

S&B USE

7646

EXEMPTION APPLICATION
FROM
RENTAL WEATHERIZATION STANDARDS
Section 101.122, Wisconsin Statutes
PIPE INSULATION

DEPARTMENT OF COMMERCE
Safety and Buildings Division
P.O. Box 7302
Madison, Wisconsin 53707
(920) 854-7405

NAMES OF ALL OWNERS	ADDRESS OF RENTAL UNIT	PREPARER OTHER THAN OWNER
OWNER'S ADDRESS	NUMBER OF DWELLING UNITS	PREPARER'S ADDRESS
CITY STATE ZIP	CITY	CITY STATE ZIP
OWNER'S TELEPHONE NUMBER ()	COUNTY	TELEPHONE NUMBER ()

Applications for exemptions must be made on this form. **ONLY ONE EXEMPTION MAY BE REQUESTED ON EACH FORM.** The worksheet within this application estimates the energy saved from the envelope measures required by Ch. 67.05. Other nonenvelope cost payback calculations may be approved by the Department. The final acceptance of cost payback shall be made by the Department.

TO APPLY FOR AN EXEMPTION - Each request for an exemption must include:

1. **A completed application.**
2. **5-Year payback calculations (Worksheet on pages 2, 3, & 4 or other documented method).
(Note: Separate calculations should be done for supply and/or return ducts.)**
3. **Drawings or pictures depicting the conditions.**
4. **Documentation of unit fuel cost (Fuel billing less than 6 months old).**
5. **Cost estimate of the conservative measure (Signed by contractor).**
6. **Owner's signature and date signed.**
7. **\$25 Application fee (Make checks payable to Dept. of Commerce, Safety and Buildings Division).**
8. **Send to Dept. of Commerce, Rental Weatherization, P.O. Box 7302, Madison, Wisconsin 53707.**

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The Department will determine eligibility for an exemption in accordance with COMM 67.06 of the Wisconsin Administrative Code. Upon determination of eligibility, the office will issue a letter of exemption which must be presented to the inspector performing the compliance inspection.

Calculation Procedures for Exemption Form

The following portion of the application is used to calculate savings for envelope energy conservation measures required by Ch. COMM 67. Worksheet uses estimating methods specified by Ch. 67.

1. Refer to Fig. 1. Enter the zone number for the rental unit. 1a)
 Enter the degree days/year. 1b)
2. Enter the coefficient found in Table 1 referring to your type of fuel. Coefficient = 2)
 Units = (fuel units x hour) / (day x Btu)
3. Multiply line 1b, the number DD, times the coefficient, line 2. (1b) x (2) = 3)
 Units = (fuel units x hour x F/Btu-year)
4. Enter your cost for one unit of fuel. (In \$ per gallon, \$ per KWH, \$ per CCF, \$ per cord of wood). \$/Fuel Unit = 4)
5. Multiply line 3 by line 4. (3) x (4) =- 5)

NOTE: *All the information needed to complete #1 - #5 can be found in Figure 1, Table 1, and a heating fuel utility bill from the most current heating season.

TABLE 1 - Fuel Coefficiencies (Line 2)

FUEL	COEFFICIENT
LP	.00239
Oil	.00158
Natural Gas	.00218
Electricity	.03516
Wood	8.65×10^{-6}

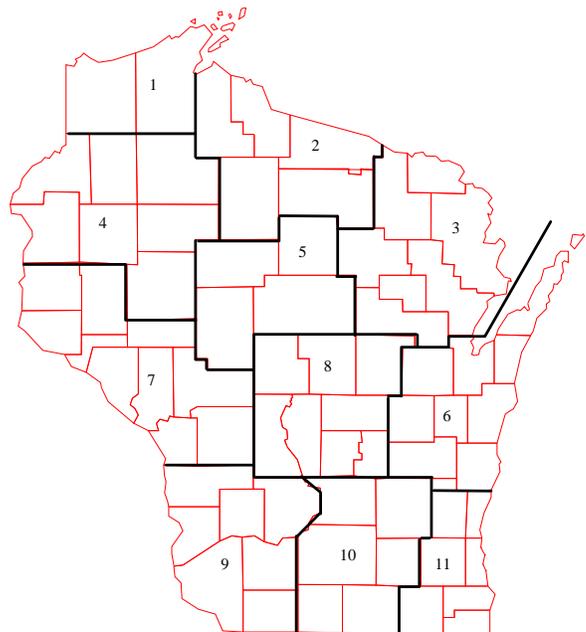
NOTE: These coefficients account for the heating value of the fuel and the annual furnace efficiency.

FIGURE 1

Degree Days Per Year

Wisconsin Division
of State Energy
Degree Day Zones

- Zone 1 - 8960
- Zone 2 - 9128
- Zone 3 - 8608
- Zone 4 - 8686
- Zone 5 - 8354
- Zone 6 - 8089
- Zone 7 - 8330
- Zone 8 - 7872
- Zone 9 - 7466
- Zone 10 - 7673
- Zone 11 - 7324



6. Your pipes may have sections of different diameters. Carefully measure the outer diameter of your pipes (don't worry about joints) and select the appropriate coefficients from Table 2.

What are your pipes made of? Check one: Copper (1) Steel (2)

	DIAMETER 1	DIAMETER 2	DIAMETER 3	
6a) Enter pipe diameter dimensions for each pipe section (inches). 6a)	<input type="text"/>	<input type="text"/>	<input type="text"/>	
6b) Enter length of each pipe section (feet). 6b)	<input type="text"/>	<input type="text"/>	<input type="text"/>	
6c) Enter the appropriate coefficient from Table 2. 6c)	<input type="text"/>	<input type="text"/>	<input type="text"/>	
6d) Multiply line 6b by line 6c. 6d)	<input type="text"/>	<input type="text"/>	<input type="text"/>	6e) <input type="text"/>

- 6e) Add all the products of line 6d and enter the resulting sum here. **▲ UA**
- 6f) If this exemption is for insulation on steam or hydronic (hot water) heating pipes, the sum in line 6e is the **▲ UA** product. Go to line 7.
- 6g) If this exemption is for domestic hot water pipe insulation, divide the sum in line 6e by the number of degree days from line 1b. Enter the result. This is the **▲ UA** product. Go to line 7.

6g)

TABLE 2 - Coefficients for Pipe Insulation (Line 6c)

Actual Pipe OD, Inches*	Coefficients			
	Domestic Hot Water Noncirculating	Domestic Hot Water Circulating	Hydronic Heating	Steam Heating
STEEL				
0.84	4198	8395	0.3439	
1.05	5292	10585	0.4253	
1.32	6570	13140	0.5339	1.294
1.66	8212	16425	0.6697	1.593
1.90	9308	18615	0.7602	1.828
2.38	11680	23360	0.9321	2.262
2.88	14052	28105	1.122	2.579
3.50	16790	33580	1.348	3.258
4.50	21352	42705	1.701	4.136
COPPER				
0.62	1642	3285	0.1357	
0.88	2555	5110	0.2081	
1.12	3102	6205	0.2534	0.6787
1.32	3832	7665	0.3167	0.8597
1.62	4562	9125	0.3710	0.9774
2.12	5840	11680	0.4796	1.249
2.62	6935	13870	0.5701	1.520
3.12	8212	16425	0.6606	1.774
4.12	10585	21170	0.8507	2.380

*OD stands for "Outer Diameter." To accurately determine the OD of your pipe, measure the circumference with a tape measure. Then divide the circumference by 3.14. Choose the OD on the chart that is closest to your answer.

7. Enter the results of line 5. _____
8. **5-YEAR DOLLAR SAVINGS.** Multiply line 6e or 6g by line 7. _____
9. **RETROFIT COST.** Must be documented by an estimate signed by the issuing contractor _____
10. Are the 5-year energy savings greater than the retrofit cost?
- _____ Yes, the retrofit pays back in five years
- _____ No, it does not pay back in five years

(Owner's Signature)

(Preparer's Signature)

Attach Photos or Drawings