

Permit Fee: \$ _____ + State Fee: _____ = Total Fee: \$ _____

CA Fee _____ PERMIT #: _____

This Item For Office Use

**Town of Brookfield
PERMIT APPLICATION
MECHANICAL only**

| |
|-----------------------------|
| Tax Collector |
| _____ Approved _____ Denied |
| _____ Date: _____ |

APPLICATION DATE: _____ PROPERTY ID#: _____

| | | |
|---------------------------------|--|---------------------------|
| Property Street Address: | | Proposed Use: |
| Owner Name: | | Construction Type: |
| Owner Mailing Address: | | Phone: |
| Applicant Name: | | Phone: |
| Contractor Name: | | Phone: |
| Contractor Address: | | |
| Contractor License #: | | Exp. Date: |

Description of Work: _____

Type of Fuel: Gas Oil Electric Coal Wood Other

Enter number of New/Replacement Units:

| | | | | | |
|-------------------------|--|---------------------------|--|-------------------------|--|
| Oil Tank/Gallons | | Furnace | | Split System A/C | |
| Propane Tank | | Heat Pump | | A/C Compressor | |
| Other | | Gas/Oil Conversion | | Water Heater | |

Start Date: _____ **Completion Date:** _____ **Value of Work: \$** _____

I hereby certify that I am the owner of record of the above named property, or that the proposed work is authorized by the owner and that I have been authorized to make this application as the designated agent and I agree to conform to all applicable laws of this jurisdiction. In addition, if a permit for work is issued, I certify that the code official or the code official's authorized representative shall have the authority to enter areas covered by such permit at any reasonable hour to enforce the provisions of the code(s) applicable to such permit.

| | | | |
|-----------------------------------|-------------|--|-------------|
| Signature Owner/Agent | Date | Signature Contractor | Date |
| Building Official Approval | Date | Witness Authorization Acknowledgement | Date |
| Fire Marshal Approval | Date | | |

**Town of Brookfield
Land Use Office
100 Pocono Rd.
Brookfield, CT 06804**

ATTENTION PERMIT HOLDER

****It is the responsibility of the permit holder or agent to call for inspections (minimum 24 hours in advance). The permit holder is responsible for all construction for that project. An oversight of code requirement(s) during plan review does not relieve you of your responsibility for compliance. During inspections, you may be required to make changes to insure that the current building & fire codes are satisfied.****

- Per Chapter 127 of the Brookfield Code of Ordinances:

Building Inspections which result in a failure will incur an additional \$25.00 fee for each reinspection.

All reinspection fees shall be due and payable prior to the issuance of a Certificate of Occupancy.

- Per Chapter 242 of the Brookfield Code of Ordinances:

Site Stabilization Inspections which result in a failure will incur an additional \$25.00 fee for each reinspection.

All reinspection fees shall be due and payable prior to bond release.

I acknowledge that per the Brookfield Code of Ordinances, I will be responsible for reinspection fees as outlined above. I also understand that it is my responsibility to call for inspections of the project.

Applicant/Agent signature

Date

Address: _____ Permit No. _____

**Town of Brookfield Building Department
Calculations for Combustion Air**

This form must be filled out for all of the following Permits:

1. All new homes
2. All finished basements
3. All boiler, furnace, and water heater replacements

What is the total combined gross btu ratings of all appliances located in the boiler room or rooms?

What is the volume of this room? (length x width x height) _____

Does the volume equal more than 50 cu. ft. for each 1,000 btu's of combined appliance ratings?

If it does, combustion air is not required.

If it is less than 50 cubic feet for each 1,000 btu's of combining rating, combustion air is required.

How will compliance with combustion air be achieved? Check one below.

- a.) interior air _____
for interior air, what is the volume of the room the air is being taken from _____
- b.) air directly from the exterior of the building thru screened openings _____
- c.) air directly from the outside thru horizontal ducts _____

What is the calculated size of each opening? _____

Where will each opening be located? _____

Copies of your calculations must be submitted to the Building Official

I attest that I have done the above required calculations based on Chapter 17 of the 2003 IRC Mechanical Code or Chapter 7 of the 2003 IMC

Signed _____

Printed Name _____

Company _____

What is the total gross btu ratings for all fuel burning appliances?

| | | |
|----------|----------------------------------|---------------|
| Example: | 2 furnaces at 100,000 btu's = | 200,000 btu's |
| | 1 water heater at 85,000 btu's = | 85,000 btu's |
| Total | | 285,000 btu's |

How many cubic feet are contained in the room that the appliances are located?

Example:

The room is 40 feet long by 28 feet wide by 7 foot 6 inches high.
This equals 8,400 cubic feet.

The code requires a room to be 50 cubic feet for each 1,000 btu's of appliances.
So, in the above illustration, we have 285,000 btu's, so we would need 50×285 or 14,250 cubic feet.
So, for the above example, the room the boiler is in would be defined as a confined space, so we would need to introduce Combustion air.

Where we get the air for combustion will determine what size openings are required.

If we are getting the air from an interior space we will need 1 square inch for each 1,000 btu's of combined rating. For the above example, we will need each opening to be 285 square inches. One opening within 12 inches of the ceiling and one opening within 12 inches of the floor.

If we are getting air directly from the outside through louvers, we will need 1 square inch for each 4000 btu's. This will require 72 square inches but the code has set 100 square inches as the minimum size opening for combustion air. So, we will require 2 openings 100 square inches each located as above.

If we are getting air from the outside through horizontal ducts, we will require 1 square inch for each 2000 btu's. So, for the above example, we will require 2 openings, each opening to be $285 \div 2 = 143$ square inches located as above.

Remember, if an interior source is being used, the space we are getting the air from must meet the 50 cubic feet for each 1000 btu's rule also. The size of the boiler room can be combined with the size of the room that the air is being taken from to achieve this volume. All calculations must be approved by the Building Official.

Section 710

Opening obstructions

Metal louvers free air is 75%.

Wooden louvers free air is 25%.

TO CONTRACTORS:

CT General Statutes (Effective January 1, 2005):

§20-338b Building Permit Applications. Who may sign.

Any licensed contractor who seeks to obtain a permit from a building official may sign the building permit application personally or delegate the signing of the building permit application to an employee, subcontractor or other agent of the licensed contractor, provided, the licensed contractor's employee, subcontractor or other agent submits to the building official a dated letter on the licensed contractor's letterhead, signed by the licensed contractor, stating that the bearer of the letter is authorized to sign the building permit application as the agent of the licensed contractor. The letter shall not be a copy or facsimile, but shall be an original letter bearing the original signature of the licensed contractor. The letter shall also include:

1. The name of the municipality where the work is to be performed;
2. The job name or description of the job;
3. The starting date of the job;
4. The name of the licensed contractor;
5. The name of the licensed contractor's agent; and
6. The license numbers of all contractors to be involved in the work.