



MIKE CAUSEY, INSURANCE COMMISSIONER & STATE FIRE MARSHAL
BRIAN TAYLOR, CHIEF STATE FIRE MARSHAL

September 25, 2019

Bob Haynes
Buncombe County
Permits & Inspections
30 Valley Street
Asheville, NC 27603

**RE: 2018 NC Residential Code, Section R310.2.2
Emergency Escape and Rescue Opening Sill Height**

Mr. Haynes:

This letter is in response to your September 25, 2019 request for formal interpretation that I received on September 24, 2019. You stated in your letter:

I am asking for a formal interpretation as to where the measurement for emergency rescue openings are to be measured from.

It is interesting that the International Residential Code (IRC) and the International Building Code (IBC) use different terms regarding the maximum height of the bottom of emergency escape and rescue openings. IBC, Section 1030.3 indicates the measurement is made to the bottom of the opening, and the IRC indicates that it is to the window sill. Also, the ICC commentary for those codes provides no explanation as to why 44 inches was selected as the maximum height. My guess is that 44" is related to do with the ability of individuals, other than young children, to climb over and through the opening and still keeping them lower than potential smoke and hot gases.

I researched the term "sill" and found the following definition online from Meriam-Webster Dictionary.

- 1: a horizontal piece (such as a timber) that forms the lowest member or one of the lowest members of a framework or supporting structure: such as*
 - a: the horizontal member at the base of a window*
 - b: the threshold of a door*

Conclusions:

The "sill" for purposes of the NCRC is any horizontal member at the bottom of the widow unit that remains in place when the window sash is operated. This includes but is not limited to the window frame, stool, stop, and any other such item. It does not include window operating arms of casement windows, but it does include any operating arm covers that extend into the opening width required by R310.2.1.

Because window type may not be known at the time of rough framing it is recommended that a ½" tolerance be given to application of the 44" height limit of R310.2.2.

As a matter of reference, a copy of your letter requesting a formal interpretation and all attachments you submitted with that request are included with this letter.

Please call if you have comments or questions.

Sincerely,



Carl Martin, RA

Chief Code Consultant

cc: File
Robbie Davis, Chairman – BCC
David Smith, BCC - Chairman Residential Code Standing Committee

Link to letter of request for formal interpretation:



Formal Request.pdf