

ALUMINUM STRIP IN PLATE, SHEET AND STRIP, JIS H4000

1 GRADE & SYMBOL

Grade		Symbol	Information Reference
Alloy No.	Profile		
1050	Plate, Coil & Circular	A1050P	Low in strength but excellent in formability, weldability and corrosion resistance. For reflection plates, lighting fixtures, ornaments, tanks for chemical industry, conductive materials and etc.
1100	Plate, Coil & Circular	A1100P	Strength relatively low but excellent in formability, weldability & corrosion resistance. For general vessels, architectural materials, electric appliances, various containers, printing boards and etc.
5052	Plate, Coil & Circular	A5052P	Medium strength, excellent in corrosion resistance, formability and weldability. For ships, vehicles, buildings, cans for beverages and etc.
6061	Plate, Coil & Circular	A6061P	Excellent in corrosion resistance and used as structural materials for rivet jointing. For ships, vehicle, ground construction and etc.

2 CHEMICAL COMPOSITION

Alloy	Chemical Composition								
	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Al
1050	0.25 max.	0.40 max.	0.05 max.	0.05 max.	0.05 max.	0.05 max.	0.05 max.	0.03 max.	99.50 min.
1100	Si + Fe 1.00 max.		0.05-0.20	0.50 max.	-	-	0.10 max.	-	99.00 min.
5052	0.25 max.	0.40 max.	0.10 max.	0.10 max.	2.20-2.80	0.15-0.35	0.10 max.	-	Remainder
6061	0.40-8.00	0.70 max.	0.15-0.40	0.15 max.	0.80-1.20	0.04-0.35	0.25 max.	0.15 max.	Remainder

3 MECHANICAL PROPERTIES

Alloy	Temper	Thickness (mm)	Tensile Strength		Proof Strength		Elongation (%)
			kgf/mm ²	N/mm ²	kgf/mm ²	N/mm ²	
1050	H0	0.20≤0.50	6-10	59-98	-	-	15min
		0.50≤0.80			-	-	20min
		0.80≤1.30			2min	20min	25min
		1.30≤6.50			2min	20min	30min
	H12	0.20≤0.30	8-12	78-118	-	-	2min
		0.30≤0.50			-	-	3min
		0.50≤0.80			-	-	4min
		0.80≤1.30			6.5min	64min	6min
	H14	1.30≤2.90	9.5-13	94-127	6.5min	64min	8min
		0.20≤0.30			-	-	1min
		0.30≤0.50			-	-	2min
		0.50≤0.80			-	-	3min
	H16	0.80≤1.30	12-15	118-147	7.5min	74min	4min
		1.30≤2.90			7.5min	74min	5min
		0.20≤0.50			-	-	1min
		0.50≤0.80			-	-	2min
H18	0.80≤1.30	13min	127min	8.5min	84min	3min	
	1.30≤4.00			8.5min	84min	4min	
	0.20≤0.50			-	-	1min	
	0.50≤0.80			-	-	2min	
1100	H0	0.80≤1.30	7.5-11	74-108	-	-	20min
		1.30≤6.50			2.5min	25min	25min
		0.20≤0.30			2.5min	25min	30min
		0.30≤0.50			-	-	2min
	H12	0.50≤0.80	9.5-13	94-127	-	-	3min
		0.80≤1.30			-	-	4min
		1.30≤2.90			7.5min	74min	6min
		0.20≤0.30			7.5min	74min	8min
	H14	0.30≤0.50	12-15	118-147	-	-	1min
		0.50≤0.80			-	-	2min
		0.80≤1.30			-	-	3min
		1.30≤2.90			9.5min	94min	4min
	H16	0.20≤0.50	14-17	137-167	9.5min	94min	5min
		0.50≤0.80			-	-	1min
		0.80≤1.30			-	-	2min
		1.30≤4.00			12min	118min	3min
H18	0.20≤0.50	16min	157min	12min	118min	4min	
	0.50≤0.80			-	-	1min	
	0.80≤1.30			-	-	2min	
	1.30≤3.00			-	-	3min	
5052	H0	0.20≤0.30	18-22	177-216	-	-	14min
		0.30≤0.50			6.5min	64min	15min
		0.50≤0.80			-	-	16min
		0.80≤1.30			-	-	18min
	H12 / H32	1.30≤2.90	22-27	216-265	-	-	19min
		0.20≤0.30			-	-	3min
		0.30≤0.50			-	-	4min
		0.50≤0.80			-	-	5min
	H14 / H34	0.80≤1.30	24-29	235-284	16min	157min	5min
		1.30≤2.90			16min	157min	7min
		0.20≤0.50			-	-	3min
		0.50≤0.80			-	-	4min
	H16 / H36	0.80≤1.30	26-31	255-304	18min	177min	4min
		1.30≤2.90			18min	177min	6min
		0.20≤0.80			-	-	3min
		0.80≤4.00			21min	206min	4min
H18 / H38	0.20≤0.80	28min	275min	21min	206min	4min	
	0.80≤3.00			23min	226min	3min	
	0.20≤0.50			-	-	4min	
	0.50≤6.50			-	-	10min	
6061	T4	0.40≤0.50	21min	206min	11min	108min	14min
		0.50≤6.50					16min
	T6	0.40≤6.50	30min	294min	25min	245min	8min
		0.50≤6.00					10min