PLAINTIFF'S EXHIBIT

GP-1960



BESTWALL®

a guide to the more profitable use of

- ✓ **BESTWALL GYPSUM WALLBOARD**
- ✓ **FIRESTOP BESTWALL GYPSUM WALLBOARD**
- ✓ **BESTWALL FIREPROOF GYPSUM SHEATHING**
- ✓ **BESTWALL HUMMER SYSTEMS**
- ✓ **WALLBOARD ACCESSORIES**

BESTWALL GYPSUM COMPANY

General Offices — Ardmore, Pennsylvania

Plants and District Sales Offices
in Principal Cities throughout the United States

FIREPROOF GYPSUM BESTWALL® BUILDING PRODUCTS

YOUR BEST BUY IS

SGP 0026262

The Original

BESTWALL® *Glass Fiber Reinforced* GYPSUM WALLBOARD

OWENS-CORNING FIBERGLAS ®T.M. Reg. U.S. Pat. Off.

BESTWALL the Original Gypsum Wallboard
Grain Board Insulating Board

FIRESTOP the Original One-Hour Fire-Rated Gypsum Wallboard

BESTWALL Fireproof Gypsum Sheathing the fire-proof and water-repellent Gypsum Sheathing

Bestwall improves gypsum board quality and on-the-job performance by reinforcing the gypsum core with textile glass filaments.

It's an *exclusive* Bestwall development — the result of the same creative research that produced the first single layer construction, one-hour fire-rated gypsum wallboard, Firestop Bestwall.

The secret of Bestwall's improved gypsum boards is in the core. Strong, resilient, incombustible textile glass filaments are carefully blended into the core to assure good dispersion. This results in a reinforcing network that adds to the board's flexural strength. The textile glass filaments give Bestwall's gypsum boards better nailing qualities, and increase resistance to cracks, shattering and breakage during application, handling and service.

Bestwall's improved gypsum boards have proven themselves under actual job conditions. Builders who use them report decided savings in time, money and effort.

Ask your Bestwall Certain-teed Sales representative or building materials dealer about Bestwall gypsum boards with glass fiber reinforcement — Bestwall Gypsum Wallboard, Bestwall Wood Grained Gypsum Wallboard, Bestwall Insulating Gypsum Wallboard, Firestop Bestwall and Bestwall Fireproof Gypsum Sheathing. They mean better, faster construction for builders — more satisfied customers and profits for dealers.

What A Difference the Glass Fiber Reinforced Core Makes

FEWER NAILING TROUBLES — Bestwall glass fiber reinforced gypsum boards nail better, and nails hold better. Less brittle than conventional gypsum boards, the improved Bestwall gypsum boards have great resistance to impact. The textile glass filaments help knit the gypsum core together.

FEWER HANDLING TROUBLES — The glass fiber reinforcement in Bestwall's improved gypsum boards increases the boards' resilience. The boards easily resist the stresses and strains of handling in transit, application and use.

LESS SHATTERING — Laboratory tests show a gypsum board core reinforced with textile glass filaments has up to 80% more resistance to shock. Thus, improved Bestwall gypsum boards resist shattering under the shock of hammer blows.

BREAKS CLEAN — Bestwall's glass fiber reinforced gypsum boards can be quickly scored and snapped — or sawed. They break clean. This is especially advantageous when trimming out for door and window openings.

SGP 0026263

Advantages of

BESTWALL® GYPSUM WALLBOARDS and SHEATHING

Reinforced with textile glass filaments

FIRE-RESISTANCE

Gypsum will not burn and will not transfer heat in excess of 212° F. until all its water of crystallization has been driven off in the form of steam. This is a slow process which enables gypsum products to protect combustible materials from fire. Bestwall Gypsum Wallboards and Sheathing meet many code requirements for fire-resistant interior wall and ceiling construction in buildings of all types.

STRUCTURAL STRENGTH

Bestwall readily resists crosswise stresses and will not sag when applied to ceilings in the specified manner. Bestwall will withstand normal settling and shocks without cracking. Specially manufactured surface papers are securely bonded to both the face and back of the gypsum board products. These papers are tough and have high tensile strength and provide important resistance to transverse stresses that bear on the wallboard.

DIMENSIONAL STABILITY

Ordinary changes in temperature and relative humidity will not cause these gypsum products to warp or buckle. Bestwall boards will not expand or contract appreciably. They will not decay or harbor vermin.

CORE STRENGTH

The reinforcement provided by the textile glass filaments affords resistance to cracking and breaking in application and use. Clean cut-outs and good nailability are assured.

ECONOMY

Large, light-weight panels go up fast in one easy operation. They may be sawed or "scored and snapped" to size. Wallboard joints may be treated with Bestwall Joint System to present smooth surfaces.

PACKAGING

A special sized paper is bonded to the face of Bestwall's wallboards and is secured under the back paper at the two long edges. To protect the wallboard faces, two pieces are "twin-mounted" — placed face to face and bound across the cut ends by strong paper tape.

SPECIAL JOINT TREATMENT

The wallboards are finished with square, beveled or tapered edges; each edge having its use. The tapered edge is shaped to accommodate the Bestwall Joint System (tape and cement). This system covers the joints forming strong, seamless wall or ceiling areas.

SGP 0026264

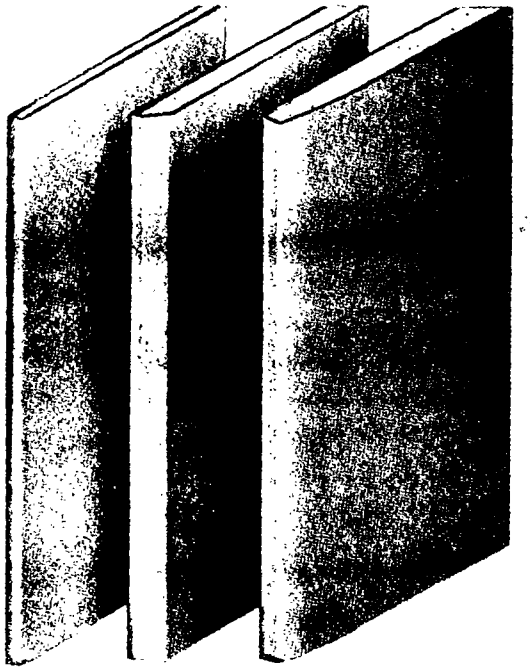
BESTWALL®

. . . the Original GYPSUM WALLBOARD

Bestwall is used for walls and ceilings in both new construction and remodeling. Easy and economical to apply, Bestwall is strong yet flexible enough to conform to moderately curved surfaces.

Tapered edge Bestwall should be used with the Bestwall Joint System when smooth, jointless surfaces are desired. Square edge Bestwall is recommended for use where exposed joints are satisfactory (garages, etc.). Any type of decorative treatment may be applied to the gypsum wallboards (see the paragraph, "Decoration", under "Application Instructions").

Wood stud load-bearing partitions faced on both sides with ½" Bestwall Gypsum Wallboard have a fire endurance of 40 minutes, as tested in accordance with the Standard Method of Fire Tests of Building Construction and Materials specified by the American Society for Testing Materials. When faced with ⅜" Bestwall, the fire endurance is 25 minutes.



Square Edge Beveled Edge Tapered Edge

EDGES	Tapered, Square; Beveled (Special order only).
THICKNESSES	¼", ⅜", ½", ⅝"
WIDTH	4'
LENGTHS	6' to 16' in even feet

SGP 0026265

BESTWALL®

Grain Boards

Bestwall Grain Boards are pre-finished panels that provide the beauty of natural wood at a fraction of the cost. Photographic reproductions of true-wood patterns are printed on special paper, finished with a durable transparent coating and cemented to the face of regular Bestwall Gypsum Wallboard.

Bestwall Grain Boards are available in five finishes: Driftwood Mahogany, Knotty Pine, Autumn Mahogany, Figured Aspen and Fawn Mahogany.

The Aspen and the three Mahogany grain boards are supplied with beveled edges and the Knotty Pine has square edges. Thus, the joints present a pleasing paneled effect when left unfinished; or, they may be covered with wood strips to make the effect more pronounced.

EDGES ..... Beveled (Figured Aspen, Driftwood, Autumn and Fawn Mahogany)
Square (Knotty Pine)
THICKNESS ..... 3/8" (1/2" on order)
WIDTH ..... 4'
LENGTHS ..... 8', 9', 10'

Insulating Gypsum Wallboard

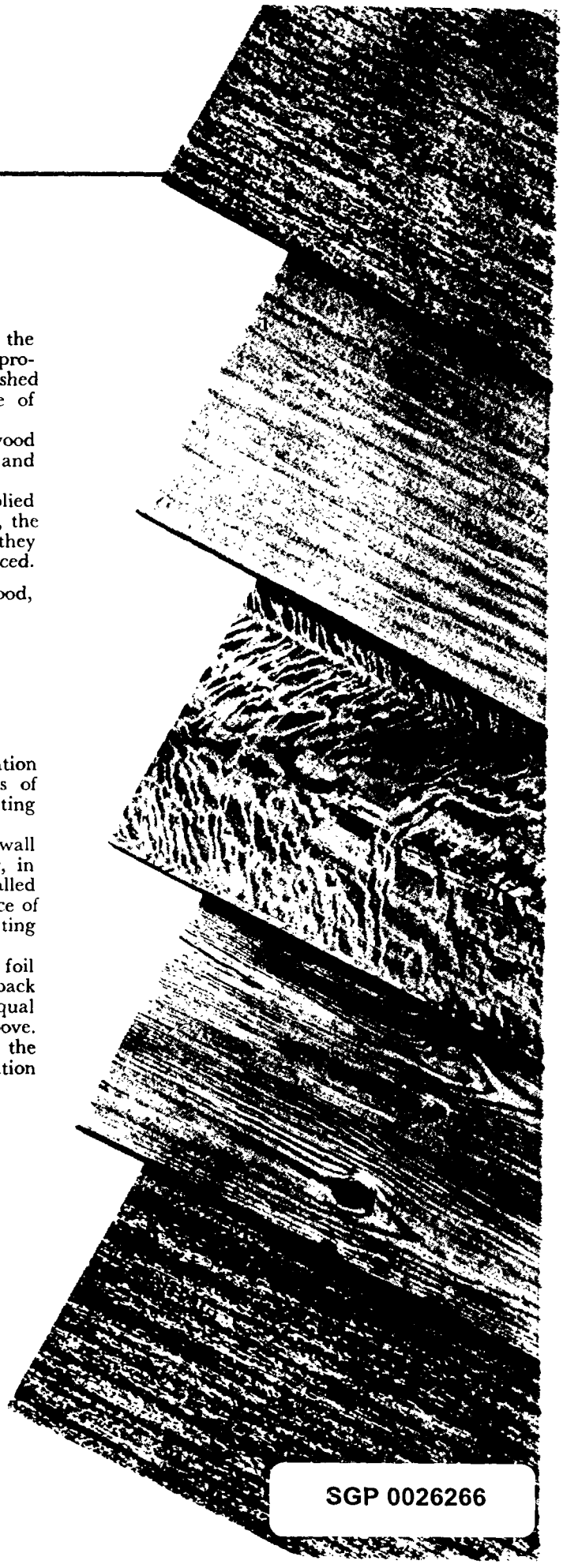
Bestwall Insulating Gypsum Wallboard in a single application provides three major advantages: the strength and economies of regular wallboard, a most effective vapor barrier and good insulating qualities.

Aluminum foil is laminated to the back of regular Bestwall Gypsum Wallboard to provide good insulation value. However, in order to realize the insulation potential, the panels must be installed with the foil side against the studs and facing a minimum air space of 3/4". The foil also serves as a highly efficient vapor barrier, preventing condensation within the exterior wall construction.

According to U. S. Bureau of Standards tests, aluminum foil reflects 90% of radiant heat. The F.H.A. has accepted foil-back gypsum wallboard as having insulation value approximately equal to 1/2" thick fiber insulation board, when installed as noted above. Thus, Bestwall Insulating Wallboard offers three-fold value: the advantages of regular wallboard, plus effective thermal insulation and a vapor barrier.

EDGES ..... Tapered, Square
THICKNESSES ... 3/8", 1/2", 5/8"
WIDTH ..... 4'
LENGTHS ..... 6' to 16' (in even feet)





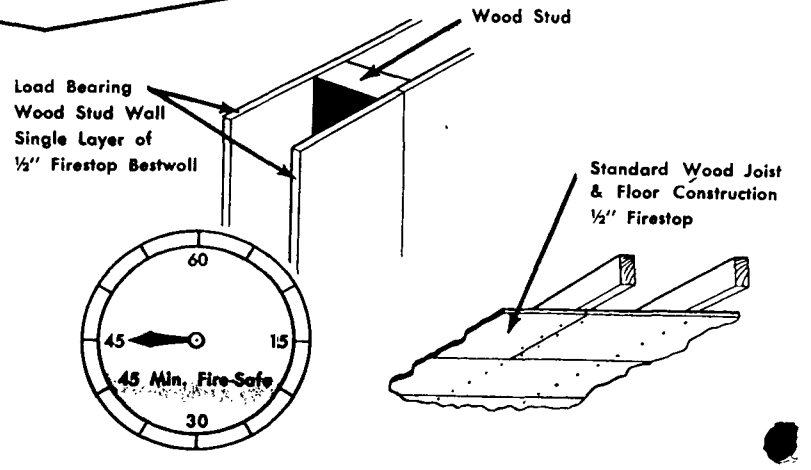
Autumn Mahogany
Fawn Mahogany
Figured Aspen
Knotty Pine
Driftwood Mahogany

SGP 0026266

FIRESTOP BESTWALL®

GYPSUM WALLBOARD

Public • Residential • Commercial Buildings

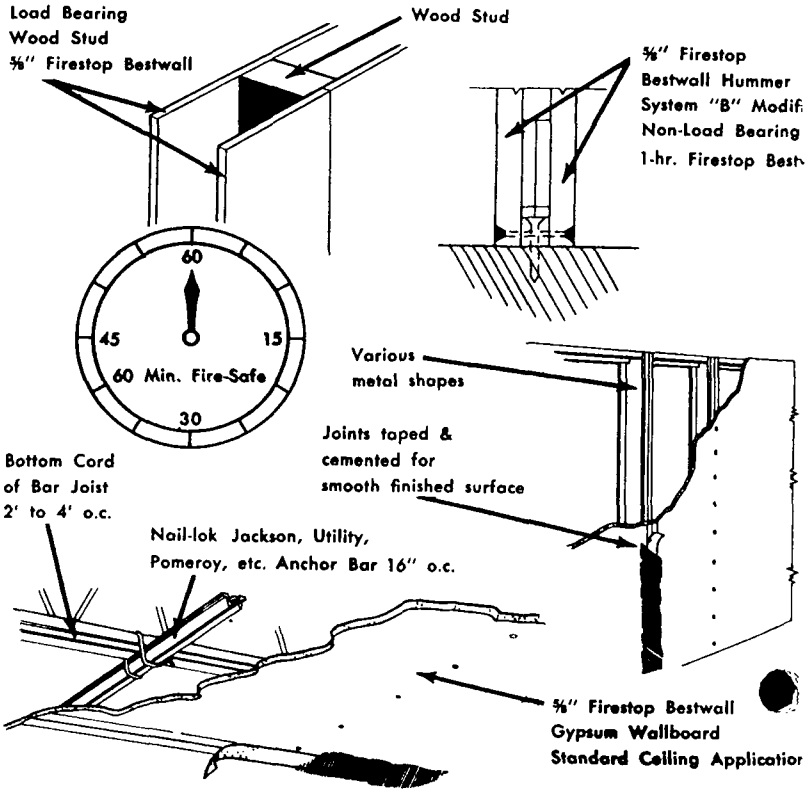


Greater fire protection with drywall construction is achieved with Firestop Bestwall, an original development of Bestwall laboratories. This is possible through the use of two core additives: specified amounts of incombustible textile glass filaments and unexpanded vermiculite.

The incombustible filaments supply strength and help hold the gypsum core together even after all the chemically-combined water has been released. The unexpanded vermiculite — added in an exact amount and well dispersed in the core — expands under heat, balancing the shrinkage of the gypsum core as it loses its chemically-combined water. Thus a solid face of calcinated gypsum stays in place.

This thermo-stabilized gypsum core increases Firestop Bestwall's insulation value at high temperatures and provides up to three times greater fire resistance than conventional gypsum wallboard.

Great economies can be realized by using Firestop Bestwall Gypsum Wallboard where extra fire resistance is required. Only one layer of 5/8" thickness need be applied to either walls or ceiling to obtain a one-hour fire rating for construction over wood or steel rather than two layers of ½" conventional gypsum wallboard. One layer of ½" Firestop Bestwall on the framing provides 45 minutes of fire resistant construction.



SGP 0026267

Fire Resistive Ratings† of 5/8"

FIRESTOP BESTWALL®

The Original One-Hour (single layer) Gypsum Wallboard

FRAMING	CONSTRUCTION	NAILING	RATING	AUTHORITY	UL Design No.
PARTITIONS — Load Bearing or Non-Load Bearing					
Metal Studs* 24" (Max.) O.C.	1 layer, 5/8" Firestop Bestwall both sides	See Note 2	1 Hour	Test by independent, nationally-known laboratory. Name on request.	11**
2"x4", Wood Studs 16" O.C.	2 layers, 5/8" Firestop Bestwall both sides	See Note 1	2 Hour	Test by independent, nationally-known laboratory. Name on request.	—
	1 layer, 5/8" Firestop Bestwall both sides	See Note 2	1 Hour	Underwriters' Laboratories Retardant 2889 - 8/5/47	5
PARTITIONS — Non-Load Bearing					
NONE	1 layer, 5/8" Firestop Bestwall both sides over 1" Gypsum Strips	See Note 5	1 Hour	Underwriters' Laboratories Retardant 2717-19-21 - 6/3/57	10
NONE	2 layers, 5/8" Firestop Bestwall both sides over 1" Gypsum Strips	See Note 5	2 Hour and 3 Hour	Underwriters' Laboratories Retardant 2717-20-22 - 8/26/57	7 5
FLOOR AND CEILING					
12" Bar Joists 24" O.C. Covered with 2" concrete floor slab	1 layer, 5/8" Firestop Bestwall as ceiling surface through metal furring	See Note 4	1 Hour	Underwriters' Laboratories Retardant 2717-16 - 12/1/52	2
12" Bar Joists 24" O.C. Covered with 2" concrete floor slab	2 layers, 5/8" Firestop Bestwall as ceiling surface through metal furring	See Note 6	1½ Hours	Underwriters' Laboratories Retardant 2717-23 - 12/1/58	3
2"x10" Wood Joists Covered with wood subflooring, building paper, wood finish flooring	1 layer, 5/8" Firestop Bestwall as ceiling surface	See Note 3	1 Hour	Underwriters' Laboratories Retardant 2717-7 - 7/12/51	1

†Tests made with panels under load. Ratings are applicable to load bearing partitions (and also to non-load bearing). *Stran-steel studs used in tests.

**Non-Load Bearing.

Note 1: 6d c.c. 13 ga. flat-head 1⅞" long for first layer, 8d c.c. 11½ ga. flat-head 2¾" long for second layer. Nailing 7" o.c. for both layers.

Note 2: 6d c.c. 13 ga. flat-head 1⅞" long, 7" o.c.

Note 3: 6d c.c. 13 ga. flat-head 1⅞" long, 6" o.c.

Note 4: No. 6 flat-head sheet metal screws 8" o.c. to furring channels, or 1¼" annular nails 6" o.c. to nailing channels.

Note 5: See plans for attachment at top and bottom runners and for fasteners to hold board together.

Note 6: See plans for details.

5/8" Firestop Bestwall is the *only* gypsum wallboard qualified for Code-acceptance in *all* the constructions in the table above, *plus* having a Flame Spread Rating of 10-15. Firestop has been officially tested in Underwriters' Tunnel Furnace and is listed for Fire Hazard Classification.

Firestop Bestwall is made under Underwriters' Label Service. Underwriters' representatives conduct frequent inspection of Firestop Bestwall at each Bestwall plant where it is manufactured, as a check on Bestwall's manufacturing, inspection and quality-control operations.

The Underwriters' manifest shown below appears on the twin mounting tape which binds the two cut ends in a bundle of two pieces (normal shipping package).

This is for 5/8" Firestop. Firestop Backer and ½" Firestop are similarly marked.

FIRE HAZARD CLASSIFICATION

Flame Spread	10-15
Fuel Contributed	5-15
Smoke Developed	0-45

Underwriters' Laboratories, Inc. INSPECTED WALLBOARD ISSUE

FIRE RETARDANT CLASSIFICATION

Floor and Ceiling	Walls and Partitions	
Design No. 1 — 1 hr.	Design No. 5 — 1 hr.	Design No. 7 — 2 hrs.
Design No. 2 — 1 hr.	Design No. 5 — 2 hrs.	Design No. 10 — 1 hr.
Design No. 3 — 1½ hrs.	Design No. 5 — 3 hrs.	Design No. 11 — 1 hr.

SGP 0026268

Fireproof Gypsum

BESTWALL®

HUMMER SYSTEMS

Patented and Patents Pending

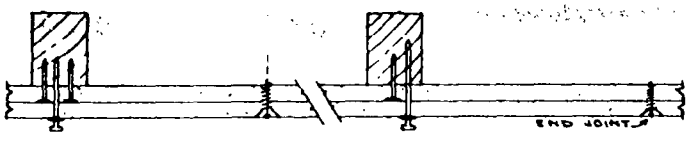
Available through Licensed Applicators

Bestwall Hummer Systems are specially designed methods for erecting gypsum wallboard in multiple layer applications. They may be used with conventional framing or without framing in non-load bearing partitions to provide low-cost, high quality wall and ceiling surfaces.

Laminated gypsum wallboard constructions provide sturdier, stronger walls and consequently less maintenance cost, greater resistance to sound and heat transmission, and better fire protection. Most interior framing can be eliminated when some of these constructions are combined with trussed roof construction in residential work, and for non-load bearing partitions in commercial, institutional and industrial buildings.

Thin wall sections — 2¼" thick — make it possible to use many standard thin wall-opening details. Modern, narrow, plain trim fits in with these thin laminated gypsum wallboard partitions.





SYSTEM A MODIFIED

Bestwall Hummer System "A" Modified

This is an improvement of the oldest and simplest laminated wallboard construction. Application is made over framed walls and ceilings. The first layer is nailed and the second layer is applied with adhesive and screws. (Illustrated above.) A tapered edge board with a center taper is used on the ceiling.

Bestwall Hummer System "A" Modified eliminates nail popping and joint beading and provides a perfect installation. As the face layer is installed and before the glue has set, Phillips head wood screws are driven in the center taper in ceilings and in the tapered edge and end joints between two adjacent sheets of wallboard. The screws are kept between (off) nailing members. Bestwall Hummer System "A" Modified assures top-quality laminated gypsum wallboard construction.

Hummer System Strip Lamination

Hummer System Strip Lamination is designed to prevent joint beading and to eliminate nail "popping" at lowest cost, by putting all nails and fastenings under joint system tapes and trim.

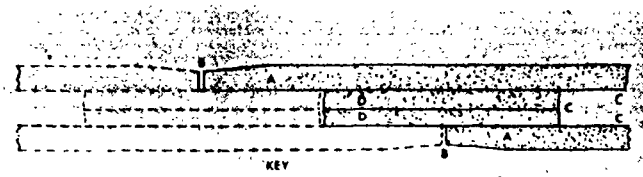
8" wide strips of ⅜" gypsum wallboard are spaced to fall under edge joints of the board and under the center of the wallboard (maximum 2' on center). The strips are applied first to the ceiling and then to the walls at right angles to the framing members. Strips are also applied in both the wall and ceiling places at the ceiling angle and at the floor in all walls. These strips may be 4" wide with 2 cut from a full 8" strip.

Short 8" strips of ⅜" wallboard are nailed to the two framing members so as to fall beneath any end joint. Fasteners placed in these strips thus fall beneath the joint system and tape.

Regular ½" Bestwall Tapered Edge Board is used for the face layer on walls.

½" Bestwall Tapered Edge Board with a Center Taper is used for the face layer on ceilings.

Bestwall Hummer System Strip Lamination is cheaper than a conventional two layer application. Using glue and backing up all joints with special bracing eliminates going back to repair "pops" or joint "beads". There is less cost in place, yet the finished wall closely matches a complete double layer installation.



SYSTEM B MODIFIED
Non Bearing Partition
2 1/4 x 4 x 8 Sections

KEY
A 5/8" Bestwall Gypsum Wallboard.
B Face panel is tapered edge board for Joint Treatment
C - Adhesive
D - 1/2" Bestwall Gypsum Wallboard
Dotted outlines show how panels lap in section partition



Bestwall Hummer System "B" Modified

System "B" Modified was developed to provide walls without frame or support of any material other than gypsum wallboard. Sheets of 4' wide 5/8" Firestop Bestwall Gypsum Wallboard are laminated, narrow strips being used between the 2 face layers to reduce bulk, weight and cost and to provide rigidity, space for wiring and to reduce sound transmission.

The construction provides 1 hour fire resistance. By using 2 layers of 5/8" Firestop on each side of the strips and certain details of erection, 2 and 3 hour fire resistance can be secured. These constructions are excellent for interior non-load bearing partitions.

The two-layer laminated application of System "A" Modified is the accepted way to finish framed ceilings and framed exterior walls. In buildings with solid masonry walls, a refinement of the non-load bearing partition (System "B" Modified) makes a simple, self-furring, free-standing wall surfacing. Essentially this variation in construction detail omits the full sheet on one side of the panel. Furring is eliminated also.

Systems "B" Modified, "A" Modified and Strip Lamination are designed to have the joints treated with a paper tape and cement and to present a clean, unbroken surface.

Bestwall Hummer System "C"

This factory-fabricated narrow panel of several layers of gypsum board is ideal for walls where joints are left unfinished and for movable wall construction. Special edges give a good-looking paneled effect.

The panel can be used in homes, apartments, offices and factories. It can be erected, trimmed and painted in one day since there are no nails in the surface and no joints to be treated.

System "C" is recommended where omission of joint treatment is desired. Basic units are fabricated at Bestwall's gypsum plants, which results in a minimum amount of labor in the field.

The factory-made panels are 8' long and are made of two full sheets of 3/8" Bestwall Gypsum Wallboard and two strips. The edges are so arranged as to effect a tongue and groove product. The face paper is that of regular gypsum wallboard and may be readily decorated. Two combinations are available.

In one, the face sheets are 16" wide and the edges rounded.

The other type panel is made with a face sheet 24" wide and beveled edges.

The second panel being a little wider is a little less expensive to erect. However, with the exposed joints 2' on centers, the paneled effect will be different in appearance. Although both panels can be handled easily, the 16" wide unit is the lighter.

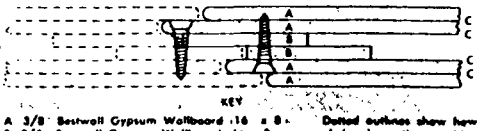
System "C" can be erected very rapidly with a minimum amount of field work. Besides saving the cost of the joint treatment, this system uses blind nail and screw attachments eliminating all joint treatment, and making possible one coat paint decorations with good results.

The panel is designed for use in a movable partition but will be equally satisfactory in a permanent partition. Thus, it finds its place in remodeling work as well as new construction.

The panels of System "C" can also be used to erect a less than ceiling high partition for fast, low-cost dividing walls in large office or loft buildings.



SYSTEM C
Non Bearing Partition
2 1/4 x 16 x 8
Rounded Edges



KEY
A 3/8" Bestwall Gypsum Wallboard 16" x 8'
B 3/8" Bestwall Gypsum Wallboard 4' x 8'
C Adhesive
D - #16 Phillips Head Screw, 1-1/2" long
Dotted outlines show how panels lap in section partition

SGP 0026270

BESTWALL®
JOINT SYSTEMS

There are two different wallboard joint treatments. Each enables the end and edge joints of gypsum wallboard to be concealed by cement and tape. Both are designed to give smooth, uninterrupted walls with joints as strong as wallboard itself.

One treatment is comprised of Bestwall Bedding Compound, Bestwall Topping Compound and Tape. This treatment is designed for use on large projects so that excellent results are obtained with a minimum of time and labor. The Bedding Compound is a dry-powder material that is mixed with water to make the cement that is used to bed the tape in the joint and to cover nail heads in the field of the panel. The Topping Compound is a similar material that is mixed with water to make the cement that is used to cover the bedded tape and to finish off the joints and nail heads.

The other treatment uses one material — Bestwall Joint System Cement for both bedding and topping the Bestwall Tape and for spotting nail heads. This material also is a dry powder that is mixed with water. This treatment is especially suited for remodeling and home improvement jobs and gives just as good results as the first treatment.

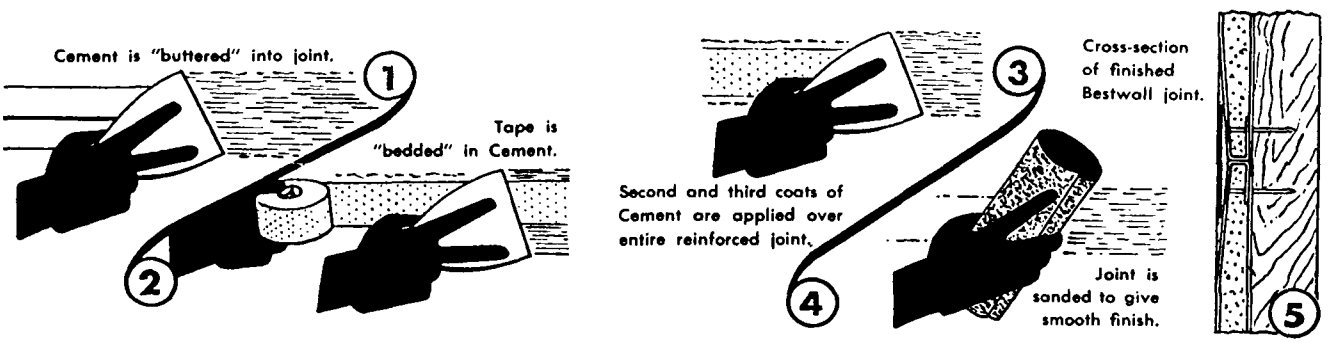
The Tape used is designed to permit air to escape through it during application, and to provide maximum adhesion with the cement.

Another product, Bestwall Laminating Compound, is a powder which is mixed with water to form the bonding material used in two-ply laminated gypsum wallboard construction.

For textured effects, Bestwall Certex is recommended. Bestwall Certex is a texturing compound suitable for use on new or old walls of wallboard or other surfaces. By varying the method of application, numerous decorative finishes such as antique, stone or stencil can be produced.

Bestwall Patching Plaster is used for repairing large areas and cracks before painting. It spreads smoothly, resists shrinkage and is easy to apply. Bestwall Patching Plaster stays flat and smooth after troweling.

Bestwall Spackling Compound is an extremely smooth, easy-working material for filling small cracks and holes in plaster and many other surfaces. It mixes with white lead, varnish or colors-in oil to make Swedish Putty.



Packaging Data

BESTWALL JOINT SYSTEM

No. 1 Pkg. 18 lbs. Cement, 250 ft. Tape
No. 2 Pkg. 4 lbs. Cement, 60 ft. Tape*
No. 3 Pkg. 4 lbs. Cement, 60 ft. Tape, 1 Plastic Broad Knife*
5 lb. boxes — Cement Only*
25 lb. bags — Cement Only

BESTWALL J.S. BEDDING COMPOUND

25 lb. bags only

BESTWALL J.S. TOPPING COMPOUND

25 lb. bags only

BESTWALL J.S. LAMINATING COMPOUND

25 lb. bags only

BESTWALL TAPE

250 ft.**, and 500 ft. rolls**

BESTWALL CERTEX

25 lb. bags
5 lb. boxes*

BESTWALL SPACKLING COMPOUND

25 lb. bags
5 lb. boxes*

BESTWALL PATCHING PLASTER

25 lb. bags
5 lb. boxes*

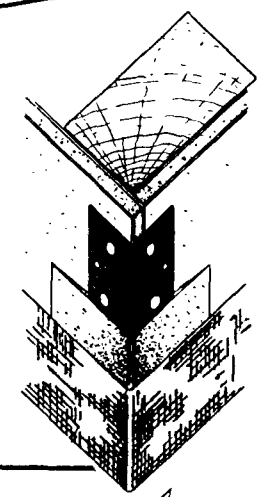
**Packed 6 boxes per case for dealer shipment*
***250 foot rolls packed 20 per carton, 500 foot rolls packed 10 per carton for dealer shipment*

SGP 0026271

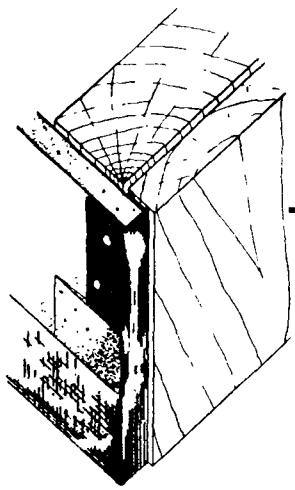
BESTWALL®
METAL CASINGS and CORNERS

Wallboard corners and edges around openings can be permanently protected with Bestwall Metal Corner and Metal Casings. They can be installed quickly and easily, saving time, labor and expense.

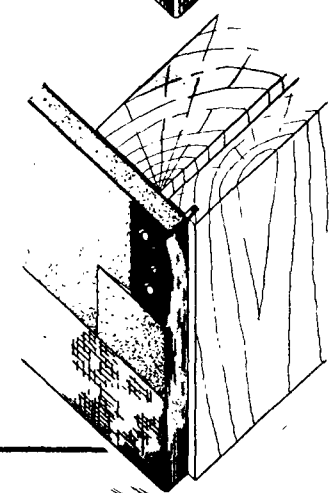
All Bestwall Metal Casings and Corners are made of hot-galvanized steel, knurled and perforated for maximum cement and paint adhesion. Most are 0.018 gauge; a few are 0.020. One low cost corner is lighter. Bestwall Metal Casings and Corners provide proper grounds and precise screed for cement application. Some sections are fastened by nails driven through board into studs, jambs or headers. Others are fastened by nails directly to framing with board slipped in later.



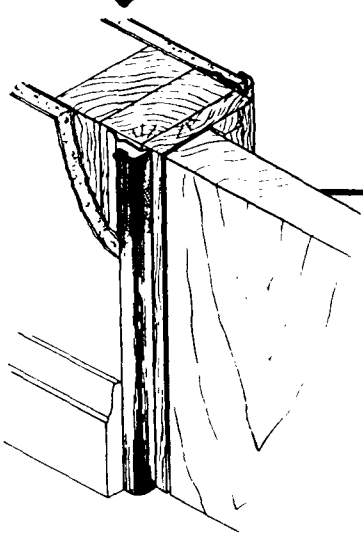
Nos. 100, DL100 and DLL100 — Metal Corners. — Protect the weakest spot in wallboard construction from damage. Provide stronger, more accurate external corners. No. 100 has 1" x 1" flanges. No. DL100 has 1¼" x 1" flanges and No. DLL100 has 1¼" x 1¼" flanges for easier nailing and greater protection. All three corners come in standard 8' lengths.



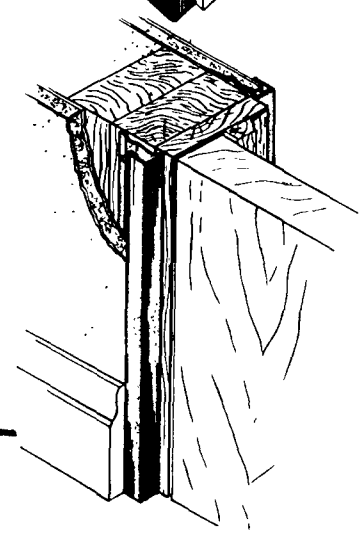
No. 101 — Channel Edge Metal Casing — Slips easily over wallboard edge at door or window openings to give functional square trim. Also comes in Angle Edge (No. 102) which can be applied after wallboard is completely nailed. Standard 7' and 12' lengths.



No. 103 — Recessed Edge Metal Casing — Assures a clean juncture plus true alignment of trim and framing without precision fitting. Jambs and headers are slotted 3/16" to ⅜" from face. Wallboard is erected with slot exposed. Angle hemmed leg of casing is inserted in slot. Nails are driven through flange and board into jamb. Standard 7' and 12' lengths.



No. 104 — Round Nose Metal Casing — Extra rigid, traditional-type casing with quarter-round returns. May be nailed in place and board inserted in nose or slid over wallboard edge and nailed through board and flange. Standard 7' and 12' lengths.

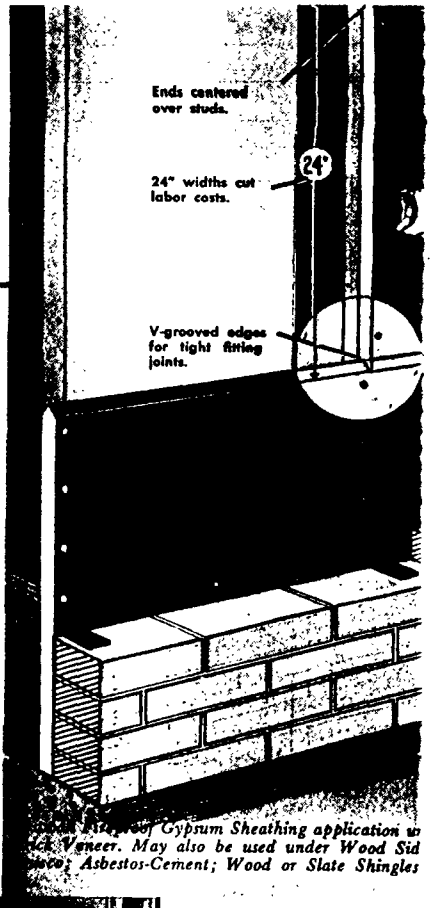


No. 105 — Square Nose Metal Casing — Sturdy, heavy, conventional-type casing for maximum protection. Nail around wall openings so that wallboard can be inserted into nose, or cut back board slightly from opening, slip casing over edge, nail both to door buck. Surface may be brought flush to trim thickness by feathering cement back. Standard 7' and 12' lengths.

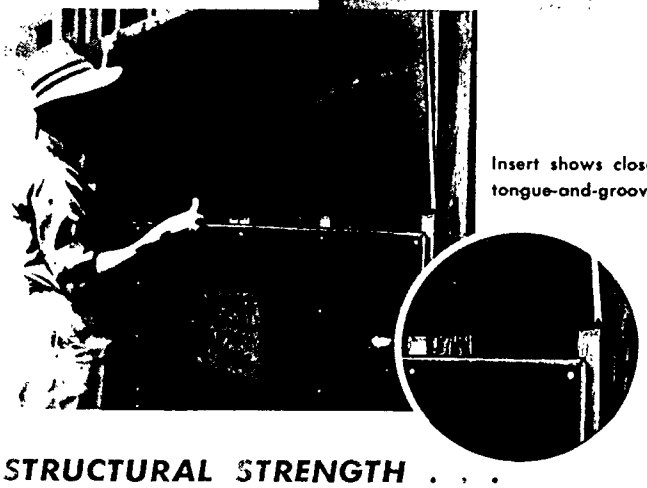
SGP 0026272

BESTWALL®
FIREPROOF
GYPSUM SHEATHING

Fireproof • Wind Resistant • Water Repellent
Reinforced with glass fibers • Structural Strength
Dimensional Stability



Fireproof Gypsum Sheathing application with Veneer. May also be used under Wood Siding; Asbestos-Cement; Wood or Slate Shingles



Insert shows close-up of tongue-and-groove edges.

FIREPROOF

Bestwall Fireproof Gypsum Sheathing's core is incombustible gypsum. Gypsum is rock. It cannot support combustion. The combination of fireproof gypsum lath and plaster walls or gypsum wallboard over wood studs applied as specified, plus fireproof gypsum sheathing under standard wood siding is officially rated for one full hour fire resistance from both sides.

REINFORCED WITH GLASS FIBERS

Only Bestwall Fireproof Gypsum Sheathing is reinforced with textile glass fibers in the core. This exclusive Bestwall development provides easier, quicker application, cleaner breaks, greater flexibility, better nailing and strength.

WIND RESISTANT

Bestwall Fireproof Gypsum Sheathing provides great wind resistance. The precision-cut tongue-and-groove edges provide tight joints that prevent wind and rain infiltration. Because the panels are easy to cut and easy to break, the butted ends assure a tight fit, whether they are machine-cut or hand-cut.

WATER REPELLENT

Another cost-saving factor of Bestwall Gypsum Sheathing over other types of sheathing is its water repellence. The specially treated core and surface papers together with the tongue-and-groove joints completely eliminate the need for an underlayer of treated building paper (except where required by local building codes). Bestwall Fireproof Gypsum Sheathing meets ASTM 79 including the water resistance requirement. This extra measure of water repellence provides a solution to the old problem of outside on-the-job storage.

STRUCTURAL STRENGTH . . . DIMENSIONAL STABILITY

Bestwall's precision-made 2′ x 8′ panels, applied horizontally across framing members, tie 7 studs together. Precision-cut tongue-and-groove edges fit together to help make a permanent, rigid surface, structurally strong and dimensionally stable.

QUICKER APPLICATION

Large 2′ x 8′ panels may be applied quickly and easily. Each panel covers 16 square feet of sidewall area, providing the full 24-inch surface without face loss. Since only 4 x 7 nails are required per panel (depending upon the type of exterior finish) both application time and material cost are saved.

SGP 0026273

BESTWALL FIREPROOF GYPSUM WALLBOARD

APPLICATION INSTRUCTIONS

While the following instructions apply generally to all types of Bestwall, specific references to a particular type of board and type of edge should be read carefully before proceeding. Note that the thicker the board used, the stronger, more durable and more fire-resistant the walls and ceilings will be. Also, in wall construction, horizontal application is recommended where joints are to be concealed, while vertical application is used where joints are to be left exposed or to be finished with metal or wood trim. In ceiling application, the boards should always be applied at right angles to the nailing member.

General Instructions

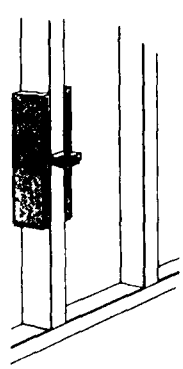
Plan the job beforehand. To obtain the best results, the job should be planned so that there are a minimum number of joints, thereby keeping the treatment of joints to a minimum. Example: in covering a 14′ wide wall with a 3′ window or door occuring 5′ from one end, use 8′ and 6′ lengths applied horizontally so that joints occur above and below opening rather than running the full height of the wall. Joints must always occur over a stud. To do this, plan to use full size boards where practical and order the required number of 6′ to 12′ lengths (up to 16′ available on order).

Preparation of Framing

Before applying board, framing should be carefully examined to be sure that all studs and joists are true, firmly nailed and in a plane surface. Nailing headers should be provided for all fixtures. Plumbing and electrical connections should be completely roughed in and inspected. In applying gypsum wallboard over existing walls and ceilings, loose material should be tightened or removed; where the surfaces are badly damaged, or very uneven, furring strips should be used. As with new work, furring strips should be true, solid and in the same plane.

Studding, joists and/or furring strips are spaced 16″ on centers. ½″ or ⅝″ thick wallboards may be applied horizontally to framing 24″ on centers.

Bowed or warped studs may be straightened by sawing the hollow sides at the middle of the bow and driving a wedge into the saw kerf until the stud is in line. Reinforce by nailing 1″ x 4″ strips on each side of the cut.

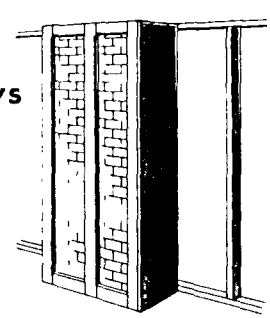


Framing at Openings

See that there is a backing around openings for nailing of all ends of the wallboard. In new construction, order millwork with grounds the same thickness as the Bestwall board used. Where window frames are not cut down to correct depth, a wood filler strip should be nailed either on back of outside trim of window casing or on covering boards. This saves building-out on the inside studs for proper clearance of standard frames. Door frames should be cut to size. If not, a moulding strip must be used.

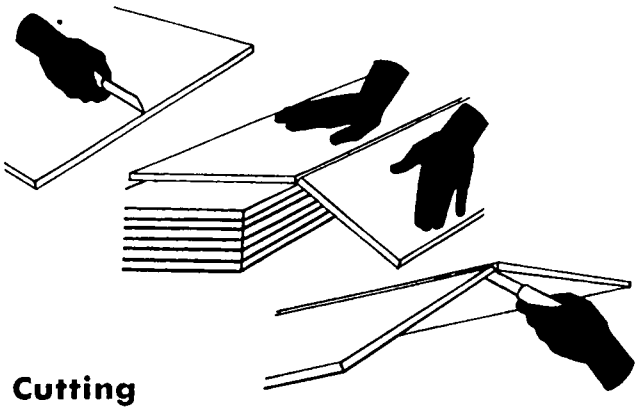
Brick Work

In applying Bestwall over brick walls, anchor nailing plugs in the mortar joints to provide for nailing of strips. To furnish a nailing surface, 2″ x 2″ (minimum) lumber may be used for furring strips, placed on 16″ centers.



Framing for Chimneys

Furring strips should not be attached to chimneys or other masonry subjected to excessive movement. Fur with 2″ x 2″ (minimum) lumber to provide nailing surface, nailing these furring strips together at the corners, to the floor and ceiling and to the wall, but not to the chimney itself. This will allow free movement of the chimney.

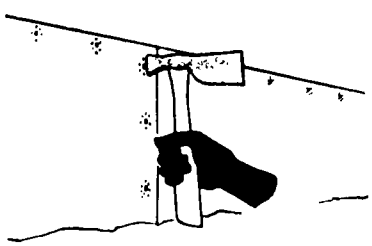


Cutting

The wallboard may be cut to fit by scoring it on the face side with a sharp knife (using a straight edge) so that the surface paper is parted. Then lay the panel over a solid support with the scored side up. Snap the sheet back, away from the scored face. Then score the back surface along the break. This method is fast and clean; however, the panel may also be cut with a saw.

Nailing

Be sure that wallboard edges are butted, but not forced into place. Nail panels to intermediate joists first, from the center to the edges; then nail the ends. Never nail closer than 3/8" to edge or end of the board. Nails should be spaced not to exceed 7" apart on ceilings and not to exceed 8" apart on walls. Leave nails



in a "dimple", formed by the last blow of crowned-face driving tool. Do not use a nail set or break the face paper in nailing. Nail adjoining edges and ends so that nails are opposite each other, not staggered.

The nails to be used with each thickness of wallboard are:

1/4" BOARD — Flat head, diamond point nails, 1 1/4" long.

3/8" BOARD —

(a) 13 1/2" gauge, 1 3/8" long, 1/4" dia. flat head. Medium Diamond point, cement coated annular ring nail.

(b) GWB 54 nail. 1 1/4" long annular ring nail, 1/4" flat head. Medium Diamond point.

(c) 4d common flat head nail, 14 ga. steel wire, 1 3/8" long, 7/32" dia. flat head. Long Diamond point.

1/2" BOARD —

(a) 13 1/2" gauge, 1 3/8" long, 1/4" flat head. Medium Diamond point, cement coated annular ring nail.

(b) GWB 54 nail. 1 1/4" long annular ring nail, 1/4" dia. flat head. Medium Diamond point.

(c) 5d common nail, 1 5/8" long, 15/64" dia. flat head. Long Diamond point.

5/8" BOARD —

(a) 13 1/2" gauge, 1 5/8" long, 1/4" flat head. Medium Diamond point, cement coated annular ring nail.

(b) GWB 54 nail. 1 3/8" annular ring nail.

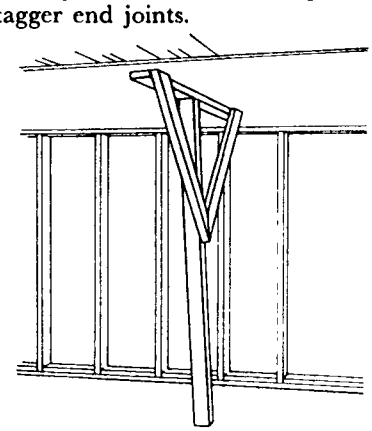
(c) 6d common nail, 1 7/8" long, 1/4" dia. flat head. Long Diamond point.

5/8" FIRESTOP BESTWALL —

6d - 13 gauge - 1 7/8" long, 1/4" dia. flat head. Long Diamond point nails.

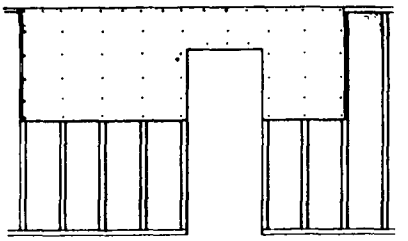
Ceilings

The ceilings should be completed first, the panels being applied at right angles to (across) the joists. The recommended method calls for two men, on staging or stilts, supporting the board on their heads while nailing the board into place. Where one man is working alone, a "T Buck" and staging should be used. The upright "T Buck" should be 1" longer than the height of the ceiling. For staging, two ordinary saw horses and planking may be used. A crosspiece about 3 feet long is nailed across the studs about 3/4" below the ceiling. One end of the Bestwall panel is slid on the crosspiece. The other end is raised into position by the use of the "T Buck". The board is then nailed in place. If possible, span the entire width (or length) of the ceiling with one panel, to eliminate end joints that would require treatment. Otherwise, stagger end joints.



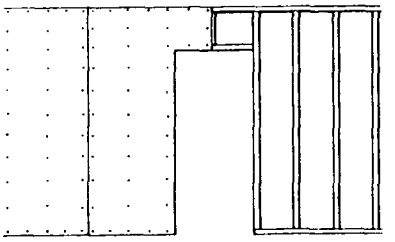
Walls

Horizontal Application — When joints of wallboard are to be concealed by the Bestwall Joint System, horizontal application is recommended. Longer panels



can be used and the fewer joints can be treated easier by being at waist level. Tapered edge wallboards should always be applied horizontally. Grain boards are always applied vertically.

Apply wallboard to upper corner first and work across and down wall. Vertical joints should be staggered. Wall joints should never meet ceiling joints at ceiling line. Avoid vertical joints at edges of openings. Either cut opening out of a full panel or plan joint to occur on the stud nearest to the center of opening.



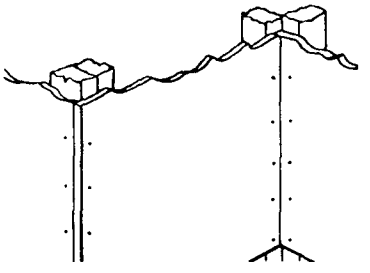
Vertical Application — Bestwall Wallboards with square or beveled edges, such as Bestwall Grain Boards, present a more attractive appearance when applied vertically. The joints may be covered with wood trim, or left exposed. In either case, the joint pattern should be planned carefully before installation is begun.

The wallboard panels are furnished in lengths that will reach from floor to ceiling of most rooms. When applied vertically, there are no horizontal joints. If the panels do not quite reach the ceiling, baseboards and mouldings could be used to cover the remaining height. Avoid vertical joints at edges of openings; they should occur on stud nearest the center as shown above.

Corners

Double Studs should be provided at all wall intersections. Wallboard corners are formed by lapping one panel over the edge of the other panel.

Bestwall Metal Corners and Metal Casings may be used for stronger and neater installations.



Staples

Nails or staples may be used in the first ply of two-ply application. If nails are used, then instructions should be followed as previously. Power-driven staples may be used to attach the first-ply only of two-ply gypsum wallboard to wood framing members.

The staples should meet the following minimum requirements:

Wire — 16 U. S. Standard gauge flattened galvanized wire.

Staple Crown — Flat, 7/16″ wide (outside measure).

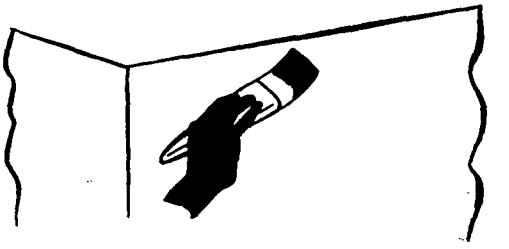
Staple Legs —.

For ⅜″ thick first-ply board — 1″ long with divergent points.

For ½″ thick first-ply board — 1⅛″ long with divergent points.

Staples should be driven with the crown at right angles to the paper bound edges of the wallboard except where the paper board edges fall in the framing members. Then the staples should be driven parallel to the edges. Staples should be driven in such a manner that the crown bears tightly against the wallboard but does not cut into the face paper. The legs of the staple should be not less than ⅜″ from the ends and edges of the wallboard.

Staples should be spaced not more than 7″ on center on ceilings and not more than 8″ on center on walls.



Decoration

Bestwall Wallboards may be decorated as soon as joint treatment is completed and thoroughly dry. Paint, enamel, wallpaper or any other treatment may be applied. However, it is recommended that a pigmented varnish primer or a pigmented vinyl primer first be applied to provide an even suction over the paper and joint cement. Then follow the application recommendations of the manufacturer of the decorative material.

Bestwall Wood Grained Wallboards may be given a glossy finish by painting with a clear shellac or by varnishing and then waxing.

Product Data
BESTWALL GYPSUM WALLBOARD

PRODUCT DATA	Edge	Thickness	Width	Length	Weight, lbs. per 1,000 sq. ft.	Framing with Recommendations	Nail Size	Common Nails lbs. per 1,000 sq. ft.	Nail Spacing	Panels per Bundle
BESTWALL GYPSUM WALLBOARD	Tapered	¼"	4'	6' to 12'	1075	16" o.c.	GWB-54 or 4d	3.8		2
	Square, Tapered	⅜"	4'	6' to 14'	1525	16" o.c.	GWB-54 or 4d	3.8		2
	or Beveled	½"	4'	6' to 14'	2050	16" or 24" o.c.	GWB-54 or 5d	5		2
		⅝"	4'	6' to 14'	2600	16" or 24" o.c.	GWB-54 or 6d	5		2
BESTWALL BACKER	Square	⅜"	2' or 4'	6' to 14'	1525	16" o.c.	GWB-54 or 4d	3.8		2
BESTWALL INSULATING GYPSUM WALLBOARD*	Square or Tapered	⅜"	4'	6' to 14'	1525	16" o.c.	GWB-54 or 4d	3.8	7"	2
	Square or Tapered	½"	4'	6' to 14'	2050	16" or 24" o.c.	GWB-54 or 5d	5	max. o. c.	2
BESTWALL GRAIN BOARDS	Square:	⅜"	4'	8', 9', 10'	1525	16" o.c.	4d-Colored Head	3.8	ceilings	2
	Knotty Pine	½"	4'	8', 9', 10'	2050	16" or 24" o.c.	5d-Colored Head	5		2
	Beveled: Figured Aspen, Ribbon Mahogany, Driftwood Mahogany, Autumn Mahogany	⅜"	4'	8', 9', 10'	1525	16" o.c.	4d-Colored Head	3.8	8" max. o. c. walls	2
	Fawn Mahogany	½"	4'	8', 9', 10'	2050	16" or 24" o.c.	5d-Colored Head	5		2
FIRESTOP BESTWALL GYPSUM WALLBOARD	Tapered	½"	4'	6' to 12'	2150	16" or 24" o.c.	5d c.c.	5		2
	Tapered	⅝"	4'	6' to 12'	2600	16" or 24" o.c.	6d c.c.	6.5		2
FIRESTOP BACKER	Tongue-and-Groove	⅝"	2'	6' to 12'	2600	16" or 24" o.c.	6d c.c.	7		2
BESTWALL GYPSUM SHEATHING	V Edge Tongue-and-Groove	½"	2'	8'	2050	16" or 24" o.c.	1¾"-11 Gauge Large head Galvanized Roofing Nails	4.6	8" on centers	2
								11.3	4" on centers	

BESTWALL JOINT SYSTEM	Packaged	Approx. Shipping Wt.
Package No. 1 18 lbs. Cement, 250 ft. Tape	Bags	20 lbs.
Package No. 2 4 lbs. Cement, 60 ft. Tape	6 Boxes per Case	31 lbs.
Package No. 3 4 lbs. Cement, 60 ft. Tape, Plastic Broad Knife	6 Boxes per Case	31 lbs.
5 lb. boxes — Cement Only	6 Boxes per Case	31 lbs.
25 lb. bags — Cement Only	Bags	25 lbs.
B.J.S. Bedding Compound 25 lbs.	Bags	25 lbs.
B.J.S. Topping Compound 25 lbs.	Bags	25 lbs.
B.J.S. Laminating Compound 25 lbs.	Bags	25 lbs.
Bestwall Tape 250 ft. Rolls 500 ft. Rolls	 20 per Carton 10 per Carton	

Note: ⅜", ½" & ⅝" thick Bestwall available in 14 x 16 ft. lengths on special order.

½" & ⅝" thick Firestop Bestwall available in 14 x 16 ft. lengths on special order.

FIREPROOF GYPSUM BESTWALL BUILDING PRODUCTS

Data on wallboard accessories are presented with the product description.

SGP 0026277

BESTWALL GYPSUM COMPANY

General Offices — Ardmore, Pennsylvania

Plants and District Offices in Principal Cities throughout the United States

Form No. BW-59154

Printed in U.S.A.

ASBESTOS
Product Brochures
1959

SGP 0026261