



Security Glazing - The Problem

As the cost of vandalism to property continues to rise year after year, in rural as well as inner city areas, it is now necessary to consider the material specification on 'at-risk' structures in order to counter the effectiveness of the vandal. The most familiar, and costly, act of vandalism is the breaking of glass. Often this is simply wilful damage. However, it can also be the easiest entry point to a building. Vandalism can, therefore, be extremely costly: once a vandal gains access to a building, consequential costs can escalate dramatically.

Specify the Solution

The effects of vandalism are well documented. However, architects and users can now counter this problem with a choice of materials specifically designed for vandal resistance and freedom from maintenance.

At a glance the benefits of Vandalite

- Impact Resistance will withstand accidental & wilful violence
- Reduced replacement costs fewer replacements mean lower maintenance costs
- Blends aesthetically with its surroundings
- Good light transmission properties
 saves artificial lighting
- Simple to install reduces on-site costs

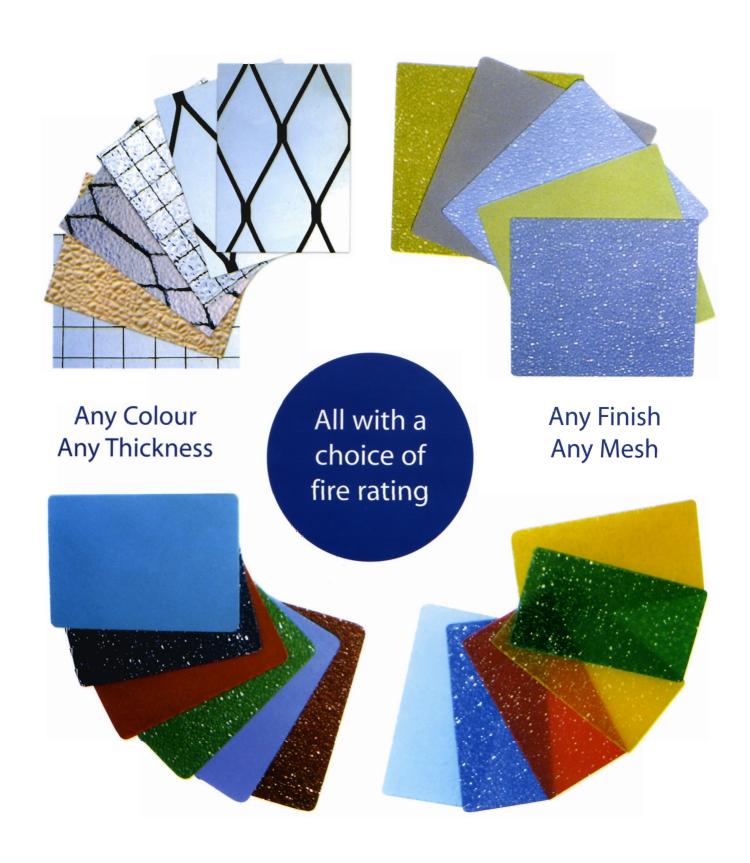
Simple Installation

Unlike wired glass, Vandalite products may be handled and fixed with relative ease, reducing on-site fixing costs. Cutting on site or at customers' premises is possible using appropriate equipment. We recommend guillotine, abrasive wheel or jigsaw, according to the version chosen. Our fast curing security glazing mastic gives a guaranteed fixing of Vandalite to timber, steel, aluminium, UPVC and even concrete or brick rebates. (Fixing details shown on the back page)

Tested To The Limit

Vandalite glazing products have satisfied the most rigorous testing. The British Standards Institution BS5544 (1978) impact resistance test, for example, involved a hardened steel ball of 2206g mass being dropped from heights of up to 9 metres onto samples of Vandalite. Each remained intact throughout. As a result, Vandalite was the first glazing product in the world to carry the BS Kitemark for Anti-Bandit Glazing.

Rigorous testing of Vandalite to surface spread of flame, fire resistance and fire exposure criteria of B.S.I. has also been effected across the product range.



Impact Strength Means:

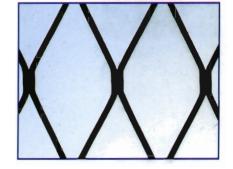
y to damage • Replacement costs eliminated • Installati

Standard Vandalite Security Glazing (Diamond Mesh)

Vandalite Security Glazing was designed with the problem of vandalism very much in mind, everything from street lighting to bus shelters, factories to void housing.

The product itself was designed to provide a viable alternative to conventional 'Georgian Wired' type products, which are costly to maintain and increasingly difficult to install. Although all Vandalite glazing is designed to be economical in use, no compromise on quality or performance is ever considered.

Standard Vandalite is probably the most durable glazing material available today. Unlike glass, it won't shatter, because the resin based translucent sheet is reinforced by a flattened expanded steel diamond mesh.



Decorative Vandalite Pigmented

As well as a number of surface finishes ranging from smooth to 'cracked ice' (single or both sides), the product can also be supplied in an opaque or translucent form in a range of BS4800 and

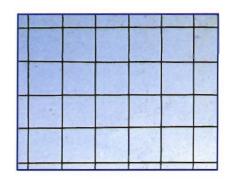
Decorative Vandalite does not compromise any of the product's security or vandal resistant qualities and enables the product to be used in a host of building roles, including infil panels in bus shelters, balconies, schools and toilets. The vandal resistant qualities of the material make graffiti removal simple - without spoiling the sheet surface!



Georgian Vandalite

Available in three thicknesses and a selection of stock sizes (see specification panel), Georgian Vandalite has the appearance of wired glass but with the benefits of Vandalite. Georgian Vandalite is available with an optional 'cracked ice embossed' surface finish on one or both surfaces of the sheet. Available in two fire ratings, the most popular being BS476 part 7: class 2.

This product is typically used in glass roof structures, infil panels and glazed doors.

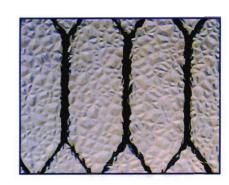


Vandalite Gothic

The recent addition of the 'Gothic' reinforcing mesh has once again provided the specifier with more choice in the visual appearance of the product.

The striking design ensures that the strength of the sheet is unaffected whilst aesthetics are enhanced. The product is available in two thicknesses and two fire ratings.

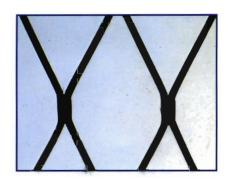
Gothic is not a stock item and is available on high volume orders only.



Tudor Vandalite

Offering the same qualities as Standard Vandalite, but with a more open mesh design, Tudor Vandalite allows improved levels of light transmission.

This product is available in 3mm nominal thickness and in sheet size 1220mm LWM x 2440 SWM. Tudor is not a stock item and is available on high volume orders only.



Insulated Panels

Vandalite have extended their product portfolio with the introduction of a comprehensive range of insulation panels for roof or wall cladding.

Although conceived around the strength and durability of Vandalite as the surface sheet, a variety of other alternatives can be used, from galvanised steel to a selection of surface finishes in GRP.

The insulation material again offers complete flexibility of choice, including rigid foam core materials.

In essence, each system can be designed and produced to yield the desired 'U' value.

The three panel types which are the most commonly specified

- · Double sided foam infil, flush cut
- Single sided foam infil, with rebated edge detail
- Totally sealed outer skin with foam insulation

Vandalite can also produce an insulated infil panel which complies to C.L.A.S.P. specification to produce a 'U' value of .045 Wm^{2o}C, with a class 1 surface spread of flame rating.



Specification

Fire ratings

The four types of Vandalite available are variously designed to meet the many different 'fire ratings' required by the Building Regulations, 1976. These include the following British Standards: External: SAA (BS476 Part III) Class II: (BS476 Part V11) Class I: (BS476) Part V11) 'O' Rating: (Building Regulations 1976) Fire Grades are designed and quoted for in good faith and with the experience of our resin suppliers and ourselves in manufacturing sheet to meet these standards. In all cases the resins used are stated by manufacturers to be the appropriate class and tested to that standard in a representative range of laminates. Vandalite do not warrant that any laminate will confirm to specific parts of BS476 or any other fire test.

Vandalite 124

Possibly the ultimate reinforced glazing material for use in fire doors and similar applications. This product has been independently tested and found to achieve over two hours' Integrity in BS476 part 22: 1987, indicative tests. During such tests the material was subject to temperatures of up to 1030°C on the furnace side and 300°C on the unexposed side.

Decorative Vandalite

All Vandalite types are available with 'cracked ice' embossed surface finish (single or both sides), opaque or translucent and can be supplied coloured in any BS4800 specification tint. Depth of colour will vary according to thickness. As tinted Vandalite is manufactured against specific orders a sample of colour should be supplied for matching. The colours shown here are a selection and as close as the printing process will allow.



Impact Resistance

All Vandalite types meet the impact resistance requirements of BS 5544: 1978.

Weathering Resistance

Accelerated weathering tests have been performed on all Vandalite types to correspond with 8 years of natural weathering. Negligible degradation occurs over this period.

Sales and After-Sales

Our sales staff will be happy to discuss your security glazing problems. We have our own representation throughout the United Kingdom. Simply ring Vandalite's Sales Department on (01254) 383333 or 01254 357000.

Delivery

Vandalite offer a swift and efficient delivery service to all parts of the UK and Eire. For further details ask our Sales Department - (01254) 383333 or 01254 357000.

Chemical Resistance

All Vandalite types resist attack by acids, weak bases and salts, oils and solvents.service temperature range -20°C to 210°C

Light Admission

(referred to clear float glass of same thickness) 85%

Coefficient of Thermal Expansion

(referred to type 3 Standard) 20 x 10 -6per °C

Thermal Conductivity

All Vandalite types have thermal conductivity figures lower than glass.

Heat losses can therefore be expected to be very much lower with single glazed panels.

Fixing

All Vandalite types should be fixed as per diagram and can be fixed to the following substrates: timber, brick, concrete, stone, steel, pvc and aluminium.

Always use Vandalite Fast Curing Security Glazing Mastic when fixing all Vandalite types.



Handling and Storage

Store sheets flat with suitable spacers between each sheet. Strip off protective film before fixing.

Specifying

When specifying Vandalite please state:

- Number of sheets
- 2. Size of each sheet
- 3. Vandalite type
- 4. Direction of mesh
- 5. Fire rating

A cutting service is available for non-stock size requirements. Any additional charge will be quoted at time of ordering.

Cutting

Standard size sheets can be cut using proper cutting equipment. We recommend guillotine, abrasive wheel or jigsaw (Bosch reference for jigsaw blade: T118A)

TYPE	Standard Thickness (Nominal)	Stock sizes (mm)
Plain	3mm, 4mm, 6mm	1220 x 1830
		1220 x 2440
		1220 x 3050
		1220 x 3660
		1525 x 1525
		1525 x 3050
Tudor	3mm	1220 x 2440
Standard	3mm, 4mm, 6mm	1220 x 1830
		1220 x 2440
Georgian	3mm, 4mm, 6mm	1220 x 1830
		1220 x 2440
		1220 x 3050
		1220 x 3660
		1525 x 1525
		1525 x 3050
Gothic		1080 X 2440

In all cases nominal thicknesses are designated by type, eg TYPE 3 - 3mm nominal thickness.

