1958

PLAINTIFF'S EXHIBIT

GP-1957



Products of

Gypsum Company



2 **FIRESTOP BESTWALL**

For fire-rated gypsum wallboard construction in single layer application over combustible and incombustible framing.

4 **BESTWALL HUMMER SYSTEMS**

Laminated Bestwall gypsum wallboard constructions for quality wallboard installations and for thin, non-load bearing partitions.

6 **BESTWALL GYPSUM LATH AND PLASTERS**

Fast, easy working application — save time and materials.

7 **BESTWALL 2" SOLID PARTITIONS**

Non-load bearing partition of Bestwall gypsum lath and plaster to save space and costs in new construction and remodeling.

BESTWALL OLSEN GYPSUM LATH CLIPS

For fast, efficient attachment of gypsum lath.

8 **BESTWALL JOINT SYSTEM**

For smoother, better gypsum wallboard construction.

8 **BESTWALL FIREPROOF GYPSUM SHEATHING**

Fireproof — Wind Resistant — Water Repellent — Glass Fibered.

FIREPROOF GYPSUM BESTWALL BUILDING PRODUCTS

SGP 0026243

FIRESTOP

Gypsum Wallboard

NOW REINFORCED WITH OWENS-CORNING FIBERGLAS

For Fire Rated Drywall Construction Over Wood or Steel Framing To Meet Many Code Requirements for Fire Resistance

Firestop Bestwall Gypsum Wallboard was the first drywall material to provide:

Up to one hour fire resistant, load-bearing walls and ceilings with one layer application over both combustible and incombustible framing.

Two-hour fire resistant, load-bearing walls with two layer application.

This outstanding performance results from Bestwall's development of a gypsum board core with greatly improved fire resistive characteristics.

FIRE RATINGS PROVED (See Table Opposite Page)

Constructions surfaced with Firestop Bestwall have been officially tested by two nationally-known laboratories under ASTM Std. E-119, following the standard time-temperature curve.

Fire resistance ratings based on these tests are shown in the table on opposite page.

INCOMBUSTIBLE

Firestop Bestwall Gypsum Wallboard has been tested in Underwriter's Laboratories Tunnel and in the Fire Hazard Classification listed by U. L. shows a Flame Spread of 10 to 15.

Firestop Bestwall is approved under countless local building codes throughout the United States.

EASILY IDENTIFIED

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.

It is easy to identify Firestop Bestwall for each and every panel is branded every 5 feet down the center of the face with the thickness of the board and the words "Firestop Bestwall."

Incombustible glass fibers and unexpanded vermiculite in the gypsum core thermo-stabilize Firestop Bestwall making it more fire resistive than regular gypsum wallboard. Firestop Bestwall provides up to three times greater fire resistance than conventional gypsum wallboard.

MEETS BUILDING CODE REQUIREMENTS

Firestop Bestwall may be used to meet building code requirements for fire-resistant interior wall and ceiling construction in buildings of all types from highly incombustible to wood frame, and various occupancies as dwellings, single and multiple, institutional and commercial. Firestop may also be used as the interior finish of exterior load bearing walls to provide one-hour fire resistance. Firestop Bestwall meets F.H.A. and V.A. requirements and has been accepted under most municipal, state and county codes and the national model codes.

IMPROVED GYPSUM CORE AIDS FIRE RESISTANCE

Firestop Bestwall's extra fire protection lies in its core. An exclusive Bestwall process minimizes shrinking and cracking of the gypsum core thus delaying the breaking up of the board when it is exposed to intense heat.

Small amounts of glass fibers and unexpanded vermiculite are added to the gypsum core of Firestop Bestwall. The incombustible glass fibers retain their strength under extreme heat, and so 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, just balancing the shrinkage of the gypsum core as it loses its chemically-combined water. Thus in a fire a solid face of calcinated gypsum stays in place.

SGP 0026244

SOUND TRANSMISSION RATING

Results of sound transmission tests by Riverbank Laboratories on a standard wood stud partition faced each side with a single layer of 5/8" Firestop Bestwall Gypsum Wallboard show a .39 decibel noise reduction value with a density of 7.2 pounds per square foot.

This compares favorably with the sound characteristics of other constructions of similar characteristics as reported in National Bureau of Standards Report BMS 144.

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 1/2" Firestop are similarly marked.

FIRE HAZARD CLASSIFICATION

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



FIRE RETARDANT CLASSIFICATION

Floor and Ceiling

Design No. 1 — 1 hr. Design No. 2 — 1 hr.
Design No. 3 — 1½ hr.

Walls and Partitions

Design No. 5 — 1 hr. Design No. 7 — 2 hr.
Design No. 5 — 2 hr. Design No. 10 — 1 hr.
Design No. 5 — 3 hr. Design No. 11 — 1 hr.

Fire Resistance Ratings

RATINGS	PARTITIONS—Load Bearing or Non-Load Bearing	FLOOR AND CEILING CONSTRUCTION
	WOOD FRAME 2" x 4" Wood Studs, 16" on centers. Both Sides of Partition Covered with	WOOD FRAME 2" x 10" Wood Joist Covered with Wood Sub-Flooring, Building Paper, and Wood-Finish Flooring, Ceiling Surfaced with
30 Minutes	1 layer 3/8" thick	1 layer 3/8" thick
45 Minutes	1 layer 1/2" thick	1 layer 1/2" thick
60 Minutes (1 Hour)	1 layer 5/8" thick or 2 layers 3/8" thick	1 layer 5/8" thick
120 Minutes (2 Hours)	2 layers 5/8" thick*	
	STEEL FRAME Steel Studs—24" (Max.) on centers. Both Sides of Partition Covered with	STEEL FRAME 12" Steel Bar Joists 24" on Centers. Covered with 2" Concrete Floor Slab. Ceiling Surfaced, through Metal Furring with
60 Minutes (1 Hour)	1 layer 5/8" thick*	1 layer 5/8" thick
90 Minutes (1 1/2 Hours)		2 layers 5/8" thick
	Non-Load Bearing Gypsum Strips for Studs Both Sides of Partition Covered with	*Independent Laboratory Tests (Name on Request)
60 Minutes (1 Hour)	1 layer 5/8" thick	
180 Minutes (3 Hours)	2 layers 5/8" thick	

*Load Bearing Test by Independent Laboratory (Name on Request). **Stran-Steel Studs used in test.

Note: One layer of 1/2" thick regular gypsum wallboard on ceiling only gives 25 minutes resistance.
Nails for 1/2" thick boards - 5d c.c. 13 1/2 ga. flat head 1 5/8" long, 6" on centers in ceiling, 7" on center in walls.
Nails for 5/8" thick boards - 6d c.c. 13 ga. flat head 1 7/8" long, 6" on centers in ceiling, 7" on center in walls.
Nails for second layer in two layer applications of 5/8" thick board – 8d c.c. 11 1/2 ga. flat head 2 3/8" long, 7" on centers in walls
These nailing specifications apply also to nailable steel framing with a nailing line or groove

*Non Load Bearing Steel Framing – 1 layer 5/8" Firestop Bestwall, Underwriters' Tests July 1955 – UL Design No. 8 – 1 hr.

SIX OTHER ADVANTAGES

In addition to its great fire resistance, Firestop Bestwall is:

STRONG — It readily resists crosswise stresses. 5/8" Firestop Bestwall has a flexural strength of 225 to 275 lbs. as compared to Federal Specifications minimum requirement of 105 lbs. for 1/2" regular gypsum wallboard.

STABLE — Firestop Bestwall resists cracks due to framing movements, vibration and settling. It's unaffected by extremes in temperature and relative humidity.

VERSATILE — It is adaptable to any plan. Can be arched or curved.

DECORATIVE — Properly primed and sealed, Firestop Bestwall will take any type of decoration - enamel, oil paint, resin emulsion paint, water paint, wallpaper, etc.

LARGE — Large, easy to handle panels cover up to 48 square feet (4' x 12' sheet) of wall surface.

EASY TO APPLY — Firestop Bestwall goes up fast, cuts by scoring and snapping, is easily nailed.

SIZES, THICKNESSES, WEIGHTS				
Thickness	Width	Length	Edge	[illegible]
5/8"	48"	6' to 12'	Tapered	2.6 lbs.
1/2"	48"	6' to 12'	Tapered	2.1 lbs.

SGP 0026245

Fireproof Gypsum



Hummer SYSTEMS

LAMINATED GYPSUM WALLBOARD CONSTRUCTIONS

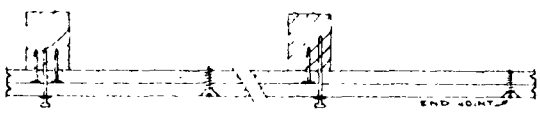
Patented and Patents Pending ***Available Through Licensed Applicators***

INCLUDE SPACE-SAVING NON-BEARING PARTITIONS TO REDUCE BUILDING TIME AND COSTS

Bestwall Hummer Systems are especially designed methods for erecting Bestwall Gypsum Wallboard in multiple layer applications. They may be used with conventional framing on walls and ceilings 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 with less maintenance cost, greater resistance to sound and heat transmission, and better fire protection. Most interior framing can be eliminated with laminated gypsum board construction in residential work with trussed roof construction and in commercial and industrial buildings with flat slab or beam and girder construction.

Thin wall sections — in the range of from 2" to 2½" thick - - make it possible to use many standard thin wall-opening details. Modern, thin, narrow, plain trim fits in with these thin laminated gypsum wallboard partitions.

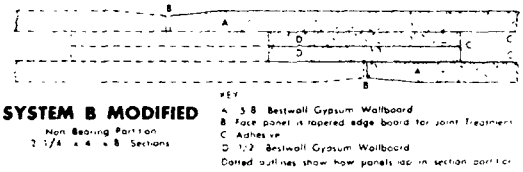


SYSTEM A MODIFIED

BESTWALL HUMMER SYSTEM "A" MODIFIED

This is the oldest and simplest laminated wallboard construction for application over conventional framed walls and ceilings with two improvements. 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 in the ceiling.

Bestwall Hummer System "A" Modified is a way of putting up gypsum wallboard to eliminate nail popping and joint beading and provide a perfect installation. As the face layer is installed and before the glue has set, drive Phillips head wood screws in the center taper in ceilings and in the tapered edge and end joints between two adjacent sheets of wallboard, keeping the screws between (off) nailing members. Bestwall Hummer System "A" Modified assures you of top quality laminated gypsum wallboard construction.



SYSTEM B MODIFIED

Non Bearing Partition
2 1/4 x 4 x 8 Sections

KEY
A 3/8 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 are 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 ⅝" Firestop Bestwall Gypsum Wallboard are laminated, narrow strips being used between the 2 face layers to reduce bulk, weight, 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 ⅝" 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.

SYSTEMS "A" MODIFIED AND "B" MODIFIED REQUIRE JOINT TREATMENT

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

SGP 0026246





Workman installing Bestwall Hummer system C panel.

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 lapped 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 full sheets are 16" wide and the edges rounded.

The other type panel is made with sheets 24" wide and the edges beveled.

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.

Neither panel is recommended for use if the joints are to be treated. In addition to the extra cost of finishing the greater number of joints, the finished wall will not be as true as can be accomplished with 4' wide sheets.

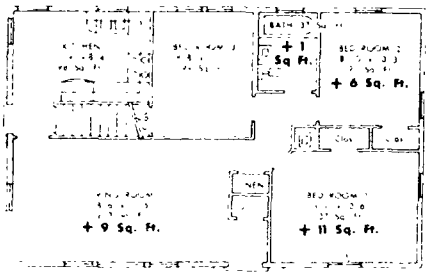
System C can be erected very rapidly with a minimum amount of field work. Besides saving the cost of the joint treatment, this system uses blind nail and screw attachment, eliminating nail joint treatment and making possible the use of paint decorations with good results.

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.

BESTWALL HUMMER SYSTEM "B" MODIFIED AND "C" IDEAL FOR HOMES BUILT WITH TRUSSED ROOF CONSTRUCTION

Bestwall Hummer System "B" Modified provides an ideal non-load bearing gypsum wallboard partition in the popular trussed roof construction — used to help reduce house costs in one story and so-called story-and-a-half houses. Illustrations show typical small home with roof framed in conventional manner with center load bearing partition carrying the ceiling joists, and with walls finished with $^1/_2$" gypsum board. The same home is shown in which trussed roof design is used and interior partitions are the thin gypsum wallboard construction of Bestwall Hummer System "B" Modified. Notice possible space savings. There are corresponding cost savings.

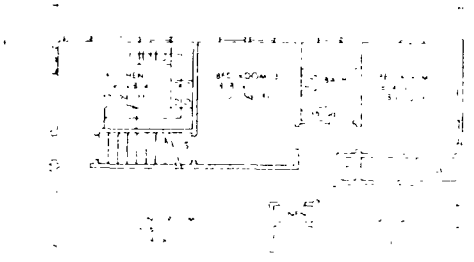


Left
Non load bearing Bestwall Hummer System B Modified walls.

Below
Conventional framing 2" x 4" wood stud wall finished with $^1/_2$" gypsum wallboard



Bestwall Hummer System B Modified panel [illegible]



SGP 0026247

Fireproof Gypsum

LATH and PLASTERS

BESTWALL GYPSUM LATH AND PLASTERS

Bestwall Plasters — Unfibered, Fibered and Extra Fibered.

Bestwall unfibered plaster may be used for the scratch (first) coat on brick, tile, gypsum lath, fiber insulating lath and similar solid surfaces, and for the brown (second) coat on all types of backings.



Bestwall Fibered plaster contains a carefully measured amount of textile glass fibers to provide great binding property. Bestwall glass fibered plaster provides less droppings, speedier and easier application and a better base for finish coats. Plasterers spread more yards per day, get straighter walls with little effort and trouble. Bestwall glass-fibered plaster is required for the scratch coat on perforated gypsum lath, wood and metal lath and is sometimes used for the brown coat on all backings. Bestwall Extra-fibered plaster is preferred in some parts of the country as a scratch coat on metal lath. For the scratch coat on all types of lath use a mixture of one part of plaster to two parts of plastering sand by weight, or 100 pounds of plaster to two cubic feet of vermiculite or perlite. For the scratch coat on brick, tile or gypsum block and the brown coat on all backings use one part of plaster to three parts of sand, or 100 pounds of plaster to three cubic feet of vermiculite or perlite. For 2 coat work the mix may be 1 part of plaster to two and one-half parts of plastering sand by weight or 100 pounds of plaster to two and a half cubic feet of vermiculite or perlite.



Bestwall Lite-Mix Plaster — A pre-mixed, light weight gypsum plaster containing expanded Perlite. Add water only to use. Quicker to apply — Lite-Mix assures even consistency and quick, smooth spreading. Easier to handle — Bestwall Lite-Mix weighs about half as much as sanded gypsum which makes it much easier to handle and lighter on the walls. More Insulation value — Bestwall Lite-Mix provides more than four times as much insulation value as ordinary sanded gypsum plasters. Greater fire resistance — Lite-Mix is fireproof gypsum plaster plus expanded Perlite which provides greater fire resistance, an important safety factor in all buildings.

Bestwall Kalite Acoustical Plaster — a highly efficient sound-absorbing plaster for hand application over standard scratch and brown coats of gypsum plaster. Bestwall Kalite is suitable for use in ordinary interiors where unusual moisture conditions are not present. Bestwall Kalite is ideal when a hard, strong surface is required and when cleaning and redecorating are a necessity. Standard colors of Bestwall Kalite are Natural Grey and Buff and mixing requires only the addition of water. The sound absorption coefficient of one-half inch thick Bestwall Kalite is .55 and three-quarter inch thickness is .60.

Bestwall Light Acoustical Plaster — an ideal sound conditioner for new work or refinishing ceilings. Bestwall Light Acoustical Plaster is designed for machine application, but may be easily applied by hand. It has a sound absorption coefficient of .55 to .60 and also provides excellent fire protection because it is completely incombustible.

Bestwall Light Acoustical Plaster produces a natural white finish which by test reflects 69% of the light when machine applied and 67% of the light when hand-trowelled. The finish may be painted or left undecorated as desired.

Bestwall Acoustical Plasters are ideal for use in restaurants, offices, churches, schools, auditoriums, hospitals and homes.

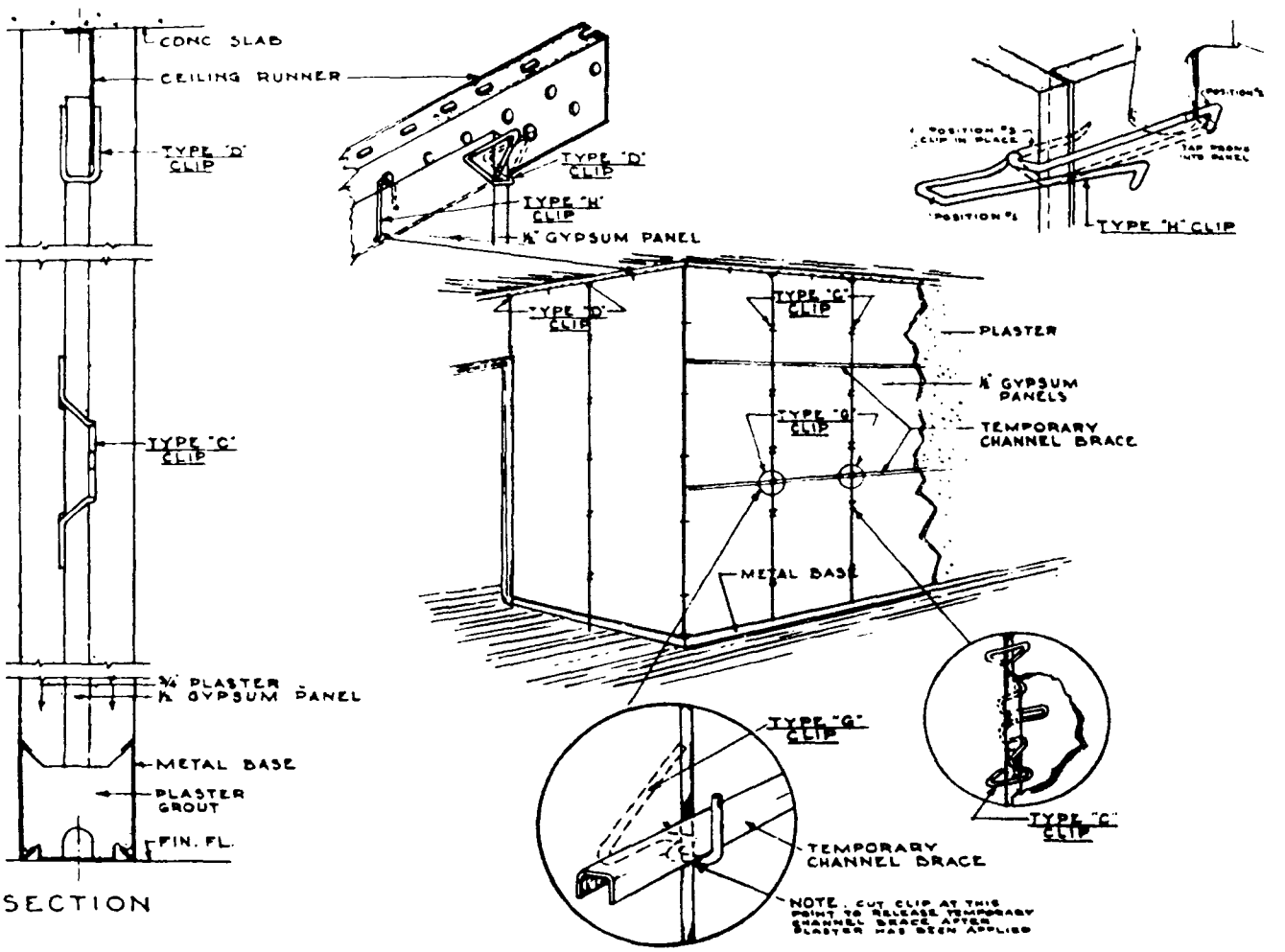
Bestwall Gypsum Lath — consists of a core of gypsum rock, sandwiched between two layers of tough fibrous covering. It is available in convenient, easy to handle sheets which provide a strong, fireproof base for gypsum plaster, and furnishes an unusually strong plaster bond. Bestwall Gypsum Lath does not warp, buckle, expand or contract. It does not decay or disintegrate, and will not harbor vermin. Easily and quickly applied to studs, furring strips, or joists, Bestwall Gypsum Lath provides a smooth, even surface for plastering.



SGP 0026248

BESTWALL® 2" Solid Partition Gypsum Lath and Plaster

For Lightweight, Fire-Resistant, Non-Bearing Walls in New Construction or Remodeling



ADVANTAGES

1 Hour Fire Rating	Tested under A.S.T.M. standards.
Economical	Eliminates studs and double lath. Clips speed work. Save time, labor and materials.
Light Weight	2" solid plaster partition weighs from 14 to 19 lbs. per sq. ft. 4" plastered tile partition weighs from 26 to 30 lbs. per sq. ft.
Solid	No hollow space for vermin, rodents, dirt.
Durable	Solid wall is sturdy, rigid, permanent.

FIREPROOF GYPSUM BESTWALL BUILDING PRODUCTS

Olsen Gypsum Lath Clips

BESTWALL OLSEN GYPSUM LATH CLIPS

Bestwall Olsen Lath Clips permanently and securely attach gypsum lath to any type of framing and provide less nailing, no wire tying and easier attachment which enables the lath to be erected faster. With Bestwall Olsen Lath Clips lath is easily fastened to bar joists, I beams, wood studs, wood joists, steel studs, steel channels, and Z bars. Single clips perform many functions.

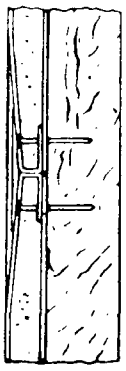
Bestwall Olsen Lath Clips are made of 12 gauge electro-galvanized wire (or heavier). They improve resistance to cracking caused by movement of framing and to transmission because of the resilient attachment of the

SGP 0026249

FIREPROOF GYPSUM
BESTWALL
BUILDING PRODUCTS

JOINT SYSTEM PRODUCTS

Bestwall Joint System



Two different gypsum wallboard joint treatments are available.

A one-material treatment, Bestwall Joint System Cement, for both embedding and topping tape and for spotting nail heads. The Cement has the adhesive qualities needed to hold embedded tape and the workability needed for topping. Color of cement, when dry, matches the face paper of Bestwall Gypsum Wallboard. A good topping out job with Bestwall Joint System Cement eliminates sanding.

A two-material treatment provides Bestwall Bedding Compound for bedding tape, and Bestwall Topping Compound for covering tape, finishing the joint and covering nail heads. Topping Compound is soft enough when dry to be sanded, and is preferred by applicators who wish to sand their joint work.

PACKAGING:



Bestwall Joint System Cement.
No. 1 Package 18 lbs Cement; 250 ft. Tape

No. 2 Package 4 lbs. Cement; 60 ft. Tape (6 to carton).

No 3 Package 4 lbs. Cement; 60 ft. Tape; 1 Plastic Broadknife (6 to carton).

Cement only — 5 lbs. (6 to carton) — 25 lb. bags.

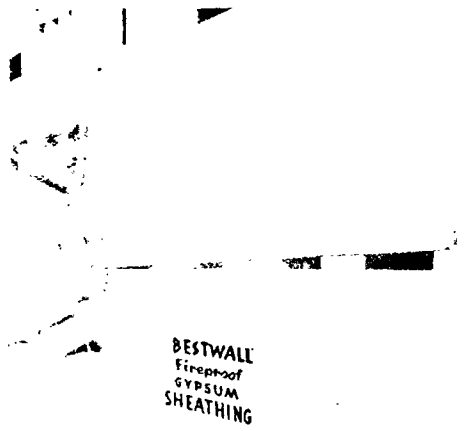
Bestwall Bedding Compound — 25 lb. bags.

Bestwall Topping Compound — 25 lb. bags.

Bestwall Laminating Compound — 25 lb bags.

Bestwall Certex Texture — 25 lb. bags

Bestwall Tape — 250 ft. and 500 ft. rolls (5000 ft to carton).



BESTWALL FIREPROOF GYPSUM SHEATHING

Bestwall Fireproof Gypsum Sheathing is reinforced with textile glass filaments for easier, quicker application, cleaner breaks, and greater flexibility. Insist on Bestwall Fireproof Gypsum Sheathing for better performance.

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.

FIREPROOF • WIND RESISTANT • WATER REPELLENT • REINFORCED WITH GLASS FIBERS • STRUCTURAL STRENGTH • DIMENSIONAL STABILITY

Bestwall Fireproof Gypsum Sheathing is extra water-repellent because the moisture has to get through the tough, treated covering paper before it can attack the treated core. 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.

Bestwall Fireproof Gypsum Sheathing provides great wind resistance. The tongue and groove construction of the sheathing keeps the wind out while also providing greater structural strength and dimensional stability. Building paper is not required (except under some local building codes).

Bestwall Fireproof Gypsum Sheathing's core is incombustible gypsum and builds fire resistance into the wall.

SGP 0026250

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Form No BW58370 — 40M — 10-58

PRINTED IN U.S.A.

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1958

SGP 0026241

Plaster Lath Sheathing Wallboard Joint System

Gypsum Products - Product Specification Directory

1958 Fireproof Gypsum Bestwall Building Prod.

Products of Bestwall Gypsum Company

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