

PAOLI LABORATORY

APRIL 15, 1963

BLUE RAPIDS, KANSAS

MR. C. O. SHUTTLEWORTH

FIELD TRIP TO MANHATTAN, KANSAS

J. D. RAUCH - bjm

cc: Mr. Sam Bundy - Kansas City Sales
Mr. Jack Dees - Kansas City S/R
Mr. J. S. Jorgensen - Blue Rapids

RE: LITE ACOUSTICAL PLASTER

On April 9, 1963, this writer met in Manhattan, Kansas Mr. Jack Dees, Bestwall Sales Representative from Kansas City; Mr. Jack Miller, a local plastering contractor; Mr. F. O. Wolfenbarger and Mr. Holder, both of a local architectural firm. We went to the Kappa Delta sorority house on Eleventh Street on the Kansas State University Campus.

The upper floors of this house have been finished in Bestwall Lite Acoustical Plaster applied over Bestwall Gypsum lath and a Scratch Coat of wallplaster. In several of the rooms we inspected, we were shown where light or white areas have appeared in the Acoustical plaster. These light areas were on four foot centers and were approximately two inches wide by fourteen inches long. As near as we were able to determine, these light color areas would correspond with the ends of the gypsum lath. These light color areas did not form a consistent pattern over the whole ceiling area but would be often enough to be able to determine that they were spread properly to conform to the standard size of gypsum lath. We never found just one light color area, there were always at least two spaced 18-inches apart. Some of the rooms examined had as few as two of these light areas while one room had as many as 18 or 20 light colored areas.

Mr. Wolfenbarger and Mr. Miller advanced the theory that some of the lath may have been applied with the top and bottom piece of gypsum lath face up. This would allow these two pieces of lath from each bundle to expose the place where the end bundling tape had been removed. They theorize the glue left in these areas after the bundling tape had been removed is causing some sort of chemical reaction resulting in these areas being several shades lighter in color than the surrounding Lite Acoustical plaster.

Next we went to the Pi Beta Theta sorority house at 1819 Todd Road, also on the campus of the Kansas State University. This house has approximately 5,000 square feet of Lite Acoustic plaster on the basement and ground floor ceilings. This Acoustic plaster was applied over a base coat of gypsum wallplaster that had been applied over metal lath. This whole ceiling area is spotted with rust spots appearing on the surface of the Acoustic plaster. We were able to examine some areas of this job from the top side of the lath. We were able to see where the metal lath and tie wires were rusting quite badly. Mr. Miller advised that due to extreme weather conditions this ceiling remained wet for several days after application, the house being closed up tight and unvented.

Corrective steps have already been tried in this house. Some of the rust spots have been cut out and patched back in, but the rust stains would reappear. We have also tried treating the rust areas with a 5% solution of Oxalic acid. This would remove the stain for awhile but eventually it would return.

SGP 0019070

Mr. Doss and I suggested that the only corrective measures we could recommend would be to seal off these areas by painting the ceiling with a non-bridging type paint that is designed for redecorating acoustical material.

The same procedure was recommended on the Kappa Delta house. We advised them that a report of this investigation would be sent to our laboratory for their consideration and that perhaps they would be able to provide some corrective measures other than using the non-bridging type paint. At this time no one has mentioned anything regarding ~~the~~ defective material or adjustments of any kind. The main concern seems to be the need of directions regarding proper corrective measures that they can take. They want to redecorate these ceilings sometime during the summer vacation period while the houses are unoccupied. Both jobs have been completed and occupied approximately 14 months.

We were unable to obtain samples of this material without defacing the job; however if mention of defective material enters into either of these jobs, we will have to remove a section of the ceiling in question for laboratory examination.

Bestwall Gypsum Company

FOR BLUE RAPIDS

DATE April 18, 1963 FROM Paoli Lab

OFFICE

ATTENTION OF Mr. J. D. Rauch

SUBJECT FIELD TRIP TO MANHATTAN, KANSAS

ANSWERING YOURS 4/15 to C.G. Shuttleworth DICTATED BY J. R. Watt/md

cc: Mr. Sam Bundy - Kansas City
Mr. Jack Doss - Kansas City S/R
Mr. J. S. Jorgensen - Blue Rapids

In several instances in the South, a rust eradicator used by automotive body shops was used successfully in removing rust spots from acoustical plasters. One used was Martin Senour Paint Company's Twin Etch No. 6879. It consists mainly of phosphoric acid and butyl cellosolve. As I recall, it was diluted with about four parts water and then sprayed on the rust spots, preferably after the plaster is thoroughly dry. Precautions should be taken to avoid contact with the skin or eyes.

We have no idea why the light streaks occurred at the ends of the lath. If it becomes necessary for you to get a sample, in an effort to determine the cause, examination of the joist, lath and plaster will possibly give you a clue. Spraying with a non-bridging paint, as you suggested, is probably the best method to correct the condition.



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