RGE AND E consumer news

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"Superwall" Insulation: A New Technique

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Two weeks ago I talked about insulation rated by R-value–its ability to retard heat flow and effect a saving of heating energy. But a house wall is made of more than insulation, it also includes drywall, wood studs, sheathing and siding such as brick or aluminum. Since all of these materials, too, have R-values which also affect the loss of heat from the house, you should be familiar with the way the total effect is measured.

The total effect or U-value is expressed, not as the ability to stop heat flow, but rather as the amount of heat that actually does flow through the wall. You would add up all the R-values and take their reciprocal to get the U-value. It may sound complicated, but really is not. For example, R-11+ R-2=R-13. The reciprocal of 1/13=.08, and this is the U-value. It represents the amount of heat transmitted in one hour through one square foot of wall for each degree of temperature difference between the air outside and inside the house.

Let's take the next step. If the temperature outside is 0° and inside it is 70° the difference between the two is 70. A conventionally insulated house by today's standards, with 3-1/2" of fiberglass, and including wood frame with a U-value of .08 would lose 5.6 BTU's (British Thermal Units) per hour per square foot of wall space (70°x.08=5.6 BTU's).

People interested in a particularly well insulated houses are experimenting with several new techniques to improve (or reduce) the U-value of the wall. **One of them is the "superwall" which replaces the conventional sheathing of 1/2" fiberboard or 1/2" plywood with 3/4" of polystyrene, a rigid plastic foam board. It is actually a combination of insulation and sheathing and because it is placed outside the house frame, it reduces the heat loss from the wood frame.** "Superwall" including wood frame would have a U-value of .06 and would lose 4.2 BTU's per hour per square foot as compared to a loss of 5.6 BTU's in a standard insulated wall. Let me clarify the fact that this polystyrene foam board is in addition to the insulation which is placed between the studs.

One word of caution, however. Although polystyrene may contain a flame retardant, it will burn once ignited. The polystyrene should be a high quality product with a high degree of fire resistivity because some are more fire-resistant than others. It should be installed with a protective barrier on the inside such as gypsum wallboard or plaster. The manufacturer's and installer's safety recommendations should be checked carefully before installing it.

Call RG&E's Residential Department at 546-2700, Extension 2751, or send in the coupon below for further information on this energy-saving idea.

A Look at Microwave Ovens:

One of the Energy Efficient Appliances

A popular energy-saving appliance today is a microwave oven. Since their introduction in the 1940's, reduced cost and improvements in design have made domestic use of microwave ovens feasible.

The microwave oven is very efficient because the energy produced is used only in cooking the food, not in heating the surrounding air and oven walls. It has been stated by various testing organizations and manufacturers of microwave ovens that they use less energy than conventional range cooking of some of the same foods. Even though a microwave oven requires a steady flow of electricity, the much shorter cooking period usually does result in an energy savings.

Within the microwave oven there is a magnetron tube. When the oven is started the tube releases the microwaves which are channeled into the oven cavity. As microwaves enter the cavity, they are dispersed in a zig-zag pattern. They pass through containers and are absorbed by the food. The microwaves cause the food molecules to vibrate against each other, thus resulting in friction and consequent heat.

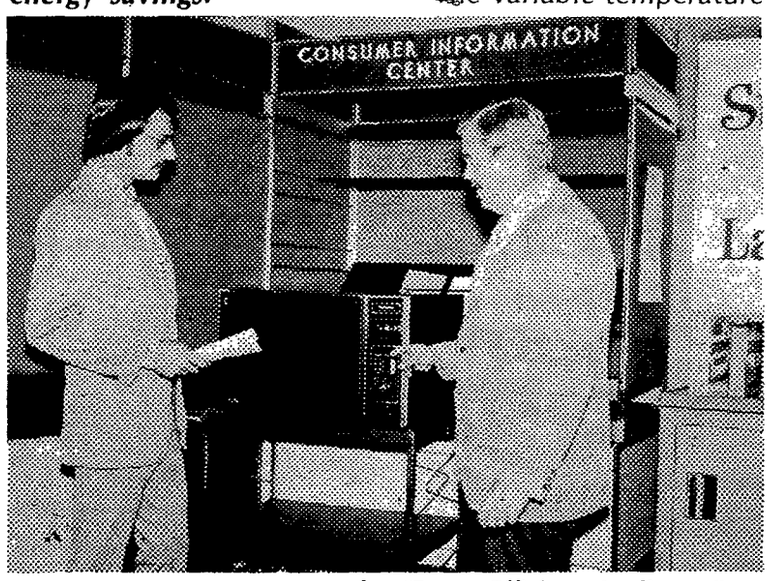
Two of the newest features on some microwave ovens are the vaiable cook and variable temperature settings. The variable cook cycles enables the oven to transmit varying degrees of intermittent power. This new feature can reheat, simmer, roast, etc.

The variable temperature takes the guesswork out of microwave cooking. With this feature you are able to set the temperature of the food and forget about setting the timer. A probe is inserted into the food and into oven wall. Dial the internal temperature desired, close the door and the oven starts to cook immediately.

When talking about a microwave oven, consumers often express concern about radiation. Microwaves are electromagnetic waves of high energy, similar to radio, light and heat waves. They travel at high frequencies, but not as high as Xrays, Gamma or Cosmic rays. Microwaves have longer wave-lengths than Xrays, they are non-ionizing, non-cumulative and do not breakdown cells.

To insure continued safety, the U.S. Government has established a Bureau of Radiological Health to issue control standards for microwave ovens. Today you will find labels on ovens certifying compliance with the Federal standards.

Come in and see our complete display of energy efficient appliances on the main floor at 89 East Avenue. The Consumer Information Center is open from 8 AM to 5 PM Mondays, Wednesdays, and Fridays; and from 8 AM to 9 PM Tuesdays and Thursdays.



Microwave ovens are among the "Energy-Efficient Appliances" on display at this month's Consumer Information Center.

For your protection . . . All RG&E Personnel Carry Identification Cards

RG&E personnel call on many area residents and businesses for a variety of reasons pertaining to gas, electric and steam service. Many times customers are expecting our representatives to call; other times they are not. RG&E is aware that customers may be apprehensive and reluctant to open their homes to strangers without proper identification. And they should be. For this reason **all** RG&E employees carry identification cards.

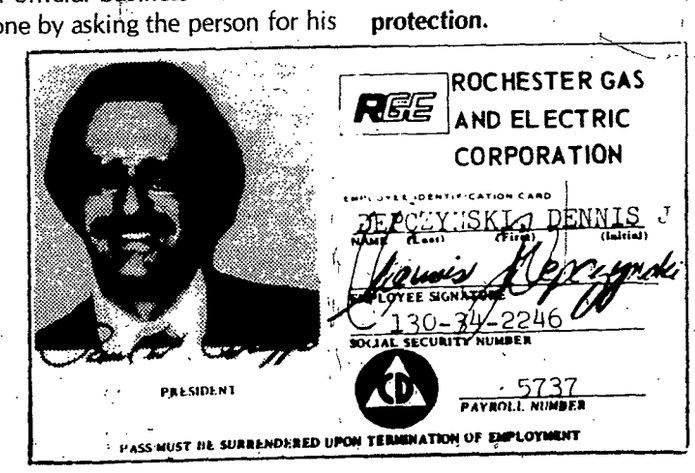
The card includes a full color photograph of the employee along with his or her name and signature and RG&E's full corporate name, Rochester Gas and Electric Corporation.

As another precautionary measure, you may want to obtain further verification that the person is from RG&E and is there on official business. This can be done by asking the person for his or her department at RG&E and the extension number. Then call that department for verification. This can be done regardless of the time of day or night because RG&E maintains a 24-hour telephone service, and someone is always available to determine if RG&E personnel are scheduled to be at your house or in your area.

RG&E suggests, for your safety and protection, you check the identification and get verification for anyone wishing to enter your property.

The RG&E phone number for Rochester-Monroe County is 546-2700. In the Lake Shore, Genesee, and Canandaigua/Finger Lakes districts please check your telephone directory for the proper number.

Again, we strongly urge you not to hesitate to use any of these means for identification verification. They are for your protection.



Inflation: What We Are Doing About It

Everyone has felt the bite of inflation.

We at RG&E, like you, are doing our best to increase productivity and still keep expenses at a minimum.

One of our successful economy measures has been to use our own personnel for jobs previously performed by outside people on a contract basis. When the Ginna Nuclear Plant was shut down for its annual refueling, inspection, and maintenance in March of this year, RG&E accomplished the refueling operation with trained Company personnel for the first time.

Last year, we completed a major substation interconnecting RG&E's 115,000-volt transmission system with the cross-state 345,000 volt line. This was the largest project we ever constructed, using our own work force, and labor costs consequently were decreased greatly.

These steps are just two examples of how we are trying to save time and money. Inflation still takes its toll, but we continue to look for new ways to improve our service to you.

Holiday Hours and New Schedule for Brookwood

The Brookwood Science Information Center will be closed on Thanksgiving Day, November 27, and will re-open on Sunday, November 30. Beginning that day, the Center will be open Sundays only until April 19, 1976. Hours are 10 AM to 4 PM.

Located on Lake Road in Ontario, New York, Brookwood is just 16 miles east of Rochester. It is open to the public at no charge, and plenty of parking is available. Group sessions may be arranged Mondays through Thursdays (evenings, too) by calling the Corporate Communications Department at RG&E, 546-2700, extension 2225.

UNICEF Holiday Greeting Cards Can Make a World of Difference

To help bring about a deeper awareness for world peace, the United Nations is holding its annual sale of UNICEF holiday greeting cards.

They can be purchased at the Rochester Association for the United Nations office, Chamber of Commerce Building, 55 St. Paul Street from 9 AM to 4:30 PM. Proceeds from the sale provide food, medicine, and school supplies for the world's needy children.

For a free UNICEF card brochure and the sales outlet nearest you, call 232-1080.

FILL OUT AND RETURN THIS COUPON TO: CJ-32
Dept 34 Rochester Gas and Electric
89 East Avenue, Rochester, N Y 14649
546-2700
I would like more information on the following items

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Town _____ Zip Code _____