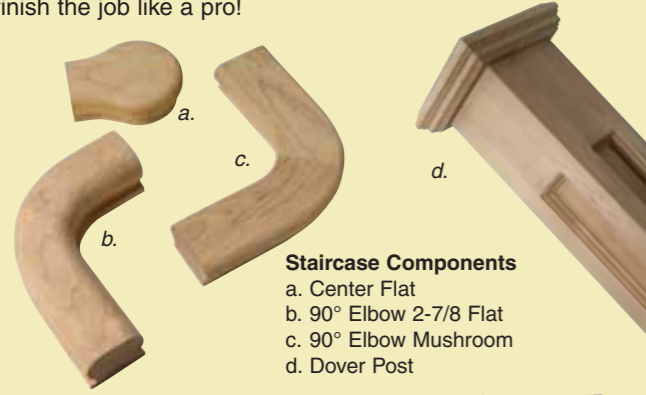


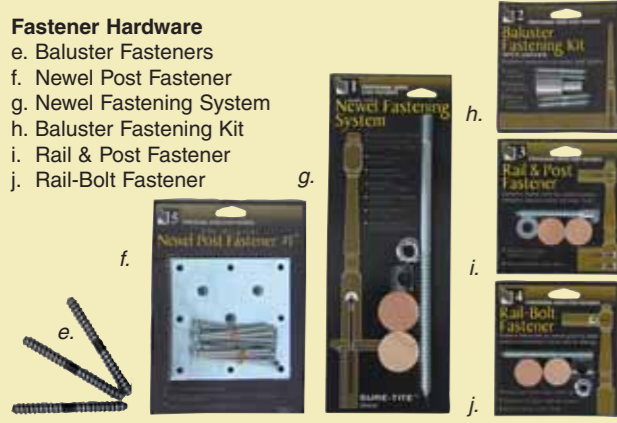
## Details Make the Difference

At Windsor we stock or can get everything you'll need to finish the job like a pro!



**Staircase Components**  
 a. Center Flat  
 b. 90° Elbow 2-7/8 Flat  
 c. 90° Elbow Mushroom  
 d. Dover Post

**Fastener Hardware**  
 e. Baluster Fasteners  
 f. Newel Post Fastener  
 g. Newel Fastening System  
 h. Baluster Fastening Kit  
 i. Rail & Post Fastener  
 j. Rail-Bolt Fastener



Actual spindle lengths and spaces will be determined by your local Code Authority. Always check your codes before beginning a project.

## Windsor Plywood

# Windsor Plywood's SPINDLES & STAIR PARTS



## Wood Spindles & Newels

At Windsor we carry a complete selection of spindles, posts and rails. It's not that difficult to build a staircase with some good help... and at Windsor we want to be that help.



## Looking for Something Different?

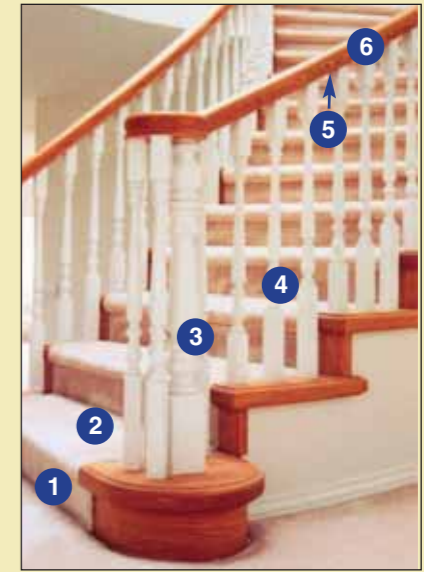
These decorative metal spindles combine steadfast strength, beauty, and durability. With a 100% galvanized system and premium exterior powder coat finish, these products will eliminate virtually all maintenance concerns. Available in black or pewter finish.



Mix and match styles to get the look you're after



## Wood Stair Components



1. Riser
2. Tread
3. Newel Post
4. Spindles
5. Fillet (Under handrail)
6. Handrail

## Metal Stair Components



1. Riser
2. Tread
3. Box Post
4. Metal Spindle Square style
5. Metal Spindle Single basket
6. Handrail



www.windsorplywood.com

THERE'S NO END TO THE POSSIBILITIES

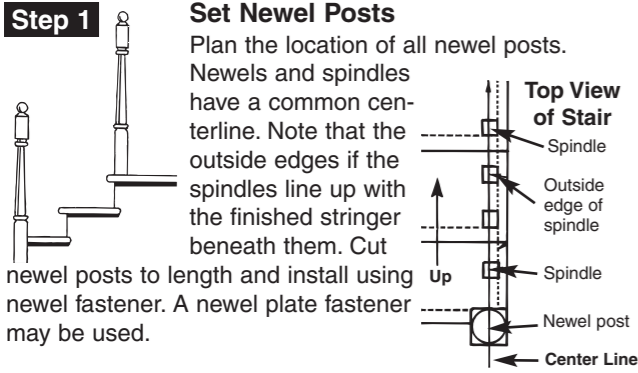
Windsor... the *experts* you need to know!

# Spindles & Stair Fasteners Made Easy

## Step 1

### Set Newel Posts

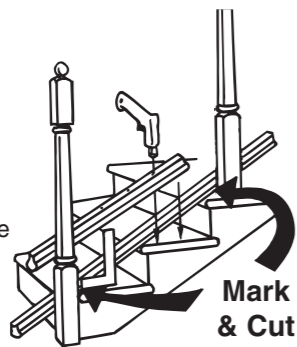
Plan the location of all newel posts. Newels and spindles have a common centerline. Note that the outside edges of the spindles line up with the finished stringer beneath them. Cut newel posts to length and install using newel fastener. A newel plate fastener may be used.



## Step 2

### Measure, Cut and Attach Rails

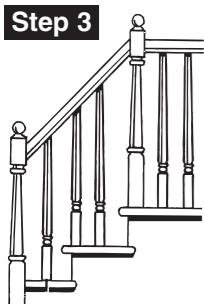
Cut and dry fit rails. To make horizontal rail connections, use rail and post fastener.



## Step 3

### Cut and Attach Spindles

Cut spindle to length. Allow ample length for spindles to fit into bottom of handrail. For strongest results, use spindle fastening kit and spindle fasteners. As an option, use shoe rail or existing dowel bottoms. Toe nail top of spindles into underside of rail. Finish installation by cutting fillet to size, if used, attach with glue.

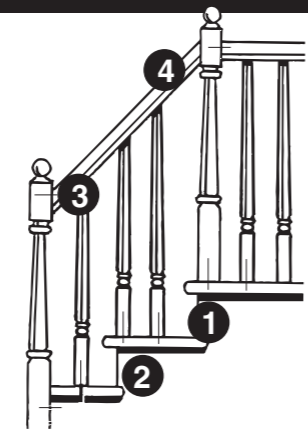
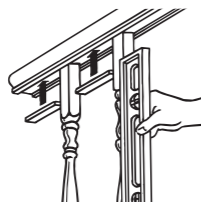


### How to Attach to Plowed Rails

**Precutting Fillets...** Determine the correct spacing needed and trim fillets. Only one end of the fillets needs to be cut to match the stair rake.

### Attaching Spindles...

Use wood glue and finishing nails toe nailed in at angles from either side in the plowed area. Use fillets as spacers and nail cover-ups.



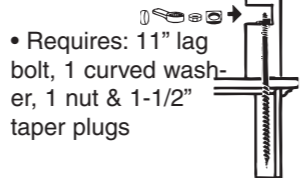
## Wooden Stair fastener

The use of professional stair fastener system will eliminate most of the problems associated with putting up a railing. These components will provide the security and strength you've been looking for, while at the same time are hidden from sight which preserves the aesthetics of the railing system.

### 1 Newel Fastening System

The most secure method for mounting newel posts to the finished floor

- Uses floor joists for support
- Needs no mortising or coping



### 4 Rail-Bolt Fastener

Fastens hand rails to posts and fittings to rails. Requires: lag, curved washer, flanged nut and tapered plugs.



### 6 Light Wall Rail Bracket

Requires: Bracket and screws



### 2 Spindles Fastening Kit

Fastens spindles to stairs and floors. Requires: 1 Driver, and 4 spindles fastener

### Spindle fastener

1 per spindle



### 3 Rail and Post Fastener

Fastens hand rails to posts & posts to stairs. Requires: 1 Lag bolt, 1 washer tapered plugs.



### 5 Newel Plate Fastener

Use under carpet, over concrete, over finished floors. Requires: heavy 3/16" plate & 13 mounting screws

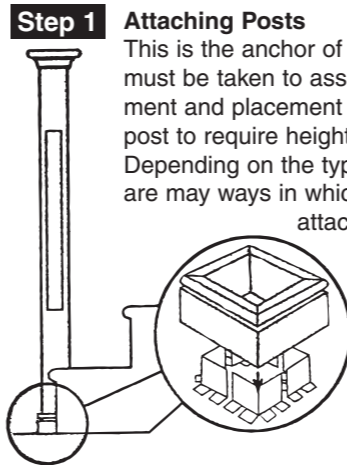


# Metal Spindles

## Step 1

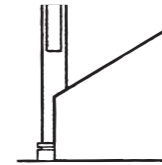
### Attaching Posts

This is the anchor of your stairway and care must be taken to assure proper secure attachment and placement of all newels. Trim newel post to require height (as per building code). Depending on the type of construction there are many ways in which newel posts may be attached.



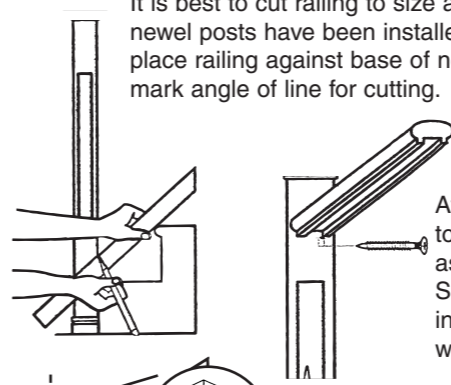
A simple method with open tread is to utilize our unique newel attaching hardware. Attaching hardware can be used where newels are free standing or attached against stairs.

Newel posts can also be notched and secured to bottom riser or foot of half wall. Half newel posts or rosettes should be used against a wall.

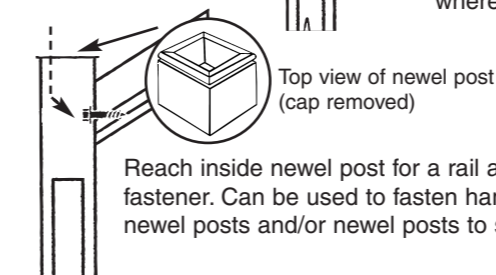


## Step 2 Attaching Railing

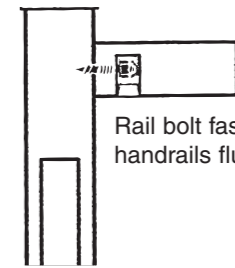
It is best to cut railing to size and angle after newel posts have been installed. Simply place railing against base of newel post and mark angle of line for cutting.



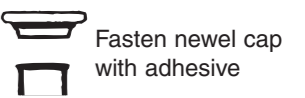
Attach handrail to newel posts as shown. Similarly cut and install bottom rail where required.



Reach inside newel post for a rail and post fastener. Can be used to fasten handrails to newel posts and/or newel posts to stair risers.

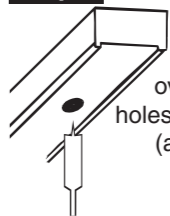


Rail bolt fasteners are best used to fasten handrails flush to newel post.

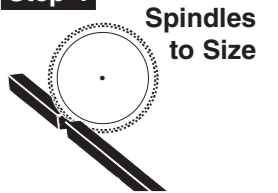


## Step 3 Drill Holes

Drill slightly oversize round holes into handrail (approx. 1-1/4" into wood)

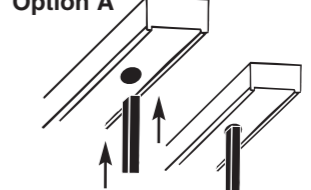


## Step 4 Cut Metal Spindles to Size



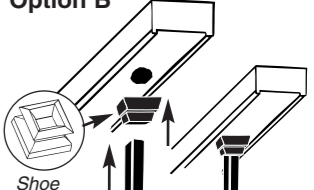
## Step 5 Inserting Metal Spindle

### Option A



Insert metal spindle into round hole.

### Option B



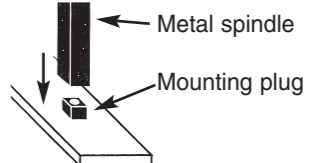
Slid metal spindle through the shoe and insert into round hole. Secure shoe to metal spindle with set screw.

## Step 6 Secure spindle to top rail

Use clear silicone or epoxy to secure spindle into wood.

## Step 7 Secure bottom rail

### Option A



### Option B

