



◀ **ANDY WEYENBERG**

Andy Weyenberg began welding at his father's business a few years before joining the Army. After going to school for Electro-Mechanical, he started working for Miller Electric Mfg. LLC as a technical service rep and training instructor. Andy has built and raced stock cars since he was a teenager — and now builds high-performance street vehicles while also managing the Miller motorsports program.

SKILL LEVEL: Intermediate
TIME COMMITMENT: 8 hours

/ TOOLS AND MATERIALS



.063 3003 alloy aluminum



Multimatic® 220 AC/DC multiprocess welder



1/16" 4043 filler metal



Jigsaw (bandsaw, sawzall or even hand snips will do)



Bead roller



Metal bending tool or brake



Stainless steel brush and acetone

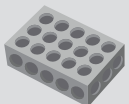


Small flat sanding disc



Cabinet latches or key locks (2)

Optional Equipment/Tools



Machinist blocks
(to lift the enclosure and weld the corners completely)

WARNING: READ AND FOLLOW ALL LABELS AND THE OWNER'S MANUAL.

OUTDOOR TV ENCLOSURE

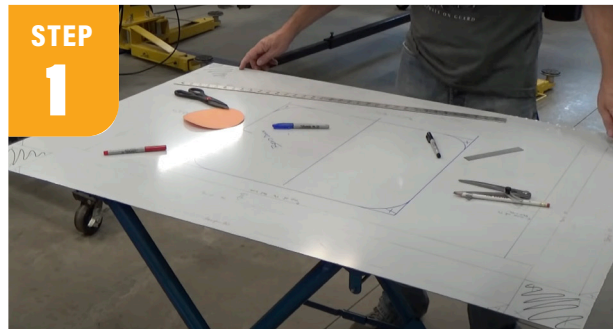
Keep your flat screen protected from the elements with this outdoor aluminum TV enclosure.



AS SEEN ON REAL GARAGE
[YouTube.com/RealGarageWithAndy](https://www.youtube.com/RealGarageWithAndy)

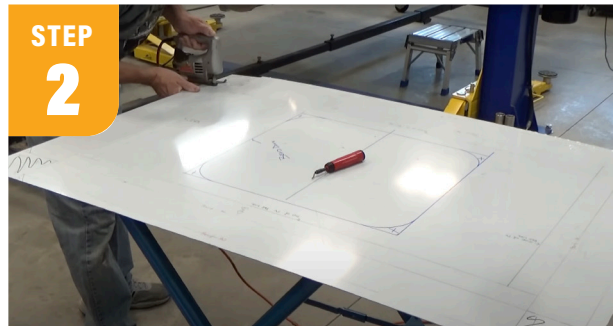
STEP BY STEP

STEP 1



My TV is 38" wide and 2-1/2" deep. I made my opening with 1" clearance around the TV and 1" in front of the TV face. So my overall sheet measurement is 51" x 35". My finished measurement after bending 3-1/2" sides with a 1" front lip is 42" x 26".

STEP 2

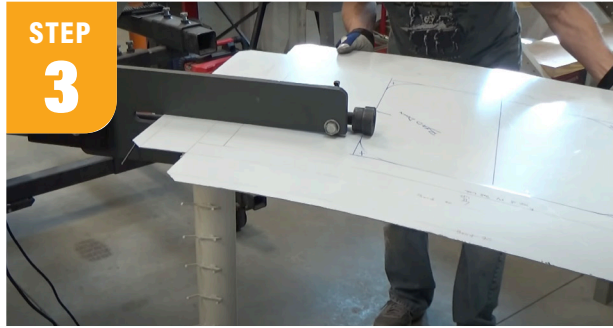


Because we will bend the sides up to enclose the TV, notch out the corners using your jigsaw and then deburr the edges.

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STEP 3



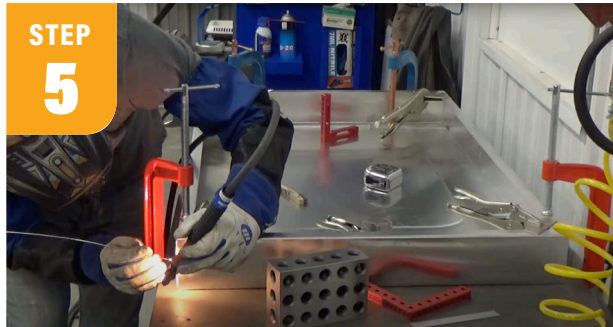
Using a bead roller with step die, in the center of the sheet, put an offset facing inside. This will allow a little air flow behind the TV. If your bead roller is not electric, you may want another person to help.

STEP 4



Bend the 1" lips first on your brake or metal bending tool, then the 3-1/2" bends. Remember to calculate the bend radius.

STEP 5



Once the bends are completed and lined up, clamp it down and tack weld the corners using your Multimatic 220 AC/DC. Start with tacking the outside and the tops, and then finish welding it all together. Remember to clean all your weld joints first using a stainless steel brush and acetone.

STEP 6



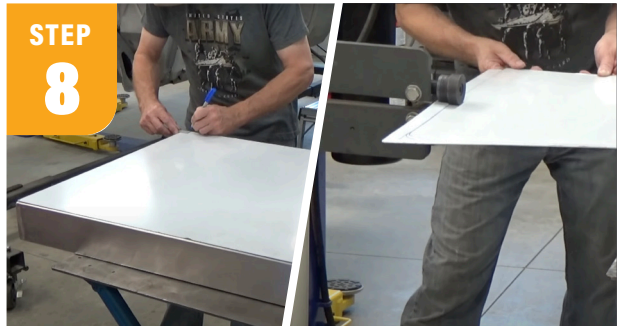
Using a small, flat sanding disc, smooth the welds on the surface of the enclosure so when you attach the front panel it will lay flat.

STEP 7



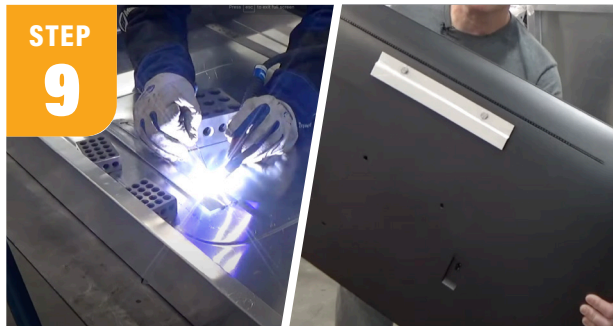
To make the front panel, measure the width and height of your enclosure. I subtracted 1/8" from each side. (Mine is 41-3/4" x 25-3/4".) Cut to size.

STEP 8



Mark and cut out a 1" x 1" notch on the front bottom panel corners using your band saw. Using a bead roller, step die a 1" lip on the two short sides and top. Then flip the panel and put 1" step roll on bottom with the notched corners so it's inverted from the other three. This will give you a lip that will slide inside the bottom of the enclosure.

STEP 9



To mount the TV inside the enclosure, you can drill holes and mount it permanently or you can make an offset mount like I did using 2" strips. Run the 2" strips through your bead roller to make an offset mount. Weld one strip inside the cabinet, and bolt the other to the backside of the TV.

STEP 10



To hang the enclosure, put a couple of holes in the back to mount it to the wall. Also add another hole for the power cord.



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