

Lateral Stability

Description

This project investigates stable arrangements of structural walls against lateral loading.

Goals

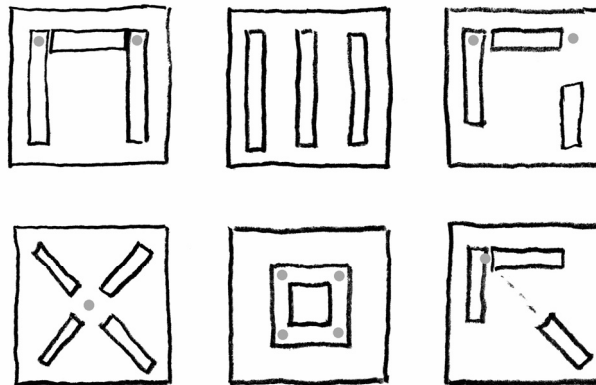
To observe the effects of lateral loading

To investigate the criteria of stable wall patterns

To develop stable arrangements of shear walls based on the 2 point rule

Procedure

1. Arrange the small wood walls on the foam core base to support the MDF slab.
2. Make each of the six arrangements.
3. Apply lateral and torsional accelerations to the base and note the effects on the assembly. Mark on the diagrams below which fail and which remain stable.
4. Make your own stable and unstable arrangement.
5. Sketch the arrangements below and mark the intersection points.



Stable

Unstable

Due

11 April 2021