



LEAD SHEETING

Company Overview

Established in 1933, Castle Lead Works is Africa's largest manufacturer of lead products, with services ranging from lead-ingot manufacture to the installation of complete chemical plants. Lead has developed into a modern material suitable for the needs of the new millennium in terms of both performance and economics. Castle Lead Works carries out its own research and development and has its own analytical laboratory with atomic absorption spectrometry capabilities.

The company has a first class safety record and is committed to its philosophy of environmental sensitivity, health, hygiene and safety.

Lead Sheeting

Lead is still ideal for many traditional applications — such as roofing, cladding and flashing— because of its many attributes:

- exceptionally long service life
- exceptionally malleable
- non-combustible
- low thermal conductivity
- poor electrical conductivity
- cost effective
- totally recoverable
- excellent sound barrier

When lead is freshly cut and exposed to air, a surface film of oxide forms on its surface, followed by a patina of lead carbonate. This patina adheres strongly to the surface and is insoluble in normal atmospheric moisture.

Lead sheeting is rolled in widths of up to 7 ft, in lengths of 7 m and in thicknesses varying from 0.5mm upwards. Milled lead sheet is manufactured to British Standard 334, ASTM B29, QQ-L-171 and DIN 1719 — Milled Lead Sheet and Strip for building purposes. It is produced by :

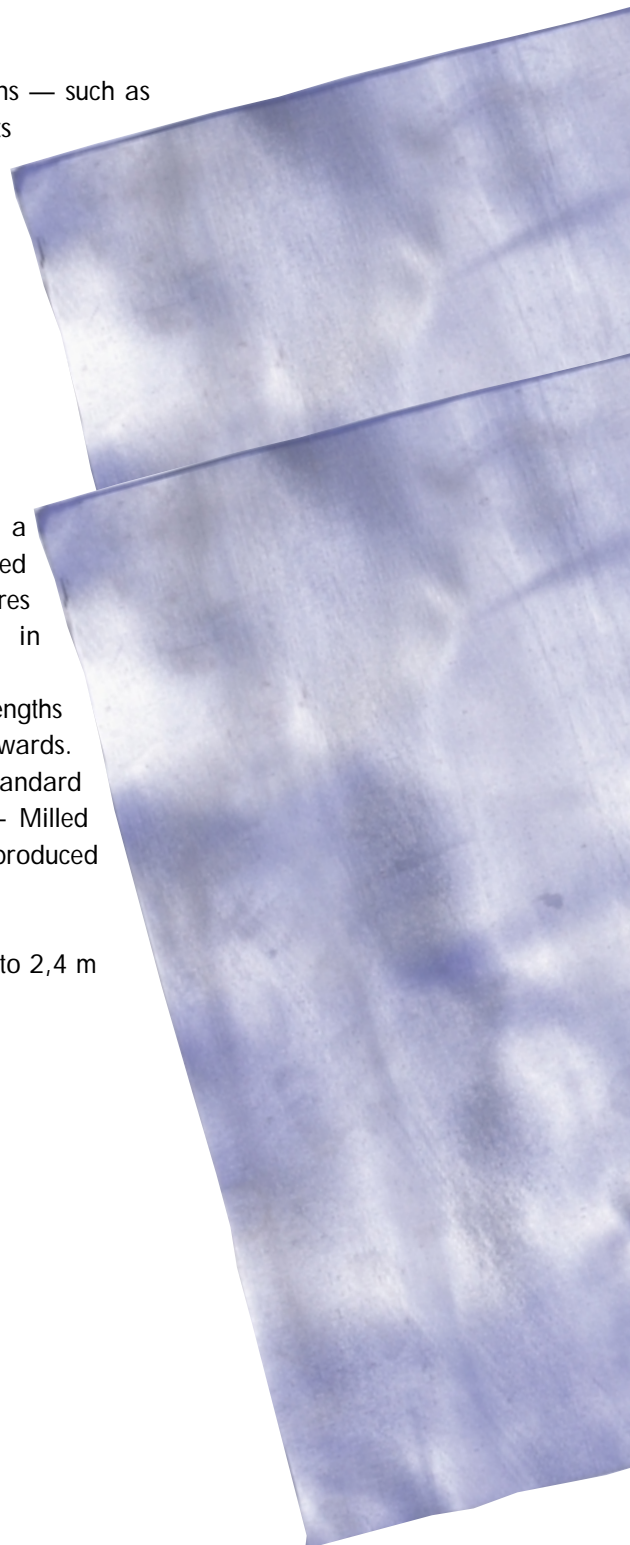
Conventional rolling mill:

Thicknesses greater than 1,6 mm, with sheets up to 2,4 m wide and 7 m long.

Lead sheeting is rolled in all alloys. For example:

- 0,06% copper lead
- 0,04% tellurium lead
- 0,5%- 1% silver lead
- 0,5% - 8% antimonial lead
- 7% tin lead

FACT SHEET





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Guide to sheet lead sizes and weights

Weight		Corresponding Thickness	
Lbs/ft ²	kg/m ²	inches	mm
1	4,88	0,017	0,432
-	5,65	-	0,500
2	9,76	0,034	0,863
-	11,37	-	1,000
3	14,65	0,051	1,295
-	17,06	-	1,500
4	19,52	0,068	1,727
-	22,74	-	2,000
5	24,40	0,085	2,159
6	29,28	0,101	2,565
7	34,16	0,118	2,997
8	39,04	0,135	3,429
-	39,80	-	3,500
9	43,92	0,152	3,861
-	45,48	-	4,000
10	48,80	0,169	4,293
-	51,17	-	4,500
11	53,68	0,186	4,724
12	58,56	0,203	5,156
14	68,32	0,237	6,020

Sheet widths up to 2200 mm (86.6") can be produced however, down to 1 mm thickness on the conventional rolling mills, to special order.

Lead Fabrication Division

Castle Lead Works' Fabrication Division specialises in the lead lining of pressure vessels and the fabrication of mist precipitators in acid plants. Competent and well-trained lead burners operate this division.

Lead is ideal for many traditional applications, including roofing. However, the last few decades have seen the development of many more uses, such as sound insulation, corrosion protection and radiation shielding in x-ray laboratories and nuclear power stations.



**CASTLE
LEAD WORKS**

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