

# X-RAY PROTECTIVE GLASS PROPERTIES

## Minimum Lead Equiv in mm at stated X-Ray Potential

Thickness Range (mm)	100 kV	110 kV	150 kV	200 kV	250 kV	300 kV
7.0–8.5	2.3	2.3	2.1	1.8	1.8	1.8
8.5–10.0	2.8	2.8	2.5	2.2	2.2	2.2
11.0–13.0	3.6	3.6	3.3	2.8	2.7	2.8

## Optical Properties

Refractive Index	Nd	1,757
Abbe Value	vd	29.7
Transmittance in % for 5mm path	315 nm	Nil
Transmittance in % for 5mm path	350 nm	0.05

## Mechanical / Electrical Properties

Density (minimum)	G/cm <sup>3</sup>	4.8
Knoop Hardness	Kg/mm <sup>2</sup>	440
Youngs Modulus	N/mm <sup>2</sup> x 10 <sup>3</sup>	62.7
Poissons Ratio		0.23
Brewster Coefficient		0.88
Dielectric Constant		11.0

## Heavy Metal Content

Lead (pb)	48%
Barium (Ba)	15%

## Thermal Properties

Exp. Coefficient (20—300°C)	x10 <sup>-7</sup> /°C	81.8
Annealing Temperature	10 <sup>13</sup> Poise	558
Softening Temperature	10 <sup>7.6</sup> Poise	685

# EL DORADO

El Dorado Metals of Arkansas