



## Shielded Metal Arc Welding (Vertical Welding)

### Project 3 – Specification and Print

<b>Weld Type</b>	2 Fillet welds and 1 Square Groove
<b>Welding Process</b>	SMAW
<b>Position</b>	Vertical
<b>Material</b>	¼" Steel
<b>Joint Type</b>	Tee, Lap, and Butt
<b>Backing Option</b>	
<b>Backing Material</b>	

<b>Polarity</b>	DC+
<b>Electrode</b>	E7018 3/32
<b>Transfer Mode</b>	
<b>Tungsten Electrode</b>	
<b>Shielding Gas</b>	
<b>Flow Rate</b>	
<b>Cup Size</b>	

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
Tee	Stringer	SMAW	E7018	3/32	80a	DC+			
Lap	Stringer	SMAW	E7018	3/32	80a	"			
Butt	Stringer	SMAW	E7018	3/32	80a	"			





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**Heat Treatment:**

**Preheat Temperature:**

**Post Heat Temperature:**

**Interpass Temperature:** Quench after each pass

**Stress Relieving:**

**Technique:** Weld the joints using a vertical down stringer method.

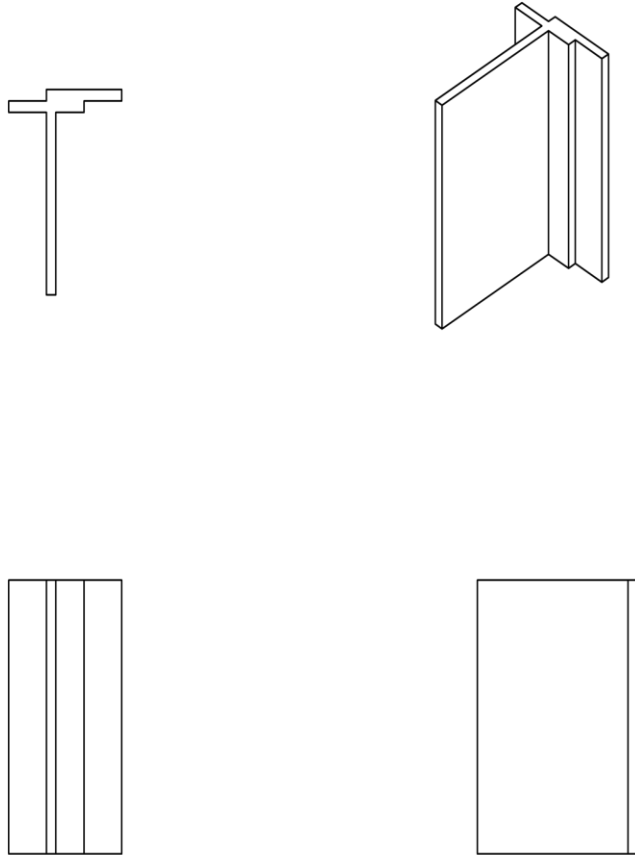
**Number of Electrodes:** whatever it takes

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





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		UNLESS OTHERWISE SPECIFIED:	NAME	DATE		
		DIMENSIONS ARE IN INCHES	DRAWN		TITLE:	
		TOLERANCES:	CHECKED		CIMWD-111 Project 3	
		FRACTIONAL ±	ENG APPR.		SIZE DWG. NO. REV	
		ANGULAR: MACH ± BEND ±	MFG APPR.		A PART 16	
		TWO PLACE DECIMAL ±	Q.A.		SCALE: 1:4 WEIGHT: SHEET 1 OF 1	
		THREE PLACE DECIMAL ±	COMMENTS:			
		INTERPRET GEOMETRIC TOLERANCING PER:				
		MATERIAL				
		FINISH				
		APPLICATION				
		DO NOT SCALE DRAWING				

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