

**U.S. DEPARTMENT OF COMMERCE  
NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY  
(Formerly the National Bureau of Standards-NBS)  
OFFICE OF STANDARDS SERVICES**

**COMMERCIAL STANDARD CS176-58  
PREFINISHED HARDBOARD WALL PANELS**

Commercial Standard CS176-58, Prefinished Hardboard Wall Panels, (superseded by PS59-73) was withdrawn by the U.S. Department of Commerce in 1982.

\*\*\*\*\*

The following standard was used to replace CS176-58: American National Standards Institute/American Hardboard Association (ANSI/AHA) A135.5-1982, Prefinished Hardboard Paneling.

For additional assistance and information and/or copies, contact:

**American Hardboard Association (AHA)**  
1210 West Northwest Highway  
Palatine, Illinois 60067-1897, USA  
Telephone: (847) 934-8800  
Fax: (847) 934-8803

**American National Standards Institute (ANSI)**  
11 West 41nd Street, 13th Floor  
New York, New York 10036, USA  
Telephone: (212) 642-4900  
Fax: (212) 302-1286 (orders only); (212) 398-0023  
Email: [info@ansi.org](mailto:info@ansi.org)  
Internet: <http://www.ansi.org>

The ANSI staff contact for assistance and information pertaining to construction standards and related issues may be reached at (212) 642-4935; Fax: (212) 398-0023.

# WITHDRAWN

File Copy

COMMERCIAL STANDARD **CS176-58**

Supersedes CS176-51

**DO NOT REMOVE**

## **Prefinished Hardboard Wall Panels**

A recorded  
voluntary standard of the  
trade published by  
the U. S. Department  
of Commerce



**For sale by the Superintendent of Documents  
U. S. Government Printing Office, Washington 25, D. C. Price 10 cents**

W W A R D H I T W

U. S. DEPARTMENT OF COMMERCE

SINCLAIR WEEKS, Secretary

DO NOT

Issued by

OFFICE OF TECHNICAL SERVICES

Commodity Standards Division

With the cooperation of

NATIONAL BUREAU OF STANDARDS

---

### COMMERCIAL STANDARDS

Commercial Standards are developed by manufacturers, distributors, and users in cooperation with the Commodity Standards Division of the Office of Technical Services, and with the National Bureau of Standards. Their purpose is to establish quality criteria, standard methods of test, rating, certification, and labeling of manufactured commodities, and to provide uniform bases for fair competition.

The adoption and use of a Commercial Standard is voluntary. However, when reference to a Commercial Standard is made in contracts, labels, invoices, or advertising literature, the provisions of the standard are enforceable through usual legal channels as a part of the sales contract.

Commercial Standards originate with the proponent industry. The sponsors may be manufacturers, distributors, or users of the specific product. One of these three elements of industry submits to the Commodity Standards Division the necessary data to be used as the basis for developing a standard of practice. The division, by means of assembled conferences or letter referenda, or both, assists the sponsor group in arriving at a tentative standard of practice and thereafter refers it to the other elements of the same industry for approval or for constructive criticism that will be helpful in making any necessary adjustments. The regular procedure of the division assures continuous servicing of each Commercial Standard, through review and revision, whenever, in the opinion of the industry, changing conditions warrant such action.

### SIMPLIFIED PRACTICE RECOMMENDATIONS

Under a similar procedure the Commodity Standards Division cooperates with industries in the establishment of Simplified Practice Recommendations. Their purpose is to eliminate avoidable waste through the establishment of standards of practice for sizes, dimensions, varieties, or other characteristics of specific products; to simplify packaging practices; and to establish simplified methods of performing specific tasks.

---

The initial printing of Commercial Standard CS 176-58 was made possible through the cooperation of manufacturers in the industry.

March 15, 1960

**PREFINISHED HARDBOARD WALL PANELS  
CS176-58**

**Supplementary List of Acceptors**

(The manufacturers listed below have been recorded as official acceptors since the printed edition of CS176-58 was published)

Barclay Manufacturing Co., Inc., New York, N. Y.

Coralite Co., Los Angeles, Calif.

Miratile Manufacturing Co., Chicago, Ill.

Superior Wall Products Co., Philadelphia, Pa.

Tileboard Corp., Brooklyn, N. Y.

Wallace Manufacturing Co., N. Kansas City, Mo.

**Gen-A-Panel Manufacturing Co., Dallas, Texas**

USCOMM-DC-62072

# Prefinished Hardboard Wall Panels

## (Second Edition)

[Effective September 15, 1958]

### 1. PURPOSE

1.1 This standard is offered for the common understanding of those concerned with the manufacture, sale, and use of prefinished hardboard wall panels. It establishes definite criteria of physical properties that should be possessed by this material and presents a basis on which performance guarantees may be made by the manufacturer for the guidance and assurance of the prospective user.

### 2. SCOPE

2.1 This standard provides specifications for one grade of prefinished hardboard wall panels. It covers physical requirements and tests for strength, water absorption, linear expansion, hardness, gloss and resistance to light, heat, humidity, acid, alkali, and staining. It also sets forth the standard commercial sizes and tolerances.

### 3. GENERAL REQUIREMENTS

3.1 *Composition.*—The base material shall be a rigid composition-board material suitable for application to walls to produce a smooth or decorative surface.

3.2 *Moisture content.*—Finished panels, when shipped from the factory, shall have such moisture content that when properly installed over a dry wall or surface, no objectionable buckling or shrinking, due to dimensional changes in the panel, shall occur.

### 4. DETAILED REQUIREMENTS AND TESTS

#### 4.1 BASE MATERIAL

4.1.1 The base material shall be a rigid composition-board material, at least one surface of which shall be a smooth, plane surface. The board shall be processed in such manner as to meet the water resistance requirements of paragraphs 4.1.6 and 4.1.9.

4.1.2 *Sampling.*—Sampling shall be done in such a manner as to give a fair representation of the entire shipment by one of the following procedures:

(a) *Single car or carrier load shipment.*—Five boards shall be selected at random from the car or carrier.

(b) *Multiple car or carrier load shipment.*—Not less than one board shall be selected at random from each car or carrier, but at least five boards shall be selected from the shipment.

(c) *Shipment of less than one car or carrier load.*—The number of boards selected shall be equivalent to  $\frac{1}{2}$  of 1 percent of the total num-

ber of boards in the shipment, providing that the number taken shall be not less than three nor more than five boards.

4.1.2.1. From each board selected, cut a 24 by 54 inch piece for test. (When boards are only 4 feet long the piece shall be 24 by 48 inches.)

4.1.3 *Specimens for Test.*—Each sample from a shipment shall be subjected to the individual tests specified hereinafter. The average of the several values obtained shall be used in determining compliance with the requirements of specific tests, except in the case of caliper tolerance (see par. 4.1.4) which shall apply to each individual sample.

4.1.4 *Caliper Tolerance.*—The caliper tolerances shall be in accordance with table I.

TABLE I. *Nominal caliper and caliper tolerances*

Surface finish ( <i>treaded or tempered</i> )	Nominal caliper	Caliper tolerance
Smooth-one-side.....	<i>In.</i>	<i>In.</i>
	$\frac{3}{8}$	.125- .155
	$\frac{3}{16}$	.170- .205
	$\frac{1}{4}$	.230- .265
Smooth-two-sides.....	$\frac{5}{16}$	.295- .335
	$\frac{1}{2}$	.125- .155
	$\frac{3}{16}$	.170- .205
	$\frac{1}{4}$	.230- .265

4.1.5 *Atmospheric Conditions.*—Tests shall be made at prevailing atmospheric conditions, except in case of dispute. In that event they shall be made on material conditioned to approximately a constant weight in an atmosphere of 50 percent, plus or minus 2 percent, relative humidity and at a temperature of 70 to 75 degrees F.

4.1.6 *Water Absorption and Thickness Expansion.*—A specimen 12 inches square, of each of the nominal calipers shown in table I, shall be weighed and calipered to the nearest one-thousandth of an inch at points midway along each side 1 inch from the adjacent edge. These calipered points shall be marked. The specimen shall then be immersed horizontally under 1 inch of distilled water maintained at a temperature of 70, plus or minus 5, degrees F. After 24 hours of immersion the specimen shall be placed on end to drain for 10 minutes. At the end of that time the excess water shall be removed by hand with blotting paper or a paper towel and the specimen immediately weighed. The weight of absorbed water shall be calculated and the water absorption expressed in percentage by weight based on the initial weight. The maximum absorption shall be 15 percent. The specimen shall then be recalipered at the marked points. Average the four readings before soaking and the four after, and calculate the thickness increase as follows:

$$\text{Percent increase} = \frac{(\text{caliper after soaking} - \text{caliper before soaking})}{\text{caliper before soaking}} \times 100.$$

The thickness increase shall not exceed 12 percent.

4.1.7 *Modulus of Rupture.*—A specimen 3 inches wide and not less than 12 inches long shall be taken for test. The thickness shall be measured to the nearest 0.001 inch and the width to the nearest 0.01 inch, using a micrometer. The specimen shall be supported flatwise

on parallel supports 8 inches apart, and the load applied at midspan on a bearing parallel to the end supports at a rate of approximately 4 inches per minute. The breaking load shall be recorded to the nearest 1 pound. The modulus of rupture shall be calculated from the following formula:

$$R = \frac{3Wl}{2bd^2}$$

where

W = breaking load, in pounds.

l = length of span, in inches.

b = width of specimen, in inches.

d = thickness of specimen, in inches.

The bearing and supports shall be rounded to a radius of approximately  $\frac{3}{8}$  inch. Three specimens from the long direction of the board and three at right angles thereto shall be tested. The modulus of rupture in each direction of the piece is the average of three specimens taken from that direction. The minimum modulus of rupture shall be 6,000 pounds per square inch.

4.1.8 *Density*.—A specimen 12 by 12 inches of known volume shall be weighed to the nearest 1 gram and the weight converted to pounds per cubic foot. The minimum density shall be 60 pounds per cubic foot.

4.1.9 *Linear Hygroexpansion*.—The maximum linear hygroexpansion shall be determined in the following manner from a specimen 12 by 54 inches that has been cut parallel with the long dimension of the board. The specimen is first conditioned for 24 hours at 50 percent, plus or minus 2 percent, relative humidity and at a temperature of 70° to 75° F. Two fine cross marks are made with a razor blade 48 inches apart. The specimen is next conditioned for 24 hours at 95 percent minimum relative humidity and a temperature of 70° to 75° F., after which the distance between the two reference points is again measured. The measurements shall be made in the conditioned air specified in each case, or as quickly as possible after each specimen is removed therefrom. The maximum variation in dimensions of board shall not exceed  $\frac{1}{8}$  inch for each 4 feet due to gain in moisture. When boards selected for test are only 4 feet long, then the specimen shall be 12 by 48 inches, the cross marks 36 inches apart, and the maximum variation shall not exceed  $\frac{3}{32}$  inch for each 3 feet due to gain in moisture.

4.1.10 *Reliance on Producer*.—Prefinished hardboard wall panel manufacturers who do not manufacture their own base material may rely upon the certification of their source of supply for compliance with the foregoing requirements.

## 4.2 COATING

4.2.1 Prefinished hardboard wall panels shall be thoroughly and evenly covered with one or more coats of finishing material of such quality, so applied and completely cured, as to meet the following requirements and to stand the following tests. The appearance and properties of the finished product shall be at least equivalent to that obtained by a finished wearing coat of 1½ mils over a filled or primed surface. Test specimens shall be taken not less than 6 inches from any edge of board and the coating shall have aged at least 72 hours.

4.2.2 *Appearance of Coating*.—To be commercially free of orange

peel, scratches, pin and pit holes, dirt specks, waviness, sagging, or uneven distribution.

**4.2.3 Film Thickness.**—A direct microscopic measurement of the film thickness of the various applied coatings shall be made as follows:

(a) Cut a minimum of three 1- by 4-inch pieces from various sections of the large panel being tested. Cut only the base material in the 4-inch direction with saw and break the coating film;

(b) Examine broken edge under microscope and record film thickness at a minimum of 6 places along 4-inch edge using a calibrated screw micrometer eyepiece or similar measuring accessory. The average film thickness of the final finish wearing coat or coats shall be not less than 1 mil.

**4.2.4 Film Hardness.**—The comparative degree of film hardness is to be determined by using a Sward Rocker. Minimum number of rocks shall be 15 (Sward hardness No. 30). Run test in triplicate. Select area on sample free of pits, bumps, or other surface defects where rocker is to function.

**4.2.5 Washability.**—Use Gardner Washability Tester, Model 105 and a hog bristle brush (Gardner Laboratory Inc.). Cut a sample 4 by 18 inches, determine its gloss and hardness, and clamp the sample in the table pan lengthwise. Soak the brush in a 3 percent solution of trisodium phosphate for 10 minutes, pour 10 cc. of the same solution on the clamped sample, record the reading on the counter, and start the motor. Run the machine, adding more solution from time to time to keep the specimen moist but not soaking wet, until 3,000 oscillations have been completed. Dry specimen with a clean, soft cloth and check gloss. After 3,000 oscillations there shall be no loss of gloss. Rest specimen for 2 hours and test for hardness. There shall be no loss of hardness.

**4.2.6 Adhesion.**—The cross-cut method is used for determining adhesion. Two sets of 11 parallel lines,  $\frac{1}{16}$  inch apart, are cut to intersect at right angles, thus forming a grid of 100 squares each  $\frac{1}{16}$  by  $\frac{1}{16}$  inch. Adhesion is measured by the number of squares to which the coating still clings. The cuts are made just deep enough to go through the coating but not into the board, and are then brushed lightly with a fine brush. For the sample to pass the test 75 or more of the squares must remain coated.

**4.2.7 Stain Test (white panels only).**

**4.2.7.1** Place the following materials on the finish, under watch glasses, and allow to remain for 24 hours. There shall be no more than a very slight effect on the finish.

- |                                 |                                    |
|---------------------------------|------------------------------------|
| (a) 190-proof denatured alcohol | (h) lard oil and oleic acid (fresh |
| (b) household ammonia           | 1 to 1 mixture)                    |
| (c) 3% hydrochloric acid        | (i) household bluing               |
| (d) 3% nitric acid              | (j) 3% hydrogen peroxide           |
| (e) 3% sodium hydroxide         | (k) turpentine                     |
| (f) Clorox                      | (l) gasoline                       |
| (g) 5% acetic acid              | (m) colloidal graphite             |

Unless otherwise specified, liquids shall be used in concentrated form.

At the end of the 24-hour period residual materials shall be carefully removed before inspection of the finish.

**4.2.8. Impact Resistance.**—A 6-ounce steel ball is allowed to fall from various heights onto test specimens placed at an angle of 30°

with the horizontal, and firmly held in place. Observe the height of drop necessary to break the surface. This height should be at least 24 inches.

4.2.9 *Gloss*.—All gloss shall be measured by ASTM D523: Method of test for Specular Gloss of Paint Finishes. Gloss ratings shall be as follows:

High gloss	70 and over
Medium gloss	51 to 69
Low gloss	50 and under

When no degree of gloss is specified it will be assumed high gloss is required.

4.2.10 *Heat Resistance*.—

4.2.10.1 A 4- by 4-inch specimen shall be laid on a ring support having an inner diameter of 3 inches and placed above a  $\frac{3}{8}$  inch Bunsen or Tirrill gas burner. The burner shall have the air supply completely shut off and adjusted to give a luminous flame  $1\frac{1}{2}$  inches long. The finished coated surface of the specimen shall be toward the flame and 1 inch above the tip of the flame. After 10 seconds of exposure the finished coated surface shall not burn, show any discoloration, blistering, or thermoplasticity. After 30 seconds of exposure the finished coated surface may show some discoloration or slight blistering, but shall not support combustion as evidenced by flaming or continuous glow.

4.2.10.2 Place another 4- by 4-inch specimen in an oven at 200° F. for 48 hours; the only effect permitted shall be a slight change in color.

4.2.11 *Resistance to Light*.—Specimens 3 by 12 inches shall be exposed to a carbon arc lamp (Fadeometer) for 100 hours. The Fadeometer shall have a current of approximately 13 amperes and 140 volts at the arc. The test specimens shall be placed 10 inches from the arc. The lamp shall be so ventilated that the temperature at the test specimens does not exceed 105° F. When compared visually with an unexposed specimen, the exposed specimen shall show no change in gloss and not more than a slight change in color. Any color change shall be uniform over the entire specimen.

4.2.12. *Steam Test*.—A 500 cc. narrow mouth Erlenmeyer flask shall be half filled with water, which shall be maintained at a mild boil. A 4-inch square sample panel shall be placed, coated face down, on the mouth of the flask for 8 hours. The back and edges of the specimen shall be protected by an acrylic lacquer or similar material that will not soften or lose adhesion below 200 degrees F. The specimen shall then be allowed to recover for 16 hours. Three complete cycles shall be run. There shall be no blistering, loosening or separation of coating.

4.2.13 *Accelerated Aging*.—A 3- by 10-inch specimen shall be exposed for 240 hours in a twin-arc accelerated weathering machine operating on 2-hour cycles (with lights on) of 18 minutes wet spray and 102 minutes dry. The back and edges of the specimen shall be protected with an acrylic lacquer or similar material that will not soften or lose adhesion below 200° F. The specimen shall show, at most, a slight change in color and a slight loss in gloss, with no blistering, crazing, chalking, cracking, separation of film, or peeling of film from base material.

4.2.14 *Resistance to Temperature Change.*<sup>1</sup>—Place a 6- by 12-inch specimen into the oven at 125° F. for exactly 1 hour; remove and keep at room temperature for 1 hour; put specimen in refrigerator at minus 5° F. for 1 hour; inspect immediately; leave at room temperature again for 1 hour. This test shall be performed at rate of 2 cycles per day, always beginning with oven. Specimens shall be free of checking, crazing, and blistering after 10 cycles.

4.2.14.1 *Alternate procedure.*<sup>1</sup>—This test may be conducted in accordance with ASTM D 1211, namely 1 hour at 120° F.,  $\pm 5^\circ$  F. in oven, then within 1 minute transfer to refrigerator for 1 hour at minus 5° F.,  $\pm 2^\circ$  F. After allowing 15 minutes relaxation period, allow 15 minutes for inspection before placing sample in oven for beginning of next cycle. Specimens shall be subjected to at least 2 cycles per day until 10 have been completed. No checking, crazing, or blistering is permitted.

4.2.15 *High Humidity.*—Place a 6- by 12-inch specimen in atmosphere of 95° F., plus or minus 2° F., and at 95 percent minimum relative humidity for 240 hours. There shall be no blistering, peeling, checking, crazing, or more than very slight color change.

4.2.16 *Water Immersion.*—A 6- by 12-inch sample panel, set vertically on the 12-inch edge, shall be immersed in water at room temperature for 96 hours. After a 24-hour recovery period, comparison shall be made with an unimmersed sample. No permanent softening or other effects shall occur in the finish. Fiber-raising or softening of the base material shall not be considered a defect.

4.2.17 *Scoring and Striping.*—The scored portion of any prefinished hardboard wall panel shall be adequately coated to give the same wearing properties as required by the tests described in section 4.2, where applicable. Striping, if any, and score-line finish shall be firmly bonded so that there will be no separation of the striping material from the coating of the rest of the panel, and the stripes shall meet the tests described in section 4.2, where applicable.

4.2.18 *Substantiating Test Data.*—The manufacturer shall be responsible for conducting the tests outlined in paragraphs 4.2.1 through 4.2.17 inclusive, at sufficiently frequent intervals to insure control of his manufactured products. Manufacturers claiming conformance to the Commercial Standard shall make their substantiating test data available to the Standing Committee for review, if requested.

4.2.18.1 In order to provide the purchaser with a measure of the quality of the manufactured products several quick spot checks can be performed by applying the tests outlined in paragraphs 4.2.2, Appearance of coating; 4.2.3, Film thickness; 4.2.4, Film hardness; 4.2.6, Adhesion; and 4.2.7, Stain test (white panels only).

## 5. SIZES

5.1 *Commercial Sizes.*—It is recommended that commercial sizes of prefinished hardboard wall panels shall be produced in widths of 4 feet and in lengths of 4, 5, 6, 8, and 12 feet.

<sup>1</sup> Samples that pass the tests outlined in either paragraph 4.2.14 or paragraph 4.2.14.1 shall be considered to comply with this particular requirement.

## 6. LABELING

6.1 In order to assure the purchaser that he is getting prefinished hardboard wall panels conforming to this commercial standard, it is recommended that producers, either individually or in concert with their trade association or testing laboratories, issue a label including the following wording:

This prefinished hardboard wall panel conforms with the requirements of Commercial Standard CS176-58, as developed by the trade under the procedure of the Commodity Standards Division, and issued by the United States Department of Commerce.

-----  
Name of company

## 7. APPLICATION

7.1 *Instructions for Application.*—It is recommended that prefinished hardboard wall panels be applied or installed in accordance with the individual manufacturer's recommendations for the purpose intended.

## 8. EFFECTIVE DATE

8.1 Having met all procedural requirements of the Commodity Standards Division, including approval by the acceptors hereinafter listed, this Commercial Standard was issued by the U. S. Department of Commerce, effective September 15, 1958.

EDWIN W. ELY,  
*Chief, Commodity Standards Division*

## 9. HISTORY OF PROJECT

*First edition.*—On June 7, 1950, the Predecorated Panelboard Council requested the cooperation of the Commodity Standards Division in the establishment of a Commercial Standard for prefinished wall panels. After adjustment in accordance with the consensus of all interested groups and acceptance by a satisfactory majority of the industry, the standard was promulgated as Commercial Standard CS176-51, effective for new production on May 15, 1951.

*First revision.*—Under date of February 27, 1956, a manufacturer of prefinished wall panels submitted the draft of a proposed revision of CS176-51 to the Division with a request for cooperation in developing a revised standard which would reflect advances in the industry. Several drafts of the proposed revision were initiated and approved by the Standing Committee in an attempt to meet the suggestions of interested organizations that the revised standard contain workable requirements and tests which would assure a good finished product. The Recommended Revision of CS176-51 was circulated for acceptance on May 20, 1958, and subsequently was accepted by a satisfactory majority of the industry. On August 15, 1958, the establishment of the revision, designated Prefinished Hardboard Wall Panels, Commercial Standard CS176-58, effective from September 15, 1958, was announced.

Project Manager: H. A. Bonnet, Commodity Standards Division, Office of Technical Services.

Technical Adviser: Paul T. Howard, Chief, Organic Coatings Section, Chemistry Division, National Bureau of Standards.

## STANDING COMMITTEE

The function of the standing committee is to review, prior to circulation for acceptance, changes proposed to keep the standard abreast of progress. Comments concerning the standard and suggestions for revision may be addressed to the Commodity Standards Division, Office of Technical Services, U. S. Department of Commerce, which acts as secretary for the committee, or to any of its members listed below:

- J. K. Bolton, U. S. Gypsum Co., 300 W. Adams St., Chicago, Ill.  
Louis E. Buehn, Superior Wall Products Co., 4401 N. American St., Philadelphia, Pa.  
Conrad P. Harness, Home Manufacturers' Association, 910 17th St. NW., Washington, D. C.  
Frank Hobbs, Colotyle Tyle-Bord, Inc., 975 John St., Seattle, Wash.  
P. T. Howard, National Bureau of Standards, Washington, D. C.  
(Technical Advisor)  
Donald Linville, Hardboard Association, 205 W. Wacker Dr., Chicago, Ill.  
V. R. Marsh, Marsh Wall Products, Inc., Box 28, Dover, Ohio.  
James H. Mein, Masonite Corp., 111 W. Washington St., Chicago, Ill.  
Elton J. Morrow, American Institute of Architects, 45 N. Lake Ave., Albany, N. Y.  
Francis Scofield, National Paint, Varnish & Lacquer Association, Inc., 1500 Rhode Island Ave. NW., Washington, D. C.  
Eugene Tower, Forest Fiber Products Co., Box 68, Forest Grove, Oreg.  
R. G. Wallace, Jr., Wallace Manufacturing Co., 10th and Fayette Sts., No. Kansas City, Mo.  
Paul White, Sears Roebuck & Co., Dept. 664, 925 S. Homan Ave., Chicago, Ill.

**ACCEPTANCE OF COMMERCIAL STANDARD**

If acceptance has not previously been filed, this sheet properly filled in, signed, and returned will provide for the recording of your organization as an acceptor of this Commercial Standard.

Date \_\_\_\_\_

Commodity Standards Division  
Office of Technical Services  
U. S. Department of Commerce  
Washington 25, D. C.

Gentlemen:

We believe that Commercial Standard CS176-58 constitutes a useful standard of practice, and we individually plan to utilize it as far as practicable in the

production <sup>1</sup>            distribution <sup>1</sup>            purchase <sup>1</sup>            testing <sup>1</sup>  
of prefinished hardboard wall panels.

We reserve the right to depart from the standard as we deem advisable.

We understand, of course, that only those articles which actually comply with the standard in all respects can be identified or labeled as conforming thereto.

(Cut on this line)

Signature of authorized officer \_\_\_\_\_  
(In ink)

(Kindly typewrite or print the following lines)

Name and title of above officer \_\_\_\_\_

Organization \_\_\_\_\_  
(Fill in exactly as it should be listed)

Street address \_\_\_\_\_

City, zone, and State \_\_\_\_\_

<sup>1</sup> Underscore the applicable words. Please see that separate acceptances are filed for all subsidiary companies and affiliates which should be listed separately as acceptors. In the case of related interest, trade associations, trade papers, etc., desiring to record their general support, the words "General support" should be added after the signature.

## TO THE ACCEPTOR

The following statements answer the usual questions arising in connection with the acceptance and its significance:

1. *Enforcement.*—Commercial Standards are commodity specifications voluntarily established by mutual consent of those concerned. They present a common basis of understanding between the producer, distributor, and consumer and should not be confused with any plan of governmental regulation or control. The United States Department of Commerce has no regulatory power in the enforcement of their provisions, but since they represent the will of the interested groups as a whole, their provisions through usage soon become established as trade customs, and are made effective through incorporation into sales contracts by means of labels, invoices, and the like.

2. *The acceptor's responsibility.*—The purpose of Commercial Standards is to establish, for specific commodities, nationally recognized grades or consumer criteria, and the benefits therefrom will be measurable in direct proportion to their general recognition and actual use. Instances will occur when it may be necessary to deviate from the standard and the signing of an acceptance does not preclude such departures; however, such signature indicates an intention to follow the standard, where practicable, in the production, distribution, or consumption of the article in question.

3. *The Department's responsibility.*—The major function performed by the Department of Commerce in the voluntary establishment of Commercial Standards on a nationwide basis is fourfold: First, to act as an unbiased coordinator to bring all interested parties together for the mutually satisfactory adjustment of trade standards; second, to supply such assistance and advice as past experience with similar programs may suggest; third, to canvass and record the extent of acceptance and adherence to the standard on the part of producers, distributors, and users; and fourth, after acceptance, to publish and promulgate the standard for the information and guidance of buyers and sellers of the commodity.

4. *Announcement and promulgation.*—When the standard has been endorsed by a satisfactory majority of production or consumption in the absence of active, valid opposition, the success of the project is announced. If, however, in the opinion of the standing committee or of the Department of Commerce, the support of any standard is inadequate, the right is reserved to withhold promulgation and publication.

## ACCEPTORS

The organizations listed below have individually accepted this standard for use as far as practicable in the production, distribution, purchase, or use of pre-finished harboard wall panels. In accepting this standard they reserve the right to depart from it as they individually deem advisable. It is expected that products which actually comply with the requirements of this standard in all respects will be regularly identified or labeled as conforming thereto, and that purchasers will require such specific evidence of conformity.

## ORGANIZATIONS

American Specification Institute, Chicago, Ill. (General support)	Masonite Corp., Chicago, Ill. (General support)
Arco Co. (The), Cleveland, Ohio.	National Retail Lumber Dealers Association, Washington, D. C. (General support)
Berger, Kelley and Associates, Champaign, Ill. Buffalo, City of, Buffalo, N. Y.	Owens-Illinois Plywood Co., North Troy, Vt.
Carolina Lumber and Building Supply Association, Charlotte, N. C. (General support)	Plastergon Wall Board Co. (The), Buffalo, N. Y.
Decotone Products Co., Inc., Clifton Heights, Pa.	Rail Steel Bar Association, Chicago, Ill. (General support)
Emery Industries, Inc., Cincinnati, Ohio.	Richardson-Phelps Lumber Co., Grinnell, Iowa.
Forest Fiber Products Co., Forest Grove, Oreg.	Sears, Roebuck and Co., Chicago, Ill.
Home Manufacturers Association, Washington, D. C. (General support)	Timber Engineering Co., Washington, D. C.
Horn, A. C. Companies, Long Island City, N. Y. (General support)	U. S. Army, Corps of Engineers. (General support)
Interchemical Corporation Finishes Division, Cincinnati, Ohio.	Philadelphia District
Johns-Manville Sales Corp., New York, N. Y.	Ohio River Division
Macy's Bureau of Standards, New York, N. Y.	North Pacific Division Laboratory
Marsh Wall Products, Inc., Dover, Ohio.	Young, Ray, Manufacturers' and Mill Representative, Radburn, Fair Lawn, N. J.
	U. S. Gypsum Co., Chicago, Ill. (General support)

## OTHER COMMERCIAL STANDARDS

A list of Commercial Standards may be obtained from the Commodity Standards Division, Office of Technical Services, U. S. Department of Commerce, Washington 25, D. C. This list includes the purchase price of each publication and gives directions for ordering copies.