



# ALUMINUM TYPICAL PROPERTIES

## Typical Mechanical Properties

Alloy/Temper	Tension				Hardness	Shear	Fatigue	Modulus
	Strength ksi		Elongation % in 2 in.		Brinnell Number	Ultimate Shearing Strength	Endurance Limit	Modulus of Elasticity
	Ultimate	Yield	1/16 In Thick Specimen	1/2 In Thick Specimen	500 Kg load 10 mm ball	ksi	ksi	ksi 10 <sup>3</sup>
2024-O	27	11	20	22	47	18	13	10.6
2024-T3	70	50	18	----	120	41	20	10.6
2024-T4, T351	68	47	20	19	120	41	20	10.6
2024-T361	72	57	13	----	130	42	18	10.6
Alclad 2024-O	26	11	20	----	----	18	----	10.6
Alclad 2024-T3	65	45	18	----	----	40	----	10.6
Alclad 2024-T4, T351	64	42	19	----	----	40	----	10.6
Alclad 2024-T361	67	63	11	----	----	41	----	10.6
Alclad 2024-T81, T851	65	60	6	----	----	40	----	10.6
Alclad 2024-T861	70	66	6	----	----	42	----	10.6
3003-O	16	6	30	40	28	11	7	10.0
3003-H12	19	18	10	20	35	12	8	10.0
3003-H14	22	21	8	16	40	14	9	10.0
3003-H16	26	25	5	14	47	15	10	10.0
3003-H18	29	27	4	10	55	16	10	10.0
5052-O	28	13	25	30	47	18	16	10.2
5052-H32	33	28	12	18	60	20	17	10.2
5052-H34	38	31	10	14	68	21	18	10.2
5052-H36	40	35	8	10	73	23	19	10.2
5052-H38	42	37	7	8	77	24	20	10.2
5083-O	42	21	----	22	----	25	----	10.3
5083-H32	46	33	----	16	----	----	23	10.3
5083-H116	46	33	----	16	----	----	23	10.3
5083-H32	46	33	----	16	----	----	23	10.3
6061-O	18	8	25	30	30	12	9	10.0
6061-T4, T451	35	21	22	25	65	24	14	10.0
6061-T6, T651	45	40	12	17	95	30	14	10.0
6063-O	13	7	----	----	25	10	8	10.0
6063-T1	22	13	20	----	42	14	9	10.0
6063-T4	25	13	22	----	----	----	----	10.0
6063-T5	27	21	12	----	60	17	10	10.0
6063-T6	35	31	12	----	73	22	10	10.0
6063-T83	37	35	9	----	82	22	----	10.0
6063-T831	30	27	10	----	70	18	----	10.0
6063-T832	42	39	12	----	95	27	----	10.0
6082-T6, T6511	49	46	12	14	95	31	14	10.0
7050-T73510, T73511	72	63	----	12	----	----	----	10.4
7050-T7451	76	68	----	11	----	44	----	10.4
7050-T7651	80	71	----	11	----	47	----	10.4
7075-O	33	15	17	16	60	22	----	10.4
7075-T6, T651	83	73	11	11	150	48	23	10.4
Alclad 7075-O	32	14	17	----	----	22	----	10.4
Alclad 7075-T6, T651	76	67	11	----	----	46	----	10.4