



IN THE CIRCUIT COURT OF THE
11TH JUDICIAL CIRCUIT IN AND
FOR DADE COUNTY, FLORIDA

GENERAL JURISDICTION DIVISION

CASE NO: 91-80000

In re: Asbestos Litigation)
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W.R. GRACE & CO. - CONN.'S ANSWERS AND OBJECTIONS TO
PLAINTIFFS' MASTER PRELIMINARY INTERROGATORIES AND
REQUESTS FOR PRODUCTION

The following answers are based upon facts known or believed by W. R. Grace & Co. - Conn., formerly known as W.R. Grace & Co., ("Grace-Conn") at the time of answering these interrogatories and responding to these requests. Much of the information is sought from many years ago and is, therefore, difficult or impossible to reconstruct or retrieve. Grace-Conn, therefore, reserves the right to amend these answers as and if new or better information becomes available to it or if errors are discovered.

Unless otherwise stated in an answer to a specific interrogatory or request, these answers are limited to products which were used in the commercial construction industry that had fireproofing, thermal or acoustical insulating properties and contained commercial asbestos, and to the activities of Grace-Conn's Construction Products Division ("CPD") associated with the manufacture and sale of same in the United States during the relevant time period.

Any reference to the manufacture, sale or distribution of a product by an entity other than Grace-Conn, e.g., by the Zonolite Company, should not be considered an admission that Grace-Conn is liable or responsible for injuries alleged to have resulted from the manufacture, sale or use of such product. Grace-Conn reserves the right to object to the admissibility of all or part of any answer to an interrogatory or request on this basis.

To the extent that these interrogatories and requests call for information beyond the limitations stated above, an objection is made thereto as being irrelevant, immaterial, overly broad, unduly burdensome, and/or not reasonably calculated to lead to the discovery of admissible evidence and the answers thereto are privileged and/or protected.

- B. The state of your incorporation;
- C. The address of your principal place of business;
- D. The dates and time period during which defendant held a certificate of authority to do business in the state of Florida;
- E. The dates and time period during which defendant regularly conducted business in Florida.

ANSWER 2

- a. W.R. Grace & Co.-Conn.
- b. Connecticut.
- c. One Town Center Road, Boca Raton, FL 33486.
- d-e. Subject to the General Objections interposed above, Grace-Conn states that it is registered to do business in Florida, the inclusive dates of which are a matter of public record equally available to plaintiffs as to Grace-Conn.

INTERROGATORY 3

Corporate History

Describe in detail Defendant's complete corporate or business history for all associated business entities that were involved, in any manner, in the sale, manufacture, distribution, and/or mining of asbestos and/or asbestos containing products, including dates of incorporation, mergers, consolidations, reincorporations, and the like. Also provide historical information regarding all predecessors, prior names, asset purchases, acquisitions or spin-offs for all associated business entities that were involved, in any manner, in the sale, manufacture, distribution, and/or mining of asbestos and/or asbestos containing products. In addition:

- A. If defendant or any of its predecessors or subsidiaries at any time purchased or assumed any of the assets and/or liabilities of any corporation or entity which at any prior time engaged in the manufacturing or sale of asbestos-containing products, then please state the following as to each acquisition:
 - 1. The name or description of each corporation, entity or assets acquired by Defendant, that entity's state of incorporation and principal place of business, its date of incorporation, and the name of Defendant at the time of acquisition;

2. The manner by which each such corporation, entity or interest therein, was acquired (e.g., merger, consolidation, change of name, stock sale, transfer or purchase of assets or product line);
3. The date of each such acquisition;
4. The state in which each such acquisition was effected;
5. The state law governing each such acquisition if specified by contract; and
6. How the business or financial interest in that corporation or entity ended, if it ended. (e.g. dissolved the company, sold all stock, placed subsidiary in bankruptcy, etc.)
7. List all states where entity is or was registered to do business, including the dates of registration for each state.

ANSWER 3

Subject to the General Objections interposed above, Grace-Conn states that it acquired the assets of the Zonolite Company in 1963. As a result of this acquisition, Grace-Conn acquired the Superior Asbestos Company as a wholly-owned subsidiary, and a majority of the shares of the Texas Vermiculite Company. Grace-Conn also acquired a minority of the shares of Western Mineral Products Company, California Zonolite Company, Ari-Zonolite Company, Tennessee Zonolite Company, and Vermiculite-Northwest, Inc. The Superior Asbestos Company was dissolved in 1964 or 1965. In 1966, Western Mineral Products was merged into Grace-Conn. Also in 1966, Grace-Conn acquired the remainder of the outstanding stock of California Zonolite Company and Vermiculite-Northwest, Inc. Grace-Conn acquired an additional one-third interest in Ari-Zonolite in 1966. In 1967, Grace-Conn acquired the remainder of Tennessee Zonolite's outstanding stock. California Zonolite and Vermiculite-Northwest, Inc. were dissolved by December 31, 1969. Tennessee Zonolite was dissolved in 1970. Grace-Conn acquired the remainder of the stock of Ari-Zonolite in 1974, and that company was dissolved effective December 31, 1974. In 1975, Grace-Conn acquired the remainder of the outstanding stock of Texas Vermiculite, and that company was dissolved.

In providing this information, Grace-Conn does not admit that it assumed the liability of any of these companies, or that the knowledge or activities of these companies are in any way imputable to Grace-Conn.

Relevant, non-privileged documents containing information responsive to this interrogatory will be made available to the plaintiffs in Boston, Massachusetts at a mutually agreeable time.

Grace-Conn further objects to these interrogatories and requests insofar as they seek production of any information constituting a trade secret, confidential financial data or other confidential research, development or commercial information.

Grace-Conn further objects to these interrogatories and requests insofar as they seek information which is subject to the attorney-client privilege, which evidences or constitutes attorney work product or which is otherwise not discoverable under the provisions of the Florida Rules of Civil Procedure.

PRELIMINARY INTERROGATORIES

INTERROGATORY 1

Data Sources

Please identify each person with whom you consulted or who provided information used in answering these Interrogatories on behalf of Defendant. Additionally, provide the subject matter category that each person provided information for from the following categories if appropriate:

1. Corporate History
2. Product Information
3. Warnings/Knowledge of Potential Danger/State of the Art/Testing/Medical or Scientific

Identify each person's:

- A. Address;
- B. Position with the Defendant;

ANSWER 1

Grace-Conn objects to this interrogatory on the grounds that it is overly broad, unduly burdensome, irrelevant, immaterial and not reasonably calculated to lead to the discovery of admissible evidence. Subject to this objection and to the General Objections interposed above, Grace-Conn states that these answers were prepared with the assistance of many employees and representatives of Grace-Conn, with the assistance and advice of Grace-Conn counsel, retained counsel and their staffs who, in the course of preparing for these and other cases, have interviewed many individuals and have reviewed voluminous records of Grace-Conn.

INTERROGATORY 2

Corporate Information

Please state the following:

- A. This defendant's correct corporate name;

INTERROGATORY 4

Asbestos/Mining

Did Defendant, prior to 1980, engage in the mining, milling and/or subsequent sale of asbestos fiber? If so, please state:

- A. The date such activity began;
- B. The years during which such activity took place;
- C. The date when such activity was terminated;
- D. If such activity was terminated, the reason why;
- E. Within the United States was there any geographic limitation which you claim was applicable to the sales of your asbestos (Yes or No)?
- F. Identify the organizational unit of Defendant so engaged.
- G. Type of asbestos mined.
- H. Managers of each mine and years of service.
- I. Identify sales and shipment records from each mine.

ANSWER 4

Subject to the General Objections interposed above, Grace-Conn states that it has never mined commercial asbestos. The Superior Asbestos Company was formed by the Zonolite Company to conduct a pilot project in 1962, prior to Grace-Conn's acquisition of Zonolite, to evaluate the possibility of commercial use of the tremolite in the Libby vermiculite deposits. The Superior Asbestos Company made no sales of raw asbestos and was dissolved in 1964 or 1965. Further answering, Grace-Conn states that it has in the past and continues in the present to mine vermiculite which may or may not contain naturally occurring asbestiform tremolite. Vermiculite is subjected to a purification process which leaves only trace amounts of tremolite, if any amount at all, in finished products that contain vermiculite.

INTERROGATORY 5

Asbestos/Manufacture

Has Defendant at any time, engaged in the manufacture of any asbestos containing product which generic product type has been previously identified in exposure sheets in this circuit? If so, please state:

- A. The date such activity began;

- B. The years during which such activity took place;
- C. The date when such activity was terminated;
- D. If such activity was terminated, the reason why;
- E. Within the United States was there any geographic limitation which you claim was applicable to the sales of your asbestos containing products (Yes or No)?
- F. Identify the organizational unit of Defendant so engaged.

ANSWER 5

- a-d. See the Product Appendix 1-22(b-e).
- e. No.
- f. Zonolite Division 1963-1968; Construction Products Division 1969-1973

INTERROGATORY 6

Asbestos/Sales

Has Defendant at any time, engaged in the marketing and/or sale of any asbestos containing product which generic product type has been previously identified in exposure sheets in this circuit? If so, please state:

- A. The date such activity began;
- B. The years during which such activity took place;
- C. The date when such activity was terminated;
- D. If such activity was terminated, the reason why;
- E. Within the United States was there any geographic limitation which you claim was applicable to your sales of asbestos containing products (Yes or No)?

If Yes state the geographical area into which you claim you sold asbestos containing products; and,
- F. Identify the organizational unit of Defendant so engaged.
- G. Identify all sales managers and the years during which they served.

ANSWER 6

a-f. See answer 5 above.

- g. Grace-Conn objects to this interrogatory on the grounds that it is overly broad, unduly burdensome, irrelevant, immaterial and not reasonably calculated to lead to the discovery of admissible evidence. Without waiving or in anyway limiting this objection or the General Objections interposed above, Grace-Conn states that its records are incomplete as to the names of CPD sales managers and the dates of their employment. Nevertheless, the following people are known or believed to have had sales managerial responsibilities in Florida during the relevant time period:

Bob Asher
R.A. Pellicer
Steve Bragg
Jerry Archard
Cortland Lowe

INTERROGATORY 7

Asbestos/Distributor

Has Defendant at any time, engaged in the marketing and/or sale of any asbestos containing product, which generic product type has been previously identified in exposure sheets in this circuit, manufactured in whole or in part by an unrelated business entity? If so, state:

- A. The name and address of the unrelated business entity;
- B. The product's trade and/or brand name;
- C. The years during which such activity took place;
- D. Identify the organizational unit of Defendant, or the associated business entity so engaged.
- E. Within the United States was there any geographic limitation which you claim was applicable to each distributor and/or wholesaler (Yes or No)?
- F. Whether there was a written distributorship agreement;
- G. Whether the distributorship was exclusive;
- H. Identify all documents pertaining to the distributor or wholesaler relationship and the custodian thereof;
- I. The ratio of sales to distributors compared to direct sales to consumers.

- J. List of sales records or shipments to each distributor or wholesaler.

ANSWER 7

Subject to the General Objections interposed above, Grace-Conn states no.

INTERROGATORY 8

Asbestos/Rebranding

Has Defendant at any time, engaged in the rebranding of asbestos containing products, which generic product type has been previously identified in exposure sheets in this circuit, manufactured in whole or in part by an unrelated business entity? If so, please state:

- A. The name and address of the unrelated business entity;
- B. The product's original trade and/or brand name;
- C. Who performed the physical rebranding and where it was accomplished;
- D. The years during which such activity took place;
- E. Brand name and/or trade name after the product was rebranded;
- F. User or seller of the product after rebranding;
- G. Identify the organizational unit of Defendant so engaged.

ANSWER 8

Subject to the General Objections interposed above, Grace-Conn states no.

INTERROGATORY 9

Asbestos/Sales to Manufacturer

Has Defendant at any time, engaged in the sale of asbestos containing products, which generic product type has been previously identified in exposure sheets in this circuit, to an unrelated business entity that was engaged in the manufacture of asbestos containing products? If so, please state:

- A. The name and address of the unrelated business entity;
- B. The product's trade and/or brand name that was sold;

- C. The years during which such activity took place;
- D. Identify the organizational unit of Defendant so engaged.
- E. List each sales office of your asbestos-containing products and for each please state:
 - (1) Name and address;
 - (2) Geographical areas for which each sales office was responsible;
 - (3) Identify all managers and the years during which they served;
 - (4) Identify all sales personnel and the years during which they served, and describe each person's sales jurisdiction or responsibility;
 - (5) Identify sales records or shipment records for each sales office and the custodian thereof.

ANSWER 9

Subject to the General Objections interposed above, Grace-Conn states that it was not in the business of selling its asbestos containing products to other manufacturers of asbestos containing products.

INTERROGATORY 10

Asbestos/Sales to Government or Government Agencies

Did this Defendant ever sell or cause to be sold any of its asbestos-containing products, identified on exposure sheets filed in this circuit, to (1) the United States Government; (2) the United States Air Force; (3) Army Air Force; (4) United States Army; (5) United States Navy; (6) United States Marine Corps; (7) General Services Administration; (8) Department of Defense; or (9) or any other agency operated by the United States Government? If so, please provide the following:

- A. The names and last known address of the governmental agency;
- B. Whether there was written contract or sales agreement;
- C. Identify all documents pertaining to the governmental contracts or agreements and custodian of said documents;
- D. Whether the formula used for the manufacture of the product was the same as the formula used for the manufacture, sale or distribution of the product to non-governmental customers;

- E. The extent to which sales to governmental agencies were handled through distributors or wholesalers as opposed to direct sales by Defendant;
- F. The extent to which the physical appearance of the product sold or distributed to a governmental agency differed from the physical appearance of the product sold or distributed to non-governmental customers;
- G. The extent to which the packaging and/or labelling of the product sold or distributed to a governmental agency differed from the packaging or labelling of the product sold or distributed to non-governmental customers;
- H. Identify Sales and shipment records for each governmental agency and the custodian thereof.

ANSWER 10

Subject to the General Objections interposed above, Grace-Conn's states that certain relevant products have been sold to some of the listed entities for use in the construction of government buildings, but such products have not been sold to the United States Navy. Relevant, non-privileged, non-trade secret documents containing information responsive to this interrogatory will be made available to the plaintiffs in Boston, Massachusetts at a mutually agreeable time.

INTERROGATORY 11

Asbestos/Sales Through Licensees

If any of this Defendant's asbestos-containing products, which generic product type has been previously identified in exposure sheets in this circuit, reached the consumer through licensees, please provide the following:

- A. The names and last known address of licensees;
- B. The years each licensee was licensed to sell, distribute or manufacture this Defendant's asbestos-containing products;
- C. Within the United States was there any geographic limitation which you claim was applicable to each licensee (Yes or No)?

If yes state the geographical areas for which each licensee was permitted to sell, manufacture or distribute this Defendant's asbestos-containing products; and,

- D. Describe the terms and conditions of each licensee agreement entered into between this Defendant and

licensee insofar as manufacture, sale, and distribution of asbestos-containing products;

- E. List of products each licensee was permitted to sell or manufacture;
- F. Identify all documents pertaining to the licensee relationship and the custodian thereof;
- G. Whether or not sales to consumers in each area were made exclusively through licensee.

ANSWER 11

Grace-Conn objects to this interrogatory on the grounds that it is overly broad, unduly burdensome, irrelevant, immaterial and not reasonably calculated to lead to the discovery of admissible evidence. Without waiving or in any way limiting this objection or the General Objections interposed above, and to the extent this interrogatory is interpreted and limited to licensing products, Grace-Conn states that Zonolite Company originally had license agreements with many licensee/processors in which the products all bore Zonolite labels. After Grace-Conn's acquisition of Zonolite, most of these licensees were acquired by Grace-Conn. Relevant, non-privileged, non-trade secret documents containing information responsive to this interrogatory will be made available to plaintiffs in Boston, Massachusetts at a mutually agreeable time.

INTERROGATORY 12

Asbestos/Facilities

For the period 1920 to date, or during the period that Defendant mined, manufactured, sold or distributed asbestos containing products, whichever period is less, state the following regarding each facility that was used by you as a mining, milling, manufacturing, processing, distribution or marketing facility for asbestos containing products;

- A. The name and address of the building, mine, mill or facility;
- B. The inclusive dates the facility was in operation; and,
- C. The function of the facility (e.g., manufacturing, warehousing, mine, sales office, etc.)
- D. Plant managers and years of management;
- E. Name and type of asbestos-containing products manufactured or processed at each facility;
- F. Identify shipment records for each facility and the custodian thereof;

- G. If asbestos was mined and sold to any other entity besides this defendant, please provide list of those entities.

ANSWER 12

Grace-Conn objects to this interrogatory on the grounds that it is overly broad, unduly burdensome, irrelevant, immaterial and not reasonably calculated to lead to the discovery of admissible evidence. Subject to this objection and the General Objections interposed above, Grace-Conn states:

a-c,e. See the Product Appendix 1-22(e-g).

- d. Grace-Conn states that it records as to the names of its plant managers and dates of their employment are incomplete. Nevertheless, the following persons are known to have been plant managers of the relevant manufacturing facilities:

Birmingham, AL (closed 1967)

Vernon Turner - 1951

Irondale, AL

Clarence B. Duckworth - present

North Little Rock, AR

Bob Stringfellow - 1985-present
Don Blakely - 1965-1985
Bill Barnett - 1962-1965
Bill Blanton - 1951-1961

Phoenix (Glendale), AZ

Ray Mariani - 1957-present
Glen Schoenstein - 1950-1956

Los Angeles, CA (closed 1976)

Harold Haight - 1969-1976
Francis B. Gunnell - 1966-1969

Robert P. Whitney - 1965
John Huxley - ?
Don Kaufman - ?

Newark, CA

Ted Bigley - 1973-present
Paul J. Gallagher - 1966?-1973
John McCormick - 1964-1967?

Sacramento, CA (closed 1966 or 1967)

Paul J. Gallagher - 1956-1966 or 1967

Santa Ana, CA (opened 1972)

Milt McDaniel - 1972-present

Denver, CO

Art Dean	- 1958-present
Orland Eberley	- 1957-1958
William F. Phebus	- 1950?-1957

Pompano Beach, FL (opened 1972)

Doug Fowling	- 1979-present
Herb Mason	- 1973-1979
Grover Cunningham	- 1972-1973

Jacksonville, FL

Joe Micco	- 1981-present
Wade Clark	- 1980-1981
Lynn Feldman	- 1976-1980
Tom Winkel	- 1973-1976
Billy Chestnutt	- 1968-1973
Grover Cunningham	- 1965-1968
Lloyd Marshall	- late fifties

Tampa, FL

B.K. Wright	- 1983-present
Curtiss Williams	- 1982-1983
Heyward L. Parker	- 1960-1982
Harvey Lawhead	- 1953-1960
Wesley Kearney	- 1950-1953

Chicago, IL

Jerry McGee	- 1980-present
Wally Kurzak	- 1979-1980
Bob Ward	- 1961-1979
Richard Parris	- 1959-1961
Roger Smith	- ?-1959

Wilder, KY

Les McClanahan	- 1977-present
Jack Ashworth	- 1970-1977
Les McClanahan	- 1974-1977
Lee Draper	- 1966-1973
Les Sather	- 1955-1966

Trenton, NJ

Timothy Carrothers	- 1984-present
Norm Cardinal	- 1976-1984
Bob Devine	- 1973-1976
G.A. Peters	- 1973-1974?
Walt L. Kaluzney	- 1971-1973
G.A. Ecott	- 1968-1970
George Rothermel	- 1964-1967

High Point, NC

Joe M. Timmons, Jr.	- 1983-present
Joe Micco	- 1981-1983
Jim Israel	- 1952-1981

Albany, NY (closed 1961)

John C. Ottinger
Don Groeber

- 1947-1949?
- 1949?

Weedsport, NY (opened 1963)

Paul Reyer

- 1963-present

Oklahoma City, OK

Robert E. Ward

- present

Portland, OR

Mark Halpern
Pat Harvey
Bryan Elliott
Don Kaufman
Ernest F.A. Johnson
Robert Morris
Ed Burroughs

- 1984-present
- 1981-1984
- 1979-1981
- 1978-1979
- 1976-1977
- 1967-1974
- ?

New Castle, PA (opened 1969)

Tom Schaffer
Thomas Freed

- 1970-present
- 1969

Travelers Rest, SC

Bill Momberger
Jerry Branch
Roland Hill
Jake Joye
Wayne Ward
Ron Kilbaugh
Jim Wright
George Rothermel
A.E. Wise
L.L. Haskett
Jim Clifford
J.C. Schulte

- 1982-present
- 1981-1982
- 1978-1980
- 1977-1978
- 1776-1977
- 1776-1977
- 1975-1976
- 1968-1976
- 1969-1971
- 1969
- 1965-1966
- 1965-1966

New Orleans, LA

J. David Howell
David Curtiss
Jerry McGee
Frank Cavender
Bill Barnett
D.L. Bibbins
John Beyer
C.G. Moody

- 1981-present
- 1979-1980
- 1975-1978
- 1969-1974?
- 1965-1968
- 1963-1965
- 1959-1963
- 1952-1959

Easthampton, MA (opened 1964)

Jack Grimaldi
Dough Powling
J.J. (Jay) Kelly, Jr.
Otto J. Bluebaugh
Kenneth L. Lapan
Michael I. Lapan
D.E. Groeber

- 1979-present
- 1977-1979
- 1974-1977
- 1971-1973
- 1969-1971
- 1967-1968
- 1965?-1967

North Billerica, MA (in operation 1955-1964)

Raymond Gillette ?-1964?

Muirkirk, MD

James L. Dean - 1974-present

Dearborn, MI

Jack Daniels - 1984-present

Dave Curtiss - 1979-1984

Jerry McGee - 1978-1979

Jack Phillips - 1977-1978

Arnie E. Dembowski - 1971-1976

D.M. Stewart - 1965-1967

Minneapolis, MN

J.N. Baba - 1984-present

Don Nyvold - 1945-1984

St. Louis, MO

R.C. PEnce - 1978-present

Curtiss Gibson - 1979?

William Skiles - 1965?-1977

Harold Bishop - ? (3 years)

Bill Townsend - ?

Omaha, NE

John Kozarovich - 1980-present

Russ Cash	- 1977-1980
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Paul Pittman - 1958-1968

Joe Israel - 1959-1967

Hugh Dockins - 1955-1958

Kearney, SC

Jeff Dannaker - 1985-present

Timothy W. Carrothers - 1979-1985

B.C. Wethington - 1978-1979

Ron Kilbaugh - 1972-1977

Richard T. Hill - 1971-1972?

Worthing - 1970-1972

Grover Cunningham - 1968-1970

Joe Timmons - 1966-1968

Nashville, TN

W. Kolar - 1984-present

Vernon Turner - 1967-1982

? Haines - 1966-1979?

Bill Oliver - 1965- (6 months)

Junior Durham - ?

Robert Morton - 1956

Robert Bolton - 1958
Bill Durham - 1955-1956

Joe Timmons - 1952-1955

Joe Timmons = 1932-1933
Roy Weeks = 1950-1952

ROY WEEKS - 1950-1952

Dallas, TX

Ernie Johnson	- 1979-present
Don Hase	- 1977-1979
Curtis Gibson	- 1974-1977
Steve Mohelic	- 1953-1973

San Antonio, TX

T.O. Murray	- present
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Spokane, WA (closed 1974)

Scott Ranier	- 1972-1974
Milt McDaniel	- 1945-1972

Milwaukee, WI

Jeff Corpal	- 1982-present
Barbara J. Cross	- 1980-1981
T.F. Clark	- 1979
D.W. Morgan	- 1978
Frank Kees	- 1976-1977
Don J. Emerson	- 1970-1975
Sandy Mangino	- 1967-1970
Lee Draper	- ?-1966

f. Grace-Conn objects to this interrogatory on the grounds that it is overly broad, unduly burdensome, irrelevant, immaterial and not reasonably calculated to lead to the discovery of admissible evidence. Subject to this objection and the General Objections interposed above, Grace-Conn states that Arthur D'Errico is the custodian of the records.

g. Subject to the General Objections interposed above, Grace-Conn states see Answer 4, above. Relevant, non-privileged, non-trade secret documents containing information responsive to this interrogatory will be made available to plaintiffs in Boston, Massachusetts at a mutually agreeable time.

INTERROGATORY 13

Answering Defendant's Asbestos Containing Products

Using the format set out below, answer the following interrogatory. The main purpose of this interrogatory is to first, obtain basic information concerning asbestos-related products, which generic product type has been previously identified in exposure sheets in this circuit, with which the answering defendant and its associated business entities were involved, and second, to identify the number of "Interrogatory Response Sheets" the answering defendant must complete.

Provide the following information for each asbestos-containing product, which generic product type has been previously identified in exposure sheets in this circuit, with which this answering defendant was involved:

- A. The name of the associated business entity so involved;
- B. The Product Trade Name of the asbestos product(s) with which the entity was involved (See the definition of "Product Trade Name" at interrogatory number 14(B);
- C. The type(s) of involvement the entity had with asbestos-containing products (See the definition of "involvement" at interrogatory number 14(E);
- D. Identify the inclusive years of each type of product involvement (e.g., if the entity manufactured and distributed the product, list both types of involvement and the years that correspond to such involvement);

ANSWER 13

Grace-Conn objects to the instructions to this interrogatory on the grounds that they seek to impose requirements beyond those imposed by the Florida Rules of Civil Procedure. Subject to this objection and the General Objections interposed above, see the Product Appendix 1-22 (a-c).

INTERROGATORY 14

Product Information

Following this page is a proposed "Interrogatory Response Sheet" and definitions, examples and instructions dealing with the completion of this question.

For each and every asbestos-containing product, which generic product type has been previously identified in exposure sheets in this circuit, with which you were involved, as previously identified in responding to the previous interrogatory, please answer the following.

A separate response is to be provided to this question for each and every asbestos-containing product with which the responding defendant was involved.

If different entities were involved with the same asbestos-containing products the asbestos-containing product is to be addressed in a response to this question for each such business entity, including the answering defendant if applicable.

ANSWER 14

Grace-Conn objects to the instructions to this interrogatory on the grounds that they seek to impose requirements beyond those

imposed by the Florida Rules of Civil Procedure. Subject to this objection and the General Objections interposed above, see Product Appendix 1-22(a-c, f-1) and Answer 5(e), above.

INTERROGATORY 15

Asbestos Free Products

For each asbestos containing product whose trade name is listed in Answer No. 14, state:

- A. Was the product, or a substitute for that product, ever manufactured and/or sold by you without asbestos; if so, when did the sale of the product commence;
- B. Brand name of the asbestos free product;
- C. The reason product was manufactured without asbestos;
- D. Was the asbestos-containing counterpart of said product sold while the asbestos-free counterpart was being manufactured; if so, provide the time periods;

ANSWER 15

See the Product Appendix 1-22(1).

INTERROGATORY 16

Product Development/Design

For each asbestos product referred to in Answer no. 14, or which was sold to any other defendant, state separately:

- A. Was the product manufactured or sold to any entity prior to its being placed on the commercial market;
- B. The date and place where the product was designed and developed;
- C. The identity and last known address of the person or persons responsible for the design or development of the product;
- D. Was the product ever tested prior to its being sold for use by the consumer? If so, provide the identity and present location of all records dealing with these tests (including testing concerning use, application, durability, toxicity, etc.) and the custodian of said records.

ANSWER 16

- a. Grace-Conn states not to its knowledge.

- b-c. Subject to the General Objections interposed above, Grace-Conn states that the Zonolite Company had a research division when Grace-Conn acquired assets of Zonolite in 1963. Grace-Conn has continued the department which is now in its Construction Products Division. The below listed individuals have been in charge of research at various times:

Heymann C. Duecker (currently in charge)
W. R. Grace & Co. - Conn.
Construction Products Division
62 Whittemore Avenue
Cambridge, Massachusetts 02140

D. Powell
(current address unknown)
(1970-1971)

Arnold Rosenberg
W. R. Grace & Co. - Conn.
Construction Products Division
62 Whittemore Avenue
Cambridge, MA 02140.
(1969-1974)

Vance H. Dodson
W. R. Grace & Co. - Conn.
Construction Products Division
62 Whittemore Avenue
Cambridge, Massachusetts 02140.
(1969-1970)

Eugene L. Perrine
Wiss, Janney, Elstner Associates, Inc.
330 Pfingsten Road Northbrook, Illinois 60062.
(1951-1963 with Zonolite; Director after 1960)
(1964-1968 with Grace-Conn)

George E. Ziegler
4709-H Edwards Mill Road
Raleigh, NC
Director of Zonolite Research Division until 1960

Grace-Conn also maintains the Washington Research Center in Columbia, MD. The Washington Research Center performs research related to all of Grace-Conn's various business units including, to a limited extent, the Construction Products Division.

- d. Relevant, non-privileged, non-trade secret documents containing information responsive to this interrogatory will be made available to plaintiffs in Boston, Massachusetts at a mutually agreeable time.

INTERROGATORY 17

Sales Documents

Please state whether you have any documents of any kind indicating or reflecting past sales of one or more asbestos-containing products listed in response to interrogatory 14 including, but not limited to, invoices, orders, purchases records, sales records, confirmations, bills of lading, annual or other periodic summaries of sales or orders, accounts payable or accounts receivable records, etc. If so, describe in detail the different types of documents that you have for each such asbestos-containing product, and state the following as to each type of document:

- A. The items of information contained on it (e.g., date of sale, product, quantity, purchaser, shipment location, price, etc.);
- B. The years of sale encompassed by documents still in existence;
- C. The current location of the documents;
- D. Identify the current custodian of the documents, as well as the current employees most familiar with the codes or system used on the documents.

ANSWER 17

Grace-Conn objects to this interrogatory on the grounds that it is irrelevant, immaterial, overly broad, unduly burdensome and not reasonably calculated to lead to the discovery of admissible evidence because not all plaintiffs allege exposure to Grace-Conn asbestos-containing products. Subject to this objection and the General Objections interposed above, Grace-Conn states that it will supplement its answer to this interrogatory on a case-by-case basis upon indication of exposure of a plaintiff to a specific Grace-Conn asbestos-containing product at a specific job site or location.

INTERROGATORY 18

Sales Offices

Did you ever have any sales offices in Florida that were responsible for distribution and/or sales of asbestos and/or asbestos-containing products listed in responding to interrogatory 14? If so, please state as to each such sales office:

- A. Its address and years of operation;
- B. Identify all managers from 1930 through the present and the years during which they served;

ANSWER 18

See answer 12, above.

INTERROGATORY 19

Fiber Purchases

Please state the name address of each business entity from whom the Defendant, Defendant's predecessors, Defendant's subsidiaries have ever bought or received raw asbestos fiber.

ANSWER 19

Subject to the General Objections interposed above, Grace-Conn states that each plant purchased commercial asbestos on a plant-by-plant basis. W.R. Grace & Co.-Conn has determined thus far that the major suppliers of commercial asbestos were Johns-Manville, National Gypsum and Carey-Canada. Some commercial asbestos was purchased from Pacific Asbestos Company.

INTERROGATORY 20

Insurance

For all policies of insurance affording general liability or products liability coverage, including primary policies, excess policies, policies of reinsurance, program of self-insured retention (SIR) and/or policies in which defendant was additionally insured, applicable to injuries allegedly caused by exposure to asbestos and/or asbestos-containing products state:

- A. Insurer: Specify exactly as named in the insurance policy or other evidentiary document of coverage.
- B. Insured: The insured named in the policy.
- C. Policy Period: Refer to the actual period for which the insurance policy is and/or was in effect.
- D. Policy Type: Specify whether primary, excess or self-insured, etc.
- E. Per Occurrence/
Accident Limits: Refer to the limit for any one occurrence or anyone accident.

- F. Products Aggregate: Refer to the aggregate limit applicable to products bodily injury liability coverage. Certain insurance policies may contain a combined aggregate for bodily injury, property damage and other covered perils; if so, refer to the combined limit and so indicate.
- G. Products Aggregate Consumption: The function of the Aggregate Consumption Summary is to track the consumption of total products liability aggregate limits claims. List such consumption. If applicable the date upon which the policy limits were paid out in full or exhausted.
- H. Policy Number: Specify exactly as contained on the insurance policy or other evidential document of coverage the policy number. Additionally provide the custodian of the policy and/or document.
- I. Insurer Objection: Specify the bases upon which the relevant insurer refuses to fully pay claims upon demand. If the insurer has not objected to payment or is paying, note N/A.

ANSWER 20

Grace-Conn objects to this interrogatory on the grounds that it is overly broad, unduly burdensome, irrelevant, immaterial and not reasonably calculated to lead to the discovery of admissible evidence. Without waiving its objections, Grace-Conn states that it has identified at least five primary insurance carriers that sold policies that Grace-Conn contends provide coverage for claims in its asbestos-related personal injury cases. Each of these insurance carriers, with the exception of the Continental Casualty Company, has either denied coverage or has accepted coverage under a reservation of rights. Furthermore, Grace-Conn has not yet completed the research on its insurance coverage history. As a result, Grace-Conn cannot be certain at this time about the nature and extent of its insurance coverage. However, to the extent that insurance coverage information is available, Grace-Conn states that the following policies might provide coverage:

Maryland Casualty Company

1. Name insured: W. R. Grace & Co.
Type: Comprehensive General Liability
Policy Number: 96-224900
Policy Period: 6/3/0/63-6/30/64
Applicable Policy Limits: \$1,000,000 each accident
\$1,000,000 aggregate
2. Named insured: W. R. Grace & Co.
Type: Comprehensive General Liability
Policy Number: 96-243400
Policy Period: 6/30/64-6/30/65
Applicable Policy Limits: \$1,000,000 each accident
\$1,000,000 aggregate
3. Name insured: W. R. Grace & Co.
Type: Comprehensive General Liability
Policy Number: 96-257400
Policy Period: 6/30/65-6/30/66
Applicable Policy Limits: \$1,000,000 each accident
\$1,000,000 aggregate
4. Name insured: W. R. Grace & Co.
Type: Comprehensive General Liability
Policy Number: 96-269500
Policy Period: 6/30/66-6/30/67
Applicable Policy Limits: \$1,000,000 each accident
\$1,000,000 aggregate
5. Name insured: W. R. Grace & Co.
Type: Comprehensive General Liability
Policy Number: 31-278301
Policy Period: 6/30/67-6/30/70
Applicable Policy Limits: \$1,000,000 each accident
\$1,000,000 aggregate
6. Name insured: W. R. Grace & Co.
Type: Comprehensive General Liability
Policy Number: 31R-911051
Policy Period: 6/30/70-6/30/73
Applicable Policy Limits: \$1,000,000 each accident
\$1,000,000 aggregate

Continental Casualty Company

1. Named insured: W. R. Grace & Co.
Type: Comprehensive General Liability
Policy Number: CCP 902-3670
Policy Period: 6/30/73-6/30/76
Applicable Policy Limits: \$1,000,000 per occurrence
\$2,000,000 aggregate
2. Named insured: W. R. Grace & Co.
Type: Comprehensive General Liability
Policy Number: CCP 248-3440
Policy Period: 6/30/76-6/30/82
Applicable Policy Limits: \$1,000,000 per occurrence
\$2,000,000 aggregate
3. Named insured: W. R. Grace & Co.
Type: Comprehensive General Liability
Policy Number: CCP 248-3440
Policy Period: 6/30/82-6/30/85
Applicable Policy Limits: \$1,000,000 per occurrence
\$4,000,000 aggregate
4. Named insured: W. R. Grace & Co.
Type: Comprehensive General Liability
Policy Number: CCP 248-3440
Policy Period: 6/30/85-6/30/86
Applicable Policy Limits: \$3,000,000 per occurrence
\$10,000,000 aggregate

Royal Indemnity Company

1. Named insured: Zonolite Company
Type: Comprehensive General Liability
Policy Number: RLG 12735
Policy Period: 3/31/50-3/31/53
Applicable Policy Limits: Unknown
2. Named insured: Zonolite Company
Type: Comprehensive General Liability
Policy Number: RLG 27635
Policy Period: 3/31/53-3/31/54
Applicable Policy Limits: \$100,000 per accident/
occurrence
\$200,000 aggregate

- | | | |
|----|--|---|
| 3. | Named insured:
Type:

Policy Number:
Policy Period:
Applicable Policy Limits: | Zonolite Company
Comprehensive General
Liability
RLG 31840
3/31/54-4/1/55
\$100,000 per accident/
occurrence
\$200,000 aggregate |
| 4. | Named insured:
Type:

Policy Number:
Policy Period:
Applicable Policy Limits: | Zonolite Company
Comprehensive General
Liability
RLG 035805
4/1/55-4/1/56
\$100,000 per accident/
occurrence
\$200,000 aggregate |
| 5. | Named insured:
Type:

Policy Number:
Policy Period:
Applicable Policy Limits: | Zonolite Company
Comprehensive General
Liability
RLG 045762
4/1/56-4/1/57
Unknown |
| 6. | Named insured:
Type:

Policy Number:
Policy Period:
Applicable Policy Limits: | Zonolite Company
Comprehensive General
Liability
RLG 045836
4/1/57-4/1/58
Unknown |
| 7. | Named insured:
Type:

Policy Number:
Policy Period:
Applicable Policy Limits: | Zonolite Company
Comprehensive General
Liability
RLG 053959
4/1/58-4/1/59
Unknown |
| 8. | Named insured:
Type:

Policy Number:
Policy Period:
Applicable Policy Limits: | Zonolite Company
Comprehensive General
Liability
RLG 021629
4/1/59-4/1/60
Unknown |
| 9. | Named insured:
Type:

Policy Number:
Policy Period:
Applicable Policy Limits: | Zonolite Company
Comprehensive General
Liability
RLG 621620
4/1/60-4/1/61
Unknown |

10. Named insured: Zonolite Company
 Type: Comprehensive General Liability
 Policy Number: RLG 021621
 Policy Period: 4/1/61-4/1/62
 Applicable Policy Limits: Unknown
11. Named insured: Zonolite Company
 Type: Comprehensive General Liability
 Policy Number: Unknown
 Policy Period: 4/1/62-4/1/63
 Applicable Policy Limits: Unknown
12. Named insured: Zonolite Company
 Type: Comprehensive General Liability
 Policy Number: LU 1731-62
 Policy Period: Expired 5/26/68
 Applicable Policy Limits: Unknown

General Insurance Company of America

1. Named insured: Vermiculite-Northwest, Inc.
 Type: Blanket Liability
 Policy Number: BLP 270815
 Policy Period: 6/1/66-6/1/67
 Applicable Policy Limits: \$250,000

Aetna Casualty And Surety Co.

1. Named insured: Ari-Zonolite Company
 Type: Comprehensive General Liability
 Policy Number: 33 AL 84357CC
 Policy Period: Expired 1/01/70
 Applicable Policy Limits: Unknown
2. Named insured: Ari-Zonolite Company
 Type: Comprehensive General Liability
 Policy Number: 33 AL 053762
 Policy Period: Policy in force in 1967
 Applicable Policy Limits: Unknown
3. Named insured: Western Mineral Products
 Type: Comprehensive General Liability
 Policy Number: 37 AL 011243
 Policy Period: Policy in force in 1966
 Applicable Policy Limits: Unknown

4. Named insured:	California Zonolite Company
Type:	Comprehensive General Liability
Policy Number:	33 AL 051406CC
Policy Period:	Expired 12/30/66
Applicable Policy Limits:	Unknown

INTERROGATORY 21

Asbestos/Consultant

Has any person ever served as a consultant (excluding experts retained during the course of litigation), full, or part-time, to defendant in any manner regarding the potential medical, toxicological, or industrial hygiene aspects of asbestos or any asbestos containing product? (the term consultant is meant to include any specialist in the above areas who was at least in part retained for his expertise and opinions in other than a full-time salaried position). If so, please state the following as to each such person:

- A. Identify the person;
- B. The beginning date, ending date, and period of service for the person;
- C. The job duties and/or responsibilities for the person, as well as a summary of the work performed;
- D. The plant address, office address, or duty assignment location for the person for each part of the consultancy;
- E. The reason for retaining the person;
- F. Identify the company official responsible for retaining the person, as well as identify the company officials with whom the person met during the period of the employment of consultancy; and,
- G. State whether documents relating to the employment or consultancy in any way, including contracts, correspondence, publications, reports, status reports, studies, etc., exist and whether or not said documents mention asbestos. Additionally if said documents exist provide the name of the records custodian of said documents.

ANSWER 21

Grace-Conn objects to this interrogatory on the grounds that it is overly broad, unduly burdensome, irrelevant, immaterial, and not reasonably calculated to lead to the discovery of

admissible evidence. Without waiving or in any way limiting this objection or the General Objections interposed above, Grace-Conn states see answer 22, below.

INTERROGATORY 22

Physician/Consultant

Please state whether or not Defendant ever employed, engaged or retained any physician as a consultant, plant physician or otherwise (excluding experts retained during the course of litigation), in connection with asbestos-related business activities. If so, please state the following as to each such physician:

- A. Identify the physician and give complete dates and places of employment or service;
- B. State the physician's duties and responsibilities;
- C. Identify the company person to whom the physician reported;
- D. State the purpose for which the physician was employed, engaged or retained; and,
- E. State whether documents pertaining to the physician's professional activities involving asbestos and/or individuals exposed to asbestos exist and the custodian of said documents.

ANSWER 22

Grace-Conn objects to this interrogatory on the grounds that it is overly broad, unduly burdensome, irrelevant, immaterial, and not reasonably calculated to lead to the discovery of admissible evidence. Subject to this objection and to the General Objections interposed above, Grace-Conn states that it employs Jerry H. Berke, M.D., who reports to Harry A. Eschenbach, Director of Health, Safety and Toxicology. Prior to that, Grace-Conn had no physicians in its employ and had always used outside physicians on a fee-for-service basis with a minimum of one physician being used at each plant, although some plants used many more. Grace-Conn also states that it employed Dr. Harold H. Borgstedt, University of Rochester Medical School, Rochester, New York, as a consultant relating to toxicology and related medical matters.

Further responding, Grace-Conn states that it has employed Dr. J. Corbett McDonald to conduct an epidemiological study at its vermiculite mines at Libby, Montana and Enoree, South Carolina, Dr. Daniel Teitelbaum of Enbionics to conduct an x-ray evaluation program at Libby and Enoree, and Dr. William E. Smith to conduct a study in which a specially milled preparation of tremolite, and a mixture of that preparation with vermiculite, were deposited in the pleural spaces of hamsters. Grace-Conn

Further states that Richard R. Monson, M.D., Sc.D. of the Harvard School of Public Health, Boston, Massachusetts, conducted a mortality study of Libby employees in 1982.

INTERROGATORY 22

Safety/Consultant

Please state whether or not any industrial hygienist, toxicologist, safety director, occupational medical director, physician or consultant in any of the foregoing areas previously identified (excluding experts retained during the course of litigation), ever made at any time any statements, recommendations and/or suggestions to the Defendant pertaining to or relating to asbestos or health hazards from dust or any product. If so, state the following as to each such occasion:

- A. Identify who made the recommendation and/or suggestion;
- B. State the date of the recommendation and/or suggestion;
- C. Identify all company officials who received the recommendation and/or suggestion;
- D. State the substance of the recommendation and/or suggestion; and,
- E. State whether any documents and/or records of oral conversations embodying or pertaining to the recommendation and/or suggestion exist and if so the custodian of said records.

ANSWER 23

Subject to the General Objections interposed above, Grace-Conn states that relevant, non-privileged and non-trade secret documents containing information responsive to this interrogatory will be made available to plaintiffs in Boston, Massachusetts at a mutually agreeable time.

INTERROGATORY 24

Tests/Asbestos

Please state whether Defendant ever conducted or caused to be conducted any tests (whether laboratory or field tests) on any of their or anyone else's asbestos-containing products, including measurements of exposure levels during installation, removal and/or after installation after they had degenerated or decomposed levels during conditions of intended use of the product. If so, please state the following as to each such test:

- A. Identify the person who directed that the test and/or measurement be made and/or conducted;

- B. Identify the person or organization who conducted the test and/or measurement;
- C. Identify where, when and for how long the test and/or measurement was conducted, including the department of the plant or facility involved, as well as its owner and operator;
- D. State the product(s) tested and describe the conditions of the test, including the measurement methodology;
- E. Describe whatever efforts, if any, were used in the test to simulate the various conditions of possible or probable use of the product, such as in confined spaces or tunnels;
- F. State the asbestos exposure levels measured including the ranges measure, median measurement and average measurement;
- G. Identify to whom the test results were reported; and,
- H. Identify all documents pertaining to the test and the custodian thereof.

ANSWER 24

Grace-Conn objects to this interrogatory on the grounds that it is incomprehensible as written. Subject to this objection and to the General Objections interposed above, to the extent that Grace-Conn understand the interrogatory, Grace-Conn states yes. Tabershaw-Cooper Associates conducted air sampling in July, 1970, at three buildings in San Francisco. The Tabershaw-Cooper observations indicated that the occupational exposures to workmen who were operating the spray nozzles applying fireproofing were below then-existing permissible exposure levels.

The Werby Laboratory reported on air samples taken by Grace employees during Mono-Kote spraying operations in Chicago, Illinois, Omaha, Nebraska, Los Angeles, California, and Bethpage, New York in 1970. Threshold Limit Values were found to be well within the then existing ACGIH standards.

As to whether there are fiber emissions of asbestos from Grace-Conn's cementitious plaster fireproofing after it has been put in place, Grace-Conn notes that air samples in air plenums were taken by Tabershaw-Cooper Associates at the request of Bechtel Corp. and Grace-Conn in San Francisco in or around September 1970. Tabershaw-Cooper reported to Bechtel and to Grace-Conn that the concentrations of asbestos fibers in the Bechtel building were on the low side of the concentrations normally found in the ambient outside air.

Relevant, non-privileged and non-trade secret documents containing information responsive to this interrogatory will be made available to plaintiffs in Boston, Massachusetts at a mutually agreeable time.

INTERROGATORY 25

Financial Support/Measurement/Tests

Has Defendant ever conducted, caused to be conducted or financially supported through at least a 10% contribution towards the total cost, any asbestos-related epidemiologic, toxicologic, animal, medical, scientific tests, reviews, investigations, analysis, research or studies of any kind (hereafter termed "studies")? If so, please state as to each such study:

- A. Identify who directed or authorized that the study be done;
- B. Identify the person or organization that conducted the study;
- C. State the dates and over what time period the study was done;
- D. Describe the study design and protocol;
- E. State the complete results of the study, including any conclusions or recommendations contained therein;
- F. Identify all company officials who received notice of the existence of the study and/or its results;
- G. Identify all documents relating to the study and the custodian thereof; and,
- H. State whether the study was ever published, and if so, state the study title and citation.

ANSWER 25

Grace-Conn objects to this interrogatory on the grounds that it is overly broad, unduly burdensome, irrelevant, immaterial, and not reasonably calculated to lead to the discovery of admissible evidence. Subject to this objection and the General Objections interposed above, Grace-Conn states the following:

William E. Smith, M.D., conducted a study in 1978 in which a specially milled preparation of tremolite, and a mixture of that preparation with vermiculite, were deposited in the pleural space of hamsters. The results of the study are described in Dr. Smith's report entitled "Final Report on Biological Tests of Samples 22260P5 and 22263P2."

In 1977, the Industrial Chemicals Group commissioned a chest X-ray evaluation program to determine the nature of lung problems of Grace-Conn's employees at the mining and milling operations in Libby, Montana and Enoree, South Carolina. The study was

completed under the auspices of Enbionics, and reported by Daniel T. Teitelbaum, M.D., to Grace-Conn on August 25, 1978.

Richard R. Monson, M.D., Sc.D., of the Harvard School of Public Health, Boston, Massachusetts, conducted a mortality study of Libby employees in 1982. This study was not published to the best of Grace-Conn's knowledge.

J. Corbett McDonald, M.D., of McGill University, Montreal, Canada, began an epidemiological study in 1983 of the mortality and radiological changes in miners exposed to tremolite contaminants in the vermiculite mined and milled at Grace-Conn's Libby, Montana vermiculite mine. The findings of the study were presented at the Sixth International Symposium on Inhaled Particles, sponsored by the British Occupational Hygiene Society, at Cambridge University in England on September 4, 1985. This study was published in the British Journal of Industrial Medicine in 1986.

J. Corbett McDonald, M.D., and others of McGill University, began an epidemiological study in early 1986 of 194 men who had worked at Grace-Conn's vermiculite mine and mills in Enoree, South Carolina for at least six months and who had been hired prior to January 1, 1971. The study, entitled "Health of Vermiculite Miners Exposed to Trace Amounts of Fibrous Tremolite", was published in the British Journal of Industrial Medicine in 1988.

Relevant, non-privileged and non-trade secret documents containing information responsive to this interrogatory will be made available to the plaintiffs in Boston, Massachusetts at a mutually agreeable time.

INTERROGATORY 26

Literature Review

Has Defendant ever conducted, caused to be conducted, or financed through at least a 10% contribution towards the total cost, any effort to monitor or review the professional literature regarding the clinical, epidemiologic, toxicologic, industrial hygiene, medical and/or scientific aspects of asbestos and/or products containing asbestos (excluding for the purposes of litigation)? If so, please state the following as to each effort:

- A. Identify who directed or authorized that the effort be done;
- B. Identify the person or organization that conducted the effort;
- C. State the dates and over what time period the effort was done;

- D. Describe the effort design and protocol;
- E. State the complete results of the effort, including any conclusions or recommendations contained therein;
- F. Identify all company officials who received notice of the existence of the effort and/or its results;
- G. Identify all documents relating to the effort and the custodian thereof; and,
- H. State whether the effort was ever published, and if so, state the effort title and citation.

ANSWER 26

Subject to the General Objections interposed above, Grace-Conn states that no one individual was hired solely or expressly to be responsible for monitoring or reviewing the professional literature regarding the clinical, epidemiologic, toxicologic, industrial hygiene, medical and/or scientific aspects of asbestos and/or products containing asbestos, but certain Grace-Conn employees, in the course of performing their regular duties, may have reviewed such literature. Relevant, non-privileged, non-trade secret documents containing information responsive to this interrogatory will be made available to plaintiffs in Boston, Massachusetts at a mutually agreeable time.

INTERROGATORY 27

Specific Studies/Participation

Did Defendant at any time in any way participate in any of Metropolitan Life Insurance Company's studies of asbestos (conducted approximately between 1929-1940), any Trudeau Foundation/Saranac Lake studies (between 1929-1960), or any Industrial Hygiene Foundation studies (between 1938-1968)? If so, identify each such study in which you were involved and state as to each:

- A. What role or action you took in regard to the study;
- B. Identify all documents related to your involvement in the study and the custodian thereof;
- C. Identify each of your facilities in which any part of the study was conducted and reference your facility to the data reported in the study; and,
- D. Identify each of your officers, supervisors, managers or employees who assisted, participated in or directed your involvement in the study.

ANSWER 27

Subject to the General Objections interposed above, Grace-Conn states not to its knowledge:

INTERROGATORY 28

Asbestos Hazard/Notice

Did Defendant at any time prior to 1980 receive, have notice of, acquire or possess any advice, publication, statement, warning, order, directive, letter, memorandum, recommendation or document, written or oral, in any way related to asbestos and health hazards, or which implicitly or explicitly refers to asbestos and health issues. If so, state the following as to each such document and oral conversation, and each such occasion prior to 1980:

- A. When any of this knowledge was first acquired, how it was acquired, identify by whom it was acquired, and state the substance of the knowledge acquired.
- B. Identify all documents pertaining to the advice, publication, statement, warning, order, directive, letter, memorandum, or recommendation and the custodian thereof;
- C. Identify all company officials and directors who received notice of the existence of the document or oral conversation. For each such oral conversation state the approximate date of said conversation and the parties to said conversation; and,
- D. What action, if any, was taken by you as a consequence of the document or oral conversation.

ANSWER 28

Grace-Conn objects to this interrogatory on the grounds that it is overly broad, unduly burdensome, irrelevant, immaterial, and not reasonably calculated to lead to the discovery of admissible evidence. Grace-Conn further objects to this interrogatory on the grounds that it is vague and ambiguous in that it lacks sufficient specificity regarding the type of asbestos and level, duration, nature and manner of exposure. Subject to these objections and the General Objections interposed above, Grace-Conn states yes. It cannot identify the precise date or manner in which one or more of its employees might have become aware of alleged health hazards associated with the inhalation of asbestos fibers by human beings. However, from Grace-Conn's investigation to date it appears that the Zonolite Company, the assets of which Grace-Conn did not acquire until 1963, was informed by the Montana State Board of Health in the late 1950's that inhalation of asbestos dust had been reported to be associated with the development of pulmonary fibrosis among

workers depending upon length of exposure and the nature and concentration of the dust. The first information obtained from the Montana State Board of Health came in 1956 in a report prepared by Benjamin F. Wake, Industrial Hygiene Engineer, Division of Disease Control. The report describes Wake's examination of the Zonolite Company's Libby, Montana mine and mill in August 8-9, 1956. Further answering, Grace-Conn states it also appears that, in 1955, Zonolite Company personnel were informed of a disability claim for alleged asbestosis by a person, possibly named Weismantle, who worked for the California Zonolite Company in Sacramento.

Grace-Conn expressly denies that this information is relevant to the subject matter of this suit or attributable to Grace-Conn. Relevant, non-privileged, non-trade secret documents containing information responsive to this interrogatory will be made available to plaintiffs in Boston, Massachusetts at a mutually agreeable time.

INTERROGATORY 29

Knowledge/Asbestosis

Please state whether Defendant obtained, prior to 1980, any knowledge concerning the association, if any, between the inhalation of asbestos fibers and a lung disease known as asbestosis, in users, consumers and/or persons exposed to asbestos and/or asbestos containing products. If so, please state:

- A. When any of this knowledge was first acquired, how it was acquired, identify by whom it was acquired, and state the substance of the knowledge acquired;
- B. As to each such occasion thereafter in which your knowledge as to asbestosis increased either relative to the types of exposures (i.e. trades and occupations, etc.) and/or types of products which became associated with the development of asbestosis state:
 - (1) when was this additional knowledge acquired;
 - (2) how was this additional knowledge acquired;
 - (3) identify by whom it was acquired;
 - (4) state the substance of the additional knowledge acquired;
- C. Identify all documents relevant to your acquisition of knowledge concerning the disease asbestosis and the custodian thereof; and,
- D. If any of the foregoing knowledge was acquired through an oral conversation, identify each such oral conversation and the parties to said conversation.

ANSWER 29

Grace-Conn objects to this interrogatory on the grounds that is vague and ambiguous in that it lacks sufficient specificity regarding type of asbestos, and the level, duration, nature, and manner of exposure, and that it calls for an expert opinion. Subject to these objections and the General Objections interposed above, Grace-Conn states that it is aware that there is a body of medical literature which indicates that at exposure levels above those established by the appropriate governmental and scientific agencies, there may be a causal connection between exposure to asbestos fibers and asbestosis, lung cancer and mesothelioma. See further Answer 28, above.

INTERROGATORY 30

Knowledge/Lung Cancer

Please state whether Defendant, prior to 1980, ever obtained any knowledge concerning the association, if any, between the inhalation of asbestos fibers and lung cancer, in users, consumers and/or persons exposed to asbestos and/or asbestos containing products. If so, please state:

- A. When any of this knowledge was first acquired, how it was acquired, identify by whom it was acquired, and state the substance of the knowledge acquired.
- B. As to each such occasion thereafter in which your knowledge as to lung cancer increased either relative to the types of exposures (i.e. trades and occupations, etc.) and/or types of products which became associated with the development of lung cancer state:
 - (1) when was this additional knowledge acquired;
 - (2) how was this additional knowledge acquired;
 - (3) identify by whom it was acquired;
 - (4) state the substance of the additional knowledge acquired;
- C. Identify all documents relevant to your acquisition of knowledge concerning lung cancer and the custodian thereof; and,
- D. If any of the foregoing knowledge was acquired through an oral conversation, identify each such oral conversation, the approximate date of said conversation and the parties to said conversation.

ANSWER 30

Subject to the General Objections interposed above, Grace-Conn states see answer 29 above. Grace-Conn also states that it is unable to determine when it first acquired knowledge that there may be an association between the inhalation of asbestos fibers and the contraction of lung cancer.

INTERROGATORY 31

Knowledge/Mesothelioma

Please state whether Defendant, prior to 1980, ever obtained any knowledge concerning the association, if any, between the inhalation of asbestos fibers and mesothelioma, in users, consumers and/or persons exposed to asbestos and/or asbestos containing products. If so, please state:

- A. When any of this knowledge was first acquired, how it was acquired, identify by whom it was acquired, and state the substance of the knowledge acquired.
- B. As to each such occasion thereafter in which your knowledge as to mesothelioma increased either relative to the types of exposures (i.e. trades and occupations, etc.) and/or types of products which became associated with the development of mesothelioma state:
 - (1) when was this additional knowledge acquired;
 - (2) how was this additional knowledge acquired;
 - (3) identify by whom it was acquired;
 - (4) state the substance of the additional knowledge acquired;
- C. Identify all documents relevant to your acquisition of knowledge concerning mesothelioma and the custodian thereof; and,
- D. If any of the foregoing knowledge was acquired through an oral conversation, identify each such oral conversation, the approximate date of said conversation and the parties to said conversation.

ANSWER 31

Subject to the General Objections interposed above, Grace-Conn states see answer 29 above. Grace-Conn also states that it is unable to determine when it first acquired knowledge that there may be an association between the inhalation of asbestos fibers and the contraction of mesothelioma.

INTERROGATORY 32

Knowledge/Cancer of the Gastrointestinal Tract

Please state whether Defendant ever obtained any knowledge concerning the association, if any, between the inhalation of asbestos fibers and cancer of the gastrointestinal tract (i.e. colon, stomach, etc.), in users, consumers and/or persons exposed to asbestos and/or asbestos containing products. If so, please state:

- A. When any of this knowledge was first acquired, how it was acquired, identify by whom it was acquired, and state the substance of the knowledge acquired.
- B. As to each such occasion thereafter in which your knowledge as to cancer of the gastrointestinal tract increased either relative to the types of exposures (i.e. trades and occupations, etc.) and/or types of products which became associated with the development of cancer of the gastrointestinal tract state:
 - (1) when was this additional knowledge acquired;
 - (2) how was this additional knowledge acquired;
 - (3) identify by whom it was acquired;
 - (4) state the substance of the additional knowledge acquired;
- C. Identify all documents relevant to your acquisition of knowledge concerning cancer of the gastrointestinal tract and the custodian thereof; and,
- D. If any of the foregoing knowledge was acquired through an oral conversation, identify each such oral conversation, the approximate date of said conversation and the parties to said conversation.

ANSWER 32

Grace-Conn objects to this interrogatory on the grounds that it is vague and ambiguous in that it lacks sufficient specificity regarding type of asbestos and the level, duration, nature and manner of exposure, and that it calls for an expert opinion. Subject to these objections and the General Objections interposed above, Grace-Conn states that it is aware that there is a body of medical literature which indicates that at exposure levels above those established by the appropriate governmental and scientific agencies, there may be a causal connection between exposure to asbestos fibers and cancer of the gastrointestinal tract. Grace-Conn is unable to determine when it first acquired this knowledge.

INTERROGATORY 33

Warning/Description

Please provide the following information as to each caution, warning or hazard statement or explanation involving asbestos alleged to have been placed on the products or packaging of asbestos containing products by you?

- A. What was its precise wording;
- B. Where was it located on the product or packaging, and what was the size and color of the lettering.
- C. Has the wording or its presentation ever been altered, and if so, how and when;
- D. The years during which each version of a caution, warning or hazard statement appeared on each individual product identified in responding to interrogatory 14;
- E. Identify all company officers and/or committees who participated in the decision to affix each version of the caution, warning or hazard statement to a product or its packaging, and in particular, identify the prime decision-maker, if any; and
- F. Identify all documents related in any way to each caution, warning or hazard statement and the custodian thereof.

ANSWER 33

Subject to the General Objections interposed above, Grace-Conn states that is placed no such statement or explanation on the products or packaging of the products listed in the Product Appendix.

INTERROGATORY 34

Warning/Insert

Has Defendant ever placed any form of package insert or informative brochure in a container of an asbestos-containing product, listed in response to interrogatory 14, explaining the hazards of asbestos? If so, state as to each such insert or brochure:

- A. When was it first place in containers and for what years thereafter;
- B. What products had the insert of brochure included;

- C. Describe the size, shape, color and text of the insert or brochure;
- D. Identify all persons involved in the decision to include the insert or brochure; and,
- E. Identify all company officers and/or committees who participated in the decision to include an insert or brochure, and in particular, identify the prime decision-maker, if any; and
- F. Identify the insert and/or brochure itself and the custodian thereof.

ANSWER 34

Subject to the General Objections interposed above, Grace-Conn states no.

INTERROGATORY 35

Warning/Customer

State whether you published and/or otherwise provided any of your distributors and/or customers with any instructions in regard to the asbestos-containing products, other than inserts or labels (i.e. promotional pamphlets, product manuals, specification sheets, sales brochures, etc.) If so, please state:

- A. When such instructions were first given;
- B. By whom and when were these instructions made;
- C. State the specific instructions provided; and,
- D. Identify all oral communications and documents related to these instructions. If oral identify the approximate date of said communication and the parties involved, if written provide the custodian of said documents.

ANSWER 35

Grace-Conn objects to this interrogatory on the grounds that it is overly broad, unduly burdensome, irrelevant, immaterial and not reasonably calculated to lead to the discovery of admissible evidence as it is not limited to caution, time periods, locations, etc. Grace-Conn further objects to this interrogatory on the grounds that it is vague and ambiguous in that terms such as "warning" are undefined and subject to various interpretations. Grace-Conn further objects to this interrogatory on the grounds that it improperly implies that Grace-Conn's products presented a hazard to users. Subject to these objections and to the General Objections interposed above, Grace-Conn states that it had sales brochures for most of its

products. From time to time certain of its employees would discuss the use of its products with their customers. It is impossible to recreate these conversations. Grace-Conn further states that the 1970 Grace-Conn brochure published in Sweet's Catalog of 1971 contained the following paragraphs:

"POLLUTION AND HEALTH: Because of the constantly changing conditions involving fireproofing and its relation to pollution and health, we recommend that you contact your Zonolite sales office for the latest data on these subjects. Recent tests at Underwriters Laboratories, Inc. have provided some fire-ratings on an asbestos-free formula Mono-Kote. Other tests and ratings will follow."

Existing formulations of Mono-Kote contain minimal amounts of asbestos which are locked in during the mixing process. Mono-Kote is wet mixed, pumped and sprayed, and hardens to a cementitious mass. Job-site tests show air fiber counts well below occupational Threshold Limit Values proposed by government bodies."

Relevant, non-privileged, non-trade secret documents containing information responsive to this interrogatory will be made available to plaintiffs in Boston, Massachusetts at a mutually agreeable time.

INTERROGATORY 36

Warning/Mask

Has Defendant ever placed any form of disposable face mask or respirator in a container of an asbestos-containing product for later use by persons who would handle and/or be exposed to the product? If so, please state:

- A. The products covered by the practice;
- B. The year this practice began and the years it was implemented;
- C. Describe the type of face mask or respirator included in the container; and,
- D. Identify all oral communications and documents related to this practice. If oral identify the approximate date of said communication and the parties involved, if written provide the custodian of said documents.

ANSWER 36

Subject to the General Objections interposed above, Grace-Conn states no.

INTERROGATORY 37

Sales Material

Has Defendant at any time, published and/or distributed any sales brochures, promotional pamphlets, product manuals, specification sheets or other written sales materials or documents of any kind or character? If so, please:

- A. Identify each such document and the custodian thereof;
- B. State for what period of time you published and/or distributed sales brochures, promotional pamphlets, product manuals, specification sheets, or other written sales material or documents without any form of warnings, cautions, hazard statements or explanations concerning asbestos.

ANSWER 37

Subject to the General Objections interposed above, Grace-Conn states yes.

- A. See Answer 12 (f), above.
- B. See Answer 35, above.

INTERROGATORY 38

Advertisement

If you advertised any of your asbestos-containing products, listed in response to interrogatory 14, in newspapers, magazines, or other publications at any time from 1930 to the present, please state for each such advertisement that contained a warning regarding your products:

- A. The name of the publication in which it appeared, including the date and page number;
- B. A complete transcript of the advertisement and a description of any pictures accompanying it;
- C. The name and address of the person or agency that was responsible for approving each such advertisement;
- D. The name and address of whoever has current custody of the above-described advertising literature; and,
- E. Identify all documents relating to such advertisements and the custodian thereof.

ANSWER 38

See answer 35, above.

INTERROGATORY 39

Product Usage/Documents

Has any written material of any kind or character been prepared by Defendant or its agents indicating how your asbestos-containing products should be used and/or maintained (other than information in regards to the hazards, if any, presented by use of the defendant's asbestos containing products)? If so, please state as follows:

- A. Identify all such material and the custodian thereof;
- B. The name, address and job classification of each person who prepared same; and;
- C. The dates and manner in which said material was distributed to purchasers of Defendant's products.

ANSWER 39

See Answer 35, above.

INTERROGATORY 40

Notice/Asbestos Injury

Did Defendant receive notice, prior to 1975, that any person was claiming injury as a result of using asbestos-containing products mined, manufactured, sold and/or used by you? If so, please state as to each such claim.

- A. The name of the claimant;
- B. The date of notice of the claim;
- C. A description of the claim including the type of exposure experienced by the claimant (e.g., mining, milling, manufacturing, insulating, etc.);
- D. The type of injuries allegedly sustained;
- E. The caption and court, address of the court or workers; compensation file number of the claim;
- F. Identify all documents relating to the claim and the custodian thereof.

ANSWER 40

Subject to the General Objections interposed above, Grace-Conn states no as to claims made by end users.

INTERROGATORY 41

Specific Trade Association

Please state whether Defendant has ever been a member of the following business groups (or group with similar name), and if so, answer the following as to each group;

- (1) The address of the group;
 - (2) The years during which you were a member;
 - (3) Identify all documents in your possession relating in any way to the group, including documents before, during and after the period of your membership and the custodian thereof.
- A. Industrial Health Foundation (or one of its predecessors);
 - B. Asbestos Textile Institute;
 - C. Asbestos Information Association of North America;
 - D. National Mineral Wool Producers Association;
 - E. Asbestos Cement Pipe Producers Association;
 - F. Magnesia Insulation Manufacturers Association;
 - G. American Industrial Hygiene Association;
 - H. Brake Lining Manufacturers Association;
 - I. Friction Materials Standards Institute, Inc.;
 - J. Asbestos Brake Lining Manufacturers Institute;
 - K. Quebec Asbestos Mining Association;
 - L. Institute of Occupational and Environmental Health of Quebec Asbestos Mining Association;
 - M. American Society for Testing and Materials;
 - N. Grinding Wheel Institute;
 - O. Trudeau Foundation;
 - P. National Safety Council;
 - Q. National Insulation Manufacturers Association; and,
 - R. The Refractories Institute;

ANSWER 41

Grace-Conn objects to this interrogatory on the grounds that it is overly broad, unduly burdensome, irrelevant, immaterial and not reasonably calculated to lead to the discovery of admissible evidence. Grace-Conn further objects to the parenthetical "or group with similar name" on the grounds that it is vague and ambiguous. Subject to these objections and to the General Objections interposed above, Grace-Conn states as to the listed groups that it has attended annual meetings of the Asbestos Information Association since approximately 1977. Further answering, Grace-Conn has been a sustaining member of the American Industrial Hygiene Association since 1976 and a member of the National Safety Council since approximately 1971.

Further answering, Grace-Conn states that the organizations are or were located at the following addresses:

Asbestos Information Association
1745 Jefferson Davis Highway
Arlington, Virginia

American Industrial Hygiene Association
475 Wolf Ledges Parkway
Akron, Ohio 44311

National Safety Council
425 No. Michigan Avenue
Chicago, Illinois

Grace-Conn further states that relevant, non-privileged, non-trade secret documents containing information responsive to this interrogatory will be made available to cross-plaintiff in Boston, Massachusetts at a mutually agreeable time.

INTERROGATORY 42

Library

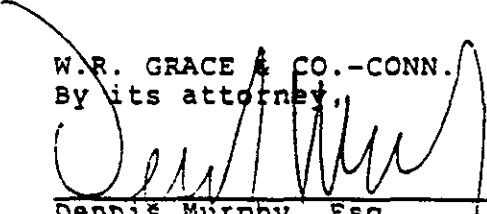
Please state whether Defendant ever maintained any form of library or collection of books and publications. If so, state the following as to each such library:

- A. The original location of the library, including the building in which it was located;
- B. The years during which the library was in operation;
- C. The offices, plant facilities, departments or other organizational units serviced by the library;
- D. Identify each custodian of the library or librarian as well as the years of his service as librarian;

ANSWER 42

Grace-Conn objects to this interrogatory on the grounds that it is overly broad, unduly burdensome, irrelevant, immaterial and not reasonably calculated to lead to the discovery of admissible evidence. Subject to this objection and the General Objections interposed above, Grace-Conn states that it currently has a library at its Construction Products Division in Cambridge, Massachusetts. The librarians of Grace-Conn's CPD library have been Marjorie Metcalf (current), Sue Burgess, Martha Mitchell and Jeanette Hamilton.

W.R. GRACE & CO.-CONN.
By its attorney,



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DATED:

PRODUCT APPENDIX

1. a. Econo-White 65 and Econo-White 70.
 - b. 1956 by Zonolite Company; 1963 by Grace-Conn.
 - c. Produced by Zonolite Company from 1956 until 1963.
Produced by Grace-Conn from 1963 until approximately 1970.
 - d. Approximately 1970.
 - e. Lack of market.
 - f. The product was manufactured at some or all of the plants listed below. Where approximate dates of production are known, they are also listed.
 - (1) North Little Rock, Arkansas; 1956-1968.
 - (2) Sacramento, California.
 - (3) Dearborn, Michigan.
 - (4) Omaha, Nebraska.
 - (5) Trenton, New Jersey.
 - (6) Albany, New York.
 - (7) Ellwood City, Pennsylvania; made for a two-year period, late 1950's or early 1960's.
 - (8) Travelers Rest, South Carolina.
 - (9) Kearney, South Carolina.
 - (10) Dallas, Texas.
 - g. Chemical Composition: Short fiber chrysotile asbestos, Perlite, Bentonite (Montmorillonite type), Titanium dioxide, Sodium lauryl sulfate. Contained approximately 14.97 percent and 14.43 percent 7M asbestos, respectively, by weight.
 - h. Acoustical plaster for walls and ceilings.
 - i. White acoustical plaster.
 - j. This product was packaged in multi-walled, pasted-valve bags constructed of two 60 pound plies of natural kraft paper, which is prescribed by the transportation industry, specifically, National Motor Freight Classification 100-1.
 - k. Grace-Conn objects to this interrogatory on the grounds that it is overly broad, unduly burdensome, irrelevant, immaterial and not reasonably calculated to lead to the discovery of admissible evidence. Without waiving its objection, Grace-Conn states that its investigation to date has revealed no information which is responsive to this interrogatory.

1. Grace-Conn did not manufacture an asbestos free substitute for this product.
2.
 - a. Zono-Cooustic 2 and Zono-Cooustic Z.
 - b. 1960 by Zonolite Company; 1963 by Grace-Conn.
 - c. Produced by Zonolite Company from 1960 to 1963. Produced by Grace-Conn from 1963 until approximately 1973.
 - d. Approximately 1973.
 - e. Lack of market.
 - f. The product was manufactured at some or all of the plants listed below. Where approximate dates of production are known, they are also listed.
 - (1) North Little Rock, Arkansas; 1961-1962.
 - (2) Los Angeles, California.
 - (3) Newark, California; 1970-1973.
 - (4) Sacramento, California.
 - (5) Wilder, Kentucky.
 - (6) Dearborn, Michigan.
 - (7) St. Louis, Missouri.
 - (8) Omaha, Nebraska.
 - (9) Trenton, New Jersey.
 - (10) Albany, New York.
 - (11) Portland, Oregon; 1960's.
 - (12) Ellwood City, Pennsylvania.
 - (13) Travelers Rest, South Carolina, 1959-1963.
 - (14) Kearney, South Carolina.
 - (15) Dallas, Texas.
 - (16) Spokane, Washington; 1959-1962.
 - g. Chemical Composition: Short fiber chrysotile asbestos, Vermiculite, Titanium dioxide, Sodium lauryl sulfate, Plaster of Paris, Hydrated lime. Contained approximately 12.64 percent 7M asbestos by weight.
 - h. Acoustical base coat for walls and ceilings.
 - i. Off-white acoustical plaster.
 - j. This product was packaged in multi-walled, pasted-valve bags constructed of two 60 pound plies of natural kraft paper, which is prescribed by the transportation industry, specifically, National Motor Freight Classification 100-1.
 - k. Grace-Conn objects to this interrogatory on the grounds that it is overly broad, unduly burdensome, irrelevant, immaterial and not reasonably calculated to lead to the discovery of admissible evidence. Without waiving its objection, Grace-Conn states that its investigation to

date has revealed no information which is responsive to this interrogatory.

1. Grace-Conn did not manufacture an asbestos free substitute for this product.
3.
 - a. Zonolite Acoustical Plastic/Plaster
 - b. 1945 by Zonolite Company; 1963 by Grace-Conn.
 - c. Produced by Zonolite Company from approximately 1945 until 1963. Produced by Grace-Conn from 1963 until approximately 1972.
 - d. Approximately 1972.
 - e. Lack of market.
 - f. The product was manufactured at some or all of the plants listed below. Where approximate dates of production are known, they are also listed.
 - (1) Birmingham, Alabama.
 - (2) Phoenix or Glendale, Arizona; 1959-early 1970's.
 - (3) North Little Rock, Arkansas; 1951-mid 1960's.
 - (4) Los Angeles, California; 1951-early 1970's.
 - (5) Sacramento, California.
 - (6) Denver, Colorado; 1952-1959.
 - (7) Tampa, Florida; 1950's-1967.
 - (8) Easthampton, Massachusetts.
 - (9) North Billerica, Massachusetts.
 - (10) Dearborn, Michigan.
 - (11) Minneapolis, Minnesota; 1949-1962.
 - (12) St. Louis, Missouri.
 - (13) Omaha, Nebraska; 1962-1970.
 - (14) Trenton, New Jersey; 1964.
 - (15) Albany, New York.
 - (16) Portland, Oregon.
 - (17) Ellwood City, Pennsylvania; 1948-1960.
 - (18) Travelers Rest, South Carolina; 1948-1963.
 - (19) Kearney, South Carolina.
 - (20) Dallas, Texas; 1973.
 - (21) Spokane, Washington; 1945-early 1970's.
 - (22) Milwaukee, Wisconsin; made until 1971, beginning date unknown.
- g. Chemical Composition: (Standard) Short fiber chrysotile asbestos, Vermiculite, Bentonite (montmorillonite type), Sodium lauryl sulfate. Contained approximately 17.11 percent 7M asbestos in standard acoustical plaster. Bermuda Tan: Short fiber chrysotile asbestos, Vermiculite, Bentonite (montmorillonite type), Sodium lauryl sulfate, Dowicide, Sodium nitrite. Contained approximately 18.69 percent 7M asbestos by weight in Bermuda Tan.

- h. Acoustical coating for ceilings.
 - i. Light beige acoustical plastic.
 - j. This product was packaged in multi-walled, pasted-valve bags constructed of two 60 pound plies of natural kraft paper, which is prescribed by the transportation industry, specifically, National Motor Freight Classification 100-1.
 - k. Grace-Conn objects to this interrogatory on the grounds that it is overly broad, unduly burdensome, irrelevant, immaterial and not reasonably calculated to lead to the discovery of admissible evidence. Without waiving its objection, Grace-Conn states that its investigation to date has revealed no information which is responsive to this interrogatory.
 - l. Grace-Conn did not manufacture an asbestos free substitute for this product.
4. a. Zonolite Finish Coat (Decorator's White).
- b. 1950 by Zonolite Company; 1963 by Grace-Conn.
 - c. Produced by Zonolite Company from 1950 to 1963. First manufactured by Grace-Conn in 1963; product may have been produced until 1974.
 - d. Product may have been produced by Grace-Conn until 1974; information indicates that asbestos was deleted by 1973.
 - e. Lack of market.
 - f. The product was manufactured at some or all of the plants listed below. Where approximate dates of production are known, they are also listed.
 - (1) Los Angeles, California.
 - (2) Sacramento, California.
 - (3) Denver, Colorado; 1952-1965.
 - (4) Pompano Beach, Florida; 1971-1974.
 - (5) Wilder, Kentucky.
 - (6) Easthampton, Massachusetts.
 - (7) Dearborn, Michigan.
 - (8) Trenton, New Jersey.
 - (9) Albany, New York.
 - (10) Portland, Oregon.
 - (11) Travelers Rest, South Carolina; 1950's.
 - (12) Dallas, Texas; 1973.
 - (13) Spokane, Washington.
- g. Chemical Composition: Short fiber chrysotile asbestos, Vermiculite, Bentonite (montmorillonite type), Titanium

dioxide, Sodium lauryl sulfate. Contained approximately 13.11 percent 7M asbestos by weight.

- h. Decorative textured finish
 - i. White textured finish.
 - j. This product was packaged in multi-walled, pasted-valve bags constructed of two 60 pound plies of natural kraft paper, which is prescribed by the transportation industry, specifically, National Motor Freight Classification 100-1.
 - k. Grace-Conn objects to this interrogatory on the grounds that it is overly broad, unduly burdensome, irrelevant, immaterial and not reasonably calculated to lead to the discovery of admissible evidence. Without waiving its objection, Grace-Conn states that its investigation to date has revealed no information which is responsive to this interrogatory.
 - l. Grace-Conn did not manufacture an asbestos-free substitute for this product.
5. a. Zonolite Finish Coat (Decorator's White)(Extra Hard)
- b. 1961 by Zonolite Company, 1963 by Grace-Conn.
 - c. Produced by Zonolite Company from 1961 to 1963. First produced by Grace-Conn in 1963; product may have been produced by Grace-Conn until approximately 1974.
 - d. Product may have been produced by Grace-Conn until 1974; information indicates that asbestos was deleted by 1973.
 - e. Lack of market.
 - f. The product was manufactured at some or all of the plants listed below. Where approximate dates of production are known, they are also listed.
 - (1) Los Angeles, California.
 - (2) Sacramento, California.
 - (3) Denver, Colorado.
 - (4) Pompano Beach, Florida; 1971-1974.
 - (5) Wilder, Kentucky.
 - (6) Easthampton, Massachusetts.
 - (7) Dearborn, Michigan.
 - (8) Trenton, New Jersey.
 - (9) Albany, New York.
 - (10) Portland, Oregon.
 - (11) Travelers Rest, South Carolina.
 - (12) Dallas, Texas.
 - (13) Spokane, Washington.

- g. Chemical Composition: Short fiber chrysotile asbestos, Vermiculite, Bentonite (montmorillonite type), Titanium dioxide, Sodium lauryl sulfate. Contained approximately 12.78 percent 7M asbestos by weight.
 - h. Decorative textured finish.
 - i. White textured finish.
 - j. This product was packaged in multi-walled, pasted valve bags constructed of two 60 pound plies of natural kraft paper, which is prescribed by the transportation industry, specifically, National Motor Freight Classification 100-1.
 - k. Grace-Conn objects to this interrogatory on the grounds that it is overly broad, unduly burdensome, irrelevant, immaterial and not reasonably calculated to lead to the discovery of admissible evidence. Without waiving its objection, Grace-Conn states that its investigation to date has revealed no information which is responsive to this interrogatory.
 - l. Grace-Conn did not manufacture an asbestos-free substitute for this product.
6. a. Zonolite Spra-Tex (Regular)
- b. 1955 by Zonolite Company; 1963 by Grace-Conn.
 - c. Produced by Zonolite Company from approximately 1955 to 1963. Produced by Grace-Conn from 1963 to 1972.
 - d. 1972.
 - e. Lack of market.
 - f. The product was manufactured at some or all of the plants listed below. Where approximate dates of production are known, they are also listed.
 - (1) North Little Rock, Arkansas; may have been made after 1961.
 - (2) Los Angeles, California.
 - (3) Sacramento, California.
 - (4) Pompano Beach, Florida.
 - (5) Wilder, Kentucky.
 - (6) New Orleans, Louisiana.
 - (7) Omaha, Nebraska.
 - (8) Trenton, New Jersey.
 - (9) Albany, New York.
 - (10) Ellwood City, Pennsylvania; 1957-1963.
 - (11) Travelers Rest, South Carolina.
 - (12) Kearney, South Carolina.
 - (13) Spokane, Washington.

- 7
- g. Chemical Composition: Short fiber chrysotile asbestos, Vermiculite, Kaolin clay, Titanium dioxide, Sodium lauryl sulfate. Contained approximately 33.045 percent 7M asbestos by weight.
 - h. Decorative textured finish.
 - i. White decorative ceiling finish.
 - j. This product was packaged in multi-walled, pasted-valve bags constructed of two 60 pound plies of natural kraft paper, which is prescribed by the transportation industry, specifically, National Motor Freight Classification 100-1.
 - k. Grace-Conn objects to this interrogatory on the grounds that it is overly broad, unduly burdensome, irrelevant, immaterial and not reasonably calculated to lead to the discovery of admissible evidence. Without waiving its objection, Grace-Conn states that its investigation to date has revealed no information which is responsive to this interrogatory.
 - l. Grace-Conn did not manufacture an asbestos free substitute for this product.
7. a. Zonolite Spra-Tex (Extra-Hard).
- b. 1961 by Zonolite Company; 1963 by Grace-Conn.
 - c. Produced by Zonolite Company from 1961 to 1963. Produced by Grace-Conn from 1963 to 1972.
 - d. 1972.
 - e. Lack of market.
 - f. The product was manufactured at some or all of the plants listed below. Where approximate dates of production are known, they are also listed.
 - (1) North Little Rock, Arkansas.
 - (2) Los Angeles, California.
 - (3) Sacramento, California.
 - (4) Pompano Beach, Florida.
 - (5) Wilder, Kentucky.
 - (6) New Orleans, Louisiana.
 - (7) Omaha, Nebraska.
 - (8) Trenton, New Jersey.
 - (9) Albany, New York.
 - (10) Ellwood City, Pennsylvania; 1961-1963.
 - (11) Travelers Rest, South Carolina; 1961-1963.
 - (12) Kearney, South Carolina.
 - (13) Spokane, Washington.

- g. Chemical Composition: Short fiber chrysotile asbestos, Kaolin clay, Titanium dioxide, Sodium lauryl sulfate, Vermiculite, IOD concentrate. Contained approximately 32.09 percent 7M asbestos by weight.
 - h. Decorative textured finish.
 - i. White textured ceiling finish.
 - j. This product was packaged in multi-walled, pasted-valve bags constructed of two 60 pound plies of natural kraft paper, which is prescribed by the transportation industry, specifically, National Motor Freight Classification 100-1.
 - k. Grace-Conn objects to this interrogatory on the grounds that it is overly broad, unduly burdensome, irrelevant, immaterial and not reasonably calculated to lead to the discovery of admissible evidence. Without waiving its objection, Grace-Conn states that its investigation to date has revealed no information which is responsive to this interrogatory.
 - l. Grace-Conn did not manufacture an asbestos free substitute for this product.
8. a. Z-Tex, may also be marketed as EZ-Tex, Z-Tex 2 and Z-Tex 2 Super White.
- b. 1958.
 - c. Produced by Zonolite Company from approximately 1958 until approximately 1962.
 - d. 1962.
 - e. Lack of market.
 - f. The product was manufactured at some or all of the plants listed below. Where approximate dates of production are known, they are also listed.
 - (1) North Little Rock, Arkansas.
 - (2) Sacramento, California.
 - (3) Pompano Beach, Florida.
 - (4) Wilder, Kentucky.
 - (5) St. Louis, Missouri.
 - (6) Trenton, New Jersey.
 - (7) Albany, New York.
 - (8) Travelers Rest, South Carolina.
 - g. Chemical Composition: Exact composition unknown at this time. The product contained approximately 14.3 percent short fiber chrysotile asbestos.

- h. Sprayed texture product.
 - i. White or beige sprayed texture product.
 - j. This product was packaged in multi-walled, pasted valve bags constructed of two 60-pound plies of natural kraft paper, which is prescribed by the transportation industry, specifically, National Motor Freight Classification 100-1.
 - k. Grace-Conn objects to this interrogatory on the grounds that it is overly broad, unduly burdensome, irrelevant, immaterial and not reasonably calculated to lead to the discovery of admissible evidence. Without waiving its objection, Grace-Conn states that it held manufacturing rights under patent no. 3,042,681, patented July 3, 1962 and registered through the U.S. Patent Office.
 - l. Grace-Conn did not manufacture an asbestos free substitute for this product.
9. a. Perltext Super-40 Fog. The product may have been sold under the following name at various times: Perltext Fog. Grace-Conn believes that the product may have been produced and sold under the alternative name prior to 1968.
- b. This was a Western Mineral Products product. Grace-Conn manufactured the product from the time it acquired Western Mineral Products in 1966.
 - c. This was a Western Mineral Products product. Grace-Conn first manufactured the product in 1966 after it had acquired Western Mineral Products, until 1973.
 - d. 1973.
 - e. This product was discontinued in 1973 in accordance with Grace-Conn's decision to discontinue production of all Perltext textured products containing commercial asbestos.
 - f. The product was manufactured at some or all of the plants listed below. Where approximate dates of production are known, they are also listed.
 - (1) Pompano Beach, Florida; after 1971.
 - (2) Omaha, Nebraska; before 1972.
 - g. Chemical Composition: Short fiber chrysotile asbestos, Talc, Whiting, Staramic, Dowicil, Methocel, NTA, Daxad-17, Titanium dioxide, Ultramarine blue. Contained approximately 5.5 percent short fiber chrysotile asbestos by weight.

- h. Base coat for decorative textured finish.
 - i. White or beige base coat.
 - j. This product was packaged in multi-walled, pasted-valve bags constructed of two 60 pound plies of natural kraft paper, which is prescribed by the transportation industry, specifically, National Motor Freight Classification 100-1.
 - k. Grace-Conn objects to this interrogatory on the grounds that it is overly broad, unduly burdensome, irrelevant, immaterial and not reasonably calculated to lead to the discovery of admissible evidence. Without waiving its objection, Grace-Conn states that its investigation to date has revealed no information which is responsive to this interrogatory.
 - l. Grace-Conn produced and sold Zonolite Super-40 FOG, a texture product formulated without commercial asbestos.
10. a. Perltext Super-40 Perlite.
- b. This was a Western Mineral Products product. Grace-Conn manufactured the product from the time it acquired Western Mineral Products in 1966.
 - c. This was a Western Minerals Product product. Grace-Conn first manufactured the product in 1966 after it had acquired Western Mineral Products, until 1973.
 - d. 1973.
 - e. The product was discontinued in 1973 in accordance with Grace-Conn's decision to discontinue production of all Perltext textured products containing commercial asbestos.
 - f. The product was manufactured at some or all of the plants listed below. Where approximate dates of production are known, they are also listed.
 - (1) Pompano Beach, Florida; 1972-1973.
 - (2) Omaha, Nebraska; mid-sixties.
 - (3) Dallas, Texas.
 - g. Chemical Composition: Short fiber chrysotile asbestos, Casein, Trisodium phosphate, Dowicil, Sodium nitrite, Methocel, Whiting, Perlite aggregate, Lithopone, NTA, Staramic. Contained approximately 7 percent short fiber chrysotile asbestos by weight.
 - h. Decorative textured finish.
 - i. White or beige textured finish product.

- j. This product was packaged in multi-walled, pasted-valve bags constructed of two 60 pound plies of natural kraft paper, which is prescribed by the transportation industry, specifically, National Motor Freight Classification 100-1.
- k. Grace-Conn objects to this interrogatory on the grounds that it is overly broad, unduly burdensome, irrelevant, immaterial and not reasonably calculated to lead to the discovery of admissible evidence. Without waiving its objection, Grace-Conn states that its investigation to date has revealed no information which is responsive to this interrogatory.
- 1. Grace-Conn produced and sold Zonolite Super-40 Perlite, a texture product formulated without commercial asbestos.
- 11. a. Perltext Super-40 Polycoarse. The product may have been sold under the following alternative trade name: Perltext Polycoarse. Grace-Conn believes that the product may have been produced and sold under the alternative name prior to 1968.
- b. This was a Western Mineral Products product. Grace-Conn manufactured the product from the time it acquired Western Mineral Products in 1966.
- c. This was a Western Mineral Products product. Grace-Conn first manufactured the product in 1966 after it had acquired Western Mineral Products, until 1973.
- d. 1973.
- e. This product was discontinued in 1973 in accordance with Grace-Conn's decision to discontinue production of all Perltext textured products containing commercial asbestos.
- f. The product was manufactured at some or all of the plants listed below. Where approximate dates of production are known, they are also listed.
 - (1) Pompano Beach, Florida; 1972-1973
 - (2) Omaha, Nebraska; mid-sixties-1972.
- g. Chemical Composition: Short fiber chrysotile asbestos, Whiting, Talc, Staramic, Lithopone, Methocel, Dowicil, Daxad-17, Ultramarine blue, Polystyrene aggregate, NTA. Contained approximately 5 percent short fiber chrysotile asbestos by weight.
- h. Sprayed texture product.
- i. White or beige textured product.
- j. This product was packaged in multi-walled, pasted-valve bags constructed of two 60-pound plies of natural kraft paper, which is prescribed by the transportation industry, specifically, National Motor Freight Classification 100-1.

- k. Grace-Conn objects to this interrogatory on the grounds that it is overly broad, unduly burdensome, irrelevant, immaterial and not reasonably calculated to lead to the discovery of admissible evidence. Without waiving its objection, Grace-Conn states that its investigation to date has revealed no information which is responsive to this interrogatory.
 - l. Grace-Conn produced and sold Zonolite Super-40 Polycoarse, a texture product formulated without commercial asbestos.
12. a. Perltex Super-40 SAV.
- b. This was a Western Mineral Products product. Grace-Conn manufactured the product from the time it acquired Western Mineral Products in 1966.
 - c. This was a Western Mineral Products product. Grace-Conn first manufactured the product in 1966 after it had acquired Western Mineral Products, until 1973.
 - d. 1973.
 - e. This product was discontinued in 1973 in accordance with Grace-Conn's decision to discontinue production of all Perltex textured products containing commercial asbestos.
 - f. The product was manufactured at some or all of the plants listed below. Where approximate dates of production are known, they are also listed.
 - (1) Pompano Beach, Florida; 1971-1973.
 - (2) Omaha, Nebraska, mid-sixties-1972.
 - g. Chemical Composition: Short fiber chrysotile asbestos, Casein, Trisodium phosphate, Dowicil, Methocel, Sodium nitrite, Whiting, South African vermiculite aggregate, Lithopone, Staramic, NTA. Contained approximately 6.0 percent short fiber chrysotile asbestos by weight.
 - h. Decorative textured finish.
 - i. White or beige textured finish.
 - j. This product was packaged in multi-walled, pasted-valve bags constructed of two 60-pound plies of natural kraft paper, which is prescribed by the transportation industry, specifically, National Motor Freight Classification 100-1.
 - k. Grace-Conn objects to this interrogatory on the grounds

that it is overly broad, unduly burdensome, irrelevant, immaterial and not reasonably calculated to lead to the discovery of admissible evidence. Without waiving its objection, Grace-Conn states that its investigation to date has revealed no information which is responsive to this interrogatory.

1. Grace-Conn produced and sold Zonolite Super-40 SAV, a texture product formulated without commercial asbestos.
13. a. Perltext Spray Surfacers. This product may have been sold under the following alternative trade names: Plastertext, Perltext Super-40 Spray Surfacers or Perltext Super 40.
- b. This was a Western Mineral Products product. Grace-Conn manufactured the product from the time it acquired Western Mineral Products in 1966.
- c. This was a Western Mineral Products product. Grace-Conn first manufactured the product in 1966 after it had acquired Western Mineral Products, until approximately 1973.
- d. Approximately 1973.
- e. This product was discontinued in 1973 in accordance with Grace-Conn's decision to discontinue production of all Perltext textured products containing commercial asbestos.
- f. The product was manufactured at one or both of the plants listed below. Approximate dates of manufacture are also listed.
 - (1) Pompano Beach, Florida; 1971-1973.
 - (2) Omaha, Nebraska; before 1972.
- g. Chemical Composition: 7M Asbestos, Bentonite, Titanium dioxide, Hydrated lime, Duponol, Perlite. Percentage of asbestos unknown.
- h. Spray texture coating.
- i. Product was a texture product, applied over board, concrete, metal or plaster, white in color.
- j. This product was packaged in multi-walled, pasted valve bags constructed of two 60-pound plies of natural kraft paper, which is prescribed by the transportation industry, specifically, National Motor Freight classification 100-1.
- k. Grace-Conn objects to this interrogatory on the grounds that it is overly broad, unduly burdensome, irrelevant, immaterial and not reasonably calculated to lead to the discovery of admissible evidence. Without waiving its

objection, Grace-Conn states that its investigation to date has revealed no information which is responsive to this interrogatory.

1. Unknown. However, Grace-Conn currently has no evidence that the product was manufactured after 1973, when Grace-Conn ceased the production of all acoustical plaster products containing commercial asbestos.
14. a. Perl-Coustic
- b. This was a Western Mineral Products product. Grace-Conn manufactured the product from the time it acquired Western Mineral Products in 1966.
 - c. Western Mineral Products until 1966; Grace-Conn (1966 until date unknown; Grace-Conn currently has no evidence that this product was manufactured after 1973).
 - d. Unknown. However, Grace-Conn currently has no evidence that the product was manufactured after 1973, when Grace-Conn ceased the production of all acoustical plaster products containing commercial asbestos.
 - e. This product was discontinued in 1973 in accordance with Grace-Conn's decision to discontinue production of all Perltext textured products containing commercial asbestos.
 - f. The product was manufactured at one or both of the plants listed below. Approximate dates of manufacture are also listed.
 - (1) Omaha, Nebraska.
 - (2) Milwaukee, Wisconsin.
 - g. Chemical Composition: Short fiber chrysotile asbestos, Perlite, Soka-Floc BW-20, Bentonite, Sodium Nitrite, Dowicide G, Naconal DB Beads. Contained approximately 15-17% 7M asbestos by weight.
 - h. Spray texture coating.
 - i. Acoustical Finish Coat.
 - j. This product was packaged in multi-walled, pasted valve bags constructed of two 60-pound plies of natural kraft paper which is prescribed by the transportation industry. Specifically, National Motor Freight classification 100-1.
 - k. Grace-Conn objects to this interrogatory on the grounds that it is overly broad, unduly burdensome, irrelevant,

immaterial and not reasonably calculated to lead to the discovery of admissible evidence. Without waiving its objection, Grace-Conn states that its investigation to date has revealed no information which is responsive to this interrogatory.

1. Unknown. However, Grace-Conn currently has no evidence that the product was manufactured after 1973, when Grace-Conn ceased the production of all acoustical plaster products containing commercial asbestos.
15. a. Prep-Coat #3
- b. Western Mineral Products until 1966; Grace-Conn (1966-approximately 1972).
 - c. Unknown. However, Grace-Conn believes that the date was approximately 1972.
 - d. Unknown. However, Grace-Conn currently has no evidence that the product was manufactured after 1973, when Grace-Conn ceased the production of all sprayed textured products containing commercial asbestos.
 - e. Unknown. However, Grace-Conn currently has no evidence that the product was manufactured after 1973, when Grace-Conn ceased the production of all sprayed textured products containing commercial asbestos.
 - f. The product was manufactured at one or both of the plants listed below. Approximate dates of manufacture are also listed.
 - (1) Omaha, Nebraska; before 1972.
 - g. Chemical Composition: Short fiber chrysotile asbestos, White cement, Calcium Carbonate, Vermiculite, Finish Lime Double Hydrated, Perlite. Contained approximately 4-5% asbestos by weight.
 - h. Believed to be a decorative exterior finish.
 - i. Investigation continues.
 - j. This product was packaged in multi-walled, pasted valve bags constructed of two 60-pound plies of natural kraft paper which is prescribed by the transportation industry. Specifically, National Motor Freight classification 100-1.
 - k. Grace-Conn objects to this interrogatory on the grounds that it is overly broad, unduly burdensome, irrelevant, immaterial and not reasonably calculated to lead to the discovery of admissible evidence. Without waiving its

objection. Grace-Conn states that its investigation to date has revealed no information which is responsive to this interrogatory.

1. Unknown. However, Grace-Conn currently has no evidence that the product was manufactured after 1973, when Grace-Conn ceased the production for all sprayed textured products containing commercial asbestos.

16. a. Versakote or Prep Coat #4.

- b. This was a Western Mineral Products product. Grace-Conn manufactured the product from the time it acquired Western Mineral Products in 1966.
- c. This was a Western Minerals Products product. Grace-Conn first manufactured the product in 1966 after it had acquired Western Mineral Products. A product called Versakote has been manufactured without commercial asbestos since 1974.
- d. This product has not been withdrawn from the market; since 1974, no asbestos has been used in this product.
- e. Not applicable.
- f. The product was manufactured at some or all of the plants listed below. Where approximate dates of production are known, they are also listed.
 - (1) Pompano Beach, Florida; 1972-1973.
 - (2) Omaha, Nebraska; 1972.
- g. Chemical Composition: Short fiber chrysotile asbestos, Aluminum stearate, Gelvatol, Hamaco, Daxad-17, Darex set accelerator, Nopco PD-1, Aluminum hydrate, Dowicil, Whiting, White portland cement, Perlite aggregate, Titanium dioxide, Hydrated lime. Contained approximately 4.52 percent short fiber chrysotile asbestos by weight.
- h. Very hard, decorative textured exterior finish.
- i. White or beige textured finish.
- j. This product was packaged in multi-walled, pasted valve bags constructed of two 60 pound plies of natural kraft paper, which is prescribed by the transportation industry, specifically, National Motor Freight Classification 100-1.
- k. Grace-Conn objects to this interrogatory on the grounds that it is overly broad, unduly burdensome, irrelevant,

immaterial and not reasonably calculated to lead to the discovery of admissible evidence. Without waiving its objection, Grace-Conn states that its investigation to date has revealed no information which is responsive to this interrogatory.

1. A product called Versakote has been manufactured without commercial asbestos since 1974.
17. a. **Spra-Wyt.**
- b. This was a Western Mineral Products product. Grace-Conn manufactured the product from the time it acquired Western Mineral Products in 1966.
 - c. This was a Western Mineral Products product. Grace-Conn first manufactured the product in 1966 after it had acquired Western Mineral Products, until a date unknown, but believed to be not later than 1973.
 - d. Exact discontinuance date unknown, but not later than 1973.
 - e. Unknown.
 - f. The product was manufactured at some or all of the plants listed below. Approximate dates of production are not known. Investigation continues.
 - (1) Denver, Colorado.
 - (2) Minneapolis, Minnesota.
 - (3) Omaha, Nebraska.
 - g. Chemical Composition: 7M Asbestos, Bentonite, Titanium dioxide, Hydrated lime, Duponol, Perlite. The percentage of asbestos is unknown at this time.
 - h. Acoustical finish coat.
 - i. Acoustical plaster, color unknown.
 - j. This product was packaged in multi-walled, pasted-valve bags constructed of two 60 pound plies of natural kraft paper, which is prescribed by the transportation industry, specifically, National Motor Freight Classification 100-1.
 - k. Grace-Conn objects to this interrogatory on the grounds that it is overly broad, unduly burdensome, irrelevant, immaterial and not reasonably calculated to lead to the discovery of admissible evidence. Without waiving its objection, Grace-Conn states that its investigation to date has revealed no information which is responsive to this interrogatory.

1. Unknown
18. a. Hi-Sorb Acoustical Plaster.
- b. Originally produced by Western Mineral Products under license from Highland Stucco and Lime Products, Inc., Van Nuys, California. First manufactured under license by Grace-Conn in 1966.
 - c. This was a Western Mineral Products product. Manufactured by Grace-Conn from 1966 after it had acquired Western Mineral Products, until a date unknown, but believed to be not later than 1973.
 - d. Exact discontinuance date unknown, but not later than 1973.
 - e. Unknown.
 - f. The product was manufactured at some or all of the plants listed below. Approximate dates of production are not known. Investigation continues.
 - (1) Denver, Colorado.
 - (2) Minneapolis, Minnesota.
 - (3) Omaha, Nebraska.
 - g. Chemical Composition: (XX White Hi-Sorb) Short fiber chrysotile asbestos, South African Vermiculite, Perlite, Plaster of Paris, Bentonite, Cal. Concentrate, Titanium, Drywall Additive. Contained approximately 8-10% 7M asbestos by weight in XX White Hi-Sorb. (Oyster White Hi-Sorb) Short fiber Chrysotile asbestos, South African Vermiculite, Vermiculite, Plaster of Paris, Bentonite, Cal. Concentrate, Drywall Additive. Contained approximately 8-10% 7M asbestos by weight in Oyster White Hi-Sorb.
 - h. Acoustical plaster.
 - i. Textured ceiling plaster, oyster white; also available in color variations.
 - j. This product was packaged in multi-walled, pasted valve bags constructed of two 60-pound plies of natural kraft paper, which is prescribed by the transportation industry. Specifically, National Motor Freight Classification 100-1.
 - k. Grace-Conn objects to this interrogatory on the grounds that it is overly broad, unduly burdensome, irrelevant, immaterial and not reasonably calculated to lead to the discovery of admissible evidence. Without waiving its objection, Grace-Conn states that its investigation to

date has revealed no information which is responsive to this interrogatory.

1. Unknown, investigation continues.
19. a. High Temperature Insulating Cement.
- b. 1945 by Zonolite Company; 1963 by Grace-Conn.
- c. Produced by Zonolite Company from approximately 1945 until 1963. Produced by Grace-Conn from 1963 until approximately 1970 or 1971.
- d. Approximately 1970 or 1971.
- e. Lack of market.
- f. The product was manufactured at some or all of the plants listed below. Where approximate dates of production are known, they are also listed.
 - (1) Birmingham, Alabama.
 - (2) Phoenix or Glendale, Arizona; 1959-early 1970's.
 - (3) North Little Rock, Arkansas; 1951-mid 1960's.
 - (4) Los Angeles, California; 1951-early 1970's.
 - (5) Sacramento, California.
 - (6) Denver, Colorado.
 - (7) Tampa, Florida; 1950's-1967.
 - (8) Easthampton, Massachusetts.
 - (9) North Billerica, Massachusetts.
 - (10) Dearborn, Michigan.
 - (11) Minneapolis, Minnesota; 1949-1962.
 - (12) St. Louis, Missouri.
 - (13) Omaha, Nebraska; 1962-1970.
 - (14) Trenton, New Jersey; 1964.
 - (15) Albany, New York.
 - (16) Portland, Oregon.
 - (17) Ellwood City, Pennsylvania; 1948-1960.
 - (18) Travelers Rest, South Carolina; 1948-1963.
 - (19) Kearney, South Carolina; 1963-1964.
 - (20) Dallas, Texas.
 - (21) Spokane, Washington; 1945-early 1970's.
 - (22) Milwaukee, Wisconsin; made until 1971, beginning date unknown.
 - (23) Edmonton, Alberta.
 - (24) Vancouver, British Columbia; 1946-1972.
 - (25) Winnipeg, Manitoba.
 - (26) Regina, Saskatchewan.
- g. Chemical Composition: Short fiber chrysotile asbestos, Vermiculite, Bentonite (montmorillonite type), Sodium lauryl sulfate, Sodium Nitrate. Contained approximately 17.11 percent asbestos by weight or approximately 18.69 percent asbestos by weight.

- h. High temperature insulating cement.
 - i. Light beige insulating cement.
 - j. This product was packaged in strong paper bags weighing 25 pounds each.
 - k. Grace-Conn objects to this interrogatory on the grounds that it is overly broad, unduly burdensome, irrelevant and not reasonably calculated to lead to the discovery of admissible evidence. Without waiving its objection, Grace-Conn states that its investigation to date has revealed no information which is responsive to this interrogatory.
 - l. Grace-Conn did not manufacture an asbestos-free substitute for this product.
20. a. Zonolite Mono-Kote (MK-1).
- b. December 1958 by the Zonolite Company, 1963 by Grace-Conn.
 - c. Produced by the Zonolite Company from December 1958. Virtually all sales ended by 1962, although there may have been some sales until approximately 1969.
 - d. Virtually all sales ended by the end of 1962, although there may have been some sales by Grace-Conn until approximately 1969.
 - e. Lack of market.
 - f. The product was manufactured at some or all of the plants listed below. Approximate dates of production are not known.
 - (1) Phoenix, Arizona.
 - (2) Los Angeles, California.
 - (3) Sacramento, California.
 - (4) Denver, Colorado.
 - (5) Tampa, Florida.
 - (6) Wilder, Kentucky.
 - (7) New Orleans, Louisiana.
 - (8) Dearborn, Michigan.
 - (9) Minneapolis, Minnesota.
 - (10) Omaha, Nebraska.
 - (11) Trenton, New Jersey.
 - (12) Albany, New York.
 - (13) Portland, Oregon.
 - (14) Travelers Rest, South Carolina.
 - (15) Dallas, Texas.
 - (16) Spokane, Washington.

- g. Chemical Composition: approximately 11.9% short fiber chrysotile asbestos, vermiculite, plaster of paris, portland cement, ZOD concentrate.
 - h. Cementitious fireproofing.
 - i. Cementitious light beige fireproofing material.
 - j. This product was packaged in multi-walled, pasted-valve bags constructed of two 60 pound plies of natural kraft paper, which is prescribed by the transportation industry, specifically, National Motor Freight Classification 100-1.
 - k. Grace-Conn objects to this interrogatory on the grounds that it is overly broad, unduly burdensome, irrelevant, immaterial, and not reasonably calculated to lead to the discovery of admissible evidence. Without waiving its objection, Grace-Conn states that it held manufacturing rights under patent no. 3,042,681, patented July 3, 1962 and registered through the U.S. Patent Office.
 - l. Grace-Conn did not manufacture an asbestos-free substitute for this product.
21. a. Zonolite Spra-Insulation (MK-2).
- b. 1960 by Zonolite Company; 1963 by Grace-Conn.
 - c. Produced by Zonolite Company from 1960 to 1963. Produced by Grace-Conn from 1963 until approximately 1972.
 - d. Approximately 1972.
 - e. Lack of market.
 - f. The product was manufactured at some or all of the plants listed below. Where approximate dates of production are known, they are also listed.
 - (1) Sacramento, California.
 - (2) Denver, Colorado.
 - (3) Wilder, Kentucky.
 - (4) Minneapolis, Minnesota.
 - (5) Omaha, Nebraska.
 - (6) Trenton, New Jersey.
 - (7) Weedsport, New York.
 - (8) North Little Rock, Arkansas; a small amount may have been made at this plant some time after 1960.
 - (9) Portland, Oregon.
 - (10) Traveler's Rest, South Carolina; 1960.
 - (11) Dallas, Texas.
 - (12) Spokane, Washington; 1960-1962.

- (13) Milwaukee, Wisconsin; discontinued about 1967.
- (14) Los Angeles, California.

- g. Chemical Composition: Short fiber chrysotile asbestos, Vermiculite, White Portland Cement, Plaster of Paris, ZOD concentrate. Contained approximately 11.78 percent 7M asbestos by weight.
 - h. Insulation and acoustical material for application to metal building interiors.
 - i. Dark beige cementitious material.
 - j. This product was packaged in multi-walled, pasted-valve bags constructed of two 60 pound plies of natural kraft paper, which is prescribed by the transportation industry, specifically, National Motor Freight Classification 100-1.
 - k. Grace-Conn objects to this interrogatory on the grounds that it is overly broad, unduly burdensome, irrelevant, immaterial, and not reasonably calculated to lead to the discovery of admissible evidence. Without waiving its objection, Grace-Conn states that it held manufacturing rights under patent no. 3,042,681, patented July 3, 1962 and registered through the U.S. Patent Office.
 - l. Grace-Conn did not manufacture an asbestos-free substitute for this product.
22. a. Zonolite Mono-Kote (MK-3).
- b. 1959 by Zonolite Company. 1963 by Grace-Conn.
 - c. Produced by Zonolite Company from 1959 to 1963. Produced by Grace-Conn from 1963 until 1973.
 - d. 1973.
 - e. Discontinued to comply with federal regulations.
 - f. The product was manufactured at some or all of the plants listed below. Where approximate dates of production are known, they are also listed.
 - (1) Phoenix, Arizona (Glendale); 1960-1973.
 - (2) North Little Rock, Arkansas; 1959-1973.
 - (3) Los Angeles, California; 1959-1973.
 - (4) Newark, California; 1965-1973.
 - (5) Sacramento, California.
 - (6) Santa Ana, California; 1972-1973.
 - (7) Denver, Colorado; 1959-1973.
 - (8) Jacksonville, Florida; 1968-1973.
 - (9) Tampa, Florida; 1960-1967.
 - (10) Chicago, Illinois (W. Chicago); 1959-1973.

- (11) Wilder, Kentucky.
 - (12) New Orleans, Louisiana; some MK-3 was made at this plant for a short period in the early 1960's.
 - (13) Easthampton, Massachusetts; 1964-1973.
 - (14) Dearborn, Michigan.
 - (15) Minneapolis, Minnesota; 1960-1972.
 - (16) Kansas City, Missouri.
 - (17) St. Louis, Missouri; 1959-1973.
 - (18) Omaha, Nebraska; 1962-1973.
 - (19) Trenton, New Jersey; 1964.
 - (20) Albany, New York.
 - (21) Weedsport, New York; 1965-1973.
 - (22) Portland, Oregon; 1963-1973.
 - (23) Ellwood City, Pennsylvania; mid-1960's.
 - (24) New Castle, Pennsylvania; 1969-1973.
 - (25) Travelers Rest, South Carolina; 1959-1965.
 - (26) Kearney, South Carolina; 1966 or 1967-1973.
 - (27) Dallas, Texas.
 - (28) Spokane, Washington; 1959-1973.
 - (29) Milwaukee, Wisconsin.
- g. Chemical Composition: Short fiber chrysotile asbestos, Vermiculite, Plaster of Paris, Sodium lauryl sulfate. Contained approximately 13.23 percent 7M or 12.18 7R short fiber chrysotile asbestos by weight.
 - h. Fireproofing.
 - i. Light beige cementitious material.
 - j. This product was packaged in multi-walled, pasted-valve bags constructed of two 60 pound plies of natural kraft paper, which is prescribed by the transportation industry, specifically, National Motor Freight Classification 100-1.
 - k. Grace-Conn objects to this interrogatory on the grounds that it is overly broad, unduly burdensome, irrelevant, immaterial, and not reasonably calculated to lead to the discovery of admissible evidence. Without waiving its objection, Grace-Conn states that it held manufacturing rights under patent no. 3,369,929, issued February 20, 1968 and registered through the U.S. Patent Office.
 - l. While Mono-Kote (MK-3) was never reformulated, it was replaced by two new products, Mono-Kote (MK-4) and (MK-5), neither of which contains commercial asbestos. MK-4 was first marketed by Grace-Conn in or around April, 1971. MK-5 was first marketed by Grace-Conn in or around October, 1972.

CERTIFICATION

STATE OF FLORIDA)

COUNTY OF PALM BEACH, SS.)

Terri L. Pike, being first duly sworn, on oath deposes and says she is Controller, Office of Environmental Policy of W. R. Grace & Co. - Conn., defendant in the above-entitled action; that she has read the foregoing answers to interrogatories and responses to request for documents and knows the contents thereof; that said responses were prepared by and with the assistance of employees and representatives of the corporation, with the assistance and advice of counsel, upon which she has relied; that the responses set forth herein, subject to inadvertent or undiscovered errors, are based on and therefore necessarily limited by the records and information still in existence, presently recollected and thus far discovered in the course of the preparation of these responses; that consequently W. R. Grace & Co. - Conn. reserves the right to make any changes in the responses if it appears at any time that omissions or errors have been made therein or that more accurate information is available; and that subject to the limitations set forth herein the said responses are true to the best of her present knowledge, information and belief.



TERRI L. PIKE

Subscribed and sworn to before me
this 24 day of February, 1992.


NOTARY PUBLIC

NOTARY PUBLIC STATE OF FLORIDA
MY COMMISSION EXPIRES 4/1/96
BONDED THRU GENERAL INS. UND.

IN THE CIRCUIT COURT OF THE 11TH
JUDICIAL CIRCUIT IN AND FOR DADE
COUNTY, FLORIDA

GENERAL JURISDICTION DIVISION

CASE NO. 91-80000

IN RE: Asbestos Litigation

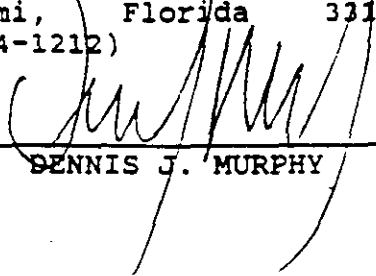
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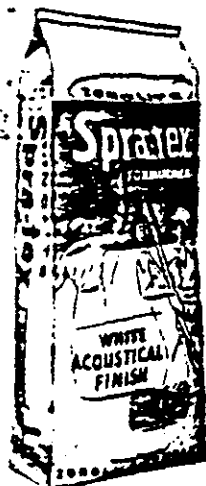
COMES NOW, W. R. GRACE & CO. - CONN, by and through its undersigned counsel, and hereby notifies the Court and the parties of the filing of the attached Answers and Objections to Plaintiff's Master Preliminary Interrogatories which must be considered by the Court.

CERTIFICATE OF SERVICE

WE HEREBY CERTIFY that a true copy of the foregoing was mailed to: ALL COUNSEL OF RECORD, this 5 day of February, 1991.

KUBICKI, DRAPER,
GALLAGHER & McGRANE, P.A.
Attorneys for W. R. Grace
25 West Flagler Street
Miami, Florida 33130
(374-1212)

BY: 
DENNIS J. MURPHY



Zonolite Finish Coats are available in two light reflectivities and two surface hardnesses for application to acoustical plasters (e.g. Zonolite Acoustical Plastic, see data sheet PA-49 or Zono-Coustic, see data sheet PA-54) or may be applied directly to concrete as a texture coat. When applied to a thickness of $\frac{1}{8}$ in., over acoustical plasters, Zonolite Finish Coats will not adversely affect sound absorption. All Zonolite Finish Coats are mill-mixed materials, requiring only the addition of water at the job. They are applied by any one of several pump type plaster machines or air-spray texture guns.

TECHNICAL DATA

Finish Coat	Type Designation	Hardness	Light Reflectivity, per cent
Spra-Tex	SH70	Standard	70
	EH70	Extra	70
Decorators' White	SH65	Standard	65
	EH65	Extra	65

SHORT-FORM SPECIFICATION

Acoustical plaster and concrete surfaces shall receive one coat of Zonolite Finish Coat (Spra-Tex, type SH70 or EH70 or Decorators' White, type SH65 or EH65) as manufactured by the Zonolite Company or its licensees, machine applied in the areas shown on the schedule of finishes. The method of mixing and application shall conform to the manufacturer's recommendation.

RECOMMENDED GUIDE SPECIFICATION FOR ZONOLITE FINISH COATS WITH NOTES TO THE ARCHITECT

01 SCOPE:

Note: 01 a. These specifications are recommended as a part of the plastering section, covering the application of Zonolite Finish Coats to acoustical plaster or directly to concrete. When supplemented by the general conditions, plans, details and schedules, this specification will provide the contractor with sufficient information to establish costs and to construct the work properly.

a. The work covered by this section of the specification includes:

- (1) Furnishing and installing materials for the machine application of Zonolite Finish Coats as specified herein, complete in accordance with this section of the specifications, the applicable drawings and schedules, and subject to the general terms and conditions of the contract.
- (2) Protection of surfaces not to receive finish coat.
- (3) Cleaning subsequent to application, including the removal of all waste and surplus materials.

b. The work not covered by this section of the specification is as follows:

- (1) Installation of the base material to which finish coat is applied.
- (2) Cleaning and preparation of surfaces to receive finish coat.

Note: 01 b. (2) When Zonolite Finish Coats are applied to concrete surfaces, exposed wire should be painted with a rust inhibitive paint.

c. The application of finish coat shall be as herein described over all areas indicated in the schedule of finishes.

02 MATERIALS:

a. Finish coats shall be Zonolite Finish Coat type SH70 or EH70 or Decorators' White, type SH65 or EH65, as manufactured by the Zonolite Co. or its licensees.

03 DELIVERY AND STORAGE:

a. Manufactured material shall be delivered in the original packages bearing the name of the manufacturer and the brand and shall be kept dry until ready for use. It shall be kept off the ground, under cover and away from sweating walls and other damp surfaces.

04 MIXING:

a. Water shall be poured into a clean mechanical mixer. The finish coat material shall be added and mixed for 3 to 5 minutes.

b. The quantity of water used shall be $8\frac{1}{2}$ to $10\frac{1}{2}$ U.S. gal (7 to 8 Imperial gal) for each 25 lb bag of Spra-Tex, types EH70 and SH70, and shall be $9\frac{1}{2}$ to $12\frac{1}{2}$ U.S. gal (8 to $10\frac{1}{2}$ Imperial gal) for each 22 lb bag of Decorators' White, type EH65 or SH65.

05 APPLICATION:

a. Application of the finish coat shall be made by a pump type plaster machine or an air-spray texture gun to a thickness of $\frac{1}{8}$ in. The surface to which the finish coat is applied shall be firm, clean, free of rust, oil, dust, dirt or loose paint, and dry or set. Finish coats shall not be applied to a painted surface which is water soluble or to areas which are normally touched by occupants. Protect adjacent surfaces from over spray where necessary.

Note: 05 a. Zonolite Finish Coats may be applied about 4 hr after the application of Zonolite Zono-Coustic acoustical plaster under normal drying conditions. Zonolite Acoustical Plastic should be allowed to dry for a few days before the finish coat is applied.

06 TEMPERATURE AND VENTILATION:

a. The requirements for temperature and ventilation shall conform to the American Institute of Architects' Standard Specification for Plastering.

07 CLEANING:

ZONOLITE FINISH COATS 7163590

SPRA-TEX and DECORATORS' WHITE



Zonolite Finish Coats are available in two light reflectivities and two surface hardnesses for application to acoustical plaster (e.g. Zonolite Acoustical Plastic, see data sheet PA-48 or Zono-Coustic, see data sheet PA-54) or may be applied directly to concrete as a texture coat. When applied to a thickness of $\frac{1}{8}$ in., over acoustical plaster, Zonolite Finish Coats will not adversely affect sound absorption. All Zonolite Finish Coats are mill-mixed materials, requiring only the addition of water at the job. They are applied by any one of several pump type plaster machines or air-spray texture guns.

TECHNICAL DATA

Finish Coat	Type Designation	Hardness	Light Reflectivity, per cent
Spra-Tex	SH70	Standard	70
	EH70	Extra	70
Decorators' White	SH65	Standard	65
	EH65	Extra	65

SHORT-FORM SPECIFICATION

Acoustical plaster and concrete surfaces shall receive one coat of Zonolite Finish Coat (Spra-Tex, type SH70 or EH70 or Decorators' White, type SH65 or EH65) as manufactured by the Zonolite Company or its licensee, machine applied in the areas shown on the schedule of finishes. The method of mixing and application shall conform to the manufacturer's recommendation.

RECOMMENDED GUIDE SPECIFICATION FOR ZONOLITE FINISH COATS WITH NOTES TO THE ARCHITECT

-01 SCOPE:

Note: -01 a. These specifications are recommended as a part of the plastering section, covering the application of Zonolite Finish Coats to acoustical plaster or directly to concrete. When supplemented by the general conditions, plans, details and schedules, this specification will provide the contractor with sufficient information to establish costs and to construct the work properly.

a. The work covered by this section of the specification includes:

(1) Furnishing and installing materials for the machine application of Zonolite Finish Coats are specified herein, complete in accordance with this section of the specifications, the applicable drawings and schedules, and subject to the general terms and conditions of the contract.

(2) Protection of surfaces not to receive finish coat.

(3) Cleaning subsequent to application, including the removal of all waste and surplus materials.

b. The work not covered by this section of the specification is as follows:

(1) Installation of the base material to which finish coat is applied.

(2) Cleaning and preparation of surfaces to receive finish coat.

Note: -01 b. (2) When Zonolite Finish Coats are applied to concrete surfaces, exposed wire should be painted with a rust inhibitive paint.

c. The application of finish coat shall be as herein described over all areas indicated in the schedule of finishes.

-02 MATERIALS:

a. Finish coats shall be Zonolite Finish Coat, type _____ as manufactured by the Zonolite Co. or its licensee.

Note: -02 a. See technical data above for proper type designation, i.e., Spra-Tex, type SH70 or EH70 or Decorators' White, type SH65 or EH65. The installed cost differential between these four types of finishes is less than \$.01 per sq ft @ $\frac{1}{8}$ in. thickness.

b. Water shall be clean, fresh and suitable for domestic consumption.

-03 DELIVERY AND STORAGE:

a. Manufactured material shall be delivered in the original packages bearing the name of the manufacturer and the brand and shall be kept dry until ready for use. It shall be kept off the ground, under cover and away from sweating walls and other damp surfaces.

-04 MIXING:

a. Water shall be poured into a clean mechanical mixer. The finish coat material shall be added and mixed for 3 to 5 minutes.

b. The quantity of water used shall be $8\frac{1}{2}$ to $10\frac{1}{2}$ U.S. gal (7 to 8 Imperial gal) for each 25 lb bag of Spra-Tex, types SH70 and EH70, and shall be $9\frac{1}{2}$ to $12\frac{1}{2}$ U.S. gal (8 to $10\frac{1}{2}$ Imperial gal) for each 22 lb bag of Decorators' White, type SH65 or EH65.

-05 APPLICATION:

a. Application of the finish coat shall be made by a pump type plaster machine or an air-spray texture gun to a thickness of $\frac{1}{8}$ in. The surface to which the finish coat is applied shall be firm, clean, free of rust, oil, dust, dirt or loose paint, and dry or set. Finish coats shall not be applied to a painted surface which is water soluble or to areas which are normally touched by occupants. Protect adjacent surfaces from over spray where necessary.

Note: -05 a. Zonolite Finish Coats may be applied about 4 hr after the application of Zonolite Zono-Coustic acoustical plaster under normal drying conditions. Zonolite Acoustical Plastic should be allowed to dry for a few days before the finish coat is applied.

-06 TEMPERATURE AND VENTILATION:

a. The requirements for temperature and ventilation of the Vermiculite Institute Standard Specification for Vermiculite Plastering and Acoustical Plastic shall apply.

-07 CLEANING

a. After the application of a finish coat has been approved by the architect, the contractor shall remove his equipment and clean all deposits from floors, walls, doors, windows and other areas which do not require a finish coat.

ZONOLITE | SRA-TEX AND DECORATORS' WHITE

AIA-39-A

TECHNICAL DATA



ZONOLITE PLASTER SYSTEMS

PA-91

Zonolite® Econo-White Mill-Mixed Plaster

Data Sheet

ZONOLITE ECONO-WHITE

Zonolite Econo-White is a mill-mixed plaster which can be applied to plaster base coats or directly to concrete surfaces for acoustical treatment. Econo-White is available with a light reflectivity of 65 percent.

Econo-White can also be applied as a finish coat over Zonolite Acoustical Plastic (Bermuda Tan) or can be used as a simulated acoustical texture over concrete or galvanized steel.

Recommended Guide Specification

SCOPE:

The work covered by this section of the specification includes:

(1) Furnishing and installing materials for the machine application of Zonolite Econo-White are specified herein, complete in accordance with this section of the specifications, the applicable drawings and schedules, and subject to the general terms and conditions of the contract.

(2) Protection of surfaces not to receive finish coat.

(3) Cleaning subsequent to application, including the removal of all waste and surplus materials.

MATERIALS:

Acoustical Plaster shall be Zonolite Econo-White as manufactured by the Zonolite Division, W. R. Grace & Co.

Water shall be clean, fresh and suitable for domestic consumption.

DELIVERY AND STORAGE:

Manufactured material shall be delivered in the original packages bearing the name of the manufacturer and the brand and shall be kept dry until ready for use. It shall be kept off the ground, under cover and away from sweating walls and other damp surfaces.

PREPARATION OF BASE:

Base Coat Plaster: Base coat plaster over which Zonolite Econo-White is to be applied shall be to full grounds, dry darried or rodged to an even surface. Plaster Base Coat must be lightly wire scratched or broomed so that surface film is broken. The base coat shall be in a semi-green condition during application of Econo-White. Exposed metal and tie wires shall be covered with a rust-inhibitive material prior to application of Econo-White.

Concrete: Concrete surfaces shall be clean, firm and free of dust and oil. Any exposed metal shall be covered with a rust-inhibitive material.

Metal: Zonolite Econo-White can be applied directly to galvanized steel deck, provided it is dry and free of dust and oil.

Painted Surfaces: Zonolite Econo-White can be applied to any firm painted surface that is not water soluble.

MIXING:

a. Water shall be poured into a clean mechanical mixer. The plaster material shall be added and mixed for 3 to 5 minutes.

APPLICATION:

Base coat of Econo-White shall be applied by plaster machine to a thickness of $\frac{3}{4}$ " and darried or rodged to a true and level surface.

The finish coat shall be applied by plaster machine uniformly to bring thickness out to a total of $\frac{1}{2}$ ". The time interval between application of base coat and the finish coat shall be long enough for the base coat to be in a dry or semi-dry condition.

TEMPERATURE AND VENTILATION:

The requirements for temperature and ventilation of the American Standard Specification for Gypsum Plastering, ASA No. A42.1 — 1964, shall apply.



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