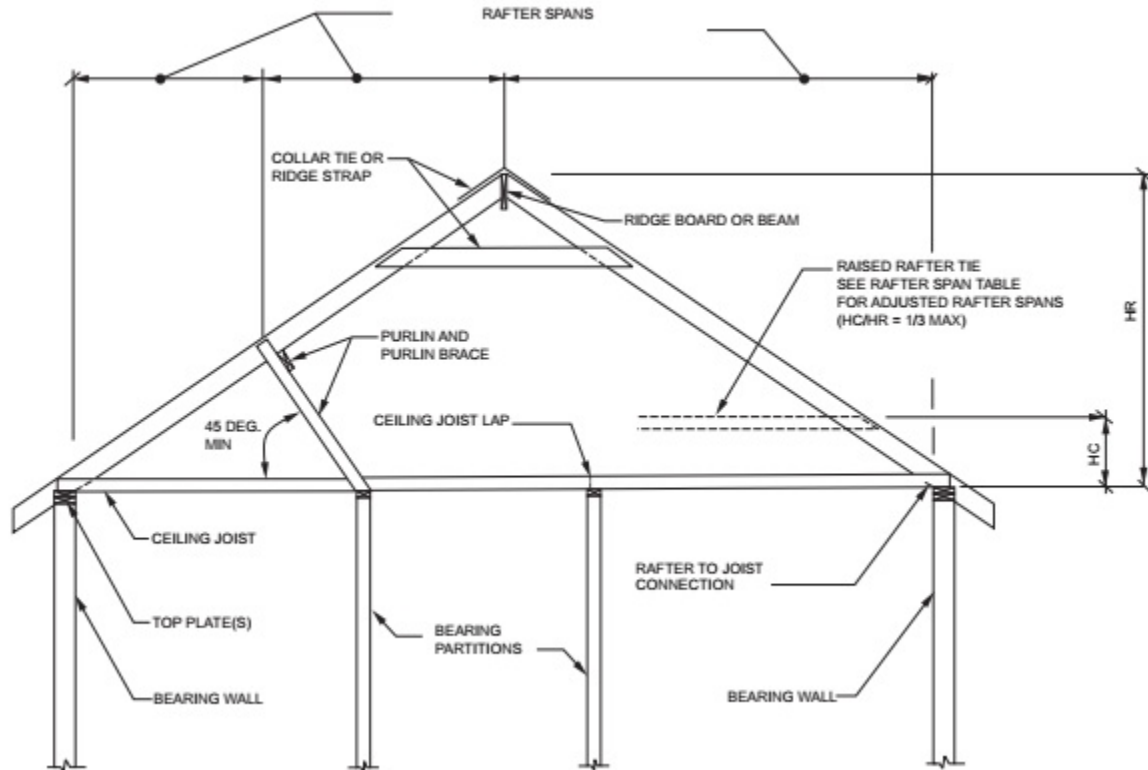


## CONVENTIONAL ROOF CONSTRUCTION



**FIGURE R802.4.5  
 BRACED RAFTER CONNECTION**

For the construction of conventional roofs using rafters, follow the figure above and the referenced code sections from the *2021 International Residential Code*.

Ceiling joist spans shall be in accordance with Tables R802.5.1. Typical ceiling joists are 2x6 Doug Fir #2 at 24" on center with a maximum span length of 15 feet. See referenced tables for additional joist configurations.

Rafters shall be framed not more than 1-1/2" offset from each other to ridge board or directly opposite from each other with a gusset plate as a tie. The ridge board shall be not less than 1" nominal thickness and not less in depth than the cut end of the rafter. (R802.3)

Where rafter lengths exceed the maximum rafter spans specified by Tables R802.4.1(1) through R802.4.1(8), the installation of purlins down to bearing walls, to reduce the span of rafters, is permitted as shown above.