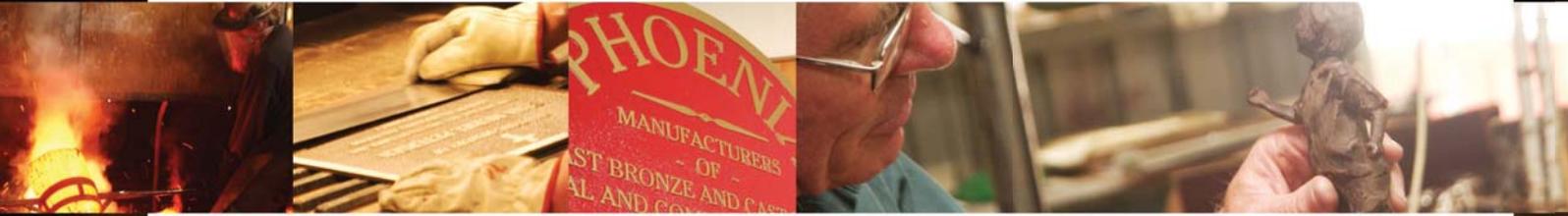


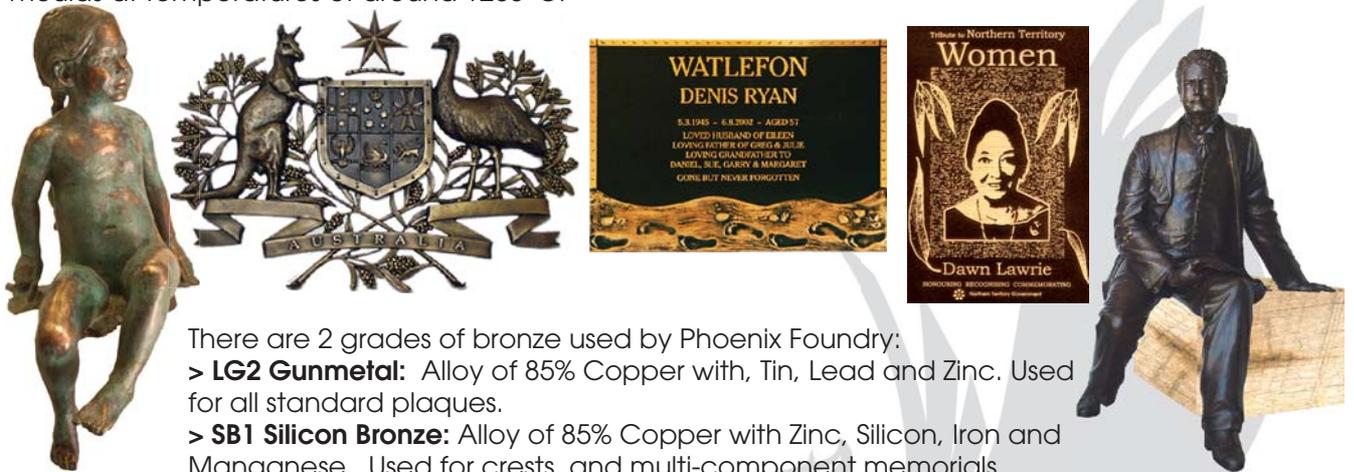
# METAL COMPOSITION



The vast majority of plaques are cast in **Bronze**, an alloy of copper and tin. Other possible options are **Brass** and **Aluminium**.

## > BRONZE

The alloy Bronze has been with us for over 3000 years. It is the most commonly used metal for artistic casting as well as memorialisation. As well as the appealing "golden" colour when finished, other properties such as extreme durability and ease of casting have led to its dominance as the metal of choice for cast memorial plaques. Bronze has a density of 8300kg/m<sup>3</sup> and is cast in sand moulds at temperatures of around 1200°C.



There are 2 grades of bronze used by Phoenix Foundry:

- > **LG2 Gunmetal:** Alloy of 85% Copper with, Tin, Lead and Zinc. Used for all standard plaques.
- > **SB1 Silicon Bronze:** Alloy of 85% Copper with Zinc, Silicon, Iron and Manganese. Used for crests, and multi-component memorials

## > ALUMINIUM

Any plaque can be made from aluminium. Choose Aluminium if a "silver" colour on the raised sections is preferred or if weight is an issue. Aluminium has a density of 2700kg/m<sup>3</sup> which is about a third the density of Bronze. It is also cast in sand moulds at around 700°C.



The grade of Aluminium used by Phoenix Foundry is:

- > **DA601 Aluminium:** Alloy of 91% Aluminium with Silicon, Iron and Magnesium

## > BRASS

In some circumstances, Brass may be specified to match older style engraved plates. While the polished metal is a slightly lighter colour than bronze it is similar in most properties.

Phoenix Foundry uses:

- > **SCB1 Brass:** which is an alloy of 70% Copper, 25% Zinc with small amounts of Tin and Lead.

