

**NC Department of Insurance
Office of the State Fire Marshal - Engineering Division
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King Studs at Wall Openings

Code: 2018 NC Residential Code
Section: Table R602.3(5)

Date: May 2, 2019
Revised: January 9, 2020

Question #1:

What does footnote “d” of Table R602.3(5) mean?

Footnote:

- d. One half of the studs interrupted by a wall opening shall be placed immediately outside the jack studs on each side of the opening as king studs to resist wind loads. King studs shall extend full height from sole plate to top plate of the wall.

Answer #1:

The total number of king studs on each side of an opening shall be one half the number of studs cut by the framed opening unless a design professional has specified the location of each stud within a given wall. The span lengths of the framed openings are limited to the girder and header spans of tables R602.7(1) and R602.7(2) for the girder and header size. The king studs are to be connected as required by Table R602.3.1 Wall Framing for Double Studs. Footnote “b” of Table R602.3(1) Wall Framing would apply to multiple studs. See the illustrations on page 2 and 3.

Question #2:

Is there an alternative method to footnote “d” of Table R602.3(5)?

Answer #2:

Yes. The following table has been proposed as a code amendment to replace footnote “d” and Table R602.7.5.

**TABLE R602.7.5
MINIMUM NUMBER OF FULL HEIGHT KING STUDS
AT EACH END OF HEADERS IN EXTERIOR WALLS**

<u>HEADER SPAN (feet)</u>	<u>MINIMUM NUMBER OF FULL HEIGHT STUDS (King)</u>
<u>Up to 3'</u>	<u>1</u>
<u>>3' to 6'</u>	<u>2</u>
<u>>6' to 9'</u>	<u>3</u>
<u>>9' to 12'</u>	<u>4</u>
<u>>12' to 15'</u>	<u>5</u>

Illustrations for #1:

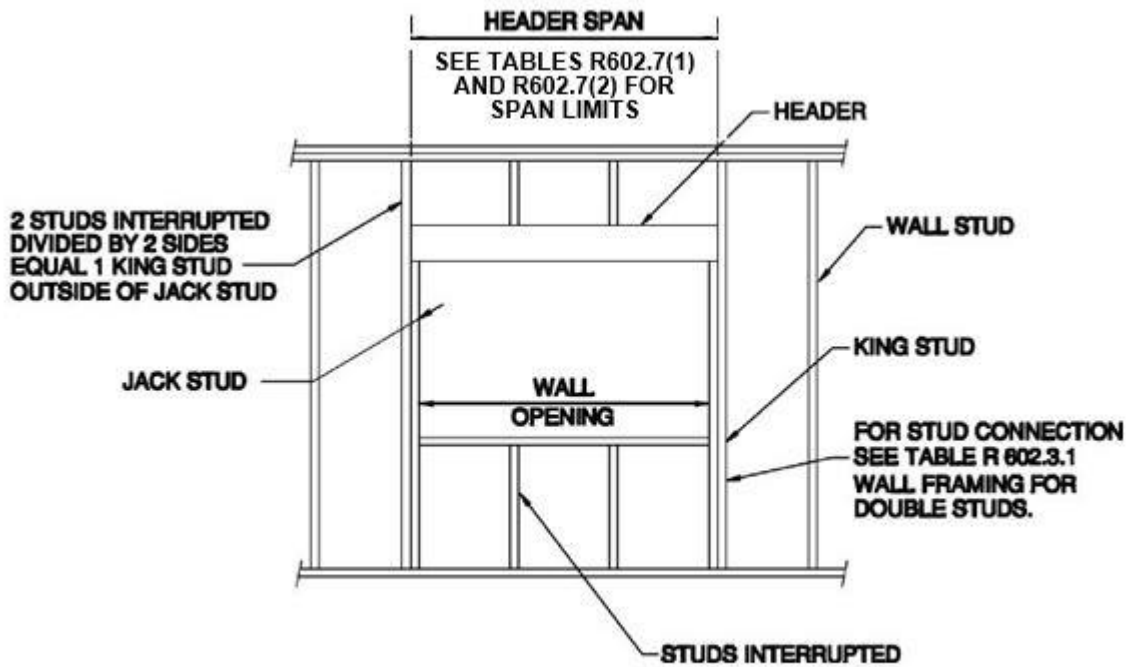


Illustration 1-For placement of king studs only.

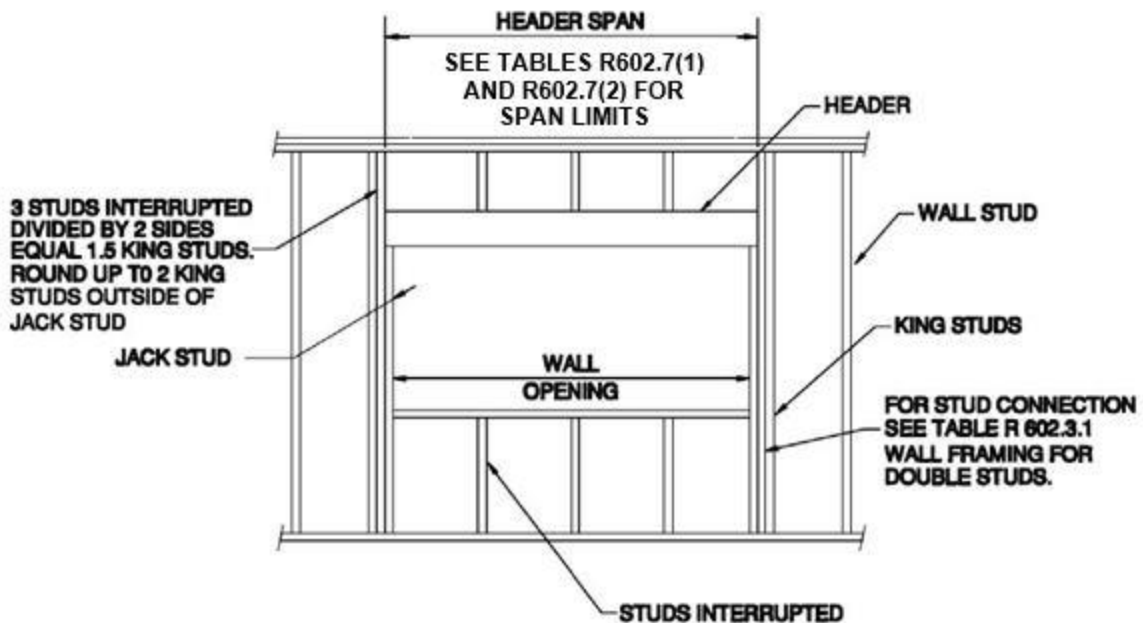


Illustration 2-For placement of king studs only.

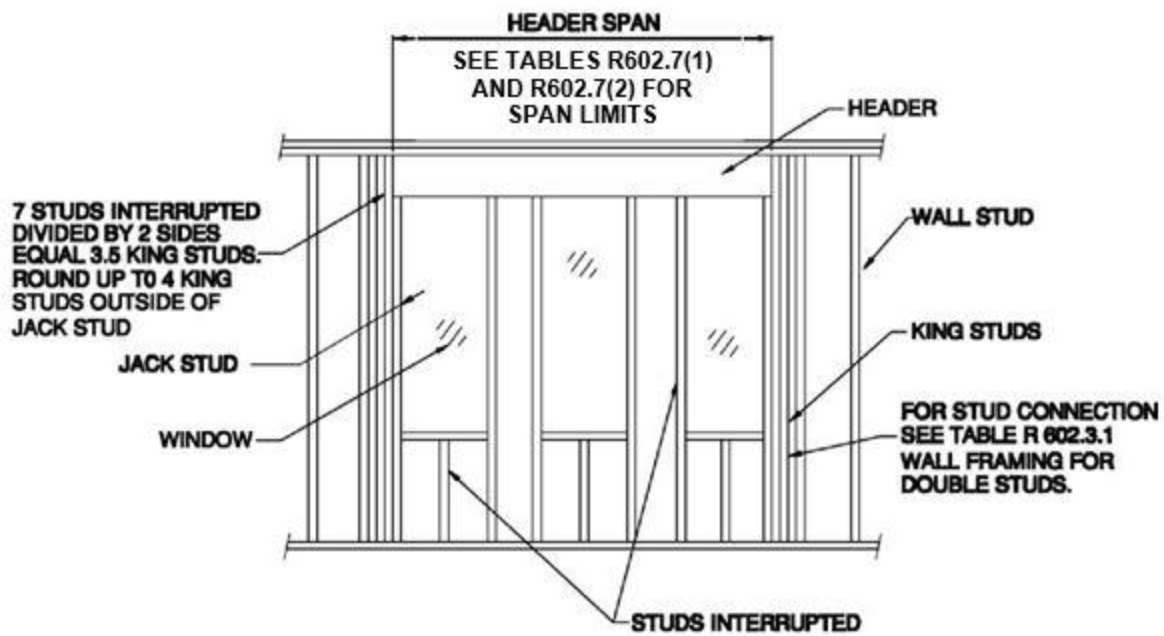


Illustration 3-For placement of king studs only.