

Baluster Guide



If you're about to build a new deck, or feel like upgrading an existing one, then this baluster guide is just for you. From aluminum to clear glass, here's a quick introduction to the styles and choices in balusters today: and why they matter.

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Balusters - The very basics!

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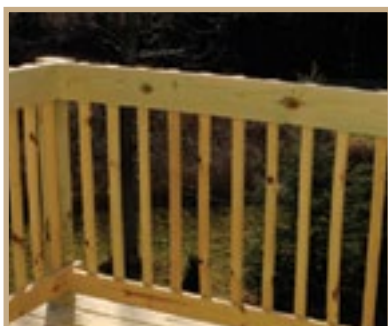
About Us.....

It's all in the details

When you envision yourself on a new deck, you're probably thinking about the moments you'll spend with friends and family, socializing and relaxing. You're not pondering the individual elements of construction – like balusters. And yet, along with the decking itself, balusters provide the details that outline every moment there.

If you're about to build a new deck, or feel like upgrading the one you have now, then this baluster guide is just for you. From stately wood to clear glass, here's a quick introduction to the styles and choices in balusters today: and why they matter.

For more one-on-one advice and insight, take advantage of the experts at DecksDirect.com by calling 1-888-824-5316, 7a.m. to 5:30p.m. Monday through Friday, CST. Callbacks can also be provided afterhours and on weekends.



Traditional wood baluster



Modern metal baluster

Balusters

are the vertical pieces between the top and bottom rails of a deck. Sometimes called pickets or spindles, their primary function is to protect people from falls.

For a long time, balusters were traditionally made of wood. Thanks to advances in manufacturing technologies and metal finishes, design options have multiplied in keeping with consumer preferences.

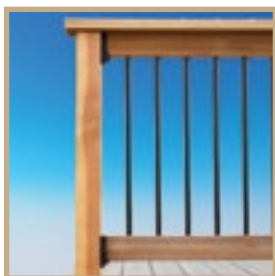
In tandem with these developments have come a host of manufacturers distributing online and through retail stores – giving consumers more choices in style, design and where to buy balusters, than ever before.

Baluster Basics: What's the Difference?

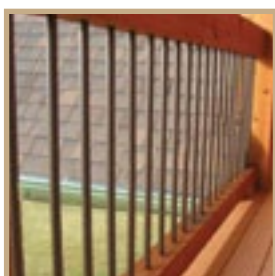
Manufacturers: *Who's who in the world of balusters*



DecKorators DecKorators is one of the earliest innovators of maintenance-free decorative aluminum balusters and accessories for home and commercial applications. They focus on making balusters available in more designs, more color choices, and more affordable options.



Solutions High style and moderate pricing make an entrance with Solutions Balusters. Manufactured from quality aluminum and finished with high performance powder coating, this baluster line has unique design features you won't find anywhere else, like powder coating over the ends of the balusters and colors in satin finishes.



Fortress With a strong background in fencing, Fortress designs, manufactures and distributes exterior ornamental iron products for the fence and rail industry of North America. Fortress "pickets" and balusters are made from 100% galvanized and powder coated steel, paired with complete railing systems—they also offer a complete railing system with Pure View Glass balusters.



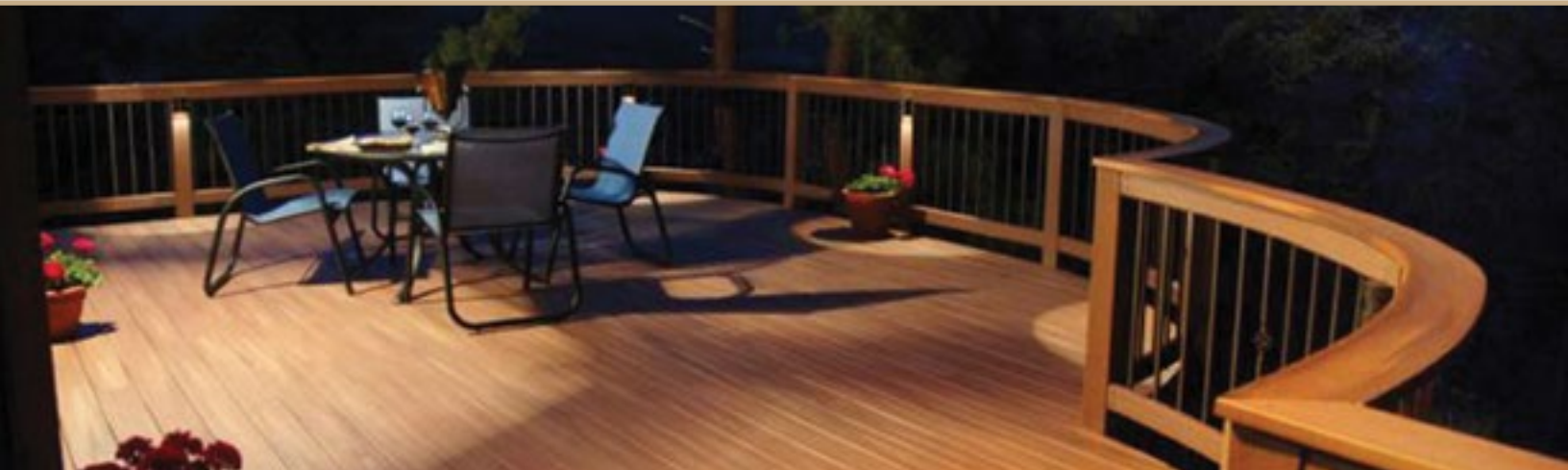
Tehk Tehk draws inspiration from environmental textures and the experience of deck living to design and manufacture balusters and other deck products. Their premium aluminum balusters feature richly colored, textured finishes. Tehk manufactures product for the builder with the customer in mind.



Dekor Recognized as a top of the line manufacturer of balusters and other deck products, Dekor is driven to continually set industry standards in innovation and craftsmanship. Their premium line of balusters is made from aircraft grade aluminum, with some designs featuring built-in, low-voltage lighting.

Baluster Basics: What's the Difference?

"Big Picture" Points: things to think about before you buy



Know your code! The first consideration in choosing deck balusters is always safety. Before starting any deck project you should contact your local building department for any and all applicable code requirements. These vary from state to state and even among municipalities, but typically are:

Baluster spacing: The opening between balusters should be less than 4 inches.

Railing height: Required railing height can also vary from city to city. The most common minimum height requirements are 36 or 42 inches from the deck surface to the top of the railing. Contact your local building department for specifications regarding your project. Many municipalities have updated their requirements in 2009 and 2010.

Installation There's more than one way to mount a baluster! The manufacturer's design often dictates how the baluster is installed: face-mounted on the outside of deck railings with screws or in-between the railings via channels or baluster connectors. Baluster connectors eliminate guesswork and make it easier to install balusters in level configurations or angled, as on stairways. Some rail systems come pre-assembled with the railings and balusters already connected – all you do is connect them to the deck posts. Installation details are a significant factor, especially if you're going to do the work yourself. (See more about installation in the "Mounting Matters" section.)

Installing new deck balusters is a great weekend project for any do-it-yourselfer. A new railing can completely change the look, feel and function of a deck.

Architecture The size, color and style of baluster or railing can have a dramatic impact on the look and feel of your deck, as well as whether or not it blends with the rest of your home and yard. For maximum effect, you want the balusters to be in proportion with the other details of your home and properly spaced with larger building elements like columns.

Lifestyle Is your deck an oasis at the end of the day, a quiet place for rest and reflection? Or is it the center of activity all day long, inviting non-stop interest and interactions with friends and neighbors? Balusters can make all the difference by blocking out the rest of the world, inviting them in, or creating the perfect place in between.

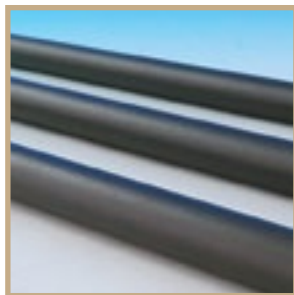
All about the view – or lack of it.

Plain and simple, balusters not only control your view from the deck, they also help control what your neighbors can see. Wide balusters provide more privacy for decks with a hot tub, whereas glass panels invite views from all perspectives.

Maintenance Matters How much time do you really want to spend maintaining the look of your deck and its balusters? Wood balusters require more intricate maintenance than other materials, and glass panels may require treatment to minimize spotting. For some people, creating the perfect setting is well worth the extra maintenance.

Baluster Basics: What's the Difference?

Materials: *the most common materials and how they differ*



Aluminum Lightweight and durable, aluminum balusters resist rust and corrosion – making them virtually maintenance-free for the life of the product. Homeowners choose aluminum balusters because they're less expensive than forged wrought iron but capture the same look and feel. A powder-coated finish provides maximum performance and durability, and can be tailored to almost any custom color by the manufacturer.

Pros - Low maintenance, lightweight, lower shipping cost, easy to cut.

Cons - Can be dented, can react with pressure treated lumber.



Glass Allowing clear, unobstructed views, glass balusters are tempered for safety. Some manufacturers add etched designs, lighting options and a choice of color shades. For optimum appearance, the balusters can be treated to reduce water spotting. Cleaning glass balusters is much easier and safer than a large glass panel.

Pros - Unobstructed views, modern design.

Cons - High maintenance/cleaning, heavy, higher shipping cost.



Steel Galvanized and powder coated, steel products are the most durable product available. The strength of steel balusters and rails allow for a thinner and more ridged finish rail. If you are looking for a strong, safe and clean looking deck rail, take a look at the Fortress Iron Railing System.

Pros - Strong, durable, low profile options.

Cons - Heavy, higher shipping cost.

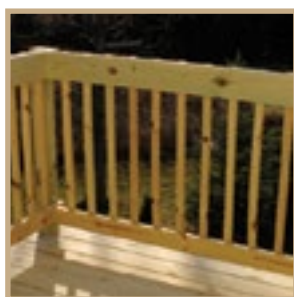


Wrought Iron The wrought iron baluster is often preferred for its old-fashioned looks and sturdy feel. Galvanized and/or powder coated for durability, wrought iron is usually locally fabricated as a fully-welded piece.

(Note: wrought iron balusters are not available at DecksDirect.com)

Pros - Low maintenance, unique designs.

Cons - Welding required for repairs.



Wood Traditional wood balusters are still popular choices, and the reasons are obvious: the stately, professional look is classic, elegant and economic. However, the very features that make wood so attractive also lend to time-consuming maintenance. Wood balusters tend to damage more easily and require significantly more time to stain or paint on an annual basis.

(Note: wood balusters are not available at DecksDirect.com)

Pros - Can be painted or stained to match decking, natural look.

Cons - High maintenance, susceptible to decay, warping and bowing, obstructed views.

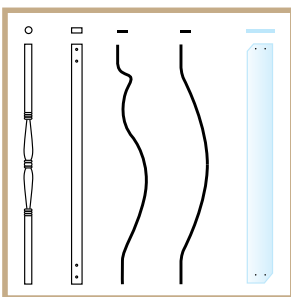
Baluster Basics: What's the Difference?

Characteristics: *an overview of style and design choices*

Options in baluster design vary from manufacturer to manufacturer, but these are some of the most common features you may be able to customize in your baluster:



Size/Width Wide balusters complement homes with a sturdy structure and look and create more privacy by shielding deck activity from outside viewers. By comparison, narrow balusters enhance the elegance or modern appeal of more contemporary homes, creating openness and welcoming the surrounding view.



Shape Conventional opinion holds that round shape balusters complement every kind of deck, whereas square balusters are reminiscent of old world styles, wrought iron gates and fences.

But those aren't the only shapes out there. Take a closer look and you'll see a variety of twists built into steel balusters, "Belly" styles that bend outwards, and other styles that sway to one side or the other. Additionally, glass panels are offered in straight cut and contoured shapes.



Color While baluster colors range from wood tones to metallic finishes, the precise hues always vary with the specific manufacturer. The most common color palettes will include bronzes, blacks, bronzes and whites. Custom colors are also available from some manufacturers.

For free color and finish samples, or advice on selecting the right product, take advantage of the experts at DecksDirect.com by calling 1-888-824-5316.



Texture/Finish Powder coatings are the most common finish on metal balusters, as they virtually eliminate the need for time consuming or costly maintenance. This baked-on color doesn't require harsh chemicals for application and stands up to the elements for years to come. However, some manufacturers also add gloss coatings or textured finishes that enhance the visual appeal of your balusters.



Mounting Design dictates if balusters mount on the outside of a deck railing or inside the rail system itself, via a channel or baluster connectors (more details on baluster connectors in the "Extras" section). Some balusters, like glass panels, mount either way but require special connectors to do so.

Baluster Basics: What's the Difference?

Extras: the little things that make the difference



Lighting One of the most popular ways to spice up a deck is with lighting, and some Dekor balusters are available with lighting built right into the design. Attractive LED lights in designer baskets enhance your deck's atmosphere – alternate balusters featuring single and double illuminated baskets, or mix in some balusters with unlit baskets for a twist.



Connectors Baluster connectors make for easy installation and typically come in two styles: level for rail (standard) assemblies and angled for stair configurations. Connectors are ordered separately from the balusters but are typically interchangeable among brands of baluster manufacturers. Choose from clean looking concealed connectors or exposed decorative connectors to match the style and look you desire.



Accessories Accessories typically come in one of two configurations: built right into the baluster (and permanently fixed in place) or as add-ons that affix by screws and can be mounted exactly where you want them. This is where true customization comes in, as the accessories can be mixed or matched in color, paired two to a baluster, alternating with singles, or a variety of other displays – whatever suits your pleasure! Some of the most common accessories are:

Baskets decorative spheres with open, airy designs located on the baluster; Dekor gives you the option of choosing built-in lighting with theirs. Baskets are built into the baluster or added during installation.

Knuckles (also called Collars) decorative square or round pieces that are either built into the baluster or added during installation.

Centerpieces typically wider, ornamental pieces that attach with screws and can be added to balusters at anytime. Choices in design are almost limitless, ranging from "Fleur de lis" and "Vineyard" to "Classical" and "Nouveau".



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weekends.*

Mounting Matters

Baluster length and rail height

Requirements Structural building requirements are in place to protect the safety and welfare of people. Local building codes vary greatly from state to state and even city to city. Many municipalities require a building permit for the construction of a deck or patio, especially if it is attached to a house or is more than 30 inches off the ground.

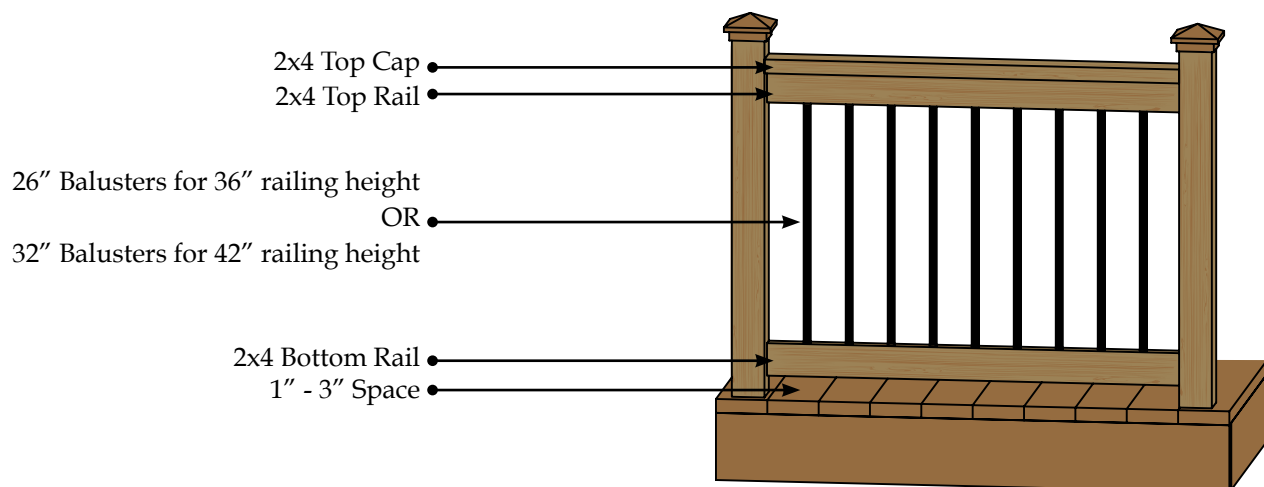
Length & Height Baluster length is just one factor that goes into the total height of your installed handrail. We have provided examples of the two most common rail heights below. How and where you mount the balusters will also have an impact on total rail height, as demonstrated in the next section.



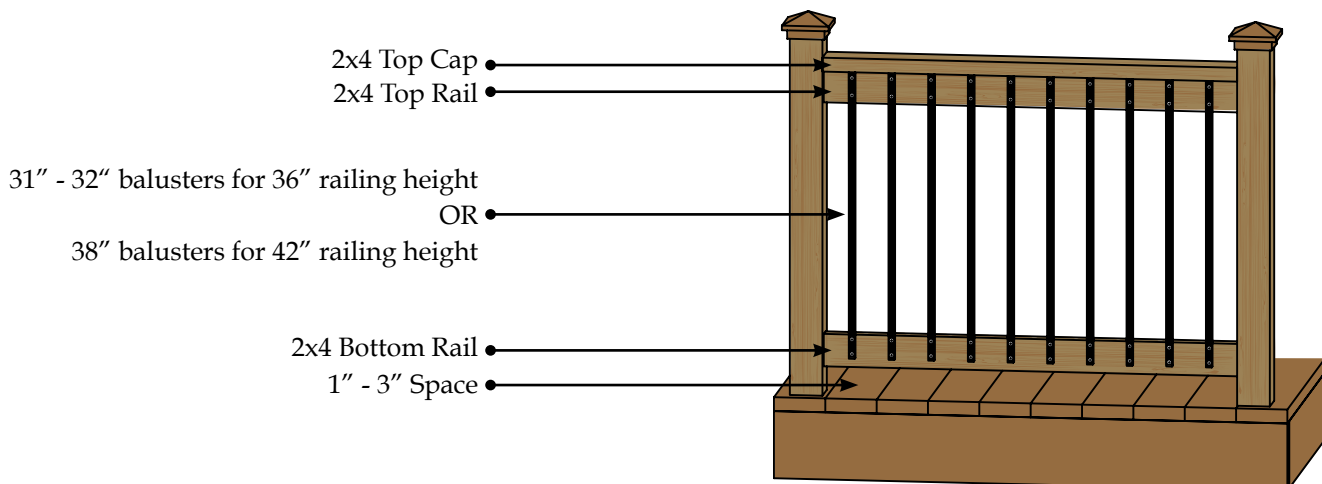
Project Note!

It is always important to check with your local building department or municipality to obtain the most up-to-date information available.

Sample railing height -Between the top and bottom rails



Sample railing height - Face-mounted on the outside of the rails

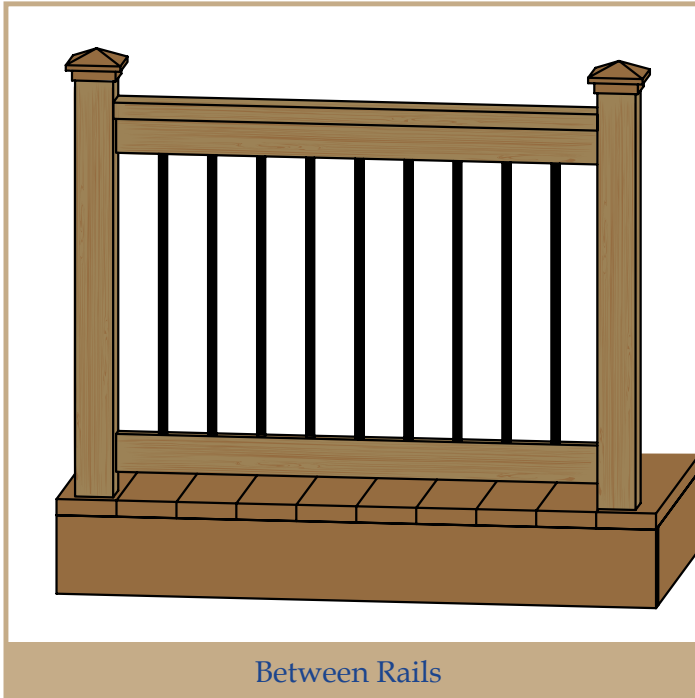


Mounting Matters

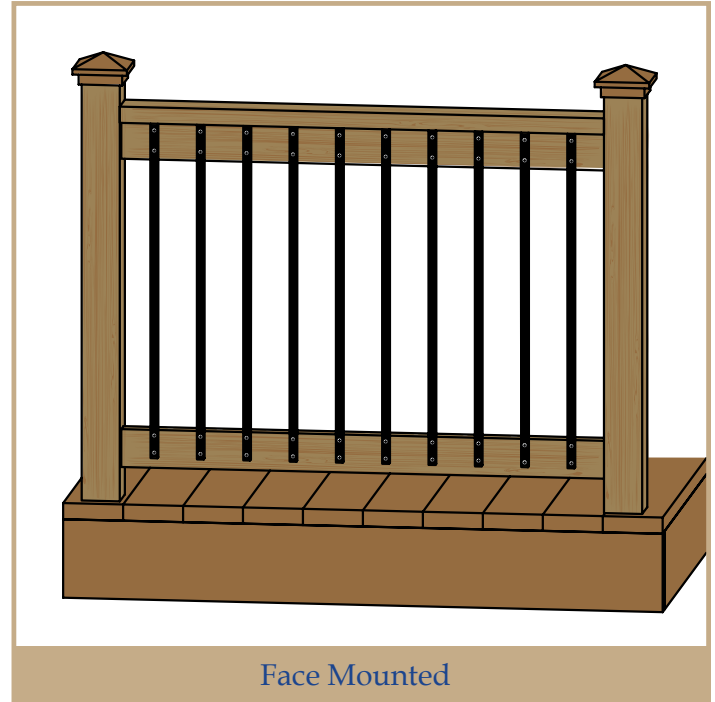
Location, location, location

Metal Baluster Attachment Options

Metal balusters are usually attached to the rails in one of two common configurations:



Between Rails



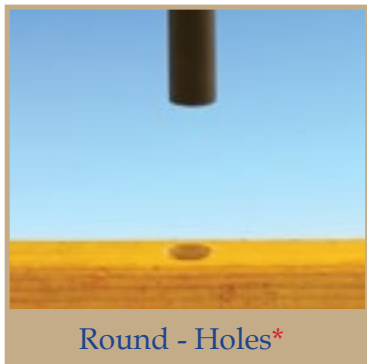
Face Mounted

Between the top and bottom rails

Balusters can be secured between rails via adhesive, clips, mounting shoes or baluster connectors. Setting them within a channel is generally not recommended unless the materials are synthetic and can stand up to water that pools in the channel.

Face-mounted on the outside of the rails

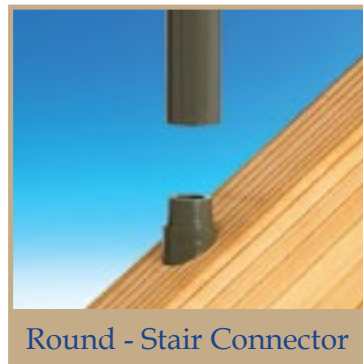
In this configuration, balusters overlap the top and bottom rails and may also be called “pickets”. They are most often attached with special mounting screws.



Round - Holes*



Square - Connector



Round - Stair Connector



Face mount - Screws

* Not recommended for pressure treated wood.

Mounting Matters

Location, location, location

Glass Baluster Attachment Options

Glass balusters are usually attached to the rails in one of two common configurations:



Between Rails



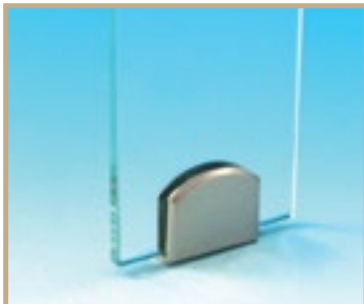
Face Mounted

Between the top and bottom rails

Glass balusters can be secured between rails via clips, or baluster connectors. Setting them within a channel is generally not recommended unless the materials are synthetic and can stand up to water that pools in the channel.

Face-mounted on the outside of the rails

In this configuration, balusters overlap the top and bottom rails. They are most often attached with special mounting screws. The Deckorators .



Glass - SS clip



Glass - Connector



Glass - Stair Connector



Glass - Face mount

How to: sample installation

Baluster design: *Classic round or square*

Installation type: In between rails, new deck construction

This is a sample guide for installing classic style round or square balusters in between the top and bottom rails, but as already stated there's more than one way to mount a baluster. Be sure to review the specific instructions included with the balusters you select for your deck.

Note: Always use proper safety equipment, and follow proper safety procedures when installing balusters



Installation Tip!

If you're installing deck lighting and handrails simultaneously, your railing may be modified to accommodate wiring.

For more information, see the DecksDirect.com Lighting Guide.



Balusters



Connectors



Tape measurer



Cordless drill



Drill Bit



Pencil



Speed Square



Miter Saw



Safety Glasses

How to: sample installation

Deck Rails: *Straight / level installation*

1. Cut, measure and mark.

Measure the distance between handrail posts and cut two equal length 2x4s that will serve as the top and bottom railings.

Place and align the top and bottom rails side by side, in their vertical position.

Using a tape measure and pencil, locate and mark the center of the rails.

Working outward from the center, measure and mark a line every 4-1/2 inches until you reach the end of the rail. (If the mark closest to the end of the rail is less than 2-1/4 inches, offset ALL of the current marks by 2-1/4 inches.



Step 1 - Measure



Step 1 - Mark

2. Attach baluster connectors.

Place the screws provided into each connector. Holding the connector with the screw firmly into the recess of connector, position the point of the screw directly onto the cross mark location.

Using a drill, drive the screw into the wood rail causing the connector to pull tight to the wood rail. Be careful not to over tighten. Continue installing all connectors on the top and bottom rail.



Step 2 - Attach



Step 2 - Attach

3. Install bottom railing and balusters.

Place the bottom railing level between the deck posts and secure to the posts. A 2x4 wood block can be used as spacer and support. A rail bracket can be used to make a strong connection from the railing to the post. Follow the specific manufactures recommendations for installation.

Slide a baluster over each connector on the bottom railing. Ensure each baluster is firmly positioned to the bottom of the connector.



Step 3 - Railing



Step 3 - Balusters

4. Install top railing.

Position the top railing over the balusters. Starting at one end of the rail, start aligning the balusters into each of the connectors. After all balusters are aligned into the connectors, ensure each baluster is firmly positioned to the bottom of the connector. Position and secure the top railing between the deck posts and secure to the posts. A rail bracket can be used to make a strong connection from the railing to the post. Follow the specific manufactures recommendations for installation.



Step 4 - Top Rail



Finished Installation!

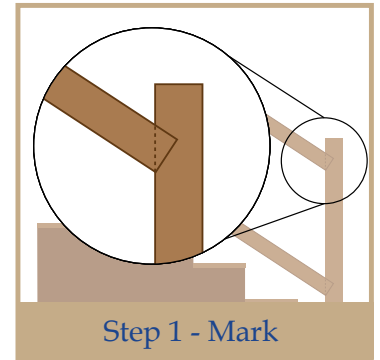
How to: sample installation

Deck Rails: *Angled installation*

1. Trim the railings.

Lay each stair rail, in its assumed vertical position, atop the stair treads and flush against the stair posts. Using the stair posts as a guide, draw a line on the railings indicating the proper angle, and then cut the stair railings.

Note: most stair connectors are angled between 30°-35°. We recommend reading and following the specific manufactures recommendations for installation.



2. Measure and mark the railings.

Take one pair of top and bottom railings and lay them next to each other, in their assumed vertical positions. Turn the TOP railing upside down – the ends of the boards will have different angles.

Using a tape measure and pencil, locate and mark the center of each railing.

Working outward from the center, mark and measure every 5½ inches until you reach the end of each railing. Make sure your balusters are no more than 4 inches apart.



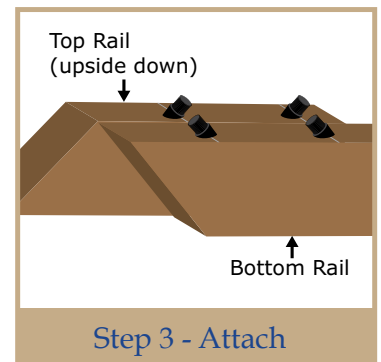
3. Attach baluster connectors.

Stair baluster connectors are angled to make for easy baluster installation. The connector should be positioned so its angle matches the angle of the railing.

How to attach - Use a cordless drill to attach a baluster connector at each spot marked on the railings, using the screws that were provided with the connectors.

Begin by screwing the connectors vertically into the railing, just until the screw meets the wood.

At that point, re-position the screw and the connector to the correct angle and finish attaching it to the railing. DO NOT over tighten, or the connector may shift to an incorrect angle.

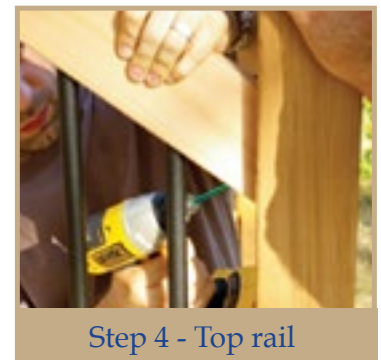


4. Assemble the complete railing.

Starting with the bottom rail, slide a baluster onto each connector.

Attach the top railing one baluster at a time, ensuring that each baluster is properly aligned with and held by a baluster connector.

Place the entire rail assembly between the stair posts and secure.



Frequently Asked Questions

☐ Is a balustrade the same thing as balusters?

Balustrade is the architecturally correct term for a complete rail assembly, i.e. the complete configuration of a top rail or handrail, bottom rail and balusters (the vertical pieces between the handrail and bottom rail). It excludes the deck posts and post caps that may be part of the deck perimeter.

☐ How far apart should I space my balusters?

In general, International Residential Code (IRC) requires that the space between balusters be less than 4". To accommodate for decorative details, this includes the widest space between balusters – not just the gap between baluster bases. Since codes vary greatly from state to state, you should always check with your local municipality before installing or updating a deck and/or the balusters.

☐ How do I calculate the number of balusters I need?

DecksDirect.com has created a on-line tool to help you calculate the number of balusters needed. Simply input your project specifications and press calculate, it's that easy! The DecksDirect.com baluster calculator can be found at:

http://www.decksdirect.com/baluster_calculator

☐ Can I use deck balusters on my indoor stairway – or are they just for decks?

Yes, we certainly see people use deck balusters on indoor applications, and the lit styles are especially popular on stairways. You still need to check with your local building code to obtain safe installation guidelines for interior stairways.

☐ Can I custom order a special length of baluster?

Please contact DecksDirect.com to inquire about special or made to order items. We will work with you to find the best possible products for your project. Note: Special order items may not be available with all manufacturers.

☐ I have an existing deck with wood balusters. Can I take the balusters off and replace them with another kind?

Replacing your wood balusters can significantly change the look of a deck. This can be done by first removing the wood balusters; cutting them in the middle and removing the top and bottom sections of the wood baluster.

If installing face mount pickets that are the same size, all you will need to do is follow the products installation instructions.

If installing balusters that mount inside the rail, the top rail will have to be removed before the new balusters can be installed.

☐ Do I have to install handrails or balusters on my deck? Or is that just required if I have children?

Handrails may be required for your deck depending on your location. Codes vary greatly from state to state, you should always check with your local building department before installing or updating a deck and/or balusters. In general, the International Residential code (IRC) requires a deck, porch or balcony to have a structural railing installed in order to pass a home inspection. For child safety, the balusters must be spaced less than 4" apart.

☐ My balusters are powder-coated. Can I paint them a different color?

Although not recommended as it will void the warranty, most baluster can be re-painted if properly prepared. DecksDirect.com offers a large selection of finishes from many manufacturers. If you do not find what you are looking for on our site, we would be happy to discuss a custom product to suit your needs.

☐ My deck is made with pressure treated lumber, can I still install balusters?

Pressure treated lumber (ACQ) is corrosive to aluminum. Although most aluminum balusters are powder-coated, you will still need to use a baluster connector to create a barrier between the wood and the baluster.

About Us



DecksDirect.com was founded in 2003 for the express purpose of creating a better deck building experience for the do-it-yourselfer. A family owned and operated company located in Minnesota, we understand the pleasures of deck living, not to mention the satisfaction that comes from building the deck your family will enjoy for years.

That's why DecksDirect.com is dedicated to the builder in all of us. We partner with and stock the products of reputable manufacturers to bring you a huge selection of deck lighting, balusters, railings, post caps, and installation hardware. So whether you're motivated by form, function, fascination – or all three – you'll find what you want at DecksDirect.com.

What's the difference?

You can choose from a multitude of online retailers to get all the materials you need for building a deck, but DecksDirect.com gives you something more: a live person to walk you through choosing materials and accessories as well as the installation process.

For over 20 years we've worked in the deck industry: collaborating and consulting with architects, builders, do-it-yourselfers, home centers, homeowners, manufacturers, material suppliers, and professionals. This means we'll give you the honest, accurate and experienced advice you need to get the job done right, with beautiful results!

Visit DecksDirect.com to see our full line of products and current specials. Or call 1-888-824-5316 to speak with us today.



Contact Us

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Phone: 1-888-824-5316

Summer Hours: 7am to 5:30pm CST - Monday thru Friday. Callbacks after-hours and weekends.

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We promptly respond to all e-mail inquiries as our customers are very important to us!

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"Thank you for your efficiency...we now know for sure we are doing business with the right company. We are looking forward to installing your products on our Euro-Deck."

Kindest regards, Lynnsy, DecksDirect.com customer

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