PLAINTIFF'S
EXHIBIT
GF-2282

MINUTES

of the

ANNUAL MEETING

NATIONAL INSULATION MANUFACTURERS ASSOCIATION
Absecon, N. J. September 25, 1967

Meeting was called to order at 9:00 A.M. by President J.F. Vyverberg with the following in attendance:

Baldwin-Ehret-Hill, Inc. Trenton, N. J.	M.M. Wilson J. McAllister
Certainteed-St. Gobain Bala Cynwyd, Pa.	R.L. Strickland
Fibreboard Corp.	F.A. Nordstrom J. Collins
Forty-Eight Insulations, Inc. Aurora, Ill.	T.S. Clousing
Johns-Manville Sales Corp. New York, N. Y.	M.W. Burleson
Owens-Corning Fiberglas Corp. Toledo, Ohio	J.F. Vyverberg
PPG Industries Pittsburgh, Pa.	P.D. Raley L.B. Grant, M.D. W.T. Irwin R.L. Loeffler H. Mulkey
The Ruberoid Div. G.A.F.	R.W. Henry W.C. O'Brien
Holmes Insulations Limited Downsview, Ontario, Canada	E.H. Thring
Cadwalader, Wickersham & Taft	J. Boyer
Mathen/Walsh	A. Walsh
National Insulation Mfrs. Assn.	J.M. Barnhart

APPROVAL OF MINUTES

A motion was made, seconded, and passed

That the Minutes of the Meeting of May 16, 1967, as bulletined by the Association, be approved.

TRAFFIC COMMITTEE REPORT

In Chairman Wallner's absence, J.M. Barnhart read the Committee Report as follows:

"This has been a frustrating year for the Traffic Committee. The general trend has been to increase freight rates, both rail and truck, and with light density commodities there is not too much defense that can be offered to forestall increases.

In January the National Truck Classification Board proposed the cancellation of most insulating material items and instead proposed ratings based on density. The proposal follows:

	LTL	T/L	Min. Wt. Factor
Less than 3 pounds per cubic foot	300	85	10.2
3 pounds but less than 6 pounds per cubic foot	200	77-1/2	12.2
6 pounds but less than 9 pounds per cubic foot	125	65	15.2
9 pounds but less than 12 pounds per cubic foot	100	60	18.2
12 pounds but less than 15 pounds per cubic foot	85	55	22.2
15 pounds or over per cubic foot	70		

We had a Traffic Committee meeting to discuss this and determined that we required industry figures which were very competently collated by our Executive Secretary, Mr. Barnhart, and we thank him for his help.

A hearing was held in Washington on this subject and we feel that we have defeated the density program, however we did not come out unscathed because I believe we must assume that where we are not paying $1.25 per 100 pounds we will in the near future be paying $2.00 per 100 pounds on less than truckload shipments. While this is a rather substantial increase on a lot of products, we feel that we have kept the increase to a very minimum.

Shortly after this the trucklines filed a proposal to publish density ratings on any product weighing less than six pounds per cubic foot as follows:

Less than 1 pound	Three times Class 500
1 pound but less than 2 pounds	Class 500
2 pounds but less than 3 pounds	" 400
3 pounds but less than 4 pounds	" 300
4 pounds but less than 5 pounds	" 250
5 pounds but less than 6 pounds	" 200

This proposal would have meant that where we now pay $1.25 per 100 pounds if the density of the product was less than 1 pound per cubic foot we would pay $15.00 per 100 pounds, less than 2 pounds per cubic foot $5.00 per 100 pounds, etc. Fortunately, we have been able to have this suspended by the Interstate Commerce Commission and I consider it very doubtful that it will be approved.

While there are many other subjects concerning cleaning cars, demurrage and so forth none of these have really come to pass. There is one thing, however, which has been on the docket for several years concerning mineral wood cement.

One of our competitors describes his mineral wool cement as high temperature bonding mortar. His cement is no different than ours, however, he advertises, invoices, describes it on the bill of lading and marks his packages as high temperature bonding mortar. For this reason he has been able to get away with what is considered a very improper practice. All of us could do the same thing, however, we all realize that mineral wool cement is mineral wool cement and not high temperature bonding mortar. One of our non-member competitors has filed several proposals requesting reduced rates on mineral wool cement with minimum weights of 70,000 and 100,000 pounds which are not practical minimum weights for our type business. The rates also are higher than those on high temperature bonding mortar. While your meeting is in session I will be in San Francisco at which time I will discuss this matter with the traffic executives of the Southern Pacific, Santa Fe, Western Pacific and Union Pacific Railroads. I will impart to them that while a reduction is welcome this is not the end of our fight to have parity with high temperature bonding mortar in every instance. This could result in one of three things, either we would get high temperature mortar rates on mineral wool cement, or the carriers would turn down our proposal or start an investigation to correct the situation which is now practiced by several of our competitors.

There is another alternative. I believe we could force the discontinuance of the use of high temperature bonding mortar as a description if we went to the Interstate Commerce Commission in a formal procedure. This would require, however, thousands of dollars of time, the requirement of expert witnesses impartial to insulation industry, and probably $50,000 in legal fees in order to accomplish this objective.

I do not recommend this last suggestion and believe the matter should be left in the hands of the Traffic Committee to work out the best possible rates and minimum weights to be able to more effectively compete with our competition.

May I thank Jack Barnhart for his very kind assistance and the very able and enthusiastic support of all the members of the Traffic Committee."

MARKETING RESEARCH COMMITTEE REPORT

Mr. R.L. Loeffler reviewed the past activities of the Committee, principally the major revision completed in the statistical reporting program.

He asked that new members be added to the Committee.

TECHNICAL & RESEARCH COMMITTEE REPORT

J.M. Barnhart reported as follows:

Since the May 16, 1967, NIMA Spring Meeting, the technical activities have included the following:

May 23, 1967	Kettering Laboratories, Cincinnati, Ohio
June 7 & 13, 1967	Manville Research Laboratory, Manville, N. J.
June 26, 27, 28, 1967	ASHRAE Meeting, Minneapolis, Minn.
July 11, 12, 1967	Duct Systems Committee Meeting, Manville, N. J.
July 17, 1967	GSA & C. E., Washington, D. C.
September 14 & 15, 1967	T & R Committee Meeting, New York, N. Y.
September 17, 18, 19 & 20, 1967	ASTM, C-16 Committee Meeting, Toronto, Can.

KETTERING LABORATORIES, CINCINNATI, OHIO, MAY 23, 1967

Foss Wilson and J.M. Barnhart met with personnel from the laboratories to ascertain the type of a report that could be written in connection with the duct systems air erosion tests.

MANVILLE RESEARCH LABORATORY, MANVILLE, N. J., JUNE 7 & 13, 1967

The Research Laboratory was visited for the purpose of witnessing preliminary tests on fibrous glass duct systems for establishing reinforcement schedules.

ASHRAE MEETING, MINNEAPOLIS, MINN., JUNE 26, 27, 28, 1967

Committee T.C. 2.4 meeting was attended for the purpose of finalyzing the 1968 ASHRAE GUIDE chapters relating to thermal insulation and vapor barriers. Committee T.C. 4.1 meeting was attended for the purpose of attempting to include the fibrous glass duct systems in the "Duct Design" chapter of the ASHRAE GUIDE.

DUCT SYSTEMS COMMITTEE MEETING, MANVILLE, N.J., JULY 11, 12, 1967

The Committee met with SMACNA and SMWIA representative to witness reinforcement tests.

GSA & C.E., WASHINGTON, D. C., JULY 17, 1967

Government T & R Committee members and J.M. Barnhart met with L. Mills of GSA and L. Broggini of C. E. to discuss HH-I-558.

T & R COMMITTEE MEETING, NEW YORK, N. Y., SEPTEMBER 14 & 15, 1967

The Mineral Fiber Section and Molded Section met on September 14 & 15, 1967, and discussed the following subjects:

1. HH-I-558
2. HH-I-545
3. ASTM Specs - C 553, C 378 to C 392
4. Military Specs - MIL-I-2781
   MIL-I-2819
   MIL-I-24244
5. Stress Corrosion
6. Thermal Conductivity Round Robin

ASTM C-16 COMMITTEE MEETING, TORONTO, CANADA, SEPTEMBER 17, 18, 19 & 20, 1967

This meeting was attended and the following subjects of interest were discussed:

1. Stress Corrosion Test
2. ASTM C 378 and C 392.
3. ASTM C 553
4. Definitions relating to "rigidity" and "flexibility".

The IDCMA Manual was discussed in detail.

A motion was made, seconded, and passed

That NIMA will cooperate with IDCMA and furnish them with applicable ASTM product specification data on a generic basis.

MINERAL FIBER SECTION REPORT

J.M. Barnhart reported on the activities of the Committee in accordance with the Minutes of their Meeting which is attached hereto and made part of these Minutes.

MOLDED SECTION REPORT

J.M. Barnhart reported on the activities of the Committee in accordance with the Minutes of their Meeting which is attached hereto and made part of these Minutes.

DUCT SYSTEMS COMMITTEE REPORT

J.M. Barnhart reported on the activities of the Committee in accordance with the Minutes of their Meetings which are attached hereto and made part of these Minutes.

PUBLICITY COMMITTEE REPORT

Ambrose Walsh, publicity counsel, reported in detail on the following:

REPORT ON NIMA NEWSLETTER PROJECT 1967

Purposes

1. To improve relationships with IDCMA members by informing them of NIMA purposes and programs.

2. To provide useful information on mineral insulations.

3. To maintain contact with other organizations in construction and process industries to keep them aware of NIMA purposes and programs.

4. To identify NIMA and its purposes and programs with individual engineers, architects, contractors and owners.

Form and Frequency

Two page newsletter published four times in the year.

Distribution

1. 1000 copies inserted at advertising rates in IDCMA NEWS four times in the year.

2. Individual copies mailed to officers of identifiable organizations with common interests, like AIA, Consulting Engineers Council, ASHRAE, ARI, IBR, etc.

3. Individual copies mailed to editors of industry media, like Heating Piping and Air Conditioning, Chemical Engineering, District Heating, etc.

Contents

Issue 1: Health & Safety
K-values of mineral insulations

Issue 2: Legislation affecting construction Index of ASTM, Federal and Military insulation specifications

Issue 3: Economic thickness: new data on efficiency of insulation of pipe, valves, fittings, flanges, etc.

Issue 4: Health & Safety

Schedule

Issue 1: printed May, 1967, mailed June, 1967

Issue 2: printed and mailed September, 1967

Issue 3: scheduled for mailing October, 1967

Issue 4: scheduled for mailing December, 1967

Results

Issue 1: 1100 copies printed, 1000 distributed through IDCNA NEWS, 40 to organization officers individually by mail and 30 to editors individually by mail.

Issue 2: 1500 copies printed, 1000 distributed through IDCNA NEWS, 205 to organization officers and members (165 added after letter request by earlier recipients) and 60 to editors with news releases announcing that copies of the index were available to their readers.

Budget & Expenditures

The newsletter project was budgeted at $750.00 per issue for 1967, that amount to cover the cost of advertising in IDCNA NEWS at a rate of $160.00 per issue, the cost of art, photography, typography, printing and mailing, estimated at $290.00 per issue, plus the agency fee for gathering the information, writing the copy, clearing it and supervising production and distribution, estimated at 2 mandays per issue or $300.00. Distribution of individual copies as well as the size of the newsletter has been necessarily limited by the budget.

The first two issues have been produced within the budget as was agreed.

Out-of-pocket costs to the agency on the first issue came to $525.00, allowing the agency a fee of $225.00 to cover preparation costs.

The second issue had a larger print order but art and printing costs were cut by 25%; the balance remaining to cover agency preparation costs should be $275.00. Since the agency's actual time input on the second issue was cut by one-third, the fee is approaching the actual time cost.

REPORT ON NEMA DUCT SYSTEMS PUBLICITY PROGRAM

Purpose

To increase acceptance of fibrous glass duct systems in commercial, industrial and eductional building markets by demonstrating acceptance by contractors, engineers and owners.

Program & Accomplishments

1. ASHRAE Speech: draft prepared in April, 1967 for presentation in February, 1968.

2. Kettering Laboratory Erosion Study: text and illustrations prepared for report now being issued by Kettering with copies available for distribution in October.

3. A technical article on the same subject will be prepared by J. Cholak of Kettering using the same text as a basis.

4. AMERICAN ARTISAN: This magazine has scheduled a 4-part, 8 to 12-page series of articles on fibrous glass duct. The series will include articles on:

   a. the fibrous glass duct installation in West Elementary School, Elgin, Illinois;

   b. the fibrous glass duct installation in Sundstrand Aviation Research Building, Rockford, Illinois;

   c. how Northlake Engineering integrated fibrous glass duct fabrication into its sheetmetal shop;

   d. how the new Lockformer fibrous glass duct fabricating machine performs.

   This series, originally scheduled for September, is now scheduled for November according to the editor, James Wilder, the delay caused by delays in the Sundstrand installation and collection of data on the Lockformer equipment being used on that job.

5. AIR CONDITIONING, HEATING & VENTILATING: this magazine has scheduled a special issue on fibrous glass duct systems to appear in February, 1968. The issue will be based on the conference held September 20, 1967 sponsored jointly by ACHV and NIMA. The conference was attended by 30, including architects, engineers and contractors from across the country along with owners -- GSA, Tishman Realty, and Western Electric. The issue will cover all aspects from design to installation in a series of bylined articles by NIMA members, engineers, contractors and owners on their experience with the material.

6. HEATING, PIPING & AIR CONDITIONING: an engineering article bylined by L. A. Bihler, chief mechanical engineer, The Engineers Collaborative, has been proposed and accepted. The article has been outlined and is being developed with Mr. Bihler's assistance; completion is expected within the next 60 days with publication early in 1968. The article will cover the experience Mr. Bihler has had in the design of 10 buildings using fibrous glass duct systems.

7. SNIPS: a story on Sundberg Engineering's experience with fibrous glass duct systems in an office building and two high speed trains is being prepared. Publication has not been scheduled as the text is still being cleared with Mr. Sundberg.

8. AIR CONDITIONING, HEATING & REFRIGERATION NEWS: The experience of Gary Sheetmetal Co. in the installation of fibrous glass duct in a church has been developed into an article now under review by the firm. Scheduled for publication in November, 1967.

Projects still under development:

9. Janesville-DeWitt School: this installation was visited and the design engineer interviewed with R. McDermott, associate editor of ACHV. It will probably serve as one example in the magazine's special issue but a second version has been discussed with HEATING & AIR CONDITIONING CONTRACTOR.

10. Fire Marshall Survey: the survey results will be developed into a feature under Mr. Flatzker's byline with his permission.

Budget and Expenditures

This program was budgeted at $8000.00 for the year. To date approximately 80% of the funds have been spent, $869.00 for out-of-pocket costs such as travel and photography and $5660.00 for agency fees to cover 38 mandays expended on the program. The agency estimates that the projects under development will be completed within the budget allotted.

SCHEDULE

ACHV FIBROUS DUCT CONFERENCE

AM SESSIONS

9:00 - 10:00	Arrivals, introductions, coffee
10:00	Introduction: Richard L. Koral, Editor Air Conditioning, Heating and Ventilating Purpose Program arrangement Schedule
10:10	WHAT IS FIBROUS GLASS DUCT J. M. Barnhart, Executive Secretary NIMA 10-minute summary to describe material, properties and uses, with examples of forms demonstrated.
11:00	WHAT CAN FIBROUS GLASS DUCT DO? Systems, uses, advantages and limitations.
12:00 - 1:30	Lunch

PM SESSIONS

1:30 - 2:30	HOW IS IT FABRICATED & INSTALLED? Techniques for forming, joining, and supporting.
2:30 - 3:30	EXPERIENCE WITH FIBROUS GLASS DUCT SYSTEMS Performance in various building types.
NOTE:	After short introductory presentation of each topic, the full panel will continue discussion based on questions from the floor. NIMA Duct Systems Committee members will serve as experts to furnish facts and recommendations when and if required.

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Mr. Patrick Henry, Chief Mechanical Engineer
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Mr. R. L. Loeffler
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Mr. P. L. Losse
Pittsburg Plate Glass Company
Pittsburg, Pennsylvania

Mr. Leonard Bibler
Engineers College
Chicago, Illinois

Mr. George Gleed
Natkin
Santa Clara, California

Mr. Norman Goldberg
Economides & Goldberg
New York, New York

HEALTH & SAFETY COMMITTEE REPORT

Dr. L. B. Grant reported as follows:

COMMITTEE MEETINGS.

The Committee met on June 5, 1967 and August 10, 1967. The Minutes of the meetings are attached. The highlights of these meetings are as follow:

Apropos the NIMA Board action directing this Committee to proceed with the U.S.P.H.S. in the initiation of a study of the mineral fiber industry, meetings were held with Dr. Lewis J. Cralley. Dr. Cralley proposed that the first phase of the study should be a study of the causes of death on former long-term employees of the industry using Bureau of Old Age Survivors Insurance Records to determine if trends are evident in specific causes of death in contrast to that of the general population or in the life expectancy pattern. Each of the companies represented by NIMA have now provided information to the U.S.P.H.S. concerning the availability of employment and personnel records from which a cohort will be established for the study. A letter dated September 14, 1967 from Dr. Cralley which is attached is the U.S.P.H.S. official reply to NIMA's request for the mineral fiber industry study.

Apropos the NIMA Board action placing the Educational Program for the IDCNA under this Committee with a recommendation that a follow-up program be formulated, Mr. Clifford Sheckler was appointed by the Committee to chair an Education Subcommittee to carry out the Board recommendation. While this Subcommittee has not as yet finalized the program it will recommend, an interim report per telephone on September 14, 1967 from Mr. Sheckler indicated that the Subcommittee had met several times. An outline of the subjects to be presented include:

1) Environment and health;
2) Workmen's compensation and legal liability;
3) Insurance at present.

The Committee is developing the detailed data on these subjects to be presented. The length of the presentation will be held to less than two hours; a handout is being prepared which will supplement the program. There is an urgent need on the Subcommittee for a person knowledgeable in insurance and workmen's compensation aspects. There is also a need for at least one additional person to be available to make the presentations at IDCNA Regional Meetings. The next meeting of the Subcommittee is tentatively set for December. Mr. John Vyverberg met with Mr. Ted Brody in Montreal in July. Mr. Brody is the National Insulation Contractors Association's Chairman of the Occupational Health Committee, and it was agreed that the oncoming Educational Program will be a cooperative effort between the two groups.

Dr. W. Clark Cooper met with the Committee on August 10 and discussed his studies and educational efforts in regard to the potential environmental health problems of the insulation workers on the West Coast. Dr. Cooper has U.S.P.H.S. Grant support for his studies. The nature of the studies is similar to those being done by Dr. I. J. Selikoff on the East Coast insulation workers. Dr. Cooper expressed his thoughts in regard to appropriate measures that should be taken to protect the health of the insulation worker. He is recommending to the Board of Trustees appointed to manage the Union's Research Fund that they use the money to educate the worker concerning measures he can take to adequately protect his health from potential environmental hazards. It was the unanimous opinion of those present at the August 10 meeting that to the degree it was feasible the educational efforts of NIMA and Dr. Cooper's group should not be in conflict.

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A meeting of the Committee has been called for October 10 in Pittsburgh for those Committee members who will be attending the Annual Industrial Hygiene Foundation Meeting at Chatham Center. It will be a luncheon meeting.

RECENT SIGNIFICANT PUBLICATIONS

Parallel information in two recent scientific papers indicate what may in time prove to be a significant breakthrough in both the understanding of pathological conditions now attributed to the inhalation of asbestos dust and also the prevention of these effects. Summaries of these articles are attached. One is by L. J. Cralley, et al., entitled "Exposure to Metals in Manufacture of Asbestos Textile Products" and the other by Paul Gross, M.D., et al., entitled "Experimental Asbestosis." Both papers allude to the significance of airborne levels of nickel and other metals which are known or suspected carcinogens associated with asbestos dust inhalation. Both suggest the strong possibility that some of the pathological effects observed may be attributed not to the asbestos but to the metals inhaled simultaneously. This suggests that prevention of these effects may be related to the reduction in metal content of the asbestos.

NOMINATING COMMITTEE REPORT

M. W. Burleson reported that the Nominating Committee proposes following Slate of Officers and Directors be placed in nomination for the year 1967-1968:

President	R. W. Henry
Vice President	T. S. Clousing
Treasurer	J. F. Vyverberg

BOARD OF DIRECTORS

R. W. Henry, Chairman	Ruberoid Div. of GAF
M. W. Burleson	Johns-Manville
T. S. Clousing	Forty-Eight Insulations
P. D. Kaley	PPG Industries
F. A. Nordstrom	Fibreboard Corp.
R. L. Strickland	Certain-Teed/St. Gobain
J. F. Vyverberg	Owens-Corning
M. M. Wilson	Baldwin-Ehret-Hill

A motion was made, seconded, and passed

That the Slate of Officers and Board of Directors as proposed by the Nominating Committee be elected.

REMARKS OF LEGAL COUNSEL

John Boyer reviewed the legal status of voluntary standardization under the antitrust laws, noting the instances where Congress has imposed legislative standards after industry delayed in adopting voluntary standards on safety, performance or disclosure. Mr. Boyer further outlined the legal

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requirements under the Trademark Laws and under the antitrust laws of certification programs based on voluntary industry standards. He concluded that standards and certification programs, if carefully initiated and operated in compliance with legal requirements, serve a useful purpose in facilitating trade and by informing and protecting buyers and consumers.

ADJOURNMENT

There being no further business, the meeting was adjourned.

Respectfully submitted,

J. M. Barnhart