

**PLAINTIFF'S
EXHIBIT**

MHD-125

**LABORATORY COMMITTEE MEETING
April 17, 1958**

Messrs: R. W. Higgins - Absent
H. E. Lewis
E. W. Rix
✓ H. B. Speelman
G. Jarecki
T. Clousing
R. Priegel
J. B. Smith (Guest)
E. R. Marden
R. B. Abell

Gentlemen:

Meeting was called to order at 11:00 A.M. on April 17, 1958, in the Aurora Laboratory Conference room. The next meeting will be held in the same place on May 15, 1958.

ACTION TAKEN ON REGULAR AGENDA:

1. E3-A Hot Strength Testing

We are now testing Thor HB tile after a 48 hour soak at a flange temperature of 1200°F. We have completed these tests at 2000, 1800, 1600, 1400 and after the 1200 tests go to 1000° to fill in data on the lower temperatures. We have just enough tile left to finish the 1200 and 1000 tests and have 200 more on order for further tests. These will be delivered before we complete our now scheduled tests so there will be no interruption.

2. E4-B Cold Impact Test Program

No Action

3. E7-B Tile Abrasion Test Program

No Action

4. E8-B Comparative Competitive Testing

Report will be completed before the next meeting.

5. E12-B New Model Thermolayer Wall

A full scale model of the Marine Wall using the heavy Thermolayer Wall castings and tile was built in the Laboratory by Messrs. Rix and Stoffel. A report on the entire project along with progression photos was written and made up for all interested parties including the Engineering Department. At the present time the plans for a new furnace to test this construction under heat have been shelved.

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6. EL3-B Low Cost K Factor Equipment

This project will be deferred until more time is available or we have a greater immediate need than we now have.

7. EL4-B American Arch Light Weight Insulating Firebrick Wall

This project is now reinstated and upon receipt of drawings from Karl Davis we will proceed.

8. EL6-A Cold Tension SP13, A.P. Green Empire 31A

This test is, as of now, discontinued and will be dropped from the agenda.

9. F1-A Block Insulation Research

A. Block Smoking

No problems - no action

B. ASTM tests and Equipment

No action

C. Block Machine Improvements

New bottom drive equipment is now installed. Test runs are underway and we are engaged in adjustments and minor alterations. This equipment will eventually make all sizes of block, including 1", with a formed crust on both top and bottom. We are now concerned with the finished product, i.e. will the density be higher or lower due to more efficient water removal? We are definitely trying to make block to the minimum density specifications but not of minimum strength. We will continue to see if we can find any alternate blockers to decrease possibility of smoking and improve other characteristics.

D. Drying Discussion

At the present time our ovens (4) are capable of drying block at the rate of 350 cartons per day while the block machine, wool production and saw room and packaging capacity is 500 cartons per day. E. W. Rix is to make a summary of all work done in the past on the ovens to see if we can possibly raise their efficiency to the 500 carton figure without too much expense.

E. Storage vs: Strength and Density

In eleven weeks there has been no change in density or strength of storage test specimens.

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10. P2-A Slug free Wool and Shot Reduction

- A. Slug Separator - Howard Speelman gave a discussion of what work was being done and what had been done on this project.
- B. Shot Reduction - Some discussion on vibrating screens etc. but no conclusions reached.
- C. Wool Granulation - We are now producing a grade of wool for use in #711 Cement that is considerably finer than production of 4 to 6 months earlier. Mr. Clousing and Mr. Smith both thought this change was desirable.

11. D2-B Pyroscat

- E. R. Marden is now working on a modification of FyR5 to reduce surface crazing and checking. More information will be forthcoming.

12. D4-A Utility Finish

- A. E9 is still our standard product shipped in all cases calling for Utility Finish unless something special is ordered.
- B. E29 is the new proposed Palm Grade Utility Finish. This material is approved by J. B. Smith. We now need plant runs to test before approved production for special shipments. We are going to try and find other sources of supply for the proper type of Diatomaceous Earth necessary for this use. E. R. Marden is to pass this formulation to Howard Speelman and make a report to the committee on the outcome of the plant run tests. E. R. Marden is to select a special grade of Utility with a compressive strength of 225psi to see if it will conform to Naval Specifications.

13. D12-B New Type Block Insulation Research

Harry Lewis requested work be done using the following alternate aggregates for block formation, Vermiculite, Asbestos (Blue and White) both with and without added wool.

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Inactive Projects:

1. E6 Hot Impact
2. E9 New Refractory Hanger
3. P3 Rust Inhibited Insulating Cement
4. D1 Decretes
5. D3 Castables, 60, 80, 100, 120# class
6. D5 Thinsuliner and Thinsuliner S/L
7. D9 Coating Materials, Waterproffing
8. D13 Bonding Cement

Respectfully Submitted,

M. H. DETRICK COMPANY
LABORATORY

R. E. Abell

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REA:adv