

# CI Spiral Stairway Order Guide

Follow these steps to better understand the specific details we will require to provide a spiral stair quote for you.

**1 Diameter:** Standard diameters for our Spirals are 42", 48", 54", 60", 66" & 72". Custom diameters are available upon request. 60" is the smallest dia. that meets requirements of many building codes.

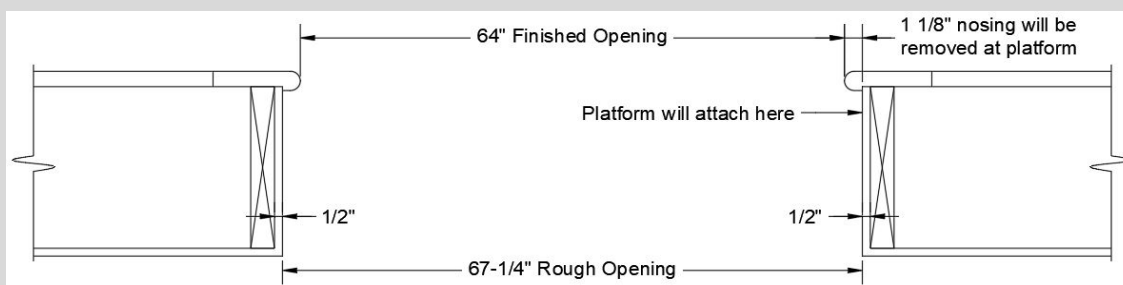
**\*NOTE:** For D100, D124, and D224 the **Finished Opening** size should be at least 4" larger than stair diameter.  
For other models, the **Finished Opening** size may need to be as much as 5" larger than stair diameter.

## \*\*Measuring Finished Opening

The Finished Opening for Custom Iron Spiral Stairs is defined as the clear space between any portion of the floor system. Measure in all directions. Square openings are rarely square.

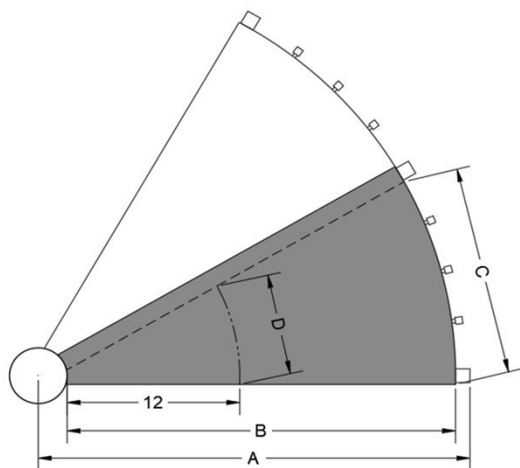
When a landing tread, or landing tread with fascia, are used to trim the opening, this must be noted. A cross-section sketch\* is useful to clearly define the situation. The sketch should indicate to which vertical surface the platform will be mounted.

Here is an example of such a sketch:



\* If there is only a rough opening when measurements are taken, you can ask the builder to provide this sketch, or you can sketch it and ask the builder to approve it.

## Tread Dimensions for standard diameter spirals:



Diameter	42"	48"	54"	60"	66"	72"
A (radius)	21"	24"	27"	30"	33"	36"
B	18"	21"	24"	27"	30"	33"
C @ 30°	10-1/4"	11-3/4"	13-1/4"	15"	16-1/2"	18"
D @ 30°	7-1/2"	7-1/2"	7-1/2"	7-1/2"	7-1/2"	7-1/2"
C @ 27°	9-1/4"	10-3/4"	12"	13-1/2"	14-3/4"	16-1/4"
D @ 27°	6-5/8"	6-5/8"	6-5/8"	6-5/8"	6-5/8"	6-5/8"

(dimensions C & D are from nosing on one tread to nosing on next tread.)

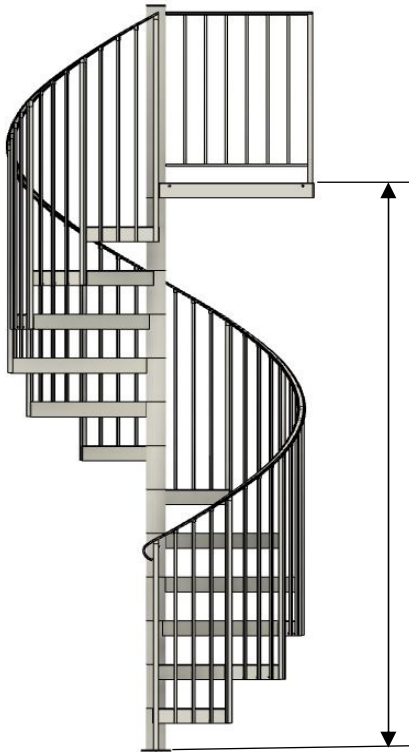
Mid-Baluster Quantity per tread:

Stair Diameter	42"	48"	54"	60"	66"	72"
Quantity	2	2	3	3	3	4



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## 2 **Height:** Measuring & Tread QTY



Measure the vertical distance from FINISHED Floor to FINISHED Floor. The "Finished Floor" can include concrete, underlayment, sub-floor, carpeting, wood, tile, etc. The Finished Floor thickness must be accounted for to ensure the correct height. The stair is NOT adjustable.

EXTERIOR Height Measurement-- Check for sloping ground between the deck edge and the location of the spiral column base footing. The centerline for the column base is the radius of the stair +2". Use a level from the deck and measure out to the centerline location, and then measure height.

Tread Quantity is determined by Finished Floor to Floor height divided by 9.5.

- 88 to 95" .....9 Treads
- > to 104-1/2" .....10 Treads
- > to 114" .....11 Treads
- > to 123-1/2" .....12 Treads
- > to 133" .....13 Treads
- > to 142-1/2" .....14 Treads
- > to 144" .....15 Treads

Stairs are available at any height. For heights greater than 144", many building codes may require a mid-rest landing platform.

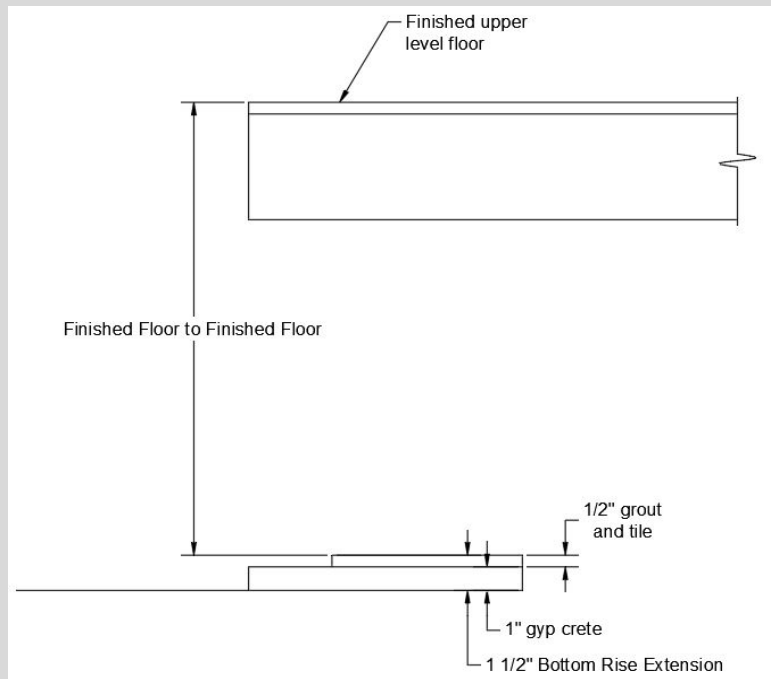
"Stacked" Spirals to span multiple levels are also available. Please inquire.

### \*\*Bottom Rise Extension:

A Bottom Rise Extension is used when the center column will be resting on a surface below the finished floor, such as a footing.

-- The bottom baluster can also be extended below the finished floor, or rest on top of the finished floor. Please Specify.

The value entered for the bottom rise extension is the difference in height between the underlying surface (which the stair will sit on) and the finished floor surface.



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## 3 Direction of Rotation:

Down-Left (counter-clockwise) or Down-Right (clockwise)  
(See diagram at right)

### Degree of Rotation

Our spirals come with 30° Treads standard.  
Other tread angles are available (please inquire), however treads that are 27° or less may not meet typical code requirements for minimum tread depth.

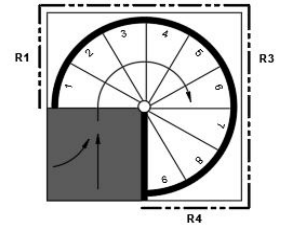
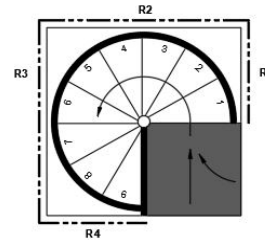
### NO PLATFORM Note:

If you want the spiral with NO platform, and hope to attach it to your own site-built platform or corner of a deck, in most cases this will not work!  
Achieving the 78" minimum headroom per code cannot typically be met without a platform built by us or in rare cases a special site-built platform. Please inquire to determine if using your own site-built platform will work.

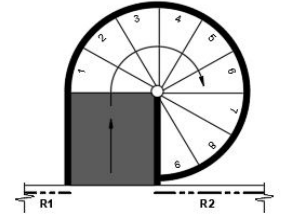
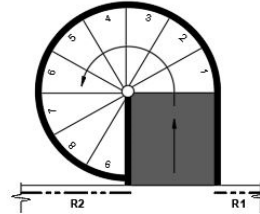
### Down-Left

### Down-Right

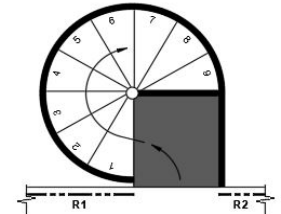
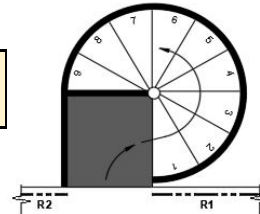
"B"  
Platform



"C"  
Platform



"D"  
Platform

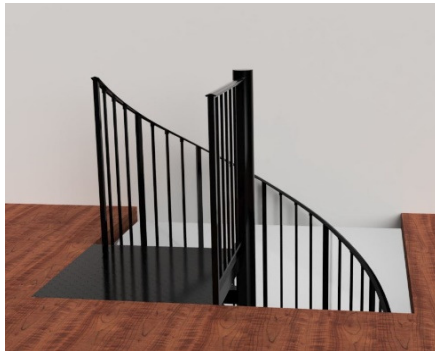


— = Railing included with platform  
- - - = Optional Balcony Railing (please inquire)

## 4 Platform Style:

Choose B, C, or D style

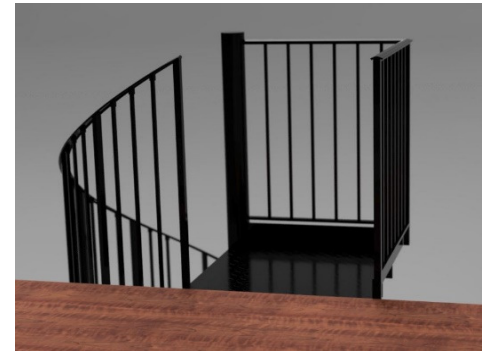
### B Platform



### C Platform



### D Platform



**B Platforms** are designed for use in a stairwell or corner of a floor system or deck where the platform will connect to 2 sides of the opening. The stairwell is assumed to be square unless specified round or otherwise. If the finished opening is not 4" or 5" larger than the stair (see #1) please provide finished opening dimensions.

**C Platforms** are designed to attach to the side of a balcony, deck or loft and have railings on 2 opposite sides.

**D Platforms** are designed to attach to the side of a balcony, deck or loft and have L-shaped rail on 2 sides.

5 **Options:** see our website for Options to choose from for Tread surfaces, Platform surface, and color.



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## 6 Add Balcony Railings:

-- When you add custom balcony railings, they will fit well and install easily!

Balcony Railings are designed to stop 2" away from walls. This is because many walls are not plumb and the railings cannot be cut to length. A plumb railing attaching at the top and bottom to a wall that isn't plumb will leave a gap. **See Example 1.**

Balcony Railings are supported by walls using a 2" spacer and flat washer. This provides a more rigid connection. The spacer can be trimmed on-site as needed. Whenever railings approach a wall, provide a secure anchor (*possibly blocking*). This secure anchor should typically be approximately 2" below the nominal height of the railing. **See Example 2.**

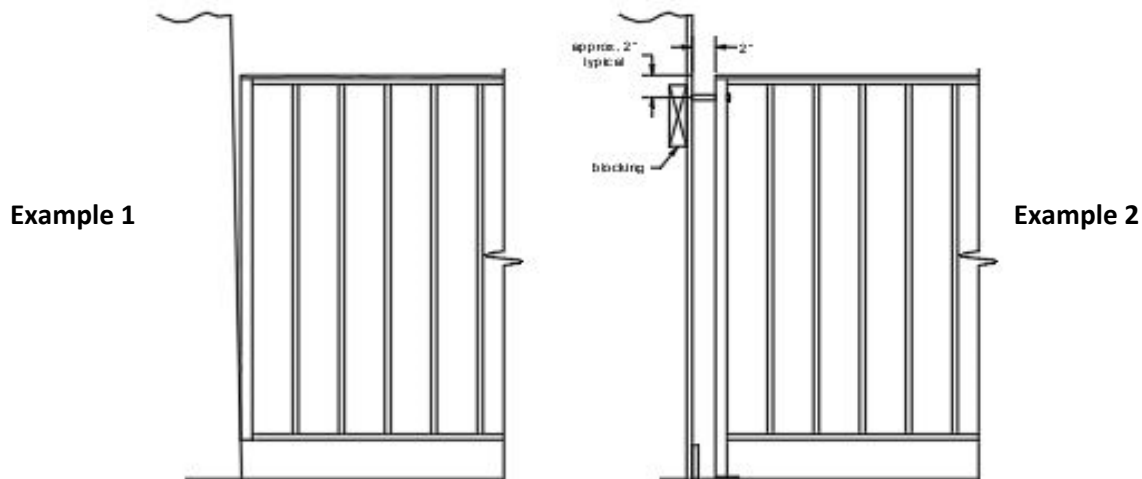
-- These custom railings are made to fit your space, and can NOT be cut to length on site.

Balcony Railings are very sturdy because they are built to job specifications. All posts are welded to the railing. Note: the baseplates on balcony railings are not designed to secure the railings without additional support provided elsewhere (such as wall studs or stairway posts).

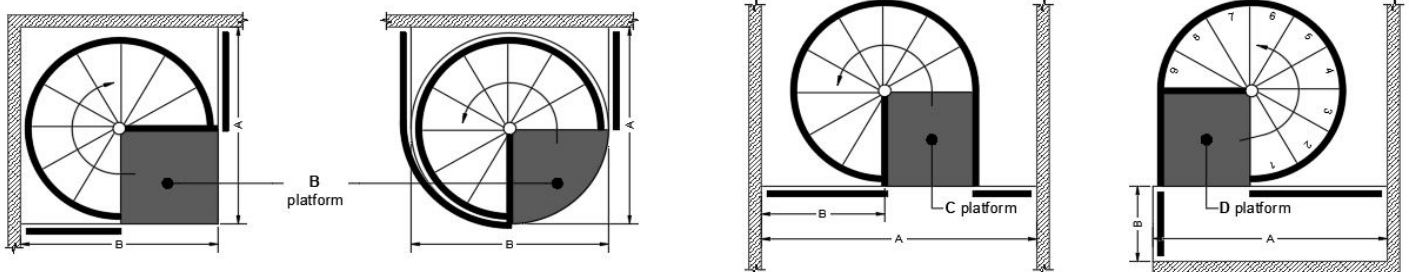
### -- Safety

Custom Balcony Railing is designed 36-1/4" tall with spaces less than 4", unless specified otherwise.

This complies with most residential building code requirements. Please specify if another height is required.



-- Let us determine the railings lengths: Supply a sketch of the finished opening with your order, including drywall or other finished material. The examples below illustrate the type of information required for us to build your railings accurately.



### Square Opening

A & B are finished opening dimensions. (down-Right shown)

### Round Opening

A & B are finished opening dimensions. C is the distance from the finished opening to the finished wall. (down-Left shown)

### Balcony or Loft Railing

A & B are finished balcony dimensions. (down-Left shown)

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## Technical Specifications

**KD Spiral:** Unless specified otherwise, all spiral stairs are shipped "Knocked-Down". Enjoy the confidence of knowing that your stair has been built specifically for you during fabrication. This minimizes field assembly time and assures a quality product.

**SETUP Spiral:** a stair that's shipped "Set-Up" has all welded connections. It ships in 1 piece and can't be disassembled.

**Welded Connections:** Most welded connections are type 2-3 NOMMA finish.

**Engineering:** Stamped engineering calculations can be provided for an additional fee. Please inquire when requesting quote.

**Materials:** Our stairs are typically constructed from either Steel or Aluminum. Other materials may be available upon request.

\*EXTERIOR PRODUCTS: Aluminum is recommended for exterior applications to prevent corrosion.

While we can fabricate exterior products in Steel if requested, a Rust Waiver would need to be signed.

**Finish:** Black Satin Powdercoat is included as standard. Other colors are available-- see "Powder Coat Color Choices" under Resources/Product Downloads on our website. Non-Stock & custom colors are available as well for additional cost.

**Building Codes:** We can build spirals to meet any building code requirement if you inform us of the requirement. Due to local variations/interpretations of codes, it is recommended that you review code-related information with your local official.

