INDEPENDENT LAB TESTING · SGS

6063 ALUMINUM ALLOY VERIFICATION

Chemical composition of ISC AL75 termination bar, tested against the ASTM B221 limits for alloy 6063.

ALLOY VERIFIED	ELEMENTS IN SPEC	KEY ALLOYING ELEMENTS
6063	**8 of 8**	**Mg 0.60%**
Conforms to ASTM B221-21	Every element tested passed	Si 0.38%, both mid-range

CHEMICAL COMPOSITION VS. 6063 LIMITS

Weight %, spark emission spectrometry (ASTM E1251)

ELEMENT	6063 LIMIT	ISC RESULT	WITHIN THE ALLOWED RANGE	RESULT
Si Silicon	0.20 – 0.6	**0.38**		PASS
Mg Magnesium	0.45 – 0.9	**0.60**		PASS
Fe Iron	≤ 0.35	**0.11**		PASS
Cu Copper	≤ 0.10	**< 0.01**		PASS
Mn Manganese	≤ 0.10	**< 0.01**		PASS
Cr Chromium	≤ 0.10	**< 0.01**		PASS
Zn Zinc	≤ 0.10	**< 0.01**		PASS
Ti Titanium	≤ 0.10	**0.013**		PASS



01

MAGNESIUM + SILICON

6063 is defined by its Mg and Si content, which combine to give the alloy its strength after T6 heat treatment. Both landed near the middle of their windows.

02

LOW IMPURITIES

Copper, manganese, chromium and zinc all measured under 0.01%, well below the 0.10% cap. Low copper is what gives 6063 its corrosion resistance outdoors.

03

NOT A SUBSTITUTE ALLOY

Every element tested falls inside the ASTM B221 limits for 6063, confirming the bar is the alloy specified on our data sheet.

CUSTOMER TAKEAWAY

Independent lab testing confirms ISC termination bar is made from genuine 6063 aluminum, with all 8 of 8 elements within ASTM B221 limits.

IMPORTANT CONTEXT

This test verifies the alloy by chemical composition only. The T6 temper is a heat-treatment condition confirmed by mechanical testing, which was not part of this report. Results apply to the sample tested. Source: independent laboratory test report (SGS), ISC test ref. ISC-AL6063-2607, issued July 29, 2026.