

IN THE COURT OF COMMON PLEAS
BUTLER COUNTY, OHIO

DONALD LEE ABNER, et al.,

Plaintiffs,

vs.

A-BEST PRODUCTS COMPANY, et al.,

Defendants.

CASE NO. CV96 01 0180
(ELLIOTT, J.)



RESPONSES OF DEFENDANT
GAF CORPORATION TO
PLAINTIFFS' MASTER SET OF INTERROGATORIES
PROPOUNDED TO
GAF CORPORATION

Defendant is hereby requested to answer under oath the interrogatories numbered 1 to 58, inclusive, as shown below, within twenty-eight (28) days of the time service is made upon the Defendant, in accordance with Ohio Civil Rule 33.

INSTRUCTIONS

1. Answer each interrogatory separately and fully in writing under oath, unless it is objected to, in which event the reasons for objection must be stated in lieu of answer.
2. An evasive or incomplete answer is deemed to be a failure to answer under Ohio Civil Rule 37(A).

3. Each Defendant is under a continuing duty to seasonably supplement its response with respect to any question directly addressed to the identity and location of persons having knowledge of discoverable matters, and the identity of each person expected to be called as an expert witness at trial and the subject matter on which he or she is expected to testify. Furthermore, each Defendant, pursuant to Rule 26(E) of the Ohio Rules, is under a similar duty to correct any incorrect response when the Defendant later learns that it is incorrect, including in such supplemental answer the date upon and manner in which such further or different information came to each Defendant's attention.

4. Unless otherwise specified, each of these interrogatories are meant to apply to the time period from 1920 until the present.

5. Should the Defendant assert a privilege with respect to any information, defendant is requested to provide the following as to each such document or item of information:

- (1) The type of document or information (e.g., letter, notebook, telephone conversation, etc.),
- (2) The date of the document or transaction involving the information;
- (3) Identification of the author and/or all participants with respect to the information;
- (4) Identification of the signatory or signatories of the document, if any;
- (5) Identification of the documents current custodian;

- (6) The present whereabouts of the document and/or the names of all persons with personal knowledge with respect to the information; and
- (7) A statement of the grounds on which the claim of privilege rests with respect to each such document or piece of information withheld.

6. If your answer states that the Defendant is undertaking an investigation of the subject matter of the interrogatory, state when the investigation began, what steps comprise the investigation and what documents are being reviewed as part of the investigation.

7. The following terms are defined as follows for the purpose of these interrogatories:

DEFINITIONS

As used in this set of Interrogatories and Request for Production, the following terms mean:

1. The words "Defendant," "You," "Your," "Your company," all mean the corporate Defendant separately answering these Interrogatories, and any of its merged, consolidated, or acquired predecessors, divisions, subsidiaries, foreign subsidiaries, foreign subsidiaries of predecessors, and/or affiliates. This includes, but is not limited to, those known to have mined, manufactured, sold, marketed, utilized or distributed asbestos or asbestos-containing products or that incorporated asbestos or asbestos-containing products at any work site. This definition includes present and former officers, directors, servants, agents, employees, and all other persons acting or purporting to act on behalf of the

corporate Defendant or its predecessors, subsidiaries, and/or affiliates known to have mined, manufactured, sold, marketed, utilized or distributed asbestos or asbestos-containing products. "Predecessors" further means any business firm, whether or not incorporated, which had all or some of its assets purchased by you or came to be acquired by you whether by merger, consolidation, or otherwise known to have mined, manufactured, sold, marketed, utilized, or distributed asbestos or asbestos-containing products. "Subsidiaries" further means any business firm, whether or not incorporated, which is or was in any way owned or controlled, in whole or in part by Defendant or its predecessors and which is known to have mined, manufactured, sold, marketed, utilized or distributed asbestos or asbestos-containing products.

2. "Document" includes, but is not limited to, correspondence, letter, memoranda, message, note, report, cable, telegram, photograph, film, tape, and all other written communications of every kind and character; note, recording disk, or any other record of oral communication; microfilm; worksheet; schedule; exhibit; demonstrative aid; letter; contract; agreement; deeds, bills of sale, deeds of trust, security agreements, leases and other instruments or documents of title; maps; diagrams; logs; summaries; printouts; graphs, charts; compilations, tables; publications; manuals; minutes; by-laws; articles of incorporation; resolution; shareholder endorsements; partnership documents; minute books, diaries; calendars, bank statements, tax returns; lists; tapes, video tapes; and any other data compilations from which information can be obtained and translated.

3. "Identify" means to give the date, title, origin, author, and addressee to enable plaintiff to retrieve it from a file; and further, identify means to give the name, address, position, title, and whether a person is employed or not employed by the Defendant.

4. The words "person" or "persons" include natural persons, firms, partnerships, associations, joint ventures, corporations, and any other form of business organization or arrangement, and officers, directors, shareholders, employees, agents, and contractors of any business organization or arrangement.

5. The words "meeting" or "meetings" may mean any coincidence or presence of any persons, whether or not such coincidence or presence was pre-arranged, was formal or informal, or was in connection with some other activity.

6. The words "describe" or "description", when referring to a place, thing, or occurrence, mean to identify with sufficient particularity the place, thing, or occurrence so as to enable one to locate, examine and fully comprehend or understand the place, thing, or occurrence described.

7. The words "product containing asbestos fibers," "asbestos-containing products," "asbestos products" all refer to any products or materials prepared in any way for sale and/or distribution that contained any kind of asbestos in any possible form. The words "asbestos materials" refer to any and all materials, substance, or matter used or assembled or fabricated during the manufacture of a product, and that contain at least some asbestos fibers. "Product" includes, but is not limited to, pipecovering, turbines, cement, block, gaskets, packing, plaster, joint compound, floor and ceiling tiles, mastics, boilers, raw fibers,

fireproofing, shingles, panels, sheets, boards, millboard, refractory cement, boilers, firebrick, brake and clutch linings, finishing compound, texture, and other construction, building, drywall, lath and insulation materials.

8. The words "design changes," and "modifications" mean alterations in the makeup and/or components of a particular product, including but not limited to, variations in the amount or type of asbestos used in the process of manufacturing the product.

9. The words "distribute," "distributed," "distributor," and "distribution" all refer to the sale, marketing, dispersal and/or shipment of asbestos-containing products for purposes of their sale, resale and/or for purposes of filling orders provided by other business concerns. The word "distributor" specifically refers to a company or its sales representatives, whether dependent or independent, responsible for sales or marketing of products.

10. The words "marketed," and "market" mean and include all efforts to assist in the distribution and/or sale of products. More generally, these terms refer to only efforts on your part or the part of manufacturers or distributors to sell or otherwise distribute products.

11. The words "medical advisory capacity" refer to the duties, abilities or capabilities of any member of Defendant's staff, or any individual or organization who has contracted with Defendant, to provide services of a medical nature, including but not limited to providing medical advice.

12. The words "trade organization," or "trade association" mean any organizations or associations of business or industrial entities that are associated and/or meet for the purpose of achieving common goals and/or exchanging information related to common needs

or interests, and/or learning information or facts of interest to the various members of the organization or association.

13. The word "plant" means a manufacturing or assembly facility where products are assembled, manufactured, constructed, fabricated, or where component parts, materials, substances, or matter of such products are fabricated, assembled, or manufactured or are prepared for further fabrication and/or assembly.

14. The word "manufacture," or "manufactured" means to fabricate, to construct, to assemble, prepare for fabrication or assembly, or any other action taken prior to completion of the product or material before the time of its shipment.

15. The words "sales materials," or "written sales materials" mean any and all documents or literature of a promotional nature that were created or printed for the purpose of assisting in the marketing or distribution of the products. Such documentation may include, but is not limited to, sales invoices, order slips, and other written indicia of orders received and sales made.

16. The words "rebranding agreement" mean an agreement of any kind whereby one party to the agreement is provided products by the other party to the agreement and the agreement contemplates that the first party will place the brand name of its choice upon the products, either by repackaging or otherwise, and then proceed to sell, market, distribute and/or place the product in the stream of commerce, utilizing its new brand name.

17. The words "research" and "research department" refer to efforts, whether scientific or otherwise, to develop new and/or different types of products, processes or

designs of pre-existing products and is meant to incorporate all efforts that specifically contemplated the possible alteration of products.

18. The words "medical department" refer to an individual or a section or group of individuals working for Defendants, either directly or in a contractual capacity, whose purpose was or is to provide guidance, assistance, or advice concerning any aspects of medical health, including but not limited to, the safety of Defendant's workers and the safety of individuals using products manufactured by the Defendant.

19. The words "industrial hygiene surveys" mean surveys, tests, interviews, or other procedures taken or effectuated for the purpose of determining air quality, air contamination, dust content, safety of a facility or hazards at any site or facility.

20. The words "health hazards," or "potential health hazards" refer and relate to any injury, effect, damage, scarring, wound, impairment or disability of any part of the human anatomy, including but not limited to the lungs and lung linings.

21. The terms "test" and "testing" are used in their broadest sense, including but not limited to, studies of atmospheric dust samples, studies of the concentration of asbestos in such airborne test samples, studies of the lung conditions of workers (by x-ray or other means of medical surveillance), pulmonary function studies of workers, animal studies, pathological studies, industrial hygiene studies, risk assessment studies, cost-benefit analyses and any other studies on the product concerning health and safety required by any governmental agency.

GAF Corporation ("GAF") hereby responds to Plaintiffs' Master Set of Interrogatories ("the Interrogatories") only pursuant to, under the protection of and to the extent that such requests comply with the Ohio Rules of Civil Procedure, as follows:

PRELIMINARY STATEMENT

These responses are made solely for the purpose of this action. Each response is subject to all appropriate objections (including, but not limited to, objections as to confidentiality, relevancy, propriety and admissibility) which require the exclusion of any statement contained herein as if the Interrogatory were answered by a witness present and testifying in court. All such objections and grounds are reserved and may be interposed at the time of trial.

GAF has not yet completed its investigation of the facts relating to this action, has not yet interviewed all witnesses in this action, has not yet completed its discovery in this action, and has not yet completed its preparation for trial. Consequently, the following responses are given without prejudice to GAF's right to produce, at any time, subsequently discovered evidence relating to proof of presently known material facts and to produce all evidence, whenever discovered, relating to the proof of subsequently discovered material facts. Except for explicit facts admitted herein, no admissions of any nature whatsoever are implied or should be inferred. The fact that any Interrogatory herein has been responded to should not be taken as an admission or acceptance of the existence of any facts set forth or assumed by such Interrogatory.

GENERAL OBJECTIONS

1. GAF objects to these Interrogatories to the extent that they seek to require it to respond on behalf of any other entity. GAF will respond with such knowledge as GAF possesses as to The Ruberoid Co. prior to its acquisition by GAF on May 26, 1967.

2. GAF objects to these Interrogatories to the extent that they seek to require it to provide information other than that which may be obtained through a reasonably diligent search of its records.

3. GAF objects to these Interrogatories to the extent that they seek to require it to respond other than in accordance with the applicable Rules of Civil Procedure. Thus, GAF declines any obligation to: (a) locate or interview former employees or any other person not presently employed or engaged by GAF; (b) generate documents not presently existing; (c) describe its unsuccessful efforts to answer any request; (d) identify an unknown custodian or the current custodian of documents not in GAF's possession; (e) identify the file designation and other identifying designation, the present location, or the source of documents identified unless specifically requested in the request; (f) add to or to change the meaning of any request in the conjunctive or disjunctive; (g) respond to any aspect of a request not described with reasonable particularity by the express language of the request; or (h) provide medical or other expert opinion beyond the scope of GAF's business.

4. GAF objects to these Interrogatories to the extent that they seek to require it to reveal trade secrets or other confidential product or commercial information. Therefore, GAF will submit certain responses only on the condition that the plaintiffs agree in writing

and undertake to maintain the confidential nature of certain trade secrets and other confidential product or commercial information.

5. GAF objects to these Interrogatories to the extent that they seek to require it to respond to questions or to identify or produce documents relating to times, events and other things beyond the subject matter of the Complaint, or outside the period from 1928 to 1981, during which The Ruberoid Co., until its acquisition by GAF on May 26, 1967, and thereafter GAF may have manufactured asbestos-containing industrial thermal insulation products, or relating to any products other than asbestos-containing industrial thermal insulation products.

6. GAF objects to these Interrogatories to the extent that they seek to require it to provide information specifically with respect to mining and manufacturing operations, or any safety precautions or tests undertaken therein whether in compliance with OSHA or otherwise, inasmuch as the occupational level exposures of asbestos mining and manufacturing workers are different from the occupational level exposures of insulators and construction bystanders working with finished asbestos-containing products.

7. GAF objects to these Interrogatories to the extent that they seek to require it to provide information or to identify any documents or other tangible things prepared or obtained in anticipation of litigation or for trial where the plaintiffs have not shown that they (a) have substantial need for the materials in the preparation of the case and (b) are unable to obtain the substantial equivalent of the materials by other means without undue hardship.

8. GAF objects to these Interrogatories to the extent that they seek to require it to disclose privileged disclosure of any attorney-client privileged communications or information otherwise protected from discovery on the grounds of privilege, work product privileged information and/or information protected by any other applicable privilege, and hereby asserts those doctrines and privileges with respect to each Interrogatory. GAF will not supply or render information protected from disclosure by virtue of such doctrines or privileges. No response herein is, or shall be construed to be, a waiver of the protection provided by such doctrine or privilege.

9. GAF objects to the definitions and instructions preceding the Interrogatories on the grounds that they are beyond the scope of the applicable Rules of Civil Procedure.

10. GAF objects generally and individually to the Interrogatories on the grounds and to the extent that they assume facts not in evidence or otherwise erroneous (i.e., that GAF had "distributors") and on the further grounds that they are vague, overly broad, oppressive, unduly burdensome, excessive in number, not relevant to the subject matter of the litigation, and not calculated to lead to the discovery of admissible evidence and thus GAF declines to pursue a detailed search of its documents.

11. GAF hereby adopts the motions and objections of the other defendants, and reserves the right to adopt future motions and objections relating to Plaintiffs' Interrogatories.

12. GAF objects to these Interrogatories to the extent that they seek to require it to gather and summarize information contained in voluminous papers that are already a matter of public record.

13. GAF objects to these Interrogatories to the extent that they seek to require it to provide information which is equally available to the plaintiffs as it is to GAF.

14. GAF objects to these Interrogatories to the extent that they seek it to respond other than in accordance with the Ohio Rules of Civil Procedure and thus GAF declines to identify computer tapes and programs, computer printouts and any electronic, mechanical or electric records or representations of any kind (including, without limitation, tapes, cassettes, disks, recordings and computer memories), or fields, files, menus, databases, or other computer classifications or material, inasmuch as such documents constitute documents or other things prepared or obtained in anticipation of litigation or for trial, work product, confidential attorney-client communications, and otherwise privileged documents.

15. GAF's failure to make any objection, either in these general objections or in a specific response below, through inadvertence, ignorance of facts giving rise to such objection, or for any other reason, should not be considered a waiver of such objection.

Subject to the foregoing objections and limitations which are applicable to each of the numbered paragraphs of the Interrogatories, and subject to any documents being in existence and recoverable through a reasonably diligent search (taking into account normal changes in personnel and document locations over the decades of asbestos litigation), and without representing that any particular document or documents are or are not thus existing and

recoverable, GAF further responds to the individual Interrogatories without waiver and with preservation of:

The right to object to the use of any responses, or the subject matter thereof, on any ground in any proceedings in any action (including any trials);

The right to object on any ground at any time to a demand or request for a further response to this discovery request or to any other interrogatories, document requests, or other discovery proceedings involving or relating to the subject matter of the discovery requests herein responded to; and,

The right at any time to revise, correct, add to, supplement or clarify any of the responses to the individual Interrogatories as follows:

CORPORATION NAME

1. For each Interrogatory below, please state the name and last known address of each person answering it, including whether he/she is employed by Defendant and if employed by Defendant include job title, length of time employed by Defendant and a year by year list of all other positions, titles, or jobs held when working for Defendant.

ANSWER: Subject to the objections set forth in the preliminary paragraphs of this response, this defendant states that various GAF officers and outside counsel have participated in the preparation of responses to Interrogatories and other discovery requests and provided information utilized in the preparation of certain of the responses of these Interrogatories.

In the course of responding to discovery over several years, various persons have provided information and referred to documents which persons and

documents this defendant is presently unable to identify individually or in relation to specific items of information.

The following former GAF employees are known to have supplied information utilized in responding to discovery:

William Schwingen - (retired) - former Vice President, Technical Services, GAF Building Materials Corporation - formerly employed at Wayne, New Jersey 07470;

Phillip Bettoli - (retired) - former Technical Director, Research Department, GAF Corporation - formerly employed at South Bound Brook, New Jersey 08880;

Wayne Page - former Vice President of Manufacturing of Consumer Products Group, GAF Corporation - formerly employed at New York, New York.

In addition, counsel for GAF Corporation, various local counsel for GAF, and their paralegal professionals have assisted in the preparation of these responses.

1.1 Please identify all documents used, related to, or referred to in connection with the preparation of or answers to these Interrogatories and state the number of the Interrogatory and its subpart to each such document.

ANSWER: This defendant objects to this request on the grounds set forth in the preliminary paragraphs of this response and on the further grounds that it is overly broad, unduly burdensome and not drafted in a fashion precise enough, nor reasonably calculated, to lead to the discovery of admissible evidence.

2. Please state whether or not Defendant is a corporation. If so, please state:
- (a) Your correct corporate name;
 - (b) The state of your incorporation;
 - (c) The address of your principal place of business;
 - (d) Your registered agent for service in the state of Ohio;
 - (e) For each Defendant claiming that this Court lacks personal jurisdiction, list year by year the total amount of income received by the Defendant from entities in Ohio, any and all years that Defendant, as defined, has been licensed to do business in Ohio, and any real property owned at any time by Defendant or its present or past subsidiaries.

ANSWER: Subject to the preliminary objections, this defendant responds that GAF Corporation was incorporated in Delaware in 1929 as American I.G. Corporation. Its name was changed in 1939 to General Aniline & Film Corporation. From its inception until May of 1967, General Aniline & Film Corporation was not engaged in any aspect of the asbestos-containing industrial thermal insulation business and, in fact, manufactured no products whatsoever containing asbestos.

On May 26, 1967, GAF acquired The Ruberoid Co. The Ruberoid Co. was originally incorporated in New York in 1886 as the Standard Paint Company. This company was succeeded by a company of the same name, which was incorporated in West Virginia in 1889; that company was succeeded by the Standard Paint Company, incorporated in New Jersey on June 16, 1905. The name of the company was changed to The Ruberoid Co. on March 10, 1921. The Ruberoid Co. began the manufacture of industrial thermal insulation products containing asbestos in 1928 when it acquired the H.F. Watson Co. The Ruberoid Co. made various other acquisitions not pertinent to this action, including a Vermont mine.

In 1942, 98 percent of the stock of General Aniline & Film Corporation was seized, pursuant to a wartime legislative enactment, by the U.S. Treasury Department which assumed control over the company management and operations. In 1965, the U.S. Government relinquished control over General Aniline & Film Corporation and its stock was sold at public auction. In 1968, the name of the company was changed from General Aniline & Film Corporation to GAF Corporation.

GAF maintains its principal place of business at 1361 Alps Road, Wayne, New Jersey 07470.

3. State Defendant's complete corporate or business history, 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. In addition:

- a. if defendant or any of its predecessors or subsidiaries at any time purchased, assumed, or in any other manner acquired ANY of the assets and/or liabilities of any corporation or entity at any prior time engaged in any aspect of the placing of asbestos containing products into the stream of commerce or the insuring of asbestos related risks, then please state the following as to each acquisition:
- b. 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;
- c. 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);
- d. the date of each such acquisition;
- e. the state in which each such acquisition was effected;
- f. the state law governing each such acquisition if specified by contract;
- g. whether Defendant became legally responsible for the past torts of each such corporation or entity;
- h. identify each document reflecting or related to the history and/or transaction(s) set forth in answer to this Interrogatory.

ANSWER: See Response to Interrogatory No. 2.

4. Please state whether or not the Defendant has purchased, assumed, or in any other manner acquired any of the assets and/or liabilities of any corporation or entity (such corporations or entities being limited to those engaged in the mining, selling, manufacturing, marketing or distribution of asbestos-containing products.) If so, please state the following:

- a. the name or description of each corporation, entity or assets acquired by Defendant, its state of incorporation and principal place of business, its date of incorporation, and the name of Defendant at the time of acquisition;
- b. 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);
- c. the date of each such acquisition;
- d. the state in which each such acquisition was effected;
- e. the state law governing each such acquisition if specified by contract;
- f. whether Defendant became legally responsible for the past torts of each such corporation or entity;
- g. whether the acquisition concerned asbestos-containing products.

ANSWER: See Response to Interrogatory No. 2.

4.1 For each corporation, other than the answering defendant ("the entity"), that has at any time in the past been involved in the placing of asbestos containing products into the stream of commerce for which officers of the answering defendant's corporation have also served as officers, directors or served in any managerial position while employed by the answering defendant, state:

- a. the name of the entity involved in the placing of asbestos products into the stream of commerce;
- b. the manner in which the entity was involved in the placing of asbestos containing products into the stream of commerce (i.e., mining, milling, manufacturing, distributing, installing, rebranding, etc.);
- c. the specific products placed into the stream of commerce by the entity year by year and by brand or trade name;
- d. the name, positions and a brief description of the responsibilities of the person or persons serving the answering defendant and the entity simultaneously including the positions held with the entity and with the answering defendant.

ANSWER: Subject to the preliminary objections, and to the extent the question is intelligible, this defendant responds, not applicable.

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5. Has Defendant ever engaged in the mining, manufacturing, selling, marketing, installation or distribution of asbestos-containing products? If so, please state the following:

- (a) The name of the company engaged in the activity (whether it is Defendant, Defendant's predecessor, or Defendant's subsidiary);
- (b) As to each product mined, manufactured, sold, marketed, installed or distributed, please state the following:
 - 1. The trade or brand name.
 - 2. Its identification number (model, serial number, etc.).
 - 3. The time period it was manufactured, mined, marketed, distributed or sold.
 - 4. Its physical description including color, general composition, and form.
 - 5. A detailed description of its intended use and purpose.
 - 6. A detailed description of the type package in which it was sold, listing the dates of each type of package used, a physical description of the package, and a description of any printed material or trademarks that appeared thereon.
 - 7. The percent of asbestos which it contained.
 - 8. The percent of asbestos by asbestos type (amosite, crocidolite, tremolite, anthophyllite).
- (c) The time period during which each of these products were on the market;

- (d) The material components/ingredients of each such product, giving specific or approximate percentage both by weight and by volume of each material component/ingredient (this interrogatory is not limited to the asbestos component of the product but seeks information as to the nature, weight and volume of non-asbestos ingredients, as well) of each such product;
- (e) How each of these asbestos-containing product can be distinguished from those of competitors;
- (f) A description of the physical appearance of such product;
- (g) A detailed description of the intended uses.

ANSWER: Subject to the preliminary objections, this defendant responds:

I. **CALSILITE®**

With the support and at the behest of the United States Government which needed to increase wartime production of shipboard insulation materials, in 1944 Ruberoid constructed a Calsilite® plant in Gloucester City, New Jersey, to manufacture Calsilite® pipe covering and block insulation. The plant was completed in approximately November 1944. Some limited production of Calsilite® occurred prior to the plant's completion. GAF believes that all Calsilite® production during World War II was for the United States Navy. In June 1947 the Calsilite® facility was shut down temporarily and all outstanding orders were cancelled. The facility was reopened on July 10, 1947 and operated on a pilot plant basis until March 7, 1949. During this research project period, production was limited and of an experimental nature. Calsilite® was again manufactured on a commercial basis by Ruberoid beginning on March 7, 1949, and then by General Aniline & Film Corporation in 1967, and then by GAF Corporation from 1968 to October 1971, when the plant was closed.

Calsilite® was a lightweight, hard, calcium silicate insulation designed to withstand temperatures up to 1250° F. Calsilite® pipe covering was manufactured in three-foot lengths and in varying thicknesses. It was available in half-sectional pieces and, at various times, in three-segmental and regular segmental shapes, for assembly around a pipe in single or double layers. Pipe covering normally was provided with standard weight cotton or canvas jackets applied with silicate of soda. No "Ts," elbows or joints were produced. Flat Calsilite® blocks were manufactured, at various times, in 18" or 36" lengths, in widths from 3" to 36", and in thicknesses up to 4 inches. Six-inch wide curved segmental blocks, capable of contouring more easily for insulation

of large pipes and circular vessels, also were available. Throughout the time it was manufactured, Calsilite® pipe covering and block was packaged in corrugated boxes.

Calsilite® was manufactured by a "pan-molding" method until 1964 when Ruberoid began using a "filter-press" method or process. Pan-molded Calsilite® was grayish white and relatively smooth, with some small holes. Calsilite® filter press was grayish white with screen marks on the outer surfaces.

Calsilite®-Hi, developed in or around 1960, could withstand temperatures up to 1800° F. In the mid-to-late 1960s, Ruberoid developed Calsilite® SS, an "inhibited" product designed specifically to prevent stress corrosion and cracking of stainless steel piping.

In addition to formula changes made in connection with product development, the Calsilite® formula was adjusted often in order to compensate for changes in the quality and availability of raw materials. GAF does not have a complete set of all the formulas used in Calsilite® production nor does it have complete information about the production dates of known formulas.

This defendant began production of asbestos-free Calsilite® after having developed the product as a result of a project initiated sometime after the acquisition of The Ruberoid Co. on May 26, 1967, with sales beginning in 1970 or 1971. This product was identified as "Calsilite® II" or "Calsilite® A-F." However, without adding asbestos, GAF was unable to manufacture a calcium silicate insulation which met all applicable United States Government specifications. These limitations made it impossible for this defendant to manufacture and sell an asbestos-free Calsilite® that met applicable Government requirements. GAF asked the Government (U.S. Navy) to modify its specifications so that GAF's new product could be sold to the Navy and other customers that required materials which would meet such specifications. The failure by the United States Government to act promptly to approve non-asbestos Calsilite® for procurement was the leading factor resulting in the closure of the entire Calsilite® facility.

II. ASBESTOS PAPER AND MILLBOARD PRODUCTS

Asbestos paper, millboard and laminated products were manufactured at Erie, Pennsylvania, by Ruberoid from 1928 to 1967, and then by General Aniline & Film Corporation in 1967, and then by GAF Corporation from 1968 to 1981, when the Erie facility was sold. These products generally were shipped in cardboard cartons of varying sizes, except for Imperial insulation and sponge felt which, because of their weight and bulk, were packaged into sections in wooden crates.

Asbestos Paper

Asbestos paper was designed to be used alone or in the manufacture of other products. It was manufactured in various thicknesses, according to customer specifications. Asbestos paper had a temperature limit of 250° F. Its primary constituent was chrysotile asbestos, generally a mixture of grades 5 to 7. Other constituents included sulphite pulp, diatomaceous earth and starch, although in the early years of manufacture this product may have consisted only of chrysotile and starch (which was sometimes in the form of tapioca).

Rollboard

Rollboard was an asbestos paper product, consisting of plies of asbestos paper bonded together without glue to create thicknesses varying from 1/16 to 1/8 of an inch. Rollboard had a temperature limit of 250° F.

Millboard

Millboard was a stiffer product than asbestos paper or rollboard and was manufactured in sheets of varying thicknesses according to customer specifications. Millboard consisted generally of chrysotile asbestos (usually grades 5D, 5R and 6D), sulphite pulp and, often, other constituents bonded with Portland cement and/or starch. In later years, at least as early as 1974, latex was added as a binder.

Corrugated Asbestos Paper

Corrugated asbestos paper was designed to be used alone or in the manufacture of other products. It was made in three types: 1/4" thickness per ply (4 plies/inch); 1/8" thickness per ply (6 plies/inch) and 1/16" thickness per ply (8 plies/inch). It was manufactured by adhering 36" to 37 1/2" wide flat sheets of asbestos paper (usually 6 pound paper) with silicate of soda to sheets of the same paper which had been corrugated using characteristic "Roman Arch" -shaped corrugations, 26-28 to the foot. Its constituents were those of the asbestos paper from which it was constructed. Corrugated asbestos paper was sold in 250 and 500 square-foot rolls.

Air Cell

Air cell was a corrugated asbestos paper product manufactured from 1928 to approximately 1958. It was constructed of layers to the thickness specified by the customer of 36" or 37-1/2" wide flat asbestos paper which was adhered to corrugated asbestos paper with silicate of soda. The corrugations of this product had a characteristic "Roman Arch" shape. As of 1938, the corrugated paper component had

28 corrugations per linear foot. Each ply was 1/4" thick and air cell came in three standard thicknesses: 2-ply, 3-ply, and 4-ply. Air cell pipe covering, sheets and blocks were sold. Often a canvas, cloth or pyroxyline jacket was applied to the outer surface of air cell pipe covering with an adhesive, usually a starch or cereal paste. Two and 1/2" wide brass lacquered bands were provided for each canvas-jacketed section of air cell pipe covering to hold it to the pipe. With the pyroxyline jacket, three 1" wide black japan bands were supplied with each section. Air cell had a temperature limit of 250° - 350° F. Prior to 1935, air cell may have been sold only under the name "Celasbestos," which was available in 5-, 6-, 7- and 8-ply versions as well as 1-4 ply versions.

Watcocell

Watcocell was a corrugated asbestos paper product manufactured as Watcocel from 1928 to 1934, as Supercell from 1935 to 1942 and as Watcocell from 1942 to 1960. In 8-ply-per-inch Watcocell, the corrugations were 1/16" thick; in 6-ply, the corrugations measured about 1/8" thickness. Watcocell was sold in rolls, sheets and blocks. Watcocell's temperature limit was 250° F.

Imperial Insulation

Imperial insulation was manufactured from at least 1936 to approximately 1960 and was discontinued due to a lack of commercial demand. It had a temperature limit of 500° - 700° F. Imperial paper consisted of two plies of flat asbestos paper which were passed through an indenting roll resulting in a waffle-like appearance with closely spaced square indentations. Imperial pipecovering was wound on a mandrel to achieve the desired thickness and was canvas-covered. In early years of production, layers of Imperial may have been stapled together or stitched with strands of wire rather than wound on a mandrel. Imperial sheets and blocks were made of layers of Imperial paper glued to the desired thickness with a fireproof glue, such as silicate of soda. This product was sold with a canvas, asphalted felt or pyroxyline jacket.

Aristo Insulation

The years of manufacture of Aristo Insulation are unknown, except that it was listed for sale in and around 1940. It was a corrugated asbestos paper product with carefully measured indentations and 23-25 laminations per inch of thickness. Its temperature limit was 700° - 750° F. The asbestos paper used in this product was treated with a surface treatment, possibly Bennett size. This product was sold in a standard thickness of one inch, but often was used in thicknesses up to and exceeding three inches. Standard canvas and waterproof jackets were available for this product.

Sponge Felt

Sponge felt was manufactured from 1936 to approximately 1960 and was discontinued due to a lack of commercial demand. It consisted of asbestos sponge paper made by imbedding small pieces of sponge into asbestos paper. Its temperature limit was 750° F. It was sold in 36" wide rolls, sheets and blocks which were produced in the same manner as Imperial products.

Woolfelt

Woolfelt, a wool or rag felt insulation manufactured from 1928 to approximately 1959, did not contain asbestos, but was sometimes sold with an asbestos paper liner or backing paper. Tar-lined woolfelt was sold with a tar paper liner which did not contain asbestos. Twin-purpose woolfelt was sold with a liner of asphalt-coated asbestos paper.

Anti-Sweat Pipe Covering

Manufactured until approximately 1958, anti-sweat pipe covering was intended exclusively for residential use on cold water pipes. At least as early as 1936 this product was composed of an inner layer of asphalt-saturated asbestos paper followed by a 1/2" layer of woolfelt, 2 layers of asphalt-saturated asbestos paper, another 1/2" layer of woolfelt and two final layers of asphalt-saturated asbestos paper. The outermost layer had a flap extending at least 3" beyond the longitudinal joint. This product was sold in 36" wide rolls and had a temperature limit of 50° F.

Frost-Proof Pipe Covering

Little is known of this product which was apparently constructed of a layer of felt made from cattle, goat or other animal hair with layers of asphalt-saturated asbestos paper and a layer of woolfelt. Its years of manufacture and temperature limit are unknown to GAF.

Range Boiler Jacket

This product consisted of a series of plies of corrugated asbestos paper built up to the required thickness on mandrels that were the same size as the range boilers the product was designed to fit. The corrugated paper used was a coarse variety with four plies per inch of thickness. These jackets were furnished in two sections--upper half and lower half. Five extra-wide bands were provided to attach the jacket to the range boiler. The outside surface was painted or covered with canvas. GAF does not know the years of manufacture of this product.

T/NA-100

T/NA-100 was manufactured from 1962 until 1971. This asbestos paper product was a thin, fully bound two-ply laminated product consisting of an interior layer of asbestos paper bonded with Neoprene to a layer of polyvinylfluoride (Tedlar) plastic film on the exterior of the product. T/NA-100 was also sold with a back surface vapor barrier of Dow "Saran" film. The paper inner layer was manufactured in Erie, Pennsylvania, the Neoprene outer layers were supplied by DuPont, and the product was assembled by High Vacuum Company, Passaic, New Jersey. Manufacture of this product was discontinued because it was not profitable.

At various times, Ruberoid product brochures and advertising listed for sale asbestos-containing products not known to have been manufactured by Ruberoid, including 85 percent magnesia and diatomaceous earth products, but which may have been manufactured for Ruberoid. This defendant is aware of no sales documents with respect to these products, the year of any sale of any such products or of any specific sale. However, this defendant is aware through litigation of individual Ruberoid labels upon sections of pipe covering indicating that the material was 85 percent magnesia pipe covering manufactured for Ruberoid by Plant Rubber and Asbestos Company, and perhaps others. It is believed that this material dates from the late 1930s.

III. INSULATING CEMENTS

1. 115 Insulation Cement

115 Insulation Cement was a chrysotile asbestos product which, in some instances, was produced at Ruberoid/GAF's Vermont facility and, in other instances, was purchased from various other asbestos suppliers and resold. Some of the product purchased from other suppliers may have been milled again at Ruberoid/GAF's Vermont facility prior to resale. Asbestos insulation cements produced at GAF's Vermont facility could generally be distinguished from asbestos insulation cements produced by other manufacturers inasmuch as the Vermont product was a slip chrysotile asbestos rather than a cross vein asbestos and was generally of a lower grade and contained a greater percentage of impurities, such as dirt and rock particles. It is believed that this product was sold from at least as early as 1937 to 1975. It is believed that the "115" designation was employed from approximately 1950 to 1975 and the designation "Grade B" was also employed in years prior to 1950.

The basic ingredients of this cement product were:

chrysotile determined to pass the 0-0-1-15 Quebec test
impurities (dirt, rock, earth)

The particular formulas utilized by entities which purchased this product for construction are not known by GAF, but this product was normally mixed with Portland cement, water and/or other substances.

2. 214 Insulation Cement

214 Insulation Cement was also a chrysotile asbestos product which, in some instances, was produced at GAF's Vermont facility and, in other instances, was purchased from various other asbestos suppliers and resold. Some of the product purchased from other suppliers may have been milled again at Ruberoid/GAF's Vermont facility prior to resale. Ruberoid/GAF's Vermont product was a lower grade cement which contained a greater percentage of impurities, such as dirt and rock particles, making it lightly mottled and giving it an overall darker appearance. It is believed that this product was sold from at least as early as 1937 to 1975. It is believed that the "214" designation was employed from approximately 1950 to 1975 and the designation "Grade BB" was also employed in years prior to 1950. The basic ingredients of this cement product were:

chrysotile determined to pass the 0-0-2-14 Quebec test
impurities (dirt, rock, earth)

The particular formulas utilized by entities which purchased this product for construction are not known by GAF, but this product was normally mixed with Portland cement, water and/or other substances.

Both "115" and "214" insulation cements could be packed "loosely" in burlap through the 1940s and thereafter "pressure packed" or "semi-pressure packed" in either kraft paper, plastic lined or woven plastic bags.

3. Calsilite® Insulation Cement

Calsilite® Insulation Cement was a combination of chrysotile asbestos fiber, ground Calsilite® pipe covering or block, and Portland and other cements.

It is believed that this product was made with Vermont-produced asbestos and thus contained certain impurities, such as rock, dirt and earth particles. This product was never widely or frequently sold and did not gain commercial acceptance. To the

extent such sales took place, they ceased completely in or around 1960, although the product was listed for sale until approximately 1963-64. Generally, the product was packaged in kraft paper bags with a plastic lining.

4. Other Insulation Cements

In unknown years prior to 1955 which varied by product, Ruberoid listed for sale the following other insulation cements. Except as stated below, little is known about these products, including the specific years they were offered, the constituents and, except as indicated, whether or not they were manufactured or produced by Ruberoid.

- a. Grade AA Insulating Cement - Grade AA was manufactured by Ruberoid using a high grade of pure asbestos fiber together with suitable binding materials that had low conductivity. It was designed to yield a hard, durable surface. Its temperature limit was 1200° F.
- b. Grade A Insulating Cement - This was a factory-prepared cement consisting of fibers which were not as long as those used in the better grade AA, together with suitable binding materials. Its temperature limit was 1000° F.
- c. Grade H F - Hard Finish - This was a hard finish cement designed to be used as a final protective coating over other coats of cement. It had a smooth, glossy, hard finish. Grade HF was recommended to be applied in a 1/4" thick layer. It had a temperature limit of 1500° F and was a prepared cement manufactured by Ruberoid.
- d. Grade HF - Hard Finish #48 High Gloss - This was another hard-finish cement manufactured apparently in 1945 and possibly other years.
- e. Grade H. T. - High Temperature Cement - This cement was designed to withstand temperatures of 1600° to 1800°. This material was not designed to be used for finishing purposes.
- f. Grade 203 Insulating Cement - Grade 203 had a screen test of approximately 0-0-8-8 which was intended to result in a light, fluffy cement. It was practically free of grit and dirt. Its temperature limit was 1200° F.

- g. Grade 016 Insulating Cement - This 100 percent chrysotile cement had a screen test of approximately 0-0-1-16 which made it the lowest grade cement sold by Ruberoid/GAF.
- h. Satin Finish Cement
- i. Grade A-11 Insulating Cement - This product consisted of vermiculite, chrysotile, and binding substances. It was recommended for temperatures up to 1500° F, or 1800° F if the applicator did not intend to reclaim the material. Grade A-11 was designed to be an insulation material, not a finishing cement.
- j. Coverkote - Coverkote was designed to be a weatherproof coating for insulated surfaces, rather than an insulating cement. It was a combination of emulsified asphalt and 25-28 percent chrysotile. It was a black plastic material particularly designed for protection of insulation on large tanks and vessels and for insulated equipment such as smoke breechings and ducts. The temperature limit for Coverkote was 400° F.
- k. Rock Wool Cement - Little is known about this product which was apparently available from Ruberoid in the late 1940s and early 1950s. It consisted of a mixture of rock wool and chrysotile asbestos and had a temperature limit of 1500° F.

Insulation cements of different fiber sizes, commonly known as sizes 313 and 412, were sold by The Ruberoid Co. from 1937 until 1967 and by General Aniline & Film Corporation and then GAF Corporation from 1967 to 1975.

In approximately 1964, The Ruberoid Co. began placing the following warning notices on packages of its asbestos-containing industrial thermal insulation products:

CAUTION

**THIS PRODUCT CONTAINS ASBESTOS FIBER.
INHALATION OF ASBESTOS IN EXCESSIVE QUANTITIES
OVER LONG PERIODS OF TIME MAY BE HARMFUL.**

**IF DUST IS CREATED WHEN THIS PRODUCT IS
HANDLED, AVOID BREATHING THE DUST. IF
ADEQUATE VENTILATION CONTROL IS NOT POSSIBLE,
WEAR RESPIRATORS APPROVED BY THE U.S. BUREAU
OF MINES FOR PNEUMOCONIOSIS PRODUCING DUST.**

GAF placed warning labels on packaging of asbestos fiber and insulation cements by 1968, and on millboard, rollboard and asbestos paper products, as well as relocating the warning label for Calsilite® pipe covering and block products from the sides to the front of the carton, by 1970. This warning label read as follows:

CAUTION

**CONTAINS ASBESTOS FIBER. INHALATION IN EXCESSIVE
QUANTITIES OVER LONG PERIODS OF TIME MAY BE
HARMFUL.**

**AVOID BREATHING DUST. IF ADEQUATE VENTILATION IS
NOT POSSIBLE, WEAR RESPIRATORS APPROVED BY THE U.S.
BUREAU OF MINES FOR PNEUMOCONIOSIS PRODUCING
DUST.**

In approximately 1972, this warning was further changed to read as follows:

CAUTION

**CONTAINS ASBESTOS FIBER. AVOID BREATHING DUST.
BREATHING ASBESTOS MAY CAUSE SERIOUS BODILY HARM.**

In 1978, warning labels were placed on individual sheets of millboard.

Until 1972, GAF's use of these warnings followed major manufacturers in the industry which used such cautionary notices after certain opinions were expressed by some members of the medical profession that there might be a health risk to some persons who installed industrial thermal insulation products containing asbestos from the inhalation of excessive quantities of asbestos fibers over prolonged periods of time under certain conditions. Commencing in 1972, pursuant to the requirements of the Occupational Safety and Health Act of 1970, GAF placed the last notice set out above.

All observers of this packaging, whether purchasers, users, handlers, distributors, or contractors, would have seen, and thus received, the warnings as set forth above.

6. Does Defendant or any of its subsidiary companies claim that any patent would cover any product listed in answer to Interrogatory No. 5? If so, please state the following:
- (a) The date of each patent;
 - (b) The date same was issued;
 - (c) The number of each patent application that is pending.

ANSWER: Subject to the objections set forth in the preliminary paragraphs of this response, this defendant states that U.S. Patent No. 3,300,927, patented January 31, 1967, covers a bonded roofing product known as T/NA-200 and arguably also covers T/NA-100, in that T/NA-100, also primarily a roofing membrane, differed only in the thickness of the polyvinylfluoride surface film, with Neoprene binder. The holder of this patent is Phillip S. Bettoli.

An original patent on the Calsilite® heat insulation process was held by Herbert Abraham, formerly president of Ruberoid, and Herbert E. Lloyd. Lloyd assigned his patent to Ruberoid (Patent No. 2,400,844) in 1946. Abraham assigned his patent to Ruberoid in 1952 (Patent No. 2,602,754). GAF filed a patent application for its asbestos-free Calsilite® through Duane A. Davis, inventor, on October 8, 1971. The patent application, Proposal No. 187,921, and rights to the process for which the patent was sought were sold in 1972.

7. Have any of the products listed above in answer to Interrogatory No. 5 been altered in chemical composition since first being marketed? If so, please state the following:

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

ANSWER: Subject to the objections set forth in the preliminary paragraphs of this response, this defendant states that it began production of asbestos-free Calsilite® when it developed asbestos-free Calsilite® in 1970, with sales beginning in 1970 or 1971. This product was identified as "Calsilite® II" or "Calsilite® A-F." However, without adding asbestos, GAF was unable to manufacture a calcium silicate insulation which met all specifications of the United States Government applicable to Calsilite®. These limitations made it impossible for this defendant to manufacture and sell an asbestos-free Calsilite® that met applicable Government requirements. GAF asked the Government (U.S. Navy) to modify its specifications so that GAF's new product could be sold to the Navy and other customers that required materials which would meet such specifications. The failure by the United States

Government to act promptly to approve non-asbestos Calsilite® for procurement as a practical matter limited the ability of this defendant to sell its non-asbestos product, and was a factor leading to the closure of the entire Calsilite® facility on October 14, 1971.

8. Have any of the asbestos-containing products listed in response to Interrogatory No. 5 ever been marketed, distributed, packaged, labeled, and/or sold by any other company or business? If so, please state the following:

- (a) The name and address of each such company.
- (b) The names and address of Defendant's distributors in Ohio and Illinois since 1940.
- (c) The date of each sale.
- (d) The name of the person at each location with whom you primarily dealt.
- (e) A list of all asbestos-containing products that you sold to each location from 1945 to 1980.
- (f) The amount of each asbestos product sold to each location during this period.
- (g) Please identify all documents relating to this distributor for the particular location.

ANSWER: Subject to the preliminary objections, this defendant believes that The Ruberoid Co. and GAF had three agreements relating to cross-agreements with other companies from time to time between 1930 and 1979, which agreements may have been, but are believed not to have been, applicable to sales of GAF products in Ohio: a relabeling agreement with the Grant Wilson Company, apparently in the 1930s generally applicable to the sales of certain products, primarily in the midwestern area of the United States; an agreement under which Baldwin-Ehret-Hill produced 313 and 412 insulating cements nationally

for GAF from time to time from 1960 until 1971; and an agreement with Armstrong Contracting and Supply Company, Lancaster, Pennsylvania, in 1963 under which Ruberoid agreed to sell certain products to the Company and attach that Company's labels, as and when directed. Other such arrangements may have been undertaken from time to time; for example, Ruberoid purchased raw asbestos from Johns-Manville and others, for resale, commencing in the early 1950s.

At various times, Ruberoid product brochures and advertising listed for sale asbestos-containing products not known to have been manufactured by Ruberoid, including 85 percent magnesia and diatomaceous earth products, but which may have been manufactured for Ruberoid. This defendant is aware of no sales documents with respect to these products, the year of any sale of any such products or of any specific sale. However, this defendant is aware through litigation of individual Ruberoid labels upon sections of pipe-covering indicating that the material was 85 percent magnesia pipe covering manufactured for Ruberoid by Plant Rubber and Asbestos Company, and perhaps others. It is believed that this material dates from the late 1930s.

8.01 Has this defendant ever purchased asbestos containing products from any other defendant?

ANSWER: See Response to Interrogatory No. 8.

8.02 If the answer to the preceding Interrogatory is yes, please state the following:

- (a) name each defendant from whom this defendant purchased any asbestos containing product;
- (b) list each product purchased from each co-defendant;
- (c) list the dates of each purchase of asbestos-containing products from each co-defendant.

ANSWER: See Response to Interrogatory No. 8.

8.03 Has this defendant ever sold asbestos containing products to any other defendant?

ANSWER: This defendant objects to this request on the grounds set forth in the preliminary paragraphs of this response and on the further grounds that it is overly broad, unduly burdensome and not drafted in a fashion precise enough, nor reasonably calculated to lead to the discovery of admissible evidence. The only possible relevant sales of this defendant's asbestos-containing industrial thermal insulation products would be for those shipments made to jobsites on which and during years in which plaintiff actually worked.

8.04 If the answer to the preceding Interrogatory is yes, please state the following:

- (a) name each defendant to whom this defendant sold any asbestos containing product;
- (b) list each product sold to each co-defendant;
- (c) list the dates of each sale of asbestos-containing products to each co-defendant.

ANSWER: This defendant objects to this request on the grounds set forth in the preliminary paragraphs of this response and on the further grounds that it is overly broad, unduly burdensome and not drafted in a fashion precise enough, nor reasonably calculated to lead to the discovery of admissible evidence. The only possible relevant sales of this defendant's asbestos-containing industrial thermal insulation products would be for those shipments made to jobsites on which and during years in which plaintiff actually worked.

8.05 Has Defendant engaged in the manufacture and/or sale and/or distribution and/or marketing and/or supply and/or purchase and/or use of non-asbestos-containing products for use in connection with temperatures above 125° Fahrenheit since 1930. 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(s) why;
- (e) the geographical area into which you claim the product(s) were sold, purchased, or used;
- (f) identify the organizational unit of defendant so engaged;
- (g) the site(s) at which each such product was manufactured;
- (h) the material components of each such product, giving specific or approximate percentage both by weight and by volume of each material component of each such product;
- (i) the temperature ranges for which each product(s) was intended to be used;
- (j) the product's generic name;

- (k) the product's trade or brand name;
- (l) the container in which the product was shipped (i.e., paper bags, cardboard boxes) including the size and amount of the container;
- (m) a description of any logos, writing impressions or identifying markings which appeared on the product, as well as a description of the package used, the dates that type of package was used, and any logos, product names, trademarks, etc. which appeared on the package;
- (n) whether the words "non-asbestos" or "asbestos free" were used on the package;
- (o) a detailed description of the intended method of preparation and application of the product;
- (p) a description of the physical appearance of the product, including size, shape, color and texture.

ANSWER: See Responses to Interrogatory Nos. 5 and 7.

8.06 Did Defendant ever market or distribute any asbestos-containing product manufactured in whole or in part by someone else? If so, please state the following for each such product:

- (a) the name and address of the manufacturer;
- (b) the product's trade and brand name;
- (c) the organizational unit of Defendant who did so;
- (d) date(s) beginning, ending and during which the marketing or distributing took place;

- (e) whether the product was distributed through the same channels as those used for products manufactured by Defendant, and if not, please explain the exact channels of distribution;
- (f) identify all documents relating the marketing or distribution.

ANSWER: See Response to Interrogatory No. 8.

8.1 Does Defendant have reason to believe that any of the asbestos-containing products listed in response to Interrogatory No. 5 were used at any of the sites listed on Exhibit A, attached hereto. If your answer is "yes", please state:

- (a) The basis of your answer.
- (b) Please state which of Defendant's asbestos-containing products listed in Interrogatory No. 5 were used at each job site listed on Exhibit A.

ANSWER: This defendant objects to this request on the grounds set forth in the preliminary paragraphs of this response and on the further grounds that it is overly broad, unduly burdensome and not drafted in a fashion precise enough, nor reasonably calculated to lead to the discovery of admissible evidence. The only possible relevant sales of this defendant's asbestos-containing industrial thermal insulation products would be for those shipments made to jobsites on which and during years in which plaintiff actually worked.

8.2 For each company or business that Defendant knows may have marketed, distributed, installed, and/or sold, those products listed in response to Interrogatory No. 5, please state the following as to each job site listed on Exhibit A.

- (a) The name and address of each such company;
- (b) The date of each sale from Defendant to such other company;
- (c) The name of the person at each other company with whom Defendant primarily dealt.
- (d) Names and quantities of the asbestos-containing products that you marketed, distributed, installed, and/or sold to each such company from 1950 to 1974.
- (e) Please identify all documents relating to the sales to each such company.

ANSWER: This defendant objects to this request on the grounds set forth in the preliminary paragraphs of this response and on the further grounds that it is overly broad, unduly burdensome and not drafted in a fashion precise enough, nor reasonably calculated to lead to the discovery of admissible evidence. The only possible relevant sales of this defendant's asbestos-containing industrial thermal insulation products would be for those shipments made to jobsites on which and during years in which plaintiff actually worked.

8.3 If you do not know any business that may have marketed, distributed, installed, and/or sold the products listed in response to Interrogatory No. 5 to any of the job sites listed on Exhibit A, please state the names and last known addresses of those companies who Defendant knows marketed, distributed, installed and/or sold their asbestos-containing products in Ohio from 1950 to 1974. For each of those companies, please state the following:

- (a) Name and address of each such company;
- (b) The dates of each sale from Defendant to such other company;
- (c) The name of the person at each other company with whom Defendant primarily dealt;
- (d) The names of the asbestos-containing products that Defendant marketed, distributed, and/or sold to each such company from 1950 to 1974.

ANSWER: This defendant objects to this request on the grounds set forth in the preliminary paragraphs of this response and on the further grounds that it is overly broad, unduly burdensome and not drafted in a fashion precise enough, nor reasonably calculated to lead to the discovery of admissible evidence. The only possible relevant sales of this defendant's asbestos-containing industrial thermal insulation products would be for those shipments made to jobsites on which and during years in which plaintiff actually worked.

8.4 Does Defendant have records and/or any knowledge that reflects sales of their asbestos-containing products to any of the sites listed on Exhibit A, attached hereto? If so, please state the following as to each job site listed on Exhibit A:

- (a) The names and last known addresses of those people with such knowledge.
- (b) The location of such records.

ANSWER: This defendant objects to this request on the grounds set forth in the preliminary paragraphs of this response and on the further grounds that it is overly broad, unduly burdensome and not drafted in a fashion precise enough, nor reasonably calculated to lead to the discovery of admissible evidence. The only possible relevant sales of this defendant's asbestos-containing industrial thermal insulation products would be for those shipments made to jobsites on which and during years in which plaintiff actually worked.

9. Did Defendant or any of Defendant's distributors, as listed in response to Interrogatory Nos. 8.1, 8.2, and/or 8.3 have sales representatives who specifically called on the sites listed on Exhibit A, attached hereto, from 1945 to 1975? If your response is yes, as to each site listed on Exhibit A, please state the following:

- (a) The name and last known address of each such representative and whether they are still employed by Defendant;
- (b) The period of time they acted as your representative;
- (c) Their general responsibility as to each facility;
- (d) Whether that person is still alive; and
- (e) Any documents relating, referring or pertaining thereto.

ANSWER: This defendant objects to this Interrogatory on the grounds set forth in the preliminary paragraphs of this response, particularly on the grounds that the information requested is overly broad and unduly burdensome. Subject to these objections, GAF responds that it does not have a list and objects to compiling a list of any and all persons over the past 60 years who were involved in sales or marketing of its asbestos-containing industrial thermal insulation products. In further response, GAF states that during the relevant time period Richard W. Henry (deceased) was the marketing manager for the Calsilite® product line, James J. Iaquinto was Manager of Sales Administration of the Industrial Products Division for GAF Corporation, and Wilbur Neel was Director of Sales for GAF.

9.1 Identify all managers and sales personnel responsible for your sales or installation of any asbestos-containing products in Ohio from 1930 to the present and state their position, last known address and the local or regional office through which they were employed.

ANSWER: This defendant objects to this Interrogatory on the grounds set forth in the preliminary paragraphs of this response, particularly on the grounds that the information requested is overly broad and unduly burdensome. Subject to these objections, GAF responds that it does not have a list and objects to compiling a list of any and all persons over the past 60 years who were involved in sales or marketing of its asbestos-containing industrial thermal insulation products. In further response, GAF states that during the relevant time period Richard W. Henry (deceased) was the marketing manager for the Calsilite® product line, James J. Iaquinto was Manager of Sales Administration of the Industrial Products Division for GAF Corporation, and Wilbur Neel was Director of Sales for GAF.

10. Did Defendant ever have any division or subsidiary engaged in the contract business of applying or removing asbestos-containing products? If so, please state:

- (a) The name of each subdivision;
- (b) The full address of the home office and the date such subdivision or subsidiary was engaged in this contracting business; and
- (c) Whether said division or subsidiary conducted such business at any of the sites listed on Exhibit A, from 1940 to 1975? If so, please state the following as to each job site listed on Exhibit A:
 - (1) The dates of such contracts;
 - (2) The specific asbestos-containing products that were used ore removed in each contract.

ANSWER: No.

11. Did Defendant ever have any division or subsidiary engaged in the contract business of applying or removing asbestos-containing refractory? If so, please give the name of each subdivision, the full address of the home office and the date such subdivision or subsidiary was engaged in this contracting business.

ANSWER: No.

12. Please identify by location and product produced, each plant in which products listed in your answer to Interrogatory No. 5 have been manufactured and/or assembled and the dates said plants have been in operation.

ANSWER: See Response to Interrogatory No. 5.

13. Has Defendant, at any time, entered into a "rebranding" agreement with any other company, either as a buyer or a seller, concerning any asbestos-containing products and/or materials? If so, please state:

- (a) The name of the company manufacturing the asbestos products under such agreement;
- (b) The trade name affixed to such products;
- (c) The periods of time covered by each such agreement;
- (d) The volume (in dollars amounts) of each such transaction;
- (e) The purchaser of such products;

- (f) Does Defendant currently have in its possession any of the writings or contracts concerning such rebranding agreement?

ANSWER: See Response to Interrogatory No. 8.

13.1 Have you ever owned or operated a business or portion thereof which engaged in construction, erection or tear out of furnaces, pipes, boilers, turbines, lehrs, ovens, kilns, etc? If so, please state:

- (a) the same of said business;
- (b) the date of commencing business and cessation of business, if applicable;
- (c) type of construction or tear out performed;
- (d) state whether said business installed or supplied asbestos-containing products on the furnaces, pipes, boilers, turbines, lehrs, etc., i.e., gaskets, pipecovering, block, cement, rope, cloth, clothes, etc., containing asbestos, asbestos pipe, board, etc.;
- (e) state the trade name and/or manufacturer of any asbestos-containing product which you installed or supplied to any site on Exhibit A.
- (f) provide the dates for the applicable construction, installation or tear-out project.

ANSWER: No.

13.2 Do you have within your custody, possession, or control any packages that presently or formerly packaged asbestos-containing products or were produced for the purpose of packaging asbestos-containing products contemporaneous with your manufacture sale or distribution of such asbestos-containing products? If so, provide the following:

- (a) a description of each such package;
- (b) the present location and custodian of each such package;
- (c) the date or approximate date on which each such package was produced.

ANSWER: Subject to the preliminary objections, this defendant states that it possesses a Calsilite® carton, from approximately 1964-67. Photographs of the carton can be made available.

INFORMATION ABOUT DESIGN/TESTING

14. What is the name, address and job title of each individual who participated in the design and preparation of manufacturing specifications for each such product listed above in answer to Interrogatory No. 5?

ANSWER: This defendant objects to this request on the grounds set forth in the preliminary paragraphs of this response and on the further grounds that it is overly broad, unduly burdensome and not drafted in a fashion precise enough, nor reasonably calculated to lead to the discovery of admissible evidence. See Response to Interrogatory No. 1.

15. As to each product listed in response to Interrogatory No. 5, please describe how each product was to be cut, shaped, scribed, mixed and applied on the job. (In answering this question, give particular reference as to whether or not the materials were to be sawed or cut on the job, blown into confined areas, mixed with water in a cement or paste.)

ANSWER: Subject to the preliminary objections, this defendant responds that jobsites were under the exclusive control of their owners, or employers or contractors at those jobsites. As a manufacturer and/or seller only, this defendant did not regulate or control the method or manner of using its asbestos-containing products. This defendant believes that those owners, employers or contractors present at jobsites (on which this defendant's asbestos-containing industrial thermal insulation products were installed or otherwise used) had a legal duty mandated by state and federal governments to inspect and monitor those jobsites, in the manner required by OSHA and other laws, and this defendant did not have any such legal duty at any time.

16. Based upon the material contents of the asbestos-containing products, the method of manufacturing, and the method of application, please state which products listed in Interrogatory No. 5 could be applied by a worker without creating dust.

ANSWER: See Response to Interrogatory No. 15. Subject thereto this defendant states: all listed products.

17. Do any documents, including but not limited to, written memoranda, specifications, recommendations, blueprints or other written materials of any kind or character now exist relating to the design and preparation of the products listed in answer to Interrogatory No. 5? If so, please:

- (a) List each such written material or document;
- (b) Identify the person or persons presently in possession of each such document;
- (c) State where each such document is located.

ANSWER: This defendant objects to this request on the grounds set forth in the preliminary paragraphs of this response and on the further grounds that it is overly broad, unduly burdensome and not drafted in a fashion precise enough, nor reasonably calculated to lead to the discovery of admissible evidence.

18. Prior to releasing the products listed in Interrogatory No. 5 for sale and usage, were any tests (either animal or human) conducted on said products to determine potential health hazards involved in the use of, or exposure to, the materials and/or products? If so, please state:

- (a) The name of the products tested and the date of each test.
- (b) The name, address, and job classification of each individual who conducted such tests;
- (c) The results of such tests.

ANSWER: Subject to the objections set forth in the preliminary paragraphs of this response, this defendant responds that, from the beginning of the manufacture of asbestos-containing industrial thermal insulation products by The Ruberoid

Co., such as Calsilite®, the standards for manufacture were contained in specifications issued by the U.S. Government and other purchasers as described below, with which specifications Ruberoid complied. Ruberoid's Calsilite® was produced to meet these specifications. Further, governmental and industrial hygienists adopted a safety standard of 5 m. particles per cubic foot, and the government studies indicated that asbestos-containing industrial thermal insulation products such as this defendant's products, as used in the shipyard and other construction workplaces, were in compliance with that standard. Further, the President and U.S. Congress, and executive departments, adopted that safety standard in the Walsh-Healy Act and perpetuated it in subsequent regulations. In the early 1970s the United States adopted the standards of the Occupational Safety and Health Act, with which the products of this defendant have also complied.

This defendant manufactured its asbestos-containing industrial thermal insulation products in compliance with specifications, including military specifications, of agencies and departments of the United States of America, and tested its products to assure compliance with these specifications.

Government specifications applicable to asbestos-containing products relevant to this litigation were promulgated or approved by various agencies and departments of the United States, including:

- a. General Services Administration
Washington, D.C.;
- b. Department of Defense
Washington, D.C.; and
- c. Department of the Navy
Washington, D.C.

Each such specification set a standard applicable to a group or class of products. Upon meeting the standard, a manufacturer's product could be placed on a "Qualified Product List," which listed all products in such group or class to which the standard applied. Such products were then eligible for sale, by contract or otherwise, for use in federally owned and federally sponsored projects and facilities including, but not limited to, the construction, outfitting, reconstruction and overhaul of vessels owned and operated by the United States, particularly the Navy.

GAF products were tested for purposes of quality control and, with respect to sales to Government agencies and departments, such tests were mandatory and performed by the Government itself in many instances. The required testing was detailed in specifications of the United States Government (including the military), as well as the American Society for Testing and Materials ("ASTM"). Tests for Calsilite® included: density; surface strength (modulus of rupture); weight loss on soaking heat; shrinkage on soaking heat; hardness; abrasion resistance; impact strength; thermal resistance/conductivity (K factor); weight loss after tumbling; thermal shock; flexural strength; and moisture absorption. It was necessary to comply with each such Government specification, as well as specifications governing packaging and similar matters, in order for products to be eligible for sale, by contract or otherwise, for use in federally owned and federally sponsored projects and facilities.

To the best of this defendant's knowledge, no complete list, compilation, abstract or summary of the documents sought by this Interrogatory presently exists. Furthermore, the information as to Government and military specifications is contained in public documents which would be equally available to plaintiffs as to GAF. Subject to the foregoing caveat, to the best of this defendant's knowledge, its products conformed to the following specifications, their predecessors, successors and amendments:

1. MIL-I-002819 (SHIPS)
2. MIL-I-24244
3. MIL-I-2781
4. MIL-I-2819
5. MIL-C-2908
6. HH-I-523
7. HH-I-00523
8. HH-I-561

Specifications identified in this response were periodically revised by the United States, its agencies and departments. The dates on which these revisions occurred are contained on the front page of each specification. These specifications are a matter of public record and are equally available to all parties to this action. This defendant has in its possession copies of some specifications. To the extent this defendant has such specifications, they will be made available to plaintiffs for copying and inspection, upon reasonable request.

To the best of this defendant's knowledge, Government specifications applicable to its industrial thermal insulation products were still in effect and required the use of asbestos at the time this defendant determined to cease, and did cease, manufacture of such thermal insulation products.

In addition to establishing and enforcing mandatory contract specifications for asbestos-containing insulation products, the United States exercised sole supervision and control over the work performed at Navy and contract shipyards and at its other facilities. The United States had the duty and responsibility to provide for the safety and welfare of its workers. In accordance with industry practice and later at the direction of OSHA, tests were to be made in the workplace by the installing contractors and other sophisticated purchasers of such products.

18.1 Prior to releasing any products for sale and usage (whether asbestos-containing or not), were any tests (either animal or human) conducted on said products to determine potential health hazards involved in the use of, or exposure to, the materials and/or products?

If so, please state:

- (a) The name of the products tested and the date of each test.
- (b) The name, address, and job classification of each individual who conducted such tests;
- (c) The results of such tests.

ANSWER: See Response to Interrogatory No. 18.

19. Does Defendant have or control any documents, including but not limited to, written memoranda, specifications, recommendations, blueprints or other written materials of any kind or character relating to the testing of the products listed in Interrogatory No. 5 hereinabove?

- (a) Identify each such written material or document;
- (b) Identify each person who presently has possession of each such document;
- (c) State where each such document is located.

ANSWER: This defendant objects to this request on the grounds set forth in the preliminary paragraphs of this response and on the further grounds that it is overly broad, unduly burdensome and not drafted in a fashion precise enough, nor reasonably calculated to lead to the discovery of admissible evidence.

20. Were any design changes or modifications made as a result of such tests listed in answer to Interrogatory No. 18 hereinabove? If so, please state:

- (a) The trade name of the product changed or modified;
- (b) The nature of the change made and the date of such changes or modifications;
- (c) The name, address, and job classification of each person in charge of making a change.

ANSWER: Subject to the objections set forth in the preliminary paragraphs of this response, this defendant states that it began production of asbestos-free Calsilite® when it developed asbestos-free Calsilite® in 1970, with sales beginning in 1970 or 1971. This product was identified as "Calsilite® II" or "Calsilite® A-F." However, without adding asbestos, GAF was unable to manufacture a calcium silicate insulation which met all specifications of the United States Government applicable to Calsilite®. These limitations made it

impossible for this defendant to manufacture and sell an asbestos-free Calsilite® that met applicable Government requirements. GAF asked the Government (U.S. Navy) to modify its specifications so that GAF's new product could be sold to the Navy and other customers that required materials which would meet such specifications. The failure by the United States Government to act promptly to approve non-asbestos Calsilite® for procurement as a practical matter limited the ability of this defendant to sell its non-asbestos product, and was a factor leading to the closure of the entire Calsilite® facility on October 14, 1971.

21. After releasing for sale, distribution or marketing the products listed in answer to Interrogatory No. 5, did Defendant conduct any tests (either on animals or humans) to determine potential health hazards involved in the use of said materials and/or products?

- (a) The names of the products tested and the dates of said tests;
- (b) The name, address, and job classification of each person and/or agency conducting said tests;
- (c) The results of said tests;
- (d) Whether, as a result of any tests conducted, any products were removed from the market;
- (e) The names of all products removed from the market as a result of said tests.

ANSWER: See Response to Interrogatory No. 18.

22. Has Defendant ever conducted or caused to be conducted any studies concerning the effects of the inhalation of asbestos dust and/or fibers on workers or other persons applying, using and/or working around any of the asbestos products manufactured, sold, distributed and/or relabelled for distribution by you or your predecessor? If so, please state:

- (a) The dates and nature of such studies;
- (b) The names and addresses of persons conducting such studies;
- (c) The purpose of such studies;
- (d) Identify and list those persons to whom such reports were given and the date of such dissemination;
- (e) State any publication or other written dissemination of the results of such studies;
- (f) State the nature of any action to eliminate or minimize the inhalation of asbestos dust fibers; and
- (g) Attach a copy of reports based upon such studies.

ANSWER: Subject to the preliminary objections, this defendant responds, no.

INFORMATION ABOUT SAFETY

23. Before placing in the market the asbestos-containing products that Defendant, mined, manufactured, sold, marketed, installed or distributed on the market, did Defendant make or cause to be made, any studies to determine whether their asbestos-containing products would be hazardous to people? If so, please state:

- (a) The date of said studies;
- (b) What studies were done; and
- (c) The titles of each study.

ANSWER: Subject to the objections set forth in the preliminary paragraphs of this response, this defendant responds that, from the beginning of the manufacture of asbestos-containing industrial thermal insulation products by The Ruberoid Co., such as Calsilite®, the standards for manufacture were contained in specifications issued by the U.S. Government and other purchasers as described below, with which specifications Ruberoid complied. Ruberoid's Calsilite® was produced to meet these specifications. Further, governmental and industrial hygienists adopted a safety standard of 5 m. particles per cubic foot, and the Government studies indicated that asbestos-containing industrial thermal insulation products such as this defendant's products, as used in the shipyard and other construction workplaces, were in compliance with that standard. Further, the President and U.S. Congress, and executive departments, adopted that safety standard in the Walsh-Healy Act and perpetuated it in subsequent regulations. In the early 1970s the United States adopted the standards of the Occupational Safety and Health Act, with which the products of this defendant have also complied.

This defendant manufactured its asbestos-containing industrial thermal insulation products in compliance with specifications, including military specifications, of agencies and departments of the United States of America, and tested its products to assure compliance with these specifications.

Government specifications applicable to asbestos-containing products relevant to this litigation were promulgated or approved by various agencies and departments of the United States, including:

- a. General Services Administration
Washington, D.C.;
- b. Department of Defense
Washington, D.C.; and
- c. Department of the Navy
Washington, D.C.

Each such specification set a standard applicable to a group or class of products. Upon meeting the standard, a manufacturer's product could be

placed on a "Qualified Product List," which listed all products in such group or class to which the standard applied. Such products were then eligible for sale, by contract or otherwise, for use in federally owned and federally sponsored projects and facilities including, but not limited to, the construction, outfitting, reconstruction and overhaul of vessels owned and operated by the United States, particularly the Navy.

GAF products were tested for purposes of quality control and, with respect to sales to Government agencies and departments, such tests were mandatory and performed by the Government itself in many instances. The required testing was detailed in specifications of the United States Government (including the military), as well as the American Society for Testing and Materials ("ASTM"). Tests for Calsilite® included: density; surface strength (modulus of rupture); weight loss on soaking heat; shrinkage on soaking heat; hardness; abrasion resistance; impact strength; thermal resistance/conductivity (K factor); weight loss after tumbling; thermal shock; flexural strength; and moisture absorption. It was necessary to comply with each such Government specification, as well as specifications governing packaging and similar matters, in order for products to be eligible for sale, by contract or otherwise, for use in federally owned and federally sponsored projects and facilities.

To the best of this defendant's knowledge, no complete list, compilation, abstract or summary of the documents sought by this Interrogatory presently exists. Furthermore, the information as to Government and military specifications is contained in public documents which would be equally available to plaintiffs as to GAF. Subject to the foregoing caveat, to the best of this defendant's knowledge, its products conformed to the following specifications, their predecessors, successors and amendments:

1. MIL-I-002819 (SHIPS)
2. MIL-I-24244
3. MIL-I-2781
4. MIL-I-2819
5. MIL-C-2908
6. HH-I-523
7. HH-I-00523
8. HH-I-561

Specifications identified in this response were periodically revised by the United States, its agencies and departments. The dates on which these revisions occurred are contained on the front page of each specification.

These specifications are a matter of public record and are equally available to all parties to this action. This defendant has in its possession copies of some specifications. To the extent this defendant has such specifications, they will be made available to plaintiffs for copying and inspection, upon reasonable request.

To the best of this defendant's knowledge, Government specifications applicable to its industrial thermal insulation products were still in effect and required the use of asbestos at the time this defendant determined to cease, and did cease, manufacture of such thermal insulation products.

In addition to establishing and enforcing mandatory contract specifications for asbestos-containing insulation products, the United States exercised sole supervision and control over the work performed at Navy and contract shipyards and at its other facilities. The United States had the duty and responsibility to provide for the safety and welfare of its workers. In accordance with industry practice and later at the direction of OSHA, tests were to be made in the workplace by the installing contractors and other sophisticated purchasers of such products.

24. Please state whether or not Defendant ever conducted or caused to be conducted any tests in the field (where asbestos-containing products were applied, removed or utilized) to determine the nature and extent of asbestos dust and/or fiber exposure to insulators, applicators, fellow employees, or other workers removing and/or tearing out asbestos-containing products, and/or other workers in the vicinity thereof If so, please identify:

- (a) The date, place and nature of each and every test;
- (b) The particular asbestos-containing products to which each test applied;
- (c) The results of each test with particular reference to the number of asbestos fibers per cubic centimeter of air found at each site; and

- (d) The persons to whom the results said tests were given and the date of such dissemination.

ANSWER: Subject to the preliminary objections, this defendant responds that jobsites were under the exclusive control of their owners, or employers or contractors at those jobsites. This defendant believes that those owners, employers or contractors present at jobsites (on which this defendant's asbestos-containing industrial thermal insulation products were installed or otherwise used) had a legal duty mandated by state and federal governments to inspect and monitor those jobsites, in the manner required by OSHA and other laws, and this defendant did not have any such legal duty at any time.

25. Please state whether or not Defendant ever obtained any knowledge concerning the likelihood of asbestos being hazardous to human health. If so, please state:

- (a) When Defendant first became aware of the hazardous potential of asbestos dust and asbestos fibers;
- (b) The manner in which the Defendant, Defendant's predecessor, or Defendant's subsidiary companies first obtained this knowledge and became aware of said hazards and from what source this information was obtained;
- (c) What information was disseminated within Defendant's company, or its subsidiary or predecessor regarding such adverse consequences or effects;
- (d) Whether any such information is still maintained by Defendant or its subsidiary or predecessor in any written form.
- (e) The name, address and job classification of the custodian of such information.

ANSWER: Subject to the objections set forth in the preliminary paragraphs of this response, this defendant responds that, prior to 1964, it is aware of no information that Ruberoid officials knew of health hazards from asbestos to users of its asbestos-containing industrial thermal insulation products. In approximately 1964, Ruberoid became aware of opinions expressed by some

members of the medical profession that inhalation of asbestos dust in excessive quantities which might be released while using asbestos-containing thermal insulation products over long periods of time could be harmful, although the opinion did not relate to the use of Ruberoid products. At approximately the same time, Ruberoid commenced providing its warnings. In approximately 1968, GAF received further information that inhalation of asbestos fibers in general could be harmful but GAF did not receive medical information specific to the type of products then being manufactured by GAF.

26. Please state when Defendant first became aware of the possible association between inhalation of asbestos dust and/or fibers and the contraction of asbestosis and cancers including, but not limited to gastrointestinal cancer, laryngeal cancer, renal cancer, lymphoma, lung cancer and mesothelioma. As to each disease or condition, please state the source of that information, including a description of all tests conducted relative to the possibility of such a relationship.

ANSWER: This defendant does not admit to an association between asbestos exposure, of undefined degree, and gastrointestinal cancer, laryngeal cancer, renal cancer or lymphoma. Subject to the objections set forth in the preliminary paragraphs of this response, this defendant responds that, prior to 1964, it is aware of no information that Ruberoid officials knew of health hazards from asbestos to users of its asbestos-containing industrial thermal insulation products. In approximately 1964, Ruberoid became aware of opinions expressed by some members of the medical profession that inhalation of asbestos dust in excessive quantities which might be released while using asbestos-containing thermal insulation products over long periods of time could be harmful, although the opinion did not relate to the use of Ruberoid products. At approximately the same time, Ruberoid commenced providing its warnings. In approximately 1968, GAF received further information that inhalation of asbestos fibers in general could be harmful but GAF did not receive medical information specific to the type of products then being manufactured by GAF.

27. Please identify all physicians, industrial hygienists, and other employees (including their names and addresses) who were employed, retained or otherwise engaged by Defendant for research, investigation or study concerning asbestos or asbestos-related diseases.

ANSWER: This defendant objects to this Interrogatory on the grounds set forth in the preliminary paragraphs of this response, particularly on the grounds that it is irrelevant and not calculated to lead to the discovery of admissible evidence inasmuch as conditions in GAF's facilities, including provision for safety and health in same, are not at issue in this litigation.

Subject to these objections, GAF responds that it never employed a "medical director." Harry Mesler was head of Corporate Safety for Ruberoid and later GAF. Mr. Mesler was succeeded by William Fassuliotis, who in turn was succeeded by Charles Bien. Mr. Mesler is deceased, Mr. Fassuliotis is no longer employed by GAF, and Mr. Bien is now retired. The title for the position held by Mr. Bien was Corporate Manager for Safety, Security and Occupational Health.

28. As to each person who acted in a medical advisory capacity (as it relates in any way to asbestos) to Defendant, please list their name, the date individual acted in this capacity, and that person's current address and job title.

ANSWER: This defendant objects to this Interrogatory on the grounds set forth in the preliminary paragraphs of this response, particularly on the grounds that it is irrelevant and not calculated to lead to the discovery of admissible evidence inasmuch as conditions in GAF's facilities, including provision for safety and health in same, are not at issue in this litigation.

Subject to these objections, GAF responds that it never employed a "medical director." Harry Mesler was head of Corporate Safety for Ruberoid and later GAF. Mr. Mesler was succeeded by William Fassuliotis, who in turn was succeeded by Charles Bien. Mr. Mesler is deceased, Mr. Fassuliotis is no longer employed by GAF, and Mr. Bien is now retired. The title for the position held by Mr. Bien was Corporate Manager for Safety, Security and Occupational Health.

29. Please state if any medical officer or industrial hygienist or medical consultant ever made at any time any recommendations and/or suggestions to Defendant pertaining to the risks or hazards to persons involved in the manufacture or use of asbestos products and, if so, please state when, by whom or to whom such recommendations and/or suggestions were made and the substance of each recommendation.

ANSWER: This defendant objects to this Interrogatory on the grounds set forth in the preliminary paragraphs of this response and on the further grounds that conditions in GAF's facilities, including provision for safety and health in same, are not at issue in this litigation and therefore this Interrogatory is irrelevant to the subject matter of this litigation and is not reasonably calculated to lead to the discovery of admissible evidence. From the beginning

of the manufacture of asbestos-containing industrial thermal insulation products by The Ruberoid Co., such as Calsilite®, the standards for manufacture were contained in specifications issued by the U.S. Government and other purchasers as described below, with which specifications Ruberoid complied. Ruberoid's Calsilite® was produced to meet these specifications. Further, governmental and industrial hygienists adopted a safety standard of 5 m. particles per cubic foot, and the Government studies indicated that asbestos-containing industrial thermal insulation products such as this defendant's products, as used in the shipyard and other construction workplaces, were in compliance with that standard. Further, the President and U.S. Congress, and executive departments, adopted that safety standard in the Walsh-Healy Act and perpetuated it in subsequent regulations. In the early 1970s the United States adopted the standards of the Occupational Safety and Health Act, with which the products of this defendant have also complied.

From time to time during the period beginning in approximately 1930, this defendant called upon local physicians from surrounding cities or towns near its plant locations to perform routine physical examinations and to administer routine medical treatment when and if necessary.

30. Please state the scientific and/or medical periodicals to which Defendant, its medical department, research department, industrial hygiene divisions, engineering department or consulting physicians subscribed between 1945 and 1975.

ANSWER: Subject to the objections set forth in the preliminary paragraphs of this response, this defendant states that neither GAF Corporation nor The Ruberoid Co. maintained a central corporate library as to occupational safety and health. Any information which did exist was kept by Mr. Harry Mesler while he headed corporate safety for the company from approximately the early 1960s into 1971. Prior to Mr. Mesler's appointment to this position, Ruberoid and GAF employees may have from time to time maintained or possessed personal files containing periodicals and other literature relating to asbestos, its uses and qualities.

Mr. Mesler died on August 29, 1972, and the whereabouts of any such information is unknown.

30.1 Please state whether Defendant, its medical officer or industrial hygienist or medical consultant or physicians were ever involved in testing or received literature or correspondence from the Mellon Institute.

ANSWER: No.

30.2 Has any engineer, industrial hygienist or physician in your employ been a member in any professional group, trade group or any of the following groups:

Asbestos Textile Institute
National Insulation Manufacturers Association
Thermal Insulation Manufacturers Association
Quebec Asbestos Mining Association
Asbestos Information Association
Industrial Health Foundation
Industrial Hygiene Foundation
Iron and Steel Institute
National Safety Counsel
Refractories Institute
Air Hygiene Foundation of America, Inc.
Sprayed Mineral Fiber Association

If the answer is yes, state the following:

- (a) The name of the group or groups in which the individual(s) were members;
- (b) The name and position individual(s) within the Defendant, as defined, who were members;
- (c) The years the individual(s) were members of the groups;
- (d) Whether the Defendant paid the individual(s) dues or membership fees or reimbursed the individual(s) for dues or membership fees in the group.

ANSWER: Subject to the objections set forth in the preliminary paragraphs of this response, this defendant states that Ruberoid and then GAF representatives were members, along with representatives of the United States Navy, of standard-setting groups and committees of the American Society of Testing Materials, Philadelphia, Pennsylvania ("ASTM"). Specifically, Ruberoid/GAF representatives served on subcommittee C-16, which dealt with high temperature thermal insulation, from 1950 until 1971. At various times in this period, this defendant's representatives on subcommittee C-16 were J.M. High, Thomas J. Walters, Duane A. Davis, and William C. Schwingen.

Ruberoid, and then GAF, was also a member of the National Insulation Manufacturers' Association for certain years between 1958 and 1971. Wilbur G. Neel at some point in the 1960s was a member of the Board of Directors of NIMA and attended a meeting in 1964.

During the 1970s, representatives of GAF were members of the Board of Directors of the Asbestos Information Association/North America. Among persons so serving were Frank Campagna, Joseph Hall and William Fassuliotis.

31. State in detail what test, if any, Defendant ever made with regard to the quantity, quality, or threshold limit values of asbestos dust, fibers or particles to which workers were exposed while using, working with and/or around, installing and/or applying your asbestos-containing products.

ANSWER: Subject to the preliminary objections, this defendant responds that jobsites were under the exclusive control of their owners, or employers or contractors at those jobsites. This defendant believes that those owners, employers or contractors present at jobsites (on which this defendant's asbestos-containing industrial thermal insulation products were installed or otherwise used) had a legal duty mandated by state and federal governments to inspect and monitor those jobsites, in the manner required by OSHA and other laws, and this defendant did not have any such legal duty at any time.

32. For each test described in Interrogatory No. 31, please give the name of the person conducting the test, the date of the test, and attach true copies of any documents, including but not limited to, reports, findings or memoranda concerning such tests or studies.

ANSWER: See Response to Interrogatory No. 31.

33. Please state the year that Defendant was first advised of either threshold limit values or maximum allowable concentrations of both asbestos dust and total dust by the American Conference of Governmental Industrial Hygienists and state the name of the employee/official of the company receiving such advice.

ANSWER: This defendant objects to this Interrogatory on the grounds set forth in the preliminary paragraphs of this response. Subject to these objections, this defendant responds that, prior to 1964, it is aware of no information that Ruberoid officials knew of health hazards from asbestos to users of its asbestos-containing industrial thermal insulation products. In the 1960s, industrial and governmental hygienists and the Walsh-Healy Act endorsed and enacted the standard of 5 m. particles per cubic foot and in approximately 1964 Ruberoid became aware of opinions expressed by some members of the medical profession that inhalation of asbestos dust in excessive quantities which might be released while using asbestos-containing thermal insulation products over long periods of time could be harmful, although the opinion did not relate to the use of Ruberoid products. At approximately the same time, Ruberoid commenced providing its warnings. In approximately 1968, GAF received further information that inhalation of asbestos fibers in general could be harmful but GAF did not receive medical information specific to the types of products then being manufactured by GAF. In 1972, OSHA set standards for the Threshold Limit Value ("TLV") for asbestos particles. The acceptable standard was five fibers per cc for TWA (time weight average) and ten fibers per cc for peak time. In 1976, the standard changed to two fibers per cc for TWA; the peak time asbestos exposure did not change.

33.1 State whether this defendant at any time caused to be conducted on any job site, any air sampling, dust counts, tests or other activities to determine air quality or worker safety. If your answer is in the affirmative, please indicate:

- (a) the date of any such air samples, tests, or activities;
- (b) by whom such activities were performed;
- (c) where such activities were performed;
- (d) the results of any such activities.

ANSWER: Subject to the preliminary objections, this defendant responds that jobsites were under the exclusive control of their owners, or employers or contractors at those jobsites. This defendant believes that those owners, employers or contractors present at jobsites (on which this defendant's asbestos-containing industrial thermal insulation products were installed or otherwise used) had a legal duty mandated by state and federal governments to inspect and monitor those jobsites, in the manner required by OSHA and other laws, and this defendant did not have any such legal duty at any time.

34. Does Defendant maintain a library dealing with industrial hygiene, medicine, safety and engineering and/or research? If so, state:

- (a) The date each such library was established;
- (b) The location of each library;
- (c) The name(s) of the librarians since 1930;
- (d) List all journals subscribed to by you concerning asbestos, industrial hygiene, medicine, safety, and/or engineering;
- (e) List all books and articles dealing with asbestos and asbestos-related diseases and the date acquired.

ANSWER: Subject to the objections set forth in the preliminary paragraphs of this response, this defendant states that neither GAF Corporation nor The Ruberoid Co. maintained a central corporate library as to occupational safety and health. Any information which did exist was kept by Mr. Harry Mesler while he headed corporate safety for the company from approximately the early 1960s into 1971. Prior to Mr. Mesler's appointment to this position, Ruberoid and GAF employees may have from time to time maintained or possessed personal files containing periodicals and other literature relating to asbestos, its uses and qualities.

Mr. Mesler died on August 29, 1972, and the whereabouts of any such information is unknown.

35. Did Defendant in the 1920's or 1930's commission, or participate in the arrangements with Metropolitan Life Insurance Company for studies at the Trudeau Foundation at Saranac Lake, New York, concerning the effect of inhalation or ingestion of asbestos fibers upon human and/or animal bodies.

ANSWER: Subject to the preliminary objections, this defendant responds, no.

36. When was Defendant first aware of reports of studies of the Trudeau Foundation at Saranac Lake, New York, entitled "Effects of the Inhalation of Asbestos Dust in the Lungs of Asbestos Workers" by A.J. Lanza, Assistant Medical Director published in the J. Public Health Report, Vol. 50, No. 1, dated January 4, 1935 ("Lanza Report")?

ANSWER: Subject to the preliminary objections, this defendant responds, unknown.

36.1 Did you ever contract with Saranac Laboratories to study the hazards of any dust producing product manufactured by you (whether asbestos containing or not)? If so, identify by date and author all documents concerning or any way related to such study.

ANSWER: Subject to the preliminary objections, this defendant responds, no.

36.2 Did you ever contract with Saranac Laboratories to analyze dust or products? If so, identify by date and author all documents concerning or any way related to such analysis.

ANSWER: Subject to the preliminary objections, this defendant responds, no.

37. Please state whether the Defendant at any time has been a member of any "trade organization" or "trade association" composed by other manufacturers, miners, distributors, and/or sellers of asbestos-containing products and, if so, please identify the name and address of each such association or organization, the dates of membership, and the names of any publications issued or written by such association or organization.

ANSWER: This defendant objects to this Interrogatory on the grounds set forth in the preliminary paragraphs of this response and on the further grounds that it is overly broad and seeks information not calculated to lead to the discovery of admissible evidence, particularly in that it seeks information not relating to asbestos-containing industrial thermal insulation products. Subject to the foregoing objections, this defendant responds that, relative to the manufacture

of asbestos-containing industrial thermal insulation products, this defendant was a member of the following industrial groups or organizations:

National Insulation Manufacturers' Association, Inc.
441 Lexington Avenue
New York, New York 10017
1958-1971

Thermal Insulation Manufacturers' Association, Inc.
Seven Kirby Plaza
Mount Kisco, New York 10549
After 1973 - approximately 1978

Asbestos Information Association/North America
1745 Jefferson Davis Highway, Suite 509
Arlington, Virginia 22202
1971-1977

National Safety Council
444 N. Michigan Avenue
Chicago, Illinois 60611
Prior to 1966 - 1981

American Society for Testing Materials
1916 Race Street
Philadelphia, Pennsylvania 19103
Approximately 1946 - 1981

This defendant is aware of documents, neither generated by nor in the custody and control of this defendant, reflecting that General Aniline & Film Corporation was a new member of the Industrial Hygiene Foundation during the years 1945 to 1947, a period when General Aniline & Film Corporation was under Government ownership and did not manufacture any asbestos-containing materials. Although certain documents appear to indicate that Ruberoid considered becoming a member for a limited period in 1953-1954, this defendant possesses no evidence that it ever did so.

38. With respect to each trade organization or association listed in answer to Interrogatory No. 37, please state whether the minutes of the group's meetings and any correspondence between the members of such groups concerning the hazards of asbestos exposure are available.

ANSWER: Subject to the preliminary objections, this defendant states that some minutes are available.

39. Please identify by name the technical and trade association periodicals to which the Defendant subscribed, and state whether Defendant had knowledge of any articles being printed, or withheld from printing, in said periodicals pertaining to the potential hazards of asbestos. If so, please state the following:

- (a) The title of each such article;
- (b) The periodical in which each such article was published;
- (c) The date each such article was published;
- (d) A detailed explanation of the reason for withholding any such article for printing;
- (e) Produce documentation which refers, alludes or mentions articles which were withheld for publication.

ANSWER: Subject to the objections set forth in the preliminary paragraphs of this response, this defendant states that neither GAF Corporation nor The Ruberoid Co. maintained a central corporate library as to occupational safety and health. Any information which did exist was kept by Mr. Harry Mesler while he headed corporate safety for the company from approximately the early 1960s

into 1971. Prior to Mr. Mesler's appointment to this position, Ruberoid and GAF employees may have from time to time maintained or possessed personal files containing periodicals and other literature relating to asbestos, its uses and qualities.

Mr. Mesler died on August 29, 1972, and the whereabouts of any such information is unknown.

40. Please state whether, prior to 1975, the Defendant sponsored, or attended any meeting, seminar, conference, convention or legislative hearing where the subject of occupational health and exposure to asbestos was discussed and, if so, please state the date and place of such meeting and the name and address of any speakers or participants.

ANSWER: Subject to the objections set forth in the foregoing General Objections, GAF responds that representatives of AF or Ruberoid may have attended various trade associations and other meetings at which these subjects may have been discussed. In 1968, a GAF representative (Phillip Bettoli) attended a conference at which various aspects of potential health effects of asbestos were discussed.

WARNINGS/SALES PROMOTION

41. As to each product listed in response to Interrogatory No. 5, please state whether Defendant, at any time, published and/or distributed any printed materials, including but not limited to brochures, pamphlets, catalogs, packagings or other written materials of any kind or character that contain any warnings, cautions, caveats or directions concerning the possible health effects of the products on a person. If so, please state as to each product:

(a) The name of each relevant product;

- (b) The wording of each such warning;
- (c) A description of each such printed material;
- (d) The method used to distribute the warning to persons who are likely to use the products;
- (e) The date each such warning was issued;
- (f) Whether any warning accompanied any of your asbestos-containing products' sales literature, handout or pamphlets;
- (g) Please attach a copy of the warning and date said warning was issued;
- (h) The name, address, and job classification of each person who presently has possession of the above-described documents;
- (i) The name or names and addresses of the company who provided, produced, or manufactured the boxes or containers on which the warning appeared and dates these boxes with the warnings appeared.

ANSWER: Subject to the preliminary objections, this defendant responds that, in approximately 1964, The Ruberoid Co. began placing the following warning notices on packages of its asbestos-containing industrial thermal insulation products:

CAUTION

THIS PRODUCT CONTAINS ASBESTOS FIBER.
INHALATION OF ASBESTOS IN EXCESSIVE QUANTITIES
OVER LONG PERIODS OF TIME MAY BE HARMFUL.

IF DUST IS CREATED WHEN THIS PRODUCT IS HANDLED,
AVOID BREATHING THE DUST. IF ADEQUATE VENTILATION
CONTROL IS NOT POSSIBLE, WEAR RESPIRATORS APPROVED
BY THE U.S. BUREAU OF MINES FOR PNEUMOCONIOSIS
PRODUCING DUST.

GAF placed warning labels on packaging of asbestos fiber and insulation cements by 1968, and on millboard, rollboard and asbestos paper products, as well as relocating the warning label for Calsilite® pipe covering and block products from the sides to the front of the carton, by 1970. This warning label read as follows:

CAUTION

**CONTAINS ASBESTOS FIBER. INHALATION IN
EXCESSIVE QUANTITIES OVER LONG PERIODS OF TIME
MAY BE HARMFUL.**

**AVOID BREATHING DUST. IF ADEQUATE
VENTILATION IS NOT POSSIBLE, WEAR RESPIRATORS
APPROVED BY THE U.S. BUREAU OF MINES FOR
PNEUMOCONIOSIS PRODUCING DUST.**

In approximately 1972, this warning was further changed to read as follows:

CAUTION

**CONTAINS ASBESTOS FIBER. AVOID BREATHING DUST.
BREATHING ASBESTOS MAY CAUSE SERIOUS BODILY HARM.**

In 1978, warning labels were placed on individual sheets of millboard.

Until 1972, GAF's use of these warnings followed major manufacturers in the industry which used such cautionary notices after certain opinions were expressed by some members of the medical profession that there might be a health risk to some persons who installed industrial thermal insulation products containing asbestos from the inhalation of excessive quantities of asbestos fibers over prolonged periods of time under certain conditions. Commencing in 1972, pursuant to the requirements of the Occupational Safety and Health Act of 1970, GAF placed the last notice set out above.

All observers of this packaging, whether purchasers, users, handlers, distributors, or contractors, would have seen, and thus received, the warnings as set forth above.

No list or other compilation of documents relating to this interrogatory exists in discoverable form.

42. Has sales material been prepared by Defendant or its agents for purposes of marketing or advertising the asbestos products listed in answer to Interrogatory No. 5? If so, please state:

- (a) The name and address of each person or entity who prepared same;
- (b) The name, address and job title of each person who presently has possession of same;
- (c) The date same was prepared;
- (d) The media used to disseminate the sales material.

ANSWER: Subject to the objections set forth in the preliminary paragraphs of this response, this defendant states that The Ruberoid Co. (and later GAF) presented product and technical information in trade and other magazines, and maintained entries in Sweet's Catalog Files. Advertisements for this defendant's asbestos-containing industrial thermal insulation products also appeared in the magazine Asbestos.

43. Has any written material of any kind or character been prepared by Defendant, Defendant's predecessor or any of Defendant's subsidiary companies or their agents indicating how the products listed in answer to Interrogatory No. 5 should be used or maintained by the ultimate user or those working in facilities or at job sites where the product was used, installed or removed, including, but not limited to, those sites listed on the job site list attached as Exhibit A. If so, please state the following:

- (a) The name, address and job classification of each person who prepared same;
- (b) The name, address and job classification of each person who presently has possession of same;
- (c) The dates and manner in which said material was distributed to purchasers of the products in answer to Interrogatory No. 5.

ANSWER: Subject to the preliminary objections, this defendant responds that, in approximately 1964, The Ruberoid Co. began placing the following warning notices on packages of its asbestos-containing industrial thermal insulation products:

CAUTION

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INHALATION OF ASBESTOS IN EXCESSIVE QUANTITIES
OVER LONG PERIODS OF TIME MAY BE HARMFUL.

IF DUST IS CREATED WHEN THIS PRODUCT IS HANDLED,
AVOID BREATHING THE DUST. IF ADEQUATE VENTILATION
CONTROL IS NOT POSSIBLE, WEAR RESPIRATORS APPROVED
BY THE U.S. BUREAU OF MINES FOR PNEUMOCONIOSIS
PRODUCING DUST.

GAF placed warning labels on packaging of asbestos fiber and insulation cements by 1968, and on millboard, rollboard and asbestos paper products, as well as relocating the warning label for Calsilite® pipe covering and block products from the sides to the front of the carton, by 1970. This warning label read as follows:

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EXCESSIVE QUANTITIES OVER LONG PERIODS OF TIME
MAY BE HARMFUL.**

**AVOID BREATHING DUST. IF ADEQUATE
VENTILATION IS NOT POSSIBLE, WEAR RESPIRATORS
APPROVED BY THE U.S. BUREAU OF MINES FOR
PNEUMOCONIOSIS PRODUCING DUST.**

In approximately 1972, this warning was further changed to read as follows:

CAUTION

**CONTAINS ASBESTOS FIBER. AVOID BREATHING DUST.
BREATHING ASBESTOS MAY CAUSE SERIOUS BODILY HARM.**

In 1978, warning labels were placed on individual sheets of millboard.

Until 1972, GAF's use of these warnings followed major manufacturers in the industry which used such cautionary notices after certain opinions were expressed by some members of the medical profession that there might be a health risk to some persons who installed industrial thermal insulation products containing asbestos from the inhalation of excessive quantities of asbestos fibers over prolonged periods of time under certain conditions. Commencing in 1972, pursuant to the requirements of the Occupational Safety and Health Act of 1970, GAF placed the last notice set out above.

All observers of this packaging, whether purchasers, users, handlers, distributors, or contractors, would have seen, and thus received, the warnings as set forth above.

No list or other compilation of documents relating to this Interrogatory exists in discoverable form.

44. Was any written material of any kind prepared by Defendant and distributed to those individuals listed in response to Interrogatory No. 9? If so, please state the following:

- (a) Identify the written material by content and date;
- (b) To whom was it delivered.

ANSWER: See Response to Interrogatory No. 43.

45. Does Defendant contend that asbestos-containing products can be manufactured so as to eliminate all potential health hazards to persons working with or around, installing or applying same? If so, please state the following:

- (a) The date that Defendant first determined that another product could be used in place of asbestos;
- (b) The chemical of the substitute;
- (c) Whether the substitute is suitable for the purpose for which they are to be used;
- (d) Whether Defendant used the substitute for asbestos to 1971;
- (e) Whether Defendant ever used the substitute for asbestos for high or low heat insulation.

ANSWER: This defendant objects to this Interrogatory on the grounds set forth in the preliminary paragraphs of this response, particularly on the grounds that it is overly broad and not reasonably calculated to lead to the discovery of admissible evidence. In addition, this defendant objects to this Interrogatory on the grounds that it is unduly burdensome for defendant to "prove a negative" and that it is plaintiff's burden to prove that any use of this defendant's asbestos-containing products created a health hazard.

This defendant further objects to this Interrogatory on the grounds that it seeks expert opinion beyond the scope of the applicable Rules.

46. Did Defendant give any warnings to any individuals at the sites listed on Exhibit A, including any individuals who owned, operated, or managed the facilities at the sites listed on Exhibit A, regarding the potential health hazards of any product listed in response to Interrogatory No. 5. If yes, please state:

- (a) Name of person most knowledgeable about this communication.
- (b) Name of person at the sites listed on Exhibit 1, attached hereto most knowledgeable about this communication.
- (c) Dates of each communication.
- (d) Contents of each communication.

ANSWER: This defendant does not admit that any of its products were at any of the sites listed.

Subject to the preliminary objections, this defendant responds that, in approximately 1964, The Ruberoid Co. began placing the following warning notices on packages of its asbestos-containing industrial thermal insulation products:

CAUTION

**THIS PRODUCT CONTAINS ASBESTOS FIBER.
INHALATION OF ASBESTOS IN EXCESSIVE QUANTITIES
OVER LONG PERIODS OF TIME MAY BE HARMFUL.**

**IF DUST IS CREATED WHEN THIS PRODUCT IS HANDLED,
AVOID BREATHING THE DUST. IF ADEQUATE VENTILATION
CONTROL IS NOT POSSIBLE, WEAR RESPIRATORS APPROVED
BY THE U.S. BUREAU OF MINES FOR PNEUMOCONIOSIS
PRODUCING DUST.**

GAF placed warning labels on packaging of asbestos fiber and insulation cements by 1968, and on millboard, rollboard and asbestos paper products, as well as relocating the warning label for Calsilite® pipe covering and block products from the sides to the front of the carton, by 1970. This warning label read as follows:

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**CONTAINS ASBESTOS FIBER. INHALATION IN
EXCESSIVE QUANTITIES OVER LONG PERIODS OF TIME
MAY BE HARMFUL.**

**AVOID BREATHING DUST. IF ADEQUATE VENTILATION IS
NOT POSSIBLE, WEAR RESPIRATORS APPROVED BY THE U.S.
BUREAU OF MINES FOR PNEUMOCONIOSIS PRODUCING
DUST.**

In approximately 1972, this warning was further changed to read as follows:

CAUTION

**CONTAINS ASBESTOS FIBER. AVOID BREATHING DUST.
BREATHING ASBESTOS MAY CAUSE SERIOUS BODILY HARM.**

In 1978, warning labels were placed on individual sheets of millboard.

Until 1972, GAF's use of these warnings followed major manufacturers in the industry which used such cautionary notices after certain opinions were expressed by some members of the medical profession that there might be a health risk to some persons who installed industrial thermal insulation products containing asbestos from the inhalation of excessive quantities of asbestos fibers over prolonged periods of time under certain conditions. Commencing in 1972, pursuant to the requirements of the Occupational Safety and Health Act of 1970, GAF placed the last notice set out above.

All observers of this packaging, whether purchasers, users, handlers, distributors, or contractors, would have seen, and thus received, the warnings as set forth above.

KNOWLEDGE OF PREVIOUS INJURIES

47. Did any person prior to 1970, file a claim against any Workers' Compensation carrier covering Defendant alleging that he or she contracted a disease as a result of exposure to asbestos? If so, please state the following:

- (a) A list of each such claim by claimant's name, date filed, the caption and jurisdiction involved;
- (b) The disease alleged in each such claim;

- (c) A brief summary of the disposition of each such claim; and
- (d) The name, address and job classification of the person or persons having custody of the records pertaining to each such claim.

ANSWER: This defendant objects to this Interrogatory on the grounds set forth in the preliminary paragraphs of this response and on the further grounds that conditions in GAF's facilities, including provision for safety and health in same, are not at issue in this litigation and therefore this Interrogatory is irrelevant to the subject matter of this litigation and is not reasonably calculated to lead to the discovery of admissible evidence.

47.1 Please identify all documents concerning or in any way related to any decisions made by you to cease manufacturing asbestos-containing products.

ANSWER: Subject to the preliminary objections, this defendant will respond to a proper request for production.

47.2 Has any person or company from which you purchased asbestos containing products ever issued a recall of their products or taken any action to take those products off the market after said products were in your possession? If so, provide:

- (a) the date of said recall;
- (b) the name of the company which issued the recall;
- (c) a copy of the recall.

ANSWER: Subject to the preliminary objections, this defendant responds, not to its knowledge.

47.3 State what action, if any, you have ever taken since 1930 to minimize or eliminate any risk of occupational disease or pneumoconiosis to those at any time engaged in the manufacture or production of asbestos-containing products.

ANSWER: This defendant objects to this Interrogatory on the grounds set forth in the preliminary paragraphs of this response and on the further grounds that conditions in GAF's facilities, including provision for safety and health in same, are not at issue in this litigation and therefore this Interrogatory is irrelevant to the subject matter of this litigation and is not reasonably calculated to lead to the discovery of admissible evidence.

47.4 State what action, if any, you have ever taken since 1930 to minimize or eliminate any risk of occupational disease or pneumoconiosis to those at any time engaged in the use, as distinguished from the manufacture, or exposed to the use of asbestos-containing or industrial insulation products or who were otherwise exposed to asbestos-containing or industrial insulation products.

- (a) describe such action;
- (b) state when such action was taken;
- (c) state what written material exists related to such action;
- (d) state the names, job titles and last known address of the individuals who undertook such actions.

ANSWER: Subject to the objections set forth in the preliminary paragraphs of this response, this defendant responds that, prior to 1964, it is aware of no information that Ruberoid officials knew of health hazards from asbestos to users of its asbestos-containing industrial thermal insulation products. In approximately 1964, Ruberoid became aware of opinions expressed by some

members of the medical profession that inhalation of asbestos dust in excessive quantities which might be released while using asbestos-containing thermal insulation products over long periods of time could be harmful, although the opinion did not relate to the use of Ruberoid products. At approximately the same time, Ruberoid commenced providing its warnings. In approximately 1968, GAF received further information that inhalation of asbestos fibers in general could be harmful but GAF did not receive medical information specific to the type of products then being manufactured by GAF.

In approximately 1964, The Ruberoid Co. began placing the following warning notices on packages of its asbestos-containing industrial thermal insulation products:

CAUTION

THIS PRODUCT CONTAINS ASBESTOS FIBER.
INHALATION OF ASBESTOS IN EXCESSIVE QUANTITIES
OVER LONG PERIODS OF TIME MAY BE HARMFUL.

IF DUST IS CREATED WHEN THIS PRODUCT IS HANDLED,
AVOID BREATHING THE DUST. IF ADEQUATE VENTILATION
CONTROL IS NOT POSSIBLE, WEAR RESPIRATORS APPROVED
BY THE U.S. BUREAU OF MINES FOR PNEUMOCONIOSIS
PRODUCING DUST.

GAF placed warning labels on packaging of asbestos fiber and insulation cements by 1968, and on millboard, rollboard, and asbestos paper products, as well as relocating the warning label for Calsilite® pipe covering and block products from the sides to the front of the carton, by 1970. This warning label read as follows:

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AVOID BREATHING DUST. IF ADEQUATE VENTILATION IS NOT POSSIBLE, WEAR RESPIRATORS APPROVED BY THE U.S. BUREAU OF MINES FOR PNEUMOCONIOSIS PRODUCING DUST.

In approximately 1972, this warning was further changed to read as follows:

CAUTION

CONTAINS ASBESTOS FIBER. AVOID BREATHING DUST. BREATHING ASBESTOS MAY CAUSE SERIOUS BODILY HARM.

In 1978, warning labels were placed on individual sheets of millboard.

Until 1972, GAF's use of these warnings followed major manufacturers in the industry which used such cautionary notices after certain opinions were expressed by some members of the medical profession that there might be a health risk to some persons who installed industrial thermal insulation products containing asbestos from the inhalation of excessive quantities of asbestos fibers over prolonged periods of time under certain conditions. Commencing in 1972, pursuant to the requirements of the Occupational Safety and Health Act of 1970, GAF placed the last notice set out above.

All observers of this packaging, whether purchasers, users, handlers, distributors, or contractors, would have seen, and thus received, the warnings as set forth above.

This defendant further states that it began production of asbestos-free Calsilite® when it developed asbestos-free Calsilite® in 1970, with sales beginning in 1970 or 1971. This product was identified as "Calsilite® II" or "Calsilite® A-F." However, without adding asbestos, GAF was unable to manufacture a calcium silicate insulation which met all specifications of the United States Government applicable to Calsilite®. These limitations made it impossible for this defendant to manufacture and sell an asbestos-free Calsilite® that met applicable Government requirements. GAF asked the Government (U.S. Navy) to modify its specifications so that GAF's new product could be sold to the Navy and other customers that required materials which would meet such specifications. The failure by the United States Government to act promptly to approve non-asbestos Calsilite® for procurement as a practical matter limited the ability of this defendant to sell its non-asbestos product, and was a factor leading to the closure of the entire Calsilite® facility on October 14, 1971.

48. Did Defendant receive notice prior to 1968 that any person was claiming injury as a result of using asbestos products manufactured, sold, installed, and/or distributed by Defendant? If so, please state:

- (a) The name and address of each claimant;
- (b) The date of notice of each claim;
- (c) A description of the claim;
- (d) The type of injuries allegedly sustained;
- (e) The name and address of each attorney representing the individuals making such claims;
- (f) The style and court number of each such claim;
- (g) The resolution of each claim.

ANSWER: Subject to the preliminary objections, this defendant responds, no.

48.1 Describe the method by which you have maintained records concerning the manufacturer, sale, supply, distribution, use, advertising, delivery and/or installation or tear-out of each of asbestos-containing products. For each description provide the following:

- (a) each present and former company or corporate department, division or subdivision responsible for maintaining such records;
- (b) the manner in which the records are kept (e.g., boxes, computer tape, microfilm, etc.);
- (c) the inclusive dates of any such manufacturer, sale, supply, distribution, use, advertising, delivery, and/or installation or tear-out which such record keeping system covers;
- (d) the present location at which all such records are maintained;
- (e) the identity of each person employed by you at any time from 1930 to the present who is or was responsible for the collection and maintenance of such records.

ANSWER: Michael Baker, presently Assistant Secretary, has been employed by GAF since May 28, 1982. One of his duties and responsibilities since that date has been to act as records custodian. GAF objects to identifying former persons responsible for determining record retention policies or plans on the grounds of relevance. A list or other compilation of the names of all persons responsible for determining the policy or plan regarding the record retention or destruction policy from 1930 to the present does not currently exist.

The length of time for which records are retained varies according to the operational, financial, and legal requirements of the corporation. The time period for document retention varies according to the type of document. Documents are generally retained for seven years. However, corporate and other documents may be kept for longer periods. Certain operational documents not required to be preserved by applicable regulations are generally not kept for more than two years. All records which are discoverable are retained in their original form. GAF does not have a master list of all its business records, nor does it have a defined method of accession to all its retained records, nor does the Company maintain a central document repository.

48.2 State whether any records concerning the manufacture, sale, supply, distribution, advertising, delivery, use or installation or tear-out of asbestos-containing products have been destroyed or discarded and if so, indicate:

- (a) the date and location of such destruction or discard;
- (b) the custodian and location of such records prior to their destruction or discard and the identity of each employee, representative, official or agent who ordered, authorized or supervised such destruction or discard.

ANSWER: This defendant objects to this Request on the grounds set forth in the preliminary paragraphs of this response and on the further grounds that it is overly broad, unduly burdensome and not drafted in a fashion precise enough, nor reasonably calculated to lead to the discovery of admissible evidence.

48.3 For all documents, other than invoices, work orders and/or purchase orders, which relate to matters relevant to the all the preceding interrogatories:

- (a) Is there any kind of index for the documents?
- (b) How many pages is the index of documents?
- (c) How many documents are referred to in the index?
- (d) Is the index maintained in electronic format (i.e. database, word processing or other computerized format)?
- (e) What manner of electronic format is used?

ANSWER: This defendant objects to this Request on the grounds set forth in the preliminary paragraphs of this response and on the further grounds that it is overly broad, unduly burdensome and not drafted in a fashion precise enough, nor reasonably calculated to lead to the discovery of admissible evidence.

48.4 For all invoices, work orders and/or purchase orders, which relate to matters relevant to the all the preceding interrogatories:

- (a) Is there any kind of index for the documents?
- (b) How many pages is the index of documents?
- (c) How many documents are referred to in the index?
- (d) Is the index maintained in electronic format (i.e. database, word processing or other computerized format)?
- (e) What manner of electronic format is used?

ANSWER: This defendant objects to this Request on the grounds set forth in the preliminary paragraphs of this response and on the further grounds that it is overly broad, unduly burdensome and not drafted in a fashion precise enough, nor reasonably calculated to lead to the discovery of admissible evidence. The only possible relevant sales of this defendant's asbestos-containing industrial thermal insulation products would be for those shipments made to jobsites on which and during years in which plaintiff actually worked.

PLAINTIFF/DECEDENT

49. Has Defendant obtained statement from any witnesses including the Plaintiffs?

If so, please:

- (a) list each witness who has given a statement and the name, address, and job title of each person having custody of any such statement.

ANSWER: No.

50. Do you contend that the Plaintiff/Decedent improperly used those products listed in response to Interrogatory No. 5? If so, please set out in detail in what respect the product was improperly used.

ANSWER: Objection. This Interrogatory assumes facts not in evidence. Subject to, and without waiver of, this objection, this Defendant responds as follows: There is no evidence that the Plaintiff/Decedent used any products listed in response to Interrogatory No. 5. Moreover, discovery has not been completed.

51. As to the sites listed on Exhibit A, and as to each Plaintiff/Decedent, please state whether Defendant contends that there was any substance other than asbestos which contributed or caused Plaintiff/Decedent's injuries. If your answer is yes, please state the following:

- (a) The facts upon which you rely;
- (b) The identity of the sources upon which you rely which substantiate these facts.

ANSWER: Discovery regarding this issue has not been completed.

RESPIRATORS

52. Would any respirator, mask or other breathing devices prevent inhalation of the asbestos dust and fibers contained in products listed in answer to Interrogatory No. 5? If so, state:

- (a) When the respirator was sold;

- (b) A detailed description of such respirator or other breathing devices, including name of manufacturer and model number;
- (c) The basis of your claim that such respirators or other breathing devices will prevent the inhalation of such dust and fibers;
- (d) Identify any tests performed regarding the efficaciousness of such respirators and other breathing devices in preventing the inhalation of asbestos dust and fibers including date, title, author and number;
- (e) List all documents which mention, allude or refer to tests performed on breathing devices which prevented the inhalation of asbestos dust and/or fibers.

ANSWER: This defendant objects to this Interrogatory on the grounds set forth in the preliminary paragraphs of this response, particularly on the grounds that it seeks expert opinion. Subject to these objections, this defendant responds that it is aware that there are and have been respirators or other breathing devices that allegedly prevent the inhalation of asbestos dust and fibers.

53. Does Defendant expect to call expert witnesses at the trial of this case? If so, please state the following:

- (a) Their identity, last known address;
- (b) The subject matter on which the expert is expected to testify;
- (c) The expert's specific conclusion and specific opinions and the specific basis therefore;
- (d) The expert's qualifications to render the opinions set forth above;
- (e) Whether any person identified in sub-paragraph (a) above has provided a report or other documentation to you, and if so, identify such document or report;
- (f) Identify all documents that you have provided to each person identified in response to sub-paragraph (a) above; and

- (g) Describe in detail the education and work history of, and identify any books, treaties, article, published and unpublished reports, studies or other scholarly works authored by any individual identified in response to subparagraph (a) above. Alternatively, in lieu, of said response, attach a copy of a resume or curriculum vitae and a list of publications to your answer.

ANSWER: Objection. This defendant will identify its witnesses pursuant to the scheduling order entered by the Court.

54. Please state the name and last know address of each expert witness who is not retained or employed for that purpose who is an employee of Defendant and will render an opinion within his expertise at the time of trial.

ANSWER: Objection. This interrogatory is vague. Subject to, and without waiver of, this objection, this Defendant responds as follows: Expert and fact witnesses will be identified pursuant to the Court's Case Management Schedule for these cases.

55. Does Defendant admit that service of process was properly had on it in these cases? If not, please state why.

ANSWER: This Defendant is not presently aware of any deficiencies with respect to service of process.

55.1 For each and every affirmative defense asserted in the answering defendant's Answer to Plaintiffs' Complaint, the Cross-Claims or Counter-Claims of any party against this answering defendant state:

- (a) the facts upon which the answering defendant relies for each and every affirmative defense;
- (b) each and every document which will be offered to prove each and every affirmative defense; and
- (c) each and every witness who will testify in support of each and every affirmative defense.
- (d) the substance and subject matter of the anticipated testimony of each witness identified in the preceding response.

ANSWER: Objection. This interrogatory is overly broad and unduly burdensome. Moreover, discovery on these issues has not been completed.

56. Does Defendant have policies of insurance that might cover the claims that have been made by the Plaintiffs herein?

- (a) If so, please list the name of each insurance carrier who may have coverage, the amount of such coverage, and the dates of each such policy.

ANSWER: This defendant objects to this Interrogatory on the grounds set forth in the preliminary paragraphs of this response, particularly on the grounds that it is overly broad, unduly burdensome, not reasonably calculated to lead to the discovery of admissible evidence, and presently is in litigation. Subject to these objections, this defendant responds that, on January 7, 1987, this defendant entered the Asbestos Claims Facility, Princeton, New Jersey.

56.1 Have you ever been involved in any litigation concerning potential insurance coverage for asbestos products liability matters? If so, please state:

- (a) the case caption, court and date of filing of each case in which you have been involved;
- (b) whether you were plaintiff or defendant;
- (c) a brief statement of the issues;
- (d) identify by date, author and recipient(s), (including recipients of carbon copies) all documents listed as exhibits by either party in this litigation;
- (e) identify by deponent and date all individuals who were deposed in these cases;
- (f) identify by date, author and recipient(s) all documents that have been placed on a protective order in such litigation;
- (g) identify all expert witnesses retained for use at trial in any of the above litigation by name, address and telephone number.

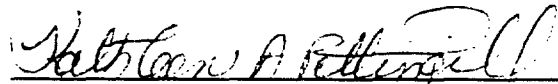
ANSWER: This defendant objects to this Request on the grounds set forth in the preliminary paragraphs of this response and on the further grounds that it is overly broad, unduly burdensome and not drafted in a fashion precise enough, nor reasonably calculated to lead to the discovery of admissible evidence.

57. Please state the name and address of each person who has knowledge of relevant facts regarding claims and defenses of this lawsuit.

ANSWER: Objection. This interrogatory is overly broad and unduly burdensome. Subject to, and without waiver of, this objection, this Defendant incorporates by reference its responses to Interrogatory Nos. 53 and 54.

58. State the last date that this Defendant sold, distributed, manufactured, installed, and/or otherwise placed asbestos-containing products into the stream of commerce.

ANSWER: Subject to the preliminary objections, this defendant responds, fall 1981.



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Attorneys for Defendant
GAF Corporation

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jck 02/24/98

CERTIFICATE OF SERVICE

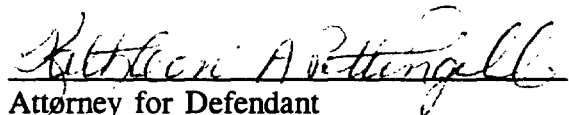
I hereby certify that a true and correct copy of the foregoing Responses of Defendant GAF Corporation To Plaintiffs' Master Set of Interrogatories Propounded To Defendant GAF Corporation was served upon the following by regular U.S. mail, postage prepaid, and, in addition, notice of the filing of the foregoing was sent by regular U.S. mail, postage prepaid, this 27th day of February, 1998, to all Counsel of Record/Defendant Corporations whose addresses are known to me.

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Attorney for Plaintiffs


Attorney for Defendant

STATE OF NEW JERSEY)
)
COUNTY OF PASSAIC) SS:

AFFIDAVIT

I, MICHAEL J. BAKER, after first being duly sworn on oath, depose and state that I am Assistant Secretary of GAF Corporation. The foregoing is verified on behalf of GAF Corporation, and I am authorized to make this verification. The matters stated herein are not within my personal knowledge, but responses have been prepared from information and the records available to GAF Corporation. I am informed that a reasonably diligent search of the records of GAF Corporation has been made in order to prepare the foregoing response. I believe the foregoing to be true, to the best of my knowledge, information and belief.



MICHAEL J. BAKER

Subscribed and sworn to before me this 17 day of February 1998.


Notary Public

CATHERINE MARY LEICHTER
NOTARY PUBLIC OF NEW JERSEY
My Commission Expires Nov. 2, 2000