GRACE

Zonolite
Construction Products Division



April 20, 1983

TO: Zonolite Sales Organization

FROM: R. C. Walsh

cc:
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Zonolite Marketing Group
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There has been some publicity concerning W. R. Grace & Co.'s involvement in asbestos-related matters. This memorandum is to provide you with background information.

Prior to the early 1970's, the Construction Products Division of Grace manufactured a gypsum-based fireproofing material and cementitious acoustical plaster mixes which were formulated with commercial asbestos. In the early 1970's, Grace reformulated these products to totally eliminate the use of asbestos.

Unfortunately, companies that produced asbestos-containing products in the past have become involved in the asbestos-related litigation which has received attention in the press. This includes companies such as Johns-Manville, Jim Walters, Owens-Corning Fiberglass, GAF Corp., Armstrong, U. S. Gypsum, U. S. Mineral Products, National Gypsum and W. R. Grace & Co., all manufacturers of building products.

The asbestos-containing fireproofing and plaster products, which were produced in the past by CPD, were cementitious materials and were applied in a wet slurry form. Because of this, they did not, in our opinion, pose a health problem in spite of their commercial asbestos content (which generally ranged between 12 and 19%). Any health problems in the construction industry which occurred were probably associated with the use of non-cementitious, dry-sprayed asbestos fiber insulation, acoustical and fireproofing products, since these generated large quantities of airborne asbestos during application.

In addition, it's our opinion that, once in place, CPD's pre-1973 cementitious products do not release fibers, since the asbestos in the material is encapsulated in a binder. In contrast, sprayed asbestos fibers which were commonly used until the early 1970's produced a soft-friable mat, which when disturbed or air eroded, may release measurable asbestos fibers in the air. This problem has received publicity as schools and other public buildings deal with the concern of removing or encapsulating the in-place sprayed-on asbestos fibers. (See Attachment A for our response.)

Because of the publicity surrounding asbestos-related matters, there have been questions as to the asbestos content of our present products. No Grace construction products are manufactured today with the addition of any asbestos.

Grace does produce products utilizing vermiculite. Vermiculite is a naturally-occurring mineral mined from deposits which have tremolite containing rock. Tremolite is an asbestiform material found in many types of mineral and rock formations throughout the world. In the processing of expanded vermiculite products, the tremolite is removed, except for trace amounts.

Customers may ask specific questions concerning the asbestos content of our present products. In most cases, these questions will be motivated because of the matters described in this memorandum involving the use of commercial asbestos products prior to the early 1970's. For your information, attached are letters we have used when customers asked whether our present vermiculite products or MONOKOTE contain asbestos. If a customer requests a letter, please pass the request to your regional office for response.

R C Walsh

Robert C. Walsh

RCW/jag
Attachments

ATTACHMENT A

Dear Mr.

This is in response to your recent inquiry concerning Zonolite® Acoustical Plaster Products and MK-3 Fireproofing which were used in your schools.

These products were a mill-mixed blend of lightweight vermiculite aggregate, air-entraining agents, preservatives and corrosion inhibitors in a gypsum or bentonite binder. As manufactured, approximately 12-19% of asbestos was added to the products. Sales of these asbestos-containing products were discontinued in 1972 and 1973.

In deciding on an appropriate course of action with regard to in-place materials such as these, consideration needs to be made as to the type of product used, the physical condition of the in-place material and the accessibility of the materials to physical damage and dusting.

The Zonolite materials should not be confused with those products which were formulated with higher asbestos contents (up to 50%) and were air sprayed to form a low density, fluffy, lightly bound mat. By contrast, the Zonolite materials were formulated to be combined with water on the jobsite to produce a cementitious plaster-type mixture which set to a relatively dense and durable material, well bonded to the surface to which it was applied.

Because of the "setting" characteristics of these plaster-type materials, we believe that the asbestos fibers are encapsulated in the matrix,and therefore, are not subject to release into the environment.

If, however, the material has been damaged or has deteriorated so that the surface is subject to dusting or flaking, consideration should be given to either (1) removal of the material, or (2) overspraying and sealing of the surface. Enclosed is a list of sealers tested by Battelle Columbus Laboratories to meet EPA regulations.

Since your concern is possible exposure to respirable asbestos fibers which might be released from the material, only on-site air sampling measurements will determine the actual airborne asbestos fiber concentrations. Air monitoring should be done in accordance with OSHA regulations.

Enclosed is a copy of the EPA guidance document "Asbestos Containing Materials in School Buildings". This document provides as much of the background on the asbestos problem in this country along with general guidelines on handling such problems.

Please review the enclosed and get back to me if you have any questions.

Sincerely,

Enclosures

GRACE

Zonolite
Construction Products Division

W.R. Grace & Co.
62 Whittemore Avenue
Cambridge, Mass. 02140

(617) 876-1400

ATTACHMENT B

MONOKOTE FIREPROOFING

Dear (Specifier):

For your information, MONOKOTE® Type MK-5 is a cementitious fire protection product which is manufactured by the Construction Products Division of W. R. Grace & Co. without the addition of any commercial asbestos. As a result, MONOKOTE can be used as a non-asbestos containing fireproofing material.

Samples of MONOKOTE have been analyzed for the presence of asbestos by several competent, independent laboratories. In each case, the laboratories report that no asbestos was found in MONOKOTE. Copies of theses reports are available should you need them.

Very truly yours,

GRACE

Zonolite
Construction Products Division

W.R. Grace & Co.
62 Whittemore Avenue
Cambridge, Mass. 02140

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ATTACHMENT C

ZONOLITE ATTIC INSULATION
(or ZONOLITE MASONRY INSULATION)

Dear Mr.

You asked that we write to answer your questions of whether Zonolite Attic (or Masonry) Insulation contains asbestos.

No asbestos is used to manufacture Zonolite Attic (or Masonry) Insulation. However, this product is made from vermiculite, which is a naturally occurring mineral mined from deposits which have tremolite-containing rock. Tremolite is an asbestiform material found in many types of mineral and rock formations throughout the world. In the processing of vermiculite to produce Zonolite Attic (or Masonry) Insulation, the tremolite is removed, except for trace amounts.

Grace has conducted tests on its Zonolite Attic (or Masonry) Insulation. Based on these tests, and in reference to government standards, Grace has concluded that the trace amount of tremolite in the material is so low that the product, when used, creates no health hazard for users.

If you need additional information on this matter, please let us know.

Sincerely,