



## PROPERTIES OF AUFHAUSER ALUMINUM WELDING ALLOYS

Alloy Number	Nominal Composition Percent <sup>(a)</sup>										Density Lb/in <sup>3</sup>	Anodized Color	Melt Range °F	Specifications	
	Al	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Others Total <sup>(c)</sup>				AWS	AMS
<b><i>Wrought Alloys</i></b>															
1100	Bal	(b)	(b)	.05-.20	.05	-	-	.10	-	.15	0.098	Light Golden	1190-1215	A5.10 ER/R1100	4102 ER1100
2319	Bal	.20	.30	5.8-6.8	.20-.40	.02	-	0.10	.10-.20	.15	0.100	Golden	1010-1190	A5.10 ER/R2319	4191 ER2319
4043	Bal	4.5-6.0	0.8	.30	.05	.05	-	.10	.20	.15	0.097	Gray	1065-1170	A5.10 ER/R4043	4190 ER4043
4047	Bal	11-13	0.8	.30	.15	.10	-	.20	-	.15	0.096	Gray-Black	1070-1080	A5.10 ER/R4047	4185 ER4047
4145	Bal	9.3-10.7	0.8	3.3-4.7	.15	.15	.15	.25	.15	.15	-	-	-	A5.10 ER/R4145	
4643	Bal	3.6-4.6	0.8	0.10	.05	.10-.30	-	0.10	0.15	.15	0.097	Gray	1065-1175	A5.10 ER/R4643	4189 ER4643
5180*	Bal	Silicon + Iron = 0.35		.10	.20-0.7	3.5-4.5	-	1.7-2.8	.06-.20	.15	-	-	-	-	-
5183	Bal	.40	.40	.10	.5-.10	4.3-5.2	.05-.25	.25	.15	.15	0.096	White	1075-1180	A5.10 ER/R5183	-
5356	Bal	.25	.40	.10	.05-.20	4.5-5.5	.05-.20	.10	.06-.20	.15	0.096	White	1060-1175	A5.10 ER/R5356	-
5554	Bal	.25	.40	.10	.50-.10	2.4-3.0	.05-.20	.25	.05-.20	.15	0.097	White	1155-1195	A5.10 ER/R5554	-
5556	Bal	.25	.40	.10	.50-1.0	4.7-5.5	.05-.20	.25	.05-.20	.15	0.096	White	1055-1175	A5.10 ER/R5556	-
5654	Bal	E	E	.05	.01	3.1-3.9	.15-.35	.20	.05-.15	.15	0.096	White	1100-1190	A5.10 ER/R5654	-
<b><i>Casting Alloys</i></b>															
R-206.0	Bal	.10	.15	4.2-5.0	.20-.50	.15-.35	Ni .05	.10	.15-.30	.15	0.101	Golden	1060-1200	A5.10 R-206.0	-
R-A356.0 (ER/R 4010)	Bal	6.5-7.5	.20	.20	.10	.25-.45	-	.10	.20	.15	0.097	Gray	1035-1135	A5.10 R-A356.0	-
(ER/R 4008)	Bal	6.5-7.5	.09	.05	.05	.30-.45	-	.05	.04-.15	.15	0.097	Gray	1035-1135	-	4181 ER4008
R-357.0	Bal	6.5-7.5	.15	.05	.03	.45-.60	-	.05	.20	.15	0.097	Gray	1030-1135	A5.10 R-357.0	-
R-C355.0 (ER/R 4009)	Bal	4.5-5.5	.20	1.0-1.5	.10	.40-.60	-	.10	.20	.15	0.098	Gray	1015-1150	A5.10 R-C355.0	-

(a) Single values are maximum, except where otherwise specified.

(b) Silicon plus iron shall not exceed 0.95 percent.

(c) Beryllium shall not exceed 0.0008 percent.

\*5180 is a proprietary alloy.