

R40183

ARDMORE

Jan. 7, 1959

Paoli Lab.

Mr. W. J. Harries

FIRE TEST LITE ACOUSTICAL PLASTER

C. G. Shuttleworth - md

CS

PLAINTIFF'S EXHIBIT

GP-492

We have examined the brochure on sprayed Limpet Asbestos as a fireproofing medium, particularly in reference to the four hour floor test.

The only other test of a similar nature we can find was made using Zonolite Acoustical Plaster, applied over corrugated steel flooring (Cofar), to a thickness of 1/2" below depth of corrugation and 2 1/4" on steel beams - rating 4 hours - U. L. 5/24/54. This construction is shown in Sweets Catalogue - 1956; Section 12C, page 10.

Our Lite Acoustical Plaster is similar to the Zonolite product, except we use perlite instead of vermiculite. It is, therefore, possible that a similar construction with our Lite Acoustical Plaster would give same rating; although there is no certainty.

If it is decided to make such a fire test, we should check with Underwriters' to be sure that there will be no limitation on the type of steel flooring used, since it would not be very helpful to have a test limited to any particular type of steel flooring.

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SGP 0018979

Bestwall - Certain-teed Sales Corporation

FOR Paoli Lab

DATE 1/5/59

FROM General Sales OFFICE

ATTENTION OF Mr. C. G. Shuttleworth SUBJECT FIRE TEST LITE ACOUSTICAL PLASTER

ANSWERING YOURS

Dictated by W. J. Harries - pag 1

Attached to this memorandum is a brochure on sprayed Limpet Asbestos as manufactured by Keasbey & Mattison Company.

It is my understanding that Keasbey & Mattison have begun an intensified program promoting their sprayed Limpet Asbestos for fireproofing. As you will note from the attached brochure that they have a four hour rating on the bottom of cellular steel deck with a minimum of 1/2" overall thickness.

Inasmuch as our Lite Acoustical Plaster contains a large percentage of Asbestos Fibers, do you feel that we could develop a similar rating on our material.

Summit Cat. Inq. - 1956

Section 12C

Zonalite - Page 10

Corrugated Steel Floor (Cofar)

*protected by undercoating of Zonalite
acoustical plaster applied 1/2" below
bottom of corrugation. Thickness
of 2 1/4" on beams - rating 4 hours*

U S 5/24/54

RECEIVED
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SECTION

only one-half
inch of

10a
Ke

*Please return
U.S.A.*

**PROVIDES
FOUR HOURS
OF FIRE PROTECTION!**

tested for one, two, three, and
four-hour fire protection
in three countries!

sprays on with a gun!

weighs only one pound
per square foot!

for floors, decks, beams,
all structural elements!

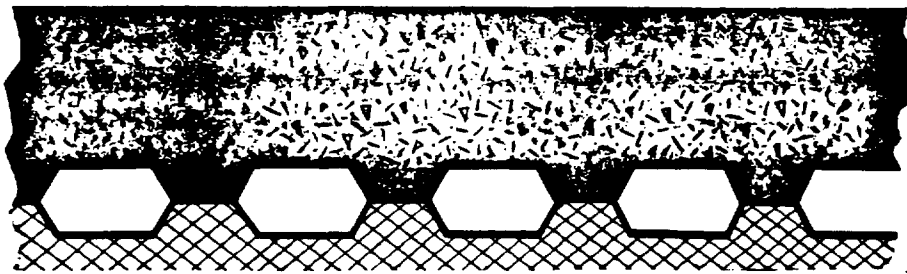


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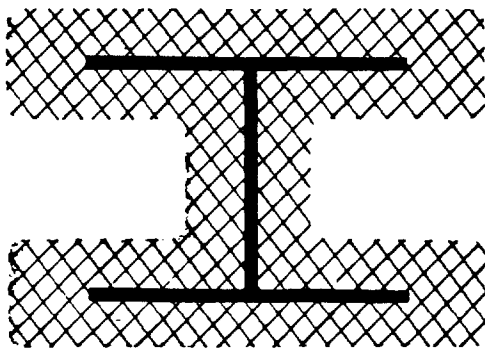
SGP 0018975

SPRAYED "LIMPET" ASBESTOS...

modern fireproofing that saves space, weight, and costs!



TESTED AND PROVEN



AN EVENLY TEXTURED, SEAMLESS BLANKET!

Applied to any surface, SPRAYED "LIMPET" ASBESTOS forms a continuous felt-like covering . . . with no holes, seams, or cracks to lower its efficiency. It's 100% pure asbestos plus an inorganic bonding material.

SPRAYED "LIMPET" ASBESTOS contains countless air cells which prevent the passage of heat. Flames can't pass behind its protective coating. It expands with the heated surface . . . thus preventing cracks through which fire could reach the protected surface.

Because it's pure asbestos, it won't rot or corrode. Resists the effects of water. Also, it's vermin-proof and chemically inert.

SPRAYED "LIMPET" ASBESTOS complies with U.S. Federal Specification SS-A-111 Type 3, and meets all incombustible requirements, as well as those of the U.S. Coast Guard.

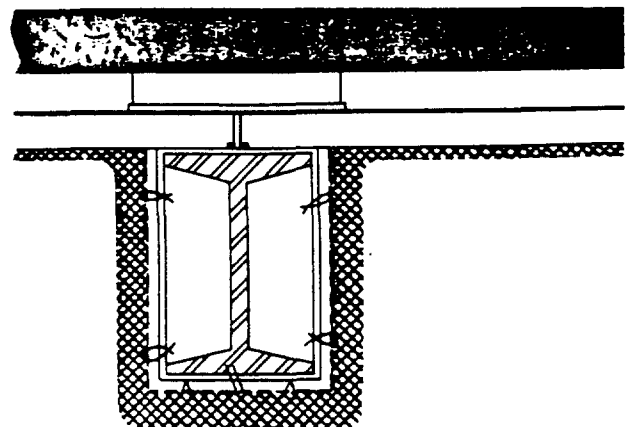
Utilizing the largest full-scale cellular steel floor specimen yet devised, SPRAYED "LIMPET" ASBESTOS was subjected to rigorous tests for fire protection under supervision of Underwriters' Laboratories, Inc., Chicago, Ill.

Standard cellular steel floor units 3" deep, with a 2½" concrete fill, were used for the test. SPRAYED "LIMPET" ASBESTOS filled the corrugations and provided a ½" minimum thickness below the steel. *Rating obtained was four hours.*

The steel beam was encased with metal lath on wire brackets. SPRAYED "LIMPET" ASBESTOS provided a 1¼" thickness at the sides, a 1½" thickness at the bottom. *Rating obtained was four hours.*

Construction and methods used in the test were in strict accordance with ASTM Specification E119-55.

Steel columns carry Underwriters' Laboratories ratings of 2, 3 and 5 hours when protected with a minimum thickness of 1½, 2, 2½ and 3 inches of SPRAYED "LIMPET" ASBESTOS, sprayed directly on to the steel surface, with average thickness not more than 12% above minimum.





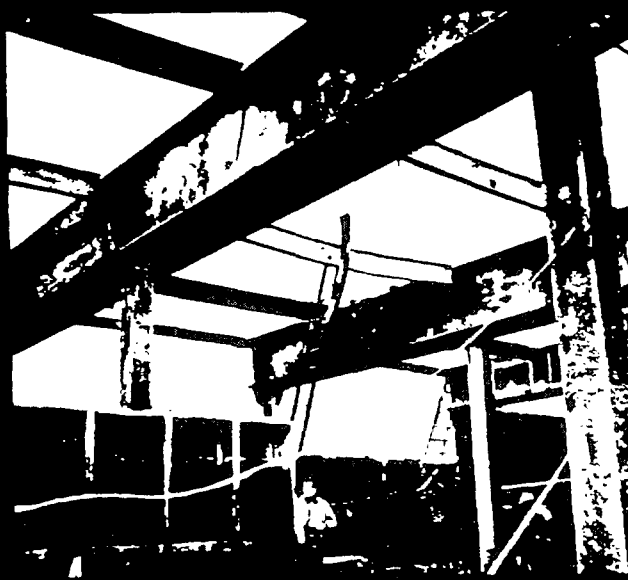
Pure asbestos fibers are "shot" from spray gun in dry state, combine in mid air with misty water spray, and adhere tightly on reaching structural surface.

One man with a special spray gun, applies SPRAYED "LIMPET" ASBESTOS and the scaffolding moves ahead without delay in this one-stop operation. There is no furring, clipping, fitting, or nailing. However, the surface should be free of dirt, grease, scale, loose paint, plaster, or any condition which would interfere with adhesion.

Easy to use, you can apply SPRAYED "LIMPET"

ASBESTOS with minimum heat. It sets fast and dries fast with a minimum of clean-up.

No primary adhesive is used on direct application to metal lath and cellular steel floors. Where an adhesive is required, the asbestos fiber is sprayed to it while it is still tacky. SPRAYED "LIMPET" ASBESTOS adheres with a strength of over one hundred pounds per square foot.



You can fireproof a wide variety of structures with SPRAYED "LIMPET" ASBESTOS. Two recent examples are the Deering-Milliken Building in New York City and Bristol-Myers Co., in Hillside, New Jersey.

Among other types of buildings for which SPRAYED "LIMPET" ASBESTOS is ideal are: warehouses, office buildings, schools, industrial plants, banks, apartment buildings, hospitals, and institutions. It fireproofs steel, concrete, wood, and aluminum. It has New York City Board of Standards & Appeals' approval under Cal. No. 32-41SM. Approval granted by many other municipalities.

Section of Penn Fruit Co., Philadelphia warehouse photographed after a fire. Note perfect condition of primary girders which were protected by SPRAYED "LIMPET" ASBESTOS. Unprotected purlins have buckled.

SPRAYED "LIMPET" ASBESTOS

... modern lightweight insulating material



McKean County Courthouse, Smithport, Pa. where SPRAYED "LIMPET" ASBESTOS was applied to reduce noise.

SPRAYED "LIMPET" ASBESTOS reduces fuel and air conditioning costs as much as 50% . . . due to its high thermal insulating efficiency. Its coefficient of thermal conductivity (k) as tested by National Physical Laboratory is 0.26 B.T.U./hr./ft.²/°F./in.

SPRAYED "LIMPET" ASBESTOS seals all crevices and cracks . . . builds its own seal. It adheres tightly and directly to any surface . . . even sheet metal walls. What's more, the structure can expand and contract as the temperature changes . . . without cracking the insulation.

SPRAYED "LIMPET" ASBESTOS provides highly efficient, highly economical insulation for hospitals, apartment houses, restaurants, office buildings and prefabricated metal buildings. Insulates concrete, steel, aluminum, and corrugated asbestos.



SPRAYED "LIMPET" ASBESTOS applied to the ceiling of this bank makes it acoustically pleasant without hiding design details.

MODERN ACOUSTICAL CONTROL

SPRAYED "LIMPET" ASBESTOS deadens sound in two ways: by absorption in millions of pores, and by yielding to the sound wave—thus reducing its intensity by diaphragmatic action. You can even "tune" certain areas by using varying thicknesses.

Because it follows the contours of any surface, SPRAYED "LIMPET" ASBESTOS hides none of the architectural details. You can spray up to 10 coats of paint without interfering with its acoustical efficiency.

At present, SPRAYED "LIMPET" ASBESTOS is providing sound-conditioning for bowling alleys, schools, churches, institutions, laboratories, restaurants, hotels, office buildings, and broadcasting stations.

MODERN CONDENSATION CONTROL

SPRAYED "LIMPET" ASBESTOS eliminates sweating and condensation behind the insulation . . . because there's no dead air space. The surface remains free of moisture.

SPRAYED "LIMPET" ASBESTOS permits penetration of water vapor but through the high capillary action (wick-like) of the asbestos fibers any condensed moisture will quickly pass to the surface where it is re-evaporated into the atmosphere.



SPRAYED "LIMPET" ASBESTOS on beams and ceiling of swimming pools controls condensation, prevents moisture dripping from ceiling

KEASBEY & MATTISON
COMPANY • AMBLER • PENNSYLVANIA



SGP 0018978