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## **Mechanics of Materials**

## Topic 6 – Analysis and Design of Beams for Bending

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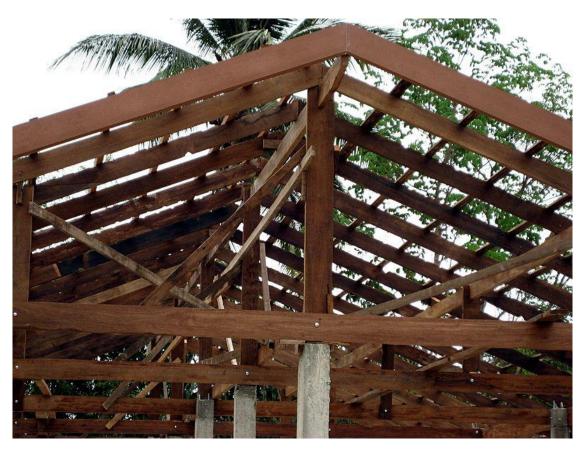
The beams supporting the multiple overhead cranes system shown in this picture are subjected to transverse loads causing the beams to bend. The normal stresses resulting from such loadings will be determined in this chapter.



Source: http://img.nauticexpo.com/images\_ne/photo-g/30468-10116858.jpg



## Timber beams used in residential dwelling.



Source: https://commons.wikimedia.org/wiki/File:Thai\_House\_Trat\_Wooden\_Beams.JPG



## Non-prismatic cantilever beams of bridge during construction.



Source: https://commons.wikimedia.org/wiki/File:Gateway\_Bridge\_construction.JPG

