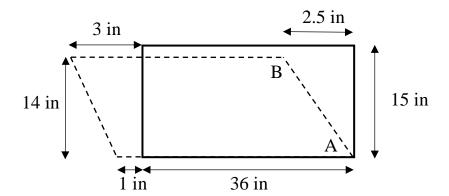
- 1. Describe in words (not equations) normal strain and shear strain. What causes these strains?
- 2. What strains are present in the rubber bridge bearing below and what is causing them? (Image from <u>EERI Learning From Earthquakes Clearinghouse</u>)



- 3. If the rubber bearing above is idealized as a square block (solid lines) with the following deformations (dashed lines).
 - a. Determine the average normal strain along line AB.
 - b. Determine the average shear strain at corner A and B.



4. If the member below deforms as shown and the allowable strain in member AB is 0.001 in/in, what is the maximum amount of displacement in member CD?

