

# CORE MATERIAL SHEET

VERSION 3.0 - FEB 2024



Material	Lead Equivalence	Attenuation (%)						Weight Kg/M <sup>2</sup>
		50 kVp	70 kVp	90 kVp	110 kVp	120 kVp	150 kVp	

Lightweight Lead is a popular solution that provides the highest level of protection at a very reasonable price.

<b>LIGHTWEIGHT LEAD</b>	0.25 mm Pb	98.8	95.1	90.7	87.5	86.2	82.7	3.34
	0.35 mm Pb	99.7	97.6	94.5	92.3	91.3	88.6	4.76
	0.5 mm Pb	*>99.9	99.1	97.4	96.1	95.5	93	6.80

Our Edge Bilayer - Low Lead material provides a half way house between lightweight lead and our lead free bilayer. By layering Antimony with Lead, we are able to provide a high level protection\* Available only via special request.

<b>LOW LEAD</b>	0.25 mm Pb	98.9	96.5	92.5	88.5	86.5	80.9	2.96**
	0.35 mm Pb	99.6	98.1	95.6	93.1	91.9	88.4	4.05**
	0.5 mm Pb	*>99.9	99.4	98	96.5	95.7	93.3	5.80**

Our ultralight Edge Bilayer - Lead Free solution, By layering Antimony with Bismuth it provides a superior level of protection that conforms to the highest standards at the lowest weights.

<b>LEAD FREE</b>	0.25 mm Pb	98.7	96.1	92	87.8			2.80
	0.35 mm Pb	99.6	98.0	95.3	92.7			3.92
	0.5 mm Pb	*>99.9	99.4	97.8	96.3			5.60

Testing in accordance with BS EN 61331-1:2014 BBG\* using inverse broad beam geometry. Performed by the National Physics Laboratory.

Figures are for guidance and all materials passed the relevant testing.  
For full report, please visit [www.rothband.com](http://www.rothband.com)

\* The response of the ionisation chamber was too low to record a value accurately. This value was extrapolated from a straightline fit of the 70-150kV values.

\*\* Weights are based upon testing up to 110kV and indicative. The test weights up to 150kV are heavier than noted here.