NEW WATER-REPELLENT GYPSUM SHEATHING
FIREPROOF - ECONOMICAL
FIREPROOF
WATER-REPELLENT
ADDS STRUCTURAL STRENGTH

DURABLE
ECONOMICAL
WIND-TIGHT
(V-TONGUE AND GROOVE JOINTS)

NEW
FIREPROOF
Gypsum sheathing is fireproof—it will neither burn nor support combustion. Gypsum is a rock—it is calcium sulphate combined with 20.9% water. When heated by fire, the water is released in the form of steam. It is this water of crystallization in the form of steam that dissipates the heat from the flames and prevents the gypsum from being heated much above 212°F—the boiling point of water. Higher temperatures cannot be transmitted through gypsum until all the water is driven off. Therefore, fire cannot ignite the wood framework of a building as long as the fireproof gypsum sheathing remains to protect it.

WATER-REPELLENT
The new water-repellent treatment, applied to both faces and to the ends and edges of gypsum sheathing board, makes the board weather-resistant and eliminates the necessity of applying building paper or felt over it unless applicable building regulations so require.

ADDS STRUCTURAL STRENGTH
Gypsum sheathing braces the frame and adds rigidity to the structure. This was amply demonstrated in tests at Armour Institute of Technology, Chicago. The tests at Armour Institute show that gypsum sheathing provides the necessary bracing strength with a high factor of safety. It does not warp or buckle, and has practically no shrinkage—therefore, it remains in correct bracing position.

DURABLE
The durability of gypsum sheathing can be likened to that of the rock from which it is made. The performance of gypsum sheathing subjected to the Ohio Valley flood of 1937 is indicative of its ability to withstand rain, snow, sleet, and even flood conditions. After the floods had receded and the sheathing had dried, it was found to be in perfectly sound condition.

ECONOMICAL
Each sheet of gypsum sheathing—2 feet by 8 feet—covers 16 square feet of wall surface. These large units make for speed of erection. Four nails to the board on each support back of most types of finishes means less nails—faster nailing. Large units plus less nailing produce more footage per day, per man.

WIND-TIGHT JOINTS
When nailed in place, gypsum sheathing does not warp or buckle and has practically no shrinkage. The interlocked V-tongue and groove joints remain snugly fitted, thus minimizing wind infiltration.
1 When ordinary sheathing is used, random lengths must be cut to fit the spacing of standard framing, resulting in waste.

2 Compare this photograph with the one below and note the difference in width between gypsum sheathing and ordinary sheathing. That’s important! Important because it means less handling of material and greater coverage. Each piece of 2 feet by 8 feet gypsum sheathing covers 16 square feet of wall surface. Such units make possible a considerable saving in the handling labor required for 1,000 square feet of wall area.

3 Actual size and nominal size are synonymous in gypsum sheathing. There is no face loss when gypsum sheathing is used. No random lengths, no matching or lap loss. On straight work, one thousand square feet of gypsum sheathing covers one thousand square feet. Tongue-and-groove edges on long sides for quick, snug fit. Ends square.
### PRODUCT COMPARISON

<table>
<thead>
<tr>
<th></th>
<th>GYPSUM SHEATHING</th>
<th>OTHER SHEATHING</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PERMANENCE</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is it fireproof?</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Is it free from harmful contraction and expansion?</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Is it free from warping and buckling?</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td><strong>PLUS QUALITIES</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is it uniform in quality?</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Does it minimize wind in infiltration?</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td><strong>UTILITY</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is it low in cost?</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Do 1000 sq. ft. cover 1000 sq. ft.? (No face loss for edge lap or for difference between &quot;nominal&quot; and &quot;actual&quot; width)</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Is cutting waste 5% or less?</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Can one man apply 1000 sq. ft. in eight hours?</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Is it convenient size for easy handling?</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Can it be scored with a knife and snapped?</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Does it eliminate building paper?</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL SCORE</strong></td>
<td><strong>12</strong></td>
<td></td>
</tr>
</tbody>
</table>

- In this table are listed those features which a satisfactory sheathing material should possess. Gypsum sheathing answers "YES" to all of them—a total score of 12. Indicate by check mark those features possessed by any other sheathing material and compare the score. No other type of sheathing can answer "YES" to all of these sheathing features.

### COST COMPARISON

#### 1000 SQ. FT. SURFACE AREA

<table>
<thead>
<tr>
<th></th>
<th>OTHER SHEATHING</th>
<th>GYPSUM SHEATHING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours Labor</td>
<td>Per Hour</td>
<td>Per Hour</td>
</tr>
<tr>
<td>2½ Rolls # 15 Felt</td>
<td>Per Roll</td>
<td>Per Hour</td>
</tr>
<tr>
<td>3¼ Hours Labor</td>
<td>Per Hour</td>
<td>Per Hour</td>
</tr>
<tr>
<td><strong>Total Cost</strong></td>
<td><strong>$</strong></td>
<td><strong>$</strong></td>
</tr>
</tbody>
</table>

- Make your own cost comparison. Fill in the unit prices and wage scales which prevail in your local market, add the usual percentage which must be included for cutting waste, face loss, etc., include the estimated number of hours of labor required to apply 1000 square feet of surface area, and you have a direct comparison of the cost of the two types of sheathing.

*To allow for minor cutting losses due to corners and odd wall dimensions.*
BRICK VENEER CONSTRUCTION
Brick veneer is applied over gypsum sheathing in the same manner as over any other type of sheathing. The wall ties are fastened by nails driven through the sheathing board and into the studs.

ASBESTOS-CEMENT SIDING OR SHINGLES
Asbestos-cement siding or shingles may be applied directly over the gypsum sheathing by means of special metal fastening devices or they may be applied to 1" x 2" wood furring strips fastened with nails driven through the sheathing and into the studs. Such strips are spaced according to nailing locations required by the shingle exposure.

WOOD SIDING CONSTRUCTION
Wood siding is fastened directly over the sheathing with nails driven through the sheathing and into the studs. End joints of siding are made to coincide with the stud spacing.

STUCCO CONSTRUCTION
For stucco finish, the stucco mesh, if self-furring, can be fastened directly over the gypsum sheathing with nails driven through the sheathing and into the studs. Alternatively, properly spaced furring strips can be applied over the gypsum sheathing and stucco lath secured to them.
Specification for the Erection of Water-repellent Gypsum Sheathing

All exterior walls specified to be sheathed shall have water-repellent gypsum sheathing nailed to the studding with 1 3/4" long, 11 gage, galvanized, barbed 7/16" diameter head roofing nails spaced 3/8" from edges and ends of sheathing and located along each support as follows:

<table>
<thead>
<tr>
<th>Type of Exterior Finish</th>
<th>Spacing of Nails</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wood Siding</td>
<td>8&quot;</td>
</tr>
<tr>
<td>Stucco</td>
<td></td>
</tr>
<tr>
<td>Asbestos-cement, wood or slate shingles applied over wood furring spaced not over 8&quot; on centers.</td>
<td></td>
</tr>
<tr>
<td>Brick Veneer</td>
<td></td>
</tr>
<tr>
<td>Asbestos-cement, wood or slate shingles applied over wood furring spaced over 8&quot; on centers.</td>
<td>4&quot;</td>
</tr>
<tr>
<td>Asbestos-cement shingles or siding attached directly to the sheathing with special fasteners.</td>
<td></td>
</tr>
</tbody>
</table>

Gypsum sheathing shall be 1/2" in thickness, 24" in width, and 6'-8" or 8'-0" in length.

Apply gypsum sheathing direct to wood studding with the long dimension across the studs and with the groove edge down. Vertical joints shall be staggered.

The ends and sides of sheathing shall be butted tightly, with the ends centered over a support. Sheathing shall fit tightly around all door and window frames. At all openings, water-resistant building paper shall be applied and shall extend not less than 4" on the sheathing. If building paper is required elsewhere by applicable building regulations, it shall be of a water-resistant but vapor-permeable type such as 15 lb. or 30 lb. asphalt saturated, but not coated, felt.

When gypsum sheathing is used behind masonry veneer, required brick ties shall be fastened to the studs. Where wood or slate shingles are applied over gypsum sheathing, 1" x 2" nailing strips shall be nailed to the studs and spaced according to the shingle exposure. Where asbestos shingles are applied over gypsum sheathing, they may be applied as specified above for wood or slate shingles, or they may be applied directly to the gypsum sheathing by means of special metal fastening devices.

A clear space of not less than 1 inch shall be provided between the sheathing and the back of masonry veneer. In stucco construction, a clear space of not less than 1/2 inch shall be maintained between the back of the stucco reinforcing and the face of the sheathing.
SCHULTZ CONSTRUCTION CO.
GENERAL CONTRACTORS
NO. 1 HILLCREST BOULEVARD
MILLBRAE, CALIFORNIA

October 12, 1945

Gypsum Association
211 West Wacker Drive
Chicago, Illinois

Attention Mr. Henry J. Schwein
Secretary & General Manager

Gentlemen:

For many years we have been using Gypsum sheathing exclusively under exterior stucco, on approximately one thousand homes, and during that time have become more and more sold on its many advantages. Checking and cracking of stucco, which was formerly a real problem, has substantially been eliminated by the use of Gypsum sheathing; its fire resisting qualities have been proven; and because of few and at the same time tight joints, it is more resistant to temperature changes.

In addition, we get those advantages at a substantial saving, not only in cost and waste of the material, but also in its application.

We are thoroughly sold on your product.

Very truly yours,

SCHULTZ CONSTRUCTION CO.

By Niels Schultz

N3:W
September 21
1945

The Gypsum Association
211 West Wacker Drive
Chicago 6, Illinois

Gentlemen:

V-J Day has passed! All of us are now looking forward and preparing for post-war business. But looking back we want to say "Thanks" to some of our friends of the war years, friends, whose products assisted us greatly in establishing our proud record of top performance in the many Army Camps in which we operated.

To the manufacturers of Gypsum products, we especially wish to express our thanks. We know of no product whose economy in use, cost of application, and its original cost which helped us more in keeping our jobs on working schedule than the products of the Gypsum manufacturers.

The use of water repellent gypsum sheathing was a "pay off" in the construction of hundreds of buildings in several camps, and exceptional results were achieved in the use of gypsum wall boards for interiors.

So in our post-war plans we feel that it is just good business to use a product that proved itself the best in the war years. It may interest you to know that I have just placed an order for several carloads of Gypsum Laminated Roof Decking on our first post-war project.

We also want to add a word of appreciation to the sales representatives who cooperated with us so willingly.

Yours very truly,

SCHULENBURG & DARR

[Signature]

H. A. SCHULENBURG
TERRYVILLE, CT

ARTHUR R. DARR
Hudson, WI
JONES BROS. CONSTRUCTION CO.
GENERAL CONTRACTORS
1100 IRVING AVE.  PHONE 1250
JOPLIN, MISSOURI
August 6, 1946

Gypsum Association
211 East Wacker Drive
Chicago, Illinois

Attention: Mr. Henry J. Schwein
General Manager

Dear Sirs:

We wish to acknowledge receipt of your letter of August 1, 1946 relative to use of "Water-Repellent" Gypsum Sheathing Board.

We have used this material rather extensively, especially as a substitute for materials limited in use due to wartime restrictions. In using it, we have primarily considered it as a material for temporary buildings. However, expanded use of the material has proven it to be more than a temporary product. We have used it for wall sheathing on industrial buildings with very satisfactory results.

Our use of the material has proven that this material makes available lower construction costs, both from the standpoint of material cost and application cost. It gives the added advantage of increased fire protection. Due to the design of the material, building papers have no added value in construction. Our experience indicates that it will be a staple item in our future construction operations.

Yours respectfully,

JONES BROS. CONSTRUCTION CO.

[Signature]

September 20, 1945.

Fred T. Dempsey
CONTRACTOR
"Builder of Better Constructed Homes"

Gypsum Association
211 East Wacker Drive
Chicago, Illinois.

Gentlemen:

Prior to the war, we used thousands of feet of gypsum sheathing in our home development in Atlanta and Decatur, Georgia. Aside from the actual savings in cost and application time, gypsum sheathing is again and again demonstrated in our satisfaction the many advantages over other sheathing materials.

In showing these homes to prospective buyers we always stressed the extra fire protection provided by gypsum sheathing. Improvements like this always appeal to buyers and we found it advantageous to always make this a part of our sales story.

The new water-repellent finish of gypsum sheathing sounds like a very practical improvement to us. Certainly, anything that helps to keep out moisture is a worthwhile contribution to better home construction.

Our past experience has made us 100% boosters for gypsum sheathing and it is a pleasure to recommend it to other builders.

Yours very truly,

[Signature]
STANDARD BUILDING COMPANY
GENERAL CONTRACTORS
1800 JUDAH STREET, corner 23rd Avenue, San Francisco, CA
Phone O'Valle 2392

October 13, 1945

Gypsum Association
311 N. Wacker Drive
Chicago, Illinois

Attention: Mr. Henry J. Schneider

Gentlemen:

This is to advise you that during the past ten years we have used many thousands feet of Gypsum Sheathing and we take pleasure in reporting that its performance has been extremely satisfactory from many standpoints.

We like its fire-proofness, its ease and low cost of erection, its stability and resistance to weather and we find it to be wind-tight and adds great bracing strength to the building.

We are highly pleased with our results to date and will continue using this excellent product.

Very truly yours,

S. M. Young

STANDARD BUILDING COMPANY

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KELLY CORPORATION

ARLINGTON, MASSACHUSETTS
Telephone Melrose 2609

September 19, 1945

Gypsum Association
311 N. Wacker Drive
Chicago, Illinois

Gentlemen:

Early in 1941 we were faced with the necessity of reducing our lumber requirements in building homes for our war workers. This objective led to the substitution of Gypsum Sheathing on all outside walls in place of board. The results of this substitution were exceedingly satisfactory.

We reduced our lumber costs and also profited by an economy in material costs as well as cost of application. From 1941 to 1944 we applied many thousands of feet of Gypsum Sheathings to more than 500 houses erected in Quincy, Massachusetts, and Providence and Newport, Rhode Island. We feel that the economy of cost, the extra fire and water-resisting quality and also the water repellent finish constitute a real contribution by the Gypsum Association to better house construction.

Our experiences during the past three years have made us a sincere booster of Gypsum Sheathing and it is a real pleasure to recommend it to other builders.

Respectfully yours,

JOE P. KELLY

KELLY CORPORATION

James P. Kelly
Treasurer
One of the greatest improvements that can be built into new homes: PERMANENT FIRE PROTECTION with Gypsum Sheathing. Ask to have it specified.

GYPSUM ASSOCIATION
211 W. WACKER DRIVE, CHICAGO 6, ILL.