

**Addendum to ORNL-6907 [1]
August 2002**

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In 2002, the data files used by the interactive ZIP-Code computer program were updated to reflect current fuel prices, insulation costs, postal zip-code changes, and anticipated future fuel prices.[2] The algorithms remained unchanged. The following tables can be used as direct replacements for those contained in The Supporting Documentation for the 1997 Revision to the DOE Insulation Fact Sheet.[1] The recommended insulation levels shown in Tables 8-11 of ORNL-6907 were not revised at this time.

The moisture guidance found in the Internet versions of the Insulation Fact Sheet was expanded and updated using the best available research results in this field.[3] This topic has been the subject of intense study the last few years due to increased awareness of moisture problems that often accompany tight well-insulated homes.

The insulation prices were revised by examining the change in insulation prices between the Means CostWorks 2002 and the R. S. Means prices published in 1996.[4,5] These escalation factors were then applied to the prices shown in Table 7 of ORNL-6907 to produce the replacement table included here.[1] The insulation cost multiplier was previously a state-wide value and was included in Appendix E of the original Supporting Documentation.[1] In this update, the state-wide values have been replaced by a cost multiplier for each zip-code area, now shown in Appendix A[4]

Residential electric power and home heating oil prices were taken from references 6 and 7. Propane prices have been varying over a wide range, so an average of prices from May 2001 to April 2002 was used.[7] Natural gas prices have also been more volatile recently, so an average of prices from December 2000 to November 2001 was used.[8]

Table 7. Insulation costs and thermal resistances used in the ZIP-Code computer program, revised 2002

Added insulation R-value (h-ft ² -°F/Btu)		Overall component U-value (Btu/°F·ft ² ·h)	Cost (\$/ft ² or \$/linear ft)	
			New construction	Existing
Wood-framed attic (\$/ft²)				
0		0.2540		
11		0.0688	0.26	0.29
19		0.0455	0.36	0.41
22		0.0400	0.40	
30		0.0333	0.50	0.54
38		0.0241	0.60	0.65
49		0.0199	0.74	0.84
60		0.0193	0.89	
Metal-framed attic (\$/ft²)				
Sheathing	Cavity			
none	0	0.592		
none	11	0.092	0.26	0.29
none	19	0.062	0.36	0.41
none	30	0.045	0.50	0.54
none	38	0.039	0.60	0.65
none	49	0.033	0.74	0.84
5	38	0.028	1.23	
5	49	0.023	1.37	
10	49	0.020	1.67	
Cathedral ceiling (\$/ft²)				
0		0.2616		
11		0.0742	0.38	
13		0.0666	0.52	
15		0.0607	0.70	
19		0.0493	0.59	
22		0.0434	0.65	

Table 7. Insulation costs and thermal resistances used in the ZIP-Code computer program, revised 2002 (cont.)

Added insulation R-value (h-ft ² -F/Btu)	Overall component U-value (Btu/°F·ft ² ·h)	Cost (\$/ft ² or \$/linear ft)	
		New construction	Existing
<u>Cathedral ceiling (\$/ft²) (cont.)</u>			
30	0.0332	0.85	
38	0.0270	1.01	
49	0.0216	2.28	
60	0.0178	2.66	
<u>Masonry Walls (\$/ft²)</u>			
0	0.263		
3.8	0.164	0.22	0.22
5.7	0.130	0.36	0.36
7.6	0.108	0.56	0.56
11.4	0.080	0.84	0.84
15.0	0.068	1.94	1.94
<u>Wood- or metal-framed floor (\$/ft²)</u>			
11	not used	0.42	0.43
13	not used	0.46	0.52
19	not used	0.59	0.64
25	not used	0.71	0.87
<u>Slab edge (\$/linear foot)</u>			
4	not used	1.53	
8	not used	1.91	
<u>Crawl space walls (\$/linear foot)</u>			
11	not used	1.65	1.67
13	not used	1.83	1.96
19	not used	2.41	2.54
<u>Basement walls - exterior application (\$/linear foot)</u>			
4	not used	6.76	
5	not used	7.64	

Table 7. Insulation costs and thermal resistances used in the ZIP-Code computer program, revised 2002 (cont.)

Added insulation R-value (h-ft ² -F/Btu)	Overall component U-value (Btu/°F·ft ² ·h)	Cost (\$/ft ² or \$/linear ft)	
		New construction	Existing
Basement walls - exterior application (\$/linear foot) (cont.)			
8	not used	10.14	
10	not used	11.85	
12	not used	13.41	
15	not used	15.86	
Basement walls - interior application (\$/linear foot)			
11 ^a	not used	5.43	5.43
11	not used	7.32	7.32
13	not used	8.14	8.14
19	not used	10.32	10.32
Band joist (\$/linear foot)			
0	0.197		
11	0.065	0.35	
13	0.059	0.41	
19	0.044	0.51	
30	0.031	0.68	
Add insulative sheathing to uninsulated exterior wall^b (\$/ft ²)			
0	0.204		
2.5	0.134		0.51
5.	0.100		0.63
7.	0.0831		0.95
Add insulative sheathing to wall with R-11 cavity insulation^b (\$/ft ²)			
	Wood	Metal	
0	0.084	0.105	
2.5	0.068	0.081	0.51
5.	0.058	0.067	0.63
7.	0.052	0.058	0.95

Table 7. Insulation costs and thermal resistances used in the ZIP-Code computer program, revised 2002 (cont.)

Added insulation R-value (h-ft ² -F/Btu)		Overall component U-value (Btu/°F·ft ² ·h)	Cost (\$/ft ² or \$/linear ft)	
			New construction	Existing
Wood-framed wall - combined insulative sheathing and cavity insulation (\$/ft²)				
<u>Sheathing</u>	<u>Cavity</u>			
0	none	0.2052		
2.5	11	0.0686	0.85	
3.5	11	0.0639	1.07	
2.5	13	0.0639	0.92	
3.5	13	0.0597	1.14	
2.5	15	0.0601	1.16	
3.5	15	0.0563	1.37	
2.5	19	0.0496	1.97	
3.5	19	0.0470	2.17	
2.5	21	0.0474	2.09	
3.5	21	0.0450	2.29	
5	11	0.0581	0.97	
7	11	0.0519	1.32	
5	13	0.0545	1.04	
7	13	0.0489	1.36	
5	15	0.0515	1.26	
7	15	0.0464	1.58	
5	19	0.0437	2.07	
7	19	0.0399	2.39	
5	21	0.0418	2.19	
7	21	0.0383	2.51	
none	11	0.0840	0.34	0.90
none	13	0.0777	0.41	
none	15	0.0727	0.63	
none	19	0.0577	1.44	

Table 7. Insulation costs and thermal resistances used in the ZIP-Code computer program, revised 2002 (cont.)

Added insulation R-value (h-ft ² -F/Btu)		Overall component U-value (Btu/°F·ft ² ·h)	Cost (\$/ft ² or \$/linear ft)	
			New construction	Existing
Wood-framed wall - combined insulative sheathing and cavity insulation (\$/ft²) (cont.)				
<u>Sheathing</u>	<u>Cavity</u>			
none	21	0.0550	1.56	
2.5	none	0.1341	0.51	
3.5	none	0.1179	0.71	
5	none	0.0999	0.63	
7	none	0.0831	0.95	
Metal-framed wall - combined insulative sheathing and cavity insulation (\$/ft²)				
<u>Sheathing</u>	<u>Cavity</u>			
none	none	0.2362		
2.5	none	0.1486	0.51	0.51
3.5	none	0.1293	0.71	
5	none	0.1084	0.63	0.63
7	none	0.0891	0.95	
none	11	0.1049	not used	0.90
none	13	0.0988	not used	
none	15	0.0942	not used	
none	19	0.0864	not used	
none	21	0.0841	not used	
2.5	11	0.0808	0.85	
3.5	11	0.0731	1.07	
2.5	13	0.0766	0.92	
3.5	13	0.0693	1.14	
2.5	15	0.0733	1.16	
3.5	15	0.0662	1.37	
2.5	19	0.0685	1.97	
3.5	19	0.0619	2.17	

Table 7. Insulation costs and thermal resistances used in the ZIP-Code computer program, revised 2002 (cont.)

Added insulation R-value (h-ft ² -F/Btu)		Overall component U-value (Btu/°F·ft ² ·h)	Cost (\$/ft ² or \$/linear ft)	
			New construction	Existing
Metal-framed wall - combined insulative sheathing and cavity insulation (\$/ft²) (cont.)				
<u>Sheathing</u>	<u>Cavity</u>			
2.5	21	0.0668	2.09	
3.5	21	0.0603	2.29	
5	11	0.0672	0.97	
7	11	0.0580	1.29	
5	13	0.0642	1.04	
7	13	0.0554	1.36	
5	15	0.0618	1.26	
7	15	0.0533	1.58	
5	19	0.0586	2.09	
7	19	0.0505	2.39	
5	21	0.0573	2.21	
7	21	0.0493	2.51	
Wood-framed OVE (assumed that 2x6 wall costs the same as a 2x4 wall) wall - combined insulative sheathing and cavity insulation (\$/ft²)				
<u>Sheathing</u>	<u>Cavity</u>			
0	none	0.2052		
2.5	19	0.0496	1.01	
5	19	0.0437	1.13	
5	21	0.0418	1.25	
7	19	0.0399	1.45	
7	21	0.0383	1.57	
none	11	0.0840	0.34	
none	13	0.0777	0.41	
none	19	0.0577	0.50	
none	21	0.0550	0.62	

a Fiberglass batts with flame resistant facing and minimal framing for unused basement

- areas.
- b Costs do not include removing and replacing exterior wall material, therefore, only appropriate when exterior sheathing is under renovation.

Appendix A: Climate and Cost Information Used in The Zip Computer Program, Revised 2002.

The data values shown in this table include the 3-digit zip code (i.e., the first three digits of a five digit postal zip code), the fuel escalation region, the state number, which is used to reference energy prices, and insulation cost adjustment factors. Climate values for heating (HDDk = heating degree days divided by 1000, base 65°F) and cooling (CDHk = cooling degree hours divided by 1000, base 74°F) are also shown.[9] The insulation cost factors are normalized to a national average of 1.0.[4]

Zip Code	City	State	HDDk	CDHk	Fuel Escalation Region	State No.	Insulation Cost Factor
1	Not used	0	0	0	0	0	0
2	Not used	0	0	0	0	0	0
3	Not used	0	0	0	0	0	0
4	Not used	0	0	0	0	0	0
5	Not used	0	0	0	0	0	0
6	Not used	0	0	0	0	0	0
7	Not used	0	0	0	0	0	0
8	Not used	0	0	0	0	0	0
9	Puerto Rico	PR	0.2	55.2	3	10	1.011
10	Springfield	MA	6	5.2	1	22	1.05
11	Springfield	MA	6	5.2	1	22	1.05
12	Pittsfield	MA	7.3	1.2	1	22	1.043
13	Greenfield	MA	6.6	2.9	1	22	1.043
14	Worcester	MA	7	1.5	1	22	1.105
15	Worcester	MA	7	1.5	1	22	1.114
16	Worcester	MA	7	1.5	1	22	1.114
17	Framingham	MA	6.2	4.2	1	22	1.128
18	Woburn	MA	6.2	3.6	1	22	1.142
19	Lynn	MA	6.1	2.8	1	22	1.154
20	Boston	MA	5.6	5.4	1	22	1.19
21	Boston	MA	5.6	5.4	1	22	1.19

Zip Code	City	State	HDD k	CDH k	Fuel Escalation Region	State No.	Insulation Cost Factor
22	Boston	MA	5.6	5.4	1	22	1.19
23	Brockton	MA	6	3.4	1	22	1.149
24	Brockton	MA	6	3.4	1	22	1.19
25	Buzzards Bay	MA	6.3	2.4	1	22	1.128
26	Hyannis	MA	6	2	1	22	1.129
27	New Bedford	MA	5.3	6.4	1	22	1.127
28	Providence	RI	5.9	3.6	1	40	1.06
29	Providence	RI	5.9	3.6	1	40	1.053
30	Manchester	NH	7.1	1.6	1	30	1.001
31	Manchester	NH	7.1	1.6	1	30	0.999
32	Pittsfield	NH	7.4	2	1	30	0.999
33	Concord	NH	7.4	2	1	30	0.999
34	Keene	NH	7	2.2	1	30	0.799
35	Littleton	NH	8.6	1.2	1	30	0.812
36	Acworth	NH	7	2.2	1	30	0.786
37	Claremont	NH	7.9	1.7	1	30	0.785
38	Portsmouth	NH	6.9	2.2	1	30	0.996
39	Kittery	ME	6.9	2.2	1	20	0.838
40	Portland	ME	7.5	1.1	1	20	0.852
41	Portland	ME	7.5	1.1	1	20	0.852
42	Auburn	ME	7.4	2.3	1	20	0.853
43	Augusta	ME	7.6	2.2	1	20	0.818
44	Bangor	ME	8	1.2	1	20	0.854
45	Bath	ME	7.5	1.1	1	20	0.841
46	Ellsworth	ME	7.2	1	1	20	0.841
47	Caribou	ME	9.6	0.9	1	20	0.852
48	Rockland	ME	7.3	1	1	20	0.835
49	Waterville	ME	7.5	1.8	1	20	0.819

Zip Code	City	State	HDD k	CDH k	Fuel Escalation Region	State No.	Insulation Cost Factor
50	White River Junct.	VT	8.3	1.1	1	46	0.714
51	Bellows Falls	VT	7.4	2.2	1	46	0.813
52	Bennington	VT	7.6	0.8	1	46	0.766
53	Brattleboro	VT	7.2	2.2	1	46	0.774
54	Burlington	VT	8	2.6	1	46	0.83
55	Not used	0	0	0	0	0	0
56	Montpelier	VT	8.5	1.4	1	46	0.832
57	Rutland	VT	7.2	1.8	1	46	0.835
58	St. Johnsbury	VT	7.9	1.9	1	46	0.74
59	Canaan	VT	8.7	1.5	1	46	0.74
60	Hartford	CT	6.2	4.8	1	7	1.058
61	Hartford	CT	6.2	4.8	1	7	1.037
62	Willimantic	CT	6.5	1.3	1	7	1.043
63	New London	CT	6	5	1	7	1.044
64	New Haven	CT	6	5	1	7	1.044
65	New Haven	CT	6	5	1	7	1.059
66	Bridgeport	CT	5.5	5	1	7	1.07
67	Waterbury	CT	6.5	2	1	7	1.058
68	Stamford	CT	5.9	3.6	1	7	1.076
69	Stamford	CT	5.9	3.6	1	7	1.076
70	Newark	NJ	5	9.1	1	31	1.096
71	Newark	NJ	5	9.1	1	31	1.096
72	Elizabeth	NJ	5	9.1	1	31	1.099
73	Jersey City	NJ	5.3	7	1	31	1.099
74	Paterson	NJ	5.4	6.1	1	31	1.102
75	Paterson	NJ	5.4	6.1	1	31	1.102
76	Hackensack	NJ	5.4	6.1	1	31	1.099
77	Red Bank	NJ	5.3	5.4	1	31	1.108

Zip Code	City	State	HDD k	CDH k	Fuel Escalation Region	State No.	Insulation Cost Factor
78	Dover	NJ	6.3	3.1	1	31	1.092
79	Summit	NJ	5.9	4	1	31	1.101
80	Cherry Hill	NJ	5.2	7.9	1	31	1.107
81	Camden	NJ	5	8.9	1	31	1.097
82	South Jersey	NJ	4.9	7.4	1	31	1.109
83	South Jersey	NJ	4.9	7.4	1	31	1.107
84	Atlantic City	NJ	4.9	6	1	31	1.109
85	Trenton	NJ	5	7.4	1	31	1.083
86	Trenton	NJ	5	7.4	1	31	1.083
87	Lakewood	NJ	5.3	5.4	1	31	1.104
88	New Brunswick	NJ	5.2	5.4	1	31	1.107
89	New Brunswick	NJ	5.2	5.4	1	31	1.107
90	Not used	0	0	0	0	0	0
91	Not used	0	0	0	0	0	0
92	Not used	0	0	0	0	0	0
93	Not used	0	0	0	0	0	0
94	Not used	0	0	0	0	0	0
95	Not used	0	0	0	0	0	0
96	Not used	0	0	0	0	0	0
97	Not used	0	0	0	0	0	0
98	Not used	0	0	0	0	0	0
99	Not used	0	0	0	0	0	0
100	New York	NY	4.9	9.5	1	33	1.316
101	New York	NY	4.9	9.5	1	33	1.316
102	New York	NY	4.9	9.5	1	33	1.316
103	Staten Island	NY	5	7	1	33	1.293
104	Bronx	NY	4.9	9.2	1	33	1.29
105	Westchester	NY	5.4	5.4	1	33	1.212

Zip Code	City	State	HDD k	CDH k	Fuel Escalation Region	State No.	Insulation Cost Factor
106	White Plains	NY	5.4	5.4	1	33	1.204
107	Yonkers	NY	5.4	5.4	1	33	1.211
108	New Rochelle	NY	5.4	5.4	1	33	1.213
109	Suffern	NY	5.7	6.1	1	33	1.209
110	Great Neck	NY	5	9.2	1	33	1.284
111	Queens	NY	5	9.2	1	33	1.287
112	Brooklyn	NY	5	7.6	1	33	1.288
113	Flushing	NY	5	7.6	1	33	1.287
114	Jamaica	NY	5.2	7.6	1	33	1.286
115	Minneola	NY	5.2	7.4	1	33	1.271
116	Far Rockaway	NY	5	7.6	1	33	1.285
117	Hicksville	NY	5.2	7.4	1	33	1.271
118	Hicksville	NY	5.2	7.4	1	33	1.271
119	Riverhead	NY	5.3	4.7	1	33	1.272
120	Albany	NY	6.9	3	1	33	0.92
121	Albany	NY	6.9	3	1	33	0.92
122	Albany	NY	6.9	3	1	33	0.92
123	Schenectady	NY	7	3	1	33	0.925
124	Kingston	NY	6.4	4.3	1	33	1.185
125	Poughkeep-sie	NY	6.4	4.3	1	33	1.197
126	Poughkeep-sie	NY	6.4	4.3	1	33	1.197
127	Monticello	NY	7.5	0.8	1	33	1.183
128	Glens Falls	NY	7.5	2	1	33	0.894
129	Plattsburgh	NY	7.8	1.9	1	33	0.932
130	Syracuse	NY	6.8	3.5	1	33	0.967
131	Syracuse	NY	6.8	3.5	1	33	0.967
132	Syracuse	NY	6.8	3.5	1	33	0.967
133	Utica	NY	7.4	2.7	1	33	0.909

Zip Code	City	State	HDD k	CDH k	Fuel Escalation Region	State No.	Insulation Cost Factor
134	Utica	NY	7.4	2.7	1	33	0.909
135	Utica	NY	7.4	2.7	1	33	0.909
136	Watertown	NY	7.5	2.7	1	33	0.915
137	Binghamton	NY	7.3	1.6	1	33	0.941
138	Binghamton	NY	7.3	1.6	1	33	0.941
139	Binghamton	NY	7.3	1.6	1	33	0.941
140	Buffalo	NY	6.8	3	1	33	1.026
141	Buffalo	NY	6.8	3	1	33	1.026
142	Buffalo	NY	6.8	3	1	33	1.026
143	Niagara Falls	NY	6.8	3	1	33	1.048
144	Rochester	NY	6.7	3.8	1	33	0.978
145	Rochester	NY	6.7	3.8	1	33	0.978
146	Rochester	NY	6.7	3.8	1	33	0.978
147	Jamestown	NY	7.4	3.7	1	33	0.969
148	Ithaca	NY	7.1	1.6	1	33	0.921
149	Elmira	NY	6.9	2.5	1	33	0.921
150	Pittsburgh	PA	6	5	1	39	0.993
151	Pittsburgh	PA	6	5	1	39	0.993
152	Pittsburgh	PA	6	5	1	39	0.993
153	Washington	PA	5.9	3.9	1	39	0.988
154	Uniontown	PA	5.4	6.2	1	39	0.984
155	Somerset	PA	6	6.1	1	39	0.952
156	Greensburg	PA	7	2.4	1	39	0.986
157	Indiana	PA	6.2	2.6	1	39	0.974
158	Du Bois	PA	7.2	1.8	1	39	0.968
159	Johnstown	PA	5.8	5.7	1	39	0.966
160	Butler	PA	6.5	4.7	1	39	0.996
161	New Castle	PA	5.9	4.8	1	39	0.997

Zip Code	City	State	HDD k	CDH k	Fuel Escalation Region	State No.	Insulation Cost Factor
162	Kittanning	PA	6.8	2.5	1	39	0.995
163	Oil City	PA	6.6	2.8	1	39	0.965
164	Erie	PA	6.8	2.2	1	39	0.986
165	Erie	PA	6.8	2.2	1	39	0.986
166	Altoona	PA	7.4	1.5	1	39	0.961
167	Bradford	PA	8	0.8	1	39	0.962
168	State College	PA	6.3	3.5	1	39	0.993
169	Wellsboro	PA	7.7	1.4	1	39	0.989
170	Harrisburg	PA	5.3	9.1	1	39	1.034
171	Harrisburg	PA	5.3	9.1	1	39	1.034
172	Chambers-burg	PA	5.6	5.4	1	39	0.913
173	York	PA	5.2	6.6	1	39	1.008
174	York	PA	5.2	6.6	1	39	1.008
175	Lancaster	PA	5.4	6	1	39	1.003
176	Lancaster	PA	5.4	6	1	39	1.003
177	Williams-port	PA	6.1	5	1	39	0.982
178	Sunbury	PA	5.8	5.3	1	39	0.997
179	Pottsville	PA	6.4	3	1	39	0.989
180	Lehigh Valley	PA	6	5.5	1	39	1.032
181	Allentown	PA	5.8	5.8	1	39	1.044
182	Hazleton	PA	6.9	1.7	1	39	1.007
183	Stroudsburg	PA	6.2	5.3	1	39	0.939
184	Scranton	PA	6.3	3.8	1	39	1.016
185	Scranton	PA	6.3	3.8	1	39	1.016
186	Wilkes-Barre	PA	6.3	3.8	1	39	1.014
187	Wilkes-Barre	PA	6.3	3.8	1	39	1.014
188	Montrose	PA	7.7	1.6	1	39	1.005
189	Doylestown	PA	5.4	6.5	1	39	1.094

Zip Code	City	State	HDD k	CDH k	Fuel Escalation Region	State No.	Insulation Cost Factor
190	Philadelphia	PA	5	8.9	1	39	1.127
191	Philadelphia	PA	5	8.9	1	39	1.127
192	Not used	0	0	0	1	0	0
193	Southeastern PA	PA	5	8.9	1	39	1.106
194	Southeastern PA	PA	5	8.9	1	39	1.116
195	Reading	PA	5.8	4	1	39	1.033
196	Reading	PA	5.8	4	1	39	1.033
197	Wilmington	DE	5	8.2	3	8	1.005
198	Wilmington	DE	5	8.2	3	8	1.002
199	Dover	DE	4.4	9.3	3	8	1.004
200	Washington	DC	4.2	12.4	3	9	0.895
201	Washington	DC	4.2	12.4	3	9	0.895
202	Washington	DC	4.2	12.4	3	9	0.895
203	Washington	DC	4.2	12.4	3	9	0.895
204	Washington	DC	4.2	12.4	3	9	0.895
205	Washington	DC	4.2	12.4	3	9	0.895
206	Waldorf	MD	4.4	8.2	3	21	0.875
207	Laurel	MD	4.5	10.5	3	21	0.868
208	Rockville	MD	4.7	9.8	3	21	0.868
209	Silver Spring	MD	4.7	9.8	3	21	0.888
210	Baltimore	MD	4.7	9.5	3	21	0.883
211	Baltimore	MD	4.7	9.5	3	21	0.883
212	Baltimore	MD	4.7	9.5	3	21	0.883
213	Baltimore	MD	4.7	9.5	3	21	0.883
214	Annapolis	MD	4.7	9	3	21	0.874
215	Cumberland	MD	5.1	7.1	3	21	0.888
216	Easton	MD	4.2	11	3	21	0.729
217	Frederick	MD	5.1	7.3	3	21	0.858

Zip Code	City	State	HDD k	CDH k	Fuel Escalation Region	State No.	Insulation Cost Factor
218	Salisbury	MD	4	9.2	3	21	0.816
219	Elkton	MD	5.2	6.6	3	21	0.776
220	Northern VA	VA	4.2	12.4	3	47	0.865
221	Northern VA	VA	4.2	12.4	3	47	0.865
222	Arlington	VA	4.2	12.4	3	47	0.867
223	Alexandria	VA	4.2	12.4	3	47	0.883
224	Fredericksburg	VA	4.4	10.2	3	47	0.748
225	Fredericksburg	VA	4.4	10.2	3	47	0.748
226	Winchester	VA	4.8	8.1	3	47	0.794
227	Culpeper	VA	4.4	8.9	3	47	0.753
228	Harrisonburg	VA	5.1	6.5	3	47	0.786
229	Charlottesville	VA	4.2	10.3	3	47	0.755
230	Richmond	VA	4	12.3	3	47	0.776
231	Richmond	VA	4	12.3	3	47	0.776
232	Richmond	VA	4	12.3	3	47	0.776
233	Norfolk	VA	3.5	13.7	3	47	0.753
234	Norfolk	VA	3.5	13.7	3	47	0.753
235	Norfolk	VA	3.5	13.7	3	47	0.753
236	Norfolk	VA	3.5	13.7	3	47	0.754
237	Portsmouth	VA	3.5	13.7	3	47	0.754
238	Petersburg	VA	3.4	14.6	3	47	0.778
239	Farmville	VA	4	9.4	3	47	0.689
240	Roanoke	VA	4.3	9.3	3	47	0.725
241	Roanoke	VA	4.3	9.3	3	47	0.725
242	Bristol	VA	3.9	8.8	3	47	0.712
243	Pulaski	VA	5.1	3.3	3	47	0.681
244	Staunton	VA	5.1	6.5	3	47	0.722
245	Lynchburg	VA	4.3	8.4	3	47	0.719

Zip Code	City	State	HDD k	CDH k	Fuel Escalation Region	State No.	Insulation Cost Factor
246	Tazewell	VA	6	0.8	3	47	0.681
247	Bluefield	WV	5.2	2.6	3	49	0.907
248	Welch	WV	5.1	7.9	3	49	0.907
249	Lewisburg	WV	5.3	3.7	3	49	0.933
250	Charleston	WV	4.7	8.8	3	49	0.929
251	Charleston	WV	4.7	8.8	3	49	0.929
252	Charleston	WV	4.7	8.8	3	49	0.929
253	Charleston	WV	4.7	8.8	3	49	0.929
254	Martinsburg	WV	5.2	8.2	3	49	0.79
255	Huntington	WV	4.7	11.2	3	49	0.938
256	Logan	WV	5.1	7.5	3	49	0.938
257	Huntington	WV	4.7	11.2	3	49	0.938
258	Beckley	WV	5.6	2.1	3	49	0.927
259	Beckley	WV	5.6	2.1	3	49	0.927
260	Wheeling	WV	5.5	6.8	3	49	0.932
261	Parkersburg	WV	5	9.1	3	49	0.926
262	Buckhannon	WV	5.4	4	3	49	0.927
263	Clarksburg	WV	5.5	6.4	3	49	0.927
264	Clarksburg	WV	5.5	6.4	3	49	0.927
265	Morgantown	WV	5.4	6.9	3	49	0.926
266	Gassaway	WV	4.8	6.3	3	49	0.934
267	Keyser	WV	5.1	7.1	3	49	0.861
268	Petersburg	WV	5.5	3.8	3	49	0.884
269	Not used	0	0	0	0	0	0
270	Winston Salem	NC	3.4	11.8	3	34	0.73
271	Winston Salem	NC	3.4	11.8	3	34	0.73
272	Greensboro	NC	3.9	11	3	34	0.73
273	Greensboro	NC	3.9	11	3	34	0.73

Zip Code	City	State	HDD k	CDH k	Fuel Escalation Region	State No.	Insulation Cost Factor
274	Greensboro	NC	3.9	11	3	34	0.73
275	Raleigh	NC	3.5	11.8	3	34	0.73
276	Raleigh	NC	3.5	11.8	3	34	0.73
277	Durham	NC	3.5	11.8	3	34	0.73
278	Rocky Mount	NC	3.4	13.8	3	34	0.659
279	Elizabeth City	NC	3.2	14	3	34	0.646
280	Charlotte	NC	3.3	15.2	3	34	0.731
281	Charlotte	NC	3.3	15.2	3	34	0.729
282	Charlotte	NC	3.3	15.2	3	34	0.729
283	Fayetteville	NC	3.2	15.6	3	34	0.728
284	Wilmington	NC	2.5	17.6	3	34	0.727
285	Kinston	NC	3.1	15.7	3	34	0.665
286	Hickory	NC	3.8	11.1	3	34	0.662
287	Asheville	NC	4.1	6.2	3	34	0.724
288	Asheville	NC	4.1	6.2	3	34	0.724
289	Andrews	NC	4.5	5.2	3	34	0.673
290	Columbia	SC	2.6	22	3	41	0.729
291	Columbia	SC	2.6	22	3	41	0.729
292	Columbia	SC	2.6	22	3	41	0.729
293	Spartanburg	SC	3.4	14.1	3	41	0.743
294	Charleston	SC	2.1	23.3	3	41	0.739
295	Florence	SC	2.6	17.9	3	41	0.742
296	Greenville	SC	3.2	14.1	3	41	0.742
297	Rock Hill	SC	3	15.8	3	41	0.664
298	Aiken	SC	2.4	20.3	3	41	0.795
299	Beaufort	SC	1.9	21.5	3	41	0.693
300	Atlanta	GA	3	16.8	3	11	0.854
301	Atlanta	GA	3	16.8	3	11	0.854

Zip Code	City	State	HDD k	CDH k	Fuel Escalation Region	State No.	Insulation Cost Factor
302	Atlanta	GA	3	16.8	3	11	0.854
303	Atlanta	GA	3	16.8	3	11	0.854
304	Swainsboro	GA	2.1	23	3	11	0.693
305	Gainesville	GA	3.4	14.8	3	11	0.725
306	Athens	GA	3	16.1	3	11	0.752
307	Dalton	GA	3.5	14.7	3	11	0.653
308	Augusta	GA	2.6	19.5	3	11	0.745
309	Augusta	GA	2.6	19.5	3	11	0.745
310	Macon	GA	2.3	24.4	3	11	0.795
311	Macon	GA	2.3	24.4	3	11	0.795
312	Macon	GA	2.3	24.4	3	11	0.795
313	Savannah	GA	1.9	22.8	3	11	0.779
314	Savannah	GA	1.9	22.8	3	11	0.779
315	Waycross	GA	1.9	23.6	3	11	0.682
316	Valdosta	GA	1.7	24.6	3	11	0.797
317	Albany	GA	2.1	26.5	3	11	0.77
318	Columbus	GA	2.4	22.1	3	11	0.781
319	Columbus	GA	2.4	22.1	3	11	0.781
320	Jacksonville	FL	1.4	24.2	3	10	0.801
321	Jacksonville	FL	1.4	24.2	3	10	0.844
322	Jacksonville	FL	1.4	24.2	3	10	0.801
323	Tallahassee	FL	1.7	25.2	3	10	0.753
324	Panama City	FL	1.6	29	3	10	0.674
325	Pensacola	FL	1.6	29	3	10	0.785
326	Gainesville	FL	1.1	27.7	3	10	0.785
327	Titusville	FL	0.7	29.9	3	10	0.841
328	Orlando	FL	0.7	34	3	10	0.841
329	Melbourne	FL	0.6	29.7	3	10	0.86

Zip Code	City	State	HDD k	CDH k	Fuel Escalation Region	State No.	Insulation Cost Factor
330	Miami	FL	0.2	39	3	10	0.846
331	Miami	FL	0.2	39	3	10	0.846
332	Miami	FL	0.2	39	3	10	0.846
333	Fort Lauderdale	FL	0.3	37.1	3	10	0.821
334	West Palm Beach	FL	0.3	35.2	3	10	0.804
335	Tampa	FL	0.7	33.7	3	10	0.773
336	Tampa	FL	0.7	33.7	3	10	0.773
337	Saint Petersburg	FL	0.5	38.6	3	10	0.766
338	Lakeland	FL	0.6	34.9	3	10	0.77
339	Fort Myers	FL	0.4	37.4	3	10	0.761
340	Miami	FL	0.2	39	3	10	0.846
341	Fort Myers	FL	0.4	37.4	3	10	0.761
342	Bradenton	FL	0.6	29.2	3	10	0.772
343	Not used	0	0	0	0	0	0
344	Ocala	FL	0.9	32.2	3	10	0.785
345	Not used	0	0	0	0	0	0
346	Clearwater	FL	0.7	33.7	3	10	0.773
347	Orlando	FL	0.7	34	3	10	0.841
348	Not used	0	0	0	0	0	0
349	Fort Pierce	FL	0.5	30.4	3	10	0.804
350	Birmingham	AL	2.9	21	3	1	0.886
351	Birmingham	AL	2.9	21	3	1	0.886
352	Birmingham	AL	2.9	21	3	1	0.886
353	Not used	0	0	0	0	0	0
354	Tuscaloosa	AL	2.7	24	3	1	0.813
355	Jasper	AL	3.3	18	3	1	0.741
356	Decatur/ Florence	AL	3.3	20.7	3	1	0.806
357	Huntsville	AL	3.3	18.6	3	1	0.847

Zip Code	City	State	HDD k	CDH k	Fuel Escalation Region	State No.	Insulation Cost Factor
358	Huntsville	AL	3.3	18.6	3	1	0.847
359	Gadsden	AL	3.2	17.1	3	1	0.83
360	Montgomery	AL	2.3	24.6	3	1	0.818
361	Montgomery	AL	2.3	24.6	3	1	0.818
362	Anniston	AL	2.9	18.2	3	1	0.717
363	Dothan	AL	2	23	3	1	0.76
364	Evergreen	AL	2.2	22.2	3	1	0.77
365	Mobile	AL	1.7	28.2	3	1	0.853
366	Mobile	AL	1.7	28.2	3	1	0.853
367	Selma	AL	2	26.5	3	1	0.776
368	Opelika	AL	2.6	19.2	3	1	0.826
369	Butler	AL	2.5	23.8	3	1	0.777
370	Nashville	TN	3.8	18.5	3	43	0.829
371	Nashville	TN	3.8	18.5	3	43	0.829
372	Nashville	TN	3.8	18.5	3	43	0.829
373	Chattanooga	TN	3.6	17	3	43	0.794
374	Chattanooga	TN	3.6	17	3	43	0.794
375	Memphis	TN	3.2	24.5	3	43	0.822
376	Johnson City	TN	3.9	8.8	3	43	0.769
377	Knoxville	TN	3.7	15	3	43	0.754
378	Knoxville	TN	3.7	15	3	43	0.754
379	Knoxville	TN	3.7	15	3	43	0.754
380	Memphis	TN	3.2	24.5	3	43	0.822
381	Memphis	TN	3.2	24.5	3	43	0.822
382	Mc Kenzie	TN	4.1	15.6	3	43	0.662
383	Jackson	TN	3.6	18	3	43	0.716
384	Columbia	TN	3.8	16	3	43	0.737
385	Cookeville	TN	4.5	7	3	43	0.65

Zip Code	City	State	HDD k	CDH k	Fuel Escalation Region	State No.	Insulation Cost Factor
386	Oxford	MS	3.6	19.2	3	25	0.655
387	Greenville	MS	2.6	25.5	3	25	0.728
388	Tupelo	MS	3.1	23	3	25	0.692
389	Grenada	MS	2.7	26	3	25	0.633
390	Jackson	MS	2.4	25.2	3	25	0.733
391	Jackson	MS	2.4	25.2	3	25	0.733
392	Jackson	MS	2.4	25.2	3	25	0.733
393	Meridian	MS	2.5	23.8	3	25	0.718
394	Hattiesburg	MS	2	24.3	3	25	0.649
395	Gulfport	MS	1.5	27.5	3	25	0.755
396	McComb	MS	2.1	22.8	3	25	0.641
397	Columbus	MS	2.9	21.8	3	25	0.655
398	Not used	0	0	0	0	0	0
399	Atlanta	GA	3	16.8	3	11	0.854
400	Louisville	KY	4.5	13.3	3	18	0.846
401	Louisville	KY	4.5	13.3	3	18	0.846
402	Louisville	KY	4.5	13.3	3	18	0.846
403	Lexington	KY	4.8	11.2	3	18	0.825
404	Lexington	KY	4.8	11.2	3	18	0.825
405	Lexington	KY	4.8	11.2	3	18	0.825
406	Frankfort	KY	5	9.7	3	18	0.843
407	Corbin	KY	4.3	11.4	3	18	0.725
408	Baxter	KY	4.7	7.8	3	18	0.725
409	Middlesboro	KY	4.4	9.5	3	18	0.725
410	Newport	KY	5.3	9.3	3	18	0.93
411	Ashland	KY	4.9	11.4	3	18	0.936
412	Ashland	KY	4.9	11.4	3	18	0.936
413	Campton	KY	5.1	8.1	3	18	0.727

Zip Code	City	State	HDD k	CDH k	Fuel Escalation Region	State No.	Insulation Cost Factor
414	Campton	KY	5.1	8.1	3	18	0.727
415	Pikeville	KY	4.7	9	3	18	0.759
416	Pikeville	KY	4.7	9	3	18	0.759
417	Hazard	KY	4.7	9	3	18	0.726
418	Hazard	KY	4.7	9	3	18	0.726
419	Not used	0	0	0	0	0	0
420	Paducah	KY	4.1	16.7	3	18	0.906
421	Bowling Green	KY	4.3	14.7	3	18	0.844
422	Russellville	KY	4.3	14.4	3	18	0.844
423	Owensboro	KY	4.3	14.5	3	18	0.853
424	Henderson	KY	4.3	14.2	3	18	0.953
425	Somerset	KY	4.4	9.2	3	18	0.722
426	Somerset	KY	4.4	9.2	3	18	0.722
427	Elizabethtown	KY	4.2	11.8	3	18	0.843
428	Not used	0	0	0	0	0	0
429	Not used	0	0	0	0	0	0
430	Columbus	OH	5.7	7.5	2	36	0.993
431	Columbus	OH	5.7	7.5	2	36	0.993
432	Columbus	OH	5.7	7.5	2	36	0.993
433	Marion	OH	5.9	6.5	2	36	0.975
434	Bowling Green	OH	6	6.6	2	36	1.056
435	Napoleon	OH	6	7.1	2	36	1.056
436	Toledo	OH	6.6	5.1	2	36	1.056
437	Zanesville	OH	5.8	5.4	2	36	0.977
438	Zanesville	OH	5.8	5.4	2	36	0.977
439	Stuebenville	OH	5.6	5.7	2	36	1.059
440	Cleveland	OH	6.2	4.8	2	36	1.065
441	Cleveland	OH	6.2	4.8	2	36	1.094

Zip Code	City	State	HDD k	CDH k	Fuel Escalation Region	State No.	Insulation Cost Factor
442	Akron	OH	6.2	4.8	2	36	1.045
443	Akron	OH	6.2	4.8	2	36	1.045
444	Youngstown	OH	6.6	3	2	36	1.048
445	Youngstown	OH	6.6	3	2	36	1.048
446	Canton	OH	6.2	4.8	2	36	1.026
447	Canton	OH	6.2	4.8	2	36	1.026
448	Mansfield	OH	6.3	4.9	2	36	1.022
449	Mansfield	OH	6.3	4.9	2	36	1.022
450	Cincinnati	OH	5	10.7	2	36	0.954
451	Cincinnati	OH	5	10.7	2	36	0.938
452	Cincinnati	OH	5	10.7	2	36	0.938
453	Dayton	OH	5.7	8.3	2	36	0.946
454	Dayton	OH	5.7	8.3	2	36	0.946
455	Springfield	OH	5.7	8.3	2	36	0.951
456	Chillicothe	OH	5.2	8	2	36	0.96
457	Athens	OH	5.5	5.6	2	36	0.959
458	Lima	OH	5.9	7.5	2	36	1.035
459	Not used	0	0	0	0	0	0
460	Indianapolis	IN	5.7	9.1	2	15	0.925
461	Indianapolis	IN	5.7	9.1	2	15	0.947
462	Indianapolis	IN	5.7	9.1	2	15	0.947
463	Gary	IN	6.3	9.1	2	15	1.018
464	Gary	IN	6.3	9.1	2	15	1.018
465	South Bend	IN	6.4	6.6	2	15	0.943
466	South Bend	IN	6.4	6.6	2	15	0.943
467	Fort Wayne	IN	6.3	6.8	2	15	0.949
468	Fort Wayne	IN	6.3	6.8	2	15	0.949
469	Kokomo	IN	6	11.1	2	15	0.921

Zip Code	City	State	HDD k	CDH k	Fuel Escalation Region	State No.	Insulation Cost Factor
470	Lawrenceburg	IN	5.3	10.7	2	15	0.893
471	New Albany	IN	4.5	13.3	2	15	0.808
472	Columbus	IN	5.5	8.8	2	15	0.892
473	Muncie	IN	6.1	7.1	2	15	0.887
474	Bloomington	IN	5.3	10.7	2	15	0.897
475	Washington	IN	4.7	13.3	2	15	0.912
476	Evansville	IN	4.7	15	2	15	0.925
477	Evansville	IN	4.7	15	2	15	0.925
478	Terre Haute	IN	5.5	9.5	2	15	0.914
479	Lafayette	IN	6.2	7.7	2	15	0.89
480	Royal Oak	MI	6.6	5.3	2	23	1.046
481	Ann Arbor	MI	6.3	6.1	2	23	1.04
482	Detroit	MI	6.6	4.9	2	23	1.071
483	Detroit	MI	6.6	4.9	2	23	1.046
484	Flint	MI	7.1	2.9	2	23	0.949
485	Flint	MI	7.1	2.9	2	23	0.949
486	Saginaw	MI	7.1	3.3	2	23	0.939
487	Saginaw	MI	7.1	3.3	2	23	0.936
488	Lansing	MI	7	4.1	2	23	0.952
489	Lansing	MI	7	4.1	2	23	0.952
490	Kalamazoo	MI	6.3	6.3	2	23	0.909
491	Kalamazoo	MI	6.3	6.3	2	23	0.909
492	Jackson	MI	6.8	4.8	2	23	0.937
493	Grand Rapids	MI	6.9	4.6	2	23	0.79
494	Muskegon	MI	6.9	2.9	2	23	0.854
495	Grand Rapids	MI	6.9	4.6	2	23	0.79
496	Traverse City	MI	7.8	3	2	23	0.807
497	Mackinaw City	MI	8	2	2	23	0.809

Zip Code	City	State	HDD k	CDH k	Fuel Escalation Region	State No.	Insulation Cost Factor
498	Iron Mountain	MI	8.7	1.4	2	23	0.919
499	Houghton	MI	9.4	1	2	23	0.919
500	Des Moines	IA	6.6	10.5	2	16	0.911
501	Des Moines	IA	6.6	10.5	2	16	0.911
502	Des Moines	IA	6.6	10.5	2	16	0.911
503	Des Moines	IA	6.6	10.5	2	16	0.911
504	Mason City	IA	7.9	6	2	16	0.785
505	Fort Dodge	IA	7.2	8	2	16	0.695
506	Waterloo	IA	7.5	6.6	2	16	0.788
507	Waterloo	IA	7.5	6.6	2	16	0.788
508	Creston	IA	6.5	9.5	2	16	0.833
509	Des Moines	IA	6.6	10.5	2	16	0.911
510	Sioux City	IA	7	10.1	2	16	0.821
511	Sioux City	IA	7	10.1	2	16	0.821
512	Sheldon	IA	7.7	6.6	2	16	0.791
513	Spencer	IA	7.8	6.1	2	16	0.765
514	Carroll	IA	7.1	8.2	2	16	0.811
515	Council Bluffs	IA	6.2	12	2	16	0.846
516	Shenandoah	IA	5.9	12.7	2	16	0.755
517	Not used	0	0	0	0	0	0
518	Not used	0	0	0	0	0	0
519	not used	0	0	0	0	0	0
520	Dubuque	IA	7.4	4.7	2	16	0.856
521	Decorah	IA	7.6	5.3	2	16	0.763
522	Cedar Rapids	IA	6.7	7.9	2	16	0.917
523	Cedar Rapids	IA	6.7	7.9	2	16	0.917
524	Cedar Rapids	IA	6.7	7.9	2	16	0.917
525	Ottumwa	IA	6.3	10	2	16	0.829

Zip Code	City	State	HDD k	CDH k	Fuel Escalation Region	State No.	Insulation Cost Factor
526	Burlington	IA	6.2	10	2	16	0.83
527	Davenport	IA	6.3	10	2	16	0.935
528	Davenport	IA	6.3	10	2	16	0.935
529	Not used	0	0	0	0	0	0
530	Milwaukee	WI	7.3	3.3	2	50	1.015
531	Milwaukee	WI	7.3	3.3	2	50	1
532	Milwaukee	WI	7.3	3.3	2	50	1.015
533	Milwaukee	WI	7.3	3.3	2	50	1.015
534	Racine	WI	6.9	5.2	2	50	0.996
535	Madison	WI	7.6	3.3	2	50	1.004
536	Madison	WI	7.6	3.3	2	50	0.972
537	Madison	WI	7.6	3.3	2	50	0.972
538	Platteville	WI	7.2	5.6	2	50	0.848
539	Portage	WI	7.4	5.5	2	50	0.971
540	River Falls	WI	8.1	4.6	2	50	1.004
541	Green Bay	WI	8.1	2.5	2	50	0.95
542	Green Bay	WI	8.1	2.5	2	50	0.95
543	Green Bay	WI	8.1	2.5	2	50	0.95
544	Wausau	WI	8.6	2.5	2	50	0.913
545	Rhineland	WI	8.9	2.3	2	50	0.914
546	La Crosse	WI	7.5	6.8	2	50	0.935
547	Eau Claire	WI	8.5	3.9	2	50	0.945
548	Spooner	WI	8.8	2.5	2	50	0.999
549	Oshkosh	WI	7.7	3.7	2	50	0.932
550	Saint Paul	MN	8	6.8	2	24	1.127
551	Saint Paul	MN	8	6.8	2	24	1.127
552	Not used	0	0	0	0	0	0
553	Minneapolis	MN	8	6.8	2	24	1.133

Zip Code	City	State	HDD k	CDH k	Fuel Escalation Region	State No.	Insulation Cost Factor
554	Minneapolis	MN	8	6.8	2	24	1.133
555	Minneapolis	MN	8	6.8	2	24	1.133
556	Duluth	MN	9.9	0.8	2	24	1.083
557	Duluth	MN	9.9	0.8	2	24	1.083
558	Duluth	MN	9.9	0.8	2	24	1.083
559	Rochester	MN	8.3	3.9	2	24	0.995
560	Mankato	MN	8.3	5	2	24	0.973
561	Windom	MN	7.8	7.2	2	24	0.784
562	Willmar	MN	8.3	4.7	2	24	0.831
563	Saint Cloud	MN	9	3	2	24	1.078
564	Brainerd	MN	9	3.5	2	24	0.995
565	Detroit Lakes	MN	9.9	2.3	2	24	0.951
566	Bemidji	MN	10.2	2.2	2	24	0.948
567	Thief River Falls	MN	9.7	3	2	24	0.896
568	Not used	0	0	0	0	0	0
569	Not used	0	0	0	0	0	0
570	Sioux Falls	SD	7.9	8.6	2	42	0.777
571	Sioux Falls	SD	7.9	8.6	2	42	0.777
572	Watertown	SD	8.8	4.9	2	42	0.754
573	Mitchell	SD	7.4	10.3	2	42	0.756
574	Aberdeen	SD	8.6	6.5	2	42	0.757
575	Pierre	SD	7.6	10.4	2	42	0.748
576	Mobridge	SD	8.2	7.8	2	42	0.756
577	Rapid City	SD	7.3	8.2	2	42	0.76
578	Not used	0	0	0	0	0	0
579	Not used	0	0	0	0	0	0
580	Fargo	ND	9.3	4.3	2	35	0.804
581	Fargo	ND	9.3	4.3	2	35	0.804

Zip Code	City	State	HDD k	CDH k	Fuel Escalation Region	State No.	Insulation Cost Factor
582	Grand Forks	ND	9.9	4.1	2	35	0.802
583	Devils Lake	ND	9.9	3.1	2	35	0.783
584	Jamestown	ND	9.4	4	2	35	0.781
585	Bismarck	ND	9.1	4.6	2	35	0.795
586	Dickinson	ND	8.9	4	2	35	0.807
587	Minot	ND	9.4	4	2	35	0.813
588	Williston	ND	9.3	4	2	35	0.783
589	Not used	0	0	0	0	0	0
590	Billings	MT	7.2	6	4	27	0.874
591	Billings	MT	7.2	6	4	27	0.874
592	Wolf Point	MT	9	4.8	4	27	0.857
593	Miles City	MT	7.9	10	4	27	0.878
594	Great Falls	MT	7.8	3.6	4	27	0.864
595	Havre	MT	8.7	4	4	27	0.861
596	Helena	MT	8.2	2.5	4	27	0.869
597	Butte	MT	9.6	0.9	4	27	0.856
598	Missoula	MT	7.8	1.1	4	27	0.878
599	Kalispell	MT	8.4	1.7	4	27	0.869
600	North Chicago Sub.	IL	6.9	5.2	2	14	1.108
601	North Chicago Sub.	IL	6.9	5.2	2	14	1.108
602	Evanston	IL	6.5	6.6	2	14	1.108
603	Oak Park	IL	6.5	6.6	2	14	1.108
604	South Chicago Sub.	IL	6.5	7.4	2	14	1.113
605	South Chicago Sub.	IL	6.2	7.4	2	14	1.108
606	Chicago	IL	6.2	9.7	2	14	1.134
607	Chicago	IL	6.2	9.7	2	14	1.134
608	Not used	0	0	0	0	0	0
609	Kankakee	IL	6.1	8.8	2	14	1.082

Zip Code	City	State	HDD k	CDH k	Fuel Escalation Region	State No.	Insulation Cost Factor
610	Rockford	IL	7	6.5	2	14	1.05
611	Rockford	IL	7	6.5	2	14	1.05
612	Rock Island	IL	6.3	10	2	14	0.99
613	La Salle	IL	6.2	11.1	2	14	0.984
614	Galesburg	IL	6.3	8.9	2	14	1.015
615	Peoria	IL	6.2	9.5	2	14	1.023
616	Peoria	IL	6.2	9.5	2	14	1.023
617	Bloomington	IL	5.9	9.4	2	14	1.007
618	Champaign/ Urbana	IL	5.8	9.9	2	14	1.006
619	Champaign/ Urbana	IL	5.8	9.9	2	14	1.006
620	East Saint Louis	IL	4.8	14.7	2	14	1
621	East Saint Louis	IL	4.8	14.7	2	14	1
622	East Saint Louis	IL	4.8	14.7	2	14	1
623	Quincy	IL	5.8	12.2	2	14	0.926
624	Effingham	IL	5.3	13.2	2	14	0.978
625	Springfield	IL	5.7	12.4	2	14	0.974
626	Springfield	IL	5.7	12.4	2	14	1
627	Springfield	IL	5.7	12.4	2	14	1
628	Centralia	IL	4.8	13.5	2	14	0.993
629	Carbondale	IL	4.6	14.1	2	14	0.93
630	Saint Louis	MO	4.9	17.8	2	26	1.007
631	Saint Louis	MO	4.9	17.8	2	26	1.007
632	Not used	0	0	0	0	0	0
633	Saint Charles	MO	5	17.1	2	26	0.96
634	Hannibal	MO	5.6	11.8	2	26	0.942
635	Kirksville	MO	5.9	9.9	2	26	0.926
636	Flat River	MO	4.8	12.2	2	26	0.951
637	Cape Girardeau	MO	4.3	16.8	2	26	0.914

Zip Code	City	State	HDD k	CDH k	Fuel Escalation Region	State No.	Insulation Cost Factor
638	Sikeston	MO	4.2	16.9	2	26	0.906
639	Poplar Bluff	MO	4.1	17.2	2	26	0.895
640	Kansas City	MO	5.3	17.5	2	26	1.002
641	Kansas City	MO	5.3	17.5	2	26	1.002
642	Not used	0	0	0	0	0	0
643	Not used	0	0	0	0	0	0
644	Saint Joseph	MO	5.5	16.1	2	26	0.957
645	Saint Joseph	MO	5.5	16.1	2	26	0.957
646	Chillicothe	MO	5.4	14.4	2	26	0.911
647	Harrison-ville	MO	4.9	17.4	2	26	0.974
648	Joplin	MO	4.3	20.8	2	26	0.836
649	Not used	0	0	0	0	0	0
650	Jefferson City	MO	4.9	15	2	26	0.862
651	Jefferson City	MO	4.9	15	2	26	0.862
652	Columbia	MO	5.2	14.5	2	26	0.862
653	Sedalia	MO	5	17.2	2	26	0.914
654	Rolla	MO	4.8	12.8	2	26	0.819
655	Rolla	MO	4.8	12.8	2	26	0.819
656	Springfield	MO	4.7	16.3	2	26	0.855
657	Springfield	MO	4.7	16.3	2	26	0.855
658	Springfield	MO	4.7	16.3	2	26	0.855
659	Not used	0	0	0	0	0	0
660	Kansas City	KS	5.3	17.5	2	17	0.941
661	Kansas City	KS	5.3	17.5	2	17	0.941
662	Shawnee/ Mission	KS	5.3	17.5	2	17	0.941
663	Not used	0	0	0	0	0	0
664	Topeka	KS	5.3	16.6	2	17	0.857
665	Topeka	KS	5.3	16.6	2	17	0.857

Zip Code	City	State	HDD k	CDH k	Fuel Escalation Region	State No.	Insulation Cost Factor
666	Topeka	KS	5.3	16.6	2	17	0.857
667	Fort Scott	KS	4.3	24.1	2	17	0.825
668	Emporia	KS	5.1	17.4	2	17	0.733
669	Concordia	KS	5.6	16.7	2	17	0.782
670	Wichita	KS	4.8	21.2	2	17	0.85
671	Wichita	KS	4.8	21.2	2	17	0.85
672	Wichita	KS	4.8	21.2	2	17	0.85
673	Independence	KS	4.3	20.3	2	17	0.738
674	Salina	KS	5.2	19.8	2	17	0.805
675	Hutchinson	KS	4.6	21.9	2	17	0.739
676	Hays	KS	5.7	16.3	2	17	0.783
677	Colby	KS	6.2	11.9	2	17	0.782
678	Dodge City	KS	5.1	18.5	2	17	0.781
679	Liberal	KS	4.3	18.5	2	17	0.725
680	Omaha	NE	6.2	12	2	28	0.847
681	Omaha	NE	6.2	12	2	28	0.847
682	Not used	0	0	0	0	0	0
683	Lincoln	NE	6.4	13.6	2	28	0.778
684	Lincoln	NE	6.4	13.6	2	28	0.778
685	Lincoln	NE	6.4	13.6	2	28	0.778
686	Columbus	NE	6.5	12.7	2	28	0.685
687	Norfolk	NE	7	10.6	2	28	0.801
688	Grand Island	NE	6.5	12	2	28	0.811
689	Hastings	NE	6.1	12.6	2	28	0.763
690	McCook	NE	5.8	13.6	2	28	0.703
691	North Platte	NE	6.9	8.5	2	28	0.763
692	Valentine	NE	7.4	8.2	2	28	0.677
693	Alliance	NE	7.1	6.4	2	28	0.732

Zip Code	City	State	HDD k	CDH k	Fuel Escalation Region	State No.	Insulation Cost Factor
694	Not used	0	0	0	0	0	0
695	Not used	0	0	0	0	0	0
696	Not used	0	0	0	0	0	0
697	Not used	0	0	0	0	0	0
698	Not used	0	0	0	0	0	0
699	Not used	0	0	0	0	0	0
700	New Orleans	LA	1.5	28.6	3	19	0.844
701	New Orleans	LA	1.5	28.6	3	19	0.844
702	Not used	0	0	0	0	0	0
703	Thibodaux	LA	1.3	27.9	3	19	0.842
704	Hammond	LA	1.7	24.7	3	19	0.842
705	Lafayette	LA	1.6	28.5	3	19	0.797
706	Lake Charles	LA	1.6	28.6	3	19	0.818
707	Baton Rouge	LA	1.7	26.9	3	19	0.803
708	Baton Rouge	LA	1.7	26.9	3	19	0.803
709	Not used	0	0	0	0	0	0
710	Shreveport	LA	2.3	28.3	3	19	0.78
711	Shreveport	LA	2.3	28.3	3	19	0.78
712	Monroe	LA	2.4	26.6	3	19	0.789
713	Alexandria	LA	2	27.3	3	19	0.778
714	Alexandria	LA	2	27.3	3	19	0.778
715	Not used	0	0	0	0	0	0
716	Pine Bluff	AR	2.7	26.7	3	4	0.769
717	Camden	AR	2.8	23.7	3	4	0.695
718	Hope	AR	3	22.5	3	4	0.742
719	Hot Springs Nat Pk	AR	2.9	26.6	3	4	0.702
720	Little Rock	AR	3.2	23.8	3	4	0.771
721	Little Rock	AR	3.2	23.8	3	4	0.771

Zip Code	City	State	HDD k	CDH k	Fuel Escalation Region	State No.	Insulation Cost Factor
722	Little Rock	AR	3.2	23.8	3	4	0.771
723	West Memphis	AR	3.2	24.5	3	4	0.85
724	Jonesboro	AR	3.6	23.2	3	4	0.847
725	Batesville	AR	3.7	19	3	4	0.756
726	Harrison	AR	3.9	18.5	3	4	0.758
727	Fayetteville	AR	4.2	16	3	4	0.709
728	Russellville	AR	3.4	22.7	3	4	0.76
729	Fort Smith	AR	3.5	23.5	3	4	0.774
730	Oklahoma City	OK	3.7	23	3	37	0.831
731	Oklahoma City	OK	3.7	23	3	37	0.831
732	Not used	0	0	0	0	0	0
733	Not used	0	0	0	0	0	0
734	Ardmore	OK	2.6	31.7	3	37	0.832
735	Lawton	OK	3.2	27.1	3	37	0.837
736	Clinton	OK	3.7	26.4	3	37	0.827
737	Enid	OK	3.8	26.1	3	37	0.827
738	Woodward	OK	4.4	23.2	3	37	0.827
739	Guymon	OK	4.5	17.5	3	37	0.688
740	Tulsa	OK	3.7	26.5	3	37	0.824
741	Tulsa	OK	3.7	26.5	3	37	0.824
742	Not used	0	0	0	0	0	
743	Vinita	OK	3.9	23.2	3	37	0.842
744	Muskogee	OK	3.4	25.7	3	37	0.764
745	McAlester	OK	3.4	26.3	3	37	0.828
746	Ponca City	OK	4.3	24.3	3	37	0.825
747	Durant	OK	2.7	26.1	3	37	0.826
748	Shawnee	OK	3.1	27.4	3	37	0.829
749	Poteau	OK	3.1	25.3	3	37	0.832

Zip Code	City	State	HDD k	CDH k	Fuel Escalation Region	State No.	Insulation Cost Factor
750	Dallas	TX	2.3	36.7	3	44	0.765
751	Dallas	TX	2.3	36.7	3	44	0.755
752	Dallas	TX	2.3	36.7	3	44	0.799
753	Dallas	TX	2.5	36.7	3	44	0.799
754	Greenville	TX	2.3	27.7	3	44	0.709
755	Texarkana	TX	2.6	23	3	44	0.73
756	Longview	TX	2.5	28.7	3	44	0.683
757	Tyler	TX	2.3	24.9	3	44	0.755
758	Palestine	TX	2.3	28.5	3	44	0.724
759	Lufkin	TX	1.9	30.4	3	44	0.734
760	Fort Worth	TX	2.4	36.3	3	44	0.8
761	Fort Worth	TX	2.4	36.3	3	44	0.8
762	Denton	TX	2.5	31.5	3	44	0.761
763	Wichita Falls	TX	3	34.5	3	44	0.793
764	Stephenville	TX	2.7	27.4	3	44	0.733
765	Temple	TX	2.1	33.1	3	44	0.764
766	Waco	TX	2.1	36.7	3	44	0.781
767	Waco	TX	2.1	36.7	3	44	0.781
768	Brownwood	TX	2.5	32.4	3	44	0.727
769	San Angelo	TX	2.3	32.7	3	44	0.744
770	Houston	TX	1.5	30.5	3	44	0.84
771	Houston	TX	1.5	30.5	3	44	0.84
772	Houston	TX	1.5	30.5	3	44	0.84
773	Conroe	TX	1.8	30.5	3	44	0.727
774	Houston	TX	1.5	30.5	3	44	0.762
775	Galveston	TX	1.3	31.9	3	44	0.831
776	Beaumont	TX	1.5	31.7	3	44	0.847
777	Beaumont	TX	1.5	31.7	3	44	0.847

Zip Code	City	State	HDD k	CDH k	Fuel Escalation Region	State No.	Insulation Cost Factor
778	Bryan	TX	1.7	34.2	3	44	0.812
779	Victoria	TX	1.3	37.3	3	44	0.76
780	Laredo/ Pearsall	TX	1.3	52.6	3	44	0.767
781	San Antonio	TX	1.6	36.2	3	44	0.828
782	San Antonio	TX	1.6	36.2	3	44	0.828
783	Corpus Christi	TX	1	42	3	44	0.771
784	Corpus Christi	TX	1	42	3	44	0.771
785	Brownsville	TX	0.6	42.5	3	44	0.76
786	Austin	TX	1.8	35.2	3	44	0.784
787	Austin	TX	1.8	35.2	3	44	0.784
788	Uvalde	TX	1.6	37.1	3	44	0.675
789	Giddings	TX	1.7	34.2	3	44	0.718
790	Amarillo	TX	4.2	15.7	3	44	0.783
791	Amarillo	TX	4.2	15.7	3	44	0.783
792	Childress	TX	3.3	27.1	3	44	0.76
793	Lubbock	TX	3.5	18.2	3	44	0.738
794	Lubbock	TX	3.5	18.2	3	44	0.738
795	Abilene	TX	2.6	31.9	3	44	0.783
796	Abilene	TX	2.6	31.9	3	44	0.783
797	Midland	TX	2.6	25	3	44	0.721
798	El Paso	TX	2.7	23	3	44	0.79
799	El Paso	TX	2.7	23	3	44	0.79
800	Denver	CO	6	5.9	4	6	0.958
801	Denver	CO	6	5.9	4	6	0.958
802	Denver	CO	6	5.9	4	6	0.958
803	Boulder	CO	5.5	7.7	4	6	0.865
804	Golden/ Dillon	CO	10	0	4	6	0.915
805	Longmont	CO	6.4	3.8	4	6	0.918

Zip Code	City	State	HDD k	CDH k	Fuel Escalation Region	State No.	Insulation Cost Factor
806	Greeley	CO	6.5	5.1	4	6	0.864
807	Fort Morgan	CO	6.5	7.2	4	6	0.915
808	Colorado Springs	CO	6.4	3.7	4	6	0.944
809	Colorado Springs	CO	6.4	3.7	4	6	0.944
810	Pueblo	CO	5.5	11	4	6	0.937
811	Alamosa	CO	8.7	0	4	6	0.925
812	Salida	CO	9	0	4	6	0.92
813	Durango	CO	6.8	0.4	4	6	0.89
814	Montrose	CO	6.4	3.6	4	6	0.875
815	Grand Junction	CO	5.7	12.1	4	6	0.854
816	Glenwood Springs	CO	7	2.1	4	6	0.909
817	Not used	0	0	0	0	0	0
818	Not used	0	0	0	0	0	0
819	Not used	0	0	0	0	0	0
820	Cheyenne	WY	7.3	2.1	4	51	0.842
821	Yellowstone Nat Pk	WY	9.1	0.5	4	51	0.803
822	Wheatland	WY	6.5	5.4	4	51	0.798
823	Rawlins	WY	8.6	0.3	4	51	0.785
824	Worland	WY	8	4.8	4	51	0.773
825	Riverton	WY	8.4	2.6	4	51	0.796
826	Casper	WY	6.9	4.5	4	51	0.839
827	Gillette	WY	7.8	4.3	4	51	0.773
828	Sheridan	WY	7.9	4.5	4	51	0.85
829	Rock Springs	WY	8.4	1	4	51	0.774
830	Jackson	WY	9.8	0.1	4	51	0.774
831	Kemmerer	WY	9.6	0.3	4	51	0.774
832	Pocatello	ID	7.1	3.3	4	13	0.884
833	Twin Falls	ID	6.7	2.8	4	13	0.775

Zip Code	City	State	HDD k	CDH k	Fuel Escalation Region	State No.	Insulation Cost Factor
834	Idaho Falls	ID	8.6	1.4	4	13	0.777
835	Lewiston	ID	5.4	7.9	4	13	1.299
836	Boise	ID	5.8	8	4	13	0.921
837	Boise	ID	5.8	8	4	13	0.921
838	Coeur D Alene	ID	6.5	2.8	4	13	1.229
839	Not used	0	0	0	0	0	0
840	Salt Lake City/ Heber City	UT	7.6	0.5	4	45	0.917
841	Salt Lake City	UT	5.8	9.9	4	45	0.917
842	Ogden	UT	5.9	9	4	45	0.899
843	Ogden/ Logan	UT	6.8	5	4	45	0.908
844	Ogden	UT	5.9	9	4	45	0.899
845	Southeast Utah/ Green River	UT	6	9	4	45	0.847
846	Provo	UT	6	9	4	45	0.92
847	Southwest Utah/ Cedar City	UT	6	5	4	45	0.92
848	Not used	0	0	0	0	0	0
849	Not used	0	0	0	0	0	0
850	Phoenix	AZ	1.4	55	4	3	0.931
851	Phoenix	AZ	1.4	55	4	3	0.931
852	Casa Grande	AZ	1.6	49	4	3	0.896
853	Buckeye/ Yuma	AZ	1.3	55	4	3	0.931
854	Not used	0	0	0	0	0	0
855	Globe	AZ	2.8	24.6	4	3	0.895
856	Sierra Vista/ Nogales	AZ	2.9	10	4	3	0.907
857	Tucson	AZ	1.7	36	4	3	0.907
858	Not used	0	0	0	0	0	0
859	Show Low	AZ	5	4.6	4	3	0.906
860	Flagstaff	AZ	7.3	0.4	4	3	0.934
861	Not used	0	0	0	0	0	0

Zip Code	City	State	HDD k	CDH k	Fuel Escalation Region	State No.	Insulation Cost Factor
862	Not used	0	0	0	0	0	0
863	Prescott	AZ	5	3.8	4	3	0.907
864	Kingman	AZ	3.1	21.6	4	3	0.905
865	Window Rock	AZ	6.7	1.9	4	3	0.903
866	Not used	0	0	0	0	0	0
867	Not used	0	0	0	0	0	0
868	Not used	0	0	0	0	0	0
869	Not used	0	0	0	0	0	0
870	Bernalillo	NM	4.7	7.6	4	32	0.91
871	Albuquerque	NM	4.4	11	4	32	0.91
872	Albuquerque	NM	4.4	11	4	32	0.91
873	Gallup	NM	6.2	1.9	4	32	0.922
874	Farmington	NM	5.7	5	4	32	0.915
875	Santa Fe	NM	6.4	1.2	4	32	0.911
876	Not used	0	0	0	0	0	0
877	Las Vegas	NM	6.1	1.1	4	32	0.912
878	Socorro	NM	4.1	11	4	32	0.912
879	Truth or Conseq.	NM	3.4	14.6	4	32	0.811
880	Las Cruces	NM	3.1	14.5	4	32	0.797
881	Clovis	NM	4.1	10	4	32	0.912
882	Roswell	NM	3.1	20	4	32	0.916
883	Carrizozo	NM	4.3	7.2	4	32	0.925
884	Tucumcari	NM	3.9	15	4	32	0.915
885	El Paso	TX	2.7	23	3	44	0.79
886	Not used	0	0	0	0	0	0
887	Not used	0	0	0	0	0	0
888	Not used	0	0	0	0	0	0
889	Las Vegas	NV	2.5	43	4	28	1.032

Zip Code	City	State	HDD k	CDH k	Fuel Escalation Region	State No.	Insulation Cost Factor
890	Las Vegas/ Tonopah	NV	5.8	5.9	4	28	1.032
891	Las Vegas	NV	2.5	43	4	28	1.032
892	Not used	0	0	0	0	0	0
893	Ely	NV	7.7	0.7	4	28	0.957
894	Reno	NV	6	2.2	4	28	0.986
895	Reno	NV	6	2.2	4	28	0.986
896	Reno	NV	6	2.2	4	28	0.986
897	Carson City	NV	5.8	2	4	28	0.986
898	Elko	NV	7.3	3.8	4	28	0.953
899	Not used	0	0	0	0	0	0
900	Los Angeles	CA	1.2	10.6	4	5	1.141
901	Los Angeles	CA	1.2	10.6	4	5	1.141
902	Los Angeles	CA	1.2	10.6	4	5	1.141
903	Inglewood	CA	1.6	4.3	4	5	1.128
904	Santa Monica	CA	1.9	1.9	4	5	1.128
905	Torrance	CA	1.7	3.9	4	5	1.128
906	Whittier	CA	2	10.2	4	5	1.127
907	San Pedro	CA	1.5	7.8	4	5	1.127
908	Long Beach	CA	1.5	7.8	4	5	1.127
909	Not used	0	0	0	0	0	0
910	Pasadena	CA	1.6	11	4	5	1.089
911	Pasadena	CA	1.6	11	4	5	1.089
912	Glendale	CA	1.7	11.4	4	5	1.089
913	Van Nuys	CA	1.7	11.4	4	5	1.097
914	Van Nuys	CA	1.7	11.4	4	5	1.097
915	Burbank	CA	1.7	11.4	4	5	1.097
916	North Hollywood	CA	1.7	11.4	4	5	1.097
917	Covina	CA	2	10.2	4	5	1.092

Zip Code	City	State	HDD k	CDH k	Fuel Escalation Region	State No.	Insulation Cost Factor
918	Alhambra	CA	1.6	11	4	5	1.092
919	San Diego	CA	1.3	4.6	4	5	1.106
920	San Diego	CA	1.3	4.6	4	5	1.106
921	San Diego	CA	1.3	4.6	4	5	1.106
922	Palm Springs	CA	1.1	54	4	5	1.168
923	San Bern./ Victorville/ Redlands	CA	2.5	16	4	5	1.162
924	San Bernardino	CA	1.8	17.8	4	5	1.162
925	Riverside	CA	1.8	14	4	5	1.176
926	Santa Ana	CA	1.4	6.9	4	5	1.18
927	Santa Ana	CA	1.4	6.9	4	5	1.18
928	Anaheim	CA	1.4	6.9	4	5	1.192
929	Not used	0	0	0	0	0	0
930	Ventura/ Oxnard	CA	2.1	1.2	4	5	1.125
931	Santa Barbara	CA	2.5	0.9	4	5	1.098
932	Bakersfield/ Visalia	CA	2.5	19	4	5	1.071
933	Bakersfield	CA	2.1	30	4	5	1.071
934	San Luis Obispo	CA	2.5	1.1	4	5	1.1
935	Lancaster	CA	2.9	21	4	5	1.088
936	Fresno	CA	2.6	19.4	4	5	1.062
937	Fresno	CA	2.6	19.4	4	5	1.062
938	Fresno	CA	2.6	19.4	4	5	1.062
939	Monterey	CA	3.2	0.1	4	5	1.138
940	So. San Francisco	CA	3.1	0.3	4	5	1.22
941	San Francisco	CA	3.1	0.2	4	5	1.22
942	Sacramento/ Placerville	CA	4.1	7.8	4	5	1.183
943	Palo Alto	CA	2.9	0.7	4	5	1.211
944	San Mateo	CA	2.6	1.2	4	5	1.216
945	Concord	CA	3	3	4	5	1.278

Zip Code	City	State	HDD k	CDH k	Fuel Escalation Region	State No.	Insulation Cost Factor
946	Oakland	CA	2.9	0.4	4	5	1.21
947	Berkeley	CA	3	0.3	4	5	1.208
948	Richmond	CA	2.7	0.4	4	5	1.212
949	San Rafael	CA	2.5	1.9	4	5	1.291
950	Gilroy	CA	3.4	0.1	4	5	1.151
951	San Jose	CA	2.4	1.4	4	5	1.195
952	Stockton	CA	2.7	13	4	5	1.12
953	Merced	CA	2.7	14	4	5	1.126
954	Santa Rosa	CA	3	1.2	4	5	1.255
955	Eureka	CA	4.7	0	4	5	1.11
956	Sacramento/ Placerville	CA	4.1	7.8	4	5	1.183
957	Pollock Pines	CA	6	1	4	5	1.183
958	Sacramento	CA	2.5	12	4	5	1.183
959	Marysville	CA	2.6	15	4	5	1.128
960	Redding	CA	2.5	28	4	5	1.128
961	Susanville	CA	6.2	2.2	4	5	1.129
962	Not used	0	0	0	0	0	0
963	Not used	0	0	0	0	0	0
964	Not used	0	0	0	0	0	0
965	Not used	0	0	0	0	0	0
966	Not used	0	0	0	0	0	0
967	Waialua	HI	0	12.2	4	12	1.229
968	Honolulu	HI	0	36.2	4	12	1.241
969	Guam	GU	0	54	4	12	0.963
970	Hood River	OR	5	1.5	4	38	1.079
971	Portland	OR	4.7	1.9	4	38	1.079
972	Portland	OR	4.7	1.9	4	38	1.079
973	Salem	OR	5	1	4	38	1.078

Zip Code	City	State	HDD k	CDH k	Fuel Escalation Region	State No.	Insulation Cost Factor
974	Eugene	OR	4.8	1.3	4	38	1.045
975	Medford	OR	4.8	6.2	4	38	1.036
976	Klamath Falls	OR	6.6	2.4	4	38	1.039
977	Bend	OR	7.1	0.6	4	38	1.065
978	Pendleton	OR	5.3	8.1	4	38	0.975
979	Ontario	OR	5.7	10	4	38	0.975
980	Seattle	WA	5.1	1	4	48	1.063
981	Seattle	WA	5.1	1	4	48	1.063
982	Everett	WA	5.4	0.2	4	48	1.053
983	Tacoma	WA	5.1	1	4	48	1.057
984	Tacoma	WA	4.8	0.5	4	48	1.057
985	Olympia	WA	5.7	0.3	4	48	1.052
986	Vancouver	WA	5	1.7	4	48	1.044
987	Seattle	WA	5.1	1	4	48	1.063
988	Wenatchee	WA	5.7	7.6	4	48	0.971
989	Yakima	WA	6	4.1	4	48	0.969
990	Spokane	WA	6.9	3.5	4	48	1.296
991	Spokane	WA	6.9	3.5	4	48	1.296
992	Spokane	WA	6.9	3.5	4	48	1.296
993	Richland	WA	4.7	9.8	4	48	1.313
994	Clarkston	WA	5.4	8	4	48	1.298
995	Anchorage	AK	11	0	4	2	1.597
996	Anchorage	AK	11	0	4	2	1.597
997	Fairbanks	AK	14	0	4	2	1.593
998	Juneau	AK	9	0	4	2	1.58
999	Ketchikan	AK	7	0	4	2	1.595

Appendix E: Energy Prices for Electricity, Natural Gas, and Fuel Oil, Revised 2002 [6-8]

State No.	State name	Electricity (¢/kWh)	Distillate oil (¢/gal)	Propane (¢/gal)	Natural gas (\$/10 ³ ft ³)
1	Alabama	7.0	93.5	128.2	13.34
2	Alaska	12.2	137.8	139.7	4.33
3	Arizona	8.3	130.9	139.7	12.13
4	Arkansas	7.7	93.5	128.2	9.86
5	California	10.9	130.9	139.7	10.04
6	Colorado	7.4	108	103.3	9.83
7	Connecticut	10.9	123.9	147.4	12.93
8	Delaware	8.6	123.5	151.7	12.15
9	District of Columbia	7.7	143	151.7	12.86
10	Florida	8.5	125.9	139.9	16.53
11	Georgia	7.9	125.9	139.9	10.61
12	Hawaii	16	130.9	139.7	22.53
13	Idaho	6	104.1	103.3	8.9
14	Illinois	8.7	111.7	105.9	9.05
15	Indiana	6.9	113.4	105.9	7.64
16	Iowa	8.4	116.6	105.9	9.64
17	Kansas	7.7	116.6	105.9	10.88
18	Kentucky	5.5	116.6	105.9	11.12
19	Louisiana	8	93.5	128.2	10.07
20	Maine	11	121.8	147.4	13.6
21	Maryland	7.7	134.2	151.7	11.64
22	Massachusetts	12.3	122.1	147.4	13.81
23	Michigan	8.4	124.8	105.9	6.39
24	Minnesota	7.5	112.6	105.9	8.64
25	Mississippi	7.4	93.5	128.2	10.55

State No.	State name	Electricity (¢/kWh)	Distillate oil (¢/gal)	Propane (¢/gal)	Natural gas (\$/10³ ft³)
25	Mississippi	7.4	93.5	128.2	10.55
26	Missouri	7	116.6	105.9	12.27
27	Montana	7	108	103.3	7.48
28	Nebraska	6.6	116.6	105.9	8.5
29	Nevada	9	130.9	139.7	9.87
30	New Hampshire	12.5	125.6	147.4	13.06
31	New Jersey	10.3	131.4	151.7	8.11
32	New Mexico	8.8	93.5	128.2	9.34
33	New York	14.1	136.4	151.7	12.51
34	North Carolina	8.2	125.9	139.9	13.37
35	North Dakota	6.7	116.6	105.9	7.99
36	Ohio	8.3	116	105.9	10.57
37	Oklahoma	7.2	116.6	105.9	10.19
38	Oregon	6.3	121.2	139.7	9.98
39	Pennsylvania	9.7	116.3	151.7	12.8
40	Rhode Island	12.1	123.8	147.4	12.79
41	South Carolina	7.6	125.9	139.9	12.42
42	South Dakota	7.7	116.6	105.9	8.76
43	Tennessee	6.4	116.6	105.9	10.66
44	Texas	8.7	93.5	128.2	9.57
45	Utah	6.7	108	103.3	8.4
46	Vermont	12.5	125.9	147.4	11.09
47	Virginia	7.7	120.3	139.9	14.15
48	Washington	5.7	133.6	139.7	10.07
49	West Virginia	6.3	114.2	139.9	8.85
50	Wisconsin	7.9	118.2	105.9	8.49
51	Wyoming	6.7	108	103.3	9.6

Appendix F. Residential Energy Price Escalation Factors, Revised 2002.

Four regional energy price escalation tables are shown in this appendix. (The regional assignments for each zip code are shown in Appendix A.) These factors were taken from Ref. 10.

Table F.1 Relative energy prices for DOE Region 1, Revised 2002 (April 1, 2002 = 1.00)

Electricity (¢/kWh)																
Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	
Factor	0.96	0.95	0.94	0.93	0.91	0.91	0.91	0.92	0.93	0.93	0.94	0.94	0.94	0.94	0.95	
Year	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	
Factor	0.95	0.96	0.96	0.96	0.97	0.97	0.97	0.98	0.98	0.99	0.99	1	1	1	1.01	
Distillate oil (¢/gal)																
Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	
Factor	0.92	0.9	0.91	0.91	0.9	0.9	0.92	0.93	0.93	0.94	0.95	0.98	0.98	0.99	0.99	
Year	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	
Factor	0.99	0.99	1	1	1	1	1.01	1.01	1.01	1.02	1.02	1.02	1.02	1.03	1.03	
Propane (¢/gal)																
Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	
Factor	1.07	1.1	1.1	1.1	1.1	1.11	1.11	1.12	1.12	1.13	1.12	1.13	1.12	1.12	1.12	
Year	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	
Factor	1.12	1.12	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.14	1.14	1.14	1.14	1.14	1.14	
Natural gas (\$/1000 ft ³)																
Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	
Factor	0.95	0.97	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.98	0.98	0.98	0.98	0.99	0.99	
Year	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	
Factor	1	1	1	1.01	1.01	1.02	1.02	1.03	1.03	1.04	1.05	1.05	1.06	1.06	1.07	

Table F.2 Relative energy prices for DOE Region 2, Revised 2002

Electricity (¢/kWh)																
Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	
Factor	0.97	0.96	0.95	0.96	0.96	0.96	0.96	0.96	0.96	0.97	0.97	0.96	0.96	0.96	0.96	
Year	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	
Factor	0.97	0.97	0.97	0.97	0.97	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	
Distillate oil (¢/gal)																
Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	
Factor	0.91	0.89	0.89	0.89	0.9	0.9	0.92	0.94	0.94	0.96	0.98	1	1.03	1.04	1.04	
Year	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	
Factor	1.05	1.05	1.06	1.06	1.07	1.07	1.07	1.08	1.08	1.08	1.09	1.09	1.09	1.09	1.1	
Propane (¢/gal)																
Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	
Factor	1	1.02	1.01	1.01	1.02	1.02	1.03	1.04	1.04	1.06	1.06	1.06	1.07	1.08	1.08	
Year	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	
Factor	1.09	1.09	1.09	1.1	1.1	1.1	1.1	1.1	1.11	1.11	1.11	1.11	1.12	1.12	1.12	
Natural gas (\$/1000 ft ³)																
Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	
Factor	0.95	0.98	0.99	0.99	0.99	0.99	0.98	0.98	0.99	0.99	1	1	1	1.01	1.01	
Year	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	
Factor	1.02	1.02	1.03	1.03	1.04	1.05	1.05	1.06	1.07	1.08	1.09	1.09	1.1	1.11	1.12	

Table F.3 Relative energy prices for DOE Region 3, Revised 2002

Electricity (¢/kWh)																
Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	
Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.97	0.97	
Year	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	
Factor	0.97	0.98	0.98	0.98	0.98	0.98	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	1	
Distillate oil (¢/gal)																
Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	
Factor	0.91	0.89	0.9	0.9	0.9	0.91	0.92	0.94	0.94	0.95	0.97	1	1.01	1.02	1.03	
Year	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	
Factor	1.03	1.04	1.04	1.04	1.04	1.05	1.05	1.05	1.06	1.06	1.06	1.06	1.07	1.07	1.07	
Propane (¢/gal)																
Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	
Factor	1.05	1.08	1.07	1.07	1.08	1.08	1.08	1.09	1.09	1.11	1.11	1.11	1.11	1.12	1.12	
Year	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	
Factor	1.12	1.12	1.13	1.13	1.13	1.13	1.13	1.14	1.14	1.14	1.14	1.14	1.15	1.15	1.15	
Natural gas (\$/1000 ft ³)																
Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	
Factor	0.96	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.99	0.99	0.99	0.99	0.99	1	
Year	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	
Factor	1	1	1.01	1.01	1.02	1.03	1.03	1.04	1.04	1.05	1.06	1.06	1.07	1.08	1.08	

Table F.4 Relative energy prices for DOE Region 4, Revised 2002

Electricity (¢/kWh)																
Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	
Factor	0.94	0.91	0.89	0.88	0.88	0.89	0.89	0.9	0.9	0.88	0.88	0.87	0.87	0.87	0.87	
Year	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	
Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.86	0.86	0.86	0.85	0.85	0.85	0.85	0.84	0.84	
Distillate oil (¢/gal)																
Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	
Factor	0.92	0.91	0.91	0.91	0.91	0.92	0.93	0.93	0.92	0.92	0.92	0.93	0.95	0.95	0.95	
Year	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	
Factor	0.95	0.95	0.95	0.96	0.96	0.96	0.97	0.97	0.97	0.97	0.98	0.98	0.98	0.99	0.99	
Propane (¢/gal)																
Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	
Factor	1.04	1.07	1.08	1.1	1.12	1.11	1.12	1.14	1.15	1.17	1.19	1.19	1.2	1.2	1.2	
Year	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	
Factor	1.2	1.2	1.2	1.2	1.21	1.21	1.21	1.21	1.21	1.21	1.22	1.22	1.22	1.22	1.22	
Natural gas (\$/1000 ft ³)																
Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	
Factor	0.95	0.98	0.99	0.99	0.98	0.98	0.98	0.97	0.96	0.97	0.98	0.98	0.98	0.98	0.98	
Year	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	
Factor	0.99	0.99	0.99	1	1.01	1.01	1.02	1.03	1.03	1.04	1.05	1.05	1.06	1.07	1.08	

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