



Shielded Metal Arc Welding (Vertical Welding)

Project 4 – Specification and Print

Weld Type	Vee Groove Weld
Welding Process	SMAW
Position	Vertical
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	50	DC+			
	Fill	SMAW	E7018	3/32	70	"			
	Cover	SMAW	E7018	3/32	70	"			





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Heat Treatment:

Preheat Temperature:

Post Heat Temperature:

Interpass Temperature: Quench between passes

Stress Relieving:

Technique: Root Pass using E6010 for CJP. Grind root on face side smooth. Fill and cover using E7018 with a stringer or weave in vertical up position.

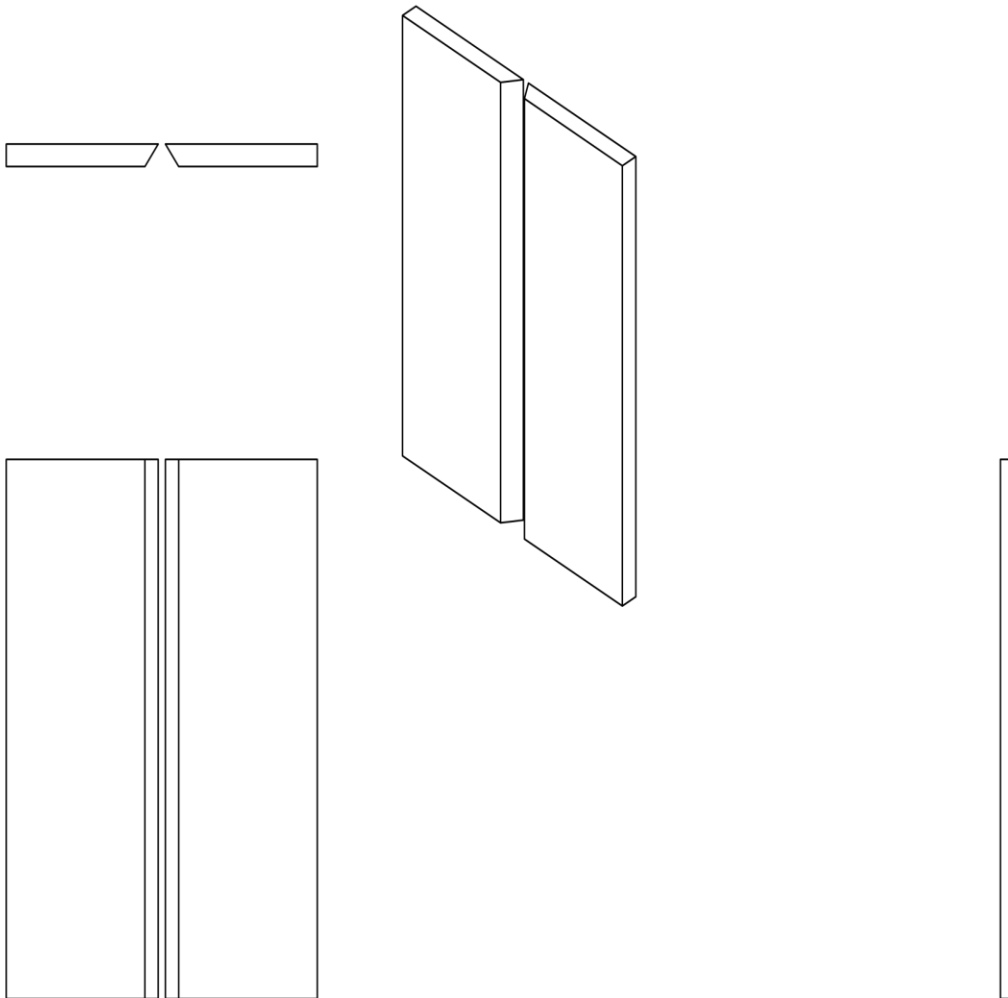
Number of Electrodes:

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





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		UNLESS OTHERWISE SPECIFIED:		NAME	DATE	TITLE: CIMWD-111 Project 4
		DIMENSIONS ARE IN INCHES	DRAWN			
		TOLERANCES: FRACTIONAL ±	CHECKED			
		ANGULAR: MACH ± BEND ± TWO PLACE DECIMAL ± THREE PLACE DECIMAL ±	ENG APPR.			
		INTERPRET GEOMETRIC TOLERANCING PER:	MFG APPR.			SIZE DWG. NO. REV A Part 10
		MATERIAL	Q.A.			
		FINISH	COMMENTS:			SCALE: 1:2 WEIGHT: SHEET 1 OF 1
5	4	3	2	1		





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