

651-6350 (EM-15) Fault Simulator

Introduction: Faults are a common occurrence in the classroom. However, it is in Earth Science classes that they are actually desirable. Faults are any area of the Earth's crust where rocks attempt to move past each other. This commonly occurs along tectonic boundaries, but can occur under other circumstances as well. Obviously, rocks are hardly fluid, gliding entities. Instead, there are enormous friction forces between plates. This means that movement tends to be a sudden explosive burst of energy, instead of a steady sliding motion.



Faults are of particular interest to humans, because they are the single greatest cause of earthquakes. When stress builds sufficiently to cause two sheets of rock to move past each other, the rocks themselves shear and energy that has spent decades or millennia building up is suddenly released. This burst of energy travels through the surrounding rocks, deforming them and causing them to behave as a fluid. This can have a devastating impact on human structures.

Due to the uncertain nature of fault lines and the massive forces involved, it is almost impossible to predict fault movement with any accuracy.

Operation: To use your fault model, it is best to have access to modeling clay.

Line up the two 'plates' until they are even. Using clay, create a replica landform on top of the plates. Rock formations are often composed of many layers of material, which can be expressed with different colors of clay. Vegetation and structures can be simulated on top.

To simulate a fault slip, quickly push the plates in opposite directions, causing them to leap past each other. Your carefully constructed rock formation will quickly be pulled in two directions, causing massive damage.

Warranty and Parts:

We replace all defective or missing parts free of charge. Additional replacement parts may be ordered toll-free. We accept MasterCard, Visa, checks and School P.O.s. All products warranted to be free from defect for 90 days. Does not apply to accident, misuse or normal wear and tear. Intended for children 13 years of age and up. This item is not a toy. It may contain small parts that can be choking hazards. Adult supervision is required.