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Safest Skyscraper Foundations

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he purpose of this experiment is to test foundation designs and which one is the safest during an earthquake. The hypothesis is if different skyscraper foundations are tested in an earthquake situation, then the pyramid foundation will be the safest. The skyscrapers are twenty four inches tall without the foundations. Four different foundation designs are chosen and built to test on an earthquake simulator. Since the skyscrapers are so sturdy a laser is pointed to the center of the mirror on the skyscrapers. The two towers with spread out bases moved more vertically than they moved horizontally because the foundation restricted horizontal movement. This makes the building unsafe. One tower moved a lot horizontally but not a lot vertically, which means that it swayed a lot, which is unsafe too. One tower moved vertically and horizontally between the two extreme movements of the other towers. This was the safest tower leading to the conclusion that a spread out base is less safe than a compact base.