



SHIRE OF DERBY/WEST KIMBERLEY

REQUIREMENTS FOR FENCING OF SWIMMING POOLS

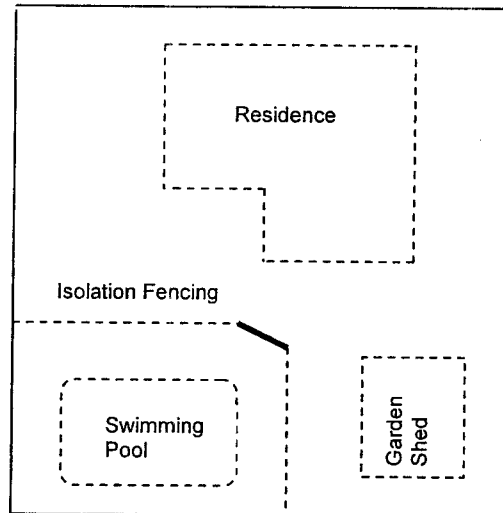
DEVELOPMENT SERVICES (*Planning, Building, Health & Ranger Services*)

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All new pools installed after 5 November 2001 require isolation fencing between any external house windows/doors and the pool.

Any barrier or fencing that is installed for new pools have to comply with the Australian Standard AS 1926.1-1993 (Swimming Pool Safety).

Eg,



2. DESIGN AND CONSTRUCTION

2.1 GENERAL

Fencing shall be designed and constructed so that at any point the outside of the fencing will present an effective barrier to young children.

The fencing shall be a permanent structure.

2.2 MATERIALS

Fencing may be constructed from any type of material, provided that the finished fencing complies with the requirements of the Standard.

2.3 FENCING HEIGHT

2.3.1 **General.** The effective fencing height shall be not less than 1.2m (see Figures 2.1 and 2.2).

The height shall be considered to be effective if a quadrant of radius 1.2m, located as shown in Figure 2.1, provides a clear span of 1.2m to finished ground level, or to any projections from, or objects on, the ground, except for non-climbable objects which are able to be positioned within the 1.2m radius.

2.3.2 **Perforated material or mesh.** Fencing using perforated materials or mesh with apertures not greater than 13mm, shall have an effective fencing height not less than 1.2m.

Fencing using perforated material or mesh with apertures greater than 13mm but less than 100mm shall comply with one of the following –

- (a) the effective fencing height shall be not less than 2.4m.
- (b) the vertical section shall have an effective fencing height of not less than 1.8m, where a cranked top is provided as shown in Figure 2.3. The cranked top shall have apertures less than 100mm.

Fencing using mesh shall include a strainer wire or rail at the top and the bottom of the fencing.

2.4 RETAINING WALL OR OTHER SUCH BARRIER

A retaining wall or other such barrier on the high side of the pool [see Figure 2.4(a)] shall be an effective barrier if it complies with the following –

- (a) it has an effective height of not less than 2.4m and an outside surface complying with Clause 2.6.
- (b) it does not slope away from the pool by more than 15° to the vertical.

A retaining wall or other such barrier on the low side of the pool [see Figure 2.4(b)] shall be an effective barrier if it does not slope towards the pool by more than 15° from the vertical and complies with either of the following –

- (c) it has an effective height complying with Clause 2.3.1 and an outside surface complying with Clause 2.6.
- (d) it has an effective height of not less than 2.4m if the outside surface does not comply with Clause 2.6.

NOTE : It is recommended that a fence that will prevent people from falling off the retaining wall or some other such barrier should be installed on top of the wall or barrier. The fence or barrier does not have to comply with the requirements of this Standard.

2.5 GROUND CLEARANCE

The height of any opening between the bottom of the fencing and the finished ground level shall not exceed 100mm.

2.6 OUTSIDE SURFACE

Projections from or indentations into the outside surface of the fencing, or any combination of projections and indentations, shall not form a substantially horizontal surface with a depth greater than 10mm, unless they are spaced not less than 900mm apart and provided that the lower projections or indentations are at least 1.1m below the top of the fencing (see Figure 2.5).

Projections or indentations which form a substantially horizontal surface do not act as a hold for climbing if they comply with Figure 2.6.

The fence shall be designed to be vertical, or where specifically designed to lean towards the pool, it shall not do so by more than 15° to the vertical (see Figure 2.1).

2.7 HORIZONTAL CLIMBABLE MEMBERS

Where fencing components provide a substantially horizontal surface, such as rails, rods, wires or bracings, that could be used as holds for climbing are located on the outside of the fencing, or where vertical members are spaced such that they provide clear openings of more than 10mm width, the following requirements shall apply –

- (a) horizontal members shall be not less than 900mm apart. Where there are two or more horizontal members, this measurement shall be made from the top surface of the highest lower member to the top surface of the lowest upper member. Where the fence is for a sloping site, the distance between the top surface of the highest lower member and the top surface of the lowest upper member shall be not less than 900mm, measured perpendicular to the finished ground level (see Figures 2.2 and 2.5).
- (b) the top surface of the highest lower horizontal member shall be at least 1.1m below the top of the fence (see Figures 2.2 and 2.5).

NOTE : Substantially horizontal surfaces such as rails, rods, wires or bracings that could be used as holds for climbing and which comply with the items (a) and (b) should be located on the inside of the fence.

2.8 HORIZONTAL NON-CLIMBABLE MEMBERS

As an alternative to Clause 2.7 horizontal members such as rails, located on the outside of the fencing shall not act as a hold for climbing if they comply with the following requirements -

- (a) Horizontal members comply with Figure 2.6.
- (b) Vertical members are spaced to provide a clear opening of not more than 10mm.

2.9 HORIZONTAL SURFACES INSIDE THE FENCING

Where any nearby horizontal surfaces that could be used as holds for climbing are permanently located near the inside of the fencing and where the spacing between vertical members is greater than 10mm, such surfaces shall be separated from the fencing by a distance of not less than 300mm.

2.10 VERTICAL MEMBERS

The clear space between any adjacent vertical members (see Figure 2.2), such as palings, rods or wires, shall not exceed 100mm at any point.

2.11 GATES AND FITTINGS

2.11.1 Direction of opening. Gates shall be hung so that they only swing outwards, ie away from the pool area.

2.11.2 Self-closing device. All gates shall be fitted with a device that will return the gate to the closed position and operate the latching device from any position with a stationary start without the application of a manual force.

The self-closing device shall be capable of complying with these requirements with the gate at any position from resting on the latching mechanism to fully open.

NOTES :

1. The self-closing device may require a cushioned back-checking operation to prevent shock when the gate is closing.
2. Self-closing devices subject to wind loading (which may prevent their closing) may require special consideration.

2.11.3 Latching device.

2.11.3.1 General – Gates shall be fitted with a latching device that will automatically operate on the closing of the gate and will prevent the gate from being re-opened without being manually released.

When in the closed position, the latching mechanism shall not be able to be released by the insertion of any implement between the 10mm gap shown in Figure 2.7(a) particularly from below the mechanism.

2.11.3.2 Location of the latching device (see Figure 2.7). Where the release to the latching device or the latch is located at a height less than 1.5m above the finished ground level or 1.4m above the highest lower horizontal member and is capable of being released at the latching mechanism, the location of the release of the latching device shall –

- (a) not be on the outside of the fencing;
- (b) be in such a position that to release the latching device from the outside it will be necessary to reach over or through the fencing at a height of not less than 1.2m above the finished ground level or not less than 1.1m above the highest lower horizontal member; and

- (c) be at least 150mm below the top of the gate if a hand-hole is not provided, or at least 150mm away from the edge of any hand-hole opening if a hand-hole is provided.

2.11.3.3 **Shielding of latching device** (see Figure 2.7). Where the release to either the latching device or the latch is located at a height less than 1.5m above the finished ground level or 1.4m above the highest lower horizontal member and is capable of being released at the mechanism, the latch and its release shall be so shielded that no opening greater than 10mm occurs within an area bounded by –

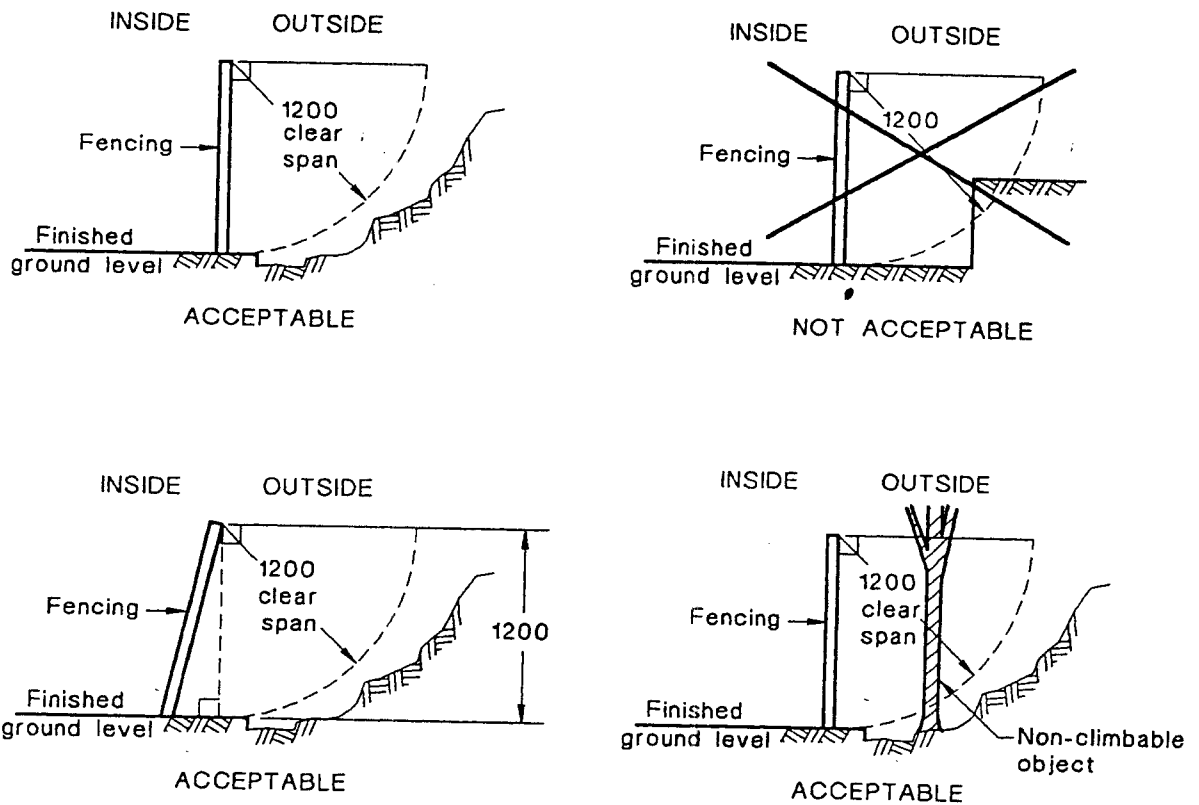
- (a) an effective radius of 450mm from the operating parts of the latch; and
- (b) the top of the fence, if this intersects the area described in item (a).

Where it is necessary to have a hand-hole in a gate, the bottom of the opening shall be not less than 1.2m above the finished ground level or 1.1m above the highest lower horizontal member, and the shielding shall be extended up to a horizontal line through the top of the hand-hole, or 150mm above the top of the latch, whichever is the higher.

The shield shall be free of sharp edges and the edges of the adjacent parts of the shield on the gate and the fence shall be rounded or chamfered to prevent a hazard when the gate closes.

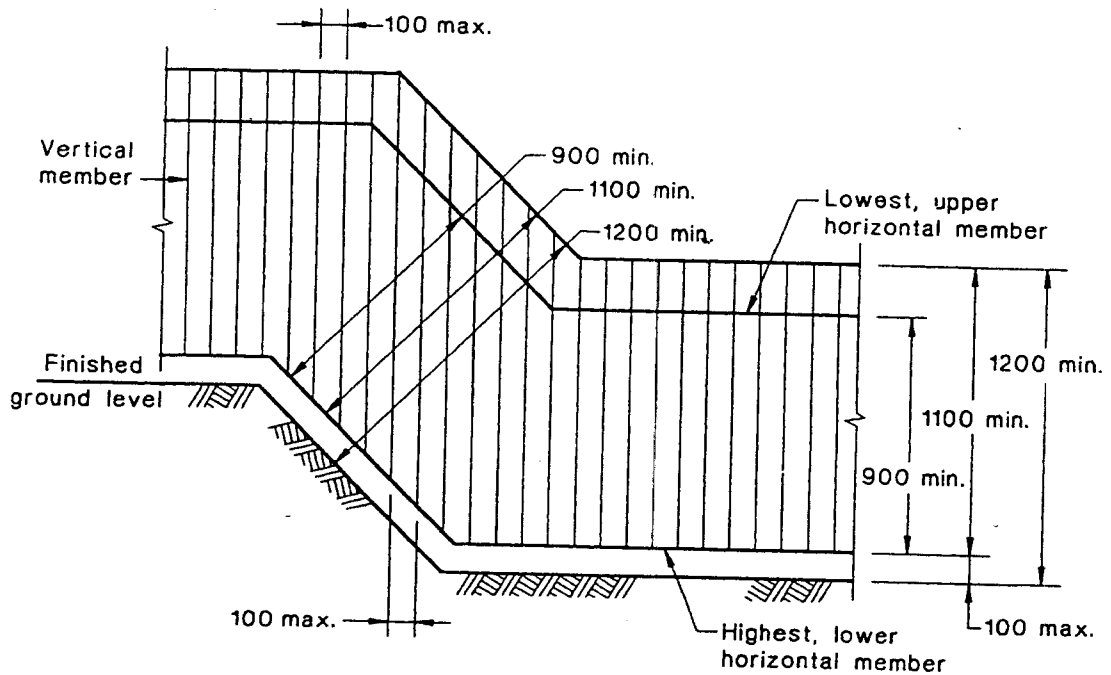
2.13 **FINISH**

The fencing shall be free of sharp edges, sharp projections and similar hazards.



DIMENSIONS IN MILLIMETRES

FIGURE 2.1 EFFECTIVE FENCING HEIGHT



DIMENSION IN MILLIMETRES

FIGURE 2.2 PERPENDICULAR FENCING DIMENSIONS ON SLOPING GROUND

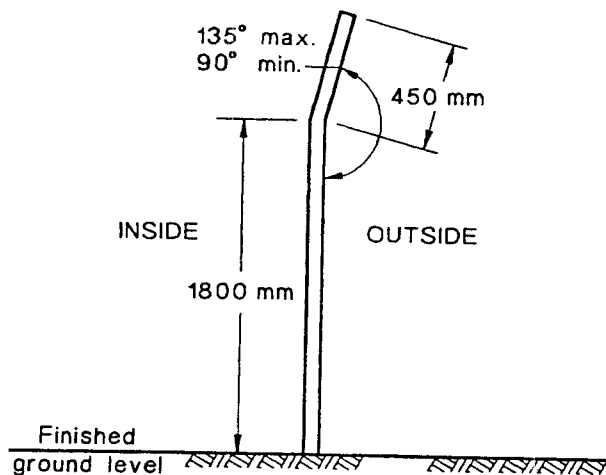


FIGURE 2.3 CRANKED CHAIN WIRE OR MESH FENCING MATERIALS HAVING APERTURES GREATER THAN 13 mm BUT LESS THAN 100 mm

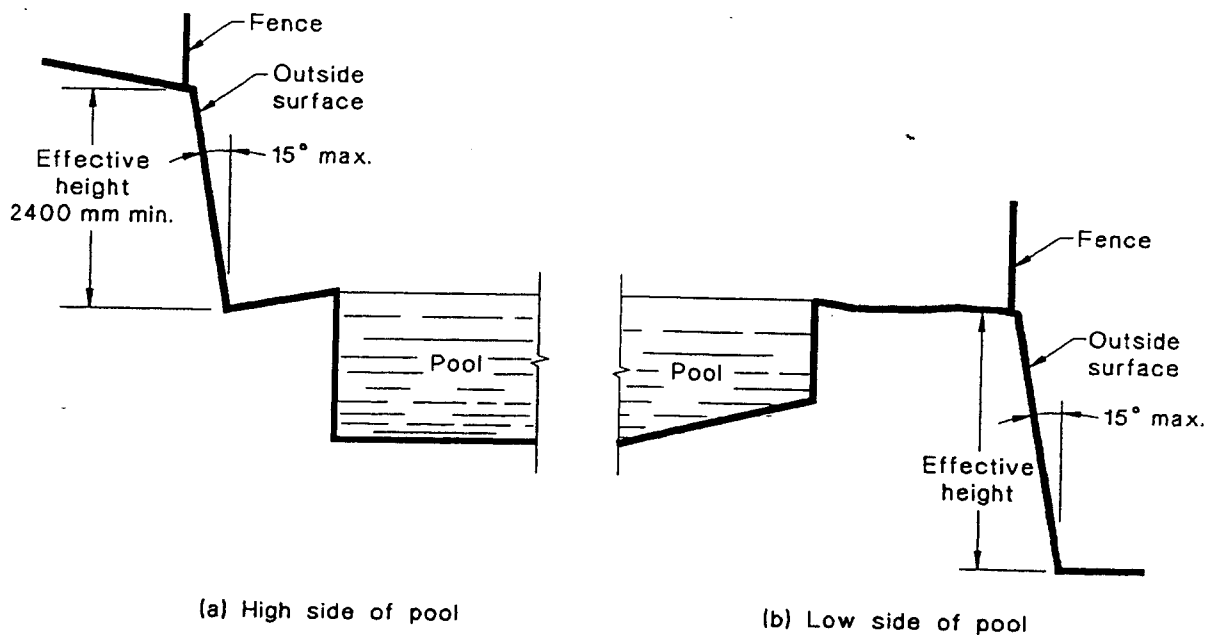
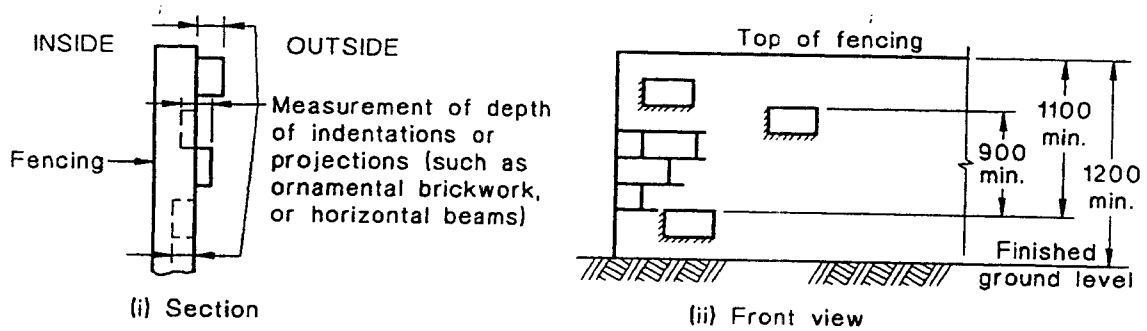
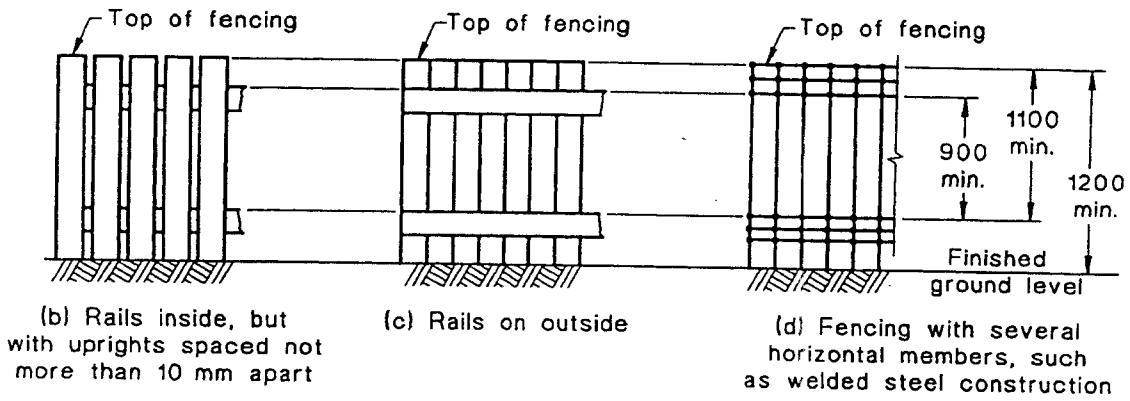


FIGURE 2.4 RETAINING WALL OR OTHER SUCH BARRIER

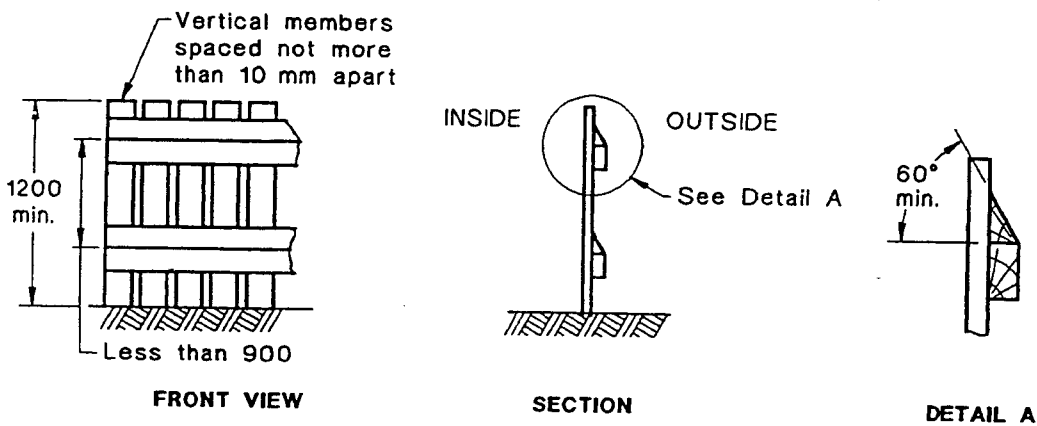


(a) Fencing with projections such as ornamental brick or stonework



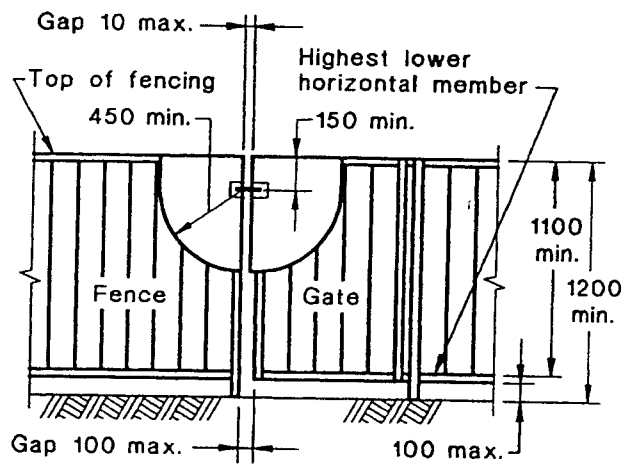
DIMENSIONS IN MILLIMETRES

FIGURE 2.5 SPACING OF ACCESSIBLE HORIZONTAL MEMBERS, OR PROJECTIONS OR INDENTATIONS

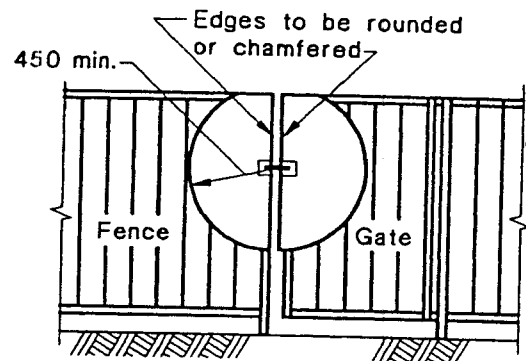


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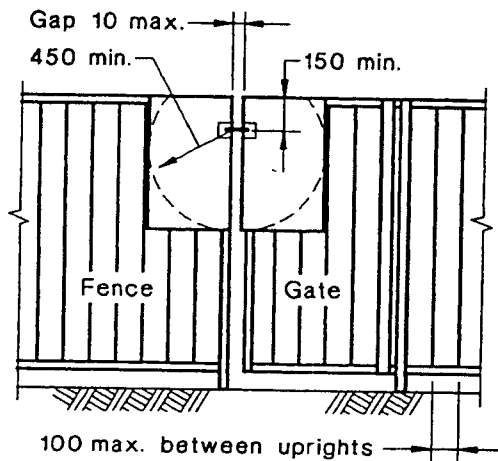
FIGURE 2.6 FENCE WITH HORIZONTAL MEMBERS PROJECTIONS OR INDENTATIONS NOT ACTING AS A HOLD FOR CLIMBING



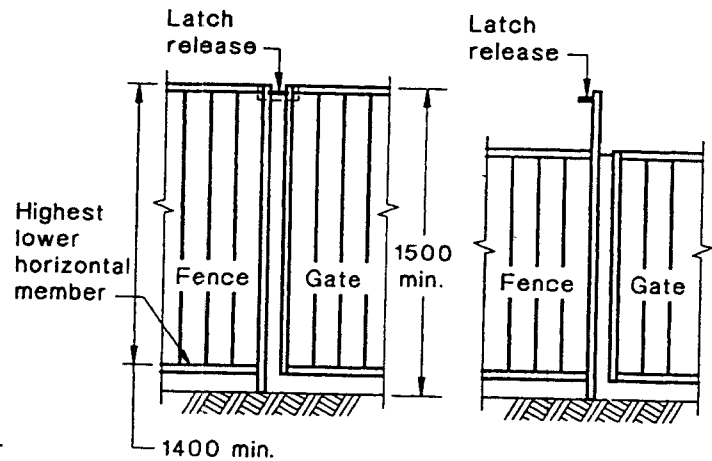
(a) Basic requirements



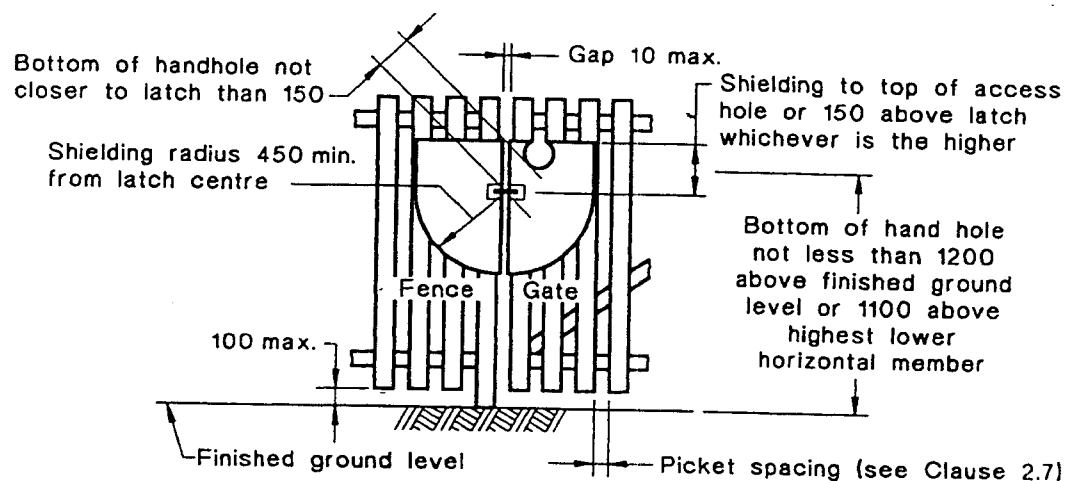
(b) Latch more than 150 below top of fence (shielding is centred on latch)



(c) Shield larger than minimum size



(d) Shield not required for latch or release located at 1500 or higher



(e) Hand hole provided in fence or gate

NOTE: Main dimensional requirements are also shown.

DIMENSIONS IN MILLIMETRES

FIGURE 2.7 LATCH SHIELDING FOR GATES OF OPEN CONSTRUCTION

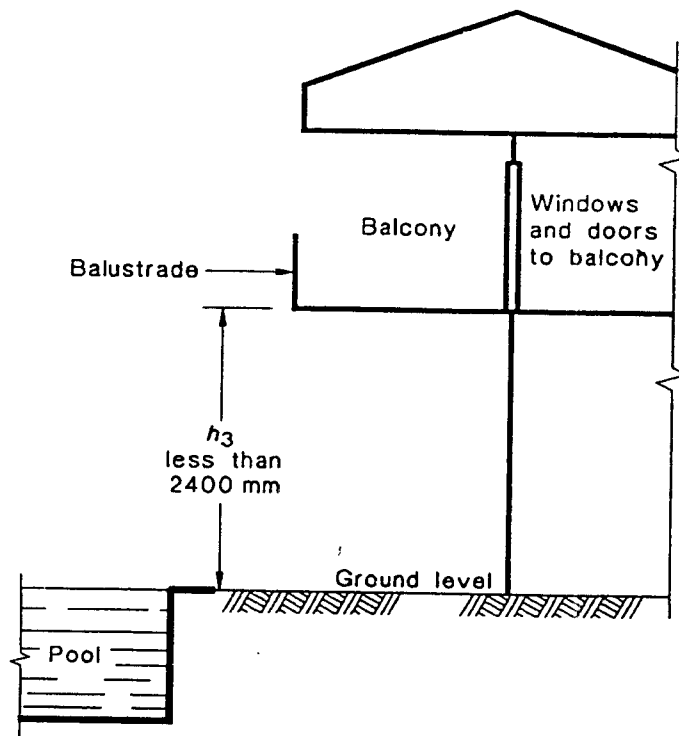


FIGURE 2.9 BALCONY PROJECTING INTO POOL AREA