Glazing

Schools Safety Guide

Document information

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Purpose	To provide guidance on the glazing aspects that need to be considered in school risk assessments.		

Contents

Introduction

Serious injury can occur if the risks associated with glazing are not recognised and appropriately managed.

Risk assessment

Schools need to consider the risks presented by glazing as part of their risk assessment programme.

Risks include; impact with glazing, collision with open windows and access to windows for opening, closing and cleaning.

When considering these risks schools need to consider the activities (planned or otherwise) that go on in school such as movement around school (including unauthorised running), PE and sports activities that take place in the vicinity of glazing.

Risk assessments need to be carried out by competent persons and due to the range of standards related to the types and use of glazing in non-domestic property, is something the school may wish to let to a competent contractor (see SSG control and selection of contractors link here). Your building services/property maintenance functions may be able to provide assistance with the assessment of glazing risks.

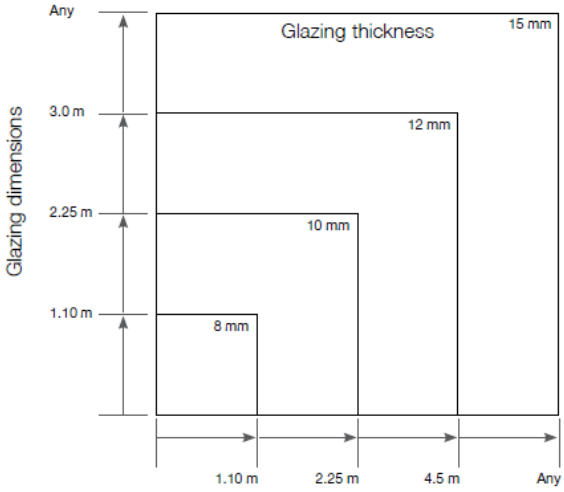
Impact with glazing

Where the assessment identifies there is a foreseeable risk of impact against or through glazing, adequate precautions must be taken.

This will mean ensuring glazing in walls, partitions, doors and gates should, where necessary for reasons of health and safety, be made of **safety material or be protected against breakage.**

Safety materials mean:

- materials which are inherently robust, such as polycarbonates or glass blocks;
- glass which, if it breaks, breaks safely;
- ordinary annealed glass which meets the thickness criteria in Figure 1 below.

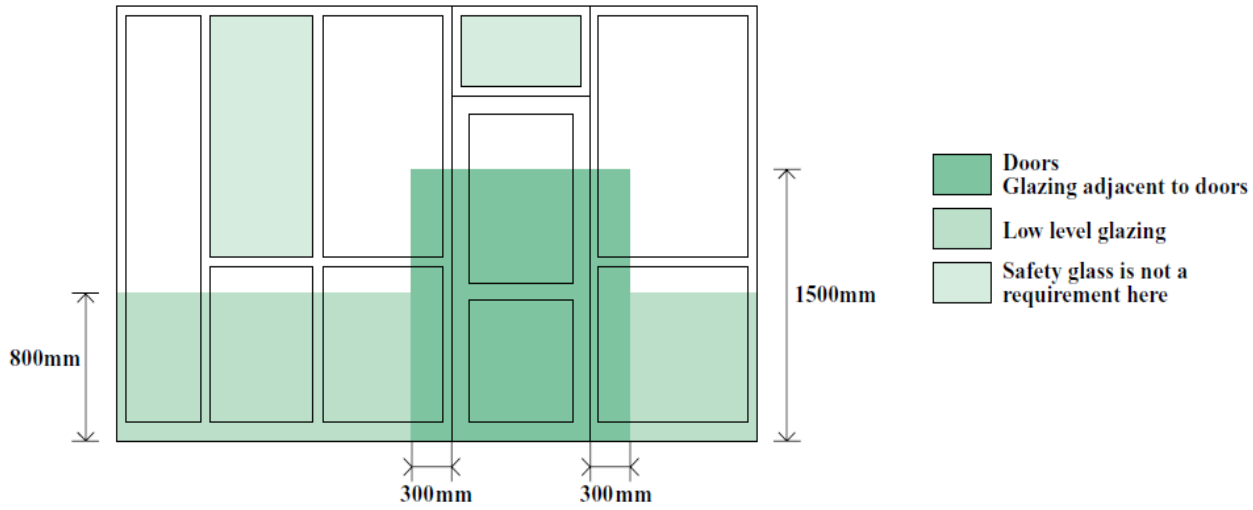


Location of critical areas

Attention should be paid to the following guidance when assessing whether it is necessary for glazing in doors, gates, walls and partitions to be of a safety material or be adequately protected against breakage:

- in doors and gates, and door and gate side panels, where any part of glazing is at shoulder level or below;
- in windows, walls and partitions, where any part of glazing is at waist level or below, except in glasshouses where people are likely to be aware of the presence of glazing and avoid contact.

The building regulations add more detail to the requirements as shown in the diagram below;



These requirements do not apply to narrow panes up to 250 mm wide measured between glazing beads.

Protection against breakage

As an alternative to using safety materials, glazing can be adequately protected from breakage by a screen or barrier which will prevent people from contacting the glass if they fall against it. The screen or barrier should be designed to prevent anyone from climbing onto it, to prevent them falling through the glass from a height.

Identification of glazing

Large areas of transparent glazing used to subdivide a building may not be immediately apparent, particularly under certain lighting conditions. People moving in or about the building may not be aware of the glazing and may collide with it.

The glazed areas referred to include large uninterrupted areas of transparent glazing which form, or are part of, the internal or external walls and doors of non-domestic buildings. Permanent identification is only necessary when other means of indicating the presence of the glazing are not present.

When identification is required it should be of a sufficient size to be immediately obvious and should be positioned between 600 and 1500mm above floor level and preferably be permanent and durable.

Protection from collision with open windows

Where the risk assessment identifies the potential for people to collide with open windows, then measures should be introduced to prevent this (e.g. by installing restrictors to limit the opening of windows or barriers to guide people around open windows.)

Safe opening and closing of windows

Openable windows, skylights and ventilators should be capable of being opened, closed or adjusted safely and, when open, should not pose any undue risk to anyone.

Safe access for cleaning windows

Windows and skylights should be designed so that they may be cleaned safely.

When considering if they can be cleaned safely, account may be taken of equipment used in conjunction with the window or skylight or of devices fitted to the building.

Should work at height be carried out to clean windows this must be planned and done safely refer to work at height SSG.

Further information

Further information on the risks and controls for glazing in buildings and workplaces can be found in the;

Building regulations approved document K (Sections 5 to 9)
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/443181/BR_PDF_AD_K_2013.pdf

The workplace (health, safety and welfare) regulations
http://www.hse.gov.uk/pubns/books/l24.htm

BS 6262-4 2018 Glazing for buildings. Code of practice for safety related to human impact.

Standards for safety glass

For new builds BSEN 12600 - Glass in building. Impact test method and classification

For older buildings BS 6206 - Specification for impact performance requirements for flat safety glass