

## **Appendix 1: Manufacturers Of Moisture Meters**

**Delmhorst Instrument Co.**  
P.O. Box 68  
Towaco, NJ 07082  
(800) 222-0638

**Mitchell Instrument Co.**  
1570 Cherokee St.  
San Marcos, CA 92069  
(619) 744-2690

**Davis Instrumentation**  
4701 Mt. Hope Dr.  
Baltimore, MD 21215  
(800) 368-2516

**Professional Equipment**  
130 Dale St.  
West Babylon, NY 11797  
(800) 334-9291

**Lignomat USA, Ltd.,**  
P.O. Box 30145  
Portland, OR 97230  
(800) 227-2105

**This list was compiled by a contractor and it may not be inclusive. It is intended as a helpful source but does not imply an exhaustive list or a recommendation.**

## Appendix 2: Other Sources Of Information

**Consumer Guide to Home Energy Savings, Third Edition** by Alex Wilson, available for purchase from the American Council for an Energy-Efficient Economy, Suite 801, 1001 Connecticut Ave., NW, Washington, DC 20036; (202) 429-8873.

**Directory of Certified Unitary Air-Conditioners, Air-Source Heat Pumps, and Sound-Rated Outdoor Unitary Equipment**, January 1994, available for purchase from Air-Conditioning and Refrigeration Institute, 1501 Wilson Boulevard, 6th Floor, Arlington, VA 22209; (703) 524-8800.

**"Flood of '93 Packet,"** available free from the American Plywood Association, Box 11700, Tacoma, WA 98411-0700; (206) 565-6600.

**Home Insulation: do it yourself and save as much as 40%, Second Printing**, 1992, Harry Yost, available for purchase from Storey Communications Inc., Schoolhouse Road, Pownal, VT 05261; (802) 823-5811.

**Insulation**, U.S. Department of Energy, 1988, available free from the Energy Efficiency and Renewable Energy Clearinghouse (EREC), P.O. Box 3048, Merrifield, VA 22116; (800) 523-2929.

**Investigating, Diagnosing, & Treating Your Damp Basement**, available for purchase from the Canada Mortgage and Housing Corporation, 700 Montreal Road, Ottawa, ON K1A 0P7, Canada; (613) 748-2658.

**Repairing Your Flooded Home**, available free through your local chapter of The American Red Cross. Also available free from FEMA Publications, Box 70274, Washington, DC 20024.

**Tips For Energy Savers**, also available free from EREC (see address and phone number above).

**Water Efficiency for Your Home: Products and Advice Which Save Water, Energy, and Money**, 1989, available for purchase from Rocky Mountain Institute, 1739 Snowmass Creek Road, Snowmass, CO 81654-9199; (303) 927-3851.

Referrals to professional cleaning firms in your area can be obtained from the Association of Specialists in Cleaning and Restoration, 10830 Annapolis Junction Rd., Suite 312, Annapolis Junction, MD 20701-1120; (301) 604-4411.

# Appendix 3: Comparing Heating Fuel Costs

## Choosing Fuels

People decide to switch fuels or heating systems usually for economic reasons. They feel that their current heating system is costing too much money. Sometimes people feel that their existing heating system is inefficient and should be replaced. Or, they are choosing a heating system for a new building. At the same time they wonder, "What fuel should I choose for my new heating system."

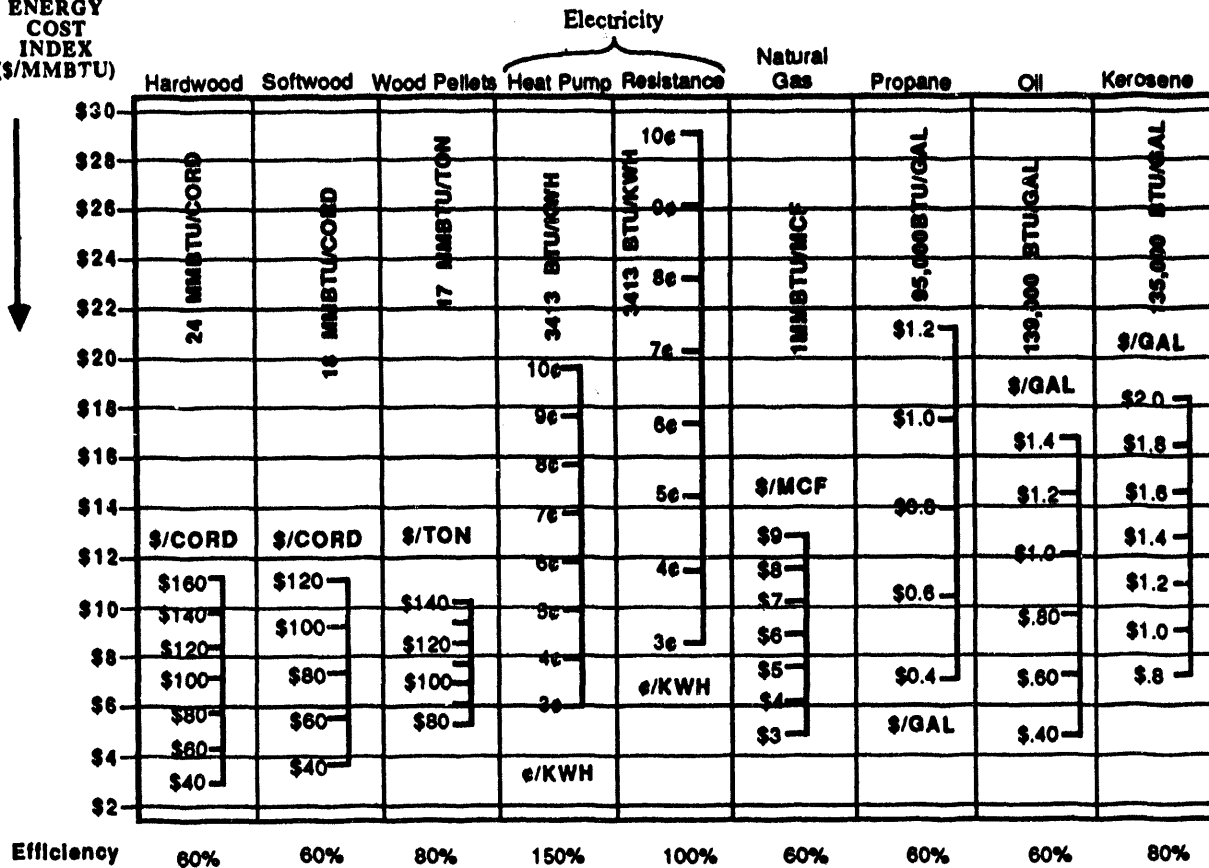
## Useful Heat

Useful heat is the heat that reaches the living space providing comfort to the occupants of the space. Useful heat is always less than the potential heating value of the fuel because heat is wasted in the in the combustion process, in the heat transfer process and in the delivery process. As the efficiency becomes less the cost of useful heat becomes greater.

**The energy cost index chart will help you to estimate the comparative cost of various fuels.**

- The fuels are listed at the top of each column on the chart and an assumed seasonal heating efficiency is listed at the bottom of each column.
- The left vertical axis of the chart gives costs per one million Btus (A Btu or British thermal unit is roughly the amount of heat contained in a kitchen match.)
- Each column contains a yardstick marked off in dollars or cents. Written in each column is the assumed Btu content of the fuel and a ratio like \$/MCF or ¢/kWh that will inform you of the units used on the yardstick.
- Natural gas, propane and oil are assumed to have seasonal heating efficiencies of 60% which is characteristic of central heating systems with pipes or ducts to distribute the heat. All the other fuels are assumed to be space heating systems without the distribution losses.
- See the second page for a glossary of terms and abbreviations.

ENERGY COST INDEX (\$/MMBTU)



**How to use the chart.**

1. Find the columns of the fuels you wish to compare by looking at the tops of the columns where the fuel type is marked.
2. Locate the cost per unit of fuel on the yardstick in the columns and mark the yardsticks with an x at your local cost.
3. Draw lines parallel to the horizontal lines on the chart starting at the x on the yardstick and extending to the left until you intersect the left vertical axis of the chart.
4. Read the cost per million Btus where the lines you've drawn intersect the left axis of the chart.

**Energy cost index equation:**

If you would like to perform your own calculations for the energy cost index the formula is given below. Remember to use a decimal for the seasonal heating efficiency you are assuming. Also if your unit of fuel contains less than a million Btus as for example with electricity (3413 Btu/kWh) use the decimal 0.003413 in the denominator of the equation.

$$\text{Energy cost index} = \frac{\text{Cost per unit of fuel}}{\text{Fuel energy content} \times \text{Heating system seasonal efficiency}}$$

\_\_\_\_\_ (\$/MMBtu)                      (MMBtu/Unit)                      (decimal)

### Example

Find the energy cost index for oil at \$0.85 per gallon used at 70% efficiency.  
Oil has 139,000 Btus per gallon or 0.139 MMBtu

$$\text{Energy cost index} = \frac{0.85}{0.139 \times .70} = \$8.74/\text{MMBtu}$$

(\$/MMBtu)

### Glossary

MMBtu - million British thermal units (Btus)

MCF = thousand cubic feet (of natural gas)

kWh = kilowatt hour of electrical energy

Cord = a stack of firewood 4' X 4' X 8'

Energy cost index = dollars paid per useful MMBtu of energy

Seasonal heating efficiency = The ratio of heat delivered to the living space to the amount of heat in the fuel over a heating season.