PLAINTIFF'S EXHIBIT 213

MINUTES
of the
TECHNICAL & RESEARCH COMMITTEE MEETING
NATIONAL INSULATION MANUFACTURERS ASSOCIATION
New York, N. Y. March 31, 1966.

Molded Section

The meeting was called to order at 9:15 A. M. with the following in attendance:

H. P. Hoopes, Chairman	Fibrebpard Paper Products Co.
J. McAllister	Baldwin-Ehret-Hill, Inc.
A. Kevlin	Owens-Corning Fiberglas Corp.
R. McKee	Baldwin-Ehret-Hill, Inc.
G. Pocius	Johns-Manville Sales Corp.
W. Schwingen	The Ruberoid Company
B. Tower	Johns-Manville Sales Corp.
D. Wingerter	Johns-Manville Sales Corp.
C. Wright	Johns-Manville Sales Corp.
J. M. Barnhart	NIMA

MILITARY SPECIFICATIONS MIL-I-2781

The following changes were agreed to:

Par. 1.2 Classification - Change to read as follows:

Grade I – Temperature up to 600F, compounded
Grade II - Temperatures up to 1000F
Class a - Fibrous
Class b - Compounded
Grade III - Temperatures up to 1200F
Class c - Compounded
Type I - Light Density
Type II - Heavy Density
Class d - Fibrous

Table II Physical requirements.

Table III - Physical Requirements

Change "k" values as follows:

Grade II

	Class c	Class d
Mean Temp		
200F	0.41	0.41
300F	0.46	0.46
400F	0.51	0.51

Since Pittsburgh Corning is not a member of NIMA, Bud Miller of PC will be contacted to ascertain whether they would be agreeable to the suggested "k" value change for their product.

Change Weight Loss by Tembling as follows:

Grade II - Class d
and Grade III - Class e, Type I to 30, 50.

MIL-I-2819

Par. 1.2 Classification - Change to read as follows:

Grade I - Temperatures up to 600F
Grade II - Temperatures up to 1200F
Grade III - Temperatures up to 1500F
Grade IV - Temperatures up to 2000F

FEDERAL SPECIFICATION HH-I-523

It was reported that Bob Lyons of GSA had indicated that this specification would not contain "expanded silica".

The following changes were agreed to:

Par. 3.4.2.1 - Delete the flame spread classification for canvas jackets.

Par. 3.4.3 - Use wordage used in specification dated September 23, 1964.

Change "vapor barrier" to "moisture barrier"

Par. 3.4.4 - Change to read "...not more than 1 perm through the laminate.

The thickness of the aluminum foil was thought to be too thin by some members. No suggested thickness was agreed to at this time. This subject will be pursued further.

FEDERAL SPECIFICATION HH-E-00100

Comments relative to this specification are to be sent to the NIMA office.

STRESS CORROSION OF AUSTENITIC STAINLESS STEEL

It was agreed that NIMA should establish a position relative to this subject.

Each company is to write to NIMA relative to their company's position pertaining to this problem prior to June 1, 1966. NIMA will summarize and circulate to the Committee defining the significance of the problem as it relates to insulation.

DEFENSE SUPPLY AGENCY LETTER

It was agrees that comments on the letter dated March 24, 1966, would be made thru NIMA. Each company is to send their comments to the NIMA office prior to May 15, 1966.

ADJOURNMENT

There being no further business the meeting was adjourned.

Respectfully submitted

J. M. Barnhart

PHILADELPHIA NAVAL SHIPYARD
(Naval Boiler & Turbine Laboratory)
Philadelphia, Pa. 19112

Code 2764 (JB)
9390 (A-727)

21 December 1965

Mr. John M. Barnhart, Secretary
National Insulation Manufacturers Assn.
441 Lexington Avenue
New York, New York 10017

Dear Mr. Barnhart:

This is with reference to your letter of 6 December 1965. Your comments on NBTL Project A-634, "Insulation Systems, Feasibility Study and Development" were most welcome.

We are only now getting started on Phase II of this project wherein, initially, we hope to develop a general specification covering felts, blankets and batts. Therefore, we feel that a meeting at this time, may be somewhat premature. Perhaps more could be gained if a meeting, such as you suggest, were deferred until the Phase II work has crystallized more fully.

We appreciate your interest in the project, and as much as possible, we will keep you informed of our progress.

Very truoy yours

/s/ J. W. Murdock
Head, Applied Physics Division

Copy to:
BUSHIPS Code 634A

OTHER BUSINESS

(a) H. P. Hoopes reported that Mare Island, California, is continually revising specs pertaining to insulation products. He will continue to follow this work.

ADJOURNMENT

There being no further business, the meeting was adjourned.

Respectfully submitted

J. M. Barnhart

7. HH-I-545 - June, 1966

8. MIL-I-2781 and MIL-I-2819 - June 1966

9. HH-I-523 - June 1966

10. Defense Sypply Agency Letter - May 15, 1966

THERMAL CONDUCTIVITY ROUND ROBIN

This subject including Pabco's suggested revisions to ASTM C 117 and C 335 were discussed. The Committee agreed that these specs need revising to include detail enough to build a standard plate. The Committee feels that this subject is an important one and much time and money can be involved to continue this subject. The Board of Directors will be asked whether the subject should be continued.

NAVAL BOILER & TURBINE LAB PROPOSAL

In light of the letter dated December 21, 1965, received from the Philadelphia Navy Yard on this subject, nothing further can be done until such time the Navy has completed more of their work. (copy of letter attached)

ASTM SPECIFICATIONS

(a) A revision to ASTM C165 is to be suggested to T VIII.

(b) Combined ASTM C392 & C378 are to be submitted to S-I after review by the Mineral Fiber Section.

(c) ASTM C-16 is recommende to use only E-84 for fire testing in specifications.

STRESS CORROSION OF AUSTENITIC STAINLESS STEEL

The Committee agreed to follow the recommendations as set forth in the Molded Section Minutes on this subject.