pipe supports every 5 feet (1525 mm) of horizontal and vertical run, beginning with support near boiler.
- ▶ The condensate must be disposed of in accordance with applicable rules.
- ▶ Periodic cleaning of the vent terminal and air-intake screens is mandatory.
- ▶ Avoid locating vent terminals near equipment or building features which can be subject to degradation from exhaust gases.
- ▶ If multiple boilers are installed in a row, allow at least 1 foot (305 mm) clearance between the vent termination of one and the combustion air intake of the other.

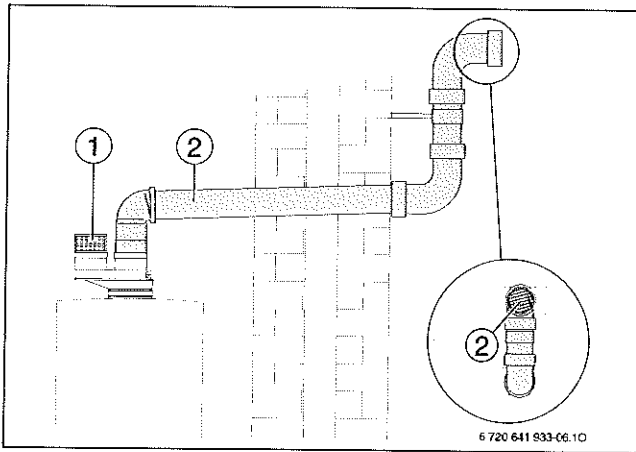


Fig. 27 Horizontal venting system (room air only)

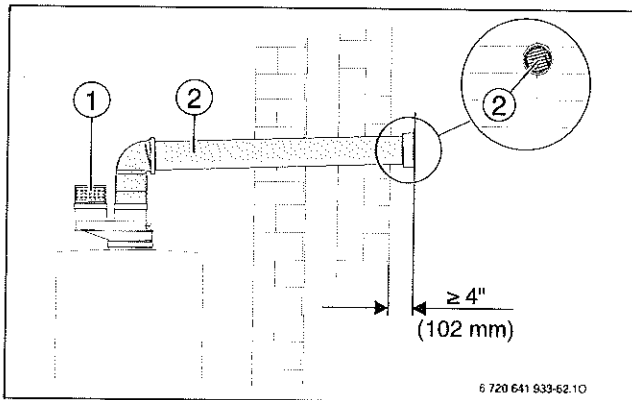


Fig. 28 Horizontal venting system (room air only)

**Key to Fig. 27 and Fig. 28:**

- 1 Intake
- 2 Exhaust

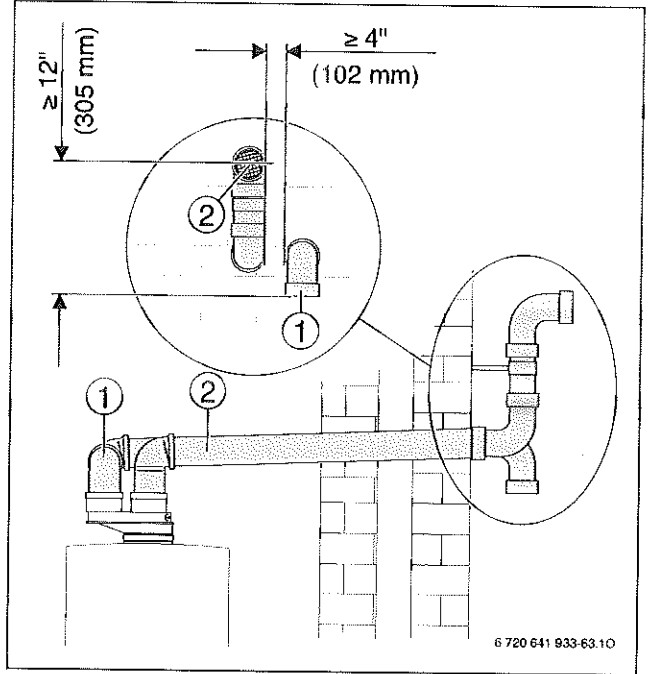


Fig. 29 Horizontal venting system (sealed combustion)

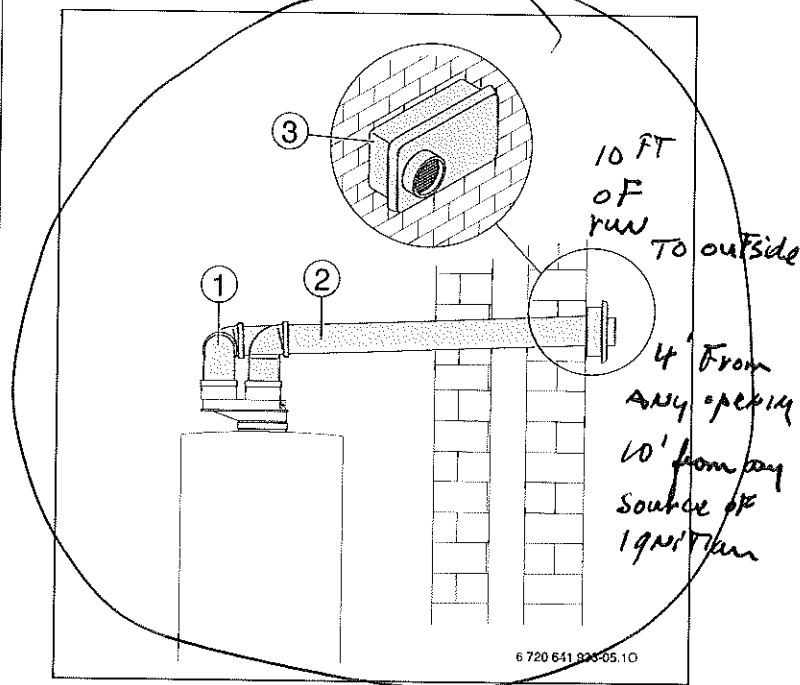


Fig. 30 Horizontal venting system (sealed combustion)

**Key to Fig. 29 and Fig. 30:**

- 1 Intake, behind exhaust
- 2 Exhaust
- 3 Wall termination