

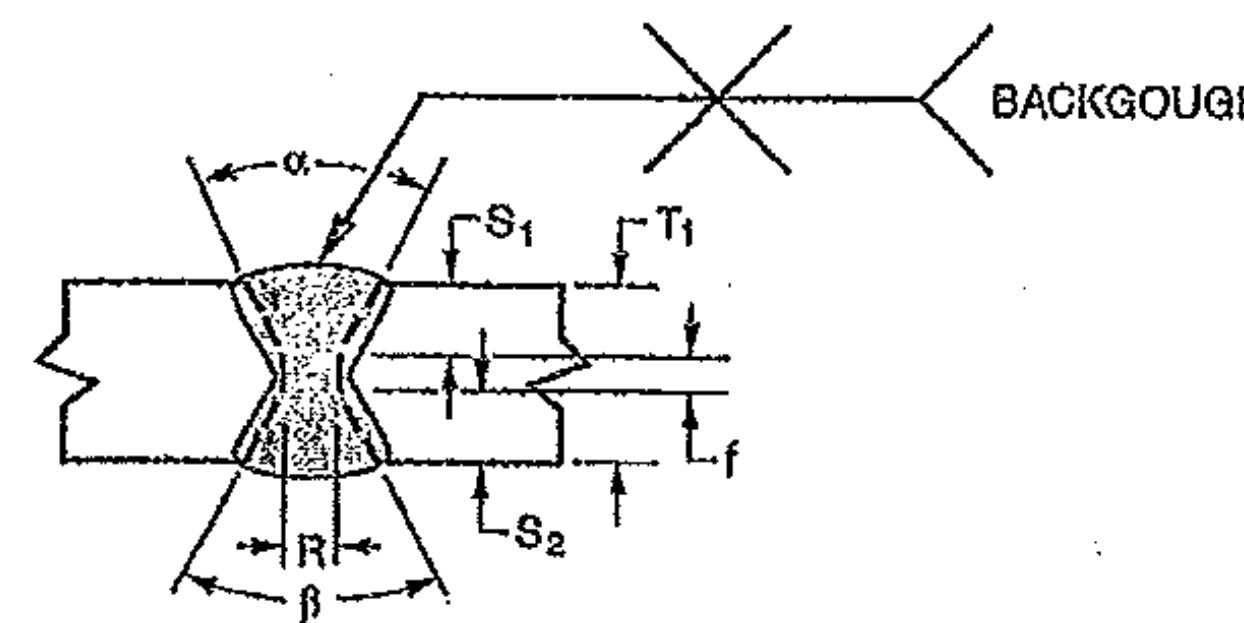
See Notes on Page 77

Welding Process		Joint Designation		Base Metal Thickness (U = unlimited)		Groove Preparation			Allowed Welding Positions	Gas Shielding for FCAW	Notes
						Root Opening	Root Face Groove Angle	Tolerances			
		T ₁	T ₂			As Detailed (see 3.13.1)	As Fit-Up (see 3.13.1)				
SMAW		B-U3b		U	—	R = 0 to 1/8 f = 0 to 1/8 α = β = 60°	+1/16, -0 +1/16, -0 +10°, -0°	+1/16, -1/8 Not limited +10°, -5°	All	—	d, e, h, j
GMAW FCAW		B-U3-GF		U	—	R = 0 f = 1/4 min. α = β = 60°	+1/16, -0 +1/4, -0 +10°, -0°	+1/16, -0 +1/4, -0 +10°, -5°	All	Not required	a, d, h, j
SAW		B-U3c-S		U	—	R = 0 f = 1/4 min. α = β = 60°	+1/16, -0 +1/4, -0 +10°, -0°	+1/16, -0 +1/4, -0 +10°, -5°	F	—	d, h, j

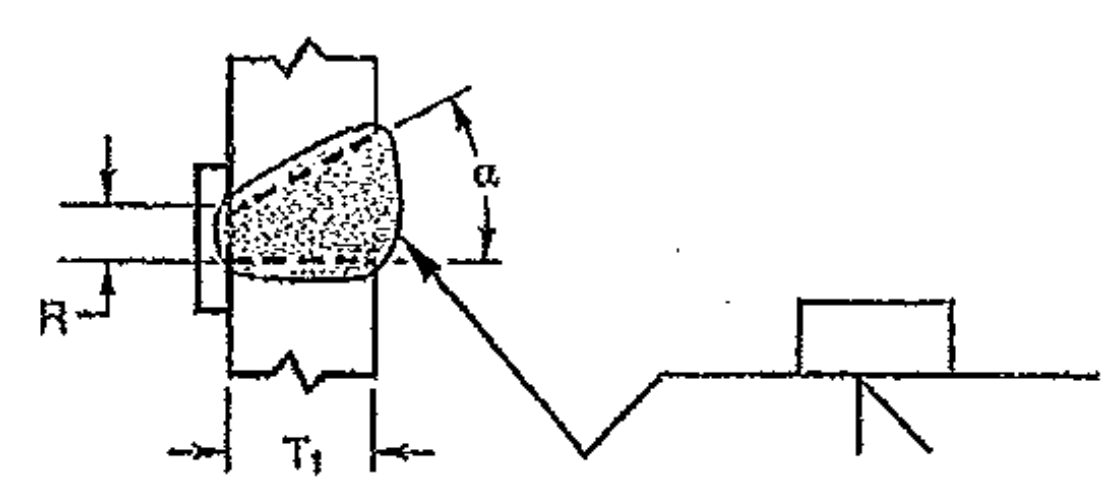
To find S₁ see table above; S₂ = T₁ - (S₁ + f)

For B-U3c-S only		
T ₁		S ₁
Over	to	
2	2-1/2	1-3/8
2-1/2	3	1-3/4
3	3-5/8	2-1/8
3-5/8	4	2-3/8
4	4-3/4	2-3/4
4-3/4	5-1/2	3-1/4
5-1/2	6-1/4	3-3/4

For T₁ > 6-1/4 or T₁ ≤ 2
S₁ = 2/3 (T₁ - 1/4)



Welding Process		Joint Designation		Base Metal Thickness (U = unlimited)		Groove Preparation		Allowed Welding Positions	Gas Shielding for FCAW	Notes
						Root Opening	Groove Angle			
		T ₁	T ₂			As Detailed (see 3.13.1)	As Fit-Up (see 3.13.1)			
SMAW		B-U4a		U	—	R = 1/4 R = 3/8	α = 45° α = 30°	All	—	c, e, j
GMAW FCAW		B-U4a-GF		U	—	R = 3/16 R = 1/4 R = 3/8	α = 30° α = 45° α = 30°	All	Required	a, c, j
SAW		B-U4a-S		U	—	R = 3/8 R = 1/4	α = 30° α = 45°	F, H	Not req.	a, c, j



Tolerances	
As Detailed (see 3.13.1)	As Fit-Up (see 3.13.1)
R = +1/16, -0	+1/4, -1/16
α = +10°, -0°	+10°, -5°

Figure 3.4 (Continued)—Prequalified CJP Groove Welded Joint Details (see 3.13) (Dimensions in Inches)