

For: Heads of all Establishments/Settings  
OCC Managers  
Governors/Management Committees  
Trade Union Safety Representatives  
Employee Notice Boards  
Intranet



## Glazing Safety Educational Settings

### Applicable legislation

Workplace (Health, Safety and Welfare) Regulations 1992 (amended)

Building Regulations 2000

British Standard BS 6206: Impact performance requirements for flat safety glass and safety plastics for use in buildings

British Standard BS 952: Glass for Glazing

### Background

In accordance with the Workplace Regulations, a glazing upgrade programme was undertaken covering Oxfordshire County Council establishments in the early 1990's. This resulted in the number of glazing incidents reported causing injury being dramatically reduced. However there have still been glazing incidents which resulted in serious injuries to pupils/students. These injuries were exacerbated due to the settings replacing glass panels with glass and/or filming that did not meet the current safety standards.

NB. Some of the original county filming is now reaching the end of its useful life and its integrity cannot be guaranteed. This will need replacing to ensure the glazing protection is maintained.

### Scope

This procedure applies to all educational settings/establishments.

### Managers' Responsibilities

To ensure that glazing in your setting/establishment does not present a risk to all building users, the following guidelines must be followed:

- Check all existing film to see that it is still 'in date' – if not replace with British Standard film.
- Existing glazing systems must be maintained in a safe condition and to the correct standards. Any safety film fitted that is, peeling or degraded or missing must be replaced to the appropriate current British Standard.
- Broken glass must be replaced to the standards specified (Annex 1).

Issued by the Health, Safety and Wellbeing Team, Customer Services, Unipart House, Garsington Road, OXFORD, OX4 2GQ

The glazing upgrading programme carried out by the County Council in the early 1990's was based on an individual site-based risk assessment, which took into account the activities on the site and the extent to which bodies could come into contact with the glazing.

When a setting/establishment changes the use of an area or moves fixed external furnishings or any landscaping/hedging that currently protects the glazing a new risk assessment must be carried out by the person managing the project to determine whether any improvements to the glazing standards are necessary to maintain the level of glazing protection.

For all new build the glazing must meet the standards specified (Annex 1), which meet the statutory requirements for glazing of Part N of the Building Regulations and the Workplace Regulations.

All new, replacement or upgraded glazing must be etched to provide evidence that the glazing complies as minimum with the standards of British Standard BS 6206 as follows:

- Toughened glass – Class "A"
- Laminated glass – Class "B"
- Annealed or cast Georgian wired glass fitted with a safety film – Class "B".

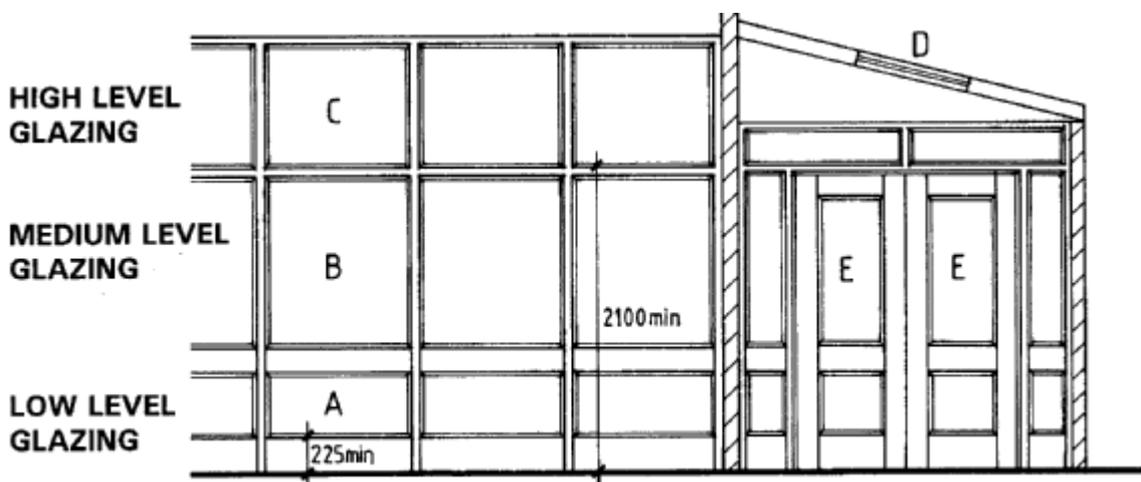
**For further information and advice:**

	<b>email and web addresses</b>	
<b>Specialist:</b>		
<b>Property Consultants</b>	<b>Web page:</b> <a href="#">Property Consultants</a>	
<b>General:</b>		
<b>Health, Safety &amp; Wellbeing Team</b>	<b>email:</b> <a href="mailto:healthandsafetyhelp@oxfordshire.gov.uk">healthandsafetyhelp@oxfordshire.gov.uk</a> <b>web address:</b> <a href="http://intranet.oxfordshire.gov.uk/links/intranet/healthandsafety">http://intranet.oxfordshire.gov.uk/links/intranet/healthandsafety</a>	<b>Helpdesk</b> <b>01865</b> <b>797222</b>

## Glazing Safety

### Types of glass

#### Glazing Maintenance – standard and fire resisting glazing



#### Standard Glazing

**A. Low level glazing** (including doors and sidelights) – unless necessary for illumination or safety purposes broken glass below existing sill level to be replaced with a solid panel. (Insulated to external walls). Wherever possible avoid re-glazing below 225mm. Laminated glass minimum class 'B' to BS 6206.

**B. Medium level glazing** (including doors and sidelights) – all areas. Laminated glass minimum, class 'B' to BS 6206.

**C. Vertical high level glazing** – in the following risk areas:

- Adjacent to play or sports areas
- In school halls, sports halls and gymnasias
- Fanlights over doors
- Laminated glass minimum class 'B' to BS 6206
- Vertical glazing in other non-risk areas – Annealed glass to BS 952

**D. Overhead glazing** – Double glazed units:

- Outer skin – Toughened glass minimum class 'A' to BS 6206
- Inner skin – Laminated glass minimum class 'B' to BS 6206

Single glazed units:

- Georgian wired glass should be used wherever possible, but laminated glass or polycarbonate sheet may be necessary in areas at high risk of internal or external impact.

**E. Door glazing** – remove fully glazed doors (i.e. doors with one large pane of glass without a central rail) and replace with doors either with vision panels, a middle rail or use glazed striped doors. Laminated glass minimum, class 'B' to BS 6206.

## **Fire resisting glazing:**

### **A. Low level glazing** (including doors and sidelights)

Unless necessary for illumination or safety purposes, broken glass below existing sill level to be replaced with a solid panel. (Ensure panel meets the necessary fire rating). Wherever possible avoid re-glazing below 225mm.

Where necessary re-glaze as follows:

- Specify a laminated wired glass that achieves both minimum class 'B' to BS 6206 and the necessary fire rating **OR**
- Specify Georgian wired glass with a safety film applied to give an impact performance rating of class 'B' when tested in accordance with BS 6206.

### **B. Medium level glazing** (including doors and sidelights) – all areas.

Re-glaze as follows:

- Specify a laminated wired glass that achieves both minimum class 'B' to BS 6206 and necessary fire rating **OR**
- Specify Georgian wired glass with a safety film applied to give an impact performance rating of class 'B' when tested in accordance with BS 6206.

### **C. Vertical high-level glazing** (including fanlights) – all areas.

Georgian wired glass.

## **Notes:**

1. Wherever possible double and single glazing should be replaced with similar glazing systems.
2. For standard glazing only where, because of the extra thickness, safety glass cannot be incorporated into the existing glazing system without full replacement the following re-glazing methods should be considered:
  - a) The use of annealed glass with a plastic film applied giving an impact performance rating of class 'B' when tested in accordance with BS 6206.
  - b) The use of toughened glass with an impact performance rating of class 'A' when tested in accordance with BS 6206 (Toughened glass should not be used where there is a significant difference in level, either side of the glazed system or where security is a consideration).

## **Glazing Compounds (e.g. Putty)**

These can be split into two groups, those requiring painting and those, which do not. The former is linseed oil based putty. Putty will shrink and crack over time and painting helps to inhibit this process. Putty used on metal windows is different from putty used on wooden windows. Make sure you have the correct type.

Non-setting compounds do not need painting once applied. These include glazing beads (the thin piece of wood, metal, plastic etc. around the outer edge of glass). Rubber and plastic seals are also sometimes used, but these tend to deteriorate over time, especially at the corners, letting in wind and rain.