



Town of Sheboygan  
4020 Technology Parkway  
Sheboygan, WI 53083

## CHECK LIST FOR NEW CONSTRUCTION PERMITS

Please check the parcel zoning. If this parcel is in Shoreland Zoning, A Shoreland Permit may be required. Please call Sheboygan County Planning and speak with a Shoreland Specialist at 920.459.3060

- \_\_\_\_\_ Date Submitted \_\_\_\_\_ Date Returned
- \_\_\_\_\_ 1 Completed WI Uniform Building Permit Application with address and parcel number. (SBD-5823)
- \_\_\_\_\_ 1 Copy of Online Building Permit Application (DSPS) website: <https://esla.wi.gov/PortalCommunityLogin>
- \_\_\_\_\_ 1 Signed Cautionary Statement (If applicable). Copy in packet or found in online packet.
- \_\_\_\_\_ 1 copy of complete listing of all Sub-Contractors. Copy in packet or found in online packet.
- \_\_\_\_\_ 1 copy of completed DILHR Energy Worksheet. Website: <https://www.energycodes.gov/rescheck>
- \_\_\_\_\_ 1 copies of the Certified Survey Map with setbacks, existing and proposed elevations of lot corners, ditch line and road, and Erosion Control plan with the New Home As-Built Elevation & Set Back certification sheet filled out. A follow up as-built survey will be needed after the home is completed.
- \_\_\_\_\_ 1 copy of completed application for Dumping/Fill Permit (If applicable). If you will need fill, you will need a Dumping/Fill Permit.
- \_\_\_\_\_ 1 copy of completed application for a Driveway Permit. Copy in packet or online at [townofsheboyganwi.gov](http://townofsheboyganwi.gov)
- \_\_\_\_\_ 1 copy of the blueprints will need to be electronically submitted to [peggy@townofsheboyganwi.gov](mailto:peggy@townofsheboyganwi.gov) or a printed copy to scale submitted with payment.
- \_\_\_\_\_ Is there a deck on this home? (must be shown on plans) Side setback \_\_\_\_\_ Rear Setback \_\_\_\_\_
- \_\_\_\_\_ 1 signed copies of building permit requirements. Copy in packet or found in online packet.

### IF SITE IS SERVED BY SEWER THE FOLLOWING IS NEEDED:

- \_\_\_\_\_ **Connection fee & Assessment Paid.** All connection fees and plumbing permits shall be completed prior to scheduling water and/or sewer inspection. Please check to make sure all assessments are paid.
- \_\_\_\_\_ **Contact Town of Sheboygan office** to schedule underground water and/or sewer inspection at least 24 hours prior to water and/or sewer work commencing. Inspections shall occur during normal staff hours.
- \_\_\_\_\_ **Does the street need to be opened?** Permits are issued by Director of Public Works/Engineer

### PLEASE NOTE THE FOLLOWING

**please see attached Table 1 regarding these fees in the Towns Fee Schedule posted on [townofsheboyganwi.gov](http://townofsheboyganwi.gov)**

Dept of Safety & Professional Services Industry Services Division Wisconsin Stats. 101.63, 101.73		<b>Wisconsin Uniform Building Permit Application</b> <small>Instructions on back of second ply. The information you provide may be used by other government agency programs [(Privacy Law, s. 15.04 (1)(m))]</small>			Application No. _____  Parcel No. _____																																																		
<b>PERMIT REQUESTED</b>		<input type="checkbox"/> Constr. <input type="checkbox"/> HVAC <input type="checkbox"/> Electric <input type="checkbox"/> Plumbing <input type="checkbox"/> Erosion Control <input type="checkbox"/> Other: _____																																																					
Owner's Name _____		Mailing Address _____			Tel. _____																																																		
Contractor Name & Type _____		Lic/Cert# _____	Exp Date _____	Mailing Address _____	Telephone & Email _____																																																		
Dwelling Contractor (Constr.) _____		_____	_____	_____	_____																																																		
Dwelling Contr. Qualifier (The Dwelling Contr. Qualifier shall be an owner, CEO, COB or employee of the Dwelling Contr.) _____		_____	_____	_____	_____																																																		
HVAC _____		_____	_____	_____	_____																																																		
Electrical Contractor _____		_____	_____	_____	_____																																																		
Electrical Master Electrician _____		_____	_____	_____	_____																																																		
Plumbing _____		_____	_____	_____	_____																																																		
<b>PROJECT LOCATION</b>		Lot area _____ Sq.ft. <input type="checkbox"/> One acre or more of soil will be disturbed		<input type="checkbox"/> Town <input type="checkbox"/> Village <input type="checkbox"/> City of _____           _____ 1/4, _____ 1/4, of Section _____, T _____ N, R _____ E/W																																																			
Building Address _____		County _____		Subdivision Name _____		Lot No. _____																																																	
Zoning District(s) _____		Zoning Permit No. _____		Setbacks: _____	Front _____ ft.	Rear _____ ft.																																																	
					Left _____ ft.	Right _____ ft.																																																	
<b>1. PROJECT</b> <input type="checkbox"/> New <input type="checkbox"/> Repair <input type="checkbox"/> Alteration <input type="checkbox"/> Raze <input type="checkbox"/> Addition <input type="checkbox"/> Move <input type="checkbox"/> Other: _____		<b>3. OCCUPANCY</b> <input type="checkbox"/> Single Family <input type="checkbox"/> Two Family <input type="checkbox"/> Garage <input type="checkbox"/> Other: _____		<b>6. ELECTRIC</b> Entrance Panel _____ Amps: _____ <input type="checkbox"/> Underground <input type="checkbox"/> Overhead <b>7. WALLS</b> <input type="checkbox"/> Wood Frame <input type="checkbox"/> Steel <input type="checkbox"/> ICF <input type="checkbox"/> Timber/Pole <input type="checkbox"/> Other: _____		<b>9. HVAC EQUIP.</b> <input type="checkbox"/> Furnace <input type="checkbox"/> Radiant Basebd <input type="checkbox"/> Heat Pump <input type="checkbox"/> Boiler <input type="checkbox"/> Central AC <input type="checkbox"/> Fireplace <input type="checkbox"/> Other: _____																																																	
<b>2. AREA INVOLVED (sq ft)</b> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th>Unit 1</th> <th>Unit 2</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>Unfin. Bsmt</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Living Area</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Garage</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Deck/ Porch</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Totals</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>			Unit 1	Unit 2	Total	Unfin. Bsmt				Living Area				Garage				Deck/ Porch				Totals				<b>4. CONST. TYPE</b> <input type="checkbox"/> Site-Built <input type="checkbox"/> Mfd. per WI UDC <input type="checkbox"/> Mfd. per US HUD <b>5. STORIES</b> <input type="checkbox"/> 1-Story <input type="checkbox"/> 2-Story <input type="checkbox"/> Other: _____ <input type="checkbox"/> Basement		<b>8. USE</b> <input type="checkbox"/> Seasonal <input type="checkbox"/> Permanent <input type="checkbox"/> Other: _____		<b>12. ENERGY SOURCE</b> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th>Fuel</th> <th>Nat Gas</th> <th>LP</th> <th>Oil</th> <th>Elec</th> <th>Solid</th> <th>Solar Geo</th> </tr> </thead> <tbody> <tr> <td>Space Htg</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>Water Htg</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> </tbody> </table>			Fuel	Nat Gas	LP	Oil	Elec	Solid	Solar Geo	Space Htg	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Water Htg	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Unit 1	Unit 2	Total																																																				
Unfin. Bsmt																																																							
Living Area																																																							
Garage																																																							
Deck/ Porch																																																							
Totals																																																							
	Fuel	Nat Gas	LP	Oil	Elec	Solid	Solar Geo																																																
Space Htg	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																																																
Water Htg	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																																																
				<b>10. SEWER</b> <input type="checkbox"/> Municipal <input type="checkbox"/> Sanitary Permit# _____		<b>13. HEAT LOSS</b> _____ BTU/HR Total Calculated Envelope and Infiltration Losses (available from "Total Building Heating Load" on Rescheck report)																																																	
				<b>11. WATER</b> <input type="checkbox"/> Municipal <input type="checkbox"/> On-Site Well		<b>14. EST. BUILDING COST w/o LAND</b> \$ _____																																																	

I understand that I: am subject to all applicable codes, laws, statutes and ordinances, including those described on the reverse side of the last ply of this form; am subject to any conditions of this permit; understand that the issuance of this permit creates no legal liability, express or implied, on the state or municipality; and certify that all the above information is accurate. If one acre or more of soil will be disturbed, I understand that this project is subject to ch. NR 151 regarding additional erosion control and stormwater management and the owner shall sign the statement on the back of the permit if not signing below. I expressly grant the building inspector, or the inspector's authorized agent, permission to enter the premises for which this permit is sought at all reasonable hours and for any proper purpose to inspect the work which is being done.  
☐ I vouch that I am or will be an owner occupant of this dwelling for which I am applying for an erosion control or construction permit without a Dwelling Contractor Certification and have read the cautionary statement regarding contractor responsibility on the second page of this form.

**APPLICANT (Print:)** \_\_\_\_\_ **Sign:** \_\_\_\_\_ **DATE** \_\_\_\_\_

<b>APPROVAL CONDITIONS</b>		This permit is issued pursuant to the following conditions. Failure to comply may result in suspension or revocation of this permit or other penalty. <input type="checkbox"/> See attached for conditions of approval.	
<b>ISSUING JURISDICTION</b> <input type="checkbox"/> Town of _____ <input type="checkbox"/> Village of _____ <input type="checkbox"/> City of _____		<input type="checkbox"/> County of _____ <input type="checkbox"/> State _____ State-Contracted Inspection Agency#: _____ Municipality Number of Dwelling Location _____	
<b>FEES:</b> Plan Review \$ _____ Inspection \$ _____ Wis. Permit Seal \$ _____ Other \$ _____ Total \$ _____		<b>PERMIT(S) ISSUED</b> <input type="checkbox"/> Construction <input type="checkbox"/> HVAC <input type="checkbox"/> Electrical <input type="checkbox"/> Plumbing <input type="checkbox"/> Erosion Control	
		<b>WIS PERMIT SEAL #</b> _____	
		<b>PERMIT ISSUED BY:</b> Name _____ Date _____ Tel. _____ Cert No. _____ Email: _____	

## INSTRUCTIONS

The owner, builder or agents shall complete the application form down through the Signature of Applicant block and submit it and building plans and specifications to the enforcing jurisdiction, which is usually your municipality or county. Permit application data is used for statewide statistical gathering on new one- and two-family dwellings, as well as for local code administration. **Please type or use ink and press firmly with multi-ply form.**

### PERMIT REQUESTED

- Check off type of Permit Requested, such as structural, HVAC, Electrical or Plumbing.
- Fill in owner's current Mailing Address and Telephone Number.
- If the project will disturb one acre or more of soil, the project is subject to the additional erosion control and stormwater provisions of ch. NR 151 of the WI Administrative Code. Checking this box will satisfy the related notification requirements of ch. NR 216.
- Fill in Contractor and Contractor Qualifier Information. Per s. 101.654 (1) WI Stats., an individual taking out an erosion control or construction permit shall enter his or her dwelling contractor certificate number, and name and certificate number of the dwelling contractor qualifier employed by the contractor, unless they reside or will reside in the dwelling. Per s. 101.63 (7) Wis. Stats., the master plumber name and license number must be entered before issuing a plumbing permit.

### PROJECT LOCATION

- Fill in Building Address (number and street or sufficient information so that the building inspector can locate the site).
- Local zoning, land use and flood plain requirements must be satisfied before a building permit can be issued. County approval may be necessary.
- Fill in Zoning District, lot area and required building setbacks.

**PROJECT DATA** - Fill in all numbered project data blocks (1-14) with the required information. All data blocks must be filled in, including the following:

2. Area (involved in project):
  - Basements - include unfinished area only
  - Living area - include any finished area including finished areas in basements
  - Two-family dwellings - include separate and total combined areas
3. Occupancy - Check only "Single-Family" or "Two-Family" if that is what is being worked on. In other words, do not check either of these two blocks if only a new detached garage is being built, even if it serves a one or two family dwelling. Instead, check "Garage" and number of stalls. If the project is a community based residential facility serving 3 to 8 residents, it is considered a single-family dwelling.
9. HVAC Equipment - Check only the major source of heat, plus central air conditioning if present. Only check "Radiant Baseboard" if there is no central source of heat.
10. Sewage - Indicate if the dwelling will be served by municipal sewer or privately owned treatment system. If a private system is used, include the Sanitary Permit number. Note: A building permit cannot be issued for a new dwelling that utilizes a privately owned wastewater treatment system until a sanitary permit has been issued. This applies to any new or existing private onsite wastewater treatment system that will be used by the dwelling.
13. Heat Loss - Provide heat loss summation data (BTUs/HR) derived from the ResCheck report or the "Heating System Sizing Summary Calculator" available on the Division's website: <http://dsps.wi.gov/Programs/Industry-Services/Industry-Services-Programs/One-and-Two-Family-UDC>.
14. Estimated Cost - Include the total cost of construction, including materials and market rate labor, but not the cost of land or landscaping.

**SIGNATURE** - The owner or the contractor's authorized agent shall sign and date this application form. If you do not possess the Dwelling Contractor certification, then you will need to check the owner-occupancy statement for any erosion control or construction permits.

**CONDITIONS OF APPROVAL** - The authority having jurisdiction uses this section to state any conditions that must be complied with pursuant to issuing the building permit.

**ISSUING JURISDICTION:** This must be completed by the authority having jurisdiction.

- Check off Jurisdiction Status, such as town, village, city, county or state and fill in Municipality Name
- Fill in State Inspection Agency number only if working under state inspection jurisdiction.
- Fill in Municipality Number of Dwelling Location
- Check off type of Permit Issued, such as construction, HVAC, electrical or plumbing.
- Fill in Wisconsin Uniform Permit Seal Number, if project is a new one- or two-family dwelling.
- Fill in Name and Inspector Certification Number of person reviewing building plans and date building permit issued.



# Wisconsin Department of Safety and Professional Services Division of Industry Services



## Online Building Permit System Instructions

The Online Building Permit System was developed by the DSPS to allow municipalities to gain compliance with 2015 Act 211. Not all municipalities utilize the Online Building Permit System. If you do not see your municipality on the next page, your municipality should be contacted directly on how to submit a building permit.

The owner, builder, or agents shall complete the application form and the Online Building Permit System will route it to your enforcing jurisdiction. Permit application data is used for statewide statistics on new one- and two- family dwellings, as well as for local code administration.

### APPLICANT FREQUENTLY ASKED QUESTIONS

#### **Cautionary Statement to Owners Obtaining Building Permits**

101.65(lr) of the Wisconsin Statutes requires municipalities that enforce the Uniform Dwelling Code to provide an owner who applies for a building permit with a statement advising the owner that:

If the owner hires a contractor to perform work under the building permit and the contractor is not bonded or insured as required under s. 101.654 (2) (a), the following consequences might occur:

(a) The owner may be held liable for any bodily injury to or death of others or for any damage to the property of others that arises out of the work performed under the building permit or that is caused by any negligence by the contractor that occurs in connection with the work performed under the building permit.

(b) The owner may not be able to collect from the contractor damages for any loss sustained by the owner because of a violation by the contractor of the one- and two- family dwelling code or an ordinance enacted under sub. (1) (a), because of any bodily injury to or death of others or damage to the property of others that arises out of the work performed under the building permit or because of any bodily injury to or death of others or damage to the property of others that is caused by any negligence by the contractor that occurs in connection with the work performed under the building permit.



## **Cautionary Statement to Contractors for Projects Involving Building Built Before 1978**

If this project is in a dwelling or child-occupied facility, built before 1978, and disturbs 6 sq. ft. or more of paint per room, 20 sq. ft. or more of exterior paint, or involves windows, then the requirements of ch. DHS 163 requiring Lead-Safe Renovation Training and Certification apply. Call (608)261-6876 or go to the Wisconsin Department of Health Services' lead homepage for details of how to be in compliance.

## **Wetlands Notice to Permit Applicants**

You are responsible for complying with state and federal laws concerning the construction near or on wetlands, lakes, and streams. Wetlands that are not associated with open water can be difficult to identify. Failure to comply may result in removal or modification of construction that violates the law or other penalties or costs. For more information, visit the Department of Natural Resources wetlands identification web page or contact a Department of Natural Resources service center.

## **Contractor Credential Requirements**

All contractors shall possess an appropriate contractor credential issued by the Wisconsin Department of Safety and Professional Services. Contractors are also required to only subcontract with contractors that hold the appropriate contractor credentials.

## **Additional Responsibilities for Owners of Projects Disturbing One or More Acre of Soil**

I understand that this project is subject to ch. NR 151 regarding additional erosion control and stormwater management and will comply with those standards.

I acknowledge I have read and understood the contents of this page. \*

[Click here to Start the Permit Request >>](#)

Published on *Building Energy Codes Program* (<https://www.energycodes.gov>)

[Home](#) > [Compliance](#) > [Software & Web Tools](#) > REScheck

---

## REScheck

### Residential Compliance Using REScheck™



The REScheck product group makes it fast and easy for builders, designers, and contractors to determine whether new homes, additions, and alterations meet the requirements of the IECC or a number of state energy codes. REScheck also simplifies compliance determinations for building officials, plan checkers, and inspectors by allowing them to quickly determine if a low-rise residence meets the code.

REScheck is appropriate for insulation and window trade-off calculations in residential detached one- and two-family buildings and multi-family buildings three stories or less in height above grade, such as apartments, condominiums, and townhouses. REScheck works by performing a simple U-factor x Area (UA) calculation for each building assembly to determine the overall UA of a building. The UA that would result from a building conforming to the code requirements is compared against the UA for your building. If the total heat loss (represented as a UA) through the envelope of your building does not exceed the total heat loss from the same building conforming to the code, the software generates a report that declares your building is compliant with the code.

REScheck Desktop may be downloaded and installed directly to your desktop, while REScheck-Web™ is accessible directly from the website without having to download and install.

[View a list of supported software versions for code compliance tools.](#)

[See if your state or county can use REScheck to show compliance.](#)

### REScheck™ for Windows®



Runs on Windows 7/8/10 in either single, multi-user, or network environments.

Note that the Mac version of REScheck has been discontinued. Mac users are advised to use [REScheck-Web](#)

#### Version 4.6.5 (build version 4.6.5.1)

View [Release Notes](#) to see what's new in this version.

#### Supported Codes:

2009, 2012, 2015, and 2018 IECC (2018 only supported in REScheck-Web)

State energy codes: Florida, Georgia, Massachusetts, North Carolina, Puerto Rico, Utah, Vermont, New York City

## REScheck-Web

REScheck-Web simplifies residential energy code compliance by automating trade-off calculations for the IECC and a number of state-specific codes. It performs just like the REScheck desktop version, but you don't need to download or install any software on your computer. REScheck-Web has been updated with several modern functions, including a new interface, a dashboard of your projects, the ability to share projects with colleagues, the ability to create individual user profiles, and more.

## REScheck Support

### Have a compliance question or need assistance with the software?

BECP's team of building energy codes experts is available to answer specific questions submitted through our web-based [help desk](#).

### REScheck Software Support Documents

- [REScheck Plan Review Quick Reference Guide](#)
- [Methodology for Developing the REScheck Software through Version 4.4.3](#)

## Subscribe to updates

To receive updates about compliance tools [subscribe to the BECP Mailing List](#).

## Updates to REScheck and COMcheck Building Energy Code Compliance Software

The U.S. Department of Energy (DOE) is directed to provide technical assistance to states to support the implementation of model residential and commercial building energy codes (42 USC 6833). As part of this assistance, the DOE Building Energy Codes Program provides ongoing support for REScheck and COMcheck compliance software, which are updated based on new editions of the model codes. DOE has published [guidance](#) surrounding its support for the software, including technical assistance requests for modified versions.

- [Contacts](#)
- [Web Site Policies](#)
- [U.S. Department of Energy](#)
- [USA.gov](#)
- [Compliance Evaluation Resources](#)

---

**Source URL:** <https://www.energycodes.gov/rescheck>



**Cautionary Statement to Owners Obtaining Building Permits**

101.65(lr) of the Wisconsin Statutes requires municipalities that enforce the Uniform Dwelling Code to provide an owner who applies for a building permit with a statement advising the owner that:

If the owner hires a contractor to perform work under the building permit and the contractor is not bonded or insured as required under s. 101.654 (2) (a), the following consequences might occur:

(a) The owner may be held liable for any bodily injury to or death of others or for any damage to the property of others that arises out of the work performed under the building permit or that is caused by any negligence by the contractor that occurs in connection with the work performed under the building permit.

(b) The owner may not be able to collect from the contractor damages for any loss sustained by the owner because of a violation by the contractor of the one- and two- family dwelling code or an ordinance enacted under sub. (1) (a), because of any bodily injury to or death of others or damage to the property of others that arises out of the work performed under the building permit or because of any bodily injury to or death of others or damage to the property of others that is caused by any negligence by the contractor that occurs in connection with the work performed under the building permit.

**Cautionary Statement to Contractors for Projects Involving Building Built Before 1978**

If this project is in a dwelling or child-occupied facility, built before 1978, and disturbs 6 sq. ft. or more of paint per room, 20 sq. ft. or more of exterior paint, or involves windows, then the requirements of ch. DHS 163 requiring Lead-Safe Renovation Training and Certification apply. Call (608)261-6876 or go to the Wisconsin Department of Health Services' lead homepage for details of how to be in compliance.

**Wetlands Notice to Permit Applicants**

You are responsible for complying with state and federal laws concerning the construction near or on wetlands, lakes, and streams. Wetlands that are not associated with open water can be difficult to identify. Failure to comply may result in removal or modification of construction that violates the law or other penalties or costs. For more information, visit the Department of Natural Resources wetlands identification web page or contact a Department of Natural Resources service center.

**Additional Responsibilities for Owners of Projects Disturbing One or More Acre of Soil**

I understand that this project is subject to ch. NR 151 regarding additional erosion control and stormwater management standards, and will comply with those standards.

Owner's Signature: \_\_\_\_\_ Date: \_\_\_\_\_



## LIST OF SUBCONTRACTORS FOR NEW DWELLING

LOT NUMBER: \_\_\_\_\_ SUBDIVISION: \_\_\_\_\_

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

**CONTRACTOR NAME AND PHONE NUMBER:**

EXCAVATING: \_\_\_\_\_ PHONE: \_\_\_\_\_

MASONRY: \_\_\_\_\_ PHONE: \_\_\_\_\_

CONCRETE: \_\_\_\_\_ PHONE: \_\_\_\_\_

CARPENTER: \_\_\_\_\_ PHONE: \_\_\_\_\_

ELECTRICAL: \_\_\_\_\_ PHONE: \_\_\_\_\_

INSULATION: \_\_\_\_\_ PHONE: \_\_\_\_\_

HEATING: \_\_\_\_\_ PHONE: \_\_\_\_\_

PLUMBING: \_\_\_\_\_ PHONE: \_\_\_\_\_

ROOFING: \_\_\_\_\_ PHONE: \_\_\_\_\_

SIDING: \_\_\_\_\_ PHONE: \_\_\_\_\_

DRYWALL: \_\_\_\_\_ PHONE: \_\_\_\_\_

PAINTING: \_\_\_\_\_ PHONE: \_\_\_\_\_

LANDSCAPING: \_\_\_\_\_ PHONE: \_\_\_\_\_

## Wisconsin Uniform Dwelling Code Energy Worksheet

**Instructions:** This worksheet is a Safety & Buildings Division (S&BD)-approved method of manually showing compliance with the energy conservation and heating equipment sizing requirements of the Uniform Dwelling Code (UDC), for new dwelling permits **submitted on or after May 1, 1999**. It may be necessary for the user to purchase a copy of the UDC from State Document Sales, (608)266-3358. Additional information is printed in the UDC Commentary, which is available for a fee, as are blank copies of this form, from S&BD at POB 2509, Madison, WI 53701, Tel. 608-267-4405. **Earlier editions of this worksheet may NOT be used.** Numbers in brackets, [1], refer to the footnotes printed on page 2.

You may also submit completed worksheets from the computer program *WIScheck*, which is available for free download from <http://www.energycodes.org/> on the Internet.

A required U-value is the **maximum** acceptable heat transmittance for an element. A required insulation R-value is the **minimum** acceptable level of resistance to heat transmittance. (U-values and R-values are reciprocals of each other.) If a component includes two or more areas of different insulation levels, either use the less insulating value for both areas, or use the Optional Weighted Average table in the **Prescriptive Package Method** section or enter separate areas and insulation values in the **System Design Method**. All "U" values must be carried to four places after the decimal point, rounded to three places. Other values may be rounded to the whole number.

**Window and door U-values** must be tested and documented by the manufacturer in accordance with the National Fenestration Rating Council (NFRC) test procedures or be taken from the glazing U-value table in s. Comm 22.05. Center-of-glass U-values cannot be used. If a door contains glass and an aggregate U-value rating for that door is not available, include the glass area of the door with your windows and use the opaque door U-value to determine compliance of the door.

The code gives credit for **high-efficiency heating equipment**. "High-Efficiency" means a furnace with an AFUE of 90% or more, or a heat pump with an HSPF of 7.8 or more without the use of electric resistance backup heat of greater than 3 kilowatts. If you plan to install more than one piece of heating equipment, the equipment with the lowest efficiency must exceed the efficiency required by the selected package.

**Choice of Method:** You have the choice of using the Prescriptive Package Method or the System Design Method to show code compliance. For the simpler **Prescriptive Package Method**, which is recommended for standard designs, complete Sections A., B., F., and G. Instructions are on page 2. You will be first calculating component areas, then comparing your planned insulation levels to the required insulation levels of the Prescriptive Packages. You will then calculate infiltration and ventilation heat losses to size your heating equipment. If you cannot comply with one of the prescriptive packages, you may be able to show compliance by the System Design Method.

For the **System Design Method**, which is recommended for alternative designs in which more insulation is installed in one component to offset less in another, complete Sections A., C., D., E., F. and G. You will be first calculating component areas, then a code-allowed heat loss factor, then component U- and R-values and then your calculated heat loss factor which you will compare to the code-allowed heat loss factor. You will then calculate infiltration and ventilation heat losses to size your heating equipment.

The **County Zone Table** below is use for determining the temperature difference for sizing your heating plant in Section G. You may submit to your local code official more exact calculations to size your heating equipment.

Zone 1 - 95 degrees	Zone 2 - 90 degrees	Zone 3 - 85 degrees	Zone 4 - 80 degrees
Ashland, Barron, Bayfield, Burnett, Chippewa, Douglas, Dunn, Florence, Forest, Iron, Lincoln, Oneida, Pierce, Polk, Price, Rusk, Saint Croix, Sawyer, Taylor, Vilas, Washburn	Adams, Buffalo, Clark, Eau Claire, Jackson, Juneau, LaCrosse, Langlade, Marathon, Marinette, Menominee, Monroe, Portage, Shawano, Oconto, Pepin, Trempealeau, Vernon, Waupaca, Wood	Brown, Calumet, Columbia, Crawford, Dane, Dodge, Door, Fond du Lac, Grant, Green, Green Lake, Iowa, Kewaunee, LaFayette, Manitowoc, Marquette, Outagamie, Richland, Sauk, Sheboygan, Waushara, Winnebago	Jefferson, Kenosha, Milwaukee, Ozaukee, Racine, Rock, Walworth, Washington, Waukesha



## Detailed Instructions for Section B. Prescriptive Package Method:

**R-value requirements** are for insulation only and do not include structural components.

**For a component with two or more areas of different insulation levels**, either use the least insulating value for both areas or use the Weighted Average tables on page 4.

**Wall R-values** represent the sum of the wall cavity insulation plus insulating sheathing, if used. Do not include exterior siding, structural sheathing or interior drywall. For example, an R-20 requirement could be met *EITHER* by R-15 cavity insulation plus R-5 sheathing *OR* R-13 cavity insulation plus R-7 sheathing. Note that there are separate tables for walls with structural sheathing only and for walls with insulating sheathing. To use a table for insulating sheathing, the sheathing used must be at least R-4, except that at least R-2 insulation may be provided over corner bracing. Table wall R-Values apply to wood-frame or mass (concrete, masonry, log) wall assemblies, but not to metal-frame construction. If metal frame is planned, use the adjusted R-Values from the Metal-Frame Wall Tables of the UDC Appendix. Table wall values apply to boxesills.

**Ceiling R-values** represent the sum of the cavity insulation plus insulating sheathing, if used. For ventilated ceilings, any insulating sheathing must be placed between the conditioned space and the ventilated portion of the roof. Ceiling R-values with "RT" indicates that a raised-heel truss or oversized truss construction must be used so that the insulation achieves the full insulation thickness over the exterior walls.

**Floor requirements** apply to floors over unconditioned spaces (such as un-insulated crawlspaces, basements and garages). Floors over outside air shall have a  $U_{\text{overall}} = 0.033$  or R-30 added insulation.

**"Heated-Slab"** requirements apply to slabs that contain heat ducts or pipes. All slab insulation must extend at least 48 inches either 1) down from the top of the slab, or 2) down from the top of the slab to the bottom of the slab and then horizontally underneath the slab, or 3) down from the top of the slab to the bottom of the slab and then horizontally away from the slab, with pavement or at least 10 inches of soil covering the horizontal insulation.

**Walls of basements** below un-insulated floors must be insulated from the top of the basement wall to the level of the basement floor. Conditioned basement windows and glass doors must be included with the other glazing. Exterior basement doors must meet the door U-value requirements. If more than 50% of the basement is exposed, then all of the basement walls must instead meet the above-foundation wall requirements.

**Crawl space wall R-value requirements** are for walls of unventilated crawlspaces. The crawlspace wall insulation must extend from the top of the wall (including the sill plate) to at least 12 inches below the outside finished grade. If the distance from the outside finished grade to the top of the footing is less than 12 inches, the insulation must extend a total vertical plus horizontal distance of 24 inches from the outside finished grade.

---

### Footnotes for worksheet:

- [1] Opaque wall area is wall area minus opening areas of doors and windows.
- [2] These below-grade U-values have the insulating value of the soil added to the code-required U-values which apply to the building materials only. See Sect. D.2. for typical insulated component U-values.
- [3] These slab-on-grade F-values are derived from the code-required U-values and include the heat loss through the edge and body of the slab. See Sect. D.2. Temperature difference is the same as for above-grade spaces.
- [4] For building additions, show that the existing heating equipment, if used to heat the addition, is large enough. To do so, you must calculate the heat loss of the whole building.
- [5] If desired manufacturer does not have a furnace of this size, then a designer may select the manufacturer's next larger size.

**Submit completed worksheet pages 3-6 with dwelling plans to local enforcing municipality.**

Project Address: \_\_\_\_\_

Builder: \_\_\_\_\_ Owner: \_\_\_\_\_

Worksheet Completed By: \_\_\_\_\_ Date: \_\_\_\_\_

Does dwelling unit have three kilowatts or more input capacity of permanently installed electrical space heating equipment?

☐ YES (see below)      ☐ NO

You will need to apply the stricter standards shown for electrically-heated homes if you answered "YES" to the above question.

**A. Area Calculations**

Enter appropriate dimensions to obtain area values. Some calculations will not be necessary depending on home design or calculation method. These calculated areas are referenced elsewhere on this worksheet, for example, "(A.1.)".

<p>1. Window, Skylight &amp; Patio Door Area (overall unit area)</p> <p>a. In Above-Foundation Walls      b. In Foundation Walls</p> <p>_____ sq. ft.      _____ sq. ft.</p> <p>c. Total (a. + b.) = _____</p>	<p>2. Opaque Door Area</p> <p>a. In Above- Foundation Walls      b. In Foundation Walls</p> <p>_____ sq. ft.      _____ sq. ft.</p> <p>c. Total (a. + b.) = _____</p>
<p>3. Gross Exposed Basement Wall Area</p> <p>_____ sq. ft.</p>	<p>4. Basement Wall Area Below Grade</p> <p>_____ sq. ft.</p>
<p>5. Opaque [1] Basement Wall Area (A.3. + A.4. - A.1.b.- A.2.b.)</p> <p>_____ sq. ft.</p> <p>If the exposed area of A.3.is greater than the below grade area of A.4., add A.5. to A.7 and cross out the number in this cell.</p>	<p>6. Gross Heated Above-Foundation Wall Area, including boxesill</p> <p>_____ sq. ft.</p>
<p>7. Above Foundation Code Wall Area (A.6. + A1.b. + A.2.b.)</p> <p>_____ sq. ft.</p>	<p>8. Opaque [1] Above-Foundation Wall Area (A.6. - A1.a. - A.2.a.)</p> <p>_____ sq. ft.</p>
<p>9. Floor Area Over Interior Unconditioned Spaces Less Than 50°</p> <p>_____ sq. ft.</p>	<p>10. Insulated Roof Or Ceiling (less skylights)</p> <p>_____ sq. ft.</p>
<p>11. Exterior Floor Area (Overhangs)</p> <p>_____ sq. ft.</p>	<p>12. Crawl Space Wall Area</p> <p>_____ sq. ft.</p>
<p>13. Slab On Grade (above or less than 12 inches below grade)</p> <p>_____ lineal feet of slab perimeter</p>	<p>14. Total Heated Envelope Area (A.5 + A.7 + A.9 + A.10 + A.11 + A.12 +(A.13. × 2'))</p> <p>_____ sq. ft.</p>
<p>15. Percent Glazing (for Prescriptive Package Method, Section B, only) (A.1.c. ÷ A.7. × 100%)</p> <p>_____ %</p>	<p>16. Windows Description - Above-Foundation Windows:</p> <p>Frame type: <input type="checkbox"/> Wood or Wood Clad    <input type="checkbox"/> Vinyl    <input type="checkbox"/> Metal</p> <p>Glazing type: <input type="checkbox"/> Dual    <input type="checkbox"/> Triple    <input type="checkbox"/> Dual w/storm panel</p> <p>Dual-Glazing Air Space: <input type="checkbox"/> 1/4'    <input type="checkbox"/> 3/8"    <input type="checkbox"/> 1/2" or more</p> <p>Features: <input type="checkbox"/> Low-E    <input type="checkbox"/> Argon-filled    <input type="checkbox"/> Suspended film</p> <p>Foundation Windows: <input type="checkbox"/> Vinyl    <input type="checkbox"/> Metal</p>

**B. Prescriptive Package Method (Skip this section if using the System Design Method of Sections C-F)**

The prescriptive package method is the simplest method for determining compliance with the UDC insulation and window requirements. To use the prescriptive package method, enter your actual design values in the "Actual" row below. For a component, with two or more areas of different insulation levels such as windows, either use the least insulating value for both areas or use the Weighted Average tables below. Multiply your % glazing by the glazing U-value to obtain your "Glazing Factor". Find the Prescriptive Table that applies to your space heating fuel and sheathing type. Select a package from the table that most closely matches the construction indicated on your plans. Do not exceed the package U-values or glazing factor or fall below the package R-values with your design. Transfer the R-Values and U-values to the blank table below in the "Allowed" row. Then proceed to Section F. See page 2 for detailed instructions for this section.

	Package #	% glazing	U glazing	Glazing Factor (% glazing × U glazing)	R wall	R ceiling	R Bsmt, Crawl Space, Slab or Floor	U door	U overall	Equip. Eff.
Actual	-----	% (A.15)							-----	
Allowed		-----	-----	Max	Min	Min	Min	Max		

(Please go to Section F.)

**Optional R-Value/U-Value Weighted Average Table for Component:**

Component Construction Description	R Value	U-Value (1÷R Value)	Area (sq ft)	U-Value × Area (UA)
			Total Area =	Total UA =

$$\frac{\text{(Total UA)}}{\text{(Total Area)}} \div \frac{\text{(Total Area)}}{\text{(Total UA)}} = \text{(Weighted Average U-Value (for windows or doors))}$$

$$\frac{\text{(Total Area)}}{\text{(Total UA)}} \div \frac{\text{(Total UA)}}{\text{(Total Area)}} = \text{(Weighted Average R-Value (for all other components))}$$

**Optional R-Value/U-Value Weighted Average Table for Component:**

Component Construction Description	R Value	U-Value (1÷R Value)	Area (sq ft)	U-Value × Area (UA)
			Total Area =	Total UA =

$$\frac{\text{(Total UA)}}{\text{(Total Area)}} \div \frac{\text{(Total Area)}}{\text{(Total UA)}} = \text{(Weighted Average U-Value (for windows or doors))}$$

$$\frac{\text{(Total Area)}}{\text{(Total UA)}} \div \frac{\text{(Total UA)}}{\text{(Total Area)}} = \text{(Weighted Average R-Value (for all other components))}$$

**C. Code-Allowed Heat Loss For System Design Method**

Enter area values from Section A as notated and temperature differences per footnote 2 into this table and then multiply across by the electric or non-electric code-required U-value. Total the right column to find the total allowed heat loss factor.

Component	Area From Sect A.	× Required U-Value		= Heat Loss UA
		<input type="checkbox"/> NON-ELEC	<input type="checkbox"/> ELECTRIC	
1. Opaque Basement Wall [2]	(A.5.)	0.077	0.077	
2. Above Foundation Code Wall	(A.7.)	0.110	0.080	
3. Floor Over Interior Unconditioned Space	(A.9.)	0.050	0.050	
4. Roof or Ceiling	(A.10.)	0.026	0.020	
5. Floor Over Exterior	(A.11.)	0.033	0.033	
6. Crawl Space Wall	(A.12.)	0.060	0.060	
7. Slab On Grade[3] <input type="checkbox"/> Unheated <input type="checkbox"/> Heated	(A.13.) Lin. ft.	0.72 'F'	0.68 'F'	
8. Subtotal				
9. Credit for High Efficiency Heating Plant: 1.18 for furnace or boiler ≥90% AFUE; 1.15 for heat pump ≥ 7.8 HPSF, Otherwise use 1.0				x
10.	<b>Total Code-Allowed Heat Loss Factor</b>			



### D. System Design Method - Actual 'U' Values Of Your Home's Components

**D.1. Above-Foundation Components** - If applicable, check the appropriate typical component constructions listed below, and use the pre-calculated U values. If your wall construction is not listed, you may obtain a pre-calculated U value from the default U-Value tables in the UDC Appendix. (Note that the default Table 2 Wood Frame U-values assume no insulating sheathing which penalizes you if your wall does have insulating sheathing, then you may need to use the Manual Calculation section below.) If you are using exterior metal framing, then you must use the Metal-Frame Wall U-Values of the UDC Appendix. If your component construction is not listed here or in the default tables, you need to use the Manual Calculation section below to manually enter R-values for the different layers of building materials from the Typical Thermal Properties of Building Materials Table of the UDC Appendix, ASHRAE Fundamentals Manual or manufacturer's specifications. Total them across and then obtain the U-value by taking the reciprocal (1/R) of the total R-value.

<b>Above-Foundation Walls</b>		<input type="checkbox"/> 2X4, 16" O.C., R-13 batt, R-1 board: U - .079	<input type="checkbox"/> 2X4, 16" O.C., R-13 batt, R-5 board: U - .061								
		<input type="checkbox"/> 2X6, 16" O.C., R-19 batt, R-1 board: U - .059	<input type="checkbox"/> 2X6, 16" O.C., R-19 batt, R-5 board: U - .049								
<input type="checkbox"/> Other - describe:		U - from Default Table									
<b>Roof or Ceiling</b>		<input type="checkbox"/> 2X4 truss, 24" O.C., with R-38 insulation: U - .030	<input type="checkbox"/> 2X4 truss, 24" O.C., with R-52 insulation: U - .025								
		<input type="checkbox"/> 2X12 cathedral ceiling, 16" O.C., with R-38 insulation: U - .027									
<input type="checkbox"/> Other - describe:		U - from Default Table									
<b>Floor Over Exterior or Unconditioned Space</b>		<input type="checkbox"/> 2X10 joists, 16" O.C., R-19 batt: U - .047									
<input type="checkbox"/> Other - describe:		U - from Default Table									
<b>Manual U-Value Calculation (if assembly not listed above)</b>											
Component Name	Cavity Or Solid If Applicable	Ext. Air Film*	Ext. Finish	Insulation Over Framing	Sheathing	Framing Or Solid	Insulation Within Cavity	Interior Finish	Int. Air Film*	Total R-Value	U-Value (1/R)
	Cavity					-----					
	Solid						-----				
	Cavity					-----					
	Solid						-----				

#### \* Air Film R-Values

Location	Heat Flow Direction		
	Upwards	Horizontal	Downwards
Exterior	.17	.17	.17
Interior	.61	.68	.92

**D.2. Foundation And Slab-On-Grade Components** - Check appropriate boxes for planned type of construction to determine pre-calculated overall 'U-value' including air films, wall, insulation, soil and cavity/solid differences. Slab on grade F-values are per lineal foot of slab perimeter.

Component Type	U-Value	
<b>Foundation Wall</b>	<b>Basement</b>	<b>Crawl Space</b>
<input type="checkbox"/> Masonry or concrete wall without insulation	0.360	0.477
<input type="checkbox"/> Masonry or concrete wall with R-5 insulation board for full height	0.115	0.136
<input type="checkbox"/> Masonry or concrete wall with R-10 insulation board or R-11 insulation batt and 2X4's for full height	0.072	0.081
<input type="checkbox"/> Permanent wood foundation with R-19 batt for full height	0.054	0.059
<input type="checkbox"/> Basement or crawl space floor without insulation	0.025	0.025
<b>Slab-On-Grade (or within 12 " of grade)</b>	<b>F-Value</b>	
<input type="checkbox"/> Slab-on-grade without insulation	1.04	
<input type="checkbox"/> Slab-on-grade with R-5 insulation for 48" total horizontal and vertical application	0.74	
<input type="checkbox"/> Slab-on-grade with R-10 insulation board for 48" total application	0.68	

**D.3. Windows And Doors** - Use manufacturer's specifications for window and glazed door values, if they were determined per NFRC Std 100, to enter into Table E. Otherwise see default tables of UDC s. Comm 22.05 for U-values.

**E. System Design Method - Calculated Envelope Heat Loss Factor Of Your Home**

Enter values into table from elsewhere on this worksheet and multiply across to find the actual heat loss factor of each component. If using pre-calculated component U-values, do not calculate separate cavity and solid figures or apply wood frame factors Total component heat loss factors in right column to find total envelope heat loss factors.

Component	Cavity Or Solid If Applicable	Area From Sect. A	× Wood Frame Factor**	× Actual 'U' Value From Sect. D	= Heat Loss Factor (UA)
Above-Foundation Windows	-----	(A.1.a.)	-----		
Foundation Windows	-----	(A.1.b.)	-----		
Doors	-----	(A.2.c)	-----		
Opaque Basement Wall	-----	(A.5.)	-----		
Opaque Above-Foundation Wall	Cavity	(A.8.)			
	Solid				
Floor Over Unconditioned Spaces	Cavity	(A.9.)			
	Solid				
Roof or Ceiling	Cavity	(A.10.)			
	Solid				
Floor Over Exterior	Cavity	(A.11.)			
	Solid				
Crawl Space Wall	-----	(A.12.)	-----		
Slab On Grade	-----	(A.13.)Lin. ft.	-----	F-Value	
<b>Total Calculated Envelope Heat Loss Factor</b> Not to exceed Total Code Allowed Heat Loss Factor of line 10 of Section C. (Enter here: )by more than 1%					

\*\* Adjustment Factors For Wood-Framed Components - Do not apply if your are using a pre-calculated or default U-Value.

Spacing Of Framing Members	Stud Walls		Joists/Rafters	
	Cavity	Solid	Cavity	Solid
12"	.70	.30	.86	.14
16"	.75	.25	.90	.10
24"	.78	.22	.93	.07

**F. Heat Loss Factor Due to Air Infiltration (for heating equipment sizing)**

Enter appropriate values. A maximum infiltration air change rate of 0.5 per hour is allowed in addition to ventilation losses.

Floor Level	Area (sq ft)	× Height (ft)	Fan Capacity (cfm)	× Constant	× Air Changes Per Hour	= Heat Loss Factor(UA)
Basement			-----	.018		
Level 1			-----	.018		
Level 2			-----	.018		
Level 3			-----	.018		
Ventilation	-----	-----		.432	-----	
<b>Total Infiltration &amp; Ventilation Heat Loss Factor</b>						

**G. Heating Equipment Sizing**

Enter appropriate value to determine the maximum and minimum allowable heating equipment capacity in BTUs/HR. A more detailed calculation may be submitted to the local code official. [4]

<b>Prescriptive Package Method:</b>		U overall from selected Prescriptive Package of Section B	×	Total Envelope Area (A.14.)	=	
<b>OR System Design Method</b> Calculated Heat Loss Factor from Sect. E.						
Infiltration & Ventilation Heat Loss Factor (from Sect. F.)						+
Total Heat Loss Factor (UA)						=
Temperature Difference from County Zone Table on page 1						×
<b>Minimum Heating Equipment Output</b>						=
Allowable Heating Equipment Size Margin Multiplier						× 1.15
<b>Maximum Allowable Heating Equipment Output</b> [5]						=
Planned Furnace Output Or Boiler IBR Rating						
Make & Model if High Efficiency Credit has been taken:						

### Prescriptive Package Tables (Corrected)

(See notes on page 2 of Energy Worksheet; I = insulating sheathing, RT = raised heel roof truss)

**Table B-1 Prescriptive packages, Non-electric Heat, Structural Sheathing only**

Package	Glazing Factor	R wall	R ceiling	R basement	U door	U overall	HVAC Equipment Efficiency
1	0.0370	R21	R42	R7	0.35	0.073	Normal
2	0.0264	R21	R51, RT	R5	0.35	0.073	Normal
3	0.0333	R15	R42	R10	0.35	0.073	Normal
4	0.0440	R19	R33	R10	0.35	0.073	Normal
5	0.0330	R13	R42	R11	0.35	0.073	Normal
6	0.0480	R19	R33	R11	0.35	0.073	Normal
7	0.0600	R21	R47	R11	0.35	0.073	Normal
8	0.0407	R13	R44	R13	0.35	0.073	Normal
9	0.0600	R19	R42	R13	0.35	0.073	Normal
10	0.0680	R21	R38, RT	R13	0.35	0.073	Normal
11	0.0296	R13	R49	R5	0.35	0.086	High
12	0.0440	R19	R30	R5	0.35	0.086	High
13	0.0520	R21	R33	R5	0.35	0.086	High
14	0.0720	R13	R47	R10	0.35	0.086	High
15	0.0784	R19	R38	R10	0.47	0.086	High
16	0.0640	R13	R33	R11	0.47	0.086	High
17	0.0896	R19	R49	R11	0.35	0.086	High
18	0.0896	R21	R34	R11	0.35	0.086	High
19	0.0920	R19	R34	R11	0.47	0.086	High
20	0.0840	R13	R49	R13	0.35	0.086	High
21	0.0840	R19	R30	R13	0.47	0.086	High
22	0.0896	R21	R31	R13	0.47	0.086	High
Package	Glazing Factor	R wall	R ceiling	R crawl	U door	U overall	HVAC Equipment Efficiency
23	0.0520	R19	R34	R19	0.47	0.070	Normal
24	0.0672	R13	R36	R19	0.47	0.083	High
25	0.0720	R13	R33	R19	0.47	0.083	High
Package	Glazing Factor	R wall	R ceiling	R slab	U door	U overall	HVAC Equipment Efficiency
26	0.0560	R21	R36	R5	0.47	0.103	Normal
27	0.0728	R13	R36	R5	0.47	0.121	High
28	0.0760	R13	R34	R5	0.47	0.121	High
Package	Glazing Factor	R wall	R ceiling	R heated-slab	U door	U overall	HVAC Equipment Efficiency
29	0.0560	R21	R47	R5	0.47	0.101	Normal
30	0.0728	R13	R42	R5	0.47	0.120	High
31	0.0760	R13	R38	R5	0.47	0.120	High
Package	Glazing Factor	R wall	R ceiling	R floor	U door	U overall	HVAC Equipment Efficiency
32	0.0480	R19	R47	R19	0.35	0.065	Normal
33	0.0728	R19	R36	R19	0.47	0.077	High
34	0.0560	R13	R34	R19	0.47	0.077	High

**Table B-2 Prescriptive packages, Non-electric Heat, Insulating Sheathing**

Package	Glazing Factor	R wall	R ceiling	R basement	U door	U overall	HVAC Equipment Efficiency
35	0.0370	R20, I	R42	R7	0.35	0.073	Normal
36	0.0363	R28, I	R38, RT	R5	0.35	0.073	Normal
37	0.0552	R18, I	R44	R10	0.35	0.073	Normal
38	0.0560	R20, I	R47	R10	0.35	0.073	Normal
39	0.0560	R23, I	R34	R10	0.35	0.073	Normal
40	0.0560	R18, I	R47	R11	0.35	0.073	Normal
41	0.0616	R23, I	R42	R11	0.35	0.073	Normal
42	0.0546	R18, I	R44	R11	0.35	0.073	Normal
43	0.0672	R23, I	R40	R13	0.35	0.073	Normal
44	0.0720	R25, I	R36	R13	0.35	0.073	Normal
45	0.0504	R18, I	R40	R5	0.35	0.086	High
46	0.0560	R19, I	R47	R5	0.35	0.086	High
47	0.0560	R23, I	R38	R5	0.47	0.086	High
48	0.0600	R25, I	R38	R5	0.47	0.086	High
49	0.0680	R26, I	R42	R5	0.35	0.086	High
50	0.0680	R28, I	R47	R5	0.47	0.086	High
51	0.0672	R26, I	R47	R5	0.35	0.086	High
52	0.0672	R28, I	R38	R5	0.35	0.086	High
53	0.0720	R20, I	R42	R7	0.47	0.086	High
54	0.0855	R18, I	R36	R11	0.35	0.086	High



55	0.0896	R23, I	R33	R11	0.47	0.086	High
56	0.0861	R18, I	R36	R13	0.47	0.086	High
57	0.1000	R23, I	R33	R13	0.47	0.086	High
Package	Glazing Factor	R wall	R ceiling	R crawl	U door	U overall	HVAC Equipment Efficiency.
58	0.0546	R18, I	R38	R19	0.47	0.070	Normal
59	0.0784	R15, I	R30	R19	0.47	0.083	High
60	0.0880	R15, I	R38	R19	0.47	0.083	High
Package	Glazing Factor	R wall	R ceiling	R slab	U door	U overall	HVAC Equipment Efficiency
61	0.0640	R23, I	R36	R5	0.47	0.103	Normal
62	0.0896	R15, I	R36	R5	0.47	0.121	High
63	0.0960	R15, I	R38	R5	0.47	0.121	High
Package	Glazing Factor	R wall	R ceiling	R heated-slab	U door	U overall	HVAC Equipment Efficiency
64	0.0640	R23, I	R34	R5	0.47	0.101	Normal
65	0.0840	R15, I	R31	R5	0.47	0.121	High
66	0.0920	R15, I	R33	R5	0.47	0.121	High
Package	Glazing Factor	R wall	R ceiling	R floor	U door	U overall	HVAC Equipment Efficiency
67	0.0480	R20, I	R44	R19	0.35	0.065	Normal
68	0.0728	R20, I	R36	R19	0.47	0.077	High
69	0.0560	R14, I	R38	R19	0.47	0.078	High

Table B-3 Prescriptive packages, Electric Heat, Structural Sheathing Only

Package	Glazing Factor	R wall	R ceiling	R basement	U door	U overall	HVAC Equipment Efficiency
E 70	0.0396	R21	R37, RT	R19	0.35	0.059	Normal
E 71	0.0429	R21	R42, RT	R19	0.35	0.059	Normal
E 72	0.0520	R21	R49	R13	0.35	0.068	High
E 73	0.0640	R19	R42, RT	R19	0.35	0.068	High
E 74	0.0693	R21	R49, RT	R19	0.47	0.068	High
Package	Glazing Factor	R wall	R ceiling	R crawl	U door	U overall	HVAC Equipment Efficiency
E 75	0.0429	R21	R54, RT	R30	0.35	0.054	Normal
E 76	0.0480	R21	R45, RT	R19	0.35	0.062	High
E 77	0.0627	R21	R54, RT	R30	0.47	0.062	High
Package	Glazing Factor	R wall	R ceiling	R slab	U door	U overall	HVAC Equipment Efficiency
E 78	0.0396	R26	R51, RT	R10	0.35	0.083	Normal
E 79	0.0480	R21	R49	R7	0.35	0.095	High
E 80	0.0528	R21	R49, RT	R5	0.35	0.095	High
Package	Glazing Factor	R wall	R ceiling	R floor	U door	U overall	HVAC Equipment Efficiency
E 81	0.0363	R21	R54, RT	R30	0.35	0.052	Normal
E 82	0.0520	R21	R49	R30	0.35	0.060	High
E 83	0.0528	R21	R44, RT	R30	0.47	0.060	High

Table B-4 Prescriptive packages, Electric Heat, Insulating Sheathing

Package	Glazing Factor	R wall	R ceiling	R basement	U door	U overall	HVAC Equipment Efficiency
E 84	0.0480	R25, I	R48, RT	R16	0.35	0.059	Normal
E 85	0.0495	R25, I	R48, RT	R16	0.35	0.059	Normal
E 86	0.0462	R28, I	R40	R16	0.35	0.059	Normal
E 87	0.0429	R25, I	R36	R18	0.35	0.059	Normal
E 88	0.0528	R23, I	R58, RT	R18	0.35	0.059	Normal
E 89	0.0462	R25, I	R42	R18	0.35	0.059	Normal
E 90	0.0560	R25, I	R46, RT	R10	0.35	0.068	High
E 91	0.0640	R23, I	R48, RT	R13	0.35	0.068	High
E 92	0.0600	R25, I	R42	R13	0.35	0.068	High
E 93	0.0600	R23, I	R37	R18	0.47	0.068	High
E 94	0.0759	R25, I	R46, RT	R18	0.47	0.068	High
Package	Glazing Factor	R wall	R ceiling	R crawl	U door	U overall	HVAC Equipment Efficiency
E 95	0.0429	R25, I	R48, RT	R23	0.35	0.054	Normal
E 96	0.0520	R23, I	R38	R23	0.35	0.062	High
E 97	0.0561	R25, I	R44	R23	0.47	0.062	High
Package	Glazing Factor	R wall	R ceiling	R slab	U door	U overall	HVAC Equipment Efficiency
E 98	0.0396	R25, I	R48, RT	R10	0.35	0.083	Normal
E 99	0.0560	R23, I	R44	R7	0.35	0.095	High
E 100	0.0594	R25, I	R46, RT	R5	0.47	0.095	High
Package	Glazing Factor	R wall	R ceiling	R floor	U door	U overall	HVAC Equipment Efficiency
E 101	0.0429	R25, I	R46, RT	R30	0.35	0.052	Normal
E 102	0.0560	R23, I	R44	R30	0.35	0.060	High
E 103	0.0627	R25, I	R44, RT	R30	0.47	0.060	High



Town of Sheboygan  
4020 Technology Parkway  
Sheboygan, WI 53083  
Telephone # (920) 451-2320  
Fax # (920) 451-2323

## NEW HOME AS-BUILT ELEVATION & SETBACK CERTIFICATION

This form must be submitted to the Town of Sheboygan and approved by the Building Inspector before the foundation inspection and backfilling of the foundation.

Date \_\_\_\_\_ Applicant Name \_\_\_\_\_

Email \_\_\_\_\_ Phone \_\_\_\_\_

I hereby certify that I have surveyed the property located at

\_\_\_\_\_ and the setbacks

and foundation elevation are as follows:

	PLAN	SURVEY
FRONT YARD SETBACK	_____	_____
LEFT-SIDE YARD SETBACK	_____	_____
RIGHT-YARD SETBACK	_____	_____
REAR YARD SETBACK	_____	_____
ELEVATION – TOP OF FOUNDATION	_____	_____
SILT FENCE INSTALLED PER SITE PLAN	_____	_____

COMMENTS: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

SURVEYOR \_\_\_\_\_ REGISTRATION # \_\_\_\_\_  
(SIGNATURE)



Town of Sheboygan  
4020 Technology Parkway  
Sheboygan, WI 53083  
Phone (920) 451-2320  
Fax (920) 451-2323

COST: \$200.00

Fill out AND Submit  
it BRINGING Fill in.

## APPLICATION FOR DUMPING/FILL PERMIT

Date \_\_\_\_\_ Name: \_\_\_\_\_ Permit # \_\_\_\_\_

Phone # \_\_\_\_\_ Email \_\_\_\_\_

Address \_\_\_\_\_

Lot Number if applicable \_\_\_\_\_

Owner \_\_\_\_\_

Type of Fill \_\_\_\_\_

Quantity of Fill \_\_\_\_\_

Describe Where Fill Is Needed:

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

Start Date \_\_\_\_\_ Finish Date \_\_\_\_\_

THIS PERMIT WILL BE SUBMITTED TO THE TOWN ENGINEER FOR REVIEW AND APPROVAL.  
ONCE THE APPROVAL IS RECEIVED BY THE TOWN OFFICE, THE PERMIT WILL BE GRANTED.

THE PRIVILEGE AS GRANTED ABOVE IS GRANTED ONLY ON THE CONDITION THAT BY THE  
ACCEPTANCE OF THE PRIVILEGE, THE SAID UNDERSIGNED SHALL BECOME PRIMARILY  
RESPONSIBLE AND LIABLE FOR ALL AND ANY DAMAGE TO PERSONS OR PROPERTY CAUSED  
BY AND ARISING FROM THE GRANT AND EXERCISE OF SUCH PRIVILEGE.

THE OWNER SHALL BE RESPONSIBLE FOR ANY AND ALL DAMAGE OR STORMWATER  
DAMAGE PROBLEMS CAUSED AS A RESULT OF THIS DUMPING OPERATION.

THIS PERMIT WILL BE SUBMITTED TO THE TOWN ENGINEER FOR APPROVAL. YOU WILL BE  
NOTIFIED OF APPROVAL.

SIGNATURE \_\_\_\_\_

This permit is good for one (1) year from date of issuance.



**Town of Sheboygan**  
4020 Technology Parkway  
Sheboygan, WI 53083  
Phone (920) 451-2320  
Fax (920) 451-2323

**Cost: \$300**

## **APPLICATION FOR DRIVEWAY/CULVERT PERMIT**

DATE \_\_\_\_\_ PERMIT # \_\_\_\_\_

LOCATION OF DRIVEWAY \_\_\_\_\_

WIDTH OF DRIVEWAY \_\_\_\_\_ (MAX. LENGTH OF CULVERT ALLOWED IS 36')

NEW \_\_\_\_\_ EXISTING \_\_\_\_\_ NUMBER OF CULVERTS \_\_\_\_\_

OWNER \_\_\_\_\_ PHONE # \_\_\_\_\_

ADDRESS \_\_\_\_\_ EMAIL \_\_\_\_\_

APPLICANT NAME (If different than owner.) \_\_\_\_\_

DESCRIBE WORK TO BE DONE \_\_\_\_\_

\_\_\_\_\_ COST \_\_\_\_\_

Please mark new driveways with stakes indicating where the new driveway is located.

CONTRACTOR \_\_\_\_\_ ADDRESS \_\_\_\_\_ PHONE \_\_\_\_\_

REMARKS \_\_\_\_\_

The undersigned hereby applies for a permit to do the work above described, and hereby agrees that such work will be done in accordance with the descriptions herein set forth in this statement. The privilege as granted above is granted only on the condition that by the acceptance of the privilege the said undersigned, shall become primarily responsible and liable for any and all damage to persons or property caused by and arising from the grant and exercise of such privilege. Upon completion of culvert installation, please notify the Town to have the culvert inspected by the engineer. Failure to obtain final approval will result in the owner taking full responsibility for any installation problems with the culvert.

Per Town Ordinance 18.03(g) Regulation of Town Culverts: After the culvert installation is complete, the driveway shall be at least four (4) inches below the grade of the adjacent highway pavement at a point six (6) feet from the edge of the pavement. Edge of driveway must be a minimum of 5-feet (green space) from lot line. This permit expires six (6) months from date of issuance.

SIGNATURE \_\_\_\_\_

Office use only

Culvert length \_\_\_\_\_

Culvert diameter \_\_\_\_\_ Culver invert Grade \_\_\_\_\_ Culver invert Grade \_\_\_\_\_

Stake \_\_\_\_\_ Stake \_\_\_\_\_

Approved \_\_\_\_\_ Date \_\_\_\_\_





## BUILDING PERMIT REQUIREMENTS

This information is being provided to outline the requirements of the Town of Sheboygan regarding new construction

- All documents must be at the Town Hall at least five working days prior to the issuance of a new home permit.
- All fees and deposits are due at the time that the permit is issued.
- The sewer connection fee is due at the time that the paperwork for the new home permit is submitted.
- If there are any structures on the parcel, please contact the Town Clerk to make an appointment with the Town Board regarding zoning and ordinances.
- All home inspections must be called/emailed by 4:00 pm for a next day inspection. All inspections are done Monday through Friday. This includes footing, foundation, backfill, rough framing, insulation, and final inspections. SAFEBuilt can be emailed at [WIinspections@safebuilt.com](mailto:WIinspections@safebuilt.com) or call 262.420.4732 and leave permit number, name, address in the Town of Sheboygan and your phone number.
- Sewer inspections/Sewer service inspections must be called in at least 24 hours/1 day in advance of requested inspection. Call the Town Hall Office at 920.451.2320. Department of Utilities provide outside sewer connection inspections.
- If the home is on municipal water and water is needed for construction, 24 hours/1 day notice is required to have the meter installed. Call the Town Hall Office at 920.451.2320. Department of Utilities provides meter installation.
- The Town Hall must be notified in writing, any changes in subcontractors as soon as a change is made.  
**Expedited Inspection Fees:** The Town Board adopted changes to our fees related to expedited inspections. "In the event an owner or contractor requests an expedited inspection with less than the notice required by Wis Admin Code 320.10 and the Town Inspector is willing and able to accommodate the expedited request, then the inspection may be done upon the payment of and expedited inspection fee of \$138.00."
- Any change to the original approved building plans must be resubmitted with a new WI Uniform Building Permit.
- Application. Additional fees will be charges for changes to building plans for administration, review, and reissuance of permits.
- Silt fence and erosion control measures must be installed correctly and maintained during the entire construction period. A tracking pad must be installed at the property and all construction vehicles are required to use the tracking pad. Any soils moved on the roadway by the truck traffic must be cleaned up immediately.
- No fill, spoils, brush, or construction material including dumpsters may be stored in any easement areas or on any Town streets.
- There is no overnight parking on any roadway in the town of Sheboygan. This includes construction equipment and dumpsters.
- When the culvert is installed, please call the Town Hall to schedule an inspection. A final driveway inspection must be done when the culvert and top surface are completed, prior to occupancy.
- A \$3,000.00 refundable "as built" survey, road and ditch inspection deposit shall be collected at the time of building permit issuance. The "as built" survey and inspection deposit shall be refunded to applicant when an "as

built" survey, road and ditch inspection as required by § 3.03(3) of the Town Code, has been approved by the Town Building Inspectors and Public Works Director or Engineer and placed on file with the Town Clerk's office and all inspections have been completed. In the event applicant fails to provide the required "as built" survey, road and ditch inspection within six (6) months of occupancy of the subject property or occupies the property before final inspections have been successfully completed, the Town may in its discretion (i) authorize its surveyor and/or engineer to prepare same and deduct the costs therefore from the "as built" survey, road and ditch inspection deposit or (ii) retain the "as built" survey, road, and ditch inspection deposit as a forfeiture for failure to provide the required "as built" survey or for occupying the property before final inspections have been successfully completed. In addition, the Town may deduct all extra building inspection fees and costs required to complete the building inspection as required by this Code. The balance of said deposit, if any, shall be refunded to the applicant within sixty (60) days of the satisfactory completion of all building permit requirements.

- A final occupancy permit will be required prior to occupancy. All inspections must be completed, and the signed Occupancy Permit must be issued prior to anyone occupying the home.

---

Contractor Signature

---

Date

# TOWN OF SHEBOYGAN

## Residential and Small Commercial Meter Setting Specifications

Revised 12/19/2022

The following specifications provide consistent standards for water meter settings in the TOWN OF SHEBOYGAN. Based on information obtained from American Water Works Association (AWWA) standards, Badger Meter Inc., and Master Meter Inc., these specifications help to ensure the meter's accuracy and the safety of workers who must maintain meters. Meter sizes will be selected by the Town of Sheboygan, based off flows provided by the plumbing designer.

- **Pressure Reducing Valves:** Prior to meter installation, contractor shall demonstrate the static water pressure at the meter location does not exceed 80psi. A pressure reducing valve shall be furnished and installed by contractor to manage pressures over 80psi.
- **Horns (yokes):** Meter horns, furnished and installed by the contractor, are required on all new residential installations, including single and multiple dwelling units. Horns must not have built-in backflow prevention. Meter horns are strongly encouraged, but not required on existing installations unless the entire meter setting must be rebuilt. Meter horns shall have a 7 1/2" inch laying length. The contractor is responsible for sizing meter horn to plumbing design and meter specifications.
- **Valves:** All meter settings must have two valves (inlet and outlet). Existing installations with only a functional inlet valve are acceptable. If an existing setting has valves in need of replacement, then the setting will need to be rebuilt, including the addition of a horn. Outlet valves shall not be installed closer than 6" from the meter horn flanges. Multiple dwelling and commercial settings must have a lockable in-valve, minimum 3/4" diameter. Valves shall have handles and be operable. It is the responsibility of property owner to maintain valves.
- **Support:** All meter horns shall be full pipe clamped to the wall or floor within 6" inches of the inlet and outlet of the horn. All support hardware must be compatible material to reduce the potential for galvanic action with the piping. Support hardware cannot distort, cut, or abrade the piping and must be sufficiently rigid to support the piping and its contents. Radiator clamps and pipe rests are not acceptable means of support.
- **Clearance:** All meter settings shall maintain 18" of unobstructed space from the floor to center pipe of the meter. The center pipe of the meter shall be no higher than 48" from the floor. A minimum of 12" of unobstructed space must be maintained above the meter lens. 36" of unobstructed space must be maintained in front of the meter setting.

If multiple meters are stacked, 24" of unobstructed space shall be maintained between the bottom meter, center of pipe and the top meter, center of pipe. If multiple meters are parallel or in a row, 6" of space must be maintained between each meter horn.

**All water meters shall be installed and removed by Town of Sheboygan District 3 staff.** Contact the Town of Sheboygan, (920) 451-2320, at least 24 hours in advance to schedule the installation. Meter installs will only be performed Mon-Thurs 7am-3pm or by special appointment.