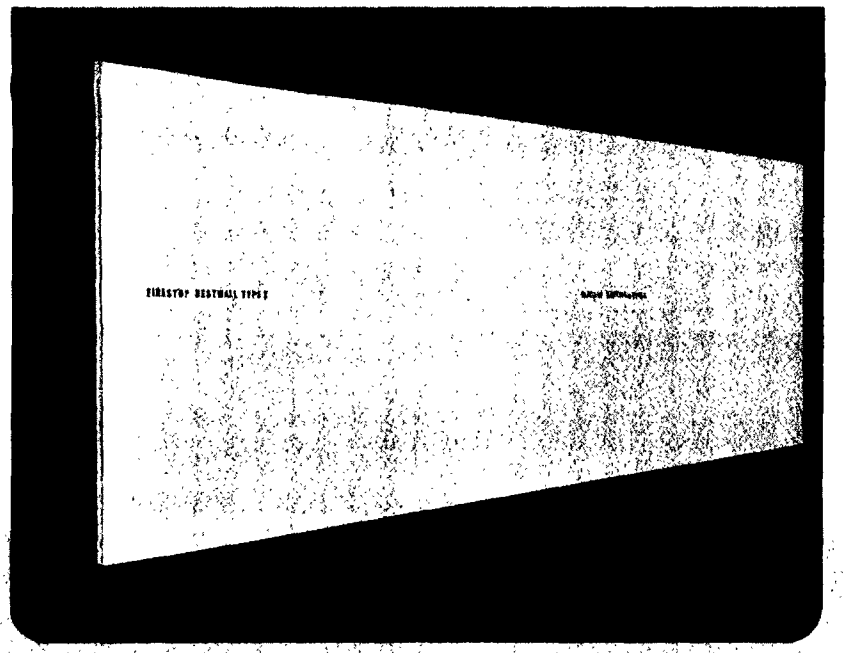
BESTWALL

FIRESTOP

PLAINTIFF'S EXHIBIT

GP-804



Improved Best all Firestop is a gypsum wallboard reinforced with specific amounts of incombustible glass fibers and unexpanded vermiculite. Under heat this results in a thermal stabilized core which provides increased fire protection. Now, through greater glass fiber reinforcement, Firestop's fire resistance has been further increased, as shown by the chart on the back of this sheet. The higher glass fiber content also gives increased strength and better nailing qualities.

Bestwall Firestop in various assemblies carries ratings of 45 minutes to 3 hours fire resistance. These ratings meet Building Code requirements for interior wall and ceiling construction in buildings of all types, from wood frame to highly incombustible, and for various occupancies of residential, public, and commercial character.

• Extra glass fiber content gives greater protection, additional flexural strength to minimize breakage in handling and installation, and better nailing qualities • Various assemblies provide 45 minutes to 3 hour fire protection • No joint treatment of any kind is required to obtain fire resistant ratings • One of the lowest cost 2 hour fire resistive incombustible floor and ceiling assemblies available • Large, lightweight panels handle easily • Official Fire Hazard Classification by U.L. 10-15 Flame-spread • U.L. Label Service Symbol appears on twin mounting tape binding each bundle of two pieces • ½" or ⅝" "Besrwall Firestop Type 'X' " is marked frequently along the center so that Firestop is easy to identify when in place.

Bestwall Firestop is recommended where fire resistance is desired, and/or for Building Code Requirements of 45 minutes to 3 hours for interior wall and ceiling construction in residential, commercial and public buildings.

Thickness: ½", ⅝"

Length: 6' to 16' (in even feet)

Width: 4' (2' on order)

Edges: Tapered or Square (Tongue and Groove backer only)

Packaging: Twin Mounted, end taped

Application: Horizontal application is recommended for new improved Firestop. Start application in upper corner, working across and down. Either cut openings out of full panels or plan joints to occur on the studs nearest the center of the openings. No joint treatment or further surface treatment of any kind is required.

Nails	Wallboard Thickness	Nail	Spacings Walls	Ceilings
5d—1⅝" long—15/64" head—13½ ga.	½"	5d Cooler	7"	6"
6d—1⅞" long—¼" head—13 ga.	⅝"	6d Cooler	7"	6"
Drywall Screws	½" or ⅝"	Length Varies	12"	

(over)

SGP 0025281

A.I.A. FILE NO. 23-L
N.A.H.B. INDEX NO. 340

GEORGIA-PACIFIC / BESTWALL GYPSUM DIVISION
PAOLI, PENNSYLVANIA 19301

FIRE RESISTANCE RATINGS POSSIBLE WITH BESTWALL FIRESTOP

CONSTRUCTION	THICK-NESS	WEIGHT LB/SQ.FT.	WALL SURFACE	FIRE RESISTANCE RATING 1	FIRE RESISTANCE TEST REF.	MODEL BLDG. CODE APPROVALS
PARTITIONS:	4⅜"	5.2	⅜" Bestwall Firestop, Both sides	30 Min.	EST.	—
2" x 4" Wood Studs:	4⅜"	5.9	½" Bestwall Firestop, Both sides	45 Min.	U.L. #1	B*, C
16" O.C. Load bearing	4⅜"	6.0	½" Bestwall Firestop, Both sides, with Mineral Wool in stud space	1 Hr.	BMS 92	B*, C
except when noted "N".	5½"	—	⅜" Bestwall Firestop, 2 layers both sides	1 Hr.	U.L. #6	—
	4⅞"	7.0	⅝" Bestwall Firestop, Both sides	1 Hr.	U.L. #5	A B C
	5½"	9.5	⅝" Bestwall Firestop, 1 layer one side, 2 layers other side	1½ Hr.	EST.	—
	6⅛"	12.0	⅝" Bestwall Firestop, 2 layers each side	2 Hr.	T-194	A B C
	5⅛"	8.5	⅝" Bestwall Firestop, over ½" sound deadening board both sides	1 Hr.	T-3006	A, C*
(N)	—	13.4	⅝" Bestwall Firestop, 2 layers each side staggered studs	2 Hr.	EST.	—
	5⅛"	5.4	⅝" Bestwall Firestop, 1 layer nailed one side, 1 layer on resilient furring other side	1 Hr.	EST.	—
	5⅛"	5.4	⅝" Bestwall Firestop, 1 layer nailed one side, 1 layer on resilient furring other side plus fiber glass insulation in stud space	1 Hr.	T-3127	A, C*
	6"	8.1	⅝" Bestwall Firestop, 2 layers one side, 1 layer on resilient furring other side	1½ Hr.	EST.	—
Nailable Steel Stud:						
Load Bearing	4⅞"	6.5	⅝" Bestwall Firestop, 1 layer each side	1 Hr.	T-209	A B C
3⅝" 24" O.C. (N)	4⅞"	6.5	⅝" Bestwall Firestop, 1 layer each side	1 Hr.	U.L. #2	A B
	6⅛"	11.5	⅝" Bestwall Firestop, 2 layers each side	2 Hr.	EST.	—
Screw Type Steel Stud:						
Non Load Bearing						
1⅝" 24" O.C.	2⅞"	5.4	⅝" Bestwall Firestop, 1 layer each side	1 Hr.	T-2316	A, C*
3⅝" 24" O.C.	4⅝"	6.0	⅝" Bestwall Firestop, 1 layer each side	1 Hr.	T-2016	A B
2½" 24" O.C	3 15/16"	4.2	½" Bestwall Firestop over 7/16" Noise Stop Board one side, ½" Bestwall Firestop other side, fiber glass insulation in stud space	1 Hr	T-3500	—
2½" 24" O.C	3¾"	—	⅝" Bestwall Firestop, 1 layer each side, face layer Eternawall (movable partition)	1 Hr.	T-2898	A
3⅝" 24" O.C	5½"	8.1	⅝" Bestwall Firestop, 1 layer one side, 2 layers other side	1½ Hr.	EST.	—
3⅝" 24" O.C.	5½"	8.1	⅝" Bestwall Firestop, 1 layer one side, fiber glass insulation in stud space, 2 layers other side	1½ Hr.	T-3126	A
1⅝" 24" O.C.	3⅞"	8.4	⅝" Bestwall Firestop, 1 layer one side, fiber glass insulation in stud space, 1 layer ⅝" Bestwall Firestop over 1" core board other side	1½ Hr.	EST.	—
2½" 24" O.C	5"	10.4	⅝" Bestwall Firestop, 2 layers each side	2 Hr.	T-2557	A
	4½"	8.0	½" Bestwall Firestop, 2 layers each side	2 Hr.	T-3218	A, B*, C*
3⅝" 24" O.C.	6⅛"	10.4	⅝" Bestwall Firestop, 2 layers each side, Eternawall face layer (movable partition)	2 Hr.	T-2406	A B C
3⅝" 24" O.C.	6⅛"	11.0	⅝" Bestwall Firestop, 2 layers each side	2 Hr.	EST.	—
3⅝" 24" O.C.	6"	8.8	⅝" Bestwall Firestop, 2 layers one side, 1 layer over ½" fiber glass board other side	2 Hr.	EST.	—
3⅝" 24" O.C.	6⅛"	11.1	⅝" Bestwall Firestop, 2 layers each side, fiber glass insulation in stud space	2 Hr.	EST.	—
Metal Faced						
Non Load Bearing						
Steel Faced Wall						
Elwin G. Smith & Co Inc.	—	—	½" Bestwall Firestop, 4 layers	2 Hr.	U.L. #12	C*
Steel Faced Wall						
(Walcon Corp)	—	—	½" Bestwall Firestop, 4 layers	2 Hr.	U.L. #10	C*
Aluminum & Steel Unit Part.						
(R.C. Mahon Co.)	—	—	½" Bestwall Firestop, 5 layers	2 Hr.	U.L. #9	C*
(R.C. Mahon Co.)	—	—	½" Bestwall Firestop, 4 layers	2 Hr.	U.L. #5	C*
(R.C. Mahon Co.)	—	—	½" Bestwall Firestop, 2 layers each side	3 Hr.	U.L. #8	C*
(R.C Mahon Co)	—	—	½" Bestwall Firestop, 5 layers	3 Hr.	U.L. #7	C*
Steel Faced Wall						
(H.H. Robertson Co)	—	—	½" Bestwall Firestop, 2 layers each side	2 Hr.	U.L. #8	C*
Semi-Solid:			**Bestwall Hummer System "B"**			
Gypsum Stud	2¼"	7.2	⅝" Bestwall Firestop, 1 layer each side 1" x 6" Rib 24" O.C.	1 Hr.	U.L. #10	A B C
Non Load Bearing	4¼"	7.9	⅝" Bestwall Firestop over ½" Sound Deadening Board each side of 2½" x 3" Gypsum Rib 24" O.C.	1 Hr.	T-3128	A
Solid Gypsum Board	2¼"	9.1	⅝" Bestwall Firestop each side 1" Core Board	2 Hr.	EST.	—
Double Solid Gypsum Board	6"	9.5	⅜" Bestwall over ½" Bestwall Firestop, each side 1" ribs	1½ Hr.	U.L.	A*, B*
	4"	13.4	⅝" Bestwall Firestop, 2 layers each side 1" Rib	2 Hr.	U.L. #7	A B C
	5"	13.4	⅝" Bestwall Firestop, 2 layers each side 1" Rib	3 Hr.	U.L. #5	A B C
EXTERIOR WALL:	5"	—	⅝" Bestwall Firestop, 1 layer each side 1¼" x 6" Gypsum Rib with exterior Stran-Wall (S.E. Panel)	1 Hr.	T-3039	—
S.E. Galv. Panels						
2" x 4" Wood Studs:	5"	—	*Interior.* ⅝" Bestwall Firestop. Exterior: ½" gypsum sheathing and wood siding or other	1 Hr.	T-99 BMS 191-192	—
16" O.C.	—	—	Interior: ⅝" Firestop, 2 layers. Exterior. ½" Bestwall Gypsum Sheathing 2" x 8" T & G and 4" brick wall	2 Hr.	U.L. #23	—
FLOOR & CEILING:	Ceiling	11.4	½" Bestwall Firestop	45 Min.	U.L. #1	C
Wood Joists 16" O.C.		13.0	½" Bestwall Firestop	1 Hr.	U.L. #46	A, B*, C*
Finished floor on rough subfloor		13.0	½" Bestwall Firestop applied to resilient metal furring 24" O.C.	1 Hr.	U.L. #33	A, B*, C
		12.0	⅝" Bestwall Firestop	1 Hr.	U.L. #1	A B
		16.0	⅝" Bestwall Firestop 2 layers with resilient furring channel 24" O.C between layers	2 Hr.	U.L. #217	A, C*
Steel Bar Joists 24" O.C.	Ceiling	34.2	⅝" Bestwall Firestop nailed or screwed to metal furring 16" O.C.	1 Hr.	U.L. #2	A B C
2" Concrete Floor on		32.0	⅝" Bestwall Firestop, metal furring 24" O.C.	1 Hr.	U.L. #19	A*, C
Metal lath centering		33.9	½" Bestwall Firestop, metal furring 24" O.C.	1½ Hr.	U.L. #17	A*, B*, C
		34.1	⅝" Bestwall Firestop, metal furring 24" O.C.	1½ Hr.	U.L. #13	A*, B*, C*
With 2½" Concrete Floor		38.5	½" Bestwall Firestop, metal furring 24" O.C.	2 Hr.	U.L. #237	A*, B*, C*
		39.3	⅝" Bestwall Firestop, metal furring 24" O.C.	2 Hr.	U.L. #69	A B C
		38.0	⅝" Bestwall Firestop "120" ceiling tile, metal grid 24" O.C.	2 Hr.	U.L. #208	A B C
		—	⅝" Bestwall Firestop "120" ceiling tile, metal grid 24" O.C.	2 Hr.	T-2104	A B C
STEEL COLUMN		—	⅝" Bestwall Firestop, 1 layer	1 Hr.	EST.	A
Fire Proofing		—	⅝" Bestwall Firestop, 2 layers	2 Hr.	U.L. #8	A, C*
		—	⅝" Bestwall Firestop, 3 layers	3 Hr.	U.L. #18	A, C*
		—	⅝" Bestwall Firestop, 4 layers	4 Hr.	EST.	A

Fire Hazard Classification—Official Underwriters' Tests.
½" and ⅝" Bestwall Firestop, 10-25 (LABELED)

For all 45 min. and 1 hour ratings ⅜" plywood (underlayment grade, T86) over building paper, over ½" structural interior plywood (with exterior glue grade—CD) may be used over the wood joists with other ceilings as detailed.

*Applied for Approval—1965

1 Official Underwriters' Tests have proven joint finishing is not required for the rating in assemblies of Firestop.

Under "Model 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.

LABEL SERVICE SYMBOL FOR ½" BESTWALL FIRESTOP

FIRE HAZARD CLASSIFICATION

Flame Spread	15
Fuel Contributed	15
Smoke Developed	0

Underwriters' Laboratories, Inc. LISTED WALLBOARD ISSUE No 000

FIRE RESISTANCE CLASSIFICATION

FLOOR AND CEILING		WALLS AND PARTITIONS			
Design No. 2	30 Min.	Design No. 1	45 Min.	Design No. 12	2 Hr.
Design No. 1	45 Min	Design No. 4	1 Hr.	Design No. 7	3 Hr.
Design No. 33	1 Hr.	Design No. 5	2 Hr.	Design No 8	3 Hr.
Design No 46	1 Hr.	Design No. 8	2 Hr.	COLUMN PROTECTION	
Design No. 17	1½ Hr.	Design No 9	2 Hr.	Design No. 21	4 Hr.
Design No 237	2 Hr.	Design No 10	2 Hr.		

LABEL SERVICE SYMBOL FOR ⅝" BESTWALL FIRESTOP

FIRE HAZARD CLASSIFICATION

Flame Spread	15
Fuel Contributed	15
Smoke Developed	0

Underwriters' Laboratories, Inc. LISTED WALLBOARD ISSUE No 000

FIRE RESISTANCE CLASSIFICATION

FLOOR AND CEILING		COLUMN PROTECTION		WALLS AND PARTITIONS	
Design No. 69	2 Hr.	Design No 18	3 Hr.	Design No. 5	3 Hrs.
Design No 217	2 Hr.	Design No. 8	2 Hr.	Design No. 7	2 Hrs.
Design No. 13	1½ Hr.			Design No. 23	2 Hrs.
Design No. 2	1 Hr.			Design No. 5	1 Hr.
Design No. 1	1 Hr.			Design No. 10	1 Hr.

The Label Service symbol of Underwriters' Laboratories, Inc., which appears on the twin mounting tape, binding each bundle of two pieces, is the method provided by Underwriters' Laboratories, Inc., to identify gypsum wallboard which has been produced under the Label Service. And especially important to architects and building inspectors, the front of each sheet is marked: "⅝" or ½" Bestwall Firestop Type X" so that it's easy to identify when in place.

GEORGIA-PACIFIC / BESTWALL GYPSUM DIVISION

2 INDUSTRIAL BLVD. • PAOLI, PENNA. 19301

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