PLAINTIFF'S EXHIBIT

ASA-898

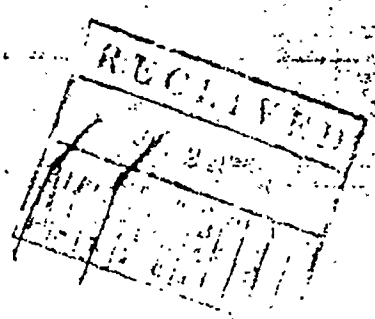
JOHNS-MANVILLE

SALES CORPORATION

BUILDING PRODUCTS DIVISION

1785 GLENARM PLACE • DENVER 2 COLO. • TELEPHONE: KEYSTONE 4-6378-9

January 15, 1958



Mr. E. B. Plapp
American Smelting & Refining Co.
Mexican Engineering Department
P. O. Box 1111
El Paso, Texas

Dear Mr. Plapp:

Your letter to Mr. John Murray, Johns-Manville Denver District Office, Denver Colorado, has been referred to me. I would like to thank you for your request of our help in the installation of a Sanacoustic ventilating type ceiling. I have enclosed two data sheets, BMS-110 and 111 which I think you will find most helpful.

Our interpertation of your requirements are as follows: Dividing the desired 20,000 cfm on air by the 1440 square feet of ceiling area I arrive at 13.9 cfm per square foot of ceiling. Then by looking on the chart on the back of Page BMS 111 I find that the necessary pressure drop through the ceiling is .22 inches of water which will be required in order to provide this delivery of air through the air flow channels. This water pressure can be increased in the event a factor of safety is desired or required.

In your letter you inquire about the effects of fairly high relative humidity. Two areas where we have installed considerable quantities of Sanacoustic are New Orleans and Houston. Both of these cities maintain high relative humidity year around. New York City, which is quite a big Sana coustic market, also, has quite high relative humidity sometimes up to 100% during the summer months. Air conditioning has not been adopted in New York to the extent that it has in many southern cities. I would assume from your letter that this space to be cooled during the summer months will not be air conditioned and if relative humidity is unusually high, often times a customer may wish adopt the Sanacoustic made with electro-galvanized metal. Also the product should be painted on both sides because of its contemplated use in a chemical laboratory.

In the latter connection we find that fumes that are highly acid are deleterious to metal unless the metal is well protected. Hence if concentrated fumes are expected in any particular laboratory room, perhaps Transite Acoustical Panels should be used. On the other hand if the fumes are relatively weak and the ventilation is good, Sanacoustic made from electro-galvanized metal and painted

both sides should be adequate. In the case of our Research Laboratory at Manville we have used Samacoustic throughout. In one room, however, we found it necessary to paint the tile with a vinyl base paint on both sides to provide the best of protection. No particular action was taken in any of the other rooms.

I hope the above comments and the enclosed data sheets will answer most of your questions, however, if there is anything further on which you would like our comments, please feel free to let us know.

Very truly yours,

E. M. McConnell
District Engineer