

Random glass explosions prompt safety warning from WFAANZ

A spate of toughened glass shower screens, pool fences and balustrades spontaneously exploding in homes across the country has prompted the Window Film Association of Australia and New Zealand (WFAANZ) to issue a safety warning to homeowners.

In 2017 two different Victorian apartment blocks experienced exploding balcony balustrade panes. In Perth last June, a shower screen suddenly shattered while a four year old boy was taking a shower. Similarly, a Sydney mum called the ambulance in September 2016 after a shattered shower screen cut her three month old baby's face. In Sydney in January two sisters, one eight months pregnant, were sitting next to a pool fence when it suddenly shattered. Shoppers at Robina Town Centre in Queensland were startled when a shopfront window unexpectedly exploded last year¹.

Apart from physical impact or damage to glass edges, the most common cause of glass explosions in toughened (tempered) glass is a phenomenon called 'Nickel Sulphide (NiS) inclusion'. *See break-out box on page two for more information.*

To protect family, friends, guests and even passers-by from spontaneous glass explosions, WFAANZ suggests the application of a safety film, which essentially creates a membrane that holds the glass together if it shatters.

Glass with applied safety film can be brought up to Grade A safety standard under Australian / New Zealand Standard AS/NZS 2208:1996, *Grade A safety glass in human impact situations*. It is a very tough, clear polyester film less than 1mm thick with a safety-strength adhesive. The combination of film and adhesive helps hold the glass together if it breaks, so instead of pieces falling onto persons or property, they remain stuck to the film.

Ally Cronan, WFAANZ President, said, "The recent incidents of random glass explosions are alarming. While toughened glass is designed to fragment into small cube-like pieces when broken, it can still pose a serious injury risk as the cubes can 'clump' together and sharp edges can be present.

"There is no way of predicting which installed products in your home could fail," Ally continues. "When it comes to glass, it's best to err on the side of caution because the risk of injury to anyone nearby is so extreme. Safety film presents a permanent, invisible and cost-effective solution to the unpredictable and dangerous threat of toughened glass explosion."

.../2

¹ Link to story and footage of the [exploding glass balustrades in Carlton and Brunswick, Victoria, 2017](#)

Link to story regarding the [Perth shower screen incident, June 2017](#)

Link to story regarding the [Sydney shower screen incident, September 2016](#)

Link to story regarding the [pool fence explosion in Sydney, January 2017](#)

Link to story regarding [shopfront window explosion in Robina, June 2017](#)

(2)

Buildings around the world use safety film to help protect against broken glass from bomb blast, extreme weather or spontaneous explosion. It can be applied to any smooth glass surface, internally or externally, and comes in a range of different colours and thicknesses (the thicker the film, the stronger the substrate it's applied to becomes). Solar control, UV reduction safety film is also available.

Professional window film installers who are members of WFAANZ abide by a strict code of practice, and can offer specific advice for each home's unique safety requirements. For further information or to find a local WFAANZ member please visit www.wfaanz.org.au.

...ENDS...

For further information please contact:

Ally Cronan

WFAANZ President

02 9401 0222

0413 626 365

info@wfaanz.org.au

What is Nickel Sulphide (NiS)?

Invisible to the human eye, NiS is a tiny particle that can form inside glass during manufacture. NiS particles naturally expand during the lifespan of the glass, and usually never cause a problem. Toughened glass is about four times the strength of normal glass. Its strength comes from a balance of tensile and compression forces put into the glass during manufacture. Sometimes the expansion of NiS particles disrupts the balance of these forces inside the toughened glass, causing spontaneous explosion of the ENTIRE pane.