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IN THE CIRCUIT COURT
THIRD JUDICIAL CIRCUIT
MADISON COUNTY, ILLINOIS

CLERK OF CIRCUIT COURT
THIRD JUDICIAL CIRCUIT
MADISON COUNTY, ILLINOIS

ROY CARSON, BRUCE LUSK, EDWARD
MEINERS, and WILLIAMS ADAMS
through LEWIS FLEURY,

NOS. 86-L-824,
86-L-836, 86-L-834,
86-L-1827 through
86-L-2458

-vs-

ANCHOR PACKING COMPANY, et al

DEFENDANT, OWENS-ILLINOIS, INC.'S ANSWERS TO
INTERROGATORIES TO DEFENDANTS

PRELIMINARY STATEMENT

Some of the events which may be relevant to the matters inquired about by Plaintiffs' Interrogatories apparently occurred more than thirty-five years ago. In addition, effective April 30, 1958, Owens-Illinois, Inc. disposed of the business involved in this action by way of sale of that business to Owens-Corning Fiberglas Corporation. Since that time, Owens-Illinois, Inc. has not engaged in any such business. It does not now and it has not since that sale manufactured, distributed or sold any asbestos-containing products. As a result of the foregoing factors, many of the individuals who might have had personal knowledge of the matters to which Plaintiffs' Interrogatories relate are deceased,

or are otherwise unavailable to Owens-Illinois, Inc., and investigations to date indicate that at least some documents which relate to matters inquired about by these interrogatories may have been transferred to Owens-Corning Fiberglas Corporation with the transfer of the business in question in 1958. Owens-Illinois, Inc. is engaged in a continuing investigation in an attempt to locate, confirm the transfer of, or confirm the absence of, such documents and is also engaged in a continuing investigation into the matters inquired about in these interrogatories. Unless otherwise stated in an answer to a specific interrogatory, the answers set out hereinafter are limited to the period during which Owens-Illinois, Inc. manufactured asbestos-containing insulation products and to the facilities related to that business. The following is a part of and is incorporated by reference in every answer provided hereinafter:

This answer is accurate as of the date made. However, Owens-Illinois, Inc.'s investigation is continuing, and Owens-Illinois, Inc. cannot exclude the possibility that it may be able to obtain more complete information or even information which indicates that the answer being supplied is incorrect. Owens-Illinois, Inc. objects to answering this interrogatory in regard to any period of time other than the period during which it engaged in the business involved in this case which ended in mid-1958 or concerning any facility not related to that business, on the basis that any such answer would be irrelevant to the subject matter of the pending litigation, would not be reasonably calculated to lead to the discovery of admissible evidence, and would be burdensome and oppressive.

Furthermore, Owens-Illinois, Inc. objects to the instructions and definitions supplied by plaintiffs with regard to these interrogatories, on the basis that the definitions are overbroad, vague, and often inconsistent with the normal usage and meaning of such words, and the instructions are overbroad, burdensome and constitute an unreasonable expansion of the interrogatories themselves. Owens-Illinois, Inc. therefore gives notice that it does not consider itself bound by the instructions and definitions propounded by plaintiffs, and instead shall answer the interrogatories in a manner consistent with a normal understanding of the language used in the answer and to the extent necessary to fairly and fully answer the interrogatory.

Q. 1. As to the person answering these interrogatories, state:

- (a) Name;
- (b) Title or position with defendant;
- (c) Business Address;
- (d) Length of time employed by defendant;
- (e) State year by year all other positions, titles or jobs that person has held with the defendant;
- (f) The years during which defendants have been licensed to do business within the State of Illinois, or State of Missouri and with regard to such years please state:
 - (1) The type of business conducted within the State of Illinois or State of Missouri;
 - (2) The names and addresses of any franchise holders, dealers, or customers located in the State of Illinois or State of Missouri during the last three years;
 - (3) Whether or not defendant directly or indirectly supplies the persons or entities identified in 1(f)(2) with any products or services; if so, please describe the relationship between defendant and those

persons or entities and state the approximate dollar value of defendant's 1930 to present sales to them.

A. 1. (a-e) Michael F. McCarthy, Assistant Secretary of Owens-Illinois, Inc., One SeaGate, Toledo, Ohio 43666.

(f) This defendant objects to this interrogatory on the basis that it seeks information which is not relevant to the subject matter of this litigation and is not reasonably calculated to lead to the discovery of admissible evidence. Without waiving the above objection, this defendant was authorized to do business in Illinois in 1929 and in Missouri in 1958.

Q. 2. Has the person answering these interrogatories made reasonably inquiry of all available sources of information such that plaintiff may rely on these answers as the truthful and complete answers made on behalf of this answering defendant? State the proper legal name and the present address of the principal place of business of each of defendant's related companies. For each related company identified, please state:

(a) Whether or not the company is licensed to do business in the State of Illinois;

(b) The business relationship between the company and defendant;

(c) The nature of the products or services that defendant sells to or purchases from the company;

(d) The type of business of the company conducts within the state of Illinois;

(e) Whether or not the company advertises defendant's products or services within the State of Illinois;

(f) Whether or not the company sells defendant's products or services within the State of Illinois;

and, if so, the approximate value of those sales or sales during 1930 to present;

(g) Whether or not the company pays any type of taxes to the State of Illinois or any political body located within the State of Illinois;

(h) Whether or not defendant has any control, directly or indirectly, over the company's advertising of defendant's products or services.

A. 2. This defendant states that it has referred to the relevant business records of the Owens-Illinois Glass Company, which are still in the possession of Owens-Illinois, Inc., in connection with the preparation of answers to these interrogatories unless otherwise indicated.

This defendant's name is Owens-Illinois, Inc. The address of the principal place of business is One SeaGate, Toledo, Ohio 43666.

This defendant objects to further answering this interrogatory on the basis that it seeks information which is not relevant to the subject matter of this litigation and is not reasonably calculated to lead to the discovery of admissible evidence. Defendant ceased all involvement in the asbestos-containing product business in 1958.

Q. 3. State the following concerning this defendant:

(a) Full and correct name;
(b) Principal place of business;
(c) State of incorporation;
(d) Date of incorporation, and name of Corporation;

(e) Is this defendant authorized to transact business in the State of Illinois? If so, state the date such authority was first issued and last renewed;

(f) Does this defendant have an agent, representative or place of business in Illinois? If so, state the name and address of such agent, representative, or other place of business;

(g) Does this defendant have an agent for service in the State of Illinois? If so, state the name and address of the registered agent.

A. 3. (a-e) Owens-Illinois Glass Company was incorporated in the State of Ohio in 1929. Owens-Illinois Glass Company changed its name to Owens-Illinois, Inc. on April 28, 1965. Owens-Illinois, Inc. was acquired pursuant to a tender offer dated 3/16/87 and is now a Delaware corporation. The address of the principal place of business is One SeaGate, Toledo, Ohio 43666. Refer to answer to Interrogatory No. 1.

(f,g) Yes, CT Corporation System, Chicago, Illinois, 60604.

Q. 4. Has this defendant been sued under its correct name? If not, state the correct legal name of the defendant and provide the information requested in No. 3 above concerning the defendant as correctly named.

A. 4. This defendant does not contest service.

Q. 5. Has this defendant ever acquired through purchase, reorganization or merger another corporation, company, or business which manufactured, sold, processed, distributed or contracted to apply asbestos products?

A. 5. No. However, Owens-Illinois Glass Company changed its name to Owens-Illinois, Inc. on April 28, 1965.

Q. 6. If the answer to Interrogatory No. 5 is "yes", then state the following concerning such predecessor:

- (a) Full and correct name;
- (b) The principal place of business;
- (c) State of incorporation;
- (d) Date of acquisition by defendant;
- (e) Was this business authorized to transact business in the State of Illinois?
- (f) Attach copies of all papers pertaining to the acquisition.

A. 6. Refer to answer to Interrogatory No. 5.

Q. 7. As to any product containing asbestos in any form, has this defendant, or any predecessor(s):

- (a) Ever designed such a product?
- (b) Manufactured such a product?
- (c) Processed such a product?
- (d) Sold such a product?
- (e) Distributed such a product?
- (f) Patented such a product?
- (g) Relabeled such a product which was manufactured, sold, or distributed by another company?

A. 7. (a) This defendant has in its records technical reports relating to the development and testing of Kaylo, and will make available to plaintiffs' counsel through its local counsel these records. Many of the reports are contained on microfilm which is old and of poor quality. Adequate copies may not be made from it, and reading it requires a reader device. This defendant further states that its investigation into the subject matter referred to in this interrogatory is continuing.

(b-e) This defendant engaged in the business of commercially manufacturing and selling an asbestos-containing product from 1948 through mid-1958.

(f) This defendant ceased the manufacture, sale and distribution of asbestos-containing products in 1958.

Its investigation as to information concerning any such United States Patents is continuing. However, it appears that the following patents may have been related to this defendant's asbestos-containing products at one time:

<u>Patent No.</u>	<u>Inventor</u>	<u>Issue Date</u>
2,425,610	Finley	8-12-47
2,439,724	Finley	4-13-48
RE.23,228	Frasor	5-09-50
2,534,303	Serinis	12-19-51
2,540,354	Selden	2-06-51
2,547,127	Kalousek	4-03-51
2,570,835	Mooney, et al.	10-09-51
2,574,667	Shuman	11-13-51
2,665,996	Kalousek	1-12-54
2,748,008	Kalousek	5-29-56
2,787,345	Soubier, et al.	4-02-57
2,788,304	Scovronek	4-09-57

(g) This defendant ceased the manufacture, sale and distribution of asbestos-containing thermal insulation products in 1958. This defendant states that in 1953 it entered into a "Sales Agreement" under which it agreed to sell certain amounts of its asbestos-containing thermal insulation products to Owens-Corning Fiberglas Corporation. Furthermore, this defendant has found information in its records which indicate that in at least 1956, it placed Owens-Corning Fiberglas Corporation's logo on some of its boxes. This defendant does not have information sufficient to further respond to this interrogatory.

Q. 8. If your answer to No. 7(b), 7(d) and 7(e) is "Yes", then give the trade name of the product, the year the defendant or predecessor first sold or distributed such product, and the year the defendant last sold or distributed such product.

A. 8. Owens-Illinois Glass Company began limited pilot plant operations involving the production of "Kaylo" asbestos-containing products in 1943. It began the manufacture of commercial quantities of "Kaylo" asbestos-containing products

in about 1948 and continued such manufacture until about April 30, 1958.

Q. 9. Have any of the products listed above in Interrogatory No. 7 been altered in chemical composition since first being marketed?

A. 9. This defendant has in its records technical reports relating to the development and testing of Kaylo, and will make available to plaintiffs' counsel through its local counsel these records. Many of the reports are contained on microfilm which is old and of poor quality. Adequate copies may not be made from it, and reading it requires a reader device. This defendant further states that its investigation into the subject matter referred to in this interrogatory is continuing.

Q. 10. If so, please state:

- (a) The trade name of each such product;
- (b) The date each such product was altered;
- (c) The nature of the alteration;
- (d) The reason for the alteration.

A. 10. Refer to answer to Interrogatory No. 9.

Q. 11. What is the name, address, and the job title of each individual who participate in the design and preparation of manufacturing specification for each such product?

A. 11. Refer to answer to Interrogatory No. 9. This defendant ceased the manufacture, sale and distribution of asbestos-containing products in 1958. This defendant has not found information in its records sufficient to enable it to answer this interrogatory.

Q. 12. Do any written memoranda, specifications, blueprints or other written materials of any kind or character relating to the design and preparation of said products now exist?

A. 12. Refer to answer to Interrogatory No. 9.

Q. 13. If so, please state:

- (a) List each written material or document;
- (b) Who presently has possession of each such document;
- (c) Where is it located?

A. 13. Refer to answer to Interrogatory No. 12.

Q. 14. In what year did the defendant first begin selling or distributing any products containing asbestos?

A. 14. Refer to answer to Interrogatory No. 8.

Q. 15. In what year did the defendant last sell the any product which contained asbestos?

A. 15. Effective April 30, 1958, this defendant sold its asbestos-containing manufacturing division to Owens-Corning Fiberglas Corporation. As of that time, this defendant ceased the manufacture, sale and distribution of asbestos-containing products and has not engaged in any such business since that date.

Q. 16. As to the named defendant or any predecessor(s) or acquired business, state the various types of products, such as blocks, pipe covering, cements, tape, spray-on insulation, mastics, and cloth, or any other asbestos-containing

products in any connection with each type of such product, state how the same was packaged (i.e., bags, boxes, sacks, etc.) for sale.

A. 16. This defendant ceased the manufacture, sale and distribution of asbestos-containing products in 1958. It believes that Kaylo and Kaylo-20 were premolded, rigid products, and were manufactured in two forms, block and pipe covering.

This defendant believes that some of its asbestos-containing insulation products were packaged in corrugated cartons with the trademark Kaylo on the carton. This defendant ceased the manufacture, sale and distribution of asbestos-containing products in 1958 and does not have information sufficient to further answer this interrogatory.

Q. 17. Is your company, as of the date of answering these interrogatories, still manufacturing, selling or distributing any products containing asbestos? If so, give the brand names of such products, the binding material and date first manufactured.

A. 17. No. Refer to answer to Interrogatory No. 15.

Q. 18. Were each of your asbestos-containing products generally expected to reach, or were packaged to reach, the consumer or user, without substantial change in the condition in which it was sold?

A. 18. Defendant believes that its product was not expected to be altered before it reached the user.

Q. 19. If your answer to Interrogatory No. 18 is "No", with respect to any product, explain in what way the defendant claims its products were altered or substantially

changed after sale or distribution and before reaching the helper, mechanic or bystander.

A. 19. Refer to answer to Interrogatory No. 18.

Q. 20. Based upon the material contents of your products, the method of manufacturing, and the method of application, can your products be generally applied or installed without liberating asbestos fibers?

(a) If there is a different answer concerning different products manufactured, sold, distributed, or used by your company then specify the different products by exact manufacturers name and popular name.

(b) If there is a difference in your answer depending on the year or years in which a particular product was used, then specify in detail what year or years you are referring to and the specific products you are referring to and the year involved.

A. 20. This defendant's asbestos-containing industrial insulation was manufactured in two forms, block and pipe covering. It was a premolded, rigid product which was not intended or required to be molded or mixed in application. It was manufactured in standard premolded shapes and sizes intended to minimize cutting of pieces in application. It appears that the product was applied by methods including gluing, tying, strapping, or wiring it to pipe. It appears that a limited amount of its product was cut during application. Roof deck was intended to be laid on or fastened to building frame members and waterproofed. Core material was intended to be used as a center layer for fire doors.

Q. 21. Was it a foreseeable use of your asbestos-containing products what they may have to be removed, stripped or replaced at any time after installation? If your company

contends the plaintiff(s) misused any of your products then state how and under what circumstances your product was misused.

A. 21. This defendant objects to this interrogatory on the basis that it seeks information which is not relevant to the subject matter of this litigation and is not reasonably calculated to lead to the discovery of admissible evidence. This defendant further objects to this interrogatory on the basis that it is vague and no time period as to when the submitted fact was foreseeable is indicated.

Q. 22. Prior to releasing the asbestos products manufactured, sold, etc. to the public for sale, were any tests conducted on same to determine potential health hazards involved in the use of materials contained therein?

A. 22. This defendant ceased the manufacture, sale and distribution of asbestos-containing products in 1958 and does not have any records from which it can obtain information sufficient to answer this interrogatory.

During May, 1979, various papers and reports were produced by an employee of the Trudeau Institute, Mr. Allan Logie, regarding animal experiments conducted at laboratories at Saranac Lake involving dust collected during the Kaylo manufacturing process. These papers and reports may contain information relating to the substance of this interrogatory. This defendant has not been able to find these papers and reports in its business records or correspondence although it has searched for and continues to search for them.

This defendant's counsel obtained copies of some of the papers and reports produced by Mr. Logie. However, these copies constitute only a portion of a larger volume of papers and reports which this defendant has not copied. They are available at Milbank, Tweed, Hadley & McCloy, 1 Chase Manhattan Plaza, New York, New York. This defendant also has reason to believe that

plaintiffs' counsel has copies of the documents produced by Mr. Logie. Other documents possibly relating to this interrogatory may have been produced by Owens-Corning Fiberglas Corporation in the asbestos litigation.

Those documents found at Saranac Lake and at Owens-Corning Fiberglas Corporation and elsewhere, indicate that during the period of time when Owens-Illinois was in the business of manufacturing asbestos-containing products, the state of government, industrial hygiene and medical community knowledge was that there was a recognized safe exposure level for asbestos dust and that persons installing insulation were not exposed to excessive or hazardous levels of asbestos dust. The foregoing documents also indicate that Kaylo plant employees were x-rayed periodically and displayed no asbestos-related chest disease; that this defendant made appropriate efforts to provide ventilation and to control the emissions of all dust omitted during the manufacturing process within recognized safe levels of exposure, including the use of respirators in some instances, dust collection equipment and other devices as necessary; and that therefore during the period in which this defendant was in the business of manufacturing Kaylo it had no reason to believe that the foreseeable use of Kaylo would create a hazard to users.

The documents produced by Owens-Corning Fiberglas Corporation indicate that the September, 1955 publication in the A.M.A. Archives of Industrial Health was a publication of inhalation experiments.

To the extent that this interrogatory seeks the production of documents, such documents, as outlined in this response, have not been found as part of this defendant's records and, to the extent that this defendant is in possession of copies of documents, it possesses copies only of documents collected in preparation for litigation. This defendant objects to producing the same. The documents are available from their proper source.

Q. 23. If so please state:

(a) The name, address, and job classification of each individual who conducted such tests.

(b) The results of such said tests.

(b) Date of such studies.

A. 23. Refer to answer to Interrogatory No. 22.

Q. 24. Do any written memoranda, specifications, blueprints or other written materials of any kind or character exist relating to the testing of said product?

A. 24. This defendant objects to this interrogatory on the grounds that it is vague and ambiguous in that it does not indicate what type of testing about which it seeks information. Without waiving the above objection, refer to answers to Interrogatory Nos. 9 and 22.

Q. 25. If so, please state:

(a) List each such written material or document.

(b) Who presently has possession of each such document and where it is located.

A. 25. Refer to answer to Interrogatory No. 24.

Q. 26. Did defendant, or any of its subsidiary companies make any design changes as a result of such tests?

A. 26. This defendant objects to this interrogatory on the grounds that it is vague and ambiguous in that it does not indicate what type of testing about which it seeks information. Without waiving the above objection, refer to answer to Interrogatory No. 9.

Q. 27. If so, please state:

(a) The nature of the change made.
(b) The name, address, and job
classification of each person in charge of making a change.

A. 27. Refer to answer to Interrogatory No. 26.

Q. 28. After releasing said products to the public, were any tests conducted thereon to determine potential health hazards involved in the use of materials contained therein?

A. 28. Refer to answer to Interrogatory No. 22.

Q. 29. If so, please state:
(a) The name, address, and job
classification of each person conducted said tests;
(b) The results of said tests.

A. 29. Refer to answer to Interrogatory No. 28.

Q. 30. Prior to 1970, did you or your predecessor(s) ever have any labor inspectors or anyone from your company whose job it was to go to areas where your products were being used or installed to make a dust level count? If so, state when this procedure started, the purpose of such procedure, and what action, if any, was taken in response to the findings, and attach results.

A. 30. This defendant objects to interrogatory on the basis that it seeks information which is not relevant to the subject matter of this litigation and is not reasonably calculated to lead to the discovery of admissible evidence. Without waiving the above objection, this defendant ceased the manufacture, sale and distribution of asbestos-containing products in 1958. This defendant has not found information in its records sufficient to enable it to answer this interrogatory.

Q. 31. If your company performed or had performed any dust level counts, what action based on the results did your company take?

A. 31. Refer to objection and answer to Interrogatory No. 30.

Q. 32. Has your company or its predecessor(s) ever conducted any studies concerning the effects of the inhalation of asbestos dust or fibers on one using or being exposed to any of the asbestos materials manufactured, sold or distributed by you, or your predecessor(s)? If answer to this question is "yes", give the date and nature of such studies and their addresses; what the purpose of the studies were; and attach a copy of any reports based upon such studies, showing to whom such reports were given, and the date.

A. 32. This defendant ceased the manufacture, sale and distribution of asbestos-containing products in 1958 and does not have any records from which it can obtain information sufficient to answer this interrogatory.

During May, 1979, various papers and reports were produced by an employee of the Trudeau Institute, Mr. Allan Logie, regarding animal experiments conducted at laboratories at Saranac Lake involving dust collected during the Kaylo manufacturing process. These papers and reports may contain information relating to the substance of this interrogatory. This defendant has not been able to find these papers and reports in its business records or correspondence although it has searched for and continues to search for them.

This defendant's counsel obtained copies of some of the papers and reports produced by Mr. Logie. However, these copies constitute only a portion of a larger volume of papers and reports which this defendant has not copied. They are available

at Milbank, Tweed, Hadley & McCloy, 1 Chase Manhattan Plaza, New York, New York. This defendant also has reason to believe that plaintiffs' counsel has copies of the documents produced by Mr. Logie. Other documents possibly relating to this interrogatory may have been produced by Owens-Corning Fiberglas Corporation in the asbestos litigation.

Those documents found at Saranac Lake and at Owens-Corning Fiberglas Corporation and elsewhere, indicate that during the period of time when Owens-Illinois was in the business of manufacturing asbestos-containing products, the state of government, industrial hygiene and medical community knowledge was that there was a recognized safe exposure level for asbestos dust and that persons installing insulation were not exposed to excessive or hazardous levels of asbestos dust. The foregoing documents also indicate that Kaylo plant employees were x-rayed periodically and displayed no asbestos-related chest disease; that this defendant made appropriate efforts to provide ventilation and to control the emissions of all dust omitted during the manufacturing process within recognized safe levels of exposure, including the use of respirators in some instances, dust collection equipment and other devices as necessary; and that therefore during the period in which this defendant was in the business of manufacturing Kaylo it had no reason to believe that the foreseeable use of Kaylo would create a hazard to users.

The documents produced by Owens-Corning Fiberglas Corporation indicate that the September, 1955 publication in the A.M.A. Archives of Industrial Health was a publication of inhalation experiments.

To the extent that this interrogatory seeks the production of documents, such documents, as outlined in this response, have not been found as part of this defendant's records and, to the extent that this defendant is in possession of copies of documents, it possesses copies only of documents collected in preparation for litigation. This defendant objects to producing the same. The documents are available from their proper source.

Q. 33. Has your company or its predecessor(s) ever conducted or caused to be conducted any studies designed to minimize or eliminate the inhalation of asbestos dust and fibers by those exposed to the use of your company's asbestos products? If so, give the following:

(a) Name of the person or firm conducting such studies.

(b) The date the studies began and the date completed.

(c) Any publication or dissemination of the results of the studies.

(d) The nature of any action to eliminate or minimize inhalation of asbestos dust or fibers.

(e) Attach copies.

A. 33. This defendant ceased the manufacture, sale and distribution of asbestos-containing products in 1958. This defendant has not found information in its records sufficient to enable it to answer this interrogatory.

Q. 34. If your answer to Interrogatory No. 33 is "yes", state the name and address of such industrial hygienist or hygienists.

A. 34. Refer to answer to Interrogatory No. 33.

Q. 35. Does your company have, has it ever had, or has your predecessor(s) ever had, a Research Department? If so, give the year such Research Department was established, and whether or not such Research Department has operated continuously since being established.

(a) How much expended each year on research, etc.

(b) What percentage of gross sales did your company or its predecessor(s) spend on research concerning the health affects of asbestos.

A. 35. This defendant objects to this interrogatory as being vague, ambiguous, irrelevant, overly broad, not reasonably calculated to lead to the discovery of admissible evidence and not limited to any issue which is the subject of this case.

Q. 36. Prior to 1965, did you company, or any predecessor(s), ever at any time give persons who would be applying or removing your asbestos products instructions concerning safety precautions to use in applying such products? If so, describe such instructions, to whom they were given, the dates they were given, and the manner of giving such instructions.

A. 36. This defendant objects to interrogatory on the basis that it seeks information which is not relevant to the subject matter of this litigation and is not reasonably calculated to lead to the discovery of admissible evidence, except as it relates to the period of time during which this defendant engaged in the manufacture, sale and distribution of its asbestos-containing products. Without waiving the above objection, this defendant ceased the manufacture, sale and distribution of asbestos-containing products in 1958. This defendant has not found information in its records sufficient to enable it to answer this interrogatory.

Q. 37. Did your company, or your predecessor(s), ever place any warnings signs on the containers in which asbestos products were packaged?

A. 37. This defendant ceased the manufacture, sale and distribution of asbestos-containing products in 1958. This defendant has not found information in its records sufficient to enable it to answer this interrogatory. However, it does not appear that any warning concerning asbestos was given in that it does not appear that this defendant had reason to believe that the use of its products would result in a foreseeable risk of harm.

Q. 38. If you have answered Interrogatory No. 37 in the affirmative, please state:

(a) On what date did your company, or your predecessor(s), issue an order directing a warning be placed on your asbestos products, or containers?

(b) On what date was such warning actually first placed on your asbestos products or containers?

(c) On what date did your asbestos products, accompanied by such warning, first reach the contractor?

(d) State the exact wording of the first warning.

(e) State the exact size of the warning printed on your asbestos products or container.

(f) Did your company, or its predecessor(s) dictate the exact size of the printed warning?

(g) Why did your company or its predecessor(s) place such warning on your asbestos products or containers?

(h) Did your company or its predecessor(s) place such warning on your asbestos products or containers because you received a directive, command, suggestion, legal opinion, or any type of communication (written or otherwise) from any person, firm, corporation, governmental agency, committee, association, attorney or institute? If so, from whom and on what

date did you receive such directive, command, suggestion, legal opinion, or other type of communication.

(i) If the wording of the warning has ever been changed or altered, state when it was changed and the exact change in the wording.

A. 38. Refer to answer to Interrogatory No. 37.

Q. 39. Did your company or its predecessor(s) ever place any warning directly on any of its asbestos pipe covering, block, cloth, millboard or other asbestos products?

A. 39. This defendant ceased the manufacture, sale and distribution of asbestos-containing products in 1958. This defendant has not found information in its records sufficient to enable it to answer this interrogatory. However, it does not appear that any warning concerning asbestos was given in that it does not appear that this defendant had reason to believe that the use of its products would result in a foreseeable risk of harm.

Q. 40. Did your company ever stamp the name of the company, its initials, or any identifying logo on any of its asbestos pipe covering, blocks, cloth, millboard or asbestos product?

A. 40. This defendant does not believe that its asbestos-containing product or the product's covering or wrapping contained any logo or identifying marks.

Q. 41. Did the warning inquired about in Interrogatories 39 and 40, or similar warning, ever appear in any of your sales literature? If so, attach copies of such sales literature, showing the date such literature was printed.

A. 41. Not applicable. Refer to answers to Interrogatory Nos. 39 and 40.

Q. 42. On what date was the sales literature inquired about in Interrogatory No. 41 first provided to distributors or sellers of your company's asbestos products, or your predecessor(s)'s products?

A. 42. Not applicable. Refer to answer to Interrogatory No. 41.

Q. 43. Were any material safety data sheets ever prepared by your company or its predecessor(s)? If so, attach copies.

A. 43. This defendant objects to this interrogatory as being vague, ambiguous, irrelevant, overly broad, not reasonably calculated to lead to the discovery of admissible evidence and not limited to any issue which is the subject of this case.

Q. 44. Did your company or its predecessor(s) ever recall any products containing asbestos from the common market?

(a) State all details of such recall, giving the name of the product, the time of recall and any further action taken in connection with the recall.

A. 44. This defendant ceased the manufacture, sale and distribution of asbestos-containing products in 1958. This defendant has not found information in its records sufficient to enable it to answer this interrogatory.

Q. 45. Has your company or its predecessor(s) ever directly advised any contractor to whom you sell your products

containing asbestos of threshold limit values for exposure to asbestos dust recommended by the American Conference of Governmental Industrial Hygienists? If so, state the date or dates that you so advised such contractors, the manner in which you advised such contractor, and the name of each contractor.

A. 45. This defendant ceased the manufacture, sale and distribution of asbestos-containing products in 1958. This defendant has not found information in its records sufficient to enable it to answer this interrogatory.

Q. 46. Prior to 1964 did your company or its predecessor(s) ever manufacture products containing asbestos without a warning? List the years.

A. 46. This defendant ceased the manufacture, sale and distribution of asbestos-containing products in 1958. This defendant has not found information in its records sufficient to enable it to answer this interrogatory. However, it does not appear that any warning concerning asbestos was given in that it does not appear that this defendant had reason to believe that the use of its products would result in a foreseeable risk of harm.

Q. 47. After 1964 did you ever manufacture products containing asbestos without a warning? If so, list the name of the product and the years.

A. 47. This defendant ceased the manufacture, sale and distribution of asbestos-containing products in 1958. Not applicable to this defendant.

Q. 48. Is your company, as of the date of answering these interrogatories, still manufacturing, selling or distributing any products containing asbestos? If so, give the

brand names of such products and the binding material and dates of first manufacture of such product.

A. 48. This defendant ceased the manufacture, sale and distribution of asbestos-containing products in 1958.

Q. 49. Did your company or any predecessor(s) ever have a division or subsidiary company engaged in the contracting business of applying asbestos products? If so, give the name of such division or subsidiary company, the full address of the home office of such division or subsidiary company, and the dates such division or subsidiary company was engaged in the contracting business.

A. 49. This defendant has never formed nor maintained a group or groups known as "contract units," such "contract units" being a division or group within or maintained by the corporation which, inter alia, engaged in the actual installation of insulation products containing asbestos at job sites.

Q. 50. Did any division of your company or subsidiary company engaged in the contract business of applying asbestos products or your workmen's compensation insurance carrier ever have any claims for lung diseases, whether directly or indirectly attributed to asbestosis, mesothelioma, lung cancer, or any exposure to asbestos products prior to 1972? If the answer is "yes", give the name of such employees and attach copies of such claims and copies of all documents relating to the disposition and handling of such claims.

A. 50. During the period in which this defendant engaged in the manufacture of its asbestos-containing products, it received no workers' compensation claims for any asbestos-related disease.

Q. 51. Give the location of the state industrial accident board handling each such claim, the disposition of such claims, and the amounts paid in workmen's compensation benefits to each such employee, and the name of the compensation carrier.

A. 51. Not applicable. Refer to answer to Interrogatory No. 50.

Q. 52. Did your company or its predecessor(s) ever make any industrial hygiene surveys concerning its asbestos products? If so, give the date of such surveys, and attach copies of such surveys.

A. 52. Refer to answer to Interrogatory No. 22.

Q. 53. State the year that this defendant or any predecessor(s) was first advised of either threshold limit values or maximum allowable concentrations of both asbestos dust and total dust by the American Conference of Governmental Industrial Hygienists, and state the name of the employee-official of the company receiving such advise and attach copies of the instrument communicating such advise.

A. 53. This defendant ceased the manufacture, sale and distribution of asbestos-containing products in 1958. It has not located information in its records that would enable it to answer this interrogatory. However, it appears that this defendant was aware of the TLV for asbestos dust and other dusts as published by the American Conference of Governmental Industrial Hygienists (ACGIH) in the mid to late 1940's or 1950's.

During the 1940's and after, it appears that an employee of this defendant subscribed to and received the Journal of Industrial Hygiene and Toxicology which contained, in 1946, an

article entitled "A Health Survey of Pipe Covering Operations in Constructing Naval Vessels," by Fleischer, Drinker and others which discusses safe levels of asbestos. Also, this defendant was a member of the Industrial Hygiene Foundation in 1946. The transactions of the Eleventh Annual Meeting, Industrial Hygiene Foundation, dated November 7, 1946 contain, beginning at page 71, an explanation by J. J. Bloomfield of then existing threshold limit values including the TLV for asbestos. It also appears that an employee of this defendant subscribed to and received the journal, Industrial Hygiene and Occupational Medicine, which contained in 1951, an abstract of an article entitled "A Contribution to the Study of Asbestosis" by P. Cartier which refers to the TLV for asbestos.

Further, in May, 1979, various papers and reports were produced by an employee of the Trudeau Institute, Mr. Allan Logie, regarding animal experiments conducted at laboratories at Saranac Lake, New York purportedly involving dust collected during the manufacture of Kaylo. These papers and reports may contain information related to the substance of this interrogatory. This defendant has not been able to find those papers and reports in its business records or correspondence although it has searched for and continues to search for them. Among those papers and reports is a paper dated May 29, 1951 which refers to the TLV for asbestos dust.

Additionally, Owens-Corning Fiberglas Corporation produced, in various cases in 1979, papers purporting to relate to this defendant's asbestos-containing product business. One such paper is a copy of a letter to Dr. Miriam Sachs, Chief, Bureau on Adult and Industrial Health, State of New Jersey Department of Health, Trenton, New Jersey regarding State standards. Neither the documents produced by Owens-Corning Fiberglas Corporation nor those produced by Mr. Logie have been located in this defendant's records.

Q. 54. Was such threshold limit values or maximum allowable concentrations inquired about in Interrogatory No. 53 TOTAL dust and not just asbestos dust?

A. 54. This defendant understands the term "threshold limit value" as it pertains to the asbestos trade to mean the maximum average atmospheric concentration of asbestos dust to which workers may be exposed for an eight hour day without injury to health. During the period of time this defendant manufactured, sold and distributed asbestos-containing products, the threshold limit value for asbestos dust, as taken from the published transactions and other material of the American Conference of Governmental and Industrial Hygienists was 5,000,000 particles of asbestos dust per cubic foot of air.

Q. 55. State in detail what test, if any, your company ever made with regard to the quantity, quality or threshold limit values or asbestos dust or particles to which applicators or consumers of your product were exposed while using your products containing asbestos.

(a) If there were any such tests or studies, give the name or names of the person(s) conducting the tests, the date of the tests and Attach true copies of any reports, findings or memorandums concerning such tests or studies.

A. 55. This defendant ceased the manufacture, sale and distribution of asbestos-containing products in 1958. This defendant has not found information in its records sufficient to enable it to answer this interrogatory.

Q. 56. When did any official with your company first have knowledge, information or understanding that asbestos would or could or might produce the diseases of:

(a) Asbestosis;

(b) Mesothelioma;
(c) Lung Cancer;
(d) Any other diseases;
(e) With reference to your company give the name of such official who first had such knowledge list them and attach copies.

(f) If there are any documents, records or memorandums of any kind concerning such knowledge, list them and attach copies.

A. 56. (a, d-f) To the extent this interrogatory inquires as to asbestos-containing products manufactured or sold by other defendants, this defendant states that it does not have any records from which it can obtain information sufficient to answer this interrogatory, nor can it locate any present employees with knowledge thereof.

Insofar as this interrogatory inquires as to asbestos-containing products manufactured by this defendant, this defendant states that it ceased the manufacture, sale and distribution of asbestos-containing products effective April 30, 1958 and has not engaged in any such business since.

During May, 1979, various papers and reports were produced by an employee of the Trudeau Institute, Mr. Allan Logie, regarding animal experiments conducted at laboratories at Saranac Lake involving dust collected during the Kaylo manufacturing process. These papers and reports may contain information relating to the substance of this interrogatory. This defendant has not been able to find these papers and reports in its business records or correspondence although it has searched for and continues to search for them.

This defendant's counsel obtained copies of some of the papers and reports produced by Mr. Logie. However, these copies constitute only a portion of a larger volume of papers and reports which this defendant has not copied. This defendant also has reason to believe that plaintiffs' counsel has copies of the

documents produced by Mr. Logie. They are available at Milbank, Tweed, Hadley & McCloy, 1 Chase Manhattan Plaza, New York, New York. Other documents possibly relating to this interrogatory may have been produced by Owens-Corning Fiberglas Corporation. Those documents indicate that experiments referred to in the documents produced by Mr. Logie were published in an AMA publication in September, 1955. As with the documents produced by Mr. Logie, the documents produced by Owens-Corning Fiberglas Corporation have not been found as part of this defendant's records.

The foregoing documents indicate that during the time in which this defendant engaged in the manufacture, sale and distribution of asbestos-containing products, its products contained a relatively small proportion of asbestos when compared to other asbestos-containing products in use during and prior to the same period of time. It appears that this defendant's employees at its asbestos product manufacturing plants were x-rayed periodically and displayed no asbestos-related chest disease, although in the course of their employment they were exposed to the raw materials of this defendant's products as well as the dust of the finished product. Furthermore, these documents indicate that there were no worker's compensation claims filed by its employees for asbestos-related diseases.

It was this defendant's understanding of the state of medical and industrial hygiene knowledge that exposure to asbestos in excessive amounts over a prolonged period of time (years), in the conditions typically experienced in factories, workshops, and possibly mines and mills could lead to the potential hazard of contracting a disease known as asbestosis.

However, the state of medical and industrial hygiene knowledge was also to the effect that there was a safe level (threshold limit value) of asbestos to which a person could be exposed without risk of injury. This defendant was aware of the threshold limit value for asbestos as published by the American Conference of Governmental Industrial Hygienists (ACGIH) in the

1940's and 1950's through publications by the Industrial Hygiene Foundation, ACGIH and from the above referenced "Logie" and "OCF" documents.

In addition, it appears that an employee of this defendant subscribed to and received the Journal of Industrial Hygiene and Toxicology which contained in January, 1946 an article published by the Navy entitled, "A Health Survey of Pipe Covering Operations in Constructing Naval Vessels," by Fleischer, Viles, Gade and Drinker. This article stated that persons who worked as insulators in shipyards were not exposed and did not work in conditions similar to those experienced in factories, workshops, mines and mills, and were not exposed to levels of asbestos above the recognized safe limits. Therefore, the article concluded that such persons were not engaged in a hazardous occupation.

From the foregoing papers, reports and articles, this defendant had no reason to believe that exposure to its asbestos-containing products would result in a foreseeable risk of harm to users.

This defendant reserves the right to supplement this response as discovery and the case warrant. This defendant has reason to believe that plaintiffs' counsel is in possession of a substantial library of asbestos-related literature containing articles that defendant may wish to rely upon.

To the extent that this interrogatory seeks the production of documents, such documents, as outlined in this response, have not been found as part of this defendant's records and, to the extent that this defendant is in possession of copies of documents, it possesses copies only of documents collected in preparation for litigation. This defendant objects to producing the same. The documents are available from their proper source.

(b-c) This defendant objects to this interrogatory on the basis that it is vague, ambiguous and unintelligible. Defendant also objects on the basis that its present knowledge is irrelevant to this action in that evidence

of a causal connection between cancer or mesothelioma and asbestos was first accepted by medical science after the period of time defendant ceased the manufacture of asbestos-containing products. Without waiving its objections, defendant is informed and believes that at no time prior to 1958 was there reason to believe that the medical and scientific community accepted that there was a causal connection established between exposure to asbestos and a risk of contracting cancer or mesothelioma.

Q. 57. Do you have any photographs of the products inquired about above or their packages or containers? If so, please attach exact copies.

A. 57. Refer to documents attached hereto as Exhibit I.

Q. 58. Has the answering defendant or any of its predecessors ever mined asbestos? If so, state the dates in which such mining took place and the locations of the mines.

A. 58. This defendant does not now and has not in the past engaged in the business of mining, milling, or selling raw asbestos.

Q. 59. List by brand name every products containing asbestos which defendant or defendant's predecessors has manufactured since 1910. As to each such product, please state the following:

- (a) The type of product (e.g., acoustical plaster, fireproofing, concrete, etc.);
- (b) The date the product first went into production;
- (c) The date the product was discontinued from production;
- (d) The last date the product was sold;

(e) All manufacturing locations of the product;

(f) The identify of the plant manager(s) or managing agent(s) of the defendant who has knowledge of the products manufactured by defendant and its predecessor(s), and who may be called upon by plaintiffs to testify by deposition.

A. 59. Kaylo and Kaylo-20.

(a) This defendant's asbestos-containing industrial insulation was manufactured in two forms, block and pipe covering.

(b-d) Owens-Illinois Glass Company began limited pilot plant operations involving the production of "Kaylo" asbestos-containing products in 1943. It began the manufacture of commercial quantities of "Kaylo" asbestos-containing products in about 1948 and continued such manufacture until about April 30, 1958.

(e) This defendant's manufacturing plants were located in Berlin, New Jersey and Sayreville, New Jersey. The Berlin plant was in operation from approximately 1943 until on or about April 30, 1958. The Sayreville plant was in operation from February, 1948 until about April 30, 1953.

(f) This defendant objects to this interrogatory on the basis that it seeks information which is not relevant to the subject matter of this litigation and is not reasonably calculated to lead to the discovery of admissible evidence:

Q. 60. As to each product identified in response to the foregoing interrogatory please indicate:

(a) The type of asbestos contained in the product as it was first manufactured;

(b) The percentage of asbestos contained in the product as it was first manufactured;

(c) Any modification to the product which altered the percentage or type of asbestos in the product and the dates of such modification;

(d) The source of asbestos in each product;

(e) The color, physical characteristics, and appearance of each product;

(f) A full and complete description of the package in which the product was sold, including, but not limited to, type of package, size, color(s), and writings thereon;

(g) All other names under which the product was sold;

(h) The number and date of each patent or patent application as to the product;

(i) If the product continued to be produced after the deletion of asbestos, all reasons why the asbestos was deleted, the identity of the person who made the decision to delete the asbestos, and the date the product was first produced without the asbestos;

(j) If the product is no longer produced, all reasons it was discontinued, the identity of the person who made the decision to discontinue the product, the brand name of the replacement product, and the date the replacement product first went into production;

(k) The identify of the custodian, managing agent, or employee who has photographs, drawings, or labels of each product;

(l) The reasons why asbestos was used as an ingredient in each product;

(m) The content of any warning labels, inserts or other writings provided with such product with ever such printed warning, what period of time it has or had accompanied the product, the exact wording of the warning, any amendments made to the wording, whether the warning was located

on each product or packaging, and on what asbestos products the warnings appear(ed);

(n) Any special instructions provided with such product regarding the use, protection or safety procedures to be employed by persons handling such product.

A. 60. (a-b) This defendant ceased the manufacture, sale and distribution of its asbestos-containing products in 1958. Its investigation as to the composition of each such product, including the type of asbestos contained therein (i.e., amosite or chrysotile) and the quantitative percentage of asbestos, is continuing, although this defendant now believes that this defendant's commercially produced asbestos-containing products were hydrous calcium silicates containing between 13% and approximately 20% asbestos. Chrysotile asbestos was the primary type apparently used. Amosite was used to a lesser extent.

(c) This defendant has in its records technical reports relating to the development and testing of Kaylo, and will make available to plaintiffs' counsel through its local counsel these records. Many of the reports are contained on microfilm which is old and of poor quality. Adequate copies may not be made from it, and reading it requires a reader device. This defendant further states that its investigation into the subject matter referred to in this interrogatory is continuing.

(d) This defendant believes that the chrysotile which was the primary type of asbestos used in its insulation products was imported from Canada, and that at least some of this chrysotile was purchased from Canadian Johns-Manville, Ltd. This defendant further believes that the amosite asbestos used in some of its insulation products was imported from South Africa and at least a portion of such amosite was purchased from the African and European Agencies. This defendant ceased the manufacture, sale and distribution of asbestos-

containing products in 1958 and does not have information sufficient to further answer this interrogatory.

(e) This defendant ceased the manufacture, sale and distribution of asbestos-containing products in 1958. It believes that Kaylo and Kaylo-20 were premolded, rigid products, and were manufactured in two forms, block and pipe covering. Kaylo was white or off-white in color, and Kaylo-20 was pinkish in color.

(f) This defendant believes that some of its asbestos-containing insulation products were packaged in corrugated cartons with the trademark Kaylo on the carton. This defendant ceased the manufacture, sale and distribution of asbestos-containing products in 1958 and does not have information sufficient to further answer this interrogatory.

(g) Kaylo and Kaylo-20.

(h) This defendant ceased the manufacture, sale and distribution of asbestos-containing products in 1958. Its investigation as to information concerning any such United States Patents is continuing. However, it appears that the following patents may have been related to this defendant's asbestos-containing products at one time:

<u>Patent No.</u>	<u>Inventor</u>	<u>Issue Date</u>
2,425,610	Finley	8-12-47
2,439,724	Finley	4-13-48
RE.23,228	Frasor	5-09-50
2,534,303	Serinis	12-19-51
2,540,354	Selden	2-06-51
2,547,127	Kalousek	4-03-51
2,570,835	Mooney, et al.	10-09-51
2,574,667	Shuman	11-13-51
2,665,996	Kalousek	1-12-54
2,748,008	Kalousek	5-29-56
2,787,345	Soubier, et al.	4-02-57
2,788,304	Scovronek	4-09-57

(i) This defendant ceased the manufacture, sale and distribution of asbestos-containing products in 1958 pursuant to the sale of its Kaylo Division to Owens-Corning

Fiberglas Corporation. This defendant did not manufacture Kaylo without asbestos.

(j) Effective April 30, 1958, this defendant sold its asbestos-containing manufacturing division to Owens-Corning Fiberglas Corporation. As of that time, this defendant ceased the manufacture, sale and distribution of asbestos-containing products and has not engaged in any such business since that date.

(k) Refer to documents attached hereto as Exhibit II.

(l) This defendant objects to this interrogatory on the basis that it seeks information which is not relevant to the subject matter of this litigation and is not reasonably calculated to lead to the discovery of admissible evidence. Without waiving the above objection, refer to answer to Interrogatory No. 60(c).

(m) This defendant ceased the manufacture, sale and distribution of asbestos-containing products in 1958. This defendant has not found information in its records sufficient to enable it to answer this interrogatory. However, it does not appear that any warning concerning asbestos was given in that it does not appear that this defendant had reason to believe that the use of its products would result in a foreseeable risk of harm.

(n) This defendant ceased the manufacture, sale and distribution of asbestos-containing products in 1958. This defendant has not found information in its records sufficient to enable it to answer this interrogatory.

Q. 61. With respect to your answer in Interrogatory No. 60, did you specifically inform the purchaser or user of your products during the same time period that your products were manufactured and sold that such products would cause cancer, asbestosis, and other serious diseases?

A. 61. This defendant ceased the manufacture, sale and distribution of asbestos-containing products in 1958. This defendant has not found information in its records sufficient to enable it to answer this interrogatory. However, it does not appear that any warning concerning asbestos was given in that it does not appear that this defendant had reason to believe that the use of its products would result in a foreseeable risk of harm. Further, during this time period, the state of medical and scientific knowledge was such that there was no reason to believe that there was an association between exposure to asbestos and the risk of contracting cancer.

Q. 62. Identify the distribution chain of defendant's asbestos products since 1925 along with any documents evidencing or confirming such chain, including but not limited to distribution from and to other defendants.

A. 62. This defendant objects to this interrogatory on the basis that it seeks information which is not relevant to the subject matter of this litigation and is not reasonably calculated to lead to the discovery of admissible evidence. Without waiving the above objection, in 1953, this defendant entered into a sales agreement with Owens-Corning Fiberglas Corporation under which it agreed to the sale of asbestos-containing products to that corporation. This defendant believes that it ceased the general marketing and sales of its asbestos-containing thermal insulation products at that time, disbanded its sales force, and that thereafter, Owens-Corning Fiberglas Corporation was the primary marketer of its product until the sale of the division to Owens-Corning Fiberglas Corporation in 1958. Refer to Exhibit III.

Q. 63. Identify your distributors and/or suppliers of raw asbestos, asbestos cement and other asbestos products with which you had business contact.

A. 63. Refer to answer to Interrogatory No. 60(d). This defendant was not involved in any business relating to asbestos cement.

Q. 64. Is this defendant aware or has it possessed knowledge concerning the reported causal connection between exposure to asbestos or asbestos products and:

- (a) asbestosis?
- (b) lung cancer?
- (c) mesothelioma?
- (d) other cancer?

A. 64. (a) During the period of time in which this defendant engaged in the manufacture, sale and distribution of its asbestos-containing products, it was this defendant's understanding that the inhalation of asbestos dust in excessive amounts over a prolonged period of time (years), under certain conditions, could lead to the potential hazard of contracting a disease known as asbestosis. However, in 1958 and before and for some years thereafter, the state of the medical and scientific knowledge was to the effect that there was a safe level of asbestos to which a person could be exposed without risk of injury and to the effect that persons such as plaintiffs were not exposed to excessive amounts of asbestos.

(b-d) This defendant objects to this interrogatory on the basis that the term causal connection is vague, ambiguous and unintelligible. Defendant also objects on the basis that its present knowledge is irrelevant to this action in that evidence of a causal connection between lung cancer, mesothelioma, and other cancers and asbestos was first accepted by medical science after the period of time defendant ceased the manufacture of asbestos-containing products. Without waiving its objections, defendant is informed and believes that at no time prior to 1958 was there reason to believe that the medical and

scientific community accepted that there was a causal connection established between exposure to asbestos and a risk of contracting lung cancer, mesothelioma, and other cancers.

Q. 65. If answer to preceding interrogatory as to any or all of its subparts, is in the affirmative, identify:

(a) When and how defendant first learned of such connection;

(b) If knowledge was obtained by attendance at any conference, lecture, convention, symposium or meeting, identify such meeting and provide the identify of persons attending and documents obtained;

(c) If knowledge was obtained from medical or scientific studies, or any other published work, identify same;

(d) If otherwise obtained, identify manner of receipt of document or communication.

A. 65. Refer to answers to Interrogatory Nos. 64 and 56.

Q. 66. With regard to any knowledge obtained subsequent to that identified in your answer to Interrogatory No. 65 (a) above, identify:

(a) All documents or communications, oral or written, concerning the causal connection between exposure to asbestos products and disease, and identity of persons so communicating;

(b) Did answering defendant obtain from or transmit any such information to other defendants in this case? If so, identify:

(1) Manner of receipt or communication for each contact;

(2) All documents and persons involved.

A. 66. This defendant objects to this interrogatory as being irrelevant and not reasonably calculated to lead to the discovery of admissible evidence and not limited to any issue which is the subject of this case. This defendant further objects to this interrogatory on the grounds that it seeks information within the work-product privilege and on the ground that it is oppressive and burdensome in that it would have to review all of the files and all of the records of all of its attorneys all over the country to respond to this interrogatory.

Q. 67. As to any knowledge possessed by answering defendant at any time referred to in your answer to Interrogatory No. 64, did you educate your employees, distributors or purchasers of the hazards known to you and the safety precautions necessary to guard against cancer and other diseases arising from the use and handling of your products? If so, identify:

(a) When and in what manner customers, insulators, factory workers and the general public were so informed;

(b) Documents communicating or otherwise disseminating such information;

(c) Programs initiated or sponsored to establish or promote safety procedures, methods or usage of equipment;

(d) Published articles or reports by employees (present or prior), including those of medical directors, scientists, engineers or other professionals;

(e) Symposia or lectures sponsored for the benefit of asbestos workers and/or the general public.

A. 67. Refer to answer to Interrogatory No. 64.

Q. 68. When and by what manner were you first aware

of the hazards relating to exposure to asbestos or asbestos products:

- (a) For inside insulators and contractors.
- (b) For outside insulators and contractors.

A. 68. Not applicable to this defendant. During the time defendant was involved in the asbestos-containing product business, the state of medical and scientific knowledge was such that defendant had no reason to believe that the use of its product would result in a foreseeable risk of harm.

Q. 69. If you have knowledge or information concerning the following, answer in the affirmative or negative, whether:

- (a) Early detection of mesothelioma results in any appreciable rate of cure or arrest;
- (b) A single exposure to asbestos may cause mesothelioma, other cancers or asbestosis;
- (c) Cumulative or multiple exposures to asbestos result in a greater risk of harm to the exposed person;
- (d) An outside insulator has a risk of harm from exposure to asbestos or asbestos products;
- (e) Stripping or removing old asbestos creates a greater risk of harm than installation of asbestos or asbestos products;
- (f) Cancer resulting from exposure to asbestos develops generally after:
 - (1) 1-5 years.
 - (2) 6-10 years.
 - (3) 11-20 years.
- (g) There is any known relationship between smoking and mesothelioma;
- (h) There is any reported cause of mesothelioma other than exposure to asbestos.

A. 69. This defendant objects to this interrogatory on the basis that it seeks an expert opinion which this defendant is not qualified to render.

Q. 70. As to each answer to Interrogatory No. 69, identify at least one person or document upon which answering defendant relies.

A. 70. Refer to objection to Interrogatory No. 69.

Q. 71. Did you perform, direct to be performed, finance, sponsor or receive the results of any studies or tests concerning the relationship between asbestos exposure and asbestosis and/or cancer? If so, identify:

(a) When, where and at what intervals such studies were performed;

(b) Were such studies in writing or reported at a later date in writing;

(c) Were the results of such studies published or otherwise disseminated? If so, state to whom and when;

(d) Who performed such studies;

(e) Will you produce the results of such studies at this time or state where the results are maintained.

A. 71. Refer to answer to Interrogatory No. 22.

Q. 72. Identify the scientific or medical periodicals to which defendant, its medical department or industrial hygiene division subscribed from 1925 to the present, and the dates of such subscriptions.

A. 72. This defendant ceased the manufacture, sale and distribution of asbestos-containing products in 1958. This

defendant has not found information in its records sufficient to enable it to answer this interrogatory. Refer to answer to Interrogatory No. 73.

Q. 73. Did defendant, its medical department or industrial hygiene division maintain a medical and/or scientific library at any time from 1925 to the present? If so, state:

- (a) The dates such library existed;
- (b) The number of volumes maintained therein;
- (c) The number of employees, part-time or full-time, assigned to maintenance of said library, and to whom in the corporate structure those employees report(ed).

A. 73. During the period of time pertinent to these actions, this defendant did not maintain an entity which would be characterized as an industrial hygiene, medicine, safety and/or engineering library. However, this defendant believes that a separate engineering library may have been maintained by its technical facility. This defendant also states that although it has no records indicating the existence of such a library, upon becoming involved in asbestos-related litigation this defendant listed all the publications which were in its then existing industrial hygiene library. These publications are listed on Exhibit IV. This defendant has not yet determined which, if any, of these publications were in this defendant's possession during the time it manufactured, sold and distributed asbestos-containing products.

Q. 74. Identify all trade organizations, associations, or other entities, including but not limited to A.T.I., I.H.F., N.I.M.A., A.I.A., N.I.C.A., T.I.M.A., Q.A.M.A., P.I.C.A., or Q.A.P.A., to which you have belonged or in which you have participated since 1925, stating the applicable dates of such membership or participation.

A. 74. This defendant objects to this interrogatory on the grounds that it seeks information which is not relevant to the subject matter of this litigation and is not reasonably calculated to lead to the discovery of admissible evidence except as it relates to the period of time within which this defendant manufactured its asbestos-containing products.

Without waiving the above objection, this defendant states that insofar as this interrogatory refers to associations or organizations of which this defendant was a member during the time when it manufactured asbestos-containing products, it was a member of the Industrial Hygiene Foundation (which changed its name to the Industrial Health Foundation in 1970) for the years 1936 through 1975. This defendant was not a member of any of the other trade associations about which this interrogatory inquires.

Q. 75. Identify all persons attending on your behalf any meetings held by trade organizations, associations, or other entities identified in answer to Interrogatory No. 74.

A. 75. This defendant ceased the manufacture, sale and distribution of asbestos-containing products in 1958. This defendant has not found information in its records sufficient to enable it to answer this interrogatory.

Q. 76. Identify the names or nature of all notes, reports, studies, or other writings submitted by you or received by you at meetings held by organizations described in answer to Interrogatory No. 74.

A. 76. This defendant ceased the manufacture, sale and distribution of asbestos-containing products in 1958. This defendant has not found information in its records sufficient to enable it to answer this interrogatory.

Q. 77. Identify any documents received by you from or submitted by you to those trade organizations, associations or other entities identified in answer to Interrogatory No. 74 relating to the relationship between asbestos exposure and disease.

A. 77. This defendant ceased the manufacture, sale and distribution of asbestos-containing products in 1958. This defendant has not found information in its records sufficient to enable it to answer this interrogatory.

Q. 78. Identify all agreements, oral or written, between you, any of the other defendants in this lawsuit, and/or any other organizations, associations or other entities identified in your answer to the Interrogatory No. 74 or any medical or scientific foundations, relating to the standardization of:

(a) Specifications for asbestos cloth products;

(b) Specifications for paper or burlap bags, or other packaging to be used for the transport and/or storage of asbestos cement;

(c) Warning or caution labels to be applied to asbestos products and/or their packaging, cartons, containers, or boxes;

(d) Methods of dissemination of public relations information to defendant's purchasers, advertisers, distributors, factory workers, contractors, insulators, users, consumers of asbestos products and/or the general public;

(e) Safety equipment and/or protective clothing to be utilized while handling defendant's asbestos products;

(f) Medical programs to be offered or sponsored by defendant.

A. 78. This defendant ceased the manufacture, sale and distribution of asbestos-containing products in 1958. This defendant has not found information in its records sufficient to enable it to answer this interrogatory.

Q. 79. Did you direct to be performed, sponsor, finance, receive the results of or were you aware of any studies or tests performed by the Saranac Lake Laboratory of the Trudeau Foundation relating to asbestos exposure and its effects upon human life? If so, identify:

(a) All documents summarizing findings or results of those studies or tests which you have in your possession or control;

(b) All communications, oral or written, between answering defendant and Saranac personnel, including but not limited to Gerrit W. H. Schepers, M.D.

(c) All documents relating to Saranac studies received or submitted by you either directly through associated or predecessor companies, through other companies, or through any trade associations, organizations or other entities;

(d) All recommendations or findings of such studies relating to:

(1) Adequacy or inadequacy of threshold limit values;

(2) Substitution of materials other than asbestos to be used in the insulation process.

(e) Where documents and/or communications identified in answers to (a) - (d) of this interrogatory are maintained.

A. 79. Refer to answer to Interrogatory No. 22.

Q. 80. How many employees of answering defendant are known by defendant to be suffering from, have suffered from or

whose deaths have been caused by asbestosis? State the date such disease of any employee was first known by defendant.

A. 80. This defendant objects to this interrogatory on the basis that it seeks information which is not relevant to the subject matter of this litigation and is not reasonably calculated to lead to the discovery of admissible evidence.

Q. 81. How many employees of answering defendant are known by defendant to be suffering from, have suffered from or whose deaths have been caused by lung cancer? State the date such disease of any employee was first known by defendant.

A. 81. This defendant objects to this interrogatory on the basis that it seeks information which is not relevant to the subject matter of this litigation and is not reasonably calculated to lead to the discovery of admissible evidence.

Q. 82. How many employees of answering defendant are known by defendant to be suffering from, have suffered from or whose deaths have been caused by mesothelioma? State the date such disease of any employee was first known by defendant.

A. 82. This defendant objects to this interrogatory on the basis that it seeks information which is not relevant to the subject matter of this litigation and is not reasonably calculated to lead to the discovery of admissible evidence.

Q. 83. Do you send or have you at any time sent counsel or other representatives to courses at defending asbestos cases? If so, identify.

A. 83. This defendant objects to this interrogatory on the basis that it seeks information which is not relevant to

the subject matter of this litigation and is not reasonably calculated to lead to the discovery of admissible evidence.

Q. 84. Identify all expert witnesses who have testified in other cases, pending or otherwise, on behalf of answering defendant.

A. 84. This defendant objects to this interrogatory on the basis that it seeks information which is not relevant to the subject matter of this litigation and is not reasonably calculated to lead to the discovery of admissible evidence.

Q. 85. Identify all present or former employees or answering defendant, other than plaintiffs, who have testified against this defendant in a litigation matter or before a governmental agency or unit.

A. 85. This defendant objects to this interrogatory on the basis that it seeks information which is not relevant to the subject matter of this litigation and is not reasonably calculated to lead to the discovery of admissible evidence. Without waiving the above objection, defendant states that no such testimony has been given.

Q. 86. With respect to your answers to Interrogatory No. 84 and 85, identify all documents, including but not limited to transcripts or notes of testimony employed by or resulting from the testimony of such expert witnesses or employees.

A. 86. Refer to objections and answers to Interrogatory Nos. 84 and 85.

Q. 87. Identify:

(a) Any expert whom you intend to call as a witness or otherwise utilize in connection with this litigation;

(b) The subject matter on which the expert is expected to testify;

(c) The substance of the facts and opinions to which the expert is expected to testify;

(d) A summary of the grounds for each opinion;

(e) The address of such person and his field or expertise;

(f) Identify and produce each treatise, article or text upon whether the expert will rely in his testimony.

A. 87. The identity of expert witnesses to be called at trial is not known at the present time. This defendant reserves the right to designate at a later date expert witnesses to be used at trial.

Q. 88. Identify and produce all board meeting minutes at which asbestos products, the hazards of asbestos exposure, the possible application of warning labels on a asbestos-containing products were discussed by the Board of Directors of your company.

A. 88. This defendant objects to this interrogatory on the basis that it seeks information which is not relevant to the subject matter of this litigation and is not reasonably calculated to lead to the discovery of admissible evidence. Without waiving the above objection, defendant states that it has no such board meeting minutes.

Q. 89. Please identify by name, address and phone number each person who has provided this answering party with statements in connection with this litigation.

A. 89. This defendant has not engaged in sufficient discovery to enable it to respond fully to this interrogatory.

Q. 90. Please identify each person who has been interviewed in the course of preparing for the trial of this matter.

A. 90. This defendant has not engaged in sufficient discovery to enable it to respond fully to this interrogatory.

Q. 91. Has this defendant ever sold any asbestos-containing products to Insulation and Material Company of St. Louis, Missouri or any other individual, corporation, partnership or other business entities within a 100 mile radius of Madison County, Illinois since 1920 including but not limited to St. Louis County, St. Louis City, St. Charles County, Missouri or Madison County or St. Clair County, Illinois, if so, state:

(a) List all individuals, corporations, partnerships or other business entities you have sold asbestos-containing products to.

(b) State all dates when asbestos-containing products were sold to these entities.

(c) State what asbestos-containing products were sold to these entities and identify by brand name.

(d) State what quantity of asbestos products were sold to these entities.

(e) Provide copies of all purchase orders, specifications, contracts or correspondence with the entities identified in (a) above or otherwise identify all documents relating to the sale.

A. 91. This defendant objects to this interrogatory as being vague, ambiguous, irrelevant, overly broad, burdensome and oppressive, not reasonably calculated to lead to the discovery of admissible evidence and not limited to any issue which is the subject of this case. Without waiving the above objection, this defendant has found no information in its records indicating sale of its asbestos-containing products to Insulation and Material Company of St. Louis, Missouri. This defendant objects to further answering this defendant on the basis that plaintiff has not provided any company names and time periods for reference. Upon receipt of such information defendant will make available any relevant documents, subject to any objections at that time.

Q. 92. Have you ever sold any asbestos-containing products to:

Monsanto, East St. Louis, Illinois
Marathon Oil Refinery, Robinson, Illinois
Shell Oil Refinery, Roxana, Illinois
Amoco Refinery, Wood River, Illinois
Clark Oil Company Refinery, Hartford, Illinois
Granite City Steel, Granite City, Illinois
Illinois Power Company (Alton Powerhouse)
Central Illinois Power Service (Coffeen Powerhouse)
Commonwealth Edison (Kinkaid Powerhouse)
Illinois Power Company (Portage Des Sioux Powerhouse)
Central Illinois Power Service (Meredosia Powerhouse)
Illinois Power Company (Grant Fork Powerhouse)
Owens-Illinois Glass Company, Alton, Illinois
Central Illinois Power Service (Baldwin Powerhouse)
Central Illinois Power Service (Pearle Powerhouse)
Central Illinois Power Service (Marion Powerhouse)
Central Illinois Power Service (Newton Powerhouse)
Texaco Oil Company Refinery, Lawrenceville, Illinois
American Steel, Granite City, Illinois

Cerro Copper, Granite City, Illinois
Consolidated Aluminum Company, Granite City, Illinois
Olin Corporation, Easton Alton, Illinois
Laclede Steel Company, Alton, Illinois
Sinclair Oil Refinery, Hartford, Illinois
Apex Oil Refinery, Hartford, Illinois

and if so:

- (a) List all individuals, corporations, partnerships, or other business entities you have sold asbestos-containing products to.
- (b) State all dates when asbestos-containing products were sold to these entities.
- (c) State what asbestos-containing products were sold to these entities and identify by brand name.
- (d) State what quantity of asbestos-containing products were sold to these entities.
- (e) Provide copies of all purchase orders, specifications, contracts or correspondence with the entities identified in (a) above or otherwise identify all documents relating to the sale.

A. 92. This defendant objects to answering this interrogatory on the basis that no dates were stated in reference to any of the companies. Upon receipt of such information defendant will make available any relevant documents, subject to any objections at that time.

Q. 93. Has this defendant ever been a General Contractor or Subcontractor where it used asbestos-containing products at any of the following locations:

Monsanto, East St. Louis, Illinois
Marathon Oil Refinery, Robinson, Illinois
Shell Oil Refinery, Roxana, Illinois
Amoco Refinery, Wood River, Illinois
Clark Oil Company Refinery, Hartford, Illinois

Granite City Steel, Granite City, Illinois
Illinois Power Company (Alton Powerhouse)
Central Illinois Power Service (Coffeen Powerhouse)
Commonwealth Edison (Kinkaid Powerhouse)
Illinois Power Company (Portage Des Sioux Powerhouse)
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American Steel, Granite City, Illinois
Cerro Copper, Granite City, Illinois
Consolidated Aluminum Company, Granite City, Illinois
Olin Corporation, Easton Alton, Illinois
Laclede Steel Company, Alton, Illinois
Sinclair Oil Refinery, Hartford, Illinois
Apex Oil Refinery, Hartford, Illinois

and if so:

- (a) List all individuals, corporations, partnerships, or other business entities you have sold asbestos-containing products to.
- (b) State all dates when asbestos-containing products were sold to these entities.
- (c) State what asbestos-containing products were sold to these entities and identify by brand name.
- (d) State what quantity of asbestos-containing products were sold to these entities.
- (e) Provide copies of all purchase orders, specifications, contracts or correspondence with the entities identified in (a) above or otherwise identify all documents relating to the sale.

A. 93. Refer to answer to Interrogatory No. 49.

Q. 94. Did this defendant ever provide any warning concerning the hazards of asbestos to any of the following companies:

Monsanto, East St. Louis, Illinois
Marathon Oil Refinery, Robinson, Illinois
Shell Oil Refinery, Roxana, Illinois
Amoco Refinery, Wood River, Illinois
Clark Oil Company Refinery, Hartford, Illinois
Granite City Steel, Granite City, Illinois
Illinois Power Company (Alton Powerhouse)
Central Illinois Power Service (Coffeen Powerhouse)
Commonwealth Edison (Kinkaid Powerhouse)
Illinois Power Company (Portage Des Sioux Powerhouse)
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Consolidated Aluminum Company, Granite City, Illinois
Olin Corporation, Easton Alton, Illinois
Laclede Steel Company, Alton, Illinois
Sinclair Oil Refinery, Hartford, Illinois
Apex Oil Refinery, Hartford, Illinois

If so, identify what the warning was, how the warning was delivered and when the warning was delivered. Provide copy of warning and correspondence concerning the warning.

A. 94. This defendant ceased the manufacture, sale and distribution of asbestos-containing products in 1958. This defendant has not found information in its records sufficient to enable it to answer this interrogatory. However, it does not appear that any warning concerning asbestos was given in that it does not appear that this defendant had reason to believe that the use of its products would result in a foreseeable risk of harm.

Q. 95. Has this defendant ever had any correspondence with any of the following companies or facilities concerning products containing asbestos:

Monsanto, East St. Louis, Illinois
Marathon Oil Refinery, Robinson, Illinois
Shell Oil Refinery, Roxana, Illinois
Amoco Refinery, Wood River, Illinois
Clark Oil Company Refinery, Hartford, Illinois
Granite City Steel, Granite City, Illinois
Illinois Power Company (Alton Powerhouse)
Central Illinois Power Service (Coffeen Powerhouse)
Commonwealth Edison (Kinkaid Powerhouse)
Illinois Power Company (Portage Des Sioux Powerhouse)
Central Illinois Power Service (Meredosia Powerhouse)
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Central Illinois Power Service (Marion Powerhouse)
Central Illinois Power Service (Newton Powerhouse)
Texaco Oil Company Refinery, Lawrenceville, Illinois
American Steel, Granite City, Illinois
Cerro Copper, Granite City, Illinois
Consolidated Aluminum Company, Granite City, Illinois
Olin Corporation, Easton Alton, Illinois
Laclede Steel Company, Alton, Illinois

Sinclair Oil Refinery, Hartford, Illinois

Apex Oil Refinery, Hartford, Illinois

If so, provide copy of any correspondence with any of the above companies concerning asbestos-containing products.

A. 95. This defendant objects to answering this interrogatory on the basis that no dates were stated in reference to any of the companies. Upon receipt of such information defendant will make available any relevant documents, subject to any objections at that time.

AFFIDAVIT

STATE OF OHIO)

)SS:

COUNTY OF LUCAS)

M. F. McCARTHY, being duly sworn according to law, deposes and says that he is an Assistant Secretary of Owens-Illinois, Inc., a defendant herein; that as such he is authorized to make an Affidavit on its behalf; and that the facts set forth in the foregoing DEFENDANT, OWENS-ILLINOIS, INC.'S ANSWERS TO INTERROGATORIES, are true and correct to the best of his knowledge, information and belief.

M. F. McCarthy

M. F. MCCARTHY

SWORN TO and subscribed
before me this 21st day
of July, 1987.

Beverly A. McNear

Notary Public

My Commission Expires:

BEVERLY A. McNEAR
Notary Public — State of Ohio
My Commission Expires Jan. 29, 1990

EXHIBIT I

HRV-PL-1550

OWENS-ILLINOIS

BERLIN, NEW JERSEY

PUBLISHED BY AND FOR THE PEOPLE OF

THE BERLIN PLANT

ONE OF THE  FAMILY

KAYLONIZER

Volume 1

July 1956

Number 3

NEO SERINIS, "POPPY" SCURTI RETIRE

Retired at the end of last month were two men familiar to most Plant 95 Onlizers. They were NEO SERINIS and DOMINIC "POPPY" SCURTI.



DOMINIC SCURTI

NEO SERINIS

DOMINIC "POPPY" SCURTI, a nine-year employee in the Berlin Plant, was born in a town near Naples, Italy in 1891. Arriving in this country, then he lived in Philadelphia and Jersey City before moving to W. Berlin.

He began work here in 1947 in the Maintenance Department, was transferred to Personnel as office janitor, and his last job was in the Production Department.

The father of three children, POPPY lives on Pine Avenue in West Berlin. His son, JOE SCURTI, works in the Mold Repair Department.

POPPY will long be remembered for his many fine games of bocci and morra on the Diamond Derby Days.

Now that he has retired, he will occupy his time with gardening which has been his hobby for some time.

NEO SERINIS, who had been employed with the Company for 13 years, was born in Caesaria, Turkey in 1889 and attended high school and Anatolia college in that country.

Coming to the United States in 1919, at the age of twenty, he completed his education at Drexel Institute in Philadelphia, where he majored in chemistry. Recently he attended his graduation class's 40th year reunion at that school.

NEO came to the Berlin Plant of Owens-Illinois in 1943 and became plant chemist, a position he was to hold until his retirement last month.

In his research capacity he played a major part in the development of the SID (Simultaneous Indurating and Drying) process currently used in the production of Kaylo which speeded up the operation and proved more economical, than the previous method.

The father of four children, Neo lives at 5 South Cedar Avenue in Berlin.

In the future he will be assisting in the General Research Department on a consultation basis.

NO-ACCIDENT MARK SET

The people of Owens-Illinois Plant 95 have worked over six months without a lost-time accident, comprising a total of 201,041 accident free man-hours.

The last lost-time accident was December 7, 1955.

HRV-PL-1551

CHIPS & QUIPS

By Charles Congdon
Walt Townsend

Well, here we are at the beginning of the vacation season. Several Onizers from the Maintenance Department have already departed to spend a few romantic and leisurely weeks in some far away place.

EARL "Baldy" FITTING and his wife have left for Florida and from there to Havana, Cuba. We are sure EARL will have a wonderful time, lucky fellow. Perhaps, when our bills are all paid up, we will be able to make a similar trip.

STAN ZELIN and his family have also left for the tropical paradise of Florida. STAN said he was certain he would do some of that much publicized gulf fishing. STAN did not have much luck fishing locally at Barnegat Bay. We certainly hope that his luck changes with the climate.

These summer weekends seem to take their toll in more ways than one, you know the ones where Saturday and Sunday are crowded into a trip to the beach. Well, TOM PITALE came back from Atlantic City on Monday a sadder and wiser person. He told your reporter he got burned. TOM really meant that he acquired a bad case of sun burn.

Although SANDY LISA is not a member of the Maintenance Department, her presence as a secretary to HERALD COLEGROVE, Plant Engineer, makes her an honorary member of the department. SANDY also was unable to report for work for a few days due to an over exposure of the sun. Both SANDY and TOM will feel sorry for any further lobsters they see in restaurants, knowing just how they must feel.

Speaking of fishing CHARLIE STRECK, one of our Dowtherm Experts, tells of a beautiful catch of fish he and four friends made last Sunday. Fifty Flukes, he said, all over two pounds each. CHARLIE said that the only thing wrong with the trip was that the captain and the first mate insisted on baiting the hook, hauling in the fish, taking the fish from the hook and in general making nuisances of themselves. CHARLIE might just as well have stayed home and bought the fish after the boat docked.

Your reporter, CHARLIE CONGDON, has produced the first dahlias of the season. He presented a fine bouquet to receptionist, LOUISE McCaffrey, and hopes to keep her desk decorated with flowers as

they become available. He also has zinnias blooming and hopes to have asters in the near future.

WALT GRAZIANO, being ever alert, informed us that the word acetylene was misspelled on the safety sign by the front entrance on the machine shop. Following up this bit of news, we found that WALT was right.

HERALD COLEGROVE sure was a happy fellow the other week. The reason, you see, was that his daughter, RUTH, was to be married. We extend our best wishes to RUTH and her husband. HERALD also sports a great big smile whenever his son JIM'S name is mentioned. JIM is a jet pilot in the U. S. Air Force. Well, HERALD you talk about JIM and his jets and in a few years I hope to talk about my son and his rockets unless he decides to be a machinist like his dad, then I will try to get him a job with Owens-Illinois.

HERALD, incidently, just returned from the first half of his vacation. He tells us that he spent it in Ohio visiting his folks.

We hear PRES DAWSON is quite a trapper. Perhaps some of you ladies are wearing coats made of some animals that PRES has caught such as muskrats, coons and even skunks. PRES also likes to dabble in herb tonic. If PRES had been born sooner he could have been a medicine man and had his own show. You know what we mean, the real old fashioned kind with Indians, banjo playing and pet snakes.

KNOW YOUR REPORTER

SPOTLIGHTS AL PIERCE



AL PIERCE

The featured reporter in this issue is ALVIN PIERCE, our ace newspaperman from the Warehouse and Shipping Department who writes the column titled "Inter Nos."

AL, like many other OnIzers employed at Plant 95, is a home town boy, born, reared and educated right in Berlin. He attended Berlin grammar school and Haddon Heights high school.

He became a member of the Owens-Illinois family on October 1, 1950, when he took a job in the Mold Repair Department.

But he was not destined to remain long, for in November of 1951 AL received his greetings from Uncle Sam and joined the U.S. Air Force.

After completing his basic training at Turner Air Force Base in Georgia, he was transferred to a number of bases before being sent to Japan.

When he had completed his tour of duty in Japan, AL was given his discharge. He took a vacation after that, like many a returning serviceman.

Upon his return to Plant 95, AL accepted the job of Inventory Tally Clerk, in the Warehouse and Shipping Department, a position he is still holding.

AL is an active worker in civic affairs. He holds the rank of Lieutenant in the Berlin Volunteer Fire Company and is a member of the Berlin V. F. W. Post, No. 6253.

Among AL's many hobbies are fishing, hunting, photography and water skiing. In fact, he is such an enthusiast that anyone venturing near the sea-shore resort of Grassy Sound on a weekend can be almost certain of seeing AL skimming across the bay on his water skis.

AL and his wife, Darlene, who live on Jackson Road in Berlin, are the proud parents of a twenty-month-old daughter, Allene.

He tells us that his life's greatest ambition is to own and operate his own business.

The most thrilling experience in AL's life, he says, happened to him in the Air Force while on tour of duty in Japan.

While he was in the process of checking out a jet plane, it made a sudden lunge forward. AL averted what could have been a disaster by being quick on the trigger. He stopped the plane before any damage was done.

AL thinks that this incident aged him all of five years in the few seconds it happened.

If you haven't figured it out by this time, "Inter Nos," the name of AL's column, means "between us" in latin.

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Happy Birthday

Robert Adams	July 14
William Fitting	July 16
Richard Geissinger	July 22
Warren Irwin	July 26
Walter Eitelbach	July 29
Stanley Zellry	July 29
John Rhoads	July 30
Herman McCurry	August 3
Anthony Melevin	August 3
Charles Juliano	August 4
Russell Hand	August 7
Thomas Knott	August 7
Charles Tomlinson	August 7
Rodger Cook	August 10
Antin Kapij	August 10
Elmer Goetz	August 14



SANDY'S CORNER

By Sandy Lisa

For you George Gobel fans who wish to see a live version of the show you may do so by coming to the Service Department and asking DARIO BELFONTE to do his version of Lonesome George. We hear that he does a real good job.

LOUISE McCAFFREY is really patriotic. We hear that she gets her suntan in the form of a "V".

Congratulations to JEAN DiBLASI on the birth of a son, LEO, JR. JEAN was a former receptionist at Plant 95.

A hearty welcome to CHARLES "Chuck" AUSTIN. CHUCK joined the Industrial Engineering Department of Plant 95 on July 1, 1956. CHUCK is a graduate of Guilford College where he majored in History, and Business Administration. CHUCK, and his wife BEVERLY, make their home in Pitman, N. J. CHUCK recently returned from a two year hitch in the Marines.

DARIO BELFONTE and JOE PLICK are currently enjoying their vacations. Your reporter will have more to add to this article upon their return to work.

PARKER ELECTED PRESIDENT

CHARLEY PARKER, Safety Director in the Glassboro, New Jersey Plant of the Closure and Plastics Division of Owens-Illinois, recently was elected President of the South Jersey Industrial Council. The Council is composed of safety directors of leading industries in the South Jersey area.

THE LISTENING KEY



By Louise McCaffrey

A farewell luncheon was given to LEE FIDELL by the girls in the office on July 29, 1956. The affair was held at the Old Tavern. LEE was presented with a lovely evening bag as a remembrance gift. She was also presented with a very unusual corsage.

WALT EITELBACH, who recently spent three days in Chicago on company business, had quite an experience. It seems the flight WALT was scheduled to return on had been over sold. The air line then offered WALT \$50.00 for his ticket plus a seat on another flight. Too tired to get up? Money isn't everything! We think it was just "Do or Die" for old O-I. Walt just had to get back on the job.

SUZANNE ERICKSON is the latest addition to the office staff. SUZANNE recently accepted a job in the Bonus Department. She hails from Manteno, Illinois and is currently living in Berlin, N. J. while her husband, who is serving in the U. S. Army, is stationed at a nearby Niki Station. SUZANNE and her husband recently purchased a Pekingese puppy and is currently in the process of finding a name for it.

BILL PALLIES from the local freight office is spending a three week vacation in Seattle, Washington. (We wonder if he is looking for some of EARL SHARP'S shipments?).

All the girls in the front office are completely happy again. ELMER GOETZ has received a deferment from the Army and it has done wonders for the girls' morale.

FOR SALE

1 - 4 cylinder motor completely overhauled minus generator, starter, manifold, water pump, fan and carburetor. Contact C. H. INGERSOLL.



EARL FITTING lights the fuel oil
to start the three-hour fire test

THREE-HOUR FIRE TEST PROVES KAYLO 20 PROTECTS STEEL WELL

In order to demonstrate to visiting engineers that Kaylo 20 makes an excellent protection for structural steel, a fuel oil fire was started and continued for three hours.

Temperatures of the fire approached 2000 degrees Fahrenheit at times, while the steel remained safe.

The results of the test were highly satisfactory to our visiting customers who witnessed it.

GROUND BROKEN FOR O-I CUBA PLANT

Following ground-breaking ceremonies for the new Owens-Illinois Plant at San Jose de las Lajas, June 15, crews of workmen and huge bulldozers went to work preparing the site for the one-story glass plant.

President of the Republic of Cuba, Fulgencio Batista y Zaldivar, and Carl Megowen, President of Owens-Illinois, performed the ground-breaking ceremony with a glass shovel, the handle of which was made of Cuban mahogany.

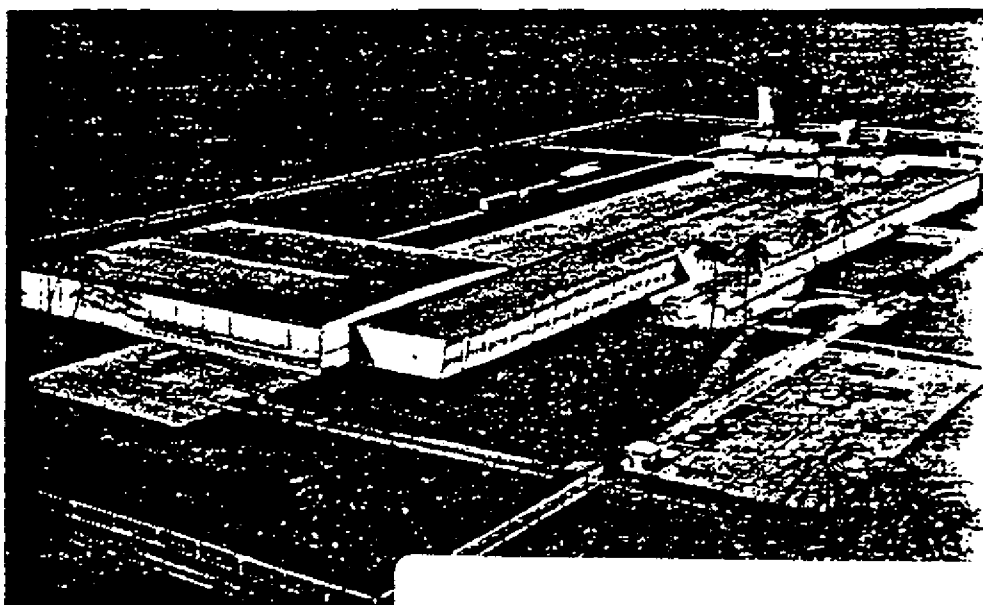
The glass shovel was presented to President Batista at the end of the ceremonies

which were attended by a large crowd of Cuban people. Mr. Megowen spoke to the gathering in English and his remarks were translated for the audience into Spanish by an interpreter.

In his short address, President Batista welcomed Owens-Illinois to Cuba.

Other speakers were Dr. Emeterio S. Santovenia, Chairman of the Board and President of BANFAIC; Mayor Navarro of San Jose de las Lajas and Dr. Joaquin Martinez Saenz, President of the National Bank of Cuba.

This is an artist's drawing of the new Owens-Illinois Glass Company plant located at San Jose de Las Lajas, a few miles from Havana. Ground-breaking ceremonies were held June 15. The plant is scheduled for completion the latter part of 1957.



THE SAFETYMAN

By Dick Cassario

Safety Director

SAFETY AROUND HOME CALLS FOR ON THE JOB CARE

It is a startling fact that more accidents occur in and around the home than anywhere else. This simply means that if the same safety rules used at work were applied in practice in our homes, they would be much safer places to live in.

We all know that many times home accidents can cause suffering and expense to the family involved. Safety is catching. Whole families should catch it and resolve to keep their homes as safe as possible.

The best way to do this is to have a home safety check list. This list should cover such items as these:

INSIDE THE HOUSE

Keep all medicines, poisons, insecticides and cleaning fluids out of reach of young children. Read labels carefully and the directions twice before using medicine. Only use medicine as properly prescribed by the doctor.

Be careful of slippery floors and throw rugs. Keep stairways and floors free of articles which might cause people to fall.

OUTSIDE THE HOUSE

See that hoes, rakes and sharp tools are never left with the edges up; all nails should be removed from broken boxes and boards. Be sure that your clothesline is strung high enough to prevent anyone from running into it.

Garage doors should always be left open when the car is running. Go slow in and out of the driveway and make sure no one is in the way. Sound your horn. Many small children have been fatally injured by cars backing over them.

STREETS AND SIDEWALKS

See that the whole family crosses at intersections only, and always on the green light. Never cross behind a parked car or truck. Many children are injured every year darting out from parked cars into the path of another

oncoming car. A moment of carelessness may mean a lifetime of regret.

HEAT SICKNESS IS AVOIDABLE

Heat sickness may be divided into three types:

1. Heat Cramps which are caused by the excessive loss of SALT and WATER which have not been replaced. This condition can be avoided.

2. Heat Exhaustion which is caused by the excessive loss of SALT, SUGAR and WATER which has not been replaced. This condition can be avoided.

3. Heat Stroke which is caused by heat retention. The heat regulating mechanism of the body is put out of order because the individual is not in good condition and has not taken daily baths to bring down the body temperature.

This condition builds up over a period of many hours or several days. This condition can be avoided. Prompt treatment may influence the outcome.

In the cases of heat sickness, it is probably not any one factor which is entirely responsible. Temperature, humidity, air motion, muscular exercise, physical condition all contribute to heat sickness.

TOM HUBER NAMED O-I'S HAVANA PLANT MANAGER

Tom M. Huber has recently been named Plant Manager of the Company's new plant in Havana Cuba, according to an announcement by John L. Gushman, Vice President in charge of the International Division.

Mr. Huber, formerly supervisor of the Quality and Specifications Department in the Alton Plant of the Company's Glass Container Division, will spend several months in training to give him additional training for his new assignment, the announcement said.

Mr. Huber joined Owens-Illinois in January, 1946, and this year will receive his 10-year service pin at the Toledo Ceremony in October.



TOM M. HUBER

His first duties at the Alton Plant were in the Central Shops and in the Control laboratory. In June, 1949, he was assigned as junior project engineer in the Glass Control Laboratory and in 1953 became Control Laboratory Supervisor at Alton.

Later the same year, Mr. Huber was named Quality and Specifications Supervisor. He gained his Bachelor of Science degree at the University of Illinois.

LIBBEY SALES CHANGES ANNOUNCED

The growing importance of the nation's Southeastern area has resulted in two major changes in the sales organization for Owens-Illinois, according to William M. Beckler, General Sales Manager.

Changes call for the promotion of George B. Skinta to the position of Southeastern Regional Sales Manager, and the appointment of Thomas F. Bensinger as Manager of a new branch office in Miami, Florida.

Mr. Skinta, former Atlanta Branch Manager, will be responsible for the operation of Libbey sales branches in Atlanta, Georgia, Richmond, Virginia, New Orleans, Louisiana, and Miami, Florida.

He joined the Libbey sales staff in 1940 and in 1943 was assigned to the New York sales office and four years later was named Manager at Atlanta.

Mr. Bensinger has been with Libbey since 1950. In 1952 he was appointed Manager of Libbey's branch at Richmond and in 1954 was named Assistant Manager of the Chicago Libbey Office.

DID YOU KNOW?

New Jersey's Garden State Parkway was rated as the safest super-highway in the country during 1955.

There are almost twice as many automobiles in Los Angeles alone as in all of South America.

Since 1900 the number of people over 65 has quadrupled while the total population has only doubled.

As a result of technological growth, there are more than 40,000 different ways in which Americans can earn a living.

O-I PROMOTES SPECIAL BEER BOTTLES

TOLEDO, O. — Owens-Illinois Glass Company, a principal supplier of bottles to the brewing industry, will spend a million dollars this year on initial promotion of special no-deposit quart size beer bottles which the company predicts will boost national beer consumption.

The comprehensive marketing program, spearheaded by a heavy magazine and newspaper advertising campaign which began recently, is based on long-term research and on O-I's sales experiences during the last decade which indicate that with postwar changes in the American way of life, beer has become more of a family and social get-together beverage.

O-I says this is emphasized by two major marketing facts:

1. More than 50% of all beer taken into the home is consumed after evening meals and when guests or friends are present.
2. 46% of all beer used at home is consumed by television viewers.

The glass company is staking its promotional investment on the belief that this is a large market which will be receptive to its no-deposit no-return quart bottles because they combine the convenience of multiple servings with other appeals particularly suited to family usage.

These special advantages are hammered home in the advertising campaign which appeared in recent issues of LIFE and LOOK. The full-page ads to be followed by 18 more in the same magazines and by 477 newspaper ads in 37 major markets will point out that:

1. "Beer stays cold (within the just-right 40 - 50 degree temperature range) 93% longer in these special quart bottles than in 12 oz. cans."
2. "The no-deposit, no-return bottles are more convenient -- you don't have to take them back."
3. "Pouring through a bottle neck makes it possible, by proper aeration, to serve beer at its best."
4. "Glass is unmatched as a inert protector of beer's sensitive flavor. Glass has no taste of its own."
5. "The 'party size' quart serves five full glasses of your favorite beer at its best."

Owens-Illinois officials believe that the quart no-deposit bottles offer U. S. brewers a natural and economic medium to use in increasing the per capita consumption of beer.

O-I backs its faith in these no-deposit bottles on its experiences as a supplier of large volume glass containers to other packagers of foods, beverages and household products.

Smith L. Rairdon, vice president in charge of marketing, said that many factors point up the potential of the larger no-deposit bottles.

- continued -

"Today," he said, "more and more foods and beverages are being bought in larger units because they combine convenience and economy.

"No-deposit quart beer bottles not only combine convenience and economy, but in addition offer the consumer newly-verified advantages of temperature maintenance and the flavor protection that comes with the pouring of beer from a bottle.

"All these factors should add up to exceptional acceptance in the growing 'beer at home' market," Mr. Rairdon said. He noted that a unit purchase of a no-return quart beer bottle carries $2 \frac{2}{3}$ times the quantity of a standard 12 oz. container.

"It is a market axiom," he pointed out, "that the more of a product there is at hand, the more of that product is consumed."

Mr. Rairdon cited the convenience factor as of extreme importance.

"The modern consumer seeks convenience products," he declared, "and many sales records prove the point. In the last seven years, instant coffee sales have jumped 439%, cake mix sales 134% and frozen fruit juices have increased 5480%, all stimulated by the virtues of the convenience they offer. The no-deposit quart bottle because it doesn't have to be taken back to the store and because it allows easy multiple servings, answers the same demands for convenience.

"Thorough consideration of all these recognized factors and trends," he concluded, "has resulted in this timely initiation of our broad marketing effort."

The no-deposit, quart bottle advertising schedule for the remainder of 1956 includes 20 full-page black and white ads in LIFE and LOOK starting in July and continuing twice-a-month through October and once a month thereafter.

Full-page ads will appear bi-weekly during July and August in 53 newspapers covering 37 major beer markets. These will be followed in September and October by 1500 line ads.

Beer retailers will also be reached with two-page spreads in FOOD TOPICS and SUPERMARKET NEWS on a bi-weekly schedule during July and August and monthly in September and October.

The newspaper advertising on a Thursday evening Friday morning schedule will appear in the Philadelphia Bulletin and numerous other leading newspapers throughout the United States.

GROUP INSURANCE FOR JUNE

Sickness disability insurance paid six employees	\$658.57
Hospital bills paid two employees	407.15
Five hospital bills paid dependents	391.27
Three bills paid for surgery	205.00
Total for the month	\$1,661.99

BATHING NOW PERMITTED FROM STEEL PIER

The Steel Pier has added to its many fine attractions the privilege of bathing from the pier.

Anyone desiring to bath from the pier may do so by requesting a bathing club ticket upon paying admission to pier.

No additional cost is required for this privilege. Towels may be rented for a small fee.

THE ROVING CAMERAMAN

CATCHES ONIZERS AT BOWLING BANQUET



Here are last season's bowling league champions, the "Bowl Weevils." From left they are: team captain, JOHN PERSHING, DARIO BELFONTI, BART BOWERS, MOE BRADDOCK, HUGH WHELAN, and THOMAS PITALE. League president, THOMAS PITALE, makes the presentation of the championship plaque to them.



A group of OnIzers and their husbands are snapped as they watch the evening's entertainment. They are, from left: FRANKY FIDELL, YOLANDA FIDELL, AL McCAFFREY, LOUISE McCAFFREY, LEE FIDELL, DORIS TESKE and SANDY LISA.



Among those who attended the intra-plant Bowling Banquet at Moffa's Farm were: MRS. RAY ALLCOTT, EDDIE FANZ, EVELYN FANZ, BOB FITTING and GLORIA FITTING. They seem to be having a fine time.



STEPHANIE INGERSOLL is shown receiving the award trophy for having captured the highest average in the women's class. THOMAS PITALE makes the presentation to her.

FINISHING NEWS

By Richard Kreis

A little bird tells us that ALLIE HEGGAN JR. and his wife are expecting the stork to pay them a visit in the fall. Try to be patient ALLIE these things take time.

JOE SCIOLLI played a fine game at first base for the plant softball team the other night.

ALBERT HUFF'S son BUDDY, who has been at home on a three week furlough from the Air Force, left the other day for California. AL tells us that he will be assigned to an air unit stationed in Japan.

Best of luck to "POPPY" SCURTII who retired from Owens-Illinois the end of June. "POPPY" will always be remembered for a job well done on the Flatware Finishing Line.

CHARLIE SIEFERT returned recently from a two week vacation. We hear that he is building a new home and spent most of his vacation working on it. CHARLIE says that he will have plenty of time for pleasure when his home is complete.

Now that the Circle "A" ranch is open again, TONY DISTEFANO is back in his glory. TONY, we are told, is an ardent horseman.

Your reporter RICHARD KREIS is toying with the idea of building a new home. He is undecided whether to build a home or save his money for his anticipated trip to Europe next year.

Don't tip off the opposing teams in the Inter-Plant Softball League but anyone venturing into the vicinity of Penbryn in the evening can see BOB FITZPATRICK practicing his secret pitch for the second half of the season.

Understand SAL MARANO'S wife has been on the sick list for a few weeks. Hope she is up and around in the near future.

THE DOCTOR SAYS

By Dr. Henry C. Schwartz

The medicine your doctor told you to take right after breakfast should be taken there not as an afterthought just before lunch according to Today's Health.

Your doctor has important reasons for telling you to take one kind of pill before meals, another right after meals, or another first thing in the morning.

For example, some capsules he prescribes have built-in timing mechanisms so they can produce delayed action, repeat action or controlled release over a certain period of time.

Take the capsule at the wrong time and you throw that whole schedule off.

Certain drugs are more effective on an empty stomach. On the other hand, others can be irritating to the stomach lining if taken before meals--the reason the doctor specified they be taken immediately after a meal.

In short, just as important as the medicine you take is when you take it.

BERLIN ONIZERS

HAVE WORKED

218

DAYS

WITHOUT A LOST-TIME ACCIDENT

THE LAST LOST-TIME ACCIDENT OCCURRED

DECEMBER 7, 1955

NURSE'S NOTES

On the sick list:

LEE HENRY is home from the Naval Hospital after an operation. LEE is coming along fine, and after some more of his wife's good home cookin' should be back on the job in the near future.

CHARLIE SINNOTT returned home from the hospital after undergoing another operation on his injured arm and leg. All the pins have now been removed from both his arm and leg.

JUNE WELSER has returned to work after undergoing an operation at Cooper Hospital. Good to see you back JUNE.

SANDY LISA was on the sick list for a few days due to a bad case of sun burn.

JOHN GORSKI has been absent ill for a few days due to a bad case of tonsillitis.

Sorry to see you leave:

LEE FIDELL, who replaced MARY DI BLASE while MARY was on a leave of absence, left us on July 1, 1956. LEE certainly did a swell job pinch hitting for MARY. LEE did much of the ground work and assisted in making the first two issues of the KAYLONIZER a success. Many thanks, LEE, for a job well done.

Stork news:

MARY and JOSEPH DI BLASE are now the proud parents of a baby boy, born on June 11, 1956. JOSEPH, JR. weighed 7 pounds and 11½ ounces and is 19 inches tall.

JEAN DI BLASI gave birth to a son on June 28, 1956. LEO, JR. weighed in at 6 pounds 8 ounces and was 20 inches tall.

EDNA STEWART had a son on June 27, 1956. He weighed 8 pounds and 4 ounces and was 21 inches tall. (June must be baby boy month)

Congratulations to the proud parents and hello to all the new Onizers.

A hearty welcome is extended to the following new Onizers recently hired or returned from the service: HAROLD BERG, WALTER SIMPSON, HAROLD WOLFRUM, JOHN GORSKI, SETH TOWNSEND, RICHARD CAVALUCCI, CHARLES AUSTIN, SUZANNE ERICKSON, WOLFGANG FRANKE and JAMES KNOLL. WOLFIE recently returned from the U. S. Air Force and Jim finished a hitch in the Army.

ONIZED DOINGS

By Yolanda Fidell

During the latter part of June, letters with an enclosed postcard were mailed out to all Plant 95 Onizers. The purpose of the letters was to acquire the ideas of all Onizers on how to make our Onized Club a better organization. To date the response has been very light. Your Executive Council urges all who have not returned their cards to do so as soon as possible. Get your ideas in. This is your club and it will only be as good as you, the members, make it.

The Social Council is now in the process of making plans for the Annual All Plant Picnic. The date for the picnic has been set for Monday, September 3, 1956. Check the next issue of the KAYLONIZER for the time and location.

Fruit baskets were sent to the following Onizers last month: CHARLES JULIANO and JUNE WELSER.

HUGHIE WHELAN, JEAN DI BLASI, EDNA STEWART, and MARY DI BLASE were the recipients of baby blankets in June. All the new arrivals last month were boys. We believe this sets a record in the Onized Family.

There are nine times as many jobs in the United States today as there were a century ago.

THE ROVING CAMERAMAN

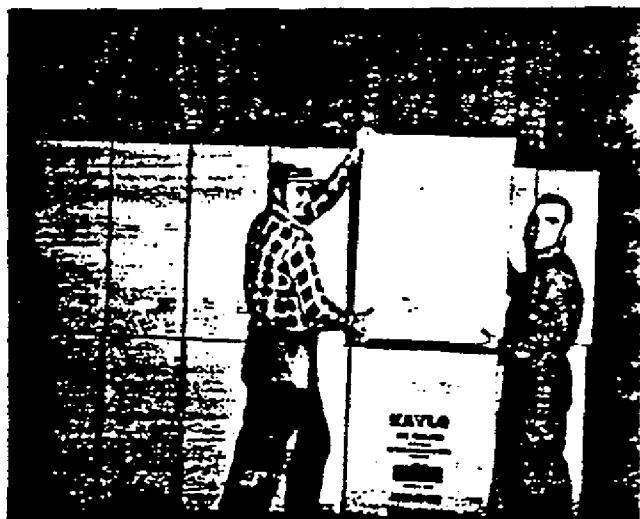
SEES MEN AT WORK IN PLANT 95



Here AL CLOUD, chief test clerk, of the Quality and Control Department compiles the previous day's figures.



LOU DESTEFANO and ALLIE HEGGAN work on a special order on the Finishing Department.



PAUL FITZPATRICK and BUD DUNMIRE of the Warehouse and Shipping Department load a carload of Kaylo products for shipment.



DICK GEISSINGER, of the Finishing Department, inspects ware at the discharge end of one of four saws used to trim Kaylo before it is packed and shipped to customers.

SKELETONS IN KAYLO PRODUCTS

Did you know that every cubic foot of Kaylo contains millions and millions of skeletons?

It's true, for one of the materials that goes into the production of Kaylo products is diatomaceous silica which is made up of the tiny skeletons of single celled plants called diatoms.

Diatoms, which are types of algae that live in the water, cannot be seen individually with the unaided eye, but in colonies they appear as jelly-like globs either floating free or attached to other plants.

Through a microscope the thousands of different diatom types can be seen. Some are shaped like discs, others have elliptical, triangular or rectangular shapes, while still others are thread-like in appearance.

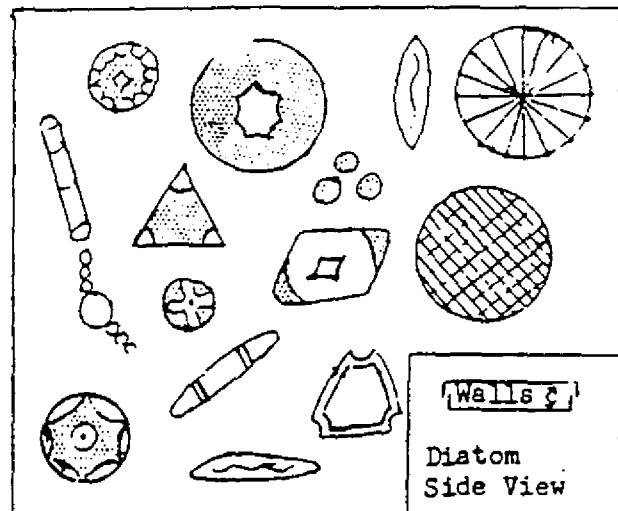
The cell walls of these plants have unusual designs on them, arranged in ornate patterns and resembling jewels. They are some of the most beautiful creatures of the microscopic world.

The unique thing about the diatom is that it lives in a glass house. The living diatom is composed of live matter inside two walls held together by a band or "girdle," so that it looks much like a pillbox.

The cell walls are made of silica which the plant extracts from the water and incorporates in itself. The walls have a glassy, transparent quality and the plant, in reality, lives behind "windows" of a sort.

At certain times in the past when conditions were favorable for growth and reproduction, huge numbers of them existed in the oceans. One such period was the Miocene age, millions of year before man made his appearance on the scene.

At that time, food, temperature and light



Some diatom sizes and designs and anatomy diagram.

conditions were right for diatoms. And too, because of the many volcanoes, the oceans of the Miocene era were full of soluble silicas. The wealth of silica permitted these algae to multiply very quickly.

As huge numbers of these plants reproduced and died, their skeletons sank to the bottom of the sea, gradually building up thick deposits.

In following ages, the crust of the earth buckled and the ocean floor was lifted into the air, becoming mountain ranges and laying bare the layers of diatoms, now white and chalky in appearance.

But it was not until a relatively few years ago, in 1890, that anyone realized the value of these deposits. It was discovered that this diatomaceous earth was an excellent insulating material and mining operations were begun. Since, the demand for this material has grown as new uses for it are discovered.

Besides its ordinary insulating properties, diatomaceous silica is used in Kaylo products because it can withstand very high temperatures without melting and thus is valuable as insulation in areas where great heat is generated.

WINS O-I GRANT

A Woodward High School Senior in Toledo is the first boy to avail himself of the opportunity to further his education under the recently-established Owens-Illinois university scholarship fund.

He is John D. Sutton and he won the scholarship, worth \$5,525, for a five-year period at Cornell University in Ithaca, New York.

Officials at Cornell announced the scholarship had been awarded on the basis of Mr. Sutton's high grades, class leadership and extracurricular activities. Woodward officials said Mr. Sutton would be graduated at the top or near the top of his class.

Owens-Illinois established its educational aid program benefitting colleges, scholars and high school teachers in widely scattered parts of the United States in an announcement May 1, 1956.

O-I FILM WINS SECOND PLACE

The sound-slide film, "Do You Fill Prescriptions Here?" produced by Owens-Illinois and the National Wholesale Druggists' Association, recently received an outstanding honor.

Among 83 slide films in competition, the O-I and NWDA film was awarded second place in its field by the National Visual Presentation Association and the Sales Executive Club of New York at the 1956 Visual Presentation Competition.

The award was made for outstanding achievement in the development of a visual presentation, which reflects the best principles of effective communication.

"INTER NOS"

By Al Pierce

All of us in the Warehouse and Shipping Department are waiting for BUD DURMIRE to build that swimming pool he has been talking about all winter. Right now it is still one of his many ideas. We hope that it will soon become a reality now that summer is here.

AL DAVIS has moved his boat to Wildwood this summer. He can now be seen buzzing around the bay at Grassy Sound, and we do mean buzzing.

That sure is a fine looking porch that JOE REISS has added to his home. We know that JOE will spend many of his leisure hours on it this summer.

Sorry to hear about RAY FLATT'S son having the misfortune of falling from his bicycle and breaking his leg. RAY tells us that RONNIE is coming along fine and should be up and around soon.

While fishing in the bay at Grassy Sound the other week, your reporter had the good fortune of hooking on to and boating a 6 $\frac{1}{4}$ pound flounder. Anyone desiring to see proof of this catch may do so by dropping into the Shipping Office.

CONNIE SCHAFFER has joined the plant softball team as a pitcher. He made a fine showing in his first appearance on the mound and we are looking forward to some fine pitching from CONNIE.

REMINDER

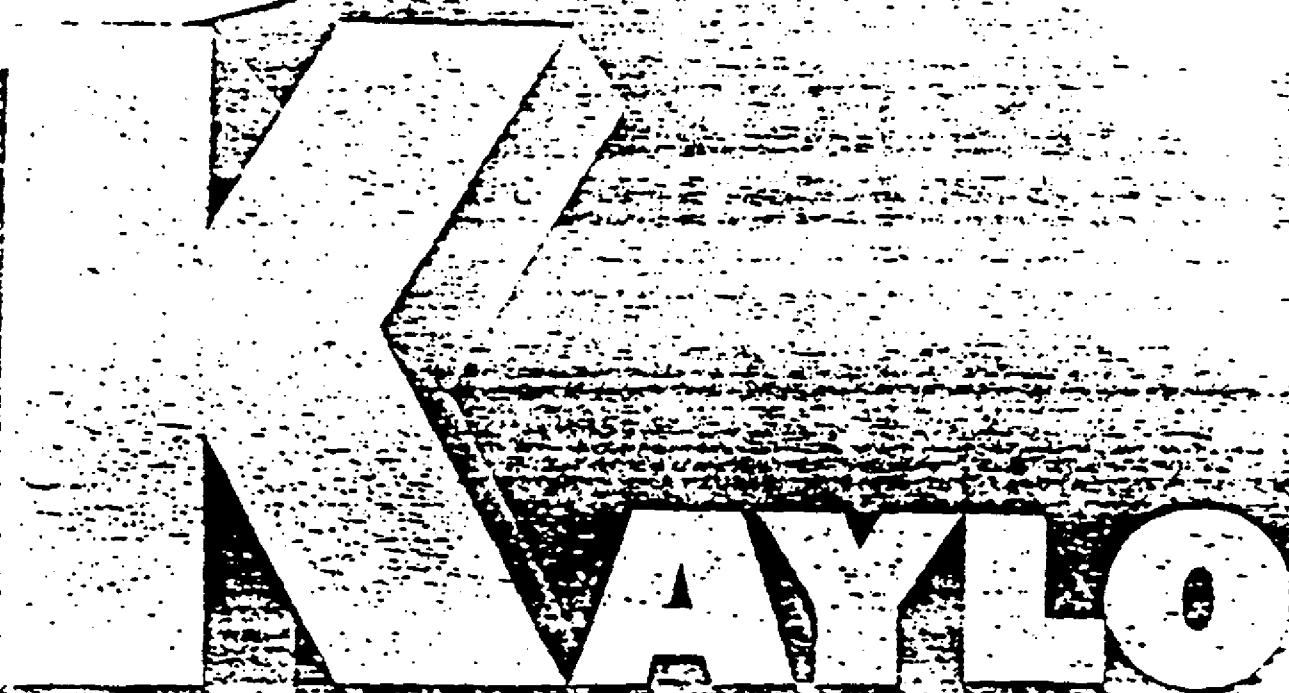
All OnIzers are requested to remember that when calling the plant after 4:30 PM or on weekends, the following number should be used: Be 7-9884.

All other open circuits in the plant are out of hearing distance to the supervisor on duty.

HRV-PL-1568

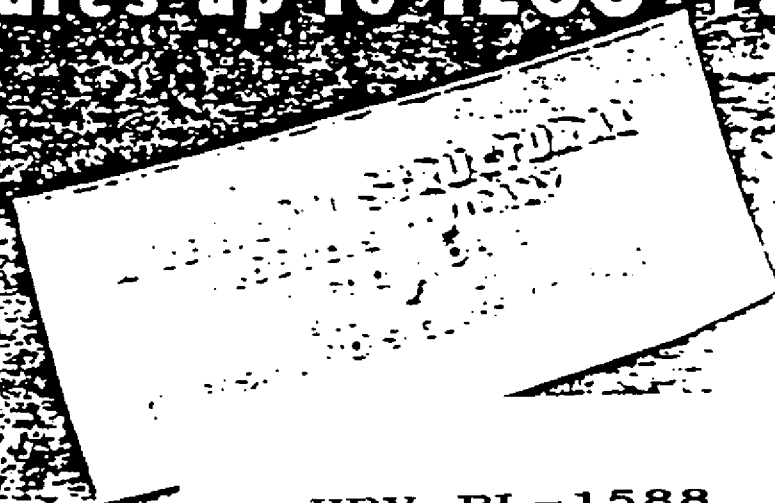
EXHIBIT II

HRV-PL-1587



KAYLO

HEAT INSULATING BLOCK
For Temperatures up to 1200° F.



HRV-PL-1588

A NEW HEAT INSULATION WITH A REMARKABLE COMBINATION OF ADVANTAGES....

Kaylo Heat Insulating Block is a new type of lightweight insulation that is efficient enough to be used at ordinary room temperature and resistant enough to perform effectively up to 1200° F.

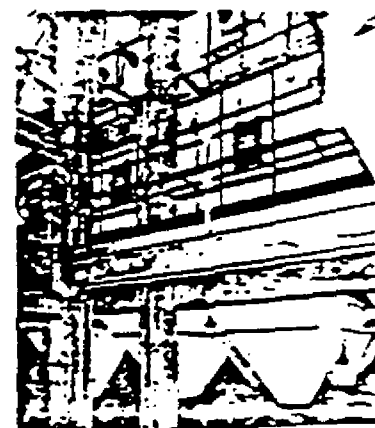
Few new products of any kind have been so thoroughly researched before being placed on the market. Heat Insulating Block is the result of many years' work by Illinois Glass Company and its physicists and chemists.

No other material now on the market effectively combines the most desirable characteristics of heat insulation.

For instance...

LOW DENSITY

Kaylo Heat Insulating Block weighs only 11 pounds per cubic foot. This light weight (less than one-third the weight of concrete) simplifies its shipping and application. It reduces weight—an important factor on ships, for an example.

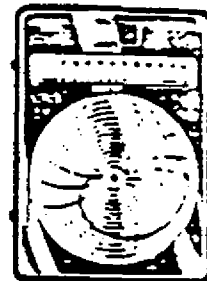
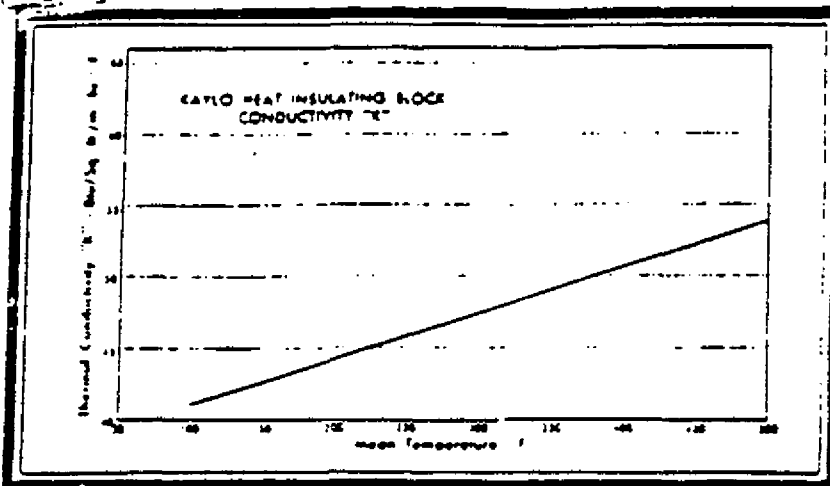


Notice the clean, smooth finish on these insulated pipes and surfaces. Applicators find it a pleasure to work with Kaylo Heat Insulating Block because they can cut it with a hand saw and yet they have a material of great flexural strength. The ship's hulls and hoppers are also insulated with Kaylo Heat Insulating Block.

KAYLO

HEAT INSULATING BLOCK

Heat Loss, Surface Temperatures
and Efficiencies...



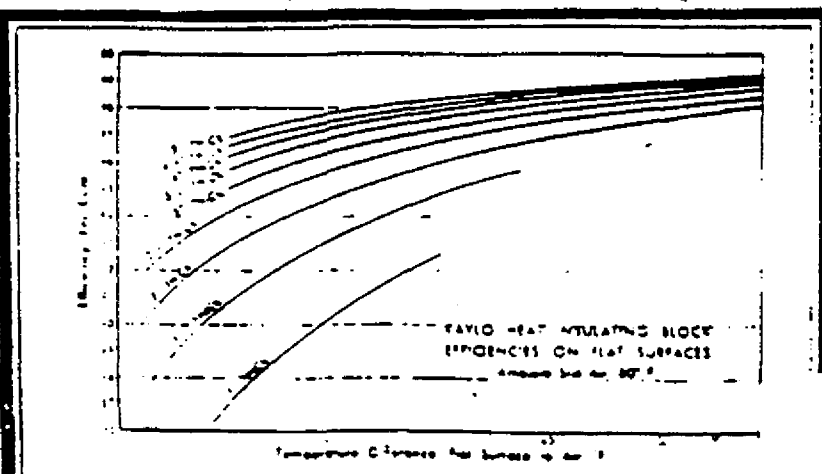
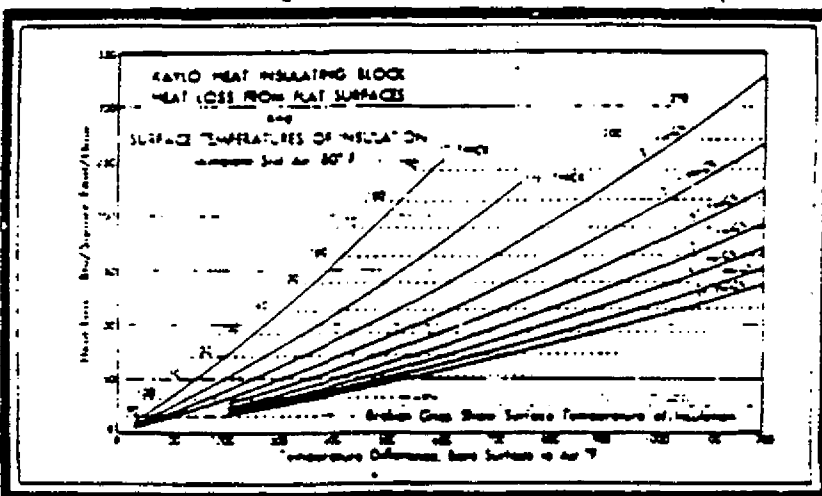
Inside or outside, for large installations or small, from 0 to 1200° F., use Kaylo Heat Insulating Block to insulate:

Breechings	Lehrs
Hot Air Ducts	Autoclaves
Tanks	Ovens
Towers	Furnaces
Dryers	Turbines
Evaporators	Chilling Pumps
Heat Exchangers	Boilers
Condensers	Preheaters
Locomotives	

SOURCES OF TEST DATA

The data shown on these pages are supported by tests run at various laboratories, all well known to the insulation industry. They are further supported by the performance of the product in service.

More detailed information on Kaylo Heat Insulating Block is available on request. American Surface Products Company, Toledo, Ohio, a subsidiary of Owens-Illinois Glass Company.



LOW THERMAL CONDUCTIVITY

The coefficient of conductivity, or K value of Kaylo Heat Insulating Block, is shown on the chart on page four. It places it among the most efficient insulations for medium high temperatures. Its insulation value comes principally from its fine, interlaced cellular structure. These cells are so tiny and so numerous that they present a material surface of approximately 140 acres per cubic foot of insulation.

Experience shows that the insulation value of Kaylo insulation improves when the material is put into service.

EFFECTIVE OVER WIDE TEMPERATURE RANGE

Kaylo Heat Insulating Block performs efficiently not only on temperatures in the low pressure steam and hot water range but on temperatures in the superheated steam range as well. This is shown by the flatness of the conductivity curve. One-material coverage with Kaylo insulation handles applications which often require two thicknesses of different materials.

HIGH COMPRESSIVE STRENGTH

Its compressive strength is unusually high for a mineral product of such light weight. Kaylo Heat Insu-

lating Block withstands compression values equivalent to those of a man's walking on it or even to those of a heel's being ground into it.

HIGH FLEXURAL STRENGTH

Its flexural strength is higher than the normal requirement for heat insulation of this type. This strength makes for easy handling and application, and contributes to long service with low maintenance.

NO ADDED BINDER

Kaylo insulation is an inorganic compound, containing no added binder. Its performance characteristics, therefore, are not affected by additives, which often reduce insulating value, modify effective temperature range or otherwise limit performance.

EASY TO APPLY WELL

Kaylo Heat Insulating Blocks are clean-cut and trim. They are easy to fit into place to make a good-looking installation. Their "feel" is pleasant and non-irritating. They can be cut, scored and sawed with ordinary wood-working tools. Finishes that go over the block, whether cement, cloth or other types, can be applied smoothly and with a minimum of effort. No special tools are needed.

LOW MOISTURE ABSORPTION

Moisture absorption is no problem with Kaylo insulation. Even when subjected to an atmosphere of 100% relative humidity and a temperature of 120° F. in standard tests, specimens absorb less than 1% moisture by volume.

RETAINS EFFECTIVENESS AFTER LONG SERVICE

Kaylo Heat Insulating Block remains strong, free from excessive powdering, and shows little loss in weight or shrinkage after long application to temperatures up to 1200° F. Even conventional tumbling tests, run after prolonged heating, produce relatively little crumbling or breakdown of the material.

STANDARD SIZES

Lengths (inches)	Widths (inches)	Thicknesses (inches)
36	6	1
36	6	1 1/2
36	6	2
36	6	2 1/4
36	6	3
36	12	1
36	12	1 1/4
36	12	2
36	12	2 1/2
36	12	3

Other sizes are available on special order.

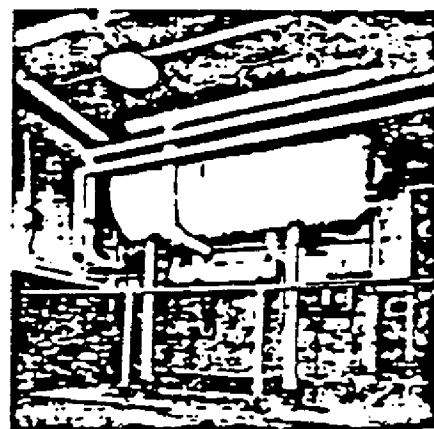
AND A REMARKABLE VERSATILITY



On large or small equipment, inside or out, Kaylo Heat Insulating Block performs efficiently and with a minimum of maintenance. Here it is being applied to the walls of a large reciprocator. Workmen are laying block over 6" x 6" wire mesh welded to the stiffeners. The block are then covered with finishing cement and phaltastic weatherproofing.



Kaylo Heat Insulating Block covers both flat and curved surfaces on the power house equipment pictured here. At the right are fresh air intakes; the center compartments house induced draft fans; and at the left are conduits leading to a precipitator. Kaylo insulation means continuous fuel savings to this power plant.



Hot water is always ready when needed in the office building where this hot water storage tank is installed thanks to Kaylo Heat Insulating Block. This permanent insulation holds water temperature constant with a minimum of power consumption.

Other applications for Kaylo Heat Insulating block are listed on the back page.

HRV-PL-1591

PHYSICAL CHARACTERISTICS AT A GLANCE

..... Approximately 11 lb. per cu. ft.
..... 50 lb. per sq. in.
(at 5% deformation)

Before heating..... 150 lb. per sq. in.
After heating for 24 hours.
at 750° F..... 144 lb. per sq. in.
at 1000° F..... 123 lb. per sq. in.
at 1200° F..... 117 lb. per sq. in.
After boiling for 24 hours (while wet)..... 74 lb. per sq. in.

LOSS IN WEIGHT

After heating for 24 hours.
at 750° F..... 5.5%
at 1000° F..... 7.9%
at 1200° F..... 9.8%
After boiling for 24 hours..... 0.2%

LOSS OF DISINTEGRATION

(Conventional Tumbling Test—Loss in weight after 10 minutes)

Before heating..... 2.2%
After heating for 24 hours.
at 750° F..... 3.7%
at 1000° F..... 5.7%
at 1200° F..... 6.9%

LINEAR SHRINKAGE AFTER SATURATION

Linear Shrinkage after heating for 24 hrs.
at 750° F..... 0.8%
at 1000° F..... 0.9%
at 1200° F..... 1.5%
Elongation after saturation (max.)..... 0.4%

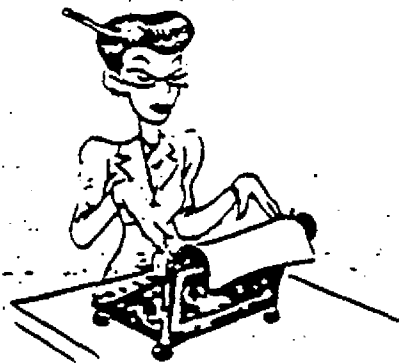
CHANGE IN VOLUME

After 6 hours exposure in atmosphere of
120° F. and 90% Relative Humidity..... 0.9%

HRV-PL-1592

PRINCIPAL FEATURES OF KAYLO HEAT INSULATING BLOCK

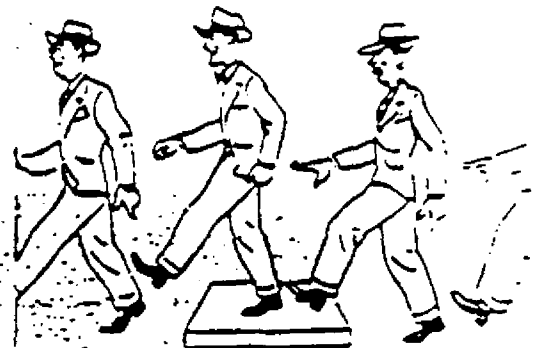
EXTREMELY LIGHTWEIGHT



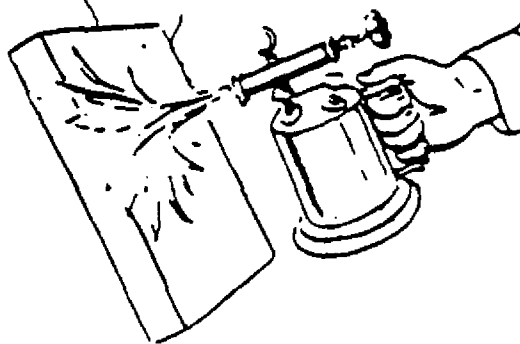
EASY TO APPLY



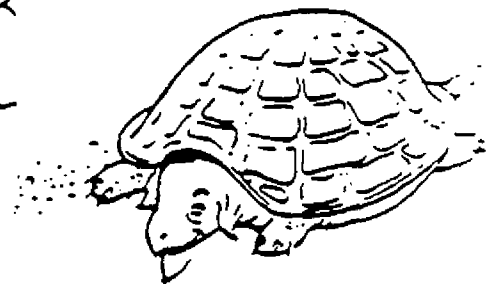
HIGH COMPRESSIVE STRENGTH



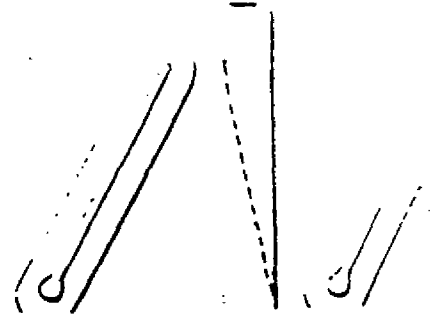
REPAIRS



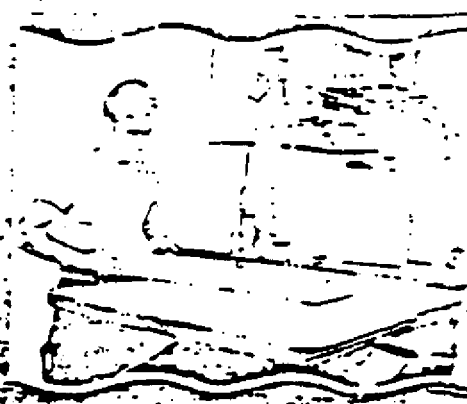
DURABLE



NO ADDED BINDER

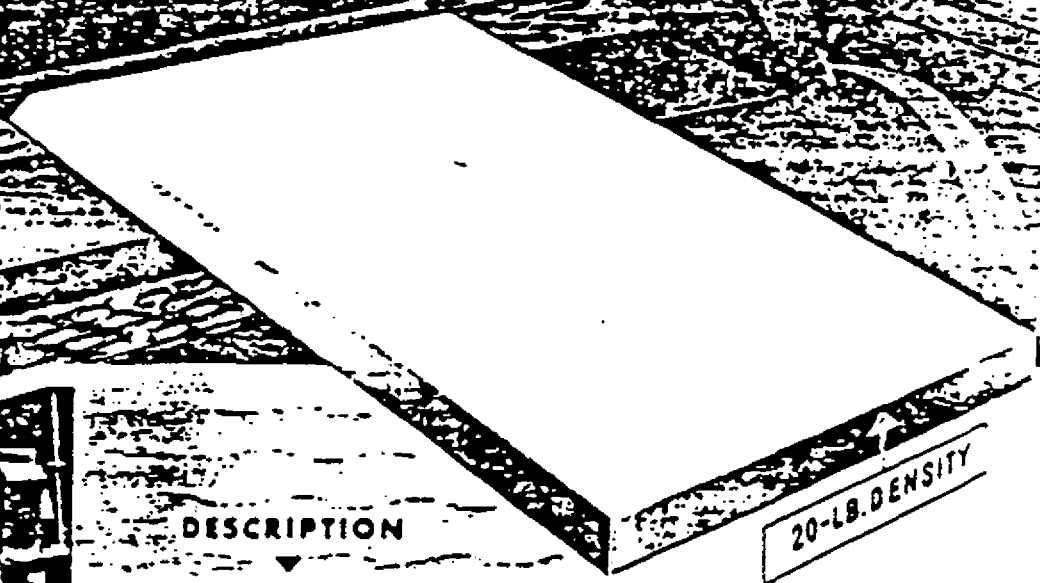


HRV-PL-1593



KAYLO

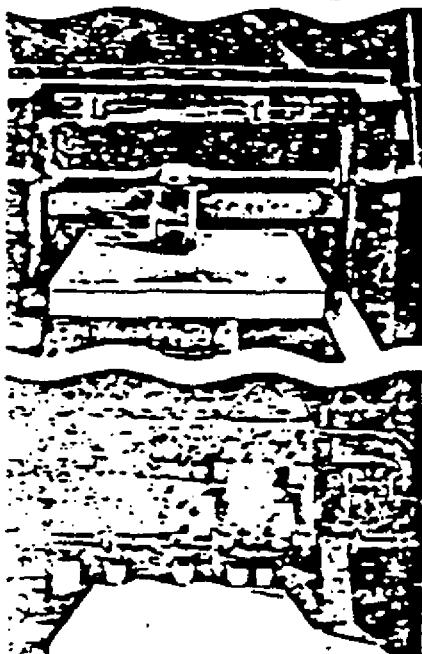
20-LB. DENSITY
STRUCTURAL INSULATING BLOCK



DESCRIPTION

Kaylo Structural Insulating Block—is a near-white, rigid mineral insulation material weighing approximately 20 pounds per cubic foot. It is composed principally of calcium silicate. Except for density and for those characteristics that are changed by density it is similar to *Kaylo Heat Insulating Block*, a lightweight insulation used to insulate against heat loss from hot surfaces. Kaylo Structural Insulating Block (20-lb. density) is designed to give maximum strength and fire resistance without sacrificing its advantages—light weight and low thermal conductivity. In fact the practical combination of these four properties—strength, weight, insulating value and fire resistance—makes it almost unique as a building material.

It weighs nominally 20 pounds to the cubic foot (actually on an average basis from 19.5 to 22 lb.), has a compressive strength of approximately 1 lb. per sq. in., a "k" of 0.66 at 100° mean and outstanding resistance to the travel of heat and flame at building fire temperatures.



KAYLO STRUCT

USES

Kaylo Structural Insulating Block is not a finished building material in itself and is not made for exposure to the weather. Its principal uses are as a structural roof tile, or roof deck unit, in which a steel reinforcing mat is inserted at the time of forming, and as a core material. In this latter use it serves as the core of laminated structures where the faces or laminates are applied with adhesives, and also as the core of structural shells or envelopes where the Kaylo core material is simply inserted in the open spaces and held by its own contact or by such conventional methods as clips or other attachments.

In any of these applications it adds rigidity to the structure and vastly increases insulation value and fire resistance.

PHYSICAL PROPERTIES

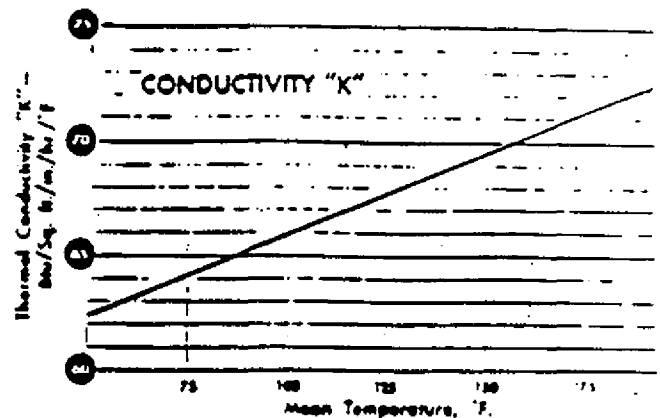
Light Weight—Nominal 20-lb. density Kaylo Block is about a third lighter than yellow pine. On an oven-dry basis it weighs from 19.5 to 22 pounds per cubic foot.

High Strength—Its compressive strength is approximately 500 lb. per sq. in. with a deformation of 5 per cent. Flexural strength is approximately 175 lb. per sq. in.

Fireproof—Kaylo 20-lb. density Structural Insulating Block has been tested at the Underwriters' Laboratories in Chicago and given the following rating, based on comparison with untreated Red Oak as 100.

Flame spread.....	0.0
Fuel contributed.....	negligible
Smoke produced.....	0.0

For use in fabrications that are to be Underwriters' Laboratories inspected, Kaylo Structural Insulating Block furnished bearing the Underwriters' label for fire test classification for building material.



Good Insulation Value—At low mean temperatures Kaylo Structural Insulating Block is one of the most efficient structural mineral insulations. At high mean temperatures it still compares favorably with heat insulating materials of its own weight.

High Light Reflectivity—When left exposed and painted as with the underside of a roof deck, Kaylo Structural Insulating Block has high light reflectivity. Its reflection factor is from 70 to 80 per cent.

Non-Abrasive Surface—Its surface is non-abrasive and has a somewhat "soapy" feel that makes it pleasant to touch. At the same time it has a firm surface that assures contact with surfaces applied over it.

No Added Binder—It contains no added binder, but instead constitutes its own binder. Hence its characteristics are not modified as to temperature limit, sound insulation value, fire resistance or otherwise by these limitations.

HRV-PL-1595



INSULATING BLOCK (20-LB. DENSITY)

Good Workability—Kaylo Structural Insulating Block is responsive to wood working tools. It can be sawed with a hand saw or power saw, can be routed, tongue-and-grooved, sanded, and, in fact, run through most wood-working equipment.

High Modulus of Elasticity—The modulus of elasticity of 20-lb. density block is approximately 160,000 lb. per sq. in.

Low Specific Heat—The specific heat of Kaylo Structural Insulating Block is approximately 0.22.

Cellular Structure—Kaylo Structural Insulating Block is about 80 per cent inter-communicating air cells. The cells are extremely small, less than a micron in diameter.

Low Moisture Absorption—Kaylo Structural Block is hygroscopic. It will absorb moisture from humid air and will reach equilibrium at lower moisture contents when exposed to lower humidities. However, because of its extremely small pore size and other characteristics, its behavior with respect to moisture differs from that of most porous materials. It has unusual capacity to distribute moisture within its mass, and to give it off to surrounding air of lower moisture content.

Its moisture absorption when surrounded by humid air is slow. Test specimens dried for 24 hours at 215° F., cooled and then exposed on all surfaces to an atmosphere of 90 per cent relative humidity and a temperature of 120° F. for six hours, absorbed less than one per cent of moisture by volume.

Consistent with the common practice for good construction involving porous insulating materials of high internal surface area, Kaylo Structural Insulating Block should be sealed against moisture on the warm side when it is subjected to extremely low temperatures.

High Wet Strength—Kaylo Structural Insulating Block, like most other insulating materials, is not intended to serve immersed in water or exposed to extremely damp or humid conditions, yet its flexural strength when wet (immersed 10 hours) is reduced only about 15 per cent.

Dimensionally Stable—The dimensions of Kaylo Structural Insulating Block change little with changes in moisture content. Experience has shown from the manufacture of thousands of units of laminated structures that they have unusual dimensional stability and unusual freedom from warping.

Available with and without Reinforcing—In the form of roof tile Kaylo Structural Insulation is available with a steel reinforcing mat. In the form of core material for various types of structure it is available without reinforcing.

Accepts Nails and Screws—Both nails and screws can be used with Kaylo Structural Block. Tables showing holding power of both are available on request. Nails should be of the cement-coated type without barbs that abrade the sides of the opening they make as they are driven into the block. Galvanized or non-ferrous nails may be used where greater resistance to corrosion is required. Screws may be inserted either with or without drilling a pilot hole.

Sizes—Kaylo Structural Insulating Block is made in a standard size of 18 x 36 inches.

Since most uses involve manufacturing operations, thicknesses that are practical can best be worked out with the manufacturer of Kaylo Insulating Products after approximate quantities needed are known. These will usually be between one and two inches thick.

Certain thicknesses are suggested by certain building requirements. A thickness of from 1½ to 2 inches of Kaylo Structural Insulating Block is required to withstand a typical building fire for one hour—usually somewhat more for a partition than for a door because of the greater performance required of a partition.

20-lb. and 11-lb. Density Block Can Be Used in Combination—Where two thicknesses of insulation are used to build up an insulating structure it is possible to use the two densities in combination to develop the best insulation value, strength and fire resistance.

**AMERICAN STRUCTURAL
PRODUCTS COMPANY**

Toledo 1, Ohio

HRV-PL-1596

LAMINATION

Lamination over a Kaylo Insulating Core—Almost any face material may be bonded to Kaylo Structural Insulating Block surfaces. Bonding agents can be selected to meet the requirements of the particular facing—also to satisfy

the service requirements of the finished product—still offer some choice in curing procedures.

Some adhesives which may be used on many face materials are listed below. This list is not intended to be complete. Its only purpose is to give a list of adhesives. There have been found to provide a strength of 35 lb. per sq. in. and a minimum heat resistance of 160 lb. per sq. in. when cured in the manner

ADHESIVES FOR JOINING KAYLO STRUCTURAL INSULATING BLOCK TO:

Wood Veneer	Aluminum	Stainless Steel
Durite No. 3026A 3026A-WH207 3026A-W9	Durite No. 3026A Pecora 718 Weldwood Insulure No. 1	Durite No. 3026 No. A, NH267 H100 3 MEC 826
Pencalite G1131	Interlate 4162	Weldwood Insulure No. 1
Pecora 718	Vulcolock	Interlate 4162
Cetabond 720	DuPont 4653	Vulcolock
Vinylseal MA 28-18	DuPont 4646	DuPont 4653
Amberlite PB14	G. E. 2142	DuPont 4646
Bostik 7026	G. E. 7031	G. E. 2142
Eodux	Vinylseal MA 28-18	G. E. 7031
Senco X-8348 — 130LW OW1	Amberlite PB14	Vinylseal MA 28-18
	Bostik EXE 138	Amberlite PB14
	Eodux	Bostik 7026
		Sodium Silicate
		Eodux

ADHESIVES FOR JOINING LIKE MATERIALS

Insulating Block to Insulating Block	Aluminum to Aluminum	Stainless Steel to Stainless Steel
Durite 3026A Pencalite G1131 Weldwood Insulure 1 G. E. 2142 Plaskon 911 Selatron 5003	Vulcolock DuPont 4653 DuPont 4646 G. E. 7031 Bostik 7026 Bostik EXE 138 Eodux	DuPont 4653 G. E. 7031 Bostik 7026 Bostik EXE 138 Eodux
Vinylseal MA 28-18 Amberlite PB14 Bostik 7026 Bostik EXE 138 Sodium Silicate Eodux Senco X-8348 — 130LW OW1		

Symbols for method of cure:

For Maximum Strength:

- A Clamped at room temperature for 24 hours.
- B Clamped in oven at 120° F. for 1 hour.
- C Placed in press at 10 p.s.i. at 300° F. for 10-30 minutes.
- D Placed in press at 100 p.s.i. at 300° F. for 10-30 minutes.
- E Clamped in oven at 250° F. for 10-30 minutes.

High-frequency curing has been tried successfully on an experimental basis with wood, aluminum and stainless steel bonded to a Kaylo insulating core. Many of the manufacturers making the above listed adhesives can provide adhesives suitable for high-frequency curing.

AMERICAN STRUCTURAL
PRODUCTS COMPANY

TOLEDO 1, OHIO

Subsidiary of OWENS-ILLINOIS GLASS COMPANY

HRV-PL-1597

ADVANTAGES...

make a good-looking installation. Their "feel" is pleasant and non-irritating. They can be cut, scored and sawed with ordinary woodworking tools. Finishes can go over the block, whether cement, cloth or other types, can be applied smoothly and with a minimum of effort. No special tools are needed.

LOW MOISTURE ABSORPTION. Kaylo Heat Insulating Block absorbs little moisture from surrounding humid air.

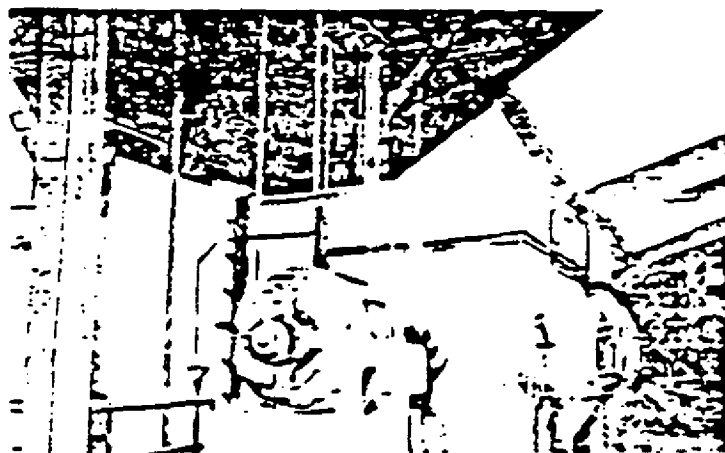
EFFECTIVE AFTER LONG SERVICE. Kaylo Heat Insulating Block remains strong, free from excessive powdering, and shows little loss in weight or shrinkage after long application to temperatures up to 1200° F. Even conventional tumbling tests, run after prolonged heating, produce relatively little crumbling or break-down of the material.

TYPICAL APPLICATIONS:

Inside or outside, for large installations or small, up to 200' F., use Kaylo Heat Insulating Block to insulate:

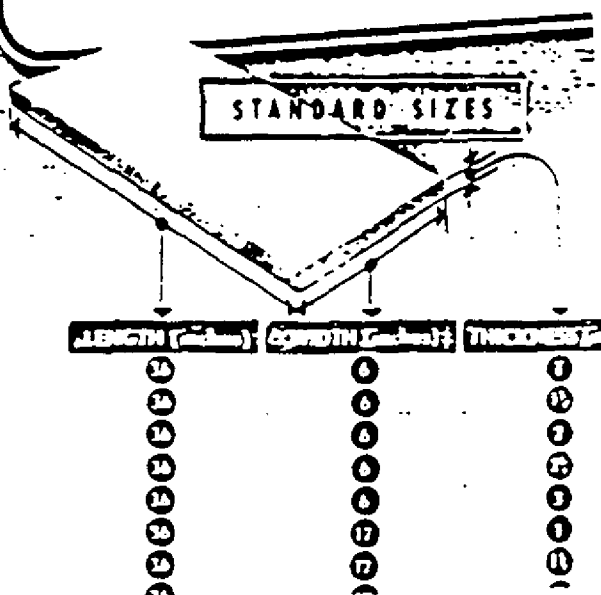
Heatings	Heat Exchangers	Turbines
or Air Ducts	Condensers	Chilling Pits
Boilers	Lehrs	Boilers
Stoves	Autoclaves	Precipitators
Refrigerators	Ovens	Locomotives
	Furnaces	

Kaylo Heat Insulating Block covers both flat and curved surfaces on the power house equipment pictured here. By minimizing heat loss, it saves fuel and keeps temperatures in the room at comfortable levels.



PHYSICAL CHARACTERISTICS

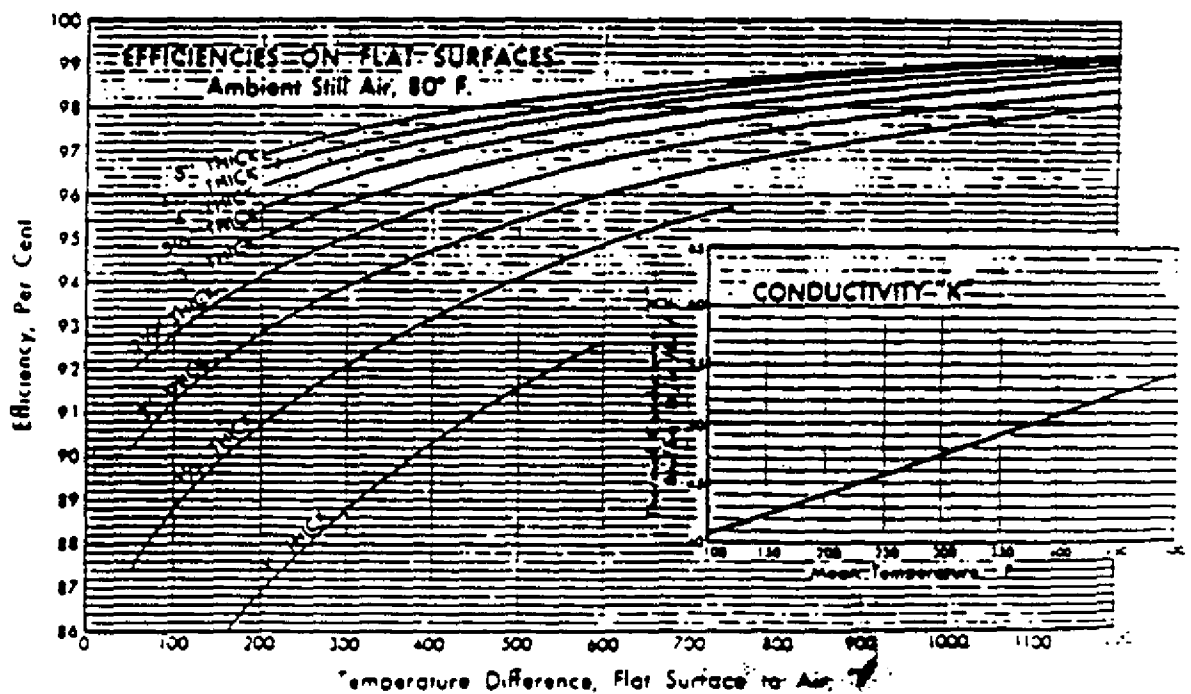
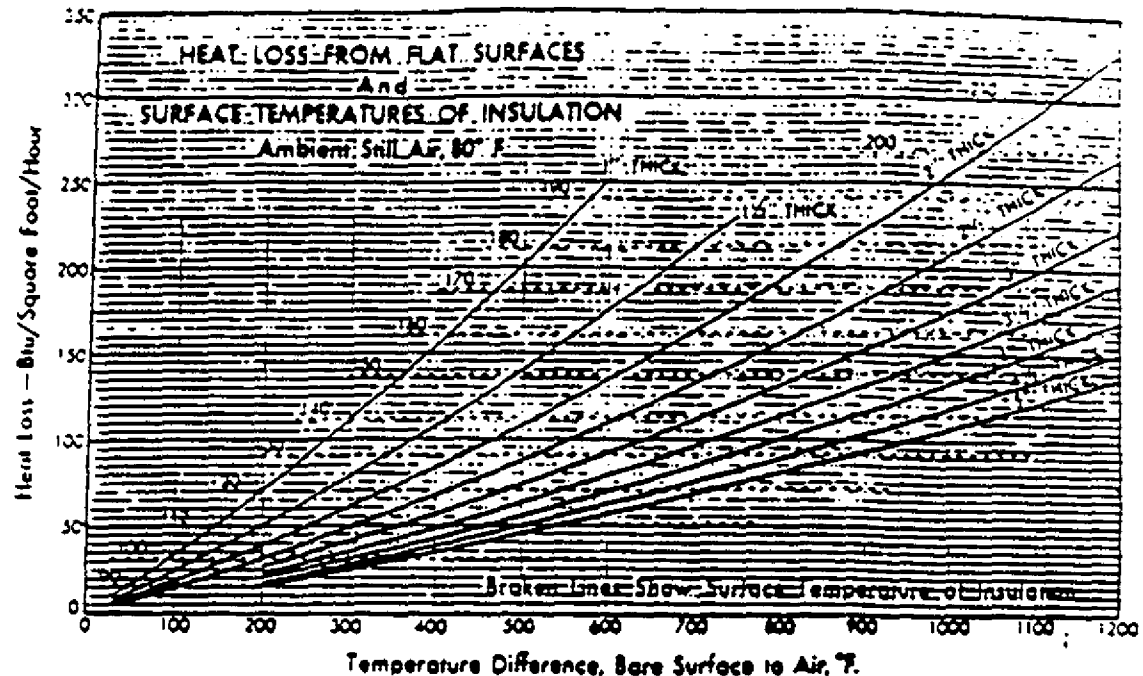
DENSITY	Approximately 11 lb. per cu. ft.
FLEXURAL STRENGTH	30 lb. per sq. in.
COMPRESSIVE STRENGTH at 5% deformation	
Before heating	150 lb. per sq. in.
After heating for 24 hours	
at 750° F.	144 lb. per sq. in.
at 1000° F.	123 lb. per sq. in.
at 1200° F.	117 lb. per sq. in.
After boiling for 24 hours (while wet)	74 lb. per sq. in.
LOSS IN WEIGHT	
After heating for 24 hours	
at 750° F.	3.5%
at 1000° F.	7.9%
at 1200° F.	9.8%
After boiling for 24 hours (after drying)	0.2%
RESISTANCE TO ABRASION	
(Conventional tumbling test—loss in weight after 10 minutes)	
Before heating	2.2%
After heating for 24 hours	
at 750° F.	3.7%
at 1000° F.	4.4%
at 1200° F.	4.4%
DIMENSIONAL STABILITY	
Linear shrinkage after heating for 24 hours	
at 750° F.	0.001 in.
at 1000° F.	0.002 in.
at 1200° F.	0.003 in.
(Elongation after saturation (meas.))	
MOISTURE ABSORPTION (volume)	
After 6 hours exposure in atmosphere of 120° F. and 90% Relative Humidity	
CONDUCTIVITY (K)	
At 100° F. mean temperature	0.0004
At 500° F. mean temperature	0.0004



KAYLO

HEAT INSULATING BLOCK

Heat Loss, Surface Temperatures, and Efficiencies



SOURCES OF TEST DATA: The data shown on these pages are supported by tests run at various laboratories, all well known to the insulation industry. They are further supported by the performance of the product in service.

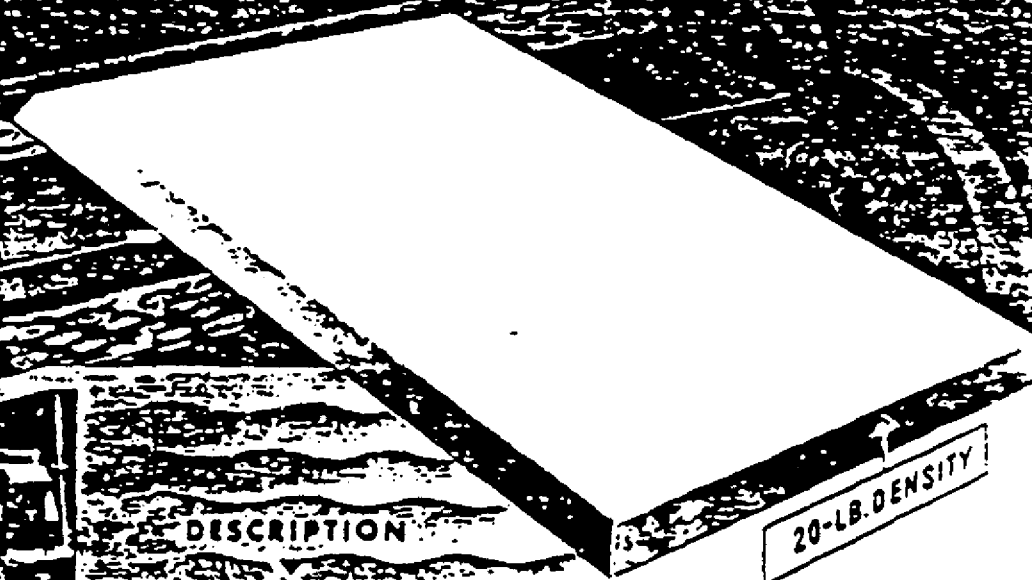
More detailed information on Kaylo Heat Insulating Block is available on request. American Structural Products Company

HRV-PL-1599

14
3

KAYLO

20-LB. DENSITY
STRUCTURAL INSULATING BLOCK



DESCRIPTION

Kaylo Structural Insulating Block—is a near-white, rigid mineral insulating material weighing approximately 20 pounds per cubic foot. It is composed principally of calcium silicate. Except for density and for those characteristics that are changed by density it is similar to Kaylo Heat Insulating Block—a lightweight insulation used to insulate against heat loss from hot surfaces. Kaylo Structural Insulating Block (20-lb. density) is designed to be a maximum strength and fire resistance without sacrificing its advantages of light weight and low thermal conductivity. In fact the practical combination of these four properties—strength, weight, insulating value and fire resistance—makes it almost unique as a building material.

It weighs nominally 20 pounds to the cubic foot (actually on an oven basis from 19.5 to 22 lb.), has a compressive strength of approximately 1 lb. per sq. in., a "k" of 0.66 at 100 mean and outstanding resistance to travel of heat and flame at building fire temperatures.

HRV-PL-1600

KAYLO

20-LB.
DENSITY

USES

Kaylo Structural Insulating Block is not a finished building material in itself and is not made for exposure to the weather. Its principal uses are as a structural roof tile, or roof deck unit, in which a steel reinforcing mat is inserted at the time of forming, and as a core material. In this latter use it serves as the core of laminated structures where the faces or laminates are applied with adhesives, and also as the core of structural shells or envelopes where the Kaylo core material is simply inserted in the open spaces and held by its own contact or by such conventional methods as clips or other attachments.

In any of these applications it adds rigidity to the structure and vastly increases insulation value and fire resistance.

PHYSICAL PROPERTIES

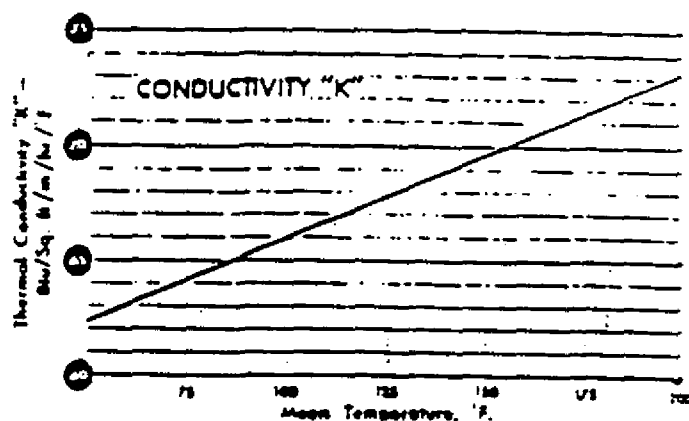
Light Weight—Nominal 20-lb. density Kaylo Block is about a third lighter than yellow pine. On an oven-dry basis it weighs from 19.5 to 22 pounds per cubic foot.

High Strength—Its compressive strength is approximately 500 lb. per sq. in. with a deformation of 5 per cent. Flexural strength is approximately 175 lb. per sq. in.

Fireproof—Kaylo 20-lb. density Structural Insulating Block has been tested at the Underwriters' Laboratories in Chicago and given the following rating, based on comparison with untreated Red Oak as 100.

Flame spread	0.0
Fuel contributed	negligible
Smoke produced	0.0

For use in fabrications that are to be Underwriters' Laboratories inspected, Kaylo Structural Insulating Block is furnished bearing the Underwriters' label for fire hazard classification for building material.



Good Insulation Value—At low mean temperatures Kaylo Structural Insulating Block is one of the most efficient structural mineral insulations. At high mean temperatures it still compares favorably with heat insulating materials of its own weight.

High Light Reflectivity—When left exposed and untreated (as with the underside of a roof deck) Kaylo Structural Insulating Block has high light reflectivity. Its light reflection factor is from 70 to 80 per cent.

Non-Abrasive Surface—Its surface is non-abrasive. It has a somewhat "soapy" feel that makes it pleasant to handle. At the same time it has a firm surface that assures good contact with surfaces applied over it.

No Added Binder—It contains no added binder, but instead constitutes its own binder. Hence its characteristics are not modified as to temperature limit, solubility, insulation value, fire resistance or otherwise by "binder limitations."



HRV-PL-1601

STRUCTURAL INSULATING BLOCK

Good Workability—Kaylo Structural Insulating Block is responsive to wood working tools. It can be sawed with a hand saw or power saw, can be routed, tongue-and-grooved, sanded, and, in fact, run through most wood-working equipment.

High Modulus of Elasticity—The modulus of elasticity of 20-lb. density block is approximately 160,000 lb. per sq. in.

Low Specific Heat—The specific heat of Kaylo Structural Insulating Block is approximately 0.22.

Cellular Structure—Kaylo Structural Insulating Block is about 80 per cent inter-communicating air cells. The cells are extremely small, less than a micron in diameter.

Low Moisture Absorption—Kaylo Structural Block is hygroscopic. It will absorb moisture from humid air and will reach equilibrium at lower moisture contents when exposed to lower humidities. However, because of its extremely small pore size and other characteristics, its behavior with respect to moisture differs from that of most porous materials. It has unusual capacity to distribute moisture within its mass, and to give it off to surrounding air of lower moisture content.

Its moisture absorption when surrounded by humid air is low. Test specimens dried for 24 hours at 215° F., cooled and then exposed on all surfaces to an atmosphere of 90 per cent relative humidity and a temperature of 120° F. for six hours, absorbed less than one per cent of moisture by volume.

Consistent with the common practice for good construction involving porous insulating materials of high internal surface area, Kaylo Structural Insulating Block should be sealed against moisture on the warm side when it is subjected to extremely low temperatures.

High Wet Strength—Kaylo Structural Insulating Block, like most other insulating materials, is not intended to serve immersed in water or exposed to extremely damp or humid conditions, yet its flexural strength when wet (immersed 10 hours) is reduced only about 15 per cent.

Dimensionally Stable—The dimensions of Kaylo Structural Insulating Block change little with changes in moisture content. Experience has shown from the manufacture of thousands of units of laminated structures that they have unusual dimensional stability and unusual freedom from warping.

Available with and without Reinforcing—In the form of roof tile Kaylo Structural Insulation is available with a steel reinforcing mat. In the form of core material for various types of structure it is available without reinforcing.

Accepts Nails and Screws—Both nails and screws can be used with Kaylo Structural Block. Tables showing holding power of both are available on request. Nails should be of the cement-coated type without barbs that abrade the sides of the opening they make as they are driven into the block. Galvanized or non-ferrous nails may be used where greater resistance to corrosion is required. Screws may be inserted either with or without drilling a pilot hole.

Sizes—Kaylo Structural Insulating Block is made in a standard size of 18 x 36 inches.

Since most uses involve manufacturing operations, thicknesses that are practical can best be worked out with the manufacturer of Kaylo Insulating Products after approximate quantities needed are known. These will usually be between one and two inches thick.

Certain thicknesses are suggested by certain building requirements. A thickness of from 1½ to 2 inches of Kaylo Structural Insulating Block is required to withstand a typical building fire for one hour—usually somewhat more for a partition than for a door because of the greater performance required of a partition.

20-lb. and 11-lb. Density Block Can Be Used in Combination. Where two thicknesses of insulation are used to build up an insulating structure it is possible to use the two densities in combination to develop the best insulation value strength and fire resistance.

**Kaylo Division
OWENS-ILLINOIS
GLASS COMPANY**

Toledo 1, Ohio

HRV-PL-1602



LAMINATION

Lamination over a Kaylo Insulating Core—Almost any face material may be bonded to Kaylo Structural Insulating Block surfaces. Bonding agents can be selected to meet the requirements of the particular facing—also to satisfy the service requirements of the finished product—and still offer some choice in curing procedures.

Some adhesives and primers which may be used on various types of face materials are listed below. This list is not intended to be complete. Its only purpose is to identify a partial list of adhesives. An adhesive listed does not imply that it is not suitable. These have been found to provide a tensile strength of 35 lb. per square inch and a minimum shear strength of 100 lb. per square inch when cured according to the manufacturer's recommendation. They are not listed in the order of their adhesive strength.)

ADHESIVES AND PRIMERS FOR JOINING

KAYLO

STRUCTURAL INSULATING BLOCK TO

Wood Veneer or Paper or Plastics		Steel, Stainless Steel Galvanized, or Aluminum		Kaylo Insulating Block or Cement-Asbestos Board	
Durite No. 3026A	A	Durite No. 3026A or No. A NH267	A	Durite 3026A	A
Pencolite G1131	A	H100	C	Pencolite G1131	A
Pecore 718	E	Pecore 718	E	Armstrong J-1162	D
Carabond 720	A	3MBC 826	C D E	Inchite 1	A
Vynkol MA 28-18	E	Pencolite G1131	A	G.E. 2142	C
Amberlite PE 14	D	Inchite No. 1	A	Solignum 5002	C
Sealt 7026	D	Inverose 4162	C D	Vynkol MA 28-18	C
Rodux	D	Vynkol	A A	Amberlite PE-14	D
Synap S-8348+130LW (DW)	D	DuPont 4653	C D E	Sealt 7026	D
Resorband 8-12	A	DuPont 4646	C D E	Sealt EXE 138	D
Armstrong J-1162	D	Resorband 8-12	A	Sodium Silicate	A
Tego	D	G.E. 2142	C	Rodux	D
		G.E. 7031	C	Synap S-8348+130LW (DW)	D
		Sealt 7026	D	Resorband 8-12	A
		Sealt EXE 138	D	Tego	D
		Sealt 1007	A		
		Vynkol MA 28-18	E		
		Amberlite PE-14	D		
		Rodux	D		
		Armstrong J-1162	D		

Symbols for method of cure:
For Maximum Strength

- A Clamped at room temperature for 24 hours.
- B Clamped in oven at 120° F. for 1 hour.
- C Placed in press at 10 p.s.i. at 300° F. for 10-30 minutes.
- D Placed in press at 100 p.s.i. at 300° F. for 10-30 minutes.
- E Clamped in oven at 250° F. for 10-30 minutes.

High-frequency curing has been tried successfully on an experimental basis with wood, aluminum and stainless steel bonded to a Kaylo insulating core. Many of the manufacturers making the above listed adhesives can provide adhesives suitable for high-frequency curing.

Kaylo Division
**OWENS-ILLINOIS
GLASS COMPANY**
Toledo 1, Ohio

HRV-PL-1603

NEW

KAYLO

HEAT INSULATING BLOCK



For Temperatures
Up To 1200°F.

AMERICAN STRUCTURAL
PRODUCTS COMPANY
INCORPORATED
1000 N. 10TH ST.
MILWAUKEE 2, WIS.

A new heat insulating block

WITH A REMARKABLE COMBINATION OF

KAYLO HEAT INSULATING BLOCK is a new type of lightweight mineral insulation that is *efficient* enough to be used at ordinary room temperatures and *resistant* enough to perform effectively up to 1200° F.

Few new products of any kind have been so thoroughly researched before being placed on the market. Kaylo Heat Insulating Block is the achievement of many years' work by Owens-Illinois Glass Company engineers, physicists and chemists. It combines the most desirable characteristics of the ideal heat insulation.

LOW DENSITY. Kaylo Heat Insulating Block weighs only 11 pounds per cubic foot. This light weight (less than one pound to the board foot) simplifies handling, shipping and application.

LOW THERMAL CONDUCTIVITY. The coefficient of conductivity, or k , of Kaylo Heat Insulating Block places it among the most efficient insulations for medium high temperatures. Its insulation value comes principally from its fine, cellular structure. These cells are so tiny and so numerous that they present a material surface of approximately 140 acres per cubic foot of insulation.

Experience shows that the efficiency of Kaylo insulation improves after exposure to service temperatures.

EFFECTIVE OVER WIDE TEMPERATURE RANGE. Kaylo Heat Insulating Block performs efficiently not only on temperatures in the low pressure steam and hot water range but on temperatures in the superheated steam range as well. One-material coverage with Kaylo insulation handles applications which often require two thicknesses of different materials.

HIGH COMPRESSIVE STRENGTH. Its compressive strength is unusually high for a mineral product of such light weight.

HIGH FLEXURAL STRENGTH. Its flexural strength is higher than the normal requirements for heat insulation of this type. This strength makes for easy handling and application, and contributes to long service with low maintenance.

NO ADDED BINDER. Kaylo insulation is an inorganic compound, containing no added binder. Its performance characteristics, therefore, are not affected by additives, which often reduce insulating value, modify effective temperature range or otherwise limit performance.

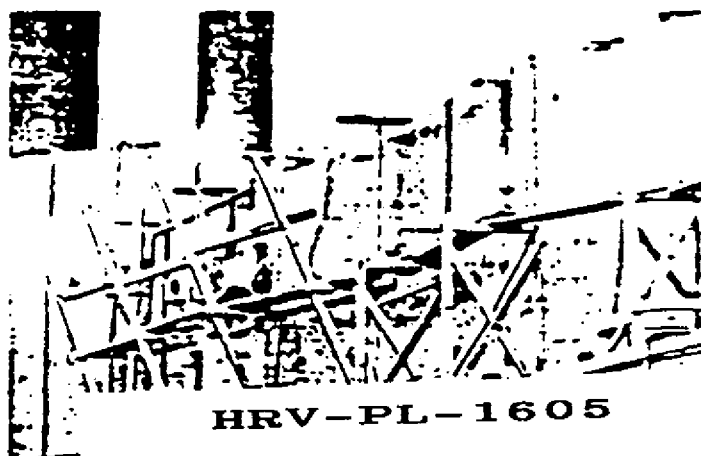
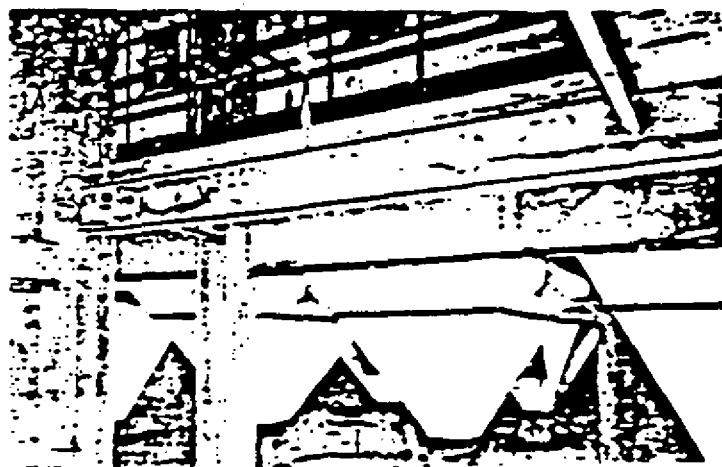
EASY TO APPLY. Kaylo Heat Insulating Blocks are clean-cut and trim. They are easy to fit into place.



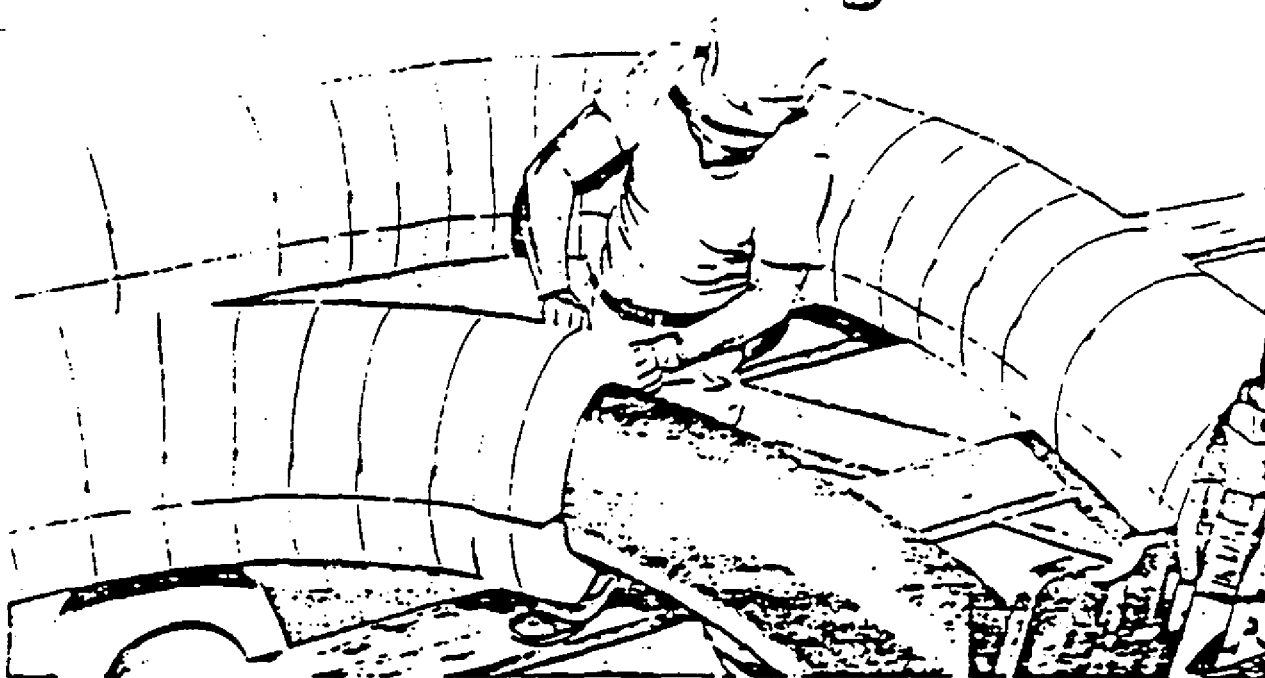
Notice the clean, straight edges on these insulated precipitator hoppers. Application is easy to work with Kaylo Heat Insulating Block because they are so easy to cut and yet have a high flexural strength.



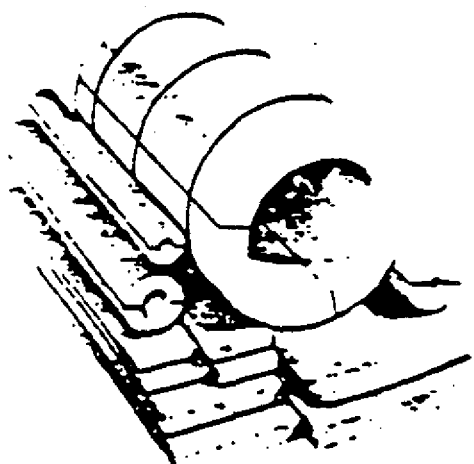
On large or small equipment, inside or out, Kaylo Heat Insulating Block performs efficiently and with a minimum of maintenance. Here it is being applied to the walls of a large precipitator.



HOW TO GET THE MOST OUT Of Your Insulating Dollars



The Right Material... Expert Application



First, Kaylo Heat Insulation is proved a better material—hydrous calcium silicate. Its light weight, strength, water-insolubility, low conductivity and wide temperature range give you extra advantages at no extra cost.

Second, Kaylo distributors have the technical knowledge and experience to provide you with a complete insulating service. Their trained applicators are skilled craftsmen who do neat and efficient installation.

To be sure of getting the most out of your insulating dollars for your next job, call the nearest Kaylo distributor. Chances are you can find him listed in the yellow pages of your phone book. If not contact us and we'll give you his name.

WRITE FOR FREE BOOK—"Kaylo Heat Insulation."
Address: Dept. H-370, Owens-Illinois Glass Company,
Kaylo Division, Toledo 1, Ohio.



KAYLO

...first in calcium silicate

...pioneered by OWENS-ILLINOIS Glass Company

MAIN OFFICE: TOLEDO 1, OHIO—KAYLO SALES OFFICES: ATLANTA • CHICAGO • HOUSTON • NEW YORK • PHILADELPHIA • PITTSBURGH • ST. LOUIS

Owens-Illinois Glass Company—Kaylo Division
Advertisements No. K-111, appearing in the following publications:
Chemical Engineering—Jan., 1953
Oil & Gas Journal—Jan. 12, 1953
Plant Engineering—Jan., 1953
Petroleum—Jan., 1953
Petroleum Refining—Feb., 1953

HRV-PL-1606

For Radii from 72 INCH...

to

Infinity...

Nesting Kaylo Heat Insulation Requires Fewer Pieces Per Job

The complete range of Kaylo Insulation includes pipe covering in Simplified Dimensional Standards for diameters from 1/4 in. to 72 in., curved block from 72 in. to 60 ft. and flat block for surfaces of less curvature whose radii approach infinity. With its wide selection of interchangeable sizes and shapes, Kaylo Insulation reduces the number of items needed per job and permits substantial savings in warehousing maintenance stock.

WRITE FOR FREE BOOK — "Kaylo Heat Insulation"
Address: Dept. H-371, Owens-Illinois Glass Company,
Toledo, Ohio.

KAYLO

...first in calcium silicate

...pioneered by OWENS [®] ILLINOIS Glass Company

© 1963 Owens-Illinois Glass Company

Owens-Illinois Glass Company
Address: Dept. H-371, appearing in the following publications:
Plant Engineering, March, 1963
Oil & Gas Journal, March 23, 1963
Chemical Engineering, March 23, 1963

HRV-PL-1607

FOR RADIATION PROTECTION

to

Infinity...

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WRITE FOR FREE BOOK — "Kaylo Heat Insulation"
Address Dept. PL-171, Owens-Illinois Glass Company,
Crown-Point, Indiana 46001, U.S.A.



KAYLO ... first in calcium silicate

... pioneered by OWENS  ILLINOIS Glass Company

OWENS-ILLINOIS GLASS COMPANY, 1000 WEST 10TH AVENUE, CHICAGO 18, ILL. • BRANCHES IN ALL MAJOR CITIES • REPRESENTATIVES IN ALL COUNTRIES

Owens-Illinois Glass Company
Allentown, Pa. E 134 - appearing in the following publications:
Plant Engineering - March, 1953
Oil & Gas Journal - March 22, 1953
Chemical Engineering - March, 1953
Chemical Processing - April, 1953
Petroleum Engineer - May, 1953

HRV-PL-1608

E X H I B I T I I I

HRV-PL-1609

Sales Agreement

Owens-Illinois Glass Company, hereinafter referred to as "Seller", and Owens-Corning Fiberglas Corporation, hereinafter referred to as "Buyer", have this day agreed as follows:

1. During the term of this Agreement, Buyer will purchase from Seller and Seller will sell to Buyer, subject to the provisions of this Agreement, the following amounts of Kaylo Heat Insulating Products:

\$ 750,000 during the period April 1, 1953
to December 31, 1953, and

\$1,000,000 during each calendar year
subsequent to 1953;

provided, however, that in the event that at any time or times the prices for Kaylo Heat Insulating Products shall be increased or decreased in accordance with the provisions of paragraph 4 hereof, the amounts hereinabove specified will be increased or decreased in the same proportion as such prices shall have been increased or decreased, prorated for the portion of the current period unexpired at the date of such price change. On or before the first day of each calendar quarter, Buyer will notify Seller in writing of the total amount of Kaylo Heat Insulating Products which it intends to purchase from Seller during such quarter.

2. As used in this Agreement the term "Kaylo Heat Insulating Products" means only those heat insulating products listed in Exhibit A, attached hereto and made a part hereof.

3. The prices for Kaylo Heat Insulating Products set forth in Exhibit A will remain in effect until October 1, 1953, and thereafter until increased or decreased in accordance with the provisions of paragraph 4 hereof.

4. Seller may increase or decrease the prices to Buyer for Kaylo Heat Insulating Products on October 1, 1953, and on the first day of any subsequent calendar quarter, by giving notice in writing to Buyer of such increase or decrease at least fifteen (15) days prior thereto. Buyer may, by giving notice in writing to Seller at any time within thirty (30) days after receipt of notice from Seller of a price increase terminate this Agreement six (6) months after the effective date of such price increase.

5. All orders for Kaylo Heat Insulating Products placed by Buyer and accepted by Seller will be at the prices in

effect at the time of shipment by Seller and will be subject to the terms set forth in Exhibit A and the following terms and conditions:

(a) Prices shall be F.O.B. plant of manufacture. In the event that Seller prepays the freight on any shipment, Buyer will reimburse Seller the full amount thereof. Title and possession shall pass to Buyer on delivery of product to the carrier consigned to Buyer or Buyer's customer.

(b) In the event of a price increase, the Buyer may, within thirty (30) days after receipt of notice thereof, request price protection on specific outstanding contracts and outstanding contract proposals. Shipments with protected prices must be made within sixty (60) days of effective date of price increase.

(c) Orders and shipping instructions will be given by Buyer reasonably in advance of desired delivery dates and, subject to the other provisions herein stated, Seller will make shipments as nearly as possible in accordance with such shipping instructions as shipping facilities and Seller's scheduling and facilities of manufacture permit. Seller's failure to meet shipping instructions will not be deemed a breach of this Agreement.

(d) Seller warrants that all Kaylo Heat Insulating Products sold to Buyer pursuant to this Agreement will meet Seller's performance specifications in effect at the time of sale. Seller will furnish Buyer a copy of said performance specifications currently in effect and of each revision thereof.

(e) Buyer shall, within ninety (90) days after shipment of any products covered by this Agreement, give written notice to Seller of any claim for errors, shortages, imperfections, deficiencies or any failure of the products to conform with the terms of this Agreement. Buyer's failure to give such notice within such time or Buyer's failure to give Seller an opportunity to make an adequate investigation, either by on the spot inspection or by having the products returned to Seller, shall constitute a waiver by Buyer of all claims with respect thereto. Any advice or assistance furnished by Seller in respect of installation or use of the products are purely gratuitous and without consideration, and Seller shall have no liability by reason thereof. Seller shall not be liable for any breach of this Agreement in any amount in excess of the agreement price for the products with respect to which such breach occurs and Seller shall not be liable in any event for special or consequential damages: and Buyer

will give notice that Seller's trademark is registered by displaying with the mark as used the letter "R" enclosed within a circle. Buyer's right to use Seller's trade name and mark shall be limited to the advertisement and sale of products manufactured by Seller and sold to Buyer pursuant to this Agreement and such right shall terminate upon the termination of this Agreement.

10. Unless sooner terminated in accordance with the provisions of paragraphs 4, 11, or 12 hereof, this Agreement shall remain in full force and effect until January 1, 1959. Except as otherwise provided in paragraph 13 hereof, the giving of any notice of termination shall not, prior to the effective date of such termination, relieve Buyer from its obligation to purchase, or relieve Seller from its obligation to sell, the amount of Kaylo Heat Insulating Products set forth in paragraph 1 hereof, and any termination shall be without prejudice to any other remedy or remedies which either party may have against the other for any breach of this Agreement.

11. Either party may at its option terminate this Agreement effective at the end of any calendar month by giving notice in writing to the other party at least one (1) year prior to the effective date of such termination.

12. In the event that Seller determines to discontinue the manufacture of Kaylo Heat Insulating Products, Seller may terminate this Agreement effective at the end of any calendar month by giving notice in writing to Buyer at least six (6) months prior to the effective date of such termination.

13. In the event that Buyer shall give notice to Seller of termination of this Agreement pursuant to the provisions of paragraph 4 hereof, or in the event that Seller shall give notice to Buyer of termination of this Agreement pursuant to the provisions of paragraph 12 hereof, Buyer, at its option, may elect to be relieved of its obligation to purchase, during the six (6) months immediately preceding the effective date of such termination, Kaylo Heat Insulating Products in the amounts prescribed in paragraph 1 hereof, by giving notice of such election within thirty (30) days after notice of such termination. In the event that Buyer elects, as herein provided, to be relieved of its obligation to purchase the amounts so prescribed, Seller shall be relieved of its obligation to sell the amounts so prescribed.

14. The right of each party to require strict performance of the other party's obligations hereunder shall not be affected in any way by any previous waiver, forbearance or course of dealing.

15. Any civil action against Seller arising out of this Agreement or by reason of any sale hereunder, or by reason of any federal or state statutory provision relating thereto,

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shall include this same limitation upon the amount of Seller's liabilities in contracts effecting all resales by Buyer to third persons and Buyer shall indemnify and save Seller harmless from any liabilities arising from Buyer's failure so to contract in making resales.

(f) All claims made by Buyer against Seller in accordance with subparagraph (e) hereof shall be subject to approval by Seller. In the event that Buyer disagrees with Seller's disposition of any such claim, Buyer may by giving notice in writing to Seller within thirty (30) days after receipt of notice of Seller's disposition of such claim, require the same to be submitted to arbitration in Lucas County, Ohio, in accordance with the Ohio Arbitration Act, by three (3) arbitrators appointed as follows: Seller and Buyer shall each appoint one (1) arbitrator and the two (2) arbitrators thus appointed shall appoint a third arbitrator. In the event that the arbitrators appointed by Seller and Buyer shall be unable within thirty (30) days to agree upon the appointment of the third arbitrator, the Court of Common Pleas of Lucas County, Ohio, may, upon application of either party hereto, appoint the third arbitrator. The decision in writing of a majority of the arbitrators will be final and binding upon both parties.

6. If, by reason of fire, earthquake, flood, explosion, accident, difference with or inability to secure workmen, lack of material, lack of facilities, Act of God or of any public enemy, voluntary or involuntary compliance with any valid or invalid order, regulation, request or recommendation of any government agency or authority, lack of transportation facilities or other cause beyond the control of Seller or Buyer, respectively, whether or not of the kind hereinbefore specified, Seller or Buyer shall be unable to perform, or is delayed in the performance of, any obligation under this Agreement, such nonperformance or delay shall be excused.

7. In the event that Seller shall be unable to fill all orders for Kaylo Heat Insulating Products placed both by Buyer and by other customers of Seller, Seller shall prorate shipments to Buyer and such other customers on an equitable basis.

8. Orders placed by Buyer for Kaylo insulating products not specifically listed and priced in Exhibit A will be subject to approval by Seller in each case and will be subject to such prices and shipping dates as may be set forth in such approval.

9. All sales and advertisements of Kaylo Heat Insulating Products shall be under Seller's trade name and trade mark "Kaylo". In using Seller's trade name and mark, Buyer will indicate that the products sold or advertised are manufactured by Seller and

shall be commenced within one (1) year from the date such cause of action arises; otherwise the same shall be barred, notwithstanding any statutory period of limitations to the contrary.

16. This Agreement is not assignable by Buyer except with the written consent of Seller.

17. The entire agreement of the parties is contained herein. There is no warranty, agreement, or understanding, express, statutory or implied, either in fact or in law, with reference to or a part of this Agreement, except such as is set forth herein. Except as otherwise provided herein, no change or alteration of this Agreement shall be effective unless the same is in writing and signed by both parties.

18. This Agreement shall be binding upon the parties, their successors and assigns, and shall be construed in accordance with the laws of the State of Ohio applicable to contracts made and to be performed in the State of Ohio.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed as of April 1, 1953, this 30th day of March, 1953.

Attest:

By _____

Attest:

By _____

OWENS-ILLINOIS GLASS COMPANY

By *Ernest V. Pies*
Ernest V. Pies

OWENS-CORNING FIBERGLAS CORPORATION

By *John Marshall Bixby*

EXHIBIT "A" OF SALES AGREEMENT

OWENS-ILLINOIS GLASS COMPANY

KAYLO SECTIONAL PIPE INSULATION

Net Billing Prices - F.O.B. Berlin, N.J.

Nominal Pipe Sizes-- Inches	Terms Net 30 Days				
	Nominal Thickness of Insulation & Prices per Lineal Foot				
	1"	1-1/2"	2"	2-1/2"	3"
1/2	\$.142	\$.297	\$.485	\$.646	\$.775
3/4	.155	.317	.517	.679	.873
1	.175	.336	.550	.711	.904
1-1/4	.194	.362	.581	.743	.937
1-1/2	.214	.388	.614	.775	1.00
2	.233	.413	.646	.808	1.06
2-1/2	.256	.452	.679	.873	1.13
3	.291	.491	.743	.969	1.23
3-1/2	.323	.530	.808	1.06	1.32
4	.388	.568	.873	1.16	1.42
4-1/2	.420	.607	.937	1.26	1.52
5	.452	.646	1.00	1.36	1.62
6	.517	.711	1.10	1.45	1.75
7	x	.775	1.19	1.55	1.88
8	x	.873	1.29	1.65	2.04
9	x	.969	1.42	1.81	2.20
10	x	1.06	1.55	1.97	x
11	x	1.13	1.65	x	x
12	x	1.19	x	x	x

-Note:

- (1) Prices listed are for single layer only.
- (2) Double layer prices are the sum of the prices for the two single layer sizes used.
- (3) Prices include standard canvas jackets and 2-1/2 aluminum bands per 3 ft. section up to and including 2-1/2" thicknesses. No allowance is made for omission of canvas jackets or bands.
- (4) Extra charge for special canvas jackets.
- (5) Extra charge for any canvas jackets on covering over 2-1/2" thickness.

EXHIBIT "A" OF SALES AGREEMENT

OWENS-ILLINOIS GLASS COMPANY

KAYLO REVELED LAG PIPE INSULATION

Net Billing Prices - F.O.B. Berlin, N.J.

Terms Net 30 Days

Nominal Pipe Sizes- Inches	<u>Nominal Thickness of Insulation & Prices per Lineal Foot</u>			
	<u>1-1/2"</u>	<u>2"</u>	<u>2-1/2"</u>	<u>3"</u>
10	\$1.02	\$1.48	\$1.88	\$2.25
11	1.08	1.57	1.97	2.41
12	1.14	1.66	2.10	2.53
14	1.29	1.85	2.35	2.84
15	1.39	1.94	2.47	3.00
16	1.45	2.04	2.59	3.14
17	1.54	2.13	2.72	3.30
18	1.60	2.22	2.84	3.45
19	1.70	2.35	2.97	3.58
20	1.76	2.47	3.09	3.70
21	1.85	2.56	3.20	3.86
22	1.91	2.66	3.33	4.01
23	1.97	2.72	3.45	4.17
24	2.04	2.78	3.55	4.32
26	2.19	3.00	3.82	4.63
27	2.25	3.11	3.95	4.75
28	2.32	3.17	4.10	4.91
30	2.47	3.39	4.29	5.18
32	2.66	3.64	4.57	5.61
33	2.72	3.73	4.69	5.67
34	2.81	3.86	4.82	5.86
36	2.97	4.04	5.06	6.14

Note:

- (1) Prices listed are for single layer only.
- (2) Double layer prices are the sum of the prices for the two single-

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EXHIBIT "A" OF SALES AGREEMENT

OWENS-ILLINOIS GLASS COMPANY

KAYLO HEAT INSULATING BLOCK

Net Billing Prices - F.O.B. Berlin, N.J.

Terms Net 30 Days

<u>Thickness- Inches</u>	<u>Prices per Square Foot</u>
1	\$.173
1-1/4	.219
1-1/2	.260
1-3/4	.305
2	.346
2-1/4	.392
2-1/2	.433
2-3/4	.478
3	.519

EXHIBIT "A" OF SALES AGREEMENT
OWENS-ILLINOIS GLASS COMPANY
KAYLO HEAT INSULATION EXTRA CHARGES
Additions to Net Billing Prices

	<u>% Addition to Billing Price</u>
Standard Canvas for Sectional Covering Over 2-1/2" Thickness	4.5%
6 oz. Canvas for All Sizes and Thicknesses	9.0
8 oz. Canvas for All Sizes and Thicknesses	13.5
Laminated Products	7.5
LCL Orders	\$2.00 each
Special Shapes, Sizes and Thicknesses	Quotation
Weathercoating	Quotation

AMENDMENT OF SALES AGREEMENT

Owens-Illinois Glass Company and Owens-Corning Fiberglas Corporation have this day agreed that the Sales Agreement between them relating to Kaylo Heat Insulating Products, executed as of April 1, 1953 on March 20, 1953, shall be amended as follows:

(1) The schedule marked Exhibit A and attached hereto shall be substituted for the schedule marked Exhibit A attached to said Sales Agreement, and all references to Exhibit A in said Sales Agreement shall be deemed to refer to Exhibit A attached hereto.

(2) This amendment shall be effective as of April 1, 1953.

IN WITNESS WHEREOF, the parties have caused this amendment to be executed this 13th day of April, 1953.

OWENS-ILLINOIS GLASS COMPANY

By

Hugh H. Bennett
Executive Vice President

Attest:

William H. Hottel
Assistant Secretary

OWENS-CORNING FIBERGLAS CORPORATION

By

John W. Marshall
Vice President

Attest:

Carl E. Stalling
Secretary

April 13, 1953

OWENS-ILLINOIS GLASS COMPANY

Net Billing Prices

F.O.B. Berlin, N. J.

Terms Net 30 Days

KAYLO SECTIONAL PIPE INSULATION

Nominal Pipe Sizes- Inches	Nominal Thickness of Insulation & Prices per Lineal Foot				
	1"	1-1/2"	2"	2-1/2"	3"
1/2	\$.142	\$.297	\$.485	\$.646	\$.775
3/4	.155	.317	.517	.679	.873
1	.175	.336	.550	.711	.904
1-1/4	.194	.362	.581	.743	.937
1-1/2	.214	.388	.614	.775	1.00
2	.233	.413	.646	.808	1.06
2-1/2	.258	.452	.679	.873	1.13
3	.291	.491	.743	.969	1.23
3-1/2	.323	.530	.808	1.05	1.32
4	.388	.568	.873	1.16	1.42
4-1/2	.420	.607	.937	1.26	1.52
5	.452	.646	1.00	1.36	1.62
6	.517	.711	1.10	1.45	1.75
7	x	.775	1.19	1.55	1.88
8	x	.873	1.29	1.65	2.04
9	x	.969	1.42	1.81	2.20
10	x	1.06	1.55	1.97	x
11	x	1.13	1.65	x	x
12	x	1.19	x	x	x

Note:

- (1) Prices listed are for single layer only.
- (2) Double layer prices are the sum of the prices for the two single layer sizes used.
- (3) Prices include standard canvas jackets and 2-1/2 aluminum bands per 3 ft. section up to and including 2-1/2" thicknesses. No allowance is made for omission of canvas jackets or bands.
- (4) Extra charge for special canvas jackets.
- (5) Extra charge for any canvas jackets on covering over 2-1/2" thickness

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Exhibit A

OWENS-ILLINOIS GLASS COMPANY

April 13, 1953

Net Billing Prices

F.O.B. Berlin, N. J.

Terms Net 30 Days

KAYLO TRI-SEGMENTAL PIPE INSULATION

Nominal Pipe Sizes- Inches	Nominal Thickness of Insulation & Prices per Lineal Foot			
	<u>1-1/2"</u>	<u>2"</u>	<u>2-1/2"</u>	<u>3"</u>
8	x	Sectional Pipe Insulation		x
9	x	for These Sizes		x
10	x	x	x	\$2.36
11	x	x	\$2.07	2.52
12	x	\$1.74	2.20	2.65
14	\$1.36 -	1.94	2.45	2.97
15	1.45 -	2.03	2.58	3.13
16	1.52 -	2.13	2.71	3.29
17	1.62 -	2.23	2.84	3.46
18	1.68	2.33	2.97	3.62
19	1.99	2.76	3.48	4.21
20	2.07	2.90	3.63	4.35
21	2.18	3.01	3.77	x
22	2.25	3.12	x	x
23	2.32	x	x	x

Note:

- (1) Prices listed are for single layer only.
- (2) Double layer prices are the sum of the prices for two single layer sizes used.
- (3) Extra charge for any canvas jackets or bands.

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April 13, 1953

OWENS-ILLINOIS GLASS COMPANY

Net Billing Prices

F.O.B. Berlin, N. J.

Terms Net 30 Days

KAYLO BEVELED LAG PIPE INSULATION

Nominal Pipe Sizes- Inches	Nominal Thickness of Insulation & Prices per Lineal Foot			
	<u>1-1/2"</u>	<u>2"</u>	<u>2-1/2"</u>	<u>3"</u>
20	x	x	Tri-segmental pipe insulation	
21	x	x	for these sizes	
22	x	x	3.33	4.01
23	x	2.72	3.45	4.17
24	2.04	2.78	3.55	4.32
26	2.19	3.00	3.82	4.63
27	2.25	3.11	3.95	4.75
28	2.32	3.17	4.10	4.91
30	2.47	3.39	4.29	5.18
32	2.66	3.64	4.57	5.61
33	2.72	3.73	4.69	5.67
34	2.81	3.86	4.82	5.86
36	2.97	4.04	5.06	6.14

Note:

- (1) Prices listed are for single layer only.
- (2) Double layer prices are the sum of the prices for the two single layer sizes used.
- (3) Extra charge for any canvas or bands.

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OWENS-ILLINOIS GLASS COMPANY

April 13, 1953

Net Billing Prices

F.O.B. Berlin, N. J.

Terms Net 30 Days

KAYLO HEAT INSULATING BLOCK

<u>Thickness- Inches</u>	<u>Prices per Square Foot</u>
1	\$.173
1-1/2	.260
2	.346
2-1/2	.433
3	.519

Note:

Block in these thicknesses can be furnished in 6", 12" and 18" widths.

Exhibit A

OWENS-ILLINOIS GLASS COMPANY

April 13, 1953

Net Billing Prices

F.O.B. Berlin, N. J.

Terms Net 30 Days

KAYLO HEAT INSULATION EXTRA CHARGES

	<u>% Addition to Billing Price</u>
Standard Canvas for Sectional Covering Over 2-1/2" Thickness	4.5%
6 oz. Canvas for All Sizes and Thicknesses	9.0
8 oz. Canvas for All Sizes and Thicknesses	13.5
Lamination of Sectional Pipe Covering to Provide Greater Thicknesses. (This addition to sum of the prices of the two thicknesses used)	7.5
All orders for less than carload quantity	\$2.00 each
Special Shapes, Sizes and Thicknesses	Quotation
Weathercoating	Quotation

Memorandum of Agreement

Owens-Illinois Glass Company, hereinafter referred to as "Seller", and Owens-Corning Fiberglas Corporation, hereinafter referred to as "Buyer", have this day agreed as follows:

1. During the term of this Agreement, Buyer will purchase from Seller and Seller will sell to Buyer, in accordance with the terms and provisions of paragraphs 5 and 9 and Exhibit A of the Sales Agreement this day executed by the parties, a copy of which is attached hereto as Exhibit I and made a part hereof, and subject to the provisions of this Agreement, the following amounts of Kaylo Heat Insulating Products:

\$1,800,000 during the period April 1, 1953 to December 31, 1953, and

\$2,400,000 during each calendar year subsequent to 1953;

provided, however, that in the event that at any time or times the prices for Kaylo Heat Insulating Products shall be increased or decreased in accordance with the provisions of paragraph 6 hereof, the amounts hereinabove specified will be increased or decreased in the same proportion as such prices shall have been increased or decreased, prorated for the portion of the current period unexpired at the date of such price change. On or before the first day of each calendar quarter, Buyer will notify Seller in writing of the total amount of Kaylo Heat Insulating Products which it intends to purchase from Seller during such quarter.

2. The amounts of Kaylo Heat Insulating Products specified in paragraph 1 hereof are in addition to the amounts specified in paragraph 1 of the Sales Agreement of which Exhibit I is a copy.

3. Seller reserves the right to sell Kaylo Heat Insulating Products to other purchasers; and the amount of Kaylo Heat Insulating Products sold by Seller to such other purchasers during any calendar year may, at option of Seller, be credited, in whole or in part, against Seller's obligation to sell during that period the amount specified in paragraph 1 hereof.

4. As used in this Agreement the term "Kaylo Heat Insulating Products" means only those heat insulating products listed in Exhibit A of Exhibit I hereto.

5. The prices for Kaylo Heat Insulating Products set forth in Exhibit A of Exhibit I will remain in effect until October 1, 1953, and thereafter until increased or decreased in accordance with the provisions of paragraph 6 hereof.

6. Seller may increase or decrease the prices to Buyer for Kaylo Heat Insulating Products on October 1, 1953, and on the first day of any subsequent calendar quarter, by giving notice in writing to Buyer of such increase or decrease at least fifteen (15) days prior thereto. Buyer may, by giving notice in writing to Seller at any time within thirty (30) days after receipt of notice from Seller of a price increase terminate this Agreement six (6) months after the effective date of such price increase.

7. If, by reason of fire, earthquake, flood, explosion, accident, difference with or inability to secure workmen, lack of material, lack of facilities, Act of God or of any public enemy, voluntary or involuntary compliance with any valid or invalid order, regulation, request or recommendation of any government agency or authority, lack of transportation facilities or other cause beyond the control of Seller or Buyer, respectively, whether or not of the kind hereinbefore specified, Seller or Buyer shall be unable to perform, or is delayed in the performance of, any obligation under this Agreement, such nonperformance or delay shall be excused.

8. Buyer will offer its standard form of distributor-applicator contract to all of Seller's existing distributor-applicators. Where such a standard form of contract is accepted by any such distributor-applicator, Buyer will service all orders, unfilled at the time of such acceptance, placed with Seller by such distributor-applicator, and will, within thirty (30) days after receipt of notice from Seller of shipment on any such order, remit to Seller one hundred seven and one-half per cent (107-1/2%) of the purchase price set forth in Exhibit A of Exhibit I hereto, together with the amount of freight, if any, prepaid by Seller on said shipments.

9. Unless sooner terminated in accordance with the provisions of paragraphs 6, 10, 11 or 13 hereof, this Agreement shall remain in full force and effect until January 1, 1959. Except as otherwise provided in paragraph 12 hereof, the giving of any notice of termination shall not, prior to the effective date of such termination, relieve Buyer from its obligation to purchase, or relieve Seller from its obligation to sell, the amount of Kaylo Heat Insulating Products set forth in paragraph 1 hereof, and any termination shall be without prejudice to any other remedy or remedies which either party may have against the other for any breach of this Agreement.

10. Either party may at its option terminate this Agreement effective at the end of any calendar month by giving notice in writing to the other party at least one (1) year prior to the effective date of such termination.

11. In the event that Seller determines to discontinue the manufacture of Kaylo Heat Insulating Products, Seller may terminate this Agreement effective at the end of any calendar month by giving notice in writing to Buyer at least six (6) months prior to the effective date of such termination.

12. In the event that Buyer shall give notice to Seller of termination of this Agreement pursuant to the provisions of paragraph 6 hereof, or in the event that Seller shall give notice to Buyer of termination of this Agreement pursuant to the provisions of paragraph 11 hereof, Buyer, at its option, may elect to be relieved of its obligation to purchase, during the six (6) months immediately preceding the effective date of such termination, Kaylo Heat Insulating Products in the amounts prescribed in paragraph 1 hereof, by giving notice of such election within thirty (30) days after notice of such termination. In the event that Buyer elects, as herein provided, to be relieved of its obligation to purchase the amounts so prescribed, Seller shall be relieved of its obligation to sell the amounts so prescribed.

13. In the event that the Sales Agreement, copy of which is attached hereto as Exhibit I, is terminated by either party thereto, this Agreement shall automatically be terminated effective the same date.

14. The right of each party to require strict performance of the other party's obligations hereunder shall not be affected in any way by any previous waiver, forbearance or course of dealing.

15. Any civil action against Seller arising out of this Agreement or by reason of any sale hereunder, or by reason of any federal or state statutory provision relating thereto, shall be commenced within one (1) year from the date such cause of action arises; otherwise the same shall be barred, notwithstanding any statutory period of limitations to the contrary.

16. This contract is not assignable by Buyer except with the written consent of Seller.

17. The entire agreement of the parties is contained herein. There is no warranty, agreement, or understanding, express, statutory or implied, either in fact or in law, with reference to or a part of this Agreement, except such as is set forth herein. Except as otherwise provided herein, no change or alteration of this Agreement shall be effective unless the same is in writing and signed by both parties.

18. This Agreement shall be binding upon the parties, their successors and assigns, and shall be construed in accordance with the laws of the State of Ohio applicable to contracts made and to be performed in the State of Ohio.

IN WITNESS WHEREOF, the parties have caused this Memorandum of Agreement to be executed as of April 1, 1953, this 1st day of March, 1953.

OWENS-ILLINOIS GLASS COMPANY

Attest:

By

W. H. Daugherty
Exec. Vice Pres

By

Attest:

OWENS-CORNING FIBERGLAS CORPORATION

By

John Marshall Gilling
Vice Pres

By

Carl S. Stallin
Sey

HRV-PL-1628

AMENDMENT OF MEMORANDUM
OF AGREEMENT

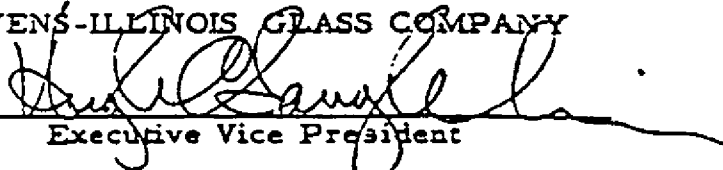
Owens-Illinois Glass Company and Owens-Corning Fiberglas Corporation have this day agreed that the Memorandum of Agreement between them relating to Kaylo Heat Insulating Products, executed as of April 1, 1953 on March 20, 1953, shall be amended as follows:

(1) The schedule marked Exhibit A and attached hereto shall be substituted for the schedule identified as Exhibit A of Exhibit I attached to said Memorandum of Agreement, and all references to Exhibit A of Exhibit I in said Memorandum of Agreement shall be deemed to refer to Exhibit A attached hereto.

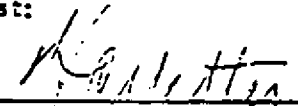
(2) This amendment shall be effective as of April 1, 1953.

IN WITNESS WHEREOF, the parties have caused this amendment to be executed this 13th day of April, 1953.

OWENS-ILLINOIS GLASS COMPANY

By 
Executive Vice President

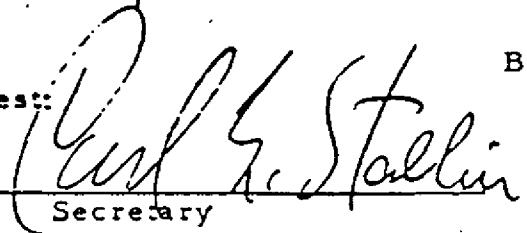
Attest:


Assistant Secretary

OWENS-CORNING FIBERGLAS CORPORATION

By 
Vice President

Attest:


Secretary

AMENDMENT OF MEMORANDUM
OF AGREEMENT

Owens-Illinois Glass Company and Owens-Corning Fiberglas Corporation have this day agreed that the Memorandum of Agreement between them relating to Kaylo Heat Insulating Products, executed as of April 1, 1953 on March 20, 1953, shall be amended as follows:

(1) The schedule marked Exhibit A and attached hereto shall be substituted for the schedule identified as Exhibit A of Exhibit I attached to said Memorandum of Agreement, and all references to Exhibit A of Exhibit I in said Memorandum of Agreement shall be deemed to refer to Exhibit A attached hereto.

(2) This amendment shall be effective as of August 1, 1954.

IN WITNESS WHEREOF, the parties have caused this amendment to be executed this 30th day of July, 1954.

OWENS-ILLINOIS GLASS COMPANY

By C. P. McGowan
President

Attest:

W. H. H. H.
Asst. Secretary

OWENS-CORNING FIBERGLAS CORPORATION

By H. R. Linkle
Vice President

Attest:

W. H. H. H.
Secretary

HRV-PL-1630

August 1, 1954

Exhibit A

OWENS-ILLINOIS

Net Billing Prices

F.O.B. Berlin, N. J.

Terms Net 30 Days

KAYLO SECTIONAL PIPE INSULATION - NO BANDS

Nominal Pipe Sizes- Inches	Nominal Thickness of Insulation & Prices per Lineal Foot				
	1"	1-1/2"	2"	2-1/2"	3"
1/2	\$.149	\$.312	\$.509	\$.679	\$.818
3/4	.163	.334	.544	.714	.920
1	.184	.353	.579	.748	.951
1-1/4	.204	.381	.611	.781	.984
1-1/2	.225	.408	.645	.818	1.05
2	.245	.434	.679	.848	1.11
2-1/2	.271	.475	.714	.920	1.19
3	.306	.516	.782	1.02	1.30
3-1/2	.340	.557	.848	1.11	1.39
4	.408	.597	.920	1.22	1.49
4-1/2	.442	.638	.984	1.32	1.60
5	.475	.679	1.05	1.43	1.71
6	.544	.748	1.16	1.52	1.84
7		.818	1.26	1.63	1.97
8		.920	1.36	1.74	2.13
9		1.20	1.49	1.90	2.31
10		1.17	1.72	2.18	
11		1.25	1.33		
12		1.32			

Note:

- (1) Prices listed are for single layer only.
- (2) Double layer prices are the sum of the prices for the two single layer sizes used.
- (3) Prices include standard canvas jackets up to and including 2-1/2" thicknesses. No allowance is made for omission of canvas jackets.
- (4) Extra charge for special canvas jackets.
- (5) Extra charge for any canvas jackets on covering over 2-1/2" thickness.

OWENS-ILLINOIS

Net Billing Prices

F.O.B. Berlin, N. J.

Terms Net 30 Days

KAYLO SECTIONAL PIPE INSULATION - WITH BANDS

Nominal Pipe Sizes- Inches	Nominal Thickness of Insulation & Prices per Lineal Foot				
	1"	1-1/2"	2"	2-1/2"	3"
1/2	\$.150	\$.315	\$.514	\$.686	\$.826
3/4	.164	.337	.549	.721	.929
1	.186	.356	.585	.755	.960
1-1/4	.206	.385	.617	.789	.994
1-1/2	.227	.412	.652	.826	1.06
2	.248	.438	.686	.857	1.12
2-1/2	.274	.480	.721	.929	1.20
3	.309	.521	.790	1.03	1.31
3-1/2	.343	.562	.857	1.12	1.40
4	.412	.603	.929	1.23	1.50
4-1/2	.447	.644	.994	1.33	1.61
5	.480	.686	1.06	1.44	1.73
6	.549	.755	1.17	1.53	1.86
7		.826	1.27	1.64	1.99
8		.929	1.37	1.76	2.15
9		1.03	1.50	1.92	2.33
10		1.18	1.73	2.20	
11		1.26	1.85		
12		1.37			

Note:

- (1) Prices listed are for single layer only.
- (2) Double layer prices are the sum of the prices for the two single layer sizes used.
- (3) Prices include standard canvas jackets up to and including 2-1/2" thickness. No allowance is made for omission of canvas jackets.
- (4) Extra charge for special canvas jackets.
- (5) Extra charge for any canvas jackets on covering over 2-1/2" thickness.
- (6) Prices include 2-1/2" aluminum bands per 3 ft. section.

August 1, 1954

Exhibit A

OWENS-ILLINOIS

Net Billing Prices

F.O.B. Berlin, N.J.

Terms Net 30 Days

KAYLO TRI-SEGMENTAL PIPE INSULATION

Nominal Pipe Sizes-- Inches	Nominal Thickness of Insulation & Prices per Lineal Foot			
	<u>1-1/2"</u>	<u>2"</u>	<u>2-1/2"</u>	<u>3"</u>
10				\$ 2.61
11			\$ 2.29	2.79
12		\$ 1.93	2.43	2.94
14	\$ 1.51	2.15	2.71	3.28
15	1.60	2.25	2.85	3.46
16	1.68	2.36	3.00	3.64
17	1.79	2.47	3.14	3.83
18	1.86	2.58	3.28	4.01
19	2.00	2.77	3.49	4.22
20	2.08	2.91	3.64	4.37
21	2.19	3.02	3.78	4.54 Quad-Seg.
22	2.26	3.13	3.93	4.72
23	2.33	3.20	4.07	4.90
24	2.40	3.27	4.18	5.09

Note:

- (1) Prices listed are for single layer only.
- (2) Double layer prices are the sum of the prices for two single layer sizes used.
- (3) Extra charge for any canvas jackets or bands.

HRV-PL-1633

August 1, 1954

Exhibit A

CHENS-ILLINOIS

Net Billing Prices

F.O.B. Berlin, N.J.

Terms Net 30 Days

KAYLO TUBE INSULATION - NO BANDS

Nominal Tube Sizes-- Inches	Actual Tube O. D.	Nominal Thickness of Insulation & Prices per Lineal Foot	
		1"	1-1/2"
3/8	.500	\$.149	\$.312
1/2	.625	.149	.312
5/8	.750	.163	.334
3/4	.875	.163	.334
1	1.125	.184	.353
1-1/4	1.375	.204	.381
1-1/2	1.625	.225	.408
2	2.125	.245	.434
2-1/2	2.625	.271	.475
3	3.125	.306	.516

Note:

- (1) Prices listed are for single layer only.
- (2) Double layer prices are the sum of the prices for the two single layer sizes used.
- (3) Prices include standard canvas jackets. No allowance is made for omission of canvas jackets.
- (4) Extra charge for special canvas jackets.
- (5) The O.D.'s of all tube insulation conform to pipe insulation simplified dimensional standards. Use nesting pipe insulation for outer layer if greater thickness is required. When double layer tube insulation is required, use pipe insulation for outer layer.

HRV-PL-1634

August 1, 1954

Exhibit A

OWENS-ILLINOIS

Net Billing Prices

F.O.B. Berlin, N.J.

Terms Net 30 Days

KAYLO TUBE INSULATION - WITH BANDS

Nominal Tube Sizes- Inches	Actual Tube O. D.	Nominal Thickness of Insulation & Prices per Lineal Foot	
		1"	1-1/2"
3/8	.500	\$.150	\$.315
1/2	.625	.150	.315
5/8	.750	.164	.337
3/4	.875	.164	.337
1	1.125	.186	.356
1-1/4	1.375	.206	.385
1-1/2	1.625	.277	.412
2	2.125	.248	.438
2-1/2	2.625	.274	.480
3	3.125	.309	.521

Note:

- (1) Prices listed are for single layer only.
- (2) Double layer prices are the sum of the prices for the two single layer sizes used.
- (3) Prices include standard canvas jackets and 2-1/2 aluminum bands per 3 ft. section. No allowance is made for omission of canvas jackets.
- (4) Extra charge for special canvas jackets.
- (5) The O.D.'s of all tube insulation conform to pipe insulation simplified dimensional standards. Use nesting pipe insulation for outer layer if greater thickness is required. When double layer tube insulation is required, use pipe insulation for outer layer.

August 1, 1954

Exhibit A

OWENS-ILLINOIS

Net Billing Prices

F.O.B. Berlin, N.J.

Terms Net 30 Days

KAYLO BEVELED LAG PIPE INSULATION

Nominal Pipe Sizes- Inches	Nominal Thickness of Insulation & Prices per Lineal Foot			
	<u>1-1/2"</u>	<u>2"</u>	<u>2-1/2"</u>	<u>3"</u>
18	\$ 1.68	\$ 2.32	\$ 2.97	\$ 3.62
19	1.77	2.46	3.09	3.74
20	1.84	2.58	3.23	3.88
21	1.94	2.67	3.36	4.03
22	2.00	2.78	3.48	4.19
23	2.07	2.84	3.61	4.36
24	2.13	2.91	3.71	4.52
26	2.29	3.13	3.99	4.84
27	2.36	3.26	4.13	4.96
28	2.43	3.32	4.29	5.13
30	2.58	3.54	4.48	5.41
32	2.78	3.81	4.78	5.87
33	2.84	3.90	4.90	5.93
34	2.94	4.03	5.04	6.13
36	3.10	4.22	5.29	6.42

Note:

- (1) Prices listed are for single layer only.
- (2) Double layer prices are the sum of the prices for the two single layer sizes used.
- (3) Extra charge for any canvas or bands.

August 1, 1954

Exhibit A

OWENS-ILLINOIS

Net Billing Prices

F.O.B. Berlin, N.J.

Terms Net 30 Days

KAYLO HEAT INSULATING BLOCK

<u>Thickness- Inches</u>	<u>Prices per Square Foot</u>
1	\$.182
1-1/2	.273
2	.363
2-1/2	.454
3	.544

Note:

Block in these thicknesses can be furnished in 6", 12" and 18" widths.

August 1, 1954

Exhibit A

OWENS-ILLINOIS

Net Billing Prices

F.O.B. Berlin, N.J.

Terms Net 30 Days

KAYLO HEAT INSULATION EXTRA CHARGES

	<u>Addition to Billing Price</u>
Standard Canvas for Sectional Covering Over 2-1/2" Thickness	7.0%
Standard Canvas for Tri-Seg and Quad-Seg Insulation (not attached)	7.0%
6 oz. Canvas for All Sizes and Thicknesses	8.0%
8 oz. Canvas for All Sizes and Thicknesses	10.5%
Lamination of Sectional Pipe Covering to Provide Greater Thicknesses. (This addition to sum of the prices of the two thicknesses used.)	7.5%
18" Length Block	\$.01 per sq. ft.
Special Shapes, Sizes and Thicknesses	Quotation

HRV-PL-1638

OWENS-ILLINOIS

GENERAL OFFICES ① TOLEDO 1, OHIO

February 17, 1956

Mr. J. Marshall Briley, Vice President
Owens-Corning Fiberglas Corporation
National Bank Building
Toledo, Ohio

Dear Marshall:

This will confirm our telephone conversation and serve as formal notice that effective April 1, 1956, our prices to your company for Kaylo heat insulating products will be revised as indicated in the enclosed schedules marked Exhibit "A."

In connection with this increase, you have requested price protection in the following situations:

1. All distributor material orders received prior to February 22, 1956, provided shipment is made before March 22, 1956, be priced at the old prices.

2. Orders Already Entered - Orders entered prior to February 22, 1956, covering bona fide contract jobs to receive price protection on all materials shipped prior to August 22, 1956.

Orders to be entered against bids or contract proposals made prior to February 22, 1956, - these orders to be entered not later than March 22, 1956. Material against these orders shipping prior to August 22, 1956, to receive price protection.

It is our understanding that the reason for your request arises out of your having extended corresponding price protection to those of your customers in the situations above described.

As I have already explained, such price protection goes beyond our contractual obligation and certainly will affect our revenue in connection with our price increase. We realize,

HRV-PL-1639

OWENS-ILLINOIS

Mr. J. Marshall Briley

Page #2

February 17, 1956

However, that there is a real business necessity for your making such commitments and are willing to do our part in assisting you to carry them out. We feel, however, that in return for our agreeing to your request, that you should waive the provision in our contract limiting our right to make the present price increase at the beginning of a calendar quarter, which, in this case, would be April 1, and agree that it may be effective as of February 22, 1956, which is the date from which you request price protection.

If you are willing to accept our price increase effective February 22, 1956, we, in turn, will grant you the price protection as requested by you and described herein.

If the foregoing arrangement is satisfactory to you, will you please affix your signature in the space provided below and return a copy to us for our files.

Sincerely,

Hugh C. Laughlin

cjc

Accepted:

OWENS-CORNING FIBERGLAS CORPORATION

By 
Vice President

OWENS-ILLINOIS
GENERAL OFFICES ① TOLEDO 1, OHIO

KAYLO DIVISION

May 24, 1956

Mr. J. Marshall Briley
Vice President
Owens-Corning Fiberglas Corporation
National Bank Building
Toledo, Ohio

Dear Mr. Briley:

We have reduced our prices on Kaylo products to reflect the adjustment made by your organization for your LGL prices on pipe insulation. Attached is the new price list published as a result of this change. These prices will be used effective with shipments from May 1, 1956, and our billing for the month of May will be issued accordingly.

Additional copies of this list are also being forwarded to your sales and service personnel who are affected by this change.

Yours truly,


E. F. TAMM

cc

Mr. J. S. Stewart
Mr. W. C. Laughlin
Mr. J. M. McHenry
Mr. C. E. Nease

HRV-PL-1641

Exhibit A
OWENS-ILLINOIS

Net Billing Price
F.O.B. Berlin, N. J.

June 1, 1956
Terms Net 30 Days

KAYLO HEAT INSULATING BLOCK

<u>Thickness- Inches</u>	<u>36 Inch Lengths</u>
	<u>Prices per Square Foot</u>
1	\$.194
1-1/2	.292
2	.389
2-1/2	.486
3	.583

	<u>18 Inch Lengths</u>
1	\$.204
1-1/2	.302
2	.399
2-1/2	.496
3	.593

Note:

Block in these thicknesses can be furnished in 6", 12"
and 18" widths.

Exhibit A

OWENS-ILLINOIS

Net Billing Prices
F.O.B. Berlin, N. J.

May 1, 1956
Terms Net 30 Days

KAYLO 20 SECTIONAL PIPE INSULATION
With Regular Canvas - 1" through 2-1/2" Thicknesses
No Canvas - 3" Thickness
No Bands

Nominal Pipe Sizes- Inches	Nominal Thickness of Insulation & Prices Per Lineal Foot				
	1"	1-1/2"	2"	2-1/2"	3"
1/2	\$.177	\$.370	\$.603	\$.804	\$.965
3/4	.193	.394	.643	.844	1.09
1	.217	.418	.683	.884	1.13
1-1/4	.241	.450	.724	.925	1.17
1-1/2	.265	.482	.764	.965	1.25
2	.289	.515	.804	1.01	1.33
2-1/2	.322	.563	.844	1.09	1.41
3	.362	.611	.925	1.21	1.53
3-1/2	.402	.659	1.01	1.33	1.65
4	.482	.708	1.09	1.45	1.77
4-1/2	.523	.756	1.17	1.57	1.89
5	.563	.804	1.25	1.69	2.01
6	.643	.884	1.37	1.81	2.17
7	x	.965	1.49	1.93	2.33
8	x	1.09	1.61	2.05	2.53
9	x	1.21	1.77	2.25	2.73
10	x	1.33	1.93	2.45	x
11	x	1.41	2.05	x	x
12	x	1.49	x	x	x

Note:

- (1) Prices listed are for single layer only.
- (2) Double layer prices are the sum of the prices for the two single layer sizes used.
- (3) No allowance is made for the omission of canvas jackets.

HRV-PL-1643

Exhibit A

OWENS-ILLINOIS

Net Billing Prices
F.O.B. Berlin, N. J.

May 1, 1956
Terms Net 30 Days

KAYLO 20 TRI-SEGMENTAL PIPE INSULATION
Regular Canvas - No Bands

Nominal Pipe Sizes- Inches	Nominal Thickness of Insulation & Prices Per Lineal Foot			
	<u>1-1/2"</u>	<u>2"</u>	<u>2-1/2"</u>	<u>3"</u>
10	x	x	x	\$ 3.11
11	x	x	\$ 2.73	3.32
12	x	\$ 2.30	2.90	3.49
14	\$ 1.79	2.56	3.24	3.92
15	1.92	2.68	3.41	4.13
16	2.00	2.81	3.58	4.35
17	2.13	2.94	3.75	4.56
18	2.22	3.07	3.92	4.77
19	2.39	3.31	4.18	5.05
20	2.48	3.48	4.35	5.22
21	2.61	3.61	4.52	5.42 Quad-Seg.
22	2.70	3.74	4.68	5.64
23	2.78	3.81	4.86	5.85
24	2.86	3.90	4.99	6.07

See footnotes on Page 36, Exhibit A.

Exhibit A
OWENS-ILLINOIS

Net Billing Prices
P.O.B. Berlin, N. J.

May 1, 1956
Terms Net 30 Days

KAYLO 20 TUBE INSULATION
8 oz. Canvas and Bands

Nominal Tube Size-- Inches	Actual Tube O.D.	Nominal Thickness of Insulation & Prices Per Lineal Foot	
		1"	1-1/2"
3/8	.500	\$.198	\$.413
1/2	.625	.198	.413
5/8	.750	.216	.440
3/4	.875	.216	.440
1	1.125	.242	.467
1-1/4	1.375	.269	.503
1-1/2	1.625	.296	.539
2	2.125	.323	.575
2-1/2	2.625	.359	.629
3	3.125	.404	.682

See footnotes on Page 31, Exhibit A.

Exhibit A

OWENS-ILLINOIS

Net Billing Prices
F.O.B. Berlin, N. J.

May 1, 1956
Terms Net 30 Days

KAYLO 20 TUBE INSULATION
6 oz. Canvas and Bands

Nominal Tube Size- Inches	Actual Tube O.D.	Nominal Thickness of Insulation & Prices Per Lineal Foot	
		1"	1-1/2"
3/8	.500	\$.191	\$.400
1/2	.625	.191	.400
5/8	.750	.209	.426
3/4	.875	.209	.426
1	1.125	.235	.452
1-1/4	1.375	.261	.487
1-1/2	1.625	.287	.521
2	2.125	.313	.556
2-1/2	2.625	.348	.608
3	3.125	.391	.660

See footnotes on Page 31, Exhibit A

Exhibit A

OWENS-ILLINOIS

Net Billing Prices
F.O.B. Berlin, N. J.

May 1, 1956
Terms Net 30 Days

KAYLO 20 TUBE INSULATION
6 oz. Canvas - No Bands

Nominal Tube Size- Inches	Actual Tube O.D.	Nominal Thickness of Insulation & Prices Per Lineal Foot	
		<u>1"</u>	<u>1-1/2"</u>
3/8	.500	\$.190	\$.397
1/2	.625	.190	.397
5/8	.750	.207	.422
3/4	.875	.207	.422
1	1.125	.233	.448
1-1/4	1.375	.259	.483
1-1/2	1.625	.284	.517
2	2.125	.310	.552
2-1/2	2.625	.345	.603
3	3.125	.388	.655

See footnotes on Page 30, Exhibit A.

Exhibit A

OWENS-ILLINOIS

Net Billing Prices
F.O.B. Berlin, N. J.

May 1, 1956
Terms Net 30 Days

KAYLO 20 TUBE INSULATION
Regular Canvas and Bands

Nominal Tube Size- Inches	Actual Tube O.D.	Nominal Thickness of Insulation & Prices Per Lineal Foot	
		1"	1-1/2"
3/8	.500	\$.178	\$.373
1/2	.625	.178	.373
5/8	.750	.195	.397
3/4	.875	.195	.397
1	1.125	.219	.422
1-1/4	1.375	.243	.454
1-1/2	1.625	.268	.487
2	2.125	.292	.519
2-1/2	2.625	.324	.568
3	3.125	.365	.616

Note:

- (1) Prices listed are for single layer only.
- (2) Double layer prices are the sum of the prices for the two single layer sizes used.
- (3) No allowance is made for omission of canvas jackets.
- (4) The O.D.'s of all tube insulation conform to pipe insulation simplified dimensional standards. Use nesting pipe insulation for outer layer if greater thickness is required. When double layer tube insulation is required use pipe insulation for outer layer.
- (5) Prices include 2-1/2 aluminum bands per 3 foot section.

Exhibit A

OWENS-ILLINOIS

Net Billing Prices
F.O.B. Berlin, N. J.

May 1, 1956
Terms Net 30 Days

KAYLO 20 TRI-SEGMENTAL PIPE INSULATION
No Canvas - No Bands

Nominal Pipe Sizes- Inches	Nominal Thickness of Insulation & Prices Per Lineal Foot			
	<u>1-1/2"</u>	<u>2"</u>	<u>2-1/2"</u>	<u>3"</u>
10	x	x	x	\$ 2.93
11	x	x	\$ 2.57	3.14
12	x	\$ 2.17	2.73	3.30
14	\$ 1.69	2.41	3.06	3.70
15	1.81	2.53	3.22	3.90
16	1.89	2.65	3.38	4.10
17	2.01	2.77	3.54	4.30
18	2.09	2.89	3.70	4.50
19	2.24	3.10	3.92	4.73
20	2.33	3.26	4.08	4.90
21	2.45	3.39	4.24	5.10 Quad-Seg.
22	2.53	3.51	4.41	5.30
23	2.61	3.59	4.57	5.51
24	2.69	3.67	4.69	5.71

Notes:

- (1) Prices listed are for single layer only.
- (2) Double layer prices are the sum of the prices for the two single layer sizes used.
- (3) Extra charge for bands.

Exhibit A
OWENS- ILLINOIS

Net Billing Prices
F.O.B. Berlin, N. J.

May 1, 1956
Terms Net 30 Days

KAYLO 20 TUBE INSULATION
8 oz. Canvas - No Bands

Nominal Tube Size- Inches	Actual Tube O.D.	Nominal Thickness of Insulation & Prices Per Linear Foot	
		<u>1"</u>	<u>1-1/2"</u>
3/8	.500	\$.196	\$.410
1/2	.625	.196	.410
5/8	.750	.214	.437
3/4	.875	.214	.437
1	1.125	.241	.463
1-1/4	1.375	.267	.499
1-1/2	1.625	.294	.535
2	2.125	.321	.570
2-1/2	2.625	.356	.624
3	3.125	.401	.677

See footnotes on Page 30, Exhibit A.

Exhibit A

OWENS-ILLINOIS

Net Billing Prices
P.O.B. Berlin, N. J.

May 1, 1956
Terms Net 30 Days

KAYLO 20 TRI-SEGMENTAL PIPE INSULATION
6 oz. Canvas - No Bands

Nominal Pipe Sizes- Inches	Nominal Thickness of Insulation & Prices Per Lineal Foot			
	<u>1-1/2"</u>	<u>2"</u>	<u>2-1/2"</u>	<u>3"</u>
10	x	x	x	\$ 3.15
11	x	x	\$ 2.76	3.36
12	x	\$ 2.33	2.93	3.53
14	\$ 1.81	2.59	3.28	3.97
15	1.94	2.72	3.45	4.18
16	2.03	2.84	3.62	4.40
17	2.16	2.97	3.79	4.61
18	2.24	3.10	3.97	4.83
19	2.42	3.35	4.23	5.11
20	2.51	3.52	4.41	5.29
21	2.64	3.66	4.58	5.51 Quad-Seg.
22	2.73	3.79	4.76	5.73
23	2.82	3.88	4.93	5.95
24	2.91	3.96	5.07	6.17

See footnotes on Page 36, Exhibit A.

Exhibit A

OWENS-ILLINOIS

Net Billing Prices
P.O.B. Berlin, N. J.

May 1, 1956
Terms Net 30 Days

KAYLO 20 TUBE INSULATION
Regular Canvas - No Bands

Nominal Tube Sizes- Inches	Actual Tube O.D.	Nominal Thickness of Insulation & Prices Per Lineal Foot	
		<u>1"</u>	<u>1-1/2"</u>
3/8	.500	\$.177	\$.370
1/2	.625	.177	.370
5/8	.750	.193	.394
3/4	.875	.193	.394
1	1.125	.217	.418
1-1/4	1.375	.241	.450
1-1/2	1.625	.265	.482
2	2.125	.289	.515
2-1/2	2.625	.322	.563
3	3.125	.362	.611

Note:

- (1) Prices listed are for single layer only.
- (2) Double layer prices are the sum of the prices for the two single layer sizes used.
- (3) No allowance is made for omission of canvas jackets.
- (4) The O.D.'s of all tube insulation conform to pipe insulation simplified dimensional standards. Use nesting pipe insulation for outer layer is greater thickness is required. When double layer tube insulation is required, use pipe insulation for outer layer.

Exhibit A

OWENS-ILLINOIS

Net Billing Prices
F.O.B. Berlin, N. J.

KAYLO 20 SECTIONAL PIPE INSULATION
With 8 oz. Canvas and Bands

Nominal Pipe Sizes-- Inches	Nominal Thickness of Insulation & Price		
	1"	1-1/2"	2"
1/2	\$.198	\$.413	\$.674
3/4	.216	.440	.718
1	.242	.467	.763
1-1/4	.269	.503	.808
1-1/2	.296	.539	.853
2	.323	.575	.898
2-1/2	.359	.629	.943
3	.404	.682	1.03
3-1/2	.449	.736	1.12
4	.539	.790	1.21
4-1/2	.584	.844	1.30
5	.629	.898	1.39
6	.718	.988	1.53
7	x	1.08	1.66
8	x	1.21	1.80
9	x	1.35	1.98
10	x	1.48	2.16
11	x	1.57	2.29
12	x	1.66	x

See footnotes on Page 23, Exhibit A.

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Exhibit A
OWENS-ILLINOIS

Net Billing Prices
F.O.B. Berlin, N. J.

KAYLO 20 SECTIONAL PIPE INSULATION
With 8 oz. Canvas - No Bands

Nominal Pipe Sizes- Inches	Nominal Thickness of Insulation & Pr		
	1"	1-1/2"	2"
1/2	\$.196	\$.410	\$.668
3/4	.214	.437	.713
1	.241	.463	.757
1-1/4	.267	.499	.802
1-1/2	.294	.535	.846
2	.321	.570	.891
2-1/2	.356	.624	.936
3	.401	.677	1.02
3-1/2	.446	.731	1.11
4	.535	.784	1.20
4-1/2	.579	.838	1.29
5	.624	.891	1.38
6	.713	.980	1.5
7	x	1.07	1.
8	x	1.20	1.
9	x	1.34	1
10	x	1.47	2
11	x	1.56	
12	x	1.65	

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See footnotes on Page 22, Exhibit A.

Exhibit A
OWENS-ILLINOIS

Net Billing Prices
P.O.B. Berlin, N. J.

May 1, 1956
Terms Net 30 Days

KAYLO 20 LARGE SIZE PIPE INSULATION
No Canvas - No Bands

Nominal Pipe Size- Inches	Nominal Thicknesses of Insulation & Prices Per Lineal Foot			
	<u>1-1/2"</u>	<u>2"</u>	<u>2-1/2"</u>	<u>3"</u>
25	\$ 2.90	\$ 3.96	\$ 5.06	\$ 6.12
26	2.90	3.96	5.06	6.12
27	2.98	4.12	5.22	6.28
28	3.06	4.20	5.43	6.49
29	3.26	4.49	5.67	6.85
30	3.26	4.49	5.67	6.85
31	3.52	4.81	6.04	7.43
32	3.52	4.81	6.04	7.43
33	3.59	4.94	6.20	7.51
34	3.71	5.10	6.36	7.75
35	3.92	5.34	6.69	8.12
36	3.92	5.34	6.69	8.12
37	4.12	5.59	7.02	8.53
38	4.12	5.59	7.02	8.53
39	4.32	5.83	7.34	8.94

Note:

- (1) Prices listed are for the single layer only.
- (2) Double layer prices are the sum of the prices for the two single layer sizes used.
- (3) Extra charge for any canvas or bands.

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Exhibit A
OWENS-ILLINOIS

Net Billing Prices
P.O.B. Berlin, N. J.

May 1, 1956
Terms Net 30 Days

KAYLO 20 SECTIONAL PIPE INSULATION
With 6 oz. Canvas - No Bands

Nominal Pipe Size- Inches	Nominal Thickness of Insulation & Prices per Linear Foot				
	1"	1-1/2"	2"	2-1/2"	3"
1/2	\$.190	\$.397	\$.647	\$.862	\$ 1.03
3/4	.207	.422	.690	.905	1.16
1	.233	.448	.733	.948	1.21
1-1/4	.259	.483	.775	.992	1.25
1-1/2	.284	.517	.819	1.03	1.34
2	.310	.552	.862	1.08	1.42
2-1/2	.345	.603	.905	1.16	1.51
3	.388	.655	.992	1.29	1.64
3-1/2	.431	.707	1.08	1.42	1.77
4	.517	.759	1.16	1.55	1.90
4-1/2	.560	.810	1.25	1.68	2.03
5	.603	.862	1.34	1.82	2.16
6	.690	.948	1.47	1.94	2.33
7	x	1.03	1.59	2.07	2.50
8	x	1.16	1.72	2.20	2.72
9	x	1.25	1.90	2.42	2.93
10	x	1.42	2.07	2.63	x
11	x	1.55	2.20	x	x
12	x	1.59	x	x	x

See footnotes on Page 22, Exhibit A

Exhibit A
OWENS-ILLINOIS

Net Billing Prices
F.O.B. Berlin, N. J.

May 1, 1956
Terms Net 30 Days

KAYLO 20 TRI-SEGMENTAL PIPE INSULATION
8 oz. Canvas - NO Bands

Nominal Pipe Sizes- Inches	Nominal Thickness of Insulation & Prices Per Lineal Foot			
	<u>1-1/2"</u>	<u>2"</u>	<u>2-1/2"</u>	<u>3"</u>
10	x	x	x	\$ 3.25
11	x	x	\$ 2.85	3.47
12	x	\$ 2.41	3.03	3.65
14	\$ 1.87	2.67	3.39	4.10
15	2.00	2.81	3.56	4.32
16	2.09	2.94	3.74	4.54
17	2.23	3.07	3.92	4.77
18	2.32	3.21	4.10	4.99
19	2.51	3.47	4.39	5.30
20	2.60	3.66	4.57	5.48
21	2.74	3.79	4.75	5.71 Quad-Seg.
22	2.83	3.93	4.94	5.94
23	2.92	4.02	5.12	6.17
24	3.02	4.11	5.26	6.40

See footnotes on Page 36, Exhibit A.

Exhibit A

OWENS-ILLINOIS

Net Billing Prices
F.O.B. Berlin, N. J.

May 1, 1956
Terms Net 30 Days

KAYLO 20 SECTIONAL PIPE INSULATION
With Regular Canvas - 1" through 2-1/2" Thicknesses
No Canvas - 3" Thickness
With Bands - All Thicknesses

Nominal Pipe Sizes- Inches	Nominal Thickness of Insulation & Prices per Lineal Foot				
	1"	1-1/2"	2"	2-1/2"	3"
1/2	\$.178	\$.373	\$.608	\$.811	\$.973
3/4	.195	.397	.649	.852	1.09
1	.219	.422	.689	.892	1.14
1-1/4	.243	.454	.730	.933	1.18
1-1/2	.268	.487	.770	.973	1.26
2	.292	.519	.811	1.01	1.34
2-1/2	.324	.568	.852	1.09	1.42
3	.365	.616	.933	1.22	1.54
3-1/2	.406	.665	1.01	1.34	1.66
4	.487	.714	1.09	1.46	1.78
4-1/2	.527	.762	1.18	1.58	1.91
5	.568	.811	1.26	1.70	2.03
6	.649	.892	1.38	1.82	2.19
7	x	.973	1.50	1.95	2.35
8	x	1.09	1.62	2.07	2.55
9	x	1.22	1.78	2.27	2.76
10	x	1.34	1.95	2.47	x
11	x	1.42	2.07	x	x
12	x	1.50	x	x	x

Notes:

- (1) Prices listed are for single layer only.
- (2) Double layer prices are the sum of the prices for the two single layer sizes used.
- (3) No allowance is made for the omission of canvas jackets.
- (4) Prices include 2-1/2 aluminum bands per 3 foot section.

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Exhibit A

OWENS-ILLINOIS

Net Billing Prices
P.O.B. Berlin, N.J.

May 1, 1956
Terms Net 30 Days

KAYLO 20 SECTIONAL PIPE INSULATION
Regular Canvas
No Bands

<u>Nominal Pipe Size- Inches</u>	<u>Nominal Thickness of Insulation & Prices per Lineal Foot</u>
	<u>3"</u>
1/2	\$ 1.00
3/4	1.12
1	1.17
1-1/4	1.21
1-1/2	1.29
2	1.37
2-1/2	1.46
3	1.58
3-1/2	1.71
4	1.83
4-1/2	1.96
5	2.08
6	2.25
7	2.42
8	2.62
9	2.83

See footnotes on Page 22, Exhibit A.

Exhibit A

OWENS-ILLINOIS

Net Billing Prices
F.O.B. Berlin, N. J.

May 1, 1956
Terms Net 30 Days

KAYLO 20 SECTIONAL PIPE INSULATION
Regular Canvas and Bands

<u>Nominal Pipe Sizes- Inches</u>	<u>Nominal Thickness of Insulation & Prices Per Lineal Foot</u>
	<u>3"</u>
1/2	\$ 1.01
3/4	1.13
1	1.18
1-1/4	1.22
1-1/2	1.30
2	1.39
2-1/2	1.47
3	1.60
3-1/2	1.72
4	1.85
4-1/2	1.97
5	2.10
6	2.27
7	2.44
8	2.65
9	2.86

See footnotes on Page 23, Exhibit A.

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100

HRV-PL-1661

Exhibit A
OWENS-ILLINOIS

Net Billing Prices
F.O.B. Berlin, N. J.

May 1, 1956
Terms Net 30 Days

KAYLO 20 REVELED LAG PIPE INSULATION
No Canvas - No Bands

Nominal Pipe Sizes- Inches	Nominal Thickness of Insulation & Prices Per Lineal Foot			
	<u>1-1/2"</u>	<u>2"</u>	<u>2-1/2"</u>	<u>3"</u>
18	\$ 1.99	\$ 2.76	\$ 3.52	\$ 4.29
19	2.11	2.91	3.68	4.44
20	2.18	3.06	3.83	4.60
21	2.30	3.18	3.98	4.79
22	2.37	3.29	4.14	4.98
23	2.45	3.37	4.29	5.17
24	2.53	3.45	4.40	5.36
25	2.72	3.72	4.75	5.75
26	2.72	3.72	4.75	5.75
27	2.80	3.87	4.90	5.90
28	2.87	3.94	5.09	6.09
29	3.06	4.21	5.32	6.43
30	3.06	4.21	5.32	6.43
31	3.29	4.52	5.67	6.97
32	3.29	4.52	5.67	6.97
33	3.37	4.63	5.82	7.05
34	3.49	4.79	5.97	7.28
35	3.68	5.02	6.28	7.62
36	3.68	5.02	6.28	7.62

Note:

- (1) Prices listed are for the single layer only.
- (2) Double layer prices are the sum of the prices for the two single layer sizes used.
- (3) Extra charge for any canvas or bands.

Exhibit A
OWENS-ILLINOIS

Net Billing Price
F.O.B. Berlin, N. J.

June 1, 1956
Terms Net 30 Days

KAYLO 20 HEAT INSULATING BLOCK

<u>Thickness-</u> <u>Inches</u>	<u>36 Inch Lengths</u>	
	<u>Prices per Square Foot</u>	
1	\$	.218
1-1/2		.328
2		.437
2-1/2		.546
3		.655

	<u>18 Inch Lengths</u>	
1	\$	.228
1-1/2		.338
2		.447
2-1/2		.556
3		.665

Notes:

Block in these thicknesses can be furnished in 6", 12" and
18" widths.

June 22, 1956

Mr. J. Marshall Briley
Owens-Corning Fiberglas Corporation
National Bank Building
Toledo, Ohio

Dear Mr. Briley:

Attached are copies of price lists for Kayle block effective June 1, 1956. This replaces the previous list issued February 22, 1956, and has been made to cover the change in your bill prices on block.

Additional copies of this list are also being sent to your sales and service personnel who are interested in this change.

Yours truly,

D. F. Truitt

pr

Enclosures: (2)

cc: Mr. W. J. Stewart
Mr. H. C. Laughlin
Mr. J. H. McMerney
Mr. C. W. Neuhaus

HRV-PL-1664

Exhibit A

OWENS-ILLINOIS

Net Billing Prices
F.O.B. Berlin, N. J.

May 1, 1956
Terms Net 30 Days

KAYLO SECTIONAL PIPE INSULATION
With Regular Canvas - 1" through 2-1/2" Thicknesses
No Canvas - 3" Thickness
No Bands

Nominal Pipe Sizes- Inches	Nominal Thickness of Insulation & Prices per Lineal Foot				
	1"	1-1/2"	2"	2-1/2"	3"
1/2	\$.159	\$.333	\$.543	\$.724	\$.869
3/4	.174	.355	.579	.760	.977
1	.195	.376	.615	.796	1.01
1-1/4	.217	.405	.652	.833	1.05
1-1/2	.239	.434	.688	.869	1.12
2	.261	.463	.724	.905	1.19
2-1/2	.290	.507	.760	.977	1.27
3	.326	.550	.833	1.09	1.38
3-1/2	.362	.594	.905	1.19	1.48
4	.434	.637	.977	1.30	1.59
4-1/2	.471	.681	1.05	1.41	1.70
5	.507	.724	1.12	1.52	1.81
6	.579	.796	1.23	1.63	1.95
7	x	.869	1.34	1.74	2.10
8	x	.977	1.45	1.85	2.28
9	x	1.09	1.59	2.03	2.46
10	x	1.19	1.74	2.21	x
11	x	1.27	1.85	x	x
12	x	1.34	x	x	x

Notes:

- (1) Prices listed are for single layer only.
- (2) Double layer prices are the sum of the prices for the two single layer sizes used.
- (3) No Allowance is made for omission of canvas jackets,

HRV-PL-1665

Exhibit A

OWENS-ILLINOIS

Net Billing Prices
P.O.B. Berlin, N. J.

May 1, 1956
Terms Net 30 Days

KATLO SECTIONAL PIPE INSULATION
With Regular Canvas - 1" through 2-1/2" Thicknesses
No Canvas - 3" Thickness
With Bands - All Thicknesses

Nominal Pipe Sizes- Inches	Nominal Thickness of Insulation & Prices per Lineal Foot				
	1"	1-1/2"	2"	2-1/2"	3"
1/2	\$.161	\$.336	\$.518	\$.731	\$.877
3/4	.175	.358	.585	.768	.987
1	.197	.380	.621	.804	1.02
1-1/4	.219	.409	.658	.841	1.06
1-1/2	.241	.439	.694	.877	1.13
2	.263	.468	.731	.914	1.21
2-1/2	.292	.512	.768	.987	1.28
3	.329	.556	.841	1.10	1.39
3-1/2	.366	.599	.914	1.21	1.50
4	.439	.643	.987	1.32	1.61
4-1/2	.475	.687	1.06	1.43	1.72
5	.512	.731	1.13	1.54	1.83
6	.585	.804	1.24	1.64	1.97
7	x	.877	1.35	1.75	2.12
8	x	.967	1.46	1.86	2.20
9	x	1.11	1.61	2.05	2.49
10	x	1.21	1.75	2.23	x
11	x	1.28	1.86	x	x
12	x	1.35	x	x	x

Note:

- (1) Prices listed are for single layer only.
- (2) Double layer prices are the sum of the prices for the two single layer sizes used.
- (3) No allowance is made for omission of canvas jackets.
- (4) Prices include 24 aluminum bands per 3 feet section.

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Exhibit A

OWENS-ILLINOIS

Net Billing Prices
F.O.B. Berlin, N. J.

May 1, 1956
Terms Net 30 Days

KAYLO SECTIONAL PIPE INSULATION
Regular Canvas
No Bands

<u>Nominal Pipe Sizes- Inches</u>	<u>Nominal Thickness of Insulation & Prices per Lineal Foot</u>
	<u>3"</u>
1/2	\$.904
3/4	1.02
1	1.05
1-1/4	1.09
1-1/2	1.17
2	1.24
2-1/2	1.32
3	1.43
3-1/2	1.54
4	1.66
4-1/2	1.77
5	1.88
6	2.03
7	2.18
8	2.37
9	2.56

See footnotes on Page 1, Exhibit A.

Exhibit A

OWENS-ILLINOIS

Net Billing Prices
F.O.B. Berlin, N. J.

May 1, 1956
Terms Net 30 Days

KAYLO SECTIONAL PIPE INSULATION
Regular Canvas and Bands

<u>Nominal Pipe Sizes- Inches</u>	<u>Nominal Thickness of Insulation & Prices per Lineal Foot</u>
	<u>3"</u>
1/2	\$.912
3/4	1.03
1	1.06
1-1/4	1.10
1-1/2	1.18
2	1.25
2-1/2	1.33
3	1.44
3-1/2	1.56
4	1.67
4-1/2	1.79
5	1.90
6	2.05
7	2.20
8	2.39
9	2.58

See footnotes on Page 2, Exhibit A.

Exhibit A
OWENS-ILLINOIS

Net Billing Prices
F.O.B. Berlin, N. J.

May 1, 1956
Terms Net 30 Days

KAYLO SECTIONAL PIPE INSULATION
With 6 oz. Canvas - No Bands

Nominal Pipe Sizes- Inches	Nominal Thickness of Insulation & Prices per Lineal Foot				
	1"	1-1/2"	2"	2-1/2"	3"
1/2	\$.172	\$.360	\$.587	\$.782	\$.938
3/4	.188	.383	.626	.821	1.06
1	.211	.407	.665	.860	1.09
1-1/4	.235	.438	.704	.899	1.13
1-1/2	.258	.469	.743	.938	1.21
2	.282	.500	.782	.978	1.29
2-1/2	.313	.547	.821	1.06	1.37
3	.352	.594	.899	1.17	1.49
3-1/2	.391	.644	.978	1.29	1.60
4	.469	.688	1.06	1.41	1.72
4-1/2	.508	.735	1.13	1.52	1.84
5	.547	.782	1.21	1.64	1.96
6	.626	.860	1.33	1.76	2.11
7	x	.938	1.45	1.88	2.27
8	x	1.06	1.56	1.99	2.46
9	x	1.17	1.72	2.19	2.66
10	x	1.29	1.88	2.39	x
11	x	1.37	1.99	x	x
12	x	1.45	x	x	x

See footnotes on Page 1, Exhibit A.

Exhibit A
OWENS-ILLINOIS

Net Billing Prices
P.O.B. Berlin, N. J.

May 1, 1956
Terms Net 30 Days

KAYLO SECTIONAL PIPE INSULATION
With 6 os. Canvas and Bands

Nominal Pipe Sizes- Inches	Nominal Thickness of Insulation & Prices per Lineal Foot				
	1"	1-1/2"	2"	2-1/2"	3"
1/2	\$.174	\$.363	\$.592	\$.789	\$.947
3/4	.189	.387	.631	.828	1.07
1	.213	.410	.671	.868	1.10
1-1/4	.237	.442	.710	.907	1.14
1-1/2	.260	.473	.750	.947	1.22
2	.284	.505	.789	.986	1.30
2-1/2	.316	.552	.828	1.07	1.38
3	.355	.600	.907	1.18	1.50
3-1/2	.395	.647	.986	1.30	1.62
4	.473	.694	1.07	1.42	1.74
4-1/2	.513	.742	1.14	1.54	1.85
5	.552	.789	1.22	1.66	1.97
6	.631	.868	1.34	1.78	2.13
7	x	.947	1.46	1.89	2.29
8	x	1.07	1.58	2.02	2.49
9	x	1.18	1.74	2.21	2.68
10	x	1.30	1.89	2.41	x
11	x	1.38	2.01	x	x
12	x	1.46	x	x	x

See footnotes on Page 2, Exhibit A.

Exhibit A
OWENS-ILLINOIS

Net Billing Prices
F.O.B. Berlin, N. J.

May 1, 1956
Terms Net 30 Days

KAYLO SECTIONAL PIPE INSULATION
With 8 oz. Canvas - no Bands

Nominal Pipe Sizes- Inches	Nominal Thickness of Insulation & Prices per Lineal Foot				
	1"	1-1/2"	2"	2-1/2"	3"
1/2	\$.178	\$.373	\$.608	\$.811	\$.973
3/4	.195	.397	.649	.852	1.09
1	.219	.422	.689	.892	1.14
1-1/4	.243	.454	.730	.933	1.18
1-1/2	.268	.487	.770	.973	1.26
2	.292	.519	.811	1.01	1.34
2-1/2	.324	.568	.852	1.09	1.42
3	.365	.616	.933	1.22	1.54
3-1/2	.406	.665	1.01	1.34	1.66
4	.487	.714	1.09	1.46	1.78
4-1/2	.527	.762	1.18	1.58	1.91
5	.568	.811	1.26	1.70	2.03
6	.649	.892	1.38	1.82	2.19
7	x	.973	1.50	1.95	2.35
8	x	1.09	1.62	2.07	2.55
9	x	1.22	1.78	2.27	2.76
10	x	1.34	1.95	2.47	x
11	x	1.42	2.07	x	x
12	x	1.50	x	x	x

See footnotes on Page 1, Exhibit A.

Exhibit A
OWENS-ILLINOIS

Net Billing Prices
P.O.B. Berlin, N. J.

May 1, 1956
Terms Net 30 Days

KAYLO SECTIONAL PIPE INSULATION
With 8 oz. Canvas and Bands

Nominal Pipe Sizes- Inches	Nominal Thickness of Insulation & Prices per Lineal Foot				
	1"	1-1/2"	2"	2-1/2"	3"
1/2	\$.180	\$.376	\$.614	\$.818	\$.982
3/4	.196	.402	.654	.859	1.10
1	.221	.425	.695	.900	1.15
1-1/4	.245	.458	.736	.941	1.19
1-1/2	.270	.491	.777	.982	1.27
2	.294	.524	.818	1.02	1.35
2-1/2	.327	.573	.859	1.10	1.43
3	.368	.622	.941	1.23	1.55
3-1/2	.409	.671	1.02	1.35	1.68
4	.491	.720	1.10	1.47	1.80
4-1/2	.532	.769	1.19	1.60	1.92
5	.573	.818	1.27	1.72	2.05
6	.654	.900	1.39	1.84	2.21
7	x	.982	1.51	1.96	2.37
8	x	1.10	1.64	2.09	2.58
9	x	1.23	1.80	2.29	2.78
10	x	1.35	1.96	2.49	x
11	x	1.43	2.09	x	x
12	x	1.51	x	x	x

See footnotes on Page 2, Exhibit A.

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Exhibit A

OWENS-ILLINOIS

Net Billing Prices
P.O.B. Berlin, N. J.

May 1, 1956
Terms Net 30 Days

KAYLO TUBE INSULATION
Regular Canvas - No Bands

Nominal Tube Sizes- Inches	Actual Tube O.D.	Nominal Thickness of Insulation & Prices Per Linear Foot	
		1"	1-1/2"
3/8	.500	\$.159	\$.333
1/2	.625	.159	.333
5/8	.750	.174	.355
3/4	.875	.174	.355
1	1.125	.195	.376
1-1/4	1.375	.217	.405
1-1/2	1.625	.239	.434
2	2.125	.261	.463
2-1/2	2.625	.290	.507
3	3.125	.326	.550

Note:

- (1) Prices listed are for single layer only.
- (2) Double layer prices are the sum of the prices for the two single layer sizes used.
- (3) No allowance is made for omission of canvas jackets.
- (4) The O.D.'s of all tube insulation conform to pipe insulation simplified dimensional standards. Use nesting pipe insulation for outer layer if greater thickness is required. When double layer tube insulation is required, use pipe insulation for outer layer.

Exhibit A
OWENS-ILLINOIS

Net Billing Prices
F.O.B. Berlin, N. J.

May 1, 1956
Terms Net 30 Days

KAYLO TUBE INSULATION
Regular Canvas and Bands

Nominal Tube Sizes - Inches	Actual Tube O.D.	Nominal Thickness of Insulation & Prices Per Lineal Foot	
		1"	1-1/2"
3/8	.500	\$.161	\$.336
1/2	.625	.161	.336
5/8	.750	.175	.358
3/4	.875	.175	.358
1	1.125	.197	.380
1-1/4	1.375	.219	.409
1-1/2	1.625	.241	.439
2	2.125	.263	.468
2-1/2	2.625	.292	.512
3	3.125	.329	.556

Notes:

- (1) Prices listed are for single layer only.
- (2) Double layer prices are the sum of the prices for the two single layer sizes used.
- (3) No allowance is made for omission of canvas jackets.
- (4) The O.D.'s of all tube insulation conform to pipe insulation simplified dimensional standards. Use nesting pipe insulation for outer layer if greater thickness is required. When double layer tube insulation is required, use pipe insulation for outer layer.
- (5) Prices include 2-1/2 aluminum bands per 3 foot section.

Exhibit A
OWENS-ILLINOIS

Net Billing Prices
F.O.B. Berlin, N. J.

May 1, 1956
Terms Net 30 Days

KAYLO TUBE INSULATION
6 oz. canvas - No Bands

Nominal Tube Sizes - Inches	Actual Tube O.D.	Nominal Thickness of Insulation & Prices Per Lineal Foot	
		1"	1-1/2"
3/8	.500	\$.172	\$.360
1/2	.625	.172	.360
5/8	.750	.188	.383
3/4	.875	.188	.383
1	1.125	.211	.407
1-1/4	1.375	.235	.438
1-1/2	1.625	.258	.469
2	2.125	.282	.500
2-1/2	2.625	.313	.547
3	3.125	.352	.594

See footnotes on Page 9, Exhibit A.

Exhibit A
OWENS-ILLINOIS

Net Billing Prices
F.O.B. Berlin, N. J.

May 1, 1956
Terms Net 30 Days

KAYLO TUBE INSULATION
6 oz. Canvas & Bands

<u>Nominal Tube Size-- Inches</u>	<u>Actual Tube O.D.</u>	<u>Nominal Thickness of Insulation & Prices Per Lineal Foot</u>	
		<u>1"</u>	<u>1-1/2"</u>
3/8	.500	\$.174	\$.363
1/2	.625	.174	.363
5/8	.750	.189	.387
3/4	.875	.189	.387
1	1.125	.213	.420
1-1/4	1.375	.237	.442
1-1/2	1.625	.260	.473
2	2.125	.284	.505
2-1/2	2.625	.316	.552
3	3.125	.355	.600

See footnotes on Page 10, Exhibit A.

Exhibit A

OWENS-ILLINOIS

Net Billing Prices
F.O.B. Berlin, N. J.

May 1, 1956
Terms Net 30 Days

KAYLO TUBE INSULATION
8 oz. Canvas - No Bands

Nominal Tube Size- Inches	Actual Tube O.D.	Nominal Thickness of Insulation & Prices Per Lineal Foot	
		<u>1"</u>	<u>1-1/2"</u>
3/8	.500	\$.178	\$.373
1/2	.625	.178	.373
5/8	.750	.195	.397
3/4	.875	.195	.397
1	1.125	.219	.422
1-1/4	1.375	.243	.454
1-1/2	1.625	.268	.487
2	2.125	.292	.519
2-1/2	2.625	.324	.568
3	3.125	.365	.616

See footnotes on Page 9, Exhibit A.

Exhibit A
OWENS-ILLINOIS

Net Billing Prices
F.O.B. Berlin, N. J.

May 1, 1956
Terms Net 30 Days

KAYLO TUBE INSULATION
8 oz. Canvas and Bands

Nominal Tube Size- Inches	Actual Tube O.D.	Nominal Thickness of Insulation & Prices Per Lineal Foot	
		1"	1-1/2"
3/8	.500	\$.180	\$.376
1/2	.625	.180	.376
5/8	.750	.196	.401
3/4	.875	.196	.401
1	1.125	.221	.425
1-1/4	1.375	.245	.458
1-1/2	1.625	.270	.491
2	2.125	.294	.524
2-1/2	2.625	.327	.573
3	3.125	.368	.622

See footnotes on Page 10, Exhibit A.

Exhibit A
OWENS-ILLINOIS

Net Billing Prices
F.O.B. Berlin, N. J.

May 1, 1956
Terms Net 30 Days

KAYLO TRI-SEGMENTAL PIPE INSULATION
No Canvas - No Bands

Nominal Pipe Sizes- Inches	Nominal Thickness of Insulation & Prices per Linear Foot			
	1-1/2"	2"	2-1/2"	3"
10	x	x	x	\$ 2.64
11	x	x	\$ 2.32	2.82
12	x	\$ 1.95	2.46	2.97
14	\$ 1.52	2.17	2.75	3.33
15	1.63	2.28	2.90	3.51
16	1.70	2.39	3.04	3.69
17	1.81	2.50	3.19	3.87
18	1.88	2.61	3.33	4.05
19	2.02	2.80	3.53	4.27
20	2.10	2.94	3.68	4.42
21	2.21	3.05	3.83	4.60 Quad-seg
22	2.28	3.16	3.97	4.78
23	2.36	3.24	4.12	4.97
24	2.43	3.31	4.23	5.15

Notes:

- (1) Prices listed are for single layer only.
- (2) Double layer prices are the sum of the prices for the two single layer sizes used.
- (3) Extra charge for bands.

Exhibit A
OWENS-ILLINOIS

Net Billing Prices
F.O.B. Berlin, N. J.

May 1, 1956
Terms Net 30 Days

KAYLO TRI-SEGMENTAL PIPE INSULATION
Regular Canvas - No Bands

Nominal Pipe Size- Inches	Nominal Thickness of Insulation & Prices per Lineal Foot			
	<u>1-1/2"</u>	<u>2"</u>	<u>2-1/2"</u>	<u>3"</u>
10	x	x	x	\$ 2.82
11	x	x	\$ 2.47	3.01
12	x	\$ 2.06	2.62	3.17
14	\$ 1.62	2.32	2.93	3.55
15	1.74	2.43	3.09	3.74
16	1.81	2.55	3.24	3.94
17	1.93	2.66	3.40	4.13
18	2.01	2.78	3.55	4.32
19	2.17	3.00	3.79	4.58
20	2.25	3.16	3.95	4.74
21	2.37	3.28	4.11	4.92 Quad-seg
22	2.45	3.40	4.25	5.12
23	2.53	3.46	4.41	5.31
24	2.60	3.54	4.53	5.51

See footnotes on Page 15, Exhibit A.

Exhibit A

OWENS-ILLINOIS

Net Billing Prices
F.O.B. Berlin, N. J.

May 1, 1956
Terms Net 30 Days

KAYLO TRI-SEGMENTAL PIPE INSULATION
6 oz. Canvas - No Bands

Nominal Pipe Sizes- Inches	Nominal Thickness of Insulation & Prices per Lineal Foot			
	<u>1-1/2"</u>	<u>2"</u>	<u>2-1/2"</u>	<u>3"</u>
10	x	x	x	\$ 2.85
11	x	x	\$ 2.50	3.05
12	x	\$ 2.11	2.66	3.21
14	\$ 1.64	2.35	2.97	3.60
15	1.76	2.46	3.13	3.79
16	1.84	2.58	3.28	3.99
17	1.96	2.70	3.44	4.18
18	2.03	2.82	3.60	4.38
19	2.20	3.04	3.84	4.65
20	2.28	3.20	4.01	4.81
21	2.40	3.32	4.17	5.01 Quad-seg
22	2.48	3.44	4.33	5.21
23	2.56	3.52	4.49	5.41
24	2.64	3.60	4.61	5.61

See footnotes on Page 15, Exhibit A.

Exhibit A

OWENS-ILLINOIS

Net Billing Prices
F.O.B. Berlin, N. J.

May 1, 1956
Terms Net 30 Days

KAYLO TRI-SEGMENTAL PIPE INSULATION
8 oz. Canvas - No Bands

Nominal Pipe Sizes- Inches	Nominal Thickness of Insulation & Prices per Lineal Foot			
	<u>1-1/2"</u>	<u>2"</u>	<u>2-1/2"</u>	<u>3"</u>
10	x	x	x	\$ 2.96
11	x	x	\$ 2.60	3.16
12	x	\$ 2.19	2.76	3.33
14	\$ 1.70	2.43	3.08	3.73
15	1.82	2.55	3.24	3.93
16	1.91	2.68	3.42	4.14
17	2.03	2.80	3.57	4.34
18	2.11	2.92	3.73	4.54
19	2.29	3.17	4.00	4.84
20	2.38	3.34	4.17	5.00
21	2.50	3.46	4.34	5.21 Quad-seg
22	2.59	3.59	4.50	5.42
23	2.67	3.67	4.67	5.63
24	2.75	3.75	4.80	5.84

See footnotes on Page 15, Exhibit A.

Exhibit A

OWENS-ILLINOIS

Net Billing Prices
P.O.B. Berlin, N. J.

May 1, 1956
Terms Net 30 Days

KAYLO LARGE SIZE PIPE INSULATION
No Canvas - No Bands

Nominal Pipe Sizes- Inches	Nominal Thicknesses of Insulation & Prices per Lineal Foot			
	<u>1-1/2"</u>	<u>2"</u>	<u>2-1/2"</u>	<u>3"</u>
25	\$ 2.61	\$ 3.57	\$ 4.56	\$ 5.52
26	2.61	3.57	4.56	5.52
27	2.69	3.72	4.71	5.67
28	2.76	3.79	4.89	5.85
29	2.94	4.05	5.12	6.18
30	2.94	4.05	5.12	6.18
31	3.16	4.34	5.45	6.70
32	3.16	4.34	5.45	6.70
33	3.24	4.45	5.59	6.77
34	3.35	4.60	5.74	6.99
35	3.53	4.82	6.04	7.32
36	3.53	4.82	6.04	7.32
37	3.72	5.04	6.33	7.69
38	3.72	5.04	6.33	7.69
39	3.90	5.26	6.62	8.06

Notes:

- (1) Prices listed are for single layer only.
- (2) Double layer prices are the sum of the prices for the two single layer sizes used.
- (3) Extra charge for any canvas or bands.

Exhibit A

OWENS-ILLINOIS

Net Billing Prices
P.O.B. Berlin, N. J.

May 1, 1956
Terms Net 30 Days

KAYLO BEVELED LAG PIPE INSULATION
No Canvas - No Bands

Nominal Pipe Size- Inches	Nominal Thickness of Insulation & Prices Per Lineal Foot			
	<u>1-1/2"</u>	<u>2"</u>	<u>2-1/2"</u>	<u>3"</u>
18	\$ 1.78	\$ 2.47	\$ 3.16	\$ 3.84
19	1.89	2.61	3.29	3.98
20	1.96	2.74	3.43	4.12
21	2.06	2.85	3.57	4.29
22	2.13	2.95	3.70	4.46
23	2.20	3.02	3.84	4.63
24	2.26	3.09	3.94	4.80
25	2.44	3.33	4.25	5.15
26	2.44	3.33	4.25	5.15
27	2.50	3.46	4.39	5.28
28	2.57	3.53	4.56	5.45
29	2.74	3.77	4.77	5.76
30	2.74	3.77	4.77	5.76
31	2.95	4.05	5.08	6.24
32	2.95	4.05	5.08	6.24
33	3.02	4.15	5.21	6.32
34	3.12	4.25	5.35	6.52
35	3.29	4.45	5.63	6.83
36	3.29	4.49	5.63	6.83

Note:

- (1) Prices listed are for the single layer only.
- (2) Double layer prices are the sum of the prices for the two single layer sizes used.
- (3) Extra charge for any canvas or bands.

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