

**NC Department of Insurance
Office of the State Fire Marshal - Engineering Division
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Guard Rails on Screened Porches

Code: 2018 Residential Code
Section: R312

Date: April 9, 2019

Question:

On a screened porch that has a floor more than 30" above the adjacent grade, are horizontal or vertical members required to prevent the passage of a 4" sphere?

Answer:

Section R312.1.2 requires that a guardrail shall be a minimum of 36 inches in height above the walking surface. Section R312.1.3 requires that vertical pickets be spaced less than 4 inches apart. The guardrail is installed to prevent people or large objects from falling to the floor or grade below. The pickets are installed to prevent children or small objects from passing through the guardrail.

Screen may be accepted in accordance with Section 105 of the NC Administrative Code as an alternate method to replace the pickets provided all of the following conditions are met:

- Guardrails shall be installed horizontally at 36 inches and 18 inches above the walking surface.
- Guardrails shall be capable of resisting a 200 pound concentrated load applied in any direction at any point along the rail (ref, Table R301.5).
- The screen and the screen attachment shall be capable of resisting a 50 psf uniform live load (ref, Table R301.5) from the direction of the protected raised walking surface.

Keywords:

mesh