NC Department of Insurance Office of the State Fire Marshal - Engineering Division 1202 Mail Service Center, Raleigh, NC 27699-1202 919-647-0000

Guards On Retaining Walls

Code: 2018 Residential Code **Section:** R404.4

Date: April 10, 2019

Question:

When are guards required on retaining walls?

Answer:

Section R404.4 requires engineering design for the following residential retaining walls and are therefore required to be permitted and inspected:

- 1. All retaining walls with an unbalanced condition exceeding 48 inches
- 2. All retaining walls that cross over property line
- 3. All retaining walls that support buildings and their accessory structures.

Section R312.1.1 states in part; "Guards shall be located along open-sided walking surfaces, including stairs, ramps and landings, that are located more than 30 inches (762 mm) measured vertically to the floor or grade below...." The Commentary for Section R312.1 states: "The guard provisions of this code address the issue of providing protection for occupants from falling off of any elevated walking surface."

Guards complying with R312 must be included on any of the above mentioned retaining walls when the finished area on the high side of the wall is more than 30 inches above the grade below and part of an egress route or other dedicated walking surface.