

MINUTES
of the
TECHNICAL & RESEARCH COMMITTEE MEETING
Glass Section
NATIONAL INSULATION MANUFACTURERS ASSOCIATION
Princeton, N. J. May 26, 1959

Chairman M. W. Keyes called the meeting to order at 10:15 A. M. with the following in attendance:

M. W. Keyes, Chairman	Pittsburgh Plate Glass Company
Walter Gubar	Gustin-Bacon Mfg. Company
V. L. Miller	Pittsburgh Corning Corp.
D. E. Morganroth	Owens-Corning Fiberglas Corp.
R. C. Parlett (For L. Scott)	Johns-Manville Sales Corp.

The following headings correspond with Agenda headings:

I. (a) Proposed Specification Insulation Pipe Covering, Thermal, Fibrous Glass was discussed. Corrections and changes were made according to the attached copy.

I. (c) The Glass Section met with the Rock and Slag Section for consideration of proposed ASTM Spec. C-264 (low temperature). Corrections and changes were adopted according to the attached draft. Thermal conductivities, Table II, was discussed by the Glass Section alone. Mr. Morganroth was to determine sigma limits for the various classes.

II. The temperature limit of Pipe, Blanket, and Felt Products (glass composition) was agreed to be that of 150 pound steam.

III. Parting Strength Test was discussed. It was agreed to consider this test as a possible industry standard for integrity and strength of product, particularly in quality control checks. Mr. Morganroth is to circulate the proposed test method together with representative data on the test.

IV. Density Tolerances of Fibrous Glass Products. Discussion was held on the technological limitations of machines presently in use. From the discussion it appeared that present machines do not product with suitable consistency flame attenuated type blankets of a density of less than twp-thirds pounds per cubic foot with a tolerance of plus or minus 10%, in thicknesses under one inch nominal.

V. Recommended Thicknesses. The Glass Section met with the other sections of the Technical & Research Committee. It was agreed after discussion that each member would review the matter and bring specific proposals to the next meeting.

VI. Erosion and Friction Factor for duct lining materials were discussed. Considerable disagreement in results was reported. Each member to report his opinion on the value and desirability of undertaking outside laboratory work to establish values for these two factors. Report to be by letter if possible, including copies to Glass Section Committee members and the Secretary.

Meeting adjourned 6:10 P. M.

M. W. Keyes, Chairman

MILITARY SPECIFICATION
INSULATION PIPE COVERING, THERMAL
FIBROUS GLASS

The following paragraphs shall be revised to read:

1.1 This specification covers fibrous glass for use as thermal insulation on pipes, valves and fittings up to 370 F.

3.2.1 Length - . . . . . A tolerance of plus or minus 3/16 inch in length will be permitted.

3.2.2 Sizes - The material shall be furnished to fit standard iron pipe sizes.

Delete Table 1

3.2.3 Thickness - The pipe covering shall be furnished in nominal thicknesses of .....

3.6 Thermal Conductivity - The thermal conductivity "k" expressed as British thermal units (B.t.u.) per square foot per hour per degree Fahrenheit (^{o}F) for a thickness of one inch shall not exceed the following values:

Mean Temperature	"k"
40°F	0.23
75°F	0.24
200°F	0.30

The specification would state that the insulation would be furnished without jackets unless specified and that all tests would be made on the unjacketed material.

APPENDIX A

Changes to ASTM C-264, Draft of 4-6-59

1. Scope Insert "and maximum" after "minimum".
Insert "limits" after "temperature".

2. Paragraph 2a. First sentence - delete comma after "fibers". Delete everything after "faced". Second sentence delete comma after "fibers". Change "with added binder" to "with binder added".

Paragraph 2c. Change "Finish" to "Facings". Change first sentence to read "The purchaser shall specify whether the blanket or felt insulation shall be supplied plain or faced and if faced shall specify the degree of water vapor resistance required."

Change second sentence to read

"Typical facings are

.022" aluminum foil
.001"aluminum foil
.004" vinyl (aluminum-pigmented)
Reinforced duplex Kraft paper
Reinforced foil-faced Kraft, flame-resistant

3. Paragraph 3 Change heading to read "Types and Classes".
Change first sentence to read "Standard types and classes of mineral wool blanket and felt insulation, based on nominal Change Taale as follows:

Table I - Types and Classes

Type I - Blankets (Flexible)		Type 2 - Felts (Semi-rigid)	
Class	Nominal Density lb/cu ft	Class	Nominal Density lb/cu ft
B-1	0.5	F-1	Under 6.0
B-2	0.75	F-2	6.0 and over
B-3	1.0		
B-4	1.4		
B-5	2.0		
B-6	3.0		

4. Paragraph 4 Change sentence to read"The type, class and facing suited to the conditions of intended service -----".

5. Paragraph 5b Insert "or roll" after "piece".

6, Table II Change headings as follows:
"Type - 1 Blankets (Flexible) Type 2 - Felts (Semi-rigid)

Classes	Class	Class	Class	Class	Class	Class
B-1 and B-2	B-3	B-4	B-5	B-6	F-1	F-2

7. Paragraph 5g Change sentence to read - "Where specified blanket and felt insulation shall contribute------".

8. Table III Change headings to read

"Type 1 - Blankets (Flexible) Type 2- Felts (Semi-rigid)

- Under Type 1 Blankets delete 54" width
- Under Type 1 Blankets delete 2-1/2" and 3-1/2" thicknesses
- From membership, get expression as to desireability of including 60" length and 30" width for Type 2- Felts.

9. Paragraph 6 - After "Lengths" change "a" to asterisk (note). Change note to read "Rolls of Type 1 blanket insulation -----".

10. Paragraph 7 Refer "Workmanship paragraph to C-16, to obtain better wording to eliminate the possible interpretation as to responsibility for <u>installed</u> condition.

11. Paragraph 8 Insert "Designation" after "ASTM" in two places

12. Paragraph 10(a) Change sentence to read "----supplier, mineral wool blanket and felt insulation shall be packed ----".

13. Paragraph 10(b) Change sentence to read"Unless otherwise specified containers shall be marked with the supplier's name and designation, type, class, size, thickness and quantity of material in the container".

14. Paragraph 11 Change sentence to read "When and as agreed by the purchaser ----".

15. Paragraph 12 Change to read "If the sample fails to conform ---". Change sub-headings to read "(a), (b) and (c).