



Shielded Metal Arc Welding – Overhead Welding

Project 4 – Specification and Print

Weld Type	Vee Groove Weld
Welding Process	SMAW
Position	Overhead
Material	1/4" Steel
Joint Type	Butt
Backing Option	CJP
Backing Material	

Polarity	DC+
Electrode	E6010 3/32 and E7018 3/32
Transfer Mode	
Tungsten Electrode	
Shielding Gas	
Flow Rate	
Cup Size	

Welding Procedure									
Weld Layers	Pass No.	Process	Filler Metal Classification	Filler Metal Diameter in (mm)	Current Amps	Current Type and Polarity	Wire Feed Speed	Volts	Remarks
Stringer	root	SMAW	E6010	3/32	50a	DC+			
	fill	"	E7018	3/32	75a	"			
	cover	"	E7018	3/32	75a	"			





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Heat Treatment:

Preheat Temperature:

Post Heat Temperature:

Interpass Temperature: Quench between passes

Stress Relieving:

Technique: Butt Joint weld root pass with E6010 and fill/cover with E7018 till just over flush in Overhead position

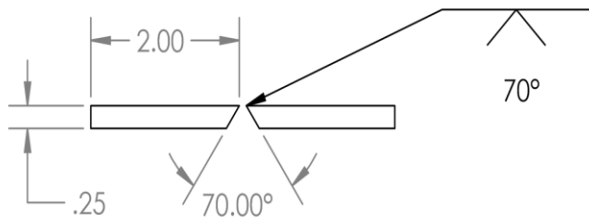
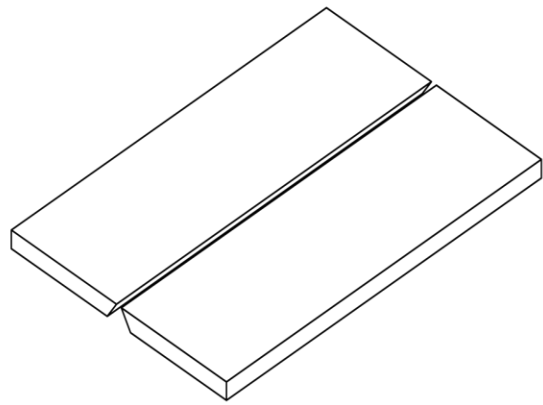
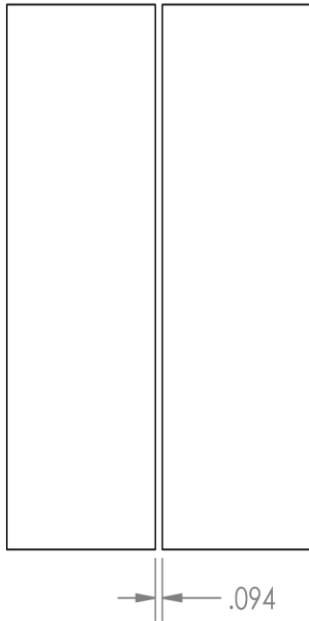
Number of Electrodes:

Additional Notes: Show instructor progress every 30 minutes, minimum.





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NOTE:
LINE CUT BEVEL
37 1/2 DEGREE
ROOT PASS 6010 3/32
FILL & COVER
7018 3/32
*GTAW ROOT, FILL
& COVER 3/32 FILLER

		UNLESS OTHERWISE SPECIFIED:		NAME	DATE		
		DIMENSIONS ARE IN INCHES		DRAWN	J.SIBERT	4/2/15	TITLE: CIMWD-112 Project 4
		TOLERANCES:		CHECKED			
		FRACTIONAL ±		ENG APPR.			
		ANGULAR: MACH ± BEND ±		MFG APPR.			
		TWO PLACE DECIMAL ±		Q.A.			
		THREE PLACE DECIMAL ±		COMMENTS:			
		INTERPRET GEOMETRIC TOLERANCING PER:					
		MATERIAL				SIZE DWG. NO. REV	
		FINISH				A PART 10.1 0	
		USED ON				SCALE: 1:2 WEIGHT: SHEET 1 OF 1	
		APPLICATION					
		DO NOT SCALE DRAWING					

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