



CPD Tutorial Summary Fall Prevention Through Openable Louvre Windows

Learning outcomes:

1. Able to identify situations where fall prevention measures are required by the BCA.
2. Able to list the options to achieve compliance in bedrooms and early childhood centres.
3. Able to list the options to achieve compliance in other rooms.
4. Awareness of testing methodologies to prove compliance.

Fall prevention requirements only apply to openable windows. AS1288 contains provisions to mitigate the risks of human impact with glazing, and windows that cannot open have no openings which can be fallen through.

The requirements vary based on the room or building type.

For bedrooms & early childhood centres:

- The requirements apply when the fall (from the floor level on the inside of the window to the ground level directly below the outside of the window) is greater than 2m.
- If the window sill is more than 1,700mm above the inside floor level there are no specific requirements.
- If the window sill is within 1,700mm of the inside floor level the openable portion of the window must be protected. The protection can be either:
 1. A device that restricts the window opening, or
 2. A screen with secure fixings.
- The window protection must meet 2 criteria:
 1. Must prevent a 125mm sphere from passing through the window, and
 2. Must resist a horizontal, outward force of 250N.
- If the device to restrict the window opening or the screen can be removed, unlocked or overridden, then:
 1. The release mechanism must be child resistant (ie requires a key, the use of two hands, or the use of a tool), and
 2. There must be an additional barrier to at least 865mm which:
 - i. Will not permit a 125mm sphere to pass through, and
 - ii. Has no horizontal or near horizontal elements between 150mm and 760mm which could facilitate climbing.

For all other room and building types:

- The requirements apply when the fall (from the floor level on the inside of the window to the ground level directly below the outside of the window) is greater than 4m.
- Openable windows must be protected by a barrier to at least 865mm which:
 1. Will not permit a 125mm sphere to pass through, and
 2. Has no horizontal or near horizontal elements between 150mm and 760mm which could facilitate climbing.



The requirement for the protection to resist force means that physical testing is required as metal and glass deflect under loads.

AS 5203 defines the test methodology. For louvre windows with restricted openings, this involves a bullet shaped probe with a diameter of 125mm:

1. being aimed between the blades and having 250N of force applied (testing the deflection of the blades), and
2. being aimed at the edge of a blade near a clip and having 250N of force applied (testing the retention of the blade within the clip).

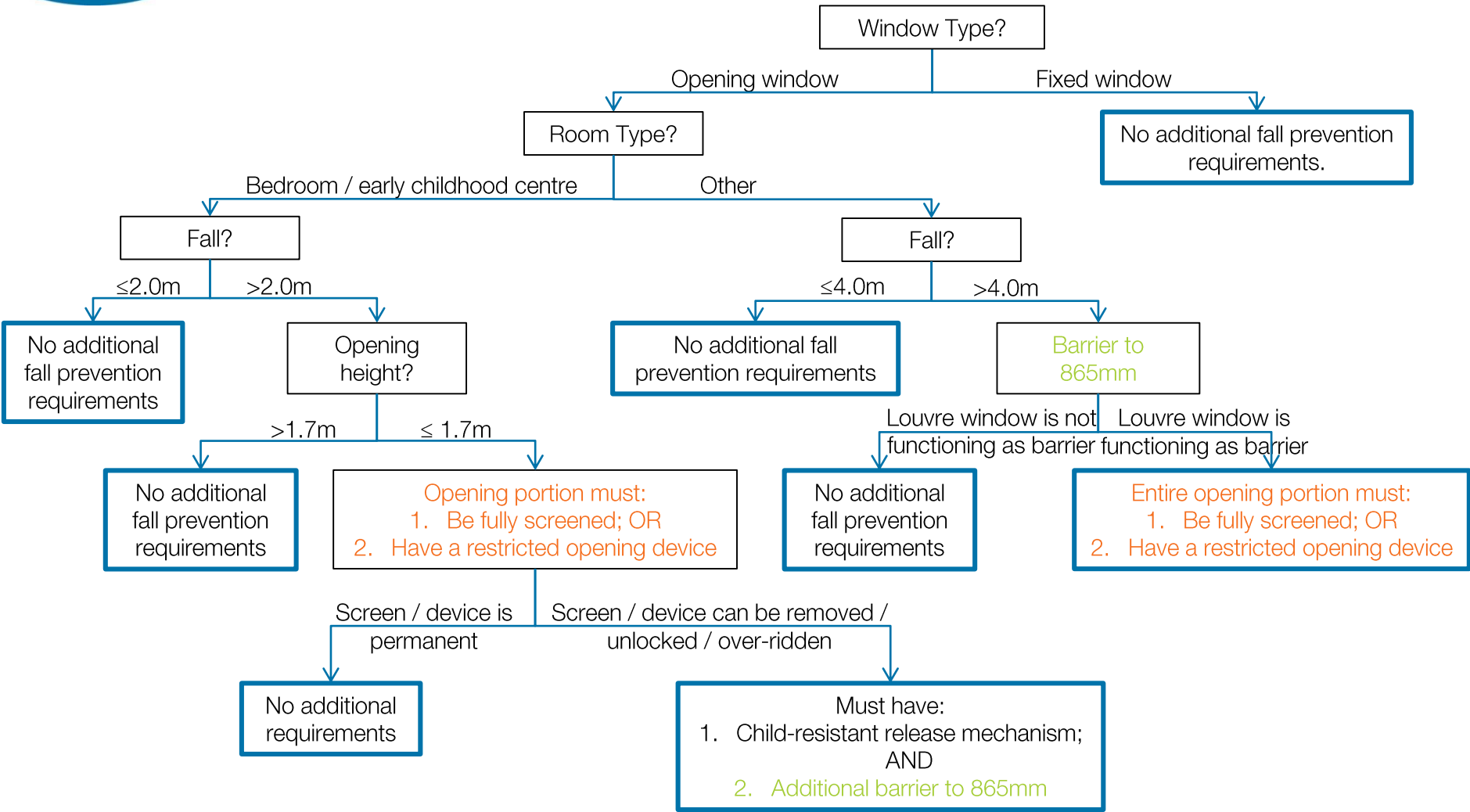
For screens, this involves a 125mm diameter pressure plate:

1. applied in the middle of the screen (testing the strength of the screen), and
2. applied at a corner, or at the middle of the largest unsupported edge (testing the strength of the fixings).

Restricted openings will reduce the ventilation openings of all window types, but with openings on both sides of each blade, louvre windows are affected less than other window types.



Fall Prevention Requirements Decision Tree



Screen & restricted opening devices must:

1. Prevent a 125mm sphere from passing through; AND
2. Resist a horizontal, outward force of 250N

Testing is required.

Barriers must:

1. Prevent a 125mm sphere from passing through; AND
2. Resist a horizontal, outward force of 250N; AND
3. Have no horizontal or near-horizontal climbable elements between 150mm and 760mm.

Please note: This decision tree is a representation of the requirements of Clauses 3.9.2.6 and D2.24 of the 2019 National Construction Code and is intended to be used as an aid, not as a replacement to clauses 3.9.2.6 and D2.24.