

COMPANY PROFILE





ALUMINIUM ALLOYS SPECIALIST

About us

We are Metal Extrusions, a leading aluminium supplier in Bangalore & across India. With over 30+ years of experience, we have established ourselves as a trusted name in the industry. We provide high-quality aluminium products and exceptional services to our customers.

OUR COMMITMENT & VISION

We are Certified for **AS912OB** Stockists / Distributors & Direct Importers Of Industrial, Aerospace, Defence & Marine Grade Aluminium Materials Like Extrusions / Plates / Sheets & Coils Etc. We are committed to providing excellent customer service, top-notch product quality, and competitive pricing structures. We believe in building long-term relationships with our customers by meeting their evolving needs and exceeding their expectations. We have invested substantially in skilled manpower and state-of-the-art equipment to meet the challenges of changing technologies in an increasingly competitive global economy.

Industry we cater – AEROSPACE, DEFENCE, MARINE, ELECTRICAL, RAILWAY, AUTOMOBILE, MOULDS BUILDING AND CONSTRUCTION, TRUCK BUILDING ETC.

WE ALSO DEAL WITH DEFENCE, AEROSPACE & MARINE GRADE ALUMINIUM MATERIALS OF EUROPEAN COMPANIES AND RUSSIAN COMPANY KUMZ



THERE WILL BE NO MOQ WITH US FOR AVAILABLE MATERIALS

Chemical composition

Alloy (ISS)	Equivalent alloy (AA)	Сор	per	Magn	esium	Silicor	n	Iron	Mangar	nese	* Others (Total)	Remarks
Old New	U.S.A.	Min.	Max.	Min.	Max.	Min.	Max.	Max	Min.	Max.	Max	
1 B 19500	1050	-	0.05	-	-	-	0.25	0.4	-	0.05	0.1	



1050 Aluminum Sheet

Technical Parameter of 1050

Temper O,H12,H14,H16,H18,H19,H22,H24, H26,H28,H112 Thickness (mm) 0.1-500 Width (mm) 20-2650 Length (mm) 500-16000

1050 aluminum sheet contains more than 99.5% aluminum, which is one of the industrial pure

1050 Aluminum Sheet Description:

aluminum, which is one of the industrial pure aluminum. 1050 aluminum sheet has the characteristics of high plasticity, corrosion resistance, good electrical and thermal conductivity, but low strength.

1050 aluminum sheet is often used in daily necessities, lighting fixtures, reflectors, decorations, chemical industry containers, heat sinks, signs, electronics, lamps, nameplates, electrical appliances, stamping parts and other products. In some occasions that require high corrosion resistance and formability, but not high requirements for strength, chemical equipment is its typical application.



Chemical composition

Alloy (ISS)	Equivalent alloy (AA)	Сор	per	Magn	esium	Silicor	n	Iron	Mangar	nese	* Others (Total)	Remarks
Old New	U.S.A.	Min.	Max.	Min.	Max.	Min.	Max.	Max	Min.	Max.	Max	
- 19600	1060	-	0.05	-	-	-	0.25	0.35	-	0.03	0.1	



1050 Aluminum Sheet Description:

1060 aluminum sheets have high elongation, tensile strength, excellent electrical conductivity, and high formability, and can meet conventional processing requirements (stamping, stretching). our Aluminum's ultra-wide and ultra-thick 1060 aluminum plate can eliminate internal stress and cut without deformation.

The width can reach 2650mm and the thickness can reach 500mm. It is a rare domestic manufacturer that can produce ultra-wide and ultra-thick aluminum plates.

1060 Aluminum Sheet

Technical Parameter of 1060

Temper O,H12,H14,H16,H18,H19,H22,H24 , H26,H28, H112 Thickness (mm) 0.1-500 Width (mm) 20-2650 Length (mm) 500-16000



AA1100/1200

Chemical composition

Alloy	Equivalent alloy (AA)	Copper		Magn	esium	Silico	n	Iron	Manga	nese		Remarks
(ISS) Old New	U.S.A.	Min.	Max.	Min.	Max.	Min.	Max.	Max	Min.	Max.	(Total) Max	
1 C 19000	1100 1200	-	0.10 0.05	_	-	- Si+Fe 1	0.5 .0	0.6	- -	0.1 0.05	0.1 0.1	



1100/1200 Aluminum Sheet Description:

1100 aluminum sheets are industrial pure aluminum, which has the advantages of high elongation, tensile strength, excellent electrical conductivity, and high formability. Corrosion, does not require high-strength parts.

1100 aluminum sheet plate belongs to pure aluminum, the production process is simple, the price of 1100 aluminum sheet is much lower than that of 5xxx series and 6xxx series aluminum.

1100/1200 Aluminum Sheet

Technical Parameter of 1100/1200

Temper O,H12,H14,H16,H18,H19,H22,H24 , H26,H28, H112 Thickness (mm) 0.1-500 Width (mm) 20-2650 Length (mm) 500-16000



1100/1200 Aluminum Coils

Chemical composition

Fe	Si	Mn	Ti	AI	Cu	Mg	Zn	Impurity
0.6 - 1	0.5 - 0.9	max 0.2	max 0.08	97.57 - 98.9	max 0.1	max 0.05	max 0.1	other, each 0.05;



8011 Aluminum Sheet Description:

8011 is an alloy of aluminum, magnesium, and manganese, and it has many uses in a range of industries.

8011 is used in the production of products such as aircraft components, aluminum foil and insulation materials. It can also be used to manufacture building elements such as window frames, doors and siding. Due to its strength and lightweight, it is also used in the automotive industry for car body parts and wheels.

8011 Aluminum Sheet

Technical Parameter of 8011

Temper O,H12,H14,H16,H18, Thickness (mm) 0.3 to 3.0 Width (mm) 900-1400 Length (mm) : customized



8011 Aluminum Coils

Chemical composition

Alloy Equiva (ISS) alloy (Magnesium	Silicon	Iron	Manganese	* Others Remarks (Total)
Old New U.S.A.	,	. Min. Max.	Min. Max.	Max	Min. Max.	Max
N3 31000 3003	- 0.1	- 0.1	- 0.6	0.7	1.0 1.5	0.4



3003 Aluminum Sheet Description:

3003 is the most widely used of all aluminum alloys. It is essentially commercially pure aluminum with the addition of manganese which increases the strength some 20% over the 1100 grade. Thus, it has all the excellent characteristics of 1100 with higher strength. It has excellent corrosion resistance.

It has excellent workability and it may be deep drawn or spun, welded or brazed. It is non heat treatable. Applications: cooking utensils, decorative trim, awnings, siding, storage tanks, chemical equipment.

3003 Aluminum Sheet

Technical Parameter of 3003

Temper F,O,H12,H14,H16 H18,H19,H22,H24, H26,H28,H111,H112,H114 Thickness (mm) 0.1–500 Width (mm) 100–2650 Length (mm) 500–16000



Chemical composition

,	Equivalent C alloy (AA)	opper M	Magnesium	Silicon	Iron	Manganese	* Others Remarks (Total)
· /	J.S.A. Min.	Max. M	4in. Max.	Min. M	Max. Max	Min. Max.	Max
N3 31000 3	005 -	0.1 -	- 0.1	- C	0.6 0.7	1.0 1.5	0.4



3105 Aluminum Sheet

3105 Aluminum Sheet Description:

3105 alloy aluminum sheet belongs to a series of AL-Mn alloy, with good Anti-Rust performance and good electrical conductivity, in which the aluminum content is 98%, due to the addition of 0.3% of copper elements, so the electrical conductivity up to 41%.

3105 alloy aluminum sheet can not be strengthened by heat treatment, so the cold working method to improve its mechanical properties: good corrosion resistance, good weldability, can be machinability of poor performance.

Technical Parameter of 3105

Temper F,O,H12,H14,H16 H18,H19,H22,H24, H26,H28,H111,H112,H114 Thickness (mm) 0.2-500 Width (mm) 100-2650 Length (mm) 500-16000



3105 Aluminum Coils

Chemical composition

Alloy (ISS)		Equivalent alloy (AA)	Сор	per	Magn	esium	Silico	on	Iron	Manga	nese	* Others (Total)	Remarks
Old	New	U.S.A.	Min.	Max.	Min.	Max.	Min.	Max.	Max	Min.	Max.	Max	
-	-	5005	-	0.2	-	0.2	-	0.3	0.7	0.5	1.1	0.15	



5005 Aluminum Sheet

Technical Parameter of 5005

Temper O, H14, H32, H34, H38 Thickness (mm) 0.2-250 Width (mm) 100-2600 Length (mm) 500-10000



5005 Aluminum Coils

www.themetalextrusions.com

5005 Aluminum Sheet Description:

5005 contains nominally 0.8% magnesium. It has medium strength, good weldability, and good corrosion resistance in marine atmospheres. It also has the low density and excellent thermal conductivity common to all aluminium alloys. It is the most commonly used grade of aluminium in sheet and plate form.

5005 has the same high resistance to general corrosion as other non heat treatable aluminium alloys. It also has the higher resistance to slightly alkaline conditions common to the 5000 series alloys.

AA5052

Chemical composition

Alloy (ISS)	Equivalent alloy (AA)	Сор	per	Magn	esium	Silico	n	Iron	Manga	nese	* Others (Total)	Remarks
Old New	U.S.A.	Min.	Max.	Min.	Max.	Min.	Max.	Max	Min.	Max.	Max	
N4 52000	5052	-	0.1	1.7	2.6	-	0.6	0.5	-	0.5	0.4	



5052 Aluminum Sheet Description:

5052 aluminum sheet contains 2.5% magnesium and 0.25% chromium. It has good workability, medium static strength, high fatigue strength, good weldability, and very good corrosion resistance, especially in marine atmospheres. so many customers use this alloy for ship building, like 5052 H32 is always used for small boat building.

5052 Aluminum Sheet

Technical Parameter of 5052

Temper F,O,H12,H14,H16 H18,H19,H22,H24, H26,H28,H111,H112,H114 Thickness (mm) 0.2-500 Width (mm) 100-2650 Length (mm) 500-16000



AA5754

Chemical composition

Alloy (ISS)		Equivalent alloy (AA)	Cop	per	Mag	nesium	Silico	n	Iron	Manga	nese	* Others (Total)	Remarks
Old	New	U.S.A.	Min.	Max.	Min.	Max.	Min.	Max.	Max	Min.	Max.	Max	
-	-	5754	-	0.1	-	0.5	-	0.4	0.4	2.6	3.2	-	Al Balance



5754 Aluminum Sheet Description:

5754 aluminum sheet is a non-heat treated Al-Mg alloy and is also an anti-rust aluminum sheet. 5754 aluminum properties show excellent corrosion resistance, good welding, and excellent machining formability. Most notably, anodizing and other surface treatments of 5754 aluminum alloy have obvious effects, making it widely used in automobile/ship components, tanks, billboards, building decoration and other aspects of the strength, welding, and surface treatment have all high requirements.

5754 Aluminum Sheet

Technical Parameter of 5754

Temper F,O,H12,H14,H16 H18,H19,H22,H24, H26,H28,H111,H112,H114 Thickness (mm) 0.4-600 mm; customizable Width (mm) 20-2650, customizable Length (mm) 500-16000, customizable



5754 Aluminum Coils

AA5083

Chemical composition

Alloy (ISS)		Equivalent alloy (AA)	Сор	per	Magr	nesium	Silico	on	Iron	Manga	nese	* Others (Total)	Remarks
Old	New	U.S.A.	Min.	Max.	Min.	Max.	Min.	Max.	Max	Min.	Max.	Max	
-	-	5083	-	O.1	4	4.9	-	0.4	0.4	0.4	1	0.15	



5083 Aluminum Sheet Description:

5083 aluminum sheet belongs to Al-Mg series alloy. It is the highest strength corrosion-resistant alloy among practical non-heat-treated alloys. And it is suitable for welding structures. Also, it is worth mentioning that 5083 aluminum sheet has good resistance to seawater and low-temperature characteristics.

Therefore, 5083 aluminum sheet has become the most suitable choice for marine-grade aluminum

5083 Aluminum Sheet

Technical Parameter of 5083

Temper F,O,H12,H14,H16 H18,H19,H22,H24, H26,H28,H111,H112,H114 Thickness (mm) 0.4-500 Width (mm) 100-2650 Length (mm) 500-16000



AA5086

Chemical composition

,	Equivalent alloy (AA)	Copp	er	Magnesium		Silicor	ı	Iron	Mangan	ese	* Others (Total)	Remarks
· /	, , ,	Min.	Max.	Min.	Max.	Min.	Max.	Max	Min.	Max.	Max	
N5 53000	5086	-	0.1	2.8	4.0	-	0.6	0.5	-	0.5	0.4	



5086 Aluminum Sheet Description:

5086 Anti-Rust aluminum plate sheet have even higher strength than 5052 or 5083 and its mechanical properties vary significantly with hardening and temperature. it is is widely used where high corrosion resistance, good weldability, moderate strength are required:

such as weldable parts for ships, automobiles, airplanes; pressure vessels, refrigeration units, TV towers, loading probe equipment, transportation equipment, missile parts, armor, etc. where strict fire protection is required

5086 Aluminum Sheet

Technical Parameter of 5086

Temper F,O,H12,H14,H16 H18,H19,H22,H24, H26,H28,H111,H112,H114 Thickness (mm) 0.4-500 Width (mm) 100-2650 Length (mm) 500-16000



Chemical composition

Alloy (ISS)		Equivalent alloy (AA)	Сор	per	Magn	esium	Silic	on	Iron	Manga	nese	* Others (Total)	Remarks
Old	New	U.S.A.	Min.	Max.	Min.	Max.	Min.	Max.	Max	Min.	Max.	Max	
-	-	6061	0.15	0.4	0.8	1.2	0.4	0.8	0.7	-	0.15	0.4	



6061 Aluminum Sheet Description:

6061 aluminum sheet is a high-quality alloy product produced by heat treatment and pre-stretching. Although its strength cannot be compared with 2000 series alloy or 7000 alloy series, the composition of 6061 aluminum alloy is mainly Mg and Si, so 6061 aluminum sheet exhibits excellent processing performance, excellent weldability and electroplating, good corrosion resistance, high toughness and other characteristics.

It is worth mentioning that the dense structure of the 6061 aluminum sheet does not deform after processing. In addition, 6061 aluminum alloy can be an easily polished, coloured film, etc.,

6061 Aluminum Sheet

Technical Parameter of 6061

Temper F, O, T4, T6, T651, H112 Thickness (mm) 0.3–500; customizable Width (mm) 20–2650, customizable Length (mm) 500–16000, customizable



Chemical composition

Alloy (ISS) Old		Equivalent alloy (AA) U.S.A.	Copper		Magnesium		Silicon		Iron Manganese		* Others I (Total)	Remarks	
	New		Min.	Max.	Min.	Max.	Min.	Max.	Max	Min.	Max.	Max	
-	-	6082	-	0.1	0.6	1.2	0.7	1.3	0.5	-	0.15	-	



6082 Aluminum Sheet

Technical Parameter of 6082

Temper F, O, T4, T6, T651, H112 Thickness (mm) 0.3–500; customizable Width (mm) 20–2650, customizable Length (mm) 500–16000, customizable

6082 Aluminum Sheet Description:

6082 aluminum sheet is a relatively good alloy aluminum sheet in the 6 series aluminum plate (Al-Mg-Si). The 6 series is aluminum alloy with magnesium and silicon as the main alloying elements. T6 and t651 temper. 6082 aluminum sheet is widely used in many fields from thin sheets to thick sheets. If it is an ultra-wide and thick 6082 aluminum sheet, it is more used in transportation fields such as automotive aluminum and marine aluminum manufacturing.

6082 aluminium sheet is a perfect lightweight material. 6082 aluminium alloy is a medium strength alloy with excellent corrosion resistance. Aluminium alloy 6082 has the highest strength of the 6000 series aluminium alloy. It has replaced alloy 6061 in many applications.



Chemical composition

Alloy (ISS) Old N		Equivalent alloy (AA) U.S.A.	Copper		Magnesium		Silicon		Iron Manganese		* Others (Total)	Remarks	
	New		Min.	Max.	Min.	Max.	Min.	Max.	Max	Min.	Max.	Max	
-	-	7075	1.2	2.0	2.1	2.9	-	0.5	0.5	-	0.3	0.2	



7075 Aluminum Sheet

7075 Aluminum Sheet Description:

7075 aluminum sheet belongs to Al-Zn-Mg-Cu super duralumin, which is a cold-treated forging alloy with high strength and hardness, far better than soft steel. Due to the fine grain structure inside 7075 aluminum alloy, it has excellent deep drilling performance, enhanced wear resistance of tools, good mechanical properties, anode reaction.

At present, 7075 aluminum sheet is the preferred metal material under the requirement of lightweight conditions with lower density and higher hardness. It is one of the most potential alloys for commercial use. And It is widely used in the manufacturing of shoe mold, high-hardness mold.

Technical Parameter of 7075

Temper F, O, T6, T651, T7451, H112 Thickness (mm) 0.5-500; customizable Width (mm) 200-2650, customizable Length (mm) 500-16000, customizable



AA7050

Chemical composition

Alloy (ISS) Old N		Equivalent alloy (AA) U.S.A.	Copper		Magnesium		Silicon		Iron Manganese		* Others Re (Total)	Remarks	
	New		Min.	Max.	Min.	Max.	Min.	Max.	Max	Min.	Max.	Max	
-	-	7050	2	2.6	1.9	2.6	-	0.1	0.15	-	0.1	0.15	



7050 Aluminum Sheet Description:

7050 aluminum sheet is a high-strength heattreatable alloy. It is based on 7075 aluminum alloy, which increases the Zn, Cu content and Cu / Mg ratio to increase the strength, and it replaces Cr with Zr to overcome the quenching sensitivity problem and inhibit recrystallization.

7050 aluminum sheet is an alloy that has been existing for decades and is known for its ability to remain strong over time. Although other alloys are available which are stronger on a one-off comparison basis, they do not necessarily prove the longevity which the 7050 products can offer

7050 Aluminum Sheet

Technical Parameter of 7050

Temper F, O, T6, T651, T7451, H112 Thickness (mm) 0.5-500; customizable Width (mm) 200-2650, customizable Length (mm) 500-16000, customizable





WAREHOUSE





LAMINATION MACHINE - 20MM (H) X 1500MM (W) X4000MM (L)







ALUMINIUM ALLOYS SPECIALIST

PLEASE FEEL FREE TO CALL US FOR YOUR REQUIREMENTS OF ALUMINIUM. EXTRUSIONS, PLATES, SHEETS & COILS Etc.

CONTACT US –

RAVI KUMAR - +91 99029 01977 NITIN JAIN - +91 97400 70733 PRAKASH K S - +91 80733 81132

- 90714 05012
- rolling@themetalextrusions.com
- premkumar@themetalextrusions.com