Prefinished Wall Panels

A RECORDED VOLUNTARY STANDARD OF THE TRADE

COMMODOITY STANDARDS

Simplified Practice Recommendations and Commercial Standards are developed by manufacturers, distributors, and users in cooperation with the Commodity Standards Division of the Office of Industry and Commerce, Bureau of Foreign and Domestic Commerce, and with the National Bureau of Standards.

The purpose of Simplified Practice Recommendations is to eliminate avoidable waste through the establishment of standards of practice for stock sizes and varieties of specific commodities that currently are in general production and demand. The purpose of Commercial Standards is to establish standard methods of test, rating, certification, and labeling of commodities, and to provide uniform bases for fair competition.

The adoption and use of a Simplified Practice Recommendation or 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.

A Simplified Practice Recommendation or a Commercial Standard originates 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 effective Simplified Practice Recommendation and Commercial Standard, through review and revision, whenever, in the opinion of the industry, changing conditions warrant such action. Simplified Practice Recommendations and Commercial Standards are printed and made available by the Department of Commerce through the Government Printing Office and the Department of Commerce field offices.
Prefinished Wall Panels

[Effective May 15, 1951]

1. PURPOSE

1.1 This standard is offered for the common understanding of those concerned with the manufacture, sale, and use of prefinished wall panels. It establishes definite criteria of physical requirements 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 property owner, the architect, or the builder.

2. SCOPE

2.1 This standard provides minimum specifications for one grade of prefinished wall panels. It covers physical requirements and tests for strength, water absorption, linear expansion, hardness, 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 possessed of characteristics which make its use suitable for application to walls to produce a smooth, plane, decorative surface. Such composition material may be, but need not necessarily be, a hard-pressed, structural fiberboard such as that covered by Federal Specification LLL-F-311.

4. DETAIL 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 is to be treated in such manner as to make it as inert as possible to water.

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 applicable 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 1/2 of 1 percent of the total number 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 Samples for test.—Each specimen 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 thickness tolerance (see par. 4.1.4).

4.1.4 Thickness tolerance.—A maximum thickness tolerance of plus 0.030 inch and minus 0.005 inch from the ordered thickness at any measured point shall be permitted. Measurements shall be made at five points on the 24- by 54-inch or the 24- by 48-inch pieces selected for test.

4.1.5 Atmospheric conditions.—Tests shall be made at atmospheric conditions except in case of disputes. Tests shall then 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° F.

4.1.6 Water absorption and thickness expansion.—A specimen 12 by 12 inches at atmospheric conditions shall be weighed and shall be calipered to the nearest one-thousandth of an inch at the center of each of the four edges 1 inch in from the edge. The calipered points shall be marked. The specimen shall be submerged horizontally under 1 inch of distilled water maintained at a temperature of 70° F, plus or minus 5° F. After 24 hours of submersion, 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 by 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:

\[ \text{Percent increase} = \left( \frac{\text{caliper after soaking} - \text{caliper before soaking}}{\text{caliper before soaking}} \right) \times 100. \]

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 support 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 8500 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 \( \frac{3}{8} \) 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 \( \frac{3}{8} \) inch for each 3 feet due to gain in moisture.

4.1.10 Reliance on producer.—Prefinished 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 wall panels shall be thoroughly and evenly covered with one or more coats of finishing material of such quality and so applied as to meet the following requirements and to stand the following tests. 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. Total film thickness shall be not less than 2.5 mils.

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 12\( \frac{1}{2} \) (Sward hardness No. 25).

4.2.5 Abrasion resistance (dry).—This test is made according to the standard procedure recommended in instructions supplied with the Taber abraser machine. Specimens are subjected to two No. CS–17 abrasion wheels, with a 1,000-gram load on each head, which rub the coating in a revolving direction until the prime coat (or base material if no prime coat is used) shows through. The number of revolutions required to rub through the cover film divided by the cover film
thickness (in mils) gives the numerical rating of the coating. (Each revolution of machine gives two distinct rubs since there are two abrasion wheels.) Coating shall withstand 600 revolutions per mil of thickness of cover film.

4.2.6 Abrasion resistance (wet).—The same procedure is used for this test as for the dry abrasion test, except that a rimmed specimen holder is used, which keeps the specimen covered with a 2-percent solution, by weight, of Fels Naphtha soap in water as the test is run. Also, No. CS—10 abrasion wheels with 1,000-gram loads on each head are used. The number of revolutions required to wear through the cover film to the prime coat (or base material if no prime coat is used) is recorded. Each revolution gives two rubs. Coating shall withstand 300 revolutions per mil of thickness.

4.2.7 Adhesion.—The cross-cut method is used for determining adhesion. Eleven parallel lines, $\frac{1}{16}$ inch apart, are cut in one direction, and another series of 11 lines is cut at right angles to the first, making 100 squares ($\frac{1}{16}$ inch by $\frac{1}{16}$ inch). Adhesion is determined by the number of squares in which the coating is removed. The cuts are made just deep enough to go through the coating but not into the board. Cuts are brushed lightly with a fine brush. To pass the test, 75 percent or more of the squares must remain.

4.2.8 Stain test.—Two or three drops of the following are placed, with an eyedropper, on the test specimens and covered with watch glasses, and allowed to remain on the specimens for 4 hours: Hot water (180° F), cold water, 1-percent NAOH, lemon juice (5-percent citric acid), mercurochrome, 50-percent ethyl alcohol, and hot (300° F), pure leaf lard. At the end of the time period, the specimens are washed with soap and water, dried with a cloth, and effects determined. (The hot water should be changed every 10 minutes and the cold water allowed to stand 18 hours.) To pass, test specimens shall show no more than initial softening followed by rehardening, or slight staining.

4.2.9 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 height of drop necessary to break the surface. To pass the test, height of drop shall not be less than 24 inches.

4.2.10 Gloss.—Gloss shall be within the range of 60 to 75 as measured by ASTM D523–49T, Method of Test for 60 Deg. Specular Gloss of Paint Finish, unless the product is specifically designated to be flat-finish. Calibrated working standards for gloss shall be in the same gloss range as that of the sample.

4.2.11 Heat resistance.—A 4-inch 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.
4.2.12 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 specimen 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. Gloss shall not change noticeably and color shall not change objectionably, and any change shall be uniform over the entire specimen.

4.2.13 Steam test.—The mouth of a 500-cc Erlenmeyer flask, one-half full of water maintained at a mild boil, shall be covered with a 4-inch by 4-inch panel for 7 hours. The back and edges of the specimen shall be protected with an Acryloid lacquer or similar material that will not soften or lose adhesion below 200° F. The specimen shall then be allowed to recover for 17 hours. Cycles shall be repeated three times. There must be no blistering, loosening, or separation of coating.

4.2.14 Accelerated aging.—A 3-inch by 10-inch specimen shall be exposed for 240 hours in a twin-arc accelerated weathering machine operating on 2-hour cycles of 15 minutes wet spray and 102 minutes dry. The back and edges of the specimen shall be protected with an Acryloid 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.

4.2.15 Resistance to temperature change.—Place a 6-inch 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; repeat cycle 10 times, always beginning with oven. Specimens shall be free of checking, crazing, and blistering.

4.2.16 High humidity.—Place a 6-inch 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, excessive chalking, or objectionable color change.

4.2.17 Scoring and striping.—The scored portion of any prefinished wall panel shall be adequately coated to give the same wearing properties as required by the foregoing 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 Frequency of and responsibility for testing.—The foregoing tests on products shall be conducted by the manufacturer on a periodic basis. Tests shall be run at sufficiently frequent intervals to insure constant control of products manufactured. The testing described in section 4.2 shall be the responsibility of the manufacturer.

5. SIZES

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

6.1 In order to assure the purchaser that he is getting prefinished 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 guarantee label containing the following wording:

The manufacturer guarantees this prefinished wall panel to meet (or exceed) the requirements of Commercial Standard CS176-51, 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 wall panels be applied or installed in accordance with the individual manufacturer's recommendations for the purpose intended.

8. EFFECTIVE DATE

8.1 Having been passed through the regular procedure of the Commodity Standards Division, and approved by the acceptors herein-after listed, this commercial standard was issued by the United States Department of Commerce, effective from May 15, 1951.

EDWIN W. ELY,
Chief, Commodity Standards Division.

HISTORY OF PROJECT

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. A draft of the proposed standard was submitted on August 30, 1950, to manufacturers, and to a number of distributor, technical, and consumer organizations for advance review and comment. All comments were carefully considered, and the draft adjusted to represent the composite views of all interested groups. The recommended commercial standard was circulated on January 22, 1951, to the trade for further consideration and written acceptance. Upon receipt of official acceptances estimated to represent a satisfactory majority of the production by volume, and in the absence of active valid opposition, the standard was promulgated on April 16, 1951, as Commercial Standard 176-51, to become effective for new production on May 15, 1951.

Project Manager: J. W. Medley, Commodity Standards Division, Office of Industry and Commerce.
Technical Adviser: P. T. Howard, Chemistry Division, National Bureau of Standards.
STANDING COMMITTEE

The following individuals comprise the membership of the standing committee, which is to review, prior to circulation for acceptance, revisions proposed to keep the standard abreast of progress. Comment concerning the standard and suggestions for revision may be addressed to any member of the committee or to the Commodity Standards Division, Office of Industry and Commerce, United States Department of Commerce, which acts as secretary for the committee.

V. R. MARSH, Marsh Wall Products, Inc., Box 28, Dover, Ohio,
P. H. CRUICKSHANK, Tylac Co., Greely and High Streets, Monticello, Ill.
FRANK HOBBS, Colotyle Tyle-Bord, Inc., 975 John Street, Seattle, Wash.
JOHN C. MOORE (alternate, Francis Scofield), National Paint, Varnish & Lacquer Assn., Inc., 1500 Rhode Island Avenue NW., Washington 5, D. C.
O. W. FROST, Forest Fiber Products Co., Box 68, Forest Grove, Oreg.
HARRY H. STEIDLE, Prefabricated Home Manufacturers' Institute, 908 Twentieth Street NW., Washington 6, D. C.
ELTON MORROW, 733 Washington Avenue, Albany 6, N. Y. (representing American Institute of Architects).
ROY E. SCHNEIDER, United States Gypsum Co., 300 West Adams Street, Chicago 6, Ill.
W. SEIDENADEL, Dept. 664, Sears, Roebuck & Co., 925 South Homan Avenue, Chicago 7, Ill.
J. B. PALMER, Masonite Corp., 111 West Washington Street, Chicago 2, Ill.
ACCEPTORS

The organizations listed below have individually accepted this standard for use as far as practicable in the production, distribution, testing, or purchase of prefinished wall panels. In accepting the standard they reserved the right to depart therefrom as they individually deem advisable. It is expected that prefinished wall panels 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.

ASSOCIATIONS

(General Support)

Mississippi Retail Lumber Dealers Association, Inc., Jackson, Miss.
Predecorated Panelboard Council, Cleveland, Ohio
Prefabricated Home Manufacturers' Institute, Washington, D. C.

FIRMS AND OTHER INTERESTS

Allied Building Products Co., Inc., Wau, Mass.
Andrews, Jones, Biscoe & Goodell, Boston, Mass.
Argentina County Lumber Co., Kelty, Tex.
Barelay Manufacturing Co., Inc., New York, N. Y.
Baxter, C. B., & Co., Kansas City, Mo.
Bestl Manufacturing Co., Ontario, Calif.
Blanchi, Paul & Purnell, Architects, Inc., Chattanooga, Tenn.
Bowman & Casson, Inc., Harrison, N. J.
Botsford Lumber Co., Winona, Minn.
Brust & Brust, Architects, Milwaukee, Wis.
Buffalo, City of, Architectural Service, Division of Buildings, Department of Public Works, Buffalo, N. Y.
Cameron Lumber Co., Inc., Newburgh, N. Y.
Cameron, Wm., & Co., Waco, Tex.
Cellarius, Chas. b., Cincinnati, Ohio
Charlotteville Lumber Co., Inc., Charlotteville, Va.
Coates, Henry T., & Associates, New York, N. Y.
Coe Manufacturing Co., New York, N. Y.
Conrad & Cummings, Associated Architects, Binghamton, N. Y.
Corvex, Inc., Los Angeles, Calif.
Corddry Co., Snow Hill, Md.
Cram & Ferguson, Boston, Mass.
Deguine, J. C., Lumber Co., Schenectady, N. Y.
Decotee Products Co., Inc., Collingdale, Pa.
De Jarnette, Charles W., Des Moines, Iowa (General support).
Detroit Edison Co., Detroit, Mich.
Detroit Lumber Co., Detroit, Mich.
Dickerson Lumber Co., Huntington, W. Va.
East Coast Tileboard Corp., Brooklyn, N. Y.
Florida University of, School of Forestry, Gainesville, Fla.
Forest Fiber Products Co., Forest Grove, Ore.
Fort Wayne Builders' Supply Co., Fort Wayne, Ind.
General Millwork Corp., Utica, N. Y.
Hill, C. V., & Co., Inc., Trenton, N. J.
Jerger, Andrew, Co., Cincinnati, Ohio
Lambert Lumber Co., Leavenworth, Kans.
Law, Law, Potter & Nystrom, Madison, Wis.
Lingo Lumber Co., Dallas, Tex.

Lumber Products, Portland, Oreg.
Lyman-Hawkins Lumber Co., Akron, Ohio
Markland, M. B., Contracting Co., Atlantic City, N. J.
Marsh Wall Products, Inc., Dover, Ohio
Monlon Manufacturing Co., Chicago, Ill.
Metropolitan Millwork Co., Brooklyn, N. Y.
Meyer Equipment Co., Inc., Buffalo, N. Y.
Mid-West Lumber Co., Mankato, Kans.
Minnesota & Ontario Paper Co., Minneapolis, Minn.
Midwest Manufacturing Co., Inc., Chicago, Ill.
Monsanto Chemical Co., Springfield, Mass.
Morre Dry Dock Co., Oakland, Calif.
Morris Bros., Waukegan, Ill.
National Tileboard Corp., New York, N. Y.
Nebraska University of, Mechanical Engineering Department, Lincoln, Nebr.
Nolli-Welty Lumber Co., Kansas City, Mo.
Oak Lumber Co., Menomonie, Wis.
Patzig Testing Laboratories, Des Moines, Iowa.
Premilite Manufacturing Co., Inc., Chicago, Ill.
Reserve Lumber Co., Cleveland, Ohio
Rinn-Scott Lumber Co., Chicago, Ill.
Riley Co., New York, N. Y. (General support.)
Sawtelle Lumber Co., Los Angeles, Calif.
Scott Testers, Inc., Providence, R. I.
Sears, Roebuck & Co., Chicago, Ill.
Thompson Lumber Co., Champaign, Ill.
Tolles-Bickford Lumber Co., Inc., Nashua, N. H.
Tylac Co., Inc., Monticello, Ill.
United States Testing Co., Inc., Hoboken, N. J.
Wallace Manufacturing Co., North Kansas City, Mo.
Whissel, L. N., Lumber Co., Inc., Buffalo, N. Y.
Whitmer-Jackson Co., Inc., Buffalo, N. Y.
Yankau, W. B. & Sons, Madison, Wis.

UNITED STATES GOVERNMENT AGENCIES

Agriculture, U. S. Department of, Division of Purchases, Sales, and Traffic, Washington, D. C.
Air Force, Department of, Air Installations, Wright-Patterson Air Force Base, Dayton, Ohio
Army, Department of, Washington, D. C.
Interior, U. S. Department of, Bureau of Indian Affairs, Washington, D. C.
Justice, U. S. Department of, Federal Correctional Institution, Danbury, Conn.
Veterans Administration, Procurement Division, Supply Service, Washington, D. C.
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 Industry and Commerce,
U. S. Department of Commerce,
Washington 25, D. C.

Gentlemen:

We believe that the Commercial Standard 176-51 constitutes a useful standard of practice, and we individually plan to utilize it as far as practicable in the production\(^1\), distribution\(^1\), purchase\(^3\), testing\(^1\) of prefinished wall panels. We reserve the right to depart from it 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.

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 ________________________________

\(^1\) Underscore which one. 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 interests, 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 commercial 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 Nation-wide 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.