

1200 Aluminium

Technical Datasheet



Service. Quality. Value.

Commercial Aluminium Alloy

Applications

- General fabrication
- Processing equipment (chemical, pharmaceutical)
- Sheet metal work
- Boiler fabrication
- Industrial pressure vessels (food sector)
- Kitchenware

Product Description

Commercial aluminium alloy grade 1200 has high corrosion resistance with slightly higher strength than 1050a. The alloy also boasts high thermal conductivity and reflectivity although this is not quite as high as 1050. The alloy has a 99% minimum requirement for aluminium content and yet is still classed as a non-heat treatable commercially pure aluminium. Grade 1200 has been largely replaced by grade 1050a.

Cold Working

Excellent

Key features:

- High thermal conductivity
- Very good weldability
- Very good atmospheric corrosion resistance
- Easily joined
- High anodising capability

Related Material Specifications

- 6L16, Alloy 1200
- 5L34, Alloy 1200
- L116, Alloy 1200
- BA 99.0%
- 6L17, Alloy 1200
- 4L54, Alloy 1200
- BS 1C
- Grade 1200

Corrosion Resistance

High

Availability

Sheet

Chemical Composition (weight %)

| Weight (%) | Al | Fe + Si | Mg | Ti | Mg | Cu | Zn | Other |
|------------|------|---------|------|------|------|------|------|-------|
| min. | 99.0 | | | | | | | |
| max. | | 1.0 | 0.05 | 0.05 | 0.05 | 0.05 | 0.10 | 0.15 |

Physical Properties

| | |
|-------------------------------|-------------------------|
| Melting Point | 660°C |
| Density | 2.71 g/cm ³ |
| Thermal conductivity | 226 W/m ² K |
| Thermal expansion coefficient | 24 x10 ⁻⁶ /K |
| Electrical Conductivity | 59.5 IACS |
| Modulus of elasticity | 69 GPa |

Technical Assistance

Our knowledgeable staff backed up by our resident team of qualified metallurgists and engineers, will be pleased to assist further on any technical topic.

UK Service Centres:

Smiths Belfast **02895 908 897**
Smiths Biggleswade **01767 604 704**
Smiths Birmingham **0121 728 4940**
Smiths Bristol **0117 971 2800**
Smiths Chelmsford **01245 466 664**
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Smiths Leeds **0113 307 5167**
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Smiths Norwich **01603 789 878**
Smiths Nottingham **0115 925 4801**
Smiths Redruth **01209 315 512**
Smiths Verwood **01202 824 347**
Main Office **0845 527 3331**

Quality & Testing:



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