

**ST. CLAIR TOWNSHIP**

1539 S. BARTLETT ROAD, ST. CLAIR, MI 48079

810-329-9042, FAX 810-329-1198 FAX

www.stclairtp.org

Authority: 1972 PA 230

Completion: Mandatory to obtain permit

Penalty: Permit cannot be issued

**Mechanical Permit Application****I. Job Location**

Name of Owner/Agent		HAS A BUILDING PERMIT BEEN OBTAINED FOR THIS PROJECT	
		<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> NOT REQUIRED	
Street Address & Job Location (street number & name)		City, State, Zip Code	County:

**II. Contractor/Homeowner Information**

Applicant Type: Contractor <input type="checkbox"/> Homeowner <input type="checkbox"/>	Name /Contractor of Record	Company Name	License Number	Expiration Date
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**Email Address**

Address (Street # & Name)				City	State	Zip Code
Telephone Number (Include Area Code)		Federal Employee ID Number (or reason for exemption)				
Workers Compensation Insurance Carrier (or reason for exemption)		MESC Employer Number (or reason for exemption)				

**III. Type of Job -- Description of Work**

Single Family <input type="checkbox"/> New <input type="checkbox"/>	Special Inspection <input type="checkbox"/>	Premanufactured Home Setup (State Approved) <input type="checkbox"/>	State Owned <input type="checkbox"/>
Other <input type="checkbox"/> Alteration <input type="checkbox"/>	LP Tank <input type="checkbox"/>	Manufactured Home Setup (Hud Mobile Home) <input type="checkbox"/>	School <input type="checkbox"/>

**IV. Plan Review Required**

Plans must be submitted with an Application for Plan Examination and the appropriate deposit before a permit can be issued, except as listed below.

Plans are not required for the following:

- One & two-family dwellings when the total building heating/cooling system input rating is 375,000 BTU's or less
- Alteration & repair work determined by the mechanical official to be of a minor nature
- Business mercantile, and storage buildings having HVAC equipment only, with one fire area and not more than 3,500 sq. feet.
- Work completed by a governmental subdivision or state agency costing less than \$15,000.00

If work being performed is described above, check box below stating "Plans Not Required"

What is the building size square footage? \_\_\_\_\_ What is the input rating of the heating system in this building? \_\_\_\_\_

**Plans are required** for all other building types and shall be prepared by or under the direct supervision of an architect or engineer licensed pursuant to 1980 PA 299 and shall bear that architect's or engineer's seal & signature.

Plan Review Submission No. \_\_\_\_\_ PLANS NOT REQUIRED

**V. Applicant Signature**

Section 23a of the state construction code act of 1972, 1972 PA 230, MCL 125.1523A, prohibits a person from conspiring to circumvent the licensing requirements of this state relating to person who are to perform work on a residential building or residential structure. Violators of Section 23a are subject to civil fines.

Signature of Contractor/Homeowner (homeowners signature indicates compliance with Section VI. Homeowner Affidavit)	Date
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**VI. Homeowner Affidavit**

I hereby certify the mechanical work described on this permit application shall be installed **by myself in my own home**, in which I am living or about to occupy. All work shall be installed in accordance with the State Mechanical Code **and shall not be enclosed, covered up, or put into operation** until it has been **inspected and approved** by the Mechanical Inspector. I will cooperate with the Mechanical Inspector and assume the responsibility to arrange for necessary inspections.

**Please Complete Application on Back Side**



## Mechanical Code Changes for 2015 Michigan Residential Code

1. New residences will be required to have a whole house ventilation system. R303.4 Natural Ventilation is no longer acceptable unless house has an air exchange rate 5 ACH or more, which would then be a violation of the energy code which requires an ACH rate of no more than 4.

WHOLE-HOUSE MECHANICAL VENTILATION SYSTEM. An exhaust system, supply system, or combination thereof that is designed to mechanically exchange indoor air for outdoor air where operating continuously or through a programmed intermittent schedule to satisfy the whole-house ventilation rate.

2. Duct systems located outside the building envelope will require duct pressure testing. The total leakage test is not required for ducts and air handlers located entirely within the building envelope. N1103.2.2
3. Duct joints will have to be sealed. Duct seams which are button lock, or snap lock seams will have to be sealed as well. M1601.4.1

Exception. For ducts having a static pressure classification of less than 2 inches of water column, additional closure systems shall not be required for continuously welded joints and seams and locking-type joints and seams of other than the snap-lock and button-lock types. M1601.4.1, Exception 3, pg. 477

4. Whole house ventilation efficiency for bath fans and air handler units must have an efficiency of 2.8 CFM per watt. Furnace blower motor shall be powered by an electronically commutated motor (ECM). Table N1103.5.1, pg. 450
5. Bathroom, utility room fan <90 CFM = 1.4 cfm/watt efficiency. Where mechanical ventilation fans are integral to tested and listed HVAC equipment, they shall be powered by an ECM. N1103.5.1, Page 449
6. Venting of Bath fans have limited lengths for ductwork per Table M1506.2. Fans also must be capable of producing .25" WC for the required CFM. Bath fans must have minimum capacity of 50 CFM intermittent or 20 CFM continuous. Kitchen exhaust fans must have a capacity of 100CFM intermittent or 25 CFM continuous. Fans must be capable of producing required CFM at 0.25" WC. M1507.3.3(1)
7. The whole house mechanical ventilation system shall provide outdoor air at a continuous rate of not less than that determined in accordance with Table M1507.3.3(1). M1507.3.3

Exception: The whole-house mechanical ventilation system is permitted to operate intermittently where the system has controls that enable operation for not less than 25-percent of each 4-hour segment and the ventilation rate prescribed in Table M1507.3.3(1) is multiplied by the factor determined in accordance with Table M1507.3.3(2).

8. Return air systems can no longer use building framing cavities for ducts or plenums. Return air must be sheet metal or other approved duct materials. N1103.2.3<sup>1/2</sup> pg. 449

Note: M1601.1.1, part 7 is overridden by N1103.2.3.

9. All furnaces and air handling units must comply with ASHRAE standard 193 for air leakage rate not more than 2%, and must state this in equipment literature. N1103.2.2.1

There are other changes in the code; it is strongly recommended that contractors obtain a copy of the code and become familiar with all the changes.

R1005.7

11. Pre-fabricated metal solid fuel fireplaces chimneys cannot have elbows that exceed 30 degrees from the vertical, and the chimney cap must be pitched 10 degrees to allowed drainage of water, and shall lap down 4". R1005.4

10. Whole house ventilation system must operate in a continuous mode or have a control which cycles at least 25% run-time in a 4 hour segment, which requires more ventilation air than table M1507.3.3(2).