

## OPEN & SHUT CASES

Case studies, news  
updates and home-pool  
safety problem-solvers  
from Swish Automation.  
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## Pool safety news selections: Sliding door topics

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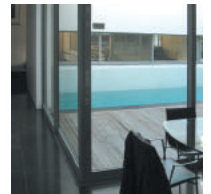
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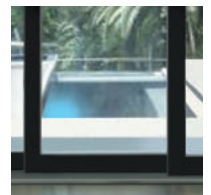
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**Note:** The pages of this compilation were originally prepared as stand-alone documents to answer questions on various home-pool safety topics at different times. It has been necessary to repeat some essential information in each issue, such as current legal requirements for pool safety compliance and the vital importance of constant adult supervision of small children in or near water.



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## Design criteria for child-resistant doors to the home pool zone

**For home pool safety, provision for fitting childproof devices to doors to the home poolzone has been available since 1987. Why was it overlooked for so long, and are today's solutions all fit for purpose?**

The Fencing of Swimming Pools Act 1987 – aimed at preventing unsupervised access to home pools by small children – came into being about the same time as an increasing trend towards 'open-wall lifestyle architecture', where indoor and outdoor home entertainment areas began to merge and pool areas became an integral part of home design.

Fencing, the key word in the Act's title, was interpreted by most authorities as the only safety compliance solution to the problems of so many very different pool-zone environments. Already the least aesthetically desirable option, it was also more recently recognised that it offered no more safety guarantees than more attractive alternatives.

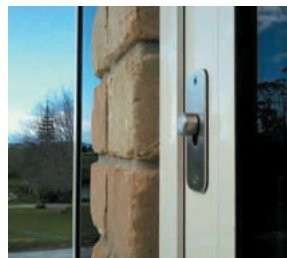
### A fresh look at alternatives: the door solution

Fencing may have a place in some home pool environments, but where doors already formed part of a poolside barrier, there was provision to equip them with child-resistant devices – and opportunities for efficient solutions that were easier on the eye.

Prior to 2005, despite consumer demand, dedicated safety devices to perform the required self-closing and self-latching function for poolside doors were generally unavailable. As a benchmark for its child-resistant, safety-compliant design, Swish adopted the stringent standards required for fire-safety doors in its design criteria: performance, reliability, durability, good looks and solution flexibility.

### Designed for purpose, engineered to perform

New Zealand's nationwide maritime climate is invasive and corrosive, taking its toll on all but the most durable outdoor surfaces. Swish determined to meet it with materials and engineering to match – marine-grade stainless steel for exterior componentry, stainless steel and high-grade aluminium alloy for concealed mechanisms, high-density composite materials for bearings and guide surfaces.



*Left: For superior performance, Swish selects marine-grade stainless steel for all exterior componentry.*

*Right: Robust engineering still has respect for décor. This stainless-steel horizontal SelfClose™ mechanism disappears into the sliding doorframe in the closed position.*

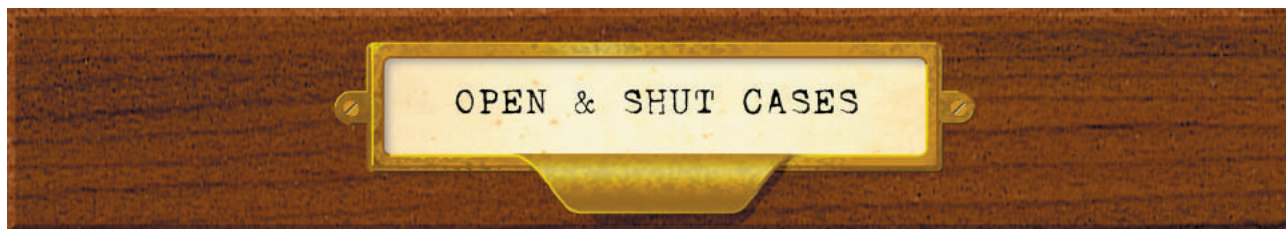


### Future trends

Trends continue towards more extensive glazing in architectural design. Energy-saving building codes will demand heavier door profiles for double-glazing. In 2005 the average weight of a slide-door panel was about 50kg, but has since almost tripled.

Swish SelfLatch/SelfClose™ systems have a proven record of being up to the task, with successful solutions for door panels up to 160kg. In an 8-year history of installations, the systems to carry these demanding loads have required little or no ongoing maintenance to maintain performance.

A trend towards open-wall lifestyle architecture and larger door panels will demand robust safety systems for the pool zone. For those few projects where SelfClose/SelfLatch systems may not be practicable, for example, for bifold doors and very heavy door panels, Swish have safety-compliant solutions to fit. ■



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## The heart of a solution for child safety in the home pool zone: SelfLatch

**This unobtrusive device is central to a range of child-resistant home pool safety solutions.**

To be truly child-resistant, doors directly accessing a home pool area are only safety-compliant when self-closing and self-latching.

Two devices are required to perform the task, with the larger, more complex self-closer often considered to be the most important.

The heart of the matter is actually the self-latching device. Correctly installed, this is the only part of the safety system which turns the door into a child-resistant barrier.

Self-closers and alarms, while very much a part of fully integrated safety systems, are purely safeguards against human error. They compensate for two basic human foibles – needs for greater convenience, and tendencies to forgetfulness.

Self-latching devices are not new – indeed, they're a standard feature of nearly every hinged door. But almost 90% of doors between house and pool are sliding panels, for which no self-latching



device existed until 2005, when Swish developed New Zealand's first dedicated self-latching device for sliding doors. Installed at least 1500mm from floor level, SelfLatch has become the core safety component for pool entrances, not only for sliding doors, but many other door types.

While Swish SelfClose devices only provide the supporting role for SelfLatch, they remain the most complex part of any installation. SelfClose devices must be able to operate a vast range of door types, panel weights and configurations – challenges which they are able to meet with stylish functionality.

The DoorMinder system, a combination of SelfLatch and audible alarm, may be used where door closers are, for various reasons, impracticable (O&SC7, July 2013).

While it exceeds NZS 8500:2006 and meets FoSPA intentions, DoorMinder requires pre-approval from territorial authorities, whose interpretations of the current 1987 law tend to vary by region.

### The devil is in the detail

Although door-set design may be a relatively minor aspect in the overall scheme of home planning, the importance of child safety around the home pool brings it sharply into focus. The uniqueness of every home pool environment adds its own challenges.



*Left: Releasing SelfLatch is a two-handed action beyond the co-ordinative ability of adventurous young hands, and out of reach at 1500mm above floor level. SelfLatch is operable from both sides of the door.*

Home-pool safety compliance, while often a frustrating process to achieve, has child-safety objectives every parent and pool owner must respect. To achieve it, forward planning – and an eye for detail – from architects, builders and door fabricators, will save costly duplicated effort later.

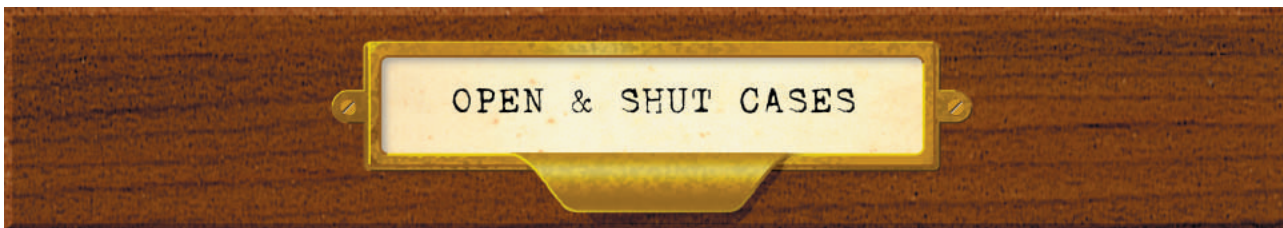
### In a nutshell

Wherever doors to the home pool exist or are specified, child safety is paramount. SelfLatch is the core element of several safety solutions:

1. SelfLatch/SelfClose
2. DoorMinder system (SelfLatch with alarm)
3. SelfClose and DoorMinder (three safety levels)

These systems are fit-for-purpose and the finest available. Yet, nothing is 'fail-safe'. There is no substitute for adult supervision of small children around water – pool, pond, lake, river or seaside. ■





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## Self-closing, self-latching door solutions meet pool safety compliance with style

**Innovative Swish SelfLatch/SelfClose systems blend function and form for practical, attractive alternatives to unsightly barriers between house and pool**

### Safety first with visual appeal

Once again, Swish has shown that pool safety compliance – designed to prevent unsupervised access by small children into domestic pool areas – doesn't have to exist at the expense of aesthetic appeal or poolside lifestyle.

In fact, Swish SelfLatch/SelfClose door systems are literally out of sight – and able to meet safety compliance challenges for the most diverse home pool environments and door types.

Low-profile vertically-mounted door systems or hidden horizontal systems are attractive alternatives to fencing between house and pool.

They meet safety standards under NZS 8500-2006, the Fencing and Swimming Pools Act 1987, and current 'by exception' conditions specified by territorial authorities. Interpretations of the law

often vary from region to region. To ensure compliance, Swish recommend that you seek pre-approval for your home pool safety system well prior to installation, as early as possible in the planning stage.



*Right: For 35mm and 40mm+ door profiles, a horizontally-mounted SelfLatch/SelfClose system combines aesthetics and practicality with a concealed device inside the door frame. SelfLatch/SelfClose systems can be installed during door fabrication or retrofitted.*

### Robust engineering to match the task

Door architecture is changing. Trends to larger, heavier glass panels and double-glazing call for robust door profiles. Traditional 44mm timber or 40mm-plus aluminium framing is becoming the new standard, with slide doors the most popular choice.

With door engineering to handle the task – including stainless steel or brass track and matching double-bogy wheels – combined with precisely vertical and level installation, Swish SelfClose systems handle typical slide-door loads with ease:

#### 40mm+ aluminium or 44mm timber joinery

Up to 150kg per panel      Horizontal system

#### 35mm aluminium joinery

Up to 110kg per panel      Horizontal or vertical system

#### 30mm aluminium joinery

Up to 60kg per panel      Vertical system

Home-pool safety compliance can be achieved with robust functionality and good looks – without unsightly barriers or intrusion on poolside lifestyle.

With child safety first, Swish SelfLatch/SelfClose systems also demonstrate that it can happen almost invisibly. ■



*For 40mm-plus profiles, Swish SelfLatch accepts stylish HB (above) or Chant recessed door latches on both sides of pool access doors at the required 1500mm above floor level.*



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## Safety compliance for unusual home-pool architecture

No two home-pool environments are exactly alike, and each presents its own unique challenges when it comes to achieving pool safety compliance.

With the aim of preventing unsupervised access to home pool areas by small children, many home owners look to options other than unsightly fencing.

And the option of having self-closing and self-latching doors accessing the pool area doesn't have to mean installation of unsightly off-the-shelf surface-mounted mechanisms.

Smart solutions balance functionality, aesthetics and pool safety compliance in one.

Swish makes effective customised solutions so quiet as to be virtually invisible – even when faced with some unusual architectural challenges ...

### Case study: The L-shaped room

When is a door not a door? When latched and closed it effectively becomes part of a wall, as a recent pool-safety compliance challenge revealed.

In this case, sliding doors meet at the inside corner of an L-shaped room, under a cantilevered roof which is engineered to require no visible central support at the corner.

Interlocked when closed, each door depends on the other to form a secure barrier. Arguably, it could be considered that both doors require self-closing and latching mechanisms to be safety compliant...

Carefully customised design solutions are needed to achieve safety compliance for out-of-the-ordinary home pool environments



*This angled sliding door configuration makes the most of linking pool zone and interior. The Swish SelfLatch/ SelfClose system is concealed in the right slider panel. In the closed position, the left slider is immovable, and remains so even when the right panel is opened to access the pool zone.*

However, a Swish horizontal SelfLatch/SelfClose system, concealed in passage door but anchored to the adjoining panel, effectively transformed the latter into a fixed-panel, floor-to-ceiling window.

With the unique configuration of this system, only one panel was required to be self-closing and latching to achieve pool safety compliance.

Importantly, the uncluttered continuity of indoor-outdoor aesthetics and functionality was preserved without obtrusive fencing or mechanisms – a perfect match of safety first with style. ■

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*For narrow-profile early aluminium joinery, SelfLatch/ SelfClose systems in surface-mounted horizontal ducts are hardly detectable against the existing joinery.*

### Case study: Older aluminium doors

Older aluminium sliding doors typically betray their presence with their narrower profile and mitred corner joins. They don't make them like that any more, but they are still a feature of many a New Zealand home pool area.

For pool safety compliance, fitting pool-access doors with self-closing and latching systems is a preferred option. Many older sliding door profiles are too narrow to conceal the apparatus in the frame, but Swish has a tidy, visually appealing solution.

Swish SelfLatch/SelfClose systems are concealed in horizontal or vertical ducts which are surface-mounted to the doorframe. Colour-matched to the existing joinery, the subtle addition is barely noticeable against the existing door architecture. ■



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## Adapting pool-access timber doors old and new for safety compliance

Whether you're preserving period architecture or simply have a preference for timber joinery, pool safety compliance can be achieved with style

In the interests of child safety, if doors are the only barrier between home interior and pool zone, the Fencing of Swimming Pools Act 1987 (FoSPA) requires that they self-close and self-latch.

For most pool owners however, the concept of adding door security devices or pool fencing suggests little to preserve aesthetics – particularly if there's a need or preference for period architecture. The original door and window styles of older dwellings are intrinsic to their yesteryear appeal.

So it's good news that preserving original style – and offering a pool-safe environment – can be achieved with individually customised solutions.

It's even more reassuring to know that it can be achieved almost invisibly.



With no two home pool zones exactly the same, many present unique challenges – 'unusual' installations become the norm.

The ultimate objective is, of course, to prevent access of unsupervised children into the pool zone, in which Swish systems comply with FoSPA1987 and NZS 8500:2006. Swish systems continue to demonstrate, in architecture old and new, that this important goal can be achieved with style, even in exceptional circumstances.

*Top left: Constraints in the timber sliding door arrangement in this period-style poolhouse necessitated a surface-mounted system for a SelfLatch/SelfClose™ mechanism. Most Swish*

*systems can be fitted invisibly inside the door frame, but even this exceptional example is virtually undistinguishable in its surroundings.*

*Left: Tidy solution for a challenging timber sliding door arrangement: End view of the surface-mounted duct concealing a SelfClose™ system.*



Hidden SelfLatch/ SelfClose™ systems can be retrofitted to most older or modern timber door frames. Precision-engineered, marine-grade stainless steel componentry can be matched accordingly, ensuring smooth operation and long life.

*Left: In-frame SelfClose™ detail for a 3-panel, 4-metre-wide, stacked sliding door installation.*

*Below: Completely hidden safety componentry provides an uninterrupted, restful view of the pool zone. ■*

