



DC Cast Sheet

Alcoa Products for Brazed Applications

Alcoa produces the entire spectrum of components for nearly every brazed aluminum heat exchanger or assembly – from light-gauge fin stock, to heater core and radiator tubes, to heavy-gauge headers and reinforcements. Alcoa alloys are used for vacuum brazing (VB) applications and for controlled atmosphere brazing (CAB) applications using potassium aluminum fluoride fluxes. Alcoa brazing materials are available in O-, H1x-, and H2x-temper, in thicknesses from 0.05 mm to 4.1 mm, and clad on one or two sides, with nominal cladding ratios from 4 to 20 percent of total material thickness on each clad surface.*

	Si	Fe	Cu	Mn	Mg	Zn	Ti	Other
AMP 0035†	0.25	0.6	0.20-0.40	0.50-1.0	0.30-0.6	0.05	0.25	0.25 Zr
AMP 0330†	0.30	0.50	0.30-0.7	1.0-1.3	0.40-0.60	0.10	0.10-0.25	-
AMP 0333†	0.25	0.6	0.20-0.40	0.8-1.3	0.10	0.05	0.25	0.25 Zr
AMP 0336†	0.25	0.40	0.40-0.6	1.0-1.3	0.10	0.10	0.10-0.20	-
AMP 0390	0.6	0.7	0.05-0.20	1.0-1.5	-	1.3-1.7	-	-
AMP 0359†	0.20	0.35	0.40-0.6	1.0-1.3	0.20-0.30	0.05	0.10-0.25	-
AA 3003	0.6	0.7	0.05-0.20	1.0-1.5	-	0.10	-	-
AA 3005	0.6	0.7	0.30	1.0-1.5	0.20-0.6	0.25	0.10	0.10 Cr
AA 3105	0.6	0.7	0.30	0.30-0.8	0.20-0.8	0.40	0.10	0.20 Cr

AMP = Alcoa Mill Products proprietary alloys. AA = Complies with Aluminum Association registered limits. Publication limits only. Limits shown are maxima unless expressed as a range.

† Long life alloys (high resistance to perforation by corrosion). Alcoa has a patented approach to corrosion resistant brazing alloys. (US 4,649,087 and US 4,828,794)

Brazing Cladding Alloys

	Si	Fe	Cu	Mn	Mg	Zn	Ti	Other
AMP 0043	6.8-8.2	0.8	0.25	0.10	0.05	0.8-1.2	-	
AMP 0405	9.0-11.0	0.8	0.30	0.05	0.05	0.8-1.2	0.20	
AA 4004	9.0-10.5	0.8	0.25	0.10	1.0-2.0	0.20	-	
AA 4045	9.0-11.0	0.8	0.30	0.05	0.05	0.10	0.20	
AA 4047	11.0-13.0	0.8	0.30	0.15	0.10	0.20	-	
AA 4104	9.0-10.5	0.8	0.25	0.10	1.0-2.0	0.20	-	0.02-0.20 Bi
AA 4147	11.0-13.0	0.8	0.25	0.10	0.10-0.50	0.20	-	
AA 4343	6.8-8.2	0.8	0.25	0.10	0.05	0.20	-	

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These data are for informational purposes only, and indicate Alcoa's standard alloy offerings. For aluminum alloy solutions customized to your specific product needs, please contact your Alcoa representative.

*Some restrictions may apply. Please contact your Alcoa representative for assistance to help evaluate your individual needs.

ALCOA MILL PRODUCTS