

Communicate with Complete Freedom

Graphing
Basic Principles

• y-int: Where $x=0$; $f(0)=y\text{-int}$
• X-ints: Where $y=0$; $f(x)=0$
Solve for x.

Key points

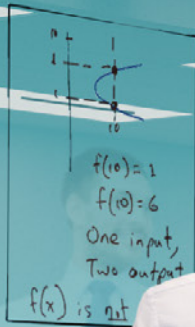
• Quadratics: Vertex $\rightarrow x = \frac{-b}{2a}$
 $y = f(\frac{-b}{2a})$
Vertex

Ex: $y = 2x^2 - 5x + 10$
• y-int: $2(0)^2 - 5(0) + 10 = 10$
• X-ints: $0 = 2x^2 - 5x + 10$

~~$(2x - 5)(x + 10)$~~
Will it have X-ints?
 $(b^2 - 4ac) = \text{Neg? NO}$
"Discriminant"
 $25 - 80 = -55$
No X-ints!

Above x-axis.

Vertex $x = \frac{-b}{2a} = \frac{5}{4}$
 $y = 2(\frac{5}{4})^2 - 5(\frac{5}{4}) + 10 = \frac{110}{16} = 6.875$



Problem

$$y = 5x^2 + 6x + 1$$

y-int: $y = 5(0)^2 + 6(0) + 1$
 $y = 1$

$$0 = 5x^2 + 6x + 1$$

$$(5x + 1)(x + 1)$$

Zero Product Theorem

$a + b = 0$,
then $a = 0$ or $b = 0$.

$$5x + 1 = 0 \text{ or } x + 1 = 0$$

$$x = -1/5$$

$$x = -1$$

QF: $a = 5$
 $b = 6$
 $c = 1$

$$x = \frac{-6 \pm \sqrt{36 - 4(5)(1)}}{2(5)}$$

$$x = \frac{-6 \pm \sqrt{16}}{10}$$

$$x = \frac{-6 \pm 4}{10}$$

Whether it's in the office, classroom, or throughout your home you can convert entire walls into productive surfaces. Lustrolite's ultra high gloss panels are suitable for use as writing display boards in conjunction with any dry erase marker and can be installed in minutes.

- ▷ Significantly less expensive than equivalent glass products
- ▷ Effortless to clean due to its advanced scratch and chemical resistant hard coating
- ▷ Half the weight of equivalent glass yet up to 25 times stronger



Panel Sizes

Lustrolite is 4mm thick, and is available in two panel sizes convenient for commercial and residential purposes.

2070 mm x 900 mm (8.7kg / sheet)

2440 mm x 1220 mm (13.8kg / sheet)

Cleaning and Maintenance

Lustrolite is easy to keep clean using warm soapy water and a microfibre cloth, chamois or squeegee. It's hygienic, non-stick surface will not harbour the build up of mould, bacteria, soap or calcium.



Scratch and Chemical Resistance

A high performance hard coat on the panel's face side provides is extremely resilient against scratching chipping, cracking, warping, staining, peeling and flaking.

Workability and Installation

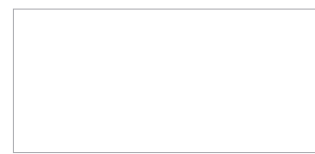
Lustrolite can be cut, sawn, drilled and finished using standard woodworking tools. Lustrolite can be installed easily using the following options:

- ▷ Full Area Cover – Permanent install using double sided mounting tape and neutral cure silicone
- ▷ Semi Permanent – Drill clearance holes in the sheet and use mechanical fasteners or stand offs at approx. 600 mm centres
- ▷ Removable – Apply strips of industrial grade hook and loop fasteners as per the fasteners manufactures recommendations

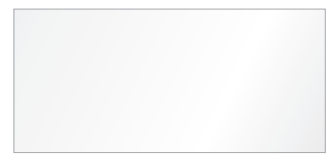
Opacity and Lighting

Coloured Lustrolite is opaque, however they can be effectively lit from the side and top. Clear Lustrolite give you the ability to customise your panel by painting or screen printing the reverse side.

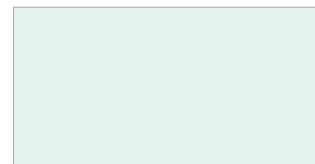
Colour Range:



Arctic



Clear



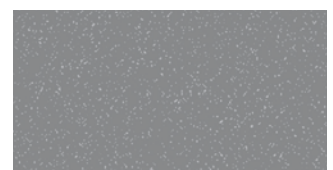
Glacier



Blue Atoll



Mocha




Titan (metallic)

Due to the nature of the printing process, the colours and images depicted throughout this leaflet may vary compared to the actual finished products' colour. Images and colours are to be used as a guide only.

PROUDLY DISTRIBUTED BY:

 **Lustrolite**[®]

EGR Decor

 40 Machinery St, Darra, Brisbane
Queensland 4076, Australia

 www.lustrolite.com

 info@lustrolite.com

 1800 347 347

 **MADE IN
AUSTRALIA**