

## NATIONAL ALUMINIUM COMPANY LIMITED

### ALUMINIUM ROLLED PRODUCTS

<b>STANDARD SHEET</b>		
ALLOY & PRODUCT CODE	AA1050 – RS10 AA1100 – RS11 AA1200 – RS12 AA3003 – RS03 AA3105 – RS31 AA5005 – RS05 AA5052 – RS52 AA8011 – RS80	
THICKNESS	0.3mm to 3.00mm	
WIDTH	500mm to 1600mm for AA 1xxx, 3xxx & 8xxx alloys 500mm to 1100 mm for AA 5xxx alloys	
LENGTH	1000mm to 4000mm	
TEMPER	H12, H14, H16, H18, H22, H24, H26	
TOLERANCES	Thickness	0.3mm to 1mm : +/- 5% Above 1mm : +/- 3%
	Width	+/- 1mm
	Length	+/- 1mm
	Diagonal Difference	1mm
STACK WEIGHT	2 MT Max.	
STACK HEIGHT	400mm Max. Plus 150mm Pallet	

<b>STANDARD COIL</b>		
ALLOY & PRODUCT CODE	AA1050 – RC10 AA1100 – RC11 AA1200 – RC12 AA3003 – RC03 AA3105 – RC31 AA5005 – RC05 AA5052 – RC52 AA8011 – RC80	
THICKNESS	0.3mm to 3.00mm	
WIDTH	500mm to 1600mm for AA 1xxx, 3xxx & 8xxx alloys 500mm to 1100 mm for AA 5xxx alloys	
TEMPER	O, H12, H14, H16, H18, H22, H24, H26, H28	
TOLERANCES	Thickness	0.3mm to 1mm : +/- 5% Above 1mm : +/- 3%
	Width	+/- 1mm
COIL OUTSIDE DIAMETER (OD)	1600mm Max.	
COIL INSIDE DIAMETER (ID)	200mm, 300mm, 400mm, 500mm Coil on Core subject to enquiry	
COIL WEIGHT	8MT Max.	
CUT EDGES	Smooth and tear free edges	
BUILD UP	Straight	

Packing: Sea worthy strong packing suitable for forklift handling

Alloys of other Grades and closer tolerances are subject to enquiry

Refer Table-1 for Mechanical properties against Temper designation, and  
Table-2 for Chemical Composition of Alloys

**Table 1 - Mechanical properties against Temper designation**

ALLOY	TEMPER	UTS (Mpa)	% ELONGATION (MIN) ON 50 mm GAUGE LENGTH			
			0.12- 0.32mm	0.33-0.63mm	0.64-1.20mm	1.21-3.00mm
AA1050	O	55 – 95	15	18	23	25
	H12	75-110	-	6	7	12
	H14	85-120	1	2	6	10
	H16	95-130	1	2	4	5
	H18	110 min	1	2	3	4
AA1100	O	75-105	15	17	22	30
	H12	95-130	-	3	5	8
	H14	110-145	1	2	3	5
	H16	130-165	1	2	3	4
	H18	150 min	1	1	2	4
AA1200	O	70-110	15	17	22	30
	H12	90-130	-	3	5	8
	H14	105-140	1	2	3	5
	H16	125-150	1	2	3	4
	H18	140 min	1	2	2	4
AA1235	O	65-95	15	17	22	30
	H12	80-115	-	3	5	8
	H14	88-127	1	2	3	5
	H16	118-147	1	2	3	4
	H18	138 min	1	2	2	4
AA8011	O	85-120	14	20	22	25
	H12	105-140	3	4	6	9
	H14	125-160	1	2	3	5
	H16	150-180	1	2	3	4
	H18	175 min	1	1	2	4
AA3003	O	95-130	14	20	22	25
	H12	120-160	3	4	6	9
	H14	140-180	1	2	3	5
	H16	165-205	1	2	3	4
	H18	185 min	1	1	2	4
AA3105	O	95-145	-	16	19	20
	H12	130-180	-	1	2	3
	H14	150-200	-	1	2	2
	H16	170-220	-	1	1	2
	H18	190 min	-	1	1	2
AA5005	O	105-145	12	16	19	21
	H12	125-165	2	4	6	9
	H14	145-185	1	2	2	3
	H16	165-205	1	1	2	3
	H18	185 min	-	-	-	-
AA5052	O	170-215	13	15	17	19
	H12	215-265	-	4	5	7
	H14	235-285	3	3	4	6
	H16	255-305	2	3	4	4
	H18	270 min	2	3	4	4

NOTE : For H22 , H24 , H26,H28 temper , UTS will be same as UTS of H 12, H14,H16 & H18 temper but % Elongation shall be slightly higher than the values indicated against H1x tempers.

**Table 2 - CHEMICAL COMPOSITION OF ALLOYS**

SL.NO	ALLOY	SPECIFICATIONS											
		% Si	% Fe	% Cu	% Mn	% Mg	% Cr	% Zn	% Ti	% V	% Other Impurities Each	% Other Impurities Total	% Aluminum
1	AA3003	0.60 max	0.70 max	0.05 to 0.20	1.00 to 1.50	-	-	0.10 max	-	-	0.05 max	0.15 max	-
2	AA5005	0.30 max	0.45 max	0.05 max	0.15 max	0.70 to 1.10	0.10 max	0.20 max	-	-	0.05 max	0.15 max	-
3	AA1050	0.25 max	0.40 max	0.05 max	0.05 max	0.05 max	-	0.05 max	0.03 max	0.05 max	0.03 max	-	99.50 min
4	AA1100	0.95 (Si + Fe) max		0.05 to 0.20	0.05 max	-	-	0.10 max	-	-	0.05 max	0.15 max	99.00 min
5	AA1200	1.00 (Si + Fe) max		0.05 max	0.05 max	-	-	0.10 max	0.05 max	-	0.05 max	0.15 max	99.00 min
6	AA3105	0.60 max	0.70 max	0.30 max	0.30 to 0.80	0.20 to 0.80	0.20 max	0.40 max	0.10 max	-	0.05 max	0.15 max	-
7	AA1235	0.65 (Si + Fe) max		0.05 max	0.05 max	0.05 max	-	0.10 max	0.06 max	0.05 max	0.03 max	-	99.35 min
8	AA5052	0.25 max	0.40 max	0.10 max	0.10 max	2.20 to 2.80	0.15 to 0.35	0.05 max	-	-	0.05 max	0.15 max	-
9	AA8011	0.50 to 0.90	0.60 to 1.00	0.10 max	0.20 max	0.05 max	0.05 max	0.10 max	0.08 max	-	0.05 max	0.15 max	-