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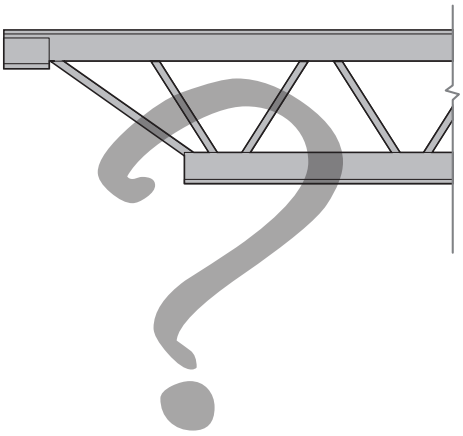
APPLICATION NOTES
June 18, 2017

Top Five FAQs About Joists

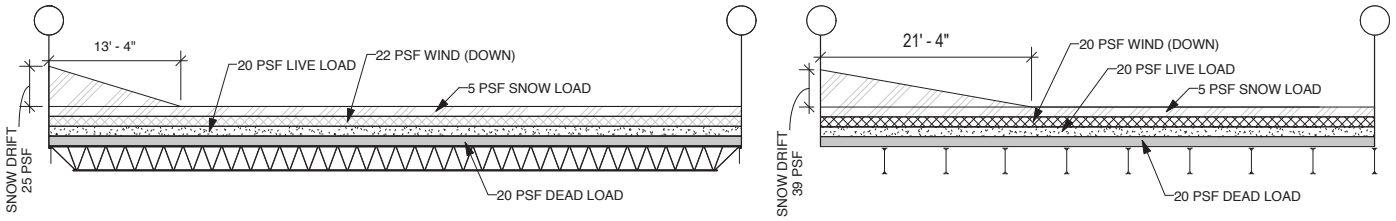


In addition to providing expert advice and design input during the early stages of the project life cycle, New Millennium subject matter experts also deliver classroom education courses. During the question and answer portion of the class, the engineers, architects, and others in attendance can ask for clarification about something discussed.

Here are the five most frequently asked questions about joists from New Millennium professional education courses.

Q. **When designing for snow drifts, what is the best way to ensure joists in the corner are designed properly?**

A. The use of two load diagrams — one illustrating the loading when the drift is perpendicular to the joists and another when the drift is parallel to the joists — is the best way to ensure that the joists in the corners are designed properly.



These load diagrams are an example of how to ensure joists in the corner of a building are designed properly to handle snow drifts.

Q. **When the depth of long top chord extensions are increased, does it cost more to increase all joist seats on the project?**

A. Yes. The rise in cost is due to the additional material used to increase the seat depth. However, the increase is minimal and has an insignificant impact on the overall cost of the joists.

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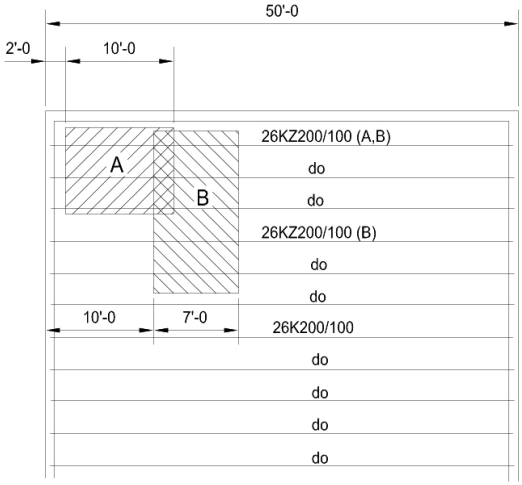
Q. **Do both ends of a joist have to have the same seat depth?**

A. No, the seat depths of joists can vary from end to end. This often is necessary at changes in bearing conditions and elevations.

Q. **Can load zone joists be used in lieu of KCS joists?**

A. Yes. When the approximate locations of loads are known, the designer has the opportunity to specify a more efficient joist. These joists can be designed to support loads residing in specific areas defined as load zones. The designer may specify as many load zones as needed. The use of load zones can be accomplished by either providing a load diagram or specifying a dimensioned hatched region on the framing plan.



The hatched regions on this framing plan indicate load zones.

Q. **How should joist and Joist Girder wind loads be specified?**

A. The components and cladding service level (ASD) net uplift is the wind load that should be specified for use in designing the joist. Typically this net uplift is also specified for the Joist Girders. However, the most economical approach for the girders is to specify the service level Main Wind Force Resisting System (MWFRS) net uplift as the wind load for use in designing the girders. Net uplift is the product of the 0.6(DL)+0.6(WL) load case.

For more information about specifying joists on your next project or about New Millennium's classroom and webinar education program, go to www.newmill.com and contact your local sales office.

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