

## Marine Grade Aluminium Checker Plate | 5083 5086 | Haomei

We Haomei are top 5052, 5083, 5086 [marine grade aluminium checker plate](#) sheet manufacturer in China, the aluminum checked plate products are widely used especially in shipbuilding. Because the excellent corrosion resistance in seawater, the marine grade aluminum checker plate requires no resistance such as repainting. It can be used with confidence for many years. So it is widely used in ship structures such as welded structures, storage tanks and pressure vessels.

5083 aluminum checker plate is widely used in decorative, shipbuilding and architectural applications. Having good forming, drilling and welding ability, Aluminum tread plate is easy to fabricate and its raised diamond lug pattern provides good slip resistance. Because 5086 aluminum alloy is not heat treated, it is easy to form, stamp and weld. 5086 aluminum checkered plate is used for: boat hulls, superstructures, gangways, ramps, shipping drums, support structures for marine applications.

Magnesium is the primary alloying agent in the 5000 series aluminum alloy and is one of the most effective and widely used alloying elements for aluminum. Alloys in this series possess moderate to high strength characteristics, as well as good weld-ability and resistance to corrosion in the marine environment. Because of this, aluminum-magnesium alloys are widely used in building and construction, storage tanks, pressure vessels and marine applications.

### Specification of marine aluminum tread plate:

Aluminum alloy grade: AA5083, 5086, 5052 (H116,H321)

Pattern: 3 bars, 5 bars, diamond.

Thickness: 0.8 - 12mm

Width: 400-1220mm

Length: max 6000mm

Length & width tolerance:  $\pm$  10%.

Thickness tolerance:  $\pm$  0.1 mm.

### Performance Advantages of 5083 aluminum checker plate:

1. The surface is smooth, no cracks, corrosion spots and traces of nitrate.
2. The surface has no peeling, air bubbles and defects.
3. Excellent processing properties, excellent corrosion resistance, high fatigue strength and high weld-ability.

**Applications of 5083 aluminum tread plate:** corridor and bridges over the lid and floors, stairs, cabin deck, fish tank, gangway to the floating dock, boat and ship.

A. marine grade aluminum tread plate sheet has good skid resistance. So it is usually used in the trench covers, loading ramps, dock flooring, stair treads and even for the car, truck, ambulance and fire truck.

B. It has the decorative function, so it can be used as decoration wall panels, cabinet and ceilings.

C. Because of the anti- corrosion, it can be used in the chemical industry, or in the decoration of the ship and port facilities.



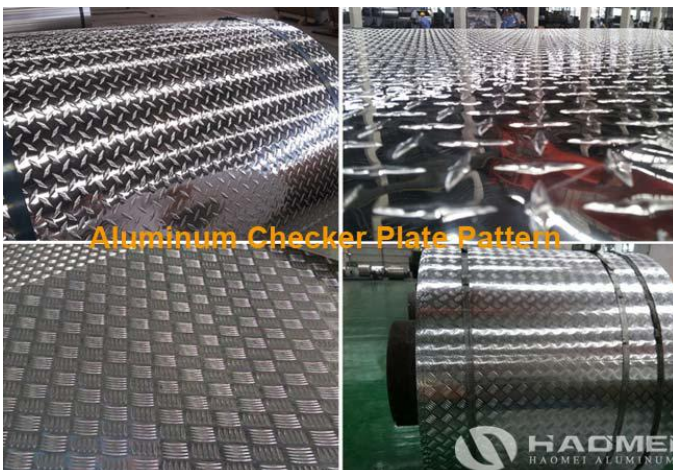
Aluminium Checker Plate Application

Aluminium Checker Plate Factory

Alloy	Chemical components (%)											
	Si	Fe	Cu	Mn	Mg	Ni	Cr	Zn	Ti	other		Al
										each	total	
5052	0.25	0.40	0.10	0.10	2.2-2.8	—	0.15-0.35	0.10	--	0.05	0.15	remain
5083	0.40	0.40	0.10	0.40-1.0	4.0-4.9	—	0.05-0.25	0.25	0.15	0.05	0.15	remain
5086	0.40	0.50	0.10	0.20-0.7 0	3.5-4.5	—	0.05-0.25	0.25	0.15	0.05	0.15	remain

Mechanical Properties of Aluminium Alloy 5083

Temperature	Proof Stress 0.2% (MPa)	Tensile Strength (MPa)	Elongation Min. %	Bend Radius 90°	Hardness HBW
H111	100	240	17	2.5 x t	65
H116 / H321	195	275	8	3.5 x t	81



Aluminum Checker Plate Pattern