

Aluminium Specifications



Plate, Sheet and Strip Chemical Composition and Mechanical Properties

Material Designation		Chemical Composition	Temper	Thickness		Mechanical Properties								
European Standard	Old BS Standard			Over mm	Up to & including mm	0.2% Proof Stress min N/mm ²	Tensile Strength		Elongation					
							Min	Max	On 50mm Material thicker than					
						Min-Max N/mm ²		0.5mm min %	0.8mm min %	1.3mm min %	2.6mm min %	3.0mm min %		
1050A	1B	Si 0.25	Zn 0.07	F	3.0	25.0	-	-	-	-	-	-	-	
		Fe 0.40	Ti 0.05	O	0.2	6.0	-	55	95	22	25	30	32	
		Cu 0.05	Others 0.03	H12	0.2	6.0	-	80	115	4	6	8	9	
		Mn 0.05		H14	0.2	12.5	-	100	135	4	5	6	6	
		Mg 0.05		H18	0.2	3.0	-	135	-	3	3	4	4	
3103	N3	Si 0.50	Cr 0.10	F	0.2	25.0	-	-	-	-	-	-	-	
		Fe 0.70	Zn 0.20	O	0.2	6.0	-	90	130	20	23	24	24	
		Cu 0.10	Others 0.015	H12	0.2	6.0	-	120	145	5	6	7	9	
		Mn 0.9-1.5		H14	0.2	12.5	-	140	175	3	4	5	6	
		Mg 0.30		H16	0.2	6.0	-	160	195	2	3	4	4	
5005		Si 0.30	Cr 0.10	O	0.2	3.0	-	95	145	18	20	21	22	
		Fe 0.7	Zn 0.25	H12	0.2	3.0	80	125	170	4	5	6	8	
		Cu 0.20	Ti -	H14	0.2	3.0	100	145	185	3	3	5	6	
		Mn 0.20	Others 0.15	H18	0.2	3.0	165	185	-	1	2	3	3	
		Mg 0.50-1.1												
5083	N8	Si 0.40	Cr 0.05-0.25	F	3.0	25.0	-	-	-	-	-	-	-	
		Fe 0.40	Zn 0.25	O	0.2	80.0	125	275	350	12	14	16	16	
		Cu 0.10	Ti 0.15	H22	0.2	6.0	235	310	375	5	6	8	10	
		Mn 0.40-1.0	Others 0.15	H24	0.2	6.0	270	345	405	4	5	6	8	
5251	N4	Si 0.40	Cr 0.15	F	3.0	25.0	-	-	-	-	-	-	-	
		Fe 0.50	Zn 0.15	O	0.2	6.0	60	160	200	18	18	18	20	
		Cu 0.15	Ti 0.15	H22	0.2	6.0	130	200	240	4	5	6	8	
		Mn 0.10-0.50	Others 0.15	H24	0.2	12.5	175	225	275	3	4	5	5	
		Mg 1.7-2.4		H28	0.2	3.0	215	255	285	2	3	3	4	
6082	H30	Si 0.7-1.3	Cr 0.25	O	0.2	3.0	-	-	155	16	16	16	15	
		Fe 0.50	Zn 0.20	T4	0.2	3.0	120	200	-	15	15	15	15	
		Cu 0.10	Ti 0.10		3.0	25.0	115	200	-	-	-	-	15	
		Mn 0.40-1.0	Others 0.15	T6	0.2	3.0	255	295	-	8	8	8	8	
		Mg 0.6-1.2			3.0	25.0	240	295	-	-	-	-	8	
				T451	6.0	25.0	115	200	-	-	-	-	-	
					25.0	90.0	115	200	-	-	-	-	-	
				T651	6.0	25.0	240	295	-	-	-	-	-	
					25.0	90.0	240	295	-	-	-	-	-	
					90.0	115.0	230	285	-	-	-	-	-	
			115.0	150.0	220	275	-	-	-	-	-			