

Determining Your Safety Railing Perimeter Needs

Thank you for considering the LORGUARD Rooftop Safety Railing System for your fall protection application. This document is designed to help you determine how many sections of railing you will need and also the quantity of baseplates required.

The Importance of Baseplates

It is important to remember that our baseplates are sold separately from our railing sections, so before placing your order, you will need to determine the overall layout of your guardrail project. The main question that needs to be answered is if your layout will be an “open” or “closed” layout. This will determine the number of base plates you need in order to complete your project.

What is an “open” layout versus a “closed” layout?

If your layout is a complete enclosure with no means of access, this is a closed system. Typical closed-system applications are used around skylights or full perimeter rooftop guarding.

If your layout requires access whether you are using a gate for access or leaving a side open, this is an open system. Typical open system applications are used around HVAC units, condensers or other rooftop equipment that requires periodic maintenance.

How does the layout determine the number of base plates needed?

Each base plate has two rail receivers. If you have a closed layout, your last rail leg is inserted into the second receiver of your first base plate. So for any closed system you need one base plate for every piece of rail you order.

Example: If you have a 5'x5' skylight that you want to completely enclose, you would order 4 (four) 6' rails and 4 baseplates.



Illustration showing a closed system around a skylight screen. Closed systems have a 1:1 ratio of rails and baseplates.

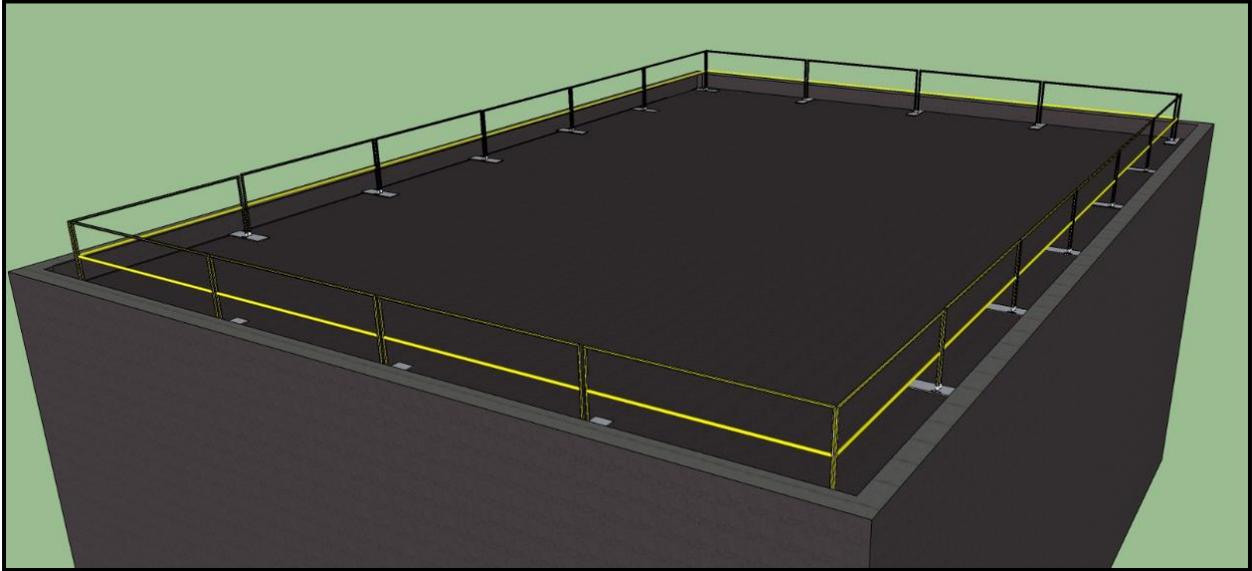


Illustration showing a full perimeter closed layout system.

If you have an open layout, the last leg of your last rail will not go into your first base plate. Which means you have an open leg of rail and you need to order one extra base plate to finish you project.

Example: If you have a HVAC unit that is 15' in length and 8' in width, but you need to have maintenance be able to access it. You would use four 10' rails to surround three sides and leave one side open. You would require FIVE base plates so the last rail leg has a base plate

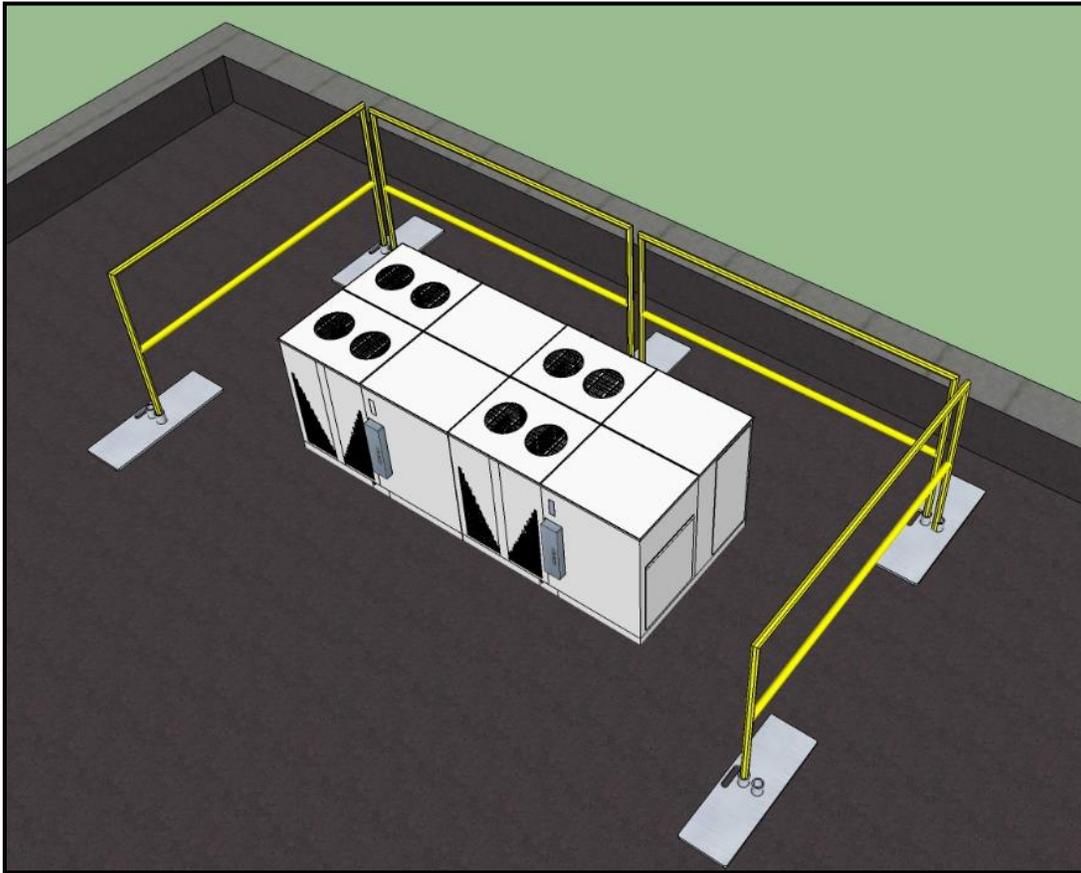


Illustration showing a typical open system around a rooftop HVAC unit near a leading edge. Open systems require one extra base plate than the number of rails required

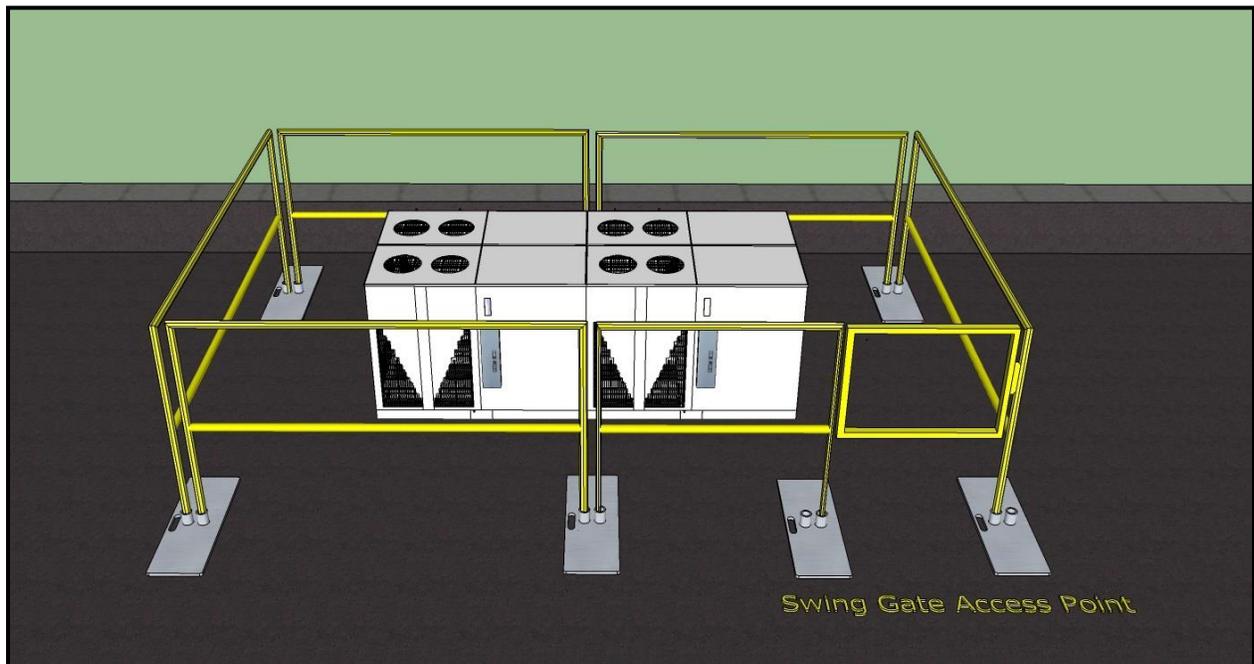


Illustration shows an open system with a swing gate access point. Although the system looks like a closed system, the swing gate gives access therefore making it an open system and it will still require one extra base plate than the required rail

Calculating Your Safety Railing Needs

Common Questions

How do I determine how much LORGUARD I need for my project?

LORGUARD comes in lengths of 6' 8' and 10', so for any closed system, some simple measurements of the area you want to enclose will determine the length of rail needed.

For an open system where people need to gain access, you want to make sure you cover the desired area and allocate enough space so the worker has the room to perform the service needed.

A good rule of thumb is you want to provide an additional 36" of space around the area of work. So for example, if you had an HVAC unit that was 6' x 6', you would want to provide 12' of rail on the leading edge side so your worker has three feet of space on either side of the unit to perform their work.

Why do I need to have rails coming back to the center of the roof?

OSHA's regulations for guardrail is that it needs to withstand 200 pounds of force in any direction on the top rail and 150 pounds in any direction on the mid rail. Since the LORGUARD system is a free standing system, the outriggers are required to maintain the OSHA force regulations.

If you have any questions that are not answered in this please do not hesitate to contact us 1-800-354-2719.