

# BaFCl X-ray Screens

## Backscatter X-ray detection for security applications

The excellent sensitivity and robustness of our phosphor based screens allow for reliable, high resolution X-ray imaging for mail, parcel, baggage and cargo inspection and for use in industrial NDT, health and safety, and quality control.



### product range

Manufactured in our state of the art facilities in Cambridge, UK, we now offer Barium Fluoro Chloride (BaFCl) as the latest material in the Scintacor x-ray screen range.

Available in a range of coating weights, with a choice of substrate and mounting material, BaFCl X-ray Screens can be manufactured in sizes up to 0.85 x 1.2m, suitable to be cut to size and to complex shapes.

BaFCl provides the potential of an X-ray detection screen option, comparable to Scintacor's highly acclaimed current products including Gadax and Csl, at a competitive cost.

### features

- Fast decay
- High light output
- Large area (up to 0.85 x 1.2m)
- Excellent uniformity
- Competitive cost
- Pre-cut to shape
- World class quality

|                         |   |
|-------------------------|---|
| <b>screen size</b>      | Scintacor screens can be cut to match the specific applications/requirements of the customer. The screens can be manufactured up to maximum dimensions of 85cm x 120cm. |
| <b>thin strips</b>      | Scintacor screens can be precision cut into strips for use with linear detectors. These strips are particularly useful in high throughput applications.                 |
| <b>substrates</b>       | Scintacor screens are manufactured on a Melinex white polyester material. Alternative substrates can be developed on demand to meet your needs.                         |
| <b>construction</b>     | A wide range of mountings and support materials are available, such as aluminium, bakelite and perspex. Wall thickness tolerances can be agreed on demand.              |
| <b>protective layer</b> | The screens can be manufactured to include an acetate layer to protect the integrity of the phosphor during transport and handling.                                     |



## applications

### Security applications

Our screens offer a fast, high performance, and reliable product for backscatter x-ray imaging in security applications.

They are constructed using a phosphor based scintillator and are available on a range of substrates.

### customised solutions

Our manufacturing flexibility allows us to fully customise the size and shape of our screens, we also have the capability to supply the screens as self-supporting sheets or mounted to a variety of materials.

With size, shape and X-ray absorption characteristics customisable to your requirements, we can design and manufacture each screen to suit your exact application and operational demands.

## BaFCl properties

|                      |  |
|----------------------|--|
| <b>Emission peak</b> | 390nm<br>70kV, 140µA x-ray                     |
| <b>Decay</b>         | 6.4 µs<br>Cs-137 8.542Ci source<br>3000 pulses |
| <b>Afterglow</b>     | 0.2%<br>After 20mS                             |
| <b>Light Output</b>  | 26% Ref. Lanex Regular<br>70kV, 140µA x-ray    |

### Scintacor

125 Cowley Road, Cambridge Commercial Park,  
Cambridge, CB4 0DL, United Kingdom

**t** +44 (0)1223 223060 **e** info@scintacor.com

**www.scintacor.com**

Part of Tibidabo Scientific Industries

DS / BaFCl-XRAY-SCREENS / rev03 / May2023