D.P.K.

PLAINTIFF'S EXHIBIT

GP-1317

TABLE OF CONTENTS

Summary 1
Distribution of R&D Expenditures for First 6 Months of 1967 2
Market Performance of New Products 3
Savings from New Lightweight 5/8" Firestop (1st 6 Months 1967). . . 4

PROCESS AND PRODUCT IMPROVEMENT

Lightweight Gypsum Wallboard. 5
Hard End Wallboard 5
New Clay Sources for Firestop 5
Glass Fiber in Firestop 6
Evaluation of Rock Deposits at Lovell 6
Vermiculite Aggregate Texture 6
Denscal 6
Dens-Cote System 7
Photomicrographs of Denscal and Densite 8

SALES SERVICE

Weight Reduction of 1/2" Firestop 9
1/4" Sound Deadening Board and 1/2" Firestop Over Wood Studs for One Hour Rating 9
Three-Hour Floor and Ceiling 9
Fire Test to Reduce the Glass Fiber Content of 5/8" and 1/2" Firestop 9
Sound Test Program 10
Fire and Sound Test Records 10
Round Edge Wallboard 10
Flamespread Rating for Eternawall 11

NEW PRODUCT DEVELOPMENT

Molded Grainboard 12
Photographs Showing Splicing of Molded Grainboard Belt 13
Photograph Showing Portion of Lab Prototype Machine 14
Radiant Heating Panel 14
Thin Gypsum Wallboard for Plywood Grainboard 15
Gypsum Firedoor Filler 16
Paint Filler 16

TABLE OF CONTENTS

FUNDAMENTAL RESEARCH & TESTING

Improved Firestop Patent Application 17
Dens-Cote Base Patent Application 17
Dens-Cote Plaster Patent Application 17
General 17
Gypsum Association and ASTM 18
Research Equipment and Facilities 19

PLANS FOR THE FUTURE 20

SUMMARY

This report covers the activities of the Research Department for the first six months of 1967. This period has been marked with a number of unusual situations created by the move to Tigard.

Our Research budget for 1967 is $221,400. In the first six months we have spent $100,362. We will probably be under-budget by an even larger amount at the end of the year because of the loss of personnel. A chart showing the distribution of Research expenditures for this period is shown on Page 2.

The market performance of new products is shown on Page 3. The sales from products developed through Research represents 4.4% of the total sales for the Division. The profits from these products represent 4.2% of the Division total. Both sales and profits from new products are higher than for any previous six month period. The improvement in the profit figure has been helped by Ready Mix joint compound finally becoming profitable. Another factor was the new texture formulas that have increased the profitability.

In September of 1966 we introduced a new 5/8" Firestop with a lower weight limit. Based on the plant figures for weight reductions, the savings generated from this improved product in the first six months were approximately $35,970. It is felt that even further savings can be generated when the plants are able to take fuller advantage of the lower weight limits. A breakdown of these figures by plants is shown on Page 4.

Other fire and sound testing is conducted as a service to the Sales Department. The fact that the sales of 1/2" Firestop was up 27.3% and 5/8" Firestop up 11.4% over the first six months of 1966 is an indication of the value of this expenditure.

These results are realized from the project work which follows the guidelines and objectives set forth by our Division Management. The project work of today will produce the results of the future. A progress report of the current R & D programs comprises the body of this report and is divided into the following sections.

Product and Process Improvement

Sales Service

New Product Development

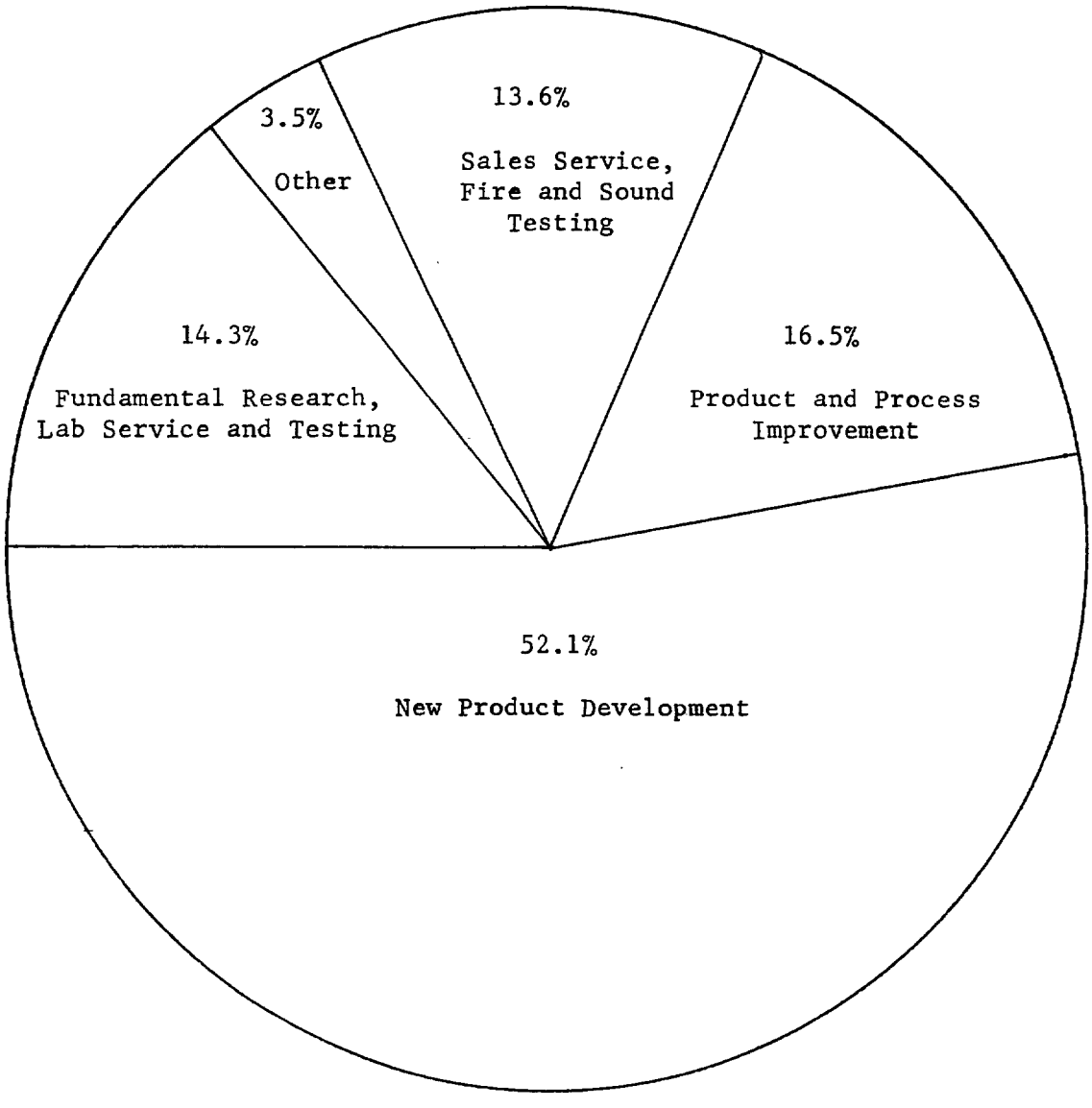
Fundamental Research, Laboratory

Service and Testing

SGP 0015013

DISTRIBUTION OF RESEARCH EXPENDITURES

FOR FIRST SIX MONTHS OF 1967



SGP 0015014

MARKET PERFORMANCE OF NEW PRODUCTS

Product	Units	List Sales	Before Taxes
Vinyl Tape Tile Backer	-	$ 257.70	$ 59
Dens-Cote Plaster Smooth Finish	1,533.5	94,968.56	5,983
Dens-Cote Plaster Sand Finish	23.4	1,375.73	181
Dens-Cote Plaster Sand Finish	108.3	4,874.88	165
Dens-Cote Tape - 300'	.1	3,104.26	173
Dens-Cote Tape - 100'	.1	3,784.16	394
1/4" Sound Deadening Board	325.4	14,851.31	1,888
Tile Backer-Water Resistant 1/2"	1,808.1	145,111.98	24,428
Tile Backer 5/8"	203.8	18,959.34	3,483
Tile Backer-5/8" Firestop	96.4	10,867.33	1,423
Wood Grained Gyp. Bd. 3/8"	336.5	19,118.64	(943)
Wood Grained Gyp. Bd. 1/2"	51.7	4,197.69	792
Dens-Cote Base 3/8" x 48" Pinholelath	1,302.1	48,621.39	4,730
Dens-Cote Base 1/2" x 48" Pinholelath	5,834.0	256,603.60	26,982
Dens-Cote Base 1/2" x 48" Firestop	262.4	14,390.67	1,431
Dens-Cote Base 5/8" x 48" Regular	138.1	6,836.59	585
Dens-Cote Base 5/8" x 48" Firestop	101.4	6,085.15	579
Triple Duty Joint Compound - 25# Bag	1,586.0	248,723.44	16,511
Triple Duty Joint Compound - 50# Bag	801.3	94,468.09	6,847
Ready Mix Joint Compound - 5 Gal.	3,071.7	394,235.35	14,868
Ready Mix Joint Compound - 1 Gal.	75.5	15,614.61	1,214
One-Day Joint Compound - 50# Bag	2.5	390.00	5
One-Day Joint Compound - 25# Bag	139.3	24,548.85	1,809
Bestex A	425.9	68,791.89	2,589
Bestex B	16.2	3,181.84	(3)
Bestex C	117.5	22,862.47	(274)
Grabit Adhesive	27.0	3,957.58	409
Ram Process Plaster	21.0	2,155.95	283
		$1,532,939.25	$116,530

SAVINGS FROM NEW LIGHTWEIGHT 5/8" FIRESTOP (1ST SIX MONTHS 1967)

Plant	M Sq.Ft. Produced	Weight Reduction/M	Savings/M	Savings/Plant
Acme	7,307	211 lbs.	$ 1.38	$ 10,100
Akron	711	225 lbs.	1.49	1,060
Blue Rapids	1,723	290 lbs.	1.41	2,430
Ft. Dodge	8,285	219 lbs.	1.01	8,370
Grand Rapids	1,410	152 lbs.	.79	1,110
Brunswick	2,149	201 lbs.	1.52	3,260
Wilmington	3,975	226 lbs.	1.23	4,890
Sigurd	11,038	102 lbs.	.43	4,750
		Approximate Total Savings		$ 35,970

SGP 0015016

Wallboard

1. Lightweight Gypsum Wallboard - R&D 255

The work on board stucco particle size was completed and a Technical Report was submitted. The results of this study have shown that Hammermill grinding (approximately 70% minus 325 mesh) will increase the compressive strength by 20 - 25%. It has also shown that Entoleter grinding (approximately 90% minus 325 mesh) will increase the compressive strength by 35 - 40%. Both of these grinds were compared to a Raymond Mill stucco of about 60% minus 325 mesh. There are obviously other factors which are necessary in order to produce a lighter weight wallboard, but the Blue Rapids plant experience with the Entoleter seems to bear-out our conclusion that this type of grinding does make it possible to acheive significant reductions in weight. Blue Rapids average 1/2" board weight is 1798 lbs./M thus far this year as opposed to 1911 lbs./M last year before they had an Entoleter.

2. Hard End Wallboard - R&D 311

This idea involves the application of a resin emulsion to the open end of the gypsum wallboard during manufacture. One objective is to stabilize the paper at the end of the board to reduce the incidence of joint beading, and also to reduce problems of end splitting of the paper. Other advantages from this application are that the end of the board will be harder and, therefore, more resistant to damage in handling, and that it may also reduce the amount of end sawing. The problem to be overcome is one of devising and installing a process for continuously applying the resin to the end of the wallboard while it is being manufactured.

This project was undertaken in cooperation with the Manufacturing Department. Unfortunately, due to the loss of personnel from the Research Department, we have been unable to devote the time necessary to make a thorough investigation, and therefore, had to rely on the Manufacturing Department. They also have had changes in personnel and have been unable to spend much time on this project. This project had been handled by Mr. Morrone,who has left the company. We will re-assign the project to someone else in the Research Department and resolve it one way or another before the end of the year.

3. New Clay Sources for Firestop - R&D 76

In conjunction with the data we are developing to process a patent application on our improved Firestop formula, we have developed a number of alternate sources for clay. Five new clays have been

SGP 0015017

approved, several of which are more economical than the clay we have been using. Based on last years sale of 1/2" and 5/8" Firestop, the annual savings which will be realized from these less expensive clays is $43,000. The Purchasing Department has made even further inroads in getting better prices for some of these clays, so future savings will be even more than $43,000 per year.

4. Glass Fiber in Firestop - R&D 131

We have had some comments from our Firestop licensees and subsequently from some of our own plants to the effect that they experience some difficulty in incorporating the formula amount of glass fiber in our Firestop products. Mr. R. W. Hinkel has suggested that it may be possible to use less glass fiber in the new Firestop formula, particularly if we are able to reduce the length from 1/2" to 1/4". In addition to easing the plant situation, this would offer some rather large potential for raw material savings, so we are pursuing the project with all possible speed. It will be necessary as a first step to purchase a fiber glass cutter which will cut 1/4" lengths. It is planned to have Wilmington purchase a cutter so we can make all of the necessary trial runs there prior to our move to Tigard.

5. Evaluation of Rock Deposits at Lovell - R&D 2

We have been assisting with the evaluation of samples of ore from the deposit at Lovell, Wyoming.

Joint System

1. Vermiculite Aggregate Texture - R&D 275

Field and market testing of two versions of a spray-on vermiculite texture have been successfully completed. The only difference in the two textures being field tested are that one has 8% vermiculite and the other has 10%. This type of texture is very popular on the West Coast and at the present time we do not even have a product to sell. The cost analysis of these formulas has been completed and it would appear that they will be more profitable than the Perlite textures we are currently selling. It is now up to Sales to initiate a New Product Request, based on the results of the field testing and the cost analysis which has been made available to them.

Industrial

1. Denscal - R&D 308

During the first few months of 1967 we assisted with the trial runs of the new Denscal plant at Blue Rapids. Mr. Maturo spent practically

SGP 0015018

one-hundred percent of his time on the Denscal operation and in addition, we utilized Mr. C. G. Shuttleworth in his consultant capacity to help us get the Denscal operation started. In the beginning it was necessary to calibrate and adjust several pieces of equipment. Once everything was operating properly, it was found that we still had a problem of erratic set. In order to insure a product with a uniform setting time, it was found necessary to re-heat the material near the end of the manufacturing process. The re-heating process drives off the last traces of moisture and prevents subsequent quickening of the set. This cannot be accomplished in the normal drying process because of the tendency to convert the Denscal to the anhydrous form. A re-heater similar to the one used in the Densite process has been ordered. In the meantime, small amounts of Denscal are being manufactured by processing it through the Densite re-heater. This is being done so that we can conduct trials on some products which will ultimately be manufactured with Denscal.

In addition to assisting with the Denscal operation we have also been providing physical data on Denscal and products in which Denscal will be used for the Sales Department. This data shows that Denscal is in every respect equivalent to U.S.G.'s Hydrocal. After the re-heater is installed, we hope to be able to make a more consistently uniform product than U.S.G.'s Hydrocal.

On the following page photomicrographs of Denscal and Densite taken at 200X show the differences in size and crystal shape of these two alpha gypsum products.

Plaster

1. Dens-Cote System - R&D 291

A new Dens-Cote formula has been developed and offers better working properties and also saves us $2.80/Ton in raw material costs. We have been shipping this formula to the Buffalo and Syracuse markets with the idea of converting all areas to this formula eventually. Although the market tests of this new formula have been quite successful, we have delayed converting other markets since we will want to substitute Denscal for Densite in the formula as soon as Denscal is available. Field tests have been run on the new formula with Denscal and the results were quite favorable. We are currently making only enough Dens-Cote with Denscal to furnish the area serviced by the Akron plant. This will serve as a further market test. As soon as the Denscal becomes available in unlimited quantities we will convert all of the other markets over to the other formula, taking advantage of the raw material savings in the new formula and also the savings we will realize in substituting Denscal for Densite.

SGP 0015019

Denscal at a magnification of 200X

Densite at a magnification of 200X

SGP 0015020

SALES SERVICE

Fire Test Program

1. Weight Reduction of 1/2" Firestop - R&D 303

   During the year of 1966 we were unsuccessful in attempting to lower the weight of 1/2" board when we experienced an unfortunate explosion of the deck two minutes before the two-hour test duration. A second test was made in May of this year and this time the test was successful and we have gained a reduction in weight from 1940 to 1775 lbs. per 1000 sq. ft. If we are able to take advantage of 100 lbs. of this weight reduction it will result in an annual savings of about $14,000 based on last years sales on 1/2" Firestop.

2. 1/4" Sound Deadening Board and 1/2" Firestop Over Wood Studs for One Hour Rating - R&D 314

   Sales has requested a 1-hour fire rating for this wood stud construction to go along with the 1-hour rating we have for a similar application over metal studs. We have waited until we were able to acheive the lighter weight 1/2" Firestop with the new formula before proceeding with this test. All the preparations have been made and the test will be conducted at Underwriters' in July or August.

3. Three-Hour Floor and Ceiling - R&D 305

   A number of pilot tests of possible constructions have been made but thus far we have been unable to come up with any real answer as to how to conduct this test. Sales is quite anxious for us to get the rating, but we would like to assure ourselves of a reasonable chance for success before we invest another $5,000 or $6,000 for the test.

4. Fire Test to Reduce the Glass Fiber Content of 5/8" and 1/2" Firestop - R&D 290

   This has already been covered under the Firestop formulation project but the fire test itself will be conducted under this project number. If we are able to reduce the glass fiber requirement by 25%, it will mean an annual savings of $47,000 if last year's Firestop sales are used as a basis.

SGP 0015021

5. Sound Test Program - R&D 276

Six different wall constructions were tested during the past six months for sound transmission value. Three of these constructions were metal stud partitions with combinations of Firestop gypsum wallboard and plywood grainboard. Sales had felt that if we could develop some improved sound ratings with the combination of plywood and gypsum board it might be worthwhile subsequently, to conduct fire tests on these same constructions. The sound test, however, showed no significant improvement from the plywood and so this would not warrant any fire testing of these constructions. Two other sound tests were conducted on double wall systems to answer a question on a specific job. Since these tests were for a certain job, the cost of the test, other than our own labor, was charged to the Sales Department. The last construction which will be tested is a wood stud partition with 1/4" sound board and 1/2" Firestop. This is identical to the same construction for which we are seeking a 1-hour fire rating and will go along with the similar sound ratings we have for 1/4" sound board and 1/2" Firestop on metal studs. The test is to be conducted in July.

General Sales Service

1. Fire and Sound Test Records - R&D 249

We are accumulating vast amounts of test reports and other forms of data on fire and sound tests. Some time has been devoted to putting this information together, particularly the sound test data, so that it will be readily available. It was thought that this was particularly important with the shuffling of records which will take place during the move.

2. Round Edge Wallboard - R&D 5

A number of tests were conducted to evaluate round edge wallboard installation, and in particular, the method for finishing the joints in round edge wallboard construction. U.S.G. is promoting round edge wallboard and apparently has applied for a patent in conjunction with round edge board. It is our feeling that it is undesirable to promote round edge board inasmuch as this would merely assist U.S.G. in getting acceptance for that type of wallboard. As a result, we might ultimately be faced with the prospects of paying them a royalty if they get a patent. However, Sales is faced with the competitive problem on the round edge board. For that reason we were asked to develop a method for finishing the joints, in the event that it is felt necessary to ship round edge board to meet competitive situations.

SGP 0015022

3. Flamespread Rating for Eternawall - R&D 215

Sales is requesting that we develop a flamespread rating of 25 for our regular Eternawall and also develop a flamespread rating of less than 25 for a Monolithic Eternawall, similar to National's Monolithic Durasan. We have decided to wait until we are able to get 6 mil vinyl in order to try for the 25 flamespread on our regular Eternawall. If we don't get the rating desired we will at least have the savings from the thinner vinyl. In the case of the Monolithic Eternawall, we have asked Sales to furnish us with samples of National's Monolithic Durasan so we can be sure we know what they are doing. A flamespread test will then need to be made at Underwriters'.

SGP 0015023

NEW PRODUCT DEVELOPMENT

Wallboard

1. Molded Grainboard - R&D 304

Our program on the molded grainboard development has been delayed about two months due to the fact that we did not receive the belt until May. The belt was originally supposed to be furnished in March but due to problems in scheduling the manufacture of the belt with Goodrich Rubber Company, it was not received until May. In consideration for this delay, Mr. W. R. Jackson of Mold Coating, Inc. has extended our option agreement two months. This means that the option period will expire in January 1968 instead of October 1967. Photographs showing the splicing of the belt are illustrated on the following page.

Another delay in the program occurred when we decided to conduct a more extensive laboratory investigation than was originally planned. However, it was found that we could gain some valuable information on a much smaller scale and that this would save us both time and money in the long run by enabling us to be better able to decide on the equipment for Brunswick. The laboratory or exploratory phase has enabled us to:

A. Develop a mixer which we feel will be suitable for mixing and dispensing the slurry.

B. Select a piece of equipment for metering the stucco with sufficient uniformity.

C. To determine the length of glass fiber and how it will have to be added.

D. To investigate a spreader roll method for distributing the slurry onto the belt. We think this method will be satisfactory.

E. To determine the optimum slurry consistency, the optimum setting time and the degree of control of consistency and set that will be necessary to manufacture the product continuously.

In short, we think a great deal of knowledge has already been learned and this will help us immensely once we get the equipment set up at Brunswick. All of the equipment for Brunswick has been either shipped or ordered and it is anticipated that the initial trials at Brunswick can be made early in September.

SGP 0015024

Photographs Showing Splicing of Molded Grainboard Belt

SGP 0015025

A photo of a portion of the lab prototype machine is shown below.

While we have been working on the forming end of the operation, the Engineering Department has had the conveyor and belt installed at Brunswick so that this part of the equipment is ready. We have concentrated on the forming operation and have not done very much insofar as the drying and finishing operations are concerned. However, once we are able to solve the forming of the product, we can tackle the other operations. If we are able to form the product satisfactorily, we can batch dry and hand finish some panels temporarily.

2. Radiant Heating Panel - R&D 235

It was decided to try to find a couple of places where we could install some of our radiant heating panels experimentally, in order to expand our knowledge of the application. It was felt that this step was very desirable before going to U. L. for approval. One installation was made in Allentown, Pennsylvania and a second trial in Hartford, Connecticut. Two basically different types of panels were shipped for the two trials. One panel had the electrodes attached but the face sheet had to be laminated in the field. The second was prelaminated, consisting of a piece of 1/4" board laminated to the 1/2" board containing the heating element and copper electrodes. Field tests brought out that it would be very desirable to have long pigtails connected to each panel so that they could be installed with the joints completely finished. The electrician

SGP 0015026

can then take over and fish the long pigtails across the ceiling and down the side walls, at which point they are connected to a junction box. This means having some long wires to contend with in the packaging and shipping of the panel, but apparently these costs are more than overcome by the savings in labor and convenience. It is very desirable to completely separate the installation of the radiant wallboard panels and the electrial work involved in energizing the panels. There were not any firm conclusions as to whether prelaminated panels or job laminated panels would be more desirable. In fact, there was some indication that it might be adviseable to have both types.

During the field testing we have continued to test some small mock-ups of this radiant heating system. A small laboratory panel has been operating continuously for six months without any sign of a problem. Other small scale experiments have been made to evaluate different types of electrical connection, different methods of laminating the face sheets, and the evaluation of insulating type fasteners, which are necessary with this type of an installation.

Further work will involve the attachment of a long pigtail on the panel and the method of attaching this pigtail to the copper electrodes. Once this is completed we may want to conduct another field test before seeking U. L.'s approval.

3. Thin Gypsum Wallboard for Plywood Grainboard - R&D 309

A small amount of 1/8" thick wallboard was manufactured at the Brunswick plant for the purpose of evaluating it as a filler for plywood grainboard. These thin sheets of 4 ft. wide gypsum wallboard were shipped to the Savannah Plywood plant and were subsequently laminated between sheets of plywood veneer. Several different temperatures and pressures were tried. Pressure levels of 100 and 150 p.s.i. gave satisfactory results. Temperatures of approximately 300°F were used without sign of calcination of the gypsum. Apparently there is sufficient moisture being released during the lamination to prevent calcination. There was a tendency for the corners of the panel to become damaged as the sheets passed through the normal plywood processing line. Also, difficulties were encountered in attempting to groove the panel. The grooving may prove to be impractical because the panel is weakened if the grooves are cut beneath the surface of the face veneer. It is possible that this panel would have to be made without grooves.

Several panels were brought back to Paoli and were subjected to severe cycling to evaluate abrupt changes in humidity. We were concerned that the panels might warp or perhaps the veneer would separate from the gypsum board. No warping or separation was evidenced, so there does not appear to be any problem of dimensional instability.

SGP 0015027

We have proposed to make another run of gypsum wallboard for a second trial. This wallboard would be slightly different in that it would be 3/16" thick, 50" wide and have a special glass fiber reinforced core and a special paper with high ply strength. We have agreed to furnish a board with these characteristics at a price of $30.00/1000 sq. ft. F.O.B. Brunswick. This project has been held up pending a management decision. We are proposing to replace the wood core with a gypsum core and the Company has a substantial investment in South America to provide the wood core stock. We believe, however, that this would be a different product and that we would have to be able to sell the advantages of fire resistance and low combustibility to offset the disadvantages of heavier weight and not being grooved.

Industrial

1. Gypsum Firedoor Filler - R&D 295

All of our attempts to make a full size door, using our experimental gypsum firedoor filler have failed. We have finally determined that the cause of these failures is due to the moisture from the adhesive penetrating the gypsum block and weakening it to the point where it collapses under the pressure which is necessary to laminate the face and back veneers. Not much time has been devoted to a means for overcoming this problem, but one thought is to impart some water resistance to the firedoor filler so that it is not weakened by the moisture from the glue line.

Joint System

1. Paint Filler - R&D 10

Some exploratory work was done in response to a request from Wilmington Sales to develop a filler for masonry wall paint. A sample of the filler being used by the customer has been analyzed, and it appears that we could furnish a similar filler and have it manufactured in one of our joint system installations. Before proceeding however, we have contacted Marketing to ask their guidance as to whether this is worth pursuing.

SGP 0015028

FUNDAMENTAL RESEARCH & TESTING

Patent Data - R&D 6

1. Improved Firestop

An enormous amount of data is being compiled from tests which were conducted to show the superior performance of our new Firestop formula containing clay, glass fiber, and vermiculite. This data will be used to support a patent application. The objective is to gain an improvement patent and thereby extend the patent coverage beyond the present Firestop patent which will expire in about five years.

2. Dens-Cote Base

We received an action from the Patent Examiner on our patent application for Dens-Cote Base and conducted a series of tests to convince the examiner that we do have an invention. We are attempting to patent the combination of pinholes and wetting agent treatment which control the suction of the plaster applied to the Dens-Cote Base. Some of our competitors are now using this method of controlling the suction of their veneer base and would be potential licensees if we receive the patent.

3. Dens-Cote Plaster

We also received an action from the Examiners Office concerning a formulation for Dens-Cote Plaster. We no longer use this formulation, and in any event it has been decided not worthwhile pursuing, so we have instructed Synnestvedt & Lechner to abandon the application.

4. General

The filing system for our patents was completely revised and many of the old patents having to do with roofing products, insulation board, etc., that we no longer have anything to do with were thrown out. This streamlining of the patent filing system was undertaken in order to make it easier to find patents and also to encourage greater use of the file as a source of technical information.

SGP 0015029

Gypsum Association and ASTM - R&D 4

Two meetings of ASTM C-11 were attended during the six month period. The subject of greatest interest to us was the proposal to reduce the ASTM weight minimums on 1/2" and 5/8" wallboard. Although this reduction in the weight limit was opposed by U.S.G., Kaiser, Celotex, and Pabco, the rest of the industry was able to solicit the support of other groups in ASTM and at the May meeting of the Society the new weight minimums were finally accepted. This means that we can manufacture 1/2" wallboard as light as 1700 lbs. and 5/8" as light as 2100 lbs. in conformance with ASTM specifications. The previous limits were 1800 lbs. and 2250 lbs.

Other items which are being considered in the Gypsum Association Technical Committee and Committee C-11 of ASTM are:

1. A new performance specification for gypsum wallboard, including test methods, is currently being developed. We are cooperating with the other members of the Association in trying to develop some realistic performance specifications for gypsum wallboard.

2. A performance specification for water resistant backer board has been put into final form and will be voted on by the ASTM Committee.

3. A new description of type X wallboard will be also submitted to ASTM for acceptance. This description involves a bench type test as opposed to the full scale fire tests in order to identify type X wallboard. We are not too keen about this change, but do have to admit that a full scale fire test is rather a cumbersome method of identifying a product. We are still vigorously opposing the proposal to do away with Underwriters' Label Service. At the last meeting there was very little discussion on this subject and hopefully the Technical Committee will not pursue it any further.

4. The Rapid Plaster System has gotten a lot of attention in recent meetings. The C.P.L.I.A. (Plastering Contractors) has been pushing for acceptance and is requesting that an ASTM specification be developed for this system. The Gypsum Association is taking a very cautious approach to Rapid Plaster and thus far has not seen fit to approve this system. The interest in Rapid Plaster had dwindled somewhat but was revived when a one-hour rating was obtained on a wood stud partition with lath and Rapid Plaster. This test was jointly sponsored by the Gypsum Association and C.P.L.I.A. Until recently our company position has been that we will follow whatever course the Association takes with Rapid Plaster. Sales is now requesting that we issue specifications for the system.

SGP 0015030

Research Equipment & Facilities

Our pilot furnace for testing partition constructions was received but was not installed because of the relocation. This new piece of equipment should prove to be a valuable asset as soon as we can get to use it.

SGP 0015031

PLANS FOR THE FUTURE

The past six months has been a period of planning and re-adjustment in preparation for the move to Tigard. Arrangements to move families and equipment; the planning of the new Research Center in Tigard; the recruiting of personnel replacements; and the other problems that develop in such an undertaking have taken precedence over some of the normal project work. We have tried to maintain continuity of some of the major projects such as the molded grainboard, radiant heating panel, fire and sound test programs and Firestop improvement patent application.

Messrs. E. F. Morrone and R. F. Martin have resigned and have left. In addition, Mr. A. Schnable will not be making the move to Portland. We were able to retain one Drexel Co-op student, but this program will terminate in September. This has necessitated some fast recruiting in order to start rebuilding the Department. With the excellent cooperation of the Portland Personnel Department, we have been able to find three excellent replacements for the permanent people we have lost. Mr. A. K. Stalker of Beaverton, Oregon was hired in May and has been training in Paoli since May. Mr. Stalker formerly worked in the wood treating industry. Mr. Michael Robinson of Tigard has recently accepted a position and will start in September. Mr. Robinson is a June graduate from Oregon State. We also arranged to transfer Mr. D. F. Klus from our Grand Rapids plant to Tigard in September. Mr. Klus, after four years experience in Manufacturing, has expressed a desire to work in Research and Development. During the next six months we will make the move to Tigard. We will be involved in setting up our equipment and training new personnel, but hope to accomplish this with a minimum of interruption to our major projects.

Our objectives for the remainder of 1967 are -

1. To bring the Brunswick pilot plant of the molded grainboard project to a successful conclusion.

2. To complete the Underwriters' testing of the radiant heating panel.

3. To reduce the glass fiber content of 5/8" and 1/2" Firestop. The anticipated annual savings from this are $47,000.

4. To maintain a fire and sound testing schedule that will keep us in a favorable competitive position.

5. To continue the investigation to determine whether it is feasible to use gypsum wallboard as a core material in plywood grainboard.

SGP 0015032

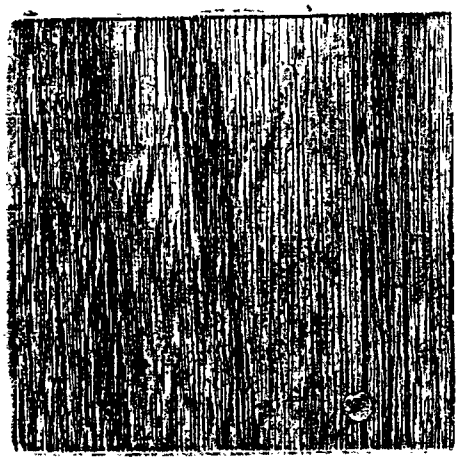
6. To rebuild our research organization by training the new personnel.

7. To set up our equipment in Tigard so that we can return to the normal development work and provision of Sales and Manufacturing services.

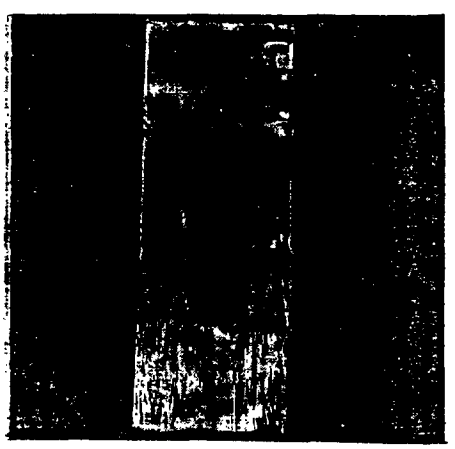
There are many worthwhile projects such as the development of a gypsum firedoor filler, continued investigation of particle size of wallboard stucco, supplying of data for Sales, and participation in Gypsum Association and ASTM testing programs which are being held in abeyance until the move is consumated and our operation has returned to normal. This doesn't mean that we won't continue to be alert for new products or new applications which may occur. Every effort is being made to put our time to the best possible use and in the best interests of the company during this difficult period.

SGP 0015033

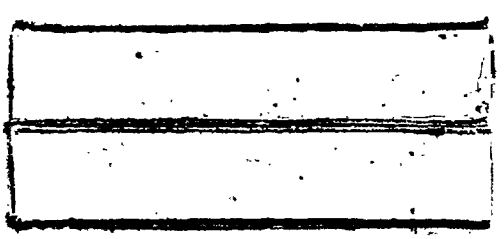
WHAT'S NEW?



MOLDED GRAINBOARD!



RADIANT HEAT PANELS!



HARD END WALLBOARD!

SGP 0015034