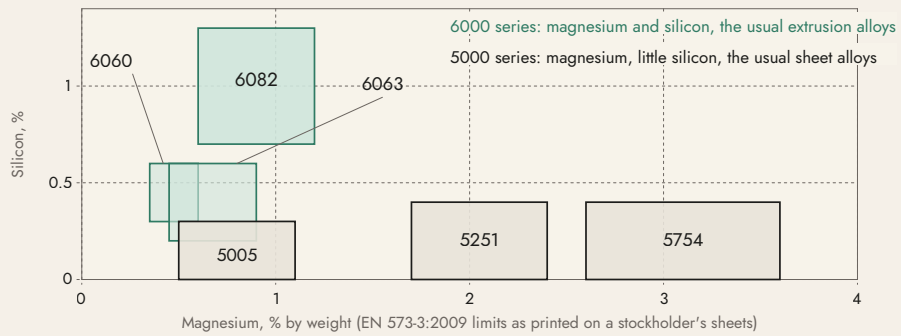
Aluminium *alloys* for architectural interiors

Six architectural aluminium alloys compared, the 6082 anodising caution, why anodising quality matters and the wording that names the alloy and the surface.

AT A GLANCE

Alloy and temper (EN AW)	Form	Minimum proof stress, MPa	Anodising and surface	Welding, forming and use
6063 T5 or T6 (AlMg0.7Si)	Extrusion	170 (profile to 10 mm wall, T6)	Easily anodised (stockholder); anodises well and consistently (extruder)	Arc welding very good; T4 forms well. Window and door frames, shopfittings, rails
6060 T5	Extrusion	120 (profile to 5 mm wall)	Rated very good; an extruder prefers it to 6063 for very demanding decorative work	Windows, doors, interior fittings, lighting, furniture
6082 T6	Extrusion, plate	250 (profile to 5 mm wall)	A plate datasheet rates decorative anodising 3 on a 1 to 6 scale; extruded surface not as smooth	Highly stressed work: trusses, bridges, cranes
5005 H34 (AlMg1)	Sheet	110	Suited to decorative anodising; streaks can occur, so order anodising quality	Very good welding. Cladding, signage, furniture, anodised parts
5251 H22, H26 (AlMg2)	Sheet, plate	120 (H22), 170 (H26)	No anodising statement on the sheet	Very good cold working. Marine work, panelling, furniture tubing
5754 H22 (AlMg3)	Sheet, plate	130	No anodising statement on the sheet	Treadplate, vehicle bodies, shipbuilding

From UK and European stockholder datasheets quoting the 2008 and 2009 editions of EN 485-2, EN 755-2 and EN 573-3, an extruder's alloy page and a US trade-body manual: confirm against the current edition and the mill certificate.



Six aluminium alloys by magnesium and silicon content: composition limits as printed on one UK stockholder's datasheets (EN 573-3:2009 edition). Original drawing by Make Bespoke Studio.

SPECIFICATION WORDING

EXTRUDED ALUMINIUM

Extruded sections in EN AW-[6063] temper [T6] to BS EN 755 [part and edition to be confirmed] [and BS EN 12020-2 for precision profiles], composition to BS EN 573-3. Anodising quality [required]. Visible runs from one batch where possible; material certificate [EN 10204 type 3.1] per batch. No substitution of alloy or temper without written approval. EN AW-6082 not to be used on a visible anodised face without an approved sample.

ALUMINIUM SHEET FOR ANODISING

Sheet EN AW-[5005] temper [H34] to BS EN 485 [part and edition to be confirmed], [anodising quality / special anodising quality], [ ] mm thick, one batch per visible run, grain direction [ ]. Extrusion and sheet to be shown together on one anodised sample; a match between different alloys is not to be assumed.

ANODIC COATING

Anodic oxidation coating to [BS EN ISO 7599, edition to be confirmed] by an anodiser working to [Qualanod, current edition], class or minimum thickness [from the anodiser's specification], colour [ ], sealed. Approved sample [ref] showing the range to be expected in production. All visible parts anodised in [one lot]. Welds [hidden / filler 5356 or 5856, shade difference accepted].

TERMS USED

Temper

How an aluminium alloy was worked and aged, written after the alloy number: T5 and T6 for aged extrusions, H34 for stabilised sheet.

Anodising quality (AQ)

Aluminium sold with controlled composition and surface so it anodises evenly; the same alloy number can show streaks without it.

Anodising

An electrochemical process that thickens aluminium's natural oxide layer; the metal stays visible and colour comes from dye or the process, so batches can vary.

Structural streaking

Streaks in an anodised surface from the metal's grain structure, most noticeable on thick sheet.

STANDARDS AND SOURCES

- BS EN 573-3:2026; BS EN 755-2:2025; BS EN 485-2:2016+A1:2018: BSI Knowledge: current. Composition, extrusion and sheet properties. Texts not read.
- BS EN ISO 7599: BSI Knowledge: 2010 edition withdrawn 23 Feb 2018; 2018 edition current at a standards seller. Not read.
- BS EN 12020-2: BSI Knowledge: 2008 edition withdrawn 31 Dec 2016; 2022 edition at a retailer. Not read.
- Qualanod specification (edition 01.07.2026): on written request; not read.
- NAAMM/NOMMA Metal Finishes Manual, AMP 500-06 (2006), Chapter 1: US trade body; anodic coatings and precautions.

Full guide: https://makebespoke.com/trade/technical/aluminium-alloys-for-architectural-interiors. Make Bespoke Studio coordinates manufacture through its partner workshops. Figures are guidance only and your specification governs; some may be superseded, so contact the studio to verify.