

## 5083 Marine Grade Aluminum Checker Plate for Fire Truck

**5083 Marine Grade Aluminum Checker Plate**—also known as a **single-bar or patterned aluminum plate**—features raised patterns on its surface, making it ideal for use as **anti-slip flooring**. This material is valued for its **attractive appearance, wear resistance, and excellent corrosion resistance**. In particular, the use of **5083 patterned aluminum plate in fire trucks** takes advantage of its **high strength, corrosion resistance, light weight, and anti-slip properties**, making it perfectly suited for the demanding environments in which these vehicles operate.

### Performance of GNEE 5083 Marine Grade Aluminum Checker Plate

GNEE manufactures one-bar, three-bar, and five-bar 5083 aluminum checker plates, each offering outstanding performance in demanding applications:

#### Superior Anti-Slip Performance

The raised rib height is approximately **1 mm**, providing a high friction coefficient. Its **wet anti-slip performance** exceeds that of standard aluminum plates by over **30%**, making it ideal for use in **fire trucks, cold storage facilities, ship decks, and stair treads**.

#### Excellent Corrosion Resistance

The 5083 alloy exhibits **strong resistance to salt spray and moisture**. It remains corrosion-free even after prolonged exposure to liquid environments. Its **service life** is approximately **50% longer** than that of ordinary aluminum plates.

#### Lightweight with High Strength

With a density of only **one-third that of steel**, the plate is **lightweight and easy to handle or install**. The **tensile strength** of the 5xxx series alloys ranges from 230 to 280 MPa, offering outstanding load-bearing performance.

#### Outstanding Formability and Machinability

5083 aluminum offers **excellent bending, cutting, and forming characteristics**, supporting complex processing needs such as **automotive parts, equipment casings, and precision components**.

### Chemical Composition of 5083 Aluminum Alloy

| Alloy | Mg      | Mn      | Cr        | Fe   | Si   | Cu   | Zn   | Ti   | Each | Al        |
|-------|---------|---------|-----------|------|------|------|------|------|------|-----------|
| 5083  | 4.0–4.9 | 0.4–1.0 | 0.05–0.25 | 0.40 | 0.40 | 0.10 | 0.25 | 0.15 | 0.05 | Remainder |

### GNEE – Trusted 5083 Aluminum Plate Supplier

GNEE offers customized **thicknesses ranging from 0.8 to 8.0 mm**, **widths of 100–1850 mm**, and **lengths of 500–16000 mm**. With **strong production capacity, strict quality control, a wide product portfolio, and an excellent market reputation**, GNEE has established itself as a **reliable global supplier** of patterned aluminum plates.

Whether for **architectural decoration, transportation facilities, or industrial applications**, GNEE provides **tailor-made aluminum solutions** to meet the diverse needs of customers worldwide.