

PAOLI, PENNSYLVANIA  
February 28, 1966

*E. C. Cook*  
*Signard*

TO: All Regional Sales Managers  
All Area Sales Managers  
All Salesmen  
Distribution Division Sales Personnel  
All Gypsum Plants

General Sales Bulletin # 15-66

SUBJECT: FIRESTOP

RE: Underwriters' Laboratories  
Building Materials List  
January, 1966

CC: R. I. Fredericks, Paoli  
K. A. McCaskill, Paoli

By: C. E. Abbey-jw *hfi*

Forwarded herewith is a copy of the January 1966 Building Materials List published by Underwriters' Laboratories, Inc. This has just been distributed, even though it is dated January. Some of the salesmen have had editions of this book in previous years. Please be sure to destroy all those old copies since they are not as complete or up-to-date as this list. A copy of this booklet is being provided to each salesman, with one copy to each Regional Sales Office, each Gypsum Plant, to each Georgia-Pacific Distribution Center, and certain key people in Paoli. These Underwriters' Laboratories books are not available as literature. Single copies can be obtained free of charge by architects, building officials and others by writing Underwriters' Laboratories directly. See your book for the address.

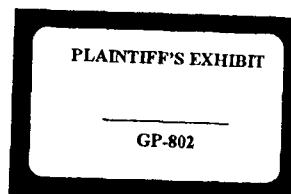
This is a very important and useful booklet for every salesman in the sale of Bestwall's Firestop products, including Firestop, Firestop Backer, Insulating Firestop, Vinyl Covered Firestop and Firestop Dens-Cote Base. Please take an hour's time, particularly new salesmen who have not had such a book previously and, first, study how to use it and then see the great deal of valuable information there is for you.

Begin with the introductory material and read the first eight pages carefully to see how the book can be used.

Review the index in the back of the book rapidly to see what is covered. Notice that all of the fire tests sponsored by Bestwall at Underwriters' Laboratories which resulted in a rating are shown with a schematic drawing and a description of the pertinent elements, including Column Fireproofing, Floor and Ceiling Assemblies and Wall and Partition Assemblies. Notice that the longer ratings are at the start of each section and that the ratings go down in time through the section. In any one group, the number of the Design indicates the numerical order of that test in comparison with all the others in the same group. For instance, the material on Page 184 starts with: Design No. 1 - 2 Hr and the 2-hour floor and ceiling assemblies run all the way to Page 266, ending with Design No. 245 - 2 Hr. (Beam 3 Hr.) There is no particular sequence in which these assemblies have been fire tested through the years at Underwriters'. It is entirely possible that Design No. 1 could have been tested twenty years ago, while Design No. 245 may have just been tested in the past year.

In the front portion of this booklet, Underwriters' lists the many materials which have been officially tested in the Tunnel Furnace according to ASTM E-84 in which the Fire Hazard Classification or Flame Spread Characteristic is developed.

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Read the material on Page 22, which gives a general description of what is being covered in this section and then refer to Page 98, which shows in the middle of the page data for 1/2" or 5/8" Firestop manufactured by the Georgia-Pacific Corporation, Bestwall Gypsum Division, either with paper surface or with vinyl facing on one side. In this regard, Bestwall was the first to have a Fire Rated Board listed for its Flame Spread Characteristics, and in the material listed in this section only National, Ruberoid and USG are not based on Bestwall tests. The other companies listed make their products under license from Bestwall and their listings are identical to Bestwall's. Pay attention to the fact that the listing for Bestwall's Eternawall has the best Flame Spread rating of the three companies, with Bestwall's being 30, National's 40, and USG 45; this is Eternawall vs. Durason vs. Vinyl Covered Sheetrock

For Column Fireproofing see:

- P. 109 Design No. 21 - 4 Hr. This is a Johns-Manville Test and Bestwall is listed under it. The 1/2" wallboard referred to is Firestop.
- P. 111 National's Design No. 26 - 4 Hr.
- P. 116 USG's Design No. 14 - 3 Hr.
- P. 117 Bestwall's Design No. 18 - 3 Hr.
- P. 118 National's Design No. 20 - 3 Hr.
- P. 121 USG's Design No. 5 - 2 Hr.
- P. 122 Bestwall's Design No. 8 - 2 Hr.
- P. 123 USG's Design No. 10 - 2 Hr.

Study Pages 383 through 389. These pages list the gypsum manufacturers and indicate the various Floor and Ceiling Designs, Wall and Partition Designs and Column Protection Designs listed for that particular company. One of the first sales advantages you should point out to any architect, dealer, or contractor is the fact that Bestwall lists only one product, 1/2" or 5/8" Firestop, whereas both National and USG are confusing everyone listing three and four types of the material. Ask each of your potential customers how they are sure they have the right material in the right place with the competitors product. Stress this to the Building Officials.

In listing the Floor and Ceiling Designs and the Wall and Partition Designs, there are so many it will be impossible to list all the competitors. You can determine this by studying the book. The following are those applicable to Bestwall's Firestop:

- P. 213 The Gypsum Association Test Design No. 63 - 2 Hr. Applicable to Bestwall's 5/8" Firestop and all competitive material.
- P. 216 Bestwall's Design No. 69 - 2 Hr.
- P. 243 Bestwall's Design No. 208 - 2 Hr., Firestop "120" Ceiling Tile
- P. 250 Bestwall's Design No. 217 - 2 Hr. (Combustible) This is the ONLY assembly of a wood floor and ceiling in which a 2-hour fire resistance has ever been proven. No assembly with metal lath and plaster, gypsum lath and plaster or competitive fire rated gypsum wallboard products has passed a 2-hour combustible rating.
- P. 264 Bestwall's Design No. 237 - 2 Hr.
- P. 272 Bestwall's Design No. 13 - 1-1/2 Hr.
- P. 275 Bestwall's Design No. 17 - 1-1/2 Hr.

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- P. 278 Bestwall's Design No. 1 - 1 Hr. (Combustible). Applicable to all fire rated boards, this was the first Floor and Ceiling tested for 1-hour with fire rated board. It was tested by Bestwall two years before any other competitor had the product, back in 1950.
- P. 286 Bestwall's Design No. 19 - 1 Hr.
- P. 295 Bestwall's Design No. 33 - 1 Hr. (Combustible)
- P. 307 Bestwall's Design No. 1 - 45 Min. (Combustible). This was the first Floor and Ceiling with a 1/2" fire rated board. It was tested by Bestwall in 1949, and available from Bestwall almost four years before any other competitor had such a product.
- P. 308 Bestwall's Design No. 1 - 30 Min. (Combustible). This is a printer's error. The wallboard should show as 3/8" thick and not 1/2" thick. While 3/8" Firestop is listed, it is not stocked at any Bestwall plants. It can be made on order where the need arises.
- P. 308 Bestwall's Design No. 2 - 30 Min. (Combustible). 16" x 32" cut-to-size tile of 1/2" Firestop nailed in place to the ceiling in an effort to produce a low cost fire rated ceiling tile installation. Due to the limited amount of construction required to have 30-minutes fire resistance it was never pushed commercially.

Continuing on in the book, we come to the Fire Resistance Classification for Walls and Partitions.

- P. 324 Bestwall's Design No. 5 - 3 Hr. (Nonbearing wall). This is a Bestwall Hummer System wall.
- P. 325 R. C. Mahon's Design No. 7 - 3 Hr. (Nonbearing wall). Extended to Bestwall's 1/2" Firestop.
- P. 326 H. H. Robertson's Design No. 9 - 3 Hr. (Nonbearing wall). Extended to Bestwall's 1/2" Firestop.
- P. 327 USG's Design No. 4 - 2 Hr. Combustible (Bearing wall). USG made this test three years after Bestwall had had the same identical test successfully made at Ohio State University.
- P. 328 R. C. Mahon's Design No. 5 - 2 Hr. Extended to Bestwall's 1/2" Firestop.
- P. 328 Bestwall's Design No. 7 - 2 Hr. (Nonbearing wall). A Bestwall Hummer System wall.
- P. 329 H. H. Robertson's Design No. 8 - 2 Hr. Extended to Bestwall's 1/2" Firestop.
- P. 329 R. C. Mahon's Design No. 9 - 2 Hr. Extended to Bestwall's 1/2" Firestop.
- P. 329 Walcon Corporation's Design No. 10 - 2 Hr. Extended to Bestwall's 1/2" Firestop.
- P. 330 Smith and Company's Design No. 12 - 2 Hr. Extended to Bestwall's 1/2" Firestop.
- P. 331 H. H. Robertson's Design No. 14 - 2 Hr. Extended to Bestwall's 1/2" Firestop.
- P. 334 H. H. Robertson's Design No. 22 - 2 Hr. Extended to Bestwall's 1/2" Firestop.
- P. 334 Structural Clay Products' Design No. 22 - 2 Hr. (Combustible - Load Bearing). Exterior wall rating extended to Bestwall's 5/8" Firestop and to all manufacturers of fire rated gypsum wallboard.

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- P. 337 Weyerhaeuser's Design No. 4 - 1 Hr. Combustible (Bearing Wall). The original fire test was run by a smaller wood company, in which Bestwall's Firestop was used. Weyerhaeuser purchased the wood company. The listing is extended to Bestwall's Firestop as well as to some other competitive products.
- P. 337 Design No. 5 - 1 Hr. Combustible (Bearing Wall). This is the original 1-hour load bearing wall test made with fire rated board and made on Bestwall's 5/8" Firestop in 1949-50, and available from Bestwall several years before other competitors had a product on the market. Five or six other manufacturers have tested their fire rated board in this assembly.
- P. 337 Bestwall's Design No. 6 - 1 Hr. Combustible (Bearing Wall). Again, a very old test of Bestwall's 3/8" Firestop. Since the 1-hour can now be obtained with 2 layers of 3/8" regular gypsum board put up in a certain manner, the 3/8" Firestop is not important and is not stocked at any Bestwall plants.
- P. 339 Bestwall's Design No. 10 - 1 Hr. (Nonbearing Wall). The original and first semi-solid wallboard partition tested and promoted under the tradename 'Bestwall Hummer System "B" '.
- P. 347 Bestwall's Design No. 1 - 30 Min. Combustible (Bearing Wall). Again, a very early test made on 3/8" Firestop. Since there is only a very limited area in which a 30-minute rating was required, this assembly has never been pushed.

Bestwall manufactures Firestop under Underwriters' Listing Service and puts the Underwriters' Manifest on the end bundling tape used on Firestop products. This corresponds to the UL "Doughnut" Label. You should use this book to emphasize to architects and building officials that Bestwall offers them the protection afforded by Underwriters' Inspection Service, assuring them that Bestwall makes the product equal to what it was at the time it was originally fire tested, and if the assembly is constructed as it was at the time it was tested, the user can be sure of having a fire resistance developed in that earlier test. Through the years Bestwall has continued to re-evaluate some of these tests and been able to improve them in such ways as eliminating the requirement for tape and cement over the joints in practically all the tests. Read carefully the description under the Designs listed. Notice in general that USG's and National's competitive systems come after Bestwall's test in numerical order, except in one or two recent developments.

Review some of the Designs shown for competition, which basically fall in the same areas, and are found by reading the material on Pages 382 to 389, and then going back into the details to locate the actual Design.

Notice that Bestwall's approval covers a product which may have a gray paper or white paper on one or both sides (regular products and backer products), Foil Backed Products, Vinyl Faced Products, and Dens-Cote Base, that is, the gray face paper, surface perforated. No reference is made to whether it is wallboard or lath, but you will see Bestwall's labels on regular board, insulating board, backer board, vinyl board and Dens-Cote Base. Underwriters' position is that the rating listed is applicable regardless of the surface treatment, whether it is tape and cement, Dens-Cote plaster, 1/16" thick or 1" thick, or whether it is a combustible material such as vinyl. In this regard do not be misled by multiple listings of competition

Continued on Page 5...

which talk about wallboard and lath and specify plasters a minimum of ' 1/16" ' thick. You have the same rating possible without the limitations that are contained in some of the competitive descriptions.

While both the booklet and this bulletin are long, take the time to study them carefully and take full advantage of the many sales points you can make on the better performance of Bestwall's product against the competition. Bear in mind, of the companies listed on Pages 384 to 389, the American Gypsum Company, Barrett Division; Allied Chemical Corporation; Blue Diamond Company; Celotex Corporation; Flintkote Company; Pabco Building Materials Division of Fibreboard Paper Products; Republic Gypsum Company; and the Texas Gypsum Company, make their fire rated board under license from the Georgia-Pacific Corporation, Bestwall Gypsum Division. Furthermore, Bestwall manufactures all fire rated board for Johns-Manville under the J-M label.

Everyone has recognized Bestwall Firestop as the leader in this field. Be sure you are getting your share of this business. With the continued trend changing from plaster to drywall, with the continued growth in drywall construction and the decrease in lath and plaster, more and more fire rated assemblies have to be built to provide the fire separations between occupancies, both horizontally and vertically in multiple dwellings, institutions and commercial buildings. A little effort pays off handsomely.

Remember, the Fire Rated Boards have a higher selling price, and by the square foot area represent increased billing, which means increased commissions.

FILE: Gypsum Product Manual  
Section 5-C