PLAINTIFF'S EXHIBIT

BIR-405

39068

MEMORANDUM

In Reply to 6/23/70 *Date* 7/1/70 *From* BBH *To* BB- Mr. Johnson

Subject NEW PRODUCTS

The following is the first of the monthly reports, complying with your request of 6/23. The first report will, of necessity be somewhat longer than the succeeding ones, because more explanation will be required.

NEW PRODUCTS & PRODUCT IMPROVEMENTS INTRODUCED WITHIN LAST 12 MONTHS

ASPHALT ROOFING:

Architect 70 Shingle

This was introduced in late 1969. Despite mechanical problems in manufacturing, customer reaction was very favorable, to judge by reports received through the managers. It was necessary to revise the blende line, changing two of the original three, to meet the demand. In the first 5 months of 1970, sales have amounted to 10,942 squares with 50% of this amount out of Shreveport. The Charleston division accounted for another 25%. The Pacific division, with sales of only 230 squares, was a big disappointment, as it had been assumed that there would be a large demand, especially in southern California. The Shreveport plant is still working on the mechanical problems, and have gotten production up to nearly 200 squares per shift. They are still trying, without success, to make the shingle pass the U/L Wind Resistance tests. So far, it is only carrying the Class C label, although it does have the Wind Seal dots of adhesive. So far, the lack of the U/L Wind Resistant label has caused no comment in the trade.

Terra Color Blendes

Although these were actually introduced over 12 months ago, they are the most recent change in the blende line. Company-wide, the four terra colors are accounting for nearly 9% of the sales of all blendes in Jets and Mark 25's. This is more than double the proportionate share achieved in 1969, their introductory year. Of the four blends, Adobe, and its Mark 25 color counterpart, Canyon, account for about 50% of the Terra color sales. The remainder is divided about equally among the other three. They seem to be meeting some degree of acceptance in all divisions, although the three northern divisions are lagging behind the south. The Pacific division is taking off with them, as they account for 28% of Jet shingle sales during the first 5 months of 1970. This is not too surprising since earth colors started in the far west. The other divisions should continue to increase for a few years.

BUILT-UP ROOFING PRODUCTS:

Coated asbestos base sheet and 33 lb. coated felt, although not developed in BBH, were introduced in February 1970. Initial reception has been favorable, except for some criticism of the roofing industry in general by members of NRCA.

"Black Back" was substituted for talc on coated built-up roofing sheets using the GAF process, starting at FB in May, 1970. This has been successful in eliminating poor adhesion on mopping caused by excess mineral matter and blistering caused by rolls wound wet. This technique is being introduced at FJ and FC and will ultimately be used in all divisions, if continued success is experienced.

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Urethane roof insulation from Upjohn was introduced in March, 1970. So far, sales have been disappointing. Sales to date have been limited to the East Walpole and Charleston divisions, with a total of 136,440 sq. ft. moved through May. Mr. Russell is studying the marketing situation to try to see what is required to stimulate sales. As nearly as can be determined, there is no product deficiency to account for its lack of sales. Reported installations have been very satisfactory.

PLASTICS PRODUCTS:

Most of the changes in the line of vinyl products made during the past 12 months have been so recent that there is not much time to assess customer reaction. The list is as follows:

Shake in Super Colors

Since its introduction on April 30, sales have been 800 squares of Green and 720 of Gray, against 1500 squares of White. It is difficult to say how much has been installed. Reaction has been favorable but not overwhelming. Bardstown reports that there has been criticism of the fact that the gray back-up vinyl has been visible in thin spots in the green Korad. We recognize this, but, actually, it requires a very critical eye to see it. It is believed that this is principally a reaction of disappointment at not being able to promote solid color. Bardstown also states that they are getting reports of scratch marks showing on the surface of the Korad from abrasion in the package. If severe, some corrective action may be necessary.

Yellow Clapboard Siding

This was introduced April 30. In the two months, shipments have been 854 squares of 8N and 856 of 44N. Reception is apparently good, as Harvey Industries and several other distributors have already re-ordered.

1/2 inch J Channel

This was introduced in May, 1970, and about 140 cartons shipped. Mr. Frazier reports that American Modular Homes already wants it modified. This will be discussed at the Vinyl Meeting on 7/30, when products for modular homes will be taken up.

Heavier Door & Window Cap

This was introduced in March, 1970 without fanfare so as not to disrupt stocks of the thinner material still on inventory. No word has been received on its reception.

Gutter Expansion Joint

Since introduction in January 1970, 161 cases of 40 have been shipped. No comment from anyone, so at least, no criticism.

Improved Gutter Hanger

The modified gutter hanger, with rounded top and bottom hooks, was introduced in January. No apparent reaction.

BIRD 011484

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MEMORANDUM

In Reply to *Date* *From* *To*

Subject - 3 -

New Screw Placement for Shutters

Installation instructions were published during the winter calling for screw placement in the side rails instead of the former diamond pattern. It is expected that this will minimize complaints of shutter distortion on application, for the new system is better by all tests.

NEW PRODUCTS IN DEVELOPMENT STAGE

ASPHALT ROOFING:

Granules-

Fungus Resistant Granules- Roofing samples surfaced with granules containing 10 lbs./ton of copper compounds have resisted organic growth for seven years in the Gainesville, Florida test decks. GAF has announced a fungus resistant shingle presumably with their granules with a ten year guarantee. It would appear that we would be on safe grounds with a similar offer, if there appeared to be any demand. Production could be as soon as desired.

Shingles-

Interrupted Overlay Shingle- This shingle, which was a fore-runner of the Architect 70 will make a roof which has a "rustic" appearance. The shingle can be made on any roofing machine capable of making thick butt shingles within 90 days of decision to go ahead.

Staggered Butt Jets & Mark 25's- Spasmodic complaints on horizontal alignment of no cut-out shingles because of width variations can be corrected by producing a staggered butt such as in the back-up strip of the Architect 70. This can be done as soon as equipment can be obtained.

Class A Shingles- No work is being done at present on a Class A shingle on fiberglass felt because of an apparent lack of demand. BB has just signed an agreement with USG for them to provide us with information necessary to study cost of making rock wool felt at DP. USG is interested in licensing the manufacture of Class A shingles on this type of felt.

New Colors & Blendes- No action, because of a lack of demand. Charleston has spoken of a darker black for its black shingle but has made no official request for a change.

VINYL PRODUCTS:

Matching Accessories for Colored Shake

Painting vinyl accessories with solvent-based acrylic appears practical. Could be set up to run in 90 days. (Little demand yet). Weathering tests are being conducted on the paint. Matching accessories in painted or Korad coated aluminum can be obtained. Several thousand dollars required in equipment investment. Three to six months time.

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BIRD 011485

Embossed Clapboards

BBH currently testing prototype equipment. Technique still to be perfected. Production at Bardstown 4-6 months.

Fascia Cover

Bardstown has die about ready to run.

One-Piece Elbow - Gutter System

Berner Tool starting on mold.

Foamed Rigid PVC Extrusions

Goodrich process makes excellent appearing wood molding substitutes. Process about ready for commercial introduction. Market survey needed. Can be had within six months.

Exterior Door & Window Casing Covers

A practical design has been created. Samples were made up, and approved, in principle by MV. No action has been taken on making dies.

Batten-Style Sheet for Mansard Roofs

Samples have been made of a product which could be made from Korad-coated sheet. It has a series of spaced parallel square cornered ribs about 1"x2". Panels about 16" in width and in varying lengths up to 9 ft. can be effectively used as mansard roof covering or as covering for feature areas over and under windows in brick or metal-faced buildings.

PRODUCT IMPROVEMENTS & METHODS

ASPHALT ROOFING:

Granules-

Fair Oaks White- Further work to attempt to make white granules by the Fair Oaks method has been unsuccessful.

Low Temperature Greens- (FB & FK) A formula has been developed for a more economical low temperature green. The adoption of this is pending one or two more mill trials.

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MEMORANDUM

In Reply to _____ *Date* _____ *From* _____ *To* _____

Subject _____

VINYL PRODUCTS:

Shutters-

A 39" shutter mold has been re-designed to try to perfect in-mold forming and trimming. A trial is awaiting available machine time.

A new shutter installation technique suggested by Bardstown utilizes the principle of hanging the shutter on nail heads by means of keyhole slots in the both flanges. Bardstown is trying to locate equipment to do this.

Siding-

Work is being continued on high speed extrusion methods.

LWWeaver/rp

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