STANDARD STOCK PONDEROSA PINE DOORS

(Third Edition)

COMMERCIAL STANDARD CS120-48

[Supersedes CS120-46] Effective Date for New Production from November 20, 1948



A RECORDED VOLUNTARY STANDARD OF THE TRADE

UNITED STATES DEPARTMENT OF COMMERCE

CHARLES SAWYER, Secretary

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Simplified Practice Recommendations and Commercial Standards are developed by manufacturers, distributors, and users in cooperation with the Commodity Standards Division of 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.

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COMMERCIAL STANDARD FOR STANDARD STOCK PONDEROSA PINE DOORS

At the instance of the National Door Manufacturers Association, a recommended commercial standard for ponderosa pine doors was circulated, on May 31, 1944, to manufacturers, testing laboratories, distributors, and consumers for approval. This standard was accepted by the trade and issued by the United States Department of Commerce as Commercial Standard CS120-44. A revision of the standard, designated CS120-46, became effective in 1946.

On July 28, 1948, a recommended revision of CS120-46, submitted by the National Door Manufacturers Association and approved by the standing committee, was circulated for written acceptance. Those concerned have since accepted and approved the revised standard as shown herein.

Project Manager: J. W. MEDLEY, Commodity Standards Division, National Bureau of Standards.

Technical Adviser: V. B. PHELAN, Building Technology Division, National Bureau of Standards.

COMMERCIAL STANDARD CS120-48

for

STANDARD STOCK PONDEROSA PINE DOORS 1 (THIRD EDITION)

PURPOSE

1. The purpose of this commercial standard is to establish standard specifications and sizes for ponderosa pine standard stock doors to guide producers, distributors, architects, builders, and the public; to provide a uniform basis for guaranteeing compliance through the use of labels or certifications; to avoid delays and misunderstandings; and to effect economies from the producer to the ultimate user through a wider utilization of standard ponderosa pine doors.

2. In the development of this standard every effort has been made to include designs that will permit freedom of architectural expression. Custom-made ponderosa pine doors will continue to be available for all types of architectural designing.

3. To meet the modern trend toward economy and simplification of installation, doors may be specified "Prefit" to the exact size required. (See par. 12.) Doors will be mortised for locks and cut for hinges when so specified.

SCOPE

4. This standard provides minimum specifications for stock ponderosa pine doors in four nominal thicknesses, 3/4, 11/8, 13/8, and 13/4 inches. It covers construction and grades, and tolerances for these requirements.

4a. There are standard stock lay-outs and designs for the following:

Door Grade Sizes Illus- trations Blind or Summer No. 1 Page Page Combination No. 1 7 26 Combination No. 1 7 26 Cupboard No. 1 and No. 1F 7 23 Cupboard No. 1, No. 1F, No. 2, and No. 2F 6-7 10-21 French or Casement No. 1 6-7 20-21 Rarage No. 1 and Mill Run 6-7 24-25 Interior No. 1, No. 1F, No. 2, and No. 2F 6 8-9 Side Lights No. 1 No. 1, No. 1F, No. 2, and No. 2F 7 22 No. 1 No. 1, No. 1F, No. 2, and No. 2F 7 22 Storm No. 1, No. 1F, No. 2, and No. 2F 7 22			1	
Blind or Summer No. 1 7 26 Combination No. 1 7 26 Cupboard No. 1 and No. 1F 7 23 Exterior No. 1, No. 1F, No. 2, and No. 2F 6-7 10-21 French or Casement No. 1 6-7 20-21 No. 1 No. 1 6-7 20-21 Interior No. 1 and Mill Run 7 24-25 Side Lights No. 1, No. 1F, No. 2, and No. 2F 6 8-9 Storm No. 1, No. 1F, No. 2, and No. 2F 7 22	Door	Grade	Sizes	
101let 100. 1	Combination Cupboard Exterior French or Casement Flush Garage Interior Side Lights	No. 1 No. 1 and No. 1F No. 1, No. 1F, No. 2, and No. 2F No. 1 No. 1 No. 1 and Mill Run No. 1, No. 1F, No. 2, and No. 2F No. 1	$\begin{array}{c} & 7 \\ & 7 \\ & 7 \\ & 6 - 7 \\ & 6 - 7 \\ & 6 - 7 \\ & 6 \\ & 7 \\ & 6 \\ & 7 \\ & 7 \end{array}$	$\begin{array}{c} 26\\ 26\\ 23\\ 10-21\\ 20-21\\ 28\\ 24-25\\ 8-9\\ 22\\ 22\\ 22\end{array}$

1 Ponderosa pine, one of the Western pines, has proved over the past 45 years to be highly adaptable for woodwork. This pine is light in color, ranging from creamy-white to straw color. The grain is close, uniform, and resists raising. The surface is even-textured. It takes nails and screws without splitting, is easy to mortise for locks and cut for hinges. It sands to a satin-smooth finish, takes paint, enamel, stain, and varnish, holding them well. The ends and edges do not splinter easily.

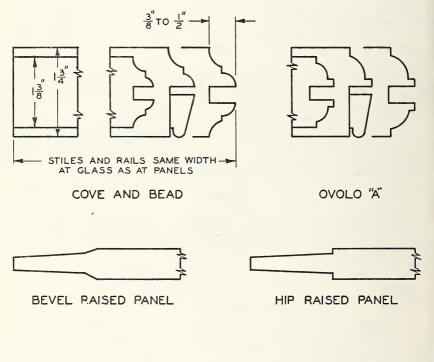
GENERAL REQUIREMENTS

PANEL AND SASH DOORS

5. All commercial standard ponderosa pine panel and sash doors shall meet the following requirements:

6. *Material.*—Doors shall be made of properly kiln-dried ponderosa pine.

7. Workmanship.—Doors shall be well manufactured and machined, with flat faces of stiles, rails, and panels smoothly machine-sanded.





FLAT PLYWOOD PANEL FIGURE 1. Sticking and panel details.

8. Construction.—Panel and sash doors shall be assembled by what is known as "dowelled construction," that is, stiles and rails to be bored to receive dowels not less than $\frac{3}{3}$ inch in diameter by approximately $4\frac{3}{4}$ inches long for doors $\frac{3}{4}$ inch thick, and not less than $\frac{1}{2}$ inch in diameter by approximately 5 inches long for doors $1\frac{1}{8}$, $1\frac{3}{6}$, and $1\frac{3}{4}$ inches thick (except that cupboard doors and narrow-stile doors may have shorter dowels). Dowels shall have glue grooves and be sized for a drive fit. Dowels shall be set in water-resistant glue and extend approximately one-half their length into each stile and rail, and shall be assembled under pressure. Because of the fact that all present standard door-boring machines are built for 21/4-inch dowel centers, the quantity of dowels used is limited according to the width of the rails and shall be based on the following minimum number of dowels at each end of rails:

Rails under $4\frac{1}{4}$ inches wide1	dowel.
Rails 4 ¹ / ₄ inches to 7 inches wide2	dowels.
Rails over 7 inches wide	dowels, plus one additional
	dowel for each additional
	full 3 inches in width.

8a. At the option of the manufacturer, doors may be assembled by what is known as blind-mortised and tenoned construction instead of dowelled construction.

9. Sticking.—Stiles and rails shall have solid sticking. All intersections shall be coped with joints well fitted. "Cove and Bead," or "Ovolo A" sticking shall be standard on all standard ponderosa pine doors. See figure 1. Imperfect sticking which may develop in machining shall be carefully repaired or neatly replaced. Panels are also illustrated in figure 1.

10. Thicknesses.—Doors shall be of the following thicknesses; and a thickness tolerance of minus $\frac{1}{16}$ inch shall be allowed:

Cupboard doors
Side lights
Interior doors
Exterior doors $\ldots 1\%''$ and $1\%''$.
Garage doors
Toilet doors
Blind (summer) doors $1\frac{1}{8}$ " and $1\frac{3}{8}$ "
Combination doors and storm doors

11. Size tolerance.—Unless otherwise specified, a height and width tolerance of plus $\frac{1}{8}$ inch shall be allowed, except when doors are ordered "Prefit."

12. *Prefitting.*—When ordered "Prefit," doors shall be supplied as follows:

- (a) Interior and exterior doors, except combination screen and storm doors, shall be prefit to 346 inch less in width and 1/8 inch less in height than nominal door size, with a tolerance of 342 inch, plus or minus, allowed.
- (b) All prefit doors shall have outside edges of stiles slightly eased.
- (c) All prefit doors shall have skid blocks, scuff strips, or other type of protection attached to the bottom of the door.

GRADING

13. All doors shall be graded according to both sides or faces. A shipment of any grade shall represent a fair average of that grade.

14. Interior, exterior, and storm doors ordinarily can be obtained in grades No. 1, No. 1F, No. 2, and No. 2F; cupboard

doors in No. 1 and No. 1F; side lights, casement doors, toilet doors, blind doors, combination doors, and flush doors in grade No. 1 only; and garage doors in grades No. 1 and "Mill Run."

GRADE NO. 1.—SUITABLE FOR NATURAL, STAIN, PAINT, OR ENAMEL FINISH

15. Stiles and rails.—The stock shall be practically clear. Bright sap, light-brown stain, and light-red kiln burn shall be permitted. Each stile or bottom rail may contain one carefully repaired pitch seam on each side, provided it does not extend through the piece nor exceed $2\frac{1}{2}$ inches in length. Rails wider than $4\frac{3}{4}$ inches and up to $9\frac{3}{4}$ inches may be glued up with not over one joint, with two joints up to 12 inches, and with not more than the same proportion of joints being permitted in wider rails. A water-resistant glue shall be used. Stiles and rails may be solid or veneered, at the option of the manufacturer. If veneered, a water-resistant glue shall be used.

16. Panels, solid.—The standard thickness of solid ponderosa pine panels raised two sides shall be not less than $\frac{7}{16}$ inch after sanding, and shall conform to the grade of the stiles and rails. Panels wider than $9\frac{3}{4}$ inches may be glued up. A water-resistant glue shall be used.

17. Panels, flat plywood.—The standard thickness of 3-ply flat plywood panels shall be not less than $\frac{1}{4}$ inch after sanding except inner-frame and cupboard doors, which shall be not less than $\frac{3}{46}$ inch. If made of ponderosa pine, they shall be "sound and better two sides," according to standard commercial grading rules issued by pine plywood manufacturers; if made of hardwood, they shall be grade 1 plywood as specified in Commercial Standard CS35–47,² relating to hardwood plywood.

GRADE NO. 1F.-SUITABLE FOR PAINT OR ENAMEL FINISH

18. Same specifications as for grade No. 1, except that the panels shall be Douglas fir plywood in accordance with Commercial Standard $CS45-48.^2$

GRADE NO. 2-SUITABLE FOR ORDINARY PAINT OR ENAMEL FINISH

19. Stiles and rails.—The stock may contain light-blue stain, medium-brown stain, or medium-red kiln burn, showing on not to exceed 50 percent of the area of any piece, as well as pitch streaks, checks, pitch pockets if carefully slivered, tight sound knots not to exceed $\frac{5}{8}$ inch in diameter, and other imperfections, not one of which shall be more serious in nature than those enumerated above. Each stile shall contain one such imperfection, and may have two, but no piece shall contain more than two, and no door shall contain more than eight on each side. Plugs shall be admitted but regarded as imperfections. Rails wider than $4\frac{3}{4}$ inches may be glued up. A water-resistant glue shall be used.

² Commercial Standards CS35, Hardwood Plywood, and CS45, Douglas Fir Plywood, may be obtained from the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C., for 10 cents each.

Stiles and rails may be solid or veneered, at the option of the manufacturer. If veneered, a water-resistant glue shall be used.

20. Panels, solid.—The standard thickness of solid ponderosa pine panels raised two sides shall be not less than $\frac{7}{16}$ inch after sanding and shall conform to the grade of the stiles and rails. Panels wider than $9\frac{3}{4}$ inches may be glued up. A water-resistant glue shall be used.

21. Panels, flat plywood.—The standard thickness of 3-ply flat plywood panels shall be not less than $\frac{1}{4}$ inch after sanding, except inner-frame and cupboard doors, which shall be not less than $\frac{3}{46}$ inch. If made of ponderosa pine, they shall be "sound and better two sides," according to standard commercial grading rules issued by pine plywood manufacturers; if made of hardwood, they shall be grade 2 plywood as specified in Commercial Standard CS35–47, relating to hardwood plywood.

GRADE NO. 2F.—SUITABLE FOR ORDINARY PAINT OR ENAMEL FINISH

22. Same specifications as for grade No. 2, except that panels shall be Douglas fir plywood in accordance with Commercial Standard CS45-48.

GRADE "MILL RUN."—GARAGE DOORS ONLY—FOR PAINT FINISH ONLY

23. "Mill Run" grade may contain blue stain, brown stain, or red kiln burn, worm holes, checks, pitch streaks, pitch pockets, fine shake, tight sound knots not to exceed 2 inches in diameter, and other imperfections, none of which shall be more serious in nature than those already enumerated.

24. Panels, solid.—The standard thickness of solid ponderosa pine panels raised two sides shall be not less than $\frac{7}{16}$ inch after sanding and shall conform to the grade of the stiles and rails. Panels wider than $9\frac{3}{4}$ inches may be glued up. A water-resistant glue shall be used.

25. Panels, flat plywood.—The standard thickness of 3-ply flat plywood panels shall be not less than $\frac{1}{4}$ inch after sanding. If made of ponderosa pine, they shall be "sound and better two sides," according to standard commercial grading rules issued by pine plywood manufacturers; if made of Douglas fir, they shall be in accordance with Commercial Standard CS45–48.

DESIGNS AND LAY-OUTS

26. Measurements for stiles, rails, mullions, and muntins shown in the lay-outs herein are over-all (face measurement plus the sticking). A tolerance of $\frac{1}{8}$ inch in width shall be permitted. Unless otherwise specified, glass measurements may vary not more than $\frac{1}{4}$ inch from those shown in the lay-outs. (These tolerances allow for variations in different manufacturers' practices.)

27. Interior doors of any design narrower than 1 foot 6 inches in width will be furnished with stiles $3\frac{3}{4}$ inches over-all width, unless otherwise specified.

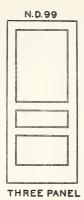
INTERIOR PANEL DOORS	EXTERIOR DOORS
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
*Also furnished in $1\frac{1}{28}$ " $1\frac{1}{28}$ " $1\frac{1}{28}$ " $1\frac{1}{28}$ " $1\frac{1}{24}$	N.D. 635 2' 8" x 6' 8" 134" and 134" 7' 0" 134" and 134" 3' 0" x 6' 8" 134" and 134" 7' 0" 134" only 3' 4" x 6' 8" 134" only 7' 6'' 134" only 7' 6'' 134" only 8' 0" 134" only 8' 0" 134" only 8' 6" 134" only 8' 6" 134" only 8' 0" 134" only
EXTERIOR DOORS	RIM AND HORIZONTAL-LIGHT DOORS
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
	INTERIOR FLUSH DOORS
EXTERIOR FRENCH OR CASEMENT DOORS N.D. 637-638-640-641-642 2' 8'' x 6' 8'' 136'' and 134'' 3' 0'' x 6' 8'' 136'' and 134'' 3' 0'' x 6' 8'' 136'' and 134'' 7' 0'' 136'' and 134'' 3' 4'' x 6' 8'' 134'' only 7' 0'' 134'' only 7' 0'' 134'' only	Plain—solid core 134" 1' 6" x 6' 6" 2' 4" x 6' 0" 2' 8" x 6' 0" 2' 0" x 6' 0" 6' 8" 6' 6" 7' 0" 7' 0" 6' 8" 2' 6" x 6' 0" 3' 0" x 6' 8" 7' 0" 6' 8" 3' 4" x 6' 8" 7' 0" 7' 0"

TABLE 1. Standard sizes

EXTERIOR FLUSH DOORS	INTERIOR FRENCH OR CASEMENT DOORS
V-grooved—solid core 134'' 3' 0'' x 6' 8'' 3' 4'' x 6' 8'' 7' 0'' 7' 0''	$\begin{array}{c} N.D. \ 622-623-625 \\ 1\frac{3}{6}'' \ \text{and} \ 1\frac{3}{4}'' \\ 2' \ 0'' \ x \ 6' \ 6'' \\ 6' \ 8'' \\ 7' \ 0'' \\ 2' \ 4'' \ x \ 6' \ 6'' \\ 6' \ 8'' \\ 6' \ 8'' \\ 7' \ 0'' \ 0'' \\ 7' \ 0'' \ 0'' \\ 7' \ 0'' \ 0'' \ 0'' \\ 7' \ 0'$
CUPBOARD DOORS	*Not furnished in design N.D. 623. <i>N.D.</i> 626-627
N.D. 710-711-712 34" and 136" 1' 0" x 1' 6" 1' 4" x 1' 6" 1' 8" x 2' 0" 2' 0" 2' 6" 3' 6" 3' 0" 3' 0" 3' 6" 3' 6" 3' 6" 3' 6" 4' 0" 4' 0" 4' 6" 5' 0" 1' 2" x 1' 6" 1' 6" x 1' 6" 2' 0" x 2' 0"	113/2'' and 13/4'' 2' 4'' x 6' 6'' 2' 8'' x 6' 8'' 6'' x 6' 6'' 7' 0'' 2' 6'' x 6' 6'' 7' 0'' 2' 6'' x 6' 6'' 7' 0'' GARAGE DOORS N.D. 721-723-725 N.D. 720-722-724 13/6'' and 13/4''
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	2' 8'' x 7' 0'' 4' 0'' x 7' 0'' 7' 6'' 7' 6'' TOILET DOORS
EXTERIOR DOORS	$\begin{array}{ccccccc} N.D. & 726-727-728 \\ & 1\frac{1}{6}'' \\ 2' & 0'' & x & 4' & 0'' & 2' & 4'' & x & 4' & 0'' \\ & 4' & 6'' & 2' & 4'' & x & 4' & 0'' & 4' & 6'' \\ & 5' & 0'' & 2' & 5' & 0'' & 5' & 0'' \\ & 5' & 0'' & 5' & 0'' & 5' & 0'' \\ & 5' & 6'' & 5' & 6'' & 5' & 6'' \end{array}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	BLIND OR SUMMER DOORS N.D. 730-731 1½'' and 1½%'' 2' 0'' x 6' 0'' 2' 8'' x 6' 0'' 2' 4'' x 6' 0'' 6' 8''
EXTERIOR DOORS	2' 6 '' x 6 ' 0 '' 7' 0'' <u>6' 6'' 3' 0'' x <u>6'</u> 8'' 6' 8'' 7' 0'' 2' 0''</u>
N.D. 513-514-515-516-517-519-536-537-538- 539-542-549-559-560-561-562-563-567- 569-570-571	COMBINATION DOORS
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
SIDE LIGHTS	STORM DOORS
S.L. $675-676$ 1' 0'' x 6' 8'' 1 $\frac{3}{6}$ '' and $\frac{1}{4}$ '' 7' 0'' 1 $\frac{3}{6}$ '' and 1 $\frac{3}{4}$ '' 1' 2'' x 6' 8'' 1 $\frac{3}{6}$ '' and 1 $\frac{3}{4}$ '' 7' 0'' 1 $\frac{3}{6}$ '' and 1 $\frac{3}{4}$ ''	$\begin{array}{cccccccccccccccccccccccccccccccccccc$

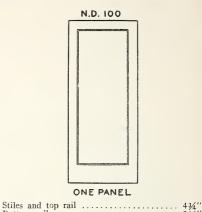
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INTERIOR DOORS



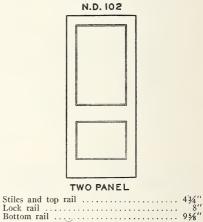
Stiles and top rail 434'''Cross rails 454'''Bottom rail 954'''Height of center panel including sticking $815_{16}'''$ Height from bottom of door to top of upper cross rail, sticking not included $411_{16}'''$

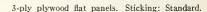
3-ply plywood flat panels. Sticking: Standard.

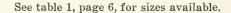


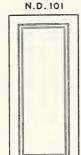
Bottom	rail	• • • •	• • • • • •	• • • • • • • • • •	95/8"
3-ply	plywood	flat	panel.	Sticking:	Standard.









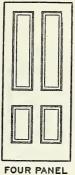


INNER FRAME

3-ply plywood flat panel. Sticking: P&G or Standard.

INTERIOR DOORS-Continued





Stiles and top rail	. 43⁄4''
Muntins Bottom rail	. 45/8
Bottom rail	95/8

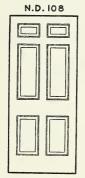
Raised panels 2 sides. Can also be furnished with 3-ply plywood flat panels, if desired. Sticking: Standard.



FIVE CROSS PANEL

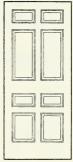
Stiles and top rail						 					43⁄4''
Intermediate rails .		-		•	•	 					45/8"
Bottom rail											95%"

Raised panels 2 sides. Can also be furnished with 3-ply plywood flat panels, if desired. Sticking: Standard.



SIX PANEL COLONIAL

N.D.111



EIGHT PANEL COLONIAL

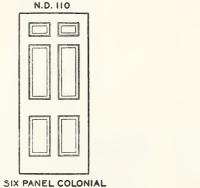
Stiles and top rail	43/4"
Lock rail	8''
Intermediate rails and mullions	37/8''
Bottom rail	95/8"
Height of top panels over-all	71/8"

Raised panels 2 sides. Can also be furnished with 3-ply plywood flat panels. Sticking: Standard.

Doors 1' 6" and narrower are made 1 panel wide.

45%" intermediate rails and mullions are optional with some manufacturers. Bottom and lock rails for N. D. 108 and N. D. 111 can be reversed when so specified.

EXTERIOR DOORS



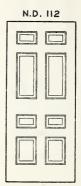
Stiles and top rail	. 51/2'
Lock rail	. 8'
Intermediate rail and mullions	53%
Bottom rail	95%'
Panel thickness	3/4"
Panel thickness	71/1

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Raised panels 2 sides. Sticking: Standard.



EIGHT PANEL COLONIAL

Stiles and top rail	
Lock rail	
Intermediate rails and mullions	
Bottom rail	
Panel thickness	3/4"
Height of small panels over-all	71/8"

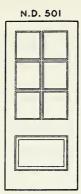
Raised panels 2 sides. Sticking: Standard.

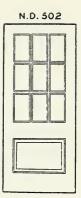
N. D. 110 and N. D. 112 colonial designs may be obtained, when so specified, with 9%'' lock rail, 4%'' intermediate rail and mullions, and 8'' bottom rail. They may also be obtained with 7/6'' raised panels.

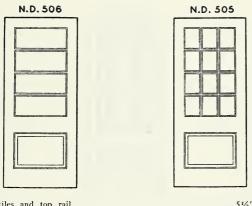
Pine Stock Doors

EXTERIOR DOORS—Continued









 Stiles and top rail.
 $5 \frac{1}{2}$ "

 Lock rail
 $9\frac{4}{3}$ "

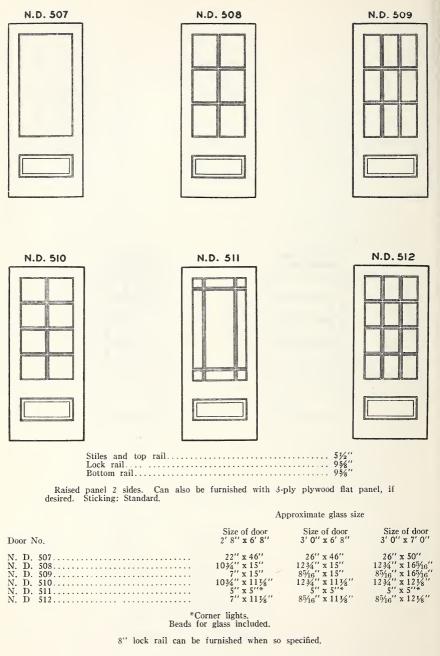
 Bottom rail
 $9\frac{5}{8}$ "

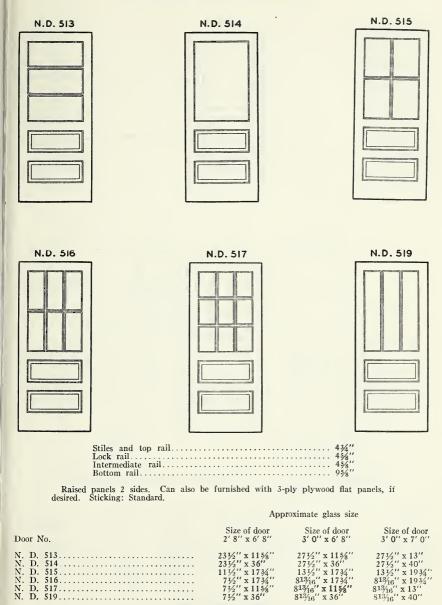
Raised panel 2 sides. Can also be furnished with 3-ply plywood flat panel, if desired. Sticking: Standard.

Approximate glass size

Door No.	Size of door	Size of door	Size of door
	2' 8'' x 6' 8''	3' 0'' x 6' 8''	3' 0'' x 7' 0''
N. D. 500	22'' x 40''	26'' x 40''	26'' x 44''
N. D. 501.	1034'' x 13''	1234'' x 13''	1234'' x 14546''
N. D. 502.	7'' x 13''	85/16'' x 13''	8546'' x 14546''
N. D. 505.	7'' x 95%''	85/16'' x 95%''	8546'' x 1058''
N. D. 506	22'' x 95%''	26'' x 95%''	26'' x 1058''

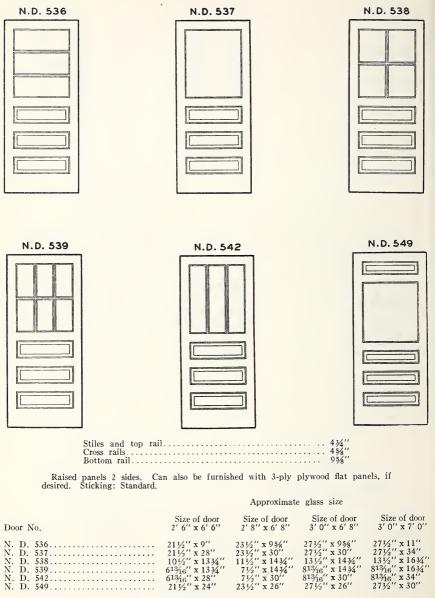
Beads for glass included. 8" lock rail can be furnished when so specified.





Beads for glass included.

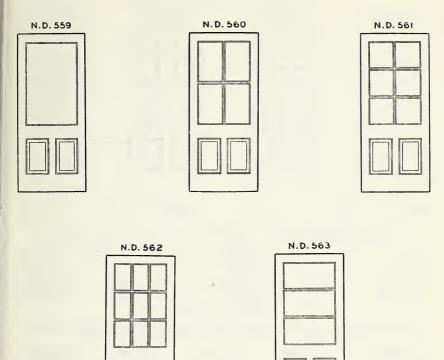
See table 1, page 7, for sizes available.



Beads for glass included.

Pinc Stock Doors

EXTERIOR DOORS—Continued





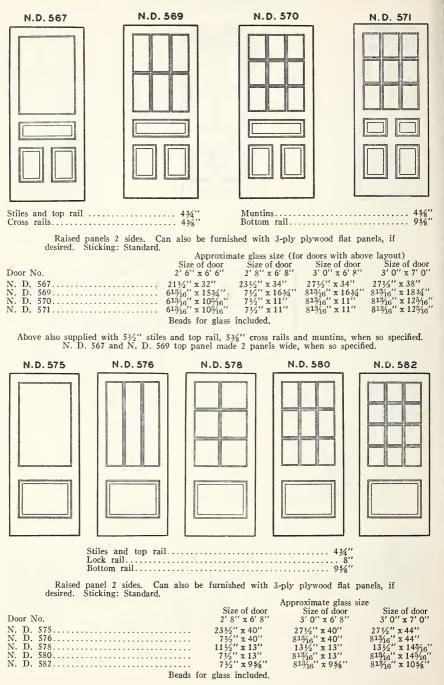
Raised panels 2 sides. Can also be furnished with 3-ply plywood flat panels, if desired. Sticking: Standard.

Approximate glass size

Door No.	Size of door	Size of door	Size of door	Size of door
	2' 6'' x 6' 6''	2' 8'' x 6' 8''	3' 0'' x 6' 8''	3' 0'' x 7' 0''
N. D. 559 N. D. 560 N. D. 561 N. D. 562 N. D. 563	$\begin{array}{c} 10^{\frac{1}{2}''} \times 18^{\frac{3}{4}''} \\ 10^{\frac{1}{2}''} \times 12^{\frac{5}{16}''} \\ 6^{\frac{13}{16}''} \times 12^{\frac{5}{16}''} \end{array}$	23 1/2" x 40" 11 1/2" x 1934" 11 1/2" x 13" 7 1/2" x 13" 23 1/2" x 13"	27 1/2" x 40" 13 1/2" x 19 3/4" 13 1/2" x 13" 813/16" x 13" 27 1/2" x 13"	$\begin{array}{c} 27\frac{1}{2}^{\prime\prime} x 44^{\prime\prime} \\ 13\frac{1}{2}^{\prime\prime} x 21\frac{3}{4}^{\prime\prime} \\ 13\frac{1}{2}^{\prime\prime} x 14\frac{5}{16}^{\prime\prime} \\ 81\frac{3}{16}^{\prime\prime} x 14\frac{5}{16}^{\prime\prime} \\ 27\frac{1}{2}^{\prime\prime} x 14\frac{5}{16}^{\prime\prime} \end{array}$

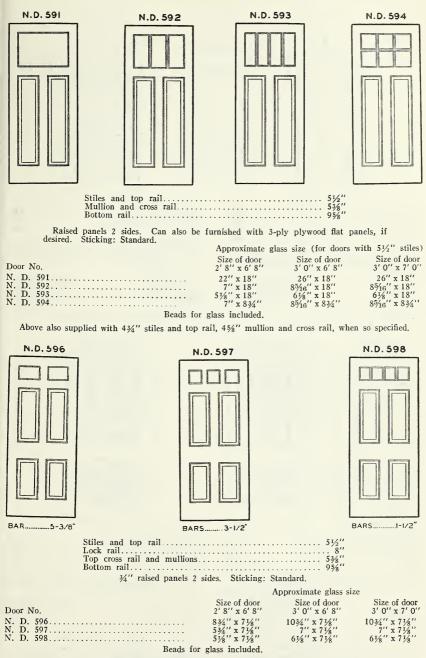
Beads for glass included.

See table 1, page 7, for sizes available.

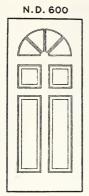


Pine Stock Doors

EXTERIOR DOORS—Continued



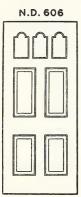
Bottom and lock rails can be reversed when so specified.



Stiles and top rail	
Top cross rail	3/8"
Intermediate rail and mullion	
Bottom rail	5/8"

Raised panels 2 sides. Can also be furnished with 3-ply plywood flat panels, if desired. Sticking: Standard.

Size of door		Approx. glass opg.
2' 8'' x 6' 8''		22" x 11"
3' 0'' x 6' 8''		26" x 13"
3' 0'' x 7' 0''		26" x 13"
В	eads for glass inc	cluded.



N.D. 607								
51/1								

3/4" raised panels 2 sides. Sticking: Standard.

. . .

	Approx. gla	ss size
Size of door	N. D. 606	N. D. 607
	6¾6" x 9"	43/8" x 11"
		53/8" x 11"
3' 0'' x 7' 0''	7½″ x 13″	53⁄8" x 15"
Beads for	glass included.	

Bottom and lock rails can be reversed when so specified.

N.D. 605

Stiles	and	top	rail			 	 	 		4 3⁄4''
Cross	rails	and	mu	ıntir	ıs	 	 	 		25/8"
Botton	n rai	1				 	 	 		95/8"

Raised panels 2 sides. Can also be furnished with 3-ply plywood flat panels, if desired. Sticking: Standard.

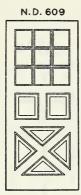
Size of door		Approx. glass opg.
2' 8'' x 6' 8'		63/4" x 117/8"
3' 0'' x 6' 8'		
3' 0'' x 7' 0		8" x 12 ¹¹ / ₁₆ "
	Reads for glass	included

Beads for glass included.



Stiles and top rail	43⁄4''
Lock rail	95%"
Cross rail and mullions	15/11
Bottom rail	8'
Bars	31/2"
11/8" heavy raised panels 2 sides. Stick	king:
Standard.	
Size of door Approx. glas	s size
2' 8'' x 6' 8'' 6 ¹ / ₈ '' x 2	67/8"
3' 0'' x 6' 8'' 73/8'' x 2	67/8"
3' 0'' x 7' 0'' 73⁄8'' x 3	07/8"
Beads for glass included.	, ,
-	
Also supplied with 3/1" raised nanels whe	n so

Also supplied with $\frac{3}{4}$ raised panels when so specified. Also supplied with $\frac{5}{2}$ stiles and top rail when so specified.



 Stiles and top rail
 434"

 Lock rail
 458"

 Cross rail and mullions
 458"

 Bottom rail
 8"

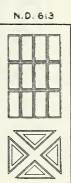
 $1\,{}^{\prime}\!\!/_8{}^{\prime\prime}$ heavy raised panels 2 sides. Sticking: Standard.

Size of door			Ap	prox. glass size
2' 8'' x 6' 8''				71/2" x 75/8"
3' 0'' x 6' 8''				813/16" x 75/8"
3' 0'' x 7' 0''				813/16" x 9"
	T 1	· 1		1

Beads for glass included.

Also supplied with $1\frac{3}{6}$ " and $1\frac{3}{4}$ " raised panels, when so specified.





 Stiles and top rail
 5½"

 Lock rail
 7"

 Mullions
 5%"

 Bottom rail
 8"

 $1\frac{1}{8}^{\prime\prime}$ heavy raised panels 2 sides. Sticking: Standard.

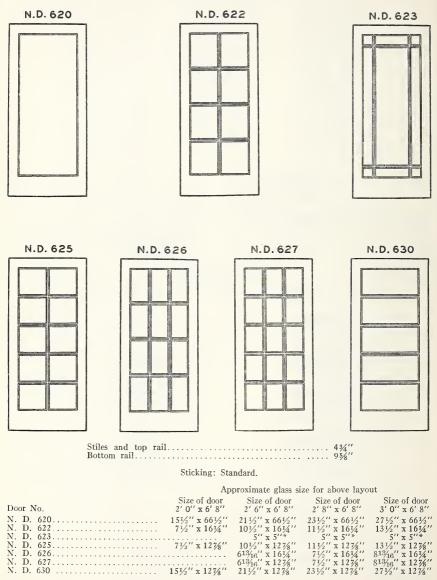
 Statistic
 Approx. glass size

 Size of door
 N. D. 612
 N. D. 613

 $2' 8'' \times 6' 8'' \dots 7'' x 12''$ $5'_{5}('' x 12'')$
 $3' 0'' x 6' 8'' \dots 85'_{16}('' x 13''_{16}('' 6'_{5}('' x 13''_{16}(''' 13''_{16}(''' 13''_{16}('' 13''_{16}('' 13''_{16}('' 13''_{16}$

Also supplied with $34^{\prime\prime}$ and $134^{\prime\prime}$ raised panels, when so specified.

(Also for Interior) Rim, horizontal light, French, or casement



*Corner lights.

15½" x 127/8"

N. D. 626.....

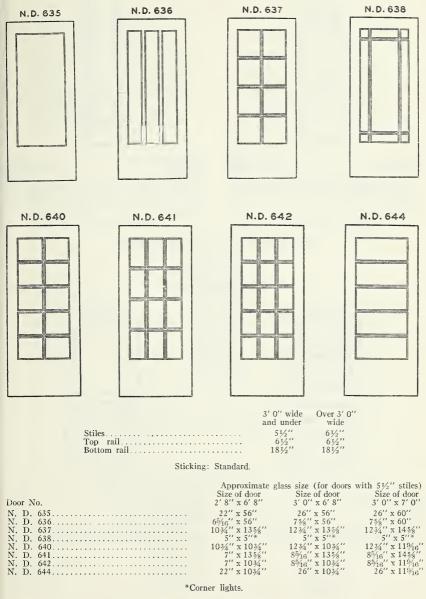
N. D. 627..... N. D. 630

Beads for glass included.

Pine Stock Doors

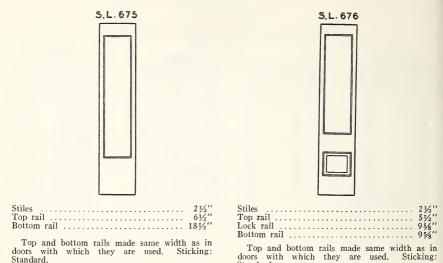
EXTERIOR DOORS—Continued

(Also for Interior) Rim, horizontal light, French, or casement



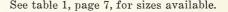
Beads for glass included.

SIDE LIGHTS

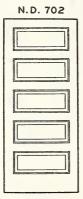


Beads for glass included.

Beads for glass included.



Standard.



STORM DOORS

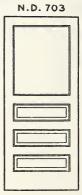
 Stiles and top rail
 434''

 Cross rails
 456''

 Bottom rail
 958''

Raised panels 2 sides. Can also be furnished with 3-ply plywood flat panels, if desired. Sticking: Standard.

	Size	of	de	oor
	6''			
2'	8''	х	6'	9''
2'	10''	х	6'	11'
3'	0''	x	7'	1''



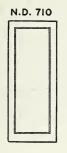
Stiles and	top	rail		 	 		•			4 3⁄4''
Cross rails			 	 	 					45/8"
Bottom rai	1		 	 	 					95%"

Raised panels 2 sides. Can also be furnished with 3-ply plywood flat panels, if desired. Sticking: Standard.

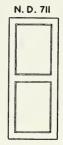
Size of door	Approx. glass size
2' 6'' x 6' 7''	
2' 8'' x 6' 9''	23½" x 30"
2' 10'' x 6' 11''	
3' 0'' x 7' 1''	

Beads for glass included.

CUPBOARD DOORS



3-ply plywood flat panel. Sticking: Standard.



 Stiles, top and cross rail
 $2\frac{1}{4}$ or $3\frac{1}{2}$

 Bottom rail
 $3\frac{1}{4}$ or $4\frac{1}{2}$

3-ply plywood flat panels. Sticking: Standard.

N.D. 712

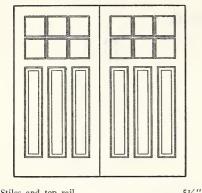
Raised panels. Sticking: Standard. Can also be furnished with 3-ply plywood flat panels, if desired.

N. D. 712 doors are made as follows:

Up to and including 2' 0" high 2 cross panels. Over 2' 0" up to and including 3' 0" high ... 3 cross panels. Over 3' 0" up to and including 4' 0" high 4 cross panels. Over 4' 0" high 5 cross panels.

GARAGE DOORS



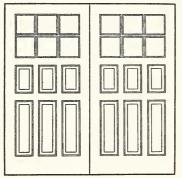


Stiles and top rail			
Cross rail		. 4	5/8"
Mullions		. 3	37/8"
Bottom rail			
Vertical and horizontal bars between glas	s.		1/2"

Raised panels 2 sides. Can also be furnished with 3-ply plywood flat panels, if desired. Sticking: Standard.

Beads for glass included.





 Stiles and top rail
 $5\frac{1}{2}^{\prime\prime\prime}$

 Cross rails
 $4\frac{1}{8}^{\prime\prime\prime}$

 Mullions
 $3\frac{1}{8}^{\prime\prime}$

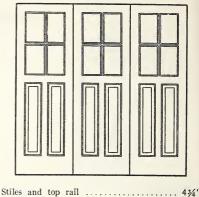
 Bottom rail
 $9\frac{1}{8}^{\prime\prime\prime}$

 Vertical and horizontal bars between glass
 $\frac{1}{2}^{\prime\prime}$

Raised panels 2 sides. Can also be furnished with 3-ply plywood flat panels, if desired. Sticking: Standard.

Beads for glass included.

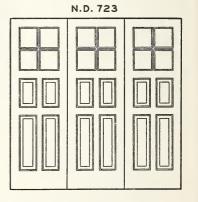
N.D. 721



Stiles and top i	all		43⁄4"
Cross rail Mullions			45/8"
Mullions			37/2"
Bottom rail			95%"
Bottom rail Vertical and hori	zontal bars	between glass.	1/2"

Raised panels. Can also be furnished with 3ply plywood flat panels, if desired. Sticking: Standard.

Beads for glass included.



Stiles and top :	rail	43⁄4''
Cross rails		45%"
Bottom rail		95%"
Vertical and hor	izontal bars between glass	1/2"

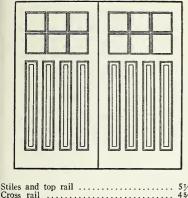
Raised panels 2 sides. Can also be furnished with 3-ply plywood flat panels, if desired. Sticking: Standard.

Beads for glass included.

Pine Stock Doors

GARAGE DOORS-Continued

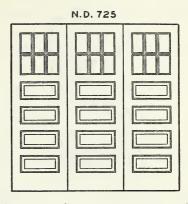
N.D. 724



Stiles and top rail51/2''Cross rail456''Mullions376''Bottom rail956'''Vertical and horizontal bars between glass72''

Raised panels 2 sides. Can also be furnished with 3-ply plywood flat panels, if desired. Sticking: Standard.

Beads for glass included.

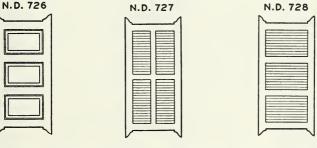


		rail		
Cross ra	ils		 	 45%"
Bottom	rail .		 	 95%"
		norizontal		

Raised panels 2 sides. Can also be furnished with 3-ply plywood flat panels, if desired. Sticking: Standard.

Beads for glass included.

TOILET DOORS

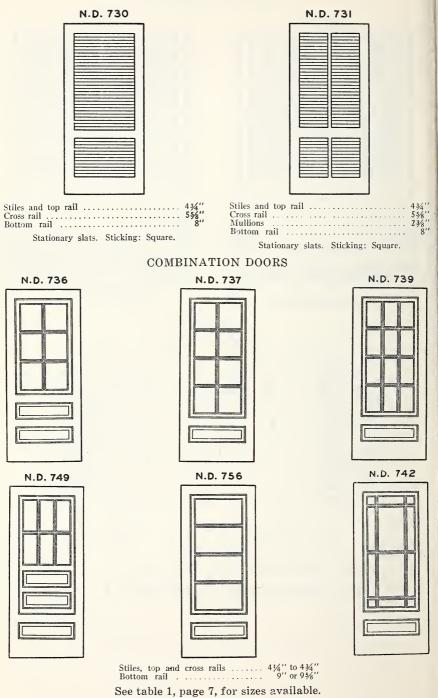


Toilet doors can be supplied without lugs, if desired.

See table 1, page 7, for sizes available.

TOILET DOORS

BLIND OR SUMMER DOORS



PONDEROSA PINE FLUSH DOORS

28. All commercial standard ponderosa pine flush doors shall meet the following requirements:

29. *Material.*—Ponderosa pine used in the manufacture of flush doors shall be properly kiln-dried. A water-resistant glue shall be used.

30. *Workmanship*.—Flush doors shall be well manufactured and flat surfaces shall be smoothly machine-sanded.

31. Construction.—The cores of flush doors shall be made of low-density wood blocks S2S not more than $2\frac{1}{2}$ inches wide, of varying lengths. (Low-density woods are those weighing not more than 2,300 pounds per thousand board feet when kiln-dried to a moisture content of 6 percent. The use of sound wormy chestnut shall, however, be permitted.) These blocks shall be bonded together under pressure with a water-resistant glue. No core shall contain more than one species of wood.

31a. Laying of blocks.—Doors with vertical block cores shall have the blocks laid up with the grain running parallel and vertically. Stile and rail cores shall be constructed with stile, rail and panel units, each unit made up entirely of blocks. In the stile and rail units the blocks shall be laid up with the grain running parallel and in the direction of the longitudinal dimension of the stile or rail. In the panel units the blocks shall be laid up with the grain running parallel and vertically when the core is to be crossbanded, and parallel and horizontally when no crossbanding is to be used.

31b. Edge strips.—The core shall be surrounded with edge strips not less than $\frac{1}{2}$ inch thick after trimming. In lieu of $\frac{1}{2}$ -inch edge strips, the tops and bottoms of the doors shall be given two coats of paint or varnish before leaving the factory. Flush veneered doors may be constructed of stile, rail and panel units, each unit made up entirely of blocks with $\frac{1}{2}$ -inch edge strips on exposed edges of stiles and rails, but not on the ends of stiles, at the option of the manufacturer. Exterior flush doors may be manufactured with wide edge strips to allow cutting the width and height of doors, and they may also be made to permit cutting circular or other irregular top.

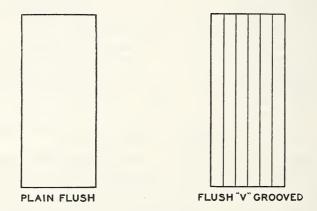
31c. *Planing cores.*—The cores after gluing shall be planed smooth to uniform thickness.

31d. *Prefitting.*—When ordered "Prefit," flush doors will be furnished as specified in paragraph 12.

32. Veneers.—Crossbanding shall be not less than $\frac{1}{16}$ inch nor more than $\frac{1}{8}$ inch thick. Face veneers shall be from $\frac{1}{16}$ inch to $\frac{1}{4}$ inch thick before sanding, except where V-grooving is required, then $\frac{1}{4}$ inch thick before sanding. The crossbanding and faces shall be bonded to the core and to each other with a water-resistant glue, and assembled under pressure.

33. Thickness.—Flush doors shall be $1\frac{3}{4}$ inches thick, and a thickness tolerance of minus $\frac{1}{6}$ inch shall be allowed.

34. *Grading.*—Flush doors shall be of No. 1 grade. Stock shall be clear except that bright sap, light-brown stain, and light-red kiln burn shall be permitted. Faces of all doors shall be smoothly machine-sanded except that doors with face veneers $\frac{1}{16}$ inch thick shall be smoothly belt-sanded. This is not to be interpreted as meaning that the door will be ready for painter's finish.



Light openings may be cut in these doors to suit the wishes of the purchaser.

See table 1, pages 6 and 7, for sizes available.

INSPECTION

35. All ponderosa pine 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 ten (10) days after receipt thereof. Any rejected doors shall be held, properly protected, for a period of thirty (30) days after notice of rejection and pending adjustment.

LABELING

36. In order to assure the purchaser that he is getting ponderosa pine doors of the quality specified, producers may individually, or in concert with their trade associations, issue guarantees, or grademark each door by stamp, brand, or label as conforming to this standard. The following wording is recommended for the label:

This GRADE ponderosa pine door complies with all the requirements of Commercial Standard CS120-48, as developed by the trade under the procedure of the National Bureau of Standards and issued by the U. S. Department of Commerce.

37. Grade marking.

37a. The following grade-marks have been adopted by the National Door Manufacturers Association, Inc., as a means of assuring consumers and distributors that ponderosa pine doors conform to the high standards of quality defined herein.

37b. Consumers and distributors may request that ponderosa pine doors be grade-marked. All ponderosa pine doors guaranteed to conform to the commercial grade rules as set forth herein may be stamped, labeled, or branded with the letters "NDMA," the grade designation, and an identification of the manufacturer by numerals.

37c. The following official grade designations have been approved by the National Door Manufacturers Association.

(1) For ponderosa pine doors of No. 1 grade:



(2) For ponderosa pine doors of No. 1F grade:



(3) For ponderosa pine doors of No. 2 grade:



(4) For ponderosa pine doors of No. 2F grade:



(5) For ponderosa pine doors of "Mill Run" grade:



NOMENCLATURE AND DEFINITIONS

38. The definitions below give the meaning of various terms used in this standard:

Bars.—Wood divisions separating lights of glass.

Coped.—The shaping of the ends of rails, mullions, muntins, or bars so that they will cover and fit the contour of the sticking.

Core.—The innermost layer in veneered door construction.

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

Doors:

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

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

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

Kiln dried.—Dried in a closed chamber in which the removal of moisture is controlled by artificial heat and usually by relative humidity.

Mullion.—An upright, or vertical, bar in a door.

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, plywood.—A panel made up of core and face veneer.

Pitch seam.—An opening or imperfection parallel to the grain, which is filled with pitch.

Rails.—The cross, or horizontal, pieces of the framework of a door.

Bottom rail.—The bottom cross, or horizontal, piece of a door.

Lock rail.—The wide cross, or horizontal, rail of a door at lock height.

Top rail.—The top cross, or horizontal, piece of a door.

Sticking.—A mold which is worked on the edges of stiles, rails, mullions, muntins, or bars, adjacent to panels or glass.

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

Veneered.—Made up of core and face veneers (may include crossbanding in flush doors).

"USE" CLASSIFICATION INDEX

INTERIOR DOORS

Stock number	Description						
N. D. 100 N. D. 101 N. D. 102 N. D. 106 ^a N. D. 107 ^a N. D. 108 ^a	3 panel 1 panel 1 panel inner frame 2 regular panel 4 regular panel 5 cross panel 6 panel Colonial 8 panel Colonial	8 8 9 9 9					

EXTERIOR DOORS

D.T.	n	110					10
		110	6 panel Colonial				
		112					
		500					
		501	1 panel & 6 lts., 2 w				
		502					
		505	1 panel & 12 lts., 3 w.				
		506	1 panel & 4 hor. lts.				
		507	1 panel & 1 lt.				
		508	1 panel & 6 lts., 2 w				
		509	1 panel & 9 lts., 3 w.				. 12
N.	D.	510	1 panel & 8 lts., 2 w				
N.	D.	511					. 12
		512					12
N.	D.	513	2 hor. pan. & 3 hor. lts.				. 13
N.	D.	514	2 hor. pan. & 1 lt.				. 13
N.	D.	515					
N.	D.	516					
		517	2 hor. pan. & 9 lts., 3 w.				
N.	D.	519	2 hor. pan. & 3 vert. lts				
		536					
		537	3 hor. pan. & 1 lt.				. 14
		538	3 hor. pan. & 4 lts., 2 w.				
		539	3 hor. pan. & 6 lts., 3 w.		••••	•••	
		542					14
		549	4 hor. pan. & 1 lt.				
		559				• • •	
		560	2 vert. pan. & 4 lts., 2 w.		• • •	• • •	
		561	2 vert. pan. & 6 lts., 2 w.		• • •	• • •	15
		562	2 vert. pan. & 9 lts., 3 w.				
		563	2 vert. pan. & 3 hor. lts.	•••	• • •	•••	15
		567	3 panel & 1 lt.		• • •	• • •	16
		569		• • •	• • •	• • •	
		570			• • •	• • •	16
		571	3 panel & 9 lts., 3 w.	• • •	• •	• • •	. 10
		575	4 panel & 9 lts., 3 w.				
			1 panel & 1 lt.	• • •	• •	· · ·	. 16
			1 panel & 3 vert. lts.				
		578					
		580	1 panel & 9 lts., 3 w.		• • •		. 16
		582	1 panel & 12 lts., 3 w.		• •		. 16
		591	2 vert. pan. & 1 lt.				. 17
		592	2 vert. pan. & 3 vert. lts				
		593					. 17
N.	D.	594	2 vert. pan. & 6 lts., 3 w				. 17

* Also for exterior use.

Stock number	Description	Page			
$\begin{array}{c} \text{N. D. 596} \\ \text{N. D. 597} \\ \text{N. D. 598} \\ \text{N. D. 598} \\ \text{N. D. 600} \\ \text{N. D. 600} \\ \text{N. D. 605} \\ \text{N. D. 606} \\ \text{N. D. 607} \\ \text{N. D. 608} \\ \text{N. D. 609} \\ \text{N. D. 613} \\ \text{N. D. 613} \\ \text{N. D. 613} \\ \text{N. D. 613} \\ \text{N. D. 620} \\ \text{N. D. 622} \\ \text{b} \\ \text{N. D. 623} \\ \text{b} \\ \text{N. D. 623} \\ \text{b} \\ \text{N. D. 626} \\ \text{b} \\ \text{N. D. 626} \\ \text{b} \\ \text{N. D. 626} \\ \text{b} \\ \text{N. D. 636} \\ \text{N. D. 635} \\ \text{N. D. 636} \\ \text{N. D. 635} \\ \text{N. D. 638} \\ \text{N. D. 638} \\ \text{N. D. 641} \\ \text{N. D. 642} \\ \text{N. D. 644} \\ \text{N. D. 644} \\ \text{N. D. 644} \\ \end{array}$	4 panel & 2 lts. 4 panel & 3 lts. 4 panel & 3 lts. 4 panel & 4 lts. 4 panel & 4 lts. 14 panel & 4 lts. 14 panel & 4 lts. 5 panel & 3 lts. 4 panel & 4 lts. 6 panel & 3 vert. lts. 6 panel & 9 lts., 3 w. 4 panel & 9 lts., 3 w. 4 panel & 12 lts., 4 w. 1 light 1 light 1 lights, 2 w. 9 marg. lts. 10 lights, 2 w. 15 lights, 3 w. 5 hor. lights 10 lights, 2 w. 9 marg. lights 10 lights, 2 w. 11 light 11 light 12 lights, 3 w. 13 hights 11 light 11 light 12 lights, 3 w. 13 lights, 2 w. 14 marg. lights 15 lights, 3 w. 15 lights, 3 w. 16 lights, 3 w. 17 lights 10 lights, 2 w. 10 lights, 2 w. 11 light 10 lights, 2 w. 12 lights, 3 w. 13 lights, 3 w. 14 marg. lights 15 lights, 3 w. 15	$\begin{array}{c} 17\\ 17\\ 17\\ 17\\ 18\\ 18\\ 18\\ 18\\ 18\\ 18\\ 19\\ 19\\ 19\\ 20\\ 20\\ 20\\ 20\\ 20\\ 20\\ 20\\ 20\\ 20\\ 20$			
	SIDE LIGHTS				
S. L. 675 S. L. 676	1 light 1 panel & 1 light	22 22			
	STORM DOORS				
N. D. 702 N. D. 703	5 hor. panel 3 hor. pan. & 1 lt.	22 22			
	Cupboard Doors				
N. D. 710 N. D. 711 N. D. 712	1 panel 2 hor. panel 2 to 5 hor. panel	23 23 23			
GARAGE DOORS					
N. D. 720 N. D. 721 N. D. 722 N. D. 722 N. D. 723 N. D. 724 N. D. 725	3 vert. pan. & 6 lts., 3 w. 2 vert. pan. & 4 lts., 2 w. 6 pan. & 6 lts., 3 w. 4 pan. & 4 lts., 2 w. 4 vert. pan. & 6 lts., 3 w. 4 hor. pan. & 6 lts., 3 w.	$24 \\ 24 \\ 24 \\ 24 \\ 25 \\ 25 \\ 25$			

^b Also for interior use.

Pine Stock Doors

TOILET DOORS

-	Stock number	Description	Page
	N. D. 726 N. D. 727 N. D. 728	3 hor. panel 4 stat. slat panel 3 stat. slat panel	$25 \\ 25 \\ 25 \\ 25$

BLIND OR SUMMER DOORS

J. J.	D. D.	$730 \\ 731$	••••	2 stat. 4 stat.	slat par slat par	el	$\frac{26}{26}$
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COMBINATION DOORS

٧. ٧.	D. 737 D. 739	2 hor. pan. & 6 lts., 2 w. 1 hor. pan. & 8 lts., 2 w. 1 hor. pan. & 12 lts., 3 w. 1 hor. pan. & 12 marg. lts.	$\begin{array}{c} 26 \\ 26 \end{array}$
٧.	D. 749	3 hor. pan. & 6 lts., 3 w. 1 hor. pan. & 4 hor. lts.	26

FLUSH DOORS

Flush	Plain flush V-grooved	28 28
	-grooved	20

EFFECTIVE DATE

39. Having been passed through the regular procedure of the Commodity Standards Division, and approved by the acceptors hereinafter listed, this commercial standard was issued by the United States Department of Commerce, effective from November 20, 1948.

Edwin W. Ely,

Chief, Commodity Standards Division

HISTORY OF PROJECT

40. On December 30, 1943, the National Door Manufacturers Association requested the cooperation of the National Bureau of Standards in the establishment of a commercial standard for standard stock ponderosa pine doors. A draft of the proposed standard was submitted on January 29, 1944, to producers, and to a number of technical, distributor, and consumer organizations for their views and comments. All comments were carefully considered at a meeting held in Chicago, Ill., on March 28, 1944. The standard was then adjusted to represent the composite views of all interested groups, and circulated on May 31, 1944, to the trade for 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 August 15, 1944, as Commercial Standard CS120-44, to become effective for new production on September 15, 1944.

FIRST REVISION

41. On April 2, 1946, the chairman of the standing committee recommended the deletion of 18 outmoded or obsolete designs; the inclusion of 2 new designs that had become popular during the preceding 2 years, and an improved listing of the standard sizes, segregated according to designs and use. On approval by the standing committee, this revision was circulated on July 17, 1946. to the trade for written acceptance. Following acceptance by a satisfactory majority, the revision was approved for promulgation as Commercial Standard CS120-46, effective from October 1. 1946.

SECOND REVISION

42. Pursuant to a request from the National Door Manufacturers Association, dated September 29, 1947, and following approval by the standing committee, a second revision was circulated on July 28, 1948, to the trade for consideration. The major changes were the inclusion of requirements for prefitting and for two new grades, namely, No. 1F and No. 2F, and the deletion of "Bead and Cove" and "Ovolo B or Rule Joint" as standard sticking. Also designs N.D. 109 and N.D. 568 were discontinued, and a new design, N.D. 571, was inserted. The success of the revision was announced on October 20, 1948, as Commercial Standard CS120-48.

STANDING COMMITTEE

43. 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. Comments concerning the standard and suggestions for revision may be addressed to any member of the committee or to the Commodity Standards Division, National Bureau of Standards, which acts as secretary for the committee.

W. H. SCHWAB (chairman), Huttig Manufacturing Co., Muscatine, Iowa.

R. D. SCAMEHORN, Morgan Co., Oshkosh, Wis. LEWIS C. PAISLEY, Farley & Loetscher Manufacturing Co., Dubuque, Iowa. R. J. LILLIBRIDGE, National Door Manufacturers Association, Inc., 712 Transportation Bldg., Washington, D. C. FRANK STEVENS, Ideal Co., Waco, Tex. (Representing Ponderosa Pine Wood-

work.)

CLAUD F. WILSON, Kimball & Wilson, Inc., 2127 Fenkell Ave., Detroit 3, Mich. (Representing Woodwork Jobbers Service Bureau.)
 NORMAN B. COVE, Hager & Cove Lumber Co., Lansing, Mich. (Representing Michigan Retail Lumber Dealers Association.)
 W. A. GOUDERLA M. Miller Methods and Market Aller Miller Science (Second Science)

W. A. COMPTON, Allen Millwork Manufacturing Co., P. O. Box 1101, Shreve-

W. A. COMPTON, Allen Millwork Manufacturing Co., P. O. Box 1101, Shreve-port, La. (Representing Southern Sash & Door Jobbers Association.)
EDWARD A. POYNTON, Director of Construction, Office of Indian Affairs, U. S. Department of the Interior, Washington 25, D. C.
HAROLD A. PARKS, Hardware Manufacturers' Statistical Association, 205 Church St. (P. O. Box 1603), New Haven 6, Conn.
C. O. CHRISTENSON, Property Standards Unit, Federal Housing Administra-tion, Washington 25, 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, National Bureau of Standards, Washington 25, D. C.

Gentlemen:

We believe that the Commercial Standard CS120–48 constitutes a useful standard of practice, and we individually plan to utilize it as far as practicable in the

Production¹ Distribution¹ Purchase¹ Testing¹

of standard stock ponderosa pine doors.

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)

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 the Department of Commerce, the support of any standard is inadequate, the right is reserved to withhold promulgation and publication.

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ACCEPTORS

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

- American Specification Institute, Chicago, Ill. Building Officials' Conference of America, Wash-ington, D. C. Carolina Lumber & Building Supply Association, Charlotte, N. C. Douglas Fir Plywood Association, Tacoma, Wash.

- Greater New York Lumber Industries, Inc., New York, N. Y. Michigan Retail Lumber Dealers Association, Lans-
- ing, Mich.
- National Door Manufacturers' Association, Inc.,
- chicago, Ill. Home Prefabricated Home Manufacturers' Inst Washington, D. C. Southern Woodwork Association, Atlanta, Ga. Institute.
- Woodwork Jobbers Service Bureau, Chicago, Ill.

FIRMS AND OTHER INTERESTS

- Acme Door Co., Hoquiam, Wash. Adams, Franklin O., Tampa, Fla. Adams-Rogers Co., Indianapolis, Ind. Alpert Woodworking Corp., Brooklyn, N. Y. Altfilisch, Charles, Decorah, Iowa. Amarillo Sash & Door Co., Amarillo, Tex. American Sash & Door Co., Kansas City, Mo. Andrews, Jones, Biscoe & Goodell, Boston, Mass. Andrews, C. E., Lumber Co., New Bethlehem, Pa. Anson & Gilkey Co., Merrill, Wis. Armstrong-Thielman Lumber Co., Inc., Calumet, Mich. Mich.

- Mich. Ashton, C. J., Co., Detroit, Mich. Athens Lumber Co., Inc., Athens, Ga. Augusta Lumber Co., Augusta, Ga. Barthmaier, Eugene V., Philadelphia, Pa. Baxter, C. B., & Co., Kansas City, Mo. Beasley & Sons Co., Nashville, Tenn. Becker Danowitz Co., Inc., Maspeth, L. I., N. Y. Bell, C. C., Manufacturing Co., Inc., West Mon-roe, La. Bell, C. C., Manufacturing Co., Inc., West Monroe, La.
 Belli, Edo J., Chicago, Ill.
 Bellman, Gillett & Richards, Toledo, Ohio.
 Beuttler, William, Sioux City, Iowa.
 Big Four Lumber Co., The, Cleveland, Ohio.
 Binda, Bial & Gerhardt, Union City, N. J.
 Binswanger & Co., Inc., Richmond, Va.
 Birmingham Sash & Door Co., Birmingham, Ala.
 Boehm, George A., New York, N. Y.
 Bohnhoff Lumber Co., Inc., Los Angeles, Calif.
 Bommer Spring Hinge Co., Inc., Brooklyn, N. Y. (General support.)

- (General support.) Bosman & Casson, Inc., Harrison, N. J. Brockway-Smith-Haigh-Lovell Co., Boston, Mass. Brust & Brust, Milwaukee, Wis.
- Bryan-Beck, Stauton, Va. Buckley, F. S., Door Co., San Francisco, Calif. Bucky, Fred W., Jr., Jacksonville, Fla. Buely & Co., Dallas, Tex.

- Buffalo, City of, Architectural Service, Division of Buildings, Department of Public Works, Buffalo, N. Y.
- Buffalo Plywood Corp., Buffalo, N. Y. Buffelen Manufacturing Co., Tacoma, Wash., and Ft. Worth, Tex.
- Builders Supply Co., Bismarck, N. Dak. Building Service, Inc., Billings, Mont. Building Supplies Corp., Norfolk, Va.

- Bush, Clinton G., Lumber Corp., Huntington Sta-tion, Long Island, N. Y. California Builders Supply Co., Oakland, Calif. California Door Corp., The, Los Angeles, Calif. Cameron, William, & Co., Inc., Waco, Tex. Cameron Lumber Co., Inc., Newburgh, N. Y. Camlet, J. Thomas, Passaic, N. J. Cannon & Mullen, Salt Lake City, Utah. Canton Sash & Door Co., Canton, Ill. Capital Prefabricators, Inc., Tyler, Tex. Carlow Co., Los Angeles, Calif. Carnahan Manufacturing Co., Loogootee, Ind. Cart, Adams & Collier Co., Dubuque, Iowa. Carter-Lee Lumber Co., Indianapolis, Ind. Celtarius, Charles F., Cincinnati, Ohio. Central Wholesale Co., Inc., Shreveport, La. Central Woodwork, Inc., Memphis, Tenn. Charjottesville Lumber Co., Inc., Charlottesville, Va.

- Va.

- Chicago & Riverdale Lumber Co., Chicago, Ill. Chick, John F., & Son, Inc., Madison, N. H. Cincinnati, City of, Department of Purchasing, Cincinnati, City of, Department of Purchasing, Cincinnati, Ohio, Cleary Millwork Co., Inc., Ansonia, Conn. Coffin, Ralph V., Seattle, Wash. Combs Lumber Co., Inc., Lexington, Ky. Conrad & Cummings, Binghamton, N. Y. Coolidge, Shepley, Bulfinch & Abbott, Boston, Macc.

- Mass.

- Mass. Corddry Co., The, Snow Hill, Md. Cordele Sash, Door & Lumber Co., Cordele, Ga. Cram & Ferguson, Boston, Mass. Crawford Manufacturing Co., El Paso, Tex. Cross, Austin & Ireland Lumber Co., Brooklyn, N. Y.

- N. 1. Crowell & Lancaster, Bangor, Maine. Curtis Companies, Inc., Chicago, Ill.; Clinton, Iowa; Wausau, Wis.; Lincoln, Nebr.; Sioux City, Iowa; Minneapolis, Minn.; and Topeka, Kans.
- Davidson Sash & Door Co., Austin, Tex., and Lake Charles, La.
- Charles, La. DeJarnette, Charles Wagner, Des Moines, Iowa. (General support.) Delmarva Sash & Door Co., Sudlersville, Md.; Barclay, Md.; Philadelphia, Pa.; and Lancaster,
- Pa.
- Deming & Thompson Co., Inc., Frankfort, Ind.
- Derr, Wm. H., Co., Philadelphia, Pa. Detroit, City of, City Engineer's Office, Detroit, Mich.
- Dobbs, A. A., Manufacturing Co., Inc., Orlando, Fla.

- Donlin Co., The, St. Cloud, Minn. Donovan & Kerr, Berkeley, Calif. Dyke Bros., Little Rock, Ark., and Texarkana, Tex.

- lex. Dykes Lumber Co., New York, N. Y. Edwards Sash, Door & Lumber Co., Tampa, Fla. Ellis Glazing, Inc., Henryetta, Okla. Estes Lumber Co., Birmingham, Ala. Evansville Sash & Door Co., Inc., Evansville, Ind. Exchange Lumber & Manufacturing Co., Spokane, Wash.
- Farley & Loetscher Manufacturing Co., Dubuque, Iowa.

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Fink & Schindler Co., The, San Francisco, Calif. Fischer Lime & Cement Co., Memphis, Tenn. Flannagan, Eric G., Henderson, N. C. Flint Lumber Co., Flint, Mich.

- Forks Sash & Door Co., East Grand Forks, Minn. Fort Wayne Builders Supply Co., Ft. Wayne, Ind. Fort Worth Sash & Door Co., Ft. Worth, Tex. Frey Planing Mill Co., The, Louisville, Ky. Fuller, W. P., & Co., San Diego, Calif.; Sacra-mento, Calif.; and Portland, Oreg. General Millwork Corp., Utica, N. Y. Gibson Door Co., The, Utica, N. Y. Goshen Sash & Door Co., Goshen, Ind. Gravson Millwork & Supply Co., Inc., Sherman.

- Grayson Millwork & Supply Co., Inc., Sherman,
- Tex.

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- Great Lakes Sash & Door Co., The, Cleveland, Ohio.

- Ohio. Greene & Wood, Inc., New Bedford, Mass. Green's Ready-Built Homes, Inc., Rockford, Ill. Gregg & Son, Inc., Nashua, N. H. Grimm, Albert C., Planing Mill, Evansville, Ind. Gulf States Plywood Co., New Orleans, La. Gunnison Homes, Inc., New Albany, Ind. Hager & Cove Lumber Co., Lansing, Mich. Hannaford, Samuel, & Sons, Cincinnati, Ohio. Haralson & Mott, Ft. Smith, Ark. Harbor Plywood Corp. of California, San Fran-cisco, Calif. cisco, Calif. Harbor Plywood Corp., Chicago, Ill., and Jack-
- sonville, Fla.
- Harbor Sales Co., Inc., The, Baltimore, Md. Hardwood Products Corp., Neenah, Wis.

- Hartung, F. L., Co., Seattle, Wash. Hawkins Lumber & Warehouse Co., Boston, Mass. Helfensteller, Hirsch & Watson, St. Louis, Mo.

- Hodgdon, Charles, San Gabriel, Calif. Hogan Lumber Co., Oakland, Calif. Holsman, Holsman, Klekamp & Taylor, Chicago, III.

- ¹¹¹. Hope, Frank L., San Diego, Calif. Houston Ready-Cut House Co., Houston, Tex. Houston Sash & Door Co., Houston, Tex. Hussey-Williams Co., Inc., Ozone Park, N. Y. Huttig Manufacturing Co., Muscatine, Iowa. Huttig Sash & Door Co., St. Louis, Mo.; Char-lotte, N. C.; Columbus, Ohio; Dallas, Tex.; Jacksonville, Fla.; Knoxville, Tenn.; Louisville, Ky: Miami Fla.; and Roanoke, Va. Ky.; Miami, Fla.; and Roanoke, Va. Hyde-Murphy Co., Ridgway, Pa. Indiana Lumber & Manufacturing Co., Inc., South
- Bend, Ind.
- Interstate Sash & Door Co., The, Canton, Ohio. Iron City Sash & Door Co., Pittsburgh, Pa. Ivey, Edwin J., Inc., Seattle, Wash.

- Jacksonville Sash & Door Co., Jacksonville, Fla. Johnson & Wimsatt, Inc., Washington, D. C.
- Kaaz Woodwork Co., Inc., The, Leavenworth, Kans.

- Kans. Kans. Keely, Hal, Plywood Co., Pittsburgh, Pa. Keely, S. S., & Son, Philadelphia, Pa. Keely, Frederic P., Millington, N. J. Kilham, Hopkins, Greeley & Brodie, Boston, Mass Kimball Lumber Co., Watertown, Mass. Krebs, Arthur H., & Co., Springfield, Ill. Kullberg Manufacturing Co., Minneapolis, Minn. Kyle, Herbert S., Charleston, W. Va. Latenser, John, & Sons, Omaha, Nebr. Law, Law, Potter & Nystrom, Madison, Wis. Le Deit Glass Co., The, San Jose, Calif. Lewis Lumber Co., Spring Lake, N. J. Lewis Manufacturing Co., Bay City, Mich. Loeb, Laurence M., White Plains, N. Y. Loetscher & Burch Manufacturing Co., Des Loetscher & Burch Manufacturing Co., Des Moines, Iowa. Loug-Bell Lumber Co., The, Kansas City, Mo. Louisville Sash & Door Co., Inc., Louisville, Ky. Lumber & Millwork Co. of Philadelphia, The,

- Philadelphia, Pa. Lumber Vard Supply Co., Great Falls, Mont. Lumbermen's Credit & Warehouse Co., Kalamazoo,
- Mich.
- Lumbermen's Door & Trim Co., The, Cleveland, Ohio.
- Lyman-Hawkins Lumber Co., The, Akron, Ohio.
- Lyon-Gray Lumber Co., Dallas, Tex. M & M Wood Working Co., Portland, Oreg. (Gen-
- eral support.)

- Madison Lumber Co. (Dendinger, Inc., Owner),
- New Orleans, La. Mahoney Sash & Door Co., The, Canton, Ohio. Markland, M. B., Contracting Co., Atlantic City, N. I.

- N. J. Marquart Millwork Co., Oshkosh, Wis. Martin, Edgar, Chicago, Ill. Martin Lumber Co., Springfield, Mass. Martin Millwork Co., Raleigh, N. C. Maryland Lumber Co., The, Baltimore, Md. Mason City Millwork Co., Mason City, Iowa. Mason, George D., & Co., Detroit, Mich. Mauk Seattle Lumber Co., Seattle, Wash. McGuinn, N. J., Lumber Co., Inc., Charlotte, N. C. N. C. McPhillips Manufacturing Co., Inc., Mobile, Ala.

- Memphis Sash & Door Co., Memphis, Tenn. Merritt Lumber Yards, Inc., Reading, Pa. Metropolitan Millwork Co., Brooklyn, N. Y. Midland Building Industries, Inc., Indianapolis, Ind.
- Miller & Vrydagh, Terre Haute, Ind.

- Miller & Vrydagh, Terre Haute, Ind. Minot Builders Supply Co., Minot, N. Dak. Mooser, William, San Francisco, Calif. Morgan Co., Oshkosh, Wis. Morgan Sash & Door Co., Chicago, Ill. Morrison-Merrill & Co., Salt Lake City, Utah; Reno, Nev.; and Pocatello, Idaho. Mueller, Hair & Hetterich, Hamilton, Ohio. Mueller, Bass Reading Pa
- Muhlenberg Bros., Reading, Pa. Mutual Millwork Co., Orlando, Fla.
- Mutual Minwork Co., Orlando, Pia. Nash, Robinson & Co., Waco, Tex. National Manufacturing Co., Sterling, Ill. National Plywood Co., Inc., New York, N. Y. National Plywoods, Inc., Chicago, Ill. Neal-Blun Co., Savannah, Ga. Neal Millwork & Supply Co., Oklahoma City, Oble

Newton Lumber & Manufacturing Co., Colorado

Springs, Colo. Nielsen Construction Co., Harrisonburg, Va. Northern Sash & Door Co., Hawkins, Wis. Northside Building Supply Co., Doraville, Ga. Nurenburg, W. S., Ft. Worth, Tex. Nuroco Woodwork Manufacturing Division, New Rochelle Coal & Lumber Co., New Rochelle, N V

O & N Lumber Co., Menomonie, Wis. Officer, Gwynn, Lafayette, Calif. Oklahoma Sash & Door Co., The, Oklahoma City,

Pacific Mutual Door Co., Baltimore, Md., and

Chicago, Ill. Paducah Sash & Door Co., Inc., Paducah, Ky. Palmetto Sash & Door Co., Orangeburg, S. C. Patten-Blinn Lumber Co., Los Angeles, Calif. Pease Woodwork Co., Inc., Cincinnati, Ohio. Pepper, George W., Jr., Philadelphia, Pa. Portsmouth Lumber Corp., Portsmouth, Va. Price Lumber & Manufacturing Co., Fremont, Ohio

Ohio, Quigley, J. R., Co., Gloucester City, N. J. Racine Wood Products Co., Racine, Wis. Radford & Sanders, Inc., Baltimore, Md. Resnikoff, Abraham, New York, N. Y. Rinehimer Bros. Manufacturing Co., Elgin, Ill. Ritchie, James H., and Associates, Boston, Mass. Roach & Musser Co., Muscatine, Iowa. Roberson, A., & Son, Inc., Binghamton, N. Y. Rock Island Lumber Co., Cleveland, Ohio. Rock Island Millwork Co., Rock Island, Ill. Rockwell Bros. & Co., Houston, Tex. Roackwell Manufacturing Co. of Wisconsin, The, Randolph, Wis.

Randolph, Wis. Rogers, T. H., Lumber Co., The, Oklahoma City,

Rounds & Porter Co., Wichita, Kans. Royal Oak Wholesale Co., Royal Oak, Mich. Rudinger, C. R., Inc., South Kearny, N. J. Ruggles, Carlos, Lumber Co., Springfield, Mass. Rust Sash & Door Co., Kansas City, Mo.

Okla.

N. Y.

Okla.

Ohio.

Okla.

Chicago, Ill.

- Sanders Bros. Manufacturing Co., Ottawa, Ill. Santa Fe Builders Supply Co., Santa Fe, N. Mex. Scheidegger Woodwork Supply Co., Chattanooga, Scheidegger Wodwork Suppry Co., Charamoog, Tenn. Segelke & Kohlhaus Co., La Crosse, Wis. Semling-Menke Co., Inc., Merrill, Wis. Shenk, Henry, Co., Erie, Pa. Silbernagel, George, & Sons Co., Wausau, Wis. Simons, Inc., Minneapolis, Minn. Snell Sash & Door Co., St. Paul, Minn., and Omaha. Nebr.

- Omaha, Nebr. Sothman Co., The, Grand Island, Nebr. Southern Counties Gas Co. of California, Los

- Angeles, Calif. Southern Millwork & Supply Co., Lafayette, La. Southwestern Sash & Door Co., Albuquerque, N. Mex.
- Southwestern Sash & Door Co., El Paso, Tex., and Joplin, Mo. Spokane Sash & Door Co., Spokane, Wash. Spokane Woodworking Co., Spokane, Wash. Standard Lumber Co., Pine Bluff, Ark. Staub & Rather, Houston, Tex. Stillwater Manufacturing Co., The, Stillwater,

- Minn.
- Stivers, A. G., Lumber & Supply Co., Chattanooga, Tenn.

- Tenn. Stoetzel, Ralph, Chicago, Ill. Stravs, Carl B., Minneapolis, Minn. Stricklin Lumber Co., Florence, Ala. Sturtevant Millwork & Lumber Corp., Bethpage, L. I., N. Y. Swan Lake Moulding Co., Klamath Falls, Oreg. Sweetwater Sash & Door Co., Sweetwater, Tex. Taylor, Ellery Kirke, Haddonfield, N. J. Taylor Sash & Door Co., Pensacola, Fla. Teachout Sash, Door & Glass Co., The, Detroit, Mich.

- Mich.

- Tennessee Glass Co., Inc., Nashville, Tenn. Texas Sash & Door Co., Ft. Worth, Tex. Theiling-Lothman Manufacturing Co., St. Louis, Mo.

- Mo. Thompson Lumber Co., Minneapolis, Minn. Thorne, Henry Calder, Ithaca, N. Y. Throop-Martin Co., The, Columbus, Ohio. Timberline, Inc., Kansas City, Mo. Trexler Lumber Co., Allentown, Pa. Tulane Hardwood Lumber Co., Inc., New Orleans, La.
- Underwood Coal & Supply Co., Mobile, Ala. Valdosta Builders Supply Co., Valdosta, Ga.

Vaughan, George C., & Sons, Houston and San Antonio, Tex.

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- Antonio, Tex. Velde Lumber Co., Pekin, Ill. Victoria Sash & Door Co., Inc., Shreveport, La. Villaume Box & Lumber Co., The, St. Paul, Minn. Vogel, Willis A., Toledo, Ohio. Wabash Screen Door Co., The, Chicago, Ill. Wahlfeld Manufacturing Co., Peoria, Ill. Walling Sash & Door Co., Wichita, Kans. Wanke Panel Co., Portland, Oreg. Washington Woodworking Co., Inc., Washington,

- D. C.

- D. C. Watertown Sash & Door Co., Watertown, S. Dak. Weinel, A. F., Lumber Co., Columbia, Ill. Welch, Carroll E., Huntington, N. Y. West, Albert E., Boston, Mass. West Coast Screen Co., Los Angeles, Calif. West Kittanning, Lumber Co., Kittanning, Pa. Western Door & Sash Co., Oakland, Calif. Western Pine Manufacturing Co., Ltd., Spokane, Wacb Wash.
- Wheeler Osgood Co., The, Tacoma, Wash. Whissel, L. N., Lumber Co., Inc., Buffalo, N. Y. White Pine Sash Co., Spokane, Wash., and Chicago, EI.

- Hl. Whitmer Jackson Co., The, Buffalo, N. Y. Wilbur Lumber Co., Waukesha, Wis. Willson, Fred F., Bozeman, Mont. Wilson, W. A., & Sons, Inc., Wheeling, W. Va. Wolverine Shingle & Lumber Co., Detroit, Mich. Zimmerman, A. C., Los Angeles, Calif.

U. S. GOVERNMENT

Air Force Base Area "B," Air Installation "B" &

- Air Force Base Area "B," Air Installation "B" & "D," TSWPE, Dayton, Ohio.
 Army, Department of the, Standards Branch, Logistics Division, Washington, D. C.
 Federal Works Agency, Public Buildings Administration, Washington, D. C. (General support.)
 Housing & Home Finance Agency, Washington, D. C. (General support.)
 Interior, Department of the, Bureau of Indian Affairs, Washington, D. C.
 Justice, Department of, Bureau of Prisons, Construction Division, Washington, D. C.
 Naval Air Station, U. S., Anacostia, Washington, D. C.
 Naval Base, Public Works Department, Philadelphia, Pa.

- phia, Pa. Navy, Department of, Public Works Department, New York, N. Y.

COMMERCIAL STANDARDS

CS No.

CS No.

Item

0-40. Commercial standards and their value to business (third edition)

- 1-42. Clinical thermometers (third edition). 2-30. Mopsticks. 3-40. Stoddard solvent (third edition).

- 4-29. Staple porcelain (all-clay) plumbing fixtures
- 5-46. Pipe nipples, brass, copper, steel, and
- 5-40. The imples, blass, copper, steel, and wrought iron (second edition).
 6-31. Wrought-iron pipe nipples (second edition). Superseded by CS5-46.
 7-29. Standard weight malleable iron or steel screwed unions.
 41. Gare, blanka (third adition).
- 8-41. Gage blanks (third edition).
- 9-33. Builders' template hardware (second edition)
- 10-29. Brass pipe nipples. Superseded by CS5-46
- 11-41. Moisture regains of cotton yarns (second edition)
- 12-48. Fuel oils (sixth edition).
- 13-44. Dress patterns (fourth edition). 14-43. Boys' button-on waists, shirts, junior and sport shirts (made from woven fabrics) (third edition).

- Item 15-46 Men's pajama sizes (made from woven fabrics) (third edition). 16-29. Wall paper.
- 17-47 Diamond core drill fittings (fourth edition).
- 18-29. Hickory golf shafts. 19-32. Foundry patterns of wood (second edi-

23-30. Feldspar.

- tion). 20-47. Staple vitreous china plumbing fixtures (fourth edition).
- 21-39. Interchangeable ground-glass joints, stop-
- cocks, and stoppers (fourth edition). 22-40. Builders' hardware (nontemplate) (second edition).

26-30. Aromatic red cedar closet lining.
27-36. Mirrors (second edition).
28-46. Cotton fabric tents, tarpaulins and covers

29–31. Staple seats for water-closet bowls. 30–31. Colors for sanitary ware. (Withdrawn as commercial standard, March 15,

Superseded by

24-43. Screw threads and tap-drill sizes. 25-30. Special screw threads. Superse CS24-43.

(second edition).

1948.)

- CS No. Item 31-38. Wood shingles (fourth edition). 32-31. Cotton cloth for rubber and pyroxylin
 - coating. 33-43. Knit underwear (exclusive of rayon) (second edition).

 - 34–31. Bag, case, and strap leather. 35–47. Hardwood plywood (third edition). 36–33. Fourdrinier wire cloth (second edition).

 - 30-35. Foreinner wire contraction entrony.
 37-31. Steel bone plates and screws.
 38-32. Hospital rubber sheeting.
 39-37. Wool and part wool blankets (second edition). 39-37. Wool and part wool bilances (second edition). (Withdrawn as commercial standard, July 14, 1941.)
 40-32. Surgeons' rubber gloves.
 41-32. Surgeons' latex gloves.
 42-43. Structural fiber insulating board (third attice)

 - edition).
 - 43-32. Grading of sulphonated oils.
 - 44-32. Apple wraps.
 - 45-48. Douglas fir plywood (eighth edition).
 - 46-40. Hosiery lengths and sizes (third edition).
 - 47-34. Marking of gold-filled and rolled-gold-
 - plate articles other than watchcases. 48-40. Domestic burners for Pennsylvania anthra-
 - cite (underfeed type) (second edition). 49–34. Chip board, laminated chip board, and miscellaneous boards for bookbinding purposes.
 - 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) frieze).
 - 53-35. Colors and finishes for cast stone.
 - 54-35. Mattresses for hospitals.
 - 55-35. Mattresses for institutions.

 - 53-35. Mattresses for institutions.
 56-49. Oak flooring (third edition).
 57-40. Book cloths, buckrams, and impregnated fabrics for bookbinding purposes except library bindings (second edition).
 58-36. Woven elastic fabrics for use in overalls (overall elastic webbing).
 59-44. Textiles—testing and reporting (fourth edition)

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 - 67-38. Marking articles made of karat gold.
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 - 71-41. Phenolic disinfectant (soluble type) (second edition) (published with CS70-41)
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 - 84-41. Electric tail lamps for vehicles (after market).
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- ire repairs—vulcanized truck, and bus tires). (passenger,
- 111-43. Earthenware (vitreous-glazed) plumbing fixtures.
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- 117-44. Mineral wool; blankets, blocks, insulating cement, and pipe insulation for heated industrial equipment.
- 118-44. Marking of jewelry and novelties of silver.
- (E) 119-45.1 Dial indicators (for linear measurements).
- 120-48. Standard stock ponderosa pine doors (third edition). 121-45. Women's slip sizes (woven fabrics).

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CS No.	Item	CS No.	Item
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	Grading of diamond powder,		Automotive lifts.
	-45.1 Master disks.	143-47.	Standard strength and extra strength per-
	Prefabricated homes (second edition).		forated clay pipe.
	Tank mounted air compressors.	144-47.	Formed metal porcelain enameled sani-
127-45.	Self-contained mechanically refrigerated		tary ware.
	drinking water coolers.	145-47.	Testing and rating hand-fired hot water
128-45.	Men's sport shirt sizes-woven fabrics		supply boilers.
	(other than those marked with regular		Gowns for hospital patients.
	neckband sizes).		Colors for molded urea plastics.
129-47.	Materials for safety wearing apparel (second edition).	148-48.	Men's circular flat and rib knit rayon underwear.
130-46	Color materials for art education in	140-48	Utility type house dress sizes.
150-40.	schools.		Hot-rolled rail steel bars (produced from
131-46	Industrial mineral wool products, all	150 10.	T-section rails).
101-10.	types—testing and reporting.	151-48	Body measurements for the sizing of
132-46	Hardware cloth.	151 10.	apparel for infants, babies, toddlers,
	Woven wire netting.		and children (for the knit-underwear
	Cast aluminum cooking utensils (metal		industry).
	composition).	152-48.	Copper naphthenate wood-preservative.
135-46.	Men's shirt sizes (exclusive of work		Body measurements for the sizing of
	shirts).		apparel for girls (for the knit-under-
136-46.	Blankets for hospitals (wool, and wool		wear industry).
	and cotton).	154	(Reserved for wire rope.)
137-46.	Size measurements for men's and boys'	155-49.	Body measurements for the sizing of
	shorts (woven fabrics).		apparel for boys (for the knit-under-
	Insect wire screening.		wear industry).
	Work gloves.		Colors for polystyrene plastics.
140-47.	Testing and rating convectors.		Ponderosa pine and sugar pine plywood.
		158-49.	Model forms for girls' apparel.

1 Where "(E)" precedes the CS number, it indicates an emergency commercial standard, drafted under war conditions with a view toward early revision.

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 Commodity Standards Division, National Bureau of Standards, Washington 25, D. C.

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