

## Instructions for Building Your Own Crusher

Item Number	Quantity	Material	Dimensions
1	4	Plywood	18" x 18" x 3/4"
2	4	Doug Fir	4" x 4" x 7"
3	4	Doug Fir	2" x 4' x 18"
4	2	Sheet Metal	18" x 18" x 22 gauge
5	1	Galvanized Iron	3/4" Floor Flange
6	1	Galvanized Iron Pipe	3/4" x 42" threaded one end

Clamp all four 18" x 18" pieces of plywood together with the sheet metal sandwiched in between. Find the center point of the plywood squares and mark. With a hole saw, drill a 1-1/2" diameter hole through all sheets of plywood and sheet metal. This will assure proper alignment for your support pipe. Place two 2x4s next to each other and align with the opposite edges of one sheet of plywood. Screw through plywood into the 2x4s using 1-3/4" screws. Use four screws per piece of 2x4. Take another piece of plywood and put a 4x4 on each corner. Screw through the plywood into the 4x4s using four 2" screws for each 4x4.

Center the floor flange over the hole in the plywood sheet that has the 2x4s on it and secure to the plywood using screws. Use heavy gauge screws but make sure they do not protrude through the plywood.

Screw the plywood that has the 4x4 on it to the piece with the floor flange on it. Make sure that no screws stand proud of the plywood. Sand down the area around the screws so that you have a smooth surface.

Take one piece of the sheet metal and cut a 3-3/4" square out of each corner. Using construction adhesive, secure the sheet metal to the plywood with the 4x4s on it. Use clamps and weights to make sure the sheet metal is tight to the plywood; you don't want any voids between the sheet metal and the plywood. Take the two remaining pieces of plywood, and the last piece of sheet metal, and using construction adhesive, glue them together making sure that sheet metal is **NOT** sandwiched between the plywood

The support pipe is threaded on one end and has a plane smooth other end. Screw the pipe into the floor flange, and you now have a crusher.

**NOTE: The truer the cuts on your 4X4s are the better your crusher will be**

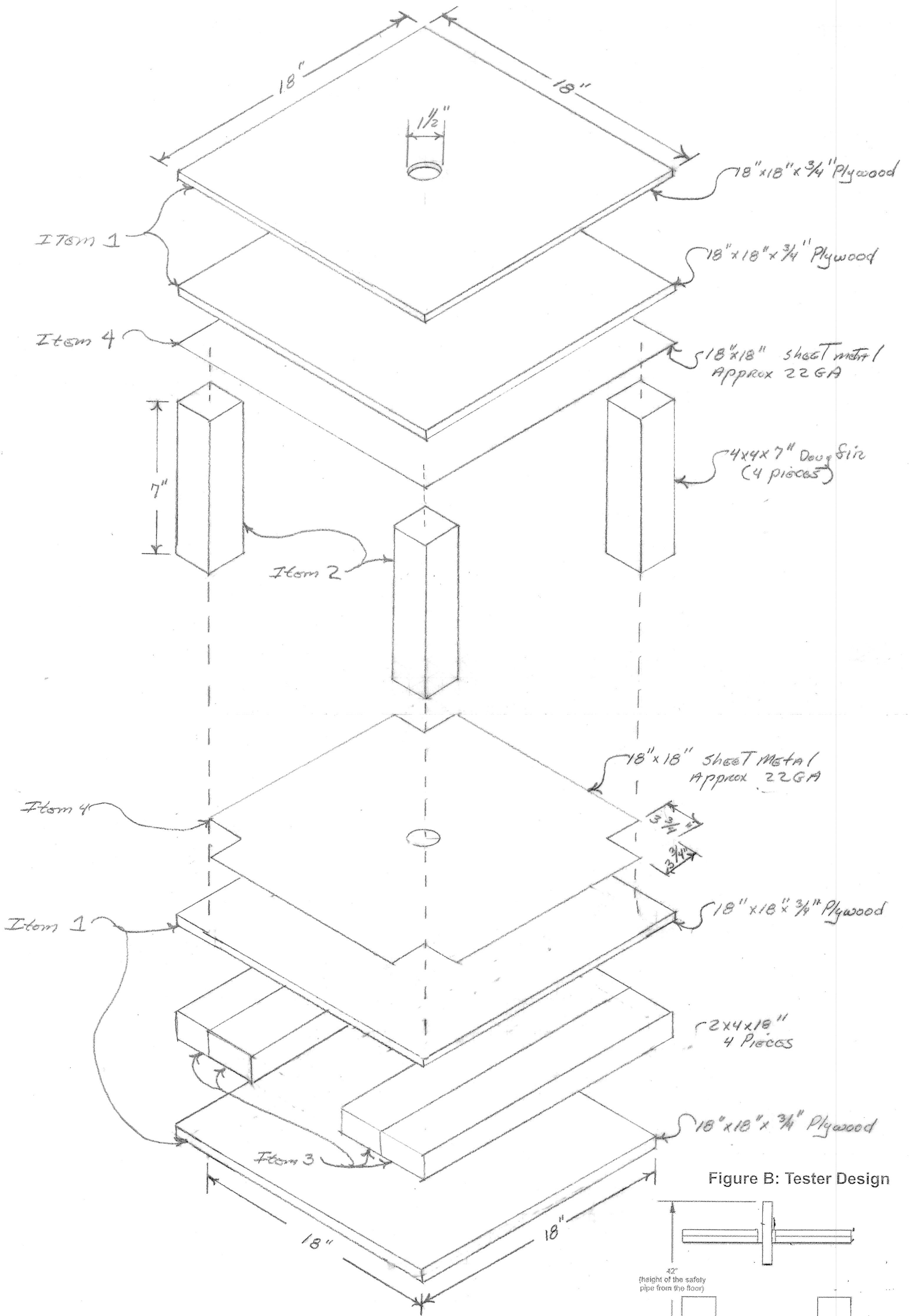


Figure B: Tester Design

