

**Subject: Table of slide panel performances**

**Attn: Specifiers / Suppliers of aluminium joinery**

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**Panel  
 Slide  
 Efficiency  
 Tests**

**Objectives**

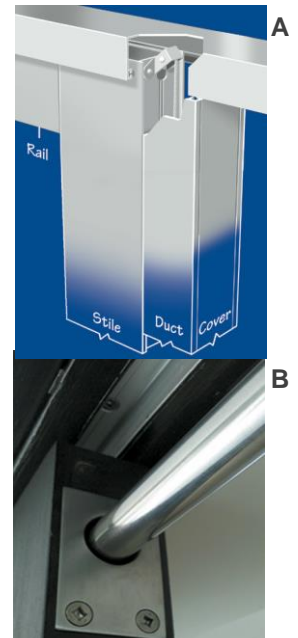
1. Confirm slide efficiency of pool access door panels to enable the fitting of Swish child-resistant safety systems per FoSPA 1987
2. Present a guide of acceptable standards for panel slide efficiency for architects, specifiers, manufacturers and builders to satisfy client needs for effective pool-safety barriers and legal compliance
3. Confirm that door-panel slide performance of manufacturer's showroom models can be achieved in realistic on-site environments

**Test environment**

1. On-site nationwide tests (sample 1685) by Swish Automation prior to system installation, involving all New Zealand door-set brands

**Findings**

1. For practical automation Swish recommend that the force required to slide a site-installed door panel should not exceed 3 kgf (29.4 N) before installation of the door-closing system (=)
2. With wheelset / track correction, slide efficiency of some panel samples (=) was improved to function well within the optimal slide performance range required for efficient automation (=)



**On-site panel slide performance guide for pool-owners, architects, specifiers, manufacturers and builders**

*Figures representing effort required to initiate panel motion are expressed in kgf (kg force) for general comprehension.  
 Newton conversion:  
 1 kgf ≈ 9.8 N*

Specification		Effort to initiate door panel movement: kgf					Specified SelfClose system
Joinery profile (alum.)	Panel weight	Standard wheels	Standard wheels	Quad wheelsets	Quad wheelsets	Quad wheelsets	
mm	kg	Standard track	Flush track	Flush track	Standard track	Reinforced track	
40	400	n/a	n/a	TBA	TBA	TBA	Horizontal
40	300	n/a	n/a	TBA	TBA	> 2.0	Horizontal
40	200	n/a	n/a	TBA	3.0	> 1.5	Horizontal
40	150	4.0	4.0	3.0	≈ 2.0	≈ 1.0	Horizontal
35	110	3.5	3.5	< 2.0	< 1.5	< 1.0	Horizontal
35	100	3.0	3.0	> 1.0	< 1.0	< 1.0	Horizontal
35	80	≈ 3.0	2.0	≈ 1.0	< 1.0		Vertical
35	60	≈ 3.0	1.0	< 1.0			Vertical
30	50	≈ 3.0	< 1.0				Vertical

- Optimal range of effort to initiate movement
- Recommended maximum practical effort to initiate movement
- Impractical for automation until wheelsets / track upgraded

- Double-glazed
- Double-glazed

**Purpose**

Modify doors between house and home pool into effective barriers against access by unsupervised children aged to 6 years, in compliance with the Fencing of Swimming Pools Act 1987.

**Statutory specifications**

1. SelfClose™ (A) and / or (B) devices (above) installed to self-close the panel from open positions ≥ 150mm to the closed self-latched position.

**Approvals**

Since April 2005, Swish Automation has installed over 2000 FoSPA-compliant, TA-approved pool access safety systems in New Zealand

