

HILMAR HIGH SCHOOL

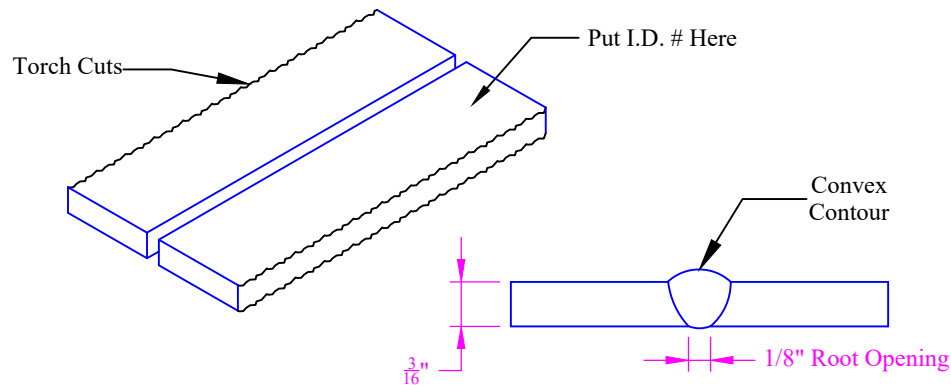
Arc Welding

Open Square Butt Joint

NAME: _____

DATE: _____

I.D #: _____



Materials:

2- $\frac{3}{16}$ " or $\frac{1}{4}$ " plate, 2" x 4"

6011 or 6010 x $\frac{1}{8}$ " welding rod

Instructions:

1. Make sure you have on hand the appropriate safety gear and to wear it at all times.
2. Use the O/A torch to cut one of the plates into 2 pieces as indicated in the diagram.
3. Tack the 2 pieces you cut together as indicated in the diagram. Be sure to leave a $\frac{1}{8}$ " gap between the pieces.
4. Using the second plate as a backing plate, perform a single pass butt weld as indicated on the diagram.
5. Weld will be graded on correctness, uniformity, penetration, smoothness, and placement.
6. General Consideration is given to layout, neatness, and overall workmanship.
7. Be sure that your ID # is stamped on the project.

O/A Cuts	(10)	
Bead Uniformity	(20)	
Bead Correctness	(20)	
Penetration	(20)	
Convex Contour	(20)	
General Consideration	(10)	
TOTAL SCORE = (100)		