

CHAPTER 14

Glossary/Index

Glossary

Adjustable Collar – A decorative forged collar attachable anywhere along the length of the plain forged baluster to create unique balustrade designs.

Adjustable Newel – A doweled starting newel that can be trimmed in length by the installer. The newel is drilled to accept a dowel on the bottom. The dowel is shipped loose and installed after the newel is trimmed.

Angle Button – *See Angle Gauge.*

Angle Gauge – A locking devise that can be attached to a framing square to give you consistent angles during layout.

Angle Newel – The longest of all newels, used at landings where there is a change in the direction of the stair and railing. Angle newels may be two, three or four rises high.

Angle Stair – A stair with one or more turns. Examples are L-Shaped stairs and U-Shaped stairs.

Apron – *See Bandboard.*

Ascending Volute – A volute that begins its ascent sooner than a standard volute, allowing for the use of a shorter newel and shorter balusters on the starting step.

Balcony Balustrade – A level portion of balustrade with components that match the stairway.

Balcony Height – The vertical distance from the finish-floor to the top of the level railing.

Baluster – A decorative vertical member, used to fill the open area between the railing and the floor or tread, adding safety, support and stability to the balustrade.

Baluster Fastening Kit – A kit which includes a driver and baluster fasteners for use in installing balusters to treads or floor. Coffman item #C-3201.

Balustrade – A rail system which includes handrail, newels and balusters.

Balustrade Center Line – An imaginary line which represents the center of the handrail, balusters, and newels.

Bandboard – A decorative trim board to finish around well holes and balconies.

Base Collar – A forged trim collar used at the base of forged balusters.

Bending Guides – L-shaped brackets that when used together, create a form to clamp the bending rail to while waiting for the glued rail to cure to the necessary radius. Bending guides may be purchased, or made from materials on the job site.

Bending Mould – A form, moulded to the outside profile of the rail, that is used to cradle bending rail as it is being bent to the shape of the stair or balcony.

Bending Rail – A rail profile made up of thin vertical strips, or plys, which have been moulded with a tongue and groove bead to create an alignment of the plys. Bending rail offers the ability to glue and bend handrail to a radius to match most curved balustrades.

Bent Riser – The riser included in a starting step, curved on one or both ends to form a decorative first step in a stair.

Blocking – Solid wood pieces installed during framing to aid in the secure installation of handrail brackets, rosettes, half newels, etc.

Box Newel – A large square newel, usually hollow, used in a Post-to-Post balustrade system.

Box Stair – A stair where the carriages/skirtboards house the treads and risers forming a box-like unit. Box stairs are typically pre-assembled and delivered to the job site as one “boxed” unit.

Bracket – *See Tread Bracket.*

Cap – That part of a fitting which widens in order to sit on top of a pin top newel. Caps are found in a variety of different Over-the-Post fittings.

Cap Board Base – A style of Coffman Traditional Wonderail that attaches balusters, rail, and a 7-1/2” base cap into a pre-assembled and adjustable stair system.

Carriage – A supporting member running the length of the stairway on which treads, risers, and balustrade are mounted. Also called Rough Stringers or Rough Horses.

Center Line – *See Balustrade Center Line.*

Circular Stair – *See Spiral Stair.*

Clamp Nail – A steel spline that is used to join the components that make up fittings. Clamp nails can also be used to attach fittings to handrail.

Closed Side Skirtboard – The trim board that is installed against the wall as a decorative accent and scuff barrier between the stair and finished wall.

Continuous Rail – *See Over-the-Post.*

Coped End – A rail fitting that has the profile of the rail shaped, or coped, into one end of a straight piece of rail.

Cove Moulding – A concave shaped moulding used to cover the joint formed where the face of the riser meets the underside of the tread. On an open stair the cove moulding is continued under the return nosing.

Curb Wall – See *Knee Wall*.

Curved Stair – A stair that winds or curves its way from one floor to the next. It may be constructed having one turn of direction, or a series of turns.

Double Carriage – Two carriages that are attached together to meet a specific structural requirement.

Double Mitered Return Tread – A tread that has mitered return nosing applied to both ends, used in a double open balustrade stair.

Dropping the Carriage – To trim the bottom of the first rise of a rough carriage by the difference in thickness between the tread and the first floor finish material. This assures that each rise going up the stair remains the same after finish materials are installed.

Easing – See *Over Easing or Up Easing*.

Epoxy – Type of adhesive recommended to install forged balusters and collars.

False Riser – See *Riser Cap*.

False Starting Step – See *Starting End Cap*.

False Tread – See *Tread Cap*.

Fillet – A thin moulding that is fitted into plowed handrail and shoe rail between the balusters.

Finish-Floor to Finish-Floor – The vertical measurement taken from the top of the finished floor of the lower level to the top of the finished floor of the upper level. The total rise of a stair.

Fitting – A combination of components that are profiled to match handrail patterns and permit directional and vertical changes with handrail in Over-the-Post balustrades.

Flared Collar – A specialty forged base collar system that screws into the tread, removing the need for drilling baluster holes in the tread.

Forged Collection – Coffman's system of metal balusters and accessories.

Guardrail – See *Balcony*.

Glue Block – A structural wood block, square or triangular, glued to the underside of a step.

Gooseneck – A rail fitting used to accommodate transitions in height and/or direction at intermediate and balcony landings.

Half Newel – A newel cut directly through the center lengthwise, to be used where handrail terminates at a wall.

Handrail – See *Rail*.

Hanger Board – A board, usually plywood, used as a method of attaching carriages to the upper floor header.

Headroom – The vertical distance from the slope of the stair along the nosing to the ceiling above.

Header – A floor framing member that runs across the well opening. The top riser of the stair is attached to the header.

Housed Stringer – See *Routed Stringer*.

Installation Block – A solid wood, removable insert block to aid in the SECURE installation of Box Newels.

Intermediate Newel – A newel installed at the turn of an angle stair.

Kick Board – A board that is secured to the floor under the bottom front edges of the carriages.

Knee Wall – A short, capped wall creating a closed tread system.

L-Bracket Post Fastener – A kit which includes metal brackets, wood screws and mitered wood trim pieces, used to attach square-based newels to the floor or tread. Coffman item #C-3505.

L-Shaped Stair – A stair with an intermediate landing to change the direction.

Landing – A platform separating two flights of stairs.

Landing Newel – A newel used at the top of a sloped stair section.

Landing Tread – A structural moulding, used on all landings and balconies, to create a transition between the stair and the finished floor.

Ledger Board – A board attached to the header on which upper ends of carriages can rest.

Left Hand Stair – A stair with balustrade on the left side from the bottom of the stair looking up.

Left Hand Tread – A mitered return tread with return nosing applied to the left side from the bottom of the stair looking up.

Level Quarterturn – A rail fitting that permits level handrail to turn 90 degrees.

Level Rail – Railing used on a balcony or a landing.

Line of Travel – The line along which most people walk as they proceed up a stair. Its location is critical to tread depth in winding and/or circular stairs.

Material List – See *Take-Off*.

Medallion – A decorative, two-piece forged baluster accessory that is installed in forged balusters.

Miter Jig – A tool designed by Coffman which eliminates the need for a pitch block in determining where to cut easings on fittings, while cradling the fitting for a plumb, square cut. Coffman item #C-3099.

Mitered Return Tread – A tread which has a piece of return nosing applied to either the left or right side for use in an open stair.

Mitered Return Tread Cap – A tread cap that has return nosing on one side for use in an open stair.

Mitered Riser – A riser with a mitered edge for attaching to the skirtboard or decorative bracket.

Mitered Skirtboard –

A skirtboard with mitered edges where the risers will be attached.

Moulding – A term describing lineal profiled components.

Nailing Jig – *See Tread Nailing Jig.*

Newel – A structural, vertical post used at the top and bottom of every stair, at all directional changes, and at intervals of not more than 8' on level balcony runs.

Newel Attaching System – A kit which includes a collar, shaft, and all necessary screws needed to install Forged newels.

Newel Cap – *See Cap.*

Newel Fastening System – A kit which includes a lag bolt, washer, nut, and 1-1/2" plugs used as one option available for installing newels.

Nosing – The rounded edge of a tread.

Notched Newel – Refers to newels that have the bottom block cut out to allow for correct center line placement.

OTP – The abbreviation for Over-the-Post.

Open Side Skirtboard –

The trim board that is installed on the open side of the stair as a decorative accent.

Open Stair – A stair where the treads and risers are exposed from one or both sides.

Opening Cap – A rail fitting used where level rail starts on top of an Over-the-Post newel.

Orientation – Handing, left hand or right hand, determined from the bottom of the stair looking up.

Over Easing – A rail fitting used to transition from sloped rail to level rail without the use of a gooseneck.

Over-the-Post – A balustrade system which utilizes fittings to go over newels for an unbroken, continuous handrail.

Partial Open Stair – A stair that has an open balustrade that extends only a portion of the way up the stair before running into a structural wall.

Partial Wall – A wall that will enclose the upper portion of the stair.

PICKET – *See Baluster.*

Pin Top Baluster – A baluster with a round top that is installed by drilling holes into the bottom of the rail.

Pin Top Newel – An Over-the-Post newel that has a pin turned on the top to fit into the cap of a fitting.

Pitch – *See Rake.*

Pitch Block – A block of wood that is cut to form a right triangle using the rise and run dimensions of the stair.

Plain Tread – A tread that is square on both sides and nosed on the front.

Plain Tread Cap – A tread cap that is square on both sides, nosed on the front, and used on the closed side of a stair.

Platform – *See Landing.*

Plow – A recess moulded in the bottom of handrail and in the top of shoe rail to receive the square top or bottom of a baluster.

Plug – *See Rail Plug.*

Plumb – Perfectly straight in the vertical plane.

PTP – The abbreviation for Post-to-Post.

Post-to-Post – A balustrade system where handrail is cut and attached between square top newels.

Prepped Newel – A Coffman newel (identified as PREP in the part number) used in Cap Board Base Wonderail installations that is half-notched, pre-drilled, and shipped complete with all necessary attaching hardware.

Pythagorean Theorem – The theorem that the square of the hypotenuse of a right triangle is equal to the sum of the squares of the other two sides. ($A^2 + B^2 = C^2$)

Rail – The lineal moulding used as hand support in balustrade systems.

Rail Bolt – A two-ended threaded steel fastener with nut and washer that is used to join handrail to fittings, newels and/or walls. Coffman item #C-3001.

Rail-Bolt Fastener – A kit which includes a rail bolt and plugs. Coffman item #C-3302.

Rail-Bolt Wrench – A specially designed wrench to ease in the installation of rail bolts. Coffman item #C-3901.

Rail Bracket –
See Wall Rail Bracket.

Rail Clearance – The minimum clearance required between the rail and any other object, such as a wall or landing tread nosing.

Rail Fitting – *See Fitting.*

Rail & Post Fastener – A kit including a bolt, washer and plugs for installing newels or for attaching rail to newels. Coffman item #C-3301.

Rail Plug – A round wood plug used to fill holes drilled in newels and rails, allowing screws or rail bolts to be used. Coffman item #C-3000.

Rail Projection – Projection of the handrail into the stairwell, measured from the wall to the far side of the rail.

Rail Termination – A method of finishing the balustrade as the rail reaches a wall. Rosettes and half newels are examples.

Rake – The angle of ascent, or slope, of a stairway. This is determined by the rise and run.

Rake Collar – A forged collar used on a slope to trim the baluster.

Rake Rail – Ascending handrail of a balustrade - follows the pitch or rise of the stair.

Return Nosing – A moulding used to trim the end of a tread on the open side of a stair.

Reversible Tread – A mitered return tread with return nosing applied to one side of a two-faced tread.

Right Hand Stair – A stair with balustrade on the right side from the bottom of the stair looking up.

Right Hand Tread – A mitered return tread with return nosing applied to the right side from the bottom of the stair looking up.

Rise – The vertical distance from the top of one tread to the top of the next tread.

Riser – The vertical finished component of a stair filling the space between the treads.

Riser Cap – An economic alternative to a full riser where carpet will be installed down the center of the stair.

Riser Core – The blocking material in the end of starting risers to form the radius and support the starting newel.

Rosette – A decorative and anchoring wall plate used to terminate handrail into a wall.

Rough Horse – *See Carriage.*

Rough Stringer – *See Carriage.*

Routed Stringer – Carriage/skirtboard with recessed cuts to receive and wedge treads and risers.

Run – The horizontal distance from the face of one riser to the face of the next riser.

S-Series Fitting – A rail fitting that will accommodate an offset in the balustrade center line without a break in the handrail.

Scotia Moulding –
See Cove Moulding.

Shoe Moulding – A convex shaped moulding, usually used where the first riser meets the finished floor.

Shoe Rail – A plowed, lineal moulding designed to receive the bottom square of a baluster.

Shoe Rail Base – A style of Coffman Traditional Wonderail that attaches balusters, rail, and shoe rail into a pre-assembled and adjustable stair system.

Skirtboard – A finished trim board used on either open or closed sides of the stair as a decorative accent.

Skirtboard Marking Jig – A tool used for marking a finished skirtboard for mitering the edge that will attach to the risers. This tool is usually made on the job site from scrap lumber.

Spacer – A length of 2 x 4 installed parallel to the stair rake between the rough wall and an inside carriage, eliminating the need to make sawtooth cuts in the finished wall materials.

Sphere Codes – Building codes that state that a sphere of a certain size cannot pass: (1) between balusters, or (2) through the triangle formed by the tread, riser and the bottom of shoe rail in a stair with shoe rail used on an open tread.

Spindle – *See Baluster.*

Spiral Stair – A stair where the treads form a circle around a center point as the stair ascends from one floor to the next.

Spring-Back – The expansion of the radius of curved rail after it is removed from the bending guides, due to the inherent tension.

Square Top Baluster – Balusters that have square (unturned) tops, usually installed with plowed rail or sub rail.

Stair Balustrade – *See Balustrade.*

Stair Body – All parts of a stair that are below the walking surface. It consists of treads, risers, skirtboard, landing tread, cove moulding, shoe moulding, tread brackets and the starting step.

Stair Gauge – *See Angle Gauge.*

Stair Width – The width of a stair measured either: (1) finished wall to finished wall, (2) between finished wall and the outside edge of the skirtboard, or (3) from the outside edge of the skirtboard to the outside edge of skirtboard.

Stairway – The entire set of steps comprising one or more flights of stairs.

Stairwell Opening – The width of a stairway plus ample room to apply all finished wall materials without infringing on the stair width code minimums.

Starting Easing – A straight rail fitting used to start an Over-the-Post system without the use of a starting step.

Starting End Cap – An economic alternative to a full starting step where carpet will be installed down the center of the stair.

Starting Newel – The vertical post used to start a balustrade system.

Starting Step – A decorative first step of a stair, generally designed with a tread and riser which lengthen the step beyond the width of the basic stair.

Straight Stair – A stairway with no turns or intermediate landings.

Stringer – *See Carriage.*

Subfloor Rise – The measurement taken from the top of the subfloor of the lower level to the top of the subfloor of the upper level. The total rise of a stair, measured before finish materials are applied.

Sub Rail – A lineal moulding, plowed top and bottom, to receive handrail on the top and square top balusters on the bottom.

Subriser – A carpet-grade riser used under riser caps where carpeting will be installed down the center of the stair.

Subtread – A carpet-grade tread used under tread caps where carpeting will be installed down the center of the stair.

Sure-Tite Newel Fastener – A kit which includes a large lag bolt, a washer, nut and plugs for use in installing newels. Coffman item #C-3008.

T-Shaped Stair – A stair with an intermediate landing that divides and continues upward with stairs on both the left and the right of the landing.

Take-Off – Material list of required stair components for a specific stair.

Tandem Cap – A rail fitting used where level rail passes over a pin top newel.

Tangent Point – The point at which a straight line touches a curve.

Tapered Top Baluster –
See Pin Top Baluster.

Template – A paper marking pattern used to locate holes for the correct placement of balusters and newels in the bottom of starting fittings and in the top of the starting tread.

Total Rise – The total vertical distance from finish-floor to finish-floor.

Total Run – The total horizontal distance covered by the entire stairway.

Tread – The horizontal component of a stair on which one steps.

Tread Cap – An economic alternative to a full tread in a stair where carpet will be installed down the center of the stair.

Tread Bracket – A decorative piece mitered to the riser and fastened on the side of an open skirtboard.

Tread Nailing Jig – A tool made to slide over the front overhang of treads as a guide for nailing the treads into the narrow top edge of the risers. This is usually made on the job site from scrap lumber.

Tread Nosing – The rounded edge of a tread.

Tread Overhang – The portion of the tread which protrudes beyond the face of the riser. The width of the overhang is added to the tread run to obtain tread width.

Turnout – A curved rail fitting used as one option to start an Over-the-Post balustrade system.

U-Shaped Stair – A stair with a landing, or landings, that changes the direction of the stair 180 degrees.

Unit Rise – *See Rise.*

Unit Run – *See Run.*

Up Easing – A rail fitting which curves, permitting the handrail to change the slope of the rail system. Up easings are normally used at the top and bottom of Over-the-Post stair runs. Up easings are a component part of all starting fittings and goosenecks.

Vertical Volute – A volute that scrolls down from the rail rather than horizontally left or right.

Volute – A rail fitting that scrolls left or right used as one option to start an Over-the-Post balustrade system.

Wall Rail – Rail affixed to the wall, usually by means of mounting brackets. It may be the primary handrail for a closed stair or the supplementary handrail to a balustrade system.

Wall Rail Bracket – A metal bracket that is used to fasten wall rail to the wall. Coffman item #C-3002 and #C-3601.

Wedge – A tapered strip of wood driven and glued into a routed stringer to fasten treads and risers securely. Wedges also help prevent squeaks.

Well Hole – *See Stairwell Opening.*

Winder Stair – A stair that makes a directional change without the use of a platform.

Winder Tread – A nonrectangular tread used in combination to make directional changes in winder stairs.

Wonderail – An adjustable system of pre-assembled handrail, shoe rail and balusters.

Wood Plug – *See Rail Plug.*

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**COFFMAN
STAIRS LLC**

1000 Industrial Road
 Marion, Virginia 24354

sales@coffmanstairs.com

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