

DIY INDUSTRIAL PIPE COFFEE TABLE – BUDDY SYSTEM

STEP	PERSON	TASK	INSTRUCTIONS/TIPS
#1	ONE	Spray paint underside and edges of plywood board. Spray paint all of the screw's tops/heads	HINT: push the screws about ¾" down into a piece of Styrofoam to keep them still while you spray paint the heads.
#1	TWO	Cut metal flat bar for banding that goes around the table. SEE DIAGRAM SHEET FOR MEASUREMENTS	Big box hardware store may be able to do this for you. If doing yourself, you can use a hack saw with a blade specific for metal.
#2	ONE	Measure, mark & dimple metal flat bar for the pre-drilled screw holes. SEE DIAGRAM SHEET FOR MEASUREMENTS	After measuring and mark where the screw holes will go with a fine tip Sharpie. Use a nail or punch and a mallet to make a 'dimple' into the metal at the marked spot. This will help the drill bit stay in place.
#2	TWO	As Person One completes the measuring and dimpling, pre-drill the holes into the metal flat bar.	SECURELY clamp metal flat bar to a scrap piece of 2x4 that is as long as the flat bar. Use a drill bit specifically for metal. Start with a bit smaller than needed and work up to a bit the same size or <u>slightly</u> smaller than the screw shank's diameter. (If using a #10 metal screw, probably a 3/16" drill bit). Use 3in1 Oil to help with friction heat. GO SLOW!
#3	ONE	Spray paint the cut and drilled metal flat bar pieces	
#3	TWO	Assemble pipe pieces for the table base, including flanges	
#4	ONE	Measure and mark the spray painted underside of table top for base attachment location.	FOR OUR TABLE: Draw a line on the painted side of the plywood table top 1" in from each long side and 3 ¾" in from each short end. Place assembled pipe base on top of board so each flange fits up against the 'corner' created by your lines. FOR YOUR OWN VERSION: Place assembled pipe base on table top's underside. Measure/shift to ensure the base is equal distance from all table edges. Mark the flanges' screw holes.
#4	TWO	Continue to assemble the table base	
#5	ONE & TWO	Align and attach table base to underside of table top	Use ¾" flat head metal screws. IF YOUR TABLE TOP IS LESS THAN ¾" THICK YOU WILL NEED SHORTER SCREWS!
#6	ONE	Touch up spray paint on table underside and base	
#6	TWO	Measure and cut tile for table top	We used the QEP 21 in. Ceramic Tile Cutter . Worked great.
#7	ONE & TWO	Adhere tiles to table top	We found it easiest to use construction adhesive to adhere the tile to the plywood. Tile spacers ensured our grout lines were uniform. We used a level to make sure the tile was flat and used clamps to keep tiles from 'popping up' before adhesive dried. MAKE SURE tile is set before Step 8.
#8	ONE & TWO	Screw metal flat bar band to side of table top	Lay table on it's side/end. Line up the metal band with the tile top and the corners. Mark the pre-drilled hole sites. Pre-drill the holes. Screw on band.
#9	ONE & TWO	Grout tile table top using pre-mixed grout	Make sure to wipe off any grout from metal band.
#10	ONE & TWO	File down any sharp corners on the metal band	Use a metal file or dremel for this. Touch up spray paint afterwards; protecting tile top from paint overspray.