

*ORIGINAL FOR
ZEROXING

COMMERCIAL STANDARD **CS120-58**

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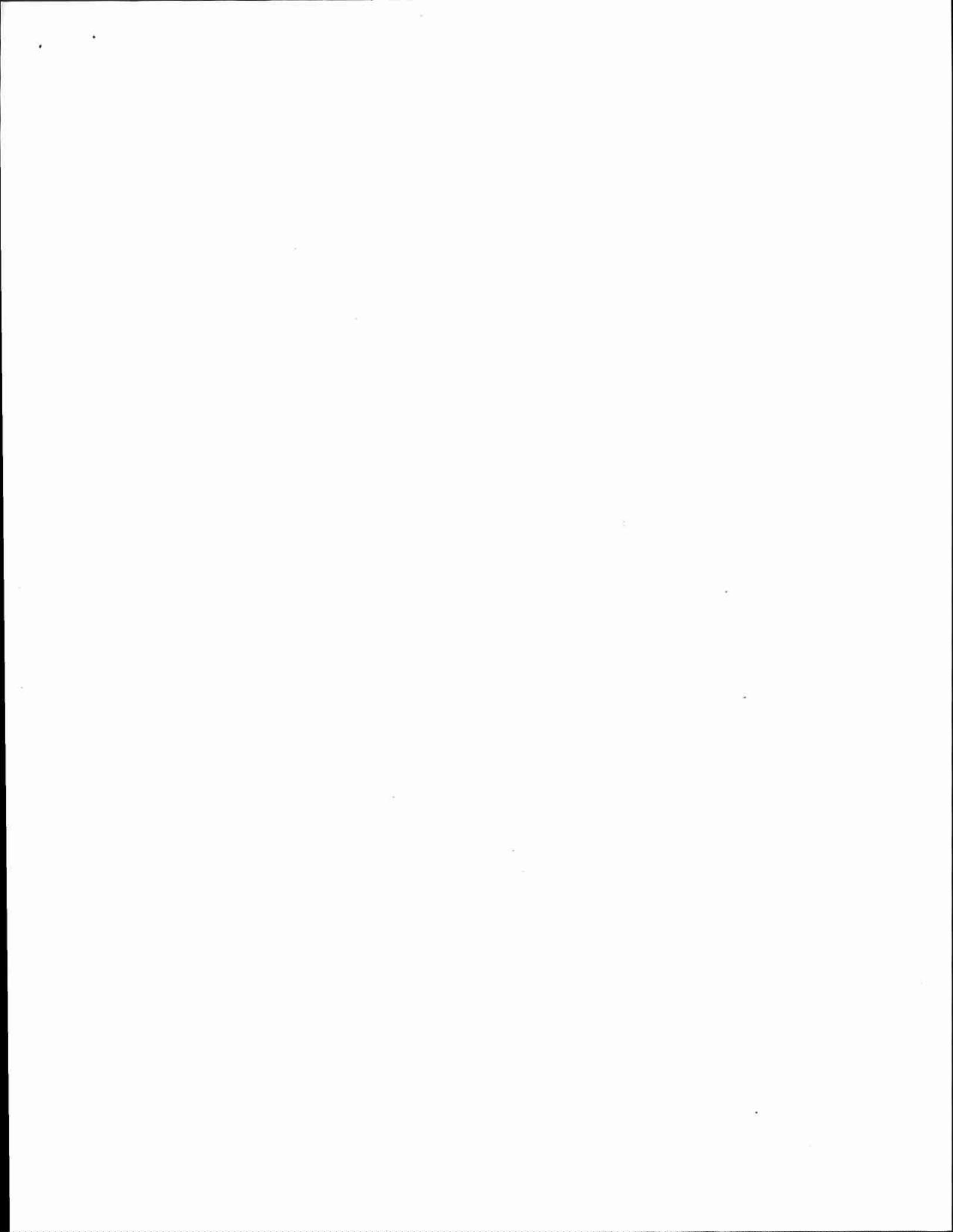
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Ponderosa Pine Doors

WITHDRAWN

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





U.S. DEPARTMENT OF COMMERCE

SINCLAIR WEEKS, Secretary

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OFFICE OF TECHNICAL SERVICES

COMMODITY STANDARDS DIVISION

COMMERCIAL STANDARDS

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

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

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

SIMPLIFIED PRACTICE RECOMMENDATIONS

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

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Ponderosa Pine Doors¹

Fifth Edition

[Effective June 2, 1958]

[Reprinted with amendments June 1962]

1. PURPOSE

1.1 The purpose of this Commercial Standard is to establish national standards specifications, designs, and sizes for stock ponderosa pine doors for the guidance of producers, distributors, architects, builders, and the public; to provide a uniform basis for guaranteeing compliance with the standard 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.

1.2 In the development of this standard every effort has been made to include designs which will permit freedom of architectural expression. Ponderosa pine doors of other designs and layouts will be considered as conforming to this standard provided they meet or exceed all other requirements. (Par. 1.2 amended Sept. 22, 1960.)

¹Ponderosa pine, one of the western pines, has proved over the past 50 years to be highly adaptable for woodwork. This pine is light in color, ranging from creamy white to straw color. The grain is close and uniform, and resists raising. The surface is even textured. It takes nails and screws without splitting, and is easy to mortise for locks and cut for hinges. It sands to a satin-smooth finish, and takes paint, enamel, stain, and varnish, holding them well. The ends and edges do not splinter easily.

1.3 To meet the demand for economy and simplification of installation, doors may be specified "prefit" to the exact size required (see par. 5.1.2). Doors will be mortised for locks and cut for hinges when so specified.

2. SCOPE AND CLASSIFICATION

2.1 SCOPE.--This standard provides the minimum specifications for panel and sash doors and for solid core flush doors in four nominal thicknesses, 3/4, 1-1/8, 1-3/8 and 1-3/4 inches. The standard covers materials, constructions, grades, sizes and tolerances, designs and layouts, inspection, labeling, trade nomenclature and definitions.

2.2 CLASSIFICATION.--The standard stock ponderosa pine doors covered by this Commercial Standard shall be of the types, grades, sizes, and designs listed in table I. The table lists the use or type of door, stock number, brief description of panel and light arrangement, if any, and where in this standard the illustrations, sizes, and grading procedures appear.

Table I.—Classification Index

(Table I amended Sept. 22, 1960.)

Type of door	Grades (see pp. 10, 11, and 12)	Stock Nos.	Description	Size	Design
				<i>Page</i>	<i>Page</i>
Interior	No. 1, No. 1F, and No. 2.	100	1 panel.....	13	17
		101	1 panel inner frame.....	13	17
		102	2 regular panels.....	13	17
		103	3 equal panels.....	13	17
		104	3 panels.....	13	17
		¹ 106	4 regular panels.....	13	18
		¹ 107	5 cross panels.....	13	18
		¹ 108	6 panel colonial.....	13	18
		¹ 109	8 equal panels.....	13	18
		¹ 113	15 equal panels.....	13	18
		Exterior	No. 1, No. 1F, and No. 2.	110	6 panel colonial.....	13	19
114	6 panels, 1 lt.....			13	19
500	1 panel, 1 lt.....			13	19
501	1 panel, 6 lts., 2 w.....			13	19
502	1 panel, 9 lts., 3 w.....			13	19
(panel and sash entrance) ²					

See footnotes at end of table.

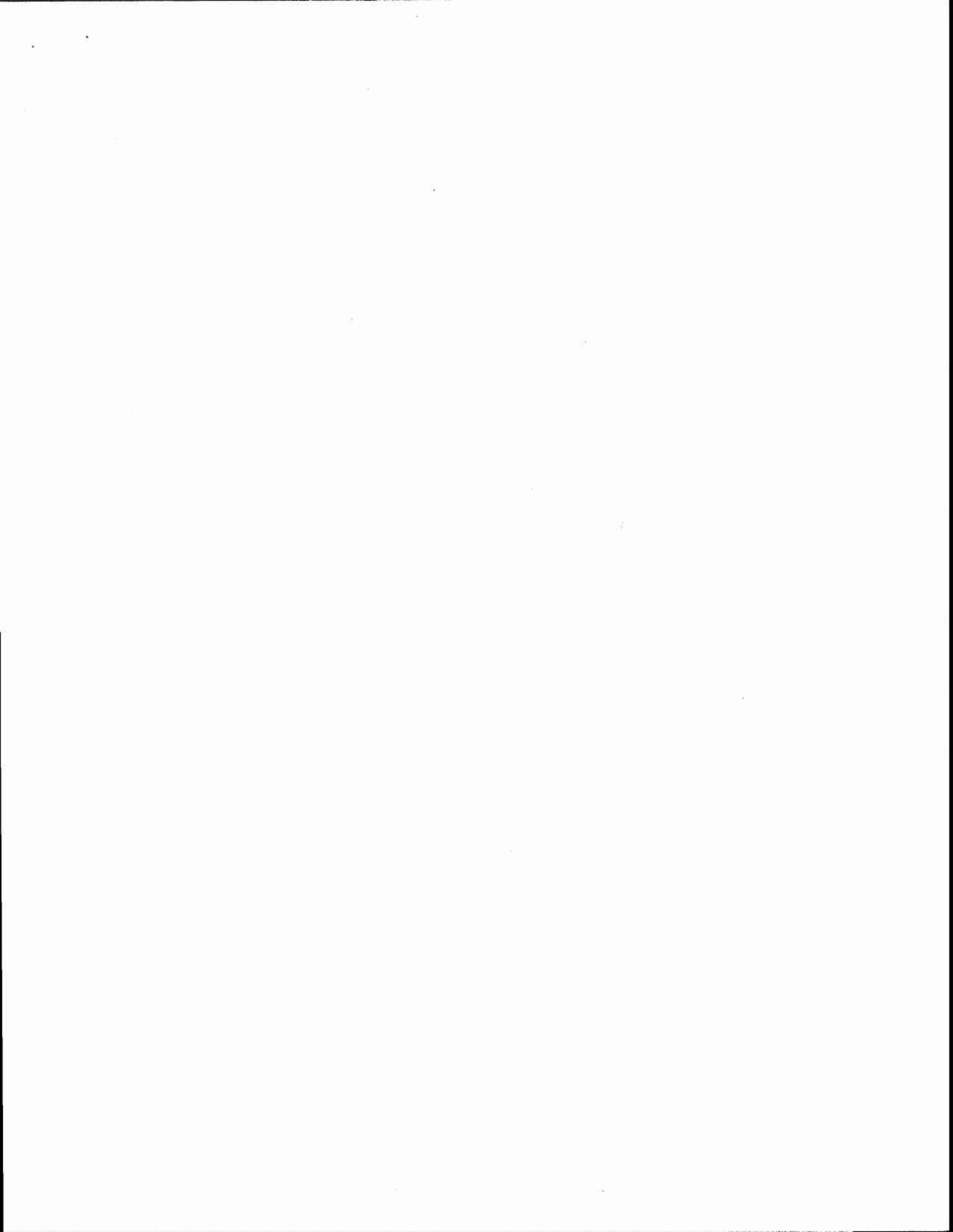


Table I.—Classification Index—Con.

Type of door	Grades (see pp. 10, 11, and 12)	Stoc. Nos.	Description	Size	Design		
Exterior--Con. (panel and sash, etc.)--Con.	No. 1, No. 1F, and No. 2.	506	1 panel, 4 hor. lts.....	<i>Page</i> 13	<i>Page</i> 19		
		584	1 panel, 1 lt.....	13	20		
		585	1 panel, 3 hor. lts.....	13	20		
		586	1 panel, 6 lts., 2 w.....	13	20		
		587	1 panel, 8 lts., 2 w.....	13	20		
		588	1 panel, 9 lts., 3 w.....	13	20		
		513	2 hor. panel, 3 hor. lts.....	13	20		
		514	2 hor. panels, 1 lt.....	13	20		
		515	2 hor. panels, 4 lts., 2 w.....	13	20		
		516	2 hor. panels, 6 lts., 3 w.....	13	20		
		517	2 hor. panels, 9 lts., 3 w.....	13	20		
		519	2 hor. panels, 3 vert. lts.....	13	20		
		536	3 hor. panels, 3 hor. lts.....	13	21		
		537	3 hor. panels, 1 lt.....	13	21		
		538	3 hor. panels, 4 lts., 2 w.....	13	21		
		539	3 hor. panels, 6 lts., 3 w.....	13	21		
		542	3 hor. panels, 3 vert. lts.....	13	21		
		549	4 hor. panels, 1 lt.....	13	21		
		559	2 vert. panels, 1 lt.....	13	21		
		560	2 vert. panels, 4 lts., 2 w.....	13	21		
		561	2 vert. panels, 6 lts., 2 w.....	13	21		
		562	2 vert. panels, 9 lts., 3 w.....	13	21		
		563	2 vert. panels, 3 hor. lts.....	13	21		
		567	3 panels, 1 lt.....	13	22		
		569	3 panels, 6 lts., 3 w.....	13	22		
		570	3 panels, 9 lts., 3 w.....	13	22		
		571	4 panels, 9 lts., 3 w.....	13	22		
		574	1 panel, 3 lts.....	13	22		
		575	1 panel, 1 lt.....	13	22		
		578	1 panel, 6 lts., 2 w.....	13	22		
		580	1 panel, 9 lts., 3 w.....	13	22		
		590	2 vert. panels, 2 lts.....	13	23		
		591	2 vert. panels, 1 lt.....	13	23		
		592	2 vert. panels, 3 vert. lts.....	13	23		
		593	2 vert. panels, 4 vert. lts.....	13	23		
		594	2 vert. panels, 6 lts., 3 w.....	13	23		
		596	4 panels, 2 lts.....	13	23		
		597	4 panels, 3 lts.....	13	23		
		598	4 panels, 4 lts.....	13	23		
		600	4 panels, 4 lts.....	13	24		
		605	14 panels, 4 lts.....	13	24		
		606	4 panels, 3 lts.....	13	24		
		607	4 panels, 4 lts.....	13	24		
		608	6 panels, 3 vert. lts.....	13	24		
		609	6 panels, 9 lts., 3 w.....	13	25		
		612	4 panels, 9 lts., 3 w.....	13	25		
		613	4 panels, 12 lts., 4 w.....	13	25		
		French or Casement ³	No. 1.....	620	1 lt.....	13	25
				622	8 lts., 2 w.....	13	25
				625	10 lts., 2 w.....	13	25
				626	12 lts., 3 w.....	13	25
				627	15 lts., 3 w.....	13	25
				630	5 hor. lts.....	13	25
				635	1 lt.....	13	26
				637	8 lts., 2 w.....	14	26

See footnotes at end of table.

Table 1.—Classification Index—Con.

Type of door	Grades (see pp. 10, 11, and 12)	Stock Nos.	Description	Size	Design	
French or Casement ³ —Con.	No. 1.....	638	9 marg. lts.....	Page 14	Page 26	
		640	10 lts., 2 w.....	14	26	
		641	12 lts., 3 w.....	14	26	
		642	15 lts., 3 w.....	14	26	
		644	5 hor. lights.....	14	26	
Side Lights.....	No. 1.....	675	1 lt.....	14	26	
		676	1 panel, 1 lt.....	14	26	
Storm.....	No. 1, No. 1F, and No. 2.	702	5 hor. panels.....	14	27	
		703	3 hor. panels, 1 lt.....	14	27	
Cupboard.....	No. 1 and No. 1F	710	1 panel.....	14	27	
Toilet.....	No. 1.....	726	3 hor. panels.....	14	28	
		727	4 stationary slat panels.....	14	28	
		728	3 stationary slat panels.....	14	28	
Louver.....	No. 1.....	730	2 stationary slat panels.....	14	28	
		731	4 stationary slat panels.....	15	28	
		732	1 stationary slat panel, 1 raised panel.	14	28	
		733	1 stationary slat panel.....	14	28	
Combination..... (sash and screen inserts)	No. 1.....	734	2 hor. panels, 1 lt.....	15	29	
		735	2 hor. panels, 3 lts.....	15	29	
		736	2 hor. panels, 6 lts., 2 w.....	15	29	
		737	1 hor. panel, 8 lts., 2 w.....	15	29	
		756	1 hor. panel, 4 hor. lts.....	15	29	
		757	1 hor. panel, 3 hor. lts.....	15	29	
		758	1 hor. panel, 1 lt.....	15	29	
759	3 equal lights.....	15	29			
Screen.....	No. 1.....	760		15	29	
		761		15	29	
		762		15	29	
		763		15	29	
		764		15	30	
		765		15	30	
Garage.....	No. 1, and No. 2 and Better.	<i>Swingup type</i>				
		780	11 panels, 1 lt., 3 w.....	15	30	
		781	8 panels, 1 lt., 2 w.....	15	30	
		782	7 panels, 1 lt., 2 w.....	15	30	
		<i>Rollup type</i>				
		786	18 panels, 6 w.....	15	31	
		787	12 panels, 4 lts., 4 w.....	15	31	
		788	22 panels, 2 lts., 6 w.....	15	31	
789	16 panels, 2 lts., 4 w.....	15	31			
Flush.....	No. 1.....	.....	<i>Interior</i>		
			Plain flush.....	15	31	
			<i>Exterior</i>			
			V-Grooved.....	15	31	

¹Also for exterior use.

²Also see Flush (exterior) doors; Interior doors Nos. 106, 107, 108, 109, and 113, and French doors.

³For both interior and exterior use.

3. REQUIREMENTS

3.1 PANEL AND SASH DOORS.

3.1.1 All Commercial Standard ponderosa pine panel, sash, and screen doors shall meet the requirements set forth in paragraph 3.1 and subparagraphs thereunder.

3.1.2 *Material.*

3.1.2.1 *Lumber.*—Unless otherwise stated herein, all doors shall be made of ponderosa pine that has been dried to a moisture content of from 6 to 12 percent at the time of fabrication, and that conforms to the specified grade as described in section 4.

3.1.2.2 *Panels.*—Door panels shall be made of one of the following: glued-up ponderosa pine, or pine plywood, hardwood plywood, Douglas fir plywood, or solid bonded granulated wood. The grades of the panels shall be as described in section 4. Panels are illustrated in figure 1.

3.1.2.3 *Adhesives and bonds.*—Adhesives for all fabrication shall be of water-resistant types. Water-resistant adhesives shall conform to Federal Specification MMM-A-125;² or be such as may be used for Type II, Water-Resistant Bond, as defined in Commercial Standard CS35-61,³ or later edition; or equal. The adhesive manufacturer's directions for mixing and handling shall be followed carefully.

3.1.3 *Standard sizes, tolerances and prefitting.*—The standard sizes available, the size tolerances permitted, and the size requirements for "prefit doors" shall be as specified in section 5.

3.1.4 *Standard designs and layouts.*—The standard designs and layouts of the various types of doors shall be as shown in section 6.

3.1.5 *Construction.*—Panel and sash doors shall be assembled by dowelled construction. Stiles and rails are to be bored to receive dowels not less than 3/8 inch in diameter by approximately 4-3/4 inches long for doors 3/4 inch thick; and not less than 1/2 inch in diameter by

approximately 5 inches long for doors 1-1/8, 1-3/8, and 1-3/4 inches thick (cup-board 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 adhesive, extend approximately one-half their length into each stile and rail, and be assembled under pressure. The minimum number of dowels at each end of the rails shall be as follows:

Rails under 4-1/4 inches wide.. 1 dowel.
 Rails 4-1/2 to 7 inches wide..... 2 dowels.
 Rails over 7 inches wide..... 3 dowels,
 plus 1 additional dowel for each additional full 3 inches in width.

3.1.5.1 At the option of the manufacturer, doors may be assembled blind mortise-and-tenon construction instead of dowelled construction. The blind mortise and tenon shall be sized for a drive fit. A water-resistant adhesive shall be used on the blind mortised-and-tenoned joints of all stiles and rails. The joints shall be pinned as follows: 2 dowel pins at each end of the top rails; 2 dowel pins at each end of the lock rails not wider than 5-5/8 inches face; 4 dowel pins at each end of the lock rails wider than 5-5/8 inches face; 4 dowel pins at each end of the bottom rails not wider than 9-1/4 inches face; and 1 extra dowel pin at each end of the bottom rails for each additional 2-inches rail width. The dowel pins shall be barbed and not more than 3/8 inch shorter in length than the thickness of the door. They shall be countersunk.

3.1.5.2 *Finger joints.*—A quality finger joint is a series of fingers machined on the ends of two pieces to be joined, which mesh together and are held firmly in position by a water-resistant adhesive applied in accordance with the adhesive manufacturer's specifications. The parts joined by the finger joint must be precision machined. Finger joints as defined herein shall be allowed in all doors except grades No. 1 and No. 1F.

3.1.6 *Sticking.*—Stiles and rails shall have solid sticking. All inter-sections shall be coped with joints well fitted. "Cove and bead" or "ovolo" sticking shall be standard (see fig. 1) on all standard ponderosa pine panel and sash doors. The

²Federal Specification MMM-A-125, Adhesives, Casein-Type, Water and Mold Resistant, can be obtained from the General Services Administration, 7th and D Sts., SW, Washington 25, D. C., for 10 cents a copy.

³Commercial Standard CS35-61, Hardwood Plywood, can be obtained from the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C., for 15 cents a copy.

type of sticking on screen doors, louver doors, combination doors, and garage doors, shall be optional with the manufacturer. Imperfect sticking that may develop in machining shall be carefully repaired or be neatly replaced.

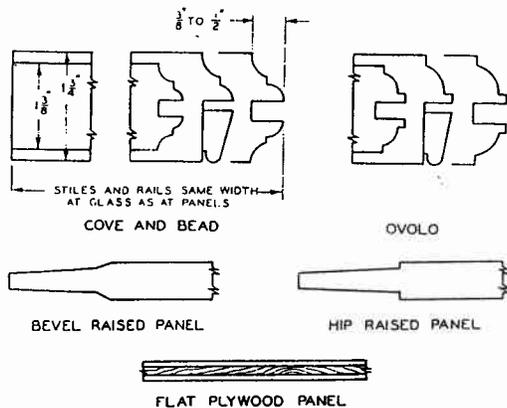


Figure 1. Sticking and panel details.

3.1.7 Insect wire screening.—At the option of the manufacturer, insect wire screening on screen doors, and screen sections of combination doors may be rolled into a groove on the stiles or rails, or may be stapled to the stiles or rails. When fastening screen cloth, the nails, brads, or staples shall be not more than an average of 2-1/2 inches apart across the direction of stretch of the screen cloth and an average of not more than 7 inches apart along the direction of stretch of the screen cloth. The nails, brads, or staples used for fastening screen molding shall be spaced not more than an average of 10 inches apart nor more than 3 inches from each end of the molding. On molding 1-3/4 inches and wider, there shall be a double row of nails, brads or staples. At the option of the manufacturer, the molding on screen doors may be either raised or flush.

Aluminum, galvanized steel or bronze insect wire screening may be used. The mesh of the insect wire screening shall be 18 x 14. The diameter of the wire in the screening shall be in accordance with Commercial Standard 138-55, or later revision.⁴ Plastic or fiber glass screen

⁴Commercial Standard CS138-55 (amended 1956) Insect Wire Screening, can be obtained from the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C., at 10 cents a copy.

cloth may be used if applied in a groove with a spline sufficiently pliable to engage the filaments of the screen cloth and hold it securely in the groove.

When screen cloth is tacked, the tacks or staples (and in all instances, the brads or staples for applying the molding) shall be of copper or brass where bronze screen cloth is used; of galvanized or plain steel, or aluminum where galvanized screen cloth is used; or of galvanized steel, zinc, tinned steel, stainless steel, blued steel, bright steel, or aluminum where aluminum screen cloth is used.

3.1.8 Glazing.—All glazed exterior doors except combination doors, shall have the glass bedded in putty or glazing compound, and the wood beads tacked into place.

3.1.9 Workmanship.—Each door shall be well manufactured. Flat faces of stiles, rails, and panels shall be machined to a smooth, uniform surface.

3.2 FLUSH DOORS.

3.2.1 All Commercial Standard ponderosa pine flush doors shall meet the requirements set forth in paragraph 3.2 and subparagraphs thereunder.

3.2.2 Material.

3.2.2.1 Wood.—The wood blocks used for laying up cores and for stile, rail, or panel units shall be of low density woods. (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. However, the use of sound wormy chestnut shall be permitted.) All wood parts used in the construction of the flush doors shall be dried to a moisture content of from 6 to 12 percent at the time of fabrication. The wood for flush doors shall be of Grade No. 1 as described in section 4.

3.2.2.2 Adhesives and bonds.—Adhesives for all fabrication shall be of water-resistant types, equally distributed over the entire surfaces to be joined. Water-resistant adhesives shall conform to Federal Specification MMM-A-125, or be such as may be used for Type II, Water-Resistant Bond, as defined in Commercial Standard CS35-61, or later edition; or equal. The adhesive manufacturer's directions shall be followed carefully.

3.2.3 Standard sizes, tolerances, and prefitting.—The standard sizes available, the size tolerance permitted and the size requirements for "prefit doors" shall be as specified in section 5.

3.2.4 Standard design and layouts.—The standard designs and layouts of the various types of flush doors shall be as shown in section 6.

3.2.5 Construction.—The cores of flush doors shall be made of low-density wood blocks S2S, not more than 2-1/2 inches, wide, and of varying lengths. These blocks shall be bonded together under pressure with a water-resistant adhesive except for floating core construction (see par. 3.2.5.2). No core shall contain more than one species of wood.

3.2.5.1 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 of 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.

3.2.5.2 Framed block or strip core.—The wood blocks or strips shall be laid up within a stile and rail frame with the end joints of the blocks or strips in adjacent rows staggered. The minimum width of stiles shall be 1 1/8 inches and the minimum width of the rails shall be 2 1/2 inches. The blocks or strips shall not be bonded together, but the core shall be bonded to the face panels. (Par. 3.2.5.2 amended Sept. 22, 1960.)

3.2.5.3 Edge strips.—The core shall be surrounded with edge strips not less than 1/2 inch thick after trimming. In lieu of 1/2 inch edge strips, the tops and bottoms of the doors shall be given two coats of paint or varnish before the doors leave the factory. At the option of the manufacturer, flush veneered doors may be constructed of stile, rail, and panel units, each unit made up entirely of blocks with 1/2 inch edge strips on exposed edges of stiles and rails, but not on the ends of stiles. Ex-

terior flush doors may be manufactured with wide edge strips to allow for cutting the width and height of doors. They may also be made to permit cutting a circular or irregular top.

3.2.5.4 Surfacing cores.—The cores, after gluing and conditioning, shall be machined to uniform thicknesses with smooth surfaces.

3.2.6 Veneers.—Crossbanding shall be not less than 1/16 inch nor more than 1/8 inch thick. Face veneers shall be from 1/16 to 1/4 inch thick before sanding. The crossbanding and faces shall be bonded to the core and to each other with a water-resistant adhesive, and assembled under pressure.

3.2.7 Glazing.—If light openings are required for exterior flush doors, they shall be glazed as specified in paragraph 3.1.8.

3.2.8 Workmanship.—Flush doors shall be well manufactured with flat surfaces and smoothly sanded faces. (This is not to be interpreted as meaning that the doors will be ready for painter's finish.)

4. STANDARD GRADING PROCEDURES

4.1 PROCEDURES (GENERAL).—The various doors shown in table I (see par. 2.2) to be available in certain grades, shall be graded in accordance with the following standard grading procedures.

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

4.2 GRADE NO. 1.—Suitable for natural, stain, paint, or enamel finish.

4.2.1 Stiles and rails.—The stock shall be practically clear of defects. Bright sap, light brown stain and light red kiln-burn shall be permitted. For panel and sash doors, each stile, lock rail, or bottom rail may contain one carefully repaired pitch seam on each side provided that it does not extend through the piece, nor exceed 1/4 inch in width or 4 inches in length. Rails wider than 4-7/8 inches and up to 7-3/4 inches, may be glued-up with one joint; up to 9-3/4 inches with two joints; up to 12 inches with three joints. Not more than the same proportion of joints will be permitted in wider rails.

A water-resistant adhesive shall be used. Stiles and rails may be solid or veneered, at the option of the manufacturer. If veneered, a water-resistant adhesive shall be used. Finger joints are not permitted. (Par. 4.2.1 amended Sept. 22, 1960.)

4.2.2 Panels, solid.—The standard thickness of solid ponderosa pine panels raised two sides shall be not less than 7/16 inch after sanding. They shall conform to the grade of the stiles and rails. Panels wider than 4-7/8 inches and up to 7-3/4 inches may be glued-up with one joint; up to 12-1/2 inches with two joints. Not more than the same proportion of joints will be permitted in wider panels. A water-resistant adhesive shall be used. (Par. 4.2.2 amended Sept. 22, 1960.)

4.2.3 Panels, flat plywood.—The standard thickness of 3-ply flat plywood panels shall be not less than 1/4 inch after sanding except that inner-frame and cupboard door panels shall be not less than 3/16 inch thick. If made of pine, they shall be sound two sides or better, to conform to Commercial Standard 157-56,⁵ or later revisions; if made of hardwood, they shall be Grade 1 plywood as specified in Commercial Standard 35-61, or later revisions. For doors with Douglas fir panels, refer to paragraph 4.3.

4.2.4 Panels, solid-bonded granulated wood.—Panels may be made from finely granulated wood, bonded with thermosetting resins of the phenol formaldehyde type, having a color, when cured, which does not materially differ from the natural color of the wood from which the panel is made. They shall have a minimum modulus of rupture in static bending of 3,500 pounds per square inch. These panels may be either solid with a sanded thickness of 1/4 inch or built-up of two or more plies.

4.3 GRADE NO. 1F.—Suitable for paint or enamel finish.

4.3.1 The specifications for Grade No. 1 apply, except that the panels shall be A-A grade (sound two sides) Douglas fir

plywood, in accordance with Commercial Standard 45-60,⁶ or later revisions.

4.4 GRADE NO. 2.—Suitable for paint or enamel finish.

4.4.1 Stiles and rails.—The stock may contain blue stain, brown stain, or red kilnburn showing on not to exceed 50 per cent of the area of any piece, as well as pitch streaks, hairline checks, pitch pockets if carefully slivered, tight sound knots not to exceed 5/8 inch in diameter, and other imperfections, none of which shall be more serious than those enumerated above. Each stile may 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 permitted but regarded as imperfections. Rails wider than 4-7/8 inches and up to 7-3/4 inches may be glued-up with one joint; up to 9-3/4 inches with two joints; and up to 12 inches with three joints. Not more than the same proportion of joints will be permitted in wider rails. A water-resistant adhesive shall be used. Stiles and rails may be solid or veneered, at the option of the manufacturer. If veneered, a water-resistant adhesive shall be used. Stiles may be glued-up with not more than two vertical joints per stile.

4.4.2 Panels, solid.—The standard thickness of solid ponderosa pine panels raised two sides shall be not less than 7/16 inch after sanding. They shall conform to the grade of the stiles and rails. Panels wider than 4-7/8 inches and up to 7-3/4 inches may be glued up with 1 joint; up to 12-1/2 inches, 2 joints. Not more than the same proportion of joints shall be permitted in wider panels. A water-resistant adhesive shall be used.

4.4.3 Panels, flat plywood.—The standard thickness of 3-ply flat plywood panels shall be not less than 1/4 inch after sanding, except that inner-framed and cupboard door panels shall be not less than 3/16 inch thick. If made of pine, they shall be sound two sides or better, to conform to Commercial Standard 157-56, or later revisions; if made of hardwood they shall

⁵Commercial Standard CS157-56, Pine Plywood (Ponderosa Pine, Sugar Pine, Idaho White Pine) can be obtained from the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C., for 10 cents a copy.

⁶Commercial Standard CS45-60, Douglas Fir Plywood, can be obtained from the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C., for 15 cents a copy.

be Grade 2 plywood as specified in Commercial Standard 35-61, or later revisions; if made of Douglas fir, the panel shall be A-A Grade (sound two sides) Douglas fir plywood, in accordance with Commercial Standard 45-60, or later revisions.

4.4.4 Panels, solid-bonded granulated wood.—Panels may be made from finely granulated wood bonded with thermosetting resins of the phenol formaldehyde type, having a color, when cured, which does not materially differ from the natural color of the wood from which the panel is made. They shall have a minimum modulus of rupture in static bending of 3,500 pounds per square inch. These panels may be either solid with a sanded thickness of 1/4 inch or built up of two or more plies.

4.5 GRADE NO. 2 AND BETTER (SWINGUP, AND ROLLUP GARAGE DOORS ONLY).—Suitable for paint finish.

4.5.1 Stiles and rails.—The stock may contain light-blue stain, medium-brown stain, or medium-red kilnburn, 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 5/8 inch in diameter, and other imperfections, none of which shall be more serious in nature than those enumerated above. No piece shall contain more than 1 imperfection, and no door shall contain more than 8 on each side. Rails wider than 4-3/4 inches may be glued-up. A water-resistant adhesive shall be used.

4.5.2 Panels, flat plywood.—The standard thickness of 3-ply flat plywood panels shall be not less than 1/4 inch after sanding. If made of pine, they shall be sound two sides or better, to conform to Commercial Standard 157-56, or later revisions; if made of hardwood, they shall be Grade 2 plywood as specified in Commercial Standard 35-61, or later revisions; if made of Douglas fir, the panels shall be A-A Grade (sound two sides) Douglas fir plywood and shall be in accordance with Commercial Standard 45-60, or later revisions.

4.5.3 Panels, solid-bonded granulated wood.—Panels may be made from finely granulated wood bonded with thermosetting resins of the phenol formaldehyde type, having a color, when cured, which does not materially differ from the natural color of the wood from which the panel is made. They shall have a minimum modulus of rupture in static bending of 3,500 pounds per square inch. These panels shall be solid with a sanded thickness of 1/4 inch.

5. STANDARD SIZES

5.1 STANDARD SIZES (GENERAL).—The standard stock sizes of ponderosa pine doors as shown in Table II are generally available for the standard stock designs and layouts shown in Section 6 of this standard. However, doors of other sizes, including intermediate sizes, are usually available on special order and may be considered as conforming to this standard, provided they meet, or exceed, all other requirements specified herein.

(Par. 5.1 amended June 15, 1962.)

5.1.1 Size tolerances.—Unless otherwise specified and except when doors are ordered "prefit" (see par. 5.1.2), the following tolerances will be allowed in the overall measurements of each door:

Height and width: Minus 0 inch, plus 1/8 inch

Thickness: Minus 1/16 inch, plus 1/16 inch

5.1.2 Prefitting.—When ordered "prefit" all doors, except garage doors, shall be supplied as follows;

- (a) Interior and exterior doors shall be prefit to 3/16 inch less in width and 1/8 inch less in height than the nominal door size. A tolerance of 1/32 inch, plus or minus shall be 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.

Table II.—Standard Overall Sizes
(Table II amended Sept. 22, 1960.)

N. D. Number (design)	Dimensions	N. D. Number (design)	Dimensions
Interior Panel Doors		French-Rim and Horizontal-Light Doors (Exterior and Interior)	
100, 101, 102, 103, 104, 106, 107, 108, 109, 113 ¹	1'6" x 6'6" x 1-3/8" 1'6" x 6'8" x 1-3/8" 2 2'0" x 6'0" x 1-3/8" 2 2'0" x 6'6" x 1-3/8" 2 2'0" x 6'8" x 1-3/8" 2'0" x 7'0" x 1-3/8" 2'4" x 6'0" x 1-3/8" 2'4" x 6'6" x 1-3/8" 2'4" x 6'8" x 1-3/8" 2'4" x 7'0" x 1-3/8" 2'6" x 6'0" x 1-3/8" and 1-3/4" 2 2'6" x 6'6" x 1-3/8" and 1-3/4" 2 2'6" x 6'8" x 1-3/8" and 1-3/4" 2'6" x 7'0" x 1-3/8" and 1-3/4" 2'8" x 6'0" x 1-3/8" and 1-3/4" 2'8" x 6'6" x 1-3/8" and 1-3/4" 2'8" x 6'8" x 1-3/8" and 1-3/4" 2'8" x 7'0" x 1-3/8" and 1-3/4" 3'0" x 6'8" x 1-3/8" and 1-3/4" 3'0" x 7'0" x 1-3/8" and 1-3/4"	620, 630	2'0" x 6'6" x 1-3/8" and 1-3/4" 2'0" x 6'8" x 1-3/8" and 1-3/4" 2'0" x 7'0" x 1-3/8" and 1-3/4" 2'4" x 6'6" x 1-3/8" and 1-3/4" 2'4" x 6'8" x 1-3/8" and 1-3/4" 2'4" x 7'0" x 1-3/8" and 1-3/4" 2'6" x 6'6" x 1-3/8" and 1-3/4" 2'6" x 6'8" x 1-3/8" and 1-3/4" 2'6" x 7'0" x 1-3/8" and 1-3/4" 2'8" x 6'8" x 1-3/8" and 1-3/4" 2'8" x 7'0" x 1-3/8" and 1-3/4" 3'0" x 6'8" x 1-3/8" and 1-3/4" 3'0" x 7'0" x 1-3/8" and 1-3/4"
Exterior Doors		French or Casement Doors (Exterior and Interior)	
110, 114, 500, 501, 502, 506, 584, 585, 586, 587, 588, 596, 597, 598	2'8" x 6'8" x 1-3/8" and 1-3/4" 2'8" x 7'0" x 1-3/8" and 1-3/4" 3'0" x 6'8" x 1-3/8" and 1-3/4" 3'0" x 7'0" x 1-3/8" and 1-3/4" 3'4" x 6'8" x 1-3/4" only 3'4" x 7'0" x 1-3/4" only	622, 625	2'0" x 6'6" x 1-3/8" and 1-3/4" 2'0" x 6'8" x 1-3/8" and 1-3/4" 2'0" x 7'0" x 1-3/8" and 1-3/4" 2'4" x 6'6" x 1-3/8" and 1-3/4" 2'4" x 6'8" x 1-3/8" and 1-3/4" 2'4" x 7'0" x 1-3/8" and 1-3/4" 2'6" x 6'6" x 1-3/8" and 1-3/4" 2'6" x 6'8" x 1-3/8" and 1-3/4" 2'6" x 7'0" x 1-3/8" and 1-3/4" 2'8" x 6'8" x 1-3/8" and 1-3/4" 2'8" x 7'0" x 1-3/8" and 1-3/4" 3'0" x 6'8" x 1-3/8" and 1-3/4" 3'0" x 7'0" x 1-3/8" and 1-3/4"
513, 514, 515, 516, 517, 519, 536, 537, 538, 539, 542, 549, 559, 560, 561, 562, 563, 567, 569, 570, 571	2'6" x 6'6" x 1-3/8" and 1-3/4" 2'6" x 6'8" x 1-3/8" and 1-3/4" 2'8" x 6'8" x 1-3/8" and 1-3/4" 2'8" x 7'0" x 1-3/8" and 1-3/4" 3'0" x 6'8" x 1-3/8" and 1-3/4" 3'0" x 7'0" x 1-3/8" and 1-3/4"	626, 627	2'4" x 6'6" x 1-3/8" and 1-3/4" 2'4" x 6'8" x 1-3/8" and 1-3/4" 2'4" x 7'0" x 1-3/8" and 1-3/4" 2'6" x 6'6" x 1-3/8" and 1-3/4" 2'6" x 6'8" x 1-3/8" and 1-3/4" 2'6" x 7'0" x 1-3/8" and 1-3/4"
574, 575, 578, 580, 590, 591, 592, 593, 594	2'8" x 6'8" x 1-3/8" and 1-3/4" 2'8" x 7'0" x 1-3/8" and 1-3/4" 3'0" x 6'8" x 1-3/8" and 1-3/4" 3'0" x 7'0" x 1-3/8" and 1-3/4"		2'6" x 7'0" x 1-3/8" and 1-3/4" 2'8" x 6'6" x 1-3/8" and 1-3/4" 2'8" x 6'8" x 1-3/8" and 1-3/4" 3'0" x 6'8" x 1-3/8" and 1-3/4" 3'0" x 7'0" x 1-3/8" and 1-3/4"
600, 605, 606, 607, 608, 609, 612, 613	2'8" x 6'8" x 1-3/4" 2'8" x 7'0" x 1-3/4" 3'0" x 6'8" x 1-3/4" 3'0" x 7'0" x 1-3/4" 3'4" x 6'8" x 1-3/4" 3'4" x 7'0" x 1-3/4"	635	2'8" x 6'8" x 1-3/8" and 1-3/4" 2'8" x 7'0" x 1-3/8" and 1-3/4" 3'0" x 6'8" x 1-3/8" and 1-3/4" 3'0" x 7'0" x 1-3/8" and 1-3/4" 3'0" x 7'6" x 1-3/4" only

Table II.—Standard Overall Sizes—Con.

N. D. Number (design)	Dimensions	N. D. Number (design)	Dimensions
French or Casement Doors (Exterior and Interior)—Con.		Cupboard Doors—Con.	
635—Con.	3'0" x 8'0" x 1-3/4" only 3'4" x 6'8" x 1-3/4" only 3'4" x 7'0" x 1-3/4" only 3'4" x 7'6" x 1-3/4" only 3'4" x 8'0" x 1-3/4" only 3'6" x 7'0" x 1-3/4" only 3'6" x 7'6" x 1-3/4" only 3'6" x 8'0" x 1-3/4" only	710—Con.	1'4" x 2'6" x 3/4" and 1-1/8" 1'4" x 3'0" x 3/4" and 1-1/8" 1'4" x 3'6" x 3/4" and 1-1/8" 1'4" x 4'0" x 3/4" and 1-1/8" 1'4" x 4'6" x 3/4" and 1-1/8" 1'4" x 5'0" x 3/4" and 1-1/8" 1'6" x 1'6" x 3/4" and 1-1/8" 1'6" x 2'0" x 3/4" and 1-1/8" 1'6" x 2'6" x 3/4" and 1-1/8" 1'6" x 3'0" x 3/4" and 1-1/8" 1'6" x 3'6" x 3/4" and 1-1/8" 1'6" x 4'0" x 3/4" and 1-1/8" 1'6" x 4'6" x 3/4" and 1-1/8" 1'6" x 5'0" x 3/4" and 1-1/8" 1'8" x 2'0" x 3/4" and 1-1/8" 1'8" x 2'6" x 3/4" and 1-1/8" 1'8" x 3'0" x 3/4" and 1-1/8" 1'8" x 3'6" x 3/4" and 1-1/8" 1'8" x 4'0" x 3/4" and 1-1/8" 1'8" x 4'6" x 3/4" and 1-1/8" 1'8" x 5'0" x 3/4" and 1-1/8" 2'0" x 2'0" x 3/4" and 1-1/8" 2'0" x 2'6" x 3/4" and 1-1/8" 2'0" x 3'0" x 3/4" and 1-1/8" 2'0" x 3'6" x 3/4" and 1-1/8" 2'0" x 4'0" x 3/4" and 1-1/8" 2'0" x 4'6" x 3/4" and 1-1/8" 2'0" x 5'0" x 3/4" and 1-1/8"
637, 638, 640, 641, 642, 644	2'8" x 6'8" x 1-3/8" and 1-3/4" 2'8" x 7'0" x 1-3/8" and 1-3/4" 3'0" x 6'8" x 1-3/8" and 1-3/4" 3'0" x 7'0" x 1-3/8" and 1-3/4" 3'4" x 6'8" x 1-3/4" only 3'4" x 7'0" x 1-3/4" only		
Side Lights			
675, 676	1'0" x 6'8" x 1-3/8" and 1-3/4" 1'0" x 7'0" x 1-3/8" and 1-3/4" 1'2" x 6'8" x 1-3/8" and 1-3/4" 1'2" x 7'0" x 1-3/8" and 1-3/4"		
Storm Doors			
702, 703	2'6" x 6'7" x 1-1/8" 2'6" x 6'9" x 1-1/8" 2'6" x 7'1" x 1-1/8" 2'8" x 6'9" x 1-1/8" 2'8" x 7'1" x 1-1/8" 2'10" x 6'9" x 1-1/8" 2'10" x 6'11" x 1-1/8" 2'10" x 7'1" x 1-1/8" 3'0" x 6'9" x 1-1/8" 3'0" x 7'1" x 1-1/8"		
Cupboard Doors			
710	1'0" x 1'6" x 3/4" and 1-1/8" 1'0" x 2'0" x 3/4" and 1-1/8" 1'0" x 2'6" x 3/4" and 1-1/8" 1'0" x 3'0" x 3/4" and 1-1/8" 1'0" x 3'6" x 3/4" and 1-1/8" 1'0" x 4'0" x 3/4" and 1-1/8" 1'0" x 4'6" x 3/4" and 1-1/8" 1'0" x 5'0" x 3/4" and 1-1/8" 1'2" x 1'6" x 3/4" and 1-1/8" 1'2" x 2'0" x 3/4" and 1-1/8" 1'2" x 2'6" x 3/4" and 1-1/8" 1'2" x 3'0" x 3/4" and 1-1/8" 1'2" x 3'6" x 3/4" and 1-1/8" 1'2" x 4'0" x 3/4" and 1-1/8" 1'2" x 4'6" x 3/4" and 1-1/8" 1'2" x 5'0" x 3/4" and 1-1/8" 1'4" x 1'6" x 3/4" and 1-1/8" 1'4" x 2'0" x 3/4" and 1-1/8"		
		Toilet Doors	
		726, 727, 728	2'0" x 4'0" x 1-1/8" 2'0" x 4'6" x 1-1/8" 2'0" x 5'0" x 1-1/8" 2'0" x 5'6" x 1-1/8" 2'4" x 4'0" x 1-1/8" 2'4" x 4'6" x 1-1/8" 2'4" x 5'0" x 1-1/8" 2'4" x 5'6" x 1-1/8" 2'6" x 4'0" x 1-1/8" 2'6" x 4'6" x 1-1/8" 2'6" x 5'0" x 1-1/8" 2'6" x 5'6" x 1-1/8"
		Louver Doors	
		730, 732, 733	1'3" x 6'6" x 1-1/8" and 1-3/8" 1'3" x 6'8" x 1-1/8" and 1-3/8" 1'4" x 6'6" x 1-1/8" and 1-3/8" 1'4" x 6'8" x 1-1/8" and 1-3/8" 1'6" x 6'6" x 1-1/8" and 1-3/8" 1'6" x 6'8" x 1-1/8" and 1-3/8" 1'8" x 6'6" x 1-1/8" and 1-3/8" 1'8" x 6'8" x 1-1/8" and 1-3/8" 2'0" x 6'6" x 1-1/8" and 1-3/8" 2'0" x 6'8" x 1-1/8" and 1-3/8" 2'4" x 6'6" x 1-1/8" and 1-3/8" 2'4" x 6'8" x 1-1/8" and 1-3/8"

Table II.—Standard Overall Sizes—Con.

N. D. Number (design)	Dimensions	N. D. Number (design)	Dimensions
Louver Doors—Con.		Screen Doors—Con.	
730, 732, 733—Con.	2'6" x 6'6" x 1-1/8" and 1-3/8" 2'6" x 6'8" x 1-1/8" and 1-3/8" 2'8" x 6'8" x 1-1/8" and 1-3/8" 3'0" x 6'8" x 1-1/8" and 1-3/8"	760, 761. etc.—Con.	3'0" x 6'9" x 1-1/8" 3'0" x 7'1" x 1-1/8"
		Garage Doors (Swingup) ³	
731	2'0" x 6'8" x 1-1/8" and 1-3/8" 2'0" x 7'0" x 1-1/8" and 1-3/8" 2'4" x 6'8" x 1-1/8" and 1-3/8" 2'4" x 7'0" x 1-1/8" and 1-3/8" 2'6" x 6'8" x 1-1/8" and 1-3/8" 2'6" x 7'0" x 1-1/8" and 1-3/8" 2'8" x 6'8" x 1-1/8" and 1-3/8" 2'8" x 7'0" x 1-1/8" and 1-3/8" 3'0" x 6'8" x 1-1/8" and 1-3/8" 3'0" x 7'0" x 1-1/8" and 1-3/8"	780, 781, 782	8'0" x 6'6" x 1-3/8" 8'0" x 7'0" x 1-3/8" 9'0" x 7'0" x 1-3/8"
		Garage Doors (Rollup) ³	
		786, 787, 788, 789	8'0" x 7'0" x 1-3/8" 9'0" x 7'0" x 1-3/8"
Combination Doors		Flush Doors (Interior)	
734, 735, 736, 737, 756, 757, 758	2'6" x 6'7" x 1-1/8" 2'6" x 6'9" x 1-1/8" 2'6" x 7'1" x 1-1/8" 2'8" x 6'9" x 1-1/8" 2'8" x 7'1" x 1-1/8" 2'10" x 6'9" x 1-1/8" 2'10" x 6'11" x 1-1/8" 2'10" x 7'1" x 1-1/8" 3'0" x 6'9" x 1-1/8" 3'0" x 7'1" x 1-1/8"	Plain—Solid Core	1'6" x 6'6" x 1-3/4" 1'6" x 6'8" x 1-3/4" 2'0" x 6'0" x 1-3/4" 2'0" x 6'6" x 1-3/4" 2'0" x 6'8" x 1-3/4" 2'0" x 7'0" x 1-3/4" 2'4" x 6'0" x 1-3/4" 2'4" x 6'6" x 1-3/4" 2'4" x 6'8" x 1-3/4" 2'4" x 7'0" x 1-3/4" 2'6" x 6'0" x 1-3/4" 2'6" x 6'6" x 1-3/4" 2'6" x 6'8" x 1-3/4" 2'6" x 7'0" x 1-3/4" 2'8" x 6'0" x 1-3/4" 2'8" x 6'6" x 1-3/4" 2'8" x 6'8" x 1-3/4" 2'8" x 7'0" x 1-3/4" 3'0" x 6'8" x 1-3/4" 3'0" x 7'0" x 1-3/4" 3'4" x 6'8" x 1-3/4" 3'4" x 7'0" x 1-3/4"
759	2'8" x 6'9" x 1-1/8" 3'0" x 6'9" x 1-1/8" 3'0" x 7'1" x 1-1/8"		
Screen Doors		Flush Doors (Exterior)	
760, 761, 762, 763, 764, 765	2'6" x 6'7" x 1-1/8" 2'6" x 6'9" x 1-1/8" 2'6" x 7'1" x 1-1/8" 2'8" x 6'9" x 1-1/8" 2'8" x 7'1" x 1-1/8" 2'10" x 6'9" x 1-1/8" 2'10" x 6'11" x 1-1/8" 2'10" x 7'1" x 1-1/8"	V-Grooved—Solid Core	3'0" x 6'8" x 1-3/4" 3'0" x 7'0" x 1-3/4" 3'4" x 6'8" x 1-3/4" 3'4" x 7'0" x 1-3/4"

¹N. D. 106, 107, 108, 109, and 113 also for exterior use.

²Also furnished in 1 1/8" thickness in design N. D. 107 only.

³Prefit garage doors are made to each manufacturer's specifications.

6. STANDARD DESIGNS AND LAYOUTS

6.1 STANDARD DESIGNS AND LAYOUTS (GENERAL).--The standard stock designs and layouts of the various doors are shown in the following illustrations. These drawings are not to scale.

6.1.1 *Measurements.*--Measurements shown for stiles, rails, mullions and muntins are overall (face measurement plus the sticking). To allow for the variations in different manufacturers' practices, a

tolerance of plus or minus 1/8 inch in width is permitted. Unless otherwise specified, glass measurements shall not vary more than 1/4 inch from those given in the layouts.

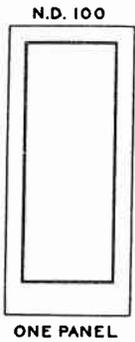
6.1.2 Unless otherwise specified, the overall width of interior door stiles of any design narrower than 1 foot 6 inches in width (such as side lights, and some cupboard and louver doors), shall be 3-3/4 inches.

STANDARD DESIGNS AND LAYOUTS

NOTES

1. Drawings are not to scale.
2. See Section 5 for additional details.
3. See Table II for standard stock sizes.

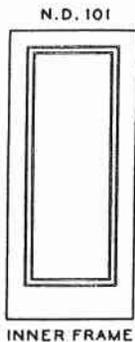
INTERIOR DOORS



ONE PANEL

	<i>Inches</i>
Stiles and top rail.....	4 3/4
Bottom rail.....	9 5/8

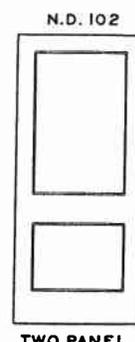
3-ply plywood flat panel. Sticking: Standard.



INNER FRAME

	<i>Inches</i>
Stiles and top rail.....face..	4 1/4
Bottom rail.....face..	9 1/4 or 9 1/2

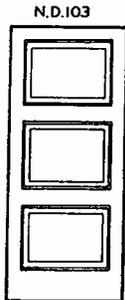
3-ply plywood flat panel. Sticking: P&G or standard.



TWO PANEL

	<i>Inches</i>
Stiles and top rail.....	4 3/4
Lock rail.....	8
Bottom rail.....	9 5/8

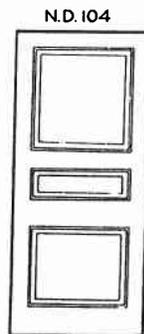
3-ply plywood flat panels. Sticking: Standard.



THREE EQUAL PANEL
"RANCHO"

	<i>Inches</i>
Stiles and top rail.....	4 3/4
Cross rails.....	4 5/8
Bottom rail.....	9 5/8

Raised panels 2 sides, horizontal grain. Sticking: Standard.



	<i>Inches</i>
Stiles and top rail.....	4 3/4
Lock rail.....	7 7/8
Cross rail.....	4 11/16
Bottom rail.....	8

Height of bottom panel (daylight)..... 22
 Height of cross panel (daylight)..... 8 1/4
 Height of upper panel varies according to door height.

Raised panels 2 sides, not less than 3/8 in. thick. Can also be furnished with 3-ply plywood flat panels. Sticking: Standard.

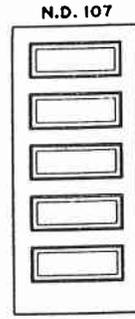
INTERIOR DOORS—Continued



FOUR PANEL

	<i>Inches</i>
Stiles and top rail.....	4 3/4
Lock rail.....	8
Muntins.....	4 5/8
Bottom rail.....	9 5/8

Raised panels 2 sides. Can also be furnished with 3-ply plywood flat panels, if desired. Sticking: Standard. Bottom rail and lock rail can be reversed, when so specified. (N.D. 106 amended Sept. 22, 1960.)



FIVE CROSS PANEL

	<i>Inches</i>
Stiles and top rail.....	4 3/4
Intermediate rails.....	4 5/8
Bottom rail.....	9 5/8

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



SIX PANEL COLONIAL

	<i>Inches</i>
Stiles and top rail.....	4 3/4
Lock rail.....	8
Intermediate rails and mullions.....	3 7/8
Bottom rail.....	9 5/8
Height of top panels overall.....	7 1/8

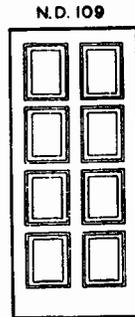
Raised panels 2 sides. Can also be furnished with 3-ply plywood flat panels. Sticking: Standard.

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

4 5/8-in. intermediate rails and mullions are optional with some manufacturers.

Bottom and lock rails can be reversed when so specified.

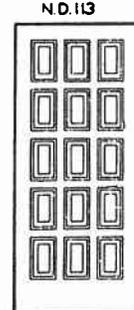
Note: N.D. 106, 107, 108, 109, and 113 are also for exterior use.



EIGHT EQUAL PANEL

	<i>Inches</i>
Stiles and top rail.....	4 3/4
Mullions.....	4 5/8
Cross rails.....	3 1/4
Bottom rail.....	9 5/8

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

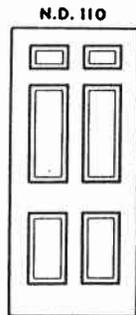


FIFTEEN EQUAL PANEL

	<i>Inches</i>
Stiles and top rail.....	4 3/4
Intermediate rails and mullions.....	2 1/8
Bottom rail.....	9 5/8

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

EXTERIOR DOORS

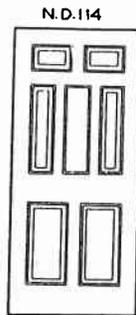


SIX PANEL COLONIAL

	<i>Inches</i>
Stiles and top rail.....	5 1/2
Lock rail.....	8
Intermediate rail and mullions.....	5 3/8
Bottom rail.....	9 5/8
Panel thickness.....	3/4
Height of top panels overall..	7 1/8

Raised panels 2 sides. Sticking: Standard.

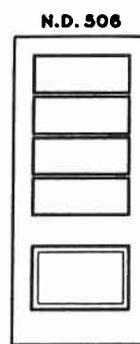
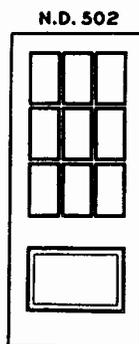
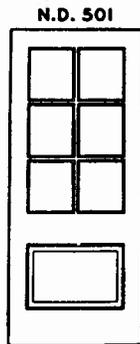
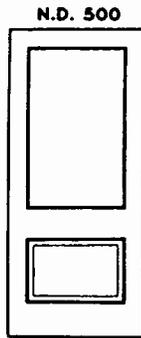
Colonial design may be obtained, when so specified, with 9 5/8-in. lock rail, 4 5/8-in. intermediate rail and mullions, and 8-in. bottom rail. It may also be obtained with 7/16-in. raised panels.



SIX PANEL - ONE LIGHT

	<i>Inches</i>
Stiles and top rail.....	5 1/2
Top cross rail.....	4 3/4
Lock rail.....	9 5/8
Bottom rail.....	9 5/8
Top and bottom mullions.....	4 3/4
Center mullion.....	3 1/4
Top panel.....	7 in. high
Glass size.....	7 by 25 in.

3/4-in. raised panels, 2 sides. Sticking: Standard.



	<i>Inches</i>
Stiles and top rail....	5 1/2
Lock rail.....	9 5/8
Bottom rail.....	9 5/8

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

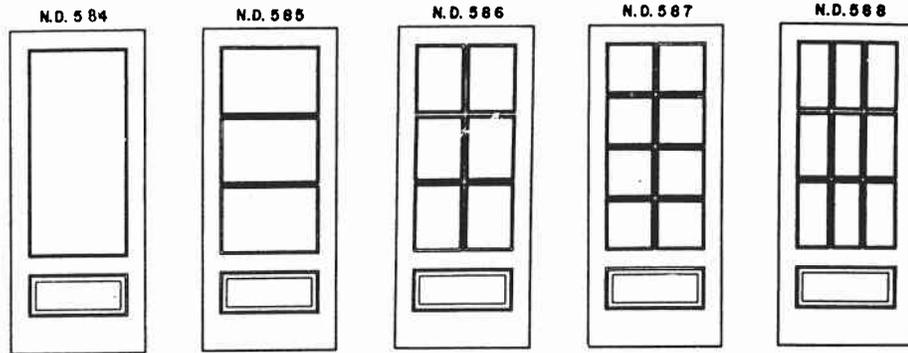
Approximate glass size (inches)

Door No.	Size of door 2' 8" X 6' 8"		Size of door 3' 0" X 6' 8"		Size of door 3' 0" X 7' 0"	
N. D. 500.....	22	X 40	26	X 40	26	X 44
N. D. 501.....	10 3/4	X 13	12 3/4	X 13	12 3/4	X 14 5/16
N. D. 502.....	7	X 13	8 5/16	X 13	8 5/16	X 14 5/16
N. D. 506.....	22	X 9 5/8	26	X 9 5/8	26	X 10 5/8

Beads for glass included.

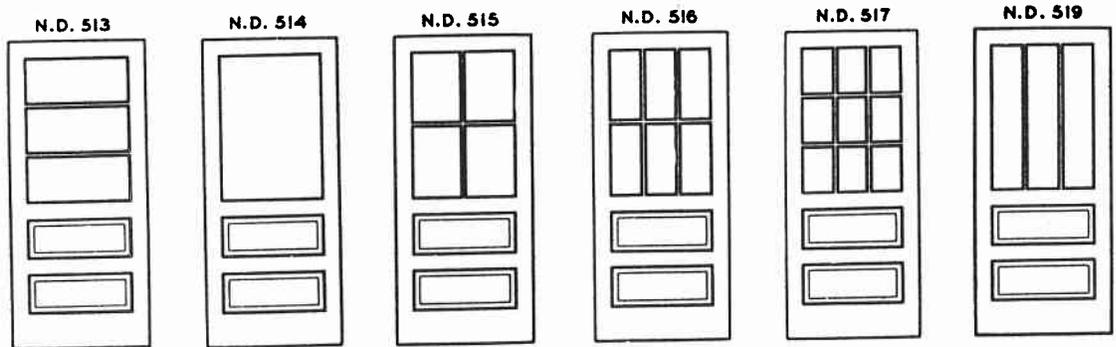
8-in. lock rail can be furnished when so specified.

EXTERIOR DOORS—Continued



	<i>Inches</i>
Stiles and top rail....	5 1/2
Lock rail.....	5 1/2
Bottom rail.....	9 5/8

Raised panel 2 sides. Can also be furnished with 3 ply plywood flat panel, if desired. Also supplied with 4 3/4" stiles and top rail, and 8" bottom rail, when so specified. Sticking: Standard. Glass height for 1 light, 6' 8" doors, 60". Beads for glass included. (N.D. 507 series deleted and N.D. 584 series added—Sept. 22, 1960).



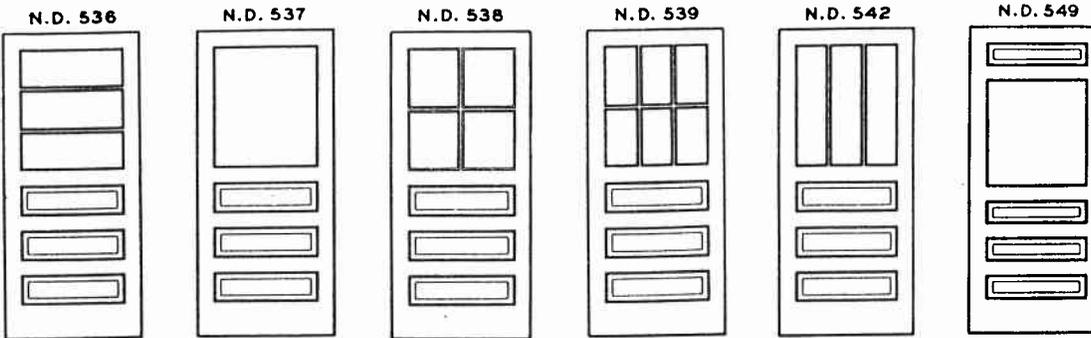
	<i>Inches</i>
Stiles and top rail....	4 3/4
Lock rail.....	4 5/8
Intermediate rail.....	4 5/8
Bottom rail.....	9 5/8

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

Door No.	Approximate glass size (inches)		
	Size of door 2' 8" x 6' 8"	Size of door 3' 0" x 6' 8"	Size of door 3' 0" x 7' 0"
N. D. 513.....	23 1/2 x 11 5/8	27 1/2 x 11 5/8	27 1/2 x 13
N. D. 514.....	23 1/2 x 36	27 1/2 x 36	27 1/2 x 40
N. D. 515.....	11 1/2 x 17 3/4	13 1/2 x 17 3/4	13 1/2 x 19 3/4
N. D. 516.....	7 1/2 x 17 3/4	8 13/16 x 17 3/4	8 13/16 x 19 3/4
N. D. 517.....	7 1/2 x 11 5/8	8 13/16 x 11 5/8	8 13/16 x 13
N. D. 519.....	7 1/2 x 36	8 13/16 x 36	8 13/16 x 40

Beads for glass included.

EXTERIOR DOORS—Continued



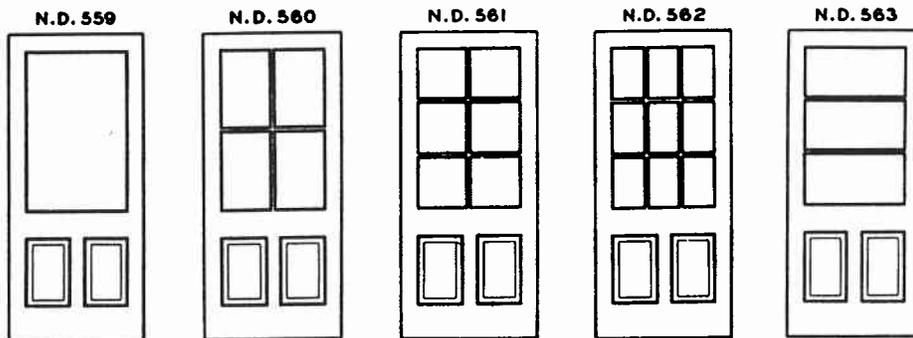
Inches
 Stiles and top rail.... 4 3/4
 Cross rails..... 4 5/8
 Bottom rail..... 9 5/8

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

Approximate glass size (inches)

Door No.	Size of door 2' 6" x 6' 6"		Size of door 2' 8" x 6' 8"		Size of door 3' 0" x 6' 8"		Size of door 3' 0" x 7' 0"	
	N. D. 536.....	21 1/2	x 9	23 1/2	x 9 5/8	27 1/2	x 9 5/8	27 1/2	x 11
N. D. 537.....	21 1/2	x 28	23 1/2	x 30	27 1/2	x 30	27 1/2	x 34
N. D. 538.....	10 1/2	x 13 3/4	11 1/2	x 14 3/4	13 1/2	x 14 3/4	13 1/2	x 16 3/4
N. D. 539.....	6 13/16	x 13 3/4	7 1/2	x 14 3/4	8 13/16	x 14 3/4	8 13/16	x 16 3/4
N. D. 542.....	6 13/16	x 28	7 1/2	x 30	8 13/16	x 30	8 13/16	x 34
N. D. 549.....	21 1/2	x 24	23 1/2	x 26	27 1/2	x 26	27 1/2	x 30

Beads for glass included.



Inches
 Stiles and top rail.... 4 3/4
 Lock rail..... 8
 Muntins..... 4 5/8
 Bottom rail..... 9 5/8

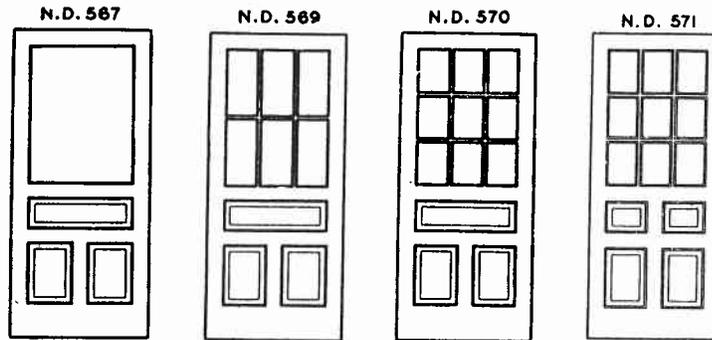
Raised panels 2 sides. Can also be furnished with 3-ply plywood flat panels, if desired. Sticking: Standard.

Approximate glass size (inches)

Door No.	Size of door 2' 6" x 6' 6"		Size of door 2' 8" x 6' 8"		Size of door 3' 0" x 6' 8"		Size of door 3' 0" x 7' 0"	
	N. D. 559.....	21 1/2	x 38	23 1/2	x 40	27 1/2	x 40	27 1/2	x 44
N. D. 560.....	10 1/2	x 18 3/4	11 1/2	x 19 3/4	13 1/2	x 19 3/4	13 1/2	x 21 3/4
N. D. 561.....	10 1/2	x 12 5/16	11 1/2	x 13	13 1/2	x 13	13 1/2	x 14 5/16
N. D. 562.....	6 13/16	x 12 5/16	7 1/2	x 13	8 13/16	x 13	8 13/16	x 14 5/16
N. D. 563.....	21 1/2	x 12 5/16	23 1/2	x 13	27 1/2	x 13	27 1/2	x 14 5/16

Beads for glass included.

EXTERIOR DOORS—Continued



Stiles and top rail.. 4 3/4 in.
 Cross rails..... 4 5/8 in.
 Muntins..... 4 5/8 in.
 Bottom rail..... 9 5/8 in.

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

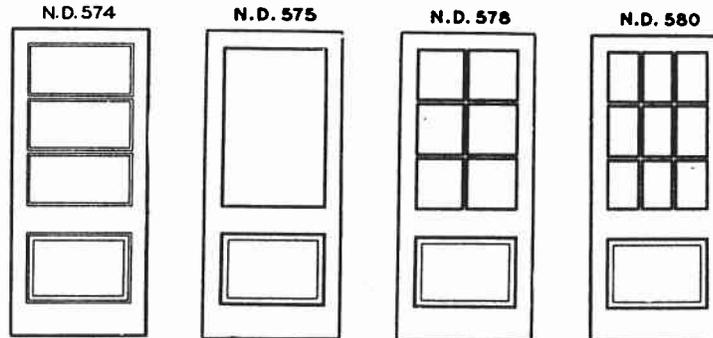
Approximate glass size (inches) for doors with above layout

Door No.	Size of door 2' 6" x 6' 6"	Size of door 2' 8" x 6' 8"	Size of door 3' 0" x 6' 8"	Size of door 3' 0" x 7' 0"
N. D. 567.....	21 1/2 x 32	23 1/2 x 34	27 1/2 x 34	27 1/2 x 38
N. D. 569.....	6 13/16 x 15 3/4	7 1/2 x 16 3/4	8 13/16 x 16 3/4	8 13/16 x 18 3/4
N. D. 570.....	6 13/16 x 10 5/16	7 1/2 x 11	8 13/16 x 11	8 13/16 x 12 5/16
N. D. 571.....	6 13/16 x 10 5/16	7 1/2 x 11	8 13/16 x 11	8 13/16 x 12 5/16

Beads for glass included.

Above doors also supplied with 5 1/2-in. stiles and top rail, 5 3/8-in. cross rails and muntins, or with 8 inch bottom rail when so specified. (Amended Sept. 22, 1960.)

N. S. 567 and N. D. 569 top panel made 2 panels wide, when so specified.



Inches
 Stiles and top rail.... 4 3/4
 Lock rail..... 8
 Bottom rail..... 9 5/8

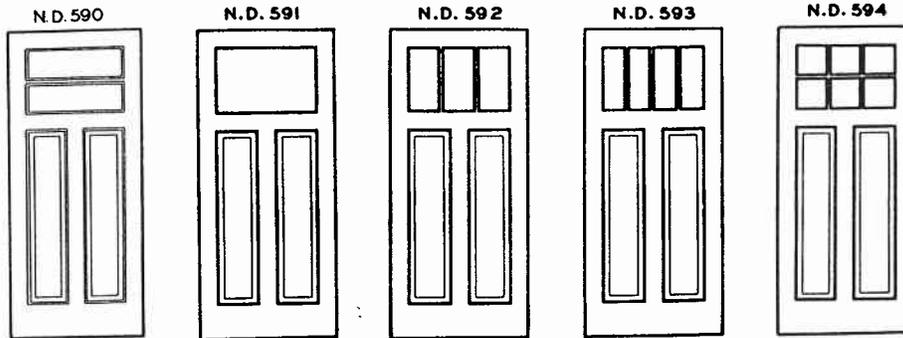
Raised panel 2 sides. Can also be furnished with 3-ply plywood flat panels if desired. Sticking: Standard. N.D. 574 can be furnished with an 8 inch bottom rail, when so specified. (N.D. 574 amended Sept. 22, 1960.)

Approximate glass size (in.)

Door No.	Size of door 2' 8" x 6' 8"	Size of door 3' 0" x 6' 8"	Size of door 3' 0" x 7' 0"
N. D. 574.....	23 1/2 x 13	27 1/2 x 13	27 1/2 x 14 5/16
N. D. 575.....	23 1/2 x 40	27 1/2 x 40	27 1/2 x 44
N. D. 578.....	11 1/2 x 13	13 1/2 x 13	13 1/2 x 14 5/16
N. D. 580.....	7 1/2 x 13	8 13/16 x 13	8 13/16 x 14 5/16

Beads for glass included.

EXTERIOR DOORS—Continued



Inches

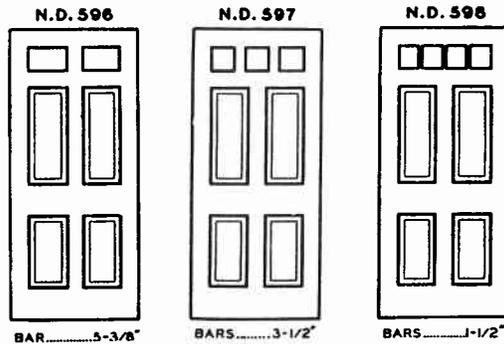
Stiles and top rail..... 5 1/2
 Mullion and cross rail... 5 3/8
 Bottom rail..... 9 5/8

Raised panels 2 sides. Can also be furnished with 3-ply plywood flat panels, if desired. Sticking: Standard.
 Approximate glass size (in.) for doors with 5 1/2-in. stiles

Door No.	Size of door 2' 8" X 6' 8"		Size of door 3' 0" X 6' 8"		Size of door 3' 0" X 7' 0"	
	N. D. 590.....	22	X 8 3/4	26	X 8 3/4	26	X 8 3/4
N. D. 591.....	22	X 18	26	X 18	26	X 18
N. D. 592.....	7	X 18	8 5/16	X 18	8 5/16	X 18
N. D. 593.....	5 1/8	X 18	6 1/8	X 18	6 1/8	X 18
N. D. 594.....	7	X 8 3/4	8 5/16	X 8 3/4	8 5/16	X 8 3/4

Beads for glass included.

Above also supplied with 4 3/4-in. stiles and top rail, 4 5/8-in. mullion and cross rail, when so specified.



Inches

Stiles and top rail..... 5 1/2
 Lock rail..... 8
 Top cross rail and mullions.. 5 3/8
 Bottom rail..... 9 5/8

3/4-in. raised panels 2 sides. Sticking: Standard.

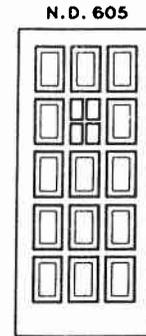
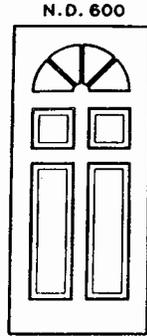
Approximate glass size (inches)

Door No.	Size of door 2' 8" X 6' 8"		Size of door 3' 0" X 6' 8"		Size of door 3' 0" X 7' 0"	
	N. D. 596.....	8 3/4	X 7 1/8	10 3/4	X 7 1/8	10 3/4	X 7 1/8
N. D. 597.....	5 3/4	X 7 1/8	7	X 7 1/8	7	X 7 1/8
N. D. 598.....	5 1/8	X 7 1/8	6 1/8	X 7 1/8	6 1/8	X 7 1/8

Beads for glass included.

Bottom and lock rails can be reversed when so specified. Above three doors also supplied with 4 3/4" stiles and top rail, and 4 5/8" cross rail and mullions when so specified. (Amended Sept. 22, 1960.)

EXTERIOR DOORS—Continued



	<i>Inches</i>
Stiles and top rail.....	5 1/2
Top cross rail.....	5 3/8
Intermediate rail and mullion.....	4 5/8
Bottom rail.....	9 5/8

	<i>Inches</i>
Stiles and top rail.....	4 3/4
Cross rails and muntins.....	2 5/8
Bottom rail.....	9 5/8

Raised panels 2 sides. Can also be furnished with 3-ply plywood flat panels, if desired. Sticking: Standard. Also supplied with 4 3/4" stiles and top rail, and 4 5/8" cross rails, when so specified. (N.D. 600 amended Sept. 22, 1960.)

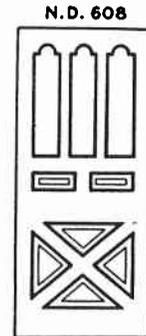
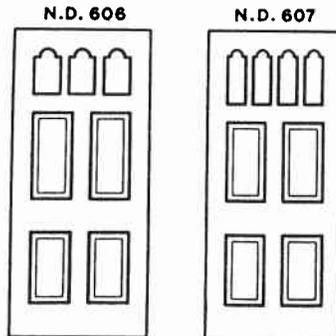
Raised panels 2 sides. Can also be furnished with 3-ply plywood flat panels, if desired. Sticking: Standard.

Size of door	Approx. glass opening (in.)
2' 8" x 6' 8".....	22 x 11
3' 0" x 6' 8".....	26 x 13
3' 0" x 7' 0".....	26 x 13

Size of door	Approx. glass opening (in.)
2' 8" x 6' 8".....	6 3/4 x 11 7/8
3' 0" x 6' 8".....	8 x 11 7/8
3' 0" x 7' 0".....	8 x 12 11/16

Beads for glass included.

Beads for glass included.



	<i>Inches</i>
Stiles and top rail.....	5 1/2
Lock rail.....	8
Top cross rail and mullions.....	5 3/8
Bottom rail.....	9 5/8
Bars.....	1 1/2 to 3 1/2

	<i>Inches</i>
Stiles and top rail.....	4 3/4
Lock rail.....	9 5/8
Cross rail and mullions.....	4 5/8
Bottom rail.....	8
Bars.....	3 1/2
Panel thicknesses.....	1 3/8" and 1 3/4"

(N.D. 608 amended Sept. 22, 1960.)

3/4-in. raised panels 2 sides. Sticking: Standard.

1 1/8-in. heavy raised panels 2 sides. Sticking: Standard.

Size of door	Approx. glass size (in.)	
	N. D. 606	N. D. 607
2' 8" x 6' 8".....	6 3/16 x 9	4 3/8 x 11
3' 0" x 6' 8".....	7 1/2 x 9	5 3/8 x 11
3' 0" x 7' 0".....	7 1/2 x 13	5 3/8 x 15

Size of door	Approx. glass size (in.)
2' 8" x 6' 8".....	6 1/8 x 26 7/8
3' 0" x 6' 8".....	7 3/8 x 26 7/8
3' 0" x 7' 0".....	7 3/8 x 30 7/8

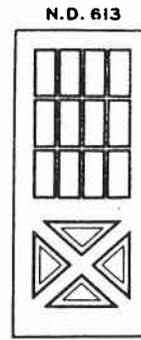
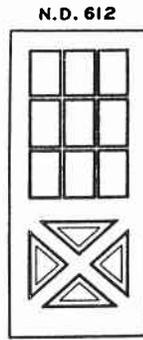
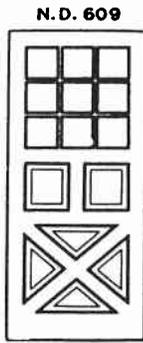
Beads for glass included.

Beads for glass included.

Bottom and lock rails can be reversed when so specified. Also supplied with 4 3/4" stiles and top rail, and 4 5/8" cross rail and mullions, when so specified. (amended Sept. 22, 1960.)

Also supplied with 3/4-in. raised panels when so specified, and with 5 1/2-in. stiles and top rail when so specified.

EXTERIOR DOORS—Continued



	<i>Inches</i>
Stiles and top rail.....	4 3/4
Lock rail.....	4 5/8
Cross rail and mullions.....	4 5/8
Bottom rail.....	8

1 1/8-in. heavy raised panels 2 sides. Sticking: Standard.

Size of door	Approx. glass size (in.)
2' 8" x 6' 8".....	7 1/2 x 7 5/8
3' 0" x 6' 8".....	8 13/16 x 7 5/8
3' 0" x 7' 0".....	8 13/16 x 9

Beads for glass included.

Also supplied with 3/4-in., 1 3/8-in. and 1 3/4-in. raised panels, when so specified. (N.D. 609 amended Sept. 22, 1960.)

	<i>Inches</i>
Stiles and top rail.....	5 1/2
Lock rail.....	7
Mullions.....	5 3/8
Bottom rail.....	8

1 1/8-in. heavy raised panels 2 sides. Sticking: Standard.

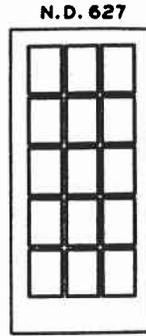
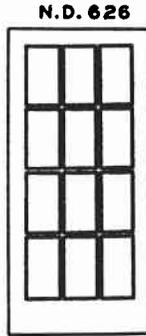
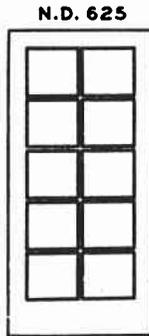
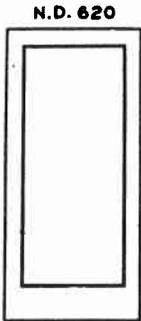
Size of door	Approx. glass size (in.)
	N. D. 612 N. D. 613
2' 8" x 6' 8".....	7 x 12 5 1/8 x 12
3' 0" x 6' 8".....	8 5/16 x 12 6 1/8 x 12
3' 0" x 7' 0".....	8 5/16 x 13 5/16 6 1/8 x 13 5/16

Beads for glass included.

Also supplied with 3/4-in., 1 3/8-in. and 1 3/4-in. raised panels, and with 4 3/4 inch stiles and top rail, and 4 5/8 inch diagonal rails, when so specified. (amended Sept. 22, 1960.)

(ALSO FOR INTERIOR)

RIM, HORIZONTAL LIGHT, FRENCH, OR CASEMENT



	<i>Inches</i>
Stiles and top rail.....	4 3/4
Bottom rail.....	9 5/8
Sticking: Standard.	

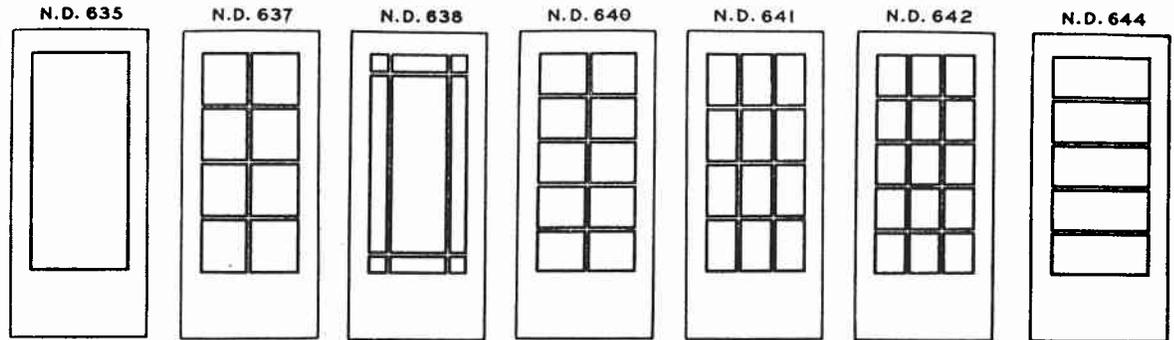
Approximate glass size (inches) for above layout

Door No.	Size of door		Size of door	
	2' 0" x 6' 8"	2' 6" x 6' 8"	2' 8" x 6' 8"	3' 0" x 6' 8"
N. D. 620.....	15 1/2 x 66 1/2	21 1/2 x 66 1/2	23 1/2 x 66 1/2	27 1/2 x 66 1/2
N. D. 622.....	7 1/2 x 16 1/4	10 1/2 x 16 1/4	11 1/2 x 16 1/4	13 1/2 x 16 1/4
N. D. 625.....	7 1/2 x 12 7/8	10 1/2 x 12 7/8	11 1/2 x 12 7/8	13 1/2 x 12 7/8
N. D. 626.....	.....	6 13/16 x 16 1/4	7 1/2 x 16 1/4	8 13/16 x 16 1/4
N. D. 627.....	.....	6 13/16 x 12 7/8	7 1/2 x 12 7/8	8 13/16 x 12 7/8
N. D. 630.....	15 1/2 x 12 7/8	21 1/2 x 12 7/8	23 1/2 x 12 7/8	27 1/2 x 12 7/8

Beads for glass included.

Above doors also supplied with 3 1/2-in. stiles and top rail when so specified, and with 1 1/2-in. bottom rail. when so specified.

EXTERIOR DOORS—Continued
(ALSO FOR INTERIOR)
RIM, HORIZONTAL LIGHT, FRENCH, OR CASEMENT



For doors—
3' 0" wide and under Over 3' 0" wide

Stiles.....inches..	5 1/2	6 1/2
Top rail.....do....	6 1/2	6 1/2
Bottom rail.....do....	18 1/2	18 1/2

Sticking: Standard.

Approximate glass size (in.) for doors with 5 1/2-in. stiles

Door No.	Size of door 2' 8" x 6' 8"		Size of door 3' 0" x 6' 8"		Size of door 3' 0" x 7' 0"	
	N. D. 635.....	22	x 56	26	x 56	26	x 60
N. D. 637.....	10 3/4	x 13 5/8	12 3/4	x 13 5/8	12 3/4	x 14 5/8
N. D. 638.....	5	x 5*	5	x 5*	5	x 5*
N. D. 640.....	10 3/4	x 10 3/4	12 3/4	x 10 3/4	12 3/4	x 11 9/16
N. D. 641.....	7	x 13 5/8	8 5/16	x 13 5/8	8 5/16	x 14 5/8
N. D. 642.....	7	x 10 3/4	8 5/16	x 10 3/4	8 5/16	x 11 9/16
N. D. 644.....	??	x 10 3/4	26	x 10 3/4	26	x 11 9/16

*Corner lights.

Beads for glass included.

SIDE LIGHTS

S.L. 675



	<i>Inches</i>
Stiles.....	2 1/2
Top rail.....	6 1/2
Bottom rail.....	18 1/2

Top and bottom rails made same width as in doors with which they are used. Sticking: Standard.

Beads for glass included.

S.L. 676



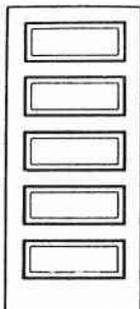
	<i>Inches</i>
Stiles.....	2 1/2
Top rail.....	5 1/2
Lock rail.....	9 5/8
Bottom rail.....	9 5/8

Top and bottom rails made same width as in doors with which they are used. Sticking: Standard.

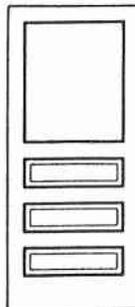
Beads for glass included.

STORM DOORS

N.D. 702



N.D. 703



	<i>Inches</i>
Stiles and top rail.....	4 3/4
Cross rails.....	4 5/8
Bottom rail.....	9 5/8

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

Size of door
2' 6" x 6' 7"
2' 8" x 6' 9"
2' 10" x 6' 11"
3' 0" x 7' 1"

	<i>Inches</i>
Stiles and top rail.....	4 3/4
Cross rails.....	4 5/8
Bottom rail.....	9 5/8

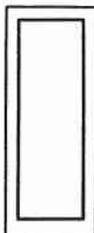
Raised panels 2 sides. Can also be furnished with 3-ply plywood flat panels, if desired. Sticking: Standard.

Size of door	Approx. glass size (in.)
2' 6" x 6' 7".....	21 1/2 x 28
2' 8" x 6' 9".....	23 1/2 x 30
2' 10" x 6' 11".....	25 1/2 x 32
3' 0" x 7' 1".....	27 1/2 x 34

Beads for glass included.

CUPBOARD DOOR

N.D. 710

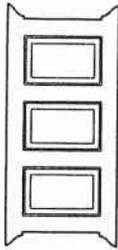


	<i>Inches</i>
Stiles and top rail.....	2 1/4 or 3 1/2
Bottom rail.....	3 1/4 or 4 1/2

3-ply plywood flat panel. Sticking: Standard.

TOILET DOORS

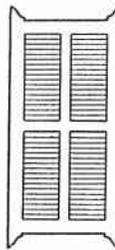
N.D. 726



Inches
 Stiles, top and bottom rails.. 4 3/4
 Cross rails..... 4 5/8

Raised panels 2 sides. Sticking: Standard.

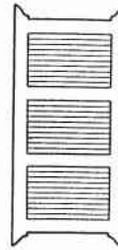
N.D. 727



Inches
 Stiles, top and bottom rails.. 3 1/2
 Cross rails and mullions..... 2 3/8

Stationary slats. Sticking: Square.

N.D. 728



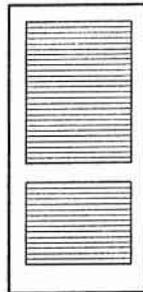
Inches
 Stiles, top and bottom rails.. 3 1/2
 Cross rails..... 3 3/8

Stationary slats. Sticking: Square.

Toilet doors can be supplied without lugs, if desired.

LOUVER DOORS

N.D. 730

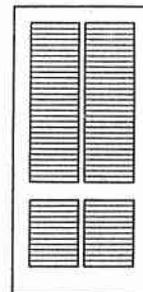


Doors wider than 2'0"*

Stiles 4 5/8"
 Top Rail 4 5/8"
 Cross Rail 4 5/8" to 7"
 Bottom Rail 8" to 10"

Height to top of cross rail approximately 36".
 Stationary slats. Sticking optional with manufacturer. (ND 730 amended June 15, 1962)

N.D. 731

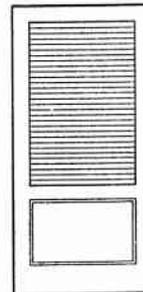


Doors wider than 2'0"*

Stiles 4 5/8"
 Top Rail 4 5/8"
 Cross Rail 4 5/8" to 7"
 Bottom Rail 8" to 10"
 Mullions 1 7/8" to 2 3/8"

Height to top of cross rail approximately 36".
 Stationary slats. Sticking optional with manufacturer. (ND 731 amended June 15, 1962)

N.D. 732

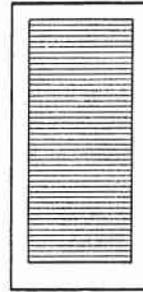


Doors wider than 2'0"*

Stiles 4 5/8"
 Top Rail 4 5/8"
 Cross Rail 4 5/8" to 7"
 Bottom Rail 8" to 10"

Height to top of cross rail 28" to 36". Panel 7/16" raised. Stationary slats. Sticking optional with manufacturer. (ND 732 amended June 15, 1962)

N.D. 733



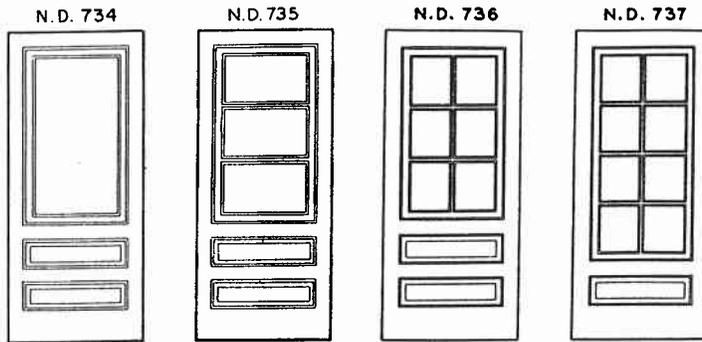
Doors wider than 2'0"*

Stiles 4 5/8"
 Top Rail 4 5/8"
 Bottom Rail 8" to 10"

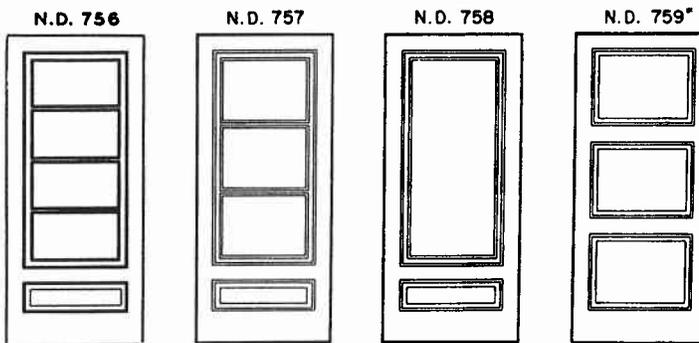
Stationary slats. Sticking optional with the manufacturer. (ND 733 amended June 15, 1962)

*Doors 2'0" and narrower may have stiles 3" to 4 5/8". Narrower stiles may be furnished on doors 1'6" and under at the option of the manufacturer.

COMBINATION DOORS
(Sash and Screen Inserts)



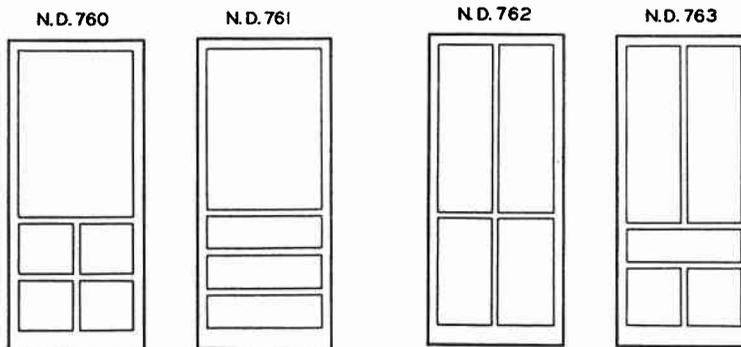
Minimum widths of parts
Inches
 Stiles, top and cross rails... 3 5/8"
 Bottom rail..... 7"



Minimum widths of parts
Inches
 Stiles and top rails..... 3 5/8"
 Bottom rail..... 7"

*Doors will have sash and screen inserts. Layout and thickness of inserts will vary between manufacturers.

SCREEN DOORS



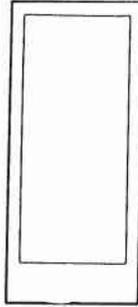
Minimum widths of parts
Inches
 Stiles and top rail..... 2 5/8
 Bottom rail..... 5 1/2

Minimum widths of parts
Inches
 Stiles and top rail..... 2 5/8
 Bottom rail..... 5 1/2

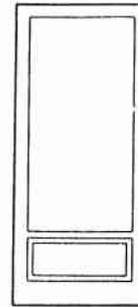
These doors can also be made with 3 5/8-in. stiles and top rail.

SCREEN DOORS—Continued

N.D. 764



N.D. 765

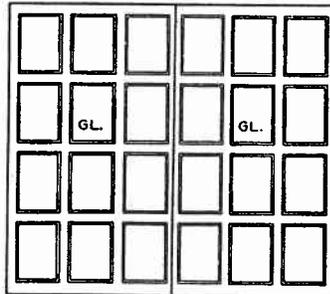


Minimum widths of parts
Inches
 Stiles and top rail..... 3 5/8
 Bottom rail..... 11 1/2

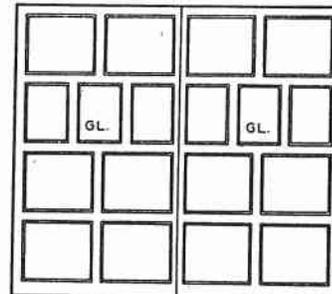
Minimum widths of parts
Inches
 Stiles and top rail..... 3 5/8
 Bottom rail..... 7

SWINGUP GARAGE DOORS

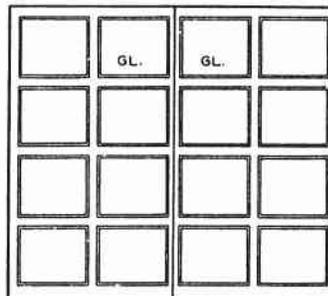
N.D. 780



N.D. 781



N.D. 782

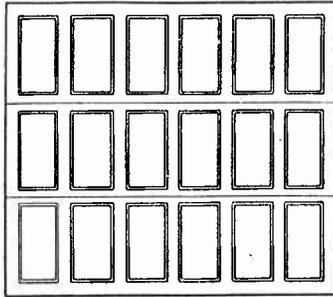


Minimum width of overall parts
Inches
 Stiles and top rail..... 3 3/8
 Bottom rail..... 4 1/2
 Meeting stile (combined) 4 1/2

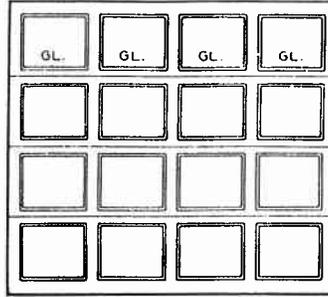
Location of glass and arrangement of panels optional with the manufacturer.

ROLLUP GARAGE DOORS

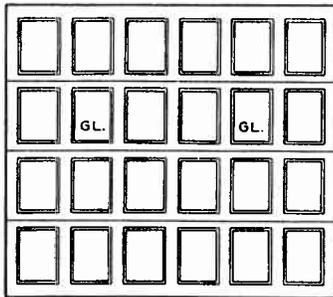
N.D. 786



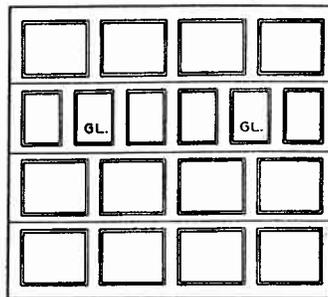
N.D. 787



N.D. 788



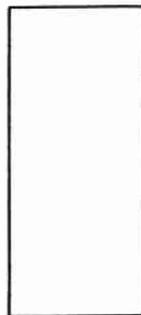
N.D. 789



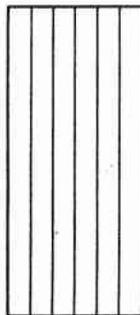
Minimum width of overall parts
Inches
 Stiles..... 4 7/16
 Top and bottom rail..... 4 9/16
 Meeting rail (combined).. 5 3/16

Location of glass and arrangement of panels optional with the manufacturer.

FLUSH DOORS (Solid Core)



PLAIN FLUSH



FLUSH "V" GROOVED

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

7. INSPECTION

7.1 All ponderosa pine doors sold as conforming to this Commercial Standard are subject to inspection in the condition received. Complaints regarding any shipment shall be made within 10 days after receipt thereof. Rejected doors shall be properly protected and held for a period of 30 days after notice of rejection pending adjustment.

8. LABELING

8.1 LABEL.--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 grade-mark 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 CS120-58, as developed by the trade under the procedure of the Commodity Standards Division, and issued by the U. S. Department of Commerce.

(Name of manufacturer)

8.2 GRADE MARKING.

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

8.2.2 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 "NWMA," the grade designation and identification of the manufacturer by numerals.

8.2.3 The following official grade designations have been approved by the National Woodwork Manufacturers Association:

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



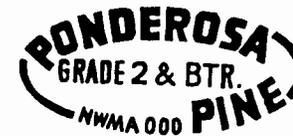
(b) For ponderosa pine doors of No. 1F grade:



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



(d) For ponderosa pine doors of No. 2 and Better grade:



9. NOMENCLATURE AND DEFINITIONS

9.1 Terminology used in this standard is defined or explained below.

Bar.—A bar extends the extreme width or length of the glass opening and may be either vertical or horizontal between glass.

Coped construction.—The ends of rails, mullions, muntins, or bars so shaped 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.

Door, flush.—Made up of core, crossbanding, and face veneers, or of core and face veneers only.

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

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

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

Mullion.—An upright or vertical member between panels.

Muntin.—Any short bar, either vertical or horizontal, between glass and not extending the extreme width or length of the glass opening.

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 door framework.

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

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

Rail, top.—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 door.—Made up of core and face veneers (may include crossbanding in flush doors).

10. EFFECTIVE DATE

10.1. 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 June 2, 1958.

HISTORY OF PROJECT

First edition.—On December 30, 1943, the National Door Manufacturers Association requested the cooperation of the U. S. Department of Commerce 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 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.—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 according to design 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.—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, No. 1F and No. 2F, and the deletion of "bead and cove"

and "ovolo B or rule joint" as standard stickings. Also, designs N.D. 109 and N.D. 568 were discontinued, and a new design, N.D. 571, was added. The success of the revision was announced on October 20, 1948, and the revised standard was issued as Commercial Standard CS120-48.

Third revision.—Another revision of the standard was proposed by the National Woodwork Manufacturers Association on September 12, 1952. With the approval of the industry's standing committee, the recommended revision, consisting primarily of changes in the general requirements, the deletion of 12 layouts, and the addition of 21 new layouts, was circulated to the trade for consideration on April 28, 1953. The Commodity Standards Division later announced that sufficient acceptances had been received to warrant promulgation, and that the revised standard, to be designated Commercial Standard CS120-53, would become effective from July 15, 1953.

Fourth revision.—The National Woodwork Manufacturers Association recommended on January 30, 1957 that Commercial Standard CS120-53 be revised to change the screening, seasoning, and adhesive requirements, as well as to delete blind or summer doors, and substitute louver doors, and to eliminate hinge garage doors. The modifications suggested by the standing committee, were resolved on December 12, 1957, and the recommended revision was circulated to the trade for consideration and written acceptance on January 23, 1958. Sufficient acceptances were received to represent a satisfactory majority, and the revised standard, CS120-58, was promulgated to become effective on June 2, 1958.

Project Manager: William H. Furcolow, Commodity Standards Division, Office of Technical Services, with advice of Harold A. Bonnet.

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 Commodity Standards Division, Office of Technical Services, U. S. Department of Commerce, which acts as secretary for the committee.

- C. C. Petri, Morgan Co., Oshkosh, Wis. (Chairman)
- W. A. Compton, Allen Millwork Manufacturing Corp., Shreveport 81, La. (Representing the Southern Sash and Door Jobbers Association.)
- E. O. Stecher, Carr, Adams & Collier Co., Dubuque, Iowa.
- Ed. C. Hoepfner, Washington Representative, National Woodwork Manufacturers Association, Inc., 1346 Connecticut Ave., N. W., Washington 6, D. C.
- L. L. Gibson, Long-Bell Division, International Paper Co., Kansas City 6, Mo.
- Fred A. Hoerner, Delta Millwork, Inc., Jackson, Miss. (Representing Ponderosa Pine Woodwork.)
- C. T. Nissen, Exec. Dir., Builders Hardware Manufacturers Association, 60 E. 42nd St., New York 17, New York.
- Harold H. Hager, Hager & Cove Lumber Co., Lansing 2, Michigan. (Representing Michigan Retail Lumber Dealers Association.)
- Cray J. Coppins, The Whitmer-Jackson Co., Cleveland, Ohio. (Representing the Northern Sash and Door Jobbers Association.)
- Richard George Wheeler, 3664 Curtis St., San Diego, Calif. (Representing the American Institute of Architects.)
- Ralph W. Mize, Bureau of Indian Affairs, U. S. Department of Interior, Albuquerque, N. M.
- Milton W. Smithman, National Association of Home Builders, 1625 L St., N. W., Washington 6, D. C.

ACCEPTANCE OF COMMERCIAL STANDARD

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

Date _____

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

Gentlemen:

We believe that this Commercial Standard 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)

(Kindly typewrite or print the following lines)

Name and title of above officer _____

Organization _____
(Fill in exactly as it should be listed)

Street address _____

City, zone, and State _____

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

TO THE ACCEPTOR

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

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

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

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

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

ACCEPTORS

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

ASSOCIATIONS (General Support)

American Specification Institute, Chicago, Ill.
Architectural Woodwork Institute, Chicago, Ill.
Associated General Contractors of America, Inc., Washington, D. C.

Carolina Lumber & Building Supply Association, Charlotte, N. C.

Hardwood Plywood Institute, McLean, Va.

Michigan Retail Lumber Dealers Association, Lansing, Mich.
Mississippi Retail Lumber Dealers Association, Inc., Jackson, Miss.

National Woodwork Manufacturers Association, Chicago, Ill.
Northern Sash & Door Jobbers Association, Chicago, Ill.

Ponderosa Pine Woodwork, Chicago, Ill.
Prefabricated Home Manufacturers Institute, (now Home Manufacturers Association), Washington, D. C.

Southern Sash & Door Jobbers Association, Memphis, Tenn.

FIRMS

Acme Sash & Door Co., Cincinnati, Ohio.
Adams-Rogers, Inc., Indianapolis, Ind.
Addison-Rudesal, Inc., Atlanta, Ga.
Algoma Plywood & Veneer Co., Algoma, Wis.
Allen Millwork Manufacturing Corp., Shreveport, La.
Amarillo Sash & Door Co., Amarillo, Tex.
American Cyanamid Co., New York, N. Y. (General support)
American Sash & Door Co., Kansas City, Mo.
Angel Novelty Co., Fitchburg, Mass.
Associated Door & Plywood Co., Chicago, Ill.

Baldwin Lumber Co., Inc., Jersey City, N. J.
Bach, E. E., Millwork Co., Minneapolis, Minn.
Baxter, C. B., & Co., Kansas City, Mo.
Beasley & Sons Co., Nashville, Tenn.
Bellwood Company of California, The, Orange, Calif.
Big Four Lumber Co., Cleveland, Ohio.
Binswanger & Co., Inc., Richmond, Va.
Blount Lumber Co., The, Lacona, N. Y.
Bosman & Casson, Inc., Union, N. J.
Boston Milling Co., Neponset, Mass.
Brockway-Smith-Haigh-Lovell Co., Boston, Mass.
Brust & Brust, Milwaukee, Wis.
Buckley, F. S., Door Co., San Francisco, Calif.
Buell & Co., Dallas, Tex.
Buffalo Plywood Corp., Buffalo, N. Y.
Buffelen Sales Co., Fort Worth, Tex.

Camlet, J. Thomas, Garfield, N. J.
Cannon & Mullen, Salt Lake City, Utah.

Carnahan Manufacturing Co., Inc., Loogootee, Ind.
Carr, Adams & Collier Co., Dubuque, Iowa.
Cellar Lumber Co., The, Westerville, Ohio.
Central Woodwork, Inc., Memphis, Tenn.
Chapin Lumber Co., Aurora, Colo.
Chilton, J. E., Millwork & Lumber Co., Inc., Nashville, Tenn.
Cincinnati Sash & Door Co., The, Cincinnati, Ohio.
Combs Lumber Co., Inc., Lexington, Ky.
Concord Lumber Co., Inc., Albany, N. Y.
Conrad & Cummings, Binghamton, N. Y.
Corbin, P. & F. Division, The American Hardware Corp., New Britain, Conn. (General support.)
Cordele Sash, Door & Lumber Co., Cordele, Ga.
Curtis Companies, Inc., Clinton, Iowa.
Curtis Companies, Inc., Minneapolis, Minn.

Dakota Sash & Door Co., Aberdeen, S. D.
Darby, Bogner & Associates, West Allis, Wis.
D'Arcy Co., Inc., Dover, N. H.
Davidson Sash & Door Co., Inc., Lake Charles, La.
Davis Manufacturing Co., Inc., New Orleans, La.
Dayton Sash & Door Co., Dayton, Ohio.
Deats Sash & Door Co., Los Angeles, Calif.
DeJarnette, Charles Wagner, Des Moines, Iowa.
Delmarva Lumber & Millwork Co., Westville, N. J.
Delta Millwork, Inc., Jackson, Miss.
Delta Plywood, Inc., Jacksonville, Fla.
Donlin Co., The, St. Cloud, Minn.
Dykes Lumber Co., New York, N. Y.

Edwards Sash, Door & Lumber Co., Tampa, Fla.
Evansville Sash & Door Co., Inc., Evansville, Ind.

Farley & Loetscher Manufacturing Co., Dubuque, Iowa.
Farley-Loetscher Co., Sioux Falls, S. Dak.
Federal Millwork Corp., Brooklyn, N. Y.
Fink & Schindler Co., San Francisco, Calif.
Flannagan, Eric G., & Sons, Henderson, N. C.
Flint Sash & Door Co., Inc., Flint, Mich.
Florida Made Door Manufacturing Co., Orlando, Fla.
Fort Wayne Builders' Supply Co., Fort Wayne, Ind.

General Millwork Corp., Utica, N. Y.
General Roofing & Construction Co., Saginaw, Mich.
Georgia Plywood Corp., Dublin, Ga.
Gibson Door Co., Inc., The, Utica, N. Y.
Glen-Mar Door Manufacturing Co., Phoenix, Ariz.
Goshen Sash & Door Co., Goshen, Ind.
Grayson Millwork & Supply Co., Sherman, Tex.
Great Lakes Millwork Corp., Ladysmith, Wis.
Great Lakes Sash & Door Co., The, Cleveland, Ohio.
Grinnell Sash & Door Co., Marion, Ill.

Hager & Cove Lumber Co., Lansing, Mich.
Harbor Plywood Corp., Northlake, Ill.
Harbor Sales Co., Inc., Baltimore, Md.
Harmon Construction Co., Oklahoma City, Okla.

Hixon-Peterson Lumber Co., Postoria, Ohio.
Houston Sash & Door Co., Houston, Tex.
Hurd Millwork Corp., Medford, Wis.
Hussey-Williams Co., Inc., Ozone Park, N. Y.
Huttig Sash & Door Co., Inc., Roanoke, Va.
Huttig Sash & Door Co., St. Louis, Mo.

Illinois Valley Manufacturing Co., Peru, Ill.
Intercoastal Door Corp., Long Island City, N. Y.
International Paper Co., Kansas City, Mo.
Interstate Sash & Door Co., The, Canton, Ohio.

Janis & Stier Inc., Birmingham, Mich.

Kneeland-Bigelow Distributing Co., Bay City, Mich.
Kuebler, J. M., Co., Wausau, Wis.

Law, Law, Potter, & Nystrom, Madison, Wis.
Loeb, Laurence M., White Plains, N. Y.
Loetscher & Burch Manufacturing Co., Des Moines, Iowa.
Los Angeles, City of, Bureau of Public Buildings, Los Angeles, Calif.

Lumber Dealers Inc., Denver, Colo.
Lumber & Millwork Company of Philadelphia, The, Philadelphia, Pa.
Lumber Products, Portland, Oreg.
Lumbermen's Millwork & Supply Co., Ardmore, Okla.
Lumbermens Supply Co., Oklahoma City, Okla.

Mahoney Sash & Door Co., The, Canton, Ohio.
Martin, F. H., Construction Co., Detroit, Mich.
Mason City Millwork Co., Mason City, Iowa.
McPhillips Manufacturing Co., Inc., Mobile, Ala.
Melnick, J. A., Corp., Inc., Brooklyn, N. Y.
Mercury Millwork Corp., Garden City, N. Y.
Merritt Lumber Yards, Inc., Reading, Pa.
Metropolitan Millwork Co., Brooklyn, N. Y.
Midland Building Industries, Inc., Indianapolis, Ind.
Midwest Jobbers, Inc., Chicago, Ill.
Miller-Vaydagh-Miller, Terre Haute, Ind.
Minot Builders Supply Association, Minot, N. D.
Moore & Co., Dallas, Tex.
Morgan Co., Oshkosh, Wis.
Morgan Millwork Co., The, Baltimore, Md.
Morgan Sash & Door Co., Chicago, Ill.
Morgan, L. C., Sash & Door Co., Lawton, Okla.
Mott, Mobley & Horstman, Fort Smith, Ark.
Muhlenberg, Bros., Wyomissing, Pa.

National Manufacturing Co., Sterling, Ill.
National Woodworks, Inc., Birmingham, Ala.
Neal Millwork & Supply Co., Oklahoma City, Okla.
Noelke-Lyon Manufacturing Co., Burlington, Iowa.
Northern Sash & Door Co., Hawkins, Wis.
Northern Specialty Co., Inc., Merrill, Wis.
Norwood Sash & Door Manufacturing Co., Cincinnati, Ohio.
Nurenborg, W. S., Ft. Worth, Tex.

Oklahoma Sash & Door Co., The, Oklahoma City, Okla.

Palmetto Sash & Door Co., Inc., Orangeburg, S. C.
Pease Woodwork Co., Hamilton, Ohio.
Portsmouth Lumber Corp., Portsmouth, Va.

Ready Hung Door Corp., Ft. Worth, Tex.
Reeb Millwork Corp., Roselle, N. J.
Reints Sash & Door Co., Oklahoma City, Okla.
Resnikoff, Abraham, New York, N. Y.
Rinehimer Brothers Manufacturing Co., Elgin, Ill.
Rinn-Scott Lumber Co., Chicago, Ill.
R-M Millwork Corp., Muscatine, Iowa.
Robbins Door & Sash Co., Scranton, Pa.

Rock Island Millwork Co., Rock Island, Ill.
Rockwell Lumber Co., Houston, Tex.
Rockwell of Randolph, Inc., Randolph, Wis.
Roddis Plywood Corp., Marshfield, Wis.
Royal Oak Wholesale Co., Royal Oak, Mich.
Rust Sash & Door Co., Kansas City, Mo.

Saginaw Sash & Door, Saginaw, Mich.
Sanders Co., The, Baltimore, Md.
Savannah Door Co., Division Bradley Plywood Corp., Savannah, Ga.

Scott Sash & Door Co., Inc., Little Rock, Ark.
Sears, Roebuck & Co., Chicago, Ill.
Security Door & Panel Corp., Cornwall Landing, N. Y.
Semling-Menke Co., Merrill, Wis.
Shenk, Henry, Co., Erie, Pa.
Sierra Mill & Building Materials Co., Sacramento, Calif.
Simons Woodwork, Minneapolis, Minn.
Simpson Logging Co., Portland, Oreg.
Smith, Allen A., Co., Toledo, Ohio.
Sothman Co., The, Grand Island, Nebr.
Southern Sash & Door Co., Greenville, S. C.
Southwestern Sash & Door Co., Joplin, Mo.
Spokane Woodworking Co., Spokane, Wash.
Standard Lumber Co., Pine Bluff, Ark.
Standard Lumber & Supply Co., Fort Wayne, Ind.
Steves Sash & Door Co., San Antonio, Tex.
Stravs, Carl B., Minneapolis, Minn.
Superior Woodwork, Co., San Antonio, Tex.
Swan Lake Moulding Co., Klamath Falls, Oreg.

Teachout Sash, Door & Glass Co., Detroit, Mich.
Templeton, Herbert A., Lumber Corp., Spokane, Wash. (General support.)

Tennessee Building Products, Inc., Nashville, Tenn.
Texas Sash & Door Co., Fort Worth, Tex.
Timber Engineering Co., Washington, D. C.
Trexler Lumber Co., Allentown, Pa.

Underwood Builders Supply Co., Mobile, Ala.
University of Texas, School of Architecture, Austin, Tex.

Vaughan, George C., & Sons., Nederland, Tex.
Victoria Sash & Door Co., Inc., Shreveport, La.
Villaume Box & Lumber Co., The, St. Paul, Minn.

Wabash Screen Door Co., The, Chicago, Ill.
Wahlfeld Manufacturing Co., Peoria, Ill.
Walling Sash & Door Co., Wichita, Kans.
Washington Woodworking Co., Inc., Washington, D. C.
Wearn Lumber Co., The, Charlotte, N. C.
Weinel, August F., Lumber Co., Columbia, Ill.
Welch, Carroll E., Huntington, N. Y.
West Coast Screen Co., Los Angeles, Calif.
Whissel, L. N., Lumber Co., Inc., Buffalo, N. Y.
Whitmer-Jackson Co., Inc., The, Buffalo, N. Y.
Whittier Lumber & Millwork Co., Newark, N. J.

Young, Ray, Radburn, Fair Lawn, N. J.

Zuber Lumber Co., Atlanta, Ga.

U. S. GOVERNMENT

Department of the Army, Office, Assistant Deputy Chief of Staff for Logistics, Procurement Division.
Department of the Interior, Office of the Secretary, Division of Property Management; and Bureau of Reclamation, Division of Contracts and Property.
Veterans Administration, Supply Service, Department of Medicine and Surgery, Development and Standards Division.

OTHER COMMERCIAL STANDARDS

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

The following organizations have accepted this Standard since the first printing:

Annona Manufacturing Co., Annona, Texas.

Cameron, William and Co., Wholesale, Waco, Texas.

Millwork, Inc., Hopkins, Minn.

Southern Supply Co., Inc., Springfield, Mo.

Sunco Manufacturing Co., Wichita, Kans.

United Wood Products Co., Inglewood 1, Calif.

White Pine Sales Co., Detroit, Michigan.

Federal Register



National Bureau of Standards VOLUNTARY STANDARDS

Action on Proposed Withdrawal

In accordance with § 10.12 of the Department's "Procedures for the Development of Voluntary Product Standards" (15 CFR Part 10, as revised; 35 FR 8349 dated May 28, 1970), notice is hereby given of the withdrawal of the following Commercial Standards:

- CS 120-58, "Ponderosa Pine Doors."
- CS 163-64, "Ponderosa Pine Windows, Sash and Screens (Using Single Glass and Insulating Glass)"
- CS 171-58, "Hardwood Veneered Doors (Solid-Core, Hollow-Core and Panel and Sash)"
- CS 190-64, "Wood Double-Hung Window Units"
- CS 204-64, "Wood Awning Window Units"
- CS 205-64, "Wood Casement Window Units"
- CS 208-57, "Standard Stock Exterior Wood Window and Door Frames"
- CS 262-63, "Water-Repellent Preservative Non-Pressure Treatment for Millwork"
- CS 264-64, "Wood Horizontal-Sliding Window Units (All Sash Operating)"
- CS 265-64, "Wood Horizontal-Sliding Window Units (One or More Non-Operating Sash)"
- CS 266-64, "Wood Single-Hung Window Units"

It has been determined that each of these standards has become technically inadequate, and in view of the existence of up-to-date National Woodwork Manufacturers Association standards for the products covered, revision of the Commercial Standards would serve no useful purpose.

This action is taken in furtherance of the Department's announced intentions as set forth in the public notice appearing in the FEDERAL REGISTER of March 27, 1974 (39 FR 11319), to withdraw these standards.

The effective date for the withdrawal of these standards will be 60 days after the publication of this notice. This withdrawal action terminates the authority to refer to these standards as voluntary standards developed under the Department of Commerce procedures.

Dated: May 30, 1974.

RICHARD W. ROBERTS,
Director.