1. Identify Your Type of Post-to-Post Staircase:

- **Post-To-Post Staircase System**

- **Legend**
  - A - Starting Newel
  - B - Landing Newel
  - C - Rosette
  - D - Half Newel

**Straight**
- C or D
- A

**"U" - Shaped**
- C or D
- A
- B
- Landing

**"L" - Shaped**
- C - Rosette
- D - Half Newel

Determine the parts needed.

---

**SUREWOOD LNL**

Over-The-Post System

www.surewood-lnl.com

Effective 11/20/2006

SOM300113

SURE

WOOD~LNL

Wood ~ LNL
Selecting Your Parts:

There are several styles and options for your treads, risers, balusters and newel posts. Below are the most common. Other items are available by special order. Check with your store representative.

Balusters, Newel Posts, Handrails, and Shoerails:

Pin Top Baluster:
- Pin top balusters used with solid handrail.
  - 6010-S Solid handrail

Square Top Baluster:
- 6010-P Plowed handrail  6050 Fillet 1-1/4''  6045 Shoerail 1-1/4''

Treads and Risers:

Wall Rails and Handrail Ends:
- 6042 Wall Rail  7009 Returned End  7011 Quarterturn

Wall Rail Brackets:
- C Rosettes: Round Rosette  Oval Rosette

D Half Newel:
- For Wall Finishing
  - Half newels available to match newel style.

Mounting Hardware:
- J-Anchor with molding
- Rail Bolt
- Wood Plugs

Post-to-Post Staircase Parts Checklist:

Check local building codes to ensure compliance.
All stair parts shown in this brochure are for interior use only.

<table>
<thead>
<tr>
<th>Part number</th>
<th>Quantity Needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treads</td>
<td></td>
</tr>
<tr>
<td>Risers</td>
<td></td>
</tr>
<tr>
<td>Landing Tread</td>
<td></td>
</tr>
<tr>
<td>Return Nosing</td>
<td></td>
</tr>
<tr>
<td>Starting Newel*</td>
<td></td>
</tr>
<tr>
<td>Landing Newel*</td>
<td></td>
</tr>
<tr>
<td>Level Run Newel*</td>
<td></td>
</tr>
<tr>
<td>Rosette or Half Newel</td>
<td></td>
</tr>
<tr>
<td>Newel Mounting Hardware (J-Anchor)</td>
<td></td>
</tr>
<tr>
<td>Rake Balusters*</td>
<td></td>
</tr>
<tr>
<td>Rake Balusters for Kneewall Staircase*</td>
<td></td>
</tr>
<tr>
<td>Level Run Balusters*</td>
<td></td>
</tr>
<tr>
<td>Handrail</td>
<td></td>
</tr>
<tr>
<td>Shoerail for Rake</td>
<td></td>
</tr>
<tr>
<td>Shoerail for Balcony (optional)</td>
<td></td>
</tr>
<tr>
<td>Plugs</td>
<td></td>
</tr>
</tbody>
</table>

*Note:
These guidelines are for a rake handrail height of 36”– 41”. Longer newels and balusters may be required for a different handrail height.
**Tools Required:**

**Operation:**
- Measuring and Leveling
- Cutting
- Nailing
- Gluing
- Screw Driving
- Drilling
- Finishing

**Tools Needed:**
- Metal measuring tape, hand levels, (torpedo and 4’ level), framing square
- Miter box and saw (fine-tooth) hand or power circular saw or standard hand saw
- Hammer, nail set, 1/2” and 1” finishing nails
- Carpenter’s glue and construction adhesive
- Screwdriver (manual or power), 3” wood screws
- Hand drill, drill guide and 1/8”, 1/4”, 3/8”, 5/8”, 3/4”, 1” wood bits
- Sandpaper, steel wool, wood file, wood chisel, finishing stain, rags, tack cloth, etc.

**Getting Started - Tread and Riser Installation:**

To properly install solid oak treads and risers, you must first remove the existing steps to expose the rough framing. Leave the beginning riser at base of steps (A). Measure and cut each step separately to ensure tight fit. (B). Pre-drill, apply construction adhesive and nail into place. For added strength, screw treads to risers from behind (C). Complete each step before continuing on to next step.

**Marking Your Staircase for Installation**

Layout your staircase directly on your treads and landings. Carefully mark Newel and Baluster positions and centerlines.

**Landing Newel Height**

A) Height of the handrail should be between 36” and 42”. Check local building codes.

B) Place the top of the handrail one inch below the top block of the newel.

C) The difference between the two marks “A” and “B” is what will be cut off bottom of newel. Proceed with newel installation.

**Newel Post Attachment**

Trim and Fasten the Newel Posts

- J-Anchor with Molding
- Wood Plugs
- Lag Bolts
**Attaching Handrail for Pin Top Balusters:**

A) Mark baluster placement on treads allowing for equal spacing.

Drill treads the same size and depth as pin on bottom of baluster.

B) Lay handrail along stairs allowing extra length for proper fit to newels. Using framing square, transfer tread markings to side of handrail. Transfer markings to bottom center of handrail.

C) Locate baluster holes in solid handrail. Mark center of handrail

D) Rotate handrail 180° on stairs so balcony side of handrail is at base of stairs. Drill holes using 5/8” drill bit a minimum of 3/4” deep into handrail. Use drill guide set to proper angle

E) Using newels as guide, mark handrail and cut to proper length. Follow instructions for attaching newels.

For balconies, follow same procedures, keeping handrail on flat surface when drilling.

**Attaching Handrail for Square Top Balusters:**

A) Lay handrail and shoerail along stairs, marking where they intersect with newels. Place rail on side and cut along marks.

B) Attach handrail using option #1 (3”wood screws) or option #2 (4-1/2” lag bolts through front of rail). Both options require pre-drilling a pilot hole. Attach shoerail using option #1 (3”wood screws), option #2 (toe-nailed finishing nails) or option #3 (screwed to kneewall).

**Handrail**

- B 1
- Wood Screws
- Lag Bolt

**Shoerail**

- B 1
- Wood Plug
- Lag Bolt

C) Use an adjustable square to determine the angle of the cut; allow for 1/4” plow depth on each handrail and shoerail.

D) Cut balusters to the correct length. Once spacing is determined, glue and toe-nail balusters into place.

E) Cut fillet pieces being sure to match angles. Glue and nail into place using 1/2” finishing nails.

*Most codes require 4” on center spacing, but you should check your local building codes.

**Finish to Wall and Wall Rail Installation:**

Attach rosette or half newel directly to handrail as shown. Secure first to handrail using nails or screws, then secure to wall.

**Wall Rail Styles:**

- 6010-S Handrail with 7011 Quaterturn
- 6010-S Handrail with 7009 Returned End
- 6042 Wall Rail with bracket
1. Identify Your Type of Over-The-Post Staircase:

- Over-The-Post Staircase System

Legend:
- A - Starting Newel
- B - Landing Newel
- C - Rosette
- D - Straight Gooseneck
- E - 90° Gooseneck
- F - 180° Gooseneck
- G - Staring Fitting

Open Staircase with Turnout Starting Fitting

Open Staircase with Volute Starting Fitting

Open Staircase with Starting Easing Fitting

Easy step-by-step instructions to help you achieve professional results.

SUREWOOD~LNL

www.surewood-lnl.com
2 Selecting Your Parts:

There are several styles and options for your treads, risers, balusters and newel posts. Below are the most common. Other items are available by special order. Check with your store representative.

Balusters, Newel Posts:

- **Pin Top Balusters**
- **Starting Newel Post**
- **Landing Newel Post**

Treads and Risers:

- **Tread**
- **8090 Landing Tread**
- **8080 Tread Return Nosing**

Handrail, Ends and Wall Rails:

- **Solid Handrail**
- **Riser With Hand 90˚**
- **Hand Volute**

Choose Fitting Style:

- **With Cap**
- **No Cap**

Choose Gooseneck Style:

- **D**
- **Ea**
- **Eb**
- **No Cap**

Choose Starting Fitting:

- **S-7035 Right Hand Volute**
- **S-7035 Right Hand Turnout**
- **S-7010 Starting Easing**

Handrail Mounting Hardware (J-Anchor)

- Select one newel fitting for each newel post mounted on top of a tread.

Balusters for Starting Fittings* - Each volute requires (6)1-1/4” x 41” balusters, or (4)1-1/4 or 1-3/4” x 41” balusters. Each turnout requires (2)1-1/4” x 41” balusters or (1)1-3/4” x 41” baluster. Each starting easing requires (1) 41” baluster.

Rake Balusters* - Select the 34” baluster for the front baluster on each tread and the 36” baluster for the back baluster on each tread. If using 3 balusters per tread, use the 36” baluster for the middle baluster on each tread.

Level Run Balusters* - Use the 36” baluster for all 36” height balconies and the 41” baluster for all 41” height balconies. Standard placement is 4” on center. Check local building code for your area.

Handrail - Buy 13” of handrail for each tread or step. Buy enough for all level runs.

Plugs - Select two wood plugs for every newel mounting using lag bolts. Select one plug for each handrail rail bolt used.

*Note: These guidelines are for a rake handrail height of 36”—41”. Longer newels and balusters may be required for a different handrail height.
4 Tools Required:

Operation: Tools Needed:
Measuring and Leveling Metal measuring tape, hand levels, (torpedo and 4' level), framing square
Cutting Miter box and saw (fine-tooth) hand or power circular saw or standard hand saw
Nailing Hammer, nail set, 1" finishing nails
Gluing Carpenter's glue and construction adhesive
Screw Driving Screwdriver (manual or power), 3" wood screws
Finishing Sandpaper, steel wool, wood file, wood chisel, finishing stain, rags, tack cloth, etc.

5 Getting Started - Tread and Riser Installation:

To properly install solid oak treads and risers, you must first remove the existing steps to expose the rough framing. Leave the beginning riser at base of steps (A). Measure and cut each step separately to ensure tight fit. (B). Pre-drill, apply construction adhesive and nail into place. For added strength, screw treads to risers from behind (C). Complete each step before continuing on to next step.

6 Basic Installation:

Marking Your Staircase for Installation
Layout your staircase directly on your treads and landings. Carefully mark Newel and Baluster positions and centerlines.

- Volute Starting Fitting Layout
  The balustrade centerline and newel centerpoints should be laid out. On a kneewall stair, the balustrade should be centered on the kneewall. On an open-tread stair, the centerline should be 1/2 of the baluster square in from the face of the stringer; i.e. 5/8" for a 1-1/4" baluster.

- Turnout Starting Fitting Layout

Landing Tread
Landing tread can be used with 3/4"oak flooring along a landing when solid oak treads and risers are used. Landing tread can be used along a balcony with oak flooring. Properly cut miters and attach directly to sub floor.

Tread Return Nosing Installation
Cut and miter tread return nosing to fit. Adds a finished look to the tread edge.
Assemble the Handrail:

Assemble the handrail on top of the stair treads prior to installing the newel posts. Use rail bolts and glue at each fitting connection. Complete instructions are included with fittings.

Rail Bolt Installation

1) Temporarily position assembled handrail onto newels.
2) Use level to mark the handrail with baluster centers.
3) While handrail is on newels, drill baluster holes with drill guide. Drill holes using 5/8” drill bit a minimum of ¾” deep into handrail.
4) Remove handrail from newels and drill baluster holes in treads. Glue and insert balusters. Toe-nail with 1” finishing nails.
5) Apply glue to top of newels and balusters and attach handrail.

Newel Post Installation:

Measure and Trim Newel Posts
The rake rail height should be between 36” – 42” (H1) (check local building codes). Center the assembled handrail over the newel locations. Measure the distance between the tread and the bottom of the handrail fitting (A1 and A2). Also measure the rake rail thickness (T1). Use the following formula to calculate the starting newel height.

\[
H1 + A1 - T1 = \text{Starting Newel Height}
\]

If the newel starts from the floor or a lower tread, add that distance as well.

Finish to Wall and Wall Rail Installation:

Attach rosette before installing handrail.

Wall Rail Styles:
- 6042 Wall Rail with bracket
- 6010-S Handrail with 7011 Quaterturn
- 6010-S Handrail with 7009 Returned End