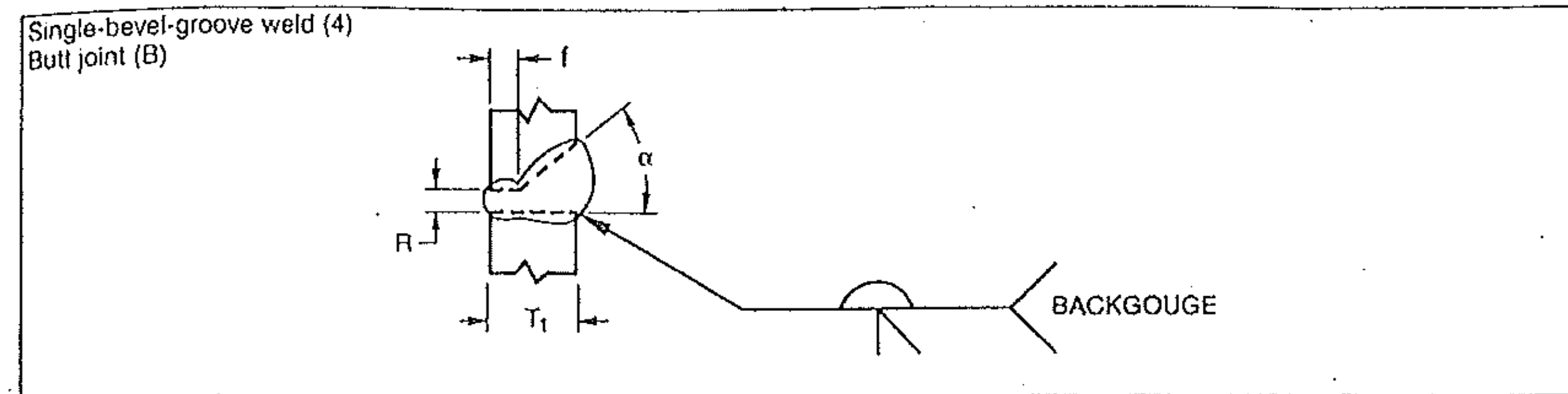


See Notes on Page 43



Welding Process	Joint Designation	Base Metal Thickness (U = unlimited)		Groove Preparation			Allowed Welding Positions	Gas Shielding for FCAW	Notes
		T ₁	T ₂	Root Opening	Tolerances				
					As Detailed (see 2.12.1)	As Fit-Up (see 3.3.4)			
SMAW	B-U4b	U	—	R = 0 to 1/8 f = 0 to 1/8 α = 45°	+1/16, -0 +1/16, -0	+1/16, -1/8 Not limited	E, H	—	1, 3, 9, 13
GMAW FGAW	B-U4b-GF	U	—		+10°, -0°	10°, -5°	H	Not required	3, 9

Notes for Figures 2.4 and 2.5

- Notes:
1. Groove preparations detailed for SMAW joints may be used for GMAW or FCAW.
 2. Joint shall be welded from one side only.
 3. Backgouge root to sound metal before welding second side.
 4. Minimum weld size (E) as shown in Table 2.2; S as specified on drawings.
 5. Evidence of CJP shall be required (see 4.7.5).
 6. Groove welds in corner and T-joints shall be reinforced with fillet welds with a leg size equal to or greater than T/4, but need not exceed 10 mm (3/8 in.). T shall be defined as the thinner of the attaching elements.
 7. Double-groove welds may have grooves of unequal depth, but the depth of the shallower groove shall be no less than one-fourth of the thickness of the thinner part joined.
 8. Double-groove welds may have grooves of unequal depth, provided they conform to the limitations of Note D. Also the weld size (E), less any reduction, applies individually to each groove.
 9. The orientation of the two members in the joints may vary from 135° to 180° provided that the basic joint configuration (groove angle, root face, root opening) remains the same and that the design weld size shall be maintained.
 10. For corner and T-joints, the member orientation may be changed provided the groove angle shall be maintained as specified.
 11. The member orientation may be changed provided that the groove dimensions shall be maintained as specified.
 12. The orientation of the two members in the joints may vary from 45° to 135° for corner joints and from 45° to 90° for T-joints, provided that the basic joint configuration (groove angle, root face, root opening) remains the same and that the design weld size shall be maintained.
 13. These joint details shall not be used where V-groove or U-groove details are practicable (see 2.14).