Aluminum Alloy Reference for Anodizing

Series (AA)*	Alloying Constituents	Metal Properties	Coating Properties	Uses	Non-A.Q. ** Types	Finishing Advice
1xxx	None	Soft Conductive	Clear, Bright	Cans, Architectural	1100, 1175	Care should be taken when racking this soft material; good for bright coatings; susceptible to etch staining
2xxx	Copper	Very Strong, Hard Low, Elongation	Yellow, Poor Protection	Aircraft, Mechanical	2011, 2017, 2219, 2224	Since copper content is >2%, these produce yellow, poor weather-resistant coatings; don't mix with other alloys on load
Зххх	Manganese	Strong Small Grains	Grayish-brown	Cans, Architectural, Lighting	3003, 3004	Difficult to match sheet-to-sheet (varying degrees of gray/brown); used extensively for lighting
4xxx	Silicon	Strong Fluid	Dark Gray	Architectural, Welding Wire	4043, 4343	
5xxx	Magnesium	Strong Ductile Fluid	Clear Good Protection	Architectural, Welding Wire, Lighting	5052, 5252	For 5005-keep silicon<0.1% and magnesium between 0.7% and 0.9%; watch for oxide streaks; 5005 used extensively for architectural
6xxx	Magnesium & Silicon	Strong Ductile	Clear Good Protection	Architectural, Structural	6061, 6101	Matte-iron>0.2%; bright-iron<0.1%; 6063 best match for 5005; 6463 best for chemical brightening
7xxx	Zinc	Very Strong	Clear Good Protection	Automotive	7029, 7046, 7075	



