

PLAINTIFF'S  
EXHIBIT  
GF-1984



# GAF

**GAF  
CORPORATION**

**A N N U A L  
R E P O R T**

**1 9 8 0**

**GAF 13129**

|                                                          |           |
|----------------------------------------------------------|-----------|
| Message to our Shareholders                              | <b>2</b>  |
| Chemical                                                 | <b>6</b>  |
| Building Materials                                       | <b>10</b> |
| Other Businesses                                         | <b>14</b> |
| Corporate                                                | <b>16</b> |
| Directors and Officers                                   | <b>18</b> |
| Review of Consolidated Financial Information             | <b>21</b> |
| Summary of Significant Accounting Policies               | <b>23</b> |
| Consolidated Statements of Income                        | <b>24</b> |
| Consolidated Statements of Changes in Financial Position | <b>25</b> |
| Consolidated Balance Sheets                              | <b>26</b> |
| Notes to Consolidated Financial Statements               | <b>28</b> |
| Auditors' Opinion                                        | <b>35</b> |
| GAF Products and Services                                | <b>36</b> |
| GAF Locations                                            | <b>38</b> |

| Financial Highlights                            | 1979           | 1978           |
|-------------------------------------------------|----------------|----------------|
| <b>Net Sales</b>                                | \$683,749,000* | \$608,968,000* |
| <b>Income from Continuing Operations</b>        | \$ 25,828,000  | \$ 28,056,000  |
| <b>Income (Loss) from Discontinued Segments</b> | 2,355,000      | 6,108,000      |
| <b>Net Income (Loss)</b>                        | \$ 28,183,000  | \$ 34,164,000  |
| <b>Earnings per Common Share</b>                |                |                |
| Primary                                         |                |                |
| Continuing                                      | \$ 1.66        | \$ 1.83        |
| Discontinued                                    | .17            | .46            |
| Net Income (Loss)                               | \$ 1.83        | \$ 2.29        |
| Fully Diluted                                   |                |                |
| Continuing                                      | \$ 1.49        | \$ 1.62        |
| Discontinued                                    | .13            | .35            |
| Net Income                                      | \$ 1.62        | \$ 1.97        |
| <b>Cash Dividends per</b>                       |                |                |
| Preferred Share                                 | \$ 1.20        | \$ 1.20        |
| Common Share                                    | \$ .68         | \$ .64         |

\*Restated to exclude amounts applicable to discontinued segments—See Note 1 of Notes to Consolidated Financial Statements.

\*\*Figure omitted—not dilutive. See Note 5 of Notes to Consolidated Financial Statements.

**The 1981 Annual Meeting of Shareholders will be held at 10:00 a.m., Tuesday, April 28, at the Beverly Wilshire Hotel, 9500 Wilshire Boulevard, Beverly Hills, California**

Stock Transfer Agent and Registrar:

Citibank, N.A.  
111 Wall Street  
New York NY 10043

GAF offers holders of its common and preferred stock the opportunity to buy additional shares through an automatic dividend reinvestment service, administered by Citibank, N.A.

**Form 10-K as filed with the Securities and Exchange Commission may be obtained, free of charge, by writing to:**

**GAF CORPORATION  
140 West 51 Street  
New York NY 10020**

**Investor Relations**

**GAF 13131**

Master  
Shareholders

In 1980, GAF sales from continuing chemicals and building materials businesses were \$677.2 million, compared with sales of \$683.7 million in 1979. A loss of \$233.5 million, or \$17.57 per share primary, was experienced in 1980, compared with earnings of \$28.2 million, or \$1.83 per share primary the prior year. 1980 results include a provision of \$244.2 million after taxes, to cover the estimated costs of discontinuing several businesses.

#### **Recession, interest costs**

The economic recession and high interest rates in 1980 depressed demand for building materials and held chemical sales to an eight percent increase over 1979 levels. Profits in both of GAF's continuing businesses were off significantly - 17 percent in chemicals, from \$62.4 million to \$52 million and 54 percent in building materials, from \$29.7 million to \$13.7 million. Total 1980 direct operating profits from the two groups were \$65.7 million, compared with 1979 direct operating profits of \$92.1 million. It is the firm belief of GAF management that when the economy recovers, as it must, construction activity will be restored to more normal levels and the company's sales and profit picture will improve substantially.

The year recently ended was difficult for American business and GAF was typical of many companies in feeling the pressures. As with other companies, GAF's debt service became increasingly burdensome, rising some 50 percent from 1979.

The interest rates affected GAF's customers as well, reducing demand for many products. Residential building contractors, for example, found it prohibitively expensive to borrow money to assemble land parcels for subdivisions or to build houses on speculation. Remodeling jobs, usually a stabilizing influence in periods of low housing

starts, also suffered as customers chose to wait for interest rates to decline rather than take loans at high rates.

Lower demand for building materials and increased costs of debt service put severe strains on GAF's resources and restricted our ability to invest in projects critical to future competitive capability. The problem in 1980 became one of how best to position GAF for future growth in this new reality.

The program arrived at by company management was outlined on December 30, 1980, when GAF announced it was classifying as discontinued, for accounting purposes, several businesses, including:

- worldwide reprographics, with plants in the U.S.A., Europe and Australasia;
- worldwide sheet vinyl and tile flooring, with three plants in the U.S.A. and one in Ireland;
- graphic arts products for the printing industry, with facilities in Binghamton, New York;
- pictorial products, including View-Master® stereo products, with major plants in Oregon and Belgium;
- paper and millboard, a small but profitable business with a plant in Erie, Pennsylvania;
- vinyl siding, with operations in Gloucester City, New Jersey;
- automotive felts and mastics, with a plant in Joliet, Illinois (This plant was closed during 1980 due to a falloff in demand as car sales slumped.)



GAF 13133

Medals  
Shakes

- WNCN-FM, GAF's classical music radio station in New York City.
- latex operations in Chattanooga, Tennessee, which were sold in early December

#### **Businesses operating**

All but one of these businesses are still operating; some are profitable, some are marginal or unprofitable. In all cases, however, profit potential exists.

Changes were made in GAF's long-term debt instruments and a credit line of up to \$225 million is being arranged. These are described in the Management's Discussion section on page 19.

The specifics of the discontinued businesses are detailed in the "Other Businesses" section of this report; at this point we will only comment that discussions are under way with potential purchasers for most of the businesses.

By selling the businesses it is offering, GAF can reduce debt and continue its program of investing in roofing and chemicals lines, which have traditionally had the greatest returns on assets.

Despite the setbacks of 1980, the company made significant progress in preparing its building materials and chemical operations for future growth. The new chemical plant in Seadrift, Texas, was completed during the year. It went through a smooth start-up and is now producing butynediol in commercial quantities. The project was on schedule and under budget.

An efficient, closed loop transportation system ensures a steady flow of materials between plants at the most economical cost. Butynediol is shipped from Seadrift to the company's chemical plants in Texas City, Texas, and Calvert City, Kentucky, where it is used to make many other chemicals. Using the same

tank cars, these plants ship formaldehyde they make back to Seadrift, where it is used to make butynediol.

Improvements in procurement and distribution were made throughout the company in 1980, with the implementation of newly introduced materials management techniques. This job has not yet been completed, but significant progress was made during the year.

GAF's roofing strategy of building for the future also progressed in 1980. The company can satisfy customer requirements for both glass-based and organic felt-based products (still the far greater part of the market). With its broad range of products for both built-up roofing and asphalt shingle roofs, GAF is in a good position for growth.

#### **West Coast expansion**

A major step in expanding sales of GAF building materials in the West Coast market was made in 1980, with the start-up of the new roofing plant in Fontana, California. In January, 1981, the plant began shipping glass-mat-based Timberline<sup>®</sup> shingles in commercial quantities, and as this report goes to press, work is under way to run a second shift at the plant.

Also of great significance in 1980 was the successful operation of the new glass-mat manufacturing facility in Chester, South Carolina. The company is now able to make virtually all the glass mat it requires.

Glass-mat-based shingles offer many advantages over wood shakes and are selling well in the Sun Belt where several communities have enacted building codes restricting the use of wood roofing due to fire hazard. Sales of GAF

Timberline shingles were strong in some of these markets, despite building slumps. All Timberline shingles and Sentinel™ shingles being made at the plants in Tampa, Florida, and Fontana, California, are now made with glass mat and work is progressing on converting plants in Savannah, Georgia, Mobile, Alabama, and Dallas, Texas, to 100 percent glass-mat shingle and roll roofing production. These conversions are expected to be completed in 1981.

#### **Glass-mat roll roofing**

All 14 GAF roofing plants can now make roll roofing, used primarily in commercial, industrial and multi-family residential construction, with glass mat. Also strengthening the company's position in built-up roofing, new efficiencies were achieved when the company began producing its own facings for its insulation sheets. GAF's Isotherm rigid urethane insulation was granted a Factory Mutual "Class One" fire rating in 1980, further enhancing the company's ability to serve the built-up roofing market. GAF sees room for significant growth in this market segment and is striving to increase its share of the market.

To meet the future growth which GAF foresees in building materials, the company is expanding its production of mineral granules. Used to give asphalt shingle roofing greater resistance to sunlight and heat, the granules are produced at four GAF facilities located strategically in different parts of the United States. In 1980, however, it was necessary to cut back granules production because of reduced demand for, and production of, roofing shingles.

As for the businesses GAF is offering for sale, it would be premature to report on discussions and negotiations now in progress, but as businesses are sold, announcements will be made.

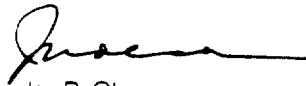
Pretrial proceedings in GAF's antitrust case against Eastman Kodak in the U.S. District Court for the Southern District of New York have been essentially completed. Motions to resolve major issues in the cases are presently pending before the Court. The company continues to be confident of the successful outcome of its case and looks forward to a trial this year.

This has been a trying year for GAF and for business in general. The economies of the United States and Europe saw demand shrink, interest rates rise and inflation drive up costs. We must assume these harmful forces will be brought under control. In the meantime, through GAF's program of redeploying its assets to support its best businesses, the company has improved its ability to cope with the vagaries of the economy. When the economy recovers, the expansions and operating improvements the company has made and is making in its chemical and building materials businesses will put us in an excellent position to take advantage of the new opportunities which lie ahead.

By Order of the Board of Directors



Jesse Werner  
Chairman of the Board



Jay R. Olson  
President

February 19, 1981

**GAF 13135**

### Sales and profits

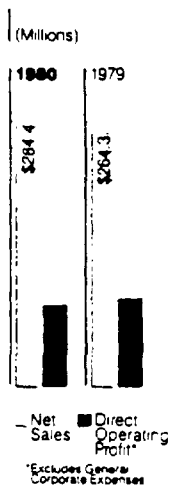
Worldwide sales of continuing GAF chemicals were \$284.4 million in 1980, an increase of eight percent from 1979 sales of \$264.3 million. Both years' figures have been adjusted to exclude a latex business, which has been sold, and a paper and millboard business which has been offered for sale.

Direct operating profits in 1980 were \$52.0 million, compared with \$62.4 million in 1979.

The decline was caused largely by lower sales of roofing granules and some specialty chemicals. Sales of several GAF chemicals used by the auto industry decreased as that industry slumped; sales of Gafite® PBT for automotive applications, although still small, bucked the trend and increased.

GAF's position in the chemical industry is as a leading developer, manufacturer and marketer of specialized products. These include surfactants, sequestrants, antioxidants, corrosion inhibitors, dispersants, stabilizers, textile auxiliary chemicals, polymers, monomers, engineering plastics, intermediates, solvents, specialty iron powders, roofing granules and others. GAF sells most of these chemicals to other companies which use them to make their own products. With few exceptions, GAF's chemicals are not end products themselves. They are often, however, critical components of a wide variety of consumer and industrial products and processes.

It is upon this base of strength and expertise that GAF is building its future in the chemical business. With increased emphasis on high technology products, GAF intends to expand its leadership role.



In 1980 the company restructured its technical service capability within the chemical marketing function so that GAF scientists and technologists teamed with marketing people, work directly with customers on developing new applications or new chemicals and are better able to meet customers' precise needs. Using this approach, new or expanded markets are being found for GAF products in areas such as cosmetics, agricultural chemicals, metalworking lubricants, plastics and synthetic detergents.

Butanediol, an acetylene-based chemical, is one of GAF's most important chemical products, forming the basis of many other GAF chemicals as well as being a product which GAF sells in significant quantity. A basic ingredient in the manufacture of specialty polyurethanes, butanediol found interesting new applications in 1980 in the manufacture of a new type of bicycle tire and new structural adhesives. It also saw expanded use in the manufacture of castable parts.

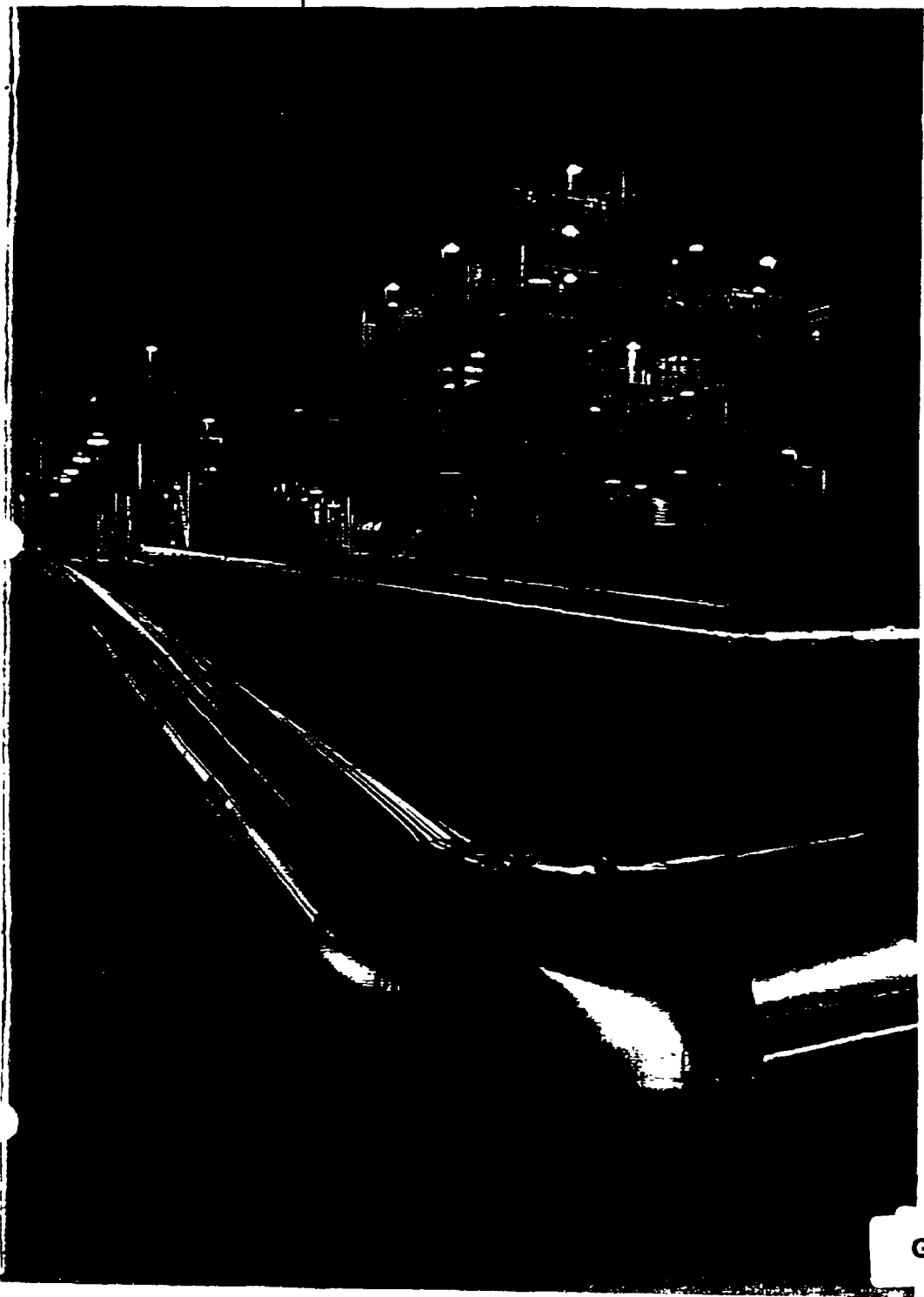
### Acetylene-based chemicals

GAF increased its ability to manufacture butynediol, a preliminary step in the manufacture of butanediol, when the new plant in Seadrift, Texas, became operational at the end of 1980.

As prices of possible alternative chemicals to butanediol in casting applications are considerably higher than the price of butanediol, the GAF chemical has become increasingly attractive. Also, butanediol's lack of toxicity gives it a distinct marketing advantage.

**GAF 13136**

100% POLYETHYLENE  
100% POLYPROPYLENE  
100% POLYBUTYLENE  
100% POLYISOBUTYLENE  
100% POLYETHYLENE  
100% POLYPROPYLENE  
100% POLYBUTYLENE  
100% POLYISOBUTYLENE



## Product List

### Chemicals

Acetylene Derivatives  
Agricultural Specialties  
Intermediates  
Iron Powders  
Monomers  
Polymers  
Solvents  
Specialty Chemicals  
Surfactants  
Textile Chemicals

### Engineering Plastics

PBT Thermoplastic  
Molding Compounds

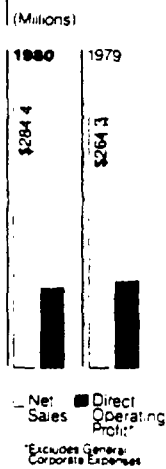
### Mineral Products

Mineral Granules

GAF 13137

GAF chemicals serve many industries and are found in a wide variety of products.

GAF supplies many surfactants and vinyl pyrrolidone copolymers for cosmetics and hair preparations. A wide range of GAF textile auxiliary chemicals are used to treat fabrics. PVP-Iodine, a widely used surgical scrub, is one of many GAF products for the medical/pharmaceutical industry. Bike tires and sport shoe soles can be made with butanediol-based polyurethane elastomers.



GAF surfactants play important roles in making detergents and cleaning preparations.



Cepha® plant growth regulator is used to ripen crops uniformly. Dairy farmers use antiseptics containing GAF chemicals as udder washes to prevent mastitis; many animal feed supplements contain GAF methylamine. Petroleum refiners use M-Pyrol® solvent for lube oil extraction.

GAF 13138

A potentially major application for M-Pyrol<sup>®</sup> (methyl pyrrolidone) solvent, a butanediol derivative, is as a replacement for trichlorethylene and other chlorinated solvents in industrial processes. Several companies which have traditionally used chlorinated solvents are switching to M-Pyrol solvent for reasons of cost effectiveness and safety. This GAF chemical is already widely used in lube oil extraction in the petroleum refining process, a market which continues to grow.

#### **Specialty surfactants**

Sales of a number of other GAF chemical products grew in 1980, as well. The company is increasing its activity in the development of specialty surfactants for the emulsion polymerization market. Sales of Aiipal<sup>®</sup> surfactants, used in coatings, paints, polishes and adhesives, rose during the year.

Meeting consumer demand for mild, low pH shampoos, GAF's synthetic detergent products also enjoyed increased sales. GAF is well positioned in this growing market. Igepal<sup>®</sup> surfactants sold well last year, as some manufacturers of powdered detergents switched to alkyl phenol ethoxylates from more expensive ethoxylated alcohols. GAF expanded its capacity to produce alkyl phenol ethoxylates at its Linden, New Jersey, and its Calvert City, Kentucky, chemical plants in 1979 and 1980.

Gafac<sup>®</sup> surfactants enjoyed significant sales increases in 1980 due to increased use in deresination of wood pulp in the manufacture of rayon and high-grade papers.

GAF's antiseptics include PVP-Iodine, a widely used "stingless" medical preparation, and Biopal<sup>®</sup> iodophors, which are useful in industrial sanitizing appli-

cations. In 1980, a Biopal iodophor received U.S. Department of Agriculture approval for use as a hand wash sanitizer in meat and poultry processing plants, opening a new market for this chemical.

New applications for the company's Gafite<sup>®</sup> and Gaftuf<sup>™</sup> PBT thermoplastics helped increase sales of these relatively new products last year. Of particular interest, a major auto maker is now using Gafite PBT to make opera window housings and a manufacturer of paint brushes is using the versatile plastic for paint bristles. Gaftuf PBT is being used by a telephone manufacturer for bell ringer housings.

#### **Roofing granules**

In the roofing granules area, capacity expansions begun in 1979 started to come on stream last year. GAF is a major manufacturer of these granules and supplies its own needs and sells to other manufacturers. Production was cut back in 1980, due to the economy-related decline in roofing demand. This had a significant impact on earnings. The company is continuing its program of expanding granules production capability in order to be ready for the housing industry's expected return to higher levels of demand.

### **Product List**

#### **Chemicals**

Acetylene Derivatives  
Agricultural Specialties  
Intermediates  
Iron Powders  
Monomers  
Polymers  
Solvents  
Specialty Chemicals  
Surfactants  
Textile Chemicals

#### **Engineering Plastics**

PBT Thermoplastic  
Molding Compounds

#### **Mineral Products**

Mineral Granules

### Sales and profits

In 1980, worldwide sales of GAF's continuing building materials were \$392.8 million, down six percent from \$419.4 million in 1979. The decline resulted from a recessionary decrease in housing starts and new commercial and industrial construction, coupled with high interest rates which effectively curtailed home improvement projects. In most previous recessions, increased replacement roofing activity more than offset the lack of new housing construction, but the high cost of borrowing also constricted this portion of the market in 1980.

Direct operating profits declined as well, from \$29.7 million in 1979 to \$13.7 million in 1980. (Sales and earnings figures for both years have been restated to exclude worldwide flooring, vinyl siding and automotive padding and mastics, which are being offered for sale. These and other discontinued businesses are discussed in more detail in the "Other Businesses" section of this report.)

It is the view of GAF management that the combination of recession and high interest cannot continue to affect the pent up demand for new housing and replacement roofing forever. When economic depressants ease, sales and profits are expected to increase.

In the meantime, the company's strategy for these economically troubled times is to increase market share wherever possible, to control costs through manufacturing efficiencies, and to prepare for the future in every practical way.

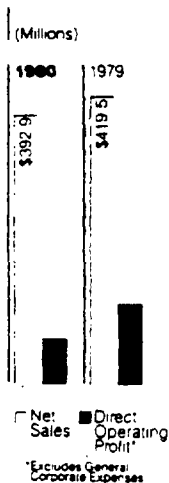
Despite diminished demand for roofing in general, GAF Timberline® shingles, the company's "top of the line" residen-

tial roofing product, sold reasonably well in 1980. Sales were down from 1979 levels, but the decline was far less than the corresponding drop in housing-related activities such as new residential housing starts.

In general, the Sun Belt states are not experiencing as great a building slump as the rest of the United States. In some areas, housing starts were actually up slightly in 1980. GAF's activity in warm-climate markets was well-timed, with the new roofing plant in Fontana, California coming on stream in late 1980, the conversion of the roofing plant in Tampa, Florida, to glass-mat asphalt shingle manufacture in early 1981, and the new glass-mat manufacturing plant in Chester, South Carolina, in full production during the year. A new manufacturing line was approved in 1980 for added production of glass-mat roofing at the Dallas, Texas, plant.

### Sun Belt strength

A number of major Sun Belt local governments have changed their building codes to prohibit new construction with wood shake roofs because of fire hazard. GAF Timberline glass-mat shingles have the beauty of wood, a wide range of colors and an Underwriters Laboratories Class A fire resistance rating making them attractive alternatives to wood. To meet this demand, the company is increasing glass-mat shingle production at all Sun Belt roofing plants in 1981. GAF Sentinel™ glass-mat



**GAF 13140**

## Product List

### Roofing Products

- Accessories
- Asphalt Shingles
- Built-Up Roofing
- Materials
- Coating & Plastic
- Cementitious
- Roll Roofing
- Vent Systems

### Insulation Products

- Building Insulation
- Built-Up Roofing
- Insulation
- Fastener System

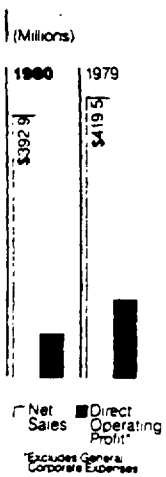


GAF 13141

Roofers install GAF Timberline® shingles made with glass mat at new job site in Texas. Sun Belt roofing activity continues to show strength despite building slumps elsewhere.



Manufacturing line in St. Louis makes Gaftemp® rigid insulation for commercial/industrial roofs.



**GAF 13142**

asphalt shingles lighter in weight than Timberline shingles, also achieved a U.L. Class A fire resistance rating in 1980.

The company's overall roofing strategy vis-a-vis glass-mat and organic felt-based prepared roofing is to maintain the flexibility to meet the needs of customers. Organic felt-based products still represent the bulk of the market and GAF intends to continue to supply these as well as glass-mat-based products.

#### **Built-up roofing**

In the area of roll roofing for industrial and commercial structures, the company made significant progress in 1980. Although GAF is a smaller factor in this portion of the roofing market than it is in the market for shingles, the company's built-up roofing products are gaining in market share. During 1980, all 14 GAF roofing plants were adapted to be able to make roll roofing with glass mat. The mat itself was improved during the year with the introduction of Gafglas™ Ply Sheet 4, a highly successful product now in national distribution.

Also, for GAF's built-up roofing system, GAF Isotherm polyurethane insulation was added in 1980. Designed for use in roof decks, this GAF-developed rigid insulation has earned a Factory Mutual "class one" fire resistance rating. Here, as with several other roofing products, GAF's market share is increasing.

The company began manufacturing facers for its polyurethane insulation last year, improving manufacturing effi-

ciency and helping control costs. These are being made at the Joliet, Illinois, plant and shipped to St. Louis, Missouri, where GAF makes its roofing insulation.

#### **Building supply centers**

Also aimed at increasing sales of GAF roofing products, in 1980 the company opened building materials supply centers in Baltimore, Maryland, Norfolk and Springfield, Virginia and Memphis, Tennessee. A supply center in King of Prussia, Pennsylvania, was opened in 1979. These centers offer one-stop shopping for roofing contractors by selling a full range of GAF roofing and insulation products as well as associated products made by others. The company has located centers in areas in which it feels its market share can be increased. Further locations are under consideration for 1981.

On the environmental side, GAF installed second-generation fume control systems at four roofing plants last year. The new systems greatly reduce the amount of energy required to get rid of the fumes. This equates to significant savings in energy costs. Modifications are under way at the other roofing plants to achieve similar results.

### **Product List**

#### **Roofing Products**

- Accessories
- Asphalt Shingles
- Built-up Roofing
- Materials
- Coating & Plastic
- Cementitious
- Roll Roofing
- Vent Systems

#### **Insulation Products**

- Building Insulation
- Built-up Roofing
- Insulation
- Fastener Systems

### **Sales and profits**

In 1980, sales from businesses GAF is discontinuing totaled \$553.4 million, compared with sales of \$529.5 million in 1979. Direct operating profits were approximately break-even in 1980, compared with losses of \$2.9 million in 1979. A discussion of the accounting for these businesses can be found in the Notes to the Consolidated Financial Statements on page 28, while the earnings from these businesses appear in the Consolidated Statements of Income on page 24.

As was indicated when GAF announced its intent to discontinue these businesses, most of the product lines involved in the restructuring program are well-positioned in their markets and many have histories of growing sales, market shares and profitability. Were it not for the present state of the economy, GAF might well be investing substantially in their futures. Under present circumstances, however, this is not practical.

- Worldwide reprographic sales rose in 1980 and the product line enjoyed increased profitability. GAF is a world leader in this business and its diazo reproduction machines, papers and associated products have earned excellent reputations for their quality and reliability. GAF's family of large, medium-sized and small diazoprinters for reproducing engineering and architectural drawings is one of the most extensive lines in the industry.

A new, large repro machine, the Series 2000 mercury vapor diazoprinter, was introduced very successfully in 1980, with major sales to oil companies and other users requiring high quantities of high quality diazo copies.

The Gaflog™ diazoprinter for oil drilling logs, introduced in 1979, also sold well in 1980, as did diazo micrographic films, designed to replace more expensive silver halide films in certain applications.

Several manufacturing improvements were made in 1980, enhancing efficiency and product quality. In early 1981, approval was given to install a new folding machine at the sensitized paper plant in Arlington, Texas, which will help meet increasing demand.

- In 1980, sales of GAF flooring, worldwide, were slightly ahead of 1979 levels. Domestic flooring operations were marginally profitable in 1979 and 1980. On the international side, the plant in Mullingar, Ireland, was not profitable causing an overall loss for GAF's flooring operations in 1980.

GAF is one of the major manufacturers and developers of both sheet vinyl and tile, and its products continue to enjoy good customer acceptance. In 1980 the company introduced the Gafstar® 4800 series of sheet vinyl, a medium-priced line with many of the features of higher-priced products. The line received strongly favorable reactions in the marketplace.

In February, 1981, GAF introduced a new system of retail flooring displays, perhaps the most attractive displays in the industry, at a meeting of the nationwide network of distributors of GAF flooring. This new marketing approach was received enthusiastically.

□ Sales of GAF graphic arts materials, largely for the printing industry, increased significantly in 1980, continuing the trend begun in 1977 when the company streamlined its photographic operations. These operations were profitable in 1980, showing solid improvement from 1979 earnings levels. GAF is not a dominant factor in this market, but has enjoyed steadily increasing market share and attracted several large customers in 1980. New products, including Gafmatic™ rapid-access films, introduced during the year were well received in the marketplace.

□ GAF's worldwide pictorial products business consists of View-Master® stereo products, Pana-Vue® slides and viewers, toys such as the new Melody Madness™ electronic game and some smaller lines. Sales in 1980 were even with 1979 levels. This business was not profitable in 1980.

□ The company's paper and millboard operations are a small but profitable business which manufactures these specialized products used by the building industry and the auto industry. Sales and profits slipped last year from 1979 levels, because of the general business declines in both major markets, but the business was still solidly profitable.

□ Vinyl siding is another relatively small business which GAF is offering for sale. Again, due largely to the decline in the housing market and high interest rates, last year's sales were off somewhat from 1979 levels. Although the line is not yet profitable, vinyl siding's results improved substantially in 1980. A number of manufacturing improvements were made in 1980 which reduced costs and enhanced product quality.

□ GAF closed its automotive paddings and mastics operations in Joliet, Illinois, in the summer of 1980, because of the lack of demand for these products from the slumping auto industry. It was expected at that time that the plant could be reopened when demand returned. GAF continues to believe that when car sales increase, there will be a market for these products.

This is the only business being discontinued that is not operating. Inventories on hand when the plant was shut down have been sold.

□ GAF has restored and preserved WNCN-FM, the company's classical music radio station in New York.

Although not yet profitable, GAF's broadcasting operations are now in a positive cash flow position. Listenership continued to rise in 1980, as did advertising revenues.

□ The company's latex operations were sold in December for a price of approximately \$12.5 million, slightly less than book value.

### Research and Development

Several research and development programs begun in the '70s came to fruition in 1980. In particular, improvements were made to technologies in the three plants which GAF opened recently. At the butynediol plant in Seadrift, Texas, for example, microprocessor control was introduced, an improved filtration process was implemented and a superior catalyst was developed.

At the new Fontana, California, roofing plant, the company is using improved heating and mixing systems for asphalt and filler, as well as new instrumentation.

A number of patents have been issued covering GAF developments in glass-mat technology, used at the plant in Chester, South Carolina. New products, including Gafglas™ Ply Sheet 4 and Gafglas Cap Sheet, were created by GAF research and development and brought to market in 1980. Another GAF-developed product introduced in 1980, Isotherm polyurethane insulation, now being made at the St. Louis plant, has excellent fire resistance.

In the area of mineral granules, the company is conducting a series of geological surveys and core drilling investigations aimed at increasing production. An energy conservation program instituted at one demonstration granules kiln in 1980 showed significant fuel savings and increased output. Further studies are under way.

GAF is involved in a number of joint programs which are partly funded by various government agencies. In one, the company is working with the Department of Energy to reduce the asphalt needed to produce roofing shingles without affecting the quality of the shingles. Asphalt is a petroleum derivative and has had steady price increases over the past years. A pilot line was installed in 1980 to make low-asphalt shingles for further evaluation.

Several chemicals were developed and/or introduced by GAF during the year. Among these are

- Two new non-polluting radiation-curable coatings based on GAF's fast-curing vinyl pyrrolidone diluent monomer technology. These require less energy and generate less pollution than traditional solvent coatings and provide wear resistance, low curl, high gloss and stain resistance.
- A new denture adhesive derived from Gantrez® copolymers, with excellent holding power, greater wearer comfort, higher tack and more consistent performance than resins now in use.
- A thermoplastic polyester elastomer with great strength, flexibility and resistance to heat and cold.
- Four new grades of Gafite® PBT resin
- A tailor-made sodium teloacrylate which has resulted in a patented, phosphate-free machine dishwashing formulation. In-house evaluation of this potential product is under way.
- A new, patented, synthetic detergent composition, using Igepon® AC-78 surfactant, with superior cleansing characteristics at skin-safe pH levels and compatibility with a wide range of perfumes, making it a desirable basis for beauty bars.
- New ether sulfate surfactants for use in emulsion polymerization systems

A variety of research and development projects were also conducted in 1980 in support of businesses being offered for sale. Many of the improvements which resulted are now being implemented.

### **Personnel**

In 1980, 20 labor contracts were negotiated all for multi-year terms. Contract settlements compared favorably with those reported by the U.S. Department of Labor and others. There were no strikes during the year. One NLRB election was held, with the union rejected.

GAF's continuing businesses employ approximately 6500 people, with a like number working in businesses being discontinued. The company is making every effort to encourage prospective buyers to retain as many employees as possible.

### **Board of Directors**

The Board regrets the passing, in November, of Sam Harris, a director of GAF and member of the executive and audit committees since 1977. His exemplary service to GAF will long be remembered by all with whom he served.

He was replaced on the Board in December by Dr. Herman Sokol, president of Bristol-Myers Company. A pioneer in antibiotics production, Dr. Sokol and his associates discovered tetracycline in the early 1950s and developed the basic process for its manufacture.

In February, two new directors were nominated to the slate to be presented to the shareholders at the Annual Meeting in April.

Augustine R. Marusi retired in 1979 as chairman and chief executive officer of Borden, Inc. He remains a Borden director and chairman of that company's executive committee.

Robert Spitzer is president and chairman of the board of Treadwell Corporation, a privately held engineering firm engaged in construction of chemical, metallurgical and power plants.

They have been nominated to succeed Carter L. Burgess and James J. O'Leary, who have resigned from the Board.

### **Management**

In June, Abraham Lindenauer was elected vice president in charge of technical services. He has served GAF in a number of technical capacities since 1972.

Juliette M. Moran, a GAF employee since 1943, was elected vice chairman of the Board in July. Formerly executive vice president, she has been a Board member since 1974.

Jay R. Olson was elected president and chief operating officer and a member of the Board of Directors in January, 1981. Mr. Olson joined GAF as corporate treasurer in 1970 and became a vice president in 1972. He was later named senior vice president and in 1978 he became executive vice president and a member of the management committee with responsibility for financial services, distribution and purchasing operations.

Robert E. Miller, vice president-finance, has assumed the responsibilities of chief financial officer, formerly held by Mr. Olson.

In November, 1980, Jonathan Berger was elected a vice president. A member of the company's legal staff since 1969, he was named deputy general counsel in 1979.

In January, 1981, Raymond J. Lacroix was elected controller. He has been with GAF since 1971, serving in a variety of financial positions.

Dr. Donald W. LaPalme was elected a vice president in February, 1981. A GAF employee since 1967, he was most recently general manager at the company's Binghamton, New York, facility.

Management expresses its sorrow at the death of Alfred P. Rimlinger in December. Mr. Rimlinger retired in April, 1980, after 44 years of service to GAF. At that time, he was vice president -international services.

**Jesse Werner**  
Chairman

**Juliette M. Moran**  
Vice Chairman

**T. Roland Berner**  
Chairman of the Board  
Curtiss-Wright Corporation

**Peter Bosshard**  
Executive Vice President  
Credit Suisse

**William S. Ogden**  
Executive Vice President  
Chase Manhattan Bank, N.A.

**Jay R. Olson**  
President  
GAF Corporation

**James T. Sherwin**  
Executive Vice President  
GAF Corporation

**Herman Sokol**  
President  
Bristol-Myers Company

**Nolan B. Sommer**  
Formerly Senior Vice President  
American Cyanamid Company

**The Board of Directors Audit Committee, consisting of outside directors, meets separately with the independent certified public accountants and company management at least twice a year to discuss the scope and results of the annual examination, internal accounting controls and significant accounting matters.**

**Jesse Werner**  
Chairman of the Board

**Jay R. Olson**  
President

**Juliette M. Moran**  
Vice Chairman

**James T. Sherwin**  
Executive Vice President

**Richard F. Smith**  
Executive Vice President

**John A. Brennan**  
Senior Vice President

**Richard F. Bucher**  
Senior Vice President

**James M. Cloney**  
Senior Vice President

**R. Power Fraser, Jr.**  
Senior Vice President

**Jack F. Gow**  
Senior Vice President

**Joseph G. Hall**  
Senior Vice President

**Jack Scheckowitz**  
Senior Vice President

**Louis G. Zachary**  
Senior Vice President

**Jonathan Berger**  
Vice President

**Randolph C. Bramwell**  
Vice President

**John J. Butler**  
Vice President

**Mason B. Cooke**  
Vice President

**Carl R. Eckardt**  
Vice President

**Leo J. Faneuf**  
Vice President

**H. Philip Farnham**  
Vice President

**Jerome K. Full**  
Vice President

**Philip S. Gilchrist**  
Vice President

**Simon W. Kantor**  
Vice President

**Bernard L. Kapell**  
Vice President

**Donald W. LaPalme**  
Vice President

**Abraham Lindenauer**  
Vice President

**Robert F. McCarthy**  
Vice President

**Frederick W. McNabb, Jr.**  
Vice President  
General Counsel and Secretary

**Robert E. Miller**  
Vice President

**Wayne H. Page**  
Vice President

**Raymond W. Smith**  
Vice President

**Raymond J. Lacroix**  
Controller

**Adele S. Weisman**  
Treasurer

Management's discussion is intended to aid the reader in evaluating the company's overall financial condition as well as to provide some insight into the company's future prospects. The accompanying financial statements should be viewed in the light of Management's recent decision to redeploy the company's capital and human resources towards strengthening the continuing businesses.

#### **Financial Condition**

On December 29, 1980, the Board of Directors, after a great deal of study, approved a major restructuring of the company. The company has determined to discontinue several of its major businesses and will concentrate its efforts and capital on its largest businesses—building materials and specialty chemicals.

In announcing the discontinuance program, Management stated its belief that in the present economic climate, the company would have difficulty achieving the cash flow necessary in the next few years to support the concurrent growth of its businesses. Contributing to the decision was the fact that the high cost of money made short-term debt inordinately expensive. As shown on the Consolidated Statements of Income, interest expense increased over 50% in 1980 to \$21.6 million, consuming a large part of operating profit and denying funds required for other corporate purposes. Businesses other than building materials and specialty chemicals are to be converted to cash and that cash will be used, first of all, to reduce debt.

The plan envisages:

- A reduction in the company's debt as a percentage of total capital, which was 35.9% for years 1979 and 1978. A similar calculation for 1980 is not representative because of the impact of the discontinuance program upon the company's balance sheet.
- An increase in the company's return on assets and return on equity.
- A substantial positive cash flow.

To meet any interim financing needs worldwide, a three year, \$225 million credit agreement, with declining availability over the period, is being arranged with a consortium of banks. Interest on these funds will be at the prime rate. Under the terms of the proposed credit agreement, the company will be required to maintain certain levels of working capital and net worth. In addition, the agreement will place limitations, among other things, upon dividends, capital expenditures, funded debt and other borrowings.

The company has also renegotiated its debt instruments with long-term lenders. As a result, scheduled principal repayments on certain loan agreements have been accelerated. Dividends, working capital, funded debt, short-term bank borrowings and operating leases are restricted under provisions of these loan agreements.

Additions to property, plant and equipment and applicable depreciation charges for the previous three years were as follows:

|                      | (Millions) |        |
|----------------------|------------|--------|
|                      | 1979       | 1978   |
| Total Expenditures   | \$58.8     | \$51.1 |
| Depreciation Charges | \$29.2     | \$27.4 |

During the year, the company completed the following major capital projects:

- a specialty chemicals plant at Seadrift, Texas, to produce butynediol, an acetylene derivative,
- a West Coast roofing plant at Fontana, California, to produce roofing materials for the western market.

In addition, during the year, to meet increased market demands, work was started on the following major expansions:

- roofing shingle capacity at the Dallas, Texas, roofing plant,
- granule capacity at the Annapolis, Missouri, granules plant.

At the end of the year the company had commitments of \$9.0 million for approved capital expenditures. Lease obligations are discussed in detail in Note 14 of Notes to Consolidated Financial Statements.

The company, at this time, does not foresee either a redefinition of its capital structure or an issuance of new securities or funded debt (except for the proposed credit agreement mentioned earlier).

**Management's Discussion and Analysis  
of Financial Position and Results of Operations**  
(continued)

**Results of Operations**

The company's overall sales and profit performance in 1980 was down due to adverse economic factors which significantly affected both the building materials and the specialty chemicals businesses.

For the years 1978 to 1980, consolidated sales were higher (12%) in 1979 than in 1978 but lower (1%) in 1980 than 1979. Despite a sales increase of 12% in 1979 over 1978, income from continuing operations was down 8% in 1980; income from continuing operations was down substantially from the previous year (60%).

While price increases were effected in the domestic marketplace and international chemical sales exceeded last year's level, the additional revenues were not enough to offset higher costs for major raw materials and lower product demands.

The favorable trend for chemical sales as indicated by the five-year data in the Summary of Selected Financial Data is expected to continue and improve. The housing related impact on the granules revenues is expected to reverse as the economy strengthens. The company's continued development of specialty surfactants, and the recent completion of the Seadrift plant for the production of butynediol, an acetylene derivative, are expected to strengthen this business segment.

While building materials' 1980 sales decreased 6% from 1979 levels and were about even with 1978 results, Management believes that this segment will return to its past record of increased sales as soon as economic depressants ease. Also expected to contribute to increased sales in 1981 is the development of the company's built-up roofing and insulation products coupled with the planned expansion of the company's supply centers.

Consolidated gross margins were 22.5%, 25.1% and 25.9% for 1980, 1979 and 1978 respectively. The declining profitability in 1980 reflects the continued increased costs of petroleum related products, higher fixed cost absorption rates due to reduced volume at the plants, and the effect of product mix due to reduced demand for building materials products. Added costs were incurred in 1980 for start-up expenses associated with the plant openings at Fontana, California, and Seadrift, Texas.

Management has initiated numerous cost reduction and production efficiency programs in recent years to offset the impact of adverse external influences on its cost of production. In conjunction with the government, a program is under way to reduce the asphalt content of roofing shingles with-

out decreasing product quality; the Seadrift chemical plant is on stream to manufacture butynediol, a preliminary step in the manufacture of butanediol; and numerous roofing plants have or will be converted to utilize the latest technology in glass-mat for shingles.

Increases in other operating expenses of \$13.6 million (12.3%) in 1980 over 1979 and \$13.1 million (13.3%) in 1979 over 1978 were due primarily to the effects of inflation.

The increase in interest expense from 1979 to 1980 of \$7.3 million was directly attributable to the high interest rate on additional short-term borrowings. The average short-term borrowings for 1980, 1979 and 1978 were \$95.4 million, \$51.4 million and \$42.4 million, respectively, bearing a related average interest rate of 12.7%, 11.5% and 7.9%.

The major components of Other Income (Charges) are:

|                            | Dollars in Thousands |          |
|----------------------------|----------------------|----------|
|                            | 1979                 | 1978     |
| Foreign Exchange Pre-tax   | \$(4,089)            | \$ 9,438 |
| Equity Results             | 234                  | (1,848)  |
| Silver Future Transactions | (5,966)              | —        |
| All Other                  | 3,840                | 2,363    |
| Total                      | \$(5,981)            | \$ 8,953 |

Results for foreign exchange, equity method, and silver future transactions are more fully discussed in Notes 3 and 4 of the Notes to Consolidated Financial Statements on page 28. All Other includes interest earned on securities, certain royalty income, and discounts earned on certain purchases. All Other income and charges have been consistent in prior years except for the sale of some properties and a gain on a debenture repurchase in 1979.

The change from a tax rate of 36.4% in 1979 to a tax benefit of 13.7% in 1980 arose primarily from the increased impact of United States investment tax credits, depletion allowances, and the benefits of the Domestic International Sales Corporation on reduced earnings.

See Note 15 of Notes to Consolidated Financial Statements for a discussion concerning the effects of inflation.

Statement of Income information is presented for continuing operations only

|                                                         | Dollars in Millions except per Share Amounts |         |         |         |
|---------------------------------------------------------|----------------------------------------------|---------|---------|---------|
| Year Ended December 31                                  | 1979                                         | 1978    | 1977    | 1976    |
| Net Customer Sales                                      |                                              |         |         |         |
| Chemical                                                | \$264.3                                      | \$217.7 | \$168.0 | \$160.5 |
| Building Materials                                      | 419.4                                        | 391.3   | 338.8   | 291.4   |
| Consolidated Sales                                      | 683.7                                        | 609.0   | 506.8   | 451.9   |
| Direct Operating Profit                                 |                                              |         |         |         |
| Chemical                                                | 62.4                                         | 48.4    | 43.7    | 40.7    |
| Building Materials                                      | 29.7                                         | 41.3    | 37.3    | 31.1    |
| Total                                                   | 92.1                                         | 89.7    | 81.0    | 71.8    |
| Income from Continuing Operations                       | 25.8                                         | 28.1    | 25.0    | 22.5    |
| Primary Earnings per Common Share—Continuing Operations | 1.66                                         | 1.83    | 1.61    | 1.42    |
| Dividends per Common Share                              | .68                                          | .64     | .60     | .58     |

The following Balance Sheet amounts pertaining to years before 1980 have not been restated to separately identify amounts applicable to discontinued segments. See Note 1 of Notes to Consolidated Financial Statements

|                                            | Dollars in Millions |         |         |         |
|--------------------------------------------|---------------------|---------|---------|---------|
| December 31                                | 1979                | 1978    | 1977    | 1976    |
| Current Assets                             | \$492.1             | \$472.2 | \$464.1 | \$451.3 |
| Current Liabilities                        | 201.5               | 179.8   | 186.3   | 145.5   |
| Working Capital                            | 290.6               | 292.4   | 277.8   | 305.8   |
| Property, Plant and Equipment—Net          | 308.4               | 280.6   | 262.9   | 275.1   |
| Total Assets                               | 835.6               | 785.3   | 762.4   | 777.4   |
| Long-term Debt (Including Current Portion) | 206.4               | 196.8   | 198.4   | 202.4   |
| Shareholders' Equity                       | 369.0               | 351.7   | 329.7   | 387.9   |

As of March 2, 1981, there were 51,649 holders on record of GAF's outstanding common stock. The following information pertains to the company's common stock, which is traded on the New York Stock Exchange

|                | 1979  |                | 1979   |        |
|----------------|-------|----------------|--------|--------|
|                |       |                | High   | Low    |
| First Quarter  | \$ 17 | First Quarter  | 13 1/4 | 11 3/8 |
| Second Quarter | \$ 17 | Second Quarter | 12 1/8 | 10 1/8 |
| Third Quarter  | \$ 17 | Third Quarter  | 11 1/8 | 10     |
| Fourth Quarter | \$ 17 | Fourth Quarter | 11 3/4 | 9 1/4  |

GAF has paid cash dividends on its common stock for 62 consecutive quarters. Under the most restrictive provisions of the company's loan agreements, \$18,000,000 of retained earnings are available at December 31, 1980 for future dividends. The company expects to be able to continue regular future dividend payments, under agreements reached with its lenders in connection with the discontinuance program. See also Notes 1 and 13 of Notes to Consolidated Financial Statements

|                                                                               | Dollars in Millions |         |         |         |
|-------------------------------------------------------------------------------|---------------------|---------|---------|---------|
|                                                                               | 1979 by Quarter     |         |         |         |
|                                                                               | First               | Second  | Third   | Fourth  |
| Net Sales                                                                     | \$143.8             | \$166.9 | \$188.2 | \$184.8 |
| Cost of Products Sold                                                         | 107.3               | 123.3   | 141.7   | 139.5   |
| Gross Profit                                                                  | \$ 36.5             | \$ 43.6 | \$ 46.5 | \$ 45.3 |
| Income (Loss) before Other Income<br>(Charges) and Income Taxes               | \$ 9.0              | \$ 12.9 | \$ 13.8 | \$ 10.9 |
| Other Income (Charges)                                                        | (3.0)               | (3.1)   | (1.5)   | 1.6     |
| Income (Loss) from Continuing<br>Operations before Income Taxes               | 6.0                 | 9.8     | 12.3    | 12.5    |
| Income Taxes (Benefits)                                                       | 2.2                 | 3.8     | 3.7     | 5.1     |
| Income (Loss) from Continuing<br>Operations                                   | 3.8                 | 6.0     | 8.6     | 7.4     |
| Income (Loss) from Discontinued<br>Segments Net of Income Taxes<br>(Benefits) | 1.5                 | (1.0)   | 1.7     | 2       |
| Net Income (Loss)                                                             | \$ 5.3              | \$ 5.0  | \$ 10.3 | \$ 7.6  |
| Earnings per Common Share***                                                  | Dollars             |         |         |         |
| Primary                                                                       |                     |         |         |         |
| Continuing                                                                    | \$ .22              | \$ .38  | \$ .57  | \$ .49  |
| Discontinued                                                                  | .11                 | (.08)   | .13     | .01     |
| Net Income (Loss)                                                             | \$ .33              | \$ .30  | \$ .70  | \$ .50  |
| Fully Diluted                                                                 |                     |         |         |         |
| Continuing                                                                    | \$ .22              | \$ .34  | \$ .49  | \$ .43  |
| Discontinued                                                                  | .09                 | (.06)   | .10     | .01     |
| Net Income                                                                    | \$ .31              | \$ .28  | \$ .59  | \$ .44  |

\*Previously reported amounts have been restated for discontinued segments—See Note 1 of Notes to Consolidated Financial Statements.

\*\*Figure omitted—not dilutive. See Note 5 of Notes to Consolidated Financial Statements

\*\*\*In accordance with the provisions of APB Opinion No. 15, earnings per share are calculated separately for each quarter and the annual period. Accordingly, annual earnings per share will not necessarily equal the total of the interim periods

**GAF 13152**

(The following accounting policies apply to the continuing operations of the company.)

**Principles of Consolidation**

The accounts of all significant subsidiaries of the company are included in the consolidated financial statements. A wholly owned captive insurance subsidiary and the 50% ownership of a chemical manufacturing company are carried on the equity method.

**Short-term Investments**

Short-term investments are valued at cost, which approximates market.

**Inventories**

Inventories are valued at the lower of cost (principally average) or market.

**Property, Plant and Equipment, and Related Depreciation**

Depreciation is computed principally on the straight-line method based on the estimated economic lives of the assets. These lives are subject to periodic review and revision to assure that the cost of the related assets is written off over their economic lives.

Beginning in 1979, certain interest charges are capitalized as part of the cost of property, plant and equipment additions. See Note 2 of Notes to Consolidated Financial Statements.

**Deferred Income Taxes**

Deferred income taxes arise from reporting certain income and expense items in the financial statements in periods different from those in which such amounts are reported for income tax purposes.

**Investment Tax Credit**

The company accounts for investment tax credits arising since January 1, 1971, as a reduction of the provision for United States income tax (the flow-through method) investment tax credits which arose prior to that date have been deferred and are being amortized over the estimated service lives of the related assets.

**Retirement Plans**

The company and its subsidiaries have retirement plans covering substantially all employees. The company's policy is to fund amounts equal to pension costs accrued and, for plans with prior service costs, to amortize such costs over periods not to exceed forty years.

**Earnings Per Share**

Primary earnings per common share are computed by dividing income, less preferred stock dividend requirements, by the weighted average number of shares of common stock outstanding during the year. The computation assumes the exercise of outstanding stock options to the extent they are dilutive.

Fully diluted earnings per common share are computed on the assumption (where the effect thereof would be dilutive) that convertible securities outstanding had been converted into shares of common stock. Appropriate adjustments for dividends on preferred stock and interest on convertible notes (net of income tax effect) are made to earnings applicable to common stock for assumed conversions. The computation also assumes the exercise of all dilutive stock options.

| Year Ended December 31                                                                                                | 1979          | 1978          |
|-----------------------------------------------------------------------------------------------------------------------|---------------|---------------|
| <b>Net Sales</b>                                                                                                      | \$683,749,000 | \$608,968,000 |
| <b>Costs and Expenses</b>                                                                                             |               |               |
| Cost of products sold                                                                                                 | 511,805,000   | 451,485,000   |
| Distribution, selling and advertising                                                                                 | 67,128,000    | 59,384,000    |
| Research and development                                                                                              | 7,324,000     | 5,917,000     |
| General and administrative                                                                                            | 36,618,000    | 32,693,000    |
| Interest (Note 2)                                                                                                     | 14,307,000    | 15,045,000    |
| Total Costs and Expenses                                                                                              | 637,182,000   | 564,524,000   |
| <b>Income before Other Income (Charges) and Income Taxes (Benefits)</b>                                               | 46,567,000    | 44,444,000    |
| <b>Other Income (Charges) (Notes 3 &amp; 4)</b>                                                                       | (5,981,000)   | 8,953,000     |
| <b>Income from Continuing Operations before Income Taxes (Benefits)</b>                                               | 40,586,000    | 53,397,000    |
| <b>Income Taxes (Benefits) (Note 9)</b>                                                                               | 14,758,000    | 25,341,000    |
| <b>Income from Continuing Operations</b>                                                                              | 25,828,000    | 28,056,000    |
| <b>Discontinued Segments (Notes 1 &amp; 9)</b>                                                                        |               |               |
| Operating income, net of income taxes (benefits) of \$(466,000) in 1980, \$(5,287,000) in 1979, and \$750,000 in 1978 | 2,355,000     | 6,108,000     |
| Estimated loss from disposition, net of income tax benefit of \$10,460,000                                            | —             | —             |
| <b>Income (Loss) from Discontinued Segments</b>                                                                       | 2,355,000     | 6,108,000     |
| <b>Net Income (Loss)</b>                                                                                              | \$ 28,183,000 | \$ 34,164,000 |
| <b>Weighted Average Number of Common and Common Equivalent Shares Outstanding</b>                                     | 13,386,000    | 13,306,000    |
| <b>Earnings per Common Share</b>                                                                                      |               |               |
| Primary                                                                                                               |               |               |
| Continuing                                                                                                            | \$1.66        | \$1.83        |
| Discontinued                                                                                                          | .17           | .46           |
| Net Income (Loss)                                                                                                     | \$1.83        | \$2.29        |
| Fully Diluted (Note 5)                                                                                                |               |               |
| Continuing                                                                                                            | \$1.49        | \$1.62        |
| Discontinued                                                                                                          | .13           | .35           |
| Net Income                                                                                                            | \$1.62        | \$1.97        |

| Year Ended December 31                                                          | 1979          | 1978          |
|---------------------------------------------------------------------------------|---------------|---------------|
| Balance January 1                                                               | \$285,613,000 | \$263,542,000 |
| Net Income (Loss)                                                               | 28,183,000    | 34,164,000    |
| Less cash dividends:                                                            |               |               |
| Preferred stock (\$1.20 per share)                                              | 3,635,000     | 3,636,000     |
| Common stock (1980—\$.77 per share, 1979—\$.68 per share, 1978—\$.64 per share) | 9,069,000     | 8,457,000     |
| Balance, December 31                                                            | \$301,092,000 | \$285,613,000 |

See Summary of Significant Accounting Policies and Notes to Consolidated Financial Statements

Year Ended December 31

1979

1978

**Working Capital Provided****Continuing Operations**

|                                                    |               |               |
|----------------------------------------------------|---------------|---------------|
| Income from Continuing Operations                  | \$ 25,828,000 | \$ 28,056,000 |
| Charges (Credits) not affecting working capital    |               |               |
| Depreciation                                       | 15,725,000    | 15,001,000    |
| Deferred income taxes                              | 2,617,000     | 229,000       |
| Foreign exchange (gains) losses—noncurrent portion | 2,226,000     | 3,273,000     |
| Other                                              | 884,000       | 4,455,000     |
| Working Capital provided                           | 47,280,000    | 51,014,000    |

**Discontinued Segments**

|                                                                 |             |             |
|-----------------------------------------------------------------|-------------|-------------|
| Income (Loss) from Discontinued Segments                        | 2,355,000   | 6,108,000   |
| Charges (credits) not affecting working capital                 |             |             |
| Depreciation                                                    | 13,465,000  | 12,363,000  |
| Deferred income tax benefits                                    | (919,000)   | (5,824,000) |
| Provision for employee benefits—noncurrent portion              | —           | —           |
| Provision for loss on disposition of fixed assets               | —           | —           |
| Write-off of intangible assets—noncurrent portion               | —           | —           |
| Other                                                           | 968,000     | 2,170,000   |
| Working Capital used                                            | 15,869,000  | 14,817,000  |
| Total working capital provided (used) from operations           | 63,149,000  | 65,831,000  |
| Increases in long-term debt                                     | 27,274,000  | 4,060,000   |
| Fixed assets of discontinued segments held for sale             | —           | 3,991,000   |
| Increase (decrease) in noncurrent liability for phase-out costs | (1,752,000) | 7,631,000   |
| Other                                                           | —           | 4,605,000   |
| Total                                                           | 88,671,000  | 86,118,000  |

**Working Capital Applied**

|                                            |            |            |
|--------------------------------------------|------------|------------|
| Additions to property, plant and equipment | 58,804,000 | 51,148,000 |
| Cash dividends                             | 12,704,000 | 12,093,000 |
| Reductions in long-term debt               | 14,336,000 | 8,278,000  |
| Other                                      | 4,672,000  | —          |
| Total                                      | 90,516,000 | 71,519,000 |

**Increase (Decrease) in Working Capital**

|                              |                |                |
|------------------------------|----------------|----------------|
|                              | (1,845,000)    | 14,599,000     |
| Working Capital, January 1   | 292,405,000    | 277,806,000    |
| Working Capital, December 31 | \$ 290,560,000 | \$ 292,405,000 |

**Analysis of Changes in Working Capital****Increase (decrease) in current assets**

|                                 |              |                |
|---------------------------------|--------------|----------------|
| Cash                            | \$ 3,519,000 | \$ (4,745,000) |
| Short-term investments          | (21,450,000) | 22,035,000     |
| Accounts receivable             | 11,772,000   | 35,770,000     |
| Inventories                     | 53,765,000   | 16,069,000     |
| Prepaid expenses                | (1,084,000)  | 2,385,000      |
| Income tax benefits             | (4,182,000)  | (14,133,000)   |
| Assets of discontinued segments | (22,448,000) | (49,296,000)   |
| Total                           | 19,892,000   | 8,085,000      |

**(Increase) decrease in current liabilities**

|                                   |              |             |
|-----------------------------------|--------------|-------------|
| Notes payable                     | 5,958,000    | 9,244,000   |
| Current portion of long-term debt | 3,662,000    | (1,543,000) |
| Accounts payable                  | (30,717,000) | (7,492,000) |
| Accrued liabilities               | 451,000      | 8,229,000   |
| Income taxes payable              | (1,091,000)  | (1,924,000) |
| Total                             | (21,737,000) | 6,514,000   |

**Increase (Decrease) in Working Capital**

|  |                |               |
|--|----------------|---------------|
|  | \$ (1,845,000) | \$ 14,599,000 |
|--|----------------|---------------|

See Summary of Significant Accounting Policies and Notes to Consolidated Financial Statements.

December 31

1979

**Assets****Current Assets**

|                                                                                                         |               |
|---------------------------------------------------------------------------------------------------------|---------------|
| Cash                                                                                                    | \$ 17,903,000 |
| Short-term investments                                                                                  | 1,175,000     |
| Accounts receivable—trade, less allowance for doubtful<br>accounts—1980, \$1,842,000; 1979, \$5,779,000 | 188,586,000   |
| Accounts receivable—other                                                                               | 10,007,000    |
| Inventories:                                                                                            |               |
| Finished goods                                                                                          | 126,071,000   |
| Work in process                                                                                         | 37,552,000    |
| Raw materials and supplies                                                                              | 100,587,000   |
| Total inventories                                                                                       | 264,210,000   |
| Prepaid expenses                                                                                        | 9,986,000     |
| Income tax benefits                                                                                     | 256,000       |
| Assets of discontinued segments,<br>at estimated realizable value (Note 1)                              | —             |
| Total Current Assets                                                                                    | 492,123,000   |

**Property, Plant and Equipment, at cost (Note 14)**

|                                     |             |
|-------------------------------------|-------------|
| Land and land improvements          | 19,463,000  |
| Buildings and building equipment    | 130,451,000 |
| Machinery and equipment             | 299,758,000 |
| Construction in progress            | 25,062,000  |
| Total Property, Plant and Equipment | 474,734,000 |
| Less accumulated depreciation       | 166,327,000 |
| Property, Plant and Equipment—Net   | 308,407,000 |

**Cost in Excess of Net Assets Acquired**

24,321,000

**Other Assets**

10,784,000

**Total Assets**

\$835,635,000

Balance Sheet amounts for 1979 have not been restated to separately identify amounts applicable to discontinued segments  
See Summary of Significant Accounting Policies and Notes to Consolidated Financial Statements

GAF 13156

December 31

1979

**Liabilities and Shareholders' Equity****Current Liabilities**

|                                                  |               |
|--------------------------------------------------|---------------|
| Notes payable (Note 13)                          | \$ 17,650,000 |
| Current portion of long-term debt (Notes 1 & 13) | 4,462,000     |
| Accounts payable                                 |               |
| Trade                                            | 102,801,000   |
| Other                                            | 7,049,000     |
| Accrued liabilities:                             |               |
| Payroll                                          | 5,886,000     |
| Retirement Plan                                  | 11,582,000    |
| Other taxes                                      | 5,624,000     |
| Interest                                         | 4,610,000     |
| Other (Note 1)                                   | 36,897,000    |
| Income taxes payable                             | 5,002,000     |
| Total Current Liabilities                        | 201,563,000   |

**Long-term Debt Less Current Portion (Note 13)** 201,930,000

**Deferred Credits**

|                        |            |
|------------------------|------------|
| Income taxes (Note 9)  | 19,520,000 |
| Investment tax credit  | 1,436,000  |
| Total Deferred Credits | 20,956,000 |

**Other Liabilities (Note 1)** 42,156,000

**Commitments and Contingent Liabilities (Note 14)**

Total Liabilities 466,605,000

**Shareholders' Equity (Notes 11, 12 & 13)**

|                                                                                                                                                                                                                                     |                      |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|
| Preferred stock, \$1 par value; authorized 6,000,000 shares;<br>\$1.20 convertible series issued—1980, 3,068,201 shares;<br>1979, 3,105,677 shares; at assigned value of \$1.25 per<br>share (liquidation value 1980, \$82,274,528) | 3,882,000            |
| Common stock, \$1 par value; authorized 25,000,000 shares;<br>issued—1980, 13,817,202 shares; 1979, 13,770,359 shares                                                                                                               | 13,770,000           |
| Additional paid-in capital                                                                                                                                                                                                          | 53,900,000           |
| Retained earnings                                                                                                                                                                                                                   | 301,092,000          |
| Total                                                                                                                                                                                                                               | 372,644,000          |
| Less stock held in treasury, at cost:                                                                                                                                                                                               |                      |
| Common—1980, 236,887 shares; 1979, 323,787 shares                                                                                                                                                                                   | 2,682,000            |
| Preferred—76,400 shares in 1980 and 1979                                                                                                                                                                                            | 932,000              |
| Total Shareholders' Equity                                                                                                                                                                                                          | 369,030,000          |
| <b>Total Liabilities and Shareholders' Equity</b>                                                                                                                                                                                   | <b>\$835,635,000</b> |

Balance Sheet amounts for 1979 have not been restated to separately identify amounts applicable to discontinued segments  
See Summary of Significant Accounting Policies and Notes to Consolidated Financial Statements.

GAF 13157

The company announced on December 30, 1980, its decision to classify as discontinued a number of businesses including its reprographics, photographic graphic arts products, pictorial products, resilient flooring and certain other smaller businesses. Also included in the discontinuance program is a latex plant, sold in December, 1980, and the company's x-ray film and related chemical businesses that were terminated on March 21, 1980. To provide for its working capital needs during the period of this program, the company is negotiating a three-year, \$225 million revolving line of credit with a group of banks. See Note 13 for further discussion.

Operating income of the discontinued segments reflects income earned prior to the effective date of the discontinuance. All anticipated losses subsequent to the effective date of discontinuance have been provided in the Estimated loss from disposition.

As of December 31, 1980, a provision of \$254.7 million (\$244.2 million after tax benefits of \$10.5 million) was recorded and consists of a reserve for the loss on disposition of assets and a liability for anticipated phase-out costs. An analysis of these accounts follows:

|                            | Reserve<br>For Loss On<br>Disposition<br>of Assets | Liability<br>For<br>Phase-Out<br>Costs | Total   |
|----------------------------|----------------------------------------------------|----------------------------------------|---------|
|                            | Dollars in Millions                                |                                        |         |
| Total Provision            | \$127.0                                            | \$127.7                                | \$254.7 |
| Activity during 1980       |                                                    |                                        |         |
| X-ray phase-out costs      |                                                    | (6.0)                                  | (6.0)   |
| Sale of latex business     | (1.0)                                              |                                        | (1.0)   |
| Balance, December 31, 1980 | \$126.0                                            | \$121.7                                | \$247.7 |

Future adjustments to this provision may occur for tax benefits of up to \$65.0 million, which will not be reflected in the financial statements until realization is assured.

The current portion of the liability for phase-out costs is estimated at \$68.1 million and is included in accrued liabilities; the non-current portion of \$53.6 million is included in other liabilities. In addition, \$29.9 million of long-term debt has been reclassified to the current portion of long-term debt.

For 1980 the assets of discontinued segments have been reclassified to remove them from their historic classifications and to separately identify them at their estimated net realizable value. The 1979 Consolidated Balance Sheet has not been similarly reclassified; however, amounts for both years are presented below.

|                                                | Dollars in Millions |
|------------------------------------------------|---------------------|
| December 31                                    | 1979                |
| Accounts Receivable—Net                        | \$ 85.6             |
| Inventories—Net                                | 171.5               |
| Property, Plant and Equipment—Net              | 135.5               |
| Other                                          | 22.9                |
| Total Assets                                   | \$415.5             |
| Less reserve for loss on disposition of assets |                     |
| Total Assets at Estimated Net Realizable Value |                     |

The Consolidated Statements of Income for the years ended December 31, 1979 and 1978 have been restated to exclude the sales, costs and expenses of the dis-

continued segments from the captions applicable to the continuing operations, and the net income from the discontinued segments has been reported separately.

Sales applicable to the discontinued segments prior to the dates at which they have been accounted for as discontinued, were \$553.4 million for 1980, \$529.5 million for 1979, and \$454.3 million for 1978.

Total interest cost incurred for continuing operations during the years 1980 and 1979 was \$24.7 million and \$17.0 million, respectively. Of the total in the years 1980 and 1979, \$3.1 million and \$2.7 million, respectively, were capitalized in connection with financing additions to property, plant and equipment, resulting in reported interest expense for continuing operations of \$21.6 million and \$14.3 million in those years. Capitalization of a portion of interest costs was adopted in 1979 in accordance with a Statement issued by the Financial Accounting Standards Board.

Foreign exchange gains (losses) on continuing operations are comprised as follows:

|                            | Dollars in Thousands |            |
|----------------------------|----------------------|------------|
|                            | 1979                 | 1978       |
| For the year               |                      |            |
| Pre-tax                    |                      |            |
| Translation                | \$ (765)             | \$ (1,973) |
| Forward exchange contracts | (3,284)              | 10,002     |
| Other                      | (40)                 | 409        |
| Total                      | \$ (4,089)           | \$ 8,438   |
| After tax                  |                      |            |
| Translation                | \$ (765)             | \$ (1,973) |
| Forward exchange contracts | (1,675)              | 4,901      |
| Other                      | 18                   | 104        |
| Total                      | \$ (2,422)           | \$ 3,032   |

Taxes related to foreign exchange are included in Income Taxes (Benefits). Generally, balance sheet translations are not tax effected, whereas the results of forward exchange contracts are subject to tax.

The net results of a wholly owned, captive insurance subsidiary and the company's share of the net results of its 50% ownership in a chemical manufacturing company are recorded in Other Income (Charges) on the Consolidated Statements of Income. For the years 1980, 1979, and 1978, respectively, equity method results showed a loss of \$966,000, income of \$234,000 and a loss of \$1,848,000. Foreign exchange gains and losses related to these investments are included within amounts reported in Note 3.

Included in Other Income (Charges) for the year 1979 is a loss of \$5,966,000 on silver future transactions.

Fully diluted earnings per share assume conversion of the 5% and 5½% convertible subordinated notes and the common stock equivalents which would arise from the exercise of stock options. Assumed conversions for the 1980 net loss per share would have been anti-dilutive and have therefore been excluded.

|                                                       | Dollars in Millions |         |
|-------------------------------------------------------|---------------------|---------|
|                                                       | 1979                | 1978    |
| Sales                                                 |                     |         |
| Chemical                                              | \$290.5             | \$241.6 |
| Less Intersegment Sales**                             | 26.2                | 23.9    |
| Net Chemical                                          | 264.3               | 217.7   |
| Building Materials                                    | 419.4               | 391.3   |
| Consolidated Sales                                    | \$683.7             | \$609.0 |
| Direct Operating Profit                               |                     |         |
| Chemical                                              | \$ 62.4             | \$ 48.4 |
| Building Materials                                    | 29.7                | 41.3    |
| Total                                                 | 92.1                | 89.7    |
| Corporate Expenses                                    | (51.5)              | (36.3)  |
| Income from Continuing Operations before Income Taxes | \$ 40.6             | \$ 53.4 |
| Identifiable Assets                                   |                     |         |
| Chemical                                              | \$182.6             | \$163.4 |
| Building Materials                                    | 348.5               | 296.3   |
| Photo & Repro                                         | 239.0               | 241.6   |
| Corporate                                             | 65.5                | 61.6    |
| Assets of Discontinued Segments                       | —                   | 22.4*** |
| Total Assets                                          | \$835.6             | \$785.3 |
| Additions to Property, Plant and Equipment            |                     |         |
| Chemical                                              | \$ 15.3             | \$ 8.5  |
| Building Materials                                    | 34.6                | 32.4    |
| Photo & Repro                                         | 6.3                 | 9.0     |
| Corporate                                             | 2.6                 | 1.2     |
| Assets of Discontinued Segments                       | —                   | —       |
| Total                                                 | \$ 58.8             | \$51.1  |
| Depreciation                                          |                     |         |
| Chemical                                              | \$ 8.2              | \$ 7.8  |
| Building Materials                                    | 6.1                 | 5.8     |
| Corporate                                             | 1.4                 | 1.4     |
| Total                                                 | \$ 15.7             | \$ 15.0 |

\*Statement of Income information is presented so as to segregate continuing from discontinued operations for all periods. Balance Sheet amounts for years prior to 1980 have not been restated. See Note 1.

\*\*Intersegment sales are recorded at the same prices charged to unaffiliated customers. Intersegment sales by the Building Materials group were negligible.

\*\*\*Assets of discontinued segments at estimated realizable value related to the 1977 discontinuance program.

GAF 13159

Information with respect to operations by geographic area is as follows.

| Dollars in Millions                                   |               |                |         |                        |                    |
|-------------------------------------------------------|---------------|----------------|---------|------------------------|--------------------|
|                                                       | United States | Western Europe | Other   | Eliminations and Other | Total Consolidated |
| Sales                                                 | \$636.7       | \$ 67.5        | \$ 15.0 | \$ (42.0)              | \$677.2            |
| Less intergeographic sales**                          | 29.6          | 12.4           | —       | (42.0)                 | —                  |
| Sales to Unaffiliated Customers                       | 607.1         | 55.1           | 15.0    | —                      | 677.2              |
| Direct Operating Profit                               | 51.0          | 12.5           | 2.2     | —                      | 65.7               |
| Corporate Office Expenses                             |               |                |         |                        | (56.6)             |
| Income from Continuing Operations before Income Taxes |               |                |         |                        | 9.1                |
| Identifiable Assets                                   | 396.0         | 28.8           | 7.8     | 265.7***               | 698.3              |
| <b>1979</b>                                           |               |                |         |                        |                    |
| Sales                                                 | \$648.8       | \$ 63.8        | \$ 9.7  | \$ (38.6)              | \$683.7            |
| Less intergeographic sales**                          | 27.7          | 10.9           | —       | (38.6)                 | —                  |
| Sales to Unaffiliated Customers                       | 621.1         | 52.9           | 9.7     | —                      | 683.7              |
| Direct Operating Profit                               | 75.4          | 15.7           | 1.0     | —                      | 92.1               |
| Corporate Office Expenses                             |               |                |         |                        | (51.5)             |
| Income from Continuing Operations before Income Taxes |               |                |         |                        | 40.6               |
| Identifiable Assets                                   | 640.8         | 168.6          | 26.2    | —                      | 835.6              |
| <b>1978</b>                                           |               |                |         |                        |                    |
| Sales                                                 | \$584.0       | \$ 46.1        | \$ 5.9  | \$ (27.0)              | \$609.0            |
| Less intergeographic sales**                          | 19.4          | 7.6            | —       | (27.0)                 | —                  |
| Sales to Unaffiliated Customers                       | 564.6         | 38.5           | 5.9     | —                      | 609.0              |
| Direct Operating Profit                               | 78.2          | 10.7           | 8       | —                      | 89.7               |
| Corporate Office Expenses                             |               |                |         |                        | (36.3)             |
| Income from Continuing Operations before Income Taxes |               |                |         |                        | 53.4               |
| Identifiable Assets                                   | 595.8         | 142.4          | 24.7    | 22.4****               | 785.3              |

\*Geographic information is presented so as to segregate continuing from discontinued operations for all periods for information pertaining to the Statements of Income. Balance Sheet amounts for years prior to 1980 have not been restated. See Note 1.

\*\*Intergeographic transfers are recorded at prices, above cost, as negotiated between the operating units.

\*\*\*Assets of discontinued segments at estimated realizable value. See Note 1.

\*\*\*\*Assets of discontinued segments at estimated realizable value related to the 1977 discontinuance program.

**GAF 13160**

The cost of employee retirement benefits for continuing operations was \$9,806,000 in 1980, \$8,613,000 in 1979, and \$8,659,000 in 1978. At December 31, 1980, the estimated unfunded prior service cost was \$29,958,000. A comparison of the accumulated Plan benefits and Plan net assets for the company's domestic defined benefit plans is presented below

|                                                       | Dollars in Thousands |           |
|-------------------------------------------------------|----------------------|-----------|
| December 31                                           | 1979                 | 1978      |
| Actuarial present value of accumulated Plan benefits: |                      |           |
| Vested                                                | \$214,759            | \$204,226 |
| Non-Vested                                            | 10,553               | 12,419    |
| Total                                                 | \$225,312            | \$216,645 |
| Plan assets available for benefits                    | \$151,743            | \$145,831 |

The weighted average assumed rate of return used in determining the actuarial present value of accumulated Plan benefits was 6% in each year. The benefit information was determined as of January 1, 1980, 1979, and 1978.

Provision has not been made for United States income taxes on unremitted earnings of foreign subsidiaries of \$43,012,000, since any withholding taxes and United States income taxes payable on dividends based on undistributed earnings would be substantially offset by foreign tax credits. United States income taxes have not been provided on the unremitted earnings of the Domestic International Sales Corporation subsidiary aggregating \$14,266,000 through December 31, 1980, since the company intends to postpone indefinitely the remittance of such earnings.

Income from continuing operations before income taxes consists of domestic and foreign income as follows:

|                                                             | Dollars in Thousands |          |
|-------------------------------------------------------------|----------------------|----------|
| For the year                                                | 1979                 | 1978     |
| Domestic                                                    | \$23,986             | \$41,601 |
| Foreign                                                     | 16,600               | 11,796   |
| Total income from Continuing Operations before Income Taxes | \$40,586             | \$53,397 |

The provision for income taxes on continuing operations consists of the following:

|                                                                                    | Dollars in Thousands |          |
|------------------------------------------------------------------------------------|----------------------|----------|
| For the year                                                                       | 1979                 | 1978     |
| United States—current                                                              | \$ 6,657             | \$20,123 |
| United States—deferred                                                             | 2,874                | 431      |
| United States investment tax credit                                                | (3,022)              | (1,992)  |
| Amortization of deferred United States investment tax credit arising prior to 1971 | (572)                | (572)    |
| Foreign—current                                                                    | 7,534                | 5,514    |
| Foreign—deferred                                                                   | (257)                | (1202)   |
| State                                                                              | 1,544                | 2,039    |
| Total income Taxes (Benefit)                                                       | \$14,758             | \$25,341 |

Total tax expenses (benefits) for the years 1980, 1979 and 1978 were less than the amounts computed by applying

the U.S. Federal statutory income tax rate to income before taxes. The reasons for these differences are as follows:

|                                                                   | Dollars in Thousands |          |
|-------------------------------------------------------------------|----------------------|----------|
| For the year                                                      | 1979                 | 1978     |
| Tax at statutory rate                                             | \$18,670             | \$25,631 |
| Increases (decreases) resulting from:                             |                      |          |
| United States investment tax credits                              | (3,594)              | 2,564    |
| Domestic International Sales Corporation and depletion allowances | (942)                | (778)    |
| Foreign operations, including foreign exchange gains and losses   | 306                  | 1,611    |
| Capital transactions and other—net                                | 318                  | 1,441    |
| Total Income Taxes (Benefit)                                      | \$14,758             | \$25,341 |

The principal sources of United States deferred taxes applicable to continuing operations were:

|                                                                                      | Dollars in Thousands |           |
|--------------------------------------------------------------------------------------|----------------------|-----------|
| For the year                                                                         | 1979                 | 1978      |
| Excess of tax depreciation over amount reported in Consolidated Statements of Income | \$(1,960)            | \$(1,227) |
| Interest expense capitalized (see Note 2)                                            | (1,187)              | —         |
| Foreign exchange translation                                                         | 955                  | 275       |
| Pension expense                                                                      | (966)                | (30)      |
| Other—net                                                                            | 284                  | 551       |
| Total                                                                                | \$(2,874)            | \$ (431)  |

As of December 31, 1980, unused investment tax credits of approximately \$4.7 million are available for offset against future tax liabilities through 1987.

For 1979, the income tax benefit on discontinued operations includes \$3.2 million resulting from a 1979 change in United Kingdom tax laws related to inventories.

The following expenses of continuing operations are included in the Consolidated Statements of Income:

|                          | Dollars in Thousands |          |
|--------------------------|----------------------|----------|
| For the Year             | 1979                 | 1978     |
| Maintenance and repairs  | \$40,154             | \$37,792 |
| Rent on operating leases | 12,618               | 11,875   |

**GAF 13161**

The \$1.20 convertible preferred stock, dividends on which are cumulative, is convertible at any time into common stock at the rate of 1 1/4 shares of common stock for each share of preferred. The company may redeem the preferred stock at \$27.50 per share. In the opinion of counsel for the company, retained earnings are not restricted as to payment of dividends on common stock by reason of the liquidation preferences of the \$1.20 convertible preferred stock.

Transactions in common stock held in treasury were as follows:

|                                                                                                                                                                                      | Dollars in Thousands |          |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|----------|
|                                                                                                                                                                                      | 1979                 | 1978     |
| Balance, January 1                                                                                                                                                                   | \$ 4,531             | \$ 4,438 |
| Re-purchase of 10,600 shares in 1980,<br>3,500 shares in 1979 and 17,000 shares<br>in 1978 pursuant to the stock<br>purchase plan                                                    | 19                   | 93       |
| Issuance from treasury of 97,500 shares<br>in 1980 and 246,920 shares in 1979 (in<br>connection with sales under the stock<br>option plan and the restricted stock<br>purchase plan) | (1,868)              | —        |
| Balance, December 31                                                                                                                                                                 | \$ 2,682             | \$ 4,531 |

As a result of the above issuance of treasury shares during 1980 and 1979, additional paid-in capital has been decreased by \$123,000 and \$174,000, respectively.

The shares of common stock reserved for issuance at December 31, 1980 and 1979 were as follows:

|                                                     | 1979      |
|-----------------------------------------------------|-----------|
| Reserved for                                        |           |
| Conversion of \$1.20 convertible<br>preferred stock | 3,882,096 |
| Conversion of convertible<br>subordinated notes     | 381,747   |
| Exercise under stock option and<br>purchase plans   | 1,321,270 |
| Total                                               | 5,585,113 |

During 1980, 37,476 shares of preferred stock, assigned value of \$46,845, were converted into 46,843 shares of common stock; during 1979, 90 shares of preferred stock were converted into 112 shares of common stock; during 1978, 190 shares of preferred stock, assigned value of \$1,000, were converted into 237 shares of common stock.

The company's stock option plans provide for the granting of options to key employees to purchase common stock of the company at not less than 100% of the fair market value at the date of grant. Under the terms of the 1975 non-qualified plan, options for 800,000 shares of common stock may be granted during a ten-year period ending February 11, 1985. Options granted to date are exercisable one year after grant and expire after 10 years. The plan provides for stock appreciation rights, wherein an option holder may request "surrender" of the option in exchange for payment (in cash or stock) by the company of the difference between the option and market prices on the date of surrender. The requested surrender of an option may be granted or denied at the discretion of the company's Stock Option Committee.

Authority to grant options under the 1965 qualified plan expired on March 31, 1975. Options granted under this plan expired five years from the date of grant. Transactions affecting options under these plans are as follows:

|                               | Number of shares | Average Option Price |
|-------------------------------|------------------|----------------------|
| Outstanding January 1, 1978   | 507,940          | \$10.07              |
| Granted                       | —                | —                    |
| Exercised                     | (24,290)         | 9.60                 |
| Terminated                    | (79,750)         | 12.04                |
| Outstanding December 31, 1978 | 403,900          | 9.64                 |
| Granted                       | 317,000          | 11.30                |
| Exercised & Surrendered       | (89,130)         | 9.60                 |
| Terminated                    | (13,100)         | 10.29                |
| Outstanding December 31, 1979 | 618,670          | 10.48                |
| Granted                       | 132,000          | 11.50                |
| Exercised                     | (22,500)         | 10.28                |
| Terminated                    | (115,500)        | 9.87                 |
| Outstanding December 31, 1980 | 612,670          | 10.82                |

Of the total options outstanding at December 31, 1980, 1979 and 1978, respectively, 480,670, 305,670, and 403,900 were exercisable. Options for 119,500, 238,000, and 548,000 shares were available for grant at December 31, 1980, 1979 and 1978, respectively.

Under the provisions of the company's 1969 restricted and unrestricted stock purchase plan, 650,000 shares of common stock were authorized for sale to key employees. The plan currently provides that restricted and unrestricted shares may be sold at prices which are not less than 50% and 80%, respectively, of the closing market price preceding the date on which an employee is designated as one to whom shares may be offered. Under certain conditions, the company has the right to repurchase restricted shares of common stock at the original selling price.

The excess of quoted market value at the date of grant over the aggregate sales price for restricted shares sold is amortized by charges to income over the restricted period. As a result of these charges, additional paid-in capital has been increased by \$199,000, \$138,000 and \$90,000 in 1980, 1979 and 1978, respectively. The balance to be amortized through 1989 amounted to \$1,183,000, \$1,012,000 and \$221,000 at December 31, 1980, 1979 and 1978, respectively.

Information regarding short-term debt for the years 1978-1980 is:

|                                                            | Dollars in Thousands |          |
|------------------------------------------------------------|----------------------|----------|
|                                                            | 1979                 | 1978     |
| As of December 31                                          |                      |          |
| Balance outstanding                                        | \$17,650             | \$23,607 |
| Average interest rate                                      | 12.7%                | 10.1%    |
| For the year                                               |                      |          |
| Average short-term<br>debt outstanding                     | \$51,446             | \$42,36  |
| Maximum short-term<br>debt outstanding at<br>any month-end | \$76,883             | \$73,53  |
| Average interest rate                                      | 11.5%                | —        |

**GAF 13162**

The average amount outstanding during the period was computed by dividing the total of the monthly outstanding principal balances by 12. The average interest rate for the year was computed using the weighted average interest rate on outstanding balances at each month-end.

At December 31, 1980, GAF had unused lines of credit aggregating \$132,000,000. These lines of credit are maintained with various banks on terms, generally renewable, expiring on various dates.

Borrowings generally bear interest at or near the prime commercial lending rate or its foreign equivalent. A variable fee, usually based on a percentage of the current prime rate, is paid on the domestic lines of credit. Compensating balances at December 31, 1980, are not significant.

Long-term debt at December 31, 1980 and 1979 was as follows:

|                                                                                                                                                                                                                                                                                              | Dollars in Thousands |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|
|                                                                                                                                                                                                                                                                                              | 1979                 |
| 9 1/4% senior notes due March 31, 1987 with scheduled principal repayments commencing December 31, 1980                                                                                                                                                                                      | \$ 65,000            |
| 8 1/4% senior notes due January 15, 1992 with scheduled principal repayments commencing December 31, 1980                                                                                                                                                                                    | 40,000               |
| 5 1/4% sinking fund debentures due December 1, 1987, with annual sinking fund payments of \$2,500,000 due on each December 1. At December 31, 1980, \$11,598,000 was held in treasury and may be used to accommodate future sinking fund requirements.                                       | 20,902               |
| Financings with a group of Irish banks, payable in Irish or British pounds, German marks or U.S. dollars. Financings are repayable from 1982 to 1987, with variable interest rates at 55% of the applicable interbank rates, plus a premium.                                                 | 17,243               |
| Tax-exempt industrial revenue bonds which bear interest at rates of 3 1/4% to 7 1/4% and mature at various dates to 2004                                                                                                                                                                     | 20,896               |
| 5% convertible subordinated notes due April 1, 1994, with optional annual repayments beginning April 1, 1990                                                                                                                                                                                 | 8,200                |
| 5 1/4% convertible subordinated notes due April 1, 1983, with optional annual repayments of either \$200,000 on each April 1 through 1982 and the balance of \$1,800,000 payable April 1, 1983, or \$733,000 on April 1, 1981 and 1982 and the balance of \$734,000 payable on April 1, 1983 | 2,400                |
| Other notes which bear interest at 5 1/4% to 12% and mature at various dates to 1993                                                                                                                                                                                                         | 13,506               |
| Obligations under capital leases (See Note 14)                                                                                                                                                                                                                                               | 18,245               |
| Total                                                                                                                                                                                                                                                                                        | 206,392              |
| Less current portion                                                                                                                                                                                                                                                                         | 4,462                |
| Long-term debt, less current portion                                                                                                                                                                                                                                                         | \$201,930            |

Scheduled principal repayments have been accelerated under agreements with certain of the company's long-term lenders in conjunction with the discontinuance program. This had the effect of increasing the current portion of long-term debt at December 31, 1980 by \$10.0 million.

Cash requirements to meet maturing debt obligations over the next five years are:

|      |              |      |              |
|------|--------------|------|--------------|
| 1981 | \$45,463,000 | 1984 | \$20,548,000 |
| 1982 | \$16,926,000 | 1985 | \$11,178,000 |
| 1983 | \$23,920,000 |      |              |

The 5% convertible subordinated notes are convertible into shares of common stock, at any time, at a conversion

price of \$22.50 per share (subject to antidilution adjustments in specified circumstances)

The 5 1/2% convertible subordinated notes are presently convertible into shares of common stock at a conversion price of \$26.72 per share (subject to antidilution adjustment in specified circumstances) only in connection with certain prepayments. All other rights lapsed in 1976.

Dividends are restricted under provisions of certain loan agreements. Under the most restrictive of these provisions \$18,000,000 of retained earnings were available at December 31, 1980, for future dividends.

To provide for its working capital needs during the discontinuance program described in Note 1, the company is negotiating a three-year \$225 million revolving line of credit with a group of banks. This line of credit will replace the company's short-term lines of credit in effect at December 31, 1980, and will have declining availability over its term. Interest on the funds will be at the prime rate. A commitment fee of 1/2% per annum will be charged on the daily average unused portion, as will a facility fee of 1/2% per annum on the commitment. This agreement will contain provisions which require the maintenance of minimum working capital and net worth and limit the amount of dividends, capital expenditures, funded debt, short-term bank borrowings and other debt.

Capitalized leases for continuing operations of \$9,769,000 and \$17,253,000 are included in Property, Plant and Equipment—Net at December 31, 1980 and 1979, respectively. The present value of future net minimum lease payments is reflected as long-term debt (See Note 13).

The most significant capital lease is for the administrative headquarters located in Wayne, N.J. The amortization expense associated with assets recorded under capital leases is included in depreciation expense. The company also has operating leases for transportation and data processing equipment and for other buildings.

In connection with the company's decision to discontinue a number of businesses as described in Note 1, net capital leases of \$6,662,000 and the related obligation of \$2,783,000 have been reclassified in 1980 to Assets of discontinued segments and Current portion of long-term debt, respectively. Obligations under long-term operating leases relating to discontinued operations have been recorded in the estimated liability for phase-out costs.

Future minimum lease payments for continuing properties held under long-term leases as of December 31, 1980 are as follows:

| Minimum Payments by Period                             | Dollars in Thousands |                  |
|--------------------------------------------------------|----------------------|------------------|
|                                                        | Capital Leases       | Operating Leases |
| 1981                                                   | \$ 1,070             | \$ 6,008         |
| 1982                                                   | 1,864                | 4,669            |
| 1983                                                   | 1,805                | 3,036            |
| 1984                                                   | 1,739                | 779              |
| 1985                                                   | 1,677                | 606              |
| Later Years                                            | 14,884               | 853              |
| Total minimum payments                                 | 23,039               | \$16,953         |
| Less interest included above                           | 9,764                |                  |
| Present value of net minimum lease payments—continuing | \$13,275             |                  |

The company had commitments for its continuing operations of approximately \$7,420,000 at December 31, 1980, for the acquisition of property, plant and equipment.

At December 31, 1980, there were certain lawsuits and claims pending against the company. In the opinion of management, the ultimate disposition of these matters will have no material adverse effect on the company's consolidated financial position.

In accordance with the Financial Accounting Standards Board Statement No. 33, "Financial Reporting and Changing Prices," the following supplementary information is presented to report the estimated impact of inflation on the company's earnings from continuing operations. The company's historical cost financial data have been adjusted for the effects of general inflation on inventories and property, plant and equipment (constant dollar basis) and for the effects of changes in specific prices on those assets (current cost basis). As a result, the impact on net income only reflects adjustments to depreciation expense and cost of products sold. Sales and other costs and expenses, including income taxes, are not adjusted.

The company supports the accounting profession's attempts to experiment with methods of reporting the impact of inflation, but cautions the reader in interpreting the following disclosures. Both the constant dollar and current cost methods involve the use of numerous assumptions and estimates. Also, as previously mentioned, the financial data are adjusted only to a limited extent, rather than on a comprehensive basis. While the required adjustments represent an attempt to estimate what it would cost in terms of today's dollars to obtain existing assets, they do not reflect the economic benefits and cost savings of replacing the company's existing assets with new facilities. The restated information also makes no allowance for the customary relationship between cost increases and changes in selling prices. The resulting measurements should therefore be viewed only as indicators of the effects of inflation.

The adjusted earnings under both the constant dollar and current cost methods are lower than the income from continuing operations reported in the primary financial statements. However, it should be noted that the guidelines established by Statement No. 33 specify that holding gains due to the increased value of inventories and property, plant and equipment held during the year (\$46.7 million) and the gain from the decline in purchasing power of net monetary liabilities held during the year (\$27.5 million) may not be aggregated with the adjusted earnings. Also, the Statement requires that the provision for income taxes included in the primary financial statements be the same amount included in constant dollar and current cost presentations even though expenses shown are higher. This treatment highlights a hidden tax being borne by the company because existing tax laws have not been revised to reflect the effects of inflation on businesses.

#### **Constant Dollar Information**

Constant dollar accounting is a method of reporting financial statement elements by utilizing as a means of measurement dollars having an equal (i.e., constant) general purchasing power. The information has been compiled, using the Consumer Price Index-Urban, to restate certain historic costs to a constant value, equivalent to average 1980 dollars. Depreciation has been increased to reflect the expense which would have been recorded if the assets had been acquired with average 1980 dollars rather than with dollars actually expended in prior years. The same procedures as those used in the primary financial statements have been applied in these constant dollar calculations with regard to useful lives, salvage values and depreciation. Cost of products sold has been increased to reflect a restatement of historic inventory costs at the beginning and end of the year in average 1980 dollars. Other items of revenue and expense appearing in the primary financial statements are assumed to have occurred proportionately throughout the year in relation to the changing CPI-U and, as such, are considered to be already stated in average 1980 dollars.

#### **Current Cost Information**

The current cost method adjusts historical costs of the company's inventories and property, plant and equipment to reflect changes in specific prices (current cost) of producing those same inventories or replacing the assets at the balance sheet date. Plant and equipment current costs were estimated by adjusting historical costs by externally generated industrial price indices. The current cost of land was developed by the use of the Consumer Price Index. Inventory costs were developed using current manufacturing costs. Inventory costs included in the Cost of Products Sold were determined on average current actual costs during the year. Current cost depreciation expense was determined using the estimated current costs of plant and equipment and the estimated useful lives and depreciation rates used for historical costs.

The estimated current cost of property, plant and equipment—net and inventories was \$313.7 million and \$104.9 million, respectively, at December 31, 1980.

#### **Other Information**

The gain from holding net monetary liabilities arises because, during 1980, the company held more liabilities which were fixed in amount of dollars to be repaid than it held assets similarly fixed in amount of dollars to be received. Accordingly, an important hedge against inflation is provided as this net monetary liability position will be paid in dollars which have a lower purchasing power than the dollars originally received in return for the obligations. Similarly, the higher net assets at year end under the constant dollar and current cost methods, as compared to historical cost net assets of \$122.3 million, reflects the fact that the company's inventories and properties, when stated in average 1980 dollars or in current cost dollars, have substantially greater value than is recorded using generally accepted accounting principles as is required in the primary financial statements.

**GAF 13164**

Consolidated Statement of Income from Continuing Operations Adjusted for Changing Prices (Unaudited)  
For the year ended December 31, 1980  
(\$ in thousands)

|                                                                                                                              | As Reported<br>in the Primary<br>Statements<br>(Historical<br>Cost) | Adjusted<br>for General<br>Inflation<br>(Constant<br>Dollars) | Adjusted<br>for Changes in<br>Specific Prices<br>(Current<br>Cost) |
|------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|---------------------------------------------------------------|--------------------------------------------------------------------|
| Net Sales                                                                                                                    |                                                                     | \$ 677,216                                                    | \$ 677,216                                                         |
| Cost of Products Sold (1)                                                                                                    |                                                                     | 521,880                                                       | 521,751                                                            |
| Depreciation                                                                                                                 |                                                                     | 29,024                                                        | 31,338                                                             |
| Other Operating Expenses                                                                                                     |                                                                     | 118,328                                                       | 118,328                                                            |
| Interest                                                                                                                     |                                                                     | 21,634                                                        | 21,634                                                             |
| Income Tax Benefit                                                                                                           |                                                                     | (1,246)                                                       | (1,246)                                                            |
|                                                                                                                              |                                                                     | 689,620                                                       | 691,805                                                            |
| Income (Loss) from<br>Continuing Operations                                                                                  |                                                                     | \$ (12,404)                                                   | \$ (14,589)                                                        |
| Purchasing Power Gain<br>on net monetary liabilities<br>held during the year                                                 |                                                                     | \$ 27,544                                                     | \$ 27,544                                                          |
| Increase in specific prices<br>(current cost) of<br>inventories and property,<br>plant and equipment held<br>during the year |                                                                     |                                                               | \$ 48,720                                                          |
| Effect of increase in<br>general price level                                                                                 |                                                                     |                                                               | 45,757                                                             |
| Excess of increase in<br>specific prices over<br>increase in the<br>general price level                                      |                                                                     |                                                               | \$ 963                                                             |
| (1) Excludes \$14,617,000 depreciation expense included in Cost of Products Sold in the primary financial statements.        |                                                                     |                                                               |                                                                    |

**Deloitte  
Haskins & Sells**

Certified Public Accountants  
One World Trade Center  
New York, New York 10048

To Shareholders and Board of Directors of GAF Corporation

We have examined the consolidated balance sheets of GAF Corporation and its consolidated subsidiaries as of December 31, 1980 and 1979 and the related consolidated statements of income, retained earnings and changes in financial position for each of the three years in the period ended December 31, 1980. Our examinations were made in accordance with generally accepted auditing standards and, accordingly, included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

As more fully described in Note 1 to the financial statements, the Company provided in 1980 for estimated losses and related costs which are expected to be incurred in connection with its plan to dispose of certain of its operations. We have reviewed the procedures applied by the Company in its determination of such provision and have inspected the underlying documentation; while the procedures were reasonable and the documentation appropriate, the actual loss and related costs presently cannot be determined with certainty as they are dependent on future events.

In our opinion, subject to the effects on the 1980 financial statements of any adjustments which may result upon consummation of the plan of disposal referred to in the preceding paragraph, the above mentioned financial statements present fairly the financial position of the companies at December 31, 1980 and 1979 and the results of their operations and the changes in their financial position for each of the three years in the period ended December 31, 1980, in conformity with generally accepted accounting principles consistently applied during the period except for the change, with which we concur, in 1979 in the method of accounting for interest costs as described in Note 2 to the financial statements.

*Deloitte Haskins & Sells*  
February 12, 1981

Five-Year Comparison of Selected Supplementary Financial Data Adjusted for Effects of Changing Prices  
(In Average 1980 Dollars)

|                                                                                   | (Dollars in Thousands except per Share Data) |           |           |           |
|-----------------------------------------------------------------------------------|----------------------------------------------|-----------|-----------|-----------|
|                                                                                   | 1979                                         | 1978      | 1977      | 1976      |
| Net Sales                                                                         | \$776,192                                    | \$769,187 | \$689,156 | \$654,099 |
| Historical cost information adjusted for general inflation:                       |                                              |           |           |           |
| Income (Loss) from continuing operations                                          | \$ 8,261                                     |           |           |           |
| Income (Loss) per common share                                                    | \$ .62                                       |           |           |           |
| Net assets at year-end                                                            | \$567,037                                    |           |           |           |
| Current cost information:                                                         |                                              |           |           |           |
| Income (Loss) from continuing operations                                          | \$ 4,170                                     |           |           |           |
| Income (Loss) per common share                                                    | \$ .31                                       |           |           |           |
| Excess of increase in specific prices over<br>increase in the general price level | \$ 15,435                                    |           |           |           |
| Net assets at year-end                                                            | \$612,471                                    |           |           |           |
| Other data, adjusted for general inflation:                                       |                                              |           |           |           |
| Purchasing power gain on net monetary liabilities<br>held during the year         | \$ 25,212                                    |           |           |           |
| Dividends per common share                                                        | \$ .77                                       | \$ .81    | \$ .82    | \$ .84    |
| Year-end market price per common share                                            | \$10.87                                      | \$14.44   | \$14.42   | \$18.94   |
| Average Consumer Price Index                                                      | 217.4                                        | 195.4     | 181.5     | 170.5     |

## **CHEMICAL PRODUCTS**

### **GAF<sup>®</sup> Chemicals**

#### **High-pressure Acetylene Derivatives**

Monomers, polymers, copolymers, solvents and organic intermediates derived from acetylene for use in cosmetic, petroleum, pharmaceutical, plastic, textile, adhesive, and other industries.

#### **Monomers**

2-Pyrol<sup>®</sup> monomer for nylon-like linear polymer, solvent and intermediate, solubilizer for drug-actives, V-Pyrol<sup>®</sup> comonomer and modifier for adhesives, coatings, fibers, etc. Intermediate, Alkyl vinyl ethers: monomers for copolymers, intermediates

#### **Vinylpyrrolidone Polymers**

Polyvinylpyrrolidone (PVP) for cosmetics, adhesives, detergents, coatings, paper, textile, specialty uses, Plasdone<sup>®</sup> pharmaceutical tablet binder and coating agent, Plasdone<sup>®</sup> C excipient for injectables, blood plasma expander, Polyclar<sup>®</sup> AT stabilizer for beer, wine, vinegar, juice, Polyplasdone XL<sup>™</sup> tablet disintegrant for pharmaceuticals, Ganex<sup>®</sup> polymers for pigment dispersion, as protective colloids, cosmetic additives, PVP/VA copolymers, film formers for adhesives, cosmetics, etc., Pollectron<sup>®</sup> emulsion copolymer, a binder, stabilizer, opacifier for various uses, Gafquat<sup>®</sup> copolymers for skin- and hair-care products

#### **Vinyl Ether Polymers**

Gantrez<sup>®</sup> AN copolymers for adhesive, detergent, photographic, textile applications; Thickener L and LN for paints and other latex systems; Gantrez<sup>®</sup> S resins for rapid cold-water solubility, used in detergents, Gantrez<sup>®</sup> ES resins for cosmetics, coatings, pharmaceuticals, Gantrez<sup>®</sup> M resins for adhesives and coatings, a latex heat sensitizer, and non-migrating plasticizer

#### **Intermediates and Solvents**

BLO<sup>®</sup> solvent for agricultural and lithographic applications, Butanediol, intermediate for thermoplastics, chain extender for urethanes, Butenediol, intermediate for pharmaceutical and agricultural chemical synthesis, Butynediol, agricultural intermediate, corrosion inhibitor, M-Pyrol<sup>®</sup> solvent for aromatic extraction of lube oils, high temperature plastics synthesis, Methylamines: reactive chemicals for pesticides, pharmaceuticals, detergents, N-Substituted pyrrolidones for formulating, purifying, or processing of coatings, drugs, dyes, plastics, etc., Propargyl alcohol, intermediate for agricultural and pharmaceutical chemical synthesis, corrosion inhibitor, Tetrahydrofuran for magnetic tape coatings, reaction synthesis, PVC pipe cements, vinyl coatings

#### **Industrial Organic and Inorganic Chemicals**

Complex cyclic and aliphatic compounds for use as active ingredients and as intermediates in the dye, pharmaceutical, agricultural, and chemical processing industries; carbonyl iron powders; iron pentacarbonyl.

#### **Surfactant Intermediates**

Nonylphenol, Dodecylphenol, Sodium isethionate, Sarcosine, N-Methyltaurine

#### **Carbonyl Iron Powders**

Microscopic-size spheres, containing as high as 99.5% metallic iron, used in VHF and UHF circuitry, transmitters, receivers, radar, and in powder metallurgy.

#### **Iron Pentacarbonyl**

A technical grade, better than 99.5% pure, for use as starting material for chemically pure iron, reagent in preparation of oxides, light-sensitive photochemical, antiknock agent for gasoline and diesel fuel, catalyst in hydrocarbon synthesis intermediate in manufacture of chemically useful reagent complexes

#### **Specialty Chemicals**

Processing and formulating agents, including bactericides, finishing agents, adhesive additives, sequestrants, antistatic agents, lubricants, and solvents, for use in various industries, agricultural chemicals; textile chemicals.

#### **Antioxidant**

Uvi-Nox<sup>®</sup> primary antioxidant for polyolefins, monomer inhibitor

#### **Antistats for Plastics**

Galac<sup>®</sup> phosphate esters for PVC, polyolefins, polystyrene

#### **Biocides**

Biopal<sup>®</sup> iodophors for detergent-sanitizers.

#### **Corrosion Inhibitors**

Butoxyme<sup>®</sup> 497 for acid pickling, electroplating, specialty applications, Katapone<sup>®</sup> VV-328 corrosion inhibitor for steel, copper, aluminum. Also for petroleum processing, drilling acidizing.

#### **Lubricants**

Antara<sup>®</sup> extreme-pressure additives for metalworking fluids

#### **Sequestrants**

Cheelox<sup>®</sup> sequestrants, chelate trace metal impurities in textile processing, leather dyeing, paper processing, clarify liquid soaps and shampoos, stabilize rubber latices and agricultural chemical emulsions, sequester calcium, iron, copper, magnesium, tin, etc., in hard water and wet processing

#### **Textile Auxiliaries**

Dyeing assistant, Gafsoft<sup>®</sup> softeners for textile yarns and fabrics; Gafex<sup>®</sup> detergents, foam suppressants, emulsifiers, leveling agents; Katanol<sup>®</sup> dye carrier for pressure dyeing of disperse-dyeable polyester, Katapol<sup>®</sup> VP-532 retarder for cationic dyes, Peregai<sup>®</sup> dyeing, leveling, stripping assistants, Solidogen<sup>®</sup> dye fixing agent for direct and developed dyes

#### **Other Specialty Chemicals**

Biancol<sup>®</sup> dispersant and peptizing agent for pigments, clays and other solids in paper, agricultural chemicals, latices, Cepha<sup>®</sup> plant growth regulator for use on various agricultural crops, Gafamide<sup>®</sup> CDD-518 foam stabilizer for liquid dish-washing products, drycleaning, heavy-duty detergents

#### **Surfactants**

Nonionic, anionic, and cationic surface-active agents for use as detergents, emulsifiers, dispersants, and wetting agents

#### **Nonionics**

Antarox<sup>®</sup> surfactants, low-foaming household and industrial detergents, Emulphogene<sup>®</sup> emulsifiers, foaming light- or heavy-duty detergents, latex stabilizers, Emulphor<sup>®</sup> dispersants, emulsifiers, antistats, textile lubricants, Igepal<sup>®</sup>

**GAF 13166**

surfactants for chemical and thermal stability in textile and paper processing, hydrocarbon and agricultural chemical emulsification, detergent compounding, emulsion polymerization, etc.

#### **Anionics**

Airpax<sup>®</sup> high-foaming detergents for household products; static control, primary emulsification; Antara<sup>®</sup> lubricants and corrosion inhibitors in oil- or water-based systems; Galac<sup>®</sup> detergents and emulsifiers with antistatic, lubricating, de-dusting, anticorrosion properties; Igepon<sup>®</sup> detergents, wetting agents and dispersants, both high- and low-foaming and compatible with soaps, used in textile and hard surface detergency and in formulating cosmetics and agricultural chemicals; Nektal<sup>®</sup> wetting agents for paper, textile, paint, ink applications.

#### **Cationic**

Katapol<sup>®</sup> water-soluble emulsifiers for mineral oils and agricultural chemicals, antiprecipitants and textile leveling agents; antistat and lubricant for wool and synthetic fiber processing.

#### **GAF<sup>®</sup> Engineering Plastics**

Polybutylene terephthalate (PBT) thermoplastic molding compounds for automobile, mechanical and electrical parts, electrical/electronic components, appliance housings, and business machines.

#### **Thermoplastic Polyesters**

Gafite<sup>®</sup> unreinforced and glass-reinforced PBT compounds; Gafite<sup>®</sup> LW low-warpage PBT compounds, from impact-modified mica-reinforced materials to glassfiber/mica combinations; Gafut<sup>™</sup> high-impact PBT compounds in glass-reinforced and unreinforced grades.

#### **GAF<sup>®</sup> Mineral Products**

Natural and ceramic-colored mineral granules in a variety of screen gradings and calibrated colors for roofing and other uses; inert fillers.

### **BUILDING MATERIALS**

#### **GAF<sup>®</sup> Building Products**

##### **Prepared Roofing**

Complete line of premium organic and glass fiber self-sealing asphalt shingles.

##### **Asphalt Roofing Shingles**

Timberline<sup>®</sup> premium asphalt shingles, random butt design, earth-tone colors; Timberline<sup>®</sup> Class A glass fiber shingles, for extra safety and long life; Sentinel<sup>™</sup> Class A glass fiber shingles, fire and wind resistant; Standard self-sealing shingles, rugged with classic square-tab design; Fire Guard<sup>™</sup> Class A heavyweight twin-tab shingles; Sovereign<sup>®</sup> shingles, heavyweight, twin-tab design; Tite-On<sup>®</sup> locking shingles, distinctive basketweave pattern; Nor'easter<sup>®</sup> strip shingles, no cut-outs, total double coverage; Suburban<sup>®</sup> Twin-Tabs<sup>®</sup> shingles in classic square-butt style, sweeping appearance.

##### **Roll Roofing**

Smooth-surfaced roll roofing; mineral-surfaced roll roofing, combines utility and economy with fire resisting qualities and attractive colors; Dabl-Coverage<sup>®</sup> mineralized roll roofing provides double-thick protection.

### **Built-up Roofing Systems**

Products for hot-applied application including organic- and glass-mat-based roofing felts and asphalts, roofing membranes, cements and coatings; Mineral-Shield<sup>®</sup> cold-applied built-up roofing system; accessories.

#### **Roofing Membranes**

Air-Vent<sup>®</sup> perforated asbestos and asphalt felts; Asbestos base felt; Asbestos combination flashing; glass-reinforced Universal base sheet, organic coated both sides for use on asphalt roofs and over poured gypsum, wood fiber decks; roof insulation; Vapor retarder for above-deck insulation; Strata-Ply<sup>®</sup> roofing felts for three-ply roofs.

#### **Glass-Mat-Based Products**

Gafglas<sup>™</sup> 3 & 4 ply, lightweight ply sheets; Gafglas<sup>™</sup> asphalt-coated base and ply sheet; Gafglas<sup>™</sup> mineral-surfaced cap sheet; Gafglas<sup>™</sup> Stratavent<sup>®</sup> perforated vent ply, vented glass-base felt; Gafglas<sup>™</sup> Stratavent<sup>®</sup> vent ply for nailable decks, venting glass-base felt.

#### **Cements and Coatings**

Jetblak<sup>™</sup> Flashtite<sup>®</sup> cement, an asphalt plastic cement for built-up roofing flashing; Fibered aluminum coating, reflective, for smooth-surface asbestos roofs, metal and masonry surfaces; Mica Weatherguard<sup>™</sup> coating and Weather Coat<sup>®</sup> asphalt emulsion for smooth-surface asbestos roofs.

#### **Mineral-Shield<sup>®</sup> Built-up Roofing**

A time-proven, cold-applied built-up roofing system combining modern application techniques and specially formulated roofing products. Products include Mineral-Shield<sup>®</sup> roofing membrane, mastic, granules, fibered aluminum mastic, and Gafglas<sup>™</sup> glass membrane.

#### **Accessories**

Gaflex<sup>™</sup> expansion joint covers; Vent stacks to release moisture trapped in built-up roofs.

#### **Insulation Products**

Urethane, perlite, urethane-perlite, and Isotherm insulation boards for built-up roofing applications; roof insulation fasteners; building insulation.

#### **Roof Insulation**

Gaftemp<sup>®</sup> urethane insulation board, for use where high thermal value is paramount; Gaftemp<sup>®</sup> urethane-perlite insulation provides high insulating efficiency combined with rated fire resistance; Gaftemp<sup>®</sup> perlite insulation board combines thermal insulation with dimensional stability; Gaftemp<sup>®</sup> Isotherm insulation is Factory Mutual Class 1 fire rated for insulated steel deck assemblies; Gafut<sup>™</sup> roof insulation fasteners provide maximum wind uplift resistance.

### **SERVICES**

#### **Chemicals**

Custom manufacture of pharmaceutical, agricultural, and other specialty chemicals in developmental and commercial quantities.

#### **Building Supply Centers**

Distribution outlets for GAF building materials and allied products.



## GAF Locations

### Corporate Offices

140 West 51 Street  
New York, N.Y. 10020

### Domestic Operations

GAF Corporation's plants, research laboratories, sales offices, and distribution centers are located throughout the U.S.A.

#### Alabama

Birmingham  
Huntsville  
Mobile

#### Arizona

Phoenix

#### California

City of Commerce  
Fontana  
La Habra  
Long Beach  
Palo Alto  
San Diego  
South San Francisco  
West Sacramento

#### Colorado

Denver

#### District of Columbia

#### Florida

Orlando  
Tampa

#### Georgia

Atlanta  
Savannah

#### Illinois

Chicago  
Franklin Park  
Joliet  
Lincolnwood

#### Indiana

Indianapolis  
Mount Vernon

#### Kentucky

Calvert City

#### Louisiana

New Orleans

#### Maryland

Baltimore  
Glen Burnie  
Hagerstown  
Lanham

#### Massachusetts

Millis  
Newton

#### Michigan

Detroit  
Troy

#### Minnesota

Minneapolis

#### Missouri

Annapolis  
Joplin  
Kansas City  
St. Louis

#### New Jersey

Bound Brook  
Fairfield  
Gloucester City  
Linden  
South Bound Brook

Wayne  
West Deptford  
West Windsor

#### New York

Binghamton  
Johnson City  
New York  
Vails Gate  
Vestal

#### North Carolina

Charlotte

#### Ohio

Columbus  
Elyria

#### Oregon

Progress/Portland

#### Pennsylvania

Blue Ridge Summit  
Erie  
King of Prussia  
Whitehall

#### South Carolina

Chester

#### Tennessee

Memphis

#### Texas

Arlington  
Dallas  
Houston  
Seadrift  
Texas City

#### Virginia

Chesapeake  
Norfolk  
Springfield

#### Wisconsin

Pembine

### Domestic Subsidiaries

GAF Broadcasting Company, Inc.  
New York, N.Y.  
GAF Export Corporation  
New York, N.Y.  
Carolina, Puerto Rico  
GAF Hawaii Inc.  
Honolulu, Hawaii  
GAF International Corporation  
New York, N.Y.

### Major International Manufacturing and Marketing Locations

#### Australia

Adelaide  
Brisbane  
Melbourne  
Perth  
Sydney

#### Austria

Vienna

#### Belgium

Sint-Niklaas

#### Brazil

São Paulo

#### Canada

Calgary  
Edmonton  
Mississauga  
Montreal  
Toronto  
Vancouver  
Winnipeg

#### Denmark

Ballerup

#### Finland

Helsinki

#### France

Louvres

#### Great Britain

Colnbrook  
Hounslow  
Manchester

#### Greece

Athens

#### Ireland

Dublin  
Mullingar

#### Israel

Tel Aviv

#### Italy

Milano

#### Mexico

Mexico City

#### The Netherlands

Delft

#### New Zealand

Auckland  
Wellington

#### Norway

Oslo

#### Singapore

Singapore

#### South Africa

Johannesburg

#### Spain

Barcelona

#### Sweden

Stockholm

#### Switzerland

Zug

#### West Germany

Frechen

### Affiliates:

GAF/Huls Chemie

G.m.b.H.

Marl, West Germany

Sawyer's Asia

Pty. Ltd.

Bombay, India