

Guarding to window openings with low cill heights

Purpose

BCA technical guidance notes are for the benefit of its members and the construction industry, to provide information, promote good practice and encourage consistency of interpretation for the benefit of our clients. They are advisory in nature, and in all cases the responsibility for determining compliance with the Building Regulations remains with the building control body concerned.

This guidance note is based upon information available at the time of issue and may be subject to change. The Approved Documents should be consulted for full details in any particular case.

Introduction

This guidance is intended to provide a common approach when assessing guarding provided to French windows and window openings in external walls with low cill heights.

Key Issues

The Approved Documents provide recommendations for the minimum height of windows above floor level and guarding for windows where they fall below these levels.

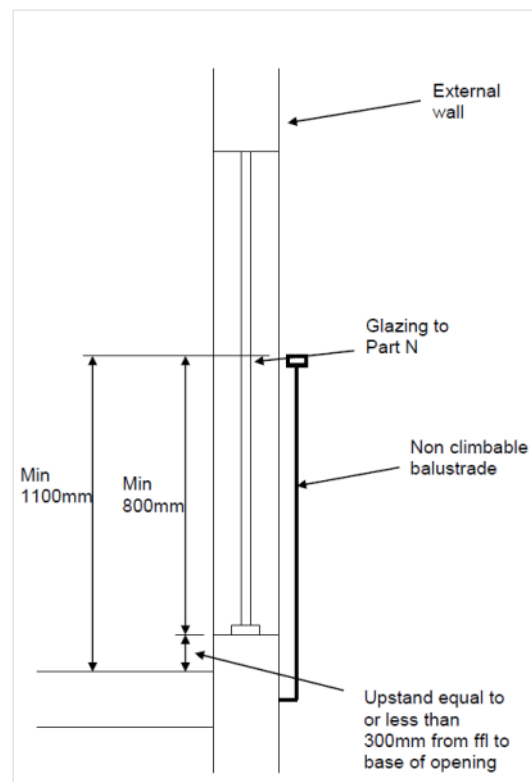
Increasingly, designers are incorporating deeper windows or French doors with low level cills into their dwelling designs. The cills to these windows can provide platforms to aid climbability by children. As such the recommendations for guarding height to windows may not be appropriate to afford the safety of the occupants and achieve compliance with the functional requirements.

Guidance

French windows

When considering guarding to French windows, a minimum guard height of 1100mm measured from finished floor level is required to ensure adequate protection from falling. This figure is almost consistent with the guidance given in BS8213-1 which recommends 1120mm high guarding for French windows (when sited above ground floor level).

Where an upstand is formed (up to 300mm high) to the base of the opening, then an 800mm guard height should be maintained above this level.



Window openings in external walls with cill heights between 300mm and 800mm above finished floor level

According to Chiddata, 50% of four year old children can step up 410mm, and 3% can step up 550mm. Any cill height lower than 600mm may therefore be considered climbable by children.

According to Chiddata, only 5% of four year old children are taller than 1200mm so most would be fairly stable standing on an upstand if a minimum guard height of 700mm were to be maintained.

Diagram 2 – Indicates acceptable guarding arrangements where parapet heights are between 300mm and 600mm above finished floor level

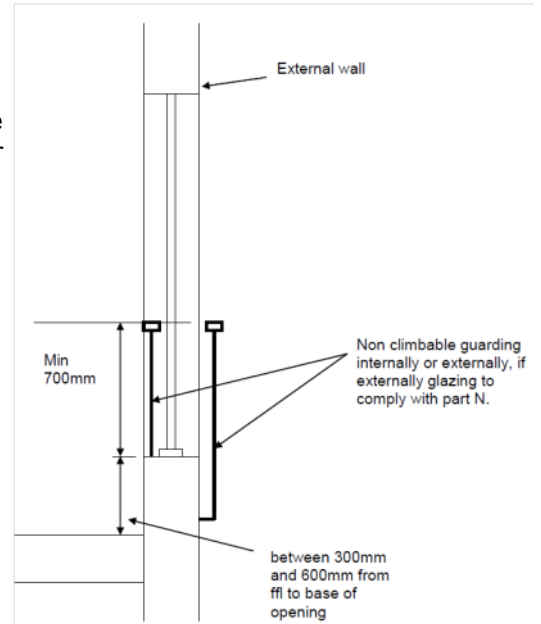
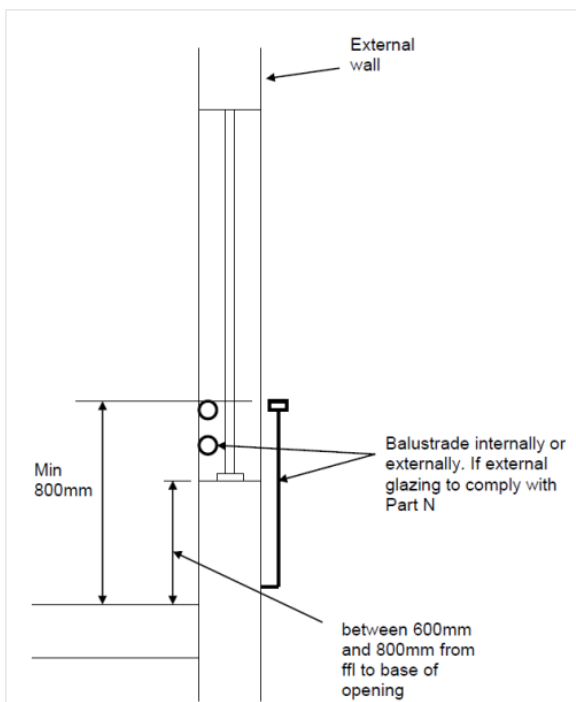


Diagram 3 – Indicates acceptable guarding arrangements where parapet heights are between 600mm and 800mm above finished floor level.

When considering balcony floor level, account need not be taken of fixed furniture such as window seating.

Note: Where the overall guard height exceeds 1100mm from finished floor level, this will conflict with the maximum 1100mm dimension required for the window to be suitable for escape. A check should be made in these circumstances to ensure that there is an alternative window in the room suitable for escape or that a suitable protected escape route has been provided.

Window restrictors

Window restrictors are not considered to be an alternative to a permanent guard in any of the diagrams in this guide. Reference should be made to *BCA Guidance Note 1 - Glass guarding and restrictors to low level windows above ground floor level in dwellings*