



Community Development Department  
 1200 L.W. Besinger Drive - Room 206  
 Carpentersville, IL 60110  
 Hours: M-F 8:30 AM – 5:00 PM  
 Phone (847) 551-3478  
 Fax (847) 426-0864  
<http://vil.carpentersville.il.us>

## Furnace Installation/Replacement

<b>ADDRESS:</b>	<b>Date Received:</b>
<b>Applicant Name:</b>	<b>Check in by:</b>
<b>Applicant Daytime Phone:</b>	<b>Date Returned to Applicant:</b>
<b>Applicant Email Address:</b>	

I understand that any missing or incomplete items or failure to clearly describe the proposed scope of work will cause this plan review to be delayed until the submittal is complete and/or the work is correctly described. Upon submittal of the remaining items, I understand that the plans are still subject to review by the Village and that corrective measures and/or additional information may be required.

\_\_\_\_\_  
 Applicant Signature

\_\_\_\_\_  
 Date

### Submittal Checklist, minimum requirements:

OK	N/A	Item Description
		Homeowners Association approval letter, if required
		Completed Application for Mechanical Work
		Detailed scope of work and equipment data
Comments / Other Submittals Required:		

### Type of Furnace Work: (please check one box below)

- Replacement of existing residential furnace (over-the-counter permit)
- Installation of new furnace or hydronic heating system (review required\*)

\*May qualify for One-Day Permit Review

## Minimum Requirements:

1. Submit a completed Application for Mechanical Work, along with data on the size of the equipment to be installed ( in BTU/hr. input rating or tons of cooling).
2. Furnaces must be installed in accordance with the manufacturer's installation instructions.
3. Furnaces must be accessible for service, repair and replacement with not less than 30" of working space provided.
4. Fuel shut off valves must be provided for each unit.
5. Programmable Thermostat - The thermostat shall be capable of controlling the heating and cooling system on a daily schedule to maintain different temperature set points at different times of day.
6. Vent connectors must be pitched at least 1/4-inch per foot, be securely supported, and joints fastened with sheet metal screws.
7. Furnaces must have a disconnect switch mounted within sight.
8. Maintain minimum clearances to combustibles from furnace and vent connectors.
9. Gas piping to be rigid black steel pipe, schedule 40.
10. Rusted and deteriorated vent connectors shall be replaced.
11. Installer shall conduct a safety check and verify proper operation of the furnace and components at start up.
12. Furnaces shall be sized in accordance with the building's heat load. Factors such as wall thickness, wall and ceiling insulation 'E' values of glazing, air leakage, sizing and construction of ductwork, and solar orientation must be considered. Heating equipment shall be sized based on building loads calculated in accordance with ACCA Manual J or other approved heating calculation methodologies.
13. Category IV condensing appliances shall have an auxiliary drain pan where damage to any building component will occur as a result of stoppage in the condensate drainage system. Exception: appliances that automatically shut down operation in the event of a stoppage in the condensate drainage system.
14. Furnaces installed in a confined space, less than 50 cubic feet per 1000 BTU input, must be provided with adequate combustion air to the space.
15. Category IV furnace flue pipe termination shall be minimum 36 inches from any electrical device or gas piping and 12 inches above finished grade.
16. New duct or transition fitting shall be sealed at the seams properly.
17. A programmable thermostat shall be installed with any replacement and/or new furnace.
18. Permit fee: \$50, payable at time of permit issuance
19. **Please note that there is a \$50 fee for re-inspections.**

## Minimum Required Inspections:

Final inspection is required when all work is completed.

## Helpful Contact Information:

J.U.L.I.E. 811  
Nicor (800) 730-6114  
Community Development (847) 551- 3478

## Schedule Inspections With:

Community Development Department