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PROGRESS REPORT

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TOPICS: 1. Utilization of Short Fibre.
2. Asbestos Fibre for Filtration Purposes
3. Standard Testing Procedure.
4. Q. A. P. A. Meeting.
5. Tests on Asphalt Floor Tile.
6. Visitors to the Laboratory.

1. Utilization of Short Fibre.

(a) It has been found that if the light material is separated from short fibre (7 R) and is then mixed with portland cement, the product obtained is considerably lighter in weight than when the whole fibre is used. Thus, with equal weights of this light fraction and portland cement, the product weighs about 40 lbs/cu.ft. and has considerable strength. Because of the low density this product should also have low thermal conductivity.

Using fibre such as has been prepared for filtration purposes, a product of very low density was obtained - 17 lbs/cu.ft., and the colour is light cream.

(b) The pressure molded specimens mentioned in the previous report, (No. C47-38, p.2, par.f) have been broken and the following figures are representative of the results obtained:

Fibre No. 646 - 1 part Portland Cement 1 part	Tensile Strength	Comp. Strength	Density
No water added	1125 lbs/sq. in.	15,375 lbs/ sq. in.	2.27 gms/cc or 142 lbs/cu.ft.
7.5% water added	1225 " " "	19,875 lbs/ sq. in.	2.40 gms/cc or 150 lbs/cu.ft.
15% water added	1340 " " "	19,000 lbs/ sq. in.	2.27 gms/cc 142 lbs/cu.ft.

The specimens which were molded with water had a very pleasing appearance, and should be suitable for decorative building purposes.

2. Asbestos Fibre for Filtration Purposes.

(a) Tests have been made on opening of fibre with rods in place of pebbles in a small pebble mill, also with hard rubber balls in place of the pebbles. It was found that the rods did not cut the fibre as much as pebbles do, but on the other hand the opening efficiency was somewhat lower. Further study is warranted.

The hard rubber balls did not of course damage the fibre at all, but the efficiency was very low. A metal ball with a rubber covering would perhaps give interesting results.

The possibility of using the J. M. opener for opening fibre for filtration purposes has been investigated, but the results indicated that this type of machine would not be satisfactory. Seven passes through the opener left the fibre with a large number of pencils, and did not release the magnetit to nearly the same degree as the pebble mill does.

(b) At the request of Mr. W. A. Newall a conference was attended at Toronto regarding the proposed arrangements for the production of filtration asbestos on a commercial scale. After a lengthy discussion of the various terms of the agreement, it was suggested to Mr. Newall that he write a letter to the Council, listing items on which he wished to obtain more official information, items he wished amended, deleted or added.

3. Standing Testing Procedure.

Work on the development of a standard testing procedure for the C. S. test has been continued. In report No. C 6X-383, prepared by A. van Winsen, a tentative procedure consisting of "cake opener - press - cake opener", is suggested, but tests which have been made indicate that the problem has not been entirely solved as variations in test were still obtained.

4. C. A. P. A. Meeting

The regular meeting of the Association, held on 23 May, 1938 at Sherbrooke, was attended.

Report No. C61-383 (see above) was presented and discussed. It was decided that the Canadian Johns-Manaville Company would build a cake opener such as was designed here, and would put it at the disposal of the Technical Committee.

The chairman of the Fibre Inspection Committee brought up the Council's request for a certified statement regarding the performance of the all-metal machine. After much discuesion, he was authorized to issue such a certificate.

Dr. Stephenson (C.J.M.medical officer) was present and a round table discussion of asbestosis took place. The application of the proposed provincial legislation on this hazard was discussed by Mr. Robertson, safety service agent for the association. As a summary of the complete discussion is to be circulated with the minutes of the meeting, it will not be dealt with here.

5. Tests on Asphalt Floor Tile.

See report No. C 57-38S, dated 12 May, 1938.

6. Visitors to the Laboratory.

Professor J. W. Bell of McGill University spent half a day in the laboratory inspecting the equipment and discussing the work which is being done.

JJM