

# MOULDINGS

- **MAPLE**
- **OAK**
- **POPLAR**
- **WHITE PINE**
- **PREFINISHED OAK**
- **EXTERIOR, DOORS AND STAIR PARTS**

Since Millard Lumber Inc. opened in 1948, it has grown to one of the largest independently owned facilities in the Midwest. With a strong commitment to quality and customer service, we are pleased to offer our millwork products in this brochure.

The products shown in this brochure are a small sampling of our broad capability. We have the facilities to prehang doors, assemble windows and manufacture specialty and custom products to your specifications and needs. If you would like more information about any product or service in this brochure, or if you have a project that needs special attention, please contact us. At Millard Lumber, it is our job to help you with yours!

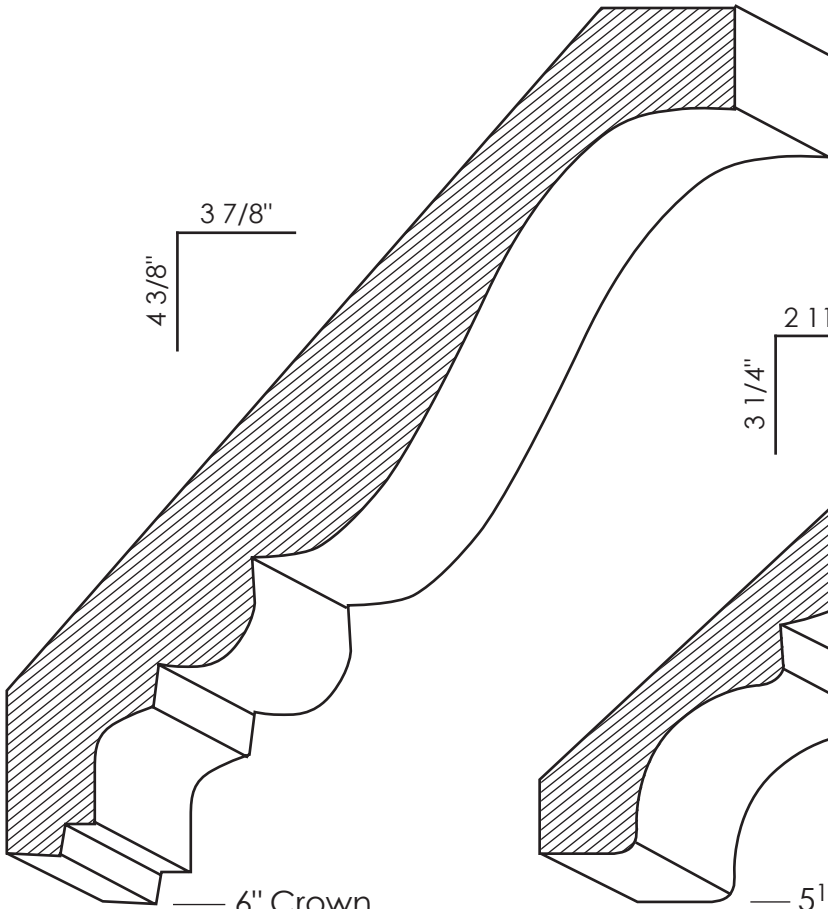
## **Mission Statement**

The employees, supervisors and management of Millard Lumber Inc. work together as a team in a mutually dignified manner to profitably provide quality building materials and services which consistently exceed the expectations of our Customers.

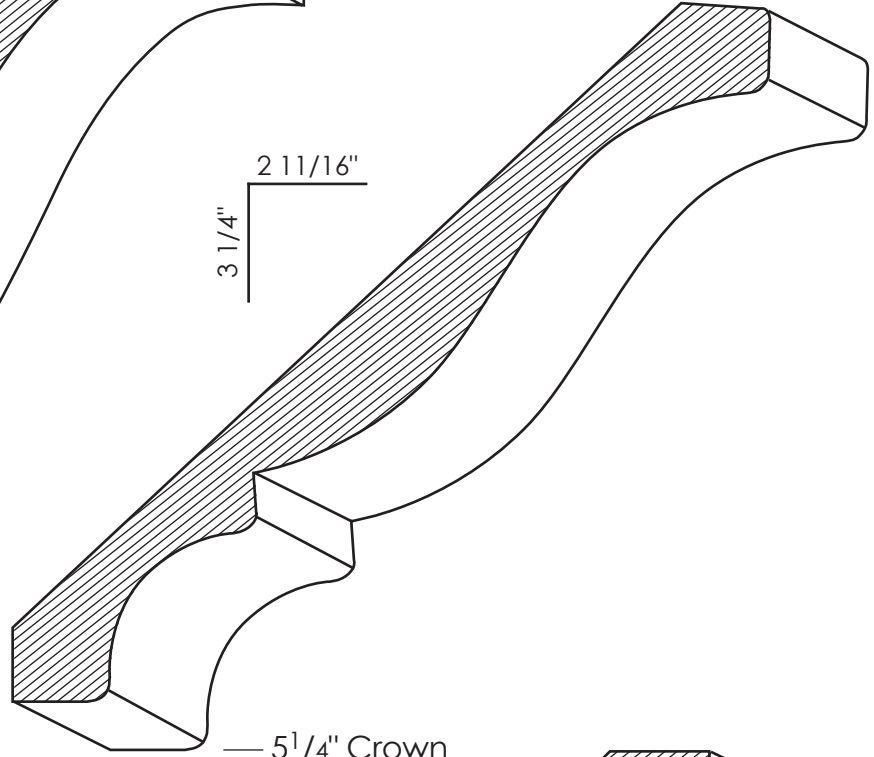
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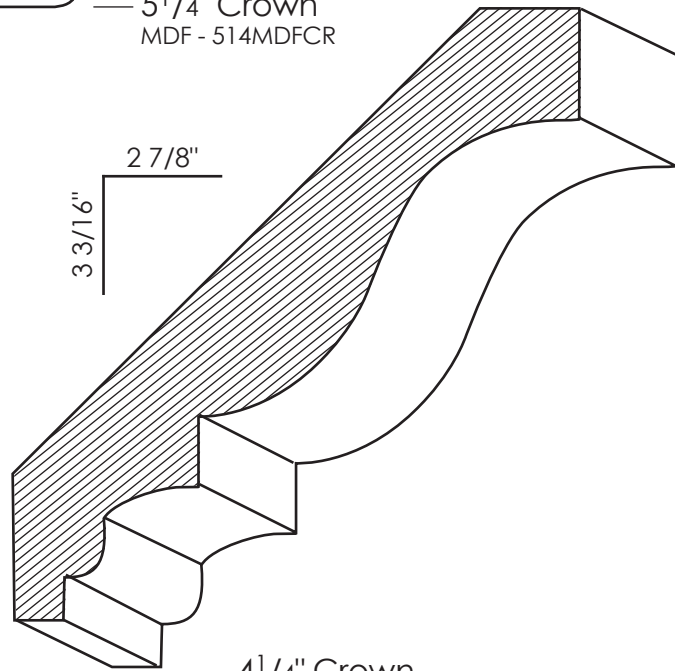
# CROWN



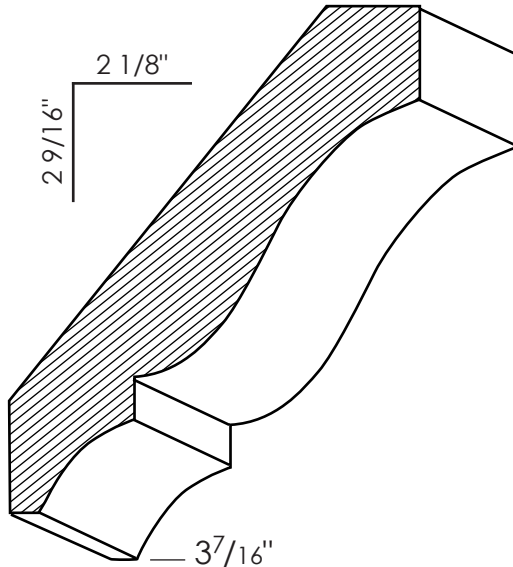
— 6" Crown  
Maple - 6MCRWN  
Oak - 6OCRWN  
Poplar - 6PCRWN



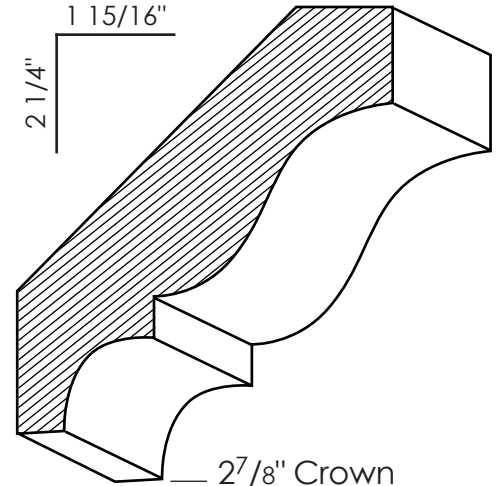
— 5 1/4" Crown  
MDF - 514MDFCR



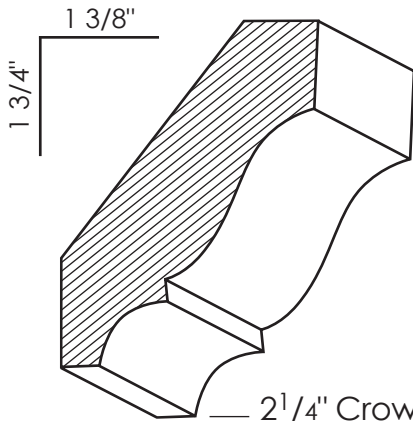
— 4 1/4" Crown  
Maple - 125M  
Oak - 125O  
Poplar - 125P



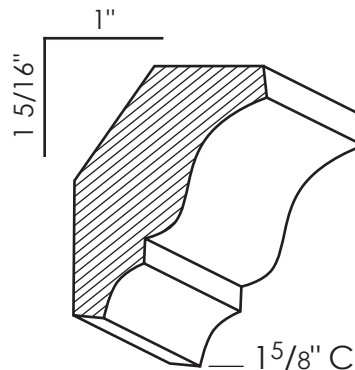
3<sup>7</sup>/<sub>16</sub>"  
Crown  
Maple - F610M  
Oak - F610O  
Poplar - F610P



2<sup>7</sup>/<sub>8</sub>" Crown  
Oak - KD119O  
Poplar - KD119P

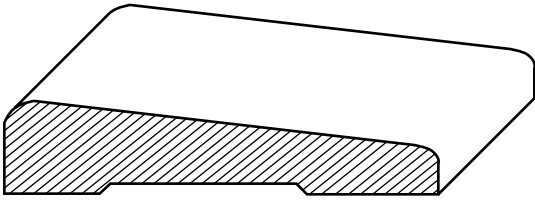


2<sup>1</sup>/<sub>4</sub>" Crown  
Maple - F608M  
Oak - F608O

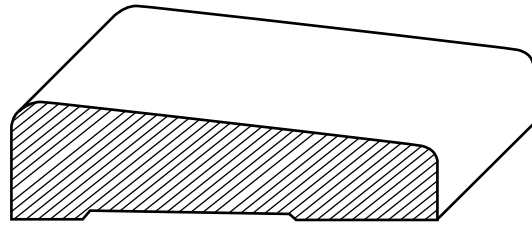


1<sup>5</sup>/<sub>8</sub>" Crown  
Maple - F616M  
Oak - F616O  
Poplar - F616P

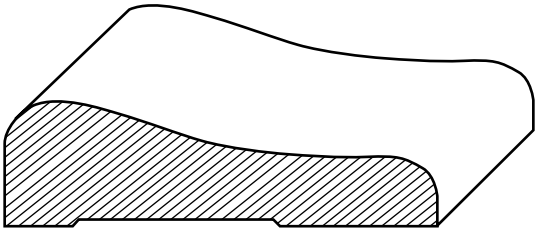
# CASING



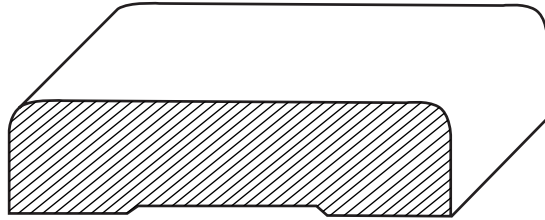
$\frac{7}{16}$ " x  $2\frac{1}{4}$ " Ranch  
Oak - 403O



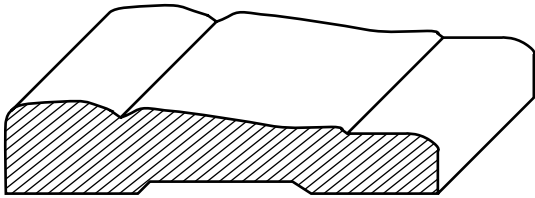
$1\frac{1}{16}$ " x  $2\frac{1}{4}$ " Flat  
White Pine - 324P



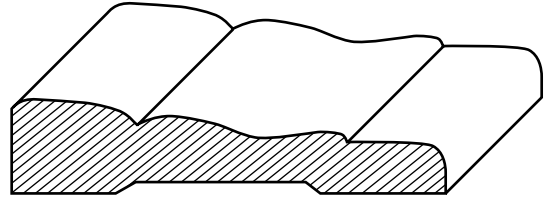
$1\frac{1}{16}$ " x  $2\frac{1}{4}$ " Moulded Oval  
White Pine - 321P



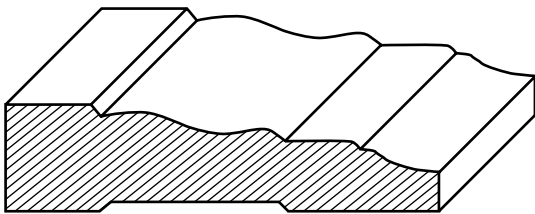
$\frac{9}{16}$ " x  $2\frac{1}{4}$ " Flat  
Oak - F157O



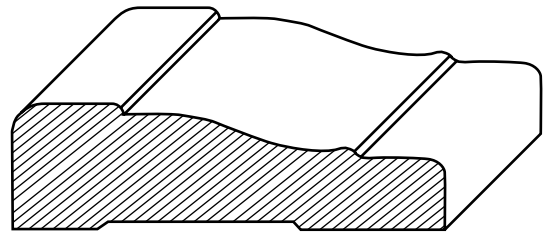
$\frac{7}{16}$ " x  $2\frac{1}{4}$ " Heritage  
Chesapeake Oak 115CP



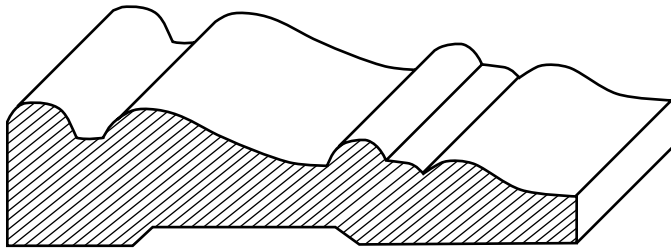
$\frac{7}{16}$ " x  $2\frac{1}{4}$ " Trend  
Maple - 115M  
Oak - 115O  
Poplar - F115PP  
Fruitwood Oak - 115FW



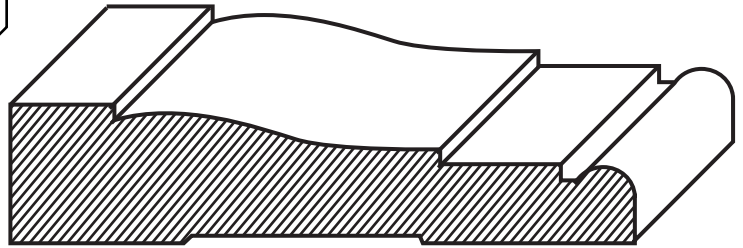
$\frac{9}{16}$ " x  $2\frac{1}{4}$ " Heritage  
Maple - 111M  
Oak - 111O  
Poplar - 111P



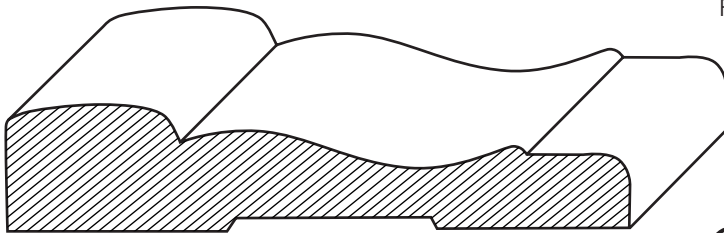
$1\frac{1}{16}$ " x  $2\frac{1}{4}$ " Heritage  
Primed MDF - 356PRM  
Primed Clay Coat - CC356  
White Pine - 356P



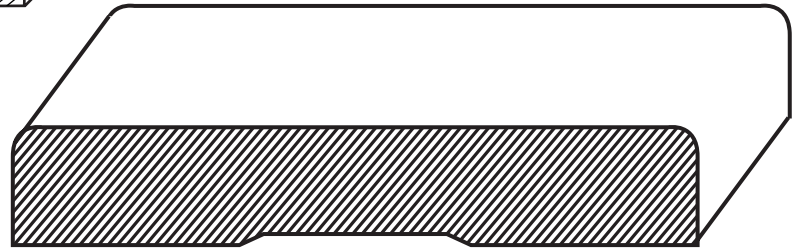
3/4" x 3" #103  
 Maple - 103M  
 Oak - 103O  
 Poplar - 103P



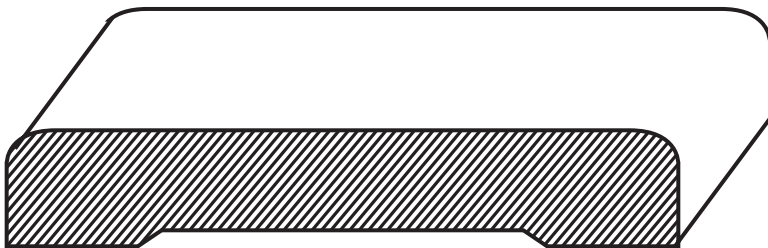
1 1/16" x 3 1/4"  
 MDF - FF312PRM  
 Primed FJ - PFJP445



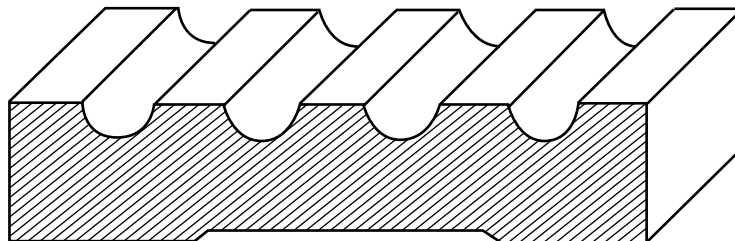
1 1/16" x 3 1/4" #L444  
 Primed FJ - PFJP193



1 9/32" x 3 1/2" Flat  
 MDF - 412EMDF

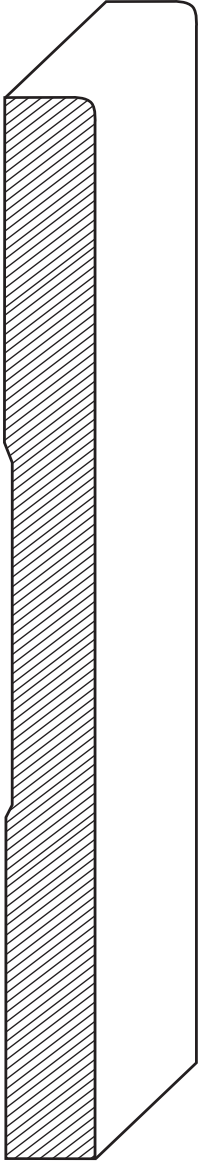


9/16" x 3 1/2" Flat  
 Poplar - POPSQCSG

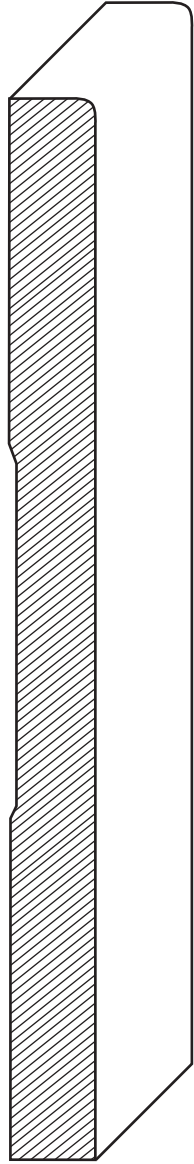


1 1/16" x 3 1/4" Fluted  
 Oak - 160O  
 Poplar - 160P

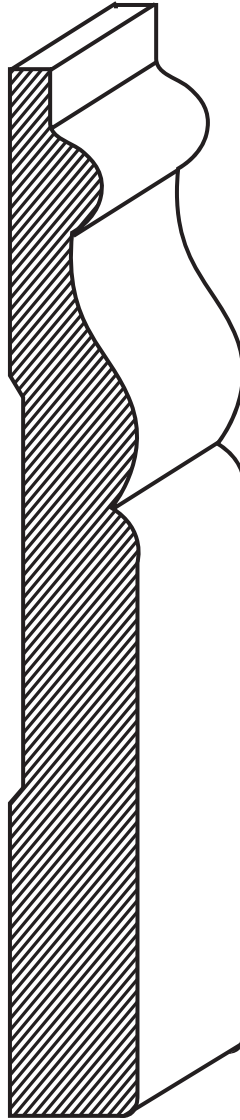
# BASE



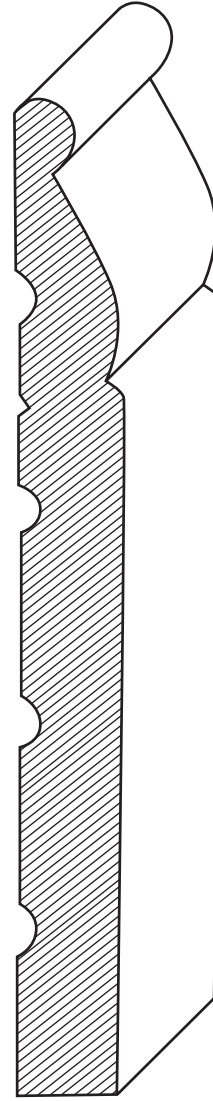
1/2" x 5 1/2"  
Square  
MDF - 512EMDF



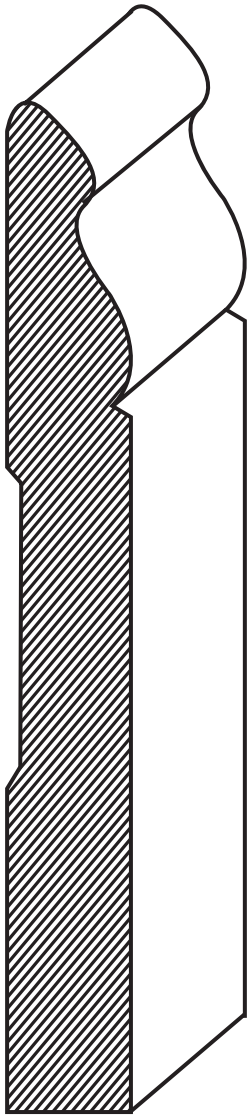
7/16" x 5 1/2"  
Square  
Poplar - PSQBASE



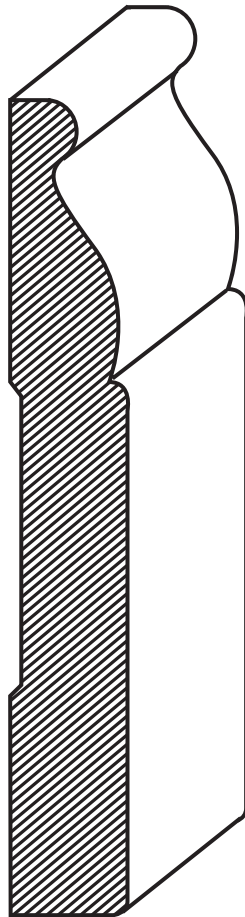
3/4" x 5 1/2"  
#2205  
Maple - 2205M  
Oak - 2205O  
Poplar - 2205P



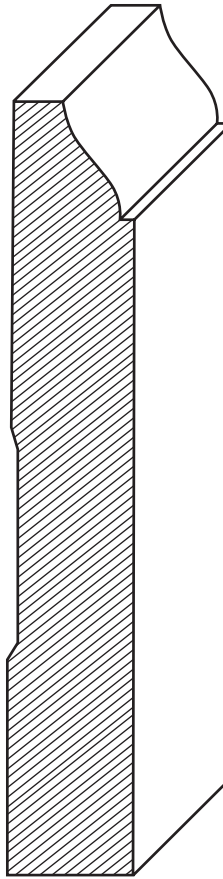
9/16" x 5 1/4"  
#813  
Primed Clay Coat - CC813



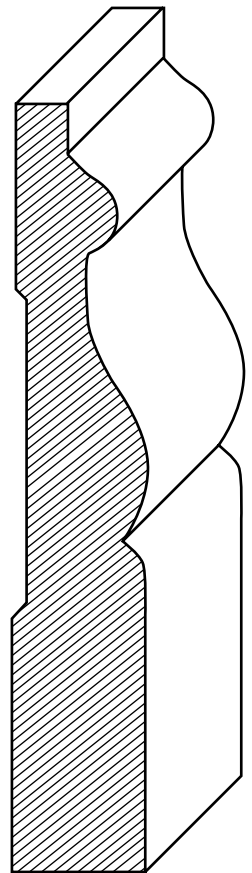
$1\frac{9}{32}'' \times 5\frac{1}{4}''$   
#163  
Primed MDF - FF163PRM



$\frac{9}{16}'' \times 4\frac{1}{4}''$   
Primed FJ  
Primed - PFJP225



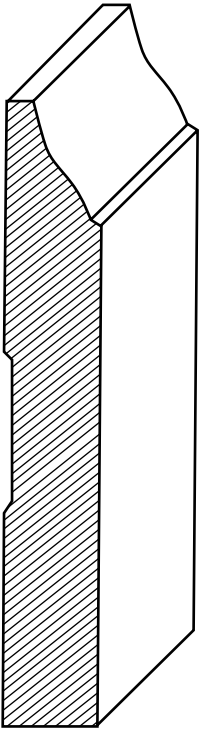
$1\frac{1}{16}'' \times 4''$   
Heritage  
Oak - KD404O  
Poplar - KD404P



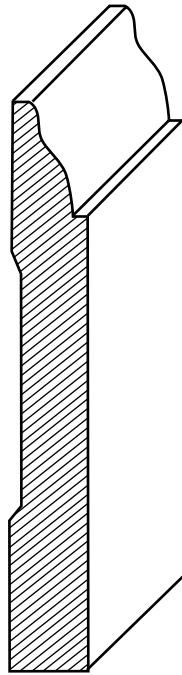
$\frac{3}{4}'' \times 4''$  #113  
Maple - 113M  
Oak - 113O  
Poplar - 113P



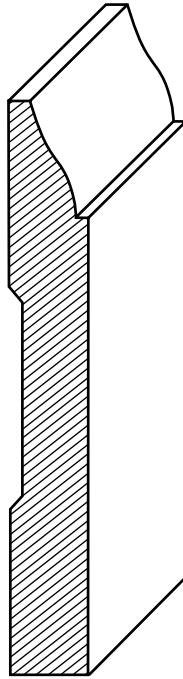
# BASE



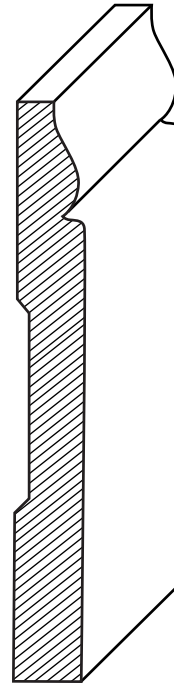
1/2" x 3 1/4"  
Heritage  
Primed MDF - 634PRM



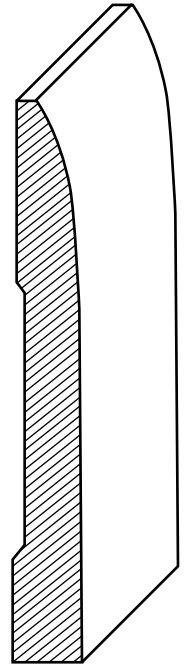
7/16" x 3"  
Heritage  
White Pine - 634P



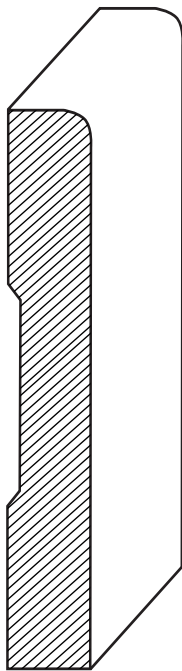
7/16" x 3"  
Heritage  
Primed Clay Coat -  
CC634



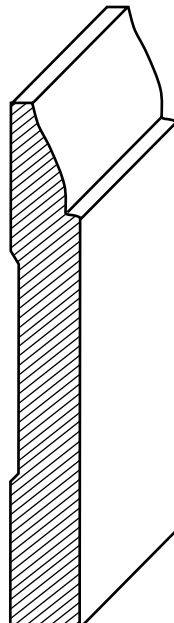
3/8" x 3" #  
2503  
Maple - 2503M  
Oak - 2503O  
Poplar - 2503P



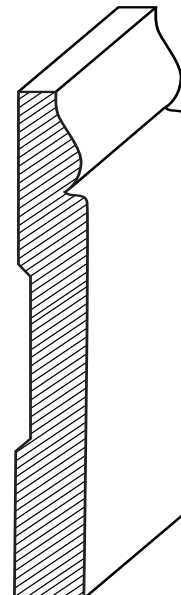
3/8" x 3"  
Oval  
Oak - 724O3  
White Pine - 724P3



7/16" x 3" Flat  
Oak - OSQBASE



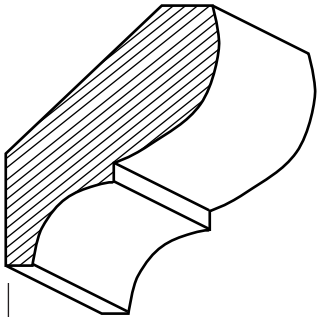
3/8" x 2 3/4" Heritage  
Chesapeake Oak - 218CP



3/8" x 2 5/8" #2502  
Fruitwood Oak - 2502FW  
Oak - 2502O  
Poplar - 2502P

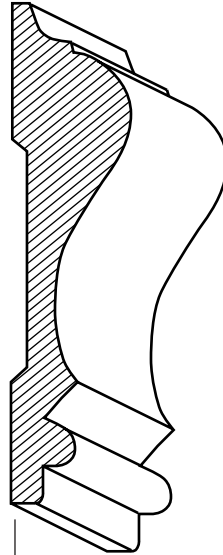
# BED MOULD / CHAIR RAIL / BASE & CORNER BLOCKS

## Bed Mould



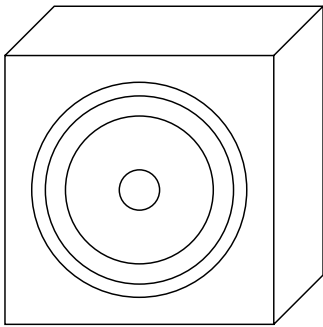
1<sup>5</sup>/<sub>8</sub>" Bed Mould  
White Pine - 74P

## Chair Rail



2<sup>5</sup>/<sub>8</sub>" Chair Rail  
Maple - 390M  
Oak - 390O  
Poplar - 390P

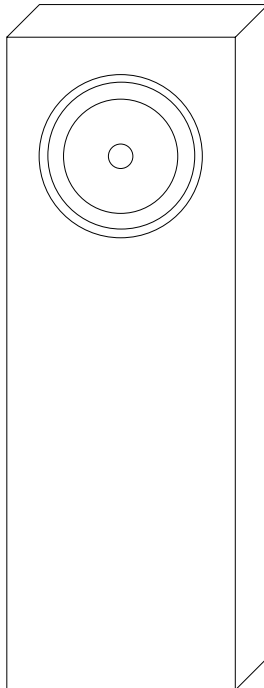
## Base & Corner Blocks



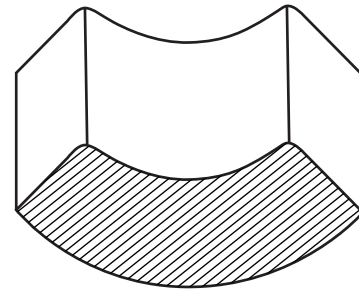
3<sup>1</sup>/<sub>2</sub>" x 3<sup>1</sup>/<sub>2</sub>" x 7/<sub>8</sub>"  
Corner Block w/Rosette  
Oak - 312OAKCB  
Poplar - 312POPCB

Also Available In:

2<sup>1</sup>/<sub>2</sub>" x 2<sup>1</sup>/<sub>2</sub>" x 3/<sub>4</sub>"  
Corner Block w/Rosette  
Maple - 212MCB  
Oak - 212OAKCB  
Poplar - 212POPCB



3<sup>1</sup>/<sub>2</sub>"  
Base Block w/Rosette  
Oak - 312OAKBB  
Poplar - 312POPBB

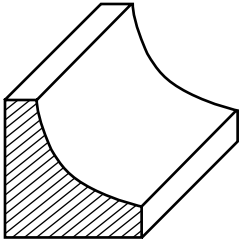


6" Radius OS Corner Block  
Oak - 90OAKBB6  
Poplar - 90POPBB6

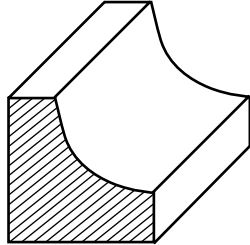
Other styles available. Ask your sales associate for samples or see selections at your Millard Lumber location.

# COVE/STOP

## Cove

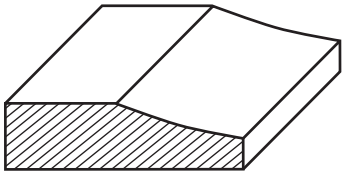


1 1/16" x 1 1/16" Cove  
White Pine - 100P

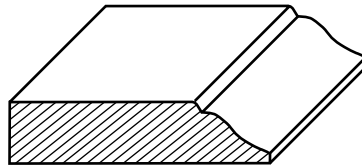


3/4" x 3/4" Cove  
Maple - 601M  
Oak - 601O  
Poplar - 601P

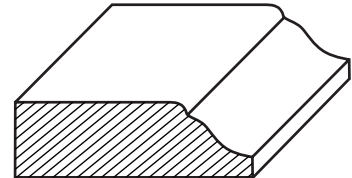
## Stop



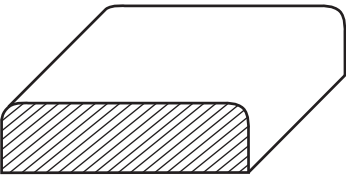
3/8" x 1 1/4" Heritage  
Chesapeake Oak - 306CP7, 7' only



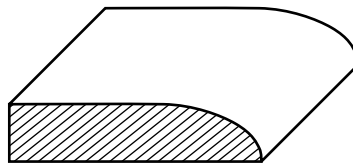
3/8" x 1 1/4" Heritage  
Primed - 946FJPR7, 7' only  
White Pine - 946P  
Primed FJ - FJPRSTP7, 7' only



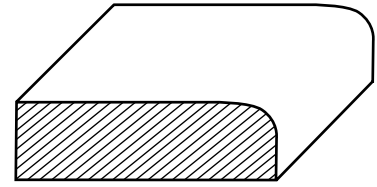
7/16" x 1 1/4" Heritage  
Maple - 306M  
Oak - 306O  
Poplar - 306P  
Fruitwood Oak - 306FW



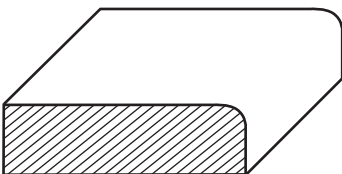
3/8" x 1 1/4" Double Bullnose  
Oak - MS11OAK  
Poplar - MS11POP  
Primed MDF - 887MDF7, 7' only



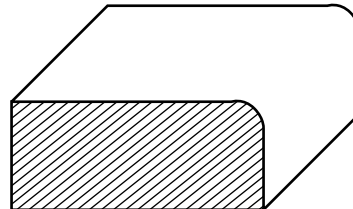
3/8" x 1 1/4" Oval  
White Pine - 256P



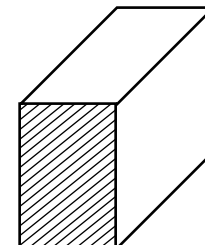
3/8" x 1 1/4" Bullnose  
White Pine - 876P



3/8" x 1 1/4" Bullnose  
Oak - 305O

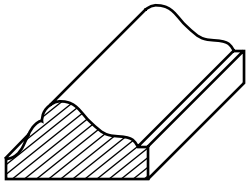


5/8" x 1 3/8" Glass Stop  
White Pine - 876P58

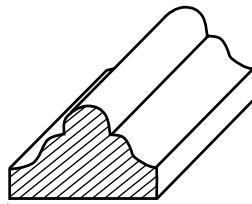


1/2" x 3/4" Parting Stop  
White Pine - 254P  
Oak - OAK PRST

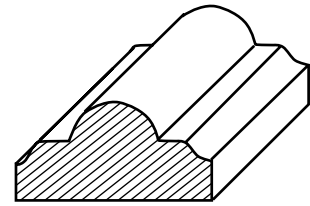
# PANEL MOULD & CAP



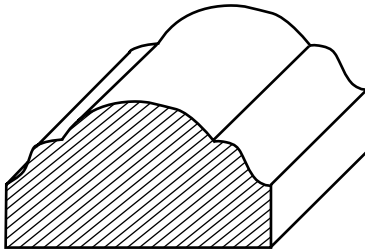
3/4" Panel Cap  
Oak - 728O



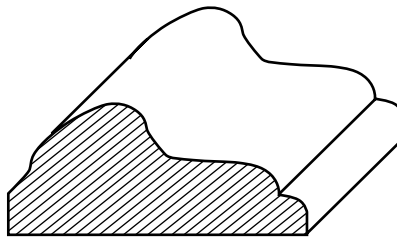
7/16" x 3/4" Panel Mould  
Maple - 100M  
Oak - M100O  
Poplar - M100P



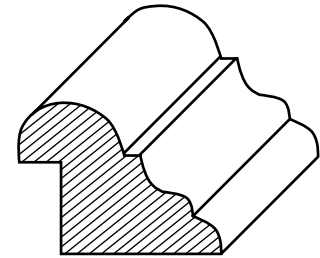
1/2" x 1" Panel Mould  
Maple - M101M  
Oak - M101O  
Poplar - M101P



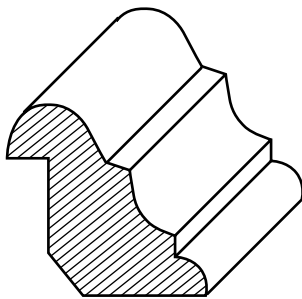
5/8" x 1 3/8" Panel Mould  
Maple - M102M  
Oak - M102O  
Poplar - M102P



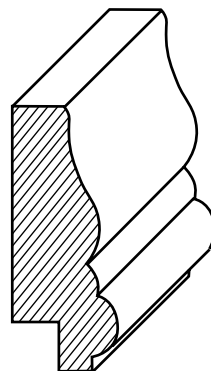
1 5/8" Plant Mould  
Maple - 117M  
Oak - 117O  
Poplar - 117P



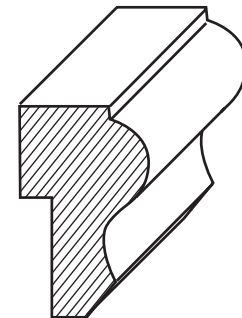
1/2" x 1 3/8" Panel Mould  
Maple - KD110M  
Oak - KD110O  
Poplar - KD110P



3/4" x 1 3/8" Panel Mould  
Maple - KD111M  
Oak - KD111O  
Poplar - KD111P



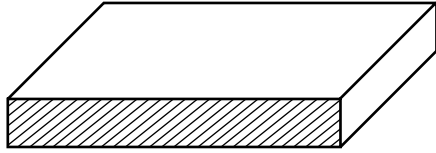
9/16" x 1 3/8" Panel Cap  
Maple - MPNLM  
Oak - MPNLO  
Poplar - MPNLP



1 1/16" x 1 1/16" Panel Cap  
Maple - MPNLMLD  
Oak - OPNLMLD  
Poplar - PPNLMLD

# LATTICE / OUTSIDE CORNER

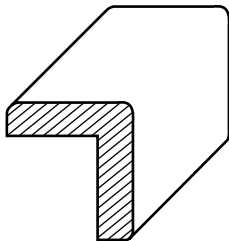
## Lattice/Mull Center



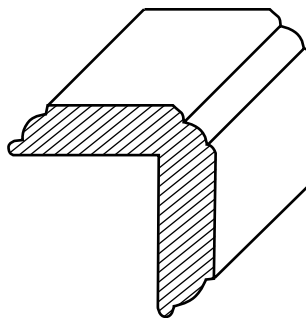
Sizes Available

OAK	1/4" x 3"	500JO
OAK	1/4" x 1 3/4"	500CO
OAK	1/4" x 4"	4OAKMULL
PINE	1/4" x 1 1/8"	268P
PINE	1/4" x 1 3/8"	267P
PINE	1/4" x 1 3/4"	265P
PINE	1/4" x 2"	972P
PINE	1/4" x 2 1/4"	970P
PINE	1/4" x 4"	970P4

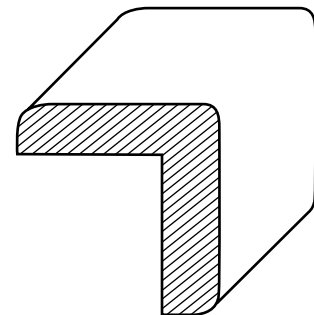
## Outside Corner



└ 3/4" White Pine - 206P

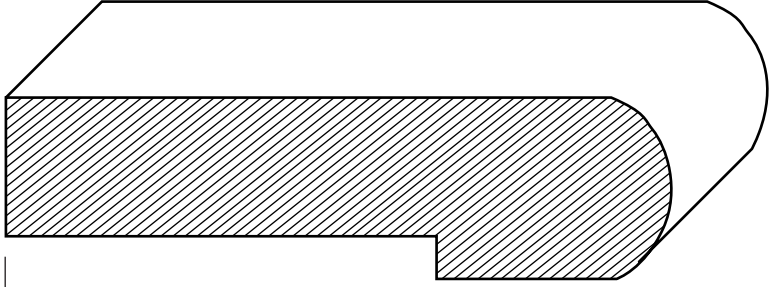


└ 1" Oak - KD210O

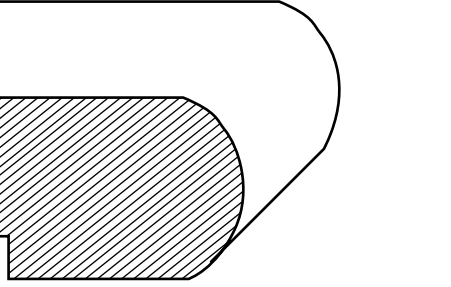


└ 1 1/8" White Pine - 205P

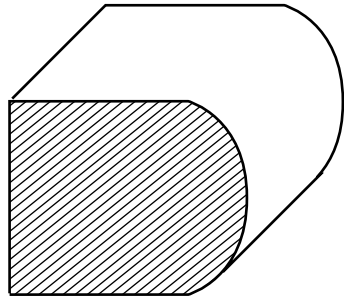
# MISCELLANEOUS



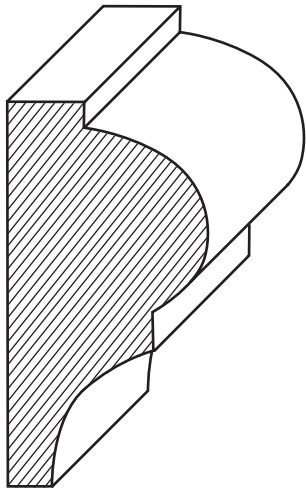
1" x 3 1/2" Landing Tread  
Maple - LTMAPLE  
Oak - LTOAK



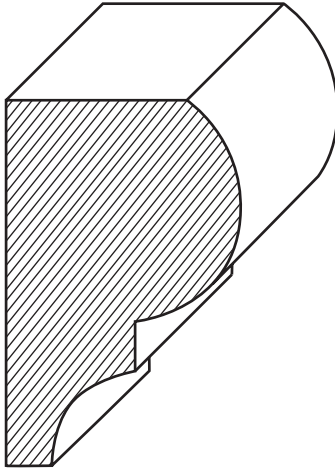
1" x 5 1/4" Wide Landing Tread  
(Not shown)  
Maple - WLTMAPLE  
Oak - WLTOAK



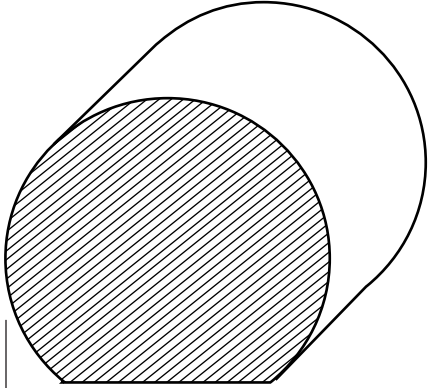
1 1/16" x 1 1/4" Return Nosing  
Oak - RNOAK



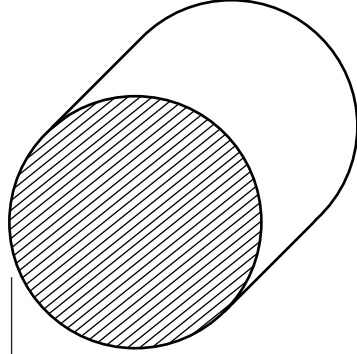
1 1/8" x 2" Nosing + Cove  
Oak - KD308O  
Poplar - KD308P



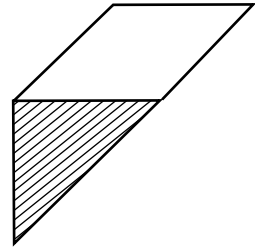
1 13/16" x 1 7/8" Nosing + Cove  
Maple - 201M  
Oak - 201O  
Poplar - 201P



1 1/2" x 1 11/16" Hand Rail  
Fir - 231F



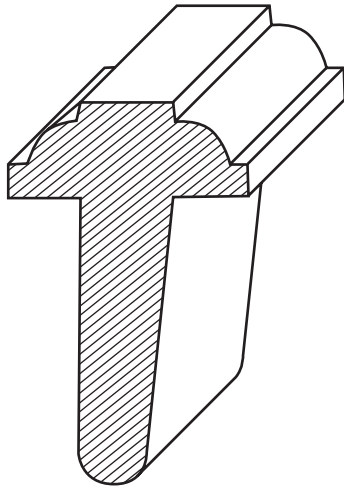
1 1/4" Closet Pole  
Fir - 233F



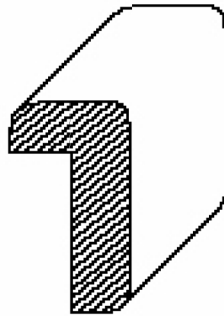
3/4" Chamfer Strip  
White Pine - 995F

Illustrations may not be to scale. Samples are available.

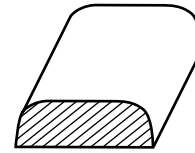
# MISCELLANEOUS



8-0 Astragal,  
No Weatherstrip  
1<sup>3</sup>/<sub>8</sub>" 1<sup>3</sup>/<sub>4</sub>"  
Maple - F324M F323M  
Oak - F324O F323O  
Poplar - F324P

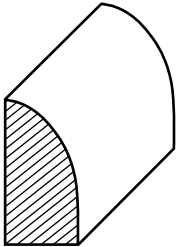


3/4"  
Doorlite Saddle Mould  
Maple - DMMAPLE  
Oak - DMOAK

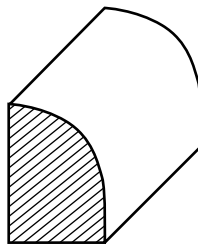


1/4" x 3/4"  
Screen Mould  
Oak - OAKSCMLD  
White Pine - 142P

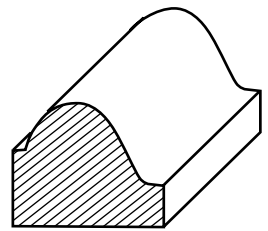
## Base Shoe/Quarter Round



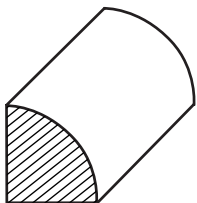
1/2" x 3/4" Base Shoe  
Chesapeake Oak - 200CP  
White Pine - 106P  
Primed FJ - 106PRM



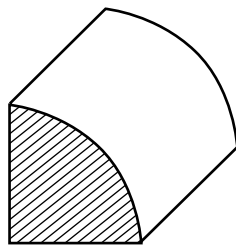
1/2" x 11/16" Base Shoe  
Maple - 200M  
Oak - 200O  
Poplar - 200P  
Fruitwood Oak - 200FW



5/8" Base Cap  
Maple - F240M  
Oak - F240O  
Poplar - F240P



1/2" Quarter Round  
White Pine - 108P

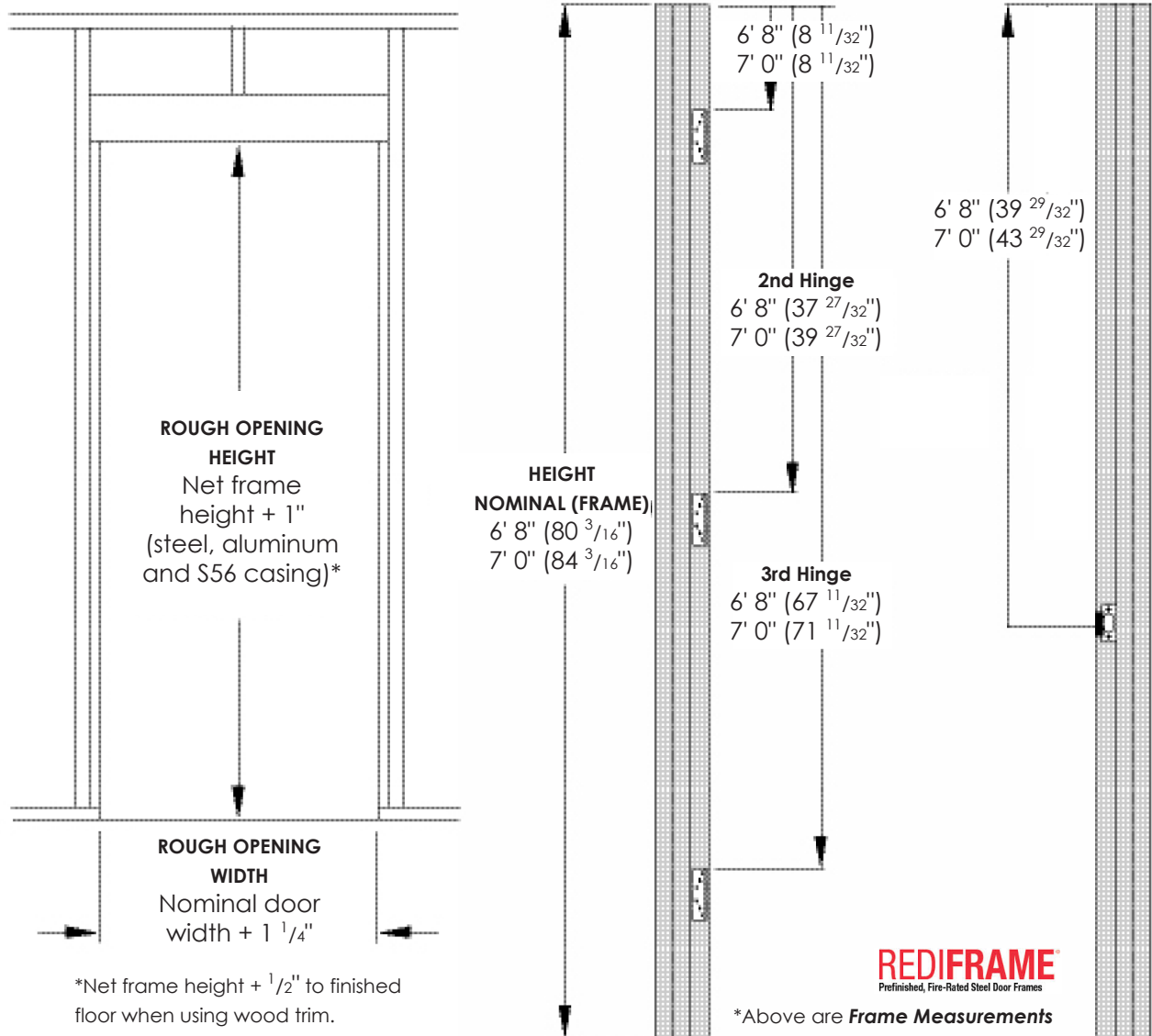


11/16" Quarter Round  
White Pine - 105P

## Rediframe Fixed Frame, 18 Gauge

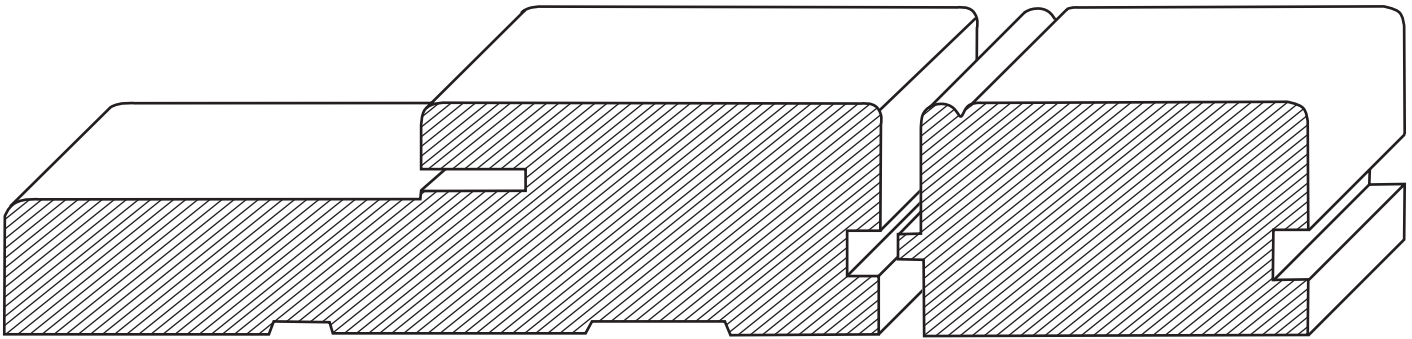
Millard Lumber stocks Rediframe, a prefinished fixed throat steel door frame designed for interior and exterior applications where the strength of a steel door frame is desired. Especially suited for new construction and light commercial applications; hotel/motel, assisted living, or residential.

- For 1<sup>3</sup>/<sub>4</sub>" doors
- For 6-8 & 7-0 heights
- Rediframe Brown color
- 4<sup>7</sup>/<sub>8</sub>" wall sizes
- 5<sup>5</sup>/<sub>8</sub>" stop height
- Demountable without damage to the finished wall, door or frame
- Standard casing is 22 gauge galvanized (A-40) steel per ASTM-653
- Embossed 90 minute neutral and positive pressure fire label; wood or steel stud



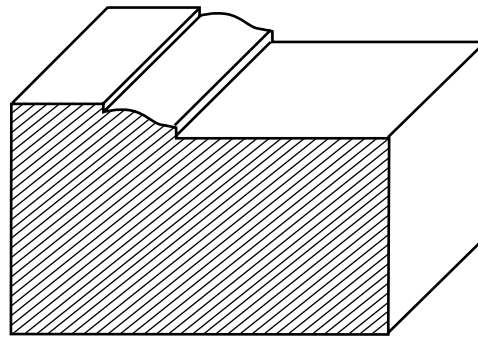


# EXTERIOR: MOULDING & DOOR FRAME

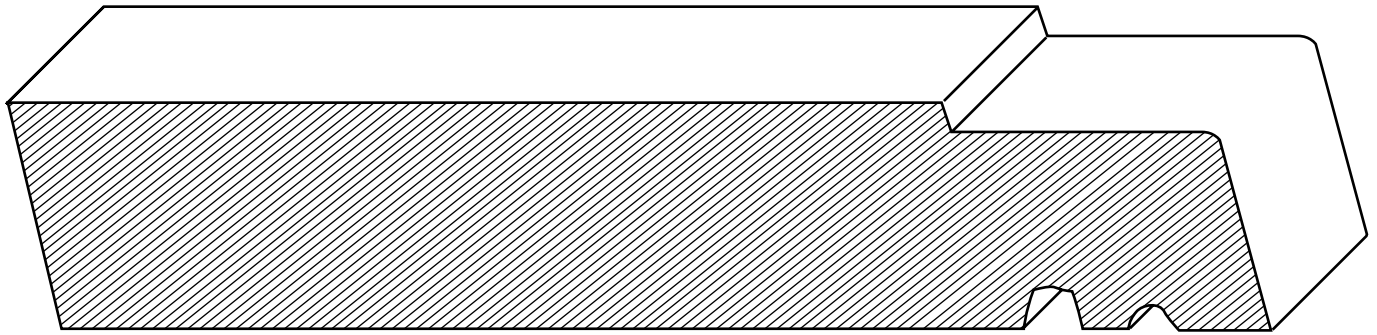


└ 4<sup>5</sup>/<sub>8</sub>" Jamb  
Primed Pine - FPRL / 2<sup>3</sup>/<sub>16</sub>" Rabbet, 8' only

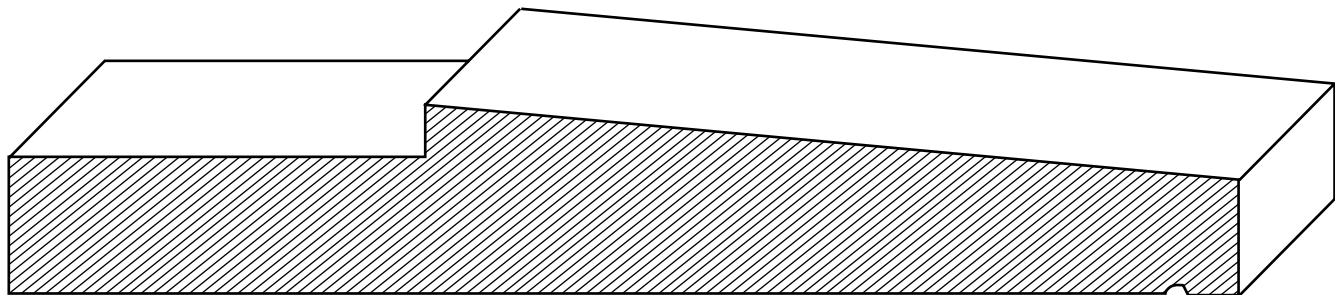
└ 1<sup>1</sup>/<sub>4</sub>" x 2" Frame Extender  
Primed Pine - 70EXFR, 7' only



└ 1<sup>1</sup>/<sub>4</sub>" x 2" Primed Brick Mould  
Wood Primed - W180P8, 10, 17  
White PVC - 180PVC8, 10, 17



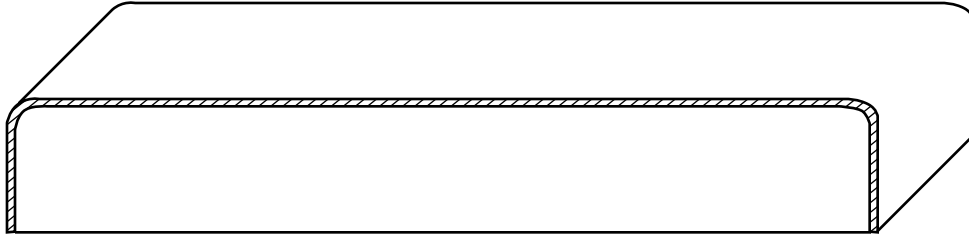
└ 1<sup>1</sup>/<sub>4</sub>" x 6<sup>1</sup>/<sub>4</sub>" Primed Window Sill WNSILL



└ 1" x 6<sup>3</sup>/<sub>4</sub>" Glass Setting Frame Sill and Sidelite GFS

# INTERIOR JAMBS

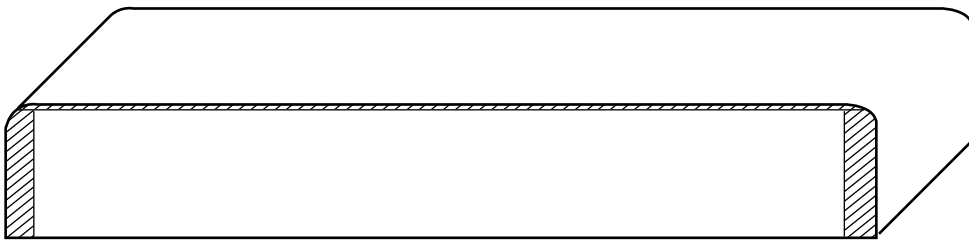
## Standard Interior Veneer Jambs



Veneer Face w/Veneer Edge, Particle Board Core

SPECIES	4 <sup>9</sup> / <sub>16</sub> " x 6'-8"	4 <sup>9</sup> / <sub>16</sub> " x 8 <sup>13</sup> / <sub>8</sub> "	4 <sup>9</sup> / <sub>16</sub> " x 7'-0"	4 <sup>9</sup> / <sub>16</sub> " x 8'-0"	4 <sup>9</sup> / <sub>16</sub> " x 16'-0"	4 <sup>3</sup> / <sub>16</sub> " x 6'-8"	4 <sup>3</sup> / <sub>16</sub> " x 8 <sup>13</sup> / <sub>8</sub> "	5 <sup>1</sup> / <sub>4</sub> " x 7'-0"	6 <sup>9</sup> / <sub>16</sub> " x 8'-0"	6 <sup>9</sup> / <sub>16</sub> " x 7'-0"
OAK	X									
POPLAR	X	X			X					
FRUITWOOD OAK		X								

## Premium Interior Veneer Jambs



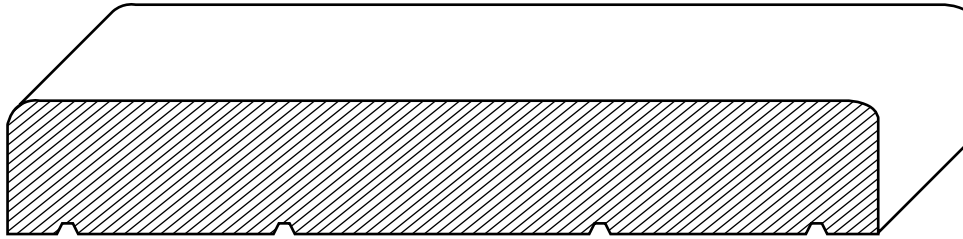
Veneer Face w/Hardwood Edge, Particle Board Core (Premium)

SPECIES	4 <sup>9</sup> / <sub>16</sub> " x 6'-8"	4 <sup>9</sup> / <sub>16</sub> " x 8 <sup>13</sup> / <sub>8</sub> "	4 <sup>9</sup> / <sub>16</sub> " x 7'-0"	4 <sup>9</sup> / <sub>16</sub> " x 8'-0"	4 <sup>9</sup> / <sub>16</sub> " x 16'-0"	4 <sup>3</sup> / <sub>16</sub> " x 6'-8"	4 <sup>3</sup> / <sub>16</sub> " x 8 <sup>13</sup> / <sub>8</sub> "	5 <sup>1</sup> / <sub>4</sub> " x 7'-0"	6 <sup>9</sup> / <sub>16</sub> " x 8'-0"	6 <sup>9</sup> / <sub>16</sub> " x 7'-0"
OAK	X	X	X	X	X		X		X	
BIRCH	X	X	X				X		X	
POPLAR			X							
MAPLE		X								

Custom jamb widths available. Ask your sales person for more information.  
 Illustrations may not be to scale. Samples are available.

# INTERIOR JAMBS

## Solid Interior Jambs



Solid Jamb

SPECIES	4 <sup>9</sup> / <sub>16</sub> " x 6'-8"	4 <sup>9</sup> / <sub>16</sub> " x 8 <sup>13</sup> / <sub>8</sub> "	4 <sup>9</sup> / <sub>16</sub> " x 7'-0"	4 <sup>9</sup> / <sub>16</sub> " x 8'-0"	4 <sup>9</sup> / <sub>16</sub> " x 16'-0"	4 <sup>3</sup> / <sub>16</sub> " x 6'-8"	4 <sup>3</sup> / <sub>16</sub> " x 8 <sup>13</sup> / <sub>8</sub> "	4 <sup>7</sup> / <sub>8</sub> " x 7'-0"	5 <sup>1</sup> / <sub>4</sub> " x 8'-0"	6 <sup>9</sup> / <sub>16</sub> " x 7'-0"
OAK			X					X		
POPLAR			X					X		

## Primed Interior Jambs

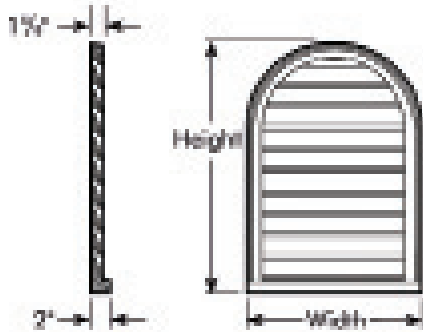


SPECIES	4 <sup>9</sup> / <sub>16</sub> " x 6'-8"	4 <sup>9</sup> / <sub>16</sub> " x 8 <sup>13</sup> / <sub>8</sub> "	4 <sup>9</sup> / <sub>16</sub> " x 7'-0"	4 <sup>9</sup> / <sub>16</sub> " x 8'-0"	4 <sup>9</sup> / <sub>16</sub> " x 16'-0"	4 <sup>3</sup> / <sub>16</sub> " x 6'-8"	4 <sup>3</sup> / <sub>16</sub> " x 8 <sup>13</sup> / <sub>8</sub> "	4 <sup>7</sup> / <sub>8</sub> " x 7'-0"	5 <sup>1</sup> / <sub>4</sub> " x 8'-0"	6 <sup>9</sup> / <sub>16</sub> " x 7'-0"
POPLAR FJ	X									
MDF		X				X				

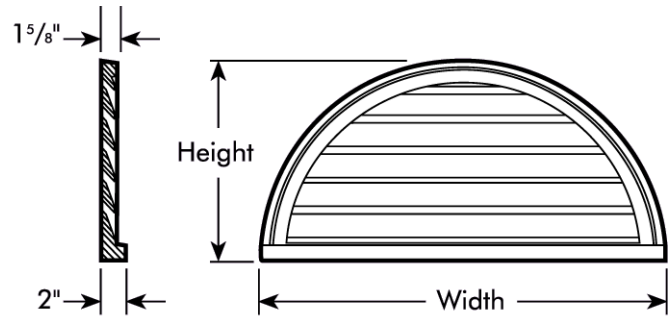
## Embossed Interior Jambs



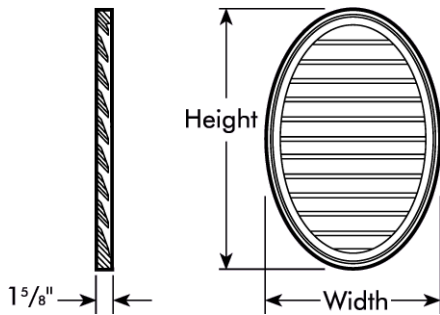
SPECIES	4 <sup>9</sup> / <sub>16</sub> " x 6'-8"	4 <sup>9</sup> / <sub>16</sub> " x 8 <sup>13</sup> / <sub>8</sub> "	4 <sup>9</sup> / <sub>16</sub> " x 7'-0"	4 <sup>9</sup> / <sub>16</sub> " x 8'-0"	4 <sup>9</sup> / <sub>16</sub> " x 16'-0"	4 <sup>3</sup> / <sub>16</sub> " x 6'-8"	4 <sup>3</sup> / <sub>16</sub> " x 8 <sup>13</sup> / <sub>8</sub> "	4 <sup>7</sup> / <sub>8</sub> " x 7'-0"	5 <sup>1</sup> / <sub>4</sub> " x 8'-0"	6 <sup>9</sup> / <sub>16</sub> " x 7'-0"
CHESAPEAKE OAK	X					X				



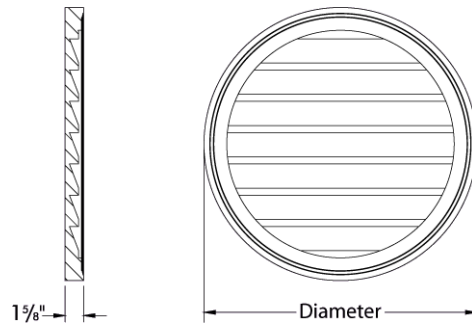
**Cathedral Louver - 660312**  
18" x 30" with a vent area of 36 sq. in  
Functional



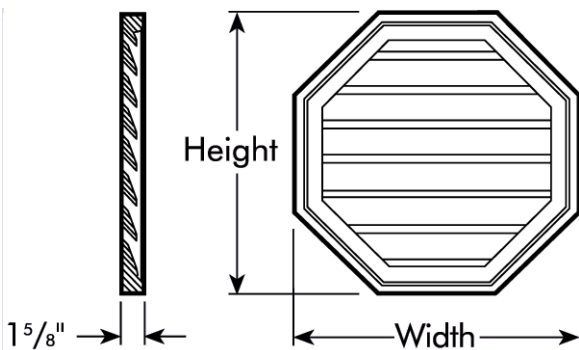
**Half-Round Louver - 660622**  
36" x 18" with a vent area of 28 sq. in  
Functional



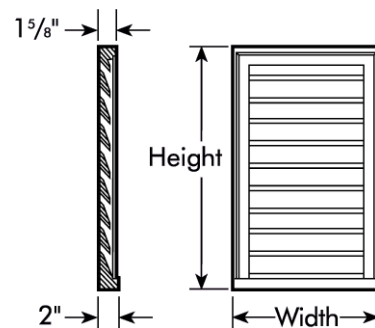
**Oval Louver - 661104**  
24.5" x 37" with a vent area of 24 sq. in  
Functional



**Round Louver - 661813**  
18" diameter with a vent area of 12 sq. in  
Functional



**Octagon Louver - 661003**  
18" x 18" with a vent area of 14 sq. in  
Functional

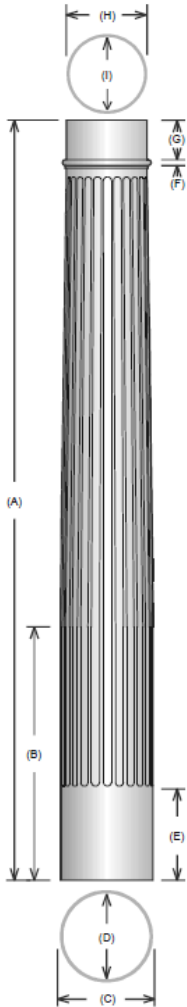


**Vertical Louver - 662029**  
18" x 30" with a vent area of 31 sq. in  
Functional

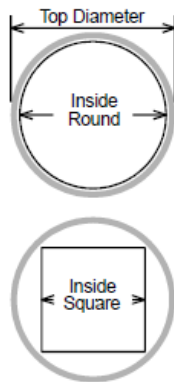
# EXTERIOR: COLUMNS, CAP & BASE



## ROUND TAPERED SHAFTS:



Column Nominal Diameter	Shaft Height (A)	Shaft Bottom*		Shaft Top*		Space Available Inside Shaft:		Shaft Neck		Flute Width (24 ea.)	Straight Portion of Shaft (unfluted columns) (B)	Straight Portion of Shaft (fluted columns) (B)	Smooth shaft before flutes (E)	Item Codes
		Outside Diameter (C)	Inside Diameter (D)	Outside Diameter (H)	Inside Diameter (I)	For Round Post	For Square Post	Neck Height† (G)	Astragal Ring‡ (F)					
8"	8'	7 5/8"	6 3/4"	6 19/32"	5 1/2"	5 1/8"	3 1/2"	4 1/4"	1/2"	11/16"	50 1/16"	50"	10 1/2"	PR88
	10'	7 5/8"	6 3/4"	6 19/32"	5 1/2"	5 1/8"	3 1/2"	4 1/4"	1/2"	11/16"	72 1/16"	65"	10 1/2"	PR810
10"	8'	9 11/16"	8 3/8"	8 9/16"	7 3/4"	7 3/8"	4 15/16"	5 1/8"	3/4"	7/8"	34 11/16"	39"	11"	PR108
	10'	9 11/16"	8 3/8"	8 9/16"	7 3/4"	7 3/8"	4 15/16"	5 1/8"	3/4"	7/8"	58 11/16"	65"	11 1/4"	PR1010
	12'	9 11/16"	8 3/8"	8 9/16"	7 3/4"	7 3/8"	4 15/16"	5 1/8"	3/4"	7/8"	82 11/16"	89"	11 1/4"	PR1012
12"	8'	11 5/8"	10 3/4"	10 1/16"	9 1/4"	8 7/8"	6"	4 3/4"	3/4"	1"	32 3/4"	42 3/4"	12"	PR128
	10'	11 5/8"	10 3/4"	10 1/16"	9 1/4"	8 7/8"	6"	4 3/4"	3/4"	1"	56 3/4"	53"	12"	PR1210



The "Space Available Inside Shaft" measurements are calculated at the top inside diameter (with ± 3/8" tolerance), when using Tuscan or Roman Doric caps. (Fluted columns may have reduced tolerances.)

When structural or composite Ornamental Capitals are used, the neck sleeve or plug will reduce the inside available space significantly. If the column will not be required to carry a load, it may be possible for the installer to modify or remove the neck sleeve or plug to allow more interior space. Please contact Turncraft Customer Service for more information.

These measurements are provided to assist in determining the correct column diameter to go around a load bearing post or lally column, or for clearance for water downspouts, conduits, etc. If a larger diameter is required, it may be possible to specify the Non-tapered Round columns instead.

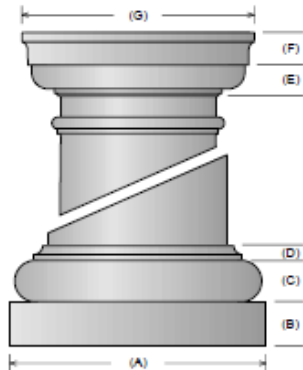
## LOAD CAPACITIES:

Round Tapered Column Shafts

Column Diameter	Concentric Load	Eccentric Load*
8"	10,000 lb.	6,600 lb.
10"	14,000 lb.	10,720 lb.
12"	18,000 lb.	13,200 lb.

\*See testing documentation for full information on eccentric loading values.

## TUSCAN CAP AND BASE FOR ROUND TAPERED COLUMNS:



Column Diameter	Tuscan Base					Materials Available†	Tuscan Cap				Item Codes	
	Plinth		Torus		Total Height		Echinus	Abacus		Total Height		Materials Available†
	(A)	(B)	(C)	(D)	(B-D)			(E)	(F)	(G)		
8"	10 7/8"	1 7/8"	1 3/4"	5/8"	4 1/4"	A, F, D, P, FF	1 5/16"	1 3/8"	9 7/8"	2 11/16"	A, F, D, P, FF	8CBSET
10"	13 1/2"	2 3/8"	2 1/8"	3/4"	5 1/4"	A, F, D, P, FF	1 13/16"	1 3/4"	12 1/8"	3 9/16"	A, F, D, P, FF	10CBSET
12"	16 1/4"	2 3/4"	2 3/8"	7/8"	6"	A, F, D, P, FF	1 7/8"	2"	14 5/8"	3 7/8"	A, F, D, P, FF	12CBSET

† A—ABS, F—FRP, D—DuraStone, P—Polyurethane, FF—Foam-Filled Polystyrene; standard material is highlighted in boldface.



Since 1935



## Model EF

For use with thin roofing materials such as composition, slate, wood shingles and shakes up to 3/4" thick. Minimum Roof Pitch: 3" in 12". Not for vertical applications.



	<b>EF2222EM</b> 22x22 Fixed E-Class Skylight Quaker Bronze eMAX3 Glass	<b>EF2230EM</b> 22x30 Fixed E-Class Skylight Quaker Bronze eMAX3 Glass	<b>EF2238EM</b> 22x38 Fixed E-Class Skylight Quaker Bronze eMAX3 Glass	<b>EF2246EM</b> 22x46 Fixed E-Class Skylight Quaker Bronze eMAX3 Glass	<b>EF3030EM</b> 30x30 Fixed E-Class Skylight Quaker Bronze eMAX3 Glass	<b>EF3046EM*</b> 30x46 Fixed E-Class Skylight Quaker Bronze eMAX3 Glass	<b>EF4646EM</b> 46x46 Fixed E-Class Skylight Quaker Bronze eMAX3 Glass
<b>Rough Opening</b>	22-1/2" X 22-1/2"	22-1/2" X 30-1/2"	22-1/2" X 38-1/2"	22-1/2" X 46-1/2"	30-1/2" X 30-1/2"	30-1/2" X 46-1/2"	46-1/2" X 46-1/2"
<b>Daylight Area</b>	21-1/8" X 21-1/8"	21-1/8" X 29-1/8"	21-1/8" X 37-8"	21-1/8" X 45-1/8"	29-1/8" X 29-1/8"	29-1/8" X 45-1/8"	45-1/8" X 45-1/8"
<b>Daylight Opening (square feet)</b>	3.09	4.27	5.45	6.61	5.89	9.12	14.14

\*NOTE: EV3046 Units – Specify 3046. First dimension is parallel to roof ridge.

Wasco's new eMAX3 is a new energy efficient glazing which meets the 2010 Energy Star program for all climate zones. The eMAX3 Triple Silver Coated Series is a high performance insulated glass with argon. Custom sizes are also available.

eMAX3, so named for its three layers of silver which limit solar heat gain and permit the maximum transmission of light, blocks 95% of ultraviolet rays and reduces window heat gain in the Wasco units by as much as 69% as compared to identical skylights constructed with two panes of clear glass.

eMAX3 is available in E-Class and Curb-Mount models.

# INTERIOR DOORS

## Stile & Rail



**6-Panel Oak**  
Unfinished



**6-Panel Popular**  
Unfinished



**Pine Full Louver**  
Unfinished

For a full list of in-stock door sizes and species see **page 41**.

## Flush



**Flush Hardboard**  
Primed Smooth



**Flush Birch**  
Unfinished



**Flush Oak**  
Unfinished



**Chesapeake Oak**  
Prefinished  
Embossed

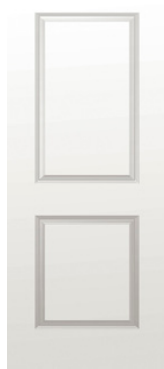


**Fruitwood Oak**  
Prefinished

## Moulded



**2-Panel Roman**  
Primed Smooth



**2-Panel Square Top**  
Primed Smooth



**Glenview**  
Primed 3-Panel



**6-Panel**  
PF White Textured  
Primed Smooth  
Primed Textured



**6-Panel**  
Amber Oak  
Embossed



**Cheyenne**  
Primed Smooth  
Plank

# INTERIOR DOORS

## Wood, Stile & Rail



**15 Lite Poplar**  
Unfinished  
2-0 doors are 10 Lite



**15 Lite V-Groove Poplar**  
Unfinished  
2-0 doors are 10 Lite



**15 Lite Oak**  
Unfinished  
2-0 doors are 10 Lite



**15 Lite V-Groove Oak**  
Unfinished  
2-0 doors are 10 Lite

# STORM DOORS



Andersen offers a full line of storm doors for your home. Choose from over 30 storm door styles featuring a vast selection of glass, ventilation, color and hardware options. Our innovative features make our storm doors easy-to-install, easy-to-use, secure and durable. Features vary by product.

Ask your Millard Lumber representative for details and availability.



All Gerkin storm doors have a full repair or replacement warranty for as long as you own your home, covering door main frame, kick panels and hinges. Hardware warranty is one year (latch set, locks, operating and sash panels and closure assembly). For detailed warranty information, visit [www.gerkin.com](http://www.gerkin.com).



**Vented Fullview 905**  
32" White - 905HWU2  
32" Bronze - 905HBU2  
32" Sandstone - 905HSU2  
36" White - 905HWU6  
36" Bronze - 905HBU6  
36" Sandstone - 905HSU6

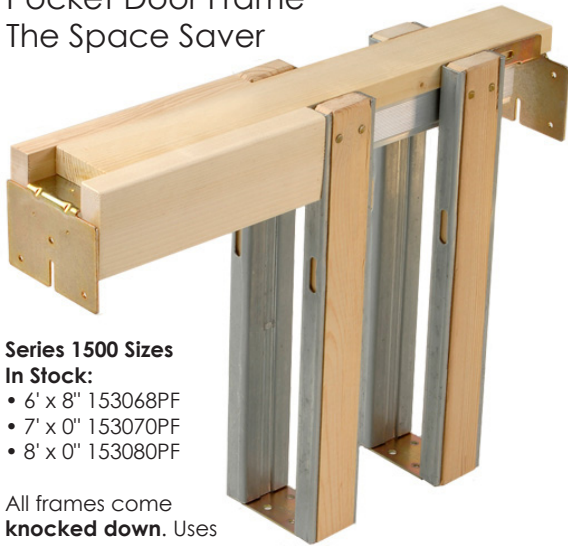


# POCKET DOOR FRAME



## Series 1500

Pocket Door Frame  
The Space Saver



### Series 1500 Sizes

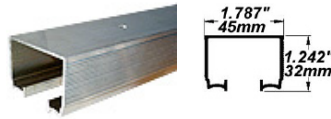
#### In Stock:

- 6' x 8" 153068PF
- 7' x 0" 153070PF
- 8' x 0" 153080PF

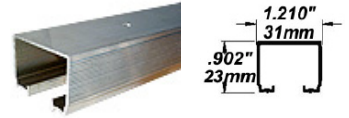
All frames come **knocked down**. Uses same Converging Kits as Series 2711 Frames.

1500HDWE - Replacement Hardware

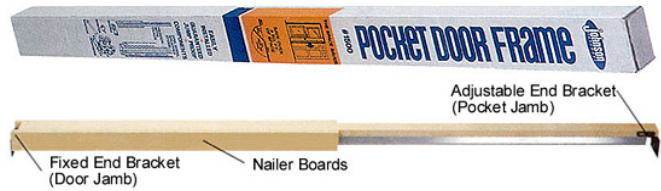
## Pocket Door Frame Parts & Accessories



No. 100 Track



No. 111 Track



## Series 2711

Pocket Door Frame  
(Assembled)



### Series 2711 Sizes

#### In Stock:

- 2' x 0" 272068PF
- 2' x 4" 272468PF
- 2' x 6" 272668PF
- 2' x 8" 272868PF
- 3' x 0" 273068PF

All frames come **assembled**. Uses same Converging Kits as Series 1500 Frames.

2700HDWE - Replacement Hardware



(2) - No. 1120 Tricycle Hangers  
(1" Diameter Wheels)  
1500HNGR



No. 1513 Door Stop



No. 1712 Adjustable Wrench



No. 1550 Door Guides



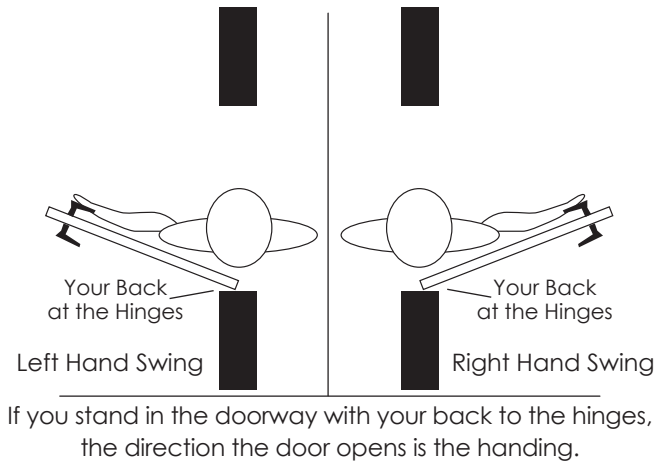
No. 1555 Converging Door Kit  
For joining 2 Pocket Door Frames  
202517



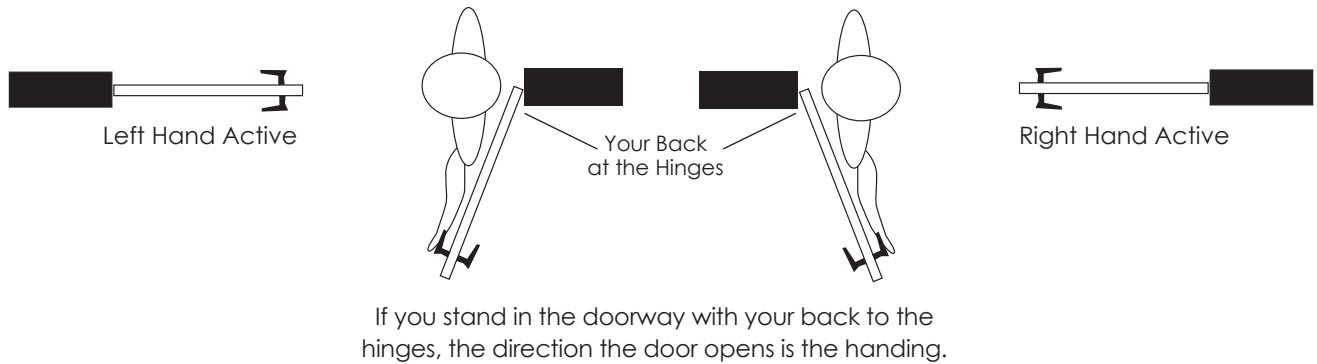
No. 1575 Adaptor Kit  
Use with 11" doors  
ADAPKIT

# INTERIOR DOOR HANDING

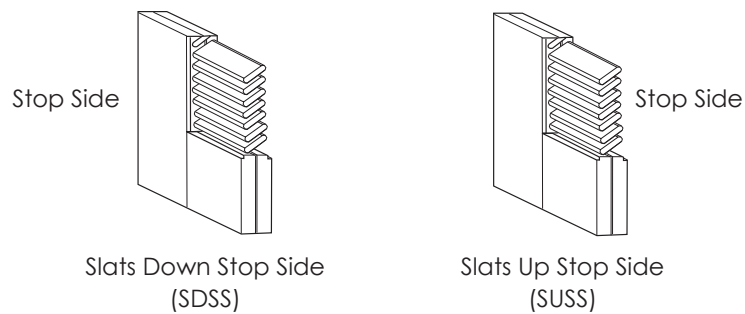
## Handing for Single Doors



## Handing for Double & French Doors with Astragal

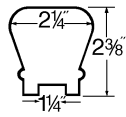
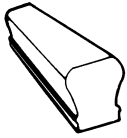


## Louvered Doors

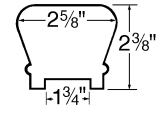
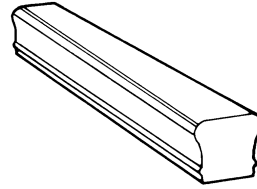


# STAIR PARTS: OAK

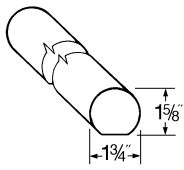
## Handrail & Shoe Rail



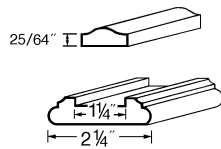
For use with 1 1/4" Balusters  
 2 1/4" Traditional Unplowed Handrail F60100  
 2 1/4" Traditional Plowed 1 1/4" Handrail F6010PO  
 2 1/4" Traditional Bending Handrail F6010BO



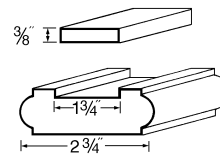
For use with 1 3/4" Balusters  
 2 5/8" Classic Unplowed Handrail F62100  
 2 5/8" Classic Plowed 1 3/4" Handrail F6210PO  
 2 5/8" Classic Bending Handrail F6210BO



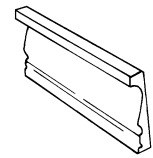
1 3/4" x 1 5/8"  
 Handrail for Wall  
 F60400



For use with 1 1/4" Balusters  
 Plowed 1 1/4" Shoe Rail  
 F60450  
 Fillet F60500



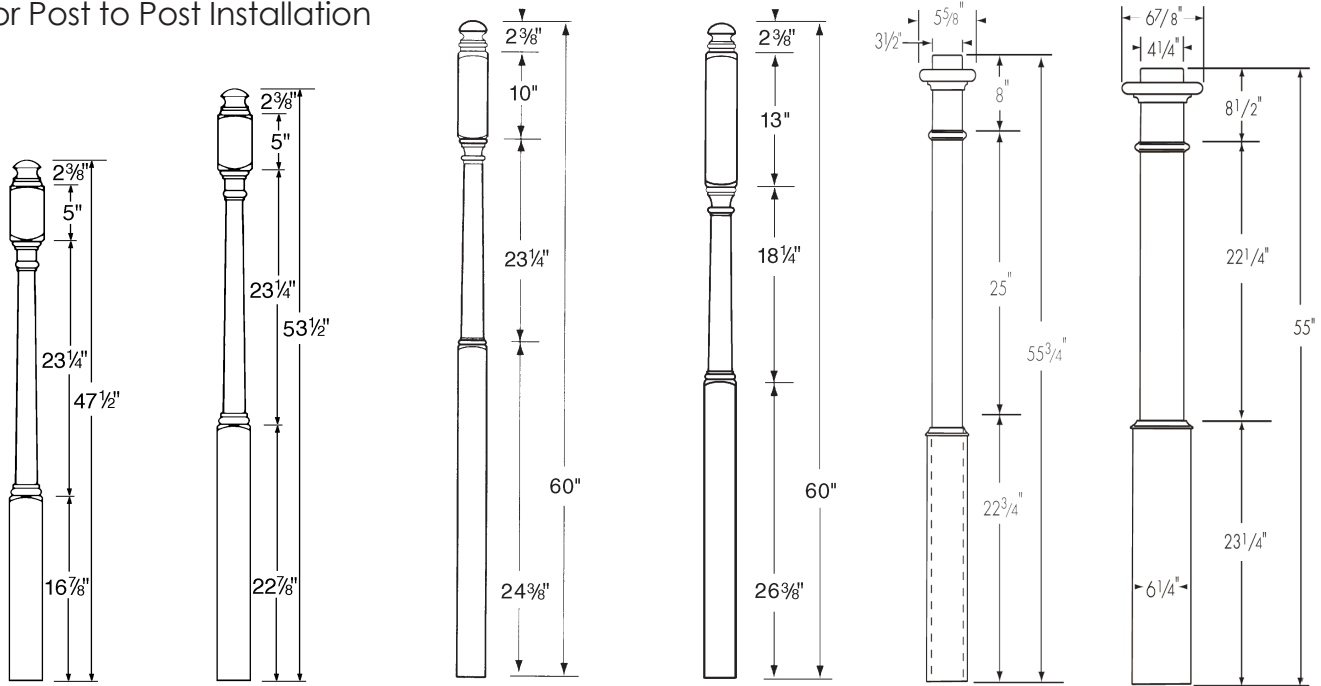
For use with 1 3/4" Balusters  
 Plowed 1 3/4" Shoe Rail  
 F60060  
 Fillet F60070



Bending Moulding  
 F60150

## Newel

For Post to Post Installation



Traditional Starting Newel  
 F40400

Traditional Starting Newel  
 F40450\*

Traditional Landing Newel  
 F40450  
 F4045BTO

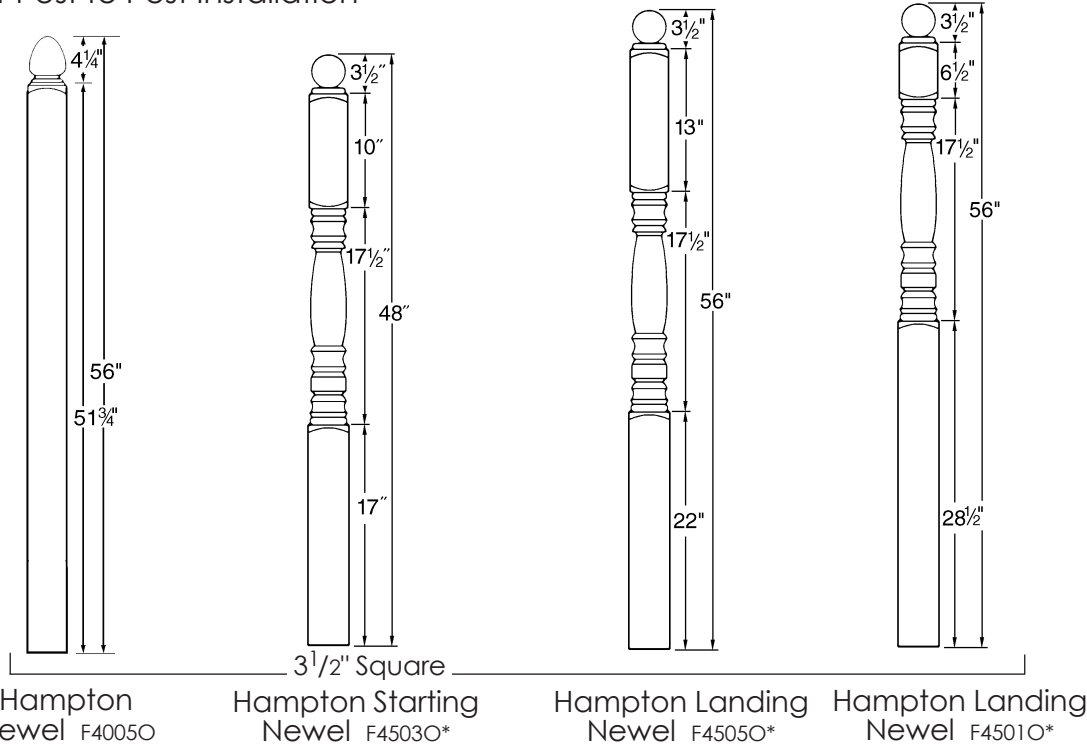
Traditional Landing Newel  
 F40460

Traditional Landing Newel  
 F40900

Traditional Landing Newel  
 F40910

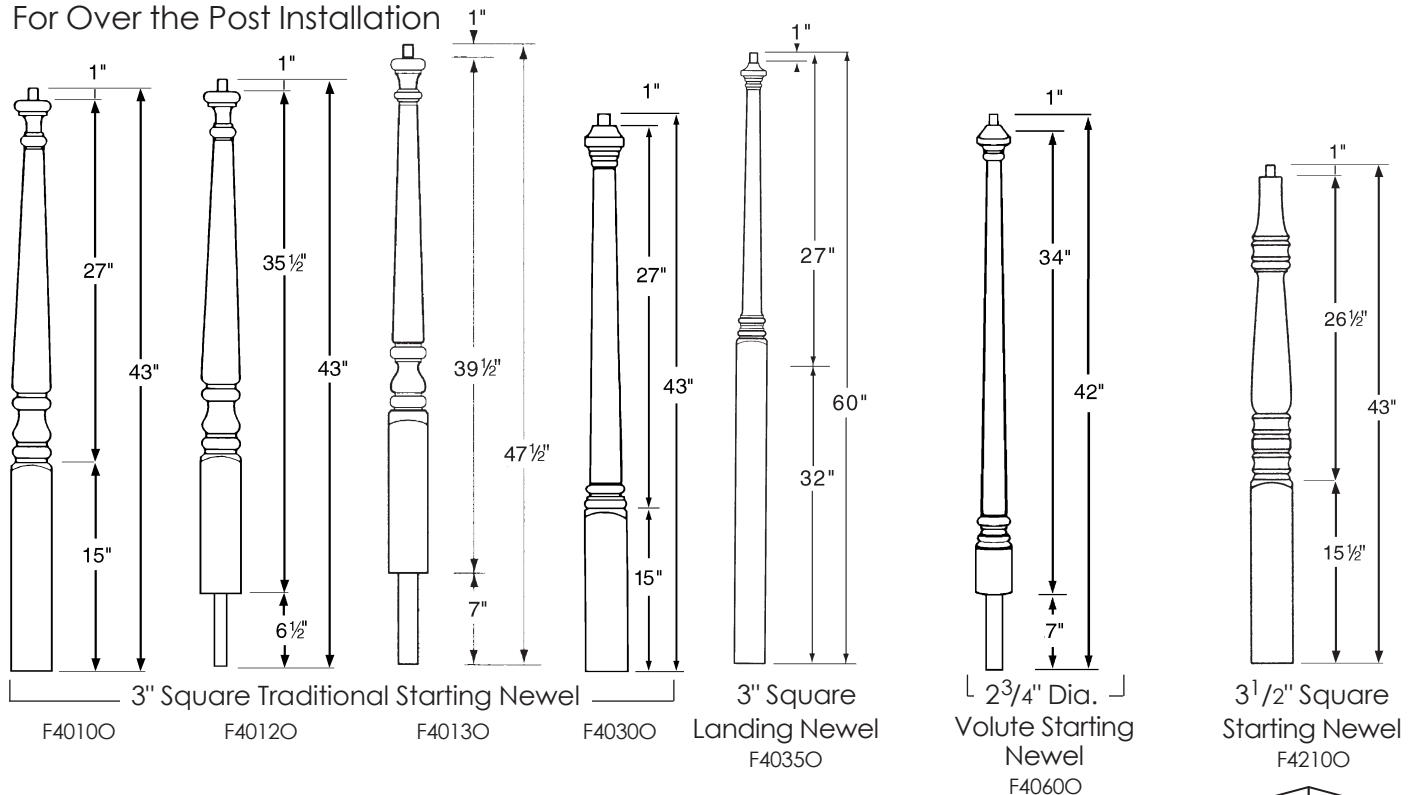
## Newel

For Post to Post Installation



## Newel

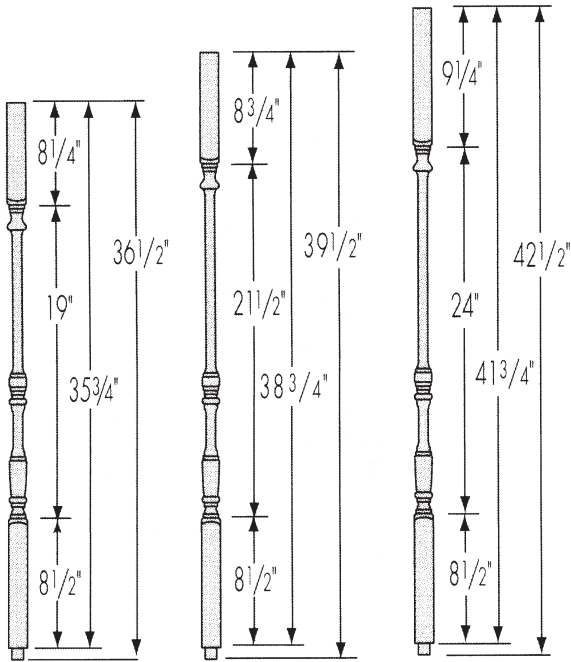
For Over the Post Installation



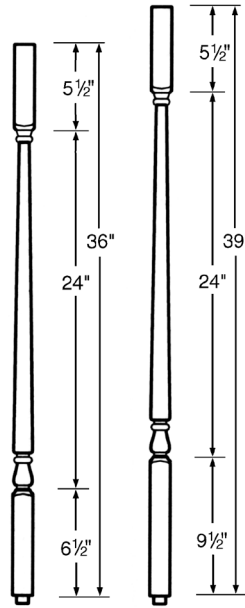
Illustrations may not be to scale. \*Newels can be split upon request.

# STAIR PARTS: OAK

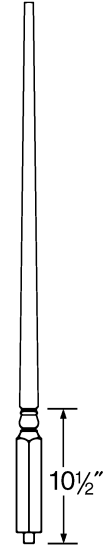
## Balusters



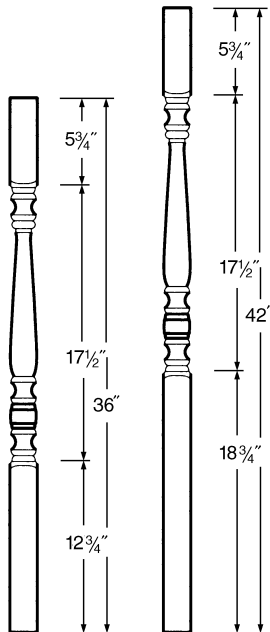
For use with 1 1/4" Unplowed Handrail  
36", 39", 42" Traditional Baluster 5067  
F506736O, F506739O, F506742O



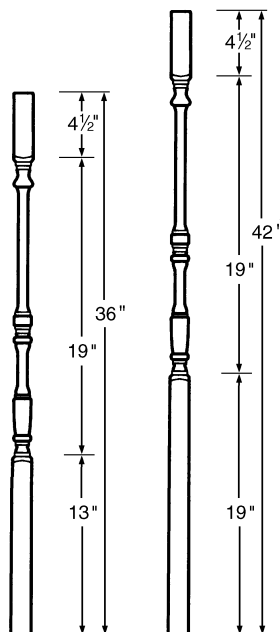
For use with 1 1/4" Plowed Handrail  
36", 39" Traditional Baluster 5070  
F5070O, F507039O



For use with 1 1/4"  
Unplowed Handrail  
31", 34", 36", 39", 42"  
Traditional Dowel Top  
Baluster 5015  
F5015O  
F501531O, F501534O,  
F501539O, F501542O



For use with 1 3/4"  
Plowed Handrail  
36", 42" Hampton  
Baluster 5005  
F5005O, F500542O



For use with  
1 1/4" Plowed Handrail  
36", 42" Traditional  
Baluster 5050  
F5050O, F505042O



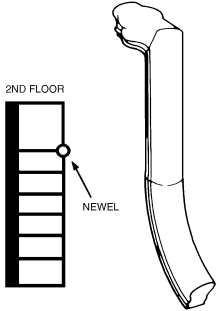
For use with  
1 1/4" and 1 3/4" Plowed Handrail  
36", 42" Traditional  
Baluster 5060 / 5360  
F506036O, F506042O  
F536036O, F536042O

# STAIR PARTS: OAK FITTINGS

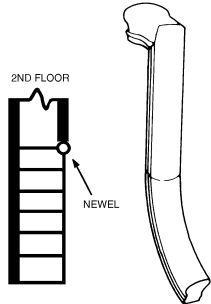
## Fittings

For Use with 6010 Traditional and 6210 Classic Handrail

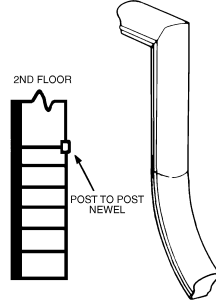
Match to appropriate Handrail – 2nd digit of Rail item number should match 2nd digit of Fitting: F-6010 to F-7010, F-6210 to F-7210



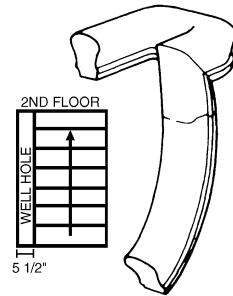
1 Riser Gooseneck  
w/Tandem Cap F70880  
2 Riser Gooseneck  
w/Tandem Cap F72890



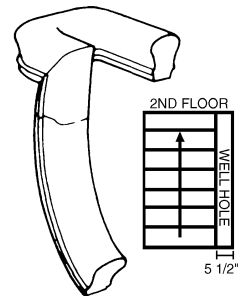
1 Riser Gooseneck  
w/Cap F70960  
2 Riser Gooseneck  
w/Cap F72970



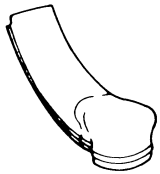
1 Riser Gooseneck  
No Cap F70980  
2 Riser Gooseneck  
No Cap F70990/F72990



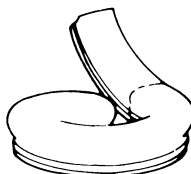
Left Hand 1 Riser  
Gooseneck Landing Return  
F70900/F72900  
5 1/2" Offset to Center of Rail



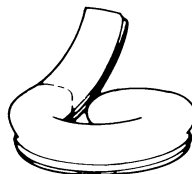
Right Hand 1 Riser  
Gooseneck Landing Return  
F70950/F72950  
5 1/2" Offset to Center of Rail



Starting Easing  
w/Cap  
F70100/F72100



4 7/8" O.C.  
Left Hand Volute  
F70300/F72300



4 7/8" O.C.  
Right Hand Volute  
F70350/F72350



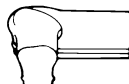
2 7/8" O.C.  
Left Hand  
Turnout F70410/F72410  
(Not Shown: 4 7/8" O.C.  
F70400/F72400)



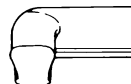
2 7/8" O.C.  
Right Hand  
Turnout F70460/F72460  
(Not Shown: 4 7/8" O.C.  
F70450/F72450)



Over Easing  
F70130/F72130



Quarterturn  
w/Cap  
F70210/F72210



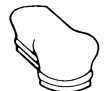
Level  
Quarterturn  
F70110/F72110



Tandem Cap  
F70200/F72200



Returned End  
F70090/F72090



Opening Cap  
F70190/F72190



Over Easing  
w/Returned  
End F70160



Starting Easing  
w/Returned End  
F70150/F72150

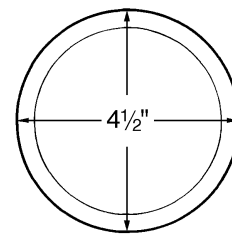


Up Easing  
F70120/  
F72120

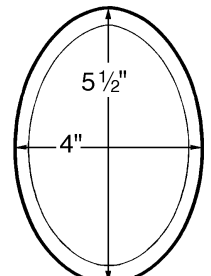


90° Up  
Easing  
F70140/  
F72140

## Rosettes



Oak Round Rosette  
F73170



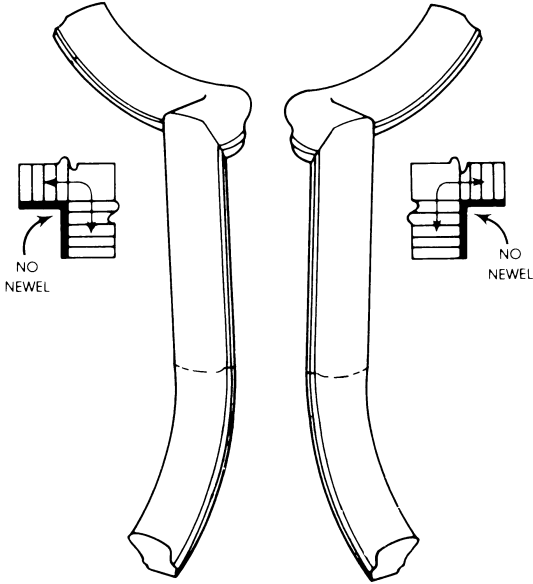
Oak Oval Rosette  
F73370

# STAIR PARTS: OAK FITTINGS

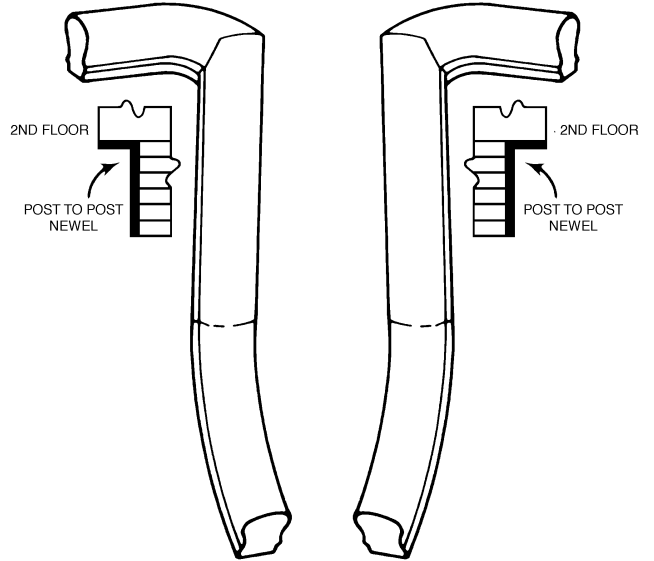
## Fittings

For Use with 6010 Traditional and 6210 Classic Handrail

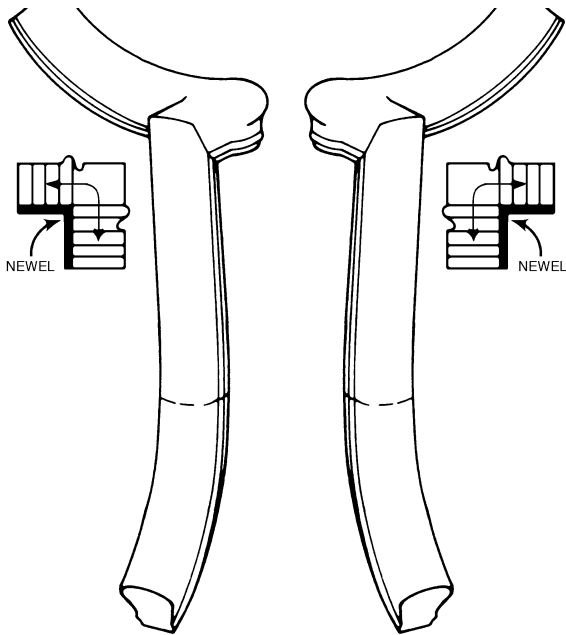
Match to appropriate Handrail – 2nd digit of Rail item number should match 2nd digit of Fitting: F-6010 to F-7010, F-6210 to F-7210



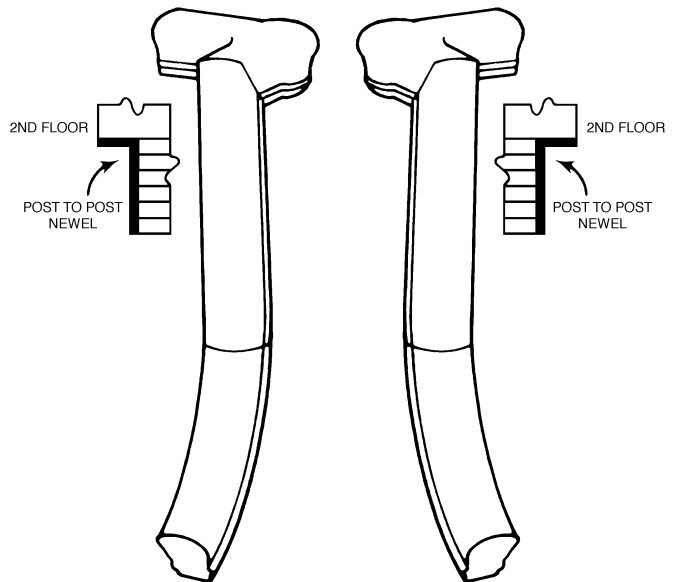
Left Hand 2 Riser Gooseneck No Cap F72500  
Right Hand 2 Riser Gooseneck No Cap F72550



Left Hand 1 Riser Gooseneck No Cap F70700  
Left Hand 2 Riser Gooseneck No Cap F72710  
Right Hand 1 Riser Gooseneck No Cap F70750  
Right Hand 2 Riser Gooseneck No Cap F72760



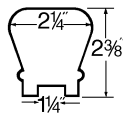
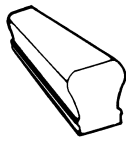
Left Hand 2 Riser Gooseneck w/Cap F70600/F72600  
Right Hand 2 Riser Gooseneck w/Cap F70650/F72650



Left Hand 1 Riser Gooseneck w/Cap F70800  
Left Hand 2 Riser Gooseneck w/Cap F72810  
Right Hand 1 Riser Gooseneck w/Cap F70850  
Right Hand 2 Riser Gooseneck w/Cap F72860

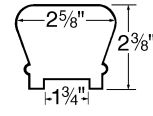
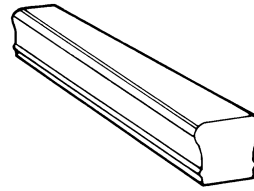
# STAIR PARTS: MAPLE

## Handrail & Shoe Rail



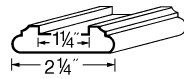
For use with 1 1/4" Balusters

- 2 1/4" Traditional Unplowed Handrail 6010 / F6010M
- 2 1/4" Traditional Plowed 1 1/4" Handrail 6010 / F6010PM
- 2 1/4" Traditional Bending Handrail 6010 / F6010MB

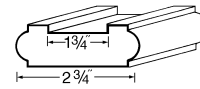
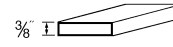


For use with 1 3/4" Balusters

- 2 5/8" Classic Unplowed Handrail 6210 / F6210M
- 2 5/8" Classic Plowed 1 3/4" Handrail 6210 / F6210PM



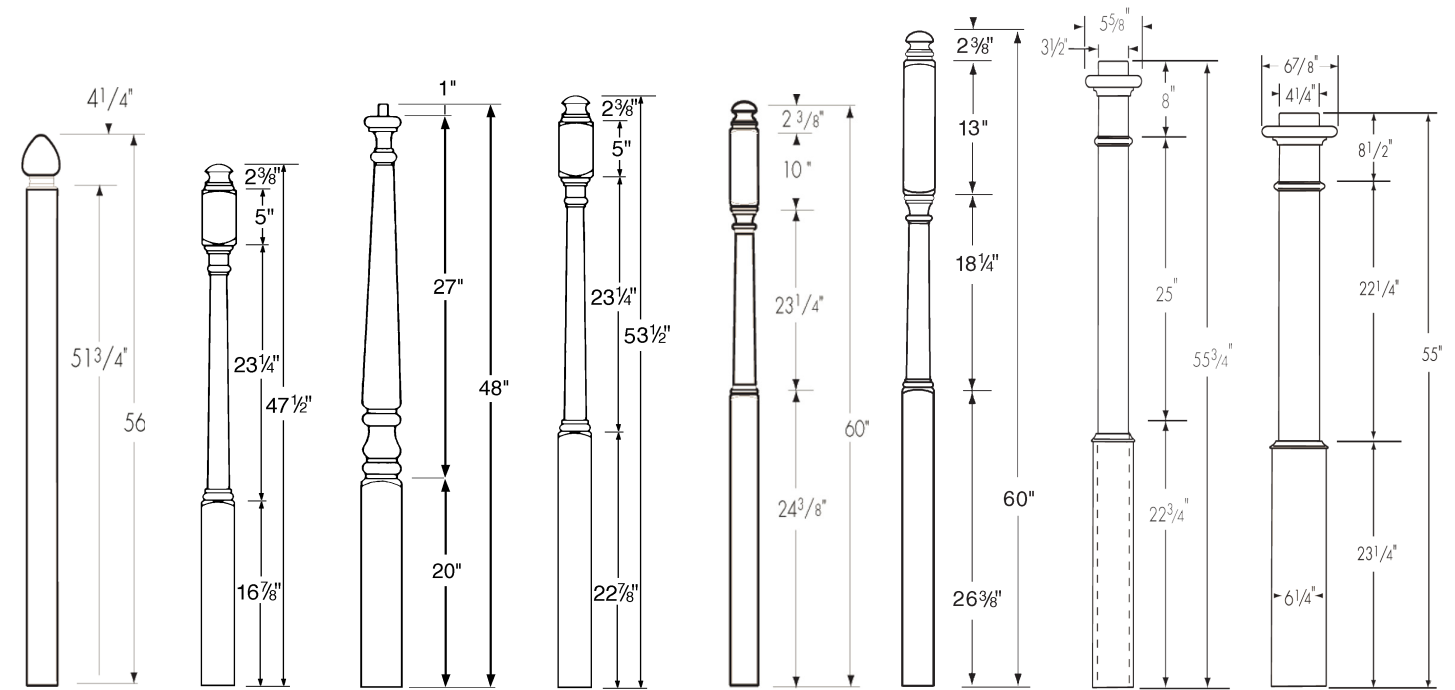
For use with 1 1/4" Balusters  
Plowed 1 1/4" Shoe Rail 6045 / F6045M  
Fillet 6050 / F6050M



For use with 1 3/4" Balusters  
Plowed 1 3/4" Shoe Rail 6006 / F6006M  
Fillet 6007 / F6007M

## Newel

For Post to Post Installation



- Traditional Starting Newel 4005 / F4005M
- Traditional Starting Newel 4040 / F4040M
- Traditional Starting Newel F401048M
- Traditional Starting Newel 4042 / F4042M
- Traditional Landing Newel 4045 / F4045M F4045BTM
- Traditional Landing Newel 4046 / F4046M
- Traditional Landing Newel 4090 / F4090M
- Traditional Landing Newel 4091 / F4091M

Illustrations may not be to scale. \*Half-Newels are available upon request.

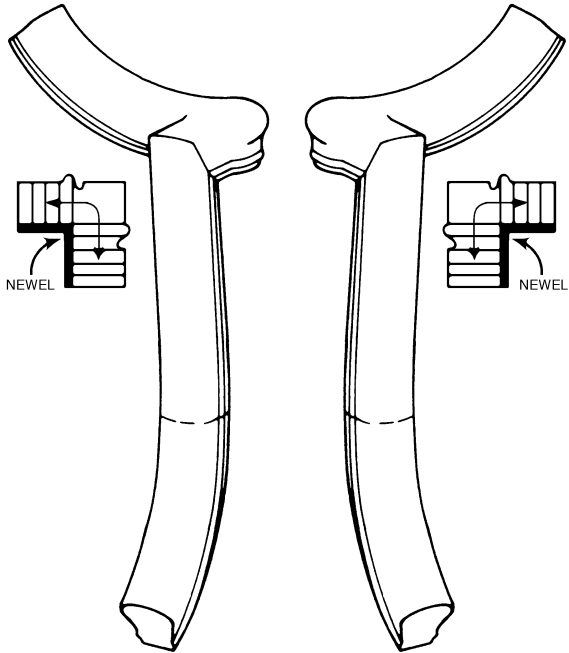


# STAIR PARTS: MAPLE

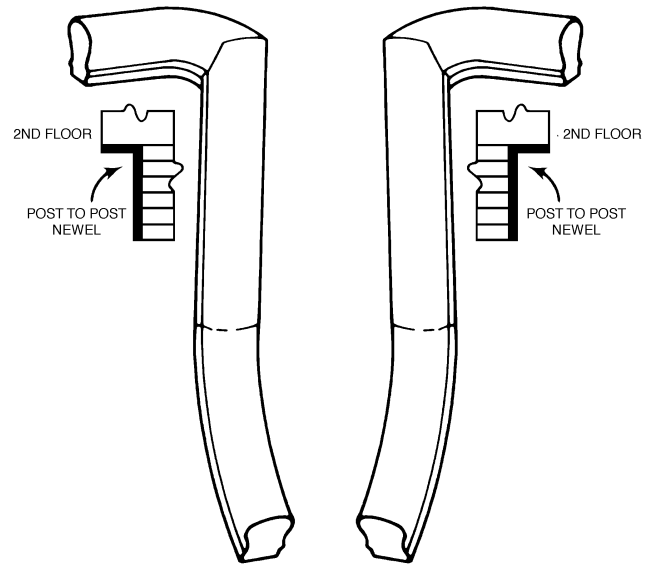
## Fittings

For Use with 6010 Traditional

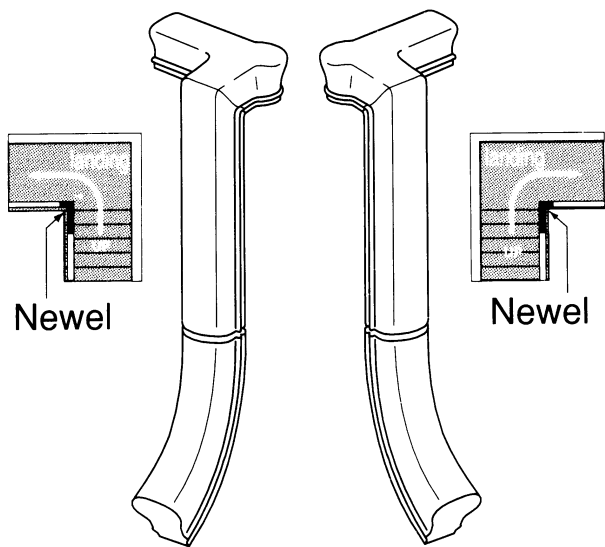
Match to appropriate Handrail – 2nd digit of Rail item number should match 2nd digit of Fitting: F-6010 to F-7010



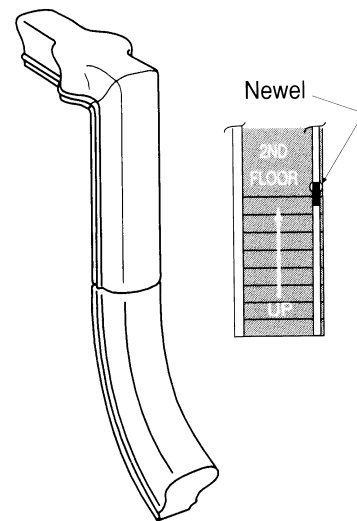
Left Hand 2 Riser Gooseneck w/Cap 7060 / F7060M  
Right Hand 2 Riser Gooseneck w/Cap 7065 / F7065M



Left Hand 2 Riser Gooseneck No Cap 7071 / F7071M  
Right Hand 2 Riser Gooseneck No Cap 7076 / F7076M



Left Hand 2 Riser Gooseneck w/Cap 7081 / F7081M  
Right Hand 2 Riser Gooseneck w/Cap 7086 / F7086M



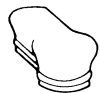
2 Riser Gooseneck w/Cap 7089 / F7089M

# STAIR PARTS: MAPLE

## Fittings

For Use with 6010 Traditional

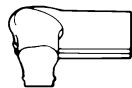
Match to appropriate Handrail – 2nd digit of Rail item number should match 2nd digit of Fitting: F-6010 to F-7010



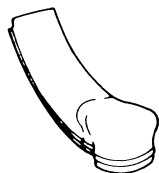
Opening Cap  
7019 / F7019M



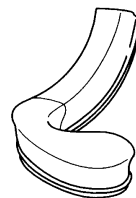
Tandem Cap  
7020 / F7020M



Quarterturn  
w/Cap  
7021 / F7021M /  
F702135M



Starting Easing  
w/Cap  
7010 / F7010M



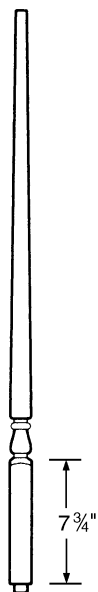
Right Hand  
Volute  
7045 / F7045M



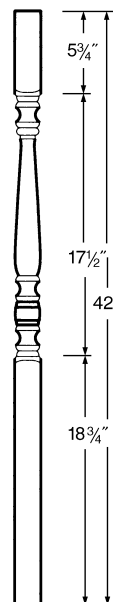
Left Hand  
Turnout  
7040 / F7040M

# STAIR PARTS: PRIMED

## Baluster



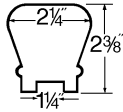
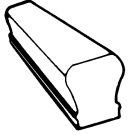
For use with Unplowed Rail  
31", 34", 36", 39", 41" Primed  
Traditional Dowel Top Baluster  
5015 / F501531PR / F501534PR / F501536PR /  
F501539PR / F501541PR



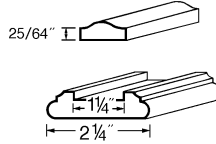
For use with 1 3/4" Plowed Rail  
42" Hampton Baluster  
5005 / F500542PR

# STAIR PARTS: POPLAR

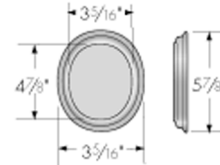
## Handrail & Shoe Rail



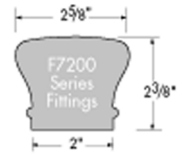
For use with 1 1/4" Balusters  
 2 1/4" Traditional Unplowed Handrail F6010P  
 2 1/4" Traditional Plowed 1 1/4" Handrail F6010PP



For use with 1 1/4" Balusters  
 Plowed 1 1/4" Shoe Rail F6045P  
 Fillet FS6050P



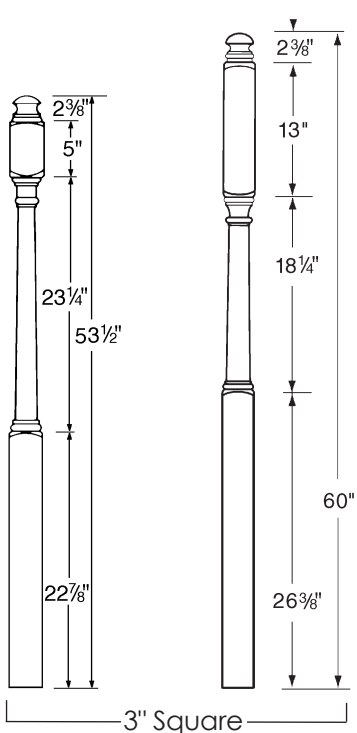
Rosette Oval  
 F7037P



Traditional  
 Unplowed  
 Handrail  
 F6210P

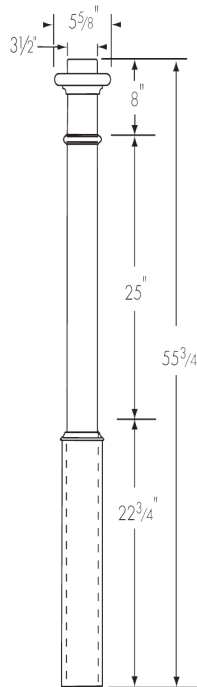
## Newel & Baluster

For Post to Post Installation



Traditional  
 Starting  
 Newel  
 F4042P\*

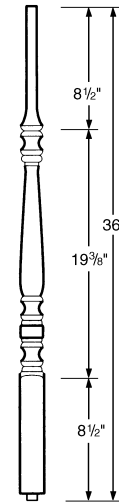
Traditional  
 Landing  
 Newel F4046P



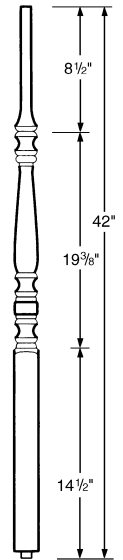
Traditional  
 Landing  
 Newel  
 4090 / F4090P



For use with 1 3/4"  
 Plowed Handrail  
 36", 42" Traditional  
 Baluster  
 F536036P, F536042P



For use with Unplowed Handrail  
 36", 42" Traditional Baluster  
 F561136P, F561142P



# STAIR PARTS: WROUGHT IRON



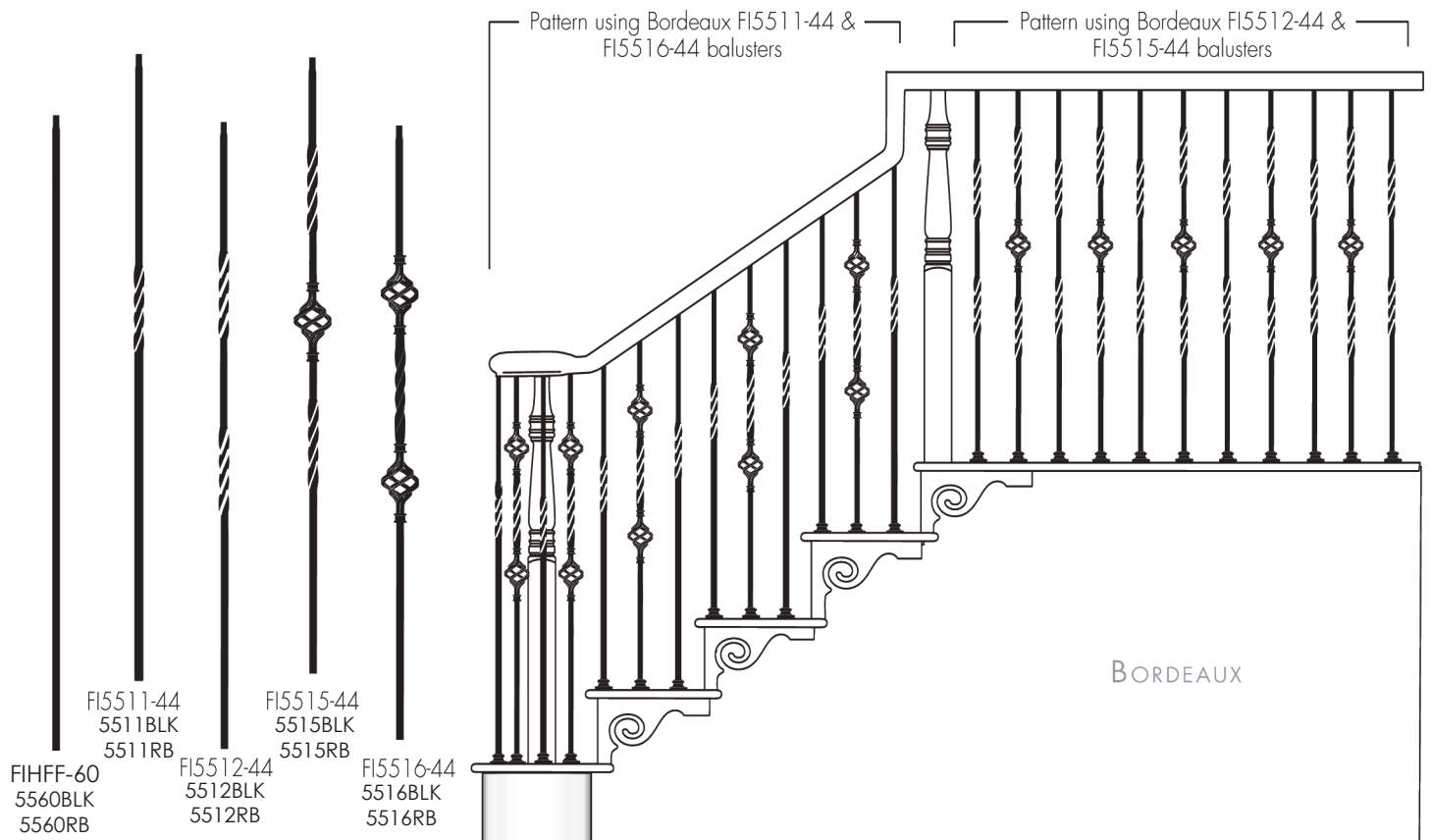
Manufacturers of Quality Stair Parts

Fitts introduces the next generation of wrought iron balusters with its Hollow Iron system. Many Hollow Iron balusters have been created "oversized" to aid in the cost of manufacturing, but have lost the delicate detail of the ornate twists and baskets. Fitts painstakingly worked to maintain the consistency of its Hollow products to its extensive solid iron baluster offering.

## Hollow Iron:

- Cost effective • Easier to cut and install • Easier to ship • Same elegant appearance as solid product

## Iron Balusters



## Shoes & Knuckles



FI3101 Shoe

3101BLK  
3101RB



FI3102 Pitch Shoe  
for Knee Wall Installation

3102BLK  
3102RB



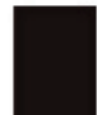
FI3104 Shoe  
w/screws  
Ironshoe



FI3103 Adjustable  
Knuckle

3103BLK  
3103RB

## Finishes



Black



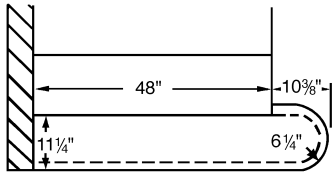
Oil Rubbed  
Bronze

Illustrations may not be to scale. Samples are available.

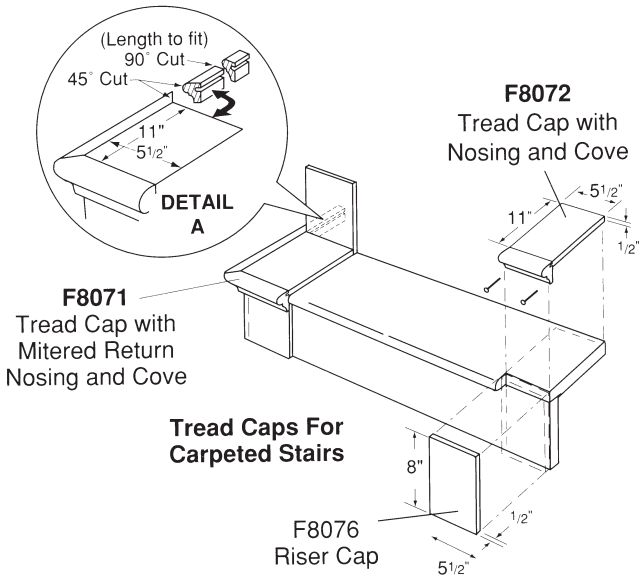
# STAIR PARTS: MISCELLANEOUS

Miscellaneous \_\_\_\_\_

Accessories Available \_\_\_\_\_



48" Oak Starting Step 8010 / F8010O



Oak Tread Cap w/Return 8071 / F8071OLH/ORH

Oak Tread Cap No Return 8072 / F8072O

Oak Riser Cap 8076 / F8076O

**Rail Plugs** F3000O/M

**Rail Bolt** F3001

**Rail Bracket**

**Risers**

**Skirting**

**Solid Oak Treads**

36" / 36OAKTR

42" / 42OAKTR

48" / 48OAKTR

96" / 96OAKTR

**False Tread Kit**

Maple – LJ8179M / LJ8279M

Oak – F8076O

**Newel Post Fastener**

Sur-tite / 101MO

Keylock / NEWELPK

**Newel Attaching Hardware**

Maple – 3" & 3-1/2" / NAHRM3 / NAHRM35

Oak – 3" & 3-1/2" / NAHRO3 / NAHRO35

Poplar – 3-1/2" / NAHPOP35

**Newel Mounting Plate**

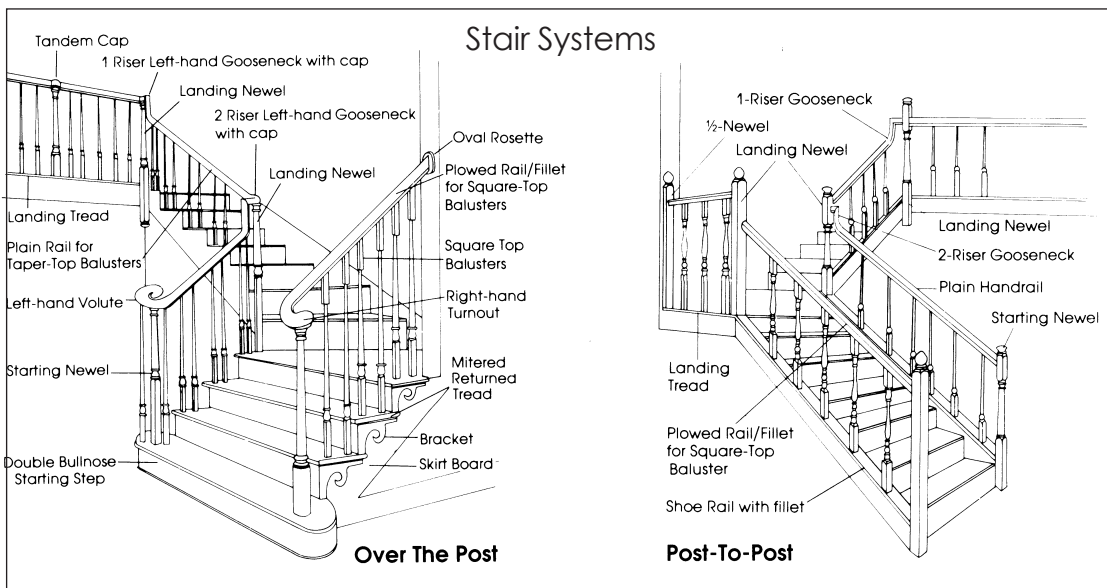
Maple / 3006NPFM

**Hardware & Tools**

Injector Gun / 3200IG

Fast Cure Epoxy / 3200EF

Injector Nozzle / 3200NZ



# BEHAVIOR OF WOOD PRODUCTS

Most complaints concerning hardwood products are related to changes in the moisture content of wood products. When moisture changes are severe, the result can be cracks, movement, cupping and/or buckling of the products. A combination of these results may be present.

The following moisture content map shows the average moisture contents in winter and summer by geographic areas. If wood products are installed in buildings along the Gulf Coast it can be expected to eventually acclimate between 11% and 13% moisture content. Wood products installed in the Western Rockies can be expected to eventually acclimate between 4% and 8% content. These moisture contents are based on the average seasonal conditions. Excessively dry or wet conditions can further influence the changing moisture content of wood products.

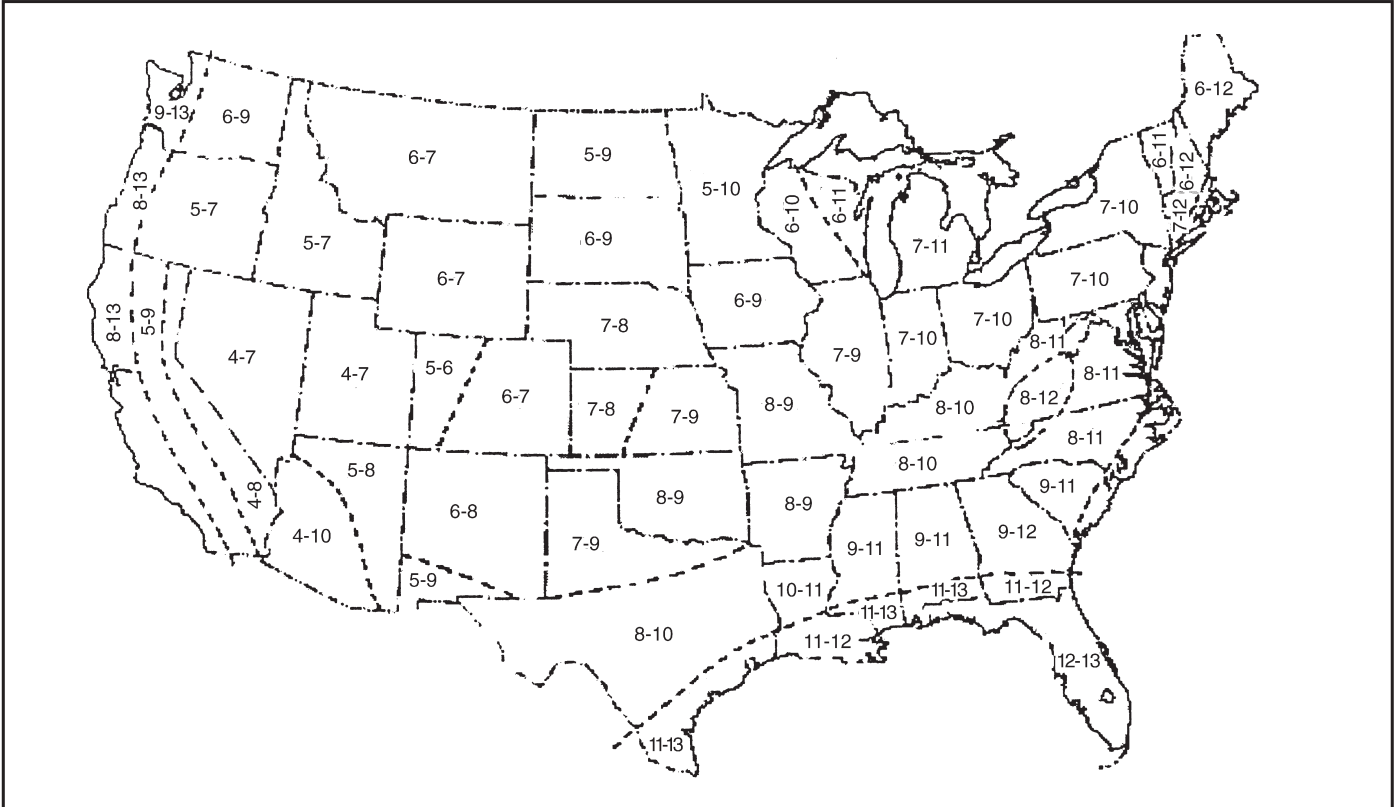
Interior environmental controls, which continually provide stable temperature and relative humidity, will also affect the final moisture content. Other influencing factors can be excessively wet or excessively dry materials and/or areas during distribution and at the job site. Our wood products are manufactured at 6-9% moisture content. If the job site conditions change this range, or the geographic area is expected to change this range, it is the responsibility of those who handle and use the product to provide for and be informed of the eventual changes, which can be expected. Generally, wood products are expected to shrink in dry climates and expand in the wetter climates.

Wood in service is usually exposed to both long-term (seasonal) and short-term (such as daily) changes in the relative humidity and temperature of the surrounding air. Thus, wood virtually always is undergoing at least slight changes in moisture content. These changes are gradual, and short-term fluctuations tend to influence only the wood surface. Moisture content changes may be retarded, but not prevented, by protective coatings, such as varnish, lacquer, or paint. The practical objective of all wood seasoning, handling and storing methods should be to minimize moisture content changes in wood in service. Favored procedures are those that bring the wood to a moisture content corresponding to the average atmospheric conditions to which it will be exposed.

## Affects of Relative Humidity

The most important factor in the preservation of wood products is the maintenance of proper environmental conditions. Many environmental factors such as temperature, relative humidity (RH), and light affect the permanence of wood.

Several considerations are involved in specifying RH for climate control. The first is the RH set point, the value that you are trying to maintain. The second is the allowable fluctuation, the short-term variation that will be allowed. Third is the seasonal drift that will be allowed, the amount by which the set point is allowed to vary over the year.



# BEHAVIOR OF WOOD PRODUCTS

## Large Changes in Relative Humidity Will Cause Damage

It has been known for a very long time that the extremes of RH cause damage. High RH results in swelling of wood products due to the absorption of moisture, while excursions to low RH can cause shrinkage due to the loss of moisture. Changes in RH were blamed for such environmentally induced damage as flaking paint, cracked wood, and glue failure. Reports of such damage increased as central heating became more widespread. Simple experiments in which some types of damage were duplicated by subjecting materials to large swings in RH showed that it was not just specific values of RH but changes in RH that could cause damage.

Anecdotal evidence indicated that damage could be prevented or minimized by maintaining a constant, moderate RH. The most famous example is that of the collections of the National Gallery, London. During World War II, the Gallery's

not capable of maintaining 50% or higher RH during very cold weather without condensation occurring in the building fabric.

Many materials such as wood, glue, and paint absorb and desorb water and consequently

change dimension as the relative humidity changes. If a material is unrestrained, this absorption and desorption is reversible within a reasonable range of relative humidity, and a material simply expands and contracts with changes in relative humidity. It is only when a material is restrained, either internally or externally, that this tendency to change dimension can cause stresses and resulting damage. If we lower the relative humidity, wood will try to shrink. If it is held by nails, etc. and prevented from shrinking, stresses develop. If these stresses are large enough, they result in permanent deformation or breakage.

Rapid RH change can also cause internal stresses in massive wood with no coating. These stresses can be large enough to destroy the internal structure of the wood. A sudden increase in RH will cause the surface layer of wood to try to expand. But it is restrained by the still dry inner core of the wood. This invisible stress will cause irreversible collapse of the cellular structure of the wood at the surface. When the wood eventually reaches equilibrium, the outer layer will be shorter, and in tension. This causes a bend in the wood product, even though the water content is now uniform throughout the thickness.

Large changes in the moisture content of the wood cause shrinking or swelling stresses that may seriously weaken both the wood and any joints and cause warping, twisting, and other undesirable effects.

Moisture conditions are particularly important, not only because of the effect of moisture in the glue itself, but because changes in moisture content affect the internal stresses developed on the glue joint.

Available evidence indicates that joints well designed and well made with any of the commonly used woodworking glues will retain their strength indefinitely, if the moisture content of the wood does not exceed approximately 15% and the temperature remains within the range of human comfort. Authorities seem to agree that from 40-50% relative humidity, with a temperature of 68°F to 70°F, is most desirable. Humidifying or dehumidifying equipment is required.

Glues have shown evidence of deterioration when exposed intermittently or continuously to temperatures much above 100°F.

<b>WOOD</b>	Is a hygroscopic material. When exposed to air it will dry or pick up moisture until it is in equilibrium with the humidity and temperature of the air.
<b>MOISTURE</b>	Absorption causes wood to swell.
<b>MOISTURE</b>	Loss causes wood to shrink.
<b>SHRINKAGE</b>	Begins at 25-30% moisture content, the fiber saturation point. Shrinkage continues to 0% moisture content, an oven dry state.
<b>SWELLING</b>	Occurs as wood gains moisture. Swelling occurs from 0% to 25-30% moisture content, the fiber saturation point.
<b>WOOD</b>	Does not shrink or swell equally in all directions.

collections were moved for safekeeping to mines in Wales. The climate in the caves was constant, although at too high an RH. The RH was adjusted by slightly heating the air to maintain between 55 and 60% RH, which earlier experiments had shown was the effective average in the then un-air conditioned Gallery. Within a matter of months, cracking, flaking and other such problems that had occurred in the Gallery essentially disappeared. The problems returned when the collections were returned to the Gallery after the war. This experience was a prime justification for installing climate control soon after.

Obviously, much of the benefit of maintaining a constant, moderate RH derives from the avoidance of damaging extremes of RH. Most older buildings, and surprisingly many new ones, are

# MILLWORK PRODUCT GUIDELINES

## MOULDINGS

### Handling:

1. Do not store in damp areas or freshly plastered buildings.
2. Store in a flat, level position in a dry, well ventilated building.
3. Cover to keep clean, but allow circulation. Relative humidity should not be less than 30 percent nor greater than 60 percent. Allow mouldings to acclimate to surroundings for 3-5 days with low heat or air on.
4. Moulding should not be subjected to extreme dryness, excessive heat, humid conditions or sudden changes therein. They should be conditioned to the average prevailing humidity before installing.
5. Reference pages 38 and 39 for more in depth care.

### Finishing:

1. Sand all mouldings with 100-120 grit sandpaper. Never use 180 or 220 on raw wood as in can result in polishing, burnishing or inconsistent stain appearance.
2. Caulk, fill and sand well.
3. Apply quality paints or stains.
4. Sand between coats as needed.
5. Always seal concealed or backing of moulding to eliminate the possibility of expansion caused by moisture absorption. Expansion and contraction is a natural characteristic of wood products and will not be deemed a defect.
6. To ensure uniform color when applying a dark stain, it is recommended that a wash coat be applied, followed by a light sanding. It is also good practice to apply stains with the mouldings in a horizontal position. This prevents the solvents from evaporating to quickly, which is a common source of streaks caused by stains setting up too quickly before cleaning can be completed.
7. Always consult the manufacturer of the finish to be used as to its specific application on the species of wood or material chosen. Various finishes react differently to various materials.
8. If staining poplar, two applications of stain may be needed for depth in color and to get good coverage.
9. Glazes, gold leaf, and antiquing are applied after the paint or stain has finish coats of sealer (lacquer, etc.).
10. Apply glaze, wipe to desired coverage and apply final coat of sealer to create sheen and depth.
11. Do a test sample before starting if multi-step finishes are involved.

### Installation:

1. Adequate blocking is needed to attach crowns to ceilings, or wide casings to walls.
2. During installation nail mouldings securely to studs.
3. Adhesives can be used where mouldings are lay on walls. Miters can receive a biscuit type joinery.
4. When installing door casings cut head casing first so that embossed pattern on side casing will miter into head casing.
5. When installing window casings follow door casings but install a window stool to add beauty and to avoid having to match four embossed mitered corners (matching four mitered corners is easy if embossing is delicate in nature).
6. When installing crowns, bases, chair rails, etc. –

First install any outside corners and work back into inside corners.

If a single moulding has two embossings, match the largest embossing first.

If a moulding has dentil embossing, match the dentil first and let the embossing match as well as possible.

## DOORS

### Handling:

1. Store product flat in a dry, well-ventilated and covered area if possible. If covering, maintain ventilation.
2. Do not walk on any door units at any time.
3. Avoid dragging doors across one another and keep doors clean.
4. Handle doors with clean hands or gloves. Avoid dirt and oil.
5. Doors should be conditioned to average prevailing relative humidity before hanging. Do not store in a building where cement or plaster has not dried.
6. If doors are stored on a job site, all ends and edges must be sealed with an effective quality oil-based sealer in order to prevent undue moisture absorption. Most solvent-based stains have some sealing qualities. However, this type of stain should not be relied upon for achieving adequate sealing.
7. Do not subject doors to abnormal extremes in temperature or humidity.
8. Never lean doors in an upright position as this may cause doors to bow.



# MILLWORK PRODUCT GUIDELINES

## DOORS CONTINUED

### **Finishing:**

Caution: We cannot evaluate all the possible paints and stains, nor the possible paints and stains, nor the customer's specific application requirements. Your paint dealer should know of suitable finish systems that give satisfactory results in your region. It is highly recommended that top quality finishes be selected, and the application instructions be followed explicitly.

1. Before applying the first coat of finish, sand the entire surface lightly with 5/0 sandpaper (180 grit). This is to remove fingerprints and handling marks.
2. Adjust or align components if necessary before finishing.
3. Clean doors thoroughly after sanding with a cloth to remove all dust or foreign material. However, avoid using abrasive or caustic cleaners.
4. Hang door before finishing, then remove to finish properly.
5. All surfaces of the door must be properly finished and sealed within 48 hours of delivery to the job site. The edges (top, bottom and sides) should be coated with each and every coat of finish that is applied to the exterior surface of the door. Doors must be dry before finishing. Note: Primer is not a sealer! Water based primers are highly discouraged. Use a fast drying lacquer-based sanding sealer.
6. On doors that are glazed with clear glass, the finish used should be flowed from the wood slightly onto the glass. This will provide assurance against water leakage and protect the glazing "putty" from drying out.
7. Follow all manufacturer's instructions for the species of the door you have chosen.
8. Never allow a door to become wet before it is sealed and finished.

### **Fitting and Hanging:**

1. Immediately after cutting and fitting (before hanging), seal all cut surfaces and ends of door with an effective quality sealer.
2. Allow adequate clearance for swelling of door or frame in damp weather. Jamb must be plumed.
3. Care should be taken in cutting panel doors down in width to avoid exposing engineered components. Use sharp fine toothed saw for trimming ends of doors.
4. For best performance, any exterior door should be installed under an overhang or with protection. If an overhang is not feasible, finishing the door in a light color will prevent excess heat build-up in the door.

### **Maintenance:**

Your door has been built to last for years to come. But, its finish will require some simple periodic maintenance to keep it looking great and provide proper protection against the elements. Below are some signs to watch for. They indicate that it's time for some simple, easy-to-perform maintenance:

1. Hairline cracks in the top coat of finish.
2. Changes in the color of the finish.
3. Changes in the texture of the finish, such as flaking or scaling.
4. Dullness or chalkiness in the finish.

If your entry receives a lot of sunlight from a southern or western exposure, you'll want to examine your doors finish often. Depending on the conditions, you may also need to maintain the door finish more frequently.

**NOTE:** the preceding guidelines are for general information purposes only. Manufacturer specifications and warranty information take precedence over these and need be reviewed before handling, finishing or installing your millwork product.

# DOOR CHART

The below chart shows the door sizes that Millard Lumber currently carries in stock. We can custom order special species and sizes at request. Please speak with your Millard Lumber sales associate for more details.

	1-4 X 6-8 1 3/8	1-6 X 6-8 1 3/8	1-8 X 6-8 1 3/8	2-0 X 6-8 1 3/8	2-4 X 6-8 1 3/8	2-6 X 6-8 1 3/8	2-8 X 6-8 1 3/8	3-0 X 6-8 1 3/8		2-0 X 6-8 SNGL-FOLD	2-6 X 6-8 SNGL-FOLD	3-0 X 6-8 SNGL-FOLD	4-0 X 6-8 BI-FOLD	5-0 X 6-8 BI-FOLD	6-0 X 6-8 BI-FOLD	1-6 X 6-8 1 3/8 SC	2-0 X 6-8 1 3/8 SC	2-4 X 6-8 1 3/8 SC	2-6 X 6-8 1 3/8 SC	2-8 X 6-8 1 3/8 SC	3-0 X 6-8 1 3/8 SC	2-6 X 6-8 1 3/4 SC	2-8 X 6-8 1 3/4 SC	3-0 X 6-8 1 3/4 SC	2-8 X 6-7 1/4 1 3/4 SC	3-0 X 6-7 1/4 1 3/4 SC	2-8 X 7-0 1 3/4 SC	3-0 X 7-0 1 3/4 SC	3-0 X 6-8 B LABEL	3-0 X 7-0 B LABEL	
OAK FLUSH	X	X	X	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X		
BIRCH FLUSH		X	X	X	X	X	X	X		X	X	X	X	X	X		X		X	X	X	X	X	X	X			X	X	X	X
FRUITWOOD OAK FLUSH	X	X		X	X	X	X	X					X	X	X																
TEXTURED COLONIST SMOOTH COLONIST	X	X	X	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X	X	X		X	X						
2PNL SQUARE TOP		X	X	X	X	X	X	X		X	X	X	X	X	X									X	X						
2PNL ROMAN ARCH TOP		X	X	X	X	X	X	X		X	X	X	X	X	X									X	X						
GLENVIEW 3PNL		X	X	X	X	X	X	X		X	X	X	X	X	X									X	X						
CHEYENNE		X		X	X	X	X	X		X	X	X	X	X	X									X	X						
PRMD HDBRD SMOOTH	X	X		X	X	X	X	X					X	X	X									X	X				X		
CHESAPEAKE OAK FLUSH		X		X	X	X	X	X		X	X	X	X	X	X									X	X						
AMBER OAK 6PNL	X	X	X	X	X	X	X	X					X	X	X									X	X						

	1-4 X 6-8 1 3/8	1-6 X 6-8 1 3/8	1-8 X 6-8 1 3/8	2-0 X 6-8 1 3/8	2-4 X 6-8 1 3/8	2-6 X 6-8 1 3/8	2-8 X 6-8 1 3/8	3-0 X 6-8 1 3/8	2-0 X 6-7 1 3/8 HC	2-6 X 6-7 1 3/8 HC	2-0 X 6-8 SNGL-FOLD	2-6 X 6-8 SNGL-FOLD	3-0 X 6-8 SNGL-FOLD	4-0 X 6-8 BI-FOLD	5-0 X 6-8 BI-FOLD	6-0 X 6-8 BI-FOLD	1-6 X 6-8 1 3/8 SC	2-0 X 6-8 1 3/8 SC	2-4 X 6-8 1 3/8 SC	2-6 X 6-8 1 3/8 SC	2-8 X 6-8 1 3/8 SC	3-0 X 6-8 1 3/8 SC	2-6 X 6-8 1 3/4 SC	2-8 X 6-8 1 3/4 SC	3-0 X 6-8 1 3/4 SC	2-8 X 6-7 1/4 1 3/4 SC	3-0 X 6-7 1/4 1 3/4 SC	2-8 X 7-0 1 3/4 SC	3-0 X 7-0 1 3/4 SC	3-0 X 6-8 B LABEL	3-0 X 7-0 B LABEL
OAK 6 PANEL	X	X		X	X	X	X	X			X	X	X											X	X						
OAK VISIONARY				X		X		X																							
OAK 15 LITE						X		X																							
OAK 10 LITE				X																											
POPLAR 6 PANEL		X		X	X	X	X	X			X	X	X																		
POPLAR VISIONARY				X		X		X																							
POPLAR 15 LITE						X		X																							
POPLAR 10 LITE				X																											
PINE FULL LOUVER		X	X	X	X	X	X	X			X	X	X	X	X	X															

# MILLARD LUMBER Inc.

## POLICIES

### SPECIAL & MANUFACTURED ORDERS

All orders of a special nature or manufactured items\* may not be cancelled after acceptance by customer verbally or in writing. Millard Lumber reserves the right to require advance payment on all such orders. Special ordered items and special manufactured items\* are not returnable.

\*Manufactured items include, but are not limited to: pre-hung interior & exterior doors, windows, doors machined to match customer specs and any other items produced in Millard Lumber shops.

### RETURNS

No material will be accepted for return unless authorized by Millard Lumber. All returned material is subject to handling, reconditioning and restocking charges as assessed by Millard Lumber.

Moulding are sold in random lengths, unless otherwise noted. We will make every effort to accomodate any specified lengths you may need, but we cannot guarantee them. An extra charge may apply for specified lengths.

## CUSTOM MOULDINGS CATALOG

We are pleased to offer custom wood moulding profiles in a separate catalog. The ability to provide our customers with custom and special wood mouldings rounds out and complements our standard trims. Literally hundreds of profiles machined from numerous species await your challenge. Let us provide the custom mouldings that will personalize your next building project and create your "signature look".

If you would like a Custom Mouldings catalog, please contact your Millard Lumber sales associate.

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MILLARD LUMBER IS PROUD TO BE A MEMBER OF THESE ASSOCIATIONS:





## LOCATIONS

### DES MOINES

3321 109th Street  
Urbandale, IA 50322  
Phone: (515) 276-6337

### KANSAS CITY

701 N. Lincoln Street  
Spring Hill, KS 66083  
Phone: (913) 592-0001

### OMAHA

12900 I Street  
Omaha, NE 68137  
Phone: (402) 896-2800

### LINCOLN AREA

11200 N. 148th Street  
Waverly, NE 68462  
Phone: (402) 786-3030