PLAINTIFF'S EXHIBIT
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GEORGIA-PACIFIC CORPORATION
BESTWALL GYPSUM DIVISION

GYPSUM WALLBOARD MANUAL NO. 1
1966 EDITION

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Sub-Section A
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"JOINT SYSTEM PRODUCTS"

A. DEFINITION

Joint System Products are the combination of products with which gypsum wallboard joints are reinforced and concealed. This general term includes the following Bestwall products: Wallboard Joint Compound, Bedding Compound, Topping Compound, All Purpose Compound, Ready Mix Joint Compound, One Day Wallboard Joint Compound, Triple Duty Wallboard Joint Compound, Bestex "A", "B" and "C", Joint System Tape, Laminating Compound and Grabit.

B. PRODUCTS

1. Wallboard Joint Compound is a dual-purpose product used for both taping and finishing. The advantage to using this product is the necessity for having only a single product, on the job, to complete all the joint work. It is "yellow" in color to match cream color of face paper but may also be obtained "white" from some plants.

2. Bedding Compound is specifically designed for bedding tape, first coating corner bead and nails. Since it is used for this express purpose, we are able to build into this product the maximum adhesive qualities necessary. This product is off white in color.

3. Topping Compound is specifically designed for finishing joints, corner bead and nailheads. Used for this express purpose, we are able to reduce the amount of adhesive and incorporate other raw materials which make the product easier sanding, better working, and lower in shrinkage. We have two toppings available: Yellow and white.

4. All Purpose Compound is a product marketed to compete with other low cost compounds on the market. It is used for bedding tape, topping, corner bead, nail spotting and texturing; but it is not the best product for any single one application. "All Purpose" is sold only in areas where there is competition from other low cost products. It has no real advantage over any of the other joint system products in the line.

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5. Ready Mix Joint Compound is a prepared wet mix product which is used for bedding tape and finishing joints, cornerbead, and nailheads. It has excellent storage life, working properties, sandability, and low shrinkage. It eliminates the necessity for job mixing, thus producing more uniform end results. It is available for hand application and for machine application in white. In some areas it is available in yellow.

6. One Day Wallboard Joint Compound is a setting type material as opposed to all other joint products which are of the drying type. It is used for bedding tape, especially with wide joints, and all coats preceding the final coat on joints, cornerbead and nailheads. Any of the other finishing compounds can be used as the final coat over One Day applications. Since it is a setting type product, it offers the advantage of completing a given job in a single day. Once set, One Day does not shrink; thus eliminating delayed shrinkage problems. A primer must be used over One Day applications prior to texturing.

7. Triple Duty Wallboard Joint Compound is a vinyl base multi-purpose dry joint system product. It can be used for all coats in the reinforcing and concealing of joints in gypsum wallboard construction. The binder in Triple Duty, being a vinyl, gives this product a long wet life. This allows pre-mixing in large quantities prior to application. Triple Duty can be applied using standard hand or mechanical tools. When the application is completed, the surface is ready for priming and decoration as desired with no further preparation necessary. Triple Duty may be used for texturing (over Triple Duty only).

8. Bestex "A", "B" and "C"

   a) Bestex A is a plain (not aggregated) texture which has good hiding powers and is white in color. It can be hand or spray applied.

   b) Bestex B is a sand finish (fine aggregate) texture for spray application only.

   c) Bestex C is a simulated acoustic (medium course aggregate) texture for spray application only.

   For best results, a vinyl primer should be applied prior to the application of any of the texture products.

9. Joint System Tape - We have available a spark perforated tape which has very low expansion properties, thus minimizing edge wrinkling and edge cracking.

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10. Laminating Compound is another product in the Joint System line, although its function is not to conceal joints. Laminating Compound is a product developed for the sole purpose of laminating two gypsum boards together. Most gypsum companies recommend joint compound for lamination because they do not have a laminating compound to offer. Laminating Compound has several advantages for the laminating of gypsum wallboard:

    a) More intimate and more permanent bond
    b) Easier to spread
    c) Longer open life
    d) More economical

11. Grabit - Another product in the Joint System line is Grabit. Grabit was designed for adhering gypsum wallboard to interior masonry or concrete walls. It is a setting type material which is used at a heavy consistency, such that irregularities in the masonry or concrete wall can be overcome. This product eliminates the necessity for furring (wood or metal).

C. JOINT SYSTEM PROBLEMS AND MEANS FOR PREVENTING AND CORRECTING:

The following sheets are self-explanatory and should be used as a guide in handling joint system problems in the field.

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PROBLEMS WHICH CAN OCCUR IN JOINT TREATMENT

JOINT TREATMENT CONDITIONS	CAUSE	REMEDY OR PREVENTION
Short Working Cement	Insufficient soaking time; that is, the casein may not be in solution so that optimum plasticity is not reached.	Allow sufficient soaking time (at least 20 minutes).
Cement Settles in Pail	Dirty or contaminated buckets. Aggravated by humid weather conditions.	Use only clean mixing pails and tools. Avoid excessive standing of mixed materials.
Putrefaction	Same as for Settling Condition.	Same as above.
Excessive Shrinkage	Excessive amount of mixing water. Especially prevalent when cold water and cold cement are used.	Use 60°F water and keep at a minimum.
Edge Cracking	Thick coats of cement under the tape and fast drying conditions.	Avoid applications over hot surfaces near pipes, radiators, salamanders. Control ventilation during the drying cycle in hot weather so as not to obtain radical changes in temperature; avoid drafts.
Nails Photographing	Airborne soot or dust particles collecting over nailhead. Shank of nail will conduct cold; airborne particles collect over this cooler area.	Dependent upon cleanliness of air. Deposits can be washed off.
Tape Photographing	Cement over tape is glazed due to tape being high. Deeper fills on either side of tape will not be glazed and will thus have a rougher texture.	Press tapes in tightly. A shear coat will equalize suction and texture.

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PROBLEMS WHICH CAN OCCUR IN JOINT TREATMENT (con't.)

JOINT TREATMENT CONDITIONS	CAUSE	REMEDY OR PREVENTION
Starved Joints	Delayed shrinkage (not allowing preceding coats to dry). Insufficient cement applied over tape to fill recess. Over sanding.	Allow sufficient drying time between coats of cement. Keep sanding to a minimum.
Blisters in Tape	Insufficient cement under tape. Tape not initially pressed into good contact with the cement.	Open up blister by slitting tape. Fill cut with cement and press tape back in place.
Poor Bond	Freezing of wet cement in pail or on wall after application. Insufficient soaking time.	Protect from freezing. Allow necessary soaking time.
Cracks in Inside Corners	Too much cement over the tape at apex of angle.	Wipe down corners correctly, leaving only a small amount or no cement in the apex.
"Flashing", "Burn Thru", or Joints Showing Through Paint	1. Painting before the joint system is completely dry. 2. Crowning the joints will cause a difference in light reflection. 3. Difference in texture and suction between cement and board. 4. Painting with paint having poor hiding properties - thinning paint too much. (Same is true for textures as well as paints.)	1. Allow sufficient drying time. 2. Avoid high crowns. 3. Apply primer or skim coat. 4. Avoid excessive thinning of paints.

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BESTWALL VERSUS COMPETITIVE PRODUCTS (U.S.G. AND NATIONAL)

JOINT COMPOUNDS

1. Mixing - Competitive products must generally be mixed very stiff initially, whereas our products are mixed at about the consistency they will be used.

2. Stability - Our joint system products retain their consistency, whereas the competitive compounds continue to thin out, particularly in warm weather. This means the applicator must add dry powder to the competitive products to retain the desired consistency.

3. Plasticity - Our products have, in general, more plasticity than competitive products. Plasticity enables better control to be had in applying our products with both hand and Ames tools. This means better shearing and feathering qualities.

4. Shrinkage - In general, our products have lower shrinkage than similar products of our competitors. Our Topping Compound has lower shrinkage than any competitive casein base compounds that we have tested.

5. Durability - Our products develop greater strength and water resistance over a period of time. After 30 days standing, competitive products turn to mush when rewetted, whereas our products retain their integrity when rewetted. In other words, our products develop a resistance to dampness and wetting whereas other joint compounds do not.

6. Quality Control - While our joint system business has been increasing, the number of complaints has been decreasing, so this is a strong indication of high quality standards. We have no way of determining how competitors are doing in this respect.

LAMINATING COMPOUND

There is no competitive material to match our product. Ease of mixing, strong water resistant bond, good coverage, and low cost are the main advantages. Competitors recommend joint compounds which are not designed for lamination.

BESTEX TEXTURES

Our combination of Bestex A, B, and C gives the applicator both excellent hand application and spray application products. These spray and hand application textures have three advantages over competition:

a) Whiteness - second to none.
b) Coverage and Economics - the excellent coverage and local aggregate addition on the job makes this the most economical texture product available.
c) Hardness - second to none.