



562-692-5911
562-695-2323 (fax)
la.sales@mcmaster.com



Certificate

Purchase Order PO26111649	Order Date 3/16/2026	Placed By Christopher Berger	McMaster-Carr Number 4302008-01	Number of Certificates 1
-------------------------------------	--------------------------------	---	---	------------------------------------

Line	Product	Ordered	Status	Certificate
10	8975K437 Multipurpose 6061 Aluminum Bar, 1/4" Thick x 6" Wide x 8 Feet Long	1 each	1 each delivers March 17	311-5402



SO: 800985, LINE #1
 HEAT #: Z00104248
 PO: GS-24382460

MCMaster-CARR SUPPLY CO
 16.2506.00096.00

0.250" X 6.000" X 96.000 ALUM RECT 6061T6511 EXTRUDED

**KAISER
 ALUMINUM**

Best in Class

CERTIFIED TEST REPORT

<https://Online.KaiserAluminum.com>

KAISER ALUMINUM
 FABRICATED PRODUCTS, LLC
 5205 KAISER DRIVE
 KALAMAZOO, MI 49048

CUSTOMER PO NUMBER: 080125K-2		CUSTOMER PART NUMBER: E16.2506.000		PRODUCT DESCRIPTION: .250 X 6.000 PRECISION WIDE BAR	
KAISER ORDER NUMBER: 6197422	LINE ITEM: 002	SHIP DATE: 08/07/2025	KAISER LOT NUMBER: Z00104248	ALLOY: 6061	TEMPER: T6511
WEIGHT SHIPPED: 1016.000 LB	QUANTITY: 48.000 PCS	B/L NUMBER: 650000	DIAM/DAF/THKNS:	WIDTH:	LENGTH: 12.000 FT
SHIP TO: HOWARD PRECISION METALS INC 8058 N. 87TH ST MILWAUKEE, WI 53224 USA			SOLD TO: HOWARD PRECISION METALS INC 8058 N. 87TH ST MILWAUKEE, WI 53224 USA		

Actual Physical Properties

REFERENCE	DASH#	SAMPLE#	UTS (KSI)	YTS (KSI)	ELONG%	HARDNESS	CONDUCT.	BEND
Z00104248	0001	0001	45.9	41.5	15.3	RE 92	N/A	N/A
Z00104248	0001	0002	45.4	40.8	14.2	RE 92	N/A	N/A
Z00104248	0001	0003	44.3	39.5	12.8	RE 92	N/A	N/A
Z00104248	0001	0004	45.4	41.0	14.5	RE 93	N/A	N/A
Z00104248	0001	0005	44.6	39.8	13.6	RE 93	N/A	N/A
Z00104248	0001	0006	44.5	39.9	13.0	RE 92	N/A	N/A
Z00104248	0001	0007	45.3	39.9	14.2	RE 92	N/A	N/A
Z00104248	0001	0008	46.1	40.8	12.9	RE 92	N/A	N/A
Z00104248	0001	0009	42.0	37.9	14.8	RE 91	N/A	N/A
Z00104248	0001	0010	44.1	39.6	14.7	RE 91	N/A	N/A
Z00104248	0001	0011	45.1	40.8	13.8	RE 91	N/A	N/A

Chemical Composition (wt%), Aluminum Remainder

LIMITS	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Pb	Bi	Zr	Ea	Tot
Maximum	0.80	0.70	0.40	0.15	1.20	0.35	0.25	0.15	NA	NA	NA	0.05	0.15
Minimum	0.40	0.00	0.15	0.00	0.80	0.04	0.00	0.00	NA	NA	NA	0.00	0.00
117456	.58	.27	.19	.06	.81	.07	.21	.02	.00	.00	.00	.01	.03

Applicable Requirements:

ASTM B221-21 (6061-T6511); AMS-QQ-A-200/8A (PROFILES); EXCEPTIONS: SATISFIES REQUIREMENTS OF 6061-T6/T6511.
 EXCEPTION TO LATEST REVISION OF ASTM B666, NO STEN
 CIL FOR MATERIAL <0.750"DIAMETER OR FLAT SURFACE, ALL PRODUCT FORMS., AMS-QQ-A-200/8A: PARAGRAPH 3.1 - CHEMICAL ANALYSIS WILL BE PERFORMED IN COMPLIANCE TO ASTM B985, E716 AND E1251 (LATEST REV). PARAGRAPH 3.3 - PRODUCTS WILL BE HEAT TREATED IN COMPLIANCE TO ASTM B807/807M AND ASTM B918/B918M (LATEST REV). PARAGRAPH 6.4 PRESERVATION AND PACKAGING LEVEL IS PRESUMED AS COMMERCIAL UNLESS OTHERWISE NOTED/AGREED IN THE PRODUCER/PURCHASER AGREEMENT. AMS-QQ-A-200 REV C: PARAGRAPH 3.10 - PRODUCTS WILL BE HEAT TREATED IN COMPLIANCE TO ASTM B807/807M AND A

Plant Serial: 00637735
 Kaiser Order Number: 6197422
 Line Item: 002



SO: 800985, LINE #1
 HEAT #: Z00104248
 PO: GS-24382460

MCMaster-CARR SUPPLY CO
 16.2506.00096.00

0.250" X 6.000" X 96.000 ALUM RECT 6061T6511 EXTRUDED

KAISER
ALUMINUM

Best in Class

CERTIFIED TEST REPORT

<https://Online.KaiserAluminum.com>

KAISER ALUMINUM
 FABRICATED PRODUCTS, LLC
 5205 KAISER DRIVE
 KALAMAZOO, MI 49048

STM B918/B918M (LATEST REV). PARAGRAPH 4.4.1 - CHEMICAL ANALYSIS WILL BE PERFORMED IN COMPLIANCE TO B985, E716 AND E1251 (LATEST REV). PARAGRAPH 4.3.3 AND 5 PRESERVATION AND PACKAGING LEVEL IS PRESUMED AS COMMERCIAL UNLESS OTHERWISE NOTED/AGREED IN THE PRODUCER/PURCHASER AGREEMENT. PARAGRAPH 4.2.6 AND 4.3.1 HARDNESS TEST SAMPLING WILL BE IN ACCORDANCE WITH TENSILE TEST SAMPLING FREQUENCY PER ASTM B221 (LATEST REV) REQUIREMENTS.

MISCELLANEOUS NOTES

MANUFACTURED IN USA MELTED IN USA
 MERCURY IS NOT UTILIZED BY KAISER ALUMINUM IN THE MANUFACTURE OF THIS MATERIAL. STRUCTURAL PIPE, TUBE AND HOLLOW PROFILES ARE NOT INTENDED FOR PRESSURE OR FLUID CARRYING APPLICATIONS PER ASTM B429. ANY EXCEPTIONS/CONDITIONS ON QUOTE AND ACKNOWLEDGMENT ARE INTEGRAL TO THIS MATERIAL CERT.
 MATERIAL COMPLIES WITH FAR 52.225-1, BUY AMERICAN ACT-SUPPLIES, DFARS 252.225-7001 BUY AMERICAN ACT & BAL OF PAYMENTS PGM, AND FAR 52.225-5 TRADE AGREEMENTS.

CERTIFICATION

Kaiser Aluminum Fabricated Products, LLC ('Kaiser') hereby certifies that metal shipped under this order has been inspected and tested and found in conformance with the applicable specifications forming a part of the description set forth in Kaiser's sales acknowledgement form. Any warranty is limited to that shown on Kaiser's general terms & conditions of sale. Test reports are on file subject to examination.

Aimee L. Macnowski, Quality & Technology Manager

Aimee L. Macnowski

Plant Serial: 00637735
 Kaiser Order Number: 6197422
 Line Item: 002