

Date:10/10/14

Wednesday Challenge Form

Group Members: Kevin, Kirk, Adrian

Problem Statement: Design an arch bridge out of any materials, as long as they are countable, and do not include adhesives of any kind. Score will be measured by final span divided by largest block dimension.

Approach: Using Clay we tried several methods of forming uniform trapezoidal type pieces which will fit together in a perfect arc. However due to the difficulty of working with clay, as well as the factor of human error, this proved to be a challenge. In the end we made multiple clay bridges in hopes of one of the succeeding. We then decided to coat them with a latex type spray, however in the end it seemed futile, the clay blocks were too random to support the bridge.

Solution: Our span was 1.5 inches, and the longest dimension was 0.7 inches, giving us a score of 1.5 inches.

Lessons Learned: Clay is a great material when used to create a one solid object however unless machine assisted, it is not a very good building block. Next time we should use foam, rubber, fabric coated blocks, or something with a higher friction.