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DOCUMENT DESCRIPTION: 1973 memo to HC Duecker from AM Rosenberg regarding cracking in mono-kote.

CAMBRIDGE

TO: H. C. Duecker DATE: March 21, 1973

FROM: A. M. Rosenberg SUBJECT: Cracking in MONO-KOTE®

CC: H. A. Brown
I. Odler
File No: 640/Cracking

Accompanying this memo is a photograph that I took on my recent trip to Travelers Rest. The photograph depicts two materials. I am sure your first reaction, since you know we are working on the Trenton problem, is that one sample is made with Kearney aggregate and one with Libby as the photograph shows one sample shrinking and cracking and the other maintaining dimensional stability. I am sorry, but that's not true.

These two materials are from the Denver plant. The one on the right is MK-3. The one on the left is MK-5. These samples are part of the validation series we are doing to determine optimum yield. I took these pictures to show you because I think they make a point. The point is that we have had a potential cracking problem with MONO-KOTE ever since its inception. MK-3 has always been very susceptible to cracking because of its ability to hold water. When you try as we do in the C11A test to optimize the yield, you tend to aggravate the cracking problem in MK-3. I would like to point out one other thing, namely, I consider these pictures typical rather than an isolated case. We have seen time and again this type of phenomena, in Cambridge, at the Washington Research Center, and at Travelers Rest.

High yields, fast pumping, high pressures, extended mix times, fast sets seem to be directly proportional to the cracking in MONO-KOTE and that goes for any MONO-KOTE product.

Arnold M. Rosenberg

AMR:mlr