

GIANT
EARTHQUAKE
STEM KIT

BUILD. PLAY. LEARN.



**PERFECT FOR
THE CLASSROOM**

DESIGNED BY TEACHERS FOR TEACHERS

Instructions and information on the back



GIANT EARTHQUAKE

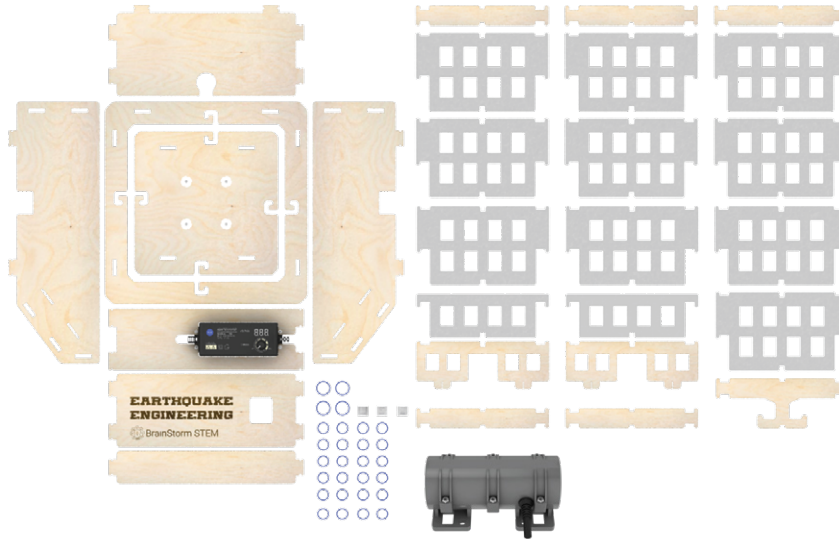
INFORMATION & INSTRUCTIONS

This large-scale Earthquake Engineering model allows teachers to demonstrate how ground motion affects structures. By simulating seismic vibrations, students can observe how buildings respond to shaking forces and how structural design influences stability.

During the demonstration, students investigate how engineers design buildings to withstand earthquakes. The activity introduces key concepts including seismic waves, resonance, structural reinforcement, and energy transfer through a building during an earthquake. Students can make predictions, observe structural behavior, and discuss why some designs perform better than others when subjected to simulated seismic

What's Inside?

PARTS INCLUDED	Qty.
1. 6mm Wooden Pieces	15
2. 3mm Wooden Pieces	1
3. 10mm Foam Pieces	12
4. Suspension O-Rings	4
5. 6mm Tab O-Rings	24
6. Motor Mounting Bolts (Preassembled)	4
7. Wood Tee Nuts (Preassembled)	4
8. Controller Mounting Bolts (Preassembled)	4
9. Controller Mounting Nuts (Preassembled)	4
10. Motor Speed Controller (Preassembled)	1
11. Vibration Motor (Preassembled)	1
12. Cable Management Clips	4
13. Edge Protection Strip	2



Disclaimer: Colors and parts may vary slightly from those shown in images or instructions, depending on available materials. All variations function the same and do not affect the performance or assembly of the kit.

DEMONSTRATION TIPS:

1. Compare Structural Designs: Build the tower with and without the structural support pieces. Run the earthquake simulation and observe:

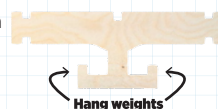
- Which design is more stable?
- Which design sways more during shaking?

Students should identify how engineers use reinforcement and structural geometry to improve earthquake resistance.

2. Investigate Structural Stability: Attach weights to the hanger piece and suspend them from the top of the tower.

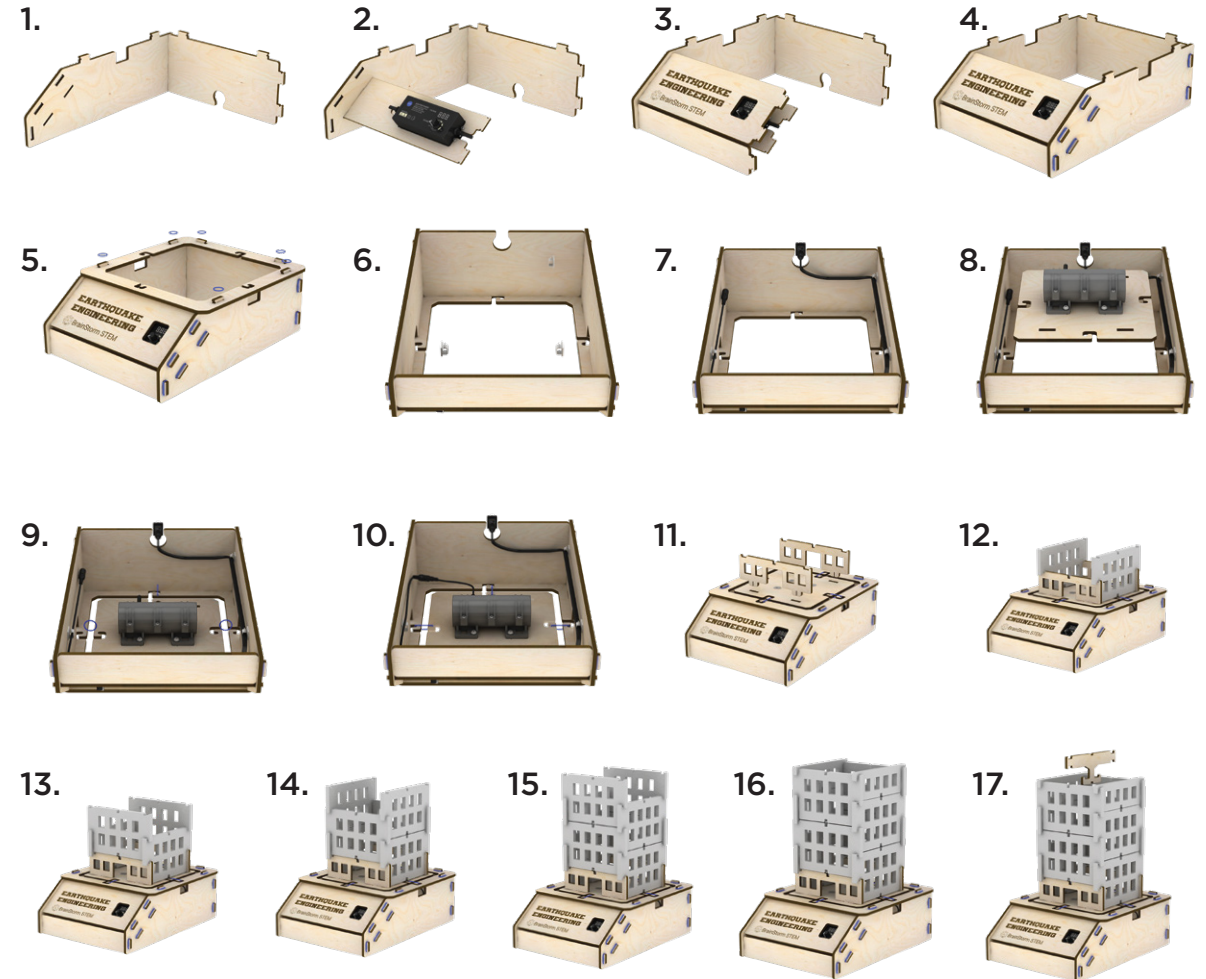
Ask students: "What happens to the structure when weight is added?", "How does additional mass affect stability during shaking?"

Discuss how real buildings must support their own weight while resisting earthquake forces.



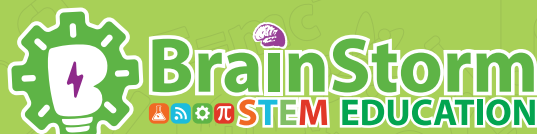
Hang weights

Model Setup



Digital instructions and resources can be found here: www.brainstormedu.com/stem-kit-instructions

Share your projects @ [BrainStormSTEMEducation](https://www.facebook.com/BrainStormSTEMEducation) [brainstorm_edu](https://www.instagram.com/brainstorm_edu)



Have Questions?
Email: info@brainstormedu.com | Call: (949) 607 - 8676

WARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov

WARNING: CHOKING HAZARD — Small parts not for children under 6 years or any individuals who have a tendency to place inedible objects in their mouths.



Conforms to ASTM F963-17 Safety Requirements for Toys (Ages 8+)
TSCA TITLE VI - California 93120 Compliant for Formaldehyde

Colors may vary from those shown.
Manufactured by: BrainStorm Studios LLC.
©2026 BrainStorm Studios LLC. All Rights Reserved.
42 Waterworks Way, Irvine, California, 92618 USA
Customer Service: 1(949)607-8676
Made in USA. 03/2026
LOT 0004