



Product: Swish SelfClose™ mechanism

Subject: Restricting access to residential pools
NZBC F9 AS/1 4.2.1

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Relevant extract from NZBC F9 / AS1 4.2

4.2.1 Doors in a building wall that provide access into the immediate pool area shall be single-leaf doors that are not more than 1000mm in width. These doors shall be side-hinged or sliding.

Interpretation and solution

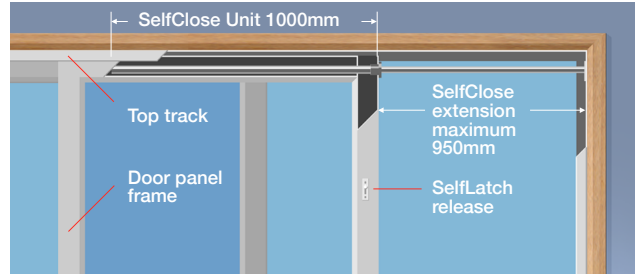
The above 1000mm width can only be intended to apply to a door aperture limit (door open). With a door panel closed and safety-latched, its dimensions are irrelevant. Apertures may pose potential risk, not door panels. Further, there is no logic to support a belief that a narrow opening is safer than a wider one in the context of pool safety for small children.

In any event, the intention of NZBC F9 / AS1 4.2.1 can be met without changing the physical dimensions of the panel. Swish SelfClose restricts slide door apertures to 950mm maximum regardless of panel dimensions. Other panels in a door-set are unaffected and remain closed. This has been a standard product feature since 2005.

Footnotes on sliding door structure and function

- Optimal width / height ratios of sliding door panels are essential for performance and reducing stress on wheelsets and structure. For optimal stability, widths of sliding door panels should be a minimum of 55% to 60% of their height.
- With slide door panels commonly 2000mm to 3000mm high (typically 2400mm), enforced restriction on panel width to 1000mm invites premature deterioration of function and safety performance.
- A longer slide panel wheelbase is essential for directional stability, balanced load distribution and reduced wear. A short wheelbase causes momentary tipping in the direction of movement and full panel load on the lead wheel. The condition worsens as wheelsets and structure deteriorate with each use.

Right Multiple panels in a door-set form an impenetrable wall for small children when closed and safety-latched. With a SelfClose constraint on the first opening panel, other panels in the series will not open in sequence, and are effectively still part of the wall. SelfLatch installed on the lead panel requires two-handed operation beyond the reach, strength and co-ordinative ability of small children.



Cut-away scale drawing showing SelfClose installation and function in constraining a sliding door aperture regardless of door panel size.

SelfClose™ Product information

Description Self-closing device for residential pool-access sliding doors, compliant with F9 / AS1 4.2.2a and 4.2.3

Purpose Prevent access from house to home pool by unsupervised children aged to 5 years by ensuring slide door panels return to closed, self-latched position after use.

Operation Manual-open / auto-close of slide door panel. Always used in conjunction with SelfLatch device to comply with F9 / AS1 4.2.2b, 4.2.2c and 4.2.3.

Installation Horizontally within door frame or vertically in décor-matched duct attached to door frame.

Construction and function

Tensioned telescopic dynamics contained in 1000mmL stainless steel tube (horizontal system) or aluminium alloy drawn tube (vertical system).

Restriction on opening width

Regardless of door panel width, typical travel of telescopic action is 850mm to 950mm depending on tension adjustment required to achieve efficient, safe door slide performance. Compliant with intention of F9 / AS1 4.2.1.

