



# Earthquake Towers

## Problem Statement:

Using previous knowledge that you have learned about towers and the forces that act upon them you are to design and build a balsa wood tower to compete in the class contest. The towers will be tested for strength and efficiency using the earthquake simulator.

## Requirements/Restrictions:

1. Must be built using only the materials given.
  - a. 1 Foundation
  - b. 4 Floor Plates
  - c. 12 Balsa Strips 1/8"x24"
  - d. Hot Glue or wood glue
2. Must have 4 floors that are evenly spaced
3. Total height from the bottom of the foundation to the top of the roof must be 15"
4. Each floor must have the given washers (7 per floor) attached
5. Excessive glue will be a deduction of points.

## Grading:

<b>Expectations</b>	<b>Points Possible</b>	<b>Points Earned</b>
<b><u>Design:</u></b> The project is constructed using engineering principals taking into consideration the forces acting upon it. (gravity, live/dead load, torsion, tension compression...)	30	
<b><u>Function:</u></b> The project functions as desired. The project fits on the earthquake simulator and is built to all specifications.	10	
<b><u>Quality:</u></b> The project is created with a high level of detail and effort. It is aesthetically appealing. No excessive glue	10	
<b><u>Total:</u></b>	<b>50</b>	