

## ABS Plate - Haomei Aluminum

ABS Plate is the abbreviation of Auto Body Sheet, which can be abbreviated as ABS. It is specially used for punching sheet metal parts for passenger cars. It is the most high-volume plate product with the highest production technology threshold today, with a thickness of 0.8 mm~1.8mm, the width is usually 800mm~2200mm., the thickness of this plate is 3mm ~12mm, it actually does not contain ABS. ABS has another abbreviation "BIW" or "BWI (Body-in-White)".

Haomei supplies a variety of lightweight aluminum alloy sheets equipped with the strength, formability, corrosion resistance and surface quality demanded for auto body sheet.

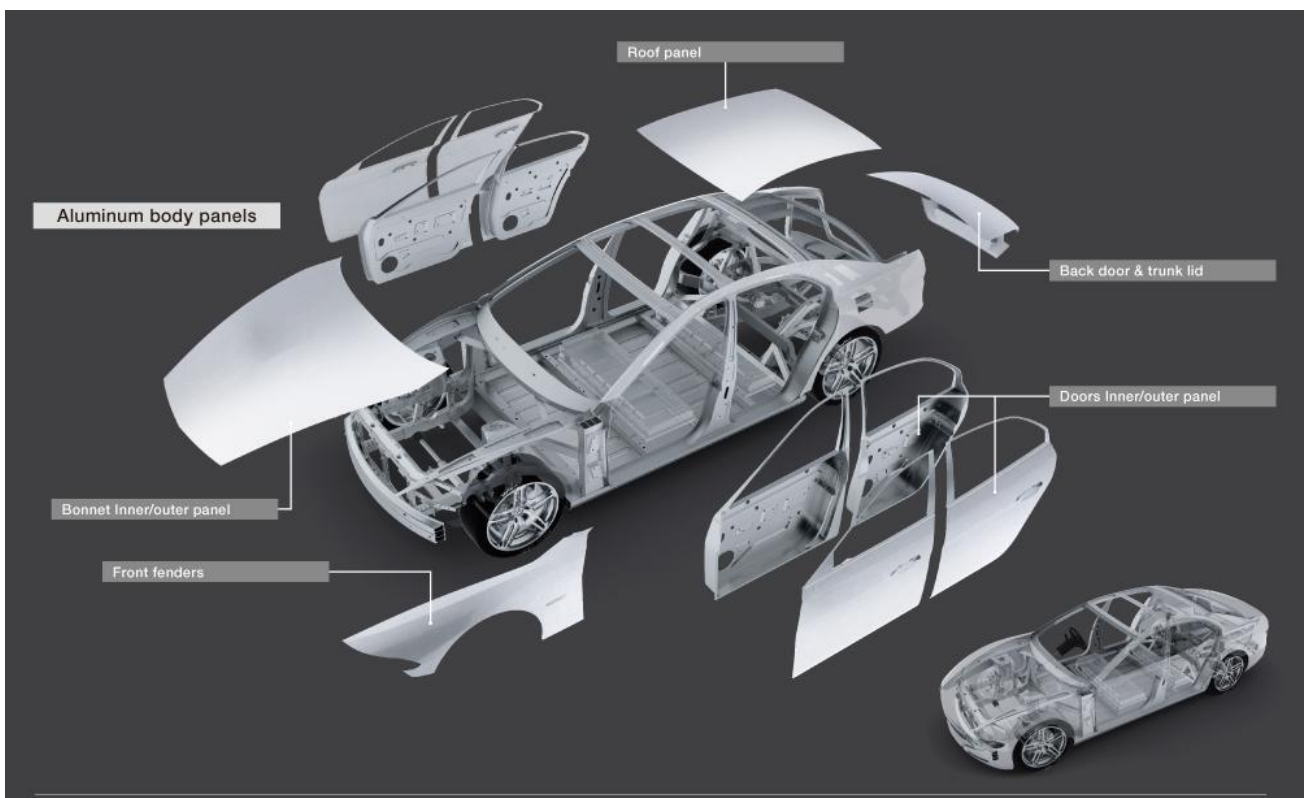
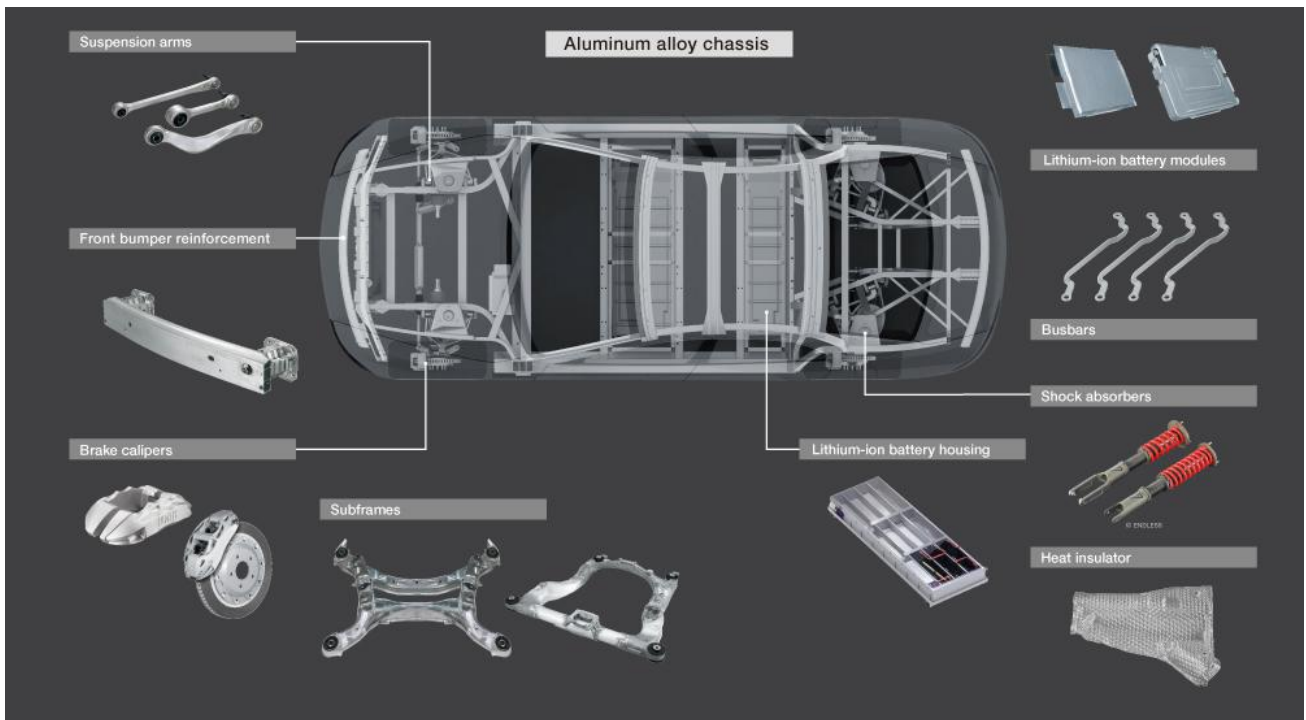
The extent of the growth of ABS over the next several years will be governed by prevailing capacity. The vast bulk of ABS is used in exterior skin applications that require wide coil with both outstanding surface quality and strength.

The use of aluminum panels and components in vehicles is not a new practice. Auto manufacturers adopted this practice to combat heavy steel parts in the vehicle makes. This helps vehicles test for specific emissions classes, making them eco-friendlier, with better gas mileage.

### The Specification of ABS Aluminium are:

Application	Auto Parts	Alloy	Thickness(mm)	Width(mm)
Car Body	Automotive door	5182	0.15-600	20-2600
	Front and rear cover			
	Automobile fender			
	Car lift			
	Automotive roof	5083		
		5754		
Chassis	Bottom guard	5083/5754	0.15-600	20-2600
	Wheel hub	6061	0.30-600	150-2600
	Battery bottom plate			
Power System	Fuel Tank	5083		
		5052		
	Gas Tank	5083		
		5052		
	Power Battery Shell Material	3003	0.20-4.5	20-2600





## The Properties of Aluminium ABS are:

Alloy		Mechanical Properties				
		Ultimate Tensile Strength (MPa)	Yield Strength (MPa)	Elongation (%)	n-value	r-value
5000 Series	AA5022	275	135	30	0.3	0.67
	AA5023	285	135	33	-	-
	AA5182	265	125	28	0.33	0.8
	AA5052	190	90	26	0.26	0.66
	AA5754	212	90	22	0.34	-
6000 Series	AA6022	275	155	31	0.25	0.6
	AA6016	235	130	28	0.23	0.7
	AA6111	290	160	28	0.26	0.6

## Advantages of aluminum ABS are:

### Lightweight Design

In recent model years, aluminum body frames have been introduced to many most popular models. Aluminum offers many advantages to the discerning driver. When you drive an aluminum car, your vehicle will be lighter weight than comparable steel-bodied cars in its class.

### Increased Power and Performance

Aluminum vehicles have been built with car enthusiasts in mind. From behind the wheel of a lightweight aluminum car, you will enjoy increased power, performance, and speed. In addition, by shedding some of the body weight from its vehicles, aluminum cars are more fuel efficient than ever before.

### Specialized Maintenance Need

Due to the unique composition of aluminum, cars with aluminum body frames require specialized maintenance procedures.



