Build Instructions for "Towers of Doom"

1. Measure and cut 4' x 8' sheet of plywood in half (or ask Home Depot to do it!). You will use one 4' x 4' sheet for the course base.
2. Attach a support frame to the underside of the course base. Cut down TWO of the 1"x 2"x 8' furring strip boards to build a frame to support the bottom base of the course. Each strip should be approximately 4' to fit along the edge of the underside of base. Attach the 4' x 4' plywood to the frame using four 1½" screws around .

a. Cut the ramp's top platform first making it 6" long and 7" wide.

b. Cut the bottom side of the ramp. The horizontal C
such that the top side of the ramp
ition. The tapers were made by first
degree angle with a table saw (45 degrees
arper angle would be better). The angle
o make the angle sharper. Trial and error

mark on the supports on both sides of the ramp base at 1.83" from the outside edge of the ramp supports (see Figure 5).

e. The ramp inclines were attached with glue on both the top and bottom of the ramp inline. A ¼" screw was used on the bottom of the ramp and a 1.41" screw was used on the top (screwed into the ramp supports). These screws were centered on the ramp and countersunk so that the screws will be covered by the tape line (see Figure 6).

7. After attaching the ramp, spray it Flat Black being careful not to overspray the red block painted in Step 5.
8. After paint all black paint is dry, make measurements and marks for the tape line. Then apply ¾" white electrical tape to the pre-marked pathway.
   TIP: Do not immediately apply stretched tape to the course base as it will shrink and pull off the course base! Instead, allow the tape to shrink back to its natural length for a few seconds, prior to applying it to the course base.
9. Finally, measure and mark the position of the 8 towers using the measurements from the main course drawing. Note that the towers on the right side of the course match measurements for those on the left side including the position of the bottom-left tower. The towers are attached to the course base with a dab of glue and one 2½" screw.
   TIP: Drill a pilot hole through the top of the course base at the center of each tower location so that positioning the screw from the bottom side is not a guessing game. A small flat washer was used in the official course build but this is optional.

Figure1 Tapered Bottom Edge of Ramp Incline

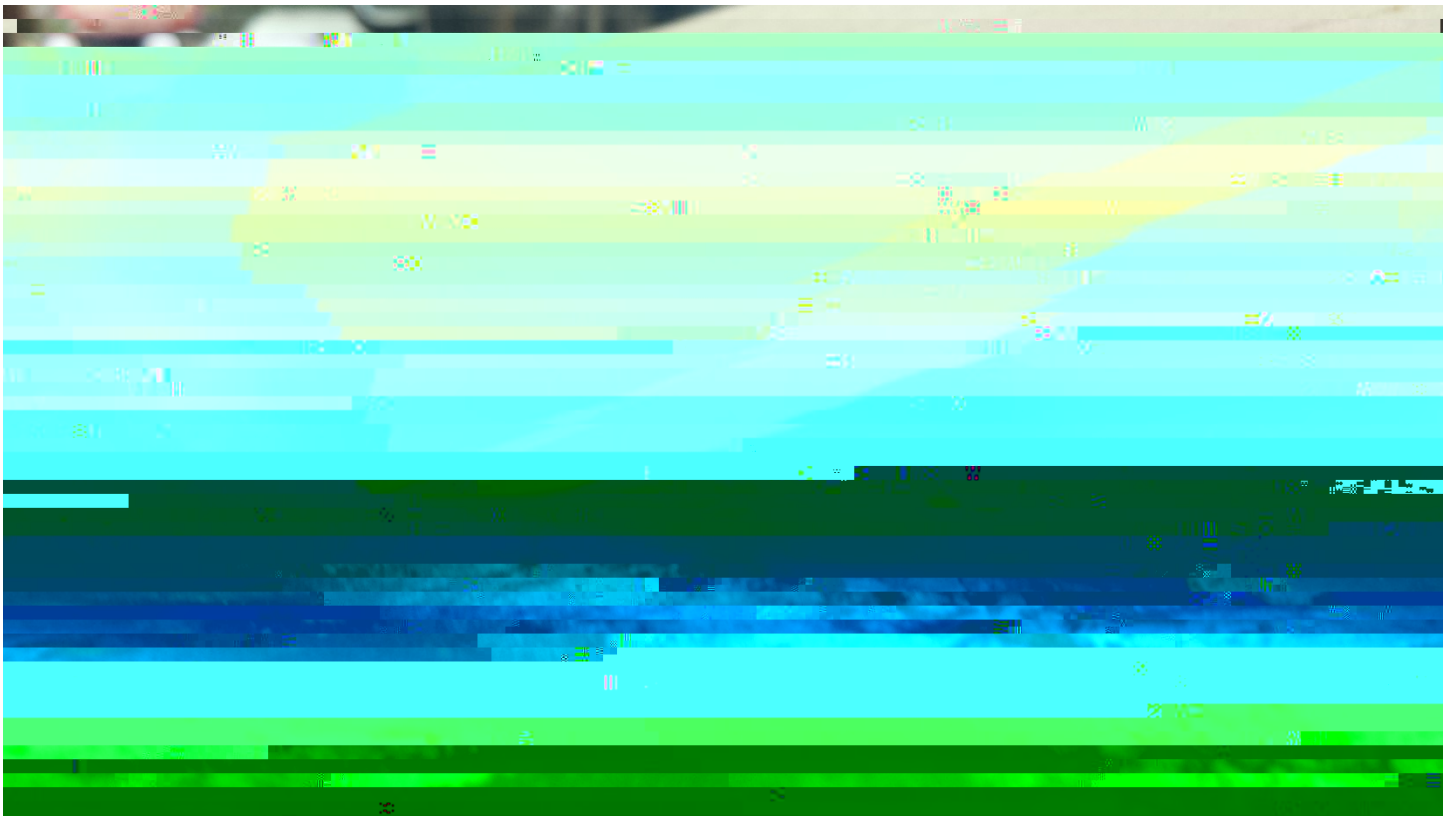

Figure2 Countersunk Screws and Rail Supports Protruding from Ramp Top Platform

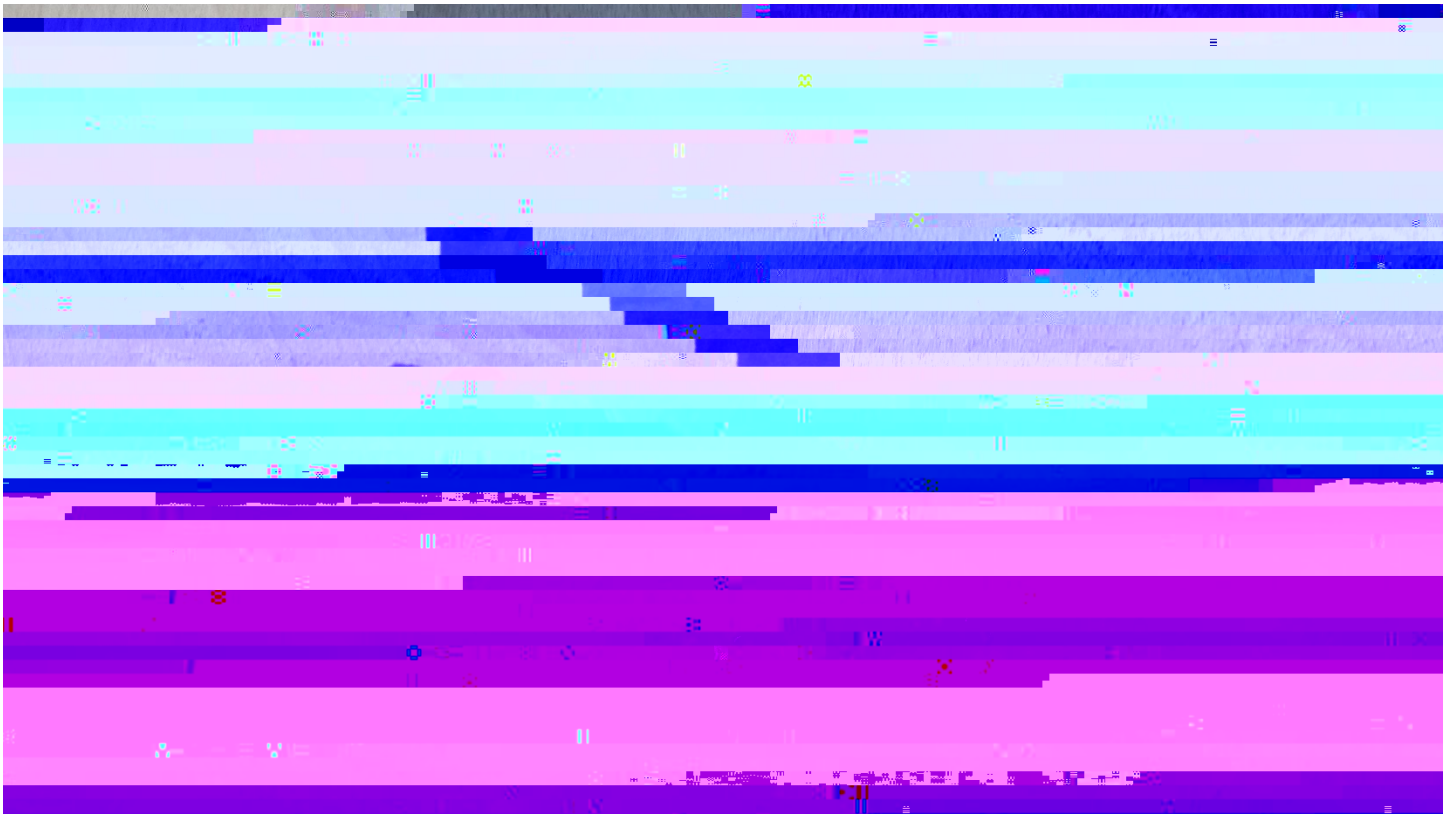

Figure3 Top Platform Protruding to Support Incline Platform

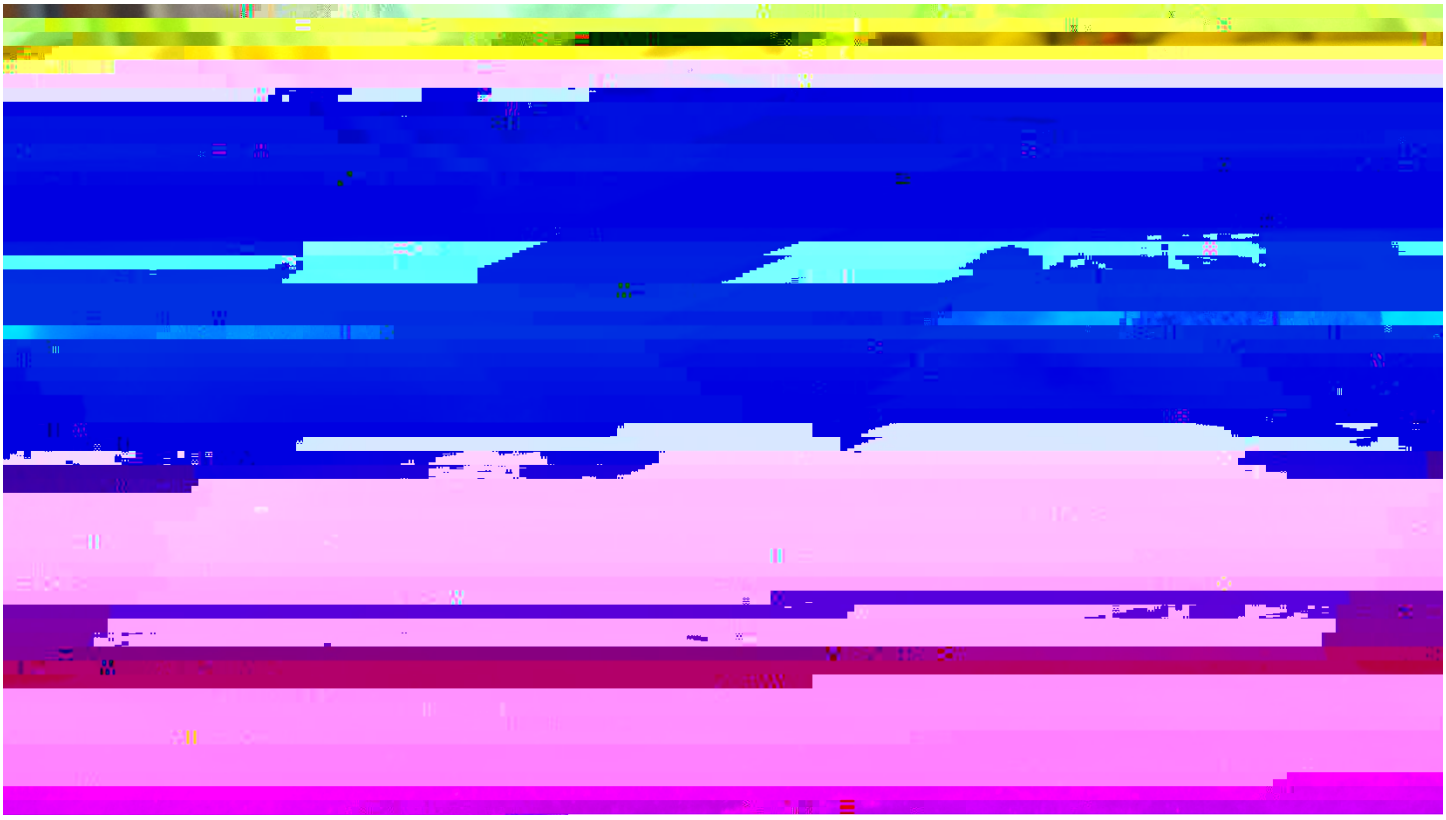

Figure4 Center Ramp Base on Course Base