JAF CORPORATION
BUILDING PRODUCTS DIVISION
RESEARCH LABORATORIES
SOUTH BOUND BROOK, NEW JERSEY

SECRET - COMPANY CONFIDENTIAL

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REPORT NO. 435-10

PLAINTIFF'S EXHIBIT GF-1667

INDUSTRIAL PRODUCTS: INSULATION

PLANT RUN AT GLOUCESTER, AUGUST 11, 1970

INTRODUCTION: The second plant run of Calsilite with bleached sulfate pulp as a replacement for Amosite fiber was made at the Gloucester plant. The purposes of the second plant run were to verify the physical properties obtained on the first plant run and to provide sufficient material for actual field installations. This report presents the results of this second run.

DESCRIPTION OF RUN: On Tuesday, August 11, a plant run consisting of one batch of Calsilite was made at the Gloucester plant. The main difference between the second run and the first run made on June 25 was the reduction in the amount of bleached sulfate pulp used to conform to the amount of Amosite presently being used in the manufacture of regular Calsilite. Again as in the first run the bleached sulfate was used as a replacement for Amosite fiber on a lb./lb. basis. The bleached pulp used for this run has the trade name Skeena which is normally available at Gloucester. The same procedure was used in the preparation of the gel batch as was used on the first run. This consisted of adding the bleached sulfate pulp a sheet at a time to the mixer containing heated city water. After the addition of the last sheet of pulp the batch was mixed for 10 minutes prior to the addition of Dicalite. From this point the remainder of the batch preparation was the same as that used for regular Calsilite. No difficulties were encountered in the molding of the block and pipe covering. The following materials were molded from this experimental batch.

Press #	Size	# of Pieces
1	36" x 36" x 2" block	40
2	12" x 36" x 1½" block	50
4	8" x 2½" pipe covering	40
7	2" x 1" pipe covering	30 gangs of 3 = 90
8	12" x2½" pipe covering	27

Some minor squirting was encountered in the molding of the 8" x 2½" pipe covering. However, as only one of the five sizes produced exhibited any squirting, the operators at the Gloucester plant felt that it was attributable not to the experimental batch but to the molder itself.

Normal procedures for autoclaving and drying were used with this experimental material. No difficulties were encountered and no adverse effects due to the experimental batch were apparent.

TEST RESULTS: The testing of this material was done at Gloucester by the personnel in the Control Lab. A summary of the results is attached to this report:

FIELD INSTALLATION: On August 27, 1970, the experimental Calsilite was placed on the 12-inch pipe along the south side of the power house at Gloucester. For this trial the old insulation was removed from approximately a 12 ft. section of the pipe. The old insulation was a double layer installation. The new insulation consisted of a single layer 2½ inches thick. The first 3 lineal feet from the righthand side is regular Calsilite, the next 9 lineal feet are Calsilite made with bleached sulfate pulp. The pipe covering was just wired onto the pipe. No attempt was made to cement the joints or cover the entire insulation as is normal practice. No difficulties were encountered with the installation of this experimental material. The pipe covering fit very accurately onto the pipe. Present plans call for this installation to remain just wired onto the pipe and to be inspected periodically to determine any adverse effects from this heated pipe having a surface temperature of 600° F.

CONCLUSIONS: The following conclusions were drawn from this run:

1. No operating difficulties were encountered in either the batch preparation or in the molding of these products.
2. In general, the physical properties approximated those obtained on the first run.
3. The weight loss after 24-hour exposure at 1250° F. was the only property not meeting GAF Specifications.
4. No difficulties were encountered in the one field installation made thus far.

RECOMMENDATIONS: It is recommended that:

1. Additional field installations be made with the experimental Calsilite on hand.

2. The one field installation completed and any others that are made be carefully followed to ascertain any adverse effects on the Calsilite of high temperature exposures.
3. Evaluate the effect of recycling filtrate water to ascertain whether this procedure would cause any operating difficulties.

The writer would like to take this opportunity to express his appreciation for the assistance and cooperation he received during this plant run and for the test results supplied him.

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