PLAINTIFF'S EXHIBIT
MHD-118

LABORATORY COMMITTEE MEETING

May 9, 1963

Messrs: R. W. Higgins
T. S. Clousing
J. W. Hosbein
H. B. Speelman - Aurora
E. R. Marden - Aurora
R. L. Hosbein
J. A. Buettgen - Aurora

Gentlemen:

JULY 11TH

The meeting was called to order at 10:30 a. m. on May 9, 1963 in the Aurora Laboratory conference room. The next meeting will be held in the same place June 6, 1963.

ACTION TAKEN ON REGULAR AGENDA:

1. E13-B TEMPERATURE GRADIENT COMPARATOR

Cobaugh replied referring to Mr. Ruhr at Barber who will contact RWH.

Mr. Higgins has written Mr. Geo. Cobaugh for gradients and test samples which Mr. Marden will evaluate as soon as received. Mr. John Owens, of Harbison-Walker has requested copies of tests conducted on their products. Mr. Marden will turn these over to Mr. Higgins who will submit them to Mr. Owens.

2. E32-A DEVELOPMENT OF "MS" WALLS AND ARCHES

No change in this project since the last meeting.

Plastic/MS nose model schd for early July erection.

3. E36-B ABRESIST CEMENT

No recent report on this project. Mr. R. Hosbein mentioned, on one of his trips to the laboratory, that he would ask the Karbo people to have their man mix the material. Mr. Marden will give Mr. Speelman the formula on the cement he developed for bonding Abresist.

4. E38-A DRYING OUT DATA

Mr. Higgins now has all available data, together with drawing, and a final report will be made.

5. P3-B SUPER 711 RESEARCH

Mr. Speelman secured the roller and plates for testing for dry adhesion (Navy specifications) and the results indicate our product exceeds minimum requirements.

The temporary formulation, covering the addition of 10% Portland, has now been abandoned. Super 711 is now again being produced according to our regular formula. Continued research by Mr. Speelman indicates that asbestos may also be responsible for high shrinkage. Further research and testing will continue. While Super 711 now closely approximates the 1960 material it still does not entirely solve the Military Specification requirements. Eagle "66" meets the specifications but does not have good workability.

6. D2-B PYROSCAT

Mr. Marden is working on another formula using an entirely new binder. Preliminary tests indicate no shrinkage. Samples will be placed outdoors for

E.R.M. LAB MIX "crete data presented 6/8/63

retest data presented 7/11/63

?

	Dec 30	Cal 30	D40	D40 retest	C40	D30	D50 retest	C50	
sh wt #	23.5	25.8	31.8	34.0	35.8	44.0	42.0	43.5	#/cf
water ratio	1.5	1.36	.67	.69	.7	.63	.558	.54	
yield	.8	.92	.81	.86	.9	.885	.796	.91	vent/vdry
req in place	27.8 #dry/cf in place	28.1	39.8	39.6	39.8	49.75	52.7	47.8	#/cf
wt a.c.	32.4 #/cf	33.3	41.5	45.5	50.4	52.5	59.2	59.5	#/cf
a.c. shr.	0.2%	.05	.05	.40	.6	.15	0.45	.75	
a.c. strength	219 psi	141	695	825	630	615	1785	1065	psi
wt fired	28.5 #/cf	28.8	40.0	40.7	43.7	50.0	51.6	51.7	#/cf
f. shr	6.1%	1.7%	1.5%	2.9%	1.8	2.1	2.45	1.35%	
str f	57 psi	63 psi	315 psi	345	345	165 psi	480	615 psi	

D50 is suspect will be re done

weathering. Many additional tests will be made before any evaluation is submitted.

Eagles' competitive fireproofing was tested by Mr. Marden and indications are that it disintegrates in water and will not stand weathering.

7. E39-A REFRACTORY HANGER WALL CASTING TEMPERATURE STUDY

The final test on this project scheduled this coming week by Messrs. Marden and Buettgen. A report will be issued on completion.

8. D1-B DECRETE - CALCRETE

At a conference between Messrs. Higgins, Marden and Buettgen "k" factors, at three different points, were established for all six products. This information was sent out to a limited, interested personnel. Retest D40 & D50

9. E40-A HEAT RESISTANT CASTING EVALUATION

Mr. R. D. Westman, of North Manchester Foundry requested the following tests on incinerator castings now being manufactured for Majestic Incinerator Co.:

Shock Resistant Properties (wet shock from temperatures above 1200 F up to 2000 F).

Scaling Resistant Properties at 1600 F.

Growth Characteristic Properties at 1600 F.

Tensile Properties at 1600 F.

Compression Properties at 1600 F.

Comparisons to be made between HS and HR Meehanite.

10. E41-A REFRACTORY CASTABLE FACED BLOCK INSULATION FOR DETRICK PANEL CONSTRUCTION

Preliminary problem is to produce block insulation to which a refractory facing can be "keyed" for panel construction for units in the aluminum field. Mr. Speelman will experiment in providing grooves or "keyways" in block insulation and Mr. Marden will work on a suitable refractory facing, approximately 3/4" to 1" thick which will be dustless when installed.

11. E42-A MINERAL WOOL BLOCK INSULATION FROM MEXICO

Sample of Mineral wool block, Super Temp. P.V., as manufactured by Productos de Materiales Aislantes, S. A., Monterrey, Mexico has been received. A full range of physical and thermal tests will be made to determine suitability for use on future arch and wall installations in Mexico. Data will be given to our Engineering Department for their use.

Respectfully submitted,
M. H. DETRICK COMPANY
R. & D Laboratory

J. A. Buettgen

JAB:va
Copies to: L. Hosbein
C. F. Pullen
E. Rowley
R. D. Westman (North Manchester)
AURORA FILE