

Single-V-groove weld (2) Butt joint (B)		Tolerances								
		As Detailed (see 5.4.1.1)	As Fit-Up (see 5.4.1.8)							
		R = +1/16, -0	+1/4, -1/16							
		$\alpha = +10^\circ, -0^\circ$	$\pm 10^\circ, -5^\circ$							
Welding Process	Joint Designation	Base Metal Thickness (U = unlimited)		Groove Preparation		Allowed Welding Positions	Gas Shielding for FCAW	Notes		
		T <sub>1</sub>	T <sub>2</sub>	Root Opening	Groove Angle					
SMAW	B-U2a	U	—	R = 1/4	$\alpha = 45^\circ$	All	—	e, j		
				R = 3/8	$\alpha = 30^\circ$				F, V, CH	e, j
				R = 1/2	$\alpha = 20^\circ$				F, V, CH	e, j
GMAW FCAW	B-U2a-QF	U	—	R = 3/16	$\alpha = 30^\circ$	F, V, CH	Required	e, j		
				R = 3/8	$\alpha = 30^\circ$		F, V, CH	Not req.	e, j	
				R = 1/4	$\alpha = 45^\circ$		F, V, CH	Not req.	e, j	
SAW	B-L2a-S	2 max.	—	R = 1/4	$\alpha = 30^\circ$	F	—	j		
SAW	B-U2-S	U	—	R = 5/8	$\alpha = 20^\circ$	F	—	i		