Return of the Retrofit Boom

The New Energy Bill May Put Some Zip Back Into the Insulation Markets

The President’s signing of the National Energy Act November 9th, though late for the 1978 insulation “season”, marked the beginning of the return of the retrofit insulation business.

After record-smashing sales in 1977, the industry tapered off drastically in 1978 following a crippling winter and coal strikes which resulted in a soft economic climate. Furthermore, public confidence in the insulation industry dropped to a critical low as the result of adverse publicity directed against nearly every type of insulation and toward insulation contractors in general.

Insulation contractors doing new construction work managed reasonably well on the strength of a better-than-average year in housing starts, but retrofit insulation nearly died in 1978.

Many firms specializing in the re-insulation of single family dwellings found themselves competing for an ever-diminishing market. Thus, during 1978, business failures were extremely high among retrofit insulation contractors.

The National Energy Act of 1978 portends a strong and prosperous future for the qualified insulation contractor using qualified materials. Qualified however, is the key word. Materials specifications have and will continue to grow tougher through new Department of Energy (DOE) standards. DOE will also issue Required Installation Practices for most types of insulations used in retrofit. The procedures will require more painstaking steps than the installer has usually provided in the past.

The broad spectrum of programs covered by the National Energy Act justifies an optimistic outlook for the retrofit insulation contractor. While the insulation tax credit will, to a large extent, revive consumer interest in re-insulation of single family residences, the scope of the Act will offer the contractor a wide variety of retrofit markets. Previously, those markets have lacked viability because incentives and funds were lacking. Now, that is all changed.

Of the five bills which comprise the National Energy Act, the most relevant to the insulation contractor are the Energy Tax Act of 1978 and the National Energy Conservation Act of 1978.

ENERGY TAX ACT

Two items in this Act are of principle concern to the insulation contractor:

1. Residential Insulation and Conservation Tax Credits.

Homeowners and renters may take income tax credit up to $300.00 or 15% of the first $2,000.00 spent for insulation or other energy conservation measures. Condominiums and cooperatives are also included in the tax credit if used as the place of principal residence. This is the long-awaited incentive which should get the residential retrofit business going again.

2. Residential Sales Tax Credits.

Homeowners may take income tax credits up to a total of $2,200.00 for

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up to $10,000.00 spent on solar or wind equipment. Solar systems need insulation too. This should create a growing market for the insulator.

NATIONAL ENERGY CONSERVATION ACT

The best assurance that the objectives of the Act will be met is the availability of funds. A considerable variety of loan and grant programs are funded under the National Energy Conservation Act.

The Department of Housing and Urban Development, (HUD), will insure loans for energy conservation measures to multi-family housing and make grants to federally assisted housing and public housing.

The Government National Mortgage Association, (GNMA), which operates under HUD, will purchase and sell home improvement loans for energy conservation purposes with priority shown to elderly and moderate income families. Moderate income is considered one-hundred percent or less of the median income for an area. Loans will be available up to $2500.00. The HUD, GNMA, and FmHA programs will offer $5 billion in federally-supported home improvement loans for energy conservation measures.

Schools, Hospitals and Public Buildings Grant Program to states totaling $900 million over the next three years will pay for energy audits and energy conservation measures. The grants will cover up to 50% of the costs. Eligible institutions include public and private non-profit elementary and secondary schools, colleges and universities, and hospitals.

Energy Conservation In Federal Buildings will require every Federal Agency to retrofit a certain percentage of its total square footage with energy conservation measures or solar energy systems to maximum efficiency by 1990.

DEPARTMENT OF ENERGY NEA ADMINISTRATOR

The Department of Energy has assumed the leadership role in estab-

lishing materials testing criteria of the requirements for standard installation techniques. This is because the National Energy Act places with the Department of Energy the responsibility for the administration of funds and supervision of all programs covered by the Act.

On November 16th, the Department of Energy released a Technical Report on Materials Criteria and Installation Practices for the Retrofit Application of Insulation and Other Weatherization Materials. This was the initial step planned by DOE toward the eventual establishment of a

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DOE regulation. A proposed regulation is expected to appear sometime early this year.

Insulation materials listed in the report are:

- Mineral fiber blanket or batt insulation.
- Mineral fiber loose-fill insulation.
- Cellulose loose-fill insulation.
- Perlite thermal insulation.
- Vermiculite thermal insulation.
- Polystyrene insulation board.
- Polyurethane and polyisocyanurate insulation board.
- Aluminum foil reflective insulation.

Notable for its absence from the materials list was urea formaldehyde foam insulation. The report explains that because the problems of UF foam shrinkage and formaldehyde vapor have not been resolved, material criteria have yet to be fully developed. Conversations with UF industry-spokesmen indicate they expect to complete testing which will lead to the establishment of UF materials criteria and their subsequent inclusion on the DOE materials list.

Mineral fiber blankets and batts are recognized under current Federal Specifications HH-I-521E. Recommendations of the report, however, are for the requirement of fire-retardant facings for batt materials.

Mineral fiber loose-fill materials are listed under the present HH-I-1030A Federal Specification. It is expected that DOE will adopt revisions to both HH-I-521 and HH-I-1030 Federal Specifications which will include changes in fire safety, corrosion and settled density testing.

Cellulose fiber loose-fill materials are listed under the current HH-I-515C Federal Specifications. However, the following footnote from the DOE technical report should be noted:

"*HH-I-515C, the Federal Specification for Loose-Fill Cellulose Insulation, has been superceded by HH-I-515D. The DOE is referencing the same fire safety and corrosion test methods as Consumer Products Safety Commission (CPSC) Interim Standard for Cellulose Insulation, HH-I-515C Section 3.1 Materials, 3.2.1 Flame Spread Rating, and 3.2.2 Smoke Developed. When CPSC adopts the revised requirements of HH-I-515D, during the first half of 1979, the DOE will do likewise."

Because of the more stringent fire safety and corrosion tests included in the HH-I-515D, many cellulose insulation manufacturers over the last two years have offered strident objections to this specification. Their complaint has been based chiefly upon anticipated higher costs and shortage of borate chemicals in formulating and processing under this specification.

It would appear, however, that such objections carry little validity since at least two major testing laboratories are currently certifying and labeling to the HH-I-515D Specification for approximately twenty cellulose manufacturers.

The 515D is now required by the General Services Administration (GSA), The Department of Housing and Urban Development (HUD), Veterans Administration (VA), Farmers Home Administration (FmHA) and it also appears inevitable that in the first half of 1979 the Consumer Products Safety Commission and the Department of Energy will require this specification.

When the DOE proposed regulation on Installation Practices ultimately appears sometime in 1979, it would be advisable for every retrofit contractor to obtain a copy of these Installation Practices since there is always the possibility that some of the aforementioned Installation Practices may be deleted or changed.

Getting Into The Market

Under the National Energy Conservation Act of 1978 the utility companies will soon play a major role in the conservation program for...
residential buildings. Utilities will be required to offer energy audits and conduct inspections at the customer’s request. They will recommend appropriate energy conservation measures and estimate costs and savings. The utility will arrange for installation and financing by providing lists of lenders, suppliers, and contractors. It is also likely that the utilities will be required to perform pre-installation and post-installation inspections, acting as the approving agent for retrofit contract workmanship and materials.

The following recommendations are useful to any retrofit installation contractor who wishes to participate in the new retrofit insulation boom:

1. Establish your credentials with your utility company and get on their recommended contractor list.
2. If you or your personnel need further training, find a manufacturer who offers training programs. There are several manufacturers who do.
3. Be certain, if your product is cellulose fiber insulation, that you are selling only such material as will meet the new Federal Specification HH-I-515D. Better yet, align yourself with a manufacturer who subscribes to an independent third-party testing laboratory conducting a labeling program which includes frequent in-plant, unannounced inspections. This is your assurance as well as your customer’s assurance of a product which is quality controlled.

4. Contact the Offices of Public Affairs of the various Federal Agencies to learn of their programs and how you might participate. At the Department of Energy, contact Public Inquiries Branch, Office of Public Affairs, Department of Energy, Washington, D.C. 20585. Phone: 202-252-5568.
5. Contact your local or state Energy Agency. Learn where your materials and services will fit into the programs the state has submitted to the U.S. Department of Energy. From them you can learn what state buildings and state and local institutions are targeted for energy conservation measures.

The forecasts by conservation economists anticipating a soft economic climate in 1979 notwithstanding; the outlook for the insulation retrofit market is exceedingly bright. Tax incentives, federal grants and loans available in abundant sums, wide diversity in retrofit markets, adequate supplies of high quality materials and renewed public confidence in the industry, are all factors which indeed point to the return of the great retrofit boom in 1979!

(Editor’s Note: The author of this article, Joe Tyler, is an employee of U.S. Fibre Company.)