

# Make Check Payable to Charter Township of Garfield

Garfield Township  
 Building Department  
 3848 Veterans Drive  
 Traverse City, MI 49684

## APPLICATION FOR PLAN EXAMINATION AND BUILDING PERMIT

**IMPORTANT - APPLICANT TO COMPLETE ALL ITEMS IN SECTIONS I, II, III, IV, AND V**

### I. LOCATION OF BUILDING

AT: \_\_\_\_\_  
 Number Street City, State, Zip

BETWEEN: \_\_\_\_\_ AND \_\_\_\_\_

SUBDIVISION: \_\_\_\_\_ LOT#: \_\_\_\_\_ LOT SIZE: \_\_\_\_\_

ANY PORTION OF THE PROPOSED STRUCTURE IN A FLOOD PLAIN?  YES\*  NO

\* IF YES, AN ELEVATION CERTIFICATE AND ENGINEERED FOUNDATION DRAWINGS WILL BE REQUIRED.

### II. TYPE AND COST OF BUILDING - ALL APPLICANTS COMPLETE PARTS A - D

#### A. TYPE OF IMPROVEMENT

- New Building
  - Stick Built on Site
  - Modular # of Sections \_\_\_\_\_
  - Manufactured \_\_\_\_ New \_\_\_\_ Used  
 Dimensions \_\_\_\_\_ X \_\_\_\_\_
- Addition
- Alteration/Build-Out of Existing
- Repair/Replacement
- Demolition # of Units \_\_\_\_\_  
 Are All Utilities Disconnected?  Y  N
- Moving or Relocation
- Foundation Only

#### B. PROPOSED USE (For Demolition, Check Most Recent Use of Structure)

##### RESIDENTIAL

- One Family
- Two or More Families # of Units \_\_\_\_\_
- Hotel, Motel, Dormitory # of Units \_\_\_\_\_
- Garage
- Carport
- Swimming Pool
  - In Ground  Above Ground
- Solar Panels
  - Ground Mount  Roof Mount
- Other - Specify \_\_\_\_\_

##### NON-RESIDENTIAL

- Amusement, Recreational
- Church, Other Religious Use
- Industrial
- Parking Garage
- Service Station/Repair Garage
- Hospital, Institutional
- Office, Bank, Professional
- Public Utility
- School, Library, or Other educational
- Stores, Retail, Mercantile
- Tanks, Towers
- Other - Specify \_\_\_\_\_

#### C. OWNERSHIP

- Private (An Individual, Corporation, Non-Profit Institution, Etc.)
- Public (Federal, State or Local Government)

#### D. COST

BASE Cost of Improvement:

1. Electrical
2. Plumbing
3. Heating A/C
4. Other (Elevator, etc.)

Total Cost Of Improvement

(Omit Cents)

\$ \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \$ \_\_\_\_\_

Non-residential - describe in detail proposed use of buildings, e.g., food processing plant, machining shop, laundry building at hospital, elementary school, secondary school, college, parochial school, parking garage, rental office building, office building at industrial plant. If use of existing building is being changed, enter proposed use.

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

### III. SELECTED CHARACTERISTICS OF BUILDING - FOR NEW BUILDINGS AND ADDITIONS, COMPLETE PARTS E - L.

FOR DEMOLITIONS COMPLETE PART J ONLY; FOR ALL OTHERS SKIP TO IV.

#### E. PRINCIPAL TYPE OF FRAME

- Masonry (Wall Bearing)
- Wood Frame Industrial
- Structural Steel
- Reinforced Concrete
- Other-Specify \_\_\_\_\_

#### F. PRINCIPAL TYPE OF HEATING FUEL

- Natural Gas
- Oil
- Electricity
- Geothermal
- Other-Specify \_\_\_\_\_

#### G. TYPE OF SEWAGE DISPOSAL

- Public/Municipa
- Private (On-Lot System)

#### H. TYPE OF WATER SUPPLY

- Public/Municipal
- Private (Well, Cistern)

#### I. TYPE OF MECHANICAL

- Will There Be Central Air Conditioning?  
 YES  NO
- Will There Be An Elevator?  
 YES  NO

#### J. DIMENSIONS

Number of Stories \_\_\_\_\_  
 Total Square Feet of Floor Area, All Floors, Based  
 On Exterior Dimensions \_\_\_\_\_  
 Total Land Area, SQ. FT. \_\_\_\_\_

#### K. NUMBER OF OFF-STREET PARKING SPACES

Enclosed (Garage) \_\_\_\_\_  
 Outdoors \_\_\_\_\_

#### L. RESIDENTIAL BUILDINGS ONLY

Number of Bedrooms \_\_\_\_\_  
 Number of Bathrooms:  
 Full \_\_\_\_\_ Partial \_\_\_\_\_

**IV. IDENTIFICATION**

**A. OWNER OR LESSEE NAME:**

Name \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_

Telephone Number \_\_\_\_\_  
Cell Phone Number \_\_\_\_\_  
Fax Number \_\_\_\_\_  
State & Zip Code \_\_\_\_\_

**B. ARCHITECT OR ENGINEER NAME:**

Name \_\_\_\_\_  
Address \_\_\_\_\_  
City/State/Zip \_\_\_\_\_

Telephone Number \_\_\_\_\_  
Cell Phone Number \_\_\_\_\_  
Fax Number \_\_\_\_\_  
License # & Expiration \_\_\_\_\_

**C. CONTRACTOR NAME:**

Name \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_  
Builder's License # \_\_\_\_\_

Telephone Number \_\_\_\_\_  
Cell Phone Number \_\_\_\_\_  
Fax Number \_\_\_\_\_  
State \_\_\_\_\_ Zip Code \_\_\_\_\_  
Expiration Date \_\_\_\_\_

Federal Employer ID # Or Reason For Exemption:

Worker's Comp Insurance Carrier Or Reason For Exemption:

MESC Employer Number Or Reason For Exemption:

**V. APPLICANT INFORMATION**

**Applicant Is Responsible For The Payment Of All Fees/Charges Applicable To The Application And Must Provide The Following Information:**

Name \_\_\_\_\_  
Address \_\_\_\_\_  
City/State/Zip Code \_\_\_\_\_

Telephone Number \_\_\_\_\_  
Cell Phone Number \_\_\_\_\_  
Fax Number \_\_\_\_\_

Email Address \_\_\_\_\_

Preferred Method of Contact for Plan Reviews \_\_\_\_\_

Federal Employer ID # Or Reason For Exemption:

I hereby certify that the proposed work is authorized by the owner of record and that I have been authorized by the owner to make this application as his/her agent, and we agree to conform to all applicable laws of the State of Michigan. All information submitted on this application is accurate to the best of my knowledge.

**Section 23a of the State Construction Code Act of 1972, Act No. 230 of the Public Acts of 1972, being Section 125.1253a of the Michigan Compiled laws, prohibits a person from conspiring to circumvent the licensing requirements of this state relating to persons who are to perform work on a residential building or a residential structure. Violators of Section 23a are subject to civil fines.**

**APPLICANT SIGNATURE:**

**APPLICATION DATE:**

**PRINT APPLICANT NAME:**

**\*\*\* REMODELS ONLY - COST OF PROJECT:**

**NOTES - FOR DEPARTMENT USE ONLY:**



# Charter Township of Garfield

Grand Traverse County

3848 VETERANS DRIVE  
TRAVERSE CITY, MICHIGAN 49684  
PH: (231) 941-1620 • FAX: (231) 941-1588  
www.garfield-twp.com

## LAND USE PERMIT APPLICATION

### 1) Owner / Applicant Information

Owner _____	Applicant _____
Address _____	Address 2 _____
City, State, Zip Code _____	City, State, Zip Code 2 _____
Phone Number _____	Phone Number 2 _____
Email _____	Email 2 _____

An applicant who is acting as the authorized agent for the owner of the property listed above shall provide a date of birth and Drivers License number.

_____ Date of Birth	_____ Drivers License #
---------------------	-------------------------

### 2) Property Information

Property Address: \_\_\_\_\_

Parcel ID #: 28-05- \_\_\_\_\_

Subdivision Name: \_\_\_\_\_ Lot#: \_\_\_\_\_

Proposed Use: \_\_\_\_\_ Current Use: \_\_\_\_\_

Setbacks: F \_\_\_\_\_ LS \_\_\_\_\_ RS \_\_\_\_\_ R \_\_\_\_\_ Bldg Height: \_\_\_\_\_

### 3) Request

Single Family Home: \_\_\_\_\_ Duplex: \_\_\_\_\_ Multi-Family: \_\_\_\_\_ Change of Use: \_\_\_\_\_

Commercial Bldg: \_\_\_\_\_ Industrial Bldg: \_\_\_\_\_ Grading: \_\_\_\_\_ Road: \_\_\_\_\_

Accessory Structure: \_\_\_\_\_ Addition: \_\_\_\_\_ Deck: \_\_\_\_\_ Other: \_\_\_\_\_

Description: \_\_\_\_\_

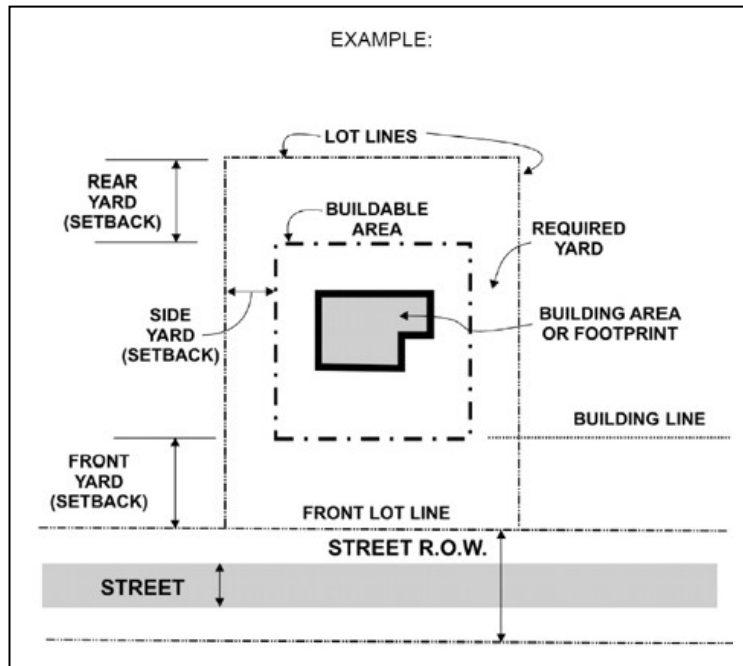
**4) Permits:**

The following agency permits are required (if applicable) prior to the issuance of a Land Use Permit and at the time of submittal of the application:

- Soil Erosion Permit
- Health Department (well/septic) or DPW Permit (water/sewer)
- Driveway Permit (Road Commission or M-DOT)
- MDEQ & Great Lakes Energy Permits
- METRO Fire Site Plan Review

**5) Dimensional Site Plan:**

Please provide a detailed sketch is required, which includes all structures on the property, proposed structures with dimensions, parcel dimensions, setbacks, Road Right of Way, and height. See example below.



**6) Affidavit:**

The undersigned affirms that he/she or they is (are) the owner, or authorized agent of the owner, involved in the application and all of the information submitted in this application, including any supplemental information, is in all respects true and correct. The undersigned further acknowledges that willful misrepresentation of information will terminate this permit application and any permit associated with this document.

\_\_\_\_\_  
Owner Signature

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Date

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

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Date



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## REQUIREMENTS FOR RESIDENTIAL PLAN REVIEW

THE REQUIREMENTS FOR DRAWINGS TO ACCOMPANY THE APPLICATION FOR BUILDING PERMIT ARE ADDRESSED IN THE MICHIGAN RESIDENTIAL CODE SECTION R106.1.1. CONSTRUCTION DOCUMENTS SHALL BE OF SUFFICIENT CLARITY TO INDICATE THE LOCATION, NATURE, AND EXTENT OF THE WORK PROPOSED AND SHOW IN DETAIL THAT IT WILL CONFORM TO THE PROVISIONS OF THE CODE.

AS A MINIMUM THIS OFFICE WILL REQUIRE TWO SETS OF DRAWINGS,  
DRAWN TO SCALE OF THE FOLLOWING:

1. SITE PLAN SHOWING THE LOCATION OF THE BUILDING OR STRUCTURE WITH DIMENSIONS IN RELATION TO LOT LINES, STREETS, AND OTHER BUILDINGS.
2. FOOTING AND FOUNDATION PLANS SHOWING MATERIALS AND DIMENSIONS OF PROPOSED WORK. INDICATE SUPPORTING BEAMS, POSTS, OR PIERS.
3. FLOOR PLANS TO SCALE OF EACH FLOOR INCLUDING EXTERIOR DIMENSIONS, LOCATION OF WINDOWS AND DOORS, AND IDENTIFICATION OF ROOMS OR SPACES. IDENTIFY BEAMS, HEADERS, AND JOISTS BY SIZE AND SPECIES. IF AN ADDITION, SHOW THE EXISTING BUILDING FLOOR PLAN WITH ROOM USES.
4. EXTERIOR ELEVATIONS SHOWING WINDOWS, DOORS, DECKS, DORMERS, OTHER PROJECTIONS, AND GRADE LINES.
5. SECTION THROUGH EXTERIOR WALL FROM FOOTING TO HIGHEST POINT ON ROOF, JOISTS BEAMS, RAFTERS, TRUSSES, OR OTHER STRUCTURAL MEMBERS. IDENTIFY MEMBERS AND INDICATE SIZES.

**THE PURPOSE OF THE PLAN SUBMITTAL IS TO DETERMINE CODE COMPLIANCE AND IDENTIFY ANY REQUIRED CHANGES PRIOR TO ACTUAL CONSTRUCTION.**

**THE PLANS MUST SHOW COMPLIANCE WITH APPLICABLE CODE REQUIREMENTS. CONSTRUCTION DRAWINGS SHALL SHOW THE SIZE, SECTION, AND RELATIVE LOCATION FOR ALL STRUCTURAL MEMBERS.**

# MICHIGAN ENERGY CODE 2015

## PRESCRIPTIVE COMPLIANCE WORK SHEET ZONE 6A:

SITE ADDRESS: \_\_\_\_\_ CITY / TOWNSHIP: \_\_\_\_\_  
 \_\_\_\_\_ DATE: \_\_\_\_\_

INSULATED AREA	MINIMUM R-VALUE	PROPOSED R-VALUE
CEILING 1: FLAT OR SCISSOR TRUSS AREA _____ SF	R-49 WITH STANDARD TRUSS OR R-38 OVER WALL PLATE	
CEILING 2: FLAT OR SCISSOR TRUSS AREA _____ SF	R-49 WITH STANDARD TRUSS OR R-38 OVER WALL PLATE	
CEILING 3: CATHEDRAL AREA _____ SF	R-30 WITH AREA < 20% OF TOTAL CEILING AND <500 SF	

INSULATED AREA	MINIMUM R-VALUE	PROPOSED R-VALUE
WOOD FRAME WALL 1:	R-20 CAVITY OR R-13 CAVITY WITH R-5 INSULATED SHEATHING. NOTE 1	
WOOD FRAME WALL 2:	R-20 CAVITY OR R-13 CAVITY WITH R-5 INSULATED SHEATHING. NOTE 1	
WOOD FRAME WALL 3:	R-20 CAVITY OR R-13 CAVITY WITH R-5 INSULATED SHEATHING. NOTE 1	

INSULATED AREA	MINIMUM R-VALUE	PROPOSED R-VALUE
FLOOR 1: OVER UNCONDITIONED SPACE	R-30 OR TO FILL CAVITY R-19 MINIMUM	
FLOOR 2: OVER UNCONDITIONED SPACE	R-30 OR TO FILL CAVITY R-19 MINIMUM	

INSULATED AREA	MINIMUM R-VALUE	PROPOSED R-VALUE
BASEMENT WALL: TOP OF WALL TO FLOOR LINE OR 10' BELOW GRADE	R-15 CONTINUOUS OR R-19 CAVITY	

INSULATED AREA	MINIMUM R-VALUE	PROPOSED R-VALUE
SLAB EDGE:	R-10 FOR 4FT PLAIN SLAB R-15 FOR 4FT HEATED SLAB	

INSULATED AREA	MINIMUM R-VALUE	PROPOSED R-VALUE
CRAWL SPACE WALL:	R-15 CONTINUOUS R-19 CAVITY	

FENESTRATION	MAXIMUM U-FACTOR	PROPOSED U- FACTOR
DOORS AND WINDOWS	0.32	
SKYLIGHT	0.55	

NOTE 1: WHERE STRUCTURAL SHEATHING COVERS LESS THAN 25% OF WALL AREA R-5 CONTINUOUS INSULATION IS NOT REQUIRED OVER STRUCTURAL SHEATHING AREAS.

NOTE 2: PLANS ARE TO INDICATE ALL INSULATION MATERIALS AND R-VALUES. VALUES INDICATED ON COMPLIANCE DOCUMENTS ARE TO COINCIDE WITH VALUES INDICATED ON THE PLANS.

NOTE 3: GENERAL AND MANDATORY REQUIREMENTS SHALL BE MET

NOTE 4: SEE CODE TEXT FOR ADDITIONAL NOTES AND ALTERNATIVES

# MICHIGAN ENERGY CODE 2015

## PRESCRIPTIVE COMPLIANCE WORK SHEET ZONE 6A:

SITE ADDRESS: \_\_\_\_\_ CITY/TOWNSHIP: \_\_\_\_\_

\_\_\_\_\_ DATE: \_\_\_\_\_

### PROPOSED BUILDING

#### ROOF/CEILING:

$$A1 \text{ _____} / R1 \text{ _____} = UA \text{ _____}$$

$$A2 \text{ _____} / R2 \text{ _____} = UA \text{ _____}$$

$$A3 \text{ _____} / R3 \text{ _____} = UA \text{ _____}$$

$$TOTAL \text{ ROOF/CEIL } UA = \text{ _____}$$

#### SKYLIGHTS:

$$A1 \text{ _____} \times U1 = UA \text{ _____}$$

$$A2 \text{ _____} \times U1 = UA \text{ _____}$$

$$TOTAL \text{ SKYLIGHT } UA = \text{ _____}$$

#### FRAME WALL: (25% FRAMING, 75% CAVITY)

$$A1 \text{ _____} \times .75 / R1 \text{ _____} = UA \text{ _____}$$

$$A1 \text{ _____} \times .25 / R-5 = UA \text{ _____}$$

$$A2 \text{ _____} \times .75 / R2 \text{ _____} = UA \text{ _____}$$

$$A2 \text{ _____} \times .25 / R-5 = UA \text{ _____}$$

$$A3 \text{ _____} \times .75 / R3 \text{ _____} = UA \text{ _____}$$

$$A3 \text{ _____} \times .25 / R-5 = UA \text{ _____}$$

$$TOTAL \text{ FRAME WALL } UA = \text{ _____}$$

#### BAND JOIST:

$$A1 \text{ _____} / R1 \text{ _____} = UA \text{ _____}$$

$$A2 \text{ _____} / R2 \text{ _____} = UA \text{ _____}$$

$$TOTAL \text{ BAND JOIST } UA = \text{ _____}$$

### STANDARD BUILDING

#### ROOF/CEILING:

$$A1 \text{ _____} \times 0.026 = UA \text{ _____}$$

$$A2 \text{ _____} \times 0.026 = UA \text{ _____}$$

$$A3 \text{ _____} \times 0.026 = UA \text{ _____}$$

$$TOTAL \text{ ROOF/CEIL } UA = \text{ _____}$$

#### SKYLIGHTS:

$$A1 \text{ _____} \times 0.55 = UA \text{ _____}$$

$$A2 \text{ _____} \times 0.55 = UA \text{ _____}$$

$$TOTAL \text{ SKYLIGHT } UA = \text{ _____}$$

#### FRAME WALL:

$$A1 \text{ _____} \times 0.057 = UA \text{ _____}$$

$$A2 \text{ _____} \times 0.057 = UA \text{ _____}$$

$$A3 \text{ _____} \times 0.057 = UA \text{ _____}$$

$$TOTAL \text{ FRAME WALL } UA = \text{ _____}$$

#### BAND JOIST:

$$A1 \text{ _____} \times 0.057 = UA \text{ _____}$$

$$A2 \text{ _____} \times 0.057 = UA \text{ _____}$$

$$TOTAL \text{ BAND JOIST } UA = \text{ _____}$$

$$TOTAL \text{ PAGE 1 } UA = \text{ _____}$$

$$TOTAL \text{ PAGE 1 } UA = \text{ _____}$$

NOTE: FRAME WALL CALCULATION USED 25% FRAMING AND 75% CAVITY WALLS 16" O.C.  
USE 22% FRAMING AND 78% CAVITY FOR WALLS 24" O.C.

# MICHIGAN ENERGY CODE 2015

## PRESCRIPTIVE COMPLIANCE WORK SHEET ZONE 6A:

SITE ADDRESS: \_\_\_\_\_

### PROPOSED BUILDING

#### FENESTRATION, WINDOWS:

$$A1 \text{ _____} / U1 \text{ _____} = UA \text{ _____}$$

$$A2 \text{ _____} / U2 \text{ _____} = UA \text{ _____}$$

$$A3 \text{ _____} / U3 \text{ _____} = UA \text{ _____}$$

$$\text{TOTAL WINDOW UA} = \text{_____}$$

#### FENESTRATION, DOORS:

$$A1 \text{ _____} \times U1 \text{ _____} = UA \text{ _____}$$

$$A2 \text{ _____} \times U2 \text{ _____} = UA \text{ _____}$$

$$A3 \text{ _____} \times U3 \text{ _____} = UA \text{ _____}$$

$$\text{TOTAL DOOR UA} = \text{_____}$$

#### FLOORS OVER UNCONDITIONED SPACES: (VENTED CRAWLS AND GARAGES)

$$A2 \text{ _____} / R2 \text{ _____} = UA \text{ _____}$$

$$A3 \text{ _____} / R3 \text{ _____} = UA \text{ _____}$$

$$\text{TOTAL FLOOR UA} = \text{_____}$$

#### BASEMENT WALL: (TOP OF WALL TO FLOOR)

$$A2 \text{ _____} / R2 \text{ _____} = UA \text{ _____}$$

$$A3 \text{ _____} / R3 \text{ _____} = UA \text{ _____}$$

$$\text{TOTAL WALL UA} = \text{_____}$$

#### BASEMENT WINDOW:

$$A2 \text{ _____} / R2 \text{ _____} = UA \text{ _____}$$

$$A3 \text{ _____} / R3 \text{ _____} = UA \text{ _____}$$

$$\text{TOTAL WINDOW UA} = \text{_____}$$

$$\text{TOTAL PAGE 2 UA} = \text{_____}$$

### STANDARD BUILDING

#### FENESTRATION, WINDOWS:

$$A1 \text{ _____} \times 0.320 = UA \text{ _____}$$

$$A2 \text{ _____} \times 0.320 = UA \text{ _____}$$

$$A3 \text{ _____} \times 0.320 = UA \text{ _____}$$

$$\text{TOTAL WINDOW UA} = \text{_____}$$

#### FENESTRATION, DOORS:

$$A1 \text{ _____} \times 0.320 = UA \text{ _____}$$

$$A2 \text{ _____} \times 0.320 = UA \text{ _____}$$

$$A3 \text{ _____} \times 0.320 = UA \text{ _____}$$

$$\text{TOTAL DOOR UA} = \text{_____}$$

#### FLOORS OVER UNCONDITIONED SPACES: (VENTED CRAWLS AND GARAGES)

$$A2 \text{ _____} \times 0.033 = UA \text{ _____}$$

$$A3 \text{ _____} \times 0.033 = UA \text{ _____}$$

$$\text{TOTAL FLOOR UA} = \text{_____}$$

#### BASEMENT WALL: (TOP OF WALL TO FLOOR)

$$A2 \text{ _____} \times 0.050 = UA \text{ _____}$$

$$A3 \text{ _____} \times 0.050 = UA \text{ _____}$$

$$\text{TOTAL BAND JOIST UA} = \text{_____}$$

#### BASEMENT WINDOW:

$$A2 \text{ _____} \times 0.320 = UA \text{ _____}$$

$$A3 \text{ _____} \times 0.320 = UA \text{ _____}$$

$$\text{TOTAL WINDOW UA} = \text{_____}$$

$$\text{TOTAL PAGE 2 UA} = \text{_____}$$



# TOTAL UA COMPLIANCE WORK SHEET, ZONE 6A:

SITE ADDRESS: \_\_\_\_\_

## CRAWL SPACE WALL: (NON-VENTED CRAWLS)

$$A2 \text{ _____} / R2 \text{ _____} = UA \text{ _____}$$

$$A3 \text{ _____} / R3 \text{ _____} = UA \text{ _____}$$

$$TOTAL WALL UA = \text{_____}$$

## CRAWL SPACE WALL (NON-VENTED CRAWLS)

$$A2 \text{ _____} \times 0.055 = UA \text{ _____}$$

$$A3 \text{ _____} \times 0.055 = UA \text{ _____}$$

$$TOTAL WALL UA = \text{_____}$$

NOTE: CRAWL SPACE WALL INSULATION SHALL EXTEND DOWNWARD FROM THE FLOOR TO THE FINISHED GRADE AND THEN VERTICALLY AND/OR HORIZONTALLY AN ADDITIONAL 24". EXPOSED EARTH SHALL BE COVERED WITH A CLASS ONE VAPOR RETARDER.

## MASS WALL:

$$A2 \text{ _____} / R2 \text{ _____} = UA \text{ _____}$$

$$A3 \text{ _____} / R3 \text{ _____} = UA \text{ _____}$$

$$TOTAL WALL UA = \text{_____}$$

## MASS WALL:

$$A2 \text{ _____} \times 0.060 = UA \text{ _____}$$

$$A3 \text{ _____} \times 0.060 = UA \text{ _____}$$

$$TOTAL BAND JOIST UA = \text{_____}$$

NOTE: MASS WALLS SHALL BE CONSIDERED TO BE ABOVE GRADE WALLS OF CONCRETE, CONCRETE BLOCK, ICF, AND SOLID TIMBER LOGS

$$TOTAL PAGE 1 UA = \text{_____}$$

$$TOTAL PAGE 2 UA = \text{_____}$$

$$TOTAL PAGE 3 UA = \text{_____}$$

$$PROPOSED BUILDING TOTAL UA = \text{_____}$$

$$TOTAL PAGE 1 UA = \text{_____}$$

$$TOTAL PAGE 2 UA = \text{_____}$$

$$TOTAL PAGE 3 UA = \text{_____}$$

$$STANDARD BUILDING TOTAL UA = \text{_____}$$

NOTE: IF THE PROPOSED BUILDING TOTAL THERMAL ENVELOPE UA IS LESS THAN OR EQUAL TO THE STANDARD BUILDING TOTAL UA RESULTING FROM USING THE U-FACTORS IN TABLE 402.1.3, THE BUILDING SHALL BE CONSIDERED IN COMPLIANCE WITH TABLE 402.1.1.

NOTE: SLAB-ON-GRADE FLOORS WITH A FLOOR SURFACE LESS THAN 12" BELOW GRADE SHALL BE INSULATED FROM THE TOP OF THE SLAB DOWNWARD, OUTSIDE OR INSIDE THE FOUNDATION WALL. A MINIMUM OF R-10 INSULATION SHALL EXTEND A MINIMUM OF 4' VERTICALLY AND HORIZONTALLY.

NOTE: ALL MANDATORY REQUIREMENTS OF THE 2015 MICHIGAN ENERGY CODE WILL APPLY.

# ENERGY CERTIFICATE

The IRC requires the builder or registered design professional to complete an energy efficiency certificate, listing the installed insulation and fenestration values. The certificate must also list the type and efficiency of installed heating, cooling, and water heating equipment. Because electric furnaces, baseboard heaters, and unvented gas-fired heaters may not provide the lowest energy consumption when compared to other methods of comfort heating and their energy efficiency ratings may be misleading, the IRC requires such appliances to be individually listed on the certificate without an efficiency designation. The permanent certificate is affixed to the electrical service panel but cannot cover the service directory or other required information governed by the electrical code. (Figure 15-10) (ref. N1101.9)

\*\*example only\*\*

Energy Efficiency Certificate		
<b>Insulation Rating</b>		<b>R-Value</b>
Ceiling/Roof	Frames	
Walls	Mass	
	Basement	
	Crawl Space	
Floors	Over Unconditioned Space	
	Slab Edge	
Ducts	Outside Conditioned Space	
<b>Glass and Door Rating</b>		<b>NFRC U-Factor</b>
	<b>NFRC SHGC</b>	
Window		
Opaque Door		
Skylight		
<b>Heating and Cooling Equipment</b>		<b>Efficiency</b>
	<b>Type</b>	
Heating System		AFUE:
Cooling System		SEER:
Water Heater		EF:
<p>Indicate if the following have been installed (an efficiency shall not be listed):</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Electric furnace</li> <li><input type="checkbox"/> Gas-fired unvented room heater</li> <li><input type="checkbox"/> Baseboard electric heater</li> </ul> <p style="text-align: right;">Designer: _____</p> <p style="text-align: right;">Builder: _____</p> <p style="text-align: right;">Date: _____</p>		

FIGURE 15-10 Permanent energy certificate



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## Residential Building Permit Process

### Outside Agency Permits

- Soil Erosion
- Health Department
- Water/Sewer-DPW
- Driveway

### Garfield Township Permits

Concurrent Review of Building and Zoning

- **Land Use Permit**

- Application
- Site Plan

Fees paid when permits are picked up.  
Prior to starting work.

- **Building Permit**

- Application of Building Permit
- Energy Code Compliance Worksheet
- Construction Drawings (2 sets)

### Grand Traverse County Permits

- Electrical
- Plumbing
- Mechanical

### Garfield Township Inspections\*\*

- Foundation
- Framing
- Final-After outside agency final inspections

- \*\*Additional inspections maybe required, consult Plan Review
- Outside agency inspections are required as per their Plan Review

### Certificate of Occupancy

- Not issued until:
  - Applicable Outside Agencies Finals
  - Applicable Grand Traverse County Permit Finals
  - Zoning Final
  - Building Final



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## **BUILDING PERMITS**

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[www.garfield-twp.com](http://www.garfield-twp.com)

## **DRIVEWAY PERMITS**

Grand Traverse County  
1881 LaFranier Rd.  
Traverse City MI 49696  
(231) 922-4848  
[www.gtcr.org](http://www.gtcr.org)

## **ELECTRICAL, MECHANICAL & PLUMBING PERMITS**

Grand Traverse County  
2650 LaFranier Rd  
Traverse City MI 49686  
(231) 995-6044

## **ZONING, LAND USE & SIGN PERMITS**

Charter Township of Garfield  
3848 Veterans Dr.  
Traverse City MI 49684  
(231) 941-1620

## **SOIL & EROSION PERMITS**

Grand Traverse County  
2650 LaFranier Rd  
Traverse City MI 49686  
(231) 995-6051  
[eh@grandtraverse.org](mailto:eh@grandtraverse.org)

## **FIRE DEPARTMENT**

Grand Traverse Metro Fire Dept.  
897 Parsons Rd.  
Traverse City MI 49686  
(231) 947-3000  
[info@gtmetrofire.org](mailto:info@gtmetrofire.org)

## **SEWER & WATER PERMITS**

Grand Traverse County  
2650 LaFranier Rd  
Traverse City MI 49686  
(231) 995-6039  
[pubworks@grandtraverse.org](mailto:pubworks@grandtraverse.org)

## **OFFICIAL ADDRESSES**

Grand Traverse County Equalization  
400 Boardman Ave, Ste 103  
Traverse City MI 49684  
(231) 922-4772  
[www.grandtraverse.org](http://www.grandtraverse.org)

## **MISS DIG**

1-800-482-7171