# Metal Sheets

## Features

- Exceptional Cold Formability: Specifically engineered for severe bending, deep drawing, and riveting without cracking.
- High Purity Alpha Alloy: Composed of roughly 63% copper and 37% zinc, making it a single-phase "alpha" brass that is highly ductile.
- Versatile Fabrication: Rated "excellent" for cold working and "fair" for hot working, allowing for a wide range of shaping techniques.
- Offers "good to excellent" resistance in most natural atmospheres and mildly corrosive environments.
- Superior Joining Characteristics: Soldering and brazing are both rated as "excellent," making it easy to join components securely.
- Features a natural golden lustre, ideal for decorative hardware and architectural models.

# RS PRO CZ108 Brass Sheet, L:500MM X W:300MM X T:0.1/4IN

**RS Stock No: 858804**



RS Professionally Approved Products bring to you professional quality parts across all product categories. Our product range has been tested by engineers and provides a comparable quality to the leading brands without paying a premium price.

## Product Description

***RS PRO CZ108 Brass Sheet***

*The RS PRO CZ108 Brass Sheet (also known as CW508L) is a high-grade alpha alloy metal sheet designed for general-purpose applications requiring exceptional cold-working capabilities and corrosion resistance. It is frequently used in industrial, scientific, and decorative settings due to its high malleability and attractive yellow finish.*

***Key Features:***

- *Good Strength-to-Weight Ratio: Maintains a high tensile strength (300-550 MPa) while remaining ductile enough for intricate forming.*
- *Excellent Surface Quality: Typically supplied with a smooth mill finish that is highly receptive to chemical etching, laser engraving, and electroplating.*
- *Thermal & Electrical Conductivity: Suitable for functional engineering components like heat exchangers, radiators, and electrical contacts.*
- *Non-Magnetic (Diamagnetic): Its high purity and copper-zinc base make it ideal for scientific instruments and sensitive electronic housings.*

***Applications:***

- *Deep Drawing & Cold Forming: Because CZ108 is highly ductile, it is the go-to material for creating complex shapes like lamp-caps, eyelets, rivets, and cartridge cases that require severe bending without cracking.*
- *Heat Exchangers & Radiators: Its excellent thermal conductivity and corrosion resistance make it a standard choice for industrial heat exchanger tubing, radiator tanks, and air conditioning components.*
- *Scientific & Electrical Instruments: Used extensively for instrument plates, switchgear components, and laboratory equipment where non-magnetic properties and reliable electrical conductivity are required.*
- *Decorative Architecture & Signage: Often selected for nameplates, kick plates, shop fittings, and interior trim because it takes a high polish and can be easily chemically etched or laser engraved.*

# Metal Sheets

## General Specifications

| | |
|---|---|
| **Material** | Brass |
| **Form** | Metal Sheet |
| **Grade** | CW508L/CZ108 |
| **Length** | 500MM |
| **Width** | 300MM |
| **Thickness** | 0.1/4IN |

## Mechanical Specifications

| | |
|---|---|
| **Tensile Strength** | 300-550MPa |
| **Proof Stress** | 110 - 500 MPa |
| **Hardness Vickers (HV)** | 55 to 180 HV |
| **Elongation A50 mm:** | 3 - 38 % |
| **Density** | 8.44 g/cm³ |
| **Melting Point** | 916 - 920°C |
| **Thermal Expansion (20-200°C)** | 20.5 x $10^{-6}$ /K |
| **Modulus of Elasticity** | 103.4 GPa |
| **Thermal Conductivity** | 116 W/m.K |

## Similar Products

| RS Code | Form | Length X Width | Thickness |
|---|---|---|---|
| 8411903 | Brass Sheet | 600MM X 300MM | 0.9MM |
| 8732487 | Brass Sheet | 600MM X 300MM | 1.2MM |
| 858800 | Brass Sheet | 500MM X 300MM | 1MM |
| 858801 | Brass Sheet | 500MM X 300MM | 3MM |
| 858802 | Brass Sheet | 500MM X 300MM | 5MM |
| 858803 | Brass Sheet | 500MM X 300MM | 1.5MM |
| 858805 | Brass Sheet | 500MM X 300MM | 0.3/8IN |
| 858806 | Brass Sheet | 500MM X 300MM | 0.3/4IN |
| 858807 | Brass Sheet | 1219MM X 610MM | 1MM |
| 858808 | Brass Sheet | 1219MM X 610MM | 3MM |
| 858810 | Brass Sheet | 1219MM X 610MM | 7.2MM |
| 858811 | Brass Sheet | 1219MM X 610MM | 6.5MM |