

# INTERIOR RAILING MADE SIMPLE

(see over)

## HOW TO CALCULATE THE NUMBER OF COMPONENTS YOU WILL NEED:

### RAILS

For stairways you need approximately 13" of rail per step. For *horizontal* sections measure distance and allow extra for cutting.

### NEWEL POST

Count one newel to start each section. A half newel should be installed where railing meets the wall.

Count one newel for each change in direction. (A newel is required when a stairway section joins a horizontal section.)

A newel should support each 8' level span of spindles.

### SPINDLES

For an open stairways, where no bottom rail is used, count two spindles per step, except for the first step which usually needs one.

When using a shoerail (or bottom rail) count 2.2 spindles per foot.

eg. 8 ft. x 2.2 = 17.6 (18 spindles)

For floating or cap wall stairway and for horizontal sections, use local building code regulations to determine spacing of spindles.

### STAIR HARDWARE

Newel Post Fasteners - one per newel post

Rail Fasteners - one for each rail end to newel post contact

Baluster Fasteners - one per spindle (20 per bag)

### RAILS

13" x \_\_\_\_ no. of steps = \_\_\_\_ total inches  
Divide total inches by 12 to get total rail feet required.

TOTAL HANDRAILS	TOTAL SHOERAILS (if required)

### NEWEL POSTS

1 newel post x \_\_\_\_ no. of new sections = \_\_\_\_\_

No. of half newel posts \_\_\_\_\_

or

1 newel post x \_\_\_\_ no. of direction changes = \_\_\_\_\_

TOTAL NEWELS	TOTAL HALF NEWELS

### SPINDLES

2 spindles x \_\_\_\_ no. of steps = \_\_\_\_\_

or

2.2 spindles x \_\_\_\_ feet = \_\_\_\_\_

TOTAL SPINDLES

### HARDWARE

1 Newel Post Fastener x \_\_\_\_ no. of newel posts = \_\_\_\_\_

2 Rail Fasteners x \_\_\_\_ no. of rails to be used = \_\_\_\_\_

1 Baluster Fastener x \_\_\_\_ no. of balusters = \_\_\_\_\_

# INTERIOR RAILING INSTALLATION INSTRUCTIONS

As easy as 1, 2, 3...

## BEFORE YOU BEGIN:

It is a good idea to check with the office of the local building inspector as local building codes and by-laws may apply. The vertical height from floor to top railing and the space between spindles are frequently stipulated.

## STAIRS

### 1. Attaching newel posts

Newel posts can be attached in many ways. The most reliable method will depend on the construction of your stairway.

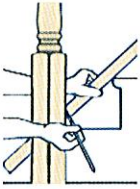


Use the *Newel Plate Fastener (#501)* when it can be covered by carpeting or other flooring material. Use care to ensure a solid footing is found when attaching the newel plate fastener. The newel plate fastener can quickly be secured to the bottom of the newel post and then mounted to the floor.

An alternate fastening method is to use the *Sure-Tite Newel Fastening System (#101)*, which installs in as little as 10 minutes.

### 2. Attaching the rails

The length of the railings must be accurately measured and then cut at the proper angle to ensure a flush fit between the newel posts. To determine the angle of the cut, lay the railing on the stairs (or on the stringer, if applicable) and mark the railing where it is to be cut. Repeat the process at the other end. Do the same to the bottom rail if one is needed.



For ease of installation, use the *Rail & Post Fastener (#301)* or the *Rail-Bolt Fastener (#302)*.

### 3. Attaching the spindles

Determine the number of spindles needed for the job and the distance between each so that all the spindles are equally spaced. Cut spacer fillets to fit between spindles.



Ensure space between spindles conform to local building codes. Typical requirements are to ensure space does not allow passage of a 4" sphere.

Using an adjustable square to determine the proper angle of the cut, trim spindles to the correct length. **BE CAREFUL! DO NOT CUT THE SPINDLES TOO SHORT!**

If spindles are to be attached to the stair steps instead of a bottom rail, the sizes will alternate from spindle to spindle. The tops of the spindles are trimmed at the same angle as the top rail and the bottoms are cut square.

Attach spindles one at a time, alternately with fillets or for ease of installation, use the *Baluster Fastening Kit (#201)*, which fastens baluster to your stairs and floors quickly and easily.

When inserting fillets, use wood glue & finishing nails toe-nailed in at an angle. Counter sink nail heads, fill holes with putty, sand & finish project with stain or paint as desired.

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