

# Technical Design Guide



The Art of Ascent

## Guide to the Ideal Curved Layout





Congratulations! Consulting an experienced stair designer-builder at the earliest stages of your design is the first step toward a well-designed curved stair. Your foresight in planning will help you avoid costly expenses and the disappointment of a poorly designed curved stair.

When you see a curved staircase that appears to have an elegant flow and breathtaking presence, we can guarantee that didn't happen by chance. The best curved staircases start by designing the room around the stair and therefore must be designed early in the design/planning stage. Start by allowing enough room for a proper design.

Unlike a standard staircase where all the tread noses are parallel, a curved staircase is designed with a number of "pie shaped" treads, with the tread noses running toward a common center point. The combination of "pie shaped" treads and standard treads within the same staircase will change the angle at which the stair ascends. These angle changes can destroy the flow and overall appearance of the curved staircase.

Just because a curved stair appears to "flow" on a plan-view drawing does NOT mean it will look good in the third dimension. The elements of a well-designed curved staircase are contained in a number of mathematical principles that we adhere to at Designed Stairs. All the designs here are based on well developed a geometrical consistency, which result in an elegant and grand curved stair. The layouts in this catalog are ideal. They use a generous radius, which surprisingly creates not only the most gracious and elegant but also the most cost effective to build.

As a professional architect, if you would like any of these layouts to be forwarded to you in a CAD file please contact Designed Stairs directly. We are also happy to provide professional layout and design services for projects that may not fit into one of these plans. Contact us thru this e-mail, or our website. Stairs@[DesignedStairs.com](mailto:Stairs@DesignedStairs.com)



## Basic Elements of a Well Designed Curved Stair

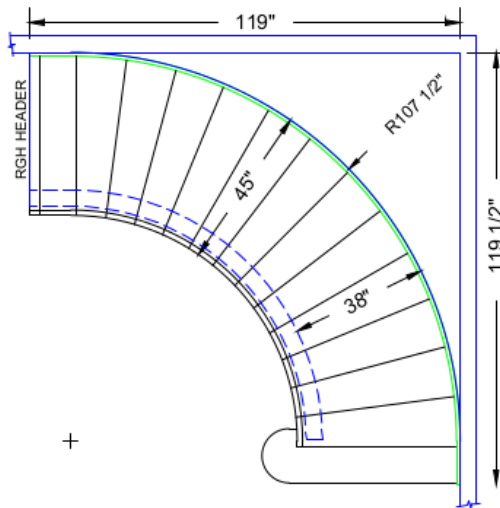
First will be the proper **placement** of the staircase into the structure, which should be addressed at the earliest stages of design work. How will the staircase affect spaces immediately surrounding it? How will the stair be viewed from the entry to the home or from the side through adjoining rooms? Does the staircase offer a welcoming angle at the base and have a stunning angle of ascent to the second floor above?

Second is the **allowance of space**. If the proper amount of room is not considered to allow a stair to be built with geometric consistency and adherence to proper safety codes, even the most knowledgeable stair designer will not be able to deliver the elegance you had envisioned.

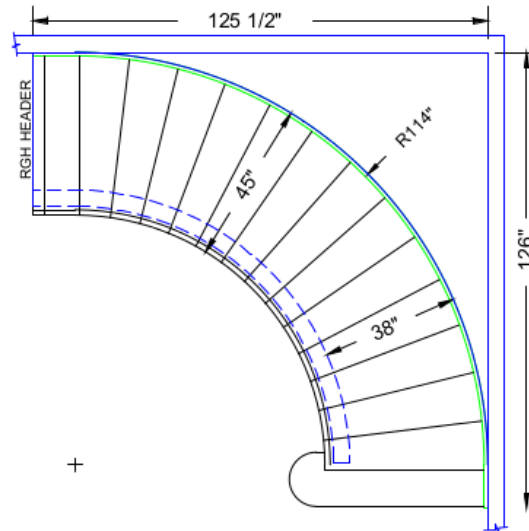
The third key to a “knock-out” curved stair design will be the “**design details**” that you chose to add to the solid geometry of the staircase. The styling of your handrail, newels, and balusters will be critical to the finished feel that the stair portrays, and the inclusion of over-sized starting treads, descending volutes, bowed tread noses, and other design details will help push it over the top.

A curved staircase is an enduring statement of elegance and one of the most functional pieces of art in the realm of human design. If elegance is what you are after, you have called upon the right resource.

# DESIGNED STAIRS

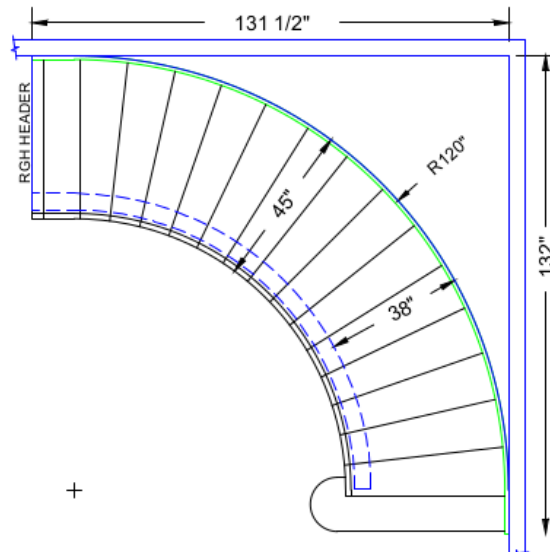


10-CS-L-15-00-38  
15 RISE, LEFT HAND



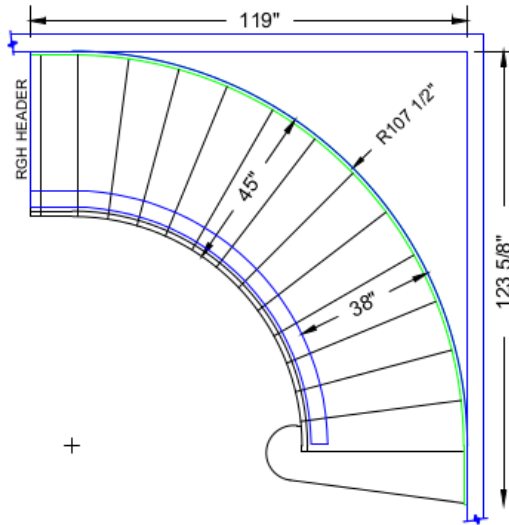
10-CS-L-16-00-38  
16 RISE, LEFT HAND

Stairs shown are designed  
to accomodate 38" well  
opening under stair

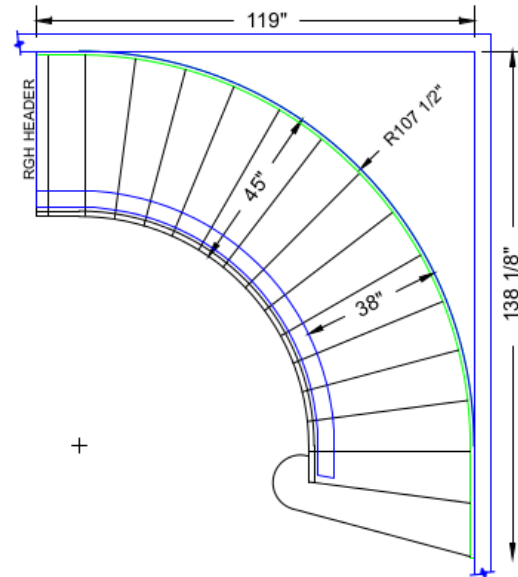


10-CS-L-17-00-38  
17 RISE, LEFT HAND

# DESIGNED STAIRS

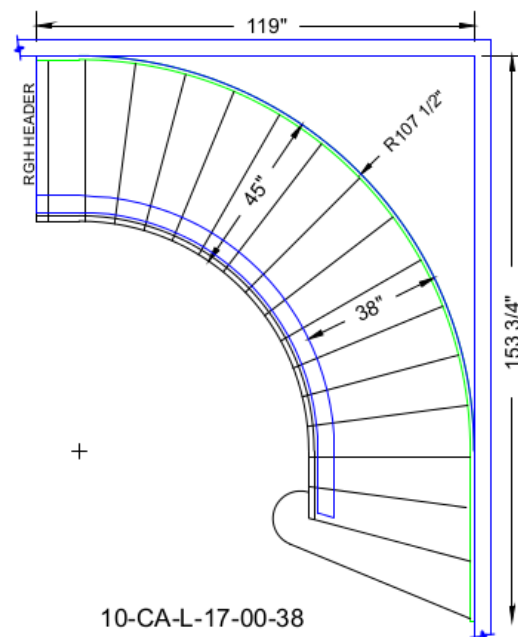


10-CA-L-15-00-38  
15 RISE, LEFT HAND



10-CA-L-16-00-38  
16 RISE, LEFT HAND

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opening under stair



10-CA-L-17-00-38  
17 RISE, LEFT HAND