Aluminium Alloy
5005 - H34 Sheet

DURBIN METAL INDUSTRIES

SPECIFICATIONS

Commercial	5005
EN	5005

Aluminium alloy 5005 is a medium strength alloy with very good resistance to atmospheric corrosion and very good weldability that is highly suitable for decorative anodising. PLEASE NOTE THAT WHILST ALLOY 5005 IS SUITABLE FOR ANODISING, STREAKS CAN OCCUR - IF THE FINISH YOU ARE SEEKING IS CRITICAL PLEASE SPECIFY 'SPECIAL ANODISING QUALITY' AT TIME OF ORDER.

Applications - Alloy 5005 is typically used for:
Buildings – Roofing, Cladding, Corrugated Sheet
Signage, Road Signs & Name Plates
Food & Chemical Equipment
Furniture
Anodised Parts
HVAC Equipment
Packaging
Pipe and Tube
Can Bodies

CHEMICAL COMPOSITION

BS EN 573-3:2009
Alloy 5005

Element	% Present
Magnesium (Mg)	0.5 - 1.1
Iron (Fe)	0.7 max
Silicon (Si)	0.3 max
Zinc (Zn)	0.25 max
Manganese (Mn)	0.2 max
Copper (Cu)	0.2 max
Others (Total)	0.15 max
Chromium (Cr)	0.1 max
Other (Each)	0.05 max
Aluminium (Al)	Balance

ALLOY DESIGNATIONS

TEMPER TYPES

The most common tempers for 5005 aluminium are:

- H34 - Stabilised - A low temperature thermal treatment or heat introduced during manufacture which stabilises the mechanical properties and relieves residual internal stress, plus usually improves ductility

SUPPLIED FORMS

- Sheet

GENERIC PHYSICAL PROPERTIES

Property	Value
Density	2.70 g/cm³
Melting Point	655 °C
Modulus of Elasticity	69.5 GPa
Thermal Expansion	23.5 x10^{-6} /K
Thermal Conductivity	201 W/m.K
Electrical Resistivity	52 % IACS
Electrical Resistivity	0.033 x10^{-6} Ω .m

MECHANICAL PROPERTIES

BS EN 485-2:2008
Aluminium Sheet
0.2mm to 12.5mm

Property	Value
Proof Stress	110 Min MPa
Tensile Strength	145 - 185 MPa
Hardness Brinell	47 HB

The properties above are for material in the H34 condition

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DURBIN METAL INDUSTRIES

CONTACT

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REVISION HISTORY

Datasheet Updated	18 July 2019

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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.

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