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PLAINTIFF'S EXHIBIT

K-1977

IN THE SUPERIOR COURT OF THE STATE OF CALIFORNIA
IN AND FOR THE COUNTY OF ALAMEDA

WILLIE COLEMAN, et al.,	)	No. 650495-3
	)	
Plaintiffs,	)	
	)	
v.	)	DEFENDANT,
	)	OWENS-ILLINOIS, INC.'S
	)	ANSWERS TO PROPOSED
FIBREBOARD CORP., et al,	)	PLAINTIFF'S FIRST SET OF
	)	INTERROGATORIES
Defendants.	)	
	)	

PROPOUNDING PARTY:	Plaintiffs, WILLIE COLEMAN, et al.,
RESPONDING PARTY:	Defendant, OWENS-ILLINOIS, INC.
SET NUMBER:	One (1)
REFERENCE:	IN RE COMPLEX ASBESTOS LITIGATION No. 607734-9 IN RE SHIPYARD AND APPLICATOR ASBESTOS CASES (Consolidated for Discovery) No. 537868-7

OWENS-ILLINOIS, INC. by and through its counsel of
record hereby responds in writing under oath to plaintiff's
first set of interrogatories.

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

1 business. The following is part of and is incorporated by
2 reference in every answer provided hereinafter:

3 This answer is accurate as of the date made.

4 However, Owens-Illinois, Inc.'s investigation is
5 continuing, and Owens-Illinois, Inc. cannot exclude
6 the possibility that it may be able to obtain more
7 complete information or even information which
8 indicates that the answer being supplied is
9 incorrect. Owens-Illinois, Inc. objects to answering
10 this interrogatory in regard to any period of time
11 other than the period during which it engaged in the
12 business involved in this case which ended in
13 mid-1958 or concerning any facility not related to
14 that business, on the basis that any such answer
15 would be irrelevant to the subject matter of the
16 pending litigation, would not be reasonably
17 calculated to lead to the discovery of admissible
18 evidence, and would be burdensome and oppressive.

19 Furthermore, Owens-Illinois, Inc. objects to the
20 instructions and definitions supplied by plaintiffs with regard
21 to these interrogatories, on the basis that the definitions are
22 overbroad, vague, and often inconsistent with the normal usage
23 and meaning of such words, and the instructions are overbroad,
24 burdensome and constitute an unreasonable expansion of the
25 interrogatories themselves. Owens-Illinois, Inc. therefore
26 gives notice that it does not consider itself bound by the
27 instructions and definitions propounded by plaintiffs, and
28 instead shall answer the interrogatories in a manner consistent

1 with a normal understanding of the language used in the
2 interrogatory and to the extent necessary to fairly and fully
3 answer the interrogatory.

4 RESPONSE TO INTERROGATORY 1:

5 (a-c) Arthur H. Smith, Assistant Secretary of
6 Owens-Illinois, Inc., One SeaGate, Toledo, Ohio 43666.

7 (d) This defendant objects to this interrogatory on
8 the basis that it seeks information which is not relevant to
9 the subject matter of this litigation and is not reasonably
10 calculated to lead to the discovery of admissible evidence.

11 RESPONSE TO INTERROGATORY NO. 2:

12 (a-d) Owens-Illinois Glass Company was incorporated
13 in the State of Ohio in 1929. Owens-Illinois Glass Company
14 changed its name to Owens-Illinois, Inc. on April 28, 1965.
15 Due to corporate restructuring in 1987, this defendant is now a
16 Delaware corporation. The address of the principal place of
17 business is One SeaGate, Toledo, Ohio 43666.

18 (e) This defendant objects to this interrogatory on
19 the basis that it seeks information which is not relevant to
20 the subject matter of this litigation and is not reasonably
21 calculated to lead to the discovery of admissible evidence.

22 RESPONSE TO INTERROGATORY NO. 3:

23 Owens-Illinois Glass Company changed its name to
24 Owens-Illinois, Inc. on April 28, 1965. Owens-Illinois Glass
25 Company has been retained as an inactive name saving subsidiary
26 but has no assets or employees.

2
3
4 RESPONSE TO INTERROGATORY NO. 4:

5 Yes. This defendant has been authorized to conduct
6 business in the State of California since 1944.

7 RESPONSE TO INTERROGATORY NO. 5:

8 This defendant objects to this interrogatory on the
9 basis that it seeks information which is not relevant to the
10 subject matter of this litigation and is not reasonably
11 calculated to lead to the discovery of admissible evidence,
12 except as it relates to the period of time during which this
13 defendant engaged in the manufacture and sale of its
14 asbestos-containing products. Without waiving the above
15 objection, this defendant did not have what might be termed a
16 scientific section which is involved in the continuing
17 development of its products.

18 RESPONSE TO INTERROGATORY NO. 6:

19 (a) Kaylo and Kaylo-20.

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

26 (d-e) This defendant ceased the manufacture, sale
27 and distribution of its asbestos-containing products in 1958.
28 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

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

3 (j) This defendant states that it has referred to
4 the relevant business records of the Owens-Illinois Glass
5 Company, which are still in the possession of Owens-Illinois,
6 Inc., in connection with the preparation of answers to these
7 interrogatories unless otherwise indicated.

8 RESPONSE TO INTERROGATORY NO. 7:

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

12 RESPONSE TO INTERROGATORY NO. 8:

13 This defendant incorporates by reference its answer
14 to Interrogatory No. 6.

15 RESPONSE TO INTERROGATORY NO. 9:

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

19 RESPONSE TO INTERROGATORY NO. 10:

20 This defendant did not purchase, mine, use, sell or
21 otherwise acquire crocidolite asbestos.

22 RESPONSE TO INTERROGATORY NO. 11:

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

26 RESPONSE TO INTERROGATORY NO. 12:

27 (a, d, e) American Structural Products Company, a
28 wholly owned subsidiary of Owens-Illinois Glass Company,

1 engaged in the manufacture and sale of asbestos-containing
2 products from about January, 1948 until about June, 1949 when
3 it became the Kaylo Division of this Owens-Illinois Glass
4 Company. The Kaylo Division of this defendant continued to
5 manufacture such products until about April 30, 1958 when it
6 was purchased by Owens-Corning Fiberglas Corporation from this
7 defendant effective on that date. As of that time, this
8 defendant ceased the manufacture and sale of
9 asbestos-containing products, and it has not engaged in any
10 such business since that date.

11 (b, c) This defendant objects to this interrogatory
12 on the basis that it seeks information which is not relevant to
13 the subject matter of this litigation and is not reasonably
14 calculated to lead to the discovery of admissible evidence.

15 (f) This defendant's manufacturing plants were
16 located in Berlin, New Jersey and Sayreville, New Jersey. The
17 Berlin plant was in operation from approximately 1943 (as a
18 pilot plant at first) until on or about April 30, 1958. The
19 Sayreville plant was in operation from February, 1948 until
20 about April 30, 1953.

21 (g) Kaylo and Kaylo-20.

22 RESPONSE TO INTERROGATORY NO. 13:

23 No. This defendant does not now and has not in the
24 past engaged in the business of mining, milling, or selling raw
25 asbestos.

26 RESPONSE TO INTERROGATORY NO. 14:

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

defendant has not found information in its records sufficient to enable it to answer this interrogatory.

RESPONSE TO INTERROGATORY NO. 15:

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.

RESPONSE TO INTERROGATORY NO. 16:

(a, b) This defendant incorporates by reference its answer to Interrogatory No. 15.

(c) Kaylo and Kaylo-20.

RESPONSE TO INTERROGATORY NO. 17:

No.

RESPONSE TO INTERROGATORY NO. 18:

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	08-12-47
2,439,724	Finley	04-13-48
RE.23,228	Frasor	05-09-50
2,534,303	Serinis	12-19-51
2,540,354	Selden	02-06-51
2,547,127	Kalousek	04-03-51
2,570,835	Mooney, et al.	10-09-51
2,574,667	Shuman	11-13-51
2,665,996	Kalousek	01-12-54
2,748,008	Kalousek	05-29-56

2,787,345
2,788,304

Soubier, et al.
Scovronek

04-02-57
04-09-57

RESPONSE TO INTERROGATORY NO. 19:

- (a) Calcium silicate materials.
- (b) Federal.
- (c) 6/18/46, 5/11/48, 1/1/57.
- (d) Trademarks printed or stenciled on containers of materials.
- (e) Trademark 421,786 republished 3/2/48.
- (f) Owens-Illinois Glass Company.
- (g) Law Department, Owens-Illinois, Inc.

RESPONSE TO INTERROGATORY NO. 20:

Not applicable to this defendant. This defendant does not now and has not in the past engaged in the business of mining, milling, or selling raw asbestos. This defendant engaged in the business of commercially manufacturing, selling and distributing an asbestos-containing product from 1948 through mid-1958.

RESPONSE TO INTERROGATORY NO. 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, except as it relates to plaintiff's employers during plaintiff's periods of employment. Without waiving the above objection, this defendant has found no information on its business records indicating that it ever sold, or otherwise

1 supplied any of its asbestos-containing products to the General
2 Services Administration.

3 RESPONSE TO INTERROGATORY NO. 22:

4 This defendant objects to this interrogatory on the
5 basis that it seeks information which is not relevant to the
6 subject matter of this litigation and is not reasonably
7 calculated to lead to the discovery of admissible evidence,
8 except as it relates to plaintiff's employers during
9 plaintiff's periods of employment.

10 RESPONSE TO INTERROGATORY NO. 23:

11 This defendant does not now and has not in the past
12 engaged in the business of mining, milling, or selling raw
13 asbestos. This defendant engaged in the business of
14 commercially manufacturing, selling and distributing an
15 asbestos-containing product from 1948 through mid-1958. This
16 defendant ceased the manufacture, sale and distribution of
17 asbestos-containing products in 1958 pursuant to the sale of
18 its Kaylo Division to Owens-Corning Fiberglas Corporation on
19 April 30, 1958. It has not found any information in its
20 records pertinent to a record or document retention policy
21 during the period when it manufactured its asbestos-containing
22 products or for the period of years shortly thereafter. In
23 accordance with the contract for the sale of the Kaylo
24 Division, in the ordinary course of business relating to such
25 sale, and because of the production of certain documents by
26 other defendant's in asbestos-related litigation in the United
27 States, this defendant believes that most of its records
28 pertinent to the Kaylo Division were either transferred or made

1 This defendant ceased the manufacture, sale and distribution of
2 asbestos-containing products in 1958 and does not have
3 information sufficient to further answer this interrogatory.

4 RESPONSE TO INTERROGATORY NO. 29:

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

11 RESPONSE TO INTERROGATORY NO. 30:

12 To the extent this request seeks visual reproductions
13 of this defendant's product, refer to Exhibit I. This
14 defendant ceased the manufacture, sale and distribution of
15 asbestos-containing products in 1958. This defendant has not
16 found information in its records sufficient to enable it to
17 further answer this interrogatory.

18 RESPONSE TO INTERROGATORY NO. 31:

19 Not applicable to this defendant. This defendant
20 does not now and has not in the past engaged in the business of
21 mining, milling, or selling raw asbestos.

22 RESPONSE TO INTERROGATORY NO. 28:

23 This defendant ceased the manufacture, sale and
24 distribution of asbestos-containing products in 1958. This
25 defendant has not found information in its records sufficient
26 to enable it to answer this interrogatory. However, it does
27 not appear that any warning concerning asbestos was given in
28 that it does not appear that this defendant had reason to

1 available to the purchaser of the division in 1958. This
2 defendant states that it has not destroyed any documents or
3 records pertaining to the Kaylo Division which were found in
4 its records in 1975 (the year in which this defendant first
5 became aware of asbestos-related actions against it) and
6 thereafter.

7 RESPONSE TO INTERROGATORY NO. 24:

8 Refer to Exhibit I.

9 RESPONSE TO INTERROGATORY NO. 25:

10 This defendant objects to this interrogatory on the
11 basis that it seeks information which is not relevant to the
12 subject matter of this litigation and is not reasonably
13 calculated to lead to the discovery of admissible evidence.
14 Without waiving the above objection, the majority of this
15 defendant's corporate records are located at its principal
16 place of business which is One SeaGate, Toledo, Ohio 43666.

17 RESPONSE TO INTERROGATORY NO. 26:

18 Not applicable to this defendant. This defendant
19 does not now and has not in the past engaged in the business of
20 mining, milling, or selling raw asbestos.

21 RESPONSE TO INTERROGATORY NO. 27:

22 Not applicable to this defendant. This defendant
23 does not now and has not in the past engaged in the business of
24 mining, milling, or selling raw asbestos.

25 RESPONSE TO INTERROGATORY NO. 28:

26 This defendant believes that some of its
27 asbestos-containing insulation products were packaged in
28 corrugated cartons with the trademark Kaylo on the carton.

1 believe that the use of its products would result in a
2 foreseeable risk of harm.

3 RESPONSE TO INTERROGATORY NO. 33:

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

12 RESPONSE TO INTERROGATORY NO. 34:

13 This defendant ceased the manufacture, sale and
14 distribution of asbestos-containing products in 1958. This
15 defendant has not found information in its records sufficient
16 to enable it to answer this interrogatory. However, it does
17 not appear that any warning concerning asbestos was given in
18 that it does not appear that this defendant had reason to
19 believe that the use of its products would result in a
20 foreseeable risk of harm. Owens-Illinois never had "contract
21 units."

22 RESPONSE TO INTERROGATORY NO. 35:

23 Charles Shook, M.D., deceased, employed from March
24 25, 1946 until June 30, 1960 was the Medical Director during
25 the period in which this defendant manufactured, sold or
26 distributed asbestos-containing products.

27 W.G. Hazard was employed as this defendant's
28 industrial hygienist during the period of time in which this

1 defendant engaged in the manufacture, sale and distribution of
2 asbestos-containing products. Mr. Hazard has retired from this
3 defendant's employ and currently resides in Toledo, Ohio. This
4 defendant objects to further answering this interrogatory on
5 the grounds that it seeks information not relevant to the
6 subject matter of this litigation and not reasonably calculated
7 to lead to the discovery of admissible evidence except as it
8 relates to the period of time within which this defendant
9 manufactured its asbestos-containing products.

10 RESPONSE TO INTERROGATORY NO. 36:

11 This defendant ceased the manufacture, sale and
12 distribution of asbestos-containing products in 1958. This
13 defendant is aware that the following present or former
14 employees have testified at trial or by deposition in
15 asbestos-related litigation:

16 Edward C. Ames	10/8/79, 1/10/80, 2/12/81, 3/26/81 and 10/7/81.
17 Robert Grim	9/6 & 7/84 (trial), 10/11/84 (trial), and 7/1/87 (trial).
18 Richard L. Grimmie	7/10/79, 10/24/79 (trial) and 19 10/29/79 (trial).
20 David Innis	9/27/83.
21 William Justice	7/11/79 and 5/3/82.
22 John Pershing	7/26/79.
23 John Rhoads	7/11/79.
24 June Welser	7/11/79.
25 Everett Shuman	4/26/79, 6/12/79, 7/15/80, 26 8/19/80, and 3/4/81.
27 Willis G. Hazard	2/11/81, 3/27/81, 12/14/81, 28 1/27/82.

1 Richard R. Beck 4/1/81.

2 Samuel F. Schillaci 4/7/81, 7/31/81 (trial),
3 11/9/81 (trial), 11/17/81,
4 4-26-27/82, 6/4/84, 8/28/84,
5 9/6/84, 11/14/84, 2/5/85,
6 3/4/85 (trial), 4/30/85,
7 12/19/85 (trial), 10/8/86,
8 4/10/87 (trial), 6/25/87
9 (trial), 11/4/87 (trial),
10 1/20/88 (trial), 10/15/88
11 (trial), 11/22/88 (trial),
12 11/29/88 (trial), 12/8/88
13 (trial), and 12/15/88 (trial).

8 George N. Bates, 4/6/81.
9 M.D.

10 Thomas A. Meehan, 8/3/81 (trial), 11/9/81
11 Esq. (trial), 12/15/83, 1/16/84,
12 8/28/84, 6/4/84, and 11/13/84.

12 Effective April 30, 1958, this defendant sold its
13 asbestos-containing product manufacturing division to
14 Owens-Corning Fiberglas Corporation. At that time certain
15 employees who worked in the division, some of whom are
16 mentioned above, transferred to Owens-Corning Fiberglas
17 Corporation. These individuals have been deposed with regard
18 to asbestos-related litigation involving Owens-Corning
19 Fiberglas Corporation.

20 This defendant objects to the production of copies of
21 the transcripts of these depositions on the basis that said
22 transcripts are filed with various courts around the country,
23 they are therefore matters of public record, and therefore
24 plaintiffs have equal access to such documents. Defendant
25 reserves the right to advance additional arguments against the
26 production of such documents if and when plaintiffs file a
27 request for production.
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RESPONSE TO INTERROGATORY NO. 37:

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 has been unable to find any information in its records which would enable it to further answer this interrogatory, although its investigation into the subject matter referred to in this interrogatory is continuing. This defendant was not a member of any of the other organizations about which this interrogatory inquires.

RESPONSE TO INTERROGATORY NO. 38:

Refer to answer to Interrogatory No. 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 further answer this interrogatory.

1 RESPONSE TO INTERROGATORY NO. 39:

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

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

15 This defendant's counsel obtained copies of some of
16 the papers and reports produced by Mr. Logie. However, these
17 copies constitute only a portion of a larger volume of papers
18 and reports which this defendant has not copied. They are
19 available through Winne, Banta, Rizzi, Hetherington &
20 Basralian, 25 E. Salem Street, Hackensack, New Jersey. This
21 defendant also has reason to believe that plaintiffs' counsel
22 has copies of the documents produced by Mr. Logie. Other
23 documents possibly relating to this interrogatory may have been
24 produced by Owens-Corning Fiberglas Corporation in the asbestos
25 litigation.....

26 Those documents found at Saranac Lake and at
27 Owens-Corning Fiberglas Corporation and elsewhere, indicate
28 that during the period of time when Owens-Illinois was in the

1 business of manufacturing asbestos-containing products, the
2 state of government, industrial hygiene and medical community
3 knowledge was that there was a recognized safe exposure level
4 for asbestos dust and that persons installing insulation were
5 not exposed to excessive or hazardous levels of asbestos dust.
6 The foregoing documents also indicate that Kaylo plant
7 employees were x-rayed periodically and displayed no
8 asbestos-related chest disease; that this defendant made
9 appropriate efforts to provide ventilation and to control the
10 emissions of all dust emitted during the manufacturing process
11 within recognized safe levels of exposure, including the use of
12 respirators in some instances, dust collection equipment and
13 other devices as necessary; and that therefore during the
14 period in which this defendant was in the business of
15 manufacturing Kaylo it had no reason to believe that the
16 foreseeable use of Kaylo would create a hazard to users.

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

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

1 RESPONSE TO INTERROGATORY NO. 40:

2 During the period of time pertinent to these actions,
3 this defendant did not maintain an entity which would be
4 characterized as an industrial hygiene, medicine, safety and/or
5 engineering library. However, this defendant believes that a
6 separate engineering library may have been maintained by its
7 technical facility.

8 RESPONSE TO INTERROGATORY NO. 41:

9 This defendant objects to this interrogatory insofar
10 as it may seek to discovery work product of counsel and trial
11 preparation material. Without waiving the above objection,
12 this defendant states that it ceased the manufacture, sale and
13 distribution of asbestos-containing products and does not have
14 any records of having interchanged any of the materials
15 referred to in this interrogatory with any of the other
16 defendants named in this case; however, this defendant states
17 that defendant Owens-Corning Fiberglas Corporation was entitled
18 to receive and may have received from this defendant material
19 of the type specified in this interrogatory pursuant to an
20 Agreement dated March 9, 1958 by which this defendant sold the
21 Kaylo Division to Owens-Corning Fiberglas Corporation, if in
22 fact this defendant had any material of said type at that
23 time. This defendant's investigation into the subject matter
24 of this interrogatory is continuing.

25 RESPONSE TO INTERROGATORY NO. 42:

26 This defendant states that no such testimony has been
27 given and that no such documents have been given and that no
28 such documents have been presented or utilized. This defendant

1 ceased activities in the business involved in this litigation
2 in mid-1958.

3 RESPONSE TO INTERROGATORY NO. 43:

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

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

17 This defendant's counsel obtained copies of some of
18 the papers and reports produced by Mr. Logie. However, these
19 copies constitute only a portion of a larger volume of papers
20 and reports which this defendant has not copied. They are
21 available through Winne, Banta, Rizzi, Hetherington &
22 Basralian, 25 E. Salem Street, Hackensack, New Jersey. This
23 defendant also has reason to believe that plaintiffs' counsel
24 has copies of the documents produced by Mr. Logie. Other
25 documents possibly relating to this interrogatory may have been
26 produced by Owens-Corning Fiberglas Corporation in the asbestos
27 litigation.

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

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

24 To the extent that this interrogatory seeks the
25 production of documents, such documents, as outlined in this
26 response, have not been found as part of this defendant's
27 records and, to the extent that this defendant is in possession
28 of copies of documents, it possesses copies only of documents

1 collected in preparation for litigation. This defendant
2 objects to producing the same. The documents are available
3 from their proper source.

4 RESPONSE TO INTERROGATORY NO. 44:

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

9 RESPONSE TO INTERROGATORY NO. 45:

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

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

23 This defendant's counsel obtained copies of some of
24 the papers and reports produced by Mr. Logie. However, these
25 copies constitute only a portion of a larger volume of papers
26 and reports which this defendant has not copied. They are
27 available through Winne, Banta, Rizzi, Hetherington &
28 Basralian, 25 E. Salem Street, Hackensack, New Jersey. This

1 defendant also has reason to believe that plaintiffs' counsel
2 has copies of the documents produced by Mr. Logie. Other
3 documents possibly relating to this interrogatory may have been
4 produced by Owens-Corning Fiberglas Corporation in the asbestos
5 litigation.

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

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

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

9 RESPONSE TO INTERROGATORY NO. 46:

10 This defendant ceased the manufacture, sale and
11 distribution of asbestos-containing products in 1958, and does
12 not have any records from which it can obtain information
13 sufficient to enable it to answer this interrogatory.
14 Documents which have been located in places other than
15 asbestos-containing products, Inc., indicate that plant workers
16 received periodic chest x-rays pursuant to established company
17 policy, that such x-rays and related health evaluations showed
18 no asbestos-related plant worker lung disease.

19 RESPONSE TO INTERROGATORY NO. 47:

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

1 RESPONSE TO INTERROGATORY NO. 48:

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

6 RESPONSE TO INTERROGATORY NO. 49:

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

13 RESPONSE TO INTERROGATORY NO. 50:

14 This defendant objects to this interrogatory on the
15 basis that it seeks information which is not relevant to the
16 subject matter of this litigation and is not reasonably
17 calculated to lead to the discovery of admissible evidence.
18 Without waiving the above objection, this defendant received
19 its first lawsuit alleging asbestos-related disease in 1975.

20 RESPONSE TO INTERROGATORY NO. 51:

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

25 RESPONSE TO INTERROGATORY NO. 52:

26 During the period in which this defendant engaged in
27 the manufacture of its asbestos-containing products, it

1 received no workers' compensation claims for any
2 asbestos-related disease.

3 RESPONSE TO INTERROGATORY NO. 53:

4 This defendant objects to this interrogatory on the
5 ground that it seeks irrelevant and immaterial information
6 which is not reasonably calculated to lead to the discovery of
7 admissible evidence. Expressly reserving and without waiving
8 its objections, and subject to them, this defendant states that
9 the issues surrounding its insurance coverage for asbestos
10 claims are complex. Because of disputes over possible
11 insurance coverage, this defendant has engaged in litigation
12 against certain insurance carriers which may provide coverage
13 for asbestos claims. One such lawsuit resulted in a decision
14 of the United States District Court of the District of Columbia
15 in Owens-Illinois, Inc. v. Aetna Casualty and Surety Company,
16 597 F.Supp. 1515 (D.D.C. 1984).

17 The litigation between this defendant and Aetna
18 Casualty and Surety Co. has been settled. The terms and
19 conditions of the settlement agreement are confidential, and as
20 a consequence, the parties are precluded from disclosing the
21 terms or contents of the agreement. Litigation with other
22 insurance carriers is ongoing.

23 RESPONSE TO INTERROGATORY NO. 54:

24 This defendant objects to this interrogatory on the
25 basis that it seeks information which is not relevant to the
26 subject matter of this litigation and is not reasonably
27 calculated to lead to the discovery of admissible evidence,
28 except as it relates to the period of time during which this

1 defendant engaged in the manufacture, sale and distribution of
2 its asbestos-containing products. Without waiving its
3 objection, the answer this defendant has found no records that
4 it owned or operated any such business.

5 RESPONSE TO INTERROGATORY NO. 55:

6 Refer to objection to Interrogatory No. 54.

7 RESPONSE TO INTERROGATORY NO. 56:

8 This defendant was not provided with Interrogatory
9 No. 56.

10 RESPONSE TO INTERROGATORY NO. 57:

11 This defendant objects to this interrogatory as being
12 vague, ambiguous, unintelligible, irrelevant, overly broad,
13 burdensome and oppressive, not reasonably calculated to lead to
14 the discovery of admissible evidence and not limited to any
15 issue which is the subject of this case. Without waiving the
16 above objection, this defendant has found no records that it
17 ever had such an arrangement.

18 DATED: August 4, 1989.

19 MORGENSTEIN & JUBELIRER

20
21 By Karlin Gould
22 Karlin Gould
23 Attorney for Owens-Illinois,
24 Inc.
25
26
27
28

AFFIDAVIT

STATE OF OHIO)

)SS:

COUNTY OF LUCAS)

A. H. SMITH, 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.

A. H. Smith

A. H. SMITH

SWORN TO and subscribed
before me this 1st day
of August, 1989.

Dianne M. Gempel

Notary Public

My Commission Expires:

DIANNE M. GEMPEL
Notary Public, State of Ohio
My Commission Expires August 27, 1991

EXHIBIT I

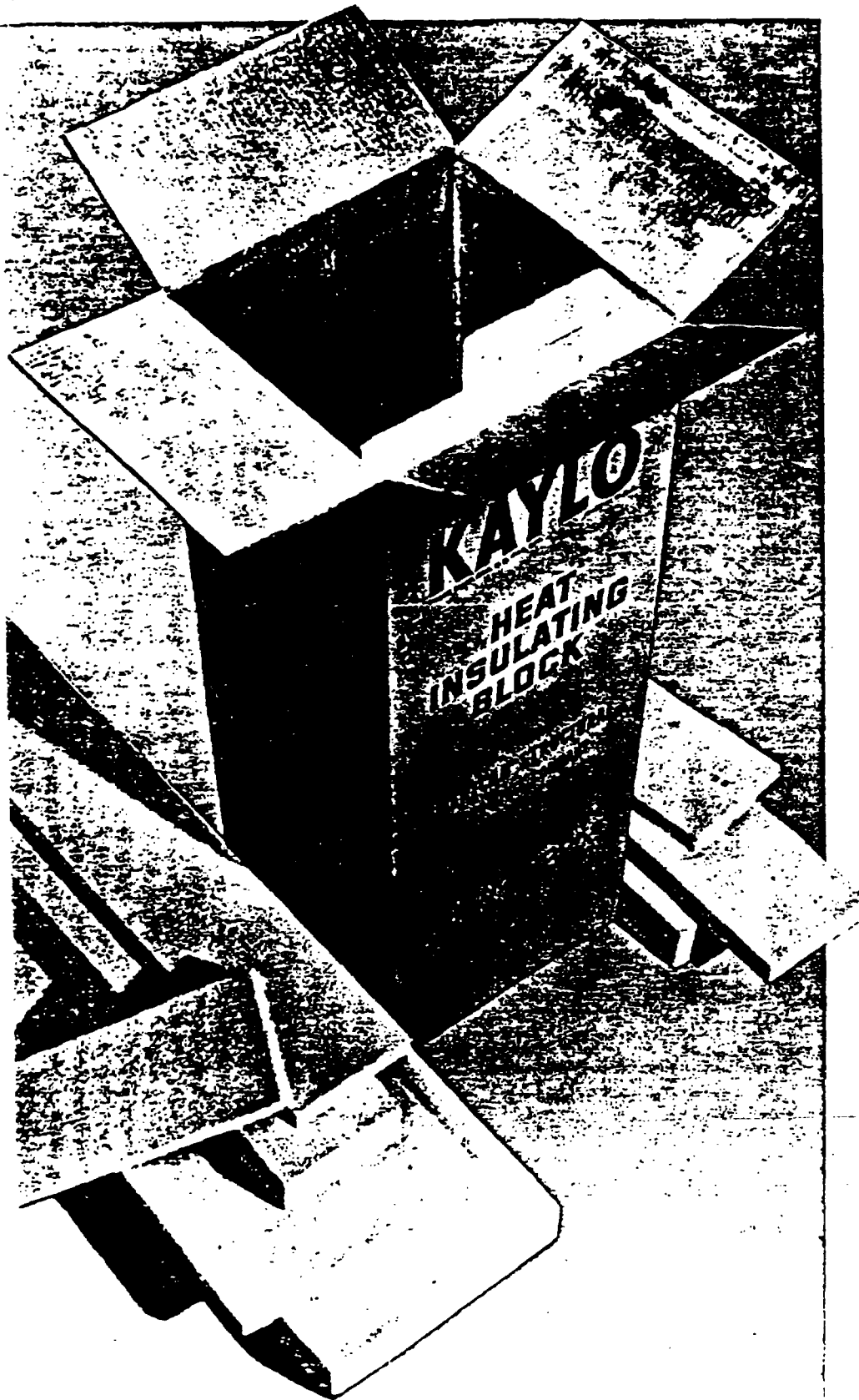
NEW

KAYLO

HEAT INSULATING BLOCK
For Temperatures up to 1200° F.

**AMERICAN STRUCTURAL
PRODUCTS COMPANY
TOLEDO, OHIO
OWENS-ILLINOIS GLASS COMPANY**

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



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.

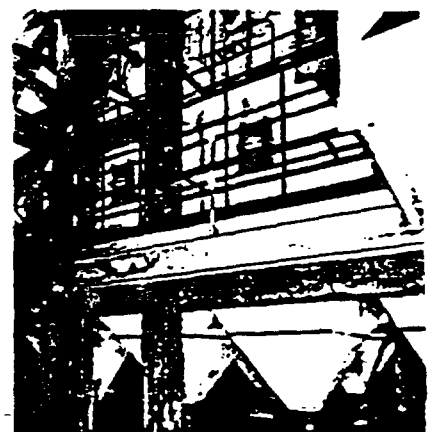
Few new products of any kind have been so thoroughly researched before being placed on the market. Kaylo Heat Insulating Block is the achievement of many years' work by Owens-Illinois Glass Company engineers, physicists and chemists.

No other material, new or old, so effectively combines the most desirable characteristics of the ideal insulation.

For instance . . .

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. It greatly reduces weight—an important advantage on ships, for an example.



Notice the clean, straight edges on these insulated precipitator hoppers. Applicators find it easy to do this kind of work with Kaylo Heat Insulating Block because they are so easy to cut and yet they have a relatively high flexural strength. The walls above the hoppers are also insulated with Kaylo Heat Insulating Block.

LOW THERMAL CONDUCTIVITY

The coefficient of conductivity, or K'' , of Kaylo Heat Insulating Block, as shown on the chart on page four, 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 90% 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

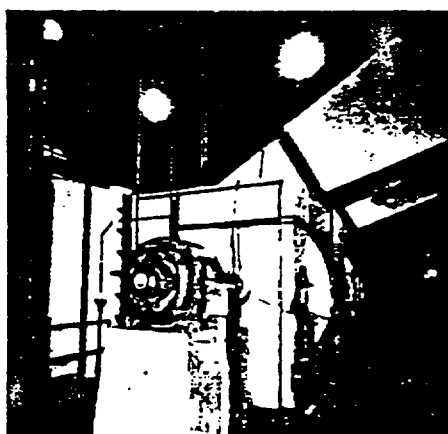
Lengths (inches)	Widths (inches)	Thicknesses (inches)
36	6	1
36	6	1½
36	6	2
36	6	2½
36	6	3
36	12	1
36	12	1½
36	12	2
36	12	2½
36	12	3

Other sizes are available on special order.

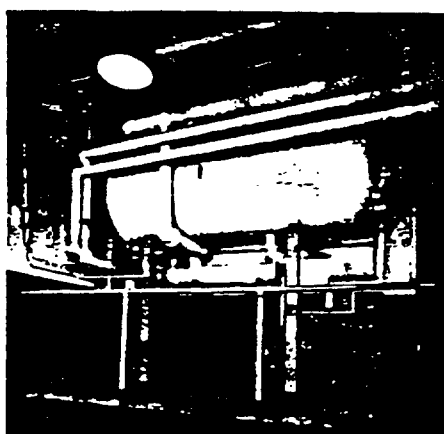
AND A REMARKABLE VERSATILITY



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 precipitator. Workmen are laying block over 6" x 6" wire mesh welded to the stiffeners. The block are then covered with finishing cement and asphalt mastic 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.

PRINCIPAL FEATURES OF KAYLO HEAT INSULATING BLOCK

HIGHLY EFFICIENT



EXTREMELY LIGHTWEIGHT



EASY TO APPLY



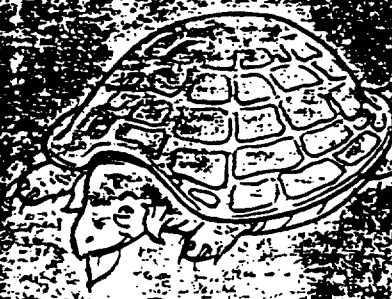
HIGH COMPRESSIVE STRENGTH



FIREPROOF



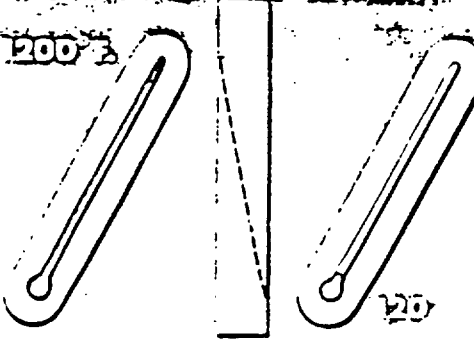
DURABLE



NO ADDED BINDER



EFFECTIVE OVER WIDE
TEMPERATURE RANGE



PHYSICAL CHARACTERISTICS AT A GLANCE

DENSITY Approximately 11 lb. per cu. ft.

FLEXURAL STRENGTH 50 lb. per sq. in.

COMPRESSIVE STRENGTH (0.5% deformation) 150 lb. per sq. in.

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%

RESISTANCE TO ABRASION

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

Before heating 2.2%

After heating for 24 hours

at 750° F. 2.1%

at 1000° F. 2.7%

at 1200° F. 6.9%

DIMENSIONAL STABILITY

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%

MOISTURE ABSORPTION (volume)

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

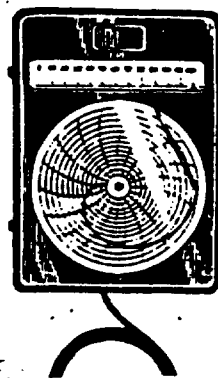
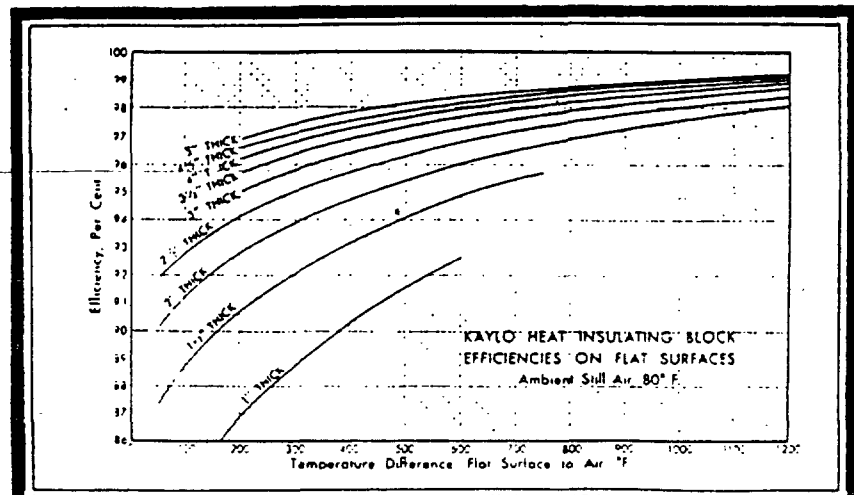
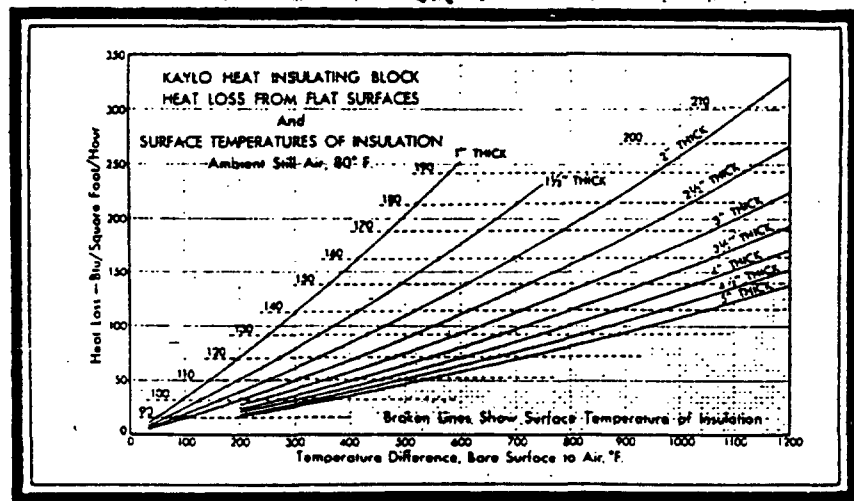
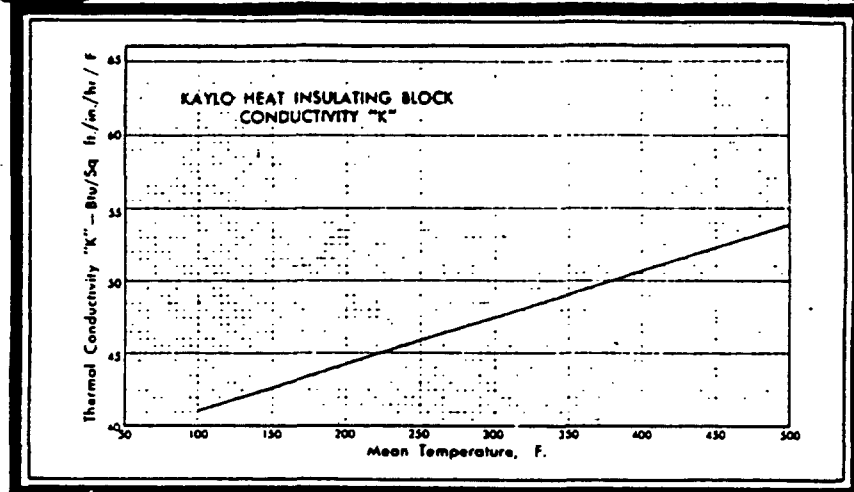
CONDUCTIVITY

At 300° F. mean temperature 0.474



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 Pits |
| Heat Exchangers | Boilers |
| Condensers | Precipitators |
| 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 Structural Products Company, Toledo 1, Ohio. Subsidiary of Owens-Illinois Glass Company.

NEW

KAYLO®

HEAT INSULATING BLOCK



For Temperatures

Up To 1200° F.

**AMERICAN STRUCTURAL
PRODUCTS COMPANY**

Toledo 7, Ohio

Subsidiary of OWENS ILLINOIS GLASS COMPANY

A new heat ins



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.

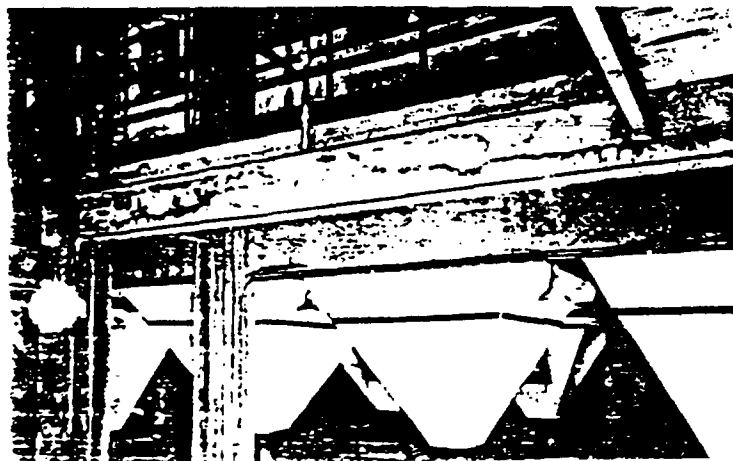
HIGH FLEXURAL STRENGTH. Its flexural strength is higher than the normal requirements for heat insulation of this type. This strength makes for easy handling and application, and contributes to long service with low maintenance.

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.

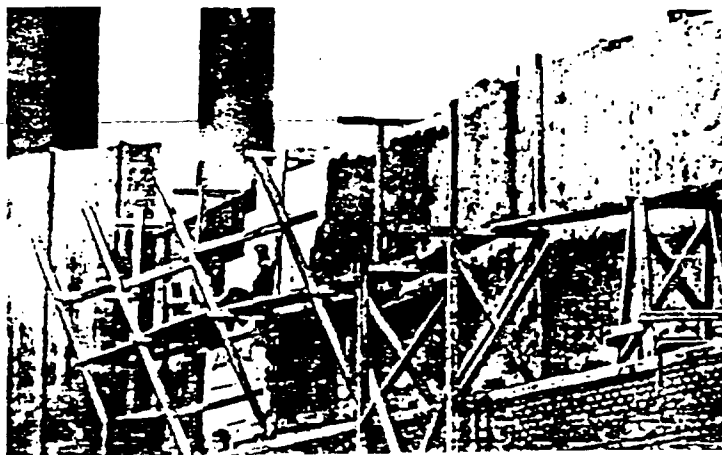
EASY TO APPLY. Kaylo Heat Insulating Blocks are clean-cut and trim. They are easy to fit into place to



Notice the clean, straight edges on these insulated precipitator boppers. Applicators find it 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.



lation

VANTAGES...

ake a good-looking installation. Their "feel" is pleasant and non-irritating. They can be cut, scored and sawed with ordinary woodworking 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. 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.

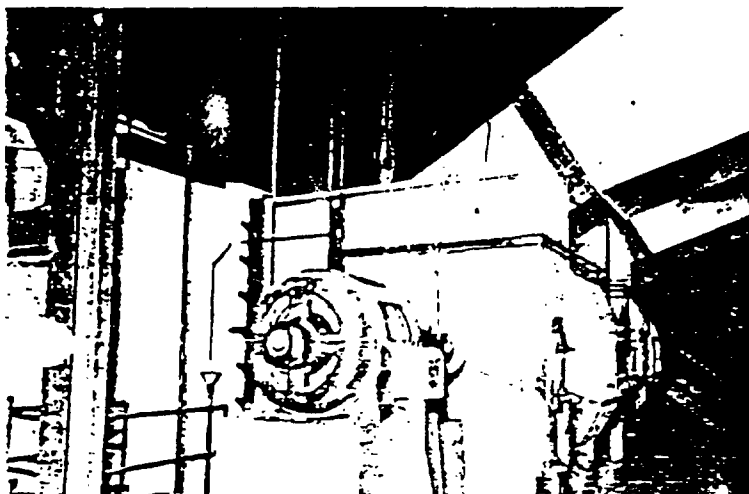
TYPICAL APPLICATIONS:

Indoor or outside, for large installations or small, up to 1200° F., use Kaylo Heat Insulating Block to insulate:

Breechings	Heat Exchangers	Turbines
Hot Air Ducts	Condensers	Chilling Pits
Tanks	Lehrs	Boilers
Towers	Autoclaves	Precipitators
Dryers	Ovens	Locomotives
Evaporators	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 within the room at comfortable levels.



PHYSICAL CHARACTERISTICS

DENSITY..... Approximately 11 lb. per cu. ft.

FLEXURAL STRENGTH..... 50 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..... 5.5%

at 750° F..... 7.9%

at 1000° F..... 9.8%

at 1200° F..... 0.2%

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..... 5.7%

at 1200° F..... 6.9%

DIMENSIONAL STABILITY

Linear shrinkage after heating for 24 hours

at 750° F..... 0.8%

at 1000° F..... 0.9%

at 1200° F..... 1.5%

Elongation after saturation (max.)..... 0.04%

MOISTURE ABSORPTION (volume)

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

CONDUCTIVITY (K)

At 100° F. mean temperature..... 0.41

At 500° F. mean temperature..... 0.54

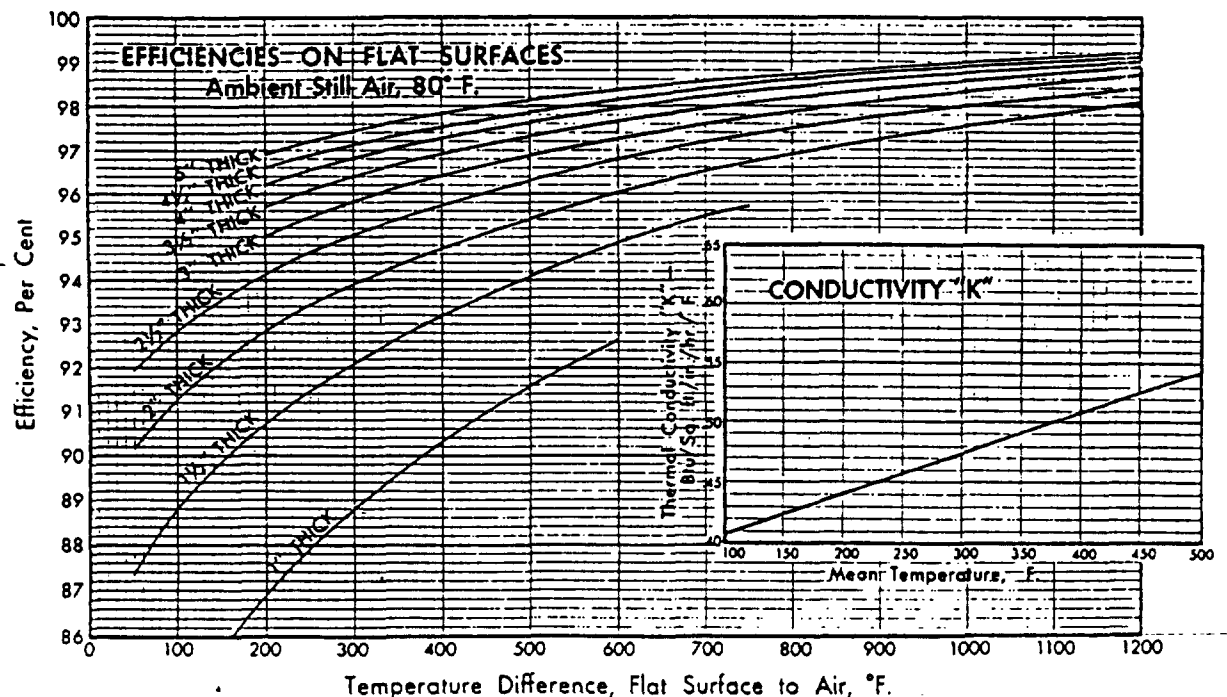
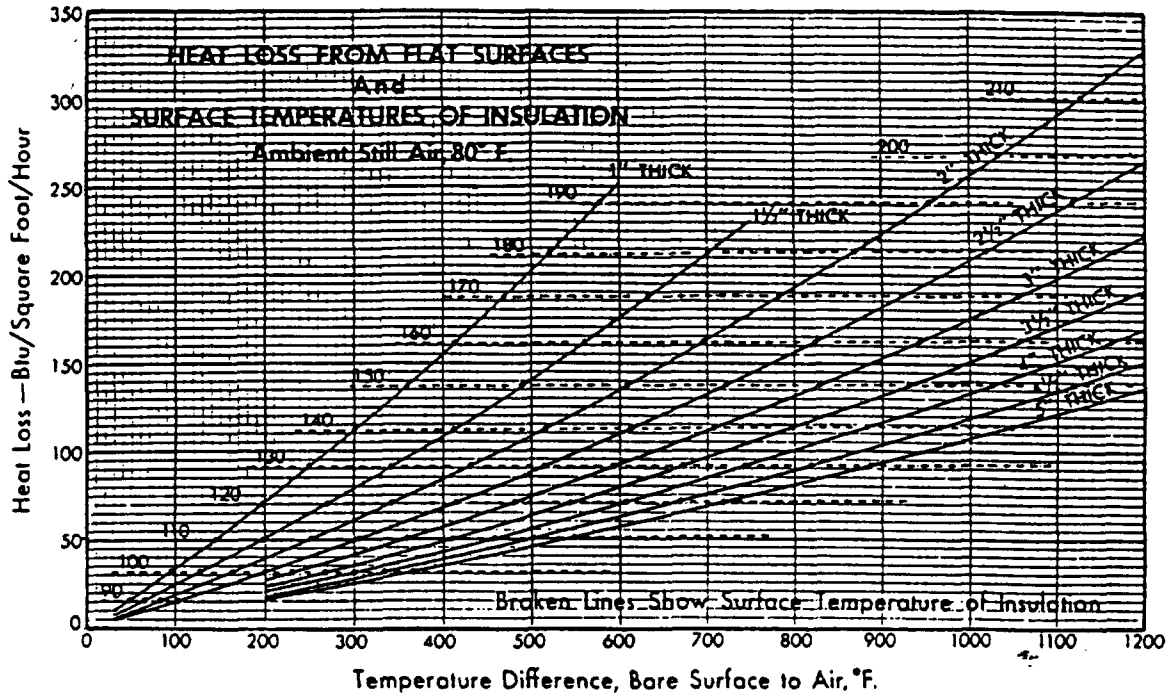
STANDARD SIZES

LENGTH (inches)	WIDTH (inches)	THICKNESS (inches)
36	6	1
36	6	1 1/2
36	6	2
36	6	2 1/2
36	6	3
36	12	1
36	12	1 1/2
36	12	2
36	12	2 1/2



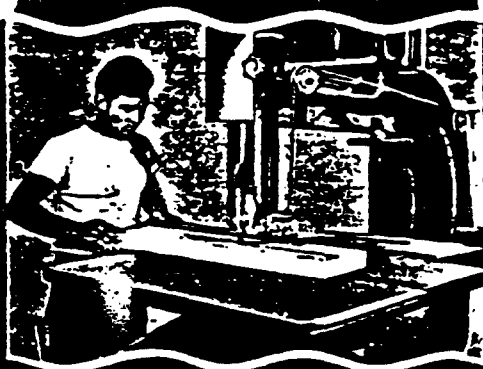
HEAT INSULATING BLOCK

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.

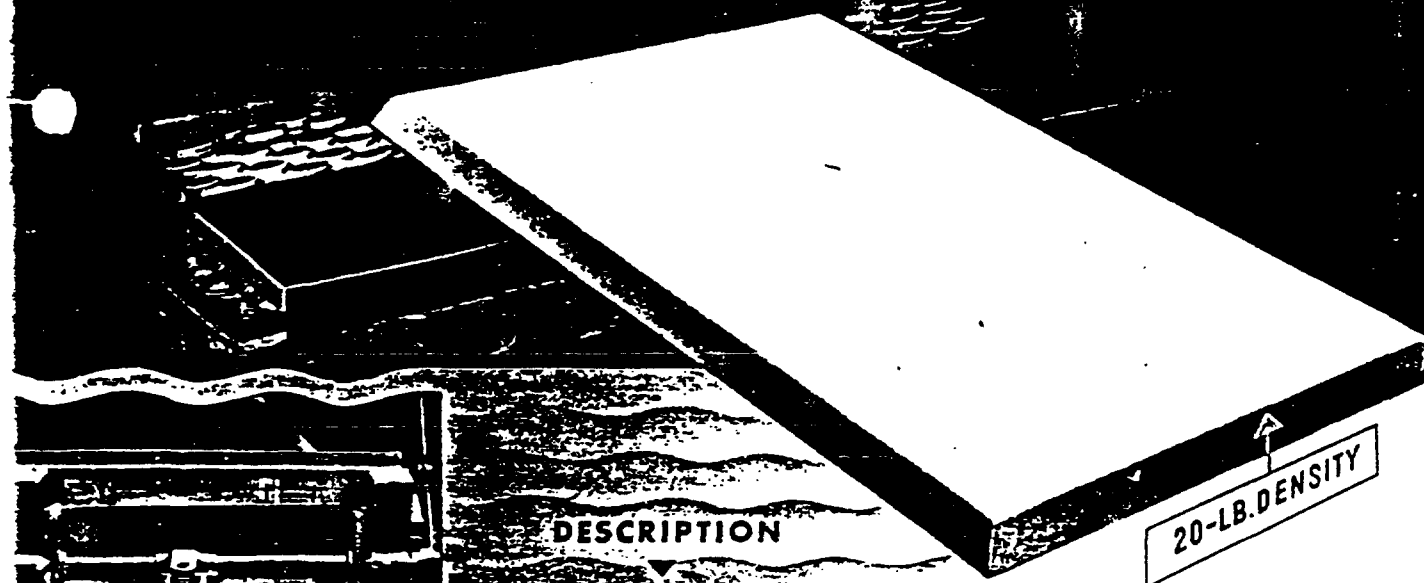
More detailed information on Kaylo Heat Insulating Block is available on request.



KAYLO®

20-LB. DENSITY

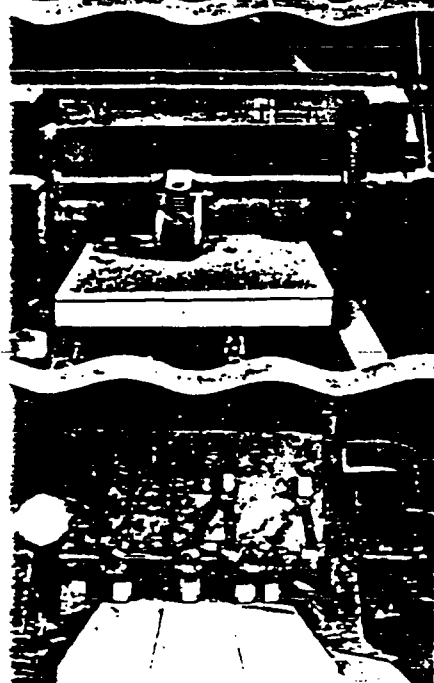
STRUCTURAL INSULATING BLOCK



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 develop 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 dry basis from 19.5 to 22 lb.), has a compressive strength of approximately 500 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[®] STRUCTI

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

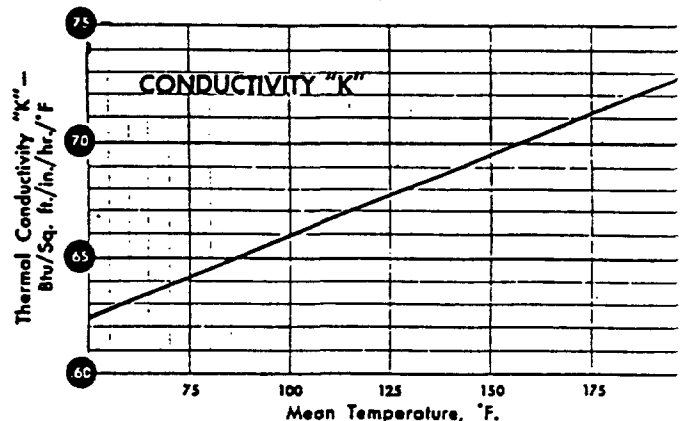
Light Weight—Nominal 20-lb. density Kaylo Block is about a third lighter than yellow pine. On an oven-dry basis it weighs from 19.5 to 22 pounds per cubic foot.

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 hazard classification for building material.

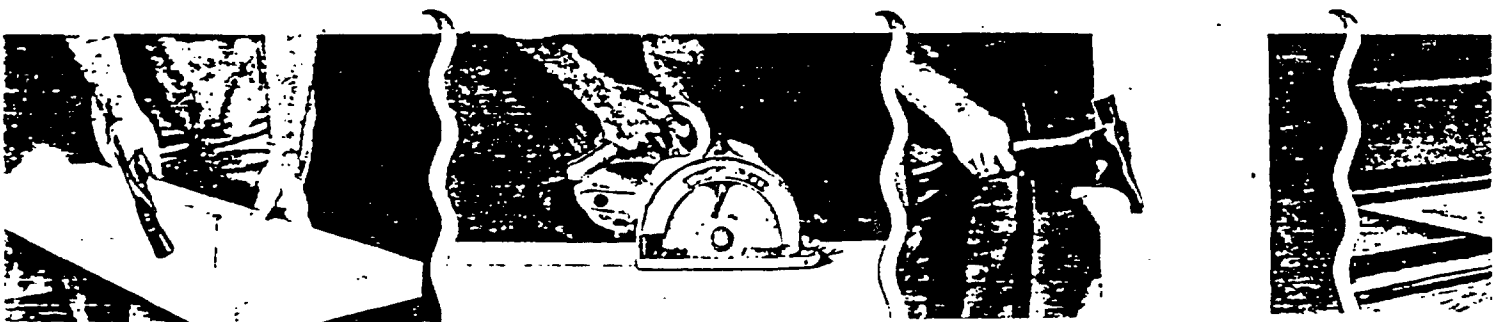


Good Insulation Value—At low mean temperatures Kaylo Structural Insulating Block is one of the most efficient structural mineral insulations. At high mean temperatures it still compares favorably with heat insulating materials of its own weight.

High Light Reflectivity—Where 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 it instead constitutes its own binder. Hence its characteristics are not modified as to temperature limit, solubility, insulation value, fire resistance or otherwise by "binding" limitations.



L 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 throughout its mass, and to give it off to surrounding air of lower moisture content.

As 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 be 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.

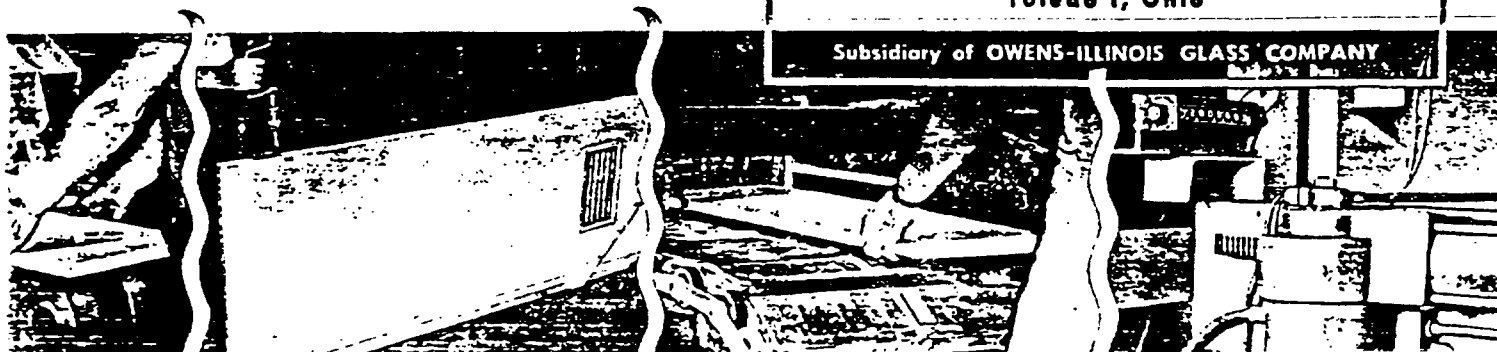
Certain thicknesses are suggested by certain building requirements. A thickness of from 1¾ to 2 inches of Kaylo Structural Insulating Block is required to withstand a typical building fire for one hour—usually somewhat more for a partition than for a door because of the greater performance required of 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

Subsidiary of OWENS-ILLINOIS GLASS COMPANY



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 which may be used with 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. These have been found to provide a tensile strength of 35 lb. per sq. in. and a minimum shear strength of 100 lb. per sq. in. when cured in the manner indicated.)

ADHESIVES FOR JOINING STRUCTURAL INSULATING BLOCK TO:

KAYLO

ADHESIVES FOR JOINING LIKE MATERIALS:

Wood Veneer	Aluminum	Stainless Steel	Insulating Block to Insulating Block	Aluminum to Aluminum	Stainless Steel to Stainless Steel
Durite No. 3026A 3026AWH207 3026AWF	Durite No. 3026A Pecora 718 Weldwood Insolute No. 1	Durite No. 3026 No. A, NH267 N100 3 MEC 826	Durite 3026A Penacolite G1131 Weldwood Insolute 1 G. E. 2142 Plaskon 911 Selectron 5003	Vulcalock Dupont 4653 Dupont 4646 G. E. 7031 Bostik 7026 Bostik EXE 138 Redux	Dupont 4653 G. E. 7031 Bostik 7026 Bostik EXE 138 Redux
Penacolite G1131	Interlake 4162 Vulcalock Dupont 4653	Weldwood Insolute No. 1 Interlake 4162 Vulcalock	G. E. 2142 Plaskon 911 Selectron 5003 Vinylseal MA 28-18 Amberlite PR14	G. E. 7031 Bostik 7026 Bostik EXE 138 Redux	G. E. 7031 Bostik 7026 Bostik EXE 138 Redux
Pecora 718	Dupont 4646 G. E. 2142 G. E. 7031	3 MEC 826 Weldwood Insolute No. 1 Interlake 4162 Vulcalock Dupont 4653 Dupont 4646 G. E. 2142 G. E. 7031	Weldwood Insolute 1 G. E. 2142 Plaskon 911 Selectron 5003 Vinylseal MA 28-18 Amberlite PR14 Bostik 7026 Bostik EXE 138 Sodium Silicate Redux Synco X-8348 + 130LW (DW)	G. E. 7031 Bostik 7026 Bostik EXE 138 Redux	G. E. 7031 Bostik 7026 Bostik EXE 138 Redux
Catabond 720	Vinylseal MA 28-18 Amberlite PR14 Bostik EXE 138 Redux	Insolute No. 1 Interlake 4162 Vulcalock Dupont 4653 Dupont 4646 G. E. 2142 G. E. 7031 Vinylseal MA 28-18 Amberlite PR14 Bostik EXE 138 Redux	Weldwood Insolute 1 G. E. 2142 Plaskon 911 Selectron 5003 Vinylseal MA 28-18 Amberlite PR14 Bostik 7026 Bostik EXE 138 Sodium Silicate Redux Synco X-8348 + 130LW (DW)	G. E. 7031 Bostik 7026 Bostik EXE 138 Redux	G. E. 7031 Bostik 7026 Bostik EXE 138 Redux
Vinylseal MA 28-18	Dupont 4653 Dupont 4646 G. E. 2142 G. E. 7031 Vinylseal MA 28-18 Amberlite PR14 Bostik EXE 138 Redux	3 MEC 826 Weldwood Insolute No. 1 Interlake 4162 Vulcalock Dupont 4653 Dupont 4646 G. E. 2142 G. E. 7031 Vinylseal MA 28-18 Amberlite PR14 Bostik EXE 138 Redux	Weldwood Insolute 1 G. E. 2142 Plaskon 911 Selectron 5003 Vinylseal MA 28-18 Amberlite PR14 Bostik 7026 Bostik EXE 138 Sodium Silicate Redux Synco X-8348 + 130LW (DW)	G. E. 7031 Bostik 7026 Bostik EXE 138 Redux	G. E. 7031 Bostik 7026 Bostik EXE 138 Redux
Amberlite PR14	Dupont 4653 Dupont 4646 G. E. 2142 G. E. 7031 Vinylseal MA 28-18 Amberlite PR14 Bostik EXE 138 Redux	3 MEC 826 Weldwood Insolute No. 1 Interlake 4162 Vulcalock Dupont 4653 Dupont 4646 G. E. 2142 G. E. 7031 Vinylseal MA 28-18 Amberlite PR14 Bostik EXE 138 Redux	Weldwood Insolute 1 G. E. 2142 Plaskon 911 Selectron 5003 Vinylseal MA 28-18 Amberlite PR14 Bostik 7026 Bostik EXE 138 Sodium Silicate Redux Synco X-8348 + 130LW (DW)	G. E. 7031 Bostik 7026 Bostik EXE 138 Redux	G. E. 7031 Bostik 7026 Bostik EXE 138 Redux
Bostik 7026	Dupont 4653 Dupont 4646 G. E. 2142 G. E. 7031 Vinylseal MA 28-18 Amberlite PR14 Bostik EXE 138 Redux	3 MEC 826 Weldwood Insolute No. 1 Interlake 4162 Vulcalock Dupont 4653 Dupont 4646 G. E. 2142 G. E. 7031 Vinylseal MA 28-18 Amberlite PR14 Bostik EXE 138 Redux	Weldwood Insolute 1 G. E. 2142 Plaskon 911 Selectron 5003 Vinylseal MA 28-18 Amberlite PR14 Bostik 7026 Bostik EXE 138 Sodium Silicate Redux Synco X-8348 + 130LW (DW)	G. E. 7031 Bostik 7026 Bostik EXE 138 Redux	G. E. 7031 Bostik 7026 Bostik EXE 138 Redux
Redux	Dupont 4653 Dupont 4646 G. E. 2142 G. E. 7031 Vinylseal MA 28-18 Amberlite PR14 Bostik EXE 138 Redux	3 MEC 826 Weldwood Insolute No. 1 Interlake 4162 Vulcalock Dupont 4653 Dupont 4646 G. E. 2142 G. E. 7031 Vinylseal MA 28-18 Amberlite PR14 Bostik EXE 138 Redux	Weldwood Insolute 1 G. E. 2142 Plaskon 911 Selectron 5003 Vinylseal MA 28-18 Amberlite PR14 Bostik 7026 Bostik EXE 138 Sodium Silicate Redux Synco X-8348 + 130LW (DW)	G. E. 7031 Bostik 7026 Bostik EXE 138 Redux	G. E. 7031 Bostik 7026 Bostik EXE 138 Redux
Synco X-8348 + 130LW (DW)	Dupont 4653 Dupont 4646 G. E. 2142 G. E. 7031 Vinylseal MA 28-18 Amberlite PR14 Bostik EXE 138 Redux	3 MEC 826 Weldwood Insolute No. 1 Interlake 4162 Vulcalock Dupont 4653 Dupont 4646 G. E. 2142 G. E. 7031 Vinylseal MA 28-18 Amberlite PR14 Bostik EXE 138 Redux	Weldwood Insolute 1 G. E. 2142 Plaskon 911 Selectron 5003 Vinylseal MA 28-18 Amberlite PR14 Bostik 7026 Bostik EXE 138 Sodium Silicate Redux Synco X-8348 + 130LW (DW)	G. E. 7031 Bostik 7026 Bostik EXE 138 Redux	G. E. 7031 Bostik 7026 Bostik EXE 138 Redux

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.

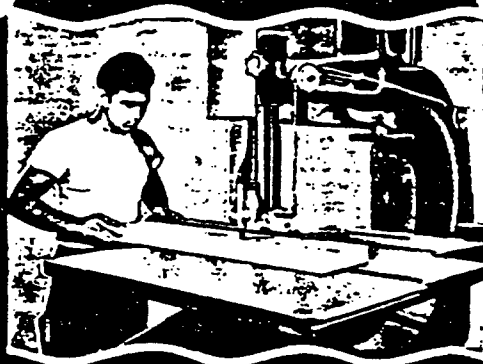
High-frequency curing has been tried successfully on an experimental basis with wood, aluminum and stainless steel bonded to a Kaylo insulating core. Many of the manufacturers making the above listed adhesives can provide adhesives suitable for high-frequency curing.

**AMERICAN STRUCTURAL
PRODUCTS COMPANY**

TOLEDO 1, OHIO

Subsidiary of OWENS-ILLINOIS GLASS COMPANY

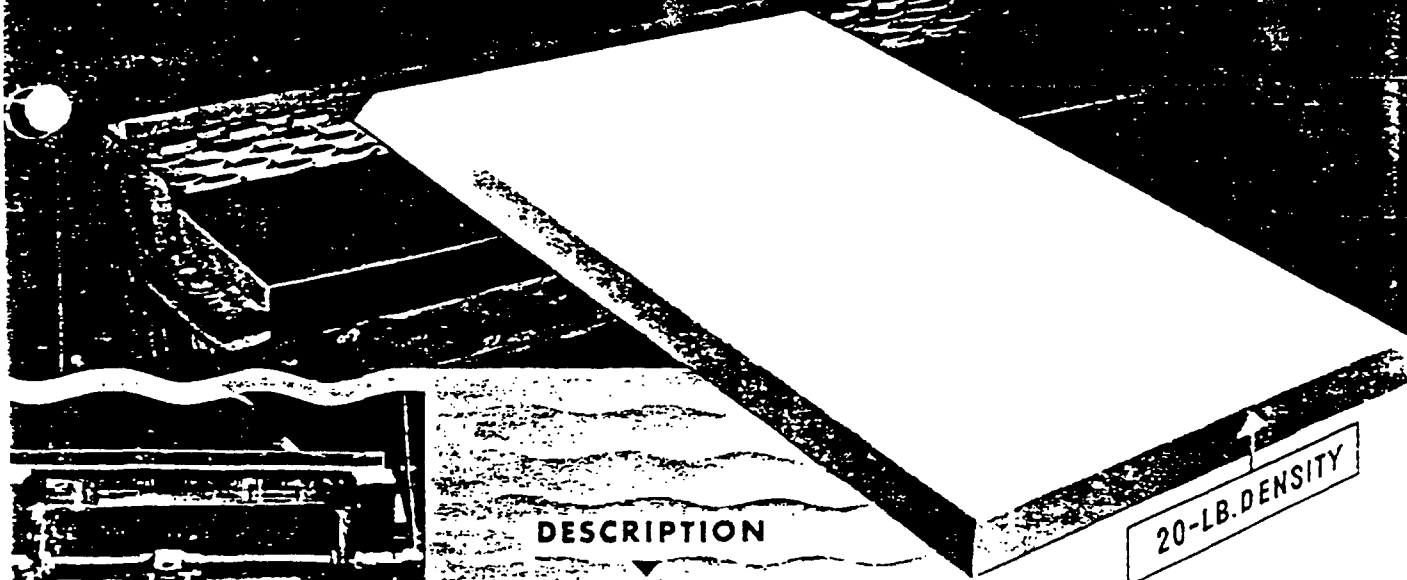
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KAYLO®

20-LB. DENSITY

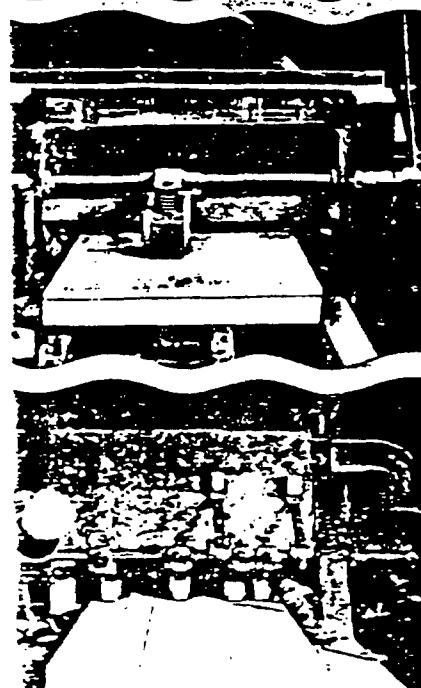
STRUCTURAL INSULATING BLOCK



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 develop 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 dry basis from 19.5 to 22 lb.). has a compressive strength of approximately 500 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®

**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

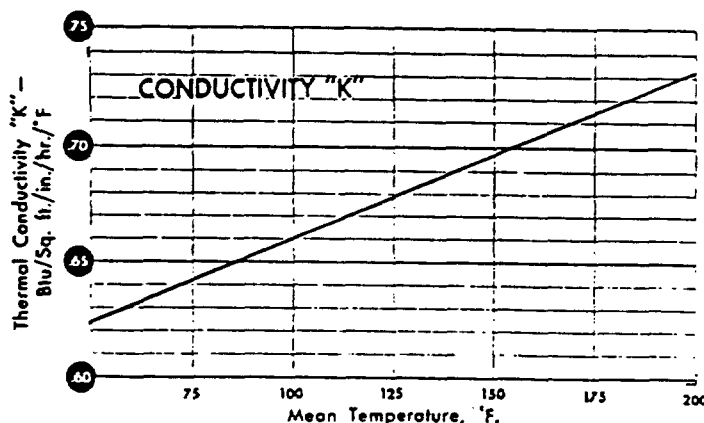
Light Weight—Nominal 20-lb. density Kaylo Block is about a third lighter than yellow pine. On an oven-dry basis it weighs from 19.5 to 22 pounds per cubic foot.

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

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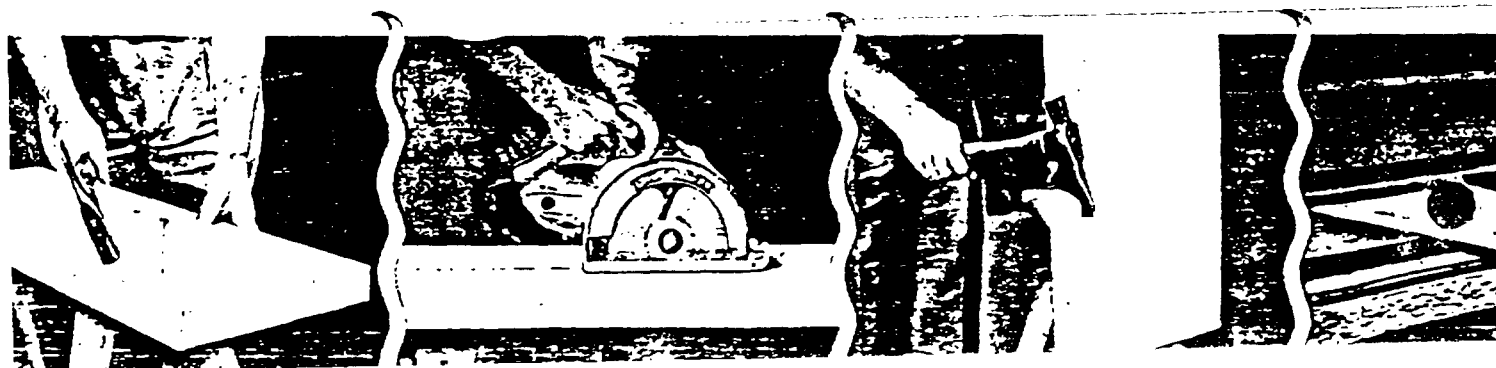


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Consistent with the common practice for good construction involving porous insulating materials of high internal surface area, Kaylo Structural Insulating Block should be sealed against moisture on the warm side when it is subjected to extremely low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

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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



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 with 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 not 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



STRUCTURAL INSULATING BLOCK TO:

Wood Veneer or Paper or Plastics		Steel, Stainless Steel Galvaneal, or Aluminum		Kaylo Insulating Block or Cement-Asbestos Board	
Durite No. 3026A	A	Durite No. 3026A or No. A NM267	A	Durite 3026A	A
Penacolite G1131	A	NI100	C	Penacolite G1131	A
Pecora 718	E	Pecora 718	E	Armstrong J 1162	D
Catabond 720	A	3MEC 826	C D E	Insolute 1	A
Vinylseal MA 28-18	E	Penacolite G1131	A	G.E. 2142	C
Amberlite PR 14	D	Insolute No. 1	A	Selectron 5003	E
Bostik 7026	D	Interlake 4162	C D	Vinylseal MA 28-18	E
Redux	D	Vulcalock	A B	Amberlite PR-14	D
Synco S-8348+130LW (DW)	D	DuPont 4653	C D E	Bostik 7026	D
Resorsabond R-12	A	DuPont 4646	C D E	Bostik EXE 138	D
Armstrong J-1162	D	Resorsabond R-12	A	Sodium Silicate	A
Tego	D	G.E. 2142	C	Redux	D
		G.E. 7031	C	Synco X-8348+130LW (DW)	D
		Bostik 7026	D	Resorsabond R-12	A
		Bostik EXE 138	D	Tego	D
		Bostik 1007	A		
		Vinylseal MA 28-18	E		
		Amberlite PR-14	D		
		Redux	D		
		Armstrong J-1162	D		

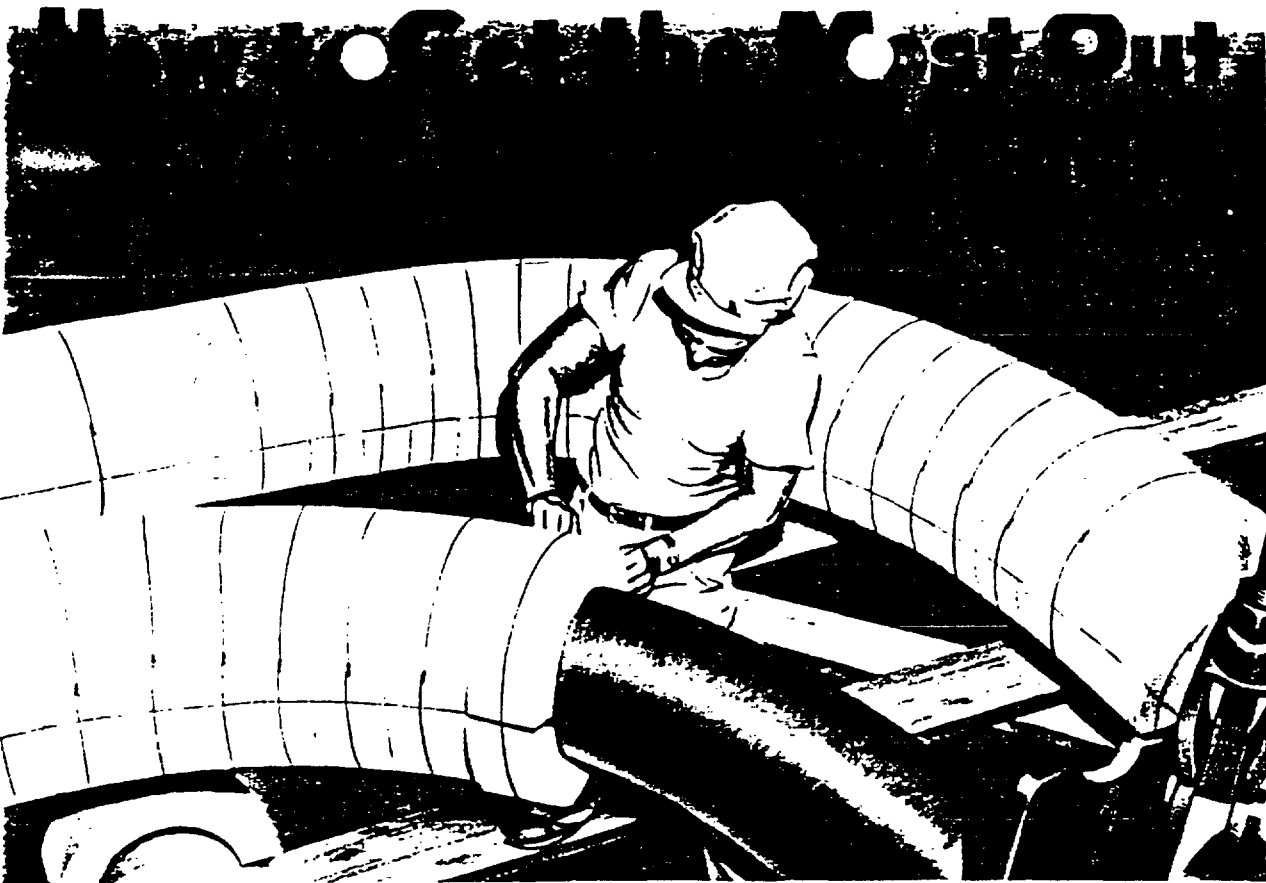
Symbols for method of cure:

For Maximum Strength

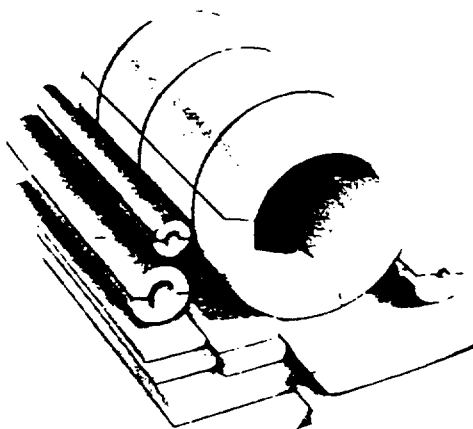
- A** Clamped at room temperature for 24 hours.
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- D** Placed in press at 100 p.s.i. at 300° F. for 10-30 minutes.
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Kaylo Division
OWENS-ILLINOIS
GLASS COMPANY
 Toledo 1, Ohio



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. N-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
Advertisement No. K-153, appearing in the following publications:
Chemical Engineering—Jan., 1953
Oil & Gas Journal—Jan. 12, 1953
Plant Engineering—Jan., 1953
Power—Jan., 1953
Petroleum Refiner—Feb., 1953
Chemical Processing—Feb., 1953
Combustion—Feb., 1953

For Radii From $\frac{1}{4}$ 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 $\frac{1}{4}$ 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. K-371, 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

Advertisement No. K-154—appearing in the following publications:

Plant Engineering—March, 1953
Oil & Gas Journal—March 23, 1953
Chemical Engineering—March, 1953
Chemical Processing—April, 1953
Petroleum Refiner—May 1953



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PROOF OF SERVICE

I, Cheryl Dorsey, do hereby declare and state:

I am employed in the City and County of San Francisco, California. I am over the age of 18 years and not a party to the within action. My business address is The Federal Reserve Bank Building, 101 Market Street, Suite 601, San Francisco, California, 94105. On August 4, 1989, I served the within:

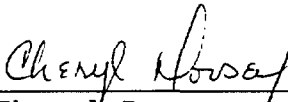
DEFENDANT, OWENS-ILLINOIS, INC.'S
ANSWERS TO PROPOSED PLAINTIFF'S FIRST SET
OF INTERROGATORIES

on the parties in this action, by placing a true copy thereof in a sealed envelope, and each envelope addressed as follows:

Ms. Jackie Goldsley
Kazan & McClin
171 - 12th Street, Suite 300
Oakland, CA 94607

/XXX/ (By Personal Service) I caused each such envelope to be delivered by hand to the offices of each addressee above.

I declare under penalty of perjury that the foregoing is true and correct. Executed this 4th day of August, 1989 at San Francisco, California.


Cheryl Dorsey

KAZAN & McCLAIN
A PROFESSIONAL
LAW CORPORATION
171 TWELFTH STREET
THIRD FLOOR
OAKLAND, CALIF. 94607
(415) 465-7728
(415) 883-7211
FAX (415) 835-4912

Denise Abrams, Esq.
KAZAN & McCLAIN, A Professional Law Corporation
171 Twelfth Street, Suite 300
Oakland, California 94607
Telephone: (415) 465-7728

Attorney for Plaintiff

IN THE SUPERIOR COURT OF THE STATE OF CALIFORNIA
IN AND FOR THE COUNTY OF ALAMEDA

WILLIE COLEMAN

Plaintiff,

vs.

FIBREBOARD CORPORATION, et al.,

Defendants.

No. 650495-3

INTERROGATORIES

PROPOUNDING PARTY: Plaintiff, WILLIE COLEMAN

RESPONDING PARTY: Defendant, OWENS-ILLINOIS, INC.

SET NUMBER: ONE (1)

TO DEFENDANT AND TO THE ATTORNEYS OF RECORD HEREIN:

Plaintiff requests that defendant OWENS-ILLINOIS answer the following interrogatories fully, separately and under oath, pursuant to §2030 of the California Code of Civil Procedure.

DEFINITIONS

"NAME" shall refer to the name, business and residence

33901

1.

1 address, and business and residence telephone number of persons
2 inquired about herein.

3 "USED" shall refer to asbestos-containing products which
4 were purchased, distributed, or otherwise supplied to or
5 possessed by the various contractors named herein.

6 "Fruitvale Cannery" shall refer to the canning business and
7 plant located at 905 66th Avenue, Fruitvale, Oakland, California,
8 known at various times as Fruitvale Cannery, National Can,
9 Glorietta Foods, and Tri-Valley Growers.

10 "OWENS-ILLINOIS" shall refer to Owens-Illinois, Inc. and its
11 predecessors, including but not limited to Owens-Illinois Glass
12 Company.

13 INTERROGATORY NO. 1:

14 NAME each and every person who can identify any asbestos-
15 containing products USED by Western Asbestos Company in Northern
16 California between the years 1944 and 1967.

17 INTERROGATORY NO. 2:

18 NAME each and every person who can identify any OWENS-
19 ILLINOIS products USED by Western Asbestos Company in Northern
20 California between the years 1944 and 1958.

21 INTERROGATORY NO. 3:

22 NAME each and every person who can identify any asbestos-
23 containing products USED by Bay Cities Asbestos Company in
24 Northern California between the years 1944 and 1948.

25 INTERROGATORY NO. 4:

26 NAME each and every person who can identify any OWENS-

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1 ILLINOIS products USED by Bay Cities Asbestos Company in Northern
2 California between the years 1944 and 1948.

3 INTERROGATORY NO. 5:

4 NAME each and every person who can identify any asbestos-
5 containing products USED by Plant Asbestos Company in Northern
6 California between the years 1947 and 1958.

7 INTERROGATORY NO. 6:

8 NAME each and every person who can identify any OWENS-
9 ILLINOIS products USED by Plant Asbestos Company in Northern
10 California between the years 1947 and 1958.

11 INTERROGATORY NO. 7:

12 NAME each and every person who can identify any asbestos-
13 containing products USED by Plant Rubber & Asbestos Works in
14 Northern California between the years 1944 and 1947.

15 INTERROGATORY NO. 8:

16 NAME each and every person who can identify any OWENS-
17 ILLINOIS products USED by Plant Rubber & Asbestos Works in
18 Northern California between the years 1944 and 1947.

19 INTERROGATORY NO. 9:

20 NAME each and every person who can identify any asbestos-
21 containing products USED by Asbestos Company of California in
22 Northern California between the years 1944 and 1947.

23 INTERROGATORY NO. 10:

24 NAME each and every person who can identify any OWENS-
25 ILLINOIS products USED by Asbestos Company of California in
26 Northern California between the years 1944 and 1947.

1 INTERROGATORY NO. 11:

2 NAME each and every person who can identify any asbestos-
3 containing products USED at Puget Sound Naval Shipyard in
4 Bremerton, Washington in 1943 and 1944.

5 INTERROGATORY NO. 12:

6 NAME each and every person who can identify any OWENS-
7 ILLINOIS products USED at Puget Sound Naval Shipyard in
8 Bremerton, Washington in 1943 and 1944.

9 INTERROGATORY NO. 13:

10 NAME each and every person who can identify any asbestos-
11 containing products USED by insulation contractors at Fruitvale
12 Cannery in Fruitvale, California between the years 1946 and 1958.

13 INTERROGATORY NO. 14:

14 NAME each and every person who can identify any OWENS-
15 ILLINOIS products USED by insulation contractors at Fruitvale
16 Cannery in Fruitvale, California between the years 1946 and 1958.

17 INTERROGATORY NO. 15:

18 NAME each and every person who can identify any asbestos-
19 containing products USED at Fruitvale Cannery in Fruitvale,
20 California between the years 1946 and 1958.

21 INTERROGATORY NO. 16:

22 NAME each and every person who can identify any OWENS-
23 ILLINOIS products USED at Fruitvale Cannery in Fruitvale,
24 California between the years 1946 and 1958.

25 INTERROGATORY NO. 17:

26 NAME each and every person who can identify any asbestos-

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1 containing products USED at Oakland Army Base in Oakland,
2 California in 1944 and 1945.

3 INTERROGATORY NO. 18:

4 NAME each and every person who can identify any OWENS-
5 ILLINOIS products USED at Oakland Army Base in Oakland,
6 California in 1944 and 1945.

7 INTERROGATORY NO. 19:

8 NAME each and every person who can identify any asbestos-
9 containing products USED at Alameda Naval Air Station in Alameda,
10 California in 1945 and 1946.

11 INTERROGATORY NO. 20:

12 NAME each and every person who can identify any OWENS-
13 ILLINOIS products USED at Alameda Naval Air Station in Alameda,
14 California in 1945 and 1946.

15 INTERROGATORY NO. 21:

16 NAME each and every person who can identify any asbestos-
17 containing products manufactured by any defendants other than
18 OWENS-ILLINOIS and USED by Western Asbestos Company in Northern
19 California between the years 1944 and 1958.

20 INTERROGATORY NO. 22:

21 NAME each and every person who can identify any asbestos-
22 containing products manufactured by any defendants other than
23 OWENS-ILLINOIS and USED by Bay Cities Asbestos Company in
24 Northern California between the years 1944 and 1948.

25 INTERROGATORY NO. 23:

26 NAME each and every person who can identify any asbestos-

1 containing products manufactured by any defendants other than
2 OWENS-ILLINOIS and USED by Plant Asbestos Company in Northern
3 California between the years 1947 and 1958.

4 INTERROGATORY NO. 24:

6 NAME each and every person who can identify any asbestos-
8 containing products manufactured by any defendants other than
9 OWENS-ILLINOIS and USED by Plant Rubber & Asbestos Works in
10 Northern California between the years 1944 and 1947.

11 INTERROGATORY NO. 25:

12 NAME each and every person who can identify any asbestos-
13 containing products manufactured by any defendants other than
14 OWENS-ILLINOIS and USED by Asbestos Company of California in
15 Northern California between the years 1944 and 1947.

16 INTERROGATORY NO. 26:

17 NAME each and every person who can identify any asbestos-
18 containing products manufactured by any defendants other than
19 OWENS-ILLINOIS and USED at Puget Sound Naval Shipyard in
20 Bremerton, Washington in 1943 and 1944.

21 INTERROGATORY NO. 27:

22 NAME each and every person who can identify any asbestos-
23 containing products manufactured by any defendants other than
24 OWENS-ILLINOIS and USED at Fruitvale Cannery in Fruitvale,
25 California between the years 1946 and 1958.

26 INTERROGATORY NO. 28:

NAME each and every person who can identify any asbestos-
containing products manufactured by any defendants other than

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OWENS-ILLINOIS and USED at Alameda Naval Air Station in Alameda, California in 1945 and 1946.

INTERROGATORY NO. 29:

NAME each and every person who can identify any asbestos-containing products manufactured by any defendants other than OWENS-ILLINOIS and USED at Oakland Army Base in Oakland, California in 1944 and 1945.

INTERROGATORY NO. 30:

NAME each distributor of OWENS-ILLINOIS products in the Northern California area between the years 1944 and 1958.

INTERROGATORY NO. 31:

For each distributor listed in response to Interrogatory No. 30, identify the years inclusive that the distributor sold OWENS-ILLINOIS products in the Northern California area.

INTERROGATORY NO. 32:

NAME each salesperson who sold OWENS-ILLINOIS products in the Northern California area between the years 1944 and 1958.

INTERROGATORY NO 33:

For each salesperson listed in response to Interrogatory No. 32 identify the years inclusive that the salesperson sold OWENS-ILLINOIS products in the Northern California area.

INTERROGATORY NO 34:

NAME every person with knowledge of the OWENS-ILLINOIS products sold in Northern California between the years 1944 and 1958.

INTERROGATORY NO. 35:

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1 NAME each distributor of OWENS-ILLINOIS products in the
2 State of Washington in 1943 and 1944.

3 INTERROGATORY NO. 36:

4 For each distributor named in response to Interrogatory No.
5 35, identify the years inclusive that the distributor sold OWENS-
6 ILLINOIS products in the State of Washington.

7 INTERROGATORY NO. 37:

8 NAME each salesperson who sold OWENS-ILLINOIS products in
9 the State of Washington in 1943 and 1944.

10 INTERROGATORY NO. 38:

11 For each salesperson listed in response to Interrogatory No.
12 37, identify the years inclusive that the salesperson sold OWENS-
13 ILLINOIS products in the State of Washington.

14 INTERROGATORY NO. 39:

15 NAME each and every person with knowledge of the OWENS-
16 ILLINOIS products sold in the State of Washington in 1943 and
17 1944.

18 INTERROGATORY NO 40:

19 NAME every person with knowledge of the OWENS-ILLINOIS
20 products sold to Western Asbestos Co. between the years 1944 and
21 1958.

22 INTERROGATORY NO 41:

23 NAME every person with knowledge of the OWENS-ILLINOIS
24 products sold to Bay Cities Asbestos Company between the years
25 1944 and 1948.

26 INTERROGATORY NO 42:

1 NAME every person with knowledge of the OWENS-ILLINOIS
2 products sold to Plant Asbestos Company between the years 1947
3 and 1958.

4 INTERROGATORY NO. 43:

5 NAME every person with knowledge of the OWENS-ILLINOIS
6 products sold to Plant Rubber & Asbestos Works between the years
7 1944 and 1947.

8 INTERROGATORY NO. 44:

9 NAME every person with knowledge of the OWENS-ILLINOIS
10 products sold to Asbestos Company of California between the years
11 1944 and 1947.

12 INTERROGATORY NO. 45:

13 NAME every person with knowledge of the OWENS-ILLINOIS
14 products sold to Fruitvale Cannery at Fruitvale, California
15 between the years 1946 and 1952.

16 INTERROGATORY NO. 46:

17 NAME every person with knowledge of the OWENS-ILLINOIS
18 products sold to Alameda Naval Air Station at Alameda, California
19 in 1945 and 1946.

20 INTERROGATORY NO. 47:

21 NAME every person with knowledge of the OWENS-ILLINOIS
22 products sold to Oakland Army Base at Oakland, California in 1944
23 and 1945.

24 INTERROGATORY NO. 48:

25 NAME every person with knowledge of the OWENS-ILLINOIS
26 products sold to Puget Sound Naval Shipyard at Bremerton,

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1 Washington in 1943 and 1944.

2 INTERROGATORY NO. 49:

3 NAME each and every person who can identify any asbestos-
4 containing products USED by J.T. Thorpe in Northern California
5 between the years 1946 and 1972.

6 INTERROGATORY NO. 50:

7 NAME each and every person who can identify any OWENS-
8 ILLINOIS products USED by J.T. Thorpe in Northern California
9 between the years 1946 and 1958.

10 INTERROGATORY NO. 51:

11 NAME each and every person who can identify any asbestos-
12 containing products manufactured by any defendants other than
13 OWENS-ILLINOIS and USED by J.T. Thorpe in Northern California
14 between the years 1946 and 1958.

15 INTERROGATORY NO 52:

16 NAME every person with knowledge of the OWENS-ILLINOIS
17 products sold to J.T. Thorpe between the years 1946 and 1958.

18 DATED: July 27, 1989

19 KAZAN & McCLAIN
20 A Professional Law Corporation

21 By:

Denise Abrams
22 DENISE ABRAMS

23 Attorney for Plaintiff
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