

MAY 1978

# the roofing spec

1515 NORTH HARLEM AVENUE • OAK PARK, ILLINOIS 60302 • 383-9513



LATEST  
PINPOINT  
RESULTS



## Which crew used the KMM<sup>®</sup> Membrane?

The crew on the left, of course.

They're smiling because they got started early, the job went down fast and clean-up was easy.

The early start? KMM Membrane is packaged and palletized for easy transportation and handling. So there's only one step between getting to the job and getting started. And that's unloading. (In crowded downtown areas, the roofing membrane can be taken up to the roof in an elevator.)

The fast, clean job? All the trained crew did was unroll the KMM Membrane, allowing 4" side and end laps, then heat-fused and sealed them with a propane torch. No nailing or heavy equipment required.

KMM is a registered trademark of Koppers Company, Inc.

The painless cleanup? Extra KMM Membrane is simply rolled up and taken back to the shop. No waste of labor and no waste of material.

KMM Membrane comes in two grades—Standard and Aluminum. Both feature a tough plastic core sandwiched between two protective layers of bitumen.

Standard grade is easy to cut and shape around projections and requires an aggregate surface. Aluminum grade has a top layer of heavy embossed aluminum sheet and is recommended for sloped roofs and those too steep for aggregate surfacing.

Since Aluminum KMM Membrane also comes in cut widths specifically tailored for all

flashing applications, there's no need to specify separate materials for roofing and flashing.

KMM Membrane is factory produced under quality controlled conditions. And Koppers offers a renewable guarantee so you can specify it with confidence.

If your crew wants to look and work more like the one on the right, talk to us.

Write: KMM Information Center, Koppers Company, Inc., 1900 Koppers Building, Pittsburgh, PA 15219.

*Koppers, the roofing people.*

# KOPPERS

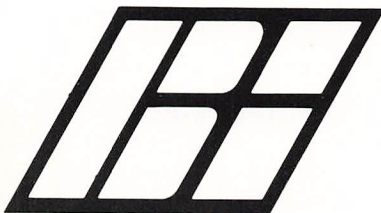
Architectural and  
Construction Materials

THERE'S NO QUESTION  
ABOUT IT, OUR  
MEN FOUND...



# The Benoit Tapered Foam System the easiest and fast- est to install. And believe me we've installed them all!

*Try it! You'll prove it to yourself too!*



**Benoit Inc.**

635 North Prior Avenue  
St. Paul, Minnesota 55104

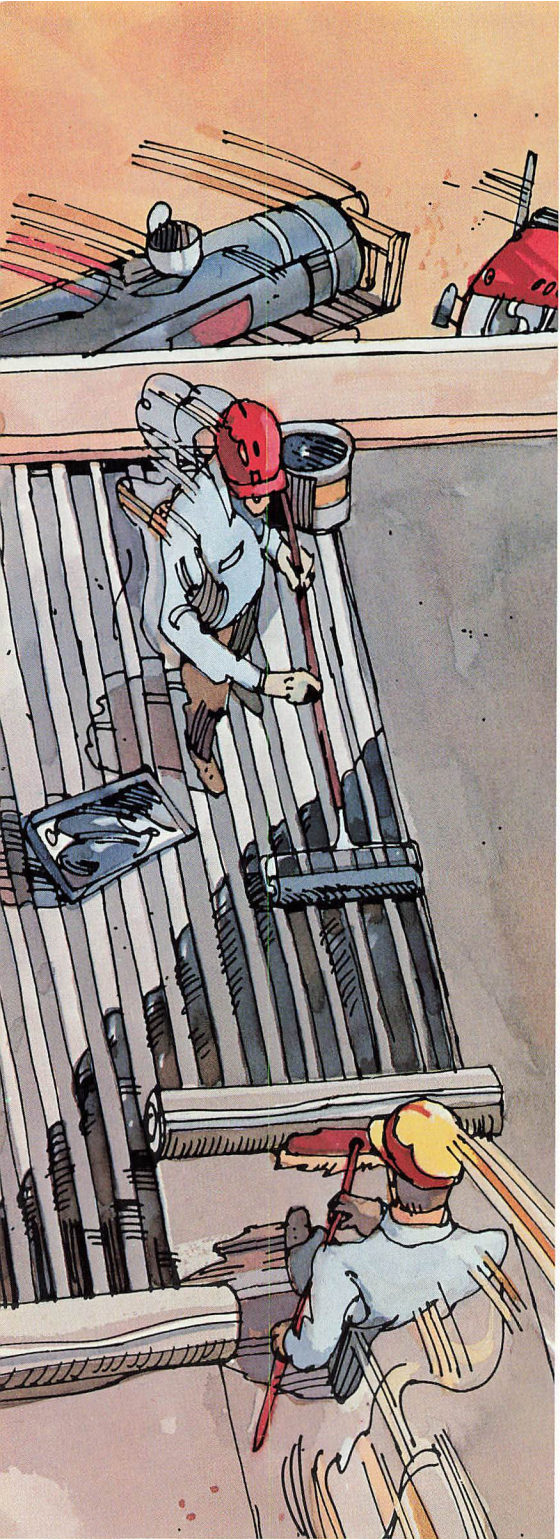
Send us one  
of your brochures  
immediately.



NAME \_\_\_\_\_

COMPANY ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_



J-M Asbestogard™ Vapor Retarder.



J-M Fesco® Board or Fesco-Foam® Roof Insulation.



J-M asbestos, fiber glass and organic roofing felts.

## When J-M covers a roof, J-M really covers a roof.

That means you'll get Johns-Manville quality from the deck up.

You're also assured of a full line of components and accessories all made to go with each other.

And you're assured of true value, of "from-the-deck-up" dependability, and lasting protection when the job is done.

With clear-cut, single-source



J-M Expand-O-Flash® Expansion Joint Covers.  
J-M Asbestile® Flashings.

responsibility for the performance of all J-M materials used in the finished assembly.

Performance and responsibility that are backed by the full resources of one of the world's largest producers of built-up roofing materials. Resources that include one of the most complete research facilities in the industry. And a staff of full-time built-up roofing specialists whose problem-solving expertise and expe-



J-M Flex-I-Drain® Roof Drain Systems.

rience are available to you anytime you need it.

All good reasons why you can specify J-M with confidence. Why a J-M roof really makes sense. And saves a lot of dollars in the long run.

For more information on J-M single-source roofing systems, consult Sweet's or contact Grant Edmonds, Johns-Manville, Ken-Caryl Ranch, RS-5 Denver, Colorado 80217, 303-979-1000.



J-M FP 10 One-Way™ Roof Vents.  
J-M Wide Bellows Expand-O-Flash.

**For single-source built-up roofing systems.**

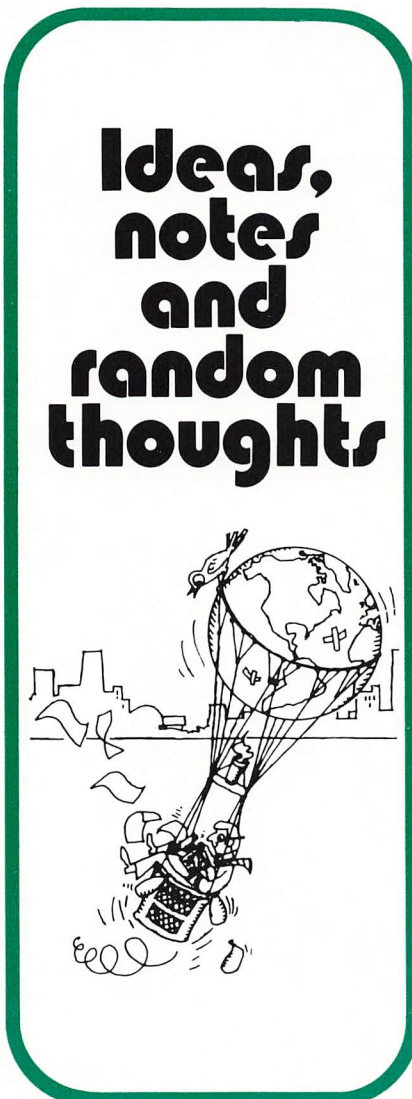


**Johns-Manville**

**Oh, That John Durkin:** At the height of the lobbying efforts to ratify the Panama Canal Treaty, President Carter was making a series of phone calls to certain Senators. One call, however, went to Rep. John Duncan of Tennessee. Carter, according to Duncan, thanked him for his support, and remarked on how much courage was required to hold to a view on a controversial issue. Duncan said thanks, but I'm only a Congressman, and I wish you'd listen to the House on this. Seems that the White House operator erred, and was trying to get Senator John Durkin, a Treaty supporter.

**Quotable:** Columnist James J. Kilpatrick: "John Randolph of Roanoke once proposed that Congress be prohibited from enacting any new laws unless it simultaneously discarded an old one. And the principle is sound. If the incoming Congress would merely cut our taxes, appropriate enough money to keep things going, vote the Panama Canal treaties up or down, and then adjourn, the Republic would survive. What else truly has to be done? Not much, I submit, not much."

**Well, There is one Thing:** The reason for delays in getting new W-2 forms this year is that the IRS couldn't decide on the type of ink to buy—because it has to wait until Social Security decides which computer to buy (and read the ink). Meanwhile, IRS suspended the requirement that ex-employees be given W-2's within 30 days of receiving their final paycheck.



**Member Stan Nelson,** Twin City Roofing Co., is the new Secretary of the North Dakota chapter of the American Subcontractors Association. The chapter is brand new, and we offer our congratulations to Mr. Nelson.

**Recent NRCA Mailings** include:  
 Congressional Review - March Issue  
 On Target Bulletin  
 Action Information - April Issue  
 Tool Box Talk  
 Technical Developments Bulletin  
 Additional copies of most are available from the NRCA office.

**Paperwork Burden:** The Joseph Schlitz Brewing Co. estimates its one-year cost of compiling reports for federal and other government agencies at \$719,864. IRS, by the way, is third on the list, which includes the following:

Bureau of Alcohol, Tobacco,	
Firearms .....	\$220,718
Environmental Agencies ....	197,687
Equal Employment Agencies .	30,952
OSHA .....	7,202
IRS required a mere	\$184,372.

**Also Quotable:** Walter E. Hoadley, Executive Vice President and Chief Economist of the Bank of America: "If you know anything about a subject, you can't serve in the Government because of conflict of interest."

**And Finally,** with the national debt now pushing \$800 billion, we're reminded of the classic remark by the late Sen. Everett Dirksen, who once said: "A million dollars here and a million dollars there, and pretty soon you're talking about real money."



We are looking for a branch manager for our mid-south small city operation. You must have experience in supervising and estimating commercial, industrial, institutional roofing and sheet metal work. If you want to run your own show with a growing progressive outfit and be paid for your success apply to Box #M58. Stock ownership is available if you want it.

All Former  
**ALCOA GRAVEL STOPS AND COPINGS**  
 Stocked By  
**ARCHITECTURAL PRODUCTS COMPANY**  
 2644 Crescent Springs Road  
 Covington, Kentucky 41011  
 606-341-1171

# Clean Up Problems and Profits In Reroofing Jobs

## The *Unitized Vac* Does It All!

**One Man Cleans Up To 120 Squares of Gravel Per Day**



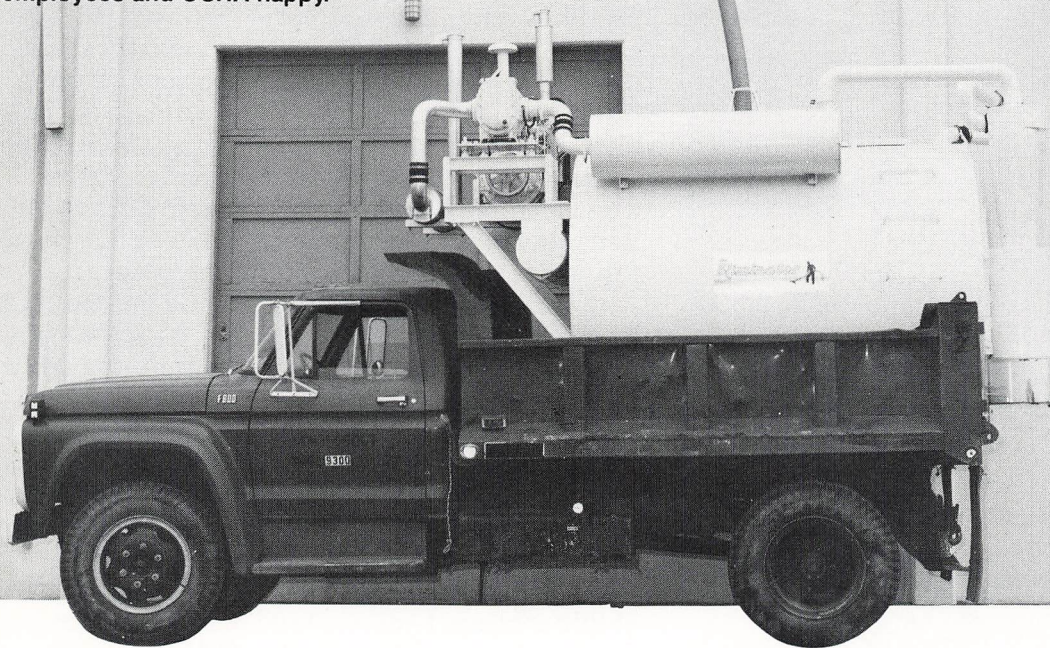
Eliminator's exclusive *Unitized Vac*, the Mark I, is quality engineered specifically for the roofing contractor. You don't need any other sweeping, conveying or hoist equipment for gravel pickup.

You get a single component vac at a price thousands of dollars less than other systems with similar capabilities. With the power unit attached to the holding tank, there's no disconnecting to do when emptying.

The four-way, low maintenance filter system and sealed holding tank produce a dust-free working area that keeps employees and OSHA happy.

The powerful diesel engine on the Mark I pulls gravel up to 1000' and the holding tank has a capacity of 4 or more hours of production.

Flexibility is unlimited with the *Unitized Vac* . . . install it in a dump body truck permanently or make it removable . . . order it on a trailer with a hydraulic dump system, or on skids for permanent location or use with roll-off equipment.



**The Unitized Vac — The Single Answer to Reroofing Problems**

**CALL OR WRITE TODAY FOR A BROCHURE ON THE COMPLETE LINE OF ELIMINATOR VACS**

 **eliminator**  
vac systems

4700 Holly Street  
Denver, Colorado 80216  
(303) 399-3550



**"SINCE WE'VE STARTED USING GAF'S COLD-APPLIED MINERAL-SHIELD® ROOFING, OUR SALES HAVE GONE THROUGH THE ROOF."**

Howard & Dick Charbonneau  
Charbonneau Contracting Corporation  
Round Lake, N.Y.



"The day after we started using Mineral-Shield, we practically gave away our old hot roofing equipment," says Dick Charbonneau. And his brother, Howard, adds:

"I can't understand why anyone would use anything else. Mineral-Shield is much more profitable than hot roofing. While material costs are similar, Mineral-Shield roofing goes down faster. You need less manpower. Less setup time. And less equipment. There are no hot carriers or kettles to mess with. Mineral-Shield roofing is a cold spray process, so you don't lose time because of burns and accidents. And you don't have to worry about things like slope limitations or maintaining critical temperatures."

When asked about blisters and fishmouths, Howard replied, "I've practically forgotten what they look like. They're virtually eliminated with Mineral-Shield roofing."

"Our customers rave about Mineral-Shield's white granule surfacing," says Dick. "They not only like the way it looks, but they like the way its high reflectivity helps keep air conditioning costs down." And he concludes:

"After applying over 4½ million square feet of this roofing, I know what I'm talking about. The hard and cold fact is that GAF® Mineral-Shield® roofing is here to stay."



GAF Corporation  
Building Products, Dept. RSP38  
140 West 51 Street  
New York, New York 10020

- Please send me more information on Mineral-Shield® roofing.
- Please have a representative call.

Name \_\_\_\_\_

Firm \_\_\_\_\_

Address \_\_\_\_\_

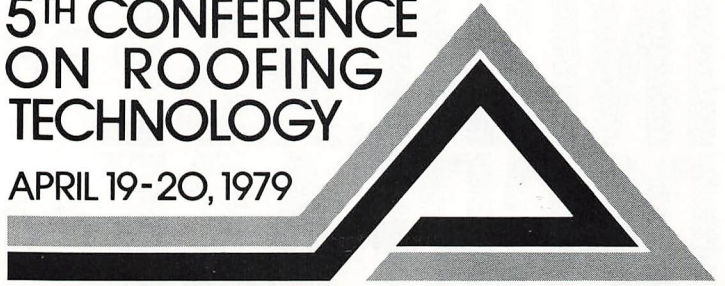
City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_



TA

# 5TH CONFERENCE ON ROOFING TECHNOLOGY

APRIL 19-20, 1979



## Technical Conference Planned

A special NRCA Task Force met recently with representatives of the National Bureau of Standards to finalize plans for the 5th Conference on Roofing Technology. The Conference will be held April 19-20, 1979, at the NBS facility in Gaithersburg, Maryland. Registration will be open to all interested persons, and attendance will be limited to 300, on a first-come first-served basis.

Those attending will be housed at the Washington Hilton Hotel in Washington, D.C., with daily transportation provided to and from Gaithersburg. The program will include a cocktail reception on the evening of April 19, and a ladies program as well. Also, optional tours of the NBS facilities have been planned, and will be available at no extra charge to all registrants.

The Conference will use the general theme: **Thermally Efficient Roofing Systems**, and will feature eleven papers and ample discussion time. The papers will be pre-printed and distributed to registrants at the time of registration. The tentative program outline is as follows:

### Wednesday, April 18

Early Registration—Washington Hilton

### Thursday, April 19

Welcoming Remarks  
General Introduction to the Conference  
William Kugler, United Materials, Inc.

#### FIRST SESSION: INSULATION

Performance Characteristics of Roof Insulation  
Prof. Don Brotherson, University of Illinois  
Moisture Effects In Insulation  
Wayne Tobiasson, U.S. Army Cold Regions  
Research & Engineering Laboratory  
Design Characteristics of Insulation  
Charles Hedlin, National Research  
Council of Canada  
Questions and Answers  
Luncheon

#### SECOND SESSION: RETROFITTING

Scientific Evaluation of the Existing System  
Jack Williams, Twin City Roofing Co.  
Technical Considerations of Retrofitting  
Dick Fricklas, Johns-Manville Corp.  
Procedures for Upgrading Roofs  
Glenn Langer, Langer Roofing & S/M Co.  
Questions and Answers  
Cocktail Reception (Evening)

### Friday, April 20

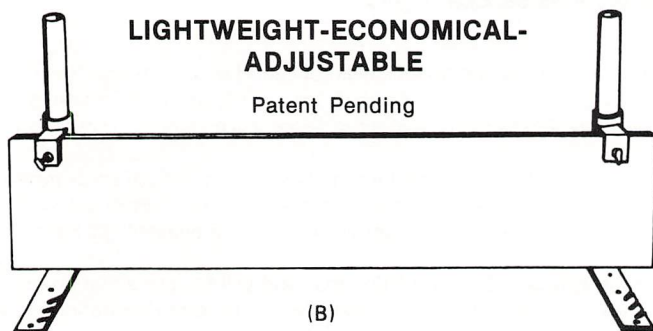
#### THIRD SESSION: MEMBRANE CONSIDERATIONS

Performance Considerations  
Werner Gumpertz, Simpson, Gumpertz  
& Heger, Inc.  
Moisture & Temperature Effects  
Dr. Herb Busching, Clemson University  
Employment of Conventional Systems  
J. Roy Martin, Jr., J. Roy Martin & Co.  
Employment of Non-Conventional Systems  
John Van Wagoner, Prospect Industries, Inc.  
Questions and Answers  
Conference Summary  
Robert E. Linck, Warren-Ehret-Linck Co.  
Concluding Remarks  
Luncheon  
Optional Tour of NBS

Additional information and registration materials will be available soon from the NRCA office.

# INCREASE PRODUCTIVITY DECREASE COSTS

**SAFELY --- EFFICIENTLY!  
WITH P.A.L. PRODUCTS**

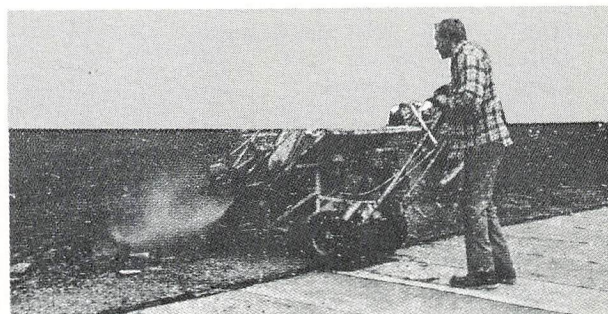


## THE TEMPORARY ROOF PARAPET

- Lightweight, easy and fast to install and dismantle.
- Adjustable from dead-level to 10/12 pitch.
- Lower receiver will support toe board or can be adjusted to receive up to 22 inch width of plywood. (See Drawing B)
- Hold debris on roof level.
- Asphalt shingle can be installed over base and when dismantled strike plate and base will release.
- Also can be used for product storage on steep roofs, and roof bracket with working & storage area.

## POWER CLAW . . . . .

The Power Claw assures a clean, modern, efficient removal operation to make your re-roofing jobs provide larger profit margins. Power Claws are now operating throughout the country, and has proven itself under the most adverse conditions. Therefore, may we suggest that you ask the Roofer who owns one to attest to the Power Claw's capabilities.



PATENT # 3542433

Write for more information on these P.A.L. products . . . . .  
"Engineered FOR the ROOFER . . . . . BY a ROOFER."

## P.A.L. DEVELOPMENT CORPORATION

P.O. Box #127

(414) 781-6870

Butler, Wisconsin 53007

# News from affiliates

## New England

The New England Roofing Contractors Association held its 52nd Annual Convention and Trade Exposition, March 15-18, in Boston, Massachusetts, with over 600 roofing contractors, architects, engineers, manufacturers, owners and government officials attending the three-day affair. Over 400 contractors and architects attended the workshop sessions featuring "One Ply Roofing Systems" with a panel of roofing manufacturers representing Dynamit Nobel of America Inc., Carlisle Tire and Rubber Co., Technical Coatings Inc., Koppers Company Inc., U.S. Mineral Products Co. and International Roofing Systems Inc.

Donald E. Brotherson, registered architect from Illinois, consultant to NRCA, and a member of the Building Research Council, University of Illinois, spoke on "Energy Saving Thru Roofing Insulation." The other workshop session featured Joseph Reilly, Crime Resistance Coordinator, Federal Bureau of Investigation for the New England area, who gave a "Crime Prevention Briefing for the Roofing Industry."

The trade exposition featured 65 exhibits by manufacturers, suppliers and distributors in the roofing industry. They presented the latest in equipment, materials and services for roofing and waterproofing contractors. The Celotex Corp. and Koppers Co. Inc. won the "best exhibit" awards.

At the annual business meeting the following officers and new directors were elected for 1978:

President ..... Kenneth B. Marshall  
Federal Sheet Metal and Roofing Co., Boston, Massachusetts

Vice President ..... C. Edward Belanger  
A. Belanger & Sons Inc., Cambridge, Massachusetts

Secretary-Treasurer ..... James A. McBrady Jr.  
James A. McBrady Inc., Scarborough, Maine

Directors—3 Years: Theodore R. Hoponick—Shelton Roofing Co., Inc., Derby, Connecticut; Sidney I. Sontz—Max Sontz Company, Inc., Lynn, Massachusetts; Donald E. Swansburg Jr.—Beacon Sales Co., Somerville, Massachusetts.

Director—2 Years: Robert B. Read—The Celotex Corp., Andover, Massachusetts.

It was reported at the annual business meeting that NERCA now represents over 210 members from the six-state area. That figure includes 125 roofing contractor members and represents a growth of 15 new members during the past year.

Immediate Past President Jon Cazeault told the membership, "We are involved in a great many association activities, industry relations and significant projects. Your association has responded to important legislation and regulatory issues and NERCA's activities are pursued with one main objective in mind...helping you to improve the way you do business."

## Tennessee

The Tennessee Association of Roofing Contractors has announced plans for its Convention to be held in Gatlinburg, at the Glenstone Lodge, June 15-17, 1978. The program is as follows:

### Thursday, June 15

10:00 AM - 1:00 PM TARC Board of Directors Meeting  
1:30 PM - 5:30 PM Roofer's Seminar  
6:30 PM - 7:30 PM Hillbilly Party

### Friday, June 16

All Day Tennis & Golf tournaments  
6:30 AM - 7:30 PM Cocktail Party & Children's Party  
7:45 PM Banquet and Speaker

### Saturday, June 17

9:00 AM - 11:30 AM Business Meeting

Registration forms and additional materials are available from the TARC office, 6300 Building, Suite 7605, Eastgate Center, Chattanooga, Tennessee 37411.



# VERMONT ROOFING SLATE

All Colors and Thicknesses

Semi-Weathering Gray and Green	Mottled Green and Purple	Bangor Blue-Black	Unfading Green
Royal Purple	Vermont Black	Mottled Gray	Rustic
Red	Flagstone Tile		

## FULL ARCHITECTURAL SERVICE

Also -  
Slate Cutters, Hammers,  
Rippers and Slate Hooks.

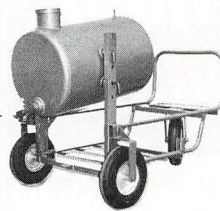
## EVERGREEN SLATE CO. Inc. "Since 1916"

Granville, New York, 12832

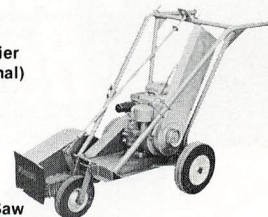
Quarries: Wells, Vt. • Shipping Station: Granville, N.Y.  
Office: 34 North St. • Telephone: 518-642-2530

## MECHANIZE FOR PROFITS

with GARLOCK Original Roof Equipment



4000-Carrier  
(The Original)

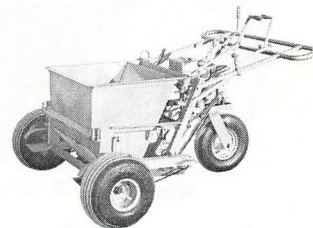


The Original Power Saw

- POWER FELT CARRIER

- POWER GRAVELER

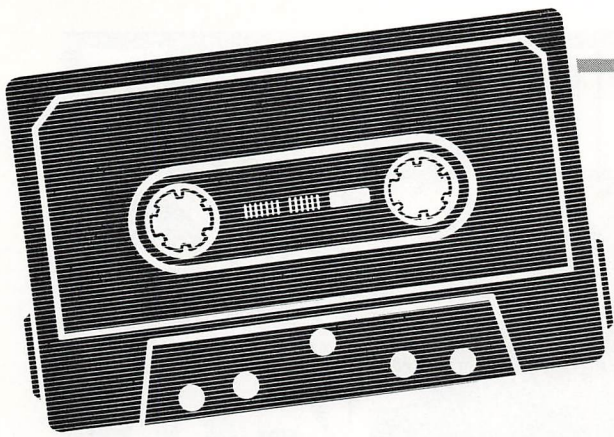
- POWER HOT STUFF CARRIER



MODEL No 600  
COMBINATION POWERED  
"WORK HORSE"

**GARLOCK** EQUIPMENT CO.  
MINNEAPOLIS, MINN.

3250 GORMAN AVENUE • MINNEAPOLIS, MINN. 55426  
PHONE 612-929-0496



# Convention cassettes available

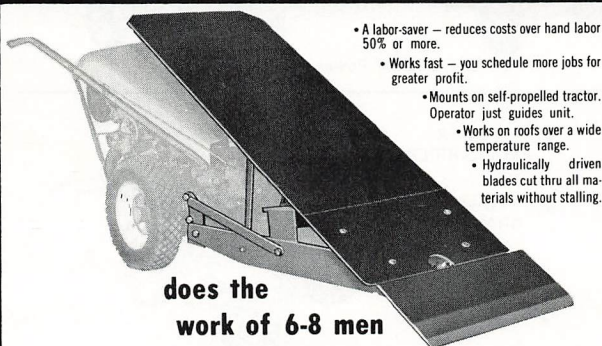
Cassette recordings of nearly all NRCA Convention sessions are now available through the NRCA office. An order form can be found in the back of this magazine. Tapes available, and prices, are as follows:

Keynote Address—Ronald Reagan . . . . .	\$ 6.00	Insurance—E. J. Leverett . . . . .	\$ 6.00
NBS Update—Bill Cullen . . . . .	\$ 6.00	Awards Luncheon—Frank Zarb . . . . .	\$ 6.00
Roof Splits—Rene Dupuis . . . . .	\$ 6.00	Rap Session—EVT . . . . .	\$ 6.00
Estate Planning—Ernest Wiedemann . . . . .	\$10.00	Rap Session—Insurance . . . . .	\$ 6.00
Computers—Bill O'Brien . . . . .	\$ 6.00	Rap Session—Safety . . . . .	\$ 6.00
Energy Manual—Don Brotherson . . . . .	\$ 6.00	All 11 Tapes . . . . .	\$59.00

TO ORDER: SEE ORDER FORM INSIDE BACK COVER

## Nieman Power Roof Remover...\*

\*Patent No. 3,779,605



does the  
work of 6-8 men

- A labor-saver — reduces costs over hand labor 50% or more.
- Works fast — you schedule more jobs for greater profit.
- Mounts on self-propelled tractor. Operator just guides unit.
- Works on roofs over a wide temperature range.
- Hydraulically driven blades cut thru all materials without stalling.

POWER ROOF REMOVER is equipped with two cutting tools to remove roofing down to the insulation or down to the decking, even if the insulation is solid mopped. A toothed blade (left) is used on most roof removing jobs when job conditions require its bull-dozing action. The wide cutting blade (above) is used mostly when removing fiberglass insulation and when removing roofing down to the insulation.

**Nieman**  
MANUFACTURING COMPANY, INC.

P. O. Box 64, New Prague, MN 56071 Telephone: (612) 758-4791

*Shelter Communications, Division of Shelter Publications, Inc., wishes to announce a correction on the promotional materials distributed in conjunction with their "Roof Maintenance" Program held recently in Orlando, Florida.*

*The correct speaker on the subject of "Fundamentals of Built-Up Roof Applications and Design" was G. W. "Bill" Tucker, of Marion Roofing and Heating Co., Inc., Okala, Florida, and not William Tucker, Interstate Roofing Co., Charlotte, N.C., as listed in the promotional literature.*

*Shelter Communications apologizes to Mr. Tucker of Charlotte for any misunderstanding and inconvenience it may have caused.*



# Pinpoint shows energy advances

The latest returns from Project Pinpoint—data accumulated on a sampling of all roofing jobs completed during the last half of 1977—show that significant progress is being made in the amount of insulation being used on roofing work: both new and repair.

The first Project Pinpoint Survey, in 1975, showed 30% of jobs completed had no added insulation. That number remained at a steady 34% in 1976, according to Pinpoint totals. However, it dropped sharply in the July, 1977 survey—to 29%, and continued that trend to the present level of 22%, in the most recent survey.

From an energy standpoint, other results are equally encouraging. 10% of all jobs had 2 or more inches of added insulation, up from 4% last July. In all, of those jobs with added insulation, three-fourths had 1-1/16" or more.

Other Pinpoint results are interesting as well. The recent survey documents the appearance on the marketplace of the single-ply membrane; though still only 4% of the market, it is up dramatically from previous

totals of less than 1%.

Also, the continuing popularity of metal decks is shown, at a new high of 44%, while concrete decks also showed a steady increase. The surprisingly high 1974-75 totals for wood decks—30%—have dropped to a more expected level of 19%.

Problem Job analyses also yield some interesting results. For example, 50% of the problems occurred over metal decks. Of those, 50%, 70% were 22 gauge or lighter; 30% had a span greater than seven feet.

Also, two-ply roofs continue to account for a disproportionate share of problems. 14% of all jobs reported had two plies; 42% of the problems were associated with two-ply roofs. Three-ply systems were used on 56% of all jobs, yet accounted for only 42% of the problems; four-ply roofs were reported on 25% of all jobs, yet accounted for 15% of the problems.

Highlights of the complete results appear on the next two pages.

## REMINDER

Project Pinpoint Data are accumulated from surveys of NRCA members. The results reflect fairly the general type of work being performed by NRCA members. Because of the large number of responses to the Baseline questionnaire, we can conclude that the figures given for this category are a fairly accurate representation of overall industry roofing practice for industrial/commercial roofing contractors.

Project Pinpoint "Problem" information is accumulated from NRCA members who have experienced problem jobs. Here, results cannot be extrapolated to include the entire industry. Because of the smaller number of returned and completed forms, we cannot draw conclusions which could be backed by any test of statistical significance. This does not mean the data are without use—they do present us with some early warning signals—we just cannot state, with certainty, that the data truly reflect industry problems.

All of the information stored in the Project Pinpoint data bank can be retrieved for specific requests, detailed analyses, geographical breakdowns, etc. This service is available to all contractor members of NRCA, upon request, at a fee designed to recover out-of-pocket NRCA expenses. Requests for Project Pinpoint information from Associate Members, if presented in writing, will be considered on an individual basis. In no case, however, will information on the performance of other manufacturers' products be released to a competitor.

One final reminder: the continued success of Project Pinpoint is dependent upon the active cooperation of all NRCA members. Report problems when you experience them. Complete baseline surveys when they're mailed. If you want any of the forms now, just mail in your request. Project Pinpoint is an important industry resource, but it can't succeed without your help.

For a complete rundown of 1977 results, please refer to Technical Developments Bulletin #3.

# Baseline results - second half 1977

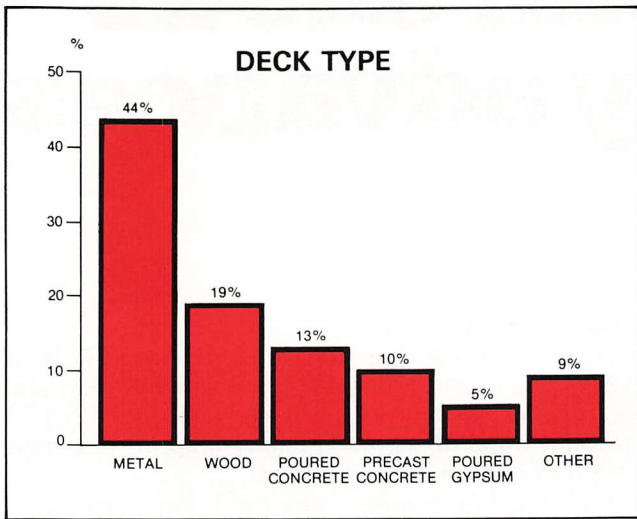


FIG. 1

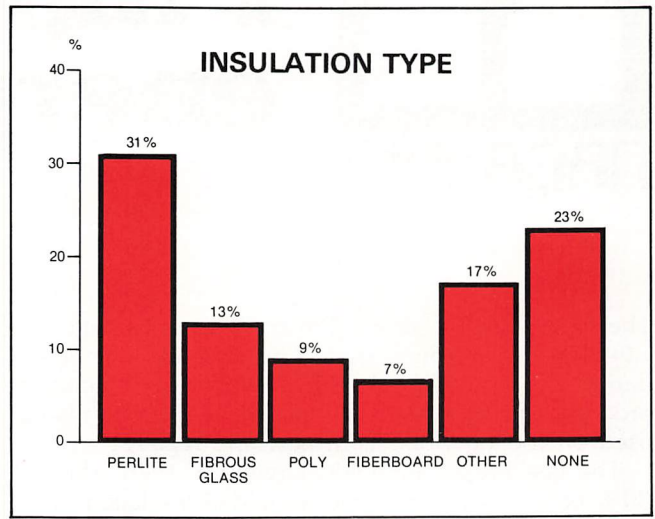


FIG. 2

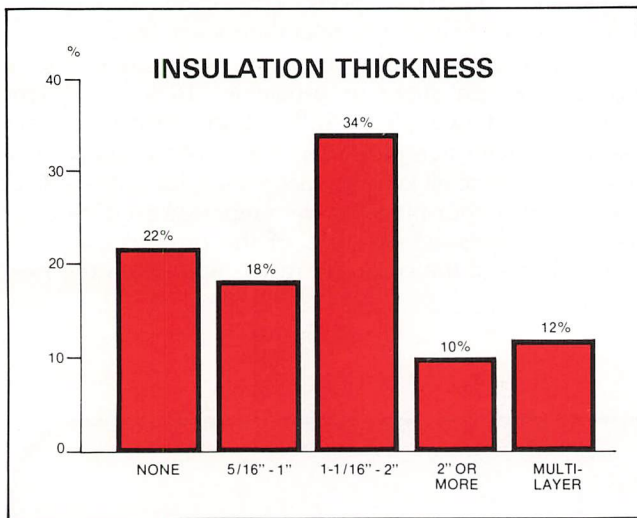


FIG. 3

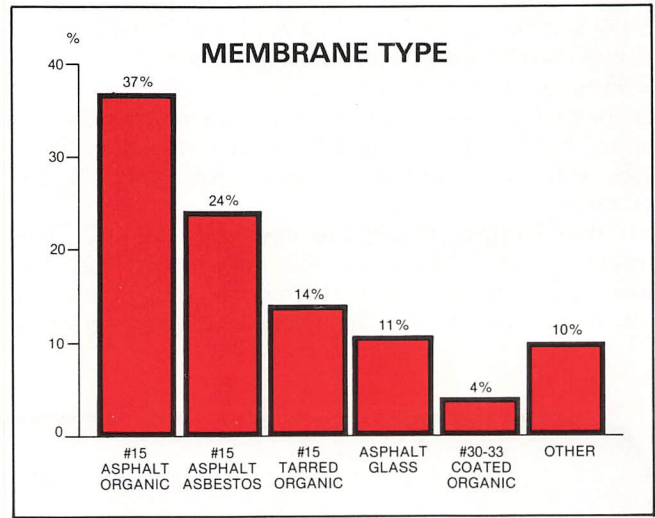


FIG. 4

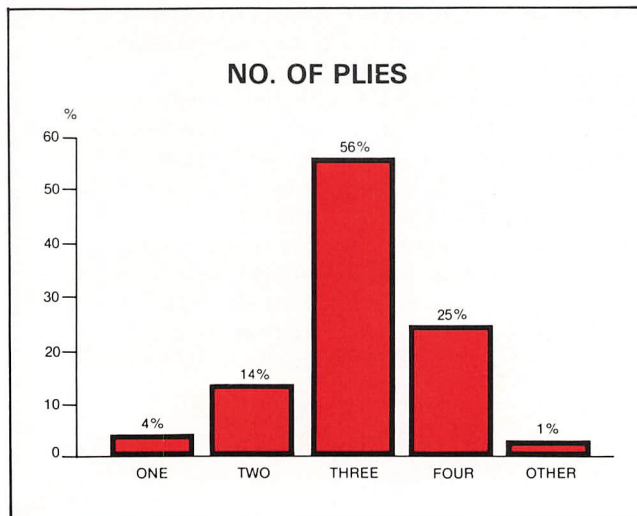


FIG. 5

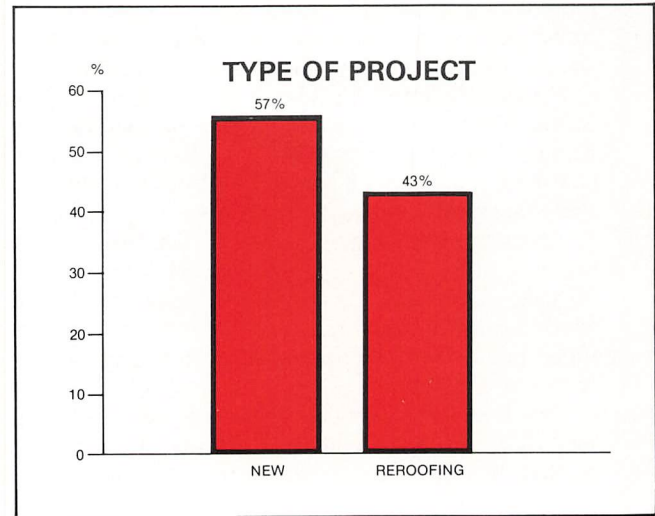


FIG. 6

# Other results

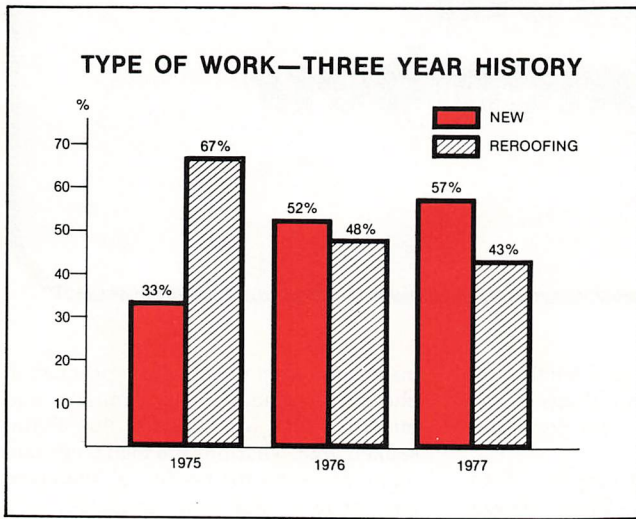


FIG. 7

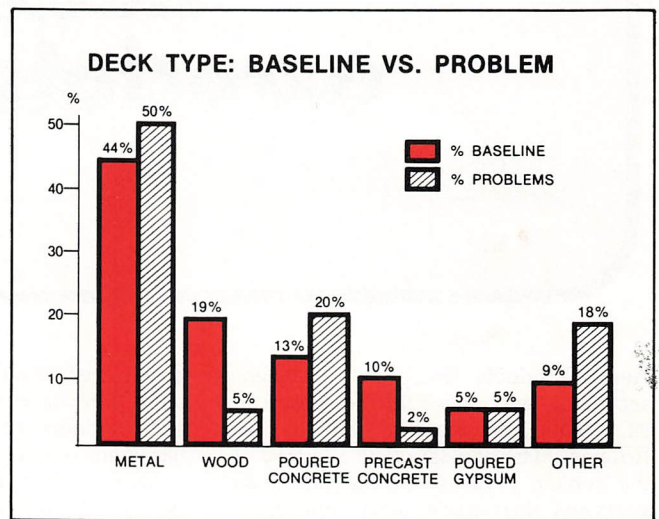


FIG. 8

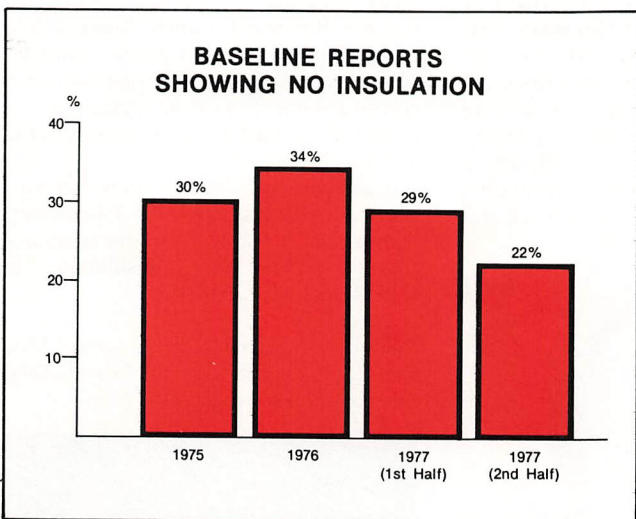


FIG. 9

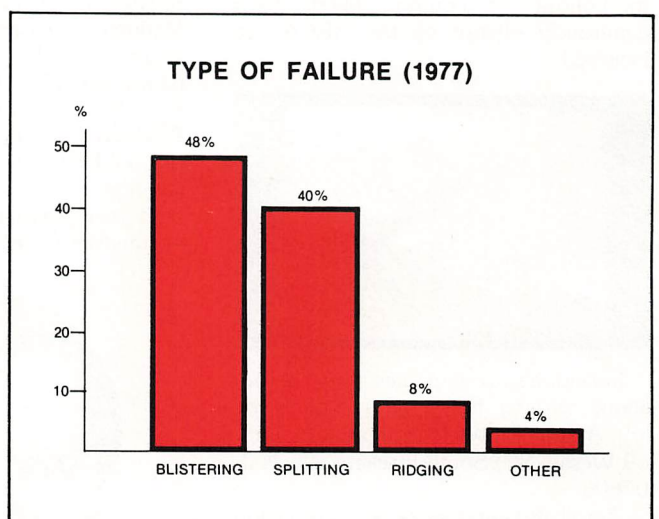


FIG. 10

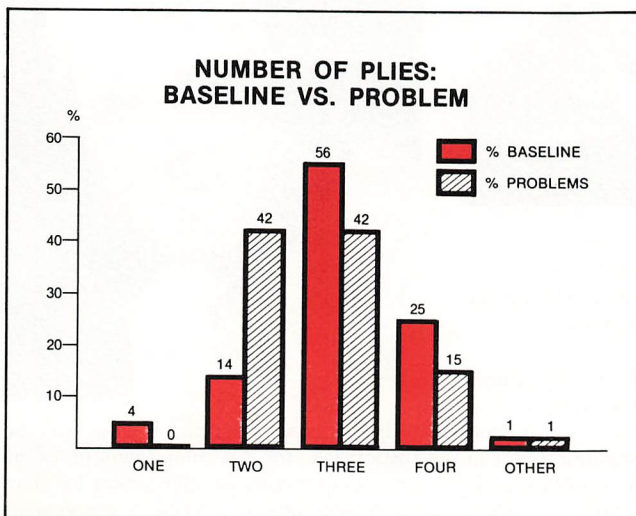


FIG. 11

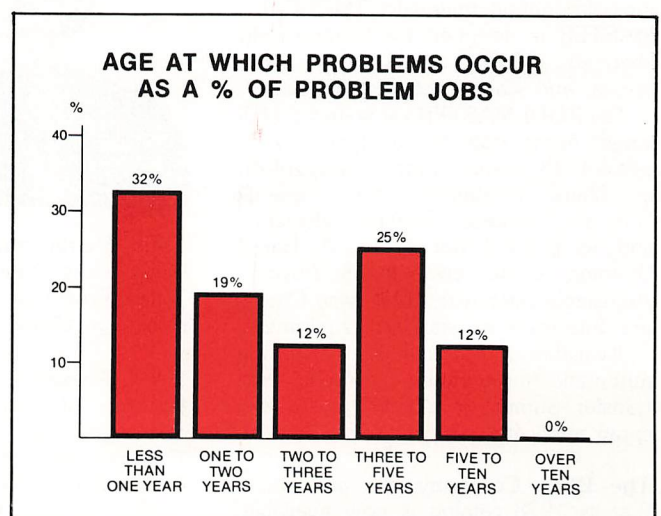
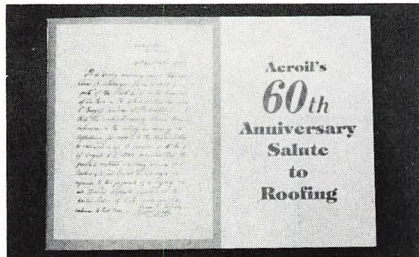


FIG. 12



# News from associate members

**Aeroil Products Co.**, South Hackensack, N.J. announces the availability of its "60th Anniversary Salute To Roofing". The booklet offers a history of the roofing industry for the past 125 years and offers articles and pictures from many roofers and roofing companies throughout the country. Many items generously offered by the NRCA are included.



Individuals, companies, or associations wishing free copies may write to: Aeroil Products Company, Inc., 69 Wesley St., South Hackensack, N.J. 07606.

Aeroil also announces the introduction of its all new "KOOLMASTER 300" for cold roofing materials. The KOOLMASTER is designed for heating cold fibered roofing materials, resaturants, and waterproofing materials.

The KOOLMASTER vat features a full length heavy duty paddle type mixer/agitator to insure proper suspension of fibers throughout the material and to increase heating efficiency and to prevent hot spots. A Barrel Draining Grate and an 8 Position Adjustable Hitch with Breakaway Chains are furnished as standard equipment.

Available as optional equipment are automatic temperature controls, roof transfer pumps or alemitte pump and spray applicator bar.

**The Bilco Company** has announced that its 1978 catalog is now available, free upon request. The catalog gives up-to-the-minute features, specifications and other pertinent data about its full line of

products which includes roof scuttles, fire vents, interior and exterior doors as well as floor doors, ceiling access doors and basement doors.

Write to The Bilco Company, P.O. Box 1203, New Haven, Conn. 06505.

Sherwin L. Steinberg, Vice President of Marketing for **Carboline Company**, St. Louis, Mo. has announced the appointment of Roy M. Perrin as a Regional Sales Manager in the company's Roofing Products Division. Mr. Perrin's primary responsibility will be to effectively develop and increase Roof-Flex elastomer sales in the mid-west, Gulf and southeastern seaboard states.



Mr. Perrin studied management at West Texas State University, Canyon, Texas. Previously, he was the manager of a large Illinois roofing firm.

The **Celotex Building Products Division** of Jim Walter Corporation dedicated its recently completed Thermax plastic foam insulation plant in Pennsauken, New Jersey, on March 31.

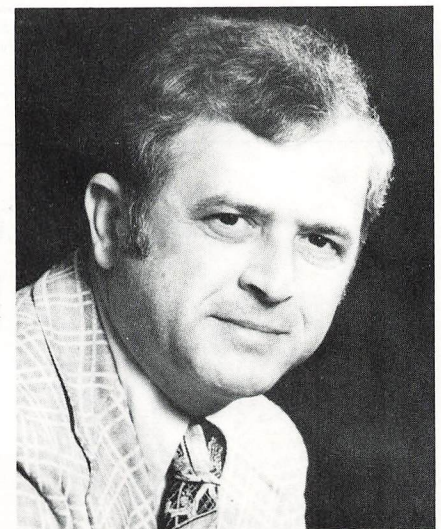
More than 300 customers and state and local dignitaries toured the 90,000 square foot plant which has an annual capacity of 200 million square feet of

insulation. The plant began production ahead of schedule in January and employs 110 residents of the Pennsauken area. Thermax is a highly efficient foam insulation for residential sheathing and for farm and metal buildings.

The Pennsauken plant is the first of three to be constructed by 1980 by the Celotex Building Products Division in a major expansion of its plastic foam insulation business. Another plant is under construction in Texarkana, Arkansas and a third will be built to serve markets in the western United States.

Celotex has been manufacturing plastic foam insulation in Charleston, Illinois since 1972 and also manufactures plastic foam roof insulation in Elizabethtown, Kentucky.

Arthur L. Weiner has been named Vice President, Engineering, for **CertainTeed Corporation's** Insulation Group.



In his new position, Weiner will be responsible for the management of all engineering activities pertaining to plant expansion and construction projects as well as environmental, process and quality control programs. These activities encompass all design, specification,

# NEWS FROM ASSOCIATE MEMBERS

purchasing, and process development functions.

Weiner joined CertainTeed in 1968 as plant superintendent for the company's insulation facility in Kansas City, Ks. He then served as plant manager for CertainTeed's insulation-producing facilities in Mountaintop, Pa. and Athens, Ga. before being named Director of Central Engineering earlier this year.

A graduate of Drexel University (B.S.) and the University of Akron (M.B.A.), Weiner and his family now reside in Exton, Pa.

A new retrofit insulation system from **The Dow Chemical Company** which makes it possible to easily and economically add additional thermal efficiency and membrane protection to the roofs of most commercial buildings was introduced at the NRCA Convention in Las Vegas.

The unique system involves adding loose laid boards of Styrofoam T.M. RM brand insulation directly over the existing roof as is, or as upgraded by others to an acceptable water tightness, and covering with a new layer of stone aggregate.

"The simplicity of the system makes it, in essence, the commercial equivalent of home attic insulation. The contractor lays

boards of Styrofoam RM insulation much as the homeowner would additional batts. In both cases the major area of heat loss in the structure is easily insulated at a low cost for maximum impact on energy consumption," said Gary Ervin, Roofing Market Manager for Dow.

The unique properties of Styrofoam RM brand insulation make possible a retrofit application servicing a great market need for a quick, inexpensive system.

"There are approximately 25 billion square feet of existing roofing area in this country which have no insulation, or insufficient amounts to combat today's higher energy costs," said Ervin.

"Commercial buildings alone lose as much as 1.8 million barrels of oil equivalent per day due to energy efficiency. The cost for this waste is being paid for by building owners."

These owners have been frustrated in finding an easy, affordable method of adding insulation to an existing roofing system, according to Ervin. Architects and other specifiers can make newly constructed buildings suitable for the current energy environment. However, the number of insufficiently protected buildings grows

with each rise in fuel prices. Soon even these new buildings may need added insulation to make them suitable for energy requirements in five, ten or twenty years. "This puts them in the same predicament as currently under-insulated buildings in the long run. Today retrofit systems have to be able to cope with the future by being able to improve on themselves as needed," said Ervin.

Dow makes no judgements or recommendations for the rehabilitation of existing roofs to an acceptable level of water tightness. However, it is possible for a roofing contractor to repair membrane and/or reduce roof weight when necessary. To accomplish this, the existing stone layer is powerbroomed off allowing for membrane inspection and/or repair. Styrofoam RM brand insulation is then laid loose directly over the membrane with proper stone coverage according to Dow specifications.

The Dow retrofit system is suitable for most roofing needs. Boards are available in a variety of thicknesses, most commonly 1½" to 3". Desired degree of thickness (achieved by single boards or combinations of several) is dependent upon value analysis of insulation requirements. When upgrading is

## E-Z LIFT<sup>®</sup>

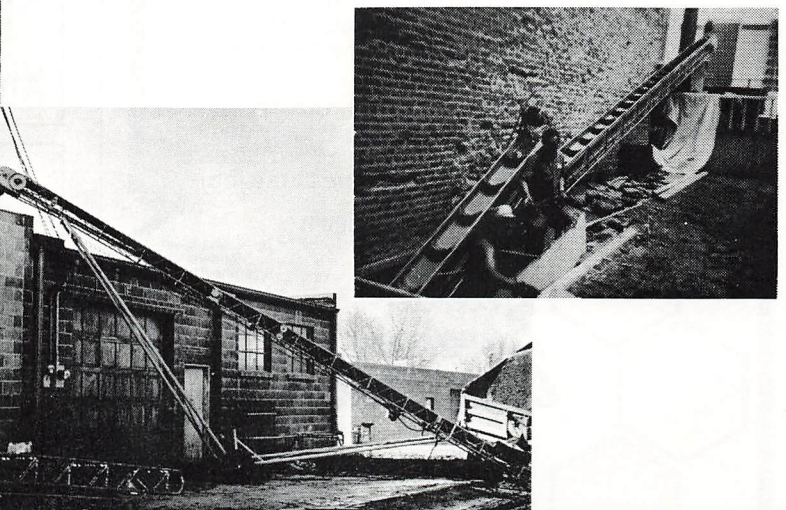
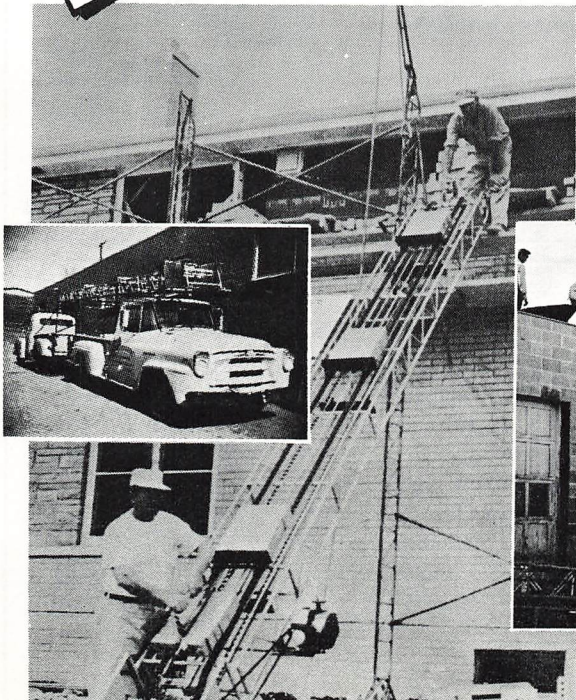
### AMERICA'S FINEST LIGHTWEIGHT PORTABLE CONVEYORS

PERFORMANCE PROVEN BY HUNDREDS OF SATISFIED USERS!

E-Z LIFTS are moving concrete, bricks, slabs, insulation, shingles, wire, packaged and rolled materials, roof deck, gypsum, grout, dirt, gravel, sand, grain, powders, rock, hay, debris . . . and hundreds of other materials . . .

Standard lengths from 16 to 33½ ft. in the "All-Purpose" and "Belt-Bucket" models. 21 ft. to 40 ft. in the "Carriage" model . . .

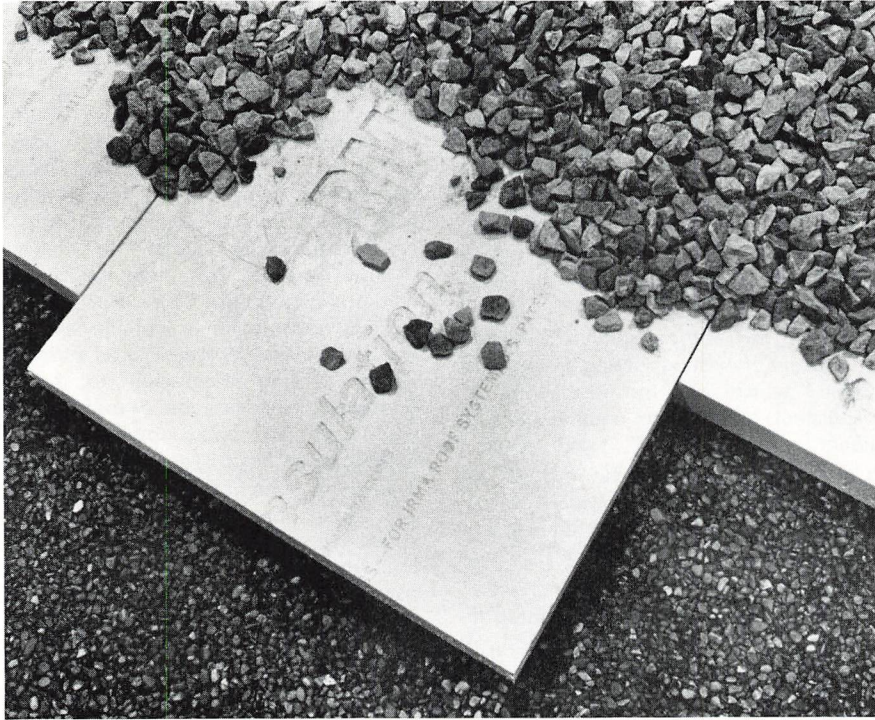
Light weight gas engine or electric power . . .



manufactured exclusively by  
**MACHINERY DEVELOPMENT, INC.** Denver, Colorado

office — 1545 Glenarm Place 80202 . . . plant — 2000 S. Cherokee Street 80223

# NEWS FROM ASSOCIATE MEMBERS



The Dow Retrofit Insulation system involves simply loose laying boards of Styrofoam™ RM brand insulation directly over the existing roof as is, or upgraded by others to an acceptable level of water tightness. A new layer of crushed stone protects the insulation, keeps it in place, and makes the roof surface suitable for foot traffic.

necessary, the top stone layer is removed, additional boards (as load capacity allows) are laid loose over the existing Styrofoam RM brand insulation and the stone layer replaced.

Actual energy savings after retrofit will vary depending upon amount of insulation already in the roof, type of fuel, climate, etc. However, the owner can determine the optimum amount of insulation necessary to achieve a desired rate of return on his investment prior to installation via an energy audit by The Dow Chemical Company.

Styrofoam RM brand insulation is combustible and should be properly installed. The Dow Chemical Company should be consulted for proper use instructions.

Edwin J. Hull, Jr., Vice President-Sales for **The Gibson-Homans Company**, presented sales awards for 1977 at the company's annual sales meeting in Scottsdale, Arizona this past January.

Joe Hannam, who works out of the company's plant in Des Moines, Iowa, was named Salesman of the Year. Mr. Hannam has been a sales representative with the company for 3½ years. Until recently his territory included the state of

## Roofers Depend on

### PETERSEN ALUMINUM

... for Today's Finishes. Anodized, Duranodic, Fluoropon® in Black, White, Medium Bronze and Dark Bronze... also Mill Finish 3003 H-14 Aluminum.

... for Aluminum Gravel Stops. Fabricated or extruded in finishes as required. Delivery is 3-6 weeks depending on style and finish desired.

... for Fascia and Mansard. Custom fabricated panel systems — almost any design configuration. Sections are formed, cut to size with battens — ready to assemble at the job!

#### Partners in Aluminum

**Petersen  
Aluminum  
Corporation**

- 72 hr. Shipment on Standard Size Sheet
- Architectural Aluminum Sheet .025-.125 in stock
- Group Items for Quantity Prices
- Custom Lengths on Standard Extrusions

3827 N. Willow St., Schiller Park, IL 60176  
Telephone: (312) 671-2510

Outside Illinois call Toll Free  
800-323-1960 for price and delivery

Product Information—Samples Available

## Don't suffer from burns or skin irritation

- Prevents scars and blisters
- Fights infection effectively
- Relieves pain quickly
- Helps to heal burns



- Md. Resident add 5% Sales Tax
- Send Check or Money Order.
- Sorry—No C.O.D.'s

Only \$3 PER TUBE

(Postage Pre-Paid)

**X-IT** FLOXOLF CHEMICAL CO., INC.  
4601 EASTERN AVENUE, BALTIMORE, MD. 21224

### SUPERINTENDENT

Long time commercial and industrial roofing and sheet metal contractor located in a small city needs a highly qualified individual to supervise and coordinate multi-crew assignments and job planning. This excellent opportunity includes salary, profit sharing, retirement benefits and vehicle. Send your short handwritten resume to NRCA, 1515 N. Harlem Ave., Oak Park, IL 60302, Box No. RS37.

South Dakota and Western Iowa. Late last year he assumed sales responsibilities for portions of Illinois, Wisconsin and Eastern Iowa.

Bernie Paul, sales representative with the Cleveland, Ohio division, and Nelson Biffar, sales representative with the Matawan, N. J. division, were named first and second runners-up respectively.

Flashing applications for various vertical and horizontal surfaces are described in new literature from **Koppers Company, Inc.**, Pittsburgh, Pa.

Titled "KMM Flashing Systems for Roof Maintenance and New Construction," the brochure contains a series of photos to illustrate vertical and horizontal flashing methods using KMM Membrane. A materials list and general specifications are included to serve as a guide for specifiers and applicators.

Copies of "KMM Flashing System for Roof Maintenance and New Construction" are available free by writing to Koppers Company, Inc., Organic Materials Group, 1900 Koppers Building, Pittsburgh, Pa. 15219.

**Pittsburgh Corning Corporation** has announced a new single-source guarantee for approved roofing systems using its FOAMGLAS® cellular glass insulation.

Designed to meet a need expressed by architects and owners, the program guarantees that the roof system will not leak and will retain its full insulation value. It also offers design flexibility since it includes roofing systems incorporating asphalt, coal tar or single-ply membranes from approved manufacturers.

Subject to stated limitations, Pittsburgh Corning will reimburse repair costs if any materials or workmanship fail during the coverage period. If problems are reported and are confirmed by subsequent inspection by Pittsburgh Corning, it will arrange for the necessary repairs.

The program currently covers five roofing systems—Koppers KMM and built-up; GAF built-up; Carlisle Sure-Seal Universal Roof; and Celotex built-up with flashing and expansion joint shields. All built-up roofs are 10-year guarantees, while single-ply roofs such as the Koppers KMM and Carlisle Sure-Seal units are covered for five years. Each guarantee carries a no-charge renewal option for the same period as the original coverage. Building owners may exercise the option within the first nine months of the final year of the initial guarantee.

FOAMGLAS® insulation is a lightweight, rigid material composed of millions of sealed glass cells that provide insulating air space. This unique composition makes it totally impermeable to water and vapors and dimensionally stable. It also has high compressive strength.



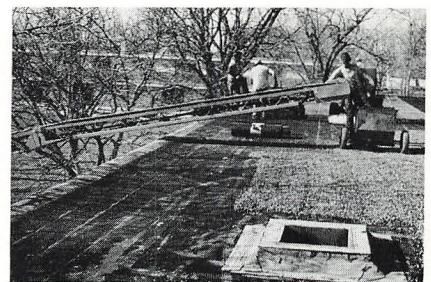
## "We've had a **MORGEN** Roofers Conveyor for two months. Just try to get it away from us!"

Nieman Roofing Co., New Prague, MN has owned a 68-foot Morgen Roofers Conveyor for only two months. And already John Nieman says, "You couldn't get it away from us!"

It has at least doubled their gravel production compared to a hoist, and they have used it for elevating felt, insulation and shingles as well.

An 18-foot section of the boom hydraulically folds under to shorten the conveyor for towing. Time to set up is a matter of minutes after arrival. Nieman Roofing has towed it to six locations so far and "haven't had a stick of trouble with it."

John Nieman likes the way the boom can be lowered to the ground for a low charging height, and the way



the conveyor is controlled by the buggy operators, who can start and stop the belt to get a full load without spilling.

"When a piece of equipment can save labor like this does, it can only make us money," Nieman says. That's why he says he'll soon be in the market for a second Morgen.

Write for literature and prices—

**MORGEN MANUFACTURING CO. Box 160 Yankton, SD 57078**



## COLLECTING YOUR MONEY

The cash-flow needs of both general contractors and subcontractors require that they vigorously pursue their right to payment. It is the nature of the financing of the construction work that general contractors and subcontractors perform dollar volumes many times in excess of their working capital. The subcontractors and those general contractors who actually perform work must pay for their labor weekly and for their materials and overhead on a current basis. If they are unable to collect payment currently, they will have immediate cash-flow problems. It is, therefore, incumbent upon contractors to understand the various remedies that are available in the construction industry for general contractors and subcontractors to collect their money for work performed.

Even better, contractors should establish standard procedures which prevent major disputes from arising in the first place. One of the best ways is to have a tough, consistent collection system—a bill collected now cannot turn into a bad account or a lawsuit later. The contract is never complete until the contractor's payment is collected for his performance. In the contract, the contractor should establish a date certain for payment to him of amounts as they become due. If payment does not arrive on that date, the followup procedure should be **immediate**. Accounts should be systematically "aged," with notices sent and collection procedures initiated every time. A reputation for collecting

fairly and consistently can be of great value in this regard.

We know of one construction subcontractor who does a business of \$2 to \$3 million per year and never builds up more than \$300 to \$400 worth of bad debts. His approach is simple; he calls the account immediately after the payment date and demands payment. He is not interested in why payment has not been made. If an excuse is offered, he says, "I have heard all the excuses before, and I am not interested in your excuses. I am sending a man over to pick up the check this afternoon." And he gets it.

Drafting and checking of contracts for legal pitfalls is the first and most important stage of pursuing a remedy or avoiding the need to pursue it. In order to have the benefit of a tight-payment clause, fair disputes and arbitration clauses, or a right-to-stop-work clause, they must be bargained for and put in the contract. Important lien and bond rights must be preserved and not waived in the contract. The next stage is systematic on-the-job documentation of extra work, change orders and unexpected conditions and costs encountered. The importance of these accumulated facts in proving what happened, whether for a disputes procedure, in arbitration, or in court, cannot be over-emphasized. A systematic approach is also necessary for strictly following the claim and notice requirements under the disputes clause. To make documentation systems work, the contractor must educate key personnel so that they will carry out procedural matters in a timely fashion and know which orders and actions constitute significant events. Of course, the contractor must file his liens and bond claims in time to make them an available remedy.

As a general rule, it is certainly in the best interests of the owner and general contractor or the general contractor and subcontractor to settle their differences amicably under the contract without having to resort to legal remedies. However, there are occasions on which it is not possible to negotiate or compromise differences. One of the parties may be stubborn or completely out of touch with his contractual obligations so that the dispute may have to be decided by a third party. Private and public construction contracts typically recognize that disputes will arise during the performance of a complex construction project, and most public and private general contracts contain procedures for handling these disputes.

Of course, the parties should attempt to solve the dispute without resorting to the formal proceedings of invoking the disputes clause or to litigation or arbitration. In any contract disputes procedure, settlement at the first level is always preferable because it avoids the costly delays of further attempts to settle or avoids the cost of arbitration or litigation. An additional advantage is that the parties at the first level are more familiar with the work and are thus able to evaluate the merits of any claim if each is fully informed on the other's position.

## BUY-SELL AGREEMENTS

Where a business is closely held, be it a corporation, partnership or proprietorship, there can be serious financial problems on the death of the

principal owner. In many instances, the business interest owned by the deceased comprises a large portion of his estate. When he dies, the Internal Revenue Service may capitalize the earning power of his business and arrive at a substantial value for the deceased's interest in the business for estate tax purposes. The estate tax payable on that value may create a substantial burden on the deceased's estate, creating a need for immediate liquidity to meet the estate tax liability.

In addition to the concerns of the deceased owner's estate, other problems arise for both the surviving partners or stockholders of the business and for the deceased's family. In many cases, the deceased will not leave a survivor who is capable of taking his place in the business. The survivors, of course, will not want an inexperienced person to become involved in the affairs of the business. The deceased's estate may find it necessary to liquidate its business interest to meet the estate's need for liquidity; for example, to pay a decedent's debts and death taxes imposed upon his estate. The estate may have to dispose of the business interest under pressure, realizing "distress sale" value rather than "going concern" value

and, of course, the surviving partners or stockholders will wish to prevent the sale of the decedent's interest in the business to outside parties without their approval.

In the case of a proprietorship, the death of the proprietor means the end of the business, unless there is a family member who is willing and able to continue the business or there has been some provision made for selling it. Otherwise, sale may be necessary at distress values to raise necessary cash.

All of the above problems, and others, can be handled with buy-sell agreements. These agreements provide for the orderly transfer of the decedent's business interest to surviving partners, stockholders, key employees or back to the business at fair values determined in advance (and not under "distress" conditions). To assure that the funds will be there when the business interests are to be transferred, life insurance is commonly used to fund buy-sell agreements. The death of the stockholder, partner or proprietor whose interest is to be purchased triggers the mechanism that produces the necessary funds; that is, the life insurance policies on his life. The proceeds from these policies give the buyers (whether the business, surviving stockholders, partners or employees) the needed funds

to meet their obligations.

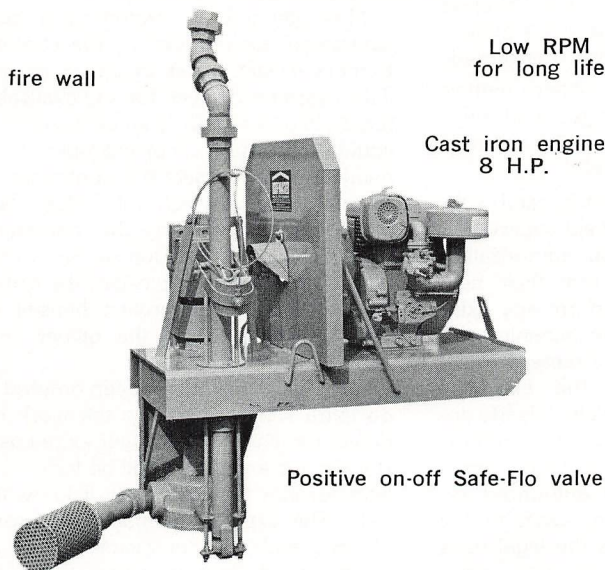
An important advantage of a buy-sell agreement is that it can be used to establish the value of the business interest for estate tax purposes. An arms-length agreement that makes it possible for the stockholder, partner or proprietor to dispose of his business interest during his lifetime only at the price established in the buy-sell agreement, whether the price is established at book value or computed pursuant to a formula provided in the agreement, will generally be effective to set the value of the business interest for estate tax purposes.

The buy-sell agreement is normally used to guarantee a market for the seller's stock, partnership interest, or proprietorship upon the seller's death. However, in many cases, buy-sell agreements are used to provide for the transfer of business interests or the disability, termination of employment or retirement of the owner, as well as the transfer on death. In any event, since the purpose of the buy-sell agreement is to transfer a business interest and to assure that there will be a smooth continuation of the business, it is essential that the entire arrangement be set down in writing, with all details spelled out.

*continued*

## Submerged Pumpmaster

Self-lubricating pump submerges in hot asphalt, needs no pre-heating.



fire wall

Low RPM for long life

Cast iron engine 8 H.P.

Positive on-off Safe-Flo valve

Install Pumpmaster on any kettle of 230 gallons capacity or more and put "hot stuff" on the roof quickly and economically. Heavy-duty rotary gear pump with high temperature bearings is self-lubricating.

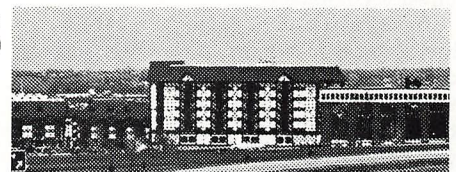


P.O. Box 63309, Los Angeles, Calif. 90063  
 Tele: (213) 261-5122  
 or (800) 421-6174 toll free (except Calif. Alaska, Hawaii)  
 Calif: (800) 372-6409 (except 213 area code)

## THE LUCAS TAPERED SYSTEM

BROUGHT A NEW CONCEPT IN ROOF DRAINAGE TO

The Sheraton West Port Inn at West Port Plaza  
 St. Louis County Missouri



WHEN YOUR JOB CALLS FOR A ROOF DECK WITH:

- positive drainage
  - increased thermal values
  - incombustibility

Use Lucas tapered panels produced from perlite board with 1/8", 1/4", or 1/2" incline, which may be combined with urethane board for maximum thermal efficiency. The LUCAS TAPERED SYSTEM eliminates most ponding conditions and contributes to a longer life expectancy of the roof.

Contact your local representative by calling

Sweet's BUYLINE® 800 Number

LICENSED PRODUCERS

Resco, Inc. • Denver, Colorado

Roughrider Supply • Fargo, North Dakota



**LUCAS INDUSTRIES, INC.**

141 Weldon Parkway  
 Maryland Heights, MO 63043

(314) 567-1465

A subsidiary of Lucas Sales Co., Inc.

## RECENT COURT DECISIONS

The United States Supreme Court recently ruled that suppliers and workers of second-tier subcontractors on federal projects are not covered by payment bonds furnished under the Miller Act.

The Georgia Supreme Court has upheld the constitutionality of an ordinance of the City of Atlanta requiring workers on construction projects in excess of \$10,000, which are funded by the City, to be paid a minimum wage which corresponds to the prevailing wage scale prescribed by the federal Davis-Bacon Act.

## AUTHORIZATION FOR EXTRA OR CHANGED WORK

The typical construction contract change clause contains a requirement that the contractor or subcontractor give written notice that he considers a particular item to be a change or extra and that unless this written notice is given within a specified time, the contractor or subcontractor may be barred from claiming additional compensation under the contract. This written-notice requirement is one of the many pitfalls which await an unwary contractor.

Construction companies should give their project managers, superintendents, and foremen detailed instructions on what notices are required by the particular contract for the specific job on which they are working. The jobsite personnel must be instructed in the correct contractual method of reporting any changes, extras, and delays. Contractors who establish a methodical system which consistently recognizes circumstances requiring written notification to the owner will not have to absorb the cost of changes because of procedural technicalities in the contract.

The notice provision, which a subcontractor should follow, may not be in his subcontract. Rather, it may be in the General Conditions, which are a part of the specifications and which are often incorporated into and made a part of the subcontract by reference. Therefore, in preparing supervisory personnel for commencement of work on a new project, it is not enough to look at only a contract or subcontract. Every part of the subcontracts, general contract, general conditions, supplementary conditions, plans and specifications must be examined, and a list must be made of every

place in those documents where notice is required.

If the general contract requires that a change order be issued in writing by the owner, then the contractor should obtain a written order from the owner or his authorized representative. If a subcontract requires a change order to be issued in writing by the general contractor prior to the performance of the work as changed, the subcontractor involved should be careful to follow the contract procedures of obtaining an appropriate written order from the general contractor or his authorized representative prior to the performance of the changed work in order to avoid problems in subsequently obtaining payment for the performance of changed work.

Often, the general contractor does not follow the procedure set out in the contract for ordering changes and extra work. Instead of a written order in advance by an authorized representative, an oral order from the general contractor's field superintendent may be issued. Although the subcontractor's foreman may be tempted to perform the extra work in expectation that the subcontractor will be paid the reasonable value of the work, he should not perform extra work ordered orally. The general contractor may dispute the fair value of the work performed, or he may reject the claim entirely because it was not authorized in advance in writing by the proper officer, as required by the contract. The subcontractor should abide strictly by the procedure set out in the contract for complying with change orders if he wishes to preserve his right to compensate for extra work performed. Specifically, he should obtain written authorization for the changed work on a form that identifies itself as being an order for changed or extra work.

Many general contractors and subcontractors supply their field supervision with a supply of extra work authorization forms with instructions that their field personnel should not perform any extra or changed work without obtaining the signature of an authorized representative of the party ordering the extra or changed work. If the claim clearly indicates that the scope covers "authorization for extra or changed work" and it is signed by an authorized representative of the party ordering the work, the signed form is the legal basis entitling the contractor to extra compensation for the extra or changed work.

When a contractor receives oral instructions from a representative whom the contractor is not certain has the appropriate authority, it is a wise course of action to write the owner reporting the field instructions and stating that these instructions require extra work for which

the contractor, if required to perform, will claim an extra. The authorized agents of the owner may then tell the contractor not to proceed with the work, in which case the contractor has no further problem; or the owner may acquiesce in these instructions either by affirmatively issuing a written change order or by silence or failure to repudiate the instructions. This notice also fairly alerts the authorized representatives of the owner to the fact that the instructions were issued by operating personnel, which provides the owner with an opportunity to clarify, define, and rescind the instructions before costs are incurred. Writing a letter confirming oral and possibly unauthorized instructions not only preserves the contractor's right to relief but also gives the owner an opportunity to avoid any misunderstandings before work is performed. A written confirmation also avoids disputes as to the issuance and scope of the instructions.

In addition to protecting claims for additional compensation, the general contractor or subcontractor should give notices of claims for extensions of time needed to perform changed work within the specific time limit for completion included in the contract. If the general contractor or subcontractor runs past this limit, he may be liable for liquidated delay damages. A general contractor or subcontractor is extremely vulnerable to liquidated damages because the money can be taken from his progress payments or retention.

Most general contractors and subcontractors are required by the contract to make a claim for an extension of time if the project is delayed for any excusable reason in order to avoid an assessment of liquidated damages. For example, if the owner verbally orders the contractor to do extra work, which will delay completion of the project, the contractor should claim an extension of time within the time limit after he receives the order. The contractor can protect himself by sending one letter to the owner containing two statements:

1. The contractor has been ordered to do extra work (state here the work ordered) for which he will incur extra costs. A claim for extra costs will be forwarded later (or can be made now if known).
2. The extra work may delay completion, and the contractor claims an extension of time to cover the extra work.

Thus, when a project is delayed, two claims are required—one for an extension of time and one for extra cost. A common error of contractors who perform extra work is to claim only an adjustment of the contract price and neglect to claim an extension of time.



# Saved by Sure-Seal<sup>®</sup> Roofing Systems!

**Save time.** Sure-Seal lops hours from installation schedules and weather hold-ups; even the dead of winter presents no problem.

**Save labor.** A crew as small as three men can handle your biggest Sure-Seal installation, and without special equipment.

**Save seams.** Tough, elastomeric Sure-Seal sheeting in 100' rolls offers three standard widths but you can order it as big as 45' x 100' in one piece.

**Save hassle.** Everything you need—Sure-Seal roofing, sealants, flashing and accessories—comes from one responsible, reliable American source.

**Save delay.** Sure-Seal eliminates spills, fumes, and safety hazards of heated materials; cleanup is swift and sure.

**Save weight.** Sure-Seal membranes weigh less than ½-lb. per square foot, make handling easier and bearing weight lighter.

**Save maintenance.** Little, if any, is ever needed for Sure-Seal's long, normal life span.

**Save training.** Sure-Seal Systems are simple so they're quickly learned and retained. Your first applications practically train your whole crew.

**Save worry.** There's a Sure-Seal System for almost every size and shape roof, old or new, in America, so you sell Sure-Seal with confidence.

**Save sales.** Sure-Seal Systems are backed by nationally respected Carlisle Tire & Rubber, leader in research, engineering and manufacture of waterproofing materials for almost three decades.

## ALL THESE SURE-SEAL SAVINGS AND A 5-YEAR WARRANTY BESIDES!

And the warranty can be extended. Find out how to become an approved Sure-Seal applicator. Write today!

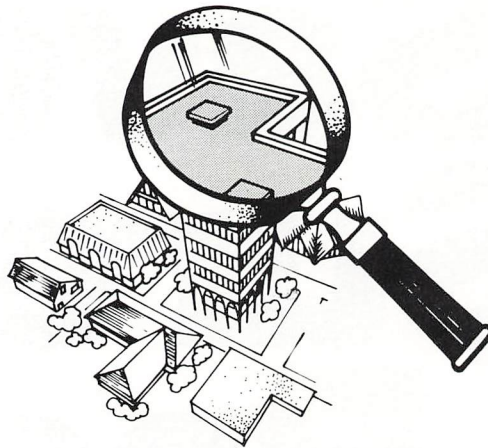


Construction Materials Department  
Carlisle Tire & Rubber Company  
Division of Carlisle Corporation  
P.O. Box 99  
Carlisle, Pa. 17013  
(717) 249-1000; Telex 84-2330 (Carlisle CLSL)

**Carlisle Tire & Rubber**  
**CARLISLE**

# A.S.T.M. Report

Meeting of December 5-7, 1977  
Reported by Milton J. Olson



D-8 On Bituminous and Other Organic Materials for Roofing, Waterproofing and related Building or Industrial Uses.

## D8:03 SURFACING AND BITUMINOUS MATERIALS

The move to drop the Standard D6 Standard Test Method for Loss on Heating of Oil and Asphaltic Compounds from the book of Standard, met with too many negative as other Standards require it.

After much discussion of D312 Standard Specifications for asphalt for use in built-up roof construction, the following objections were resolved as follows:

1. Slope guidelines are to be included in an Appendix to Standard D312, but not as part of the Standard.

### A.1 Slope Guidelines

The appendix section suggests slope guidelines for the four types of asphalts. However, no restrictions are implied or intended on the slope at which a specific type of asphalt must be used. The guidelines may be modified to whatever degree is justified by the familiarity and experience of those skilled in the art of built-up roofing construction and performance as well as with local roofing practices and local weather conditions. For example, modifications from the suggested guidelines may be made depending on: the type and occupancy of the building; the nature of the roofing components and the roof system construction including types and thickness of insulation; the application procedures including the experience and competency of the roofing crew; and the roofing specification including nailing requirements. Other considerations may include but should not be restricted to the chemical and rheological properties of the asphalt; the type of character of the felt or fabric used; the amount of asphalt used between plies; the color, type and mass of surfacing and the direction of exposure.

Keeping in mind the above considerations and that no restrictions are intended on the slope at which a specific asphalt must be used, the following guidelines are provided.

A.1.1. Type I includes asphalts which are relatively susceptible to flow at roof temperatures with good adhesive and "self healing" properties. They are generally used in slag or gravel surfaced roofs on inclines up to 4.17% (1/2" per foot) slope.

A.1.2. Type II includes asphalts which are moderately susceptible to flow at roof temperatures. They are generally for use in built-up roof construction on inclines from approximately 4.17% (1/2" per foot) slope to 12.5% (1 1/2" per foot) slope.

A.1.3. Type III includes asphalts which are relatively nonsusceptible to flow at roof temperatures for use in the construction of built-up roof construction on inclines from approximately 8.3% (1" per foot) slope to 25% (3" per foot) slope.

A.1.4. Type IV includes asphalts which are generally nonsusceptible to flow at roof temperatures for use in the construction of built-up roofing on inclines from approximately 16.7% (2" per foot) slope to 50% (6" per foot) slope. These asphalts may be useful in areas where relatively high year-round temperatures are experienced.

2. Ductility requirements was referred to a task group to consider if this requirement is needed.
3. Agreement on Type III of 203 degree MAX S.P.
4. Method D-36 was to be used as the referee procedure where two different procedures could be used.
5. Data will be provided to substantiate the penetration requirements of the Revised D-312.

The completed Revised D-312 to be submitted to sub-committee and main committee ballot.

D-1866 Standard Test Method for Translucency of Mineral Aggregate for use on B.U.R. Roofs. This test method has not been used the past 12 years and it was the opinion of the group that it should be dropped from the Book of Standards.

D-2398 Test for Softening Point of Bitumen in Ethylene Glycolo- (Ring and Ball)

Consideration of the use of Glycerine to replace the Ethylene Glycol for the softening point test where the flash point of the Ethylene glycol is close to the test temperature. Revisions will be made after further study on the matter.

Revision of Standard D449—Asphalt For Dampproofing and Waterproofing.

Motion to Submit to Sub-Committee Ballot.

Further Revisions of A.S.T.M. D4 Standard M.O.T. for Bitumen was referred to Task Force for review.

Discussion regarding ways to handle the proposed test procedure:

“Proposed Flow Test for Roofing Bitumens Using the Parallel Plate Plastometric” and “Proposed Method of Test for Evaluating the Effect of Heat on Roofing Asphalt”.

Mr. Mathey of the N.B.S. will sponsor the flow test.

Mr. Klimas will continue with his work on the Effect of Heat on Roofing Asphalt.

## D8:04 Fabrics for Bituminous Roofing and Waterproofing

Revision of 227—Coat—Tar Saturated Roofing Felts For Use in Waterproofing and in Construction of Built-Up Roofs.

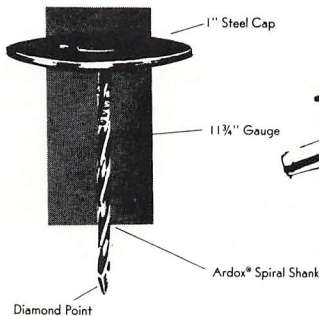
Moisture Content in roofing felts is a vital area that must be investigated more thoroughly before any set figures can be applied to the testing procedures for various felts.

The initial objective must be to determine at what point there is excessive moisture that results in foaming and ultimately blistering in the roof system.

*continued*

INTRODUCING THE...  
**ARDOX**  
TO THE  
TOP LINE

... with the exclusive "ARDOX"® spiral nail design. They are better... stronger and lower in cost per nail... than the old fashioned smooth shank nails



CONTACT BOB RODENHOUSE FOR DISTRIBUTORSHIP

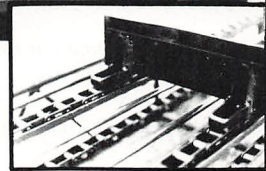


**GIVE YOUR BUSINESS A BIG LIFT!**



**H-I-H**  
(Hydraulic Industrial Heavy Duty)  
**SERIES EXTRA HEAVY DUTY CONVEYOR**

ALL HYDRAULIC PTO DRIVEN CONVEYOR WITH G.5A, G.7R OR G.7RL TURNABLES (GAS OR ELECTRIC MODELS ALSO AVAILABLE).



HEAVY DUTY CA550 ROLLER CHAIN (Virtually Unbreakable)

- 2 MEN CAN LOAD A ROOF IN MINUTES (720 bundles per hr).
- AVAILABLE AS AN EXTENDABLE UNIT (add extension as needed)
- WELDED AIRCRAFT TYPE TUBE CONSTRUCTION
- EXTRA HEAVY DUTY CA550 ROLLER CHAIN
- WILL DELIVER MATERIAL UP TO 40 FEET
- ALL HYDRAULIC CONVEYOR (gas or electric models available)

A FEW DEALERSHIPS STILL AVAILABLE  
CALL OR WRITE FOR COMPLETE DETAILS



**CLEARFIELD CONVEYORS, INC.**  
362 South Main Clearfield, Utah 84015  
Telephone 801 773-1311

# A.S.T.M. REPORT

---

We must take a very good look at the per cent saturation on D226 felts. The fact that organic felts are generally more dense today than ever before. A.S.T.M. 140% saturation as a minimum, may not be adequate today for satisfactory performance. If we are to set certain numbers on the roofing product, we had better know what the *saturation efficiency* of the materials is, what actual asphalt impregnation can be obtained and what per cent that is of the theoretically possible impregnation of the dry felts used.

Once we find out what the finished product is in terms of maximum saturation of the impregnated felts, we should then research this product to find out how much moisture these felts can absorb and still be satisfactory when used in a built-up roof system.

We will need several laboratories to help in this work.

Laboratories that can run kerosene tests to desaturate felts, to report on saturation efficiency, to condition the felts under various humidity conditions, and then run the foaming tests.

It will be essential that we find out what the moisture content, of our warehouse stock, of felt is. What per cent moisture variation takes place from hot to cold air temperatures with variable humidity conditions on the job site.

Does the moisture in the felts migrate uniformly throughout the roll?

At what degree of dryness will foaming due to the moisture in the felts cease to foam, or blister?

These are questions that must be answered if we are to come up with a suitable maximum moisture content within the materials to make a successful roof membrane.

Once the figures are established, we must then proceed to package, ship, and store these materials in such a manner as to prevent the moisture content from exceeding these limitations.

A Task Force is working to find some answers to these questions.

Proposed Revision of D-146—Standard Methods of Sampling and Testing Bitumen—Saturated Felts and Woven Fabrics for Roofing and Waterproof.—NO REPORT

D-1327 Specifications for Woven Burlap Fabrics Saturated With Bituminous Substances For Use in Waterproofing.

This is to be updated for precision and accuracy.

D-227 Specification for Coal Tar-Saturated Roofing Felt for Use in Waterproofing and in Constructing Built-Up Roofs.

Returned to Task Force for minor revisions and agreement on moisture content, location of point of test.

D-3158 Coated Asphalt Felt

This Standard was reapproved as existing specification until Task Force can resolve all negatives and then advance to Standard.

A new Reinforced Flashing Specification has been revised and will be sent to Sub-Committee ballot.

A new glass-fiber based cap sheet is being introduced and will be sent for Sub-Committee ballot.

D-250-77 Asphalt-Saturated Asbestos Felts for Use in Roofing and Waterproofing.

(25 lbs. type) Revisions include:

New type with mineral fibers added. (mineral wool, asbestos, glass and other inorganic fibers).

Establish a 2% moisture max, in place of 5% loss on heating.

Discussion of the Adhesive Bonding of Coated Felts indicates that further study be made of this item.

A new Task Force has been created to study the possible incompatibility between the asphalt saturant and the mopping asphalt to be used in constructing a built-up roof.

## **D8:05 Solvent-Bearing Bituminous Compounds**

A new recommended practice for application of asphalt-based aluminum roof coatings has been proposed.

It is intended as a guide to selection, and application methods for non-fibrated (Type I) or fibrated (Type II) asphalt-based aluminum roof coatings.

A Task Force is reviewing the negative votes in sub-committee and appropriate wording will be drafted soon.

Revision of D41-73—Specification for Primer for Use With Asphalt in Dampproofing and Waterproofing.

A change in method of testing, and some physical requirements needed. Revisions returned to Task Force Sub-Committee.

## **D8:09 Bituminous Emulsions**

Revision of D2963-71—Testing Flow Table Consistency of Clay Stabilized Asphalt Emulsions

To be balloted concurrently with Sub-Committee D8:09

## D8:20 Non-Structural Roofing Systems

### D8:20.14 Performance Tests for B.U.R. Membrane

In order to arrive at a starting point in the tremendous job of performance testing, it was the opinion of all those present that we list all the attributes of a good roof system in the order of importance as judged by the group present.

ATTRIBUTE	ATTRIBUTES		REMARKS
	VOTE	YES/NO	
Weather resistance	Unan.		RSTC group working on this
Moisture effects on strength	19/0		D-2523
Thermal Shock	18/0		NBS "TSF" Residual Strength Test
Ply Adhesion	17/0		JWRC working on this
Thermal expansion	17/1		NBS Wittemore strain gage method
Permeability	16/0		NBS working on this
Moisture expansion	16/0		JM "Neenah Expansimeter"
Tensile Strength	15/1		ASTM D-2523
Elongation at failure	14/0		NBS and JWRC working on this
Wind uplift	14/1		FM test, E-6 non-destruct. test
Tear resistance	14/1		JWRC working on this
Flexural strength	14/3		
Impact resistance	13/1		Proposed method submitted to D-08
Tensile fatigue str.	13/3		
Flexural fatigue str.	12/0		
Fungus resistance	12/0		
Shear strength	11/1		
Notch tensile str.	11/3		
Creep & stress relaxation	11/3		JWRC working on this
Pliability	10/4		
Shape of stress/strain curve	9/3		
Fire resistance	8/7		FM, & U.L. tests
Abrasion resistance	3/12		

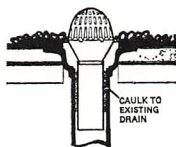
*continued*

## MARATHON COPPER ROOF DRAINS

are **BETTER**  
... **CHEAPER**  
and easy to install



Funnel or straight types



Ideal for re-roofing



Optional outlets, straight or 90° for joining to PVC or ABS plastic pipe

Marathon all-copper drains have wide flanges to ensure a good bond to roof membrane and can be quickly joined to any drain pipe. Outlets may be connected directly, or **caulked inside** existing drains or pipes.

Optional assemblies are available for gravel or smooth surface roofs, with connections for copper, plastic or cast iron drain pipes. 80 different assemblies can be supplied.

Ask your distributor for details and prices on these versatile, low cost drains.

### MARATHON ROOFING PRODUCTS INC.

367 Nagel Drive, Buffalo, N. Y. 14225

Telephone (716) 685-3340

## If you are a roofer, you shouldn't be without FLASHBAND.®

Flashband is a multi-purpose roofing material you can use for every roofing job.

- gutter lining and downspout repairs
- Around skylights
- deck joint stripping
- counter flashing
- coping joint sealing
- sealant for expansion joints
- roof patching
- gravel stop stripping
- through-the-wall flashing
- chimney and roof flashing

Flashband is a permanent roofing material. It's self-adhesive aluminum faced sealing tape, backed with a special asphalt to assure a water tight seal. The aluminum face protects the asphalt from weathering and cracking, thus assuring a permanent repair that does not dry out. In fact, it may outlast the other roofing materials it's being used with.

Flashband adheres to practically all building surfaces with a grip that gets stronger with time.

Installation is fast; no special tools are needed. Cut to size, peel off release paper, position and smooth down by hand. Flashband will mold easily to irregular surfaces. Masonry will require an asphalt specification primer.

Available in bright aluminum or grey finish, in 33 foot rolls. Widths ranging from 2" to 24".

For literature and pricing, contact your roofing distributor.

Or, call or write us direct.



**EVEVODE INC.**

401 Kennedy Blvd.  
Somerdale, NJ 08083  
(609) 784-8200

# A.S.T.M. REPORT

---

The proposed Method of Test for Comparative Impact Resistance of Bituminous Roofing Systems was presented.

It appears to be a simple guide tube and missile consisting of a steel cylinder 50mm (2") in diameter by 150mm (6") long with a case-hardened hemispherical head. Its weight is adjusted to 2.22 kg (5 lbs.) by the addition of lead shot in a cavity machined into the cylindrical portion and sealed with a screw cap.

The test procedure using a 12" X 12" roof sample will allow for four (4) impact areas of 6" X 6" square. Each of the areas seem to give a slightly different reading as to average damage, depth and diameter of damage, length of crack, etc., but this should give each sample the same degree of impact energy of 3.0 kg-m (22 ft.-lbs) which can be assessed by visual examination of the impact areas and averaged.

Test samples can be with gravel or top surfacing or without gravel surfacing.

## Thermal Shock Testing

A Round Robin Test on Thermal Shock produced various end results. Although the test procedure instructions were very specific as to instrumentation, the application of the test procedure varied.

Difference in jaws of test machines — screw type 1000 lbs.  
vs.  
pneumatic jaws 200 lbs.

Environmental chambers, some small, some large.

Method of cooling varied.

Areas where Task Force are now working:

D8:20:06 Expansion/Contraction Coefficients of Roofing Membrane

D8:20:14.5 Punching Shear in Membranes

D8:20:14.7 Elongation at Failure

D2523 Recommended Practice for Testing Load-Strain Properties of Roof Membranes.

This has been submitted for simultaneous letter ballot to the Sub-Committee and the Main Committee.

"Maximum Moisture Content in Roofing Felts to avoid foaming and blistering."

"Expansion of Materials"

"Determination of Bitumen on Aggregate:

"Extensibility of Built-Up Roofing"

"Maintenance of Built-Up Roofing"

"The Performance Characteristics Tests of Built-Up Roofing Systems"

Areas needing more research:

Ply Adhesion—no test available.

Moisture expansion.

Flexural Strength

Tensile Fatigue

Creep—Relaxation Test } Need Simpler Test

The Sampling of New Built-Up Roofing—*Chairman-Milton J. Olson*

Now has a number and will appear in the next publication ANS1/ASTM D-3617-77

Task Force—D8:20:08—Specifications for Built-Up Roof Membranes including surface finishes. *McCurdy, Chairman.*

It was the opinion of this Task Force that any further development in this area will be based on N.R.C.A. specifications.

The impact test procedure is to be sent for concurrent ballot of Sub-Committee and Main Committee Ballot.



# There are no compromises in this Zonolite® Roof Deck.

When your design calls for an insulating roof deck, this Zonolite Roof Deck is the system engineered to provide total performance without compromise.

**Total performance: maximum insulation value**

The Zonolite Roof Deck System, utilizing the natural insulating properties of Zonolite Insulating Concrete and Insulperm® insulating board, can economically provide "U" factors as low as .04 to conserve energy and minimize heating and cooling costs.

**Total performance: an ideal base for the roofing membrane**

The Zonolite Roof Deck is a smooth, even, joint-free surface. Zonolite Insulating Concrete is easily sloped to provide positive draining to eliminate ponding. Its compressive strength of 125 to 500 psi provides positive support against downward forces. The patented Zonolite Base Ply Fastener provides positive, secure, mechanical attachment of the roofing membrane and alleviates vapor build-up by providing positive top-side venting

**Total performance: protection against fire and wind damage**

Zonolite Insulating Concrete, in addition to its insulating values, acts as a fire resistant barrier. Tested by Underwriters Laboratories, Inc., Zonolite Roof Deck Systems have earned thirteen fire resistance ratings and meet requirements for FM Class I and FM Noncombustible Insulated Roof Deck Construction. It also has FM Class I-60 and UL Class 90 wind uplift approvals.

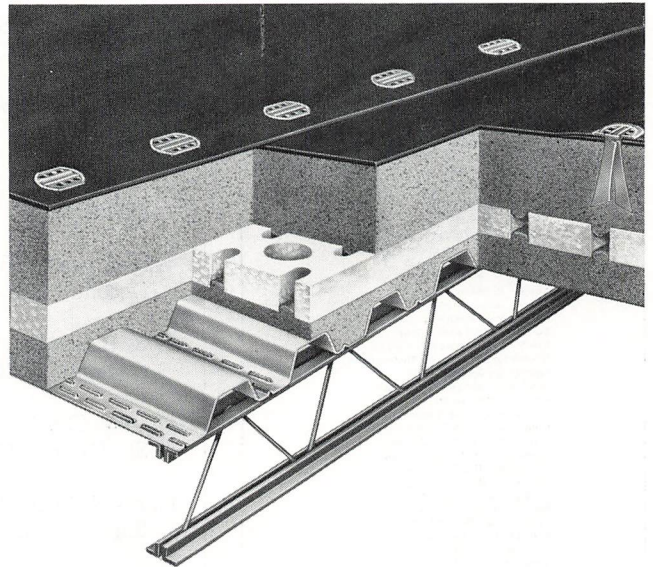
**Total performance: fast installation by qualified subcontractors**

More than 140 skilled Zonolite Roof Deck Applicators provide nationwide availability and quality control. Installation is fast: up to 25,000 sq. ft. per day,

and, when Zonolite Base Ply Fasteners are used, built-up roofing may be applied within 48 to 72 hours.

**Total performance: cost effectiveness**

Low in original cost, The Zonolite Roof Deck System also reduces construction maintenance and building operating costs. It continues to be the most economical, reliable insulating roof deck system available.



Documented, in-place performance of decks over 30 years old prove the permanence and durability of this versatile, economical Zonolite Roof Deck System. The system with a 10-year performance warranty over slotted metal substrates. The system without compromise. From W. R. Grace & Co., 62 Whittemore Avenue, Cambridge, Massachusetts 02140. In Canada, 294 Clemens Road, Ajax, Ontario L1S 3C6.

## GRACE

Contact any owners listed below and ask about the TL-16 Telescoping Hoist

**ALA** Gadsden - Gadsden Heating & Sheet Metal  
Mobile - Roofing Constructors, Inc.  
Muscle Shoals - Lookout Rtg. & Heating  
Tuscaloosa - Chappel Roofing Co.

**CONN** Derby - Richards & Son  
E. Hartford - Acme Roofing Co.  
Meridan - G. R. Cummings  
New Haven - F. J. Dahill Company (2 Hoists)

**FLA** Brandon - Jenkins Roofing  
Clearwater - Dean Roofing & Sheet Metal Inc.  
Deland - Boulterice Roofing  
Fort Myers - Albritton Roofing Co.  
Gainesville - Poole Roofing & Sheet Metal Co.  
Hollywood - B & B Industrial Co.  
Jacksonville - P. M. Hess Rtg & Sheet Metal  
Jupiter - Jupiter Roofing Co.  
Ormond Beach - H & H Roofing & Sheet Metal  
Pensacola - Edwards Roofing Company  
St. Petersburg - Krause Roofing  
Tallahassee - Dove Street Metal  
Tampa - Cement Roofing Industries

**GA** Albany - Albany Sheet Metal  
Atlanta - Kelco Roofing  
L. F. Still  
Tip Top Roofing - (5 Hoists)  
Augusta - Southern Roofing & Insulation Co.  
Bainbridge - Bainbridge Rtg. & Sheet Metal  
Macon - Dunlap Roofing  
Marietta - C. J. Harshy  
Riverdale - C & W Roofing Co.  
Savannah - Bonner Roofing & Sheet Metal Co.

**ILL** Bellville - Geissler Roofing Company  
Chicago - Palisade Roofing  
Lockport - Cargle Roofing Company  
Rivergrove - Krumwid Roofing Company  
Wheeling - Maco Coating

**IND** Evansville - Industrial Contractors  
Gary - Charles Gluth & Sons (2 Hoists)  
Terre Haute - Guarantee Roofing Co.

**KEN** Covington - H. C. Truitt  
Louisville - Fall City Roofing  
Mayfield - Klapp Roofing Company

**ME** August - Dow Roofing  
Berwick - Donald Hall Roofing  
Lewiston - Bill's Roofing Co.  
So. Portland - James McBrady Inc.

**MD** Brentwood - A. Cestone Co.

**MASS** Boston - Gilbert & Becker Co., Inc.  
Frammingham - Millis Roofing  
Halifax - Merrick Engineering Co., Inc.  
Hull - Stillman Roofing  
Lowell - Bureau Brothers, Inc.  
Monument Beach - Davis Hig & S M Co.  
South Boston - South Roofing Co.  
Springfield - Tech Roofing

**MICH** Bay City - Kowkowlin Roofing Co.  
Grand Haven - Grabman Roofing  
Grand Rapids - J & L Roofing  
Lansing - Grunwell-Cashero  
Three Rivers - Knapp Roofing  
Traverse - Bloxsom Roofing

**MINN** Alexandria - Buttewillers - Do-All  
Eden Prairie - Hal Baker Company  
Lindstrom - M. H. Johnson Roofing  
Rochester - Alpek Sheet Metal & Roofing  
St. Cloud - McDowell Rtg.

**MISS** Columbia - Robertson Sheet Metal Works  
Columbus - Graham Roofing Co.  
Jackson - Alton Sheet Metal Co. (3 Hoists)

**NH** Hudson - Quality Roofing  
Nashua - Dionnes Roofing  
Salem - ABC Roofing

**NJ** Hawthorne - United Simpson Roofing Co.  
Menlo Park - Universal General Sheet Metal  
Union - Sanders Roofing  
Wallington - Advance Roofing

**NY** Albany - B. Staeber & Son Inc.  
Beacon - Beacon Roofing  
Buffalo - Weaver Roofing  
Dunkirk - A. W. Farrell & Sons  
East Syracuse - DeWald Roofing Co., Inc.  
Gouverneur - W. J. Farley Roofing Corp.  
Jamesburg - Edison Roofing  
Jamestown - Jamestown Roofing  
Kingston - Colonial Rtg.  
Middletown - Musbach Roofing Co., Inc.  
Monticello - County Roofing  
Olean - Mazza Roofing Co., Inc.  
Oyster Bay - Oyster Bay Roofing  
Plattsburgh - G & G Roofing Co., Inc.  
Port Jarvis - Biccum Roofing  
Poughkeepsie - Vanguard Org. Inc.  
Rome - Dor Mar Roofing Co.  
Schenectady - Mid State Roofing Co.  
Spring Valley - Martin Roofing  
Syracuse - D. J. Heaphy & Son  
Utica - Pulver Roofing Company

**NC** Moorehead City - Leonard's Metal Shop  
Raleigh - Lan-Way Coatings, Inc.

**OHIO** Cleveland - P.S.I. Equipment International  
Lima - Clevenger Roofing & Sheet Metal Co.  
Marietta - Smith & Burrows Inc.  
Miamiburg - O. L. Garrison Co.

**PAEN** Allentown - M & O Roofing Co.  
Bath - H. Koche  
Braddock - McClure-Johnson  
Delmont - Kuzmkowski Roofing Co.  
Gettysburg - Roy Coldsmith  
Litz - Behm Roofing & Spouting  
Punxsutawney - Dunkel Roofing Co.  
York - George Sutton

**TENN** Chattanooga - Southern Blow Pipe & Rtg Co.  
Nashville - Whitaker Eq.

**VA** Newport News - L. C. Heath Roofing  
Norfolk - Eastern Roofing Corp.

**WISC** Madison - Southern Wisconsin Rtg.  
Manitowoc - Wm. Schaus & Sons Inc.

For further information write:  
**AEROIL PRODUCTS CO.**  
69 Wesley St.  
So. Hackensack, N.J. 07606  
(See Back Cover)

# New Members

The following have been approved for membership in NRCA between February 10 and April 10, 1978.

A-Accredited Roofing Service  
Gretna, IA

Acme Roofing & S/M  
Cleveland, OH

Colonial Roofing Co.  
Glendora, CA

Davison & Son Builders Inc.  
Tawas City, MI

Deeringer & Son Roofing Co.  
Lexington, KY

M. Downes & Co.  
McKeesport, PA

Dukes Roofing & Supply Co.  
Ann Arbor, MI

Peter E. Eberz & Son, Inc.  
Buffalo, NY

Len Eckstein Roofing  
Sunman, IN

W. J. Ezold Co., Inc.  
Millbury, MA

Wayne Frazier Enterprises Inc.  
Decatur, GA

G & R Roofing Co., Inc.  
Cucamonga, CA

Granite City Roofing Inc.  
St. Cloud, MN

Harris & Every Inc.  
Binghamton, NY

Jim & Ollie Roofing Co., Inc.  
San Jose, CA

Leach Enterprises Inc.  
Puerto Nuevo, PR

Al Miller & Sons Roofing Inc.  
Cathedral City, CA

New England Weatherproofing Corp.  
Winthrop, MA

Nordheim Roofing & S/M  
Bemidji, MN

Reliable S/M Roofing Co., Inc.  
Mt. Iron, MN

J. D. Rivet Co., Inc.  
Holyoke, MA

Roofing Consultants Inc.  
Iberia, OH

Roofs, Inc.  
Brookfield, IL

Schmidt Bros., Inc.  
Springfield, IL

Richard Sensenig Co.  
Ephrata, PA

Service Roofing Co.  
Waterloo, IA

Skyway Roofing of Troy Inc.  
Troy, NY

J. C. Smith Roofing Contractors  
Houston, TX

Spanheimer Roofing & Supply Co.  
Omaha, NB

J. H. Spratley Roofing Co.  
Spring Valley, CA

Success Roofing  
Kent, WA

Western Roofing Co., Inc.  
Bellingham, WA

## ASSOCIATE MEMBERS

A & B Equipment Co.  
Fort Worth, TX

Shelter Insulation Systems Inc.  
San Antonio, TX

Wilson Sales Associates Inc.  
Cleveland, OH

## INTERNATIONAL MEMBERS

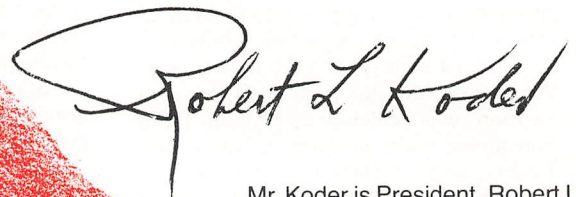
Building Products of Canada, Ltd.  
Lachine, Quebec

Roofing Contractors Ltd.  
Port of Spain, Trinidad



# "For security on the roof, my choice is Permalite® Pk® Plus Insulation!"

● "I follow specifications for roof insulation precisely...with one exception. I'm wary of putting today's built-up roof materials directly over 'super insulations'. They've given me problems. That's why I suggest using Permalite Pk Plus. It's a urethane sandwich with top and bottom layers of perlite that provides the most trouble-free way I know of using highly efficient urethane. The perlite top layer provides a modest heat-sink in summer to help prevent excessive temperature build-up...protects the BUR from loss of oils and elasticity. It provides a time-proven base for the BUR. The two perlite layers help keep the urethane warp-free and stress-free. Experience has taught me that the best platform for a built-up roof is perlite because it's dimensionally stable...fire rated...and proven in thousands of installations. For security on the roof, my choice is Permalite Pk Plus Roof Insulation."



Mr. Koder is President, Robert L. Koder Co., Des Moines, Iowa; former President, Midwest Roofing Contractors Assn. and a Board Member, National Roofing Contractors Assn.

Permalite® Pk® Plus is FM-approved for Class I Insulated Steel Deck Construction and for Windstorm Resistance Classifications 1-60 and 1-90.

● *Permalite Pk Plus is a true sandwich.* Top and bottom perlite layers protect urethane core from hot asphalt, built-up heat and linear changes. Integral Sealskin surface resists bitumen soak-up and provides superior bond of roofing felts to insulation. Write today for sample and technical data.



A subsidiary of General Refractories Company.  
GREFCO, Inc./Building Products Division  
General Office: 3450 Wilshire Blvd., Los Angeles, CA 90010  
National Sales Office: 2905 Butterfield Road,  
Oak Brook, IL 60521—(312) 654-4500.

# Industry developments

## BUILDING MATERIALS PRODUCERS ENDED 1977 WITH 23 PER CENT PROFIT GAIN

Building products manufacturers posted a 23 per cent increase in profits in 1977, benefitting from a high rate of housing starts, improvement in nonresidential construction, and a further sizable annual increase in nonbuilding projects. The latest analysis of the manufacturing component of the construction industry was released by the F. W. Dodge Division of McGraw-Hill Information Systems Company.

The latest report, based on the F. W. Dodge Division's quarterly review of a group of 53 building products firms in 13 different product categories, showed a 14 per cent sales growth during last year. An average after-tax profit of 50 per cent or more was achieved by firms in three categories: multi-products, gypsum, and heating and ventilating equipment.

With only a five per cent gain in construction volume projected for 1978, following last year's record gain of 26 per cent, earnings growth this year is expected to be more moderate, according to Dodge's vice president and chief economist, George A. Christie.

"Manufacturers will have a good year," Christie said. "Housing starts are expected to remain high; office buildings and plant construction have shown recent improvement; and remodeling and retrofitting market is expanding; and this year will see a carry over of an additional \$4 billion in public works spending."

Full-year profits of the firms in the 13 product groups reviewed by Dodge were:

Multi-Products, 6 companies . . . up 52%  
Gypsum, 2 companies . . . up 50%  
HVAC, 2 companies . . . up 50%  
Aluminum, 3 companies . . . up 49%  
Coatings, 2 companies . . . up 38%  
Cement, 6 companies . . . up 35%  
Controls, 4 companies . . . up 29%  
Tools & Hardware, 2 companies up 29%

Electrical Fixtures, 3 companies . up 25%  
Plumbing Fixtures, 2 companies up 20%  
Forest Products, 6 companies . . up 13%  
Heavy Equipment, 5 companies up 12%  
Glass, 3 companies . . . . . down 7%

## MORE ON THEFT PREVENTION

*The recent rash of stolen equipment has prompted Associate Member E. L. Hiltz & Co. to issue the following report to its customers:*

In many cases, stolen property will never be recovered. However, in the event you suspect that you have found your stolen equipment, it is YOUR burden to prove ownership. Because most manufacturers of roofing equipment do not put serial numbers on their goods, this becomes even a worse problem.

However, there are certain procedures to follow that can aid you in this event. We outline below our suggested method to prove your ownership.

1. Make sure you have proper and adequate insurance to cover ANY theft of equipment, tools or supplies.

2. Record serial numbers of all equipment that is purchased if the manufacturer uses serial numbers. Keep a copy of the invoice with this record in a permanent file.

3. Even if you do have serial numbers, they can be removed or changed. We recommend that you institute a method of positive identification of your equipment. This can be done by filing notches or putting special welds in "hidden" places on the equipment.

4. Take TWO pictures of this special identification.

5. Write TWO letters outlining where the special identifying marks are on each piece of equipment.

6. Mail ONE letter and one picture via REGISTERED MAIL to yourself. **Do not open** the letter, but put it in your permanent file for quick and ready reference

in case the equipment is stolen.

7. Mail the other letter and picture to your company attorney to keep in your file at the attorney's office to refer to in case of a theft.

8. In the event of a theft you should report it at once to the police and your insurance company. Give each the information mentioned above and tell them you have a similar copy on file with your attorney in case of recovery.

Having a theft is no fun. But, with these facts on hand, you can make it easier on yourself if the equipment is recovered.

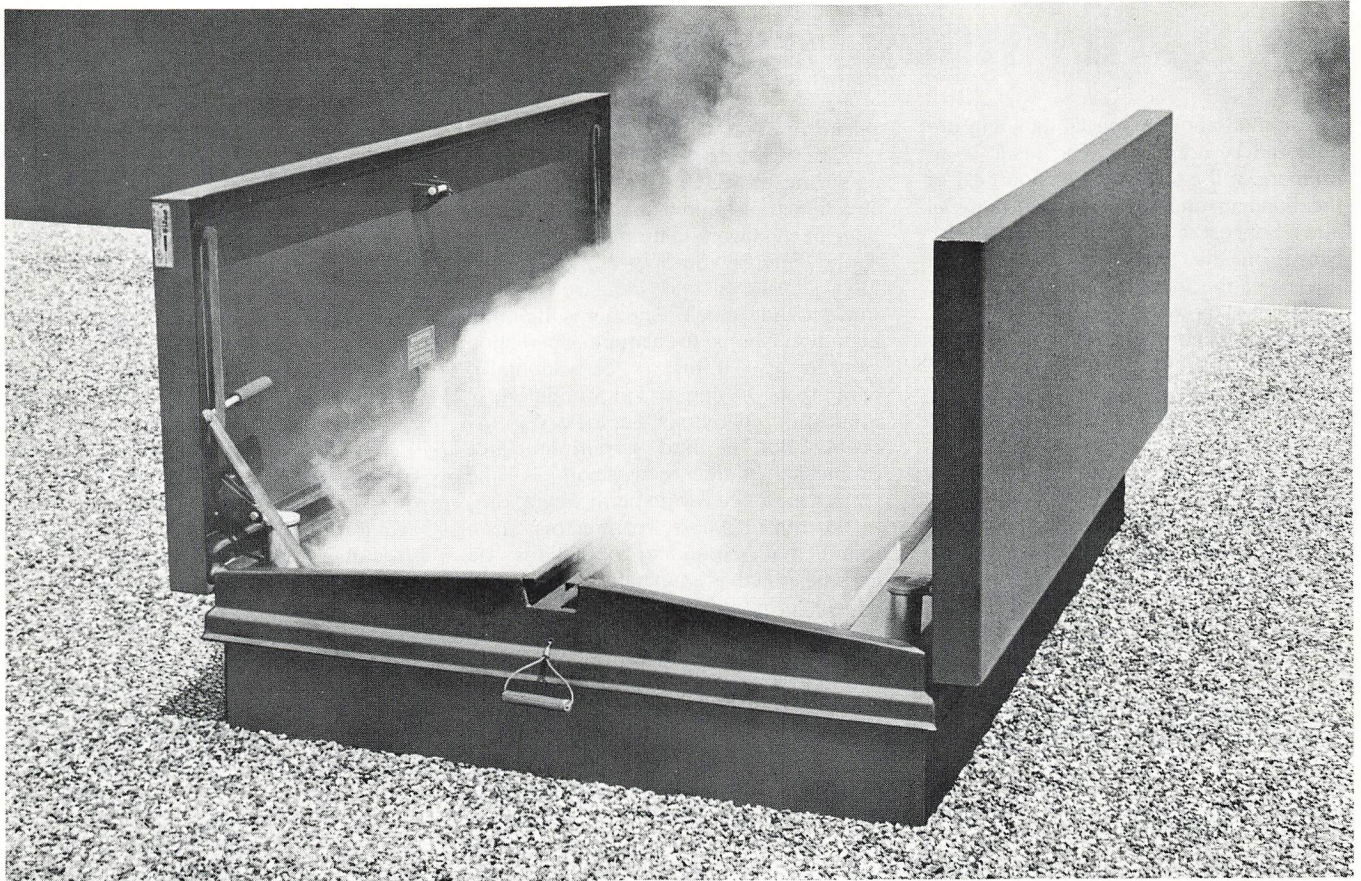
## NEW DODGE BUILDING COST ANALYSIS SERVICE ANNOUNCED

The Building Cost Services Department of McGraw-Hill Information Systems Company has announced availability of a new service called Dodge Building Cost Analysis. Developed in association with Wood & Tower, Inc., a construction estimating and construction management firm, the new service provides rapid, accurate, preliminary or budget estimates for construction throughout the U.S. and Canada.

Hugh T. Sharp, general manager of Building Cost Services, points out that "The analysis can be either a quick preliminary costing of a building design, or a second source to check other estimates. It gives architects, contractors and owners current construction costs of specific building projects, based upon preliminary design data. It's at this stage of design that major cost factors can be locked in. Costing alternate designs with Dodge Building Cost Analysis gives the architect a powerful help in choosing the best of several possible solutions."

A Dodge Building Cost Analysis starts with the current labor and materials costs in the area in which the building will be built. These cost data and descriptive

*continued*



# Bilco. The quality automatic fire vent that protects buildings ALL the time.

Automatic venting, vertically through the roof, is the modern way to reduce the risk of catastrophic fire losses in single story industrial and commercial structures. But the quality of the vent you specify relates directly to the protection your client receives . . . protection when fire strikes and all other times as well.

When you specify a Bilco vent, you call for an insulated, gasketed, heavy gauge product that is built for lasting service. You call for a vent equipped with the patented Bilco Thermolatch™ mechanism . . . the feature that makes possible our guarantee of proper operation. Thermolatch™ assures prompt release when activated in an emergency. And, just as important, it prevents accidental opening at other times due to wind uplift forces or vibrations. This is Bilco quality, the quality that means dependability, lasting service, and complete satisfaction for your client.

Sixteen standard types and sizes of thermally activated vents with UL and FM labels are available, as well as custom sizes, and many designs and modifications for special requirements.

Bilco's Automatic Fire Venting Guide answers questions about venting, helps you determine vent sizes and spacing. Send for your copy.

**Some Special Bilco Fire Vent Designs and Modifications**

 <p style="text-align: center;">Acoustical vents (STC-45) for special situations.</p>	 <p style="text-align: center;">Vents with auxiliary winch or motor operation.</p>
 <p style="text-align: center;">Vents actuated by smoke detector or other emergency device.</p>	 <p style="text-align: center;">Combination fire and explosion vents.</p>



The Bilco Company, Dept. RS-58, New Haven, Ct. 06505



# STOP LEAKS FAST



FOR INDUSTRIAL AND PROFESSIONAL USE ONLY

# SEAL X t.r.p.

FOR USE ONLY ON BUILT-UP/FLAT ROOFS <sup>T.M.</sup>

## *temporary roof patch*

*check these  
money making,  
customer pleasing  
SEAL X t.r.p features*

- ✓ WORKS EVEN IN POURING RAIN
- ✓ EASY TO APPLY
- ✓ STOPS LEAKS QUICKLY IN BUILT-UP/FLAT ROOFS
- ✓ NO EQUIPMENT REQUIRED

Apply only to built-up/flat roofs

### AMERICAN COLLOID COMPANY

Seal X Dept.  
5100 Suffield Ct., Skokie, Il. 60076

Now you can quickly stop leaks temporarily in built-up/flat roofs with SEAL X t.r.p. A minimum of manpower is required, one man can usually do the job in minutes. Your customers will be happy because you can stop costly leaks even in pouring rain or through standing water and they can continue to operate their office, warehouse or production line. Stop the leaks fast, now, and make permanent repairs later.

This specially formulated, non-polluting granular product swells into a gel when contacted by water, forming a temporary, leak proof seal. SEAL X t.r.p is available in easy to handle 25 lb. waterproof bags. Fill out the reply form below for complete information, or use it as a quick order form. For extra fast service phone Mary at (312)-966-5720.

**AMERICAN COLLOID COMPANY**  
Seal X Dept.  
5100 Suffield Ct., Skokie, Il. 60076

Please send me complete information on quick acting, SEAL X t.r.p temporary roof patch for built-up/flat roofs.

Name \_\_\_\_\_ Title \_\_\_\_\_

Company \_\_\_\_\_

Address \_\_\_\_\_

City/State/Zip \_\_\_\_\_

Phone ( ) \_\_\_\_\_

Bank/Trade Reference \_\_\_\_\_

Please send me test sample of SEAL X t.r.p plus more facts.

Please ship me 80 bags (25 lbs a) of SEAL X t.r.p at \$5.75 per bag, TOTAL \$460.00 including delivery.

Signature \_\_\_\_\_ Date \_\_\_\_\_

# INDUSTRY DEVELOPMENTS

More news on trends to buy and sell construction firms, as well as the techniques of how to go about it, will be offered in The Falls Management Institute's seminar "Acquiring, Merging, and Selling Construction Firms" to be held May 15-16 at The Hyatt Regency, Washington, D.C. and May 17-18 at Stouffer's Denver Inn, Denver, Colorado

## NEW BOOK

All types of cable-suspended and supported roofs—with emphasis on their design, forms, materials, and construction processes—are featured in *Cable-Suspended Roofs* by Prem Krishna (McGraw-Hill, \$12.50).

In recent years, cable and air-supported roofs have enabled architects and engineers to achieve outstanding structures, meeting the increasing demand for large span roofs. In this volume, Krishna presents information that will help the designer solve the often complex problems involved in the use of

cable-suspended roofs. Much of this material was not available previously, except in monographs and journals.

This book includes a thorough treatment of analysis and structural behavior, and it examines in detail potential problems in design, choice of materials, and construction with illuminating and practical solutions to these problems.

Prem Krishna, a graduate of the University of Roorkee, India, with a doctorate from the University of London, is on the faculty of the University of Roorkee. He has been a consultant on cable structures in the United States and the United Kingdom. Krishna is presently a member of the Tension Structures of the International Association of Spatial Structures and served as its first chairman.

## FROM UL

Underwriters Laboratories Inc. (UL) reports that it has determined that

cellulose fiber loose fill insulation, manufactured by Cellin Manufacturing Co. of Lorton, Virginia prior to September, 1977, was distributed in bags bearing an improper and unauthorized reference to UL.

The bags were marked with the wording "Underwriters Laboratories Listed" or "Underwriters Laboratories Tested." The material contained in the bags was not subject to UL's Follow-Up Inspection, as the bags were printed and used without UL's authorization or knowledge.

Containers for cellulose fiber loose fill insulation produced under the UL's Follow-Up Service program are imprinted with a Classification Mark, which states "Underwriters Laboratories Inc., Classified, Loose Fill Material." In addition, the Mark has a distinctive number referred to as an "Issue Number," and also contains ratings for flame spread, fuel contributed, and smoke developed.

Cellin Manufacturing Co. has since been required to delete from its bags all improper reference to Underwriters Laboratories, and has been requested by UL to recall material contained in improperly marked bags.



**FOR SALE**

## ASPHALT STORAGE TANK

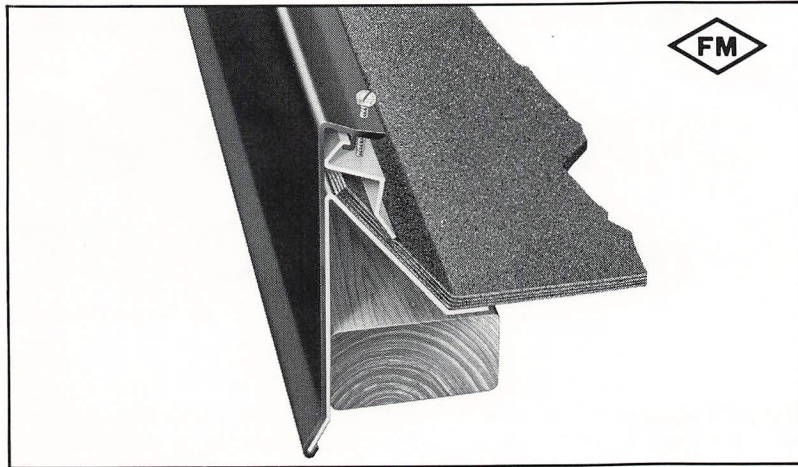
One MRECO 10,000 gal. yard storage unit. Includes MARQ Heating System, Automatic Controls, W/Natural Gas Burner, 6" of Insulation, Ladder Catwalks & Skids for Ground Mounting.

One MRECO Bulk Metered Dispensing Unit with 700 lb. per minute, reversible flow Electric Pump and Electric Meter attachment.

One MRECO G-9 Packaging unit, complete with semi-automatic, pre-set loading controls for 9-13" dia cartons on 36" x 48" pallet and pre-heat unit. Used for less than 30 days.

Send inquiries to NRCA, 1515 N. Harlem Avenue, Oak Park, Ill. 60302.

# Light & Lively.



SPECIFY MM FASCIA SYSTEMS  
write for  
a FREE brochure or refer to SWEET'S 7.3/MM

## MM Fascia Systems

### LIGHT IN WEIGHT

Drip-proof MM Fascia Systems are light yet super strong. Made of extruded aluminum, they are factory-fabricated for accuracy and uniformity. Factory Mutual approval assures that wind-load requirements are met. The Lok-Tite design eliminates any penetration of the roof and makes installation easy.

### LIVELY IN APPEARANCE

You can make them as lively as you want. A wide range of architectural finishes and coatings is available. Sharp and straight or curvilinear lines are much easier to achieve because splice plates and fasteners are concealed. So your design is the criterion we meet precisely.

# Strong & Silent.

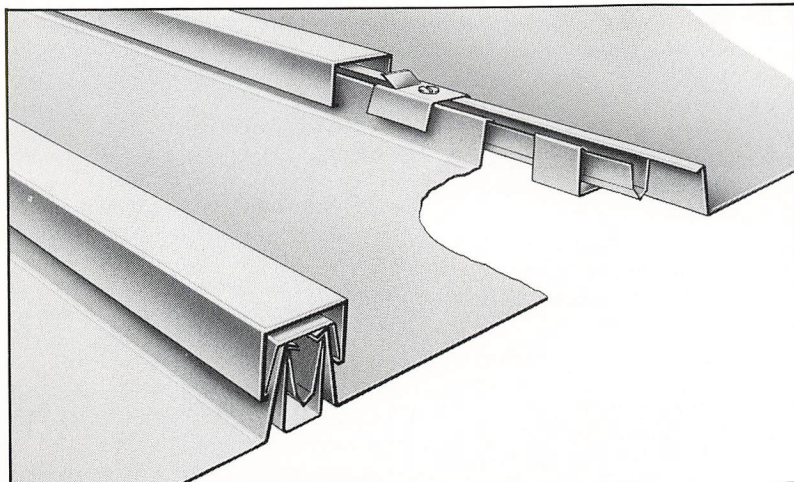
## Batten-Tite Roofing System

### HIGH STRENGTH.

You specify the thickness. Our strong alloy aluminum has greater tensile strength than steel of the same weight. Wind load analysis is provided to meet local code requirements. Select and specify from a number of patterns and finishes, including a 20-year warranted finish.

### NO WIND NOISE.

No clattering in the wind with Batten-Tite Roofing Systems. It goes down easily. And it quietly stays there. With built-in expansion/contraction capability and watertight concealed fastening, Batten-Tite Roofing has no equal. And the cost is surprisingly low to your client.



SPECIFY MM BATTEN-TITE ROOFING SYSTEMS  
write for a FREE brochure or refer to SWEET'S 7.2/MM

4520 ELMDALE DRIVE, TUCKER, GEORGIA 30084/PHONE (404)938-7570



*"The materials make it; the system shows it."*

# A safe roofer is a good roofer a good roofer is a safe roofer

by Joseph Halperin

**Editor's Note:** Many contractors have heard Joe's remarks in the Safety Seminar sponsored by Aeroil Products Co. Still, we think his message is an important one.

Production does not have to suffer when a "Safety Climate" envelops a work crew and a jobsite. On the contrary, production often is improved when jobs have a "Safety Climate." The overwhelming reason that unsafe practices exist in the roofing industry is simply because of the mistaken belief that production comes first and safety comes second—or that safety might somehow interfere with production. A closer examination of the facts will easily show that profits are enhanced by creating a safe climate for every job. Some of the direct benefits include:

1. Lower insurance costs. In many states, insurance is difficult to obtain or prohibitively expensive.

2. A worker who is sloppy about safety is often sloppy about other work details causing failure and call-backs. Safe Roofers are better roofers.

3. Time lost when accidents occur is substantial, i.e., treating the victim, getting first aid, etc., all detract from direct labor.

Roofing contractors can be broken down into four categories for purposes of determining the quality of their Safety Concern. Which category do you fall into? If you fall into any of the first three categories, then you have some homework to attend to.

1. "Dirty Harry" (Totally un-concerned roofer). If any injuries occur, it

is always the worker's fault because he is so dumb. The worker is always wrong and Dirty Harry is always right. "Do it anyway at all—but DO it—Don't bother with the debris—That ladder is OK, I can't afford better ladders—Use it!, etc., etc., etc., etc., etc."

2. "Sputtering Sam" (Accidents annoy him). After every accident he has a safety meeting, but with little knowledge about job safety. Mostly his information is incorrect and he relies on cliches such as "Be careful" or "Don't get burned"—but he never gets specific and never takes the time to learn about safety.

3. "Concerned Charlie" (He really thinks that he's trying). He starts good safety programs about three times each year, but doesn't follow through. Usually, he starts after attending an NRCA Safety Meeting, a local roofers' meeting, or after he pays his insurance premiums. His efforts last about 10-14 days, and then slowly slip into the old bad practices.

4. "Mr. Clean" (Safety is Full Time). He holds a safety meeting—10 to 20 minutes every week—usually on Monday. Reviews unsafe conditions that he may have seen during the prior week. Awards small rewards to safest crew. Asks questions—Where is fire extinguisher, First Aid Kit, nearest hospital, etc. Does everyone have ballast blocks on roof hoists?

Mr. Clean thinks safety every day and **HE CREATES A SAFETY CLIMATE** that means more profit for him.

It is no accident that the most successful contractors are generally those who have the best safety programs. Workers who know that their management has a real concern for their

# A SAFE ROOFER

well being will be better workers. This will be reflected in the quality of their work. They will tend not to be sloppy with important details. It is easier to attract a better quality of roofer if the "Safety Climate" exists.

Some of the more important aspects of running a Safe Roofing Job involve the following:

One person in every roofing company shall be responsible for Safety. Depending on the size of the company, the Safety Supervisor might be the owner, a Superintendent, a foreman, or even an estimator. That person should become familiar with all of the roofing safety information that is available from NRCA, local Roofing Associations, insurance companies, and other sources. He should see to it that he is on all of the appropriate mailing lists for updated material.

The safety supervisor will conduct a safety meeting every Monday morning that will last about 20 minutes. He will pay particular attention to new employees to be certain they are equipped with enough safety knowledge to go on a job.

He will review any problems relating to safety that he may have observed during

the prior week on jobsites, and new information that may have come to his attention.

He will remind each crew foreman to check the availability and location of first aid kits, fire extinguishers, professional medical help, and the nearest emergency room.

He will remind each crew to check the ballast on the roof hoists, check for frayed cables, "V" Belts, etc. He will remind his men to set up roof perimeter warning flags, refrain from riding hoists up to the roof, wear proper clothing, use gloves with knit cuffs, and inspect the jobsite every morning with the view that it may not be in the same condition as it was when they left the night before. (Is the ladder still tied?) The Safety Supervisor shall not permit men to work if they report in a "hung-over" condition. He should visit jobsites and review a safety check list with the appropriate person. He shall constantly remind personnel who work on the roof that they must pay attention to safety requirements or they cannot work for the company.

The Safety Supervisor should keep a written record of personnel who violate company safety rules. There should be a company policy that every employee

understands thoroughly. An example of such a policy might be as follows: A person receiving two safety citations within a thirty day period shall receive a written warning from the company that a third safety violation will result in disciplinary action, such as a five day suspension. Persons receiving a fourth safety citation in any sixty day period shall be discharged from the firm. A consistent violator of safety rules over longer periods of time may also be discharged.

Such a rule is not only for the protection of the roofing contractor, but also for the protection of the other men on the jobsite, and certainly for the protection of the man who cannot adhere to safety rules.

Roofing contractors cannot afford rising insurance premiums that eat into profits, and the best way to keep those costs down is to establish a "SAFETY CLIMATE."

Does your company have a Safety Supervisor? Do you keep written records of safety rule violations? If not, your insurance costs will probably go up again next year. The very best insurance that you can have is a "SAFETY CLIMATE." It's cheaper in the long run. ☪ ☪ ☪

## For More Production, More Efficiency, More Profit... Reeves 1,000 Gallon 'JUMBO' Pump Kettle



For big jobs. Complete with Hi-Lo Controls, Casted LP Burners, Electric brakes and lights. Viking Pump. 8 HP B&S Engine with 6 to 1 reduction gear. Kerosene model available.



Call Toll Free...  
Texas . . . . 1-800-292-7064  
National . . . 1-800-531-7116

### ROOFING EQUIPMENT CO., INC.



No. 180 "Super-Tex" for big jobs.  
7 H.P. Engine. 12" flywheel w/4  
carbide tip blades. Double pulley  
drive. Matched V-Belts. Wt. 199 lbs.



"Original" Rotary Spudding  
Machine. See Brochure 761

(512) 695-3567

ROUTE 17, BOX 300

SAN ANTONIO, TEXAS 78228

# We give you to move them Profitably.

Roofing contractors, builders and homeowners have different reasons for choosing better asphalt shingles.

At CertainTeed we understand these reasons.

That's why we offer three distinctive premium heavyweights.

That's why we back them up with the industry's most comprehensive and results-oriented sales support program.

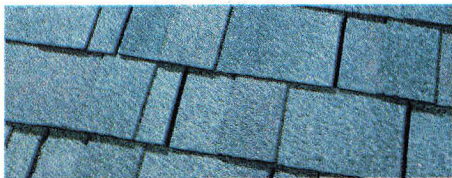
And that's why you get what it takes to move your customers up. Profitably.

## We give you the products: three heavyweight asphalt shingles.

The Hallmark Shingle® roof on the facing page combines the



Hallmark Shingles®



Independence Shingles®



Woodtex Shingles®

look of wood shakes with the long-lasting qualities of a heavyweight asphalt shingle.

Hallmark is a rugged shingle with random overlay tab design, and wood-grain texture.

In addition to Hallmark, we offer your customers the smooth surface and random tab design of Independence

Shingle.® And a wood-grain surface with depth and beauty—the Woodtex Shingle.®

Whichever CertainTeed premium asphalt shingle you offer, your customer gets a wide choice of complementary earthtone colors.

And you offer the homeowner the extra protection of a Class "C" fire rating. And a 25-year limited warranty—the longest available.

Everything you need to net a bigger profit. Turn after turn.

## We give you the program: the top sales support in the industry.

We'll give you a new, unique homeowner's pitchbook. It'll help you close more sales—more profitably—with CertainTeed premium asphalt shingles.



# what it takes up to the top.

And we'll give you the industry's best merchandising and sales aids. Product literature in the form of brochures and stuffers. Plus samples, sales training film strips, displays and display ideas. And we'll give you lead generators—ad mats, dealer TV commercials, job site signs and door knob hangers.

That's how we go all out to help you sell up.

## **You get the profits: top dollar on every sale.**

A better roof is a more profitable roof.

For example, CertainTeed premium asphalt shingles offer

more appealing designs, textures and colors. For distributors, dealers and contractors this has produced a demand growth which has far outpaced standard shingles. Resulting in bigger mark ups—and profits.

And roofing contractors and builders who sell the profitable options of heavyweight asphalt shingles will benefit from—in addition to a bigger bottom line—a distinctive reputation for selling a quality product.

All things that point to a profitable move up—just by stocking and selling CertainTeed Hallmark Shingles, Independence Shingles and Woodtex Shingles.

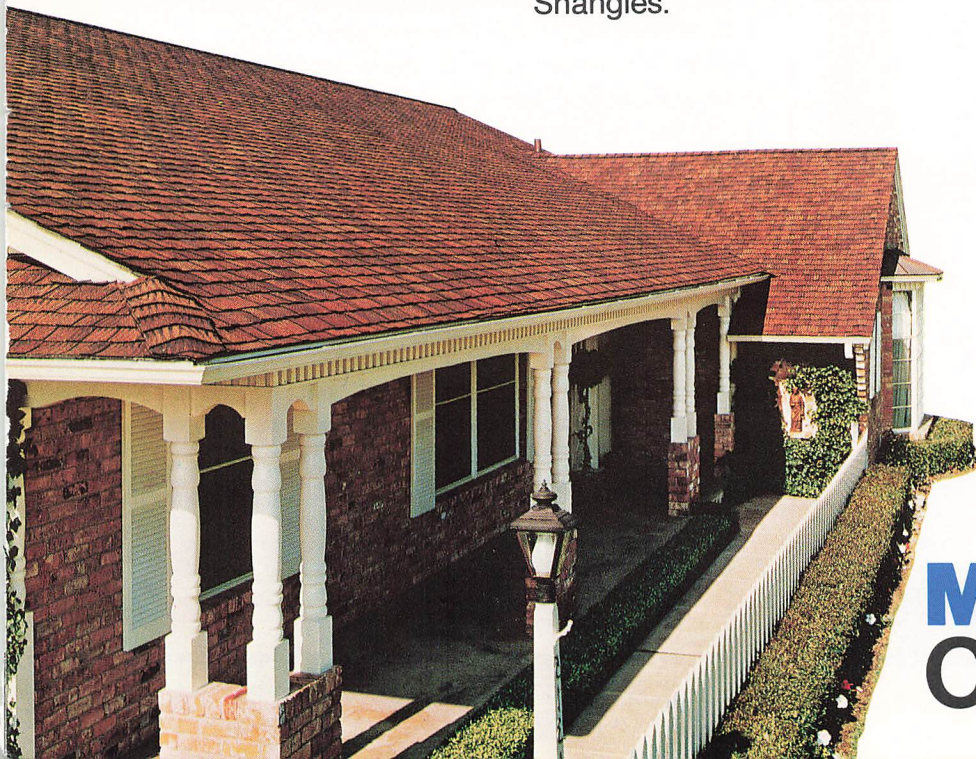
## **We offer lots of different roofing. Because you've got lots of different customers.**

Heavyweight asphalt shingles are just part of our roofing line.

We're also one of the industry's largest producers of fiber glass based asphalt shingles. Which means we're able to supply you with more residential roofing options than just about anybody.

And our fiber glass based asphalt shingles come with 20- to 25-year limited warranties and Class "A" fire protection.

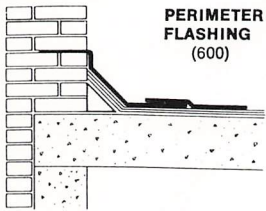
Premium asphalt shingles from CertainTeed. We'll give you what it takes to move up, profitably. Check the Yellow Pages for the CertainTeed distributor near you. Or write us direct: CertainTeed Corporation, Shelter Materials Group, P.O. Box 860, Valley Forge, Pa. 19482.



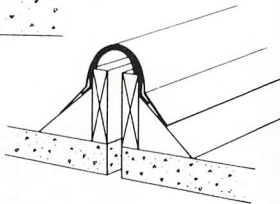
**MOVE UP** with  
**CertainTeed** 

# UPSTAIRS—DOWNSTAIRS ALL AROUND THE HOUSE NERVASTRAL WATERPROOFS IT!

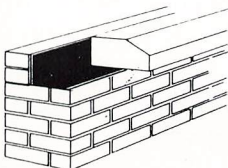
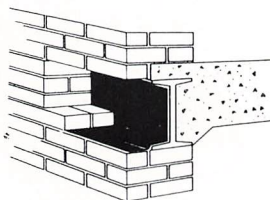
**PERIMETER  
FLASHING  
(600)**



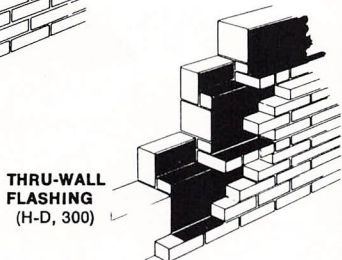
**NERVA-FLEX  
EXPANSION JOINT**



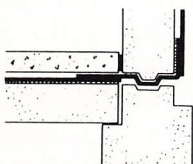
**SPANDREL  
FLASHING  
(H-D, 300)**



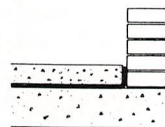
**SILL FLASHING  
(H-D, 300)**



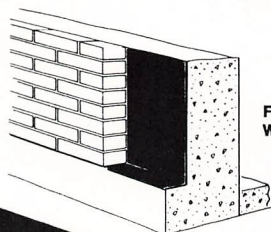
**THRU-WALL  
FLASHING  
(H-D, 300)**



**NERVASTRAL  
SHEET MEMBRANE  
(300-400-56-m600)**



**NERVA-DECK  
SLAB MEMBRANE  
(NERVA-DECK LIQUID)**



**FOUNDATION  
WATERPROOFING  
(300-400-56)**

**RUBBER & PLASTICS COMPOUND CO.,  
INCORPORATED**



25-20 43rd AVENUE • LONG ISLAND CITY  
NEW YORK 11101, Telephone 212-392-6780

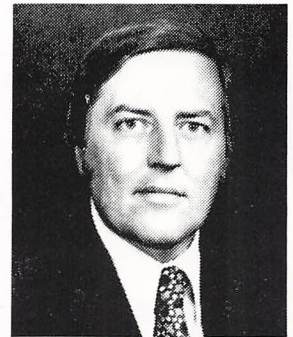
## WHO KILLED THE CONSUMER PROTECTION AGENCY?

by

**Richard L. Leshner**

President

Chamber of Commerce  
of the United States



The day of the House vote on that hardy Hydra, the consumer protection agency, one of the Washington radio stations conducted a telephone poll of sentiment on the bill. No one listening to the rich patios of the callers' voices could fail to note that these were not lobbyists, or "big business," or professional politicians. They were Americans from all walks of life—consumers—and an astonishing 84% of them said quite bluntly: Another layer of bureaucracy is the last thing the consumer needs.

Such polls are unscientific, because the participants are self-selected. But many members of the House itself have acknowledged that sentiment back home in their districts ran about the same way. Thus died, by a vote of 227-189, a bad idea that professional consumerists have been trying to pass for eight years.

It was in part an idea that had outlived its time. Eight years ago, neither the business community nor the government was as sensitive to consumer problems as it should have been. But a lot of water has gone over the dam since then. There was a blizzard of pro-consumer legislation, much of it genuinely helpful.

Sure, some tinkering is still needed. We'd like to see local small claims courts strengthened and made more accessible to the consumer, for example. That would put the help at the level where it's needed, rather than in Washington, where it's impossibly remote.

We'd also like to see the counterproductive excesses of some earlier "consumer" legislation corrected. To cite just two prominent cases, federal rules to insure the integrity of pension plans and warranties are so stringent they have forced many conscientious firms to abandon one or the other. That scarcely improves service to the worker or consumer.

But all of that said, the thing that really killed the consumer protection agency was the consumer's perception of his (and her) paramount interest in an affordable government.



### **HERMAN NORDMANN**

*Long time NRCA Member Herman Nordmann, founder of the Nordmann Roofing Co. in Toledo, Ohio, passed away on February 17. Mr. Nordmann, who was 77, is survived by his wife Liselott, and a brother and sister in Germany. We extend our sympathies to them.*



## Taurus Mobile Storage ... The Duo-purpose Bulk Asphalt System

A Taurus Mobile Storage tank is a complete liquid asphalt system, capable of serving a duo-purpose for the roofer. Designed to give the contractor maximum flexibility and mobility. It can be used either on the job, to pump "hot" directly to the roof or in your yard as a storage tank for your job tank. Taurus Mobile Storage tanks are engineered to adapt to the contractor's changing requirements.

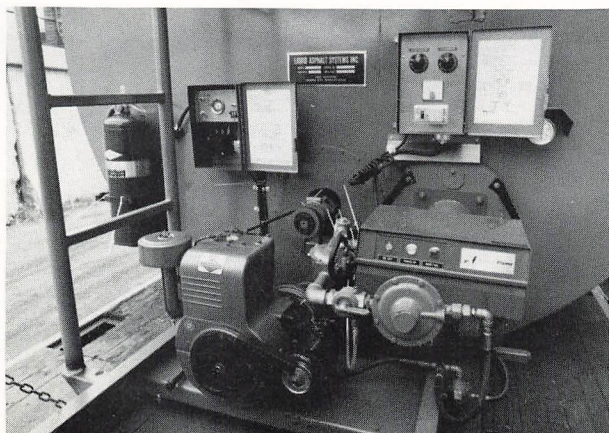
Cy Tilsen of Tilsen Roofing Company, Madison, Wisconsin, is one of many contractors that has realized the advantages of automatically controlling the temperature of large quantities of asphalt (37 tons) on big jobs over long periods of time. After job site

set-up the tanker is capable of receiving shipments of hot asphalt direct from the refinery. A storage tank that is located directly on the job. No more limiting the size of your on-deck crews due to a lack of kettle or job tank capacity.

As an alternative, a Taurus Mobile Storage tank may be used as a temporary yard storage. This is an option for those with a lot too small for a permanent yard storage tank, or if your cities zoning doesn't permit such a permanent tank on your property. Either way, the tank will provide a supply of hot asphalt for your job tanks.

When you consider the increased productivity and cost savings, a Taurus Mobile Storage tank is an investment that should pay for itself within the first year of operation.

For more information on how a Taurus Asphalt Handling Equipment will help you, please call or write.



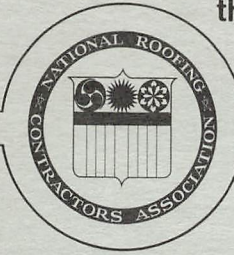
**LIQUID ASPHALT SYSTEMS, INC.**  
2425 Jefferson, Kansas City, Mo. 64108  
(816) 474-0448



# THIS TOWABLE HOIST TELESCOPES TO REACH UP TO 52ft



For further information write:  
AEROIL PRODUCTS CO.  
69 Wesley St.  
So. Hackensack, N.J. 07606



## Departments

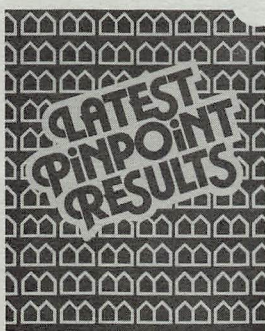
Ideas, Notes & Random Thoughts	6
News From Affiliates	11
News From Associate Members	16
Legal	20
New Members	30
Industry Developments	32

## Features

<b>Technical Conference Planned</b> Program outline for the April, 1979 meeting	9
<b>Pinpoint Shows Energy Advances</b> The latest returns from Project Pinpoint	13
<b>ASTM REPORT</b> Milt Olson summarizes the December meeting	24
<b>A Safe Roofer is a Good Roofer; A Good Roofer is a Safe Roofer</b> Some interesting observations by Aeroil's Joe Halperin	38
<b>Who Killed the Consumer Protection Agency?</b> A commentary by Richard Leshner	42

## Advertisers

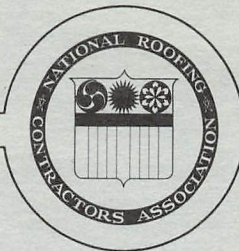
Aeroil Products Co., Inc.	30,44	Johns-Manville Corp.	4-5
American Colloid Co.	35	Koppers Co., Inc.	2
Architectural Products Co.	6	Liquid Asphalt Systems, Inc.	43
Architectural Steel Corp.	34	Lucas Sales Co.	21
Benoit, Inc.	3	Machinery Development, Inc.	17
The Bilco Co.	33	Marathon Equipment, Ltd.	27
Carlisle Tire & Rubber Co.	23	MM Systems Corp.	37
CertainTeed Products Corp.	40-41	Morgen Manufacturing Co.	19
Clearfield Conveyors Inc.	25	National Nail Packaging Corp.	25
Eliminator Co.	7	Neiman Manufacturing Co.	12
Evergreen Slate Co.	11	P & D Manufacturing Co.	34
Evoide, Inc.	27	P.A.L. Development Corp.	10
Floxolf Chemical Co.	18	Petersen Aluminum Co.	18
GAF Corp.	8	Reeves Roofing Equipment Co.	39
Garlock Equipment Co.	11	Roofmaster Products Co.	21
W. R. Grace & Co.	29	Rubber & Plastics Compound Co.	42
Grefco, Inc.	31	Vermont Structural Slate Co.	34



See page 13

THE ROOFING SPEC is published bimonthly by the **National Roofing Contractors Association**, 1515 North Harlem Avenue, Oak Park, Illinois 60302. **Annual Subscription Rate** for NRCA members is \$6.00, which is included in Annual Membership Dues. Additional subscriptions for member firms are \$6.00 annually. Non-member subscription is \$12.00 per year. **Second Class Postage** paid at Oak Park, Illinois.

Statements of fact and opinion are made on the responsibility of authors alone and do not imply an opinion on the part of the Officers, or the membership of NRCA. **Material** may be reproduced by any member or affiliate association. Appropriate credit line is requested.



# OFFICERS and DIRECTORS

## NRCA OFFICERS

### President

J. ROY MARTIN, JR.  
J. Roy Martin & Co., Inc.

### Senior Vice President

MELVIN KRUGER  
L E. Schwartz & Son, Inc.

### Vice Presidents—Two Years

BURTON KARP  
Eagle Moisture Protection Inc.  
WILLIAM E. KUGLER  
United Materials, Inc.  
SAM PIPER  
J. A. Piper Roofing Co., Inc.  
**Vice Presidents—One Year**  
TOM MANSON  
Western Roofing Co.  
WIL ROSENOW  
Hans Rosenow Roofing Co.  
RICHARD WILLIS  
The Wehner Roofing & Tinning Co.

### Immediate Past President

GEORGE STEPHENSON  
Stephenson Roofing Co.

## BOARD OF DIRECTORS

### Three Year Term

CHARLES BECHTEL  
Harold J. Becker Co., Inc.  
GEORGE BODWELL  
Bodwell-Lemmon Co.  
LARRY CARLSON  
Carlson Roofing Co.  
FRED CHRISTEN  
The Fred Christen & Sons Co.  
FRANKLIN O. CRAFT  
Dennie's Contracting Co., Inc.  
TOM DRAKE  
E. C. Goldman Inc.  
A. B. HALL  
Dixie Roofing & Metal Co.  
ROBERT T. HARRISON  
Greenville Roofing Co.  
RICHARD JUDAH  
Roof Maintenance, Inc.  
NED A. KIMBREL  
R. C. Kimbrel Roofing  
KENNETH MARSHALL  
Federal S/M & Roofing Co.  
ROBERT PELHAM  
Pelham Roofing & S/M Works  
MARLIN POTTEIGER  
Mueller-Potteiger, Inc.  
WILLIAM R. ROSE, III  
Rose Roofing Co.  
LLOYD SANKOWICH  
Alta Roofing Co.  
RICHARD ZIMMERMAN  
Hoge-Warren-Zimmerman Co., Inc.

### Two Year Term

MIKE P. ALCOCK  
M. W. Powell Co.  
MIKE BELDON  
Beldon Roofing & Remodeling Co.  
TOM BOLLNOW  
Boice Roofing Co.  
WILLIAM L. BRITTON  
Augusta Roofing & Metal Works, Inc.  
ROBERT L. BUBENZER  
Henry C. Smither Roofing Co., Inc.

JOHN CARRUTH, JR.  
Carruth Roofing Co., Inc.  
W. M. COCHRANE  
Cochrane Roofing & Metal Co., Inc.  
JAMES L. DAHILL  
F. J. Dahill Co., Inc.  
NICK DETORIE  
Liberty Roofing Co., Inc.  
ROBERT C. HARRINGTON  
Harrington Roofing Contractors Inc.  
STEPHEN K. KRUPNIK, JR.  
Krupnik Bros., Inc.  
WAYNE I. MULLIS  
Universal Roofers & Builders Inc.  
JOE RUTKOSKI  
Giffen Ind. of Tampa, Inc.  
ARNIE SCHMAUTZ  
Buckaroo-Thermoseal Inc.  
TEDDY SWAIM  
Warren-Ehret-Linck Co.  
W. H. WOLF  
Hamilton Roofing Co. of  
New Mexico Inc.

### One Year Term

GAYLORD BLUE  
Blue's Roofing and Insulation Co.  
JOHN H. BONITZ, JR.  
The Bonitz Insulation Co., Inc.  
JOHN BRADFORD  
Bradford Roofing and Insulation Co.  
ROBERT FIRST  
Clevenger Roofing and Sheet Metal  
WILLIAM T. FORT  
Fort Roofing and Sheet Metal Works  
RAY JOHNSON  
Empire Roofing and Insulation Co.  
JAMES KING  
The Fred A. Snyder Roofing &  
Sheet Metal Co.  
HERBERT J. KIZER, JR.  
Therrel Kizer Inc.  
WALTER M. KRAVITZ  
Morris Roofing & Sheet Metal Corp.  
GLENN LANGER  
Langer Roofing & Sheet Metal Works  
JAMES MANSFIELD  
James Mansfield & Sons, Inc.  
GEORGE STEYER, JR.  
Steyer Roofing Co.  
JAMES TAYLOR  
Biebel Roofing Co., Inc.  
JOEL YANCEY  
Yancey Company  
JOHNNY ZAMRZLA  
Western Pacific Roofing Co.

## STAFF

### Executive Vice President

FRED GOOD

### Technical Services Manager

EDWIN MERTZ

### General Manager

WILLIAM GOOD

### Projects Manager

GARY VAN RYZIN

### Member Services Manager

ROBERT McADAM

### Secretaries

JANICE CLARDY  
LORAIN FABER  
MELODY LEJCAR  
PENNY PIEKARSKI