

Aluminum Alloy Reference for Anodizing

Series(AA)*	Alloying Constituents	Metal Properties	Coating Properties	Uses	A.Q.** Types	Non-A.Q.** Types
1xxx	None	soft conductive	clear bright	cans architectural	none	1100, 1175
<i>Finishing advice: care should be taken when racking this soft material; good for bright coatings; susceptible to etch staining</i>						
2xxx	Copper	very strong hard low elongation	yellow poor protection	aircraft mechanical	none	2011, 2017 2219, 2224
<i>Finishing advice: since copper content is >2%, these produce yellow, poor weather-resistant coatings; don't mix with other alloys on load</i>						
3xxx	Manganese	strong small grains	grayish-brown	cans architectural lighting	none	3003, 3004
<i>Finishing advice: difficult to match sheet-to-sheet (varying degrees of gray/brown); used extensively for lighting</i>						
4xxx	Silicon	strong fluid	dark gray	architectural welding wire	none	4043, 4343
<i>Finishing advice: produce heavy black smut which is hard to remove; 4043 & 4543 used for architectural dark gray finishes in past years</i>						
5xxx	Magnesium	strong ductile fluid	clear good protection	architectural welding wire lighting	5005, 5657	5052, 5252
<i>Finishing advice: for 5005-keep silicon<0.1% and magnesium between 0.7% and 0.9%; watch for oxide streaks; 5005 used extensively for architectural</i>						
6xxx	Magnesium & Silicon	strong ductile	clear good protection	architectural structural	6063, 6463	6061, 6101
<i>Finishing advice: matte-iron>0.2%; bright-iron<0.1%; 6063 best match for 5005; 6463 best for chemical brightening</i>						
7xxx	Zinc	very strong	clear good protection	automotive	none	7029, 7046 7075
<i>Finishing advice: zinc over 5% will produce brown tinted coating; watch zinc in effluent stream; good for bright coatings</i>						