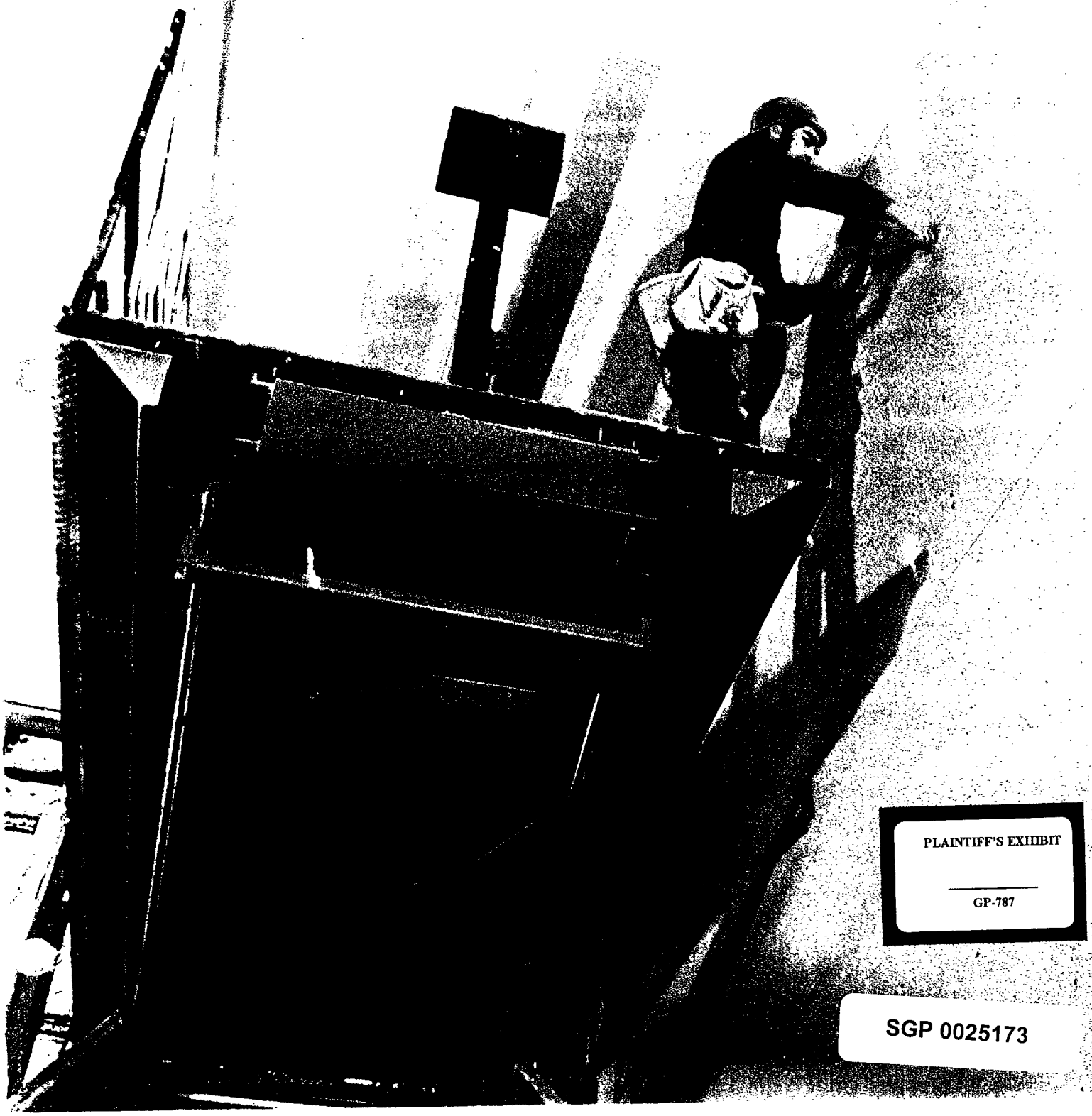
1974

Georgia-Pacific

gypsumboard

for wall and ceiling systems



PLAINTIFF'S EXHIBIT

GP-787

SGP 0025173

INDEX

WARRANTY

The assemblies and information in this brochure have been developed based on practical construction methods.

However, since the Georgia-Pacific Gypsum Division does not have any prior knowledge of a specific building design and its construction or the methods of application used with its products, no warranty of performance is made. All test results have been obtained under controlled laboratory testing conditions where environmental variables are reduced to a minimum. In the field, such laboratory conditions are not always met, since many other variables may be introduced. Laboratory results may exceed field test results but the laboratory tests under controlled conditions are the only logical way to compare the performance of different assemblies.

The Gypsum Division of the Georgia-Pacific Corporation makes no warranty that the performance of assemblies in the field will have a performance equal to or better than that developed in the test.

LIMITATIONS

• Georgia-Pacific interior gypsumboards are non-load bearing panels. • Regular Gypsumboard panels are not recommended for use under extremely moist conditions. G-P Tile Backer Board is to be used in bathrooms or other high moisture areas. • ¼" gypsumboard should only be used as an application over existing walls or as the first layer in a sound rated system • Because of the limitations of manufacturing equipment, the maximum length available in gypsumboard is 16 feet.

TESTING FACILITIES

Georgia-Pacific's major research and development center, a showplace for the nation's gypsum industry, is located at Tigard, Oregon.

The two adjacent structures, with 16,868 square feet of floor area, are equipped with many types of research and testing devices.

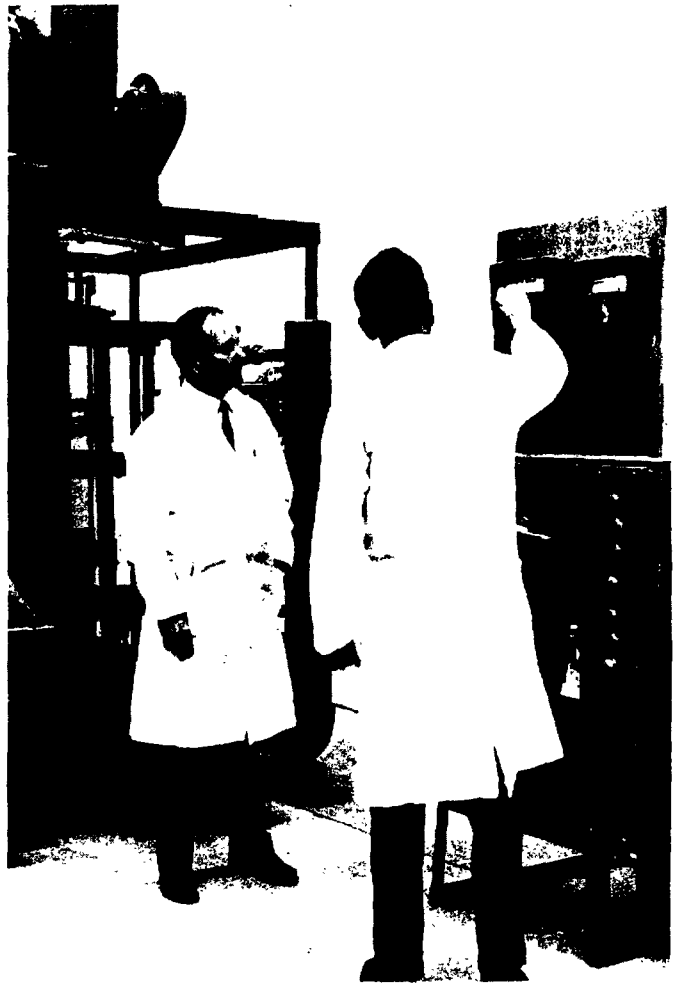
Quality control is an important factor in the type of product that Georgia-Pacific markets. Staff technicians develop and continually check G-P gypsum products such as Tile Backer Board, Insulating Boards, Vinyl Surfaced Eternawall and other products including wall and ceiling systems, plasters, pottery and metal moulding plasters and agricultural gypsum for farm use.

G-P developed the use of glass fibers to strengthen gypsumboard, high strength Densite plaster and special lath for veneer plaster, and the lab is carrying on a vigorous product development program.

The technical department conducts field and manufacturing plant services, solving difficult technical problems and develops improved manufacturing methods.

Gypsum products are tested several ways at the Tigard lab. Gypsumboards are subjected to severe stresses and extreme temperatures to make stronger and more fire resistant gypsum products.

Sound tests are conducted to develop wall and floor/ceiling systems to assure "sound privacy" for today's residential and commercial construction.



SGP 0025174

GYPSUMBOARD PRODUCTS

Georgia-Pacific

Georgia-Pacific Gypsum Division manufactures a full range of products to meet the needs of the construction industry. The versatile gypsum product provides builders with lightweight construction materials that are workable, fire and noise resistant and time saving. G-P research facilities have responded to the industry's requests and have developed the following multi-use, highly reliable, low cost products.

G-P GYPSUMBOARD EDGES

T—Tapered
S—Square
RE—Tapered with Round Edge
B—Beveled (Special Order)
T & G—Tongue and Groove
MB—Modified Beveled Edge

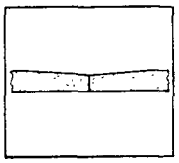
See page 5 for detailed description

PRODUCT DESCRIPTION	Thickness	Widths	Lengths	Edge
G-P REGULAR GYPSUMBOARD				
G-P Regular Gypsumboard is faced with a strong, cream colored paper which will accommodate almost any type of decorative treatment. The back paper, which is gray, is as strong as the face paper. The ½" and ⅝" gypsumboard Tapered Round edges are recommended for single layer application in new construction. They are designed to be reinforced with G-P Joint System products resulting in a smooth, seamless surface. Square edges are recommended for use where joints will be exposed. The resistance to fire exposure and sound transmission increase with the use of greater board thickness and the number of layers of board used. Bevel edges can be used where a panel effect is desired.	¼" ⅜" ½" ⅝"	4'	6' to 16' in even feet	T, S, B, RE
G-P FIRESTOP® GYPSUMBOARD				
G-P Firestop develops 45 minute to 3 hour fire resistant ratings in various wood and steel wall and floor/ceiling assemblies. Unexpanded vermiculite in the core balances gypsum shrinkage by expanding when exposed to heat, while the textile glass filaments keep the core intact even after the chemically combined water has been released. The results are a thermal stabilized core.	½" ⅝"	4'	6' to 16' in even feet	T, S, B, RE
G-P ¼" GYPSUM SOUND DEADENING BOARD				
G-P ¼" Incombustible Gypsum Sound Deadening Board meets the requirements of the most sophisticated sound control systems available with the added convenience of being one of the easiest sound control materials to install. When combined with other gypsumboard, it reduces sound transmission, has high structural strength, is non-combustible and incombustibility. It has a distinctive green face paper. When applied over 2½" steel studs or 2 x 4 wood studs, one layer of ½" G-P Firestop Type XXX over one layer of ¼" Gypsum Sound Deadening Board produces a 1-hour fire resistive wall and a 45 S.T.C.	¼"	4'	8'	S
G-P REGULAR TILE BACKER BOARD				
This is a water-resistant gypsum product with a light blue face paper, designed for use as a base for the adhesive application of ceramic, metal or plastic tile. The gypsum core consists of non-combustible gypsum rock, combined with an asphalt emulsion giving high water resistance. Ideal for bathrooms, kitchens, powder rooms and other moisture areas. G-P Tile Backer Board can be erected as easily as regular gypsumboard and requires no finishing of joints or nail heads with joint treatment nor further waterproofing under tile applied adhesively unless required by local code	½"	4'	8' to 12'	T
G-P FIRESTOP® TILE BACKER BOARD				
Same as Regular Tile Backer Board plus the addition of unexpanded vermiculite and glass fiber reinforcement which gives increased fire protection and strength. Where fire rated assemblies are required in areas subject to moisture, such as partitions between bathrooms and other interior areas, most building codes allow the use of G-P Firestop Tile Backer Board. The use of ⅝" Firestop Tile Backer Board will give the same fire resistant rating as other Firestop board.	⅝"	4'	8' to 12'	T
G-P REGULAR INSULATING GYPSUMBOARD				
Regular Insulating Gypsumboard is regular gypsumboard with bright aluminum foil laminated to the back surface. The foil paper provides a continuous vapor barrier on the warm side of the wall. To have reflective insulation value, FHA requires the foil to face a minimum air space of ¾". The aluminum foil, facing a ¾" minimum space, reflects 90% of radiant heat, providing insulation qualities equal to ½" of fiberboard insulation (tested by U. S. Bureau of Standards). Panels must be installed with foil side against the studs.	⅜" ½" ⅝"	4'	6' to 16'	T, S, RE
G-P FIRESTOP® INSULATING GYPSUMBOARD				
This is the regular insulating gypsumboard with the addition to the core of unexpanded vermiculite and glass fiber content for increased fire protection. Through the proper use of this product desired fire-rated assemblies can be achieved.	⅝"	4'	6' to 16'	T, S, RE

PRODUCT DESCRIPTION	Thickness	Widths	Lengths	Edge
G-P REGULAR ETERNAWALL™—VINYL SURFACED GYPSUMBOARD				
Standard Line. Colors—Avocado, Gold, Flax, White, Beige, Stucco, Buff, Willow Green, Fawn, Snowdrift White, Alabaster, Tangerine, Cherry, Pecan and American Walnut. **New Colors and Textures.** Colors—Honey Maple, Shadow Beige, Teak, Rosewood, Oak, Desert Yellow, Smokey Mint, Spanish Haze, Winter Green, Tarnished Gold, Powder Brown, Chocolate Malt, Autumn Orange, Burnt Sugar, Pebble White. This panel has the vinyl surface factory laminated to Regular Gypsumboard. Available in a variety of colors and textures, it provides beauty and utility to commercial, institutional and home interiors. Eternawall is strong and resilient. The solid gypsum core is non-combustible. Eternawall colors won't fade. The deep linen-textured vinyl surface can be scrubbed without damage to color, texture or design. Because of its ability to take hard wear and to resist stains, Eternawall is ideal for restaurants, hotels, clubs, and hospitals as well as home use. It is also ideally suited for movable partitions.	½" (Special order ⅜" & ⅝")	4'	8' (Other lengths available on special order.)	MB
G-P FIRESTOP® ETERNAWALL™—VINYL SURFACED GYPSUMBOARD				
This panel has the vinyl surface factory laminated to a Firestop panel which has unexpanded vermiculite and glass fibers added to the core to give it additional fire resistance. With this technically designed gypsum core, a 1 hour or greater fire rating may be obtained on wall assemblies. Same colors available as with regular Eternawall.	½" ⅝"	4'	8' (Other lengths available on special order.)	MB
G-P FIRESTOP® GYPSUM SHEATHING				
Treated—G-P Firestop Gypsum Sheathing consists of non-combustible gypsum rock combined with an asphalt emulsion to provide high resistance to water. All G-P Firestop Gypsum Sheathing is manufactured to meet ASTM C79 including requirement for water resistance. This eliminates the need for building paper (except where required by local building code). An **untreated** (no asphalt emulsion) gypsum sheathing is available. The 2' wide sheathing, applied horizontally, is made with precision formed tongue and groove edges. The 4' wide square edge sheathing, applied vertically, completely eliminates the need for corner bracing. It is designed to meet requirements of FHA Technical Circular 12.	½"	2' 4'	8' 8' & 9'	T&G S
G-P GYPSUM FIRESTOP® BACKER BOARD				
G-P ⅝" Firestop Gypsum Backer is used as a backing for decorative surface treatments of acoustical plasters, tile, plywood and various veneers. A single layer application of ⅝" G-P Firestop Gypsum Backer on both sides of wood or steel framing, enables loadbearing or non-loadbearing wall assemblies to resist temperatures rising to 1700° F. in one hour following the ASTM standard time temperature curve for one hour. Firestop Gypsum Backer consists of a gypsum core with unexpanded vermiculite, reinforced with literally miles of high tensile strength glass fibres, firmly bonded to a fibrous gray paper on both sides.	½" ⅝"	2' & 4'	8' to 16'	S, T&G
G-P REGULAR BACKER BOARD				
G-P Gypsum Backer Board is designed for first or base layers in field lamination of gypsumboard, for acoustical tile and other compatible materials. Provides low cost, even surfaces for further decorative treatments. It may be applied over loadbearing or non-loadbearing wood or metal framing with nails, screws or staples.	⅜" ½" ⅝"	2' & 4'	8' to 16'	S, T&G
PREDEC™ TEXTURED GYPSUM				
This combination of non-combustible gypsumboard with factory applied, distinctive, evenly balanced textures is a new development in the construction industry. The textures are baked on and are available in 2 patterns, sand and stucco. The panels are 5/16", ½" and ⅝" thick with square edges. The texture is a thermo-set in White, Beige, Gold and Light Green water resistant paint. This product eliminates job site finishing and installation time. It is impact and abrasion resistant and ideal for residential construction, factory built mobile and modular homes and movable or fixed partitions. It can be cleaned with a damp cloth and mild soap and water. PreDec has a flame spread rating of 20. Samples available on request.	5/16" (½" & ⅝" special order)	4'	cut to size	S
SHAFT LINER				
G-P Shaft Liner is a laminated gypsumboard partition for enclosing elevator shafts, stairs, smoke towers and air ducts. It is a non-load bearing wall, designed for resistance to air pressures without excess deflection. This system can save over 20 lbs. per square foot compared to masonry and is noncombustible, can be erected from one side and eliminates the need for scaffolding. The partition consists of a basic prelaminated core 1⅝" thick by 24" wide which fits into a top metal "J" track and bottom "L" runner. Metal "T" splines separate each core unit; and the shaft liner is then secured to the "T" splines and both top and bottom runners. This system was fire tested in accordance with ASTM E119, and is the only U.L. approved shaft enclosure system on the market. G-P shaft liners available in lengths up to 16'. With G-P's own auxiliary bracing system heights beyond 16' are attainable. Various fire resistive and sound ratings available. Solid and cavity wall types available. See pages 29-35 for details.	1⅝" Core plus facing layers	2'	cut to size	S

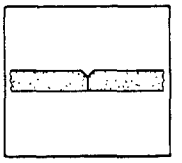
PRODUCT DESCRIPTION	Thickness	Widths	Lengths	Edge
G-P 1" COREBOARD				
1" Gypsum Coreboard is available in two styles. a. A homogenous core with a tongue and grooved joint. b. Two layers of ½" backer board, laminated. 1" Gypsum Coreboard is used for the core material in various, all-gypsum partition assemblies.	1"	2'	Custom cut up to 14'	S, T & G
G-P SOFFIT BOARD				
G-P Gypsum Soffit Board is used on exterior soffits where not exposed directly to the weather. It's an inexpensive soffit material for schools, shopping center malls, apartments and houses. It finishes and decorates like interior gypsumboard with no nails or joints showing. It has light blue face paper for identification.	½", 5/8"	4'	8'	RE
G-P FIRE FIGHTER GYPSUM BOARD				
New product designed for use on roofs, over rafters, and under sheathing and roof covering. Tests prove it blocks roof fires from entering attic and living areas. It has a special core and paper.	½"	2'	8'	S
G-P DENS-COTE GYPSUM BASE				
A 4' wide, long length, tapered edge, plain base. For use as a base layer for G-P Dens-Cote® veneer plaster. It has a highly absorbent face with pinholed surface.	3/8", ½" 5/8" Reg. and ½" and 5/8" Firestop®	4'	8', 10', 12'	T
G-P DENS-COTE VENEER PLASTER				
One coat and two coat systems give a strong durable finish with maximum speed and minimum material. Apply total thickness of 3/32". Available in smooth or textured finishes. 80 lb. bags.				

TAPERED EDGE:



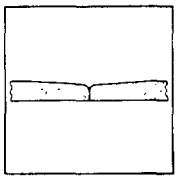
The tapered edge was originally called the "recessed edge" but is now commonly called tapered, because of the incline from the edge to about 2" into the board. This taper allows space for tape and joint treatment to be applied and the completed job will be flat, smooth and monolithic.

BEVELED EDGE



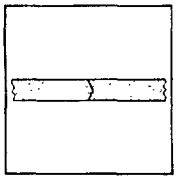
The beveled edge is a suitable edge to give a paneled effect. After fasteners are covered with joint compound the board is ready for paint with grooves exposed.

TAPERED 'N ROUND EDGE



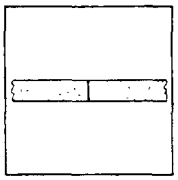
Georgia-Pacific round edge (RE) gypsumboard can be used for wall and ceilings in both new construction and remodeling. It is designed to reduce the beading and ridging problems commonly associated with standard type gypsumboard. This edge formation provides a stronger, more rigid joint and reduces joint beading or ridging.

"T & G" EDGE



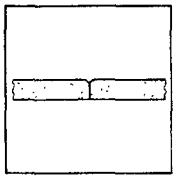
Georgia-Pacific's "tongue and groove" edge is used on 2' wide sheathing and backer boards.

SQUARE EDGE:



The gypsumboard square edge was the original wallboard edge. Initially designed to be a base with a final covering such as wallpaper, paneling, or tile, square edge can be finished with joint compounds to form a clean monothic wall suitable for paint. Also can be used where an exposed joint is desired.

MODIFIED BEVELED EDGE:



The modified beveled edge is available only on Eternawall™ panels. This particular edge more readily accommodates the vinyl surface decoration, which is delivered completely edge wrapped. The vinyl surface material is available in 15 standard patterns and colors and 15 new colors and textures.

JOINT SYSTEM PRODUCTS

G-P Joint System products are designed to conceal joints and nail heads and "surface-weld" gypsumboard panels together. Properly used, these products assure smooth, seamless appearance of walls and ceilings, with joints stronger than the gypsumboard itself.

G-P BEDDING COMPOUND

Bedding Compound is designed to provide maximum adhesion of tape to the joints and for initial application to nail heads and corner bead. It spreads smoothly and may be hand or machine applied. **Coverage:** 15 lbs. per 1,000 sq. ft. (Used in conjunction with 45 lbs. of Topping Compound.) **25 lb. bags.**

G-P TOPPING COMPOUND

G-P Topping Compound is specifically designed for the second and third coats over the bedding compound. Since it is used only for topping, the amount of adhesive can be reduced and other materials incorporated which reduce the shrinkage and make it easier to sand and work. Coverage is approximately 45 lbs. per 1,000 square feet. **Available in 25 lb. bags.**

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G-P TRIPLE DUTY™ JOINT COMPOUND

G-P Triple Duty Gypsumboard Joint Compound is a vinyl multipurpose joint system product. A single bag offers taping, topping and texturing. It can be used for all coats in the reinforcing and concealing of joints in gypsumboard construction. The binder, a vinyl, gives this product a wet life of 30 to 60 days duration. This allows premixing in large quantities prior to application. Triple Duty can be applied using standard hand or mechanical tools. There is low shrinkage and it is easily sanded. When the application is completed, the surface is ready for priming and decoration as desired with no further preparation necessary. **Coverage:** 60 lbs. per 1,000 sq. ft. **25 and 50 lb. bags.** Can be used as a Texture. **Coverage:** 12-50 lbs. per 1,000 sq. ft.

G-P READY MIX JOINT COMPOUND

Ready Mix Joint Compound is an easy-working material for embedding the joint reinforcing tape and the filling and finishing of joints in gypsumboard construction. Furnished in cans and cartons ready to use, this stable, all-purpose compound is also excellent for use in covering nail heads and forming interior and exterior angles. Ready Mix Joint Compound assures a standard mixture for uniform workability throughout the job. It has a long wet life and will not spoil even when the container is left open. Ready Mix Joint Compound produces an excellent surface for any type of decoration. For best results, the surface should be primed before being decorated. **Coverage:** 5 gal. per 1,000 sq. ft. **Package—1 and 5 gal. cans, 4 gal. cartons.**

G-P ALL PURPOSE JOINT COMPOUND

G-P All Purpose Joint Compound is used for bedding tape, topping, corner bead, nail spotting and texturing. When taping be sure the compound under the tape, and the first coat over the tape is thoroughly dry before applying the next coat over the joints. When used for texturing, for best results, apply a vinyl primer to the entire area before texturing. The texture may be applied with a roller, sponge, brush or can be sprayed, depending on the type of configuration desired. **Coverage:** 60 lbs. per 1,000 sq. ft. **25 lb. bag and packaged 18 lbs. of compound plus 250′ roll of tape.**

G-P SPEED SET™

G-P Speed Set Joint Compound makes possible the taping and finishing of all gypsumboard joints within a single day. It can be used for all coats. Speed Set is a setting rather than a drying type of compound, and will not shrink once it has set. Comes in two ways—"1 Hour Working Time" and "2 Hour Working Time". For best results, use a primer sealer over surface before painting or texturing. **25 lb. bags.**

WALL TEXTURES

G-P Wall Texture is an unaggregated texture compound for hand tool or spray application. When applied with a spray, a splatter or orange peel texture is formed. When applied by hand, a stipple, swirl, or brocade texture can be produced. G-P Wall Texture can be applied immediately after G-P Ceiling overspray wipedown. It is made for fast, volume application. Because of its formulation, G-P Wall Texture matches G-P Ceiling Textures, and allows them to blend together.

Coverage: 12-50 lbs. per 1,000 sq. ft. depending upon texture. **25 Lb. Package.**

CEILING TEXTURES

G-P Ceiling Textures are designed for spray application over ceilings constructed with gypsumboard or concrete. The resulting texture simulates acoustical texture finish.

Vermiculite—A 40 lb. bag of this aggregate is available in 3 particle sizes **(fine, medium and coarse).** An ideal product for concealing surface defects. Coverage: 200-300 sq. ft. per bag. Texture samples available on request.

Polystyrene—A new powder product in a 32 lb. bag. This rich white texture finish has strong adhesion with maximum coverage and excellent hiding qualities. The fragments of this **very rough** texture retain their size and shape during mechanical mixing. Coverage: 200-300 sq. ft. per bag.

Especially designed for volume operations, these products give unsurpassed economy. The texture dries harder and tighter. The texture maintains a high quality white decorative finish, and gives exceptional coverage if used as instructed.

G-P GRABIT™

G-P Grabit is an adhesive which permits direct attachment of gypsumboard to masonry walls. It may be used on poured concrete, cinder block or concrete block walls which are reasonably straight and true and are free from surface treatment, decorations, or protrusions. Grabit may be used on exterior walls which are above grade level without waterproofing. Grabit can be used to adhere gypsumboard to polystyrene insulation material.

Adhesion is secure and permanent, with no need for furring strips or fasteners. After being mixed with water as directed, Grabit can be applied with blade or caulking gun. Only four 1″ ribbons are needed for each 4′ wide gypsumboard panel. The adhesive fills in all normal irregularities in the masonry. In 3 to 4 hours, Grabit sets hard, and joint taping and finishing operations may then be started. This adhesive may be used wherever there is need to attach gypsumboard to masonry walls: in homes, apartments, hotels, offices, and plants. **Coverage:** Up to ¼ lb. per sq. ft. depending on roughness of base surface. **50 Lb. Package.**

G-P GYPSUMBOARD TAPE

G-P Tape is a full 2″ width, "Miracle Crease" spark perforated tape with skived edges and sanded surface both sides. Excellent bonding qualities. Stabilized against shrinkage and movement.

SGP 0025178

U. S. and Canadian
Specification Directory
Gypsumboard Products

Georgia-Pacific

PRODUCT	THICKNESS	WIDTH	LENGTH	ASTM & CSA STANDARDS	USA FEDERAL SPECIFICATION	APPLIED UNDER
G-P REGULAR GYPSUMBOARD						
Tapered Edge	1/4"	4'	6' to 12'	C 36	SS-L-30c Type III–Grade R 3/20/67	ANSI A97.1
	3/8"	4'	6' to 16'			
Square, Tapered or Round Edge	1/2"	4'	6' to 16'			
	5/8"	4'	6' to 16'			
G-P INSULATING GYPSUMBOARD	3/8"	4'	6' to 16'	C 36	SS-L-30c Type III–Grade R 3/20/67	ANSI A97.1
Square, Tapered Edge or Round Edge	1/2"	4'	6' to 16'			
	5/8"	4'	6' to 16'			
G-P ETERNAWALL™	1/2"	4'	8' Std.†	C 36	SS-L-30c Type III–Grade R or Grade X Class III 3/20/67	ANSI A97.1
Modified Beveled Edge	5/8"	4'	8' Std.†			
G-P FIRESTOP® GYPSUMBOARD	1/2"	4'	6' to 16'	C 36	SS-L-30c Type III–Grade X 3/20/67	ANSI A97.1
Square, Tapered Edge or Round Edge	5/8"	4'	6' to 16'			
G-P FIRESTOP® INSULATING GYPSUMBOARD	1/2"	4'	6' to 16'	C 36	SS-L-30c Type III–Grade X 3/20/67	ANSI A97.1
Square, Tapered Edge or Round Edge	5/8"	4'	6' to 16'			
G-P TILE BACKER BOARD	1/2"	4'	8', 11' and 12'	C 630	–	–
Tapered Edge	5/8"	4'				
G-P GYPSUM SOUND DEADENING BOARD	1/4"	4'	8' Std.†	C 442	SS-L-30c Type IV–Grade R	–
Square Edge						
G-P BACKER BOARD	3/8"	4'	8' Std.†	C 442	SS-L-30c Type IV Grade R Grade X	–
Square or T & G Edge	1/2"	2'	8' Std.†			
	5/8"	2'	8' Std.†			
G-P FIRESTOP® GYPSUM SHEATHING						
Long-Edges - Square Edge — Core-treated or non core-treated	1/2"	4'	8' & 9'	C 79	SS-L-30c Type II Grade R&W	–
Tongue and Groove — Core-treated or non core-treated	1/2"	2'	8' Std.†	C 79		
G-P DENS-COTE® BASE	1/2" 5/8"	4'	6' to 12'	C 588	–	–
G-P FIRESTOP® DENS-COTE® BASE	5/8"	4'	6' to 12'	C 588	–	–
G-P DENS-COTE® PLASTER				C 587	–	–

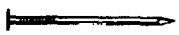
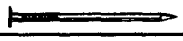
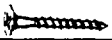
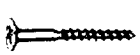
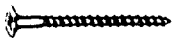
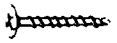
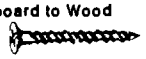
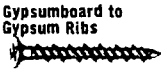
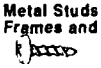
BRAND	PRODUCT	ASTM* STANDARDS	FEDERAL SPEC.	APPLIED UNDER
G-P	**JOINT SYSTEM MATERIALS**	C 475	SS-J-570a 10/24/66	ANSI A97.1
G-P	**METRO-MIX™**	C 317	——	ANSI A59.1
G-P	**FORM BOARD**	C 318	Type V SS-L-30c Grade R	ANSI A59.1

†Standard Length—Other Lengths on Order.
*All ASTM Standards—Per Latest Revision.
■All Canadian Standards in Blue

Any questions not answered by the information on this page or available from local sources should be referred to Georgia-Pacific, Gypsum Division, 900 S.W. Fifth, Portland, Oregon 97204.

SGP 0025179

Gypsumboard Nails & Screws Selector Guide

	Description	Applications
	1¼" GWB-54 Annular Ring Nail 12½ ga.; with a slight taper to a small fillet at shank. Bright finish; med. diamond pt.	½", ⅜" and ¼" Gypsumboard, ½" and ⅜" Gypsum Backer Board to wood frame
	1⅜" Annular Ring Nail (Same as GWB-54 except for length)	⅝" Gypsumboard to wood frame
	2½" 7d Nail 13 ga., ¼" diamond head	⅝" Firestop® Gypsumboard face layers over ½" Sound Deadening Board or 2 layers ⅝" Firestop to Wood Studs
	1⅞" 6d Nail 13 ga., ¼" diamond head	⅜" and ¼" Gypsumboard over existing surface, wood frame
	1⅞" 6d Nail 13 ga., ¼" diamond head	⅝" Firestop Gypsumboard to wood frame
	1⅝" 5d Nail 13½ ga., ¹⁵⁄₆₄" diamond head	½" Firestop Gypsumboard to wood frame
	1⅛" Matching Color Head Nail (Steel) 1⅞" Matching Color Head Nail (Steel)	Predecorted Gypsumboard; to wood frame over existing surface, wood frame
	1⅜" Matching Color Head Nail (Brass)	Predecorated Gypsumboard (colors) to wood frame
Gypsumboard to Metal Framing 	1" Gypsumboard Screw Type S	Single Layer Gypsumboard to 25 gauge Steel Studs. Gypsumboard to Resilient Channel. Gypsumboard to Metal Furring.
	1¼" Gypsumboard Screw Type S 1⅜" Gypsumboard Screw Type S	1" core units to L Runner in 2" Solid and Semi-Solid Partition Systems.
	1⅝" Gypsumboard Screw Type S	Double-Layer Gypsumboard to 25 gauge Steel Studs. Double-Layer Gypsumboard to Metal Furring.
	1⅞" Gypsumboard Screw Type S	Double-Layer Gypsumboard.
	1" Gypsumboard Screw Type S-12 Also available in ¾", 1⅛" & 1⁵⁄₁₆" lengths	For single or multi-layer application of Gypsumboard to heavy gauge steel (up to 12 gauge).
Gypsumboard to Wood Framing 	1¼" Gypsumboard Screw Type W	Single Layer Gypsumboard to Wood Framing.
Gypsumboard to Gypsum Ribs 	1½" Gypsumboard Screw Type G 1⅝" Gypsumboard Screw Type G	Gypsumboard to Gypsum Ribs in Semi-Solid Partition Systems.
Wood Trim to Metal Framing 	1⅝" Gypsumboard Screw Type S Trim Head 2¼" Gypsumboard Screw Type S Trim Head	Wood trim over single layer of Gypsumboard on 25 gauge Steel Studs. Wood trim over double layer Gypsumboard on 25 gauge Steel Studs.
Metal Studs to Door Frames and Runners 	⅜" Gypsumboard Screw S-12 Pan-Head	Metal Door frame to 12 gauge (max.) Steel Studs. Metal Studs to Metal Runners.
Metal Trim & Door Hinges to Metal Framing 	⅞" Type S-18 Oval Head Also available in ¾", 1⅛" & 1⁵⁄₁₆" lengths	Door hinges to door frame and aluminum components to metal.

Horizontal and Vertical Application: TYPE S AND G—Metal studs or furring spaced 24" on center. Screws should be spaced 12" on center unless otherwise noted in the detailed assemblies shown in Georgia-Pacific literature.

TYPE W—Wood studs 16" or 24" on center. Screws should be spaced 12" on center unless otherwise noted in the detailed assemblies shown in Georgia-Pacific literature.

Selection of the proper nail for each application is extremely important, particularly for fire-rated constructions. The nails recommended comply with performance standards adopted by the Gypsum Association.

Technical Data: Walls, Columns, Floor/Ceiling Construction and G-P Gypsumboard or Dens-Cote® Veneer Plaster Systems.

The following tables are summaries only, based on tests at Underwriters' Lab., National Bureau of Standards, Univ. of Calif., Ohio State Univ., Geiger and Hamme, Riverbank Lab. and/or Ohio Research Corp. sponsored by the G-P Gypsum Division, Gypsum Association, or others. Fire rating, weight, and sound characteristics are based on a combination of specific details as tested and published. Where carpet and pad is used in sound tests, carpet is 44 oz. and pad 40 oz. weights. All systems are ranked by STC number in each category.

*Many of these are new numbers assigned by Underwriters' Laboratories (old numbers are in parentheses).

COST INDEX BASIS: For wood and gypsum partitions, 100 is for 2x4 studs, 16" o.c., ½" Regular Gypsumboard each side. For metal stud partitions, 100 is for 2½" studs, 24" o.c., ⅝" Firestop each side. Other assemblies are rated against those two. Allow for local differences in labor and material costs.

FIRE HAZARD (FLAME SPREAD) CLASSIFICATION: Official Underwriters' Tests. ½" and ⅝" G-P Firestop, 10-15 (Labeled); ⅜", ½" and ⅝" G-P, 10-15 (Not Labeled). More complete listings and details are available.

Inconsistencies in test results are due to tests over a period of many years and variations in laboratory facilities.

1. STC under sound characteristics is Sound Transmission Class.
2. Official Underwriters' Tests have proven joint finishing is not required for the rating in assemblies of Firestop.
3. Under "Building Code Approvals" (A) refers to International Conference of Building Officials; (B) refers to Southern Building Code Congress; (C) refers to Building Officials Conference of America. Additional approvals requested. Check with local building officials for verification of approvals as may be required.
4. Not all code jurisdictions belong to Model Code Groups. Therefore, we advise consultation with local building officials if acceptance of these test results are in doubt.

Combustible Assemblies—For all 45 minute and 1 hour ratings ⅝" structural interior plywood or particleboard underlayment grade, over building paper, over ½" structural interior plywood with exterior glue CD grade may be used over the wood joists with ceilings as detailed.

Non-combustible Assemblies—Ceilings for all 1 hour, 1½ hour and 2 hour incombustible floor and ceiling construction assemblies with 2" or 2½" concrete floor on metal lath over steel bar joints, unless otherwise specified, may be directly attached or suspended.

G-P Firestop is listed by Underwriters and carries the UL Label for 45 minutes, 1, 2 and 3 hour Fire Resistance in various designs and with a Fire Hazard Classification of Flame spread 15, fuel contributed 15, smoke developed 0.

SOUND CHARACTERISTICS—References: Geiger and Hamme, Inc.; Riverbank Labs; Kodaras.

More complete listings and details are available.

Inconsistences in test results are due to tests over a period of many years and variations in laboratory facilities.

SGP 0025180

TECHNICAL DATA

Walls and Column Construction

Georgia-Pacific

G-P gypsumboard or Dens-Cote® veneer plaster system

FIRE RESIST.			SOUND TRANS.			CONSTRUCTION			REFERENCES	
G-P SYST. #	RATING	TEST* REFER.	STC	TEST REFER.	COST INDEX	PART. THICK-NESS	WEIGHT AND SQ. FT.	WALL SURFACE	BLDG. CODE APP	DETAIL INFO PAGE
WOOD PARTITIONS (Studs—2 x 4, 16" o.c.										
080	20 min.	EST	31	EST	90	4¼"	5.2	⅜" G-P Gypsumboard Both Sides	–	–
082	30 min.	EST	32	EST	100	4¼"	5.9	½" G-P Gypsumboard Both Sides	ABC	–
084	45 min.	U.L. 1	32	EST	110	4½"	5.9	½" G-P Firestop® Both Sides	BC	–
086	1 hr.	U. 501 (U.L. 5)	34	OR-64-8	115	4¾"	7.0	⅝" G-P Firestop Both Sides Basic 1 Hr. Fire Rated Wall	ABC	16
087	1 hr.	U. 501 (U.L. 5)	34	OR-64-8	125	4¾"	7.0	⅝" G-P Tile Backer Board Both Sides	ABC	–
092	1½ hr.	EST	37	CR-64-11	135	5¼"	9.5	⅝" G-P Firestop, 1 Layer, One Side, 2 Layers Other Side	–	–
094	1 hr.	G.A.	38	EST	135	4⅞"	8.2	⅜" G-P Gypsumboard, 2 Layers, Both Sides	A	–
096	1½ hr.	G.A.	39	NBS	140	5⅜"	9.9	½" G-P Gypsumboard, 2 Layers, Both Sides	C	–
098	2 hrs.	T-194	41	OR-64-12	160	5⅞"	12.0	⅝" G-P Firestop, 2 Layers, Both Sides	ABC	16
WOOD PARTITIONS Gypsum Sound Deadening Board (Studs—2 x 4, 16" o.c.										
100	1 hr.	U. 312 (U.L. 30)	45	BW-27-FT	145	4⅞"	7.96	½" G-P Firestop, 1 Layer Strip Laminated Over ¼" Gypsum Sound Deadening Board, 2 Sides	ABC	16
102	1 hr.	U. 312 (U.L. 30)	47	BW-28-ST	160	5¼"	8.3	⅝" G-P Firestop, 1 Layer Laminated over ¼" Gypsum Sound Deadening Board, Both Sides	ABC	16
104	1 hr.	EST	47	BW-29-ST	175	6⅞"	8.79	½" G-P Firestop, 1 Layer Over ¼" Sound Deadening Board, Both Sides Laminated, Staggered Studs	–	–
106	1 hr.	U. 312 (U.L. 30)	50	BW-35	175	5⅛"	8.7	⅝" G-P Firestop, 1 Layer Strip Laminated over ¼" Gypsum Sound Deadening Board, 2 Sides, 2" Insulation	ABC	17
105	1 hr.	EST	52	BW-30-ST	190	6⅞"	8.92	½" G-P Firestop, 1 Layer over ¼" Gypsum Sound Deadening Board, 2 Sides, 2" Insulation, Staggered Studs	–	–
108	1 hr.	EST	50	BW-31-ST	225	10"	9.14	½" G-P Firestop, 1 Layer Laminated over ¼" Gypsum Sound Deadening Board, Both Sides, Double Studs	ABC	17
109	1 hr.	EST	55	BW-32-ST	240	10"	9.29	½" G-P Firestop, 1 Layer Laminated over ¼" Gypsum Sound Deadening Board, 2 Sides, 2" Insulation, Double Studs	–	17

See Page 8 For Notes

SGP 0025181

FIRE RESIST.			SOUND TRANS.			CONSTRUCTION			REFERENCES	
G-P SYST. #	RATING	TEST* REFER.	STC	TEST REFER.	COST INDEX	PART. THICK-NESS	WEIGHT AND SQ. FT.	WALL SURFACE	BLDG. CODE APP	DETAIL INFO PAGE
WOOD STUDS Resilient Channels										
112	1 hr.	T-3127	44	OR-64-7	135	5⅛"	6.3	⅝" G-P Firestop®, 1 Layer Nailed 1 Side, 1 Layer on Resilient furring other side	ABC	17
114	1½ hr.	EST	48	OR-64-15	155	5¾"	8.8	⅝" G-P Firestop, 2 Layer 1 Side, 1 Layer on Resilient furring other side	–	18
WOOD STUDS Resilient Channels Insulating Blankets										
116	1 hr.	T-3127	50	OR-64-16	150	5⅛"	6.4	⅝" G-P Firestop, 1 Layer Nailed 1 Side, 1 Layer on Resilient furring other side, plus fiberglass insulation in stud space	ABC	18
STAGGERED STUD WALLS										
150	1½ hr.	EST	43	OR-00-0	175	7⅝"	11.0	½" G-P Regular, 2 layers, Both Sides	–	–
152	2 hrs.	EST	47	TL-69-210	190	8⅛"	12.7	⅝" G-P Firestop, 2 layers, Both Sides	ABC	–
154	1 hr.	Based on U. 501 (U.L. 5)	48	EST	140	6⅞"	7.0	⅝" Firestop, 1 layer each side, 2x6 plate, 2" insulation	ABC	–
DOUBLE WOOD STUDS										
170	1 hr.	EST	46	EST	215	9¼"	7.5	⅝" Firestop, 1 layer each side double row of studs 1" apart on separate 2x4 plates, insulation in stud space	–	–
175	2 hrs.	WP297 FM	57	RAL	–	11½"	–	½" G-P Firestop Gypsumboard, 2 layers face each side of wall, 1 layer attached to each stud inside, with 1" space between inside layers Lot Line Wall	–	18
WOOD STUDS Fiber Sound Board										
118	1 hr.	T-3006	46	OR-64-73	165	5⅝"	8.5	⅝" G-P Firestop, 1 layer over ½" Fiber Sound Deadening Board, Both Sides	ABC	18
EXTERIOR WALLS										
500	2 hrs.	U302 (U.L. 23)	50	EST	–	5⅜"	–	⅝" G-P Firestop, 2 layers interior, ½" Gypsum Sheathing, 2'x8" T&G Brick Wall Exterior	ABC	–

See Page 8 For Notes

FIRE RESIST.			SOUND TRANS.		CONSTRUCTION				REFERENCES	
G-P SYST. #	RATING	TEST REFER.	STC	TEST REFER.	COST INDEX	PART. THICK-NESS	WEIGHT AND SQ. FT.	WALL SURFACE	BLDG. CODE APP	DETAIL INFO PAGE
SEMI-SOLID GYPSUMBOARD PARTITIONS Non-Load-Bearing										
240	1 hr.	U510 (U.L. 10)	35	BW-8-FT	75	2¼"	7.2	⅝" G-P Firestop®, 1 layer each side, height limit 12 ft. based on L/120, 5 lbs. PSF	ABC	–
242	1 hr.	EST	51	OR-65-19	125	4¾"	7.2	⅝" G-P Firestop, 1 layer 1 side, other side screwed to resilient channels plus 2" fiberglass insul. in stud space	–	–
244	1 hr.	T-3128	51	OR-64-57	150	4¾"	7.9	⅝" G-P Firestop, 1 layer over ½" G-P Sound Deadening Board, both sides	ABC	–
SOLID GYPSUMBOARD PARTITIONS Non-Load-Bearing										
230	2 hrs.	G.A.	36	G.A.	90	2"	8.1	½" G-P Firestop, 1 Layer Each Side, 1" Coreboard, height limit 9 ft. based on L/120 5 lbs. PSF	ABC	19
232	2 hrs.	G.A.	36	G.A.	95	2"	8.1	½" G-P Gypsumboard, 1 Layer Each Side, 1" Coreboard, height limit 9 ft. based on L/120, 5 lbs. PSF	ABC	–
234	2 hrs.	EST	37	G.A.	100	2¼"	9.1	⅝" G-P Firestop, 1 Layer Each Side, 1" Coreboard	–	–
DOUBLE SOLID GYPSUMBOARD PARTITIONS Non-Load-Bearing										
224	2 hrs.	U502 (U.L. 7)	35	TR-57-42	–	4"	13.4	½" G-P Firestop, 2 Layers Each Side, 1" Rib Coreboard	ABC	–
222	3 hrs.	U501 (U.L. 5)	40	TR-57-43	–	5"	13.4	⅝" G-P Firestop, 2 Layers Each Side, 1" Rib Coreboard	ABC	–
200	2 hrs.	T-2575	47	OR-64-39	–	6"	13	½" G-P Gypsumboard over 1" Coreboard Each Side of 3" air space	ABC	19
TRIPLE SOLID GYPSUMBOARD PARTITIONS										
204	3 hrs.	EST	51	OR-64-58	–	6"	17	½" G-P Gypsumboard, 1 Layer over 1" Coreboard both side of 3" air space with 1" Coreboard	–	–
202	3 hrs.	EST	57	OR-64-59	–	6"	17.2	½" G-P Gypsumboard, 1 Layer over 1" Coreb'd. Each side of 3" air space with 1" Coreb'd centered in air space and fiberglass insulation in space on 1 side.	–	19
TRIPLE SOLID GYPSUMBOARD PARTITIONS Non-Load-Bearing										
206	2 hrs.	T-4958	–	–	–	2⅝"	10.5	G-P 1⅝" core unit plus two face layer ½" G-P regular screw-laminated, track and vertical "T" splines	–	–
208	2 hrs. Chase Wall	T-4991	–	–	–	7¾"	9.0	G-P 1⅝" core unit, angle runners, 2½" metal studs, one facing layer of ⅝" Firestop screwed to studs	–	–
210	1½ hr.	T-4982	–	–	–	2¼"	8.4	G-P 1⅝" core unit, plus face layer ⅝" Firestop screw-laminated. Track and vertical "T" splines on 24" centers	–	–

See Page 8 For Notes

FIRE RESIST.			SOUND TRANS.			CONSTRUCTION			REFERENCES	
G-P SYST. #	RATING	TEST REFER.	STC	TEST REFER.	COST INDEX	PART. THICK-NESS	WEIGHT AND SQ. FT.	WALL SURFACE	BLDG. CODE APP	DETAIL INFO PAGE
METAL STUDS INSULATING BLANKETS										
328	1 hr.	T-5316	41	OR-66-5	110	3½"	4.3	½" G-P Firestop®, 1 layer each side, 2" fiberglass insul. in stud space, 2½" studs, 24" o.c.	–	19
300	1 hr.	T-2316	44	OR-64-81	115	2⅞"	0.0	⅝" G-P Firestop, plus 2" fiberglass insul. in stud space, 1⅝" studs	ABC	20
316	1 hr.	T-4848	48	OR-66-6	125	5⅛"	7.0	½" G-P Firestop, 1 layer 1 side, ½" regular G-P Gypsumboard, 2 layers other side (insulation in cavity for STC), 3⅝" studs	–	22
330	1 hr.	T-2316	48	OR-64-80	145	3⅜"	7.2	⅝" G-P Firestop, 1 layer 1 side, 2 layers other side 2" fiberglass insul. in stud space, 1⅝" studs	ABC	–
334	1 hr.	EST	48	OR-66-6	130	4"	6.3	½" G-P Firestop, 1 layer 1 side, 2 layers other side plus 2" fiberglass insul. in stud space, 2½" studs	–	–
310	2 hrs.	T-3218	48	BW-12-FT	155	4½"	8.0	½" G-P Firestop, 2 layers each side, STC based on 2" insul. in stud space, 2½" studs	ABC	21
318	1½ hrs.	T-3126	50	OR-64-51	150	5½"	8.0	⅝" G-P Firestop, 1 layer 1 side, 2 layer other side plus 3" fiberglass insul. in stud space, 3⅝" studs	–	22
324	2 hrs.	T-2557	52	OR-64-50	170	6⅛"	11.1	⅝" G-P Firestop, 2 layers both sides plus 2" fiberglass in stud space, 3⅝" studs	ABC	23
METAL STUDS GYPSUM SOUND DEADENING BOARD										
304	1 hr.	U410 (U.L. 32)	45	BW-16-FT	130	4"	7.0	½" G-P Firestop, 1 layer, laminated over ¼" S.D. Board, both sides screw attached, 2½" studs	ABC	20
306	1 hr.	U410 (U.L. 32)	50	BW-17-FT	140	4"	7.12	½" G-P Firestop, both sides 1 layer, laminated to ¼" S.D. Board, screw attached, 2" fiberglass friction fit in stud space, 2½" studs	ABC	20
308	1 hr.	U410 (U.L. 32)	54	BW-18-FT	145	4½"	8.12	⅝" G-P Firestop, both sides, 1 layer laminated to ¼" S.D. Boards, screw attached, 2" fiberglass friction fit in stud space, 2½" studs	ABC	21
METAL STUDS FIBERBOARD SOUND DEADENING BOARD										
320	1 hr.	EST	44	OR-65-10	125	5⅜"	5.75	⅝" G-P Firestop, 1 layer 1 side, other side, 1 layer over ½" fiber S.D. Board, 3⅝" studs	–	22
336	1 hr.	EST	49	OR-65-11	135	5⅞"	–	⅝" G-P Firestop, 1 layer over ½" fiber S.D. Board, both sides 3⅝" studs	–	–
STEEL STUD CHASE WALL (1⅝" Metal Studs 24" o.c —6 x 12 — ½ Gypsumboard Spacers)										
326	1 hr.	EST	47	BW-335T	–	7½"	6.69	½" G-P Firestop, 1 layer laminated over ¼" S.D. Board, both sides	ABC	23
327	1 hr.	EST	52	BW-345T	–	7½"	6.84	½" G-P Firestop, 1 layer laminated over ¼" S.D. Board both sides, plus 2" insul. in stud space	ABC	

See Page 8 for Notes

FIRE RESIST.			SOUND TRANS.			CONSTRUCTION			REFERENCES	
G-P SYST. #	RATING	TEST REFER.	STC	TEST REFER.	COST INDEX	PART. THICK-NESS	WEIGHT AND SQ. FT.	WALL SURFACE	BLDG. CODE APP	DETAIL INFO PAGE
METAL STUD PARTITIONS										
340	35 min.	EST	35	OR-65-2	90	3½"	–	½" G-P Gypsumboard, 1 layer each side, 2½" studs	–	–
302	1 hr.	T-2316	35	TL-62-72	95	2⅞"	5.2	⅝" G-P Firestop®, 1 layer each side, 1⅝" studs	ABC	20
342	1 hr.	T-2898	35	OR-64-65	130	3¾"	–	⅝" G-P Firestop, Eternawall™, 1 layer each side, 2½" studs	ABC	–
344	1 hr.	T-2069	39	OR-63-1	100	3¾"	–	⅝" G-P Firestop, 1 layer each side, 2½" studs	ABC	–
346	1 hr.	T-2016	42	OR-63-11	105	4⅝"	6.0	⅝" G-P Firestop, 1 layer each side, 3⅝" studs	ABC	–
312	1½ hr.	EST	43	OR-63-2	135	4⅜"	7.5	⅝" G-P Firestop, 1 layer 1 side, 2 layers other side, 2½" studs	–	21
313	1½ hr.	EST	43	OR-64-32	140	5½"	8.0	⅝" G-P Firestop, 1 layer 1 side, 2 layers other side, 3⅝" studs	–	21
314	2 hr.	T-2557	46	EST	150	5"	10.4	⅝" G-P Firestop, 2 layers, 2 sides, 2½" studs	ABC	21
322	2 hr.	T-2557	47	OR-64-52	–	6⅛"	11.0	⅝" G-P Firestop, 2 layers, 2 sides, 3⅝" studs	ABC	22
350	2 hr.	T-2406	47	EST	–	6⅛"	10.4	⅝" G-P Firestop, 2 layers, 2 sides (face layer–Eternawall), 3⅝" studs	ABC	–
STEEL COLUMN FIREPROOFING										
–	1 hr.	G.A.	–	–	–	–	–	½" G-P Gypsumboard, 2 layers	–	–
–	1 hr.	EST	–	–	–	–	–	⅝" G-P Firestop, 1 layer	AB	–
–	1½ hr.	G.A.	–	–	–	–	–	½" G-P Gypsumboard, 3 layers	–	–
–	2 hr.	X520 (U.L. 20)	–	–	–	–	–	½" G-P Firestop, 1 layer	–	–
–	2 hr.	X517 (U.L. 8)	–	–	–	–	–	⅝" G-P Firestop, 2 layers	ABC	–
–	3 hr.	X513 (U.L. 39)	–	–	–	–	–	½" G-P Firestop, 2 layers	–	–
–	3 hr.	X509 (U.L. 18)	–	–	–	–	–	⅝" G-P Firestop, 3 layers	ABC	–
–	4 hr.	X501 (U.L. 26)	–	–	–	–	–	⅝" G-P Firestop, 4 layers	ABC	–

See Page 8 For Notes

SOUND CONTROL & FIRE RESISTANCE TECHNICAL DATA

G-P SYST. #		WEIGHT LB./ SQ. FT.	SOUND RATING		FIRE RESISTANCE		BLDG. CODE APP.	DETAIL INFO PAGE
			RATING	TEST REF.	RATING	TEST REF.*		
WOOD JOISTS 16" o.c. finished floor on rough sub-floor, except as noted								
400	3/8" G-P Regular, 1 layer	—	—	—	15 min.	—	ABC	—
401	1/2" G-P Regular, 1 layer	11.4	—	—	25 min.	—	ABC	—
402	1/2" G-P Firestop*, 1 layer applied to metal furring channel 16" o.c. with 1" x 6" T. & G. subflooring, 1 layer of resin building paper, and 1" x 4" T. & G. finished flooring	—	STC 47	TL64-155	1 hr.	L502 (UL-33)	ABC	23
403	1/2" G-P Firestop, 1 layer	11.4	—	—	45 min.	U.L. No. 1	AB	—
404	5/8" G-P Firestop attached to resilient metal furring 24" o.c. with 5/8" plywood subfloor and carpet and pad	—	STC 48, INR + 18	L-224-3 & 4	1 hr.	EST.	ABC	24
405	5/8" G-P Firestop, 1 layer	12.0	STC, 38, INR—16, (EST.)		1 hr.	L501 (U.L. No. 1)	AB	—
406	5/8" G-P Firestop, 1 layer attached to 2" x 8" joists 16" o.c. and 2" x 4" joists 16" o.c. 1/2" plywood subfloor attached to 2" x 8" joists 16" o.c. with rug and pad, 3" insulation in cavity	—	STC 51/ INR + 29	KAL-224-14 + 15	1 hr.	—	—	24
407	5/8" G-P Firestop, 1 layer nailed; 2nd layer 5/8" Firestop applied to resilient furring channel 24" o.c. between layers	16.0	—	—	2 hr.	L505 (U.L. No. 217)	ABC	—
408	5/8" G-P Firestop, nailed, 1 5/8" lightweight concrete, 5/8" plywood, wood joists, 16" o.c., insulation, resilient furring, carpet and pad	—	STC 53/ INR + 23	L-224-27 & 28	1 hr.	EST.	A	—
409	1/2" G-P Firestop, 1 layer nailed	13.0	—	—	1 hr.	L503 (U.L. No. 46)	ABC	—
411	3/8" G-P Regular, 2 layers	—	—	—	30 min.	EST.	—	—
413	1/2" G-P Regular, 2 layers	—	—	—	1 hr.	EST.	—	—
415	1/2" G-P Firestop, 1 layer, laminated and nailed to 1/4" G-P Gypsum Sound Deadening Board, with floor of 5/8" CD plywood, 1/2" particleboard underlayment, carpet and pad	—	STC 41/ INR + 25	BW-2MT	1 hr.	EST.	A	23
417	5/8" G-P Firestop, 1 layer laminated and nailed to 1/4" G-P Gypsum Sound Deadening Board with floor 5/8" CD plywood, 1/2" particleboard underlayment, carpet and pad	—	STC 42/ INR + 25	(EST.)	1 hr.	EST.	ABC	—
420	1/2" G-P Firestop, 1 layer screwed to resilient channel 24" o.c., 5/8" plywood subfloor with 3/8" particleboard over wood joists 16" o.c., 3" insulation, carpet and pad	—	STC 53/ INR + 22	OC 3-MT	1 hr.	FC 181 (FM)	—	24
422	5/8" G-P Firestop, nailed, 1 5/8" lightweight concrete, 5/8" plywood, wood joists 16" o.c., insulation, carpet and pad	—	STC 47/ INR + 15	L-224-29 & 30	1 hr.	EST.	A	—

See Page 8 for Notes

SGP 0025186

SOUND CONTROL & FIRE RESISTANCE

G-P SYST. #		WEIGHT LB./ SQ. FT.	SOUND RATING		FIRE RESISTANCE		BLDG. CODE APP.	DETAIL INFO PAGE
			RATING	TEST REF.	RATING	TEST REF.*		
	WOOD JOIST							
475	5/8" G-P Firestop, 1 layer attached to resilient channel 16" o.c., 23/32" T. & G. plywood subfloor over 2" x 10" joists 24" o.c.	—	STC 50	EST.	1 hr.	U.L. L513	—	24
	SPECIAL PURPOSE FLOOR PANELS							
410	1/2" G-P Firestop, one layer over 1/2" Sound Deadening Board (direct attached)	6.5	—	—	1 hr.	U.L. No. 47	A	—
	2" CONCRETE FLOOR ON METAL LATH over Steel Beams 24" o.c. — Combustible							
421	5/8" G-P Firestop nailed or screwed to metal furring 16" o.c.	34.2	—	—	1 hr.	U.L. No. 2	ABC	—
423	5/8" G-P Firestop Backer, nailed or screwed to metal furring 16" o.c.	34.2	—	—	1 hr.	U.L. No. 2	ABC	—
425	5/8" G-P Firestop, 1 layer, metal furring 24" o.c.	32.0	—	—	1 hr.	G501 (U.L. No. 19)	ABC	—
427	1/2" G-P Firestop, metal furring 24" o.c.	33.9	—	—	1 1/2 hr.	G502 (U.L. No. 17)	ABC	—
429	5/8" G-P Firestop, metal furring 24" o.c.	36.4	—	—	2 hr.	G505 (U.L. No. 259)	ABC	—
431	5/8" G-P Firestop, metal deck 24" o.c.	37.0	—	—	2 hr.	U.L. File R4024-12	ABC	—
	2 1/2" CONCRETE FLOOR ON METAL LATH over Steel Beams 24" o.c. — Combustible							
440	1/2" G-P Firestop, metal furring 24" o.c.	38.5	—	—	2 hr.	G504 (U.L. No. 237)	ABC	—
442	5/8" G-P Firestop, metal furring 24" o.c.	39.3	—	—	2 hr.	U.L. No. 69	ABC	—
	STEEL-WOOD COMBINATION JOISTS							
450	5/8" G-P Firestop, 18" deep combination steel-wood joists 32" o.c., 3" insulation, resilient furring, carpet and pad, 1 1/8" plywood subfloor	—	STC 47/ INR + 18	L-224-35 & 36	1 hr.	EST.	—	—
452	5/8" G-P Firestop, 18" deep combination steel-wood joists 16" o.c., 3" insulation, 5/8" plywood, lightweight concrete deck, carpet and pad	—	STC 46/ INR + 11	L-224-37 & 38	1 hr.	EST.	—	—
	BEAM PROTECTION							
—	5/8" G-P Firestop, two layers	—	—	—	2 hr.	N501, N502 (U.L. No. 254, 255)	—	—

*Many of these are new numbers assigned by Underwriters' Laboratories. (Old numbers are in parentheses.)

See Page 8 for Notes

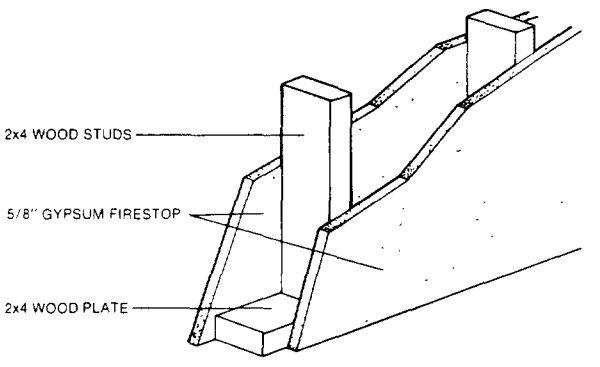
SYSTEM INSTALLATION DETAILS

5/8" G-P FIRESTOP 1 LAYER BOTH SIDES (BASIC 1 HR. FIRE RATED WALL) #086

STC/34
SOUND TEST OR-64-8

FIRE RATING/1 HR. COMBUSTIBLE
FIRE TEST U.L. U501 (U.L. 5)

Materials Used
1. 2" x 4" Wood Studs 16" o.c.
2. 2" x 4" Wood Plates
3. 5/8" Gypsum Firestop®
4. 5d Common Nails—7" spacing

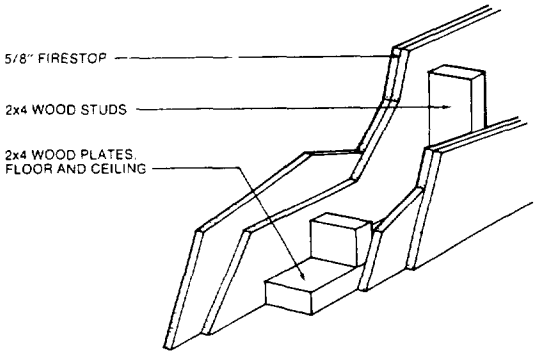


5/8" G-P FIRESTOP 1 LAYER 2 SIDES #098

STC/41
SOUND TEST OR-6 -12

FIRE RATING/2 HR COMBUSTIBLE
FIRE TEST T-194

Materials Used
1. 2" x 4" Wood Studs 16" o.c.
2. 2" x 4" Wood Plates
3. 5/8" Firestop Type X Gypsumboard
4. 6d and 8d Nails

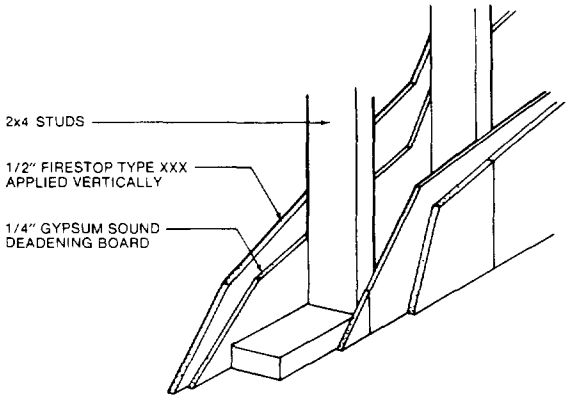


1/2" G-P FIRESTOP LAMINATED TO 1" GYPSUM SOUND DEADENING BOARD #100

STC/45
SOUND TEST G&H BW 27FT

FIRE RATING/1 HR. COMBUSTIBLE
FIRE TEST U.L. U312 (U.L. 30)

Materials Used
1. 2" x 4" Wood Studs 16" o.c.
2. 2" x 4" Wood Plates
3. 1/4" Gypsum Sound Deadening Board
4. 1/2" Firestop Type XXX Gypsumboard or Firestop Eternawall™
5. 5d cc Nails
6. 4d Finish
7. G-P Joint Compound

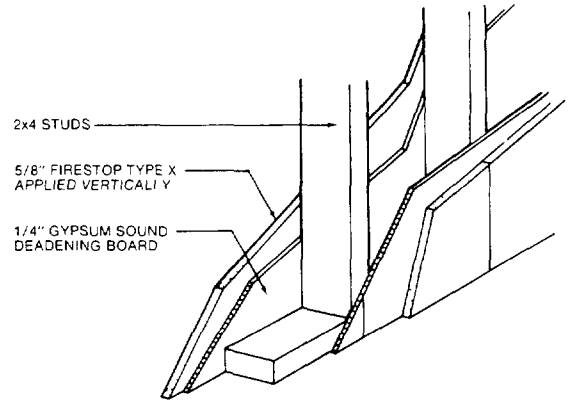


5/8" G-P FIRESTOP LAMINATED TO 1" GYPSUM SOUND DEADENING BOARD #102

STC/47
SOUND TEST G&H BW 28FT

FIRE RATING/1 HR. COMBUSTIBLE
FIRE TEST U.L. U312 (U.L. 30)

Materials Used
1. 2" x 4" Wood Studs 16" o.c.
2. 2" x 4" Wood Plates
3. 1/4" Gypsum Sound Deadening Board
4. 5/8" Firestop Type X Gypsumboard or Firestop Eternawall™
5. Joint Compound
6. 4d Finishing Nails
7. 5d Nails



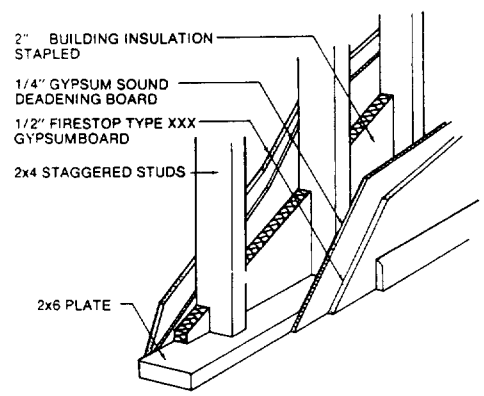
SGP 0025188

G-P FIRESTOP LAMINATED TO ½" GYPSUM SOUND DEADENING BOARD

STC/47 STC/52 WITH INSULATION
SOUND TEST G&H BW 29ST/G&H BW 30ST
FIRE RATING/1 HR. COMBUSTIBLE/EST.

Materials Used

1. 2" x 4" Wood Studs staggered 8" o.c. on opposite sides of 2" x 6" Wood Plate
2. 2" x 6" Wood Plate
3. ¼" G-P Gypsum Sound Deadening Board
4. ½" G-P Firestop Type XXX or Firestop Eternawall™
5. G-P Joint Compound
6. 4d Finishing Nails and 4d Common Nails
7. 5d Common Nails
8. 2" Insulation Batts (on BW-30ST for STC/52)

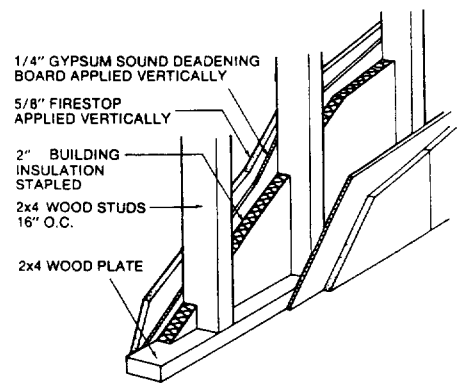


G-P FIRESTOP TYPE X (1 LAYER LAMINATED TO EACH SIDE) WITH 1½" INSULATION

STC/50
SOUND TEST G&H BW 35FT
FIRE RATING/1 HR. COMBUSTIBLE
FIRE TEST U.L. U312 (U.L. 30)

Materials Used

1. 2" x 4" Wood Studs 16" o.c.
2. 2" x 4" Wood Plates
3. ¼" Gypsum Sound Deadening Board
4. ⅝" Firestop Type X Gypsumboard or Firestop Eternawall™
5. Joint Compound
6. 4d Finishing Nails
7. 5d Nails
8. 2" Insulation Batts.

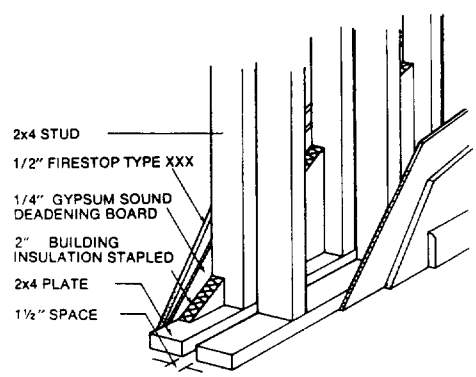


G-P FIRESTOP LAMINATED TO ½" GYPSUM SOUND DEADENING BOARD

STC/50 STC/55 WITH INSULATION
SOUND TEST G&H BW 31ST/G&H BW 32ST
FIRE RATING/1 HR. COMBUSTIBLE/EST.

Materials Used

1. 2" x 4" Wood Studs (double row) 16" o.c.
2. 2" x 4" Wood Plates—1" apart
3. ¼" G-P Gypsum Sound Deadening Board
4. ½" G-P Firestop Type XXX or Firestop Eternawall™
5. 4d Finishing Nails, 4d Nails
6. 5d Nails
7. G-P Joint Compound
8. 2" Insulation Batts (on BW 32ST with insulation for STC/55)

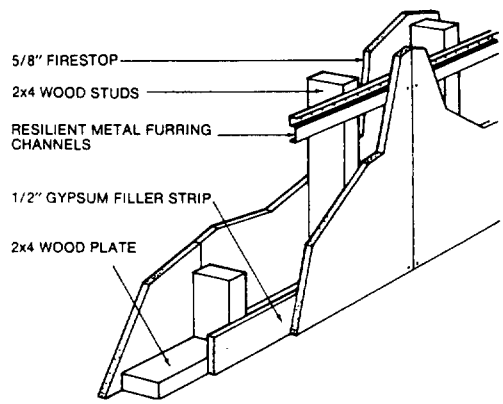


G-P FIRESTOP ON RESILIENT CHANNEL

STC/44
SOUND TEST OR-64-7
FIRE RATING/1 HR. COMBUSTIBLE
FIRE TEST T-3127

Materials Used

1. 2" x 4" Wood Studs 16" o.c.
2. 2" x 4" Wood Plates
3. ⅝" Firestop Type X Gypsumboard
4. Resilient Channels
5. 1¼" Type W Gypsumboard Screws
6. 1" Type S Gypsumboard Screws



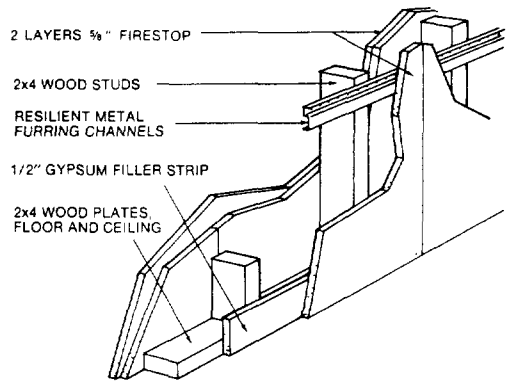
5/8" G-P FIRESTOP 2 LAYERS 1 SIDE 1 LAYER ON RESILIENT CHANNEL OTHER SIDE

STC/48
SOUND TEST OR-64-15

FIRE RATING/1½ HR. COMBUSTIBLE/EST.

Materials Used

1. 2" x 4" Wood Studs 16" o.c.
2. 2" x 4" Wood Plates
3. 5/8" Firestop Type X Gypsumboard
4. Resilient Channels
5. 1¼" Type W Gypsumboard Screws
6. 1" Type S Gypsumboard Screws



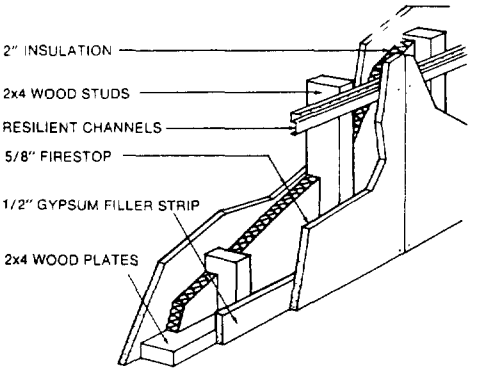
5/8" G-P FIRESTOP ON RESILIENT CHANNEL WITH INSULATION IN CAVITY

STC/50
SOUND TEST OR-64-16

FIRE RATING/1 HR. COMBUSTIBLE
FIRE TEST T-3127

Materials Used

1. 2" x 4" Wood Studs 16" o.c.
2. 2" x 4" Wood Plates
3. 5/8" Firestop Type X Gypsumboard
4. 2" Insulation
5. Donn DG-8 Resilient Channels
6. 1¼" Type W Gypsumboard Screws
7. 1" Type S Gypsumboard Screws



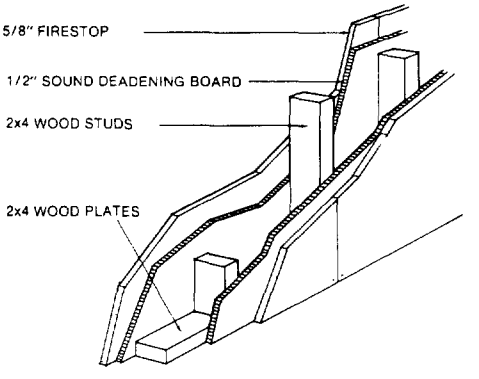
5/8" G-P FIRESTOP OVER FIBER SOUND DEADENING BOARD 2 SIDES

STC/46
SOUND TEST OR-64-73

FIRE RATING/1 HR. COMBUSTIBLE
FIRE TEST T-3006

Materials Used

1. 2" x 4" Wood Studs 16" o.c.
2. 2" x 4" Wood Plates
3. 2" x 4" Wood Fire Blocks
4. ½" Fiber Sound Deadening Board
5. 5/8" Firestop Type X Gypsumboard
6. 5d Cement Coated Nails and 8d Box Nails
7. Laminating or Joint Compound



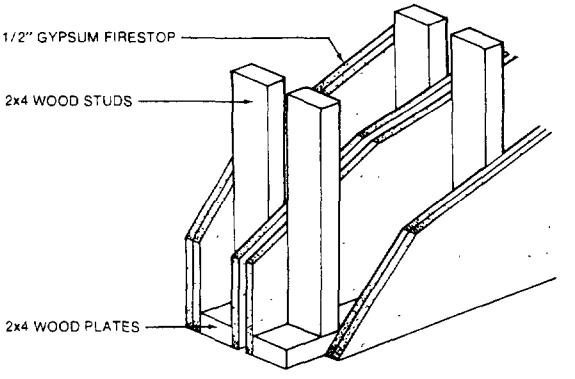
1/2" G-P FIRESTOP 2 LAYERS ON FACE, 1 LAYER INSIDE, BOTH SIDES

STC/57 STC/59 WITH INSULATION
SOUND TEST R.A.L.

FIRE RATING/2 HR. COMBUSTIBLE
FIRE TEST FM WP-297

Materials Used

1. 2" x 4" Wood Studs 24" o.c.
2. Fireblocks—2" x 4" x 22½"
3. ½" Firestop Type X Gypsumboard
4. 8d Coated Box Nails
5. 6d Coated Box Nails
6. 6d Nails
7. 12d Common Nails



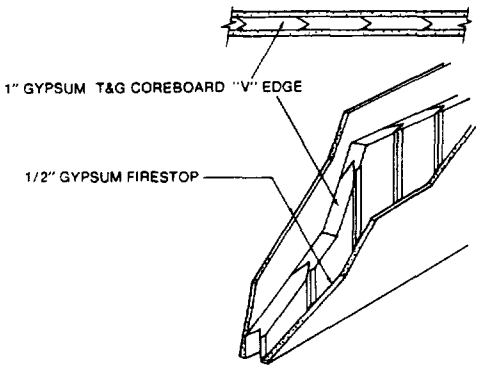
SGP 0025190

STC/36
SOUND TEST G.A.

FIRE RATING/2 HR. NON-COMBUSTIBLE
FIRE TEST G.A.

Materials Used

1. 1" T. & G. Coreboard, "V" edge
2. ½" G-P Firestop
3. Metal Track
4. Laminating Adhesive

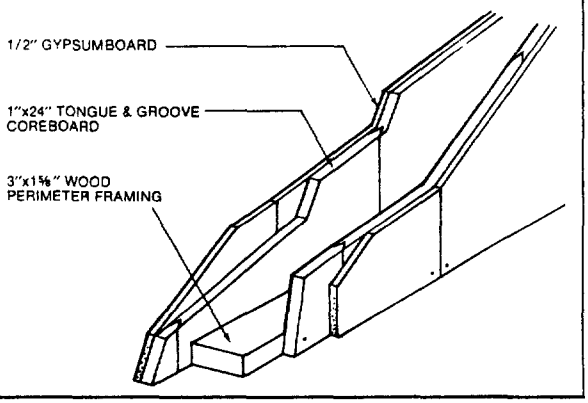


STC/47
SOUND TEST OR-64-39

FIRE RATING/2 HR. NON-COMBUSTIBLE
FIRE TEST T-2575

Materials Used

1. 3" x 1⅝" Wood Perimeter Framing
2. 1" x 24" Tongue & Groove Coreboard
3. ½" Gypsumboard
4. Laminating Compound
5. 8d Nails

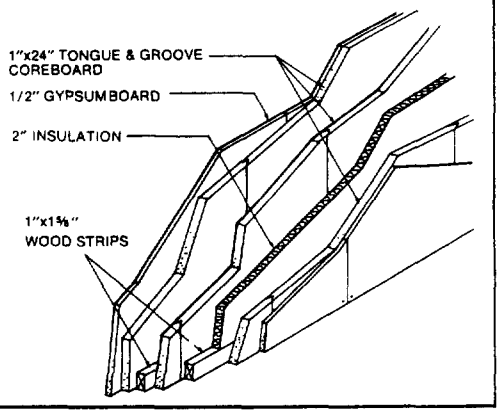


STC/57
SOUND TEST OR-64-59

FIRE RATING/3 HR. NON-COMBUSTIBLE/EST.

Materials Used

1. 1" x 1⅝" Wood Strips
2. 1" x 24" Tongue & Groove Coreboard
3. ½" Gypsumboard
4. 2" Insulation
5. Laminating or Joint Compound
6. 5d and 8d Nails

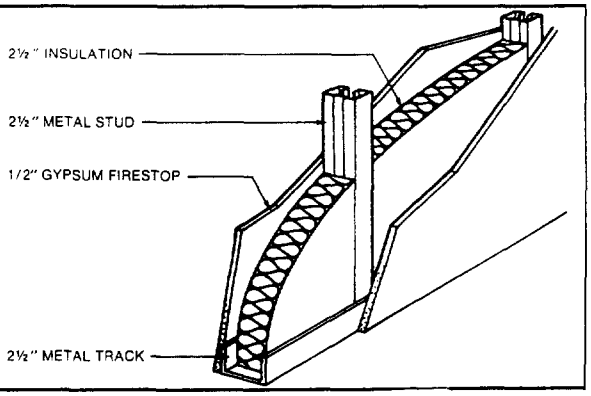


STC/41
SOUND TEST OR-66-5

FIRE RATING/1HR. NON-COMBUSTIBLE/EST.

Materials Used

1. 2½" Metal Stud 24" o.c.
2. 2½" Metal Track Top and Bottom
3. ½" G-P Firestop
4. 2½" Insulation
5. 1" Gypsumboard Screws



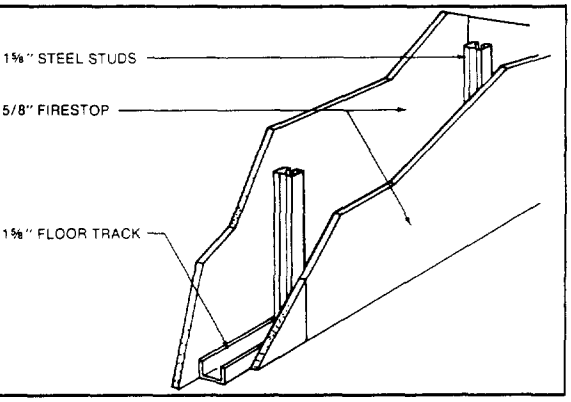
5/8" G-P FIRESTOP® 1 LAYER EACH SIDE

STC/35
SOUND TEST OR-64-81

FIRE RATING/1 HR. NON-COMBUSTIBLE
FIRE TEST T-2316

Materials Used

1. 1⅝" Steel Studs, 24" o.c.
2. 1⅝" Floor and Ceiling Track
3. ⅝" Firestop Type X Gypsumboard
4. 1" Type S Gypsumboard Screws



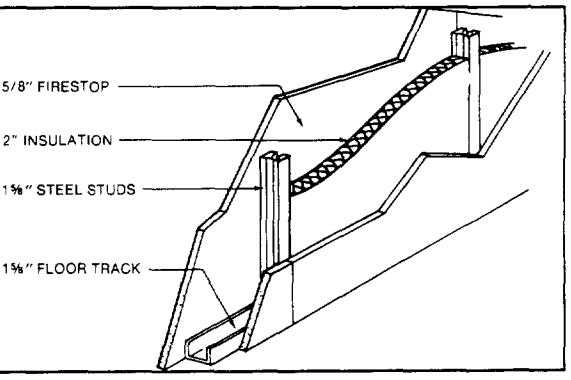
5/8" G-P FIRESTOP® 1 LAYER EACH SIDE WITH INSULATION IN CAVITY

STC/44
SOUND TEST OR 64-81

FIRE RATING/1 HR. NON-COMBUSTIBLE
FIRE TEST T-2316

Materials Used

1. 1⅝" Steel Studs, 24" o.c.
2. 1⅝" Floor and Ceiling Track
3. ⅝" Firestop Type X Gypsumboard
4. 2" Insulation
5. 1" Type S Gypsumboard Screws



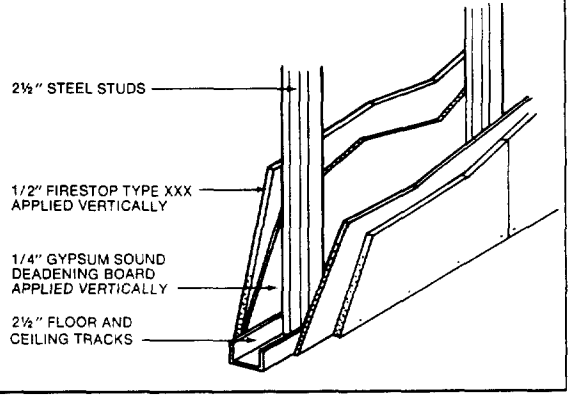
½" G-P FIRESTOP® 1 LAYER OVER ¼" GYPSUM SOUND DEADENING BOARD EACH SIDE

STC/45
SOUND TEST BW 16FT

FIRE RATING/1 HR. NON-COMBUSTIBLE
FIRE TEST T-3854 & U410 (U.L. 32)

Materials Used

1. 2½" Steel Studs, 24" o.c.
2. 2½" G-P Steel Track
3. ¼" Gypsum Sound Deadening Board
4. 1" Type S Gypsumboard Screws
5. ½" Firestop® Type XXX Gypsumboard or Firestop Eternawall™
6. 1⅜" Type S Gypsumboard Screws



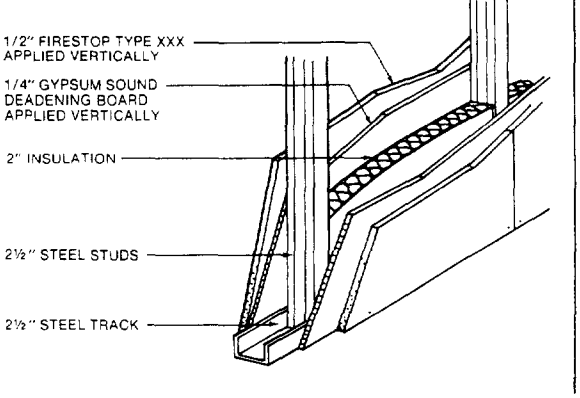
½" G-P FIRESTOP® OVER ¼" GYPSUM SOUND DEADENING BOARD WITH INSULATION IN CAVITY

STC/50
SOUND TEST BW 17FT

FIRE RATING/1 HR. NON-COMBUSTIBLE
FIRE TEST UL U410

Materials Used

1. 2½" G-P Steel Studs, 24" o.c.
2. 2½" G-P Steel Track
3. 2" Insulation
4. ¼" G-P Gypsum Sound Deadening Board
5. 1" G-P Type S Gypsumboard Screws
6. ½" G-P Firestop® Type XXX Gypsumboard or Firestop Eternawall™
7. 1⅜" G-P Type S Gypsumboard Screws



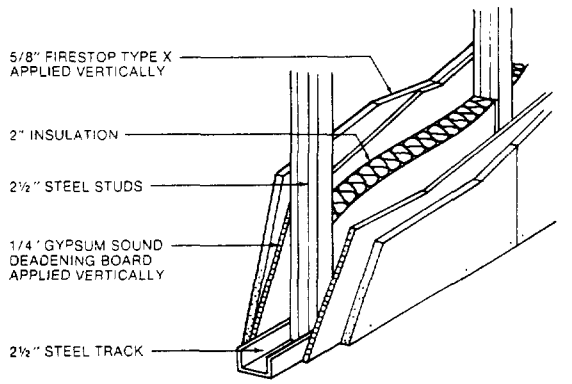
SGP 0025192

5/8" G-P FIRESTOP® OVER 1/4" GYPSUM SOUND DEADENING BOARD WITH INSULATION IN CAVITY

STC/54
SOUND TEST BW 18FT
FIRE RATING/1 HR. NON-COMBUSTIBLE
FIRE TEST UL U410

Materials Used

1. 2½" G-P Steel Studs, 24" o.c.
2. 2½" G-P Steel Track
3. 2" Insulation
4. ¼" G-P Gypsum Sound Deadening Board
5. 1" G-P Type S Gypsumboard Screws
6. 5/8" G-P Firestop® Type "X" Gypsumboard or Firestop® Eternawall™
7. 1⅜" G-P Type S Gypsumboard Screws

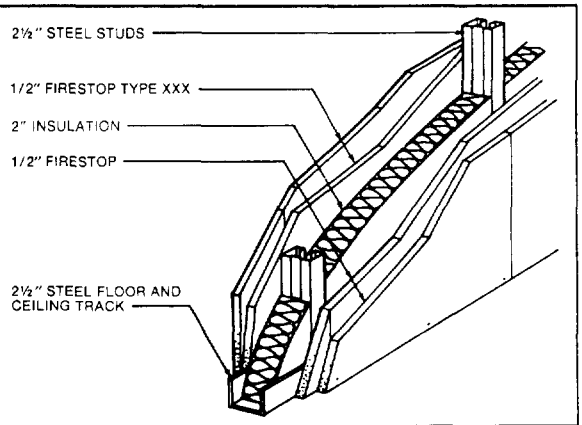


½" G-P FIRESTOP®, 2 LAYERS 2 SIDES WITH INSULATION IN CAVITY

STC/48
SOUND TEST BW 12FT
FIRE RATING/2 HR. NON-COMBUSTIBLE
FIRE TEST T-3218
(fiberglass insulation not required for fire rating)

Materials Used

1. 2½" Steel Studs, 24" o.c.
2. 2½" Floor and Ceiling Tracks
3. ½" Firestop® Type XXX Gypsum-board
4. 2" Insulation
5. Laminating or Joint Compound
6. 1" and 1⅜" Type S Gypsumboard Screws

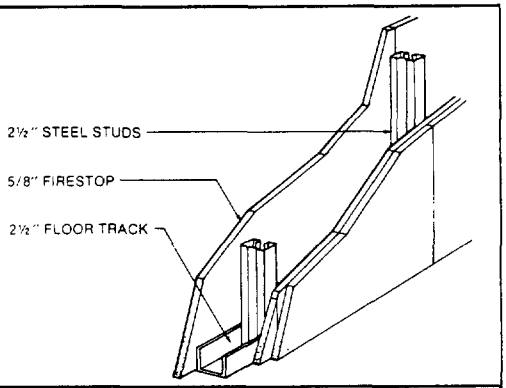


5/8" G-P FIRESTOP®, 1 LAYER 1 SIDE, 2 LAYERS OTHER SIDE

STC/43
SOUND TEST OR-63-2
FIRE RATING/1½ HR. NON-COMBUSTIBLE/EST.

Materials Used

1. 2½" Steel Studs, 24" o.c.
2. 2½" Floor and Ceiling Track
3. 5/8" Firestop® Type X Gypsumboard
4. 1" and 1⅝" Type S Gypsumboard Screws



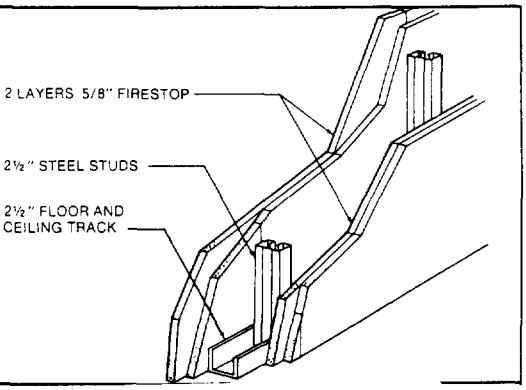
5/8" G-P FIRESTOP®, 2 LAYERS 2 SIDES

STC/46 EST.

FIRE RATING/2 HR. NON-COMBUSTIBLE/EST.
FIRE TEST T-2557

Materials Used

1. 2½" Steel Studs, 24" o.c.
2. 2½" Floor and Ceiling Track
3. 5/8" Firestop®, 2 layers each side
4. 1" & 1⅝" Type S Screws



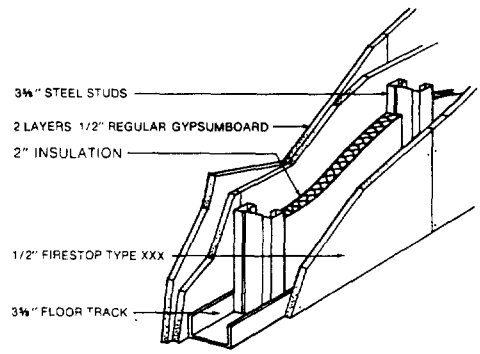
½" G-P FIRESTOP®, 1 LAYER 1 SIDE, ½" G-P REGULAR, 2 LAYERS OTHER SIDE

STC/48 EST.

FIRE RATING/1 HR. NON-COMBUSTIBLE
FIRE TEST T-4848

Materials Used

1. 3⅝" Steel Studs, 24" o.c.
2. 3⅝" Track
3. ½" Firestop® Type XXX Gypsumboard
4. ½" Regular Gypsumboard, 2 Layers
5. 2" Insulation (not required for fire rating)
6. 1" and 1⅝" Type S Screws



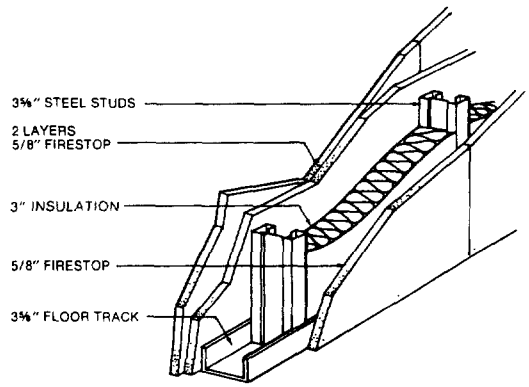
⅝" G-P FIRESTOP®, 2 LAYERS 1 SIDE, 1 LAYER OTHER SIDE WITH INSULATION

STC/50
SOUND TEST OR-64-51

FIRE RATING/1½ HR. NON-COMBUSTIBLE
FIRE TEST T-3126

Materials Used

1. 3⅝" Steel Studs, 24" o.c.
2. 3⅝" Floor and Ceiling Track
3. ⅝" Firestop® Type X Gypsumboard
4. 3" Insulation
5. Laminating Compound
6. 1" and 1⅞" Type S Gypsumboard Screws



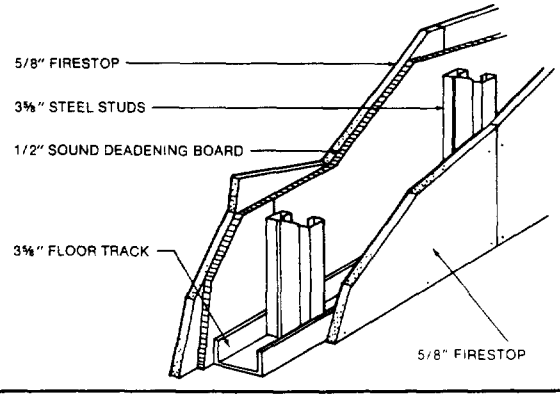
⅝" G-P FIRESTOP®, 1 LAYER 1 SIDE, 1 LAYER OVER ½" FIBER SOUND BOARD OTHER SIDE

STC/44
SOUND TEST OR-65-10

FIRE RATING/2 HR. NON-COMBUSTIBLE
FIRE TEST T-2557

Materials Used

1. 3⅝" Steel Studs, 24" o.c.
2. 3⅝" Floor and Ceiling Track
3. ½" Fiber Sound Deadening Board
4. Laminating Compound
5. ⅝" Firestop® Type X Gypsumboard
6. 1" and 1⅝" Type S Gypsumboard Screws



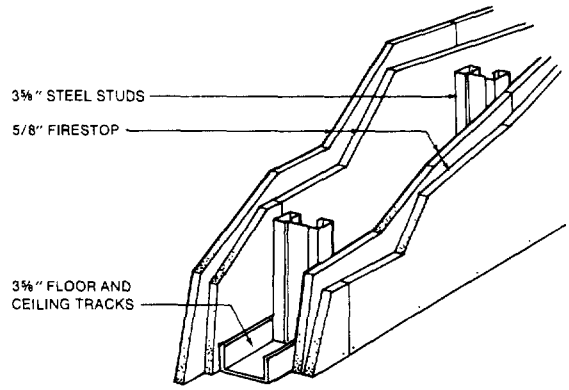
⅝" G-P FIRESTOP®, 2 LAYERS 2 SIDES

STC/47
SOUND TEST OR 64-52

FIRE RATING/2 HR. NON-COMBUSTIBLE
FIRE TEST T-2557

Materials Used

1. 3⅝" Steel Studs, 24" o.c.
2. 3⅝" Floor and Ceiling Track
3. Laminating Compound
4. ⅝" Firestop® Type X Gypsumboard
5. 1" and 1⅝" Type S Gypsumboard Screws



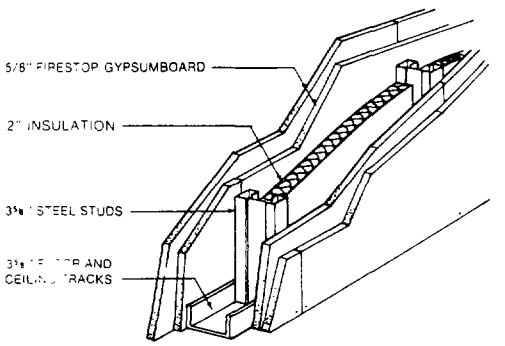
SGP 0025194

5/8" G-P FIRESTOP, 2 LAYERS 2 SIDES WITH INSULATION IN CAVITY

STC/52
SOUND TEST OR-64-50
FIRE RATING/2 HR. NON-COMBUSTIBLE
FIRE TEST T-2557

Materials Used

1. 3⅝" Steel Studs, 24" o.c.
2. 3⅝" Floor and Ceiling Track
3. ⅝" Firestop® Type X Gypsumboard
4. 2" Insulation
5. Laminating or Joint Compound
6. 1" and 1⅝" Type S Gypsumboard Screws



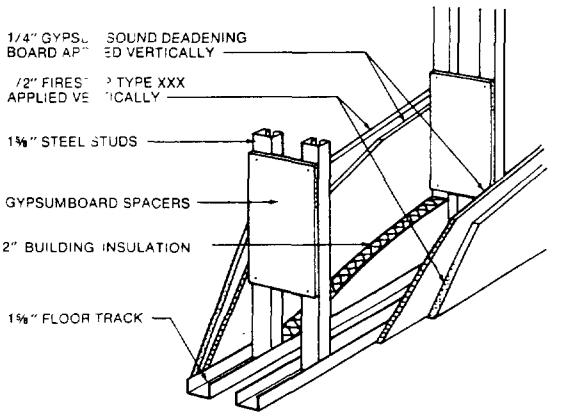
½" G-P FIRESTOP OVER ¼" GYPSUM SOUND DEADENING BOARD

STC/47 STC/52 WITH INSULATION*
SOUND TESTS: BW-33ST/BW 34ST
FIRE RATING/1 HR. NON-COMBUSTIBLE

Materials Used

1. 1⅝" Steel Studs, 24" o.c.
2. 1⅝" Floor and Ceiling Track
3. ¼" G-P ¼" Gypsum Sound Deadening Board
4. ½" Firestop® Type XXX Gypsumboard or Firestop® Eternawall™
5. 1¾" Type S Gypsumboard Screws
6. 1¼" Type S Gypsumboard Screws
7. ½" x 6" x 12" Gypsumboard Spacers
8. 2" Insulating Batts (on BW-34ST for 52 STC)

*System #327

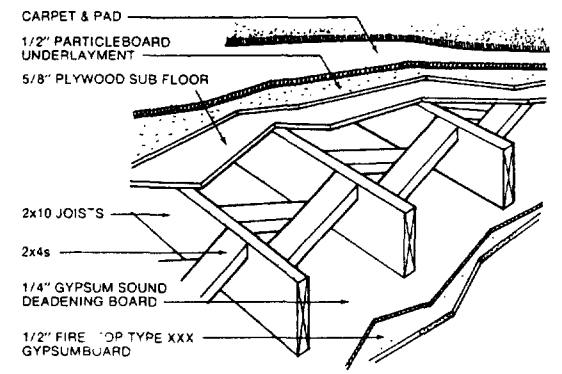


½" G-P FIRESTOP OVER ¾" GYPSUM SOUND DEADENING BOARD

STC/41 INR + 25 (WITH CARPET & PAD)
SOUND TEST G&H BW 2-MT
FIRE RATING/1 HR. COMBUSTIBLE
EST. BASED ON L 503 (U.L. 46)

Materials Used

1. 2" x 10" Wood Joists
2. Carpet and Pad
3. ½" Particleboard Underlayment
4. ⅝" CD Grade Plywood Subfloor
5. ¼" G-P Gypsum Sound Deadening Board
6. ½" G-P Firestop® Type XXX Gypsumboard
7. 4d Ring Shank Nails; 6d Common Nails; 8d Common Nails

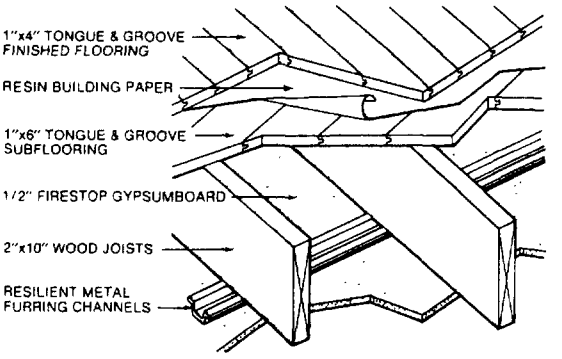


½" G-P FIRESTOP ON RESILIENT METAL FURRING (FLOOR CEILING)

STC/47
SOUND TEST TL 64-155
FIRE RATING/1 HR. COMBUSTIBLE
FIRE TEST L502 (U.L. 33)

Materials Used

1. 2" x 10" Wood Joists
2. Rosin Building Paper
3. 1" x 6" Tongue and Groove Subflooring
4. 1" x 4" Tongue and Groove Finished Flooring
5. Donn DG-8 Resilient Channels
6. ½" Firestop® Type XXX Gypsumboard
7. 1" Type S Gypsumboard Screws and 8d Nails

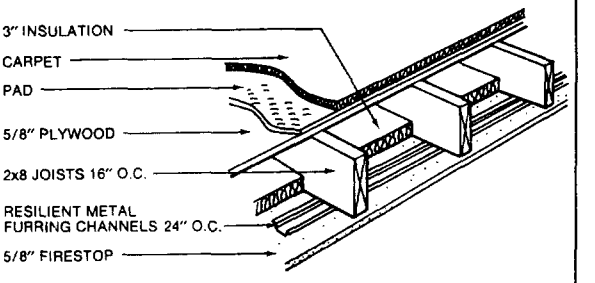


SGP 0025195

STC/48
SOUND TEST L-224-4
FIRE RATING/1 HR. COMBUSTIBLE/EST.

Materials Used

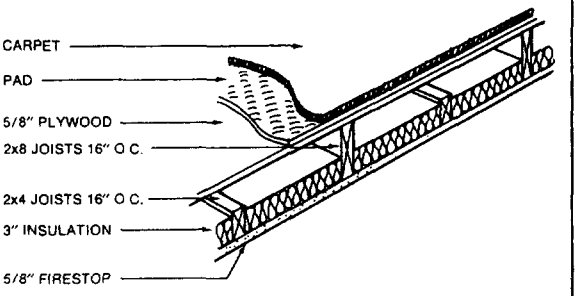
1. 2" x 8" Wood Joists—16" o.c.
2. ⅝" Plywood
3. 44 oz. Wool Carpet
4. 40 oz. All Hair Pad
5. 3" Insulation
6. Resilient Channels
7. ⅝" G-P Firestop® Type X Gypsumboard
8. 8d Nails
9. 1" and 1¼" Gypsumboard Screws



STC/51 INR + 29
SOUND TESTS: KAL-224-14, KAL-224-15
FIRE RATING/1 HR. COMBUSTIBLE/EST.

Materials Used

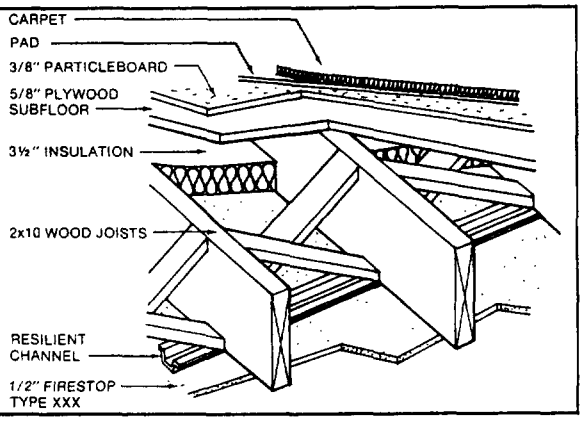
1. 2" x 8" Wood Joists
2. ½" Plywood
3. 44 oz. Wool Carpet
4. 40 oz. All Hair Pad
5. 8d Nails
6. 2" x 4" Joists
7. 3" Insulation
8. ⅝" G-P Firestop® Type X Gypsumboard



STC/53, INR+22
FIRE RATING/1 HR. COMBUSTIBLE
FIRE TEST FC 181 (FM)

Materials Used

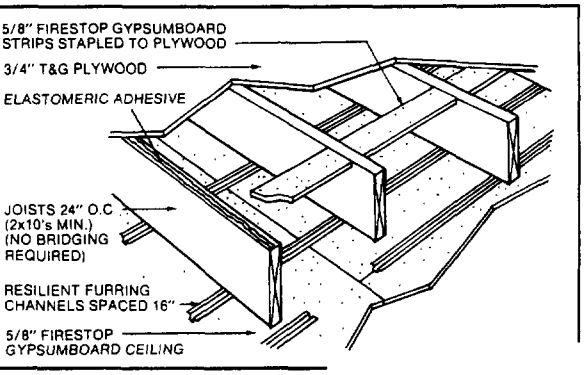
1. 2" x 10" Wood Joists
2. ⅝" Plywood Subflooring
3. ⅜" Particleboard
4. 1¼" Nails
5. 8d Nails
6. ½" Firestop® Type XXX
7. Resilient Channel
8. 8d Nails
9. 1" Gypsumboard Screws
10. 3½" Insulation
11. Carpet and Pad



STC/50/EST., IIC/70/EST. (WITH CARPET & PAD)
FIRE RATING/1 HR. COMBUSTIBLE
FIRE TEST U.L. L513

Materials Used

1. 23/32" T. & G. Plywood
2. Elastomeric Adhesive
3. ⅝" Gypsumboard Strips
4. 2" x 10" Wood Joists
5. Resilient Furring Channels
6. ⅝" Firestop® Type X

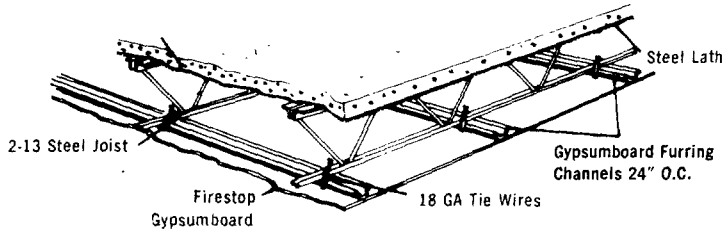


SGP 0025196

Georgia-Pacific

5/8" Firestop®—2 Hr. Rating—Incombustible, Floor/Ceiling

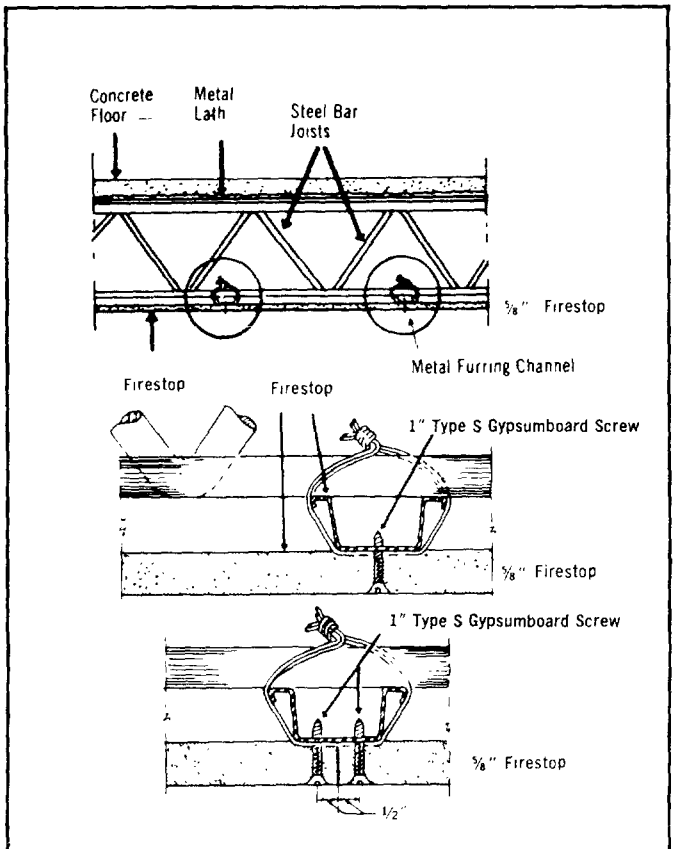
2" SAND-GRAVEL CONCRETE



U.L. Design G505 (UL 259)—2 Hr. (with 2" concrete)

G-P produces lighter weight board and better fire resistance! 5/8" Firestop Gypsumboard reinforced with glass fibers covers many ratings listed by Underwriters' Laboratories for the 5/8" thick material. This means that G-P 5/8" fire-rated board can be used in most kinds of wall, floor and ceiling assemblies.

The 10% reduction in weight can result in savings in labor and materials in multiple story construction.



UL Design G505 attachment details

Denswall™ Texturing Products

Georgia-Pacific offers 4 basic textures. All are dry p products and contain a tested balance of aggregate duce the effect you want. The coverage, however, w with different types of surfaces, spray equipment. manship, and customer requirements.

Wall Texture

Wall Texture packaged in a 25 lb. bag has no aggr G-P's wall texture may be applied with spray equi large wall brush, roller, or trowel. Wall Texture is white" and matches all G-P ceiling textures. This p offers a hard durable surface, good hiding properties. mum coverage, and is easily worked.

Ceiling Texture (Vermiculite)

Ceiling Texture packaged in a 40 lb. bag contains ve ulite aggregate and is available in either fine, me or coarse textures. Vermiculite aggregate offers an a tical finish appearance for ceilings but does not pr acoustical sound correction. The use of this product re in a "high white," rugged texture with semi-rounded and valleys" that help conceal surface defects while ducing a beautiful, decorative textured ceiling.

Ceiling Texture (Polystyrene)

Ceiling Texture packaged in a 32 lb. bag. Polystyren ture is designed for fast, economical spray applica The resultant texture is "high white," with strong a sion. This product offers maximum coverage and exce hiding qualities. Polystyrene aggregate is a plastic which is shredded into coarse angular particles that duce an extremely rough texture. These aggregate ticles will retain their size and shape during long per of mechanical mixing. An ideal product for volume s application.

All 3 Denswall™ texture products from G-P are designed spray application over ceilings constructed with gyps board or concrete and will produce a simulated acous texture finish.

Texture	Finish	Bag Size	Water Mix*	Remix	Average Coverage	
					Gypsumboard	Con
Wall Texture	St	25 lb.	Add 2½ Gallons	Do not exceed 3½ Gallons	Spray 1,000 sq. ft. Trowel 200 sq. ft.	
Vermiculite Ceiling Texture	FM & Ct	40 lb.	Add 3½ Gallons	Do not exceed 5 Gallons	Spray 400 sq. ft.	3(sq.
Polystyrene Ceiling Texture	Ct	32 lb.	Add 6 Gallons	Do not exceed 8 Gallons	Spray 400 sq. ft.	3(sq.

*Mix until dry powder is wetted and well dispersed. Th allow to soak for 20 minutes. Remix and adjust to desir consistency.

If desired, up to 1½ gallons of compatible water bas paint may be added, per bag, to impart color.

†S—Smooth (no aggregate) M—Medium
F—Fine C—Coarse

Installation Details
Application of Rigid Predecorated Panels to Gypsum Substrate

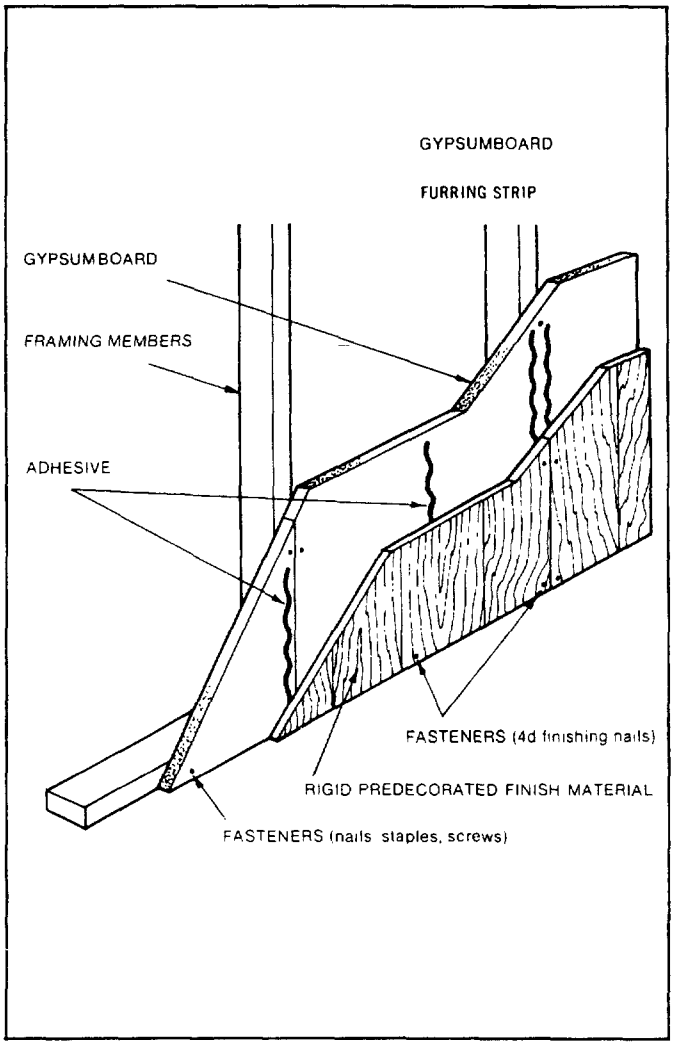
Use ⅜" or ½" gypsumboard. Attach to studs with 1⅜" gypsumboard nails, 1" gypsumboard screws (metal studs) or drywall stud adhesive. Joints need not be taped or sealed. Install the gypsumboard vertically with the edges centered on the framing members.

The rigid predecorated panels should be applied using a bead of panel adhesive over each stud. Secure paneling at top and bottom plates with 4d. finishing nails 12" o.c. Field fasteners not required unless panels are bowed.

The addition of gypsumboard as a substrate when using predecorated panels provides increased FIRE RESISTANCE and SOUND CONTROL.

Test Results

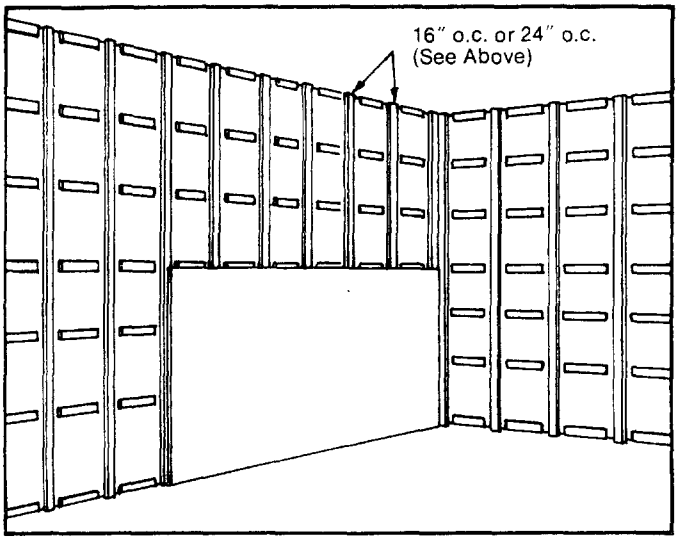
	Paneling (No Gypsum)	Paneling With ⅜" Gypsum	Paneling With ½" Gypsum
Burn thru Time	8 min.	42 min.	73 min. (plus)
Better Sound Rating	28 STC	40 STC	40 STC
Better Impact Resistance	26	82	82



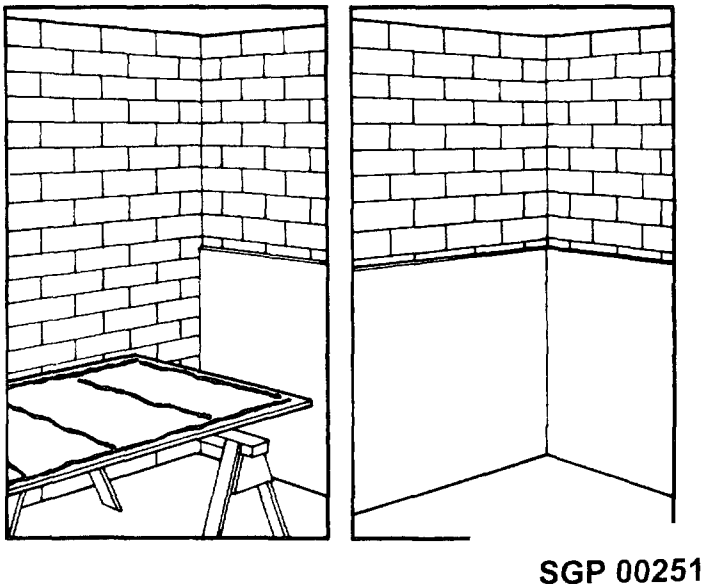
Application Over Masonry Walls

On masonry walls either above or below grade, be sure the wall is properly waterproofed before furring is applied. Although moisture barrier gypsumboards are available—there is obviously no substitute for proper waterproofing.

Wood Strips or Metal Channels: Apply furring horizontally or vertically. Space 16" o.c. for ¼" and ⅜" gypsumboard, and 24" o.c. for ½" and ⅝" gypsumboard. Use concrete stub nails or power driven fasteners to install furring. Gypsumboard should be applied perpendicular to furring. Use Georgia-Pacific insulating Gypsumboard.



Georgia-Pacific Grabit™, a Masonry Adhesive: Apply 1" ribbons of Grabit to each edge and 16" o.c. in field of back of each piece of gypsumboard. Be sure surface to be covered is reasonably straight, and free of fragments of mortar or other protrusions. The adhesive fills in irregularties in the masonry surface. Grabit may also be used to apply gypsumboard to polystyrene insulation material that has been used against the masonry. Grabit may be used without waterproofing on exterior walls which are above grade. Temporary fasteners or bracing may be necessary until Grabit sets.



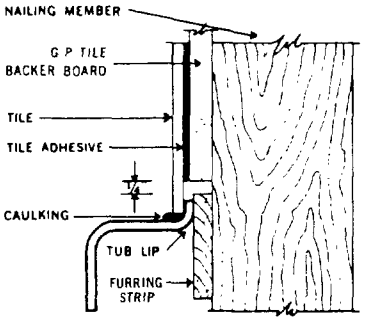
SGP 0025198

Water Resistant Gypsumboard

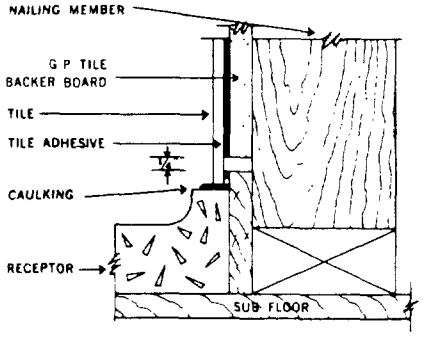
G-P Tile Backer Board is a water-resistant gypsum product with a light blue face paper, designed for use as a base for the adhesive application of ceramic, metal or plastic tile. The gypsum core consists of incombustible gypsum rock, combined with an emulsion giving high water resistance. This new G-P product is ideal for bathrooms, kitchens, powder rooms and all high moisture areas.

For fire rated partitions between bathrooms or interior areas subject to moisture use ⅝" Firestop Tile Backer proven by Underwriters' Laboratories in a 1-hour assembly over wood studs.

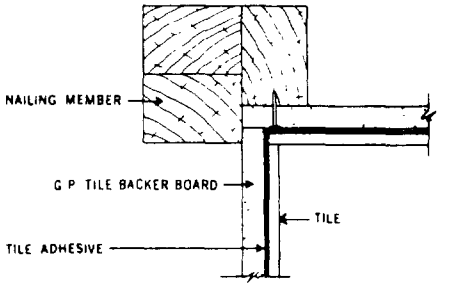
The raw edges of Tile Backer Board (end joints, cut edges, cut-outs) are to be caulked with a coating of the waterproof compound used in applying the tile. As an alternate to caulking, G-P can provide a special 2½" wide self-adhering vinyl tape to place over edges and cut-outs.



TUB



SHOWER RECEPTOR



CORNER DETAIL

*For fire and sound rated construction the Tile Backer Board must extend to the floor.

Solid and Semi-Solid Gypsum Partitions

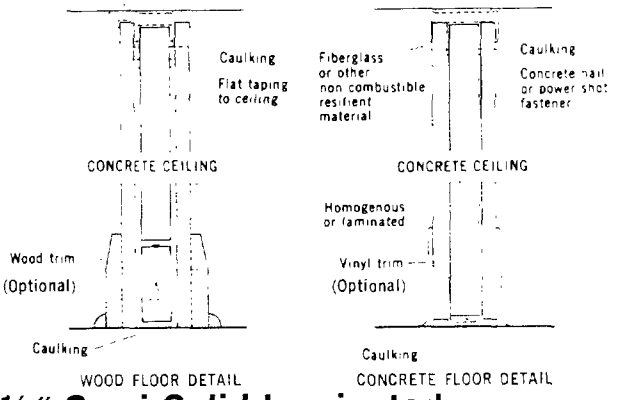
Partition systems composed entirely of gypsumboard have the added values of increased fire resistance and maximum use of space.

In the following four systems the common factor in each is that they are all constructed (except for floor ceiling runners) entirely of gypsum incombustible materials.

2" Solid Laminated— (Non-Load Bearing)

A 1" gypsum coreboard with ½" gypsumboard laminated to each side: no air space. A 2" solid wall system has a 2 hour fire rating, an STC rating of 35, produces smooth monolithic walls and creates extra usable floor space.

2" Solid Laminated Floor and Ceiling Details



2¼" Semi-Solid Laminated Gypsumboard

2¼" Semi-Solid Laminated—(Non-Load Bearing)—A center vertical rib (or stud) composed of 2 layers of laminated gypsumboard (1" x 6" rib, 24" o.c.) is the base upon which ⅝" gypsumboard is laminated to each side. This leaves intermittent 1" dead spaces for wiring. The 2¼" system has a 1 hour fire rating, money saving simplicity of installation. a 30 decibel STC, creates smooth walls and provides extra floor space.

Double Solid Laminated— (Non-Load Bearing)

Consists of laminating ½" gypsumboard to a 1" tongue and groove coreboard homogenous or laminated on each side of a 3" air space. There is absolutely no connection over the air space except at the jambs. This system has a 2 hour fire rating, greater strength than standard frame or thin solid wall, a 47 decibel STC and produces smooth wall surface.

Triple Solid Laminated- (Non-Load Bearing) SGP 0025199

The center piece is a 1" gypsum core panel running the height and length of wall, on one side of which is dead space the other side is filled with fiberglass insulation. Outer section of wall (on both sides) is ½" gypsumboard laminated to 1" coreboard (this gives a 1½" wall on both sides of center section). This system has a three hour fire rating, a 57 decibel STC and produces smooth monolithic walls.

Wood and Steel Stud Application

There are many different kinds of construction systems and all are based on the requirements of your particular building installation. Basically, the main considerations are usually: **Fire Resistance, Sound Transmission, Relative Strength of the Installation, Dimensional Restrictions** and **Economy.**

After the wall and floor/ceiling constructions have been selected, it is important that they be installed properly. The following precautions should be taken during installation to avoid situations or conditions which will detract from the sound control properties of the assembly:

Avoid connecting plenum chambers, ducts, vents, etc. These permit the unrestricted flow of sound. Corrective measures are to make partitions full height, and use ducts lined with absorbent material.

Materials: All gypsumboard shall be G-P Gypsumboard 3/8", 1/2" or 5/8" thick Regular or Firestop®, 4' wide x ceiling height for vertical application or up to 16' long for horizontal application, tapered edge. All joint treatment products are to be G-P materials.

Framing: Prior to the gypsumboard application, all framing members should be true and firmly fastened in a plane surface. Provide double studs at all corners. Both inside and outside intersections are formed by extending one edge of a panel over the other edge in a flush position and covering with tape and joint treatment. In single ply installation, all ends and joints of gypsumboard shall occur over framing members, except that this is not required for treated joints at right angles to framing members.

Application: Gypsumboard may be applied horizontally or vertically to framing with nails or screws. (Alternate method-stud adhesive may be applied to studs before applying gypsumboard.) The gypsumboard shall be attached with nails meeting ASTM-C514 or with 1¼" long G-P Type "W" gypsumboard screws or 1" long G-P type "S" Gypsumboard screws, for wood and metal or framing respectively.

SINGLE PLY GYPSUMBOARD MAXIMUM FRAMING SPACING

Gypsumboard Thickness	Application
3/8" sidewalls	Horizontal or Vertical 16" o.c.
1/2" sidewalls	Horizontal or Vertical 24" o.c.
5/8" sidewalls	Horizontal or Vertical 24" o.c.
1/2" ceilings	Parallel or Perpendicular 16" o.c.
5/8" ceilings	Parallel or Perpendicular 16" or 24" o.c.

NOTE: If heavy spray texture or other heavy finish is applied to the ceiling, do not install gypsumboard parallel to joists.

NAILING OR SCREW SPACING FOR SINGLE-PLY GYPSUMBOARD

(Framing 16" o.c.)

Gypsumboard Thickness	Single Nailing	Double Nailing
3/8" sidewalls	8" o.c. Max.	12" o.c. Max.
1/2" sidewalls	8" o.c. Max.	12" o.c. Max.
5/8" sidewalls	8" o.c. Max.	12" o.c. Max.
ceilings	7" o.c. Max.	12" o.c. Max.

	Framing 16" o.c.	Framing 24" o.c.
Gypsumboard Thickness	**Screw Spacing**	**Screw Spacing**
3/8" sidewalls	16" o.c. Max.	—
1/2" sidewalls	16" o.c. Max.	12" o.c. Max.
5/8" sidewalls	16" o.c. Max.	12" o.c. Max.
ceilings	12" o. c. Max.	12" o.c. Max.

NOTE: Nails or screws should be driven not less than 3/8" from edges or ends of panels. While fasteners are being driven, the gypsumboard shall be held in firm contact with the underlying supports. Preferably, application of fasteners should proceed from the central portion of the gypsumboard to the ends and edge. Dimple nails or screws without breaking the face paper. **Joints:** All joints should be taped and finished with tape and joint compound, nail or screw heads should be finished with joint compound. Exterior angles are covered with G-P Metal Casing Beads and finished with joint compound.

Column Fireproofing

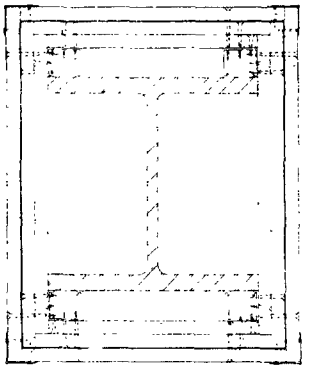
Fireproofing with G-P Firestop Gypsumboard provides a fast, efficient and economical method of protecting steel columns. Fire resistant assemblies of two, three and four hours are obtainable depending upon the number of layers of 5/8" or 1/2" G-P Firestop used. These layers are held in place by a combination of screws and metal studs. The two, three and four hour fire rated assemblies of Firestop have passed Official Fire Tests conducted by the Underwriters' Laboratories.

Fire Resistance—For three hour protection, two layers of 1/2" Firestop Type XXX can be used. Test No. X513 (UL 39-3 hour). Two hour protection can be obtained using 1 layer of 1/2" Firestop Type XXX. Test No. X520 (UL 20-2 hour). These are for heavyweight columns (14 W.F. 228).

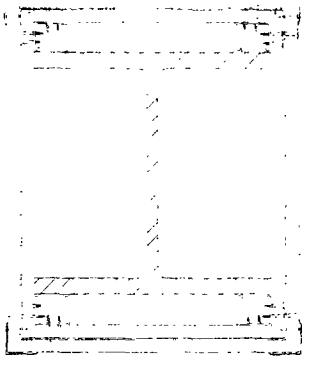
For lightweight columns (10 W.F. 49) use 4 layers of 5/8" G-P Firestop Type X for 4 hour protection, 3 layers for 3 hours. Test No. X509 (UL 18) and 2 layers for 2 hour, Test No. 517 (UL 8).

Lighter—As compared to other types of fireproofing, a dead load saving of from 50 to 75% can be realized with G-P Firestop Column Fireproofing.

Speed of Erection—G-P Firestop Gypsumboard can be installed quickly and easily when used for column fireproofing following G-P details. Minimum amount of the wire and adhesives are used.



ILLUSTRATION—THREE-HOUR fire rated steel column assembly with 5/8" Firestop. X509 (UL 18). Minimum size of column W10X49.



ILLUSTRATION—TWO HOUR fire rated steel column assembly with 5/8" Firestop. X517 (UL 8). Minimum size of column W10X49.

Shaft Liner™

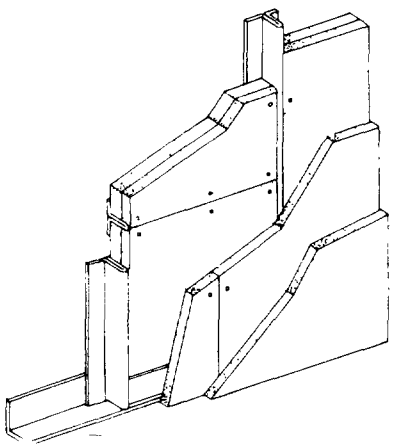
Georgia-Pacific

Gypsumboard Enclosure Systems

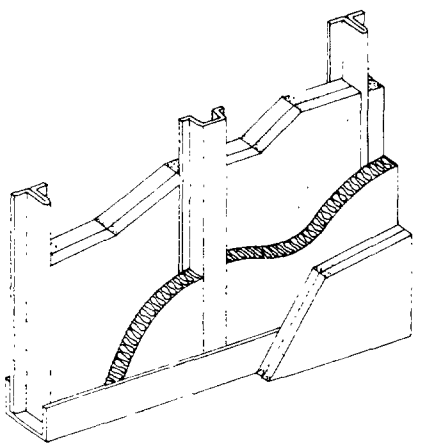
Description

Georgia-Pacific Shaft Liner™ is a gypsumboard partition for enclosing elevator shafts, stairs, smoke towers and other vertical openings. It is a non-load bearing wall, designed for resistance to uniform wind loads without excess deflection. Important advantages of the system are:

1. Much lighter weight than masonry.
2. Non-combustible.
3. Economical.
4. Can be completely erected from one side.
5. Practically eliminates the need for scaffolding.
6. Non-progressive system; panels can be individually removed for backside maintenance (prior to face layer application).
7. Minimum clean-up.
8. Full length panels not required (can be spliced).
9. Sound and fire rated.
10. Cavity and solid types available.



2 Hour Wall (Basic)
Fire Rated Both Sides



2 Hour Fire Rated Cavity Wall
Fire Rated Both Sides

The partition consists of a basic pre-laminated panel 1⅝" thick by 24" wide, which fits into a top metal "J" and bottom "L" runner. Metal "T" splines are inserted between each panel. The panels are subsequently secured to the "T" splines, and top and bottom runners. Installation of the facing layers and/or channel and surface finishing can be accomplished later to coincide with interior partitions.

This system meets the ASTM E119 requirements for 1 and 2 Hour Fire Resistive Classifications. It is also designed and tested to meet a variety of wind loads at various heights (see chart on page E/31). The standard gauge of the metal components is 20 gauge. Furring channel used in the cavity wall is 25 gauge.

The G-P Shaft Liner System is designed for versatile performance. Ease of construction from one side also makes this wall ideal for use in other vertical openings (such as stairwells). The "T" splines in the back side can be covered by erecting a layer of gypsumboard first before screw attaching the Shaft Liner panels to the metal components. The UL tested systems may be spliced vertically for ease of handling or greater heights.

The facing consists of layers of ½" or ⅝" G-P Gypsumboard. The exposed layer may be Dens-Cote® Base and Dens-Cote® Veneer Plaster, or G-P Tile Backer.

Installation

Basic 2 Hour System (UL U503) STC 40 (EST) #5000

Install the perimeter framing first. This consists of the top metal "J" and bottom "L" tracks. These components are to be secured with power driven fasteners, or equivalent, at 24" maximum centers. The 1⅝" Shaft Liner panels are inserted top first into the "J" track and pushed flush against the bottom angle runner. The "L" track and 1½" metal strip may be substituted for the "J" track at the top. These panels are separated by the "T" splines which are positioned so the flat, or flange, side faces the shaft. Type S-12 drill point screws 2"-2⅜" long are used, 24" o.c. to fasten the panel to the "T" splines. At the extreme top and bottom, screw the core to the runners, at points 2" on each side of the spline, using the drill point screws. Screws will protrude slightly on the unfinished shaft side.

To splice core panels, use 2' section of "T" spline at all horizontal butt joints. Stagger butt joints a minimum of 24". Two layers of ⅝" Georgia-Pacific Firestop® Gypsumboard 4' wide by wall height are then applied to the face side. Each is installed parallel to the Shaft Liner™ panels. The first layer is offset from the "T" spline by 12", and the second layer staggered 24" from the first. Installation is by ⅜" beads of adhesive or applying Georgia-Pacific Ready-Mix Joint Compound in strips with a gun. For improved sound reduction, adhesive or compound should fill the joints at each "T" spline. Caulk around perimeter of panel. The facing sheets are also secured with 1½"-1⅝" type G screws spaced 24" o.c. at edges and center (1st layer) and 16" o.c. at edges and center (2nd layer). Finish joints and screw heads in normal manner in preparation for the final decoration.

2 Hour Cavity Wall System (UL U514) STC 47 #6000

Install the perimeter and 1⅝" core unit as instructed in the basic 2 hour system. Install 25 gauge furring channel vertically to face of panels spaced 24" o.c., and offset 12" from "T" splines.

Fasten channels with 1½" type G screws 24" o.c. each side and at extreme top with 2⅜" type S-12 screws. Two layers of ½" Firestop Gypsumboard are then installed vertically and screw attached to the furring channel. The joints of first layer of gypsumboard should fall on channel and be fastened with 1" type S screws 12" o.c. along edges and 16" o.c. on intermediate channels. Stagger joints of

second layer 24" from first and fasten with 1⅝" type S screws 12" o.c. along edges and intermediate channels. Tape and finish joints. **For STC 47 rating,** #6000, install 1" fiberglass insulation* vertically between channels. **For STC 48,** #6250, install insulation* and 2 face layers of ⅝" Firestop Gypsumboard, use 1½" screws. **For STC 50,** #6500, install insulation* and 3 layers of ⅝" Firestop Gypsumboard.

2 Hour Chase Wall (O.S.U. T-4991) #8000

After erecting metal components and 1⅝" panel, attach G-P "L" angle runner horizontally at levels approximately 40" apart through core unit into "T" spline. Erect 2½", 25 gauge steel studs and track a minimum of 3" from core unit. Brace studs with angle runner. Apply one layer of ⅝" Firestop® to studs. See page E/33 for details.

Alternate 2 Hour System (O.S.U. T-4958) STC 39 #2000

Install framing and 1⅝" Shaft Liner panels in same manner as described for the Basic 2 Hour Wall (UL U503).

Two layers of regular ½" Georgia-Pacific Regular Gypsumboard, 4' wide by partition height are applied to the face side. Each is installed parallel to the Shaft Liner panels. Proceed with the application of these facing layers in the same manner as that for the Basic 2 Hour System (UL503).

Alternate 2 Hour System (U511) STC 39 #3000

Same as above except facing layers are ½" G-P Firestop.

1½ Hour Wall (O.S.U. T-4982) #1000

The "L", "J", and "T" components and the 1⅝" panel are erected in the same manner as in the Basic 2 Hour System. The one layer of ⅝" G-P Firestop® is laminated to the panel and secured with G screws 16" o.c. and 1" S-12 screws at extreme top and bottom. Offset joints from "T" splines by 12".

General Working Conditions

During cold weather, temperatures in the building should be maintained at not less than 50°F during application of acoustical sealants, adhesives, or joint treatment. There should be adequate ventilation to dispose of excessive moisture during these periods.

For steel frame construction, installation of top track should be completed before application of any spray-on fireproofing.

The poured concrete floor should be reasonably smooth in the area where the track is to be installed. If the track is installed close to the edge, the concrete may spall unless a fastening plate is set into the concrete to which the track can then be applied.**

The "T" spline and shaft liner panels should be no shorter than ¾" less than height of the shaft opening (floor to ceiling).

The "J" track can be used to eliminate top fastening of panels during initial placement. Working conditions of contractor can determine choice of metal to be installed at top. The strip should be 22 gauge, 1½" wide and secured with 2⅜" screws located 2" either side of "T" splines.

**When a separate plate is used it should be 12 gauge and the track may be attached with ½" S-12 No. 8 pan head screws 24 o.c.

Precautions

1. Georgia-Pacific Shaft Liner walls are non-load bearing.
2. Do not use in areas of unusually high moisture conditions.
3. Voids in solid walls created to accommodate mechanical piping, wiring, etc. should be filled with mineral fiber insulation. As an alternate, furred construction may be used.
4. Provide control joints at maximum 30 ft. intervals.
5. When hand rails or other heavy items are anchored to the Shaft Liner System, install 20 gauge metal strip between the Shaft Liner panels and facing layers.
6. 1" side of 1⅝" core panel must face shaft opening.

G-P Shaft Liner™ System Sound†/Fire†† Tests

SOUND TESTS BY GEIGER & HAMME			
System #	Description—Face Layers	* STC	Fire Rating
1000	Solid Wall—1 Layer ⅝" G-P Firestop®	—	1½ Hr.
6000	Cavity Wall—2 Layers ½" G-P Firestop® 1" Insulation	47	2 Hr.
6250	Cavity Wall—2 Layers ⅝" G-P Firestop® 1" Insulation	48	2 Hr.
6500	Cavity Wall—3 Layers ½" G-P Firestop®	49 EST.	2 Hr.
2000	Solid Wall—2 Layers ½" Regular Gypsumboard	39	2 Hr.
3000	Solid Wall—2 Layers ½" G-P Firestop®	39	2 Hr.
7000	Cavity Wall—3 Layers ⅝" G-P Firestop® 1" Insulation	50	3 Hr.
5000	Solid Wall—2 Layers ⅝" G-P Firestop®	40 EST.	2 Hr.
5500	Solid Wall—3 Layers ⅝" G-P Firestop®	44 EST.	2 Hr.
2500	Solid wall—3 Layers ½" G-P Firestop®	43 EST.	2 Hr.
8000	Chase Wall—1 Layer ⅝" G-P Firestop®	39 EST.	2 Hr.

†Based on ASTM E90
††Based on ASTM E119

SGP 0025202

*1" thick by 23" wide masonry or mobile home type insulation with density of ¾# to 1# per cu. ft.

Shaft Liner Height Selection Table

Georgia-Pacific

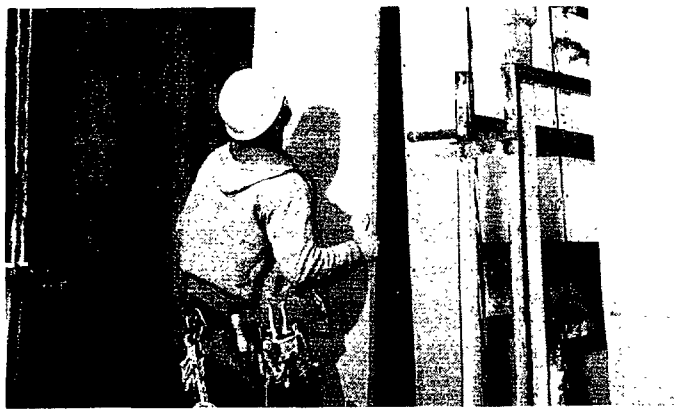
Fire Test		Wall Thickness	Allowable Deflection L = Wall Height	LIMITING HEIGHT FOR UNIFORM LATERAL LOAD 5 psi	7.5 psi	10 psi	12.5 psi	15 psi
Shaft Side	O.S.U. T-4982	2¼"	L/120	14' 3"	12' 5'	11' 4"	10' 6"	9' 10"
			L/240	11' 4"	9' 10"	9'	8' 5"	7' 10"
Both Sides	U.L. U514	3½"	L/120	15' 10"	13' 10"	12' 7"	11' 8"	11'
			L/240	12' 7"	11'	10'	9' 3"	8' 9"
Both Sides	U.L. U514	3¾"	L/120	16' 5"	14' 4"	13' 1"	12' 1"	11' 4"
			L/240	13' 1"	11' 4"	10' 4"	9' 7"	9'
Both Sides	U.L. U514	4"	L/120	17'	14' 10"	13' 6"	'2 6"	11' 9"
			L/240	13' 6"	11' 9"	10' 9"	9' 11"	9' 4"
Shaft Side	O.S.U. T-4958	2⅝"	L/120	17' 5"	15' 2"	13' 10"	12' 10"	12' 1"
			L/240	13' 10"	12' 1"	10' 11"	10' 2"	9' 7"
Shaft Side	U.L. U511	2⅝"	L/120	17' 5"	15' 2"	13' 10"	12' 10"	12' 1"
			L/240	13' 10"	12' 1"	10' 11"	10' 2"	9' 7"
Both Sides	U.L. U514	4⅜"	L/120	17' 9"	15' 6"	14' 1"	13' 1"	12' 4"
			L/240	14' 1"	12' 4"	11' 2"	10' 5"	9' 10"
Both Sides	U.L. U503	2⅞"	L/120	19'	16' 8"	15' 1"	14'	13' 2"
			L/240	15' 1"	13' 2"	12'	11' 2"	10' 6"
Both Sides	U.L. U503	3⅛"	L/120	20' 4"	17' 9"	16' 2"	15'	14' 2"
			L/240	16' 2"	14' 2"	12' 10"	11' 11"	11' 2"
Shaft Side	U.L. U511	3½"	L/120	22'	19' 2"	17' 5"	16' 2"	15' 3"
			L/240	17' 5"	15' 3"	13' 10"	12' 10"	12' 1"
Shaft Side	O.S.U. T-4991	25 ga. 2½" Stud	L/240	14'	12'	10'	8'	—
		16 ga. 3⅝" Stud	L/120	23'	20' 2"	18' 4"	17'	16'
			L/240	18' 3"	16'	14' 6"	13' 6"	12' 8"

PRODUCT SPECIFICATIONS

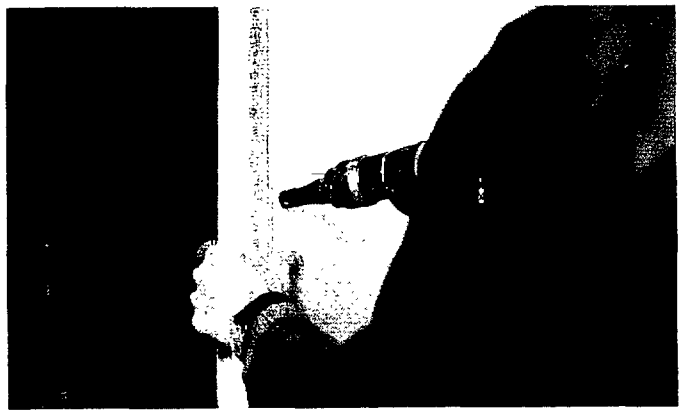
Gypsumboard, ½" and ⅝"	ASTM C 36	Tile Backer	ASTM C630
Gypsumboard, 1"	ASTM C442	Special Metal for Components	ASTM C446
Dens-Cote® Base, ½" and ⅝"	ASTM C588	Furring Channel (25 gauge)	ASTM C645
Dens-Cote® Veneer Plaster	ASTM C587		

SGP 0025203

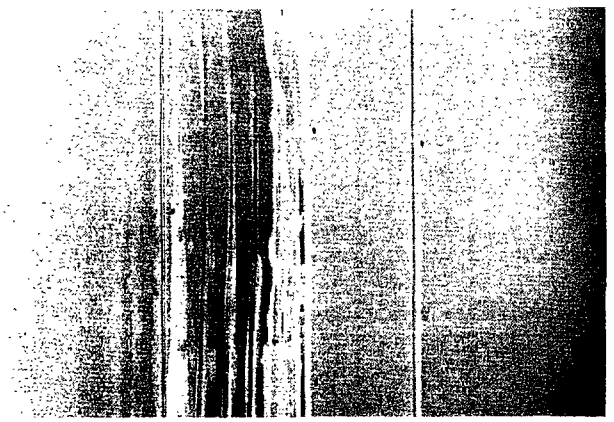
1. INSTALLING FLOOR TRACK.



2. INSTALLING CORE PANEL.

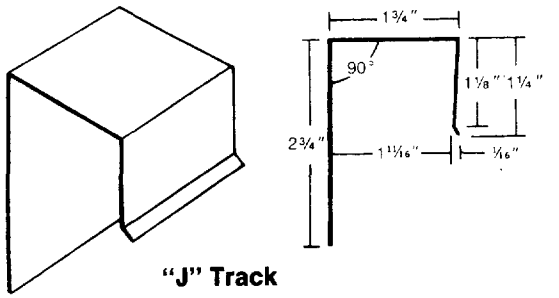


3. ATTACHING CORE TO T-SPLINE.

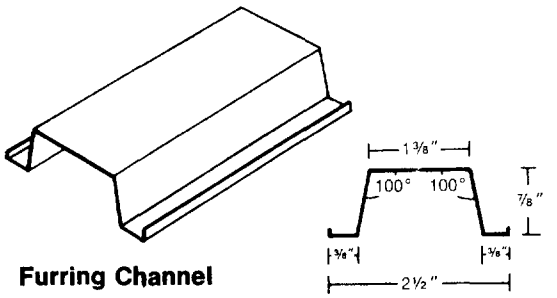


4. APPLYING FINISH LAYERS.

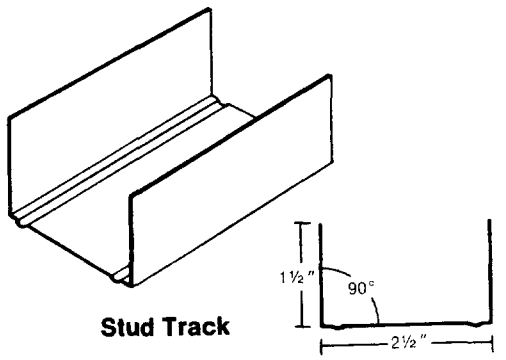
Metal Components



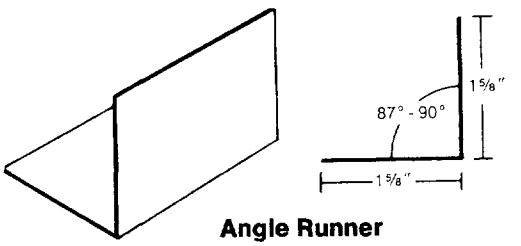
"J" Track



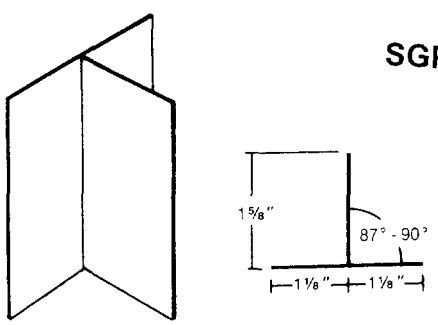
Furring Channel



Stud Track



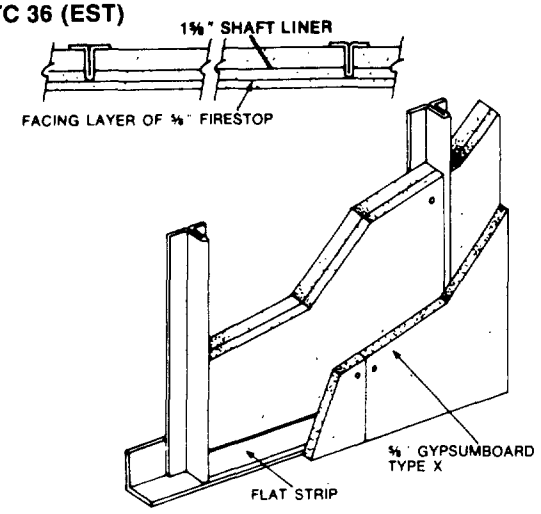
Angle Runner



"T" Spline

SGP 0025204

STC 36 (EST)

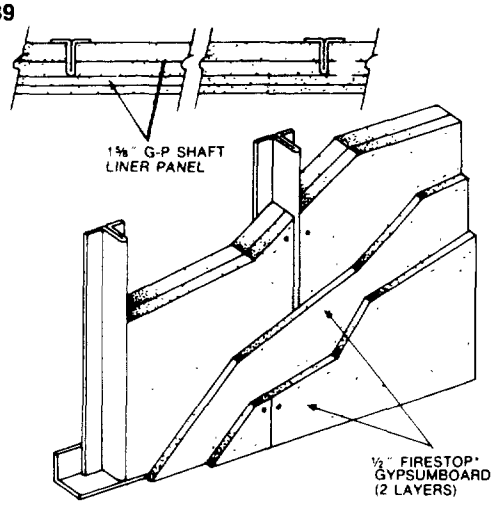


FIRE TEST OSU T-4982

System #1000

1½ HOUR FIRE RATED SOLID WALL ASSEMBLY

STC 39

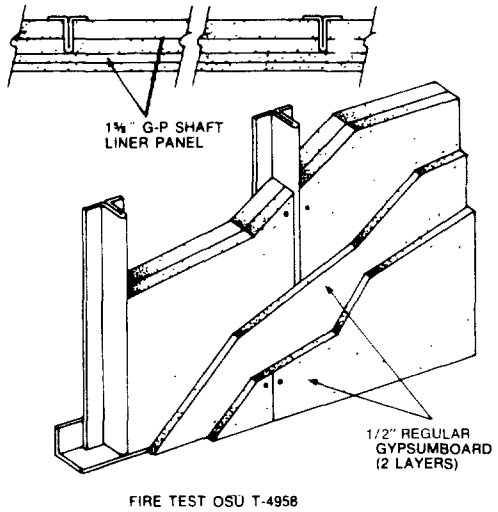


FIRE TEST OSU T-4958

System #3000

2 HOUR WALL (ALTERNATE)

STC 39

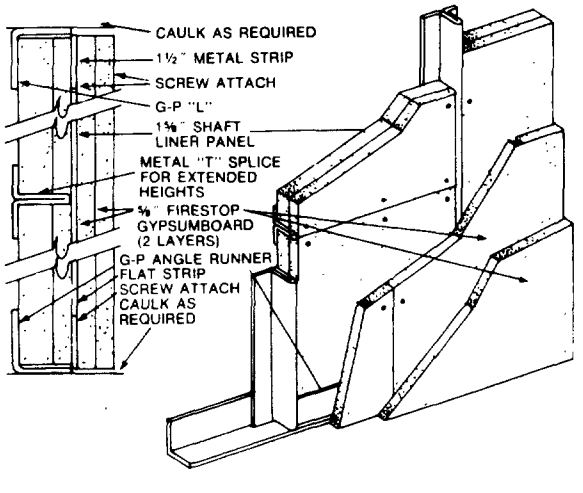


FIRE TEST OSU T-4958

System #2000

2 HOUR WALL (ALTERNATE)

STC 40

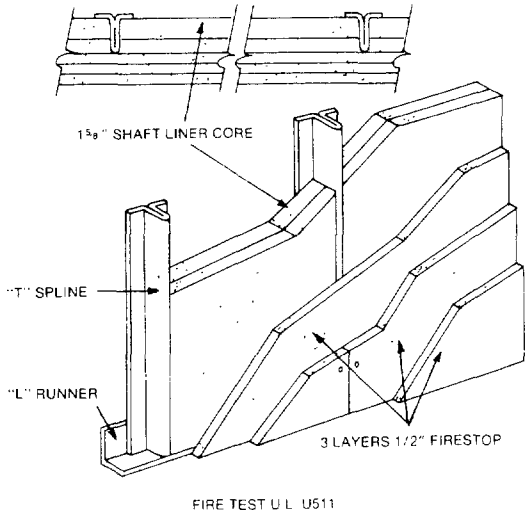


FIRE TEST U.L. U503

System #5000

2 HOUR WALL (BASIC)
Rated Both Sides

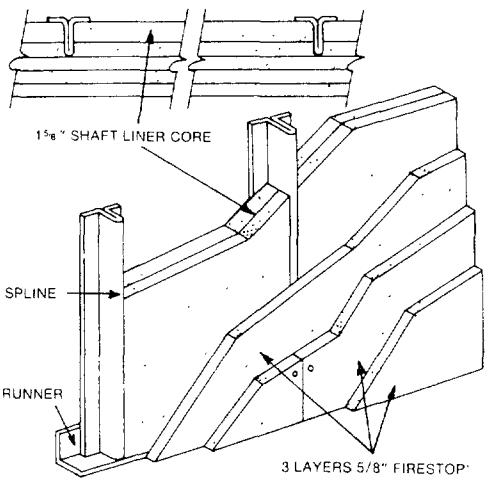
STC 43



FIRE TEST U.L. U511

System #2500

STC 44

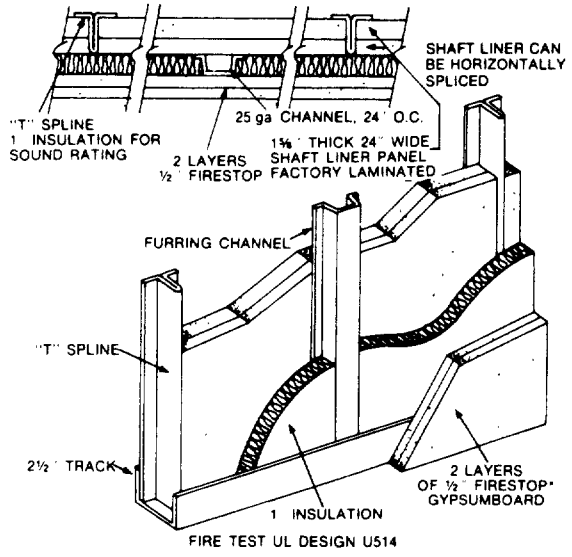


FIRE TEST U.L. U503

System #5500

SGP 0025205

STC 47

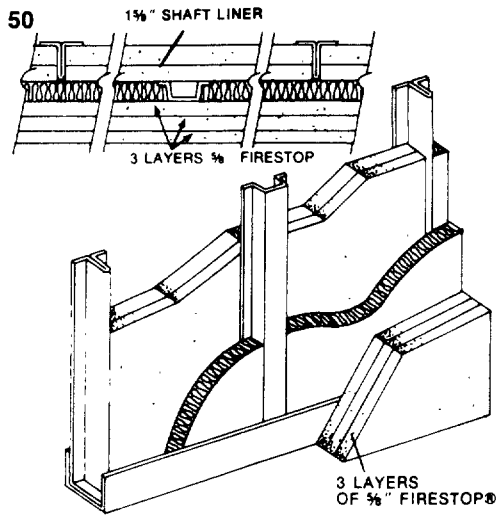


FIRE TEST UL DESIGN U514

System #6000

2 HOUR FIRE RATED
CAVITY WALL RATED BOTH SIDES

STC 50

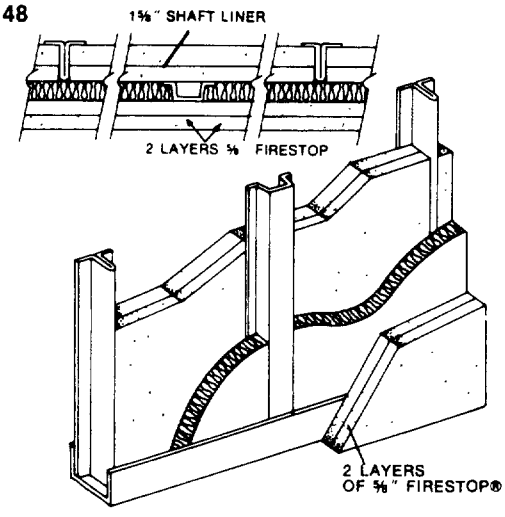


FIRE TEST UL DESIGN U514

System #7000

2 HOUR FIRE RATED
CAVITY WALL RATED BOTH SIDES

STC 48

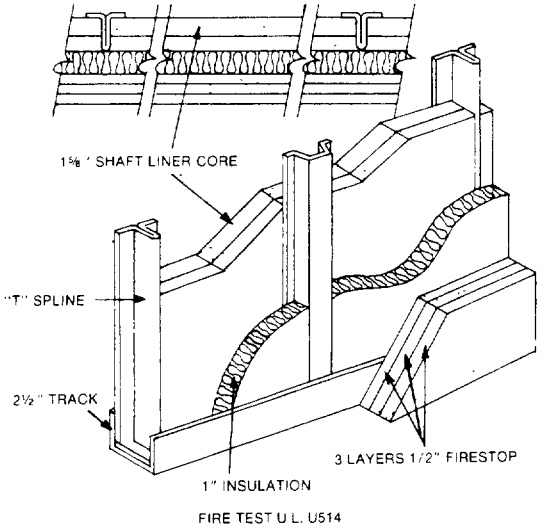


FIRE TEST UL DESIGN U514

System #6250

2 HOUR FIRE RATED
CAVITY WALL RATED BOTH SIDES

STC 49

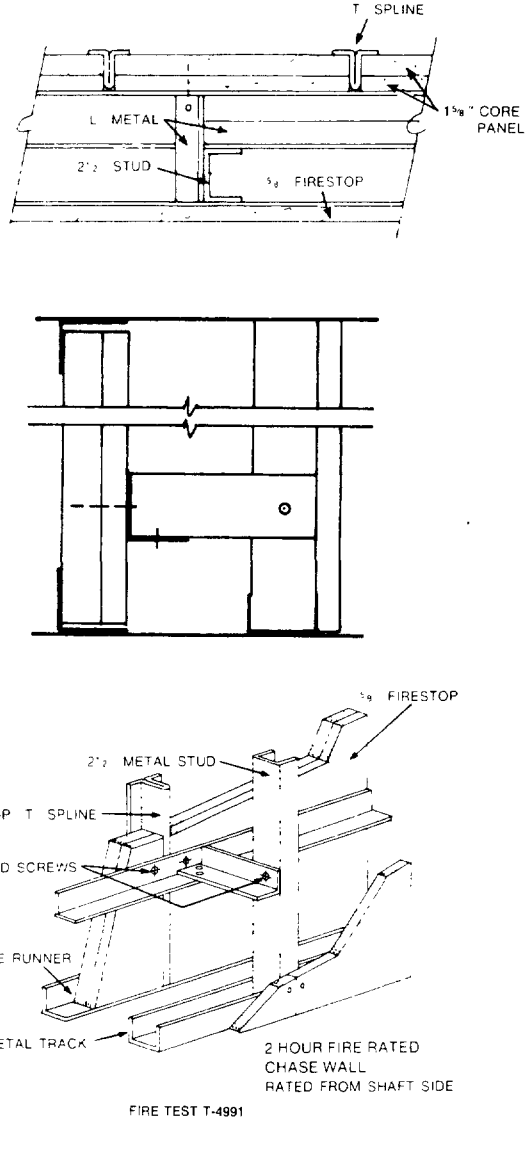


FIRE TEST U.L. U514

System #6500

2 HOUR FIRE RATED
CAVITY WALL RATED BOTH SIDES

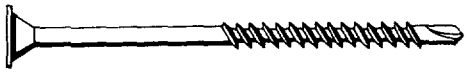
STC 39



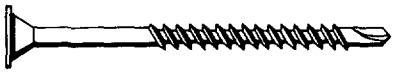
FIRE TEST T-4991

System #8000

Gypsumboard screws designed specifically for Shaft Liner systems.



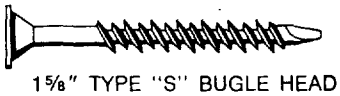
2⅜" TYPE "S"-12 BUGLE HEAD



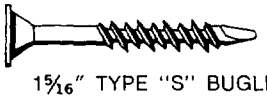
2" TYPE "S"-12 BUGLE HEAD

⅜" TYPE "S"-12 PAN HEAD

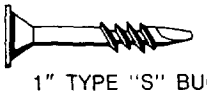
2½" TYPE "S" BUGLE HEAD



1⅝" TYPE "S" BUGLE HEAD



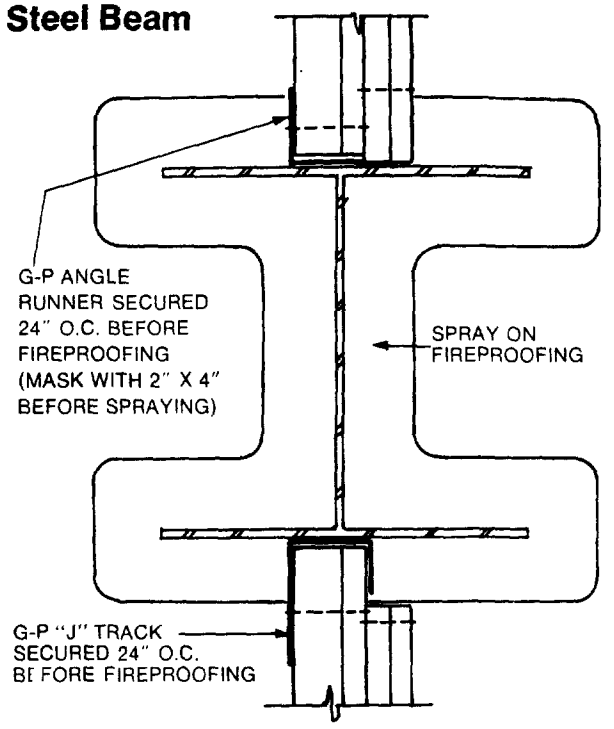
1⅝₁₆" TYPE "S" BUGLE HEAD



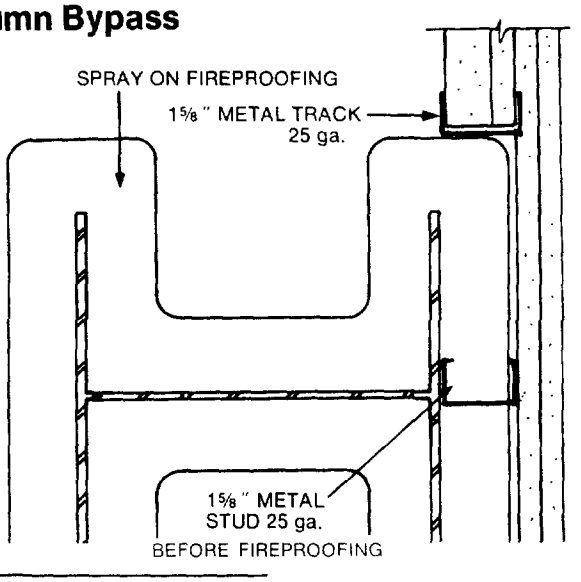
1" TYPE "S" BUGLE HEAD

1½" TYPE "G" BUGLE HEAD

Steel Beam

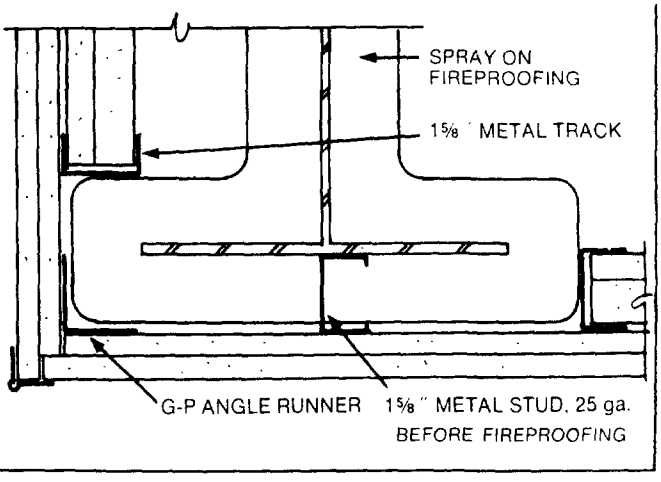


Column Bypass

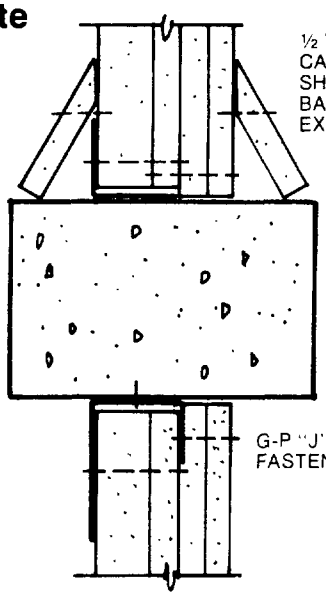


Corner Column

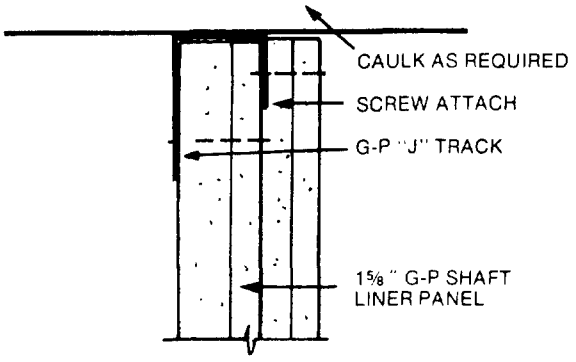
SGP 0025207



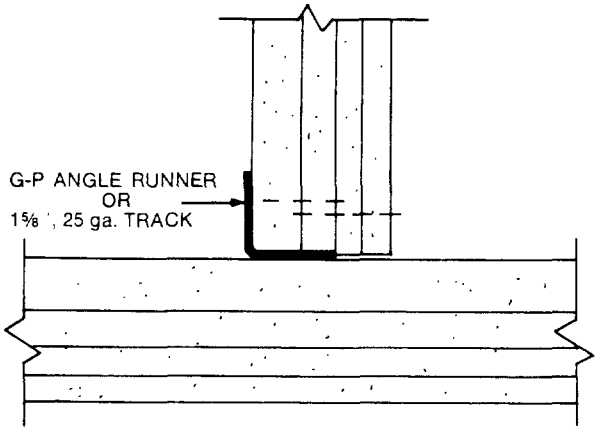
Concrete Beam



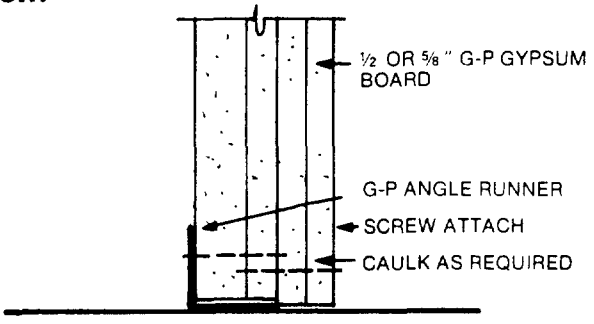
Top



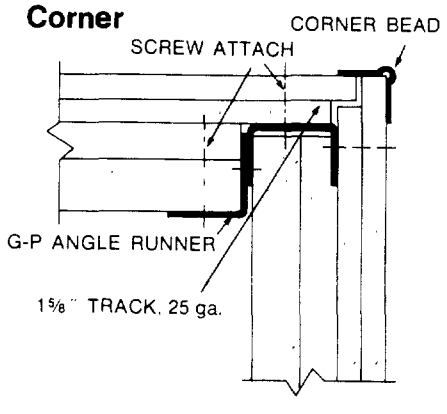
Wall Intersection



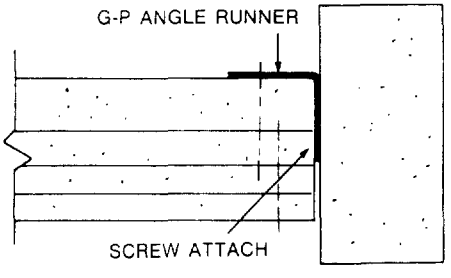
Bottom



Corner



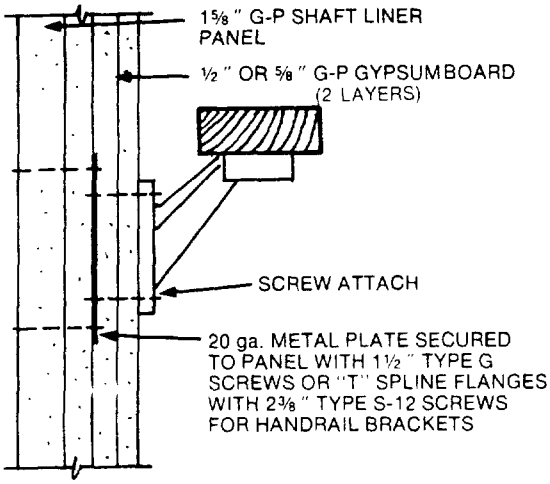
End



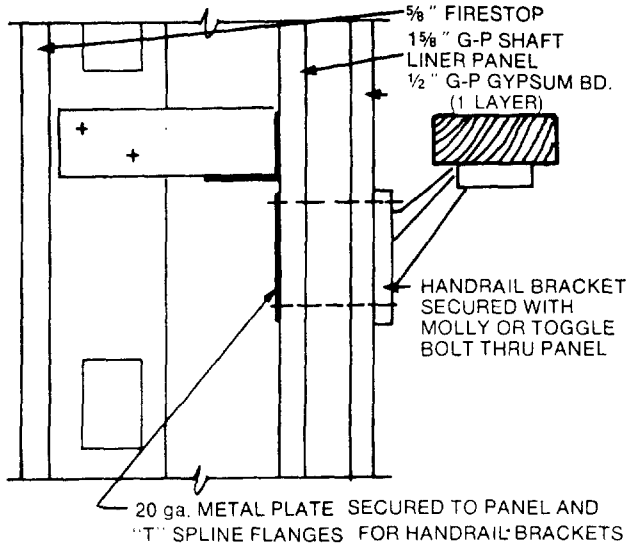
SGP 0025208

Handrail Attachments

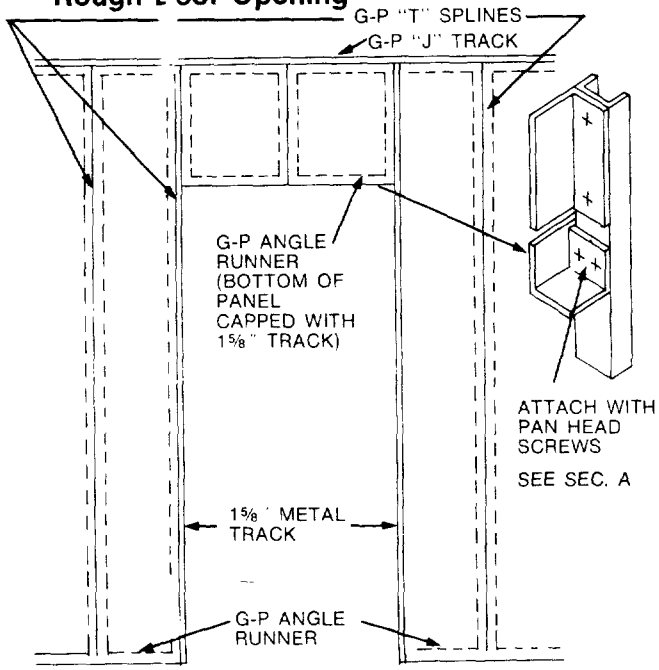
SOLID WALL



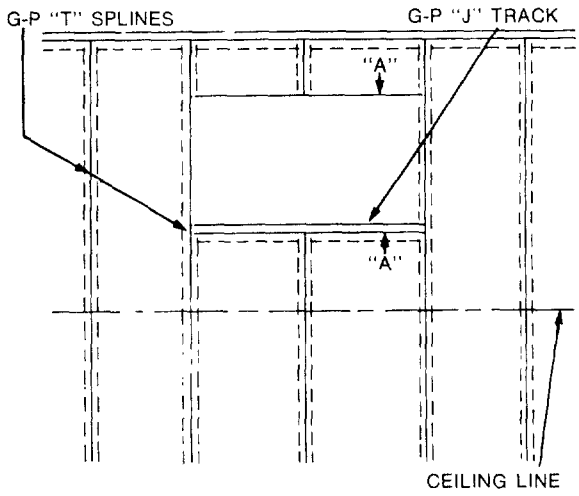
CHASE, OR FURRED WALL



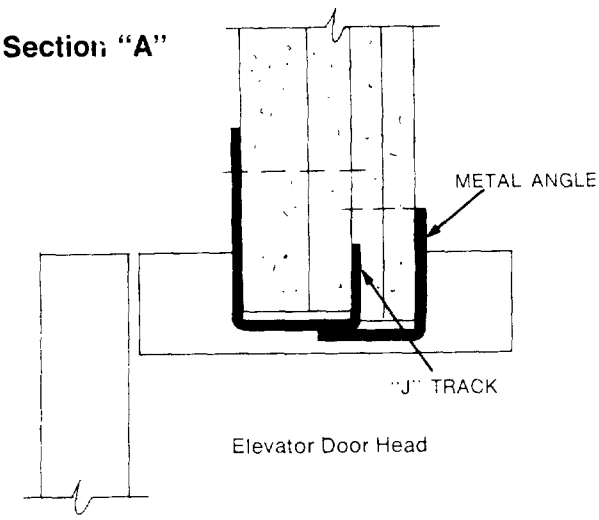
Rough Door Opening



Duct Opening



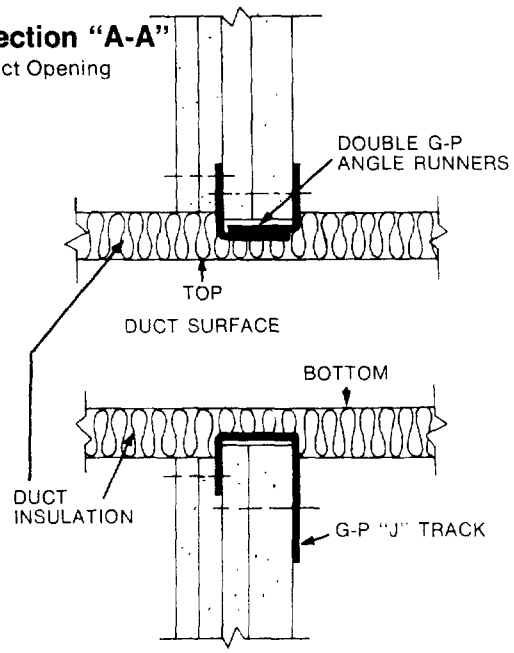
Section "A"



Elevator Door Head

Section "A-A"

Duct Opening



SGP 0025209

ETERNAWALL™

Combines gypsumboard with the beauty of sheet vinyl

These fire-resistant panels are factory laminated with a quality, washable vinyl sheet providing a permanent scuff, crack and chip-resistant surface. Colors are fade-resistant and the texture or design will not be impaired when cleaned.

Eternawall panels are available in 12 standard colors and 3 simulated woodgrains plus 15 new vinyl surfaces, including 10 colors in G-P's Burlap texture, 2 colors in weave and 3 new woodgrains. The long edge is completely wrapped with vinyl and eased to form a modified beveled edge*.

Georgia-Pacific Firestop® Eternawall™ is available for use when the wall construction requires the gypsumboard to be of fire rated construction. Firestop® Eternawall™ has a gypsumboard base containing greater glass fiber reinforcement and unexpanded vermiculite.

Specifications

All vinyl surfaced gypsumboard scheduled and/or indicated on the drawings shall be Georgia-Pacific Eternawall™ as manufactured by the Gypsum Division of Georgia-Pacific Corporation. The panel construction shall consist of supported or unsupported vinyl of "wall surfacing grade" factory laminated to G-P Regular or Firestop® Gypsumboard. The long panel edges shall be a modified bevel and completely wrapped with vinyl. The colors and patterns shall be as selected from the Eternawall™ Standard Line or special new colors and textures. (See page 4 for colors.)

Demountable Partitions

Demountable wall systems are installed by using any of the appropriate or approved color-matched moldings. To laminate to existing wall surfaces, use G-P Laminating Compound and secure panels mechanically at top and bottom plates. Panels may be applied with adhesive directly to metal studs, wood framing or furring strips. For application directly to masonry walls, use G-P Grabit™ Masonry Adhesive.

*Colors are listed on Page 4. Swatches are available in Sweets Design Catalog or by writing Georgia-Pacific Corporation, 900 S.W. Fifth, Portland, Oregon 97204.

PRODUCT DATA

Thickness: ¼", ⅜", ½" and ⅝" Regular Gypsumboard, ½" and ⅝" Firestop® Gypsumboard. ½" Regular Eternawall™ is the stock thickness.

Standard sizes: 4' x 8' and 4' x 10'. Special lengths available upon request in one foot increments from 4' x 7' to 4' x 16'. Special sizes (length and width) available on special order basis.

FIRE HAZARD CLASSIFICATION

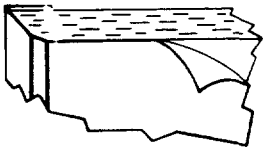
⅜", ½" and ⅝" gypsumboard consisting of gypsum core, surfaced on both sides with paper or with a vinyl facing on one side.

	Fire Hazard Classification Basic Board	With Vinyl Facing
Flame Spread	15	25
Fuel Contributed	15	10
Smoke Developed	0	20-50

Classified by Underwriters' Laboratories, Inc.
UL labeled Eternawall available.

EDGE DETAIL

Modified Beveled Edge

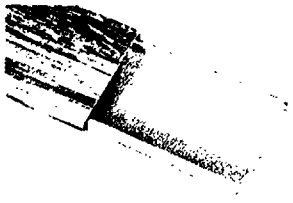


Color coated stainless steel nails are available to match all Standard colors and woodgrains. Trim accessories are available in 8' x 10' lengths to match all standard colors and woodgrains.

Matching moldings are available for the new Eternawall™ colors and textures from Keller Products, Inc., 41 Union Street, Manchester, New Hampshire 03103. Snap-on type moldings are not available for the new special order colors.

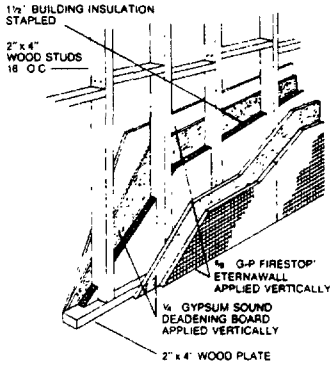
TRIM ACCESSORIES

Snap-On Corner Bead

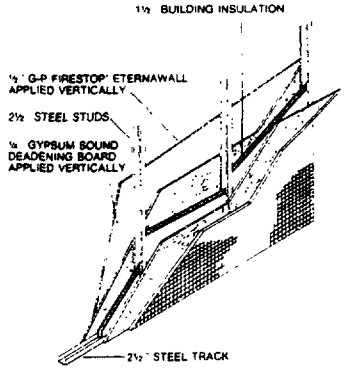


Snap-On Interior Trim

SOUND CONTROL PARTITIONS—Eternawall™ Surfaced. These fire and sound rated vinyl-surfaced gypsumboard systems eliminate the need for battens. G-P Firestop® Eternawall™ is laminated directly to G-P ¼" incombustible Gypsum Sound Deadening Board. They are not only simple to install but they are inexpensive and provide a very durable wall, and very high STC ratings.



Fire Test U.L. U312
Fire Rating—1 Hour Combustible
STC 50 System #106



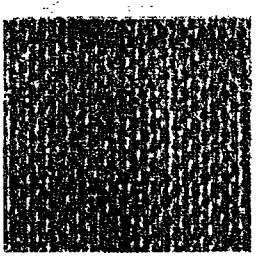
Fire Test U.L. U410
Fire Rating—1 Hour Incombustible
STC 50 System #306

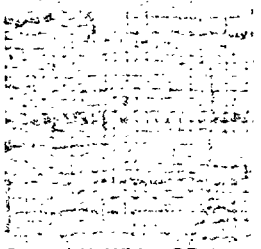
*Insulation not required for fire rating.

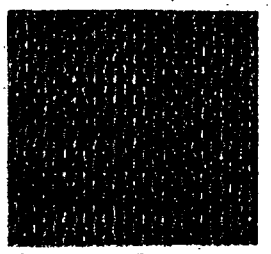
SGP 0025210

Georgia-Pacific

Standard colors


Willow Green GP-701


Snowdrift White GP-651


Tangerine GP-702

Stucco GP-705

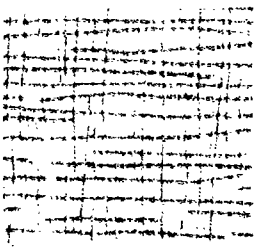
Buff GP-704

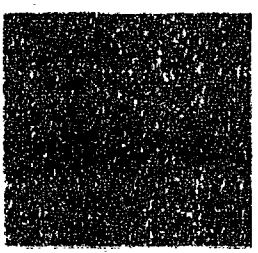

Walnut GP-682

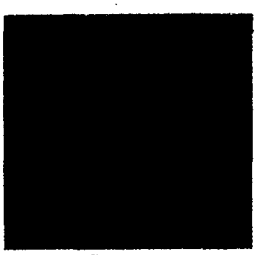
Alabaster GP-703

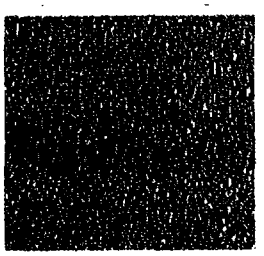
Fawn GP-652


Cherry GP-681


Flax GP-688


Gold GP-684

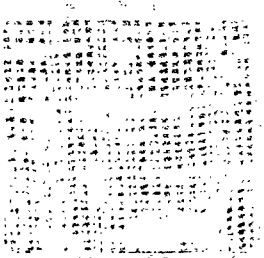

Pecan GP-683

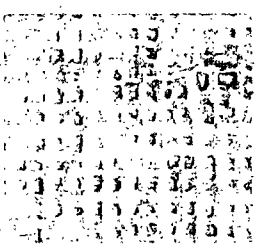

Avocado GP-685

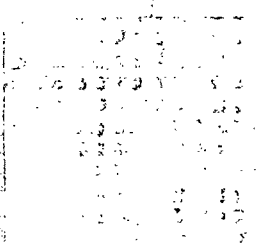
Beige GP-687

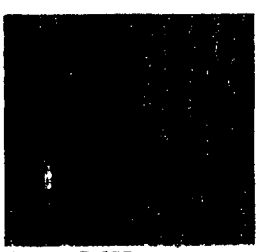
White GP-686

New colors and textures

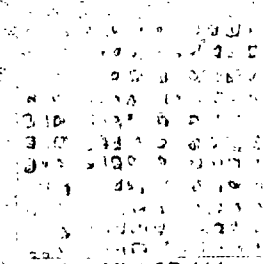

Honey Maple GP-206

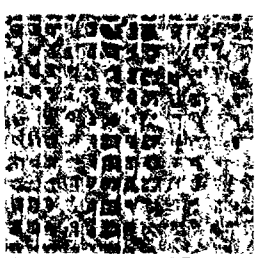

Desert Yellow GP-110

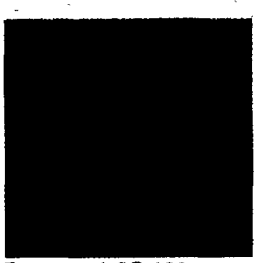

Powder Brown GP-102

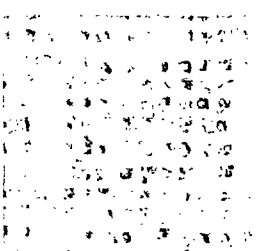

Teak GP-695

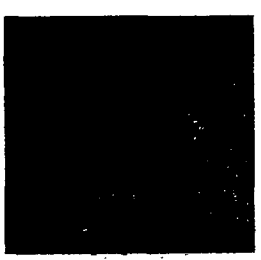
Pebble White GP-101

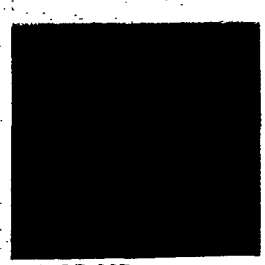

Smokey Mint GP-114

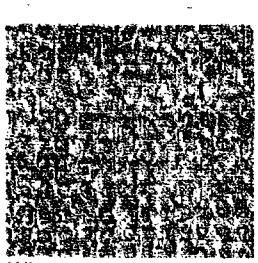

Chocolate Malt GP-107

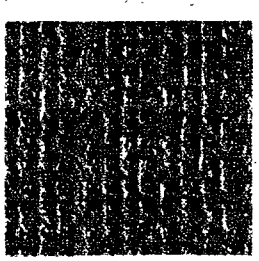

Rosewood GP-696


Spanish Haze GP-112

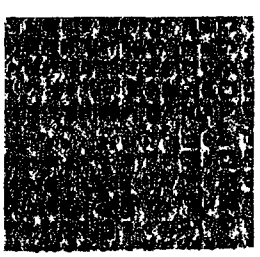

Autumn Orange GP-105


Oak GP-697

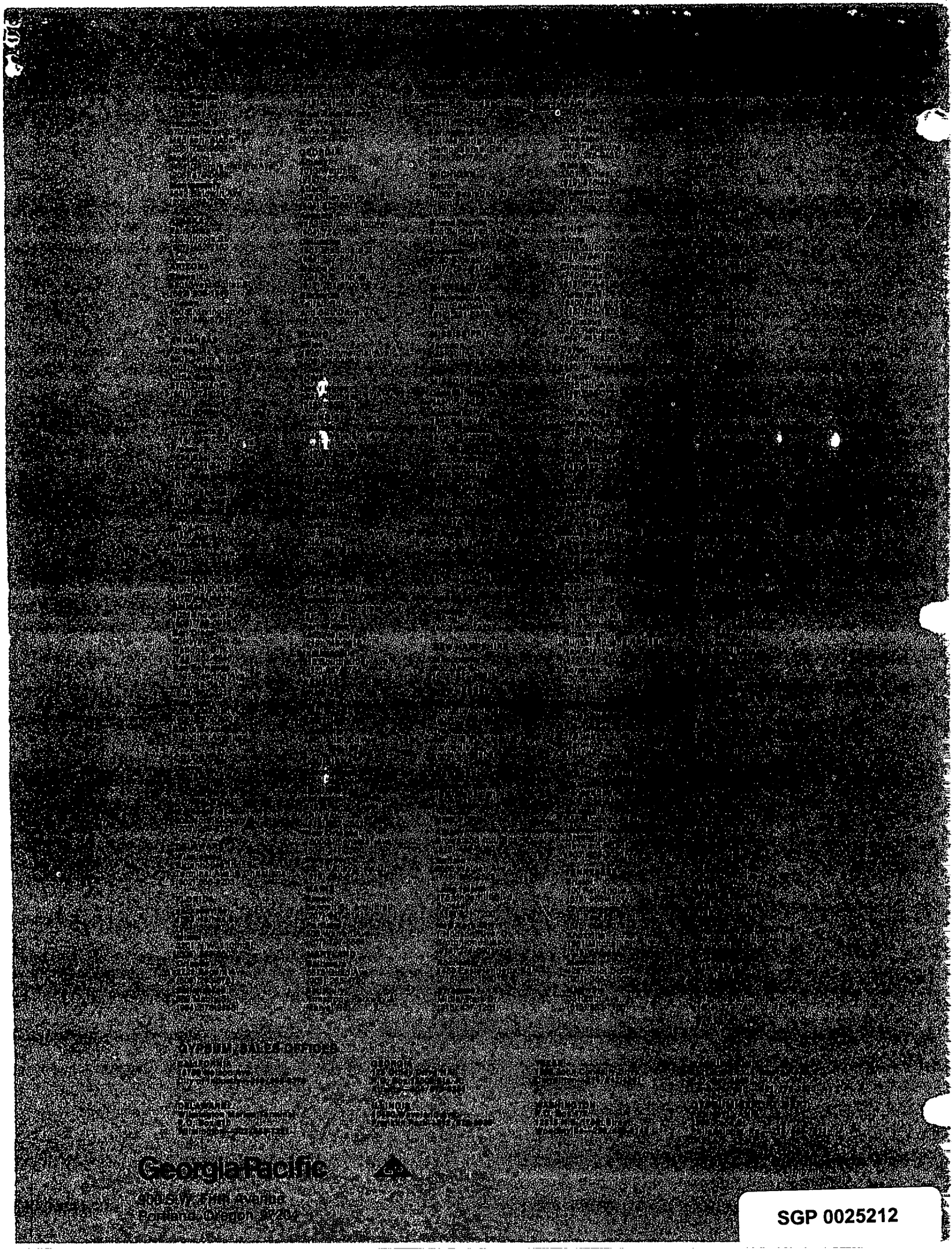

Winter Green GP-115


Burnt Sugar GP-108

Shadow Beige GP-205


Tarnished Gold GP-111

SGP 0025211



Georgia-Pacific

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