

Aluminium

5251 Aluminium H22 Sheet & Plate

Datasheet Updated
18 July 2022

RANGE

Sheet Size	Sheet Thicknesses	Plate Thicknesses
2000 x 1000	1.0mm - 1.5mm	4.0mm - 6.0mm
2500 x 1250	1.0mm - 3.0mm	4.0mm - 6.0mm
3000 x 1250	3.0mm	4.0mm - 6.0mm

SPECIFICATIONS

Commercial	5251 H22
EN	5251 H22

Medium strength aluminium alloy with good ductility.

CHEMICAL COMPOSITION

BS EN573-3
Alloy 5251

Element	% Present
Manganese (Mn)	0.10 - 0.50
Copper (Cu)	0.00 - 0.15
Magnesium (Mg)	1.70 - 2.40
Silicon (Si)	0.00 - 0.40
Zinc (Zn)	0.00 - 0.15
Chromium (Cr)	0.00 - 0.15
Titanium (Ti)	0.00 - 0.15
Other (Each)	0.00 - 0.05
Others (Total)	0.00 - 0.15
Iron (Fe)	0.00 - 0.50
Aluminium (Al)	Balance

ALLOY DESIGNATIONS

Alloy 5251 corresponds to the following standard designations and specifications, *although may not be a direct equivalent*:

- Al Mg2
- Al 2.0Mg 0.3Mn

TEMPER TYPES

The most common tempers for 5251 aluminium are:

- H22
- H24
- H26
- O

SUPPLIED FORMS

- Sheet
- Plate

APPLICATIONS

- Boats
- Panelling and pressings
- Marine structures
- Aircraft parts
- Vehicle panels
- Furniture tubing
- Silos
- Containers

CHARACTERISTICS

- Work hardening rapidly
- Readily weldable
- High corrosion resistance particularly in marine environments

MECHANICAL PROPERTIES

BS EN 485-2

Sheet and Plate 0.2mm to 25mm

Property	Value
Proof Stress	120 Min MPa
Tensile Strength	190 - 230 MPa
Hardness Brinell	56 HB

DISCLAIMER

This Data is indicative only and as such is not to be relied upon in place of the full specification. In particular, mechanical property requirements vary widely with temper, product and product dimensions. All information is based on our present knowledge and is given in good faith. No liability will be accepted by the Company in respect of any action taken by any third party in reliance thereon. Please note that the 'Datasheet Update' date shown above is no guarantee of accuracy or whether the datasheet is up to date.

The information provided in this datasheet has been drawn from various recognised sources, including EN Standards, recognised industry references (printed & online) and manufacturers' data. No guarantee is given that the information is from the latest issue of those sources or about the accuracy of those sources. Material supplied by the Company may vary significantly from this data but will conform to all relevant and applicable standards. As the products detailed may be used for a wide variety of purposes and as the Company has no control over their use; the Company specifically excludes all conditions or warranties expressed or implied by statute or otherwise as to dimensions, properties and/or fitness for any particular purpose, whether expressed or implied. Advice given by the Company to any third party is given for that party's assistance only and without liability on the part of the Company. All transactions are subject to the Company's current Conditions of Sale. The extent of the Company's liabilities to any customer is clearly set out in those Conditions; a copy of which is available on request.