



Northern  
Territory  
Government

Water Safety Branch

# pool fencing notes

new pools - pools built after 2003

## POOL FENCING NOTES FOR POOLS BUILT AFTER 2003 (NEW POOLS)

The following notes provide information on general requirements for a swimming pool barrier to comply with the modified Australian Standards and may assist in clarifying the work required.

### General:

To provide flexibility the modified Australian Standards allow a number of different solutions to be used to achieve a compliant swimming pool barrier. As there may be other options available, pool owners are encouraged to seek advice from industry specialists such as fencing manufacturers, building consultants, builders or fencing contractors.

### Balcony: reference - AS 1926.1 clause 2.16

Where a balcony projects into a pool area and the distance from the floor of the balcony to the pool surround is less than 2.4 meters, the balcony shall include a balustrade which meets with the requirements for a compliant pool fence as per AS 1926.1.

### Balcony to top of pool fence/pool gate: reference – AS 1926.1 clause 2.1

Where a pool fence is adjacent to or below a balcony the distance from the top of the pool fence to the balcony is required to be 1.2 meters or greater.

### Child resistant doorset: reference - *Swimming Pool Safety Act 2004*

Doors cannot be used as part of the swimming pool barrier for new pools installed or constructed after 1<sup>st</sup> January 2003.

### Above ground pools: reference - AS 1926.1 clause 2.15

Above ground pools are required to be fenced unless the walls of the pool have an *effective height* of 1.2 meters. Ladders are required to be fully isolated.

### Chainmesh fencing: reference - Swimming Pool Safety Regulations, clause 5.3

The effective fencing height shall be not less than 1.7 meters (measured from the inside if it is a boundary or dividing barrier). Chainmesh fencing is to include a strainer wire or a rail at the top and the bottom of the fence. Where chainmesh is a boundary or dividing barrier, please ensure a clear span of 1.2 meters from the inside of the chainmesh fence.

*(Refer to Figure 8 – Pool pump and equipment clearance on the inside of chainmesh) (Refer to Clarification of Other Chainmesh Requirements for more information)*

### Chainmesh bracing: reference - AS1926.1 clause 2.7

Rods, wires or tubular bracing that could be used as holds for climbing are required to be shielded or relocated to the inside of the fence. Please note:-

- *This requirement applies to all new chainmesh fencing.*
- *This requirement applies to existing chainmesh fencing where the fence adjoins a public place.*
- *This requirement is excluded where the existing chainmesh fence is a dividing barrier between adjoining premises and a dividing barrier notice (Form A1) has been provided.*

*(Refer to Clarification of Other Chainmesh Requirements for more information)*

### Fencing height: reference - AS 1926.1 clause 2.3

The *effective fencing height* shall be not less than 1.2 meters.

The effective height of "loop" type pool fencing is taken from ground level to the highest compliant part of the fence where the distance between adjacent vertical members does not exceed 100mm.

*(Refer figure 3 – Effective Height of Loop Top Fencing).*

The modified Australian Standards define a fence as any component that forms part of the intended barrier and includes walls, child resistant windows and balustrades on a balcony. The requirements as illustrated in *figure 1* apply to windows, balustrades and other components that form part of the intended barrier.

### Finish: reference - AS 1926.1 clause 2.12

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

### Gates and fittings: reference - AS 1926.1 clause 2.11.

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

**Self-closing device:** The modified Australian Standards require that all gates are 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.

**Latching device.** Gates are to be fitted with a latching device that will automatically operate on the closing of the gate and will prevent the gate from being reopened without being manually released.

**Location of latching device.** Latching devices are to be located at a height of no less than 1.5 meters above finished ground level and 1.4 meters above highest lower horizontal member. *(However the modified Australian Standards do allow other alternatives if this is not practical. Advice should be sought from industry specialists, as they may be able to recommend another solution such as shielding the latching device or relocating the latching device to the inside of the fencing).*

*(Refer figure 2 – Latch Release Height)*

**External hinges.** Hinges with a surface area greater than 10mm are required to be a minimum of 900mm apart with the distance from the top of the lower hinge to the top of the gate at a minimum of 1.1 meters.

*(Refer figure 4 – Horizontal Climbable Members)*

**Ground clearance:** reference - AS 1926.1 clause 2.5

The modified Australian Standards require that the height of any opening between the bottom of the fencing and the finished ground level shall not exceed 100mm. Temporary surfaces such as loose dirt, soft sand, mulch, gravel, pavers, rocks or similar are generally not suitable and would require compacting or be permanently fixed.

**Handholds or footholds - projections and indentations:** reference - AS 1926.1 clause 2.6

Projections from or indentations into the outside surface of fencing, or a combination of projections or 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 1.1 meters below the top of the fencing.

**Horizontal climbable members:** reference - AS 1926.1 clause 2.7

The modified Australian Standards restrict the use of fencing components that allow a handhold/ foothold for climbing. Where vertical members are spaced such that they provide clear openings of more than 10mm width, horizontal members shall be not less than 900mm apart. The top surface of the highest lower horizontal member shall be at least 1.1 meters below the effective top of the fence.

*(Refer figure 4 – Horizontal Climbable Members)*

**Horizontal climbable surfaces outside the fencing area:** reference - AS 1926.1 clause 2.3

Where a nearby surface that could be used as holds for climbing are located near the outside of the fencing, such surfaces shall be separated from the fencing by a distance of not less than 1.2 meters when measured from the top of the fencing. The outside of perimeter fencing is excluded from this requirement.

*(Refer figure 1 – External Clearspan)*

**Horizontal climbable surfaces inside the fencing area:** reference - AS 1926.1 clause 2.9

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

**Horizontal metal clad fence** (non-cyclonic areas)

Horizontal metal clad fencing such as corrugated iron and “trimdeck” do not meet the requirements of AS 1926.1. However horizontal metal clad fencing will be approved under Section 12 of the *Swimming Pool Safety Act* provided the fence has an effective height of at least 1.5 meters and meets all other requirements of AS 1926.1.

**Shielding to horizontal metal cladding** (walls and fences)

When a pool fence is located against a horizontal metal clad fence or wall, non-climbable shielding is required to be fitted to the horizontal metal cladding. The shielding is to be fitted on the inside and outside of the pool fence. This only applies in situations where the pool fence is lower than the metal cladding.

*(Refer figure 4 – Horizontal Climbable Members)*

**Wooden lattice** mesh fencing is required to meet the strength and rigidity requirements specified in the AS 1926.1. The effective height shall be not less than 2.4 meters (framed). Where approved for use, lattice must be sufficiently rigid and adequately fixed to the frame.

**Vertical members:** reference - AS 1926.1 clause 2.10

The clear space between any adjacent vertical members shall not exceed 100mm at any point.

**Windows:** reference - AS 1926.1

Where a window forms part of a barrier and is less than 2.4 metres above the pool surround, the openable section of the window shall be totally covered by bars/mesh screen that meet requirements specified in the AS 1926.1. Where approved by the Swimming Pool Safety Authority windows may be used without bars/screens provided that the window is fixed in such a way that that it will only open sufficiently to meet the strength and rigidity requirements specified in the Australian Standard

**Dividing Barriers** - Clause 51 of *Swimming Pool Safety Act 2004*

Subject to subsection (2) any expenses associated with constructing, altering, repairing, replacing or maintaining a dividing barrier required for the purpose of complying with the Act or the Regulations, or to enable the swimming pool to be registered, are to be borne by the owner of the premises at which the pool is situated or relates to.

**Boundary fencing:** reference - AS 1926.2 Appendix A

The onus on maintaining a swimming pool barrier rests with owner of the premises at which the swimming pool is (or is to be) located. (*Swimming Pool Safety Act clause 51- Dividing barriers*). The possibility that the boundary fence used as pool safety barrier may be compromised by the actions taken by an adjoining property owner may be taken into consideration. In these situations owners may wish to consider the installation of a separate pool fence.

*Swimming Pool Safety Act 2004 – 10(1)(b)* if there is a dividing barrier (perimeter fencing) – the owner of the premises at which the swimming pool is situated must, in accordance with the Regulations, give the owner/s of the adjoining premises the Notice prescribed by the Regulations - (A1 – Dividing barrier Notice).

*NT Fences Act-1993 and Building Permit.* Where the owner of a pool or spa decides to use a boundary fence as part of the swimming pool barrier, alterations or additions to the adjoining boundary fence should be discussed with the neighbour prior to commencing work to avoid a breach of the *NT Fences Act-1993*. Similarly, proposed changes to an existing fence that increases the wind loading on that fence may require a building permit and should be discussed with a registered building certifier or a structural engineer prior to commencing work.

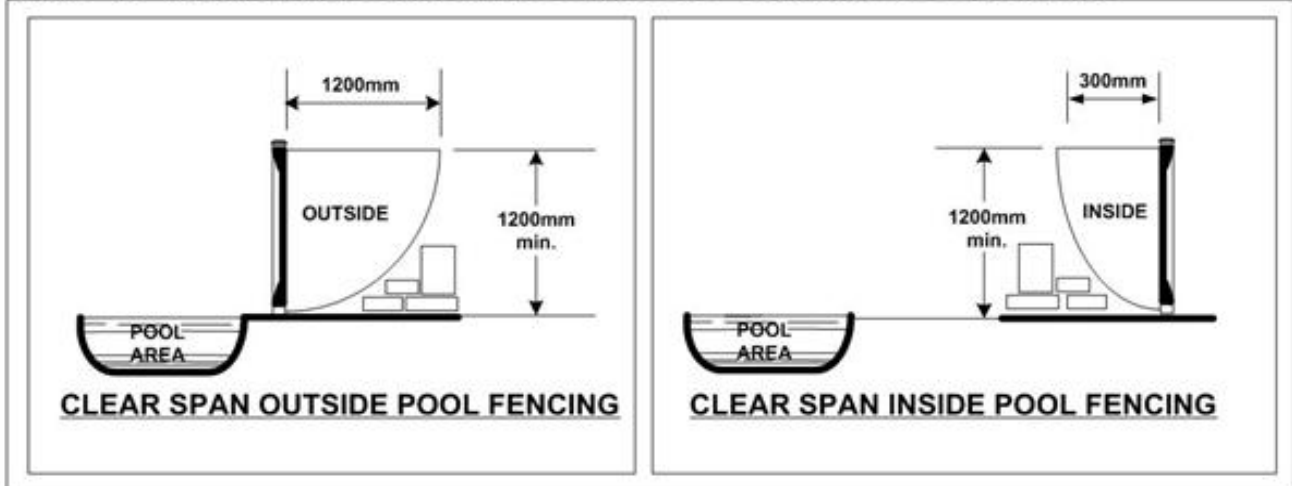
Requirements specified by the modified Australian Standards are the minimum required. As surroundings change over time it is recommended that fencing and building components exceeding the minimum requirement are selected. For example, some manufactures recommend that latches are installed 50mm-100mm higher than the minimum requirements and that fence panels are installed with a maximum gap above the ground of 75mm instead of the maximum allowable 100mm. This provides an additional safety factor and reduces the prospect of a non-compliant pool fence.

**For more information on fencing or to book a FREE advice visit contact:**

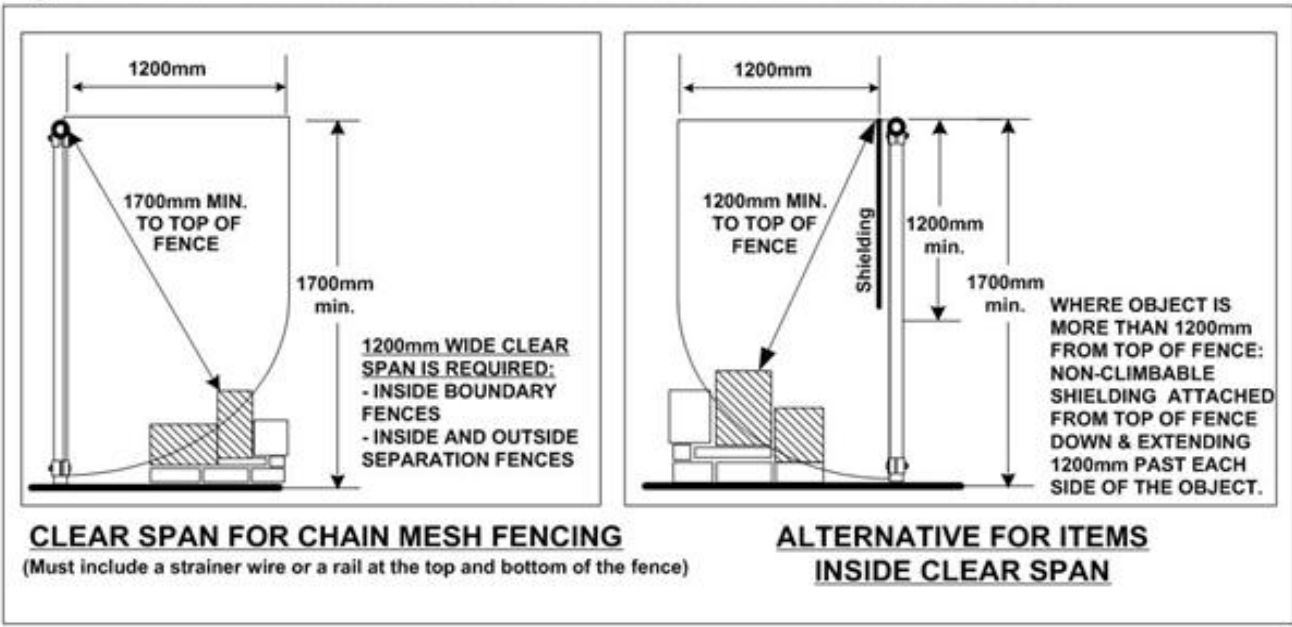
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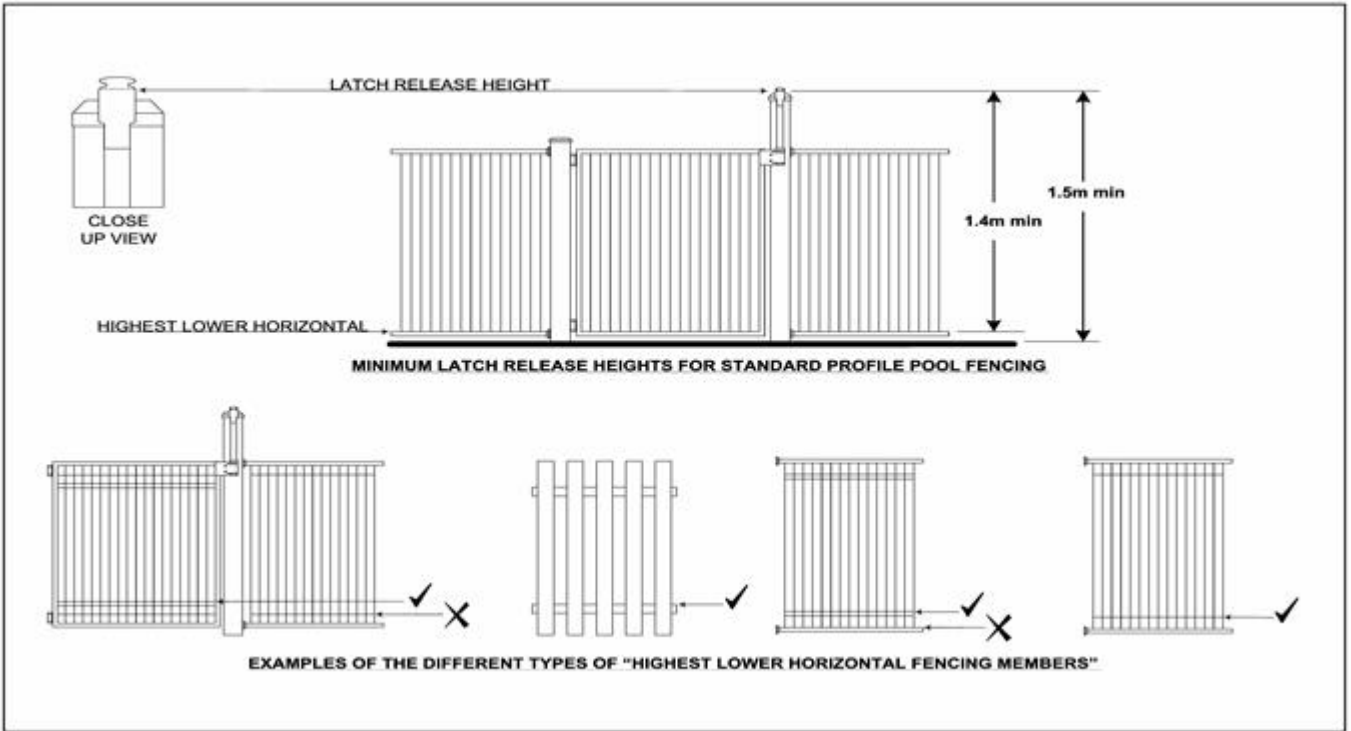
**Figure 1A - HORIZONTAL CLIMBABLE SURFACES - SWIMMING POOL FENCING**



**Figure 1B - HORIZONTAL CLIMBABLE SURFACES - CHAIN MESH FENCING**



**Figure 2 - GATES AND FITTINGS**



**Figure 3 - EFFECTIVE HEIGHT OF LOOP TOP FENCING**

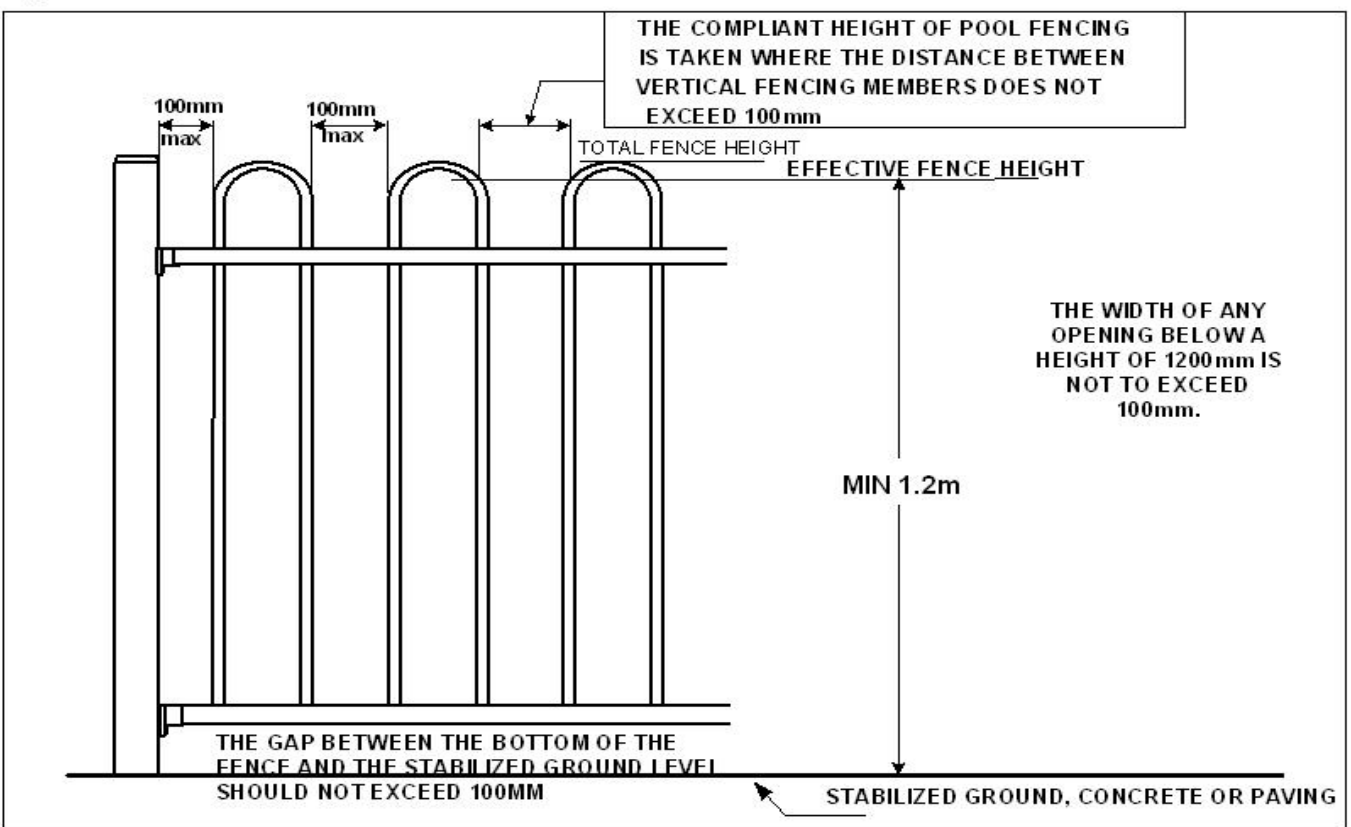


Figure 4 - COMMON SHIELDING OPTION (Where pool fencing meets chainmesh)

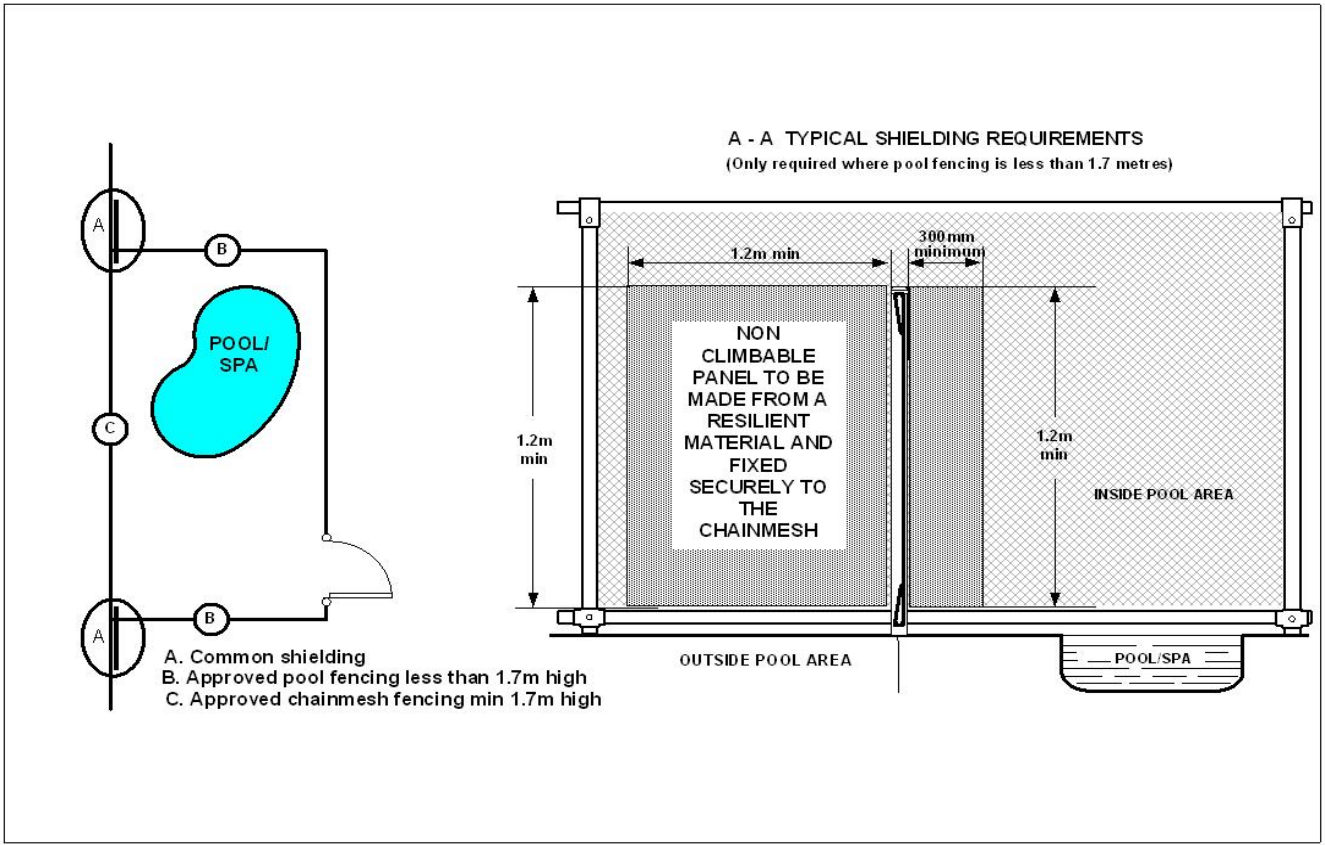


Figure 5 - STAGGERED POOL FENCING

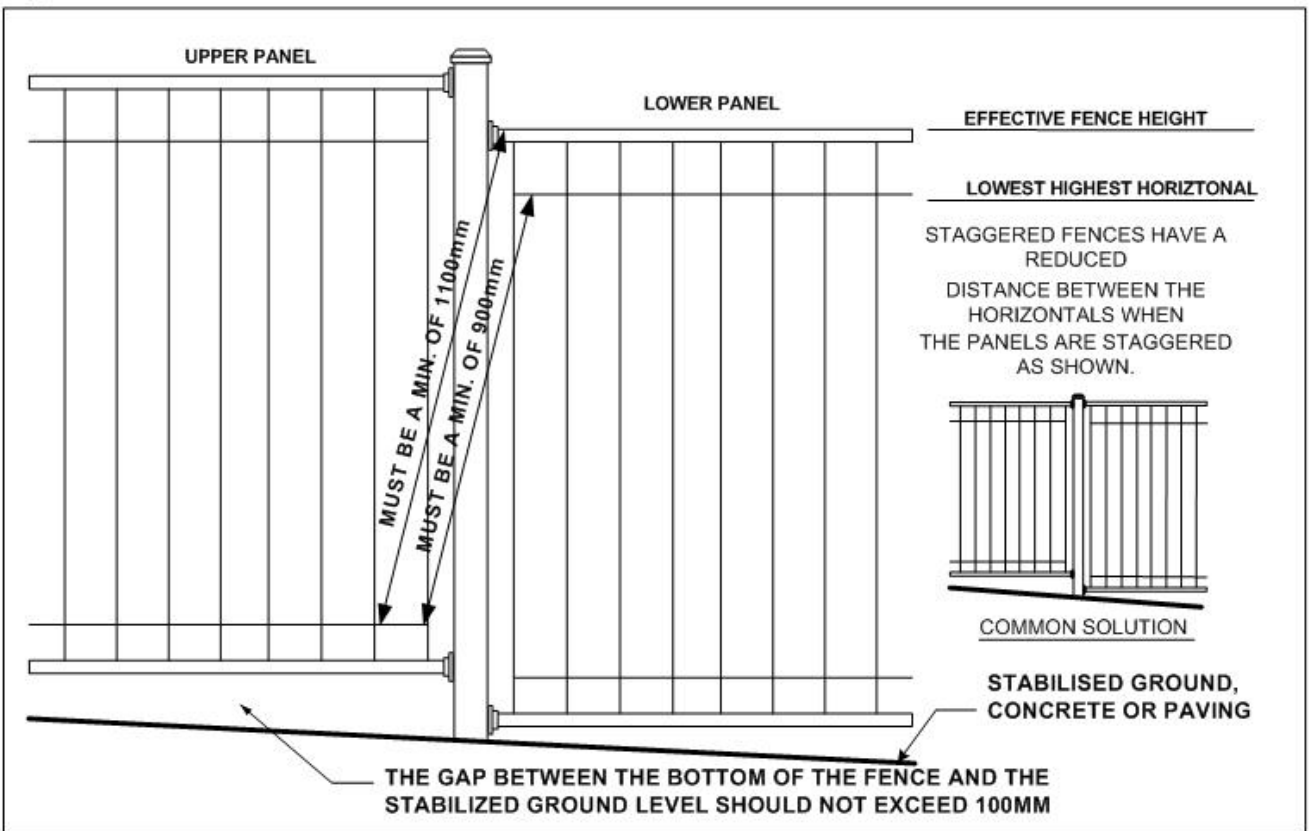


Figure 6 - STANDARD FENCING PROFILE

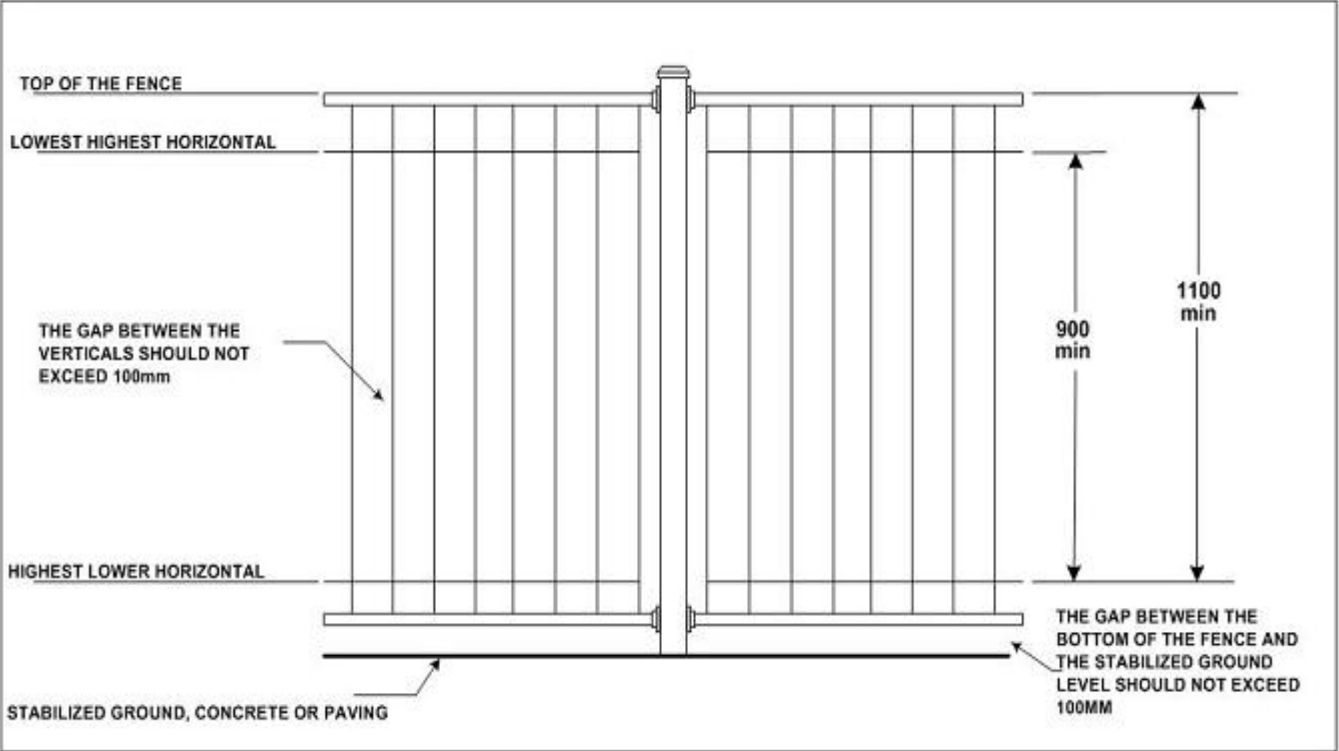
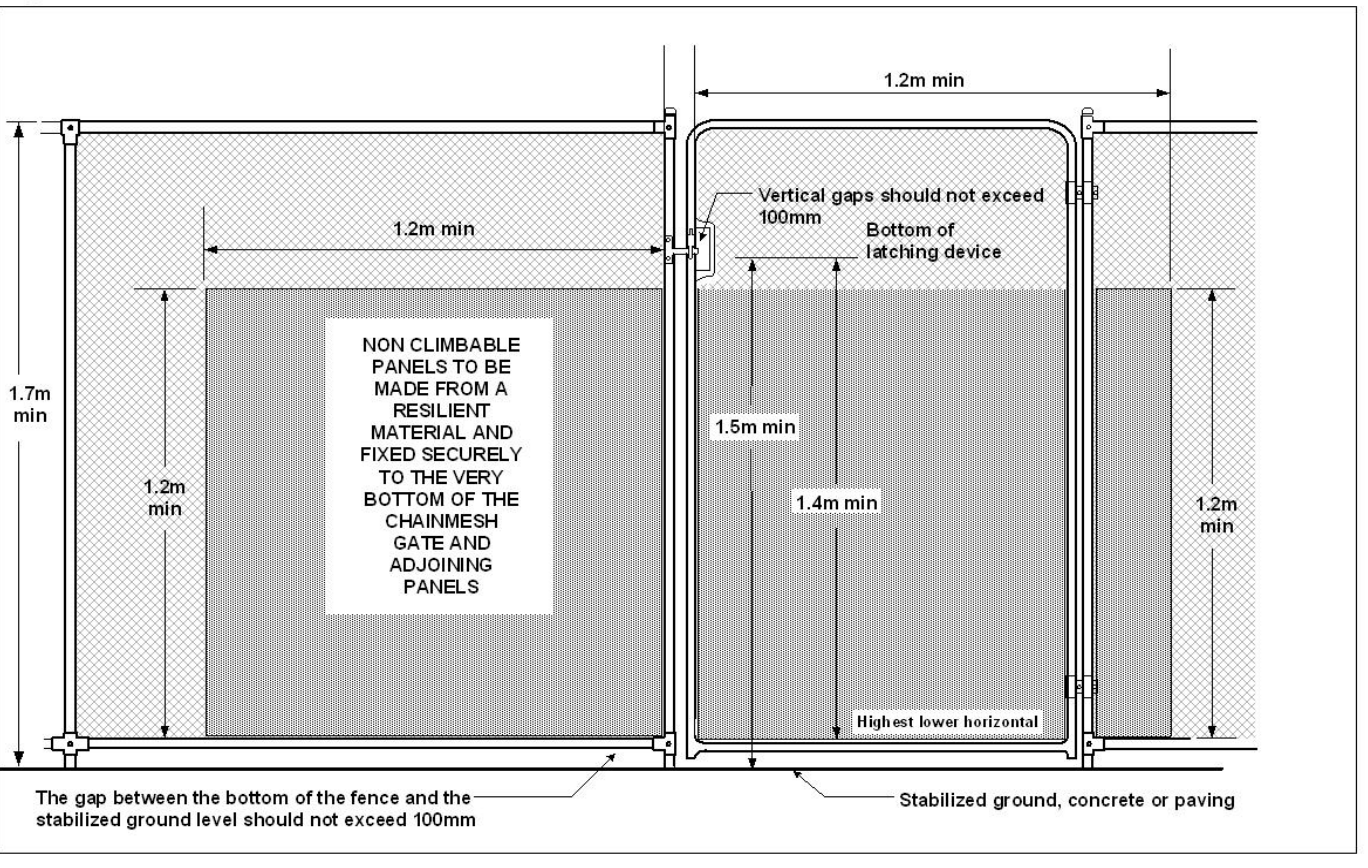


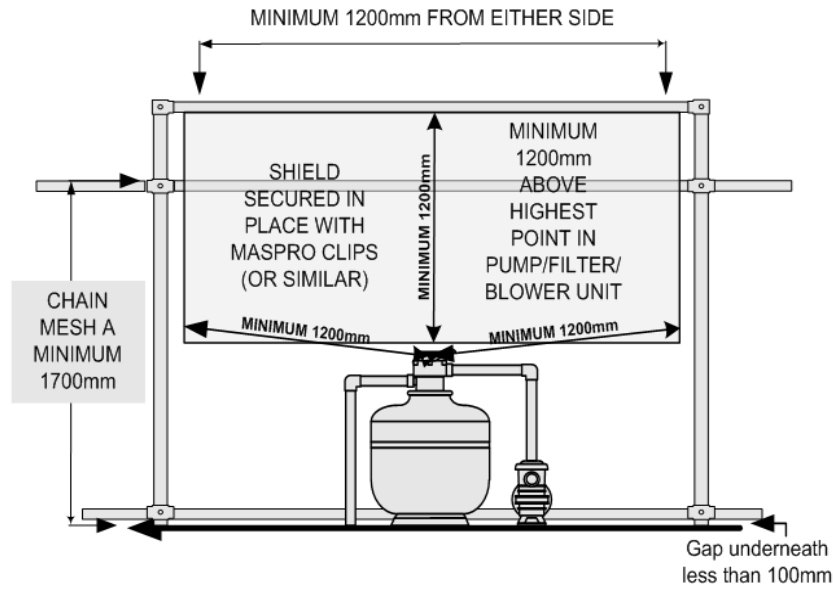
Figure 7 - CHAINMESH GATE REQUIREMENTS



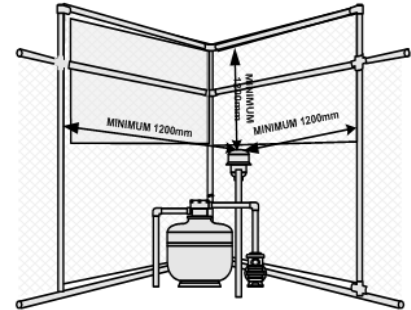


**Figure 8 - PUMP AND FILTER CLEARANCE, INTERNAL OF CHAIN MESH BOUNDARY FENCING**

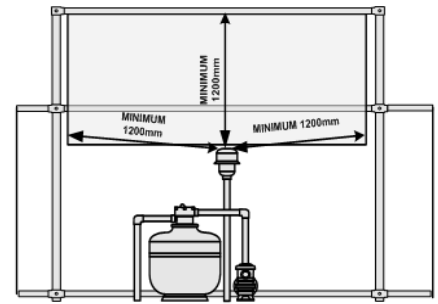
"FIGURE 8" ONLY RELATES TO UNITS WHICH FALL WITHIN A 1200mm CLEARSPAN - SEE CHAIN MESH CLEARSPAN IN "FIGURE 1"



**CORNER SHIELDING REQUIREMENT**



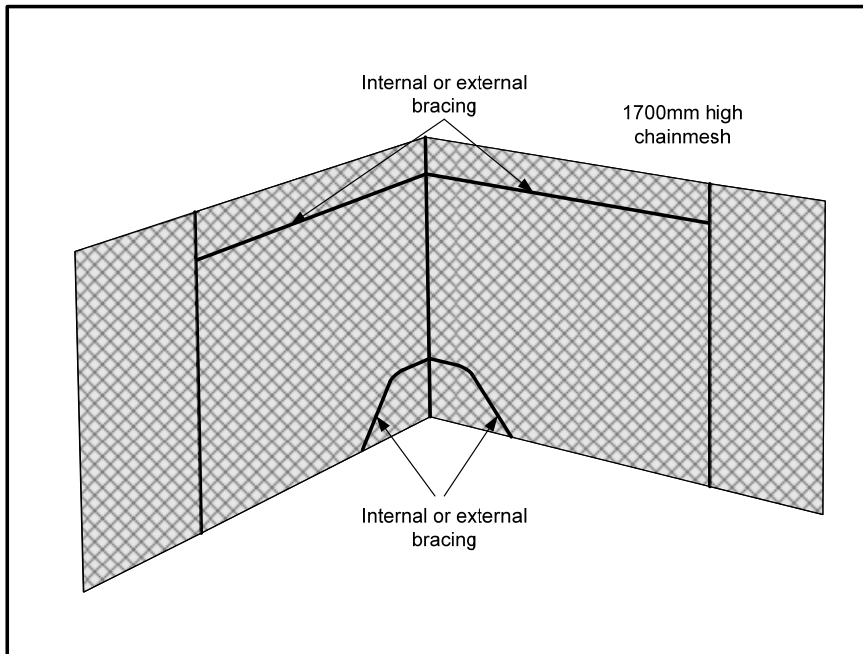
**SPA BLOWER SHIELDING REQUIREMENT**



## CLARIFICATION OF OTHER CHAINMESH REQUIREMENTS

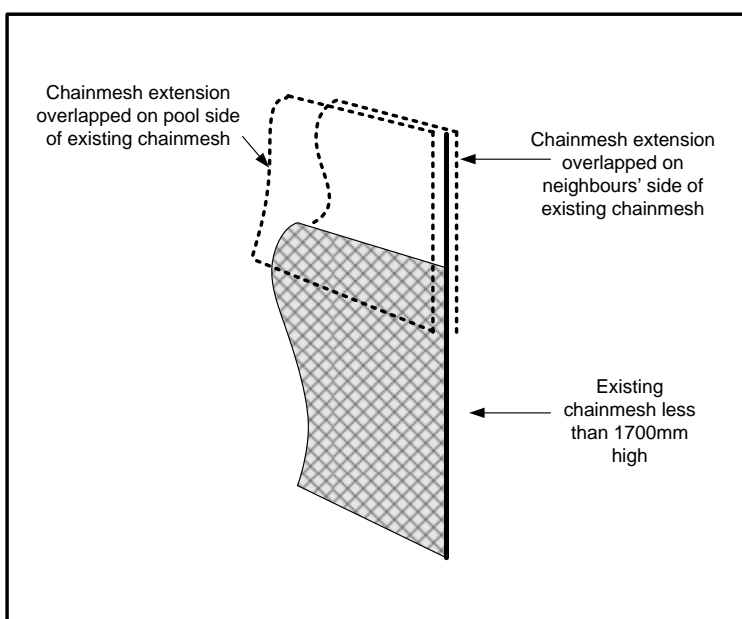
### Chainmesh Bracing

- Internal and external bracing on existing chainmesh fencing are now considered for the Non Standard Safety Provision (NSSP) including angled bracing on older style chainmesh fences.

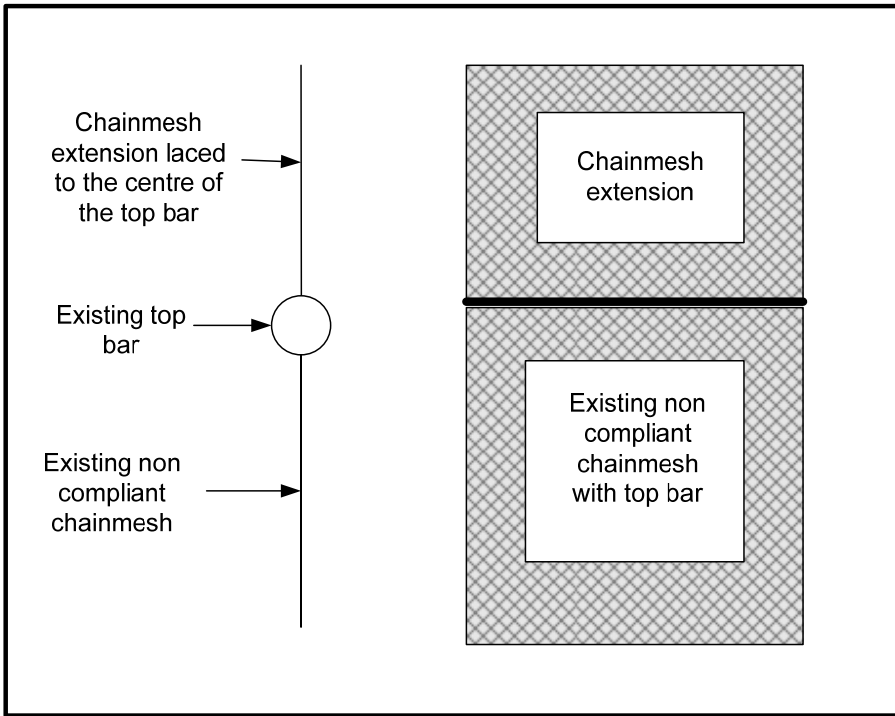


### Chainmesh extended by overlapping

- When a chainmesh fence has been extended in height by overlapping the existing chainmesh with a chainmesh extension using Maspro clips to attach the join; it is now considered as NSSP regardless of which side the overlap is on. Where possible the overlap should be on the outside.

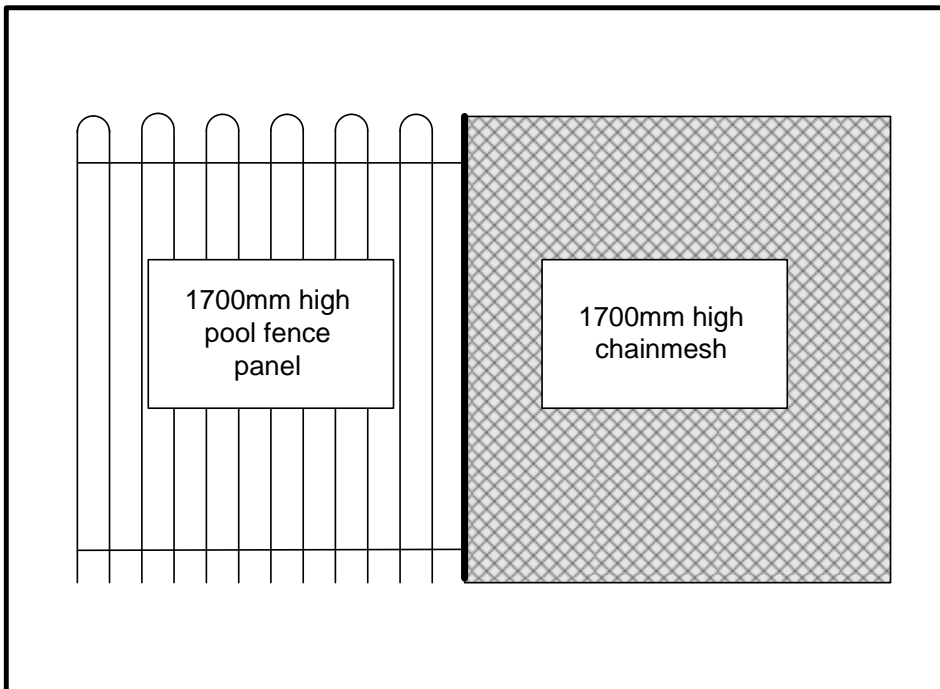


- If a non compliant (e.g. 1400mm) chainmesh fence has a top rail and is required to be extended to the required 1700mm in height, the top rail is required to be removed unless the chainmesh is laced in the centre of the top rail.

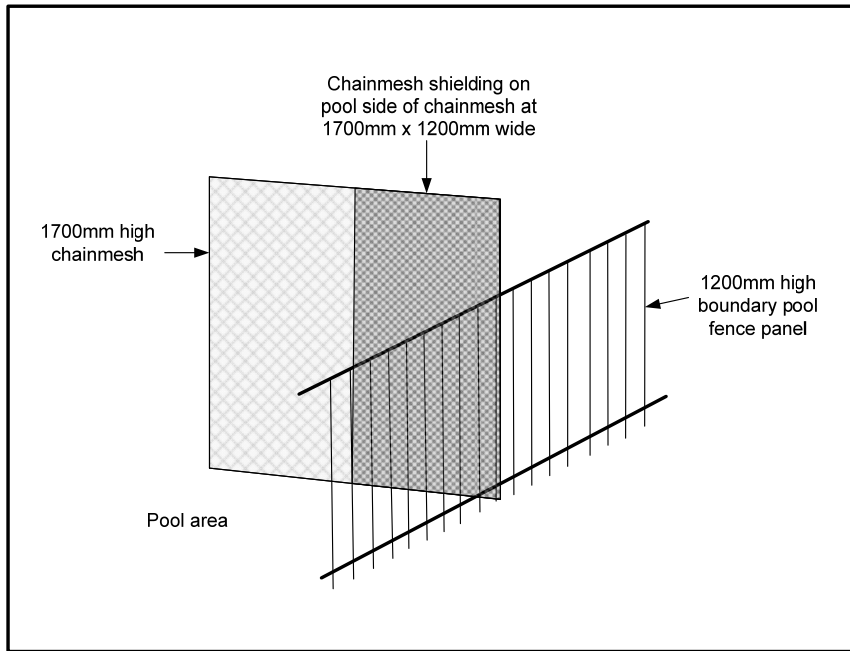


**Pool fencing adjoins chainmesh on the boundary or dividing barrier**

- If pool fencing adjoins chainmesh in a straight line the first 1200mm of pool fencing is required to be a minimum of 1700mm high from ground level with horizontal members of the pool fence as far apart as possible (no mid rails).

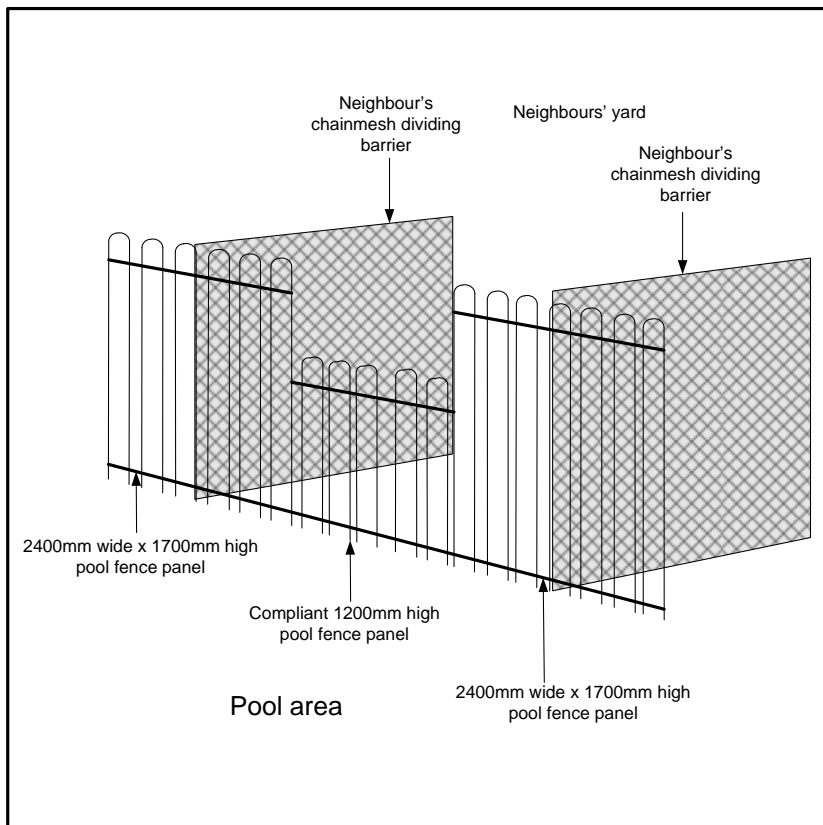


- If a boundary pool fence (less than 1700mm high) adjoins a chainmesh dividing barrier in a right angle, the chainmesh is required to be shielded using snake and mouse mesh or a similar product a minimum of 1200mm from the pool fence and as high as the chainmesh fence.



**Pool fence boundary adjoins chainmesh dividing barriers**

- Where a boundary pool fence adjoins neighbours chainmesh the pool fence panels are required to be extended to a minimum 1700mm for a minimum 1200mm either side of the adjoining chainmesh fences.



**Chainmesh on the outside of solid vertical metal cladding (parallel)**

- Chainmesh is acceptable on the outside of solid vertical metal cladding providing that the chainmesh and the solid vertical metal cladding are of equal compliant height (1700mm). Preferably the access between the two fences is blocked. If there is less than a clear 1700mm drop from the inside of the vertical metal cladding (i.e. pool pump equipment on the inside) snake and mouse mesh is required a minimum of 1200mm high from the top of the chainmesh down and extending 1200mm past the end of the vertical metal cladding (or pump equipment).



**Shielding on internal chainmesh**

- On an internal chainmesh fence the shielding is required on the outside of the chainmesh (on the outside of the pool barrier).

