



# 7 Questions to Ask

*Before You Buy*  
Lamp Posts

## A Place to Remember

Cast metal lamp posts speak to us in a language all their own. The complex texture of their surfaces, the sculpted grace of their form: these bring more than mere lighting to your site.

What was simply a row of stores or a nondescript group of buildings now becomes a place to remember. In daylight or at night, the effect is dramatic. The quiet beauty and evocative charm of these pieces give to your site a true *sense of place*.



## Making the Right Decision

What kind of lamp post should you choose? As you've probably guessed, there's more to it than just picking an appealing style.

In particular, it's important to select posts made with the right metal to suit the conditions of your site. The most common metals used for lamp posts are cast aluminum and cast iron.

Unlike most companies in our industry, Spring City makes *both*: cast aluminum *and* cast iron posts. We make steel posts and accessories, too.

Which is best for *your* site? Well, as you'll see... it depends! Asking the following questions will help you make the right choice.



## What Is the Expected Lifetime of My Project?

Both aluminum and iron give excellent service, measured in decades, in a wide variety of climates and site conditions. But if particularly long life is an important requirement for your site, the nod should go to cast iron. The service life of cast iron is commonly *three times* as long as that of cast aluminum.

In fact, it's not unusual to see cast iron products that have been in service for over 100 years. With proper coating maintenance, cast iron posts will last almost indefinitely.

It's also important to consider the specific circumstances of your site. For example, are your posts likely to suffer accidental abuse from bicycle chains or shopping carts? If so, iron might again be a better choice. Aluminum can be scratched or gouged more easily than iron.

## How Are My Posts Being Installed?

For a post of a given height, iron is heavier than aluminum. Iron is not only an inherently heavier metal, but iron posts also have thicker walls than aluminum posts, due to the manufacturing characteristics of the two metals.

What this means is that a small crew of workers can manually set up most aluminum posts, while motorized lifting equipment may be needed to place iron posts.

To give you some idea of the relative weights of the two metals, consider a 10-foot Washington-style post with a 17-inch-diameter base. Cast in iron, this piece would weigh 310 pounds. A crew could set this post up manually, but motorized help might be appreciated. The same post and base cast in aluminum would weigh 117 pounds, which a crew could probably handle quite easily.





## How Strong Should My Lamp Posts Be?

For many applications, aluminum's strength is perfectly adequate. Residential uses and ornamental applications away from traffic are common for aluminum, because they do not require particularly high load-bearing capability.

If you expect your posts to bear additional loads, however, you should choose cast iron. For example, mounting banners on the posts can add significant transient loads on windy days. Cast iron's tensile strength can sustain such loading over time better than aluminum. Also consider how far the posts will be from the roadway. Cast iron withstands bumps and vehicle impacts better than aluminum, which is more likely to break through.

Always ask for a load calculation from the manufacturer, to assure yourself that your posts will perform properly in *your* conditions. This report, sealed by a PE (professional engineer), is normally under \$500. A responsible manufacturer will be happy to provide these calculations for you.



## Do I Want Custom Features on My Posts?

Imagine your city crest as a beautiful, raised medallion on the base of your post. Or envision a completely new post of your own design!

Custom work (and historical reproductions) should be sand cast. This will produce exquisite results in both aluminum and iron, and — surprisingly — is likely to be more economical.

Custom work calls for a manufacturer with an in-house foundry with all the capabilities this exacting work requires: an expert design staff; in-house tooling, so your design works properly in metal; sand casting, for aesthetics and economy; and *stringent quality control over every step*, so your design will see a long future of trouble-free service.

And, whether your posts are custom or standard designs, it is always a good idea to have submittal drawings provided by the manufacturer. These will ensure that everyone concerned with the project clearly understands what you want delivered to your site.



## Will My Posts Be Subject to Vibration?

Will your posts be located on a roadway that carries heavy traffic? If so, vibration is a factor to consider. We've all felt the road surface move when a large truck passes over a bridge. This same effect occurs to a lesser extent on roads, too: vibration causes small (and, through resonance, sometimes quite large) movements in your lamp posts. Such movement can cause luminaires to move and joints to flex, so that over time, structural integrity may be compromised and service life shortened.

One of the most noteworthy characteristics of cast iron is its ability to dampen vibration. If your site includes a bridge or an urban street environment where harmonic vibrations may affect post and lamp life, you should choose iron.



## Is My Site Near Salt Water — or Salted Roads?

If your site is near the ocean or another large body of salt water, you should consider the effect of salt on the posts you install. Aluminum oxidation can be especially aggressive in a salty seaside environment. Iron posts would be preferable in this application.

The same is true in places where salt is spread on streets following snow and ice storms. If this salt splashes onto aluminum lamp posts, it can dramatically increase the rate of oxidation. This can be especially troublesome at the points of contact between the steel anchor bolts and the aluminum base. Again, iron is a better choice for sites like these.



## What Alloy Is Being Used in My Aluminum Posts?

Aluminum does not occur naturally in its pure state, so it is always purchased as an alloy, a composite material, which we then melt and cast here in our foundry.

Aluminum alloys vary greatly in their performance characteristics, which are critically important to the metal's strength, durability, and other service parameters. It is an unfortunate fact that some unscrupulous manufacturers use alloys bought on the huge secondary market. Why? Because they are cheap. But no one knows what these alloys are actually made of, or how long the posts made from them will last. Not you. *Not even the manufacturer!*

You should demand aluminum posts that are made from primary alloys, either SR319 or 356. Spring City uses aluminum alloy SR319, which is significantly higher in tensile strength, yield strength, and Brinell hardness than 356.



We here at Spring City hope these seven questions help you select the perfect lamp posts for your site. In over a century and a half of service, we've found that our best customers ask us lots of questions. We take great pride in being the kind of company they want to work with.



## Creating the Sense of Place™

When your setting calls for the warmth and beauty of cast metal lamp posts, you'll find *the world's largest selection* at Spring City, from an immense range of classic traditionals to the most contemporary styles and custom designs — in both cast iron and cast aluminum.

That's right. We offer a huge library of lamp posts, bollards, and beautifully crafted traffic controls cast in both iron *and* aluminum, with design-integrated steel elements as needed for particular applications. With Spring City, you'll find the perfect style *in the right metal* to fit the conditions of your site.

That's why American towns, cities, and universities have chosen Spring City more often than any other brand, since 1843.

Contact Spring City today. We'd be happy to discuss the plans you're developing. Call (610) 948-4000, or visit us at [www.springcity.com](http://www.springcity.com).



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