

CS91-41

Doors (Entrance); Factory-fitted, Douglas Fir.

U. S. DEPARTMENT OF COMMERCE

JESSE H. JONES, Secretary

NATIONAL BUREAU OF STANDARDS

LYMAN J. BRIGGS, Director

**FACTORY-FITTED DOUGLAS FIR
ENTRANCE DOORS**

National Bureau of Standards

MAR 28 1941

COMMERCIAL STANDARD CS91-41

Effective Date for New Production from February 10, 1941



**A RECORDED VOLUNTARY STANDARD
OF THE TRADE**

UNITED STATES
GOVERNMENT PRINTING OFFICE
WASHINGTON : 1941

PROMULGATION
of
COMMERCIAL STANDARD CS91-41
for
FACTORY-FITTED DOUGLAS FIR
ENTRANCE DOORS

On January 19, 1940, at the instance of the Fir Door Institute, a proposed commercial standard for factory-fitted Douglas fir entrance doors was submitted to manufacturers, and to distributor and consumer organizations, for comment. An adjusted draft was then circulated to those directly concerned for written acceptance. The trade has since accepted and approved for promulgation by the United States Department of Commerce, through the National Bureau of Standards, the standard as shown herein.

The standard is effective for new production from February 10, 1941.

Promulgation recommended.

I. J. Fairchild,
Chief, Division of Trade Standards.

Promulgated.

Lyman J. Briggs,
Director, National Bureau of Standards.

Promulgation approved.

Jesse H. Jones,
Secretary of Commerce.

FACTORY-FITTED DOUGLAS FIR ENTRANCE DOORS

COMMERCIAL STANDARDS CS91-41

PURPOSE

1. The purpose of this commercial standard is to establish standard specifications for factory-fitted Douglas fir entrance doors for the guidance of producers, distributors, and users; to provide a uniform basis for guaranteeing compliance through the use of labels or certification; to avoid delays and misunderstandings; and to effectuate economies through the broader use of factory-fitted entrance doors.

2. In the development of this standard there is no desire to suppress architectural expression, and custom-made doors will still be available from the usual sources.

SCOPE

3. This standard provides minimum specifications for one grade of factory-fitted Douglas fir entrance doors $1\frac{3}{4}$ in. thick. It covers 27 layouts, 25 of which are panel or sash doors and 2 are flush doors. All doors are available in two sizes, 3 ft by 6 ft 8 in. and 3 ft by 7 ft. It also covers packaging, inspection, nomenclature and definitions, and the method of certification of compliance with this standard. Detail schedules of layouts are listed beginning on page 4.

GENERAL REQUIREMENTS

4. All commercial standard factory-fitted fir entrance doors shall meet the following general requirements:

5. *Material*.—Doors shall be made of 100 percent heartwood, kiln-dried, old-growth Douglas fir.

6. *Workmanship*.—Doors shall be well manufactured and machined, and all flat surfaces of both faces shall be smoothly sanded.

7. *Thickness*.—Doors shall be $1\frac{3}{4}$ in. thick, and a thickness tolerance of minus $\frac{1}{16}$ in. shall be allowed.

8. *Seasoning*.—The material shall be kiln-dried according to accepted methods to a proper and uniform moisture content.

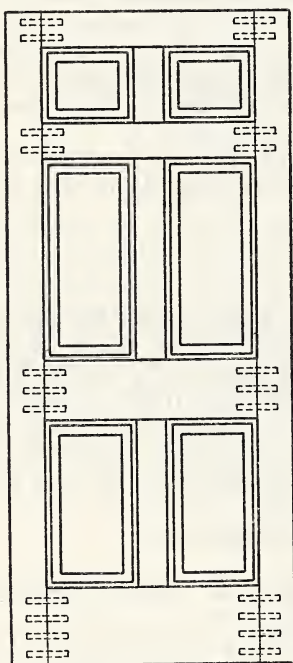
9. *Packaging*.—Each door shall be scuff-stripped on the top and bottom edges and securely wrapped in heavy paper or cartoned to prevent damage while in storage and transit.

DETAIL REQUIREMENTS

10. *Size*.—Doors shall be 3 ft by 6 ft 8 in. or 3 ft by 7 ft, as specified. They shall be accurately cut to size, within a tolerance of $\pm \frac{1}{32}$ in.

11. *Panel and sash doors*.

12. *Construction*.—Shall be assembled by what is known as “dowelled construction”; (see fig. 1) that is, stiles and rails to be bored to receive fir dowels not less than $\frac{5}{8}$ in. in diameter by not less than 5 in. long. The dowels shall have glue grooves. Dowels shall be set in water-resistant glue and shall extend approximately one-half their length into each stile and rail, and assembled under pressure. Rails 6 in. or less in width shall have two dowels; there shall be one additional dowel for each additional 3 in. in width or fraction thereof.



For rails 6 in. or less in width, two dowels at each end. One additional dowel at each end for each additional 3 in. in width or fraction thereof.

Dowels not less than $\frac{5}{8}$ in. in diameter and not less than 5 in. long with glue grooves.

FIGURE 1.—Panel-and-sash door construction.

13. *Stiles and rails*.—Stiles and rails shall be of 100 percent heartwood, selected, all vertical grain old-growth Douglas fir, the faces of which must be clear, with the exception that each stile may contain one carefully repaired pitch seam on each side, provided that such pitch seam does not extend through the piece nor exceed $3\frac{1}{2}$ in. in length. Such pitch seams shall not be over 35 in. from the bottom of the door. Bottom rail may contain one neatly repaired pitch seam, the same as the stiles.

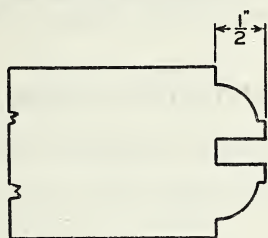
14. *Panels*.—All panels shall be raised, solid, and $\frac{3}{4}$ in. thick, of 100 percent heartwood, selected, all vertical grain old-growth Douglas fir, the faces of which must be clear. Panels shall be raised

one or two sides as specified, except door number 2015, which shall have panels raised on both sides. (See fig. 2.)

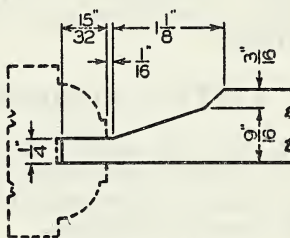
15. *Glazing*.—Doors having glass openings, indicated on designs by "G," are available only as shown under designs and layouts beginning on page 4. Glass is not furnished.

16. *Sticking*.—Either $\frac{7}{8}$ -in. "wide sticking 'A'" or $\frac{1}{2}$ -in. "ovolo" sticking will be furnished around panels as specified, unless otherwise indicated on layouts. (See fig. 2.) Defective sticking which may develop in machining must be carefully repaired or neatly replaced.

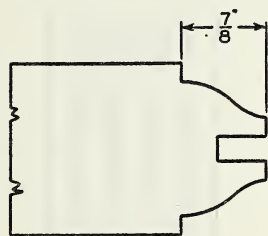
17. *Raised moldings*.—Unless otherwise indicated on layouts, doors with raised molding on one side, around panels, are regularly available.



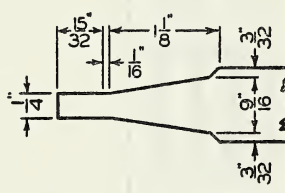
OVOLO STICKING



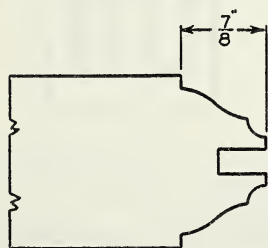
PANEL RAISED ONE SIDE



WIDE STICKING "A"



PANEL RAISED TWO SIDES



WIDE STICKING "B"

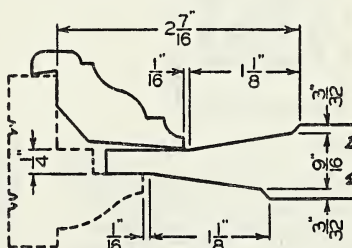
PANEL RAISED TWO SIDES
FOR RAISED MOLDING

FIGURE 2.—Sticking and panel details.

18. *Flush doors*.—(Designs 2025 and 2030).

19. *Construction*.—The core for flush doors shall be constructed of stiles not less than 4 in. wide, filled in between with strips properly jointed and glued, forming a solid core. The core shall be redried and finished to a smooth surface before applying the crossbanding.

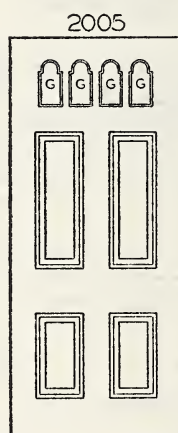
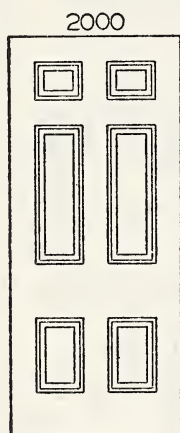
The stiles may be of one piece or built up of two or more strips well-glued together. The crossbandings and face veneers shall be glued to each side of the core with water-resistant glue and assembled under pressure. Doors may be five- or seven-ply construction at the option of the manufacturer.

20. *Veneers*.—The veneers on each side of the core shall be of the same thickness. The face veneers for slab doors having V-grooves on one face (design 2025) may be rotary cut or vertical grain, as specified. If rotary cut, it shall be not less than $\frac{1}{8}$ in. thick before sanding, while if it is vertical grain, it shall be either of one thickness not less than $\frac{1}{4}$ in., or two thicknesses of $\frac{1}{8}$ in. each before sanding. For plain flush doors (design 2030) the face veneers may be rotary cut or vertical grain, as specified, not less than $\frac{1}{8}$ in. thick before sanding. Crossbandings shall be not less than $\frac{1}{16}$ in. or more than $\frac{1}{8}$ in. thick.

FACTORY-FITTED DOUGLAS FIR ENTRANCE DOOR LIST

21. The layouts and designs for factory-fitted Douglas fir entrance doors are illustrated beginning below.

22. Measurements for stiles, rails, and muntins shown in layouts are over-all, including sticking.



Stiles and top rail.....	5 $\frac{3}{8}$ "
Lock rail.....	11 $\frac{3}{8}$ "
Intermediate rail and muntins.....	5 $\frac{3}{8}$ "
Bottom rail.....	9 $\frac{3}{8}$ "
Height from bottom of door to top of lock rail.....	36 $\frac{3}{8}$ "
Height from top of door to bottom of intermediate rail.....	18 $\frac{1}{2}$ "
Height of center panels varies with height of door.	
Sticking: Ovolo or wide sticking "A" or "B."	
Raised molding one side—optional.	

Stiles.....	5 $\frac{3}{8}$ "
Top rail.....	6 $\frac{3}{8}$ "
Lock rail.....	9 $\frac{3}{8}$ "
Intermediate rail and muntins.....	5 $\frac{3}{8}$ "
Bottom rail.....	9 $\frac{3}{8}$ "
Bars between glass.....	1 $\frac{3}{8}$ "
Height from bottom of door to top of lock rail.....	36 $\frac{3}{8}$ "
Height from top of door to bottom of intermediate rail.....	19"

Height of top panels varies with height of door.

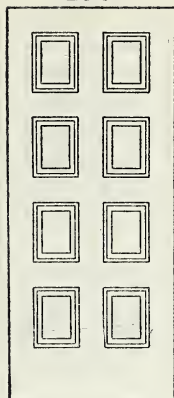
Sticking: Ovolo or wide sticking "A" or "B" around panels only. Ovolo sticking and glass bead around openings for glass.

Raised molding one side around panels only—optional.

Glass not furnished.

All doors 1 $\frac{3}{4}$ inches thick.

2010

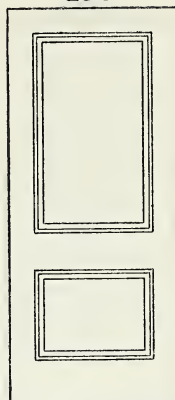


Stiles and top rail	5 $\frac{3}{8}$ "
Lock rail	5 $\frac{3}{8}$ "
Intermediate rails and muntins	5 $\frac{3}{8}$ "
Bottom rail	11 $\frac{3}{8}$ "

Sticking: Ovolo or wide sticking "A" or "B."

Raised molding one side—optional.
Panels equal.

2015



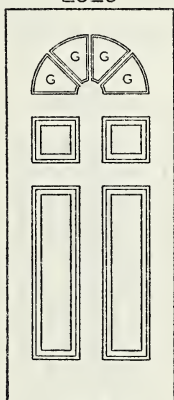
Stiles and top rail	5 $\frac{3}{8}$ "
Lock rail	8"
Bottom rail	9 $\frac{3}{8}$ "

Panels $\frac{3}{4}$ " raised 2 sides only.

Sticking: Ovolo or wide sticking "A" or "B."

Raised molding one side—optional.

2020



Stiles and top rail	5 $\frac{3}{8}$ "
Lock rail	5 $\frac{3}{8}$ "
Intermediate rail and muntins	5 $\frac{3}{8}$ "
Bottom rail	9 $\frac{3}{8}$ "
Hub	4 $\frac{1}{2}$ "
Bars between glass	$\frac{1}{2}$ "
Height from top of door to top of intermediate rail	18"

Sticking: Ovolo or wide sticking "A" or "B" around panels only. Ovolo sticking and bead around openings for glass.
Top panels square.

Raised molding one side around panels only—optional.

Glass not furnished.

2025



5 equal grooves—one face.

Rotary cut face veneers not less than $\frac{1}{8}$ " thick before sanding.

5- or 7-ply construction at manufacturers' option.

Can also be furnished with vertical grain face veneers not less than $\frac{1}{4}$ " thick or two thicknesses of $\frac{1}{8}$ " each before sanding.

All doors 1 $\frac{3}{4}$ inches thick.

2030

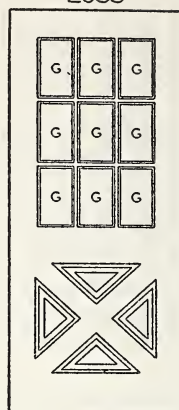


Rotary cut face veneers not less than $\frac{1}{8}$ " thick before sanding.

5- or 7-ply construction at manufacturers' option.

Can also be furnished with vertical grain face veneers not less than $\frac{1}{4}$ " thick or two thicknesses of $\frac{1}{8}$ " each before sanding.

2035



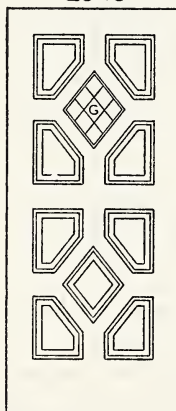
Stiles and top rail.....	5 $\frac{3}{8}$ "
Lock rail.....	7 $\frac{1}{4}$ "
Bottom rail.....	8 $\frac{3}{4}$ "
Cross bucks.....	4 $\frac{1}{2}$ "
Bars between glass.....	$\frac{1}{2}$ "
Height from bottom of door to top of lock rail.....	38 $\frac{1}{4}$ "

Sticking: Ovolo only and ovolo bead around openings for glass.

Raised molding not furnished.

Glass not furnished

2040



Stiles and top rail.....	5 $\frac{3}{8}$ "
Lock rail.....	5 $\frac{3}{8}$ "
Intermediate rails and muntins.....	4 $\frac{1}{2}$ "
Bottom rail.....	11 $\frac{3}{8}$ "

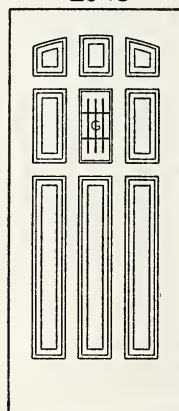
Sticking: Ovolo or wide sticking "A" or "B."

'L' molding and bullnose bead around opening for glass. (Ovolo bead if ovolo sticking.)

aised molding one side—optional.

Glass not furnished.

2045



Stiles and top rail.....	5 $\frac{3}{8}$ "
Intermediate rails and muntins.....	3 $\frac{3}{4}$ "
Bottom rail.....	11 $\frac{3}{8}$ "
Height from top of door to bottom of upper intermediate rail.....	17 $\frac{1}{8}$ "
Height from top of door to bottom of lower intermediate rail.....	35 $\frac{1}{4}$ "

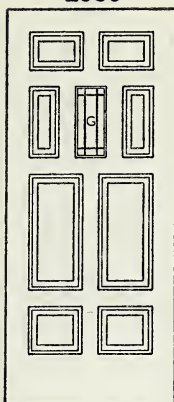
Sticking: Ovolo or wide sticking "A" or "B."

Raised molding one side—optional.
Wicket-sash and grille furnished.

Glass not furnished.

All doors 1 $\frac{3}{4}$ inches thick.

2050



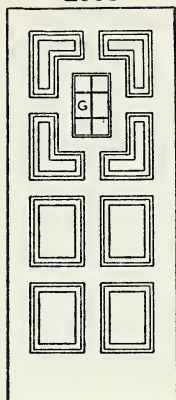
Stiles and top rail.....	5 $\frac{5}{8}$ "
Lock rail.....	4 $\frac{1}{2}$ "
Intermediate rails and muntins.....	4 $\frac{1}{2}$ "
Bottom rail.....	11 $\frac{5}{8}$ "
Height from top of door to bottom of upper intermediate rail.....	16 $\frac{1}{8}$ "
Height from bottom of door to top of lower intermediate rail.....	23 $\frac{1}{8}$ "

Sticking: Ovolo or wide sticking "A" or "B."

Raised molding one side—optional.
Wicket-sash furnished.
Grille optional.

Glass not furnished.

2055



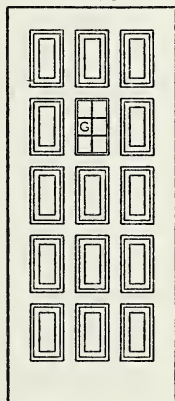
Stiles and top rail.....	5 $\frac{5}{8}$ "
Intermediate rails and muntins.....	4 $\frac{1}{2}$ "
Bottom rail.....	11 $\frac{5}{8}$ "
Height from top of door to bottom of horizontal muntin.....	22 $\frac{1}{8}$ "

Sticking: Ovolo or wide sticking "A" or "B".

Raised molding one side—optional.
Wicket-sash furnished.
Grille optional.

Glass not furnished.

2060



Stiles and top rail.....	5 $\frac{5}{8}$ "
Lock rail.....	3 $\frac{3}{4}$ "
Intermediate rails and muntins.....	3 $\frac{3}{4}$ "
Bottom rail.....	9 $\frac{5}{8}$ "

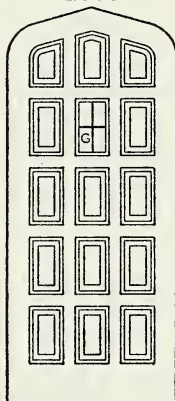
Sticking: Ovolo or wide sticking "A" or "B".

"L" molding and bullnose bead around opening for glass.
(Ovolo bead if ovolo sticking.)

Raised molding one side—optional.
Panels equal.

Glass not furnished.

2065



Stiles and top rail.....	5 $\frac{5}{8}$ "
Lock rail.....	3 $\frac{3}{4}$ "
Intermediate rails and muntins.....	3 $\frac{3}{4}$ "
Bottom rail.....	9 $\frac{5}{8}$ "

Sticking: Ovolo or wide sticking "A" or "B".

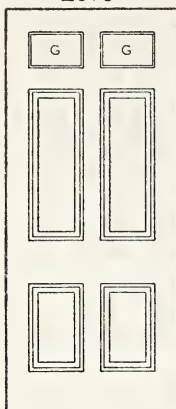
"L" molding and bullnose bead around opening for glass.
(Ovolo bead if ovolo sticking.)

Raised molding one side—optional.
Rectangular panels equal.

Glass not furnished.

All doors 1 $\frac{3}{4}$ inches thick.

2070



Stiles and top rail	5 $\frac{3}{8}$ "
Lock rail	9 $\frac{3}{8}$ "
Intermediate rail and muntins	5 $\frac{3}{8}$ "
Bottom rail	9 $\frac{3}{8}$ "
Height from bottom of door to top of lock rail	36 $\frac{3}{8}$ "

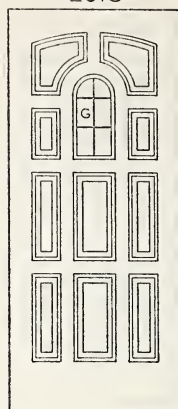
Sticking: Ovolo or wide sticking "A" or "B".

"L" molding and bullnose bead.
around openings for glass.
(Ovolo bead if ovolo sticking.)

Raised molding one side—optional.

Glass not furnished.

2075



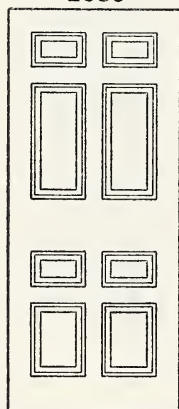
Stiles and top rail	5 $\frac{3}{8}$ "
Intermediate rails and muntins	3 $\frac{3}{8}$ "
Bottom rail	11 $\frac{3}{8}$ "
Height from top of door to bottom of upper intermediate rail	34 $\frac{1}{2}$ "

Sticking: Ovolo or wide sticking "A" or "B".

Raised molding one side—optional.
Wicket-sash furnished.
Grille optional.

Glass not furnished.

2080

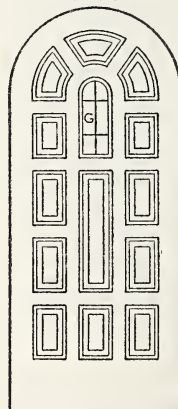


Stiles and top rail	5 $\frac{3}{8}$ "
Lock rail	9"
Intermediate rails and muntins	4 $\frac{1}{2}$ "
Bottom rail	8"
Height from top of door to top of upper intermediate rail	12 $\frac{3}{4}$ "
Height from bottom of door to top of lock rail	45"

Sticking: Ovolo or wide sticking "A" or "B".

Raised molding one side—optional.

2085



Stiles and top rail	5 $\frac{3}{8}$ "
Intermediate rails and muntins	3 $\frac{3}{8}$ "
Bottom rail	11 $\frac{3}{8}$ "
Height from top of door to bottom of upper intermediate rail	34 $\frac{1}{2}$ "

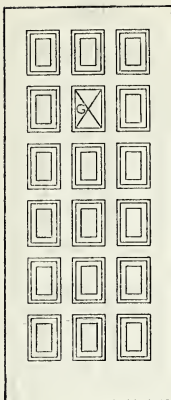
Sticking: Ovolo or wide sticking "A" or "B".

Raised molding one side—optional.
Wicket-sash furnished.
Grille optional.

Glass not furnished.

All doors 1 $\frac{3}{4}$ inches thick.

2090



Stiles and top rail.....	5 $\frac{3}{8}$ "
Intermediate rails and muntins.....	3 $\frac{3}{4}$ "
Bottom rail.....	9 $\frac{3}{8}$ "

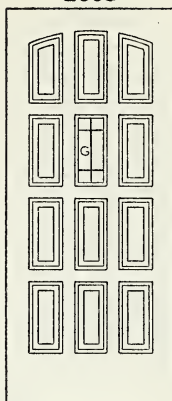
Sticking: Ovolo or wide sticking "A" or "B."

"L" molding and bullnose bead around openings for glass. (Ovolo bead if ovolo sticking.)

Raised molding one side—optional.
Panels equal.

Wicket-sash and glass not furnished.

2095



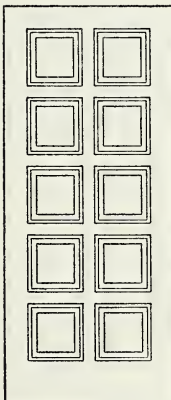
Stiles and top rail.....	5 $\frac{3}{8}$ "
Intermediate rails and muntins.....	3 $\frac{3}{4}$ "
Bottom rail.....	11 $\frac{3}{8}$ "

Sticking: Ovolo or wide sticking "A" or "B."

Raised molding one side—optional.
Wicket-sash furnished.
Grille optional.

Glass not furnished.

2100

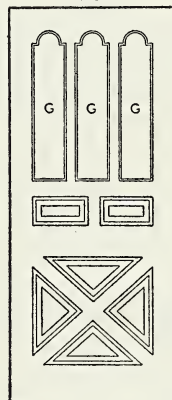


Stiles and top rail.....	5 $\frac{3}{8}$ "
Lock rail.....	3 $\frac{3}{4}$ "
Intermediate rails and muntins.....	3 $\frac{3}{4}$ "
Bottom rail.....	9 $\frac{3}{8}$ "

Sticking: Ovolo or wide sticking "A" or "B."

Raised molding one side—optional.
Panels equal.

2105



Stiles and top rail.....	5 $\frac{3}{8}$ "
Lock rail.....	7 $\frac{1}{4}$ "
Intermediate rail and muntin.....	4 $\frac{1}{2}$ "
Bottom rail.....	8 $\frac{3}{4}$ "
Cross bucks.....	4 $\frac{1}{8}$ "
Bars between glass.....	2"
Height from bottom of door to top of lock rail.....	38 $\frac{1}{4}$ "

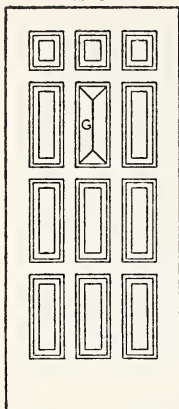
Sticking: Ovolo only and ovolo bead around openings for glass.

Raised molding not furnished.

Glass not furnished.

All doors 1 $\frac{3}{4}$ inches thick.

210



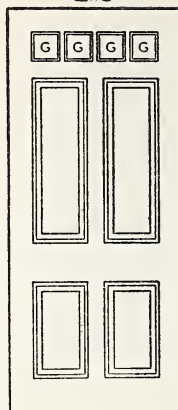
Stiles and top rail	5 $\frac{3}{8}$ "
Intermediate rails and muntins	3 $\frac{3}{8}$ "
Bottom rail	11 $\frac{3}{8}$ "

Sticking: Ovolo or wide sticking "A" or "B."

Raised molding one side—optional.
Wicket-sash furnished.
Grille optional.

Glass not furnished.

215



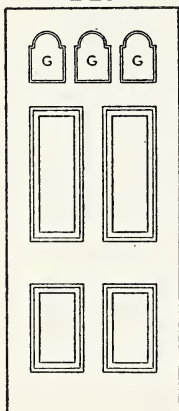
Stiles and top rail	5 $\frac{3}{8}$ "
Lock rail	9"
Intermediate rail and muntins	41 $\frac{1}{2}$ "
Bottom rail	8"
Bars between glass	1"
Height from bottom of door to top of lock rail	36"

Sticking: Ovolo or wide sticking "A" or "B" around panels only. Ovolo sticking and bead around openings for glass.

Raised molding one side—optional.

Glass not furnished.

220



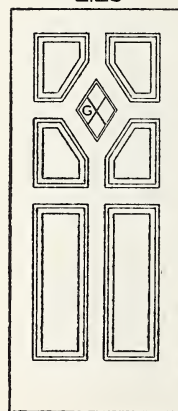
Stiles	5 $\frac{3}{8}$ "
Top rail	6 $\frac{3}{8}$ "
Lock rail	9 $\frac{3}{8}$ "
Intermediate rail and muntins	5 $\frac{3}{8}$ "
Bottom rail	9 $\frac{3}{8}$ "
Bars between glass	2"
Height from bottom of door to top of lock rail	36 $\frac{3}{8}$ "

Sticking: Ovolo or wide sticking "A" or "B" around panels only. Ovolo sticking and bead around openings for glass.

Raised molding one side—optional.

Glass not furnished.

225



Stiles and top rail	5 $\frac{3}{8}$ "
Lock rail	5 $\frac{3}{8}$ "
Intermediate rail and muntins	41 $\frac{1}{2}$ "
Bottom rail	11 $\frac{3}{8}$ "

Sticking: Ovolo or wide sticking "A" or "B."

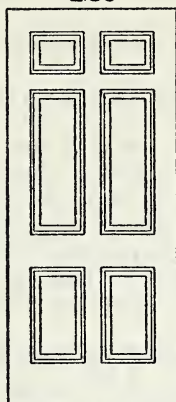
"L" molding and bullnose bead around opening for glass. (Ovolo bead if ovolo sticking.)

Raised molding one side—optional.

Glass not furnished.

All doors 1 $\frac{3}{4}$ inches thick.

2130



Stiles and top rail.....	5 $\frac{3}{8}$ "
Lock rail.....	8"
Intermediate rail and muntins.....	4 $\frac{1}{2}$ "
Bottom rail.....	9 $\frac{3}{8}$ "
Height from bottom of door to top of lock rail.....	36 $\frac{3}{8}$ "
Height from top of door to bottom of intermediate rail.....	17 $\frac{3}{8}$ "

Sticking: Ovolo or wide sticking "A" or "B."

Raised molding one side—optional.

INSPECTION

23. All doors sold as conforming to this commercial standard are subject to inspection in the condition received, and complaints regarding any shipment shall be made within five (5) days after receipt thereof. Any rejected doors shall be held, properly protected, for a period of three (3) weeks after notice of rejection and pending adjustment.

CERTIFICATION AND MARKING

24. In order to assure the purchaser that he is getting factory-fitted Douglas fir entrance doors of the high quality covered by this specification, producers may individually or in concert with their trade association, or inspection bureau, certify specific shipments or mark each door by stamp, brand, or label as conforming to the commercial standard.

25. The appearance of this Fir Door Institute label, as applicable to factory-fitted Douglas fir entrance doors, is a guarantee by the

TRADE MARK REG. NO. 375,813.

TRUFFIT
DOUGLAS FIR DOORS

manufacturer that the door conforms to Commercial Standard CS91-41, including all-heart, vertical grain, factory-fitted, individually packed, scuff-stripped, trade-marked, old-growth Douglas fir doors and subject to control inspection by the Fir Door Institute.

NOMENCLATURE AND DEFINITIONS

Check.—A lengthwise separation of the wood which occurs across the rings of annual growth.

Core.—The core is the innermost layer in flush door construction.

Crossbanding.—The veneer used in the construction of flush doors, which is placed between the core and face veneer, with the direction of the grain at right angles to that of the face veneer.

Flush door.—Made up of a core, crossbanding, and face veneers.

Heartwood.—The darker-colored wood occurring in the inner portion of the tree, sometimes referred to as "heart."

Kiln-dried.—Dried by artificial heat to a moisture content which is less than can normally be obtained through the natural process known as air seasoning.

Moisture content of wood.—Weight of the water contained in the wood expressed in percentage of the weight of the oven-dry wood.

Muntin.—Any short or light bar, either vertical or horizontal, in a door, between glass or panels and not extending the full width or length of the door.

Panel door.—Made up of stiles, rails, and one or more panels, the stiles and rails forming the frame around the panel.

Pitch seam.—A shake or check which is filled with pitch.

Rail.—The cross, or horizontal, piece of the framework of the door.

Sash door.—Same as panel door, except one or more panels are replaced by glass.

Shake.—A lengthwise separation of the wood, which occurs usually between and parallel to the rings of annual growth.

Stiles.—The upright, or vertical, outside pieces of a door.

Vertical grain.—Vertical grain lumber has been sawed parallel with the pith of the log and approximately at right angles to the growth rings; that is, the rings form an angle of 45 degrees or more with the surface of the piece.

EFFECTIVE DATE

The standard is effective for new production from February 10, 1941.

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. Each organization nominated its own representative. Comment concerning the standard and suggestions for revision, may be addressed to any member of the committee or to the Division of Trade Standards, National Bureau of Standards, which acts as secretary for the committee.

Manufacturers:

W. P. WOOLLEY (chairman), Fir Door Institute, Tacoma, Wash.

A. L. MORISETTE, Clear Fir Lumber Co., Tacoma, Wash.

HENRY L. MERTZ, Buffelen Lumber & Mfg. Co., Tacoma, Wash.

A. C. ERICKSON, M & M Woodworking Co., Portland, Oreg.

Distributors:

FRED C. KREUSCHER, Hussey-Williams Co., Inc., Ozone Park, L. I., New York.
Representing National American Wholesale Lumber Assn., Inc.
National Association of Wood Work Jobbers, Inc. (Invited to name representative.)
Western Retail Lumbermen's Association. (Invited to name representative.)

Users:

EARL W. MACY, Property Standards Section, Technical Division, Federal Housing Administration, Washington, D. C.
THEODORE IRVING COE, The Department of Technical Services, American Institute of Architects, 1741 New York Ave. NW., Washington, D. C.
GEORGE P. LOCKER, Metropolitan Building Co., 1201 4th Avenue, Seattle, Wash.
Representing National Association of Purchasing Agents.
A. G. BEAR, Construction Service, Veterans' Administration, Washington, D. C.

HISTORY OF PROJECT

On August 10, 1939, the Fir Door Institute requested the cooperation of the National Bureau of Standards in the establishment of a commercial standard for factory-fitted Douglas fir entrance doors. A draft of a proposed commercial standard was submitted to producers, and to a large number of distributor and consumer organizations, for their review and comment. After the requirements were harmonized and adjusted so that the draft represented the composite views of all interested groups, the recommended commercial standard was circulated on October 14, 1940, to those directly concerned for written acceptance.

Upon receipt of official acceptance, estimated to represent a satisfactory majority of the production volume, and in the absence of active, valid opposition, the standard was promulgated as Commercial Standard CS91-41, effective for new production from February 10, 1941.

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_____

Division of Trade Standards,
National Bureau of Standards,
Washington, D. C.

Gentlemen:

Having considered the statements on the reverse side of this sheet, we accept the Commercial Standard CS91-41 as our standard of practice in the

Production¹Distribution¹Use¹

of factory-fitted Douglas fir entrance doors.

We will assist in securing its general recognition and use and will cooperate with the standing committee to effect revisions of the standards when necessary.

Signature of individual 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 and State _____

¹ Please designate which group you represent by drawing lines through the other two. Please file separate acceptances for all subsidiary companies and affiliates which should be listed separately as acceptors. In the case of related interests, trade papers, colleges, etc., desiring to record their general approval, the words "in principle" 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 standards 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 the Department of Commerce, the support of any standard is inadequate, the right is reserved to withhold promulgation and publication.

ACCEPTORS

The organizations and individuals listed below have accepted this commercial standard as their standard of practice in the production, distribution, and use of factory fitted Douglas fir entrance doors. Such endorsement does not signify that they may not find it necessary to deviate from the standard, nor that producers so listed guarantee all of their products in this field to conform with the requirements of this standard. Therefore, specific evidence of quality certification should be obtained where required.

ASSOCIATIONS

American Specification Institute, Chicago, Ill.
 Appalachian Hardwood Manufacturers, Inc., Cincinnati, Ohio.
 Arizona Retail Lumber & Builders Supply Association, Inc., Phoenix, Ariz.
 Building Officials Conference of America, Inc., Washington, D. C.
 Carolina Lumber & Building Supply Association, Charlotte, N. C. (In principle.)
 Central Ohio Lumber Institute, Columbus, Ohio.
 Douglas Fir Plywood Association, Tacoma, Wash. (In principle.)
 Fir Door Institute, Tacoma, Wash.
 Michigan Retail Lumber Dealers Association, Lansing, Mich.
 Mississippi Retail Lumber Dealers Association, Inc., Jackson, Miss.
 National Hardwood Lumber Association, Chicago, Ill. (In principle.)
 Ohio Association of Retail Lumber Dealers, The, Xenia, Ohio.
 West Coast Lumbermen's Association, Seattle, Wash. (In principle.)
 Wisconsin Retail Lumbermen's Association, Milwaukee, Wis.

FIRMS

A One Building Material Co., Evansville, Ind.
 Acme Door Co., Hoquiam, Wash.
 Adams, Franklin O., Tampa, Fla.
 Allen, George W., LaPorte, Ind.
 Allen Lumber Co., Elwood, Philadelphia, Pa.
 Allison & Allison, Los Angeles, Calif.
 Amarillo Sash & Door Co., Amarillo, Tex.
 American Sash & Door Co., Kansas City, Mo.
 Anderson Lumber Co., Ogden, Utah.

Andrews, Jones, Biscoe & Whitmore, Boston, Mass.
 Andrews Lumber Co., C. E., New Bethlehem, Pa.
 Arizona Sash Door & Glass Co., Phoenix & Tucson, Ariz.
 Auler, Jensen & Brown, Oshkosh, Wis.
 Austin, Ennis R., South Bend, Ind.
 Bahe Co., Edward J., Chicago, Ill.
 Balch & Lippert, Madison, Wis.
 Barger Millwork Co., Statesville, N. C.
 Barnes Lumber Co., W. F. & J. F., Waco, Tex.
 Baumer, Herbert, Columbus, Ohio.
 Beacham & LeGrand, Greenville, S. C.
 Beasley & Sons Co., Nashville, Tenn.
 Becker Danowitz Co., Inc., Brooklyn, N. Y.
 Bell Manufacturing Co., Inc., C. C., West Monroe, La.
 Bettcher, Geo. F., Denver, Colo.
 Beuttler & Arnold, Sioux City, Iowa.
 Bial, George F., Hasbrouck Heights, N. J.
 Binswanger & Co., Inc., Richmond, Va.
 Bishop, Horatio W., Los Angeles, Calif.
 Black Millwork & Lumber Co., Inc., Midland Park, N. J.
 Blackburn, Inc., Robert, Milwaukee, Wis.
 Blake, Edgar Ovet, Evanston, Ill.
 Blatter, R. H., Washington, D. C.
 Blithe, Wesley Leshner, Philadelphia, Pa.
 Boehm, George A., New York, N. Y.
 Borland Lumber Co., Oil City, Pa.
 Bosman & Casson, Inc., Harrison, N. J.
 Bovard, William R., Kansas City, Mo. (In principle.)
 Brainerd, Harry B., New York, N. Y. (In principle.)
 Braseth & Houkom, Fargo, N. Dak.
 Brazer, Clarence W., New York, N. Y.
 Brew Manufacturing Co., Puyallup, Wash.
 Brockway-Smith-Haigh-Lovell Co., Boston, Mass.

- Brown, W. J., Cedar Rapids, Iowa.
 Brown-Graves Co., Akron, Ohio.
 Brust & Brust, Milwaukee, Wis.
 Buchanan & Smock Lumber Co., Asbury Park, N. J.
 Buechner & Orth, St. Paul, Minn. (In principle.)
 Buffalo Plywood Corporation, Buffalo, N. Y.
 Buffelen Lumber & Manufacturing Co., Tacoma, Wash. & Fort Worth, Tex.
 Building Service, Inc., Great Falls, Mont.
 Burritt Lumber Co., The A. W., Bridgeport, Conn.
 Byron Sash & Door Co., Inc., Louisville, Ky.
 C-W Plywood Co., Chicago, Ill.
 California Builders Supply Co., Oakland, Calif.
 Cameron Lumber Co., Inc., Newburgh, N. Y.
 Camlet, J. Thomas, Clifton, N. J.
 Camp Plywood Co., Inc., The E. W., Indianapolis, Ind.
 Candela, Rosario, New York, N. Y.
 Cannon & Mullen, Salt Lake City, Utah.
 Capitol Lumber Co., Indianapolis, Ind.
 Carder, Macon O., Amarillo, Tex.
 Carlow Co., Los Angeles, Calif.
 Carnahan Manufacturing Co., Logansport, Ind.
 Central Glazing Co., Fort Worth, Tex.
 Cervin & Stuhr, Rock Island, Ill.
 Charlottesville Lumber Co., Inc., Charlottesville, Va.
 Chase Lumber Co., S. H., San Jose, Calif.
 Chiaverini, Francis, Providence, R. I. (In principle.)
 Child, Harry Charles, Sayre, Pa.
 Churchill Cabinet Co., Chicago, Ill.
 Cincinnati Butchers' Supply Co., The, Cincinnati, Ohio.
 Clark, Carl W., Cortland, N. Y.
 Clear Fir Lumber Co., Tacoma, Wash.
 Cleary Millwork Co., Inc., Ansonia, Conn.
 Clem Lumber Co., Dallas, Tex.
 Cline Bros. Lumber Co., Inc., Kendallville, Ind.
 Clinger's Sons, D., Milton, Pa.
 Coit, E., New York, N. Y.
 Combs Lumber Co., Inc., Lexington, Ky.
 Conrad & Cummings, Binghampton, N. Y.
 Conrow, H. S., Wichita, Kans.
 Coolbaugh & Son Co., C. C., Gloucester City, N. J.
 Coolidge, Shepley, Bulfinch & Abbott, Boston, Mass.
 Cooper, David M., Ambridge, Pa.
 Cornell University, College of Architecture, Ithaca, N. Y. (In principle.)
 Cram & Ferguson, Boston, Mass.
 Cross, Austin & Ireland Lumber Co., Brooklyn, N. Y.
 Crowell & Lancaster, Bangor, Maine.
 Curtis Co., Ros., Detroit, Mich.
 Cuthbert & Cuthbert, Ann Arbor, Mich.
 D'Arcy Co., Dover, N. H.
 De Jarnette, Charles Wagner, Des Moines, Iowa.
 Delehanty, Andrew L., Albany, N. Y.
 Denby, Edwin H., New York, N. Y.
 Dibble Lumber Co., The S. B., North Adams, Mass.
 District of Columbia, Engineer Department, Washington, D. C.
 Dodge Corporation, F. W., Chicago, Ill.
 Dodge & Morrison, New York, N. Y.
 Donlin-Johnson Co., St. Cloud, Minn.
 Dower Lumber Co., John, Tacoma, Wash.
 Dunlap & Co., Inc., Columbus, Ind.
 Eichenlaub, Geo. E., Erie, Pa.
 Emery Industries, Inc., Cincinnati, Ohio.
 English, Harold T., Hutchinson, Kans.
 Estes Lumber Co., Birmingham, Ala.
 Evans Lee Co., The, Eau Claire, Wis.
 Evans MacArthur Co., New York, N. Y.
 Evansville Sash & Door Co., Inc., Evansville, Ind.
 Everett & Associates, H. F., Allentown, Pa.
 Exchange Lumber & Manufacturing Co., Spokane, Wash.
 Farley & Loetscher Manufacturing Co., Dubuque, Iowa.
 Fellheimer & Wagner, New York, N. Y.
 Fink & Schindler Co., San Francisco, Calif.
 Fischer Lime & Cement Co., Memphis, Tenn.
 Fitz-Gibbon, T. David, Norfolk, Va.
 Flannagan, Eric G., Henderson, N. C.
 Flint Sash & Door Co., Inc., Flint, Mich.
 Florida, University of, School of Forestry, Gainesville, Fla. (In principle.)
 Foltz & Son, Herbert, Indianapolis, Ind.
 Foster Co., Inc., James P., Baltimore, Md.
 Frantz & Spence, Saginaw, Mich.
 Frederick Bros., Inc., Pottstown, Pa.
 Fuller & Co., W. P., Seattle & Spokane, Wash. & Boise, Idaho.
 Gaertner, Otto, New York, N. Y.
 Gall, Harry L. C., New York, N. Y.
 Garber, Frederick W., Cincinnati, Ohio.
 General Millwork Corporation, Utica, N. Y.
 Gibb, The Office of Arthur N., Ithaca, N. Y.
 Ginsberg & Sons, Inc., D., Corona, N. Y.
 Gourley & Co., John, Highland Park, Ill.
 Great Lakes Sash & Door Co., The, Cleveland, Ohio.
 Greenstein, Louis, Buffalo, N. Y.
 Hahn, Stanley W., Silver Spring, Md.
 Hall-Gregg, Inc., Somerville, Mass.
 Hallberg & Beersman, Chicago, Ill.
 Hammond Lumber Co., Los Angeles, Calif.

- Hannaford, Frederick T., Gainesville, Fla.
Hannaford & Sons, Samuel, Cincinnati, Ohio.
Harbor Plywood Corporation, Hoquiam, Wash.
Harbor Sales Co., Inc., Baltimore, Md. & Washington, D. C.
Hardin Sash & Door Co., H. H., Fort Worth, Tex.
Harley & Ellington, Detroit, Mich.
Hartung & Hansen, Inc., Seattle, Wash.
Hasness, C. D., Harrisburg, Pa.
Hastings & Co., Inc., A. W., Boston, Mass.
Hausman, N. W., Glen Cove, N. Y.
Havre Builders Supply Co., Havre, Mont.
Helfensteller, Hirsch & Watson, St. Louis, Mo.
Hentz, Adler & Shutze, Atlanta, Ga.
Hodgdon & Son, Charles, Chicago, Ill.
Hogan Lumber Co., Oakland, Calif.
Holsman & Holsman, Chicago, Ill.
Home Supply Co., Kimberly, Wis.
Hope, Frank L., Jr., San Diego, Calif.
Hopkins, Albert Hart, Buffalo, N. Y.
Houston, Better Business Bureau of, Houston, Tex. (In principle.)
Hunter Lumber Co., Chillicothe, Ill.
Hutchings, E. T., Louisville, Ky.
Hyde-Murphy Co., Ridgway, Pa.
Independent Lumber Co., The, Grand Junction, Colo.
Iron City Sash & Door Co., Pittsburgh, Pa.
Ivey, Inc., Edwin J., Seattle, Wash.
Jefferson Wood Products Co., Jefferson, Wis.
Joannes, Francis Y., New York, N. Y.
Johnson, Keplar B., Seattle, Wash.
Johnson & Lundgren, Tacoma, Wash.
Johnson, Wallwork & Dukehart, Portland, Ore.
Johnson & Wimsatt, Inc., Washington, D. C.
Jokel—Coy—Thal, Toledo, Ohio.
Jones Hardwood Co., San Francisco, Calif.
Kansas State College, Department of Architecture, Manhattan, Kans.
Karcher, Walter T., & Livingston Smith, Philadelphia, Pa. (In principle.)
Keely Plywood Co., Hal, Pittsburgh, Pa.
Keich & O'Brien, Warren, Ohio.
Kellogg & Sons Co., Charles C., Utica, N. Y.
Kilpatrick Brothers, Inc., Oklahoma City, Okla.
Knighton & Howell, Portland, Ore.
Kohn, Robert D.,—Chas. Butler, New York, N. Y.
Kullberg Manufacturing Co., Minneapolis, Minn.
Kyle, Herbert S., Charleston, W. Va. (In principle.)
Larrick, Thomas, Athens, Ohio.
Law, Law & Potter, Madison, Wis.
Lawrence, Holford & Allyn, Portland, Ore.
Leuckel & Co., Inc., A. K., Trenton, N. J.
Levy, Will, St. Louis, Mo.
Lewis Lumber Co., Spring Lake, N. J.
Liberty Lumber & Manufacturing Co., Inc., Erwin, Tenn.
Lockhart International, Inc., New York, N. Y. (In principle.)
Lockman, Frederick V., Portland, Ore.
Loetscher & Burch Manufacturing Co., Des Moines, Iowa.
Lumber Dealers Supply Co., Denver, Colo.
Lumber Dealers Supply Co., Cheyenne, Wyo.
Lumber Products, Inc., Portland, Ore.
Lumbermen's Supply, Inc., Sacramento, Calif.
Lumbermen's Supply Co., Monroe, La.
Lyman-Hawkins Lumber Co., The, Akron, Ohio.
Lynch & Foard, Wilmington, N. C.
Lyon-Gray Lumber Co., Dallas, Tex.
M & M Wood Working Co., Portland, Ore.
MacConnell, Inc., Malcolm, University City, Mo.
Mahlstedt Allied Materials, Inc., New Rochelle, N. Y.
Mann & Co., Hutchinson, Kans. (In principle.)
Maris Plywood Corporation, San Francisco, Calif.
Martin, Edgar, Chicago, Ill.
Martin & Son, A. Oscar, Doylestown, Pa.
Mason & Co., George D., Detroit, Mich.
Massena & du Pont, Inc., Wilmington, Del.
Mauk-Seattle Lumber Co., Seattle, Wash.
Mauran, Russell, Crowell & Mullgardt, St. Louis, Mo.
McGowin-Lyons Hardware & Supply Co., Mobile, Ala.
McPhillips Manufacturing Co., Mobile, Ala.
Michigan Wholesalers, Inc., Jackson, Mich.
Millard, Julian, Harrisburg, Pa. (In principle.)
Miller & Yeager, Terre Haute, Ind.
Mock & Morrison, Tacoma, Wash.
Montague Millwork Co., Richmond, Va.
Mooser, William, San Francisco, Calif.
Morgan, David H., Philadelphia, Pa.
Morgan Millwork Co., Baltimore, Md.
Morgan Sash & Door Co., Oklahoma City, Okla.
Morrison-Merrill & Co., Salt Lake City, Utah.
Mueller, Fred G., & Walter R. Hair, Hamilton, Ohio.
Muhlenberg Brothers, Reading, Pa.
Muhlenberg, Yerkes & Muhlenberg, Reading, Pa.

- National Plywood Co., Inc., New York, N. Y.
- National Sash & Door Co., (Hortman-Salmen Co., Inc., Owner), New Orleans, La.
- National Wood Works, Sioux City, Iowa.
- Nelson, Albert L., St. Louis, Mo.
- New Orleans, Inc., Better Business Bureau of, New Orleans, La. (In principle.)
- Nicolai Door Sales Co., San Francisco, Calif.
- Northern Lumber Co., Billings, Mont.
- Northwest Door Co., Tacoma, Wash.
- Norton, Paul W., Boston, Mass. (In principle.)
- Nurenborg, W. S., Fort Worth, Tex.
- Officer, Gwynn, Berkeley, Calif.
- Ohio City Sash & Door Co., Dayton, Ohio.
- Oklahoma, University of, Norman, Okla.
- O'Neill Manufacturing Co., Inc., Rome, Ga.
- Oregon Door Co., Portland, Oreg.
- Pacific Mutual Door Co., Tacoma, Wash., and Chicago, Ill.
- Pacific System Homes, Inc., Los Angeles, Calif.
- Pancoast, Russell T., Miami Beach, Fla.
- Parker Building Specialties, Inc., San Francisco, Calif.
- Pease Woodwork Co., Inc., Cincinnati, Ohio.
- Pennsylvania State College, Department of Forestry, State College, Pa.
- Pepper, George W., Jr., Philadelphia, Pa.
- Perlin Lumber Co., Brooklyn, N. Y.
- Phelps, Frederick A., Newark, N. J.
- Platt & Brother, F. P., New York, N. Y.
- Portsmouth Lumber Corporation, Portsmouth, Va.
- Provine, L. H., Urbana, Ill. (In principle.)
- Quigley Co., J. R., Gloucester City, N. J.
- Radford Co., The, Oshkosh, Wis.
- Radford & Sanders, Inc., Baltimore, Md.
- Red River Lumber Co., Los Angeles, Calif.
- Reid, William H., Jr., Billings, Mont.
- Remington Yards, Hibbing, Minn.
- Reynolds Lumber Co., The, New London, Ohio.
- Richards, McCarty & Bulford, Columbus, Ohio.
- Ritchie & Associates, James H., Boston, Mass.
- Robert & Co., Inc., Atlanta, Ga.
- Roberts Corporation, U. N., Davenport, Iowa.
- Roberts Harbor Plywood Co., Pittsburgh, Pa.
- Roddiss Lumber & Veneer Co., Milwaukee, Wis.
- Rogers Lumber Co., T. H., McAlester, Okla.
- Rohrer Lumber Co., D. J., Clintonville, Wis.
- Rounds & Porter Co., Wichita, Kans.
- Ruggles Lumber Co., Carlos, Springfield, Mass.
- Rutland Sash & Door Co., Inc., Rutland, Vt.
- Sash, Door & Glass Corporation, Richmond, Va.
- Schaeffler, Joseph C., New York, N. Y.
- Schell-Sasse Manufacturing Co., Jacksonville, Fla.
- Schirmer, Robert F., Woodhaven, New York, N. Y.
- Schoeppe, Edward, Philadelphia, Pa.
- Schofield, George Munson, Nyack, N. Y.
- Scott Lumber Co., The, Wheeling, W. Va.
- Searle & Chapin Lumber Co., Lincoln, Nebr.
- Sears, Roebuck & Co., Chicago, Ill.
- Shannon Sash & Door Co., Kansas City, Kans.
- Shenk Co., Henry, Erie, Pa.
- Sherman's Sons Co., R. A., Westerly, R. I.
- Shire, Edward I., New York, N. Y.
- Shutts & Morrison, Erie, Pa.
- Sidells, Arthur F., & Ellis M. Keppel, Warren, Ohio.
- Simons Lumber Co., Henry, Minneapolis, Minn.
- Simons Lumber & Manufacturing Co., Harry J., St. Paul, Minn.
- Sirrine & Co., J. E., Greenville, S. C.
- Sleeper, Harold R., New York, N. Y.
- Smedley Bros. Co., Frankford, Philadelphia, Pa.
- Smith, Wilton, San Francisco, Calif.
- Smith Co., Geo. P., Charles City, Iowa.
- Smith & Rumery Co., Portland, Maine.
- Smith, Werner & Billings, Alexandria, Va.
- Snell Sash & Door Co., St. Paul, Minn.
- Southwestern Bell Telephone Co., St. Louis, Mo.
- Southwestern Sash & Door Co., Joplin, Mo.
- Southwestern Sash & Door Co., Inc., Albuquerque, N. Mex.
- Southwestern Sash & Door Co., Inc., El Paso, Tex.
- Specification Record, Chicago, Ill.
- Standard Lumber & Supply Co., Ft. Wayne, Ind.
- Stanley, F. W., Ft. Worth, Tex.
- Staub, John F., Houston, Tex.
- Steves Sash & Door Co., Corpus Christi, Tex.
- Stoetzel, Ralph E., Chicago, Ill.
- Stopper, Eugene A., Philadelphia, Pa.
- Strable Hardwood Co., Oakland, Calif.
- Structural Service Bureau, Philadelphia, Pa.
- Sweet's Catalog Service, New York, N. Y.
- Taylor, Henry L., St. Petersburg, Fla.
- Taylor Sash & Door Co., Pensacola, Fla.

Taylor, Edward Cray, & Ellis Wing Taylor, Los Angeles, Calif.
 Teachout Co., The, Cleveland, Ohio.
 Temple, Seth J., Davenport, Iowa. (In principle.)
 Thomas, Glen H., Wichita, Kans.
 Thorne, Henry Calder, Ithaca, N. Y.
 Treganza, A. O., Lemon Grove, Calif.
 Tulane Hardwood Lumber Co., Inc., New Orleans, La.
 Tulsa Rig Reel & Manufacturing Co., Tulsa, Okla.
 Underwood Coal & Supply Co., Mobile, Ala.
 Union Planing Mill, Inc., Stockton, Calif.
 Vaughan & Sons, Geo. C., Houston & San Antonio, Tex.
 Velde Lumber Co., Pekin, Ill.
 Vetter Manufacturing Co., Stevens Point, Wis.
 Victoria Sash & Door Co., Inc., Shreveport, La.
 Virginia Polytechnic Institute, Blacksburg, Va.
 Voell, Richard F., Alexandria, Va.
 Vogel, Willis A., Toledo, Ohio.
 Walker & Gillette, New York, N. Y.
 Wanke Panel Co., Portland, Oreg.
 Ward-Brock Sash & Door Co., The, Cincinnati, Ohio.
 Warren Brothers Co., Nashville, Tenn.
 Washington Woodworking Co., Inc., Washington, D. C.
 Watertown Sash & Door Co., Watertown, S. Dak.
 Webster & Wilson, Los Angeles, Calif.
 Weimer & Sons, George, St. Albans, W. Va.
 Weinberg, Joseph L., Cleveland, Ohio. (In principle.)
 Weinell Lumber Co., Aug. F., Columbia, Ill.
 Welch, Carroll E., Huntington, N. Y.
 Western Door & Sash Co., Oakland, Calif.
 Wheeler Osgood Sales Corporation, Tacoma, Wash.
 Wheelock, Inc., E. U., Los Angeles, Calif.
 Whitaker, Courtney L., Dravosburg, Pa.
 White Brothers, San Francisco, Calif.
 Whitmer-Jackson Co., Inc., The, Buffalo, N. Y. & Cleveland, Ohio.

Whittier Lumber & Millwork Co., Newark, N. J.
 Whitworth, Henry P., Miami, Fla.
 Wiles-Chipman Lumber Co., St. Louis, Mo.
 Wilkinson Co., Inc., The, Indianapolis, Ind.
 Willatsen, Andrew, Seattle, Wash.
 Willson, Fred F., Bozeman, Mont.
 Wischmeyer, William F., St. Louis, Mo.
 Wood & Son, Associates, Edward J., Clarksburg, W. Va.
 Wright, Frank H., Detroit, Mich. (In principle.)
 Zoller & Muller, New York, N. Y.

U. S. GOVERNMENT

Federal Works Agency, United States Housing Authority, Washington, D. C. (In principle.)
 Federal Works Agency, Work Projects Administration, Phoenix, Ariz.
 Federal Works Agency, Work Projects Administration, Wilmington, Del.
 Federal Works Agency, Work Projects Administration, Jacksonville, Fla.
 Federal Works Agency, Work Projects Administration, Des Moines, Iowa.
 Federal Works Agency, Work Projects Administration, Frederick, Md.
 Federal Works Agency, Work Projects Administration, St. Paul, Minn.
 Federal Works Agency, Work Projects Administration, Mitchell, S. Dak.
 Federal Works Agency, Work Projects Administration, Seattle, Wash.
 Guam, Government of, Public Works Department, Guam.
 Interior, Department of the, Office of Indian Affairs, Construction Division, Washington, D. C.
 Navy Department, Bureau of Ships, David Taylor Model Basin, Washington, D. C.
 Navy Department, United States Navy Yard, Portsmouth, N. H.
 Navy Department, United States Navy Yard, Public Works Design Section, Pearl Harbor, T. H.
 Treasury Department, Washington, D. C.
 Veterans' Administration, Washington, D. C.
 War Department, Washington, D. C.

COMMERCIAL STANDARDS

CS No.	Item
0-40.	Commercial standards and their value to business (third edition).
1-32.	Clinical thermometers (second edition).
2-30.	Mopsticks.
3-40.	Stoddard solvent (third edition).
4-29.	Staple porcelain (all-clay) plumbing fixtures.
5-40.	Pipe nipples; brass, copper, steel, and wrought iron.

CS No.	Item
6-31.	Wrought-iron pipe nipples (second edition). Superseded by CS5-40.
7-29.	Standard weight malleable iron or steel screwed unions.
8-41.	Gage blanks (third edition).
9-33.	Builders' template hardware (second edition).
10-29.	Brass pipe nipples. Superseded by CS5-40.
11-29.	Regain of mercerized cotton yarns.

CS No.	Item	CS No.	Item
12-40.	Fuel oils (fifth edition).	55-35.	Mattresses for institutions.
13-39.	Dress patterns (second edition).	56-41.	Oak flooring (second edition).
14-39.	Boys' button-on waists, shirts, junior and polo shirts (made from woven fabrics) (second edition).	57-40.	Book cloths, buckrams, and impregnated fabrics for bookbinding purposes except library bindings (second edition).
15-29.	Men's pajamas.	58-36.	Woven elastic fabrics for use in overalls (overall elastic webbing).
16-29.	Wall paper.	59-39.	Woven dress fabrics—testing and reporting (second edition).
17-32.	Diamond core drill fittings (second edition).	60-36.	Hardwood dimension lumber.
18-29.	Hickory golf shafts.	61-37.	Wood-slat venetian blinds.
19-32.	Foundry patterns of wood (second edition).	62-38.	Colors for kitchen accessories.
20-36.	Staple vitreous china plumbing fixtures (second edition).	63-38.	Colors for bathroom accessories.
21-39.	Interchangeable ground-glass joints, stopcocks, and stoppers (fourth edition).	64-37.	Walnut veneers.
22-40.	Builders' hardware (nontemplate) (second edition).	65-38.	Wool and part-wool fabrics.
23-30.	Feldspar.	66-38.	Marking of articles made wholly or in part of platinum.
24-30.	Standard screw threads.	67-38.	Marking articles made of karat gold.
25-30.	Special screw threads.	68-38.	Liquid hypochlorite disinfectant, deodorant, and germicide.
26-30.	Aromatic red cedar closet lining.	69-38.	Pine oil disinfectant.
27-36.	Mirrors (second edition).	70-41.	Phenolic disinfectant (emulsifying type) (second edition) (published with CS71-41).
28-32.	Cotton fabric tents, tarpaulins, and covers.	71-41.	Phenolic disinfectant (soluble type) (second edition) (published with CS70-41).
29-31.	Staple seats for water-closet bowls.	72-38.	Household insecticide (liquid spray type).
30-31.	Colors for sanitary ware.	73-38.	Old growth Douglas fir standard stock doors.
31-38.	Wood shingles (fourth edition).	74-39.	Solid hardwood wall paneling.
32-31.	Cotton cloth for rubber and pyroxylin coating.	75-39.	Automatic mechanical draft oil burners.
33-32.	Knit underwear (exclusive of rayon).	76-39.	Hardwood interior trim and molding.
34-31.	Bag, case, and strap leather.	77-40.	Sanitary cast-iron enameled ware.
35-31.	Plywood (hardwood and eastern red cedar).	78-40.	Ground-and-polished lenses for sun glasses (second edition) (published with CS79-40).
36-33.	Fourdrinier wire cloth (second edition).	79-40.	Blown, drawn, and dropped lenses for sun glasses (second edition) (published with CS78-40).
37-31.	Steel bone plates and screws.	80-41.	Electric direction signal systems other than semaphore type for commercial and other vehicles subject to special motor vehicle laws (after market).
38-32.	Hospital rubber sheeting.	81-41.	Adverse-weather lamps for vehicles (after market).
39-37.	Wool and part wool blankets (second edition).	82-41.	Inner-controlled spotlamps for vehicles (after market).
40-32.	Surgeons' rubber gloves.	83-41.	Clearance, marker, and identification lamps for vehicles (after market).
41-32.	Surgeons' latex gloves.	84-41.	Electric tail lamps for vehicles (after market).
42-35.	Fiber insulating board (second edition).	85-41.	Electric license-plate lamps for vehicles (after market).
43-32.	Grading of sulphonated oils.	86-41.	Electric stop lamps for vehicles (after market).
44-32.	Apple wraps.	87-41.	Red electric warning lanterns.
45-40.	Douglas fir plywood (domestic grades) (fourth edition).	88-41.	Liquid-burning flares.
46-40.	Hosiery lengths and sizes (third edition).	89-40.	Hardwood stair treads and risers.
47-34.	Marking of gold-filled and rolled-gold-plate articles other than watch cases.	90- .	(Reserved for power shovels and cranes).
48-40.	Domestic burners for Pennsylvania anthracite (underfeed type) (second edition).	91-41.	Factory-fitted Douglas fir entrance doors.
49-34.	Chip board laminated chip board, and miscellaneous boards for book-binding purposes.	92-41.	Cedar, cypress, and redwood tank stock lumber.
50-34.	Binders board for bookbinding and other purposes.		
51-35.	Marking articles made of silver in combination with gold.		
52-35.	Mohair pile fabrics (100-percent mohair plain velvet, 100-percent mohair plain frieze, and 50-percent mohair plain frieze).		
53-35.	Colors and finishes for cast stone.		
54-35.	Mattresses for hospitals.		

NOTICE.—Those interested in commercial standards with a view toward accepting them as a basis of everyday practice may secure copies of the above standards, while the supply lasts, by addressing the Division of Trade Standards, National Bureau of Standards, Washington, D. C.