

Load determination and beam sizing

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Before one can determine the size of beam required in a structure, one first has to determine the loads that the beam will see. As such, we will begin the session by determining those loads, and the cause of those loads. Not all loads are created equal; we have dead loads (permanent loads and self-weight), live loads (the occupants), snow loads, wind loads, and other less common loads that can all be applied to a member. We will look briefly at how geographic location can affect the amount of environmental loads, and use some rules of thumb to simplify the process for the pragmatic log builder.

Once we know the load a beam will be expected to carry, we will then determine the size of the beam required to carry, or resist, that load. The size and species of beam certainly comes into play, as does the grade. A brief discussion about how notching and drilling holes can affect the strength (and therefore size) requirements will also be included.

The session will be informal and paced to allow for questions and answers.

