

BESTWALL® FIREPROOF GYPSUM SHEATHING

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

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

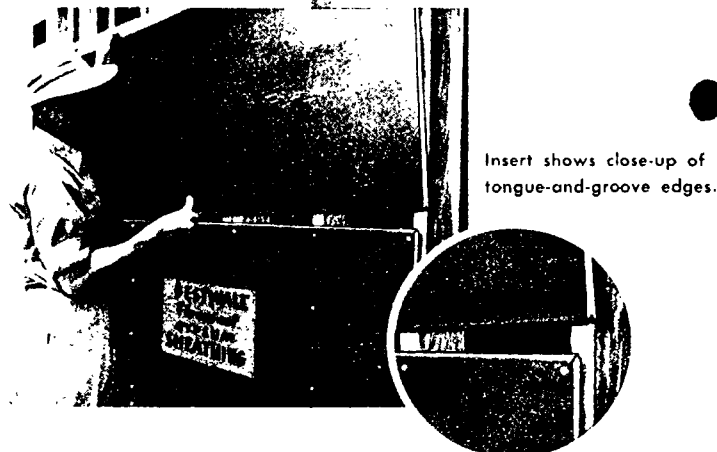
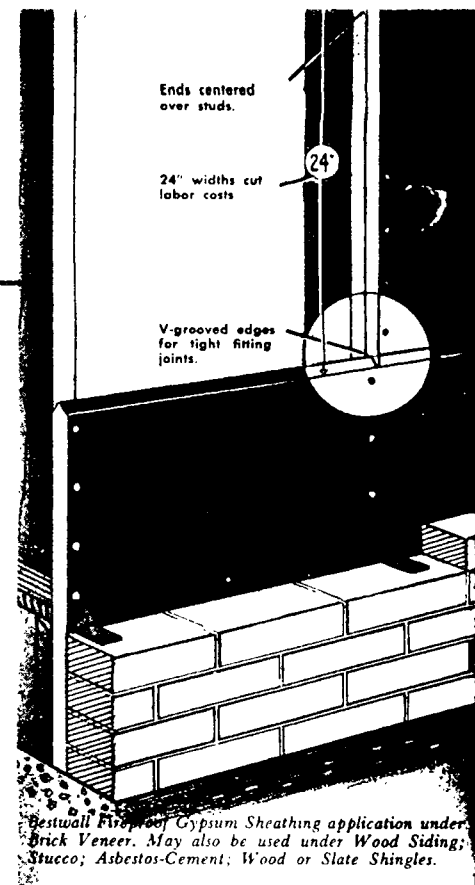
Only Bestwall Fireproof Gypsum Sheathing is reinforced with textile glass fibers in the core. This exclusive Bestwall development provides easier, quicker application, cleaner breaks, greater flexibility, better nailing and strength.

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.

PLAINTIFF'S EXHIBIT

GP-1968

SGP 0026327

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

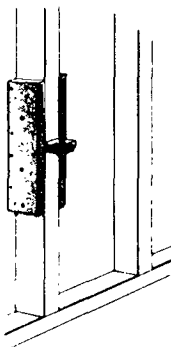
Plan the job beforehand. To obtain the best results, the job should be planned so that there are a minimum number of joints, thereby keeping the treatment of joints to a minimum. Example: in covering a 14' wide wall with a 3' window or door occurring 5' from one end, use 8' and 6' lengths applied horizontally 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. $\frac{1}{2}$ " or $\frac{3}{8}$ " 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

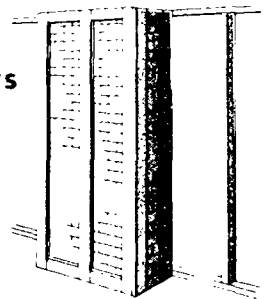
See that there is a backing around openings for nailing of all ends of the wallboard. In new construction, order millwork with grounds the same thickness as the Bestwall board used. Where window frames are not cut down to correct depth, a wood filler strip should be nailed either on back of outside trim 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.

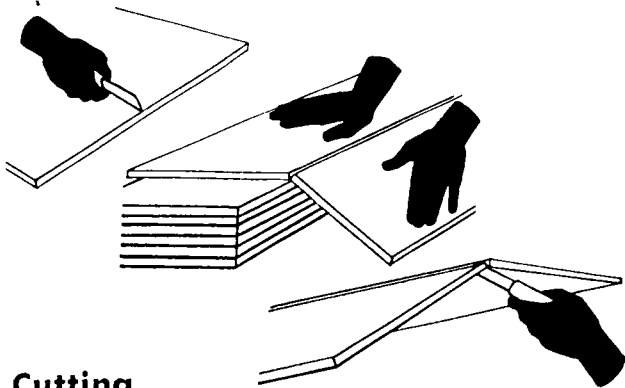
Brick Work

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. Furring 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.



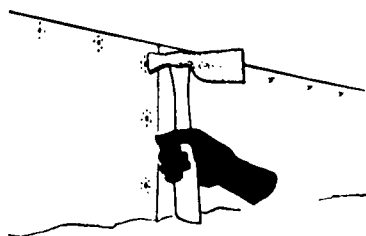


Cutting

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 $\frac{3}{8}$ " 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:

$\frac{1}{4}$ " BOARD - - Flat head, diamond point nails, $1\frac{1}{4}$ " long.

$\frac{3}{8}$ " BOARD —

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

(b) GWB 54 nail. $1\frac{1}{4}$ " long annular ring nail, $\frac{1}{4}$ " flat head. Medium Diamond point.

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

$\frac{1}{2}$ " BOARD —

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

(b) GWB 54 nail. $1\frac{1}{4}$ " long annular ring nail, $\frac{1}{4}$ " dia. flat head. Medium Diamond point.

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

$\frac{5}{8}$ " BOARD —

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

(b) GWB 54 nail. $1\frac{3}{8}$ " annular ring nail.

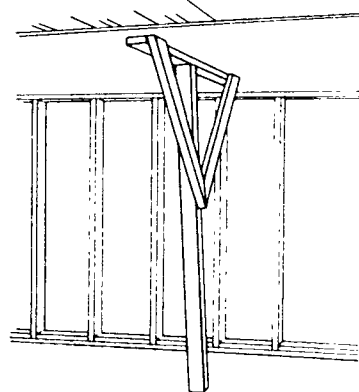
(c) 6d common nail, $1\frac{7}{8}$ " long, $\frac{1}{4}$ " dia. flat head. Long Diamond point.

$\frac{5}{8}$ " FIRESTOP BESTWALL —

6d - 13 gauge - $1\frac{7}{8}$ " long, $\frac{1}{4}$ " dia. flat head. Long Diamond point nails.

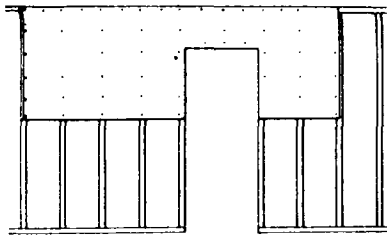
Ceilings

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 $\frac{3}{4}$ " 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.



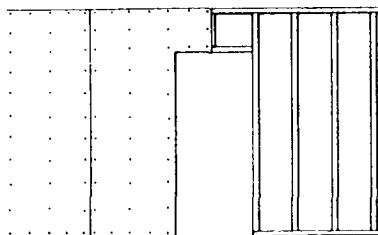
Walls

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.



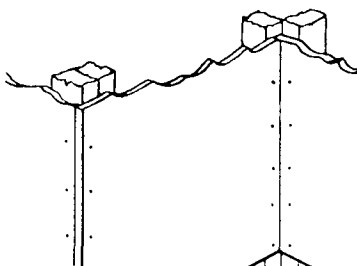
Vertical Application — Bestwall Wallboards with square or beveled edges, such as Bestwall Grain Boards, present a more attractive appearance when applied vertically. The joints may be covered with wood trim, or left exposed. In either case, the joint pattern should be planned carefully before installation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

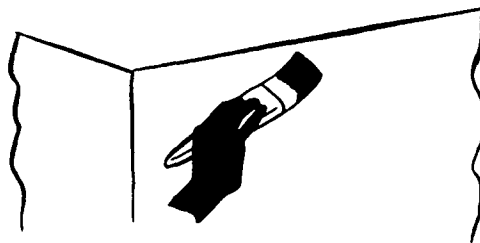
Staple Legs —

For 3/8" thick first-ply board — 1" long with divergent points.

For 1/2" thick first-ply board — 1 1/8" 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 3/8" 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	1/4"	4'	6' to 12'	1075	16" o.c.	GWB-54 or 4d	3.8		2
	Square, Tapered	3/8"	4'	6' to 14'	1525	16" o.c.	GWB-54 or 4d	3.8		2
	or Beveled	1/2"	4'	6' to 14'	2050	16" or 24" o.c.	GWB-54 or 5d	5		2
		5/8"	4'	6' to 14'	2600	16" or 24" o.c.	GWB-54 or 6d	5		2
BESTWALL BACKER	Square	3/8"	2' or 4'	6' to 14'	1525	16" o.c.	GWB-54 or 4d	3.8		2
BESTWALL INSULATING GYPSUM WALLBOARD*	Square or Tapered	3/8"	4'	6' to 14'	1525	16" o.c.	GWB-54 or 4d	3.8	7"	2
	Square or Tapered	1/2"	4'	6' to 14'	2050	16" or 24" o.c.	GWB-54 or 5d	5	max. o. c.	2
BESTWALL GRAIN BOARDS	Square:	3/8"	4'	8', 9', 10'	1525	16" o.c.	4d-Colored Head	3.8	ceilings	2
	Knotty Pine	1/2"	4'	8', 9', 10'	2050	16" or 24" o.c.	5d-Colored Head	5		2
	Beveled: Figured Aspen Ribbon Mahogany Driftwood Mahogany Autumn Mahogany Fawn Mahogany	3/8"	4'	8', 9', 10'	1525	16" o.c.	4d-Colored Head	3.8	8" max. o. c. walls	2
		1/2"	4'	8', 9', 10'	2050	16" or 24" o.c.	5d-Colored Head	5		2
FIRESTOP BESTWALL GYPSUM WALLBOARD	Tapered	1/2"	4'	6' to 12'	2150	16" or 24" o.c.	5d c.c.	5		2
	Tapered	5/8"	4'	6' to 12'	2600	16" or 24" o.c.	6d c.c.	6.5		2
FIRESTOP BACKER	Tongue-and-Groove	5/8"	2'	6' to 12'	2600	16" or 24" o.c.	6d c.c.	7		2
BESTWALL GYPSUM SHEATHING	V Edge						1 3/4"-11 Gauge Large head Galvanized Roofing Nails	4.6	8" on centers	2
	Tongue-and-Groove	1/2"	2'	8'	2050	16" or 24" o.c.		11.3	4" on centers	2

*Bestwall Backer may also be used as Firestop Backer with (after installing Gypsum Wallboard)

Note: 3/8", 1/2" & 5/8" thick Bestwall available in 14 x 16 ft. lengths on special order.

1/2" & 5/8" thick Firestop Bestwall available in 14 x 16 ft. lengths on special order.



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	

Data on wallboard accessories are presented with the product description.

BESTWALL GYPSUM COMPANY

General Offices — Ardmore, Pennsylvania

Plants and District Offices in Principal Cities throughout the United States