

Table 4.2
Recommended Aluminum Alloy Filler Metals for Structural Welding of Various Base Aluminum Alloys (see 4.3.1)

Base Metal to Base Metal	1060, 1100, 3003, Alclad 3003	2219, A201.0	3004, Alclad 3004	5005, 5050	5052, 5652	5083, 5456	5086, 5140, 535.0	5154, 5254	5454	6005, 6005A, 6061, Alclad 6061, 6063, 6082, 6351	7005	354.0, C355.0	4043
356.0, A356.0, 357.0, A357.0, 359.0, 443.0, A444.0	4043	4145	4043	4043	4043	5356	5356	4043	4043	4043	4145	4145	4043
354.0, C355.0	4145	4145	4145	4145	4043	NR	NR	NR	4043	4145	4145	4145	4043
7005	5356	4145	5356	5356	5356	5556	5356	5356	5356	5356	5356	5356	5356
6005, 6005A, 6061, Alclad 6061, 6063, 6082, 6351	4043	4145	5356	4043, 5356	4043, 5356	5356	5356	5356	5356	4043, 5356			4043
5454	4043	4043	5356	5356	5356	5356	5356	5356	5554				
5154, 5254	4043	NR	5356	5356	5356	5356	5356	5356					
5086, 514.0, 535.0	5356	NR	5356	5356	5356	5356	5356						
5083, 5456	5356	NR	5356	5356	5356	5183, 5556							
5052, 5652	4043	4043	4043	4043, 5356	5356								
5005, 5050	4043	4145	4043	4043, 5356									
3004, Alclad 3004	4043	4145	4043										
2219, A201.0	4145	2319											
1060, 1100, 3003, Alclad 3003	1100												

- Notes:
1. The filler alloy shown is the best choice for most structural applications. Where two filler alloys are shown, either is acceptable.
 2. Whenever 4043 is shown, 4047 is an acceptable alternate.
 3. Whenever 5356 is shown, 5183 or 5556 are acceptable alternates.
 4. Al-Mg alloys containing more than 3% Mg should not be used in applications where long-term exposures above 150°F are encountered.
 5. There are applications where specific requirements make the selection of filler alloys other than those shown above necessary.