

Customer Service = Resolution



**Safeguard**  
Properties

Installation of  
Handrails and  
Guardrails – When &  
How

### ***When?...***

- Handrails: A handrail should be present on any set of steps that contains 3 steps or more. Meaning, if you have to lift your foot 3 consecutive times to climb the staircase, a handrail must be present. For instance, there may be only 2 steps leading up to an entrance door, but a 3rd step must be taken to get over the threshold and into the property. This would require a handrail (example pictured below).
  - In regards to steps that are open on both sides, like the one pictured below, we should only be installing one handrail, on the side of the door handle.
  - Please Note: This guideline for handrails is independent of whether or not the steps are at or above 24" in height.
  - If less than 3 steps are present, no action will be required unless specifically requested.



- Guardrails: Guardrails should be installed when a fall hazard is present. A fall hazard is defined as “a straight drop of 24” in height or greater”. Most common areas for meeting this requirement are porches and second floor balconies.
- If a fall hazard of less than 24” in height is present, no action will be required unless specifically requested.



Please Note: If you're questioning whether or not to install handrails or guardrails (for example, on a high dollar home where it may diminish curb appeal) you are required to contact the broker from site. If the broker does not wish to have railings installed, this needs to be in writing from the broker and uploaded to your work order.



## *How?*

### **Required Materials**

- Both handrails and guardrails for exterior use and unfinished areas inside the home need to consist of Alkaline Copper Quaternary (ACQ) treated, wooden 2"x4"s. ACQ treated lumber should be used for both interior and exterior applications. Never should any piece of lumber smaller than a 2"x4" be used to construct a handrail or guardrail.

Handrails installed to finished, livable areas within the property need to be of wooden, handrail grade material; secured by handrail brackets to the wall.

- We need to be installing wooden rails, regardless of the type of handrail/guardrail that may have previously been installed.

If a specific handrail/guardrail is to be used outside of our current process, we can provide a bid upon request.

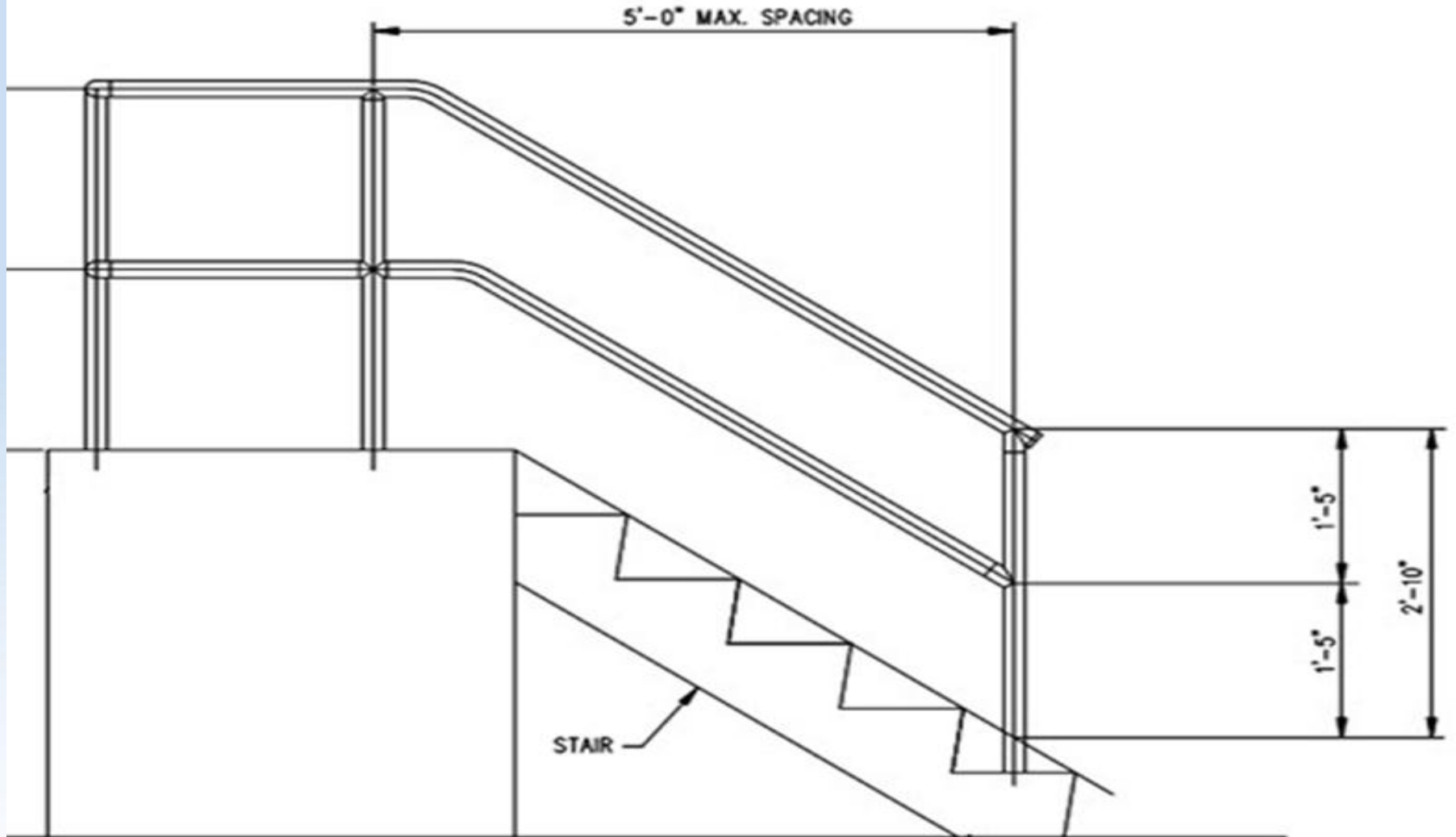
- Posts (where applicable) need to be constructed from ACQ treated, wooden 2"x4"s as well. Never should any piece of lumber smaller than a 2"x4" be used to construct framing to support handrails and/or guardrails.



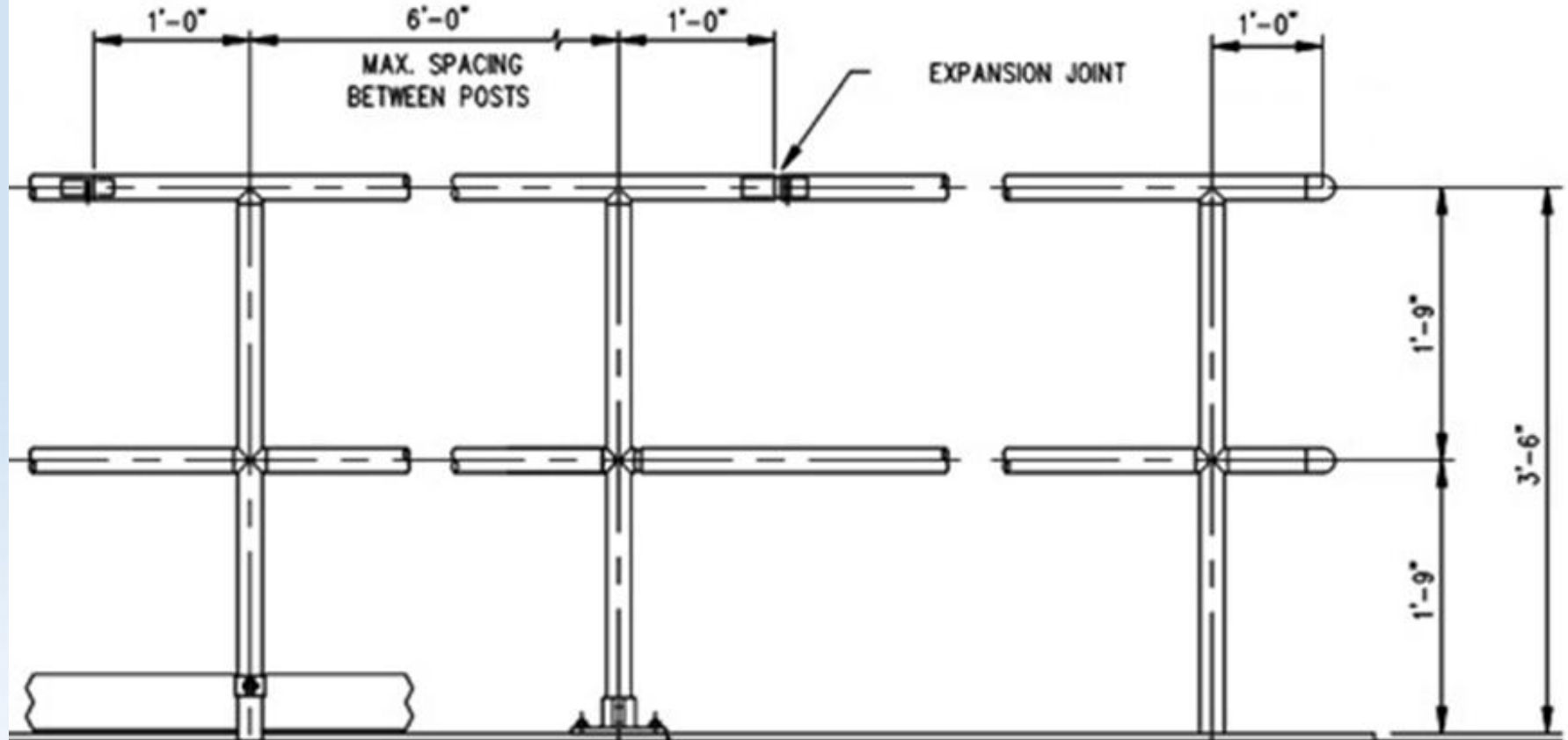
### Required Height and Spacing

- All handrails must measure 34"-38" in height, measured from the nose of the stair (tread).
- All guardrails must measure a minimum of 42" in height, measured from the leading edge of the walking surface.
- Posts and/or securing brackets for handrails should be spaced no more than 5ft apart; leaving no less than a 1 ½" gap between any wall and the handrail.
- Posts for guardrails that are installed should be spaced apart no greater than 6ft.
- At least 2 securing points are required for all handrails and guardrails. This total number will depend on the length of the handrail or guardrail installed.
  - For instance, if a 9ft guardrail is to be installed, the securing points need to be spaced out every 4 ½ feet, for a total of 3 posts.
- Handrails installed on staircases with a fall hazard of 24" or greater need to have a *middle* railing installed. The middle railing should be installed at a 17"-19" height (approximately half of the height of the full handrail).
- Guardrails installed for platforms 24" or higher need to have a *middle* railing installed. The middle railing should be installed at 21" in height, measured from the leading edge of the walking surface (half of the height of the full guardrail).

## Handrail spacing and height requirements



## Guardrail spacing and height requirements



### Securing Handrails and Guardrails

- Interior handrails (consisting of handrail-grade wood) need to be secured by handrail brackets. The brackets need to be secured to the stud of the wall. If securing to the stud is not feasible, drywall anchors must be used to ensure stability.
- Exterior handrails and guardrails will either be secured to 2"x4" posts or to an existing framework.
- Securing Posts: Posts for handrails and guardrails should be driven into the ground (dirt), secured to the side of wooden porches/decks/steps, or anchored into mortar joints.

### **Brick Structures**

In regards to the installation of handrails/guardrails to brick structures, drilling or nailing into brick is unacceptable. The brick will crack and crumble apart, causing structural damage. When brick steps are present, the vendor can *drill* into a mortar joint with a masonry bit (a pilot hole), insert a plastic anchor, and attach the 2x4 to the anchor safely with a screw; without causing any real damage. The same method would be acceptable with poured or pre-cast concrete. The areas where holes are created can be covered over with mortar patching very easily and inexpensively if needed. Vendors should **never** create any holes in the siding of a property or damage ornate columns. In these cases, they can set posts in the ground (dirt) and use those for their framework to install the railing(s).

*Please Note: If handrails or guardrails are secured directly to the siding of the property or ornate columns, you (the vendor) could be held financially responsible for the damages.*



Masonry Drill Bit



Concrete Screw



Plastic Screw Anchors



### **Broken Concrete**

There are no situations where we would be unable to attach a handrail, except if the steps have deteriorated concrete. In the case that the steps are deteriorated, we should be blocking access to that entrance so that someone does not get injured. Vendors should be using concrete screws to attach handrail stock to the sides of the steps. Any handrail installed should be done securely, so as not to give a false sense of security.

**Thank you for your continued hard work!**



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**Questions?...**