Pikes Peak REGIONAL Building Department

POLICY:

Policy effective July 23, 2025

RESIDENTIAL STEEL BEAMS AND FRAMING.

2021 International Residential Code (IRC), Section R301.1.3

2023 Pikes Peak Regional Building Code (PPRBC), Section RBC303.4.45, RBC303.4.59, and RBC303.4.66

CODE SECTION:

R301.1.3 Engineered Design. Where a building of otherwise conventional construction contains structural elements exceeding the limits of Section R301 or otherwise not conforming with this code, these elements shall be designed in accordance with accepted engineering practice. The extent of such design need only demonstrate compliance of nonconventional elements with other applicable provisions and shall be compatible with the performance of the conventional framed system. Engineered design in accordance with the International Building Code (IBC) is permitted for buildings and structures, and parts thereof, included in the scope of this code.

Policy:

Structural steel elements including, but not limited to, beams, columns, roof framing, floor framing, and load-bearing wall framing within a residential structure are considered non-conventional construction and shall be designed in accordance with accepted engineering practice.

Exception: Tested and listed steel products that include maximum allowable loading criteria as part of the product's published specifications and/or design guides.

COMMENTARY:

As amended by the 2023 Pikes Peak Regional Building Code, the 2021 International Residential Code provides no allowable load or allowable span tables for use with structural steel products, therefore engineered design of these elements is required.