





GLASSHAPE COMPANY PROFILE



CONTENTS:

- 01. Glasshape Company Profile:
 - Our Vision
 - Our Mission
 - Our Values
 - Overview
- 02. Industries We Serve

Architectural Glass:

- TemperShield®
- SwitchShield®
- PowerGlass®

High Security Glass:

- AmmoShield®
- ArmourShield®
- BlastShield[®]
- CareShield®

Cyclone Resistant Glass:

• StormShield®

Marine & Superyacht Glass:

- DuraShield Marine[®]
- Ezone Marine[®]
- PirateShield®

Machinery Glass:

- RailShield®
- DuraShield®
- ArbourShield®
- 03. Our Services
 - Digital Onsite Measures
 - Full Delivery Services
- 04. Flagship Projects
- 05. Contacts







Glasshape® Company Profile

Our Vision:

Our vision is to become a world leader in the manufacture and supply of innovative, certified glass products that are tailored to meet the demanding requirements of highly specialised industries by differentiating on product quality, customer service and distribution excellence.

Our Mission:

Offer our Customers a uniquely specialised glass solution that works for them every time.

Our Values:

- Treat customers, suppliers, and the community like we would our own family.
- · Tirelessly focus on brand, process improvement and delivery excellence by having a culture of continuous improvement.
- Invest in the development of a great team, producing great products that completely satisfy the needs and desires of our diverse range of customers

Overview:

Glasshape[®] Ltd is a highly successful and dynamic company that focuses on design, manufacture and supply of specialist glass products for a diverse range of industries namely Architectural, Building and Construction, Marine, High Security, Health, Rail, Forestry and Mining industries.

Originally founded in 1986, Glasshape[®] Ltd has mastered and refined the science of Curved and Bent Glass, Toughened Glass, Laminated Glass and Double Glazed Glass, with uncompromising quality and service. The Glasshape[®] Group has become one of Australasia's leading specialist processing, bending, toughening and laminating glass companies.

Glasshape[®] is a totally customer-driven company whose management and staff are 100% dedicated to achieving and driving results. As the company continues its double digit growth, technology is continually added to meet the increasing demand from architects, designers and their respective, highly discerning clients. Glasshape[®] customers understand that with our help, the designs they dream and draw on paper or CAD can be made into sensational glass realities.

At Glasshape[®], we take pride in producing fully certified glass for all types of applications including curved and toughened glass for balustrades, windows and complex windscreens or flat laminated glass with cyclone, high security and bullet resistant properties.

Glasshape[®] has an international presence with offices in New Zealand, Australia and USA to service clients in key markets around the world.

Industries we serve

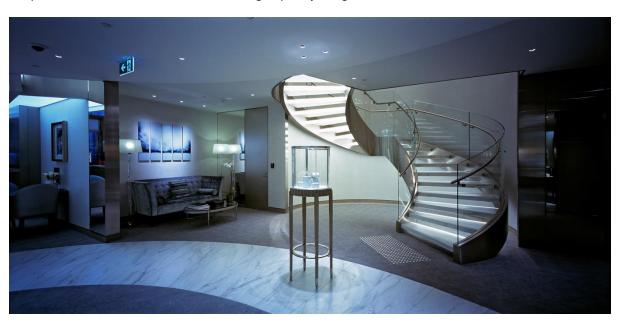
Architectural Glass: TemperShield®



Commercial designs continually evolve as offices, shops and malls, restaurants and cafés respond to demands from their customers, tenants and staff. People are more attracted to work and entertainment spaces that are lighter and more open. The careful use of glass within commercial interiors responds to those demands and at the same time adds value to the places where it is used. TemperShield® Toughened Curved Glass by Glasshape® has been specifically designed to achieve these goals.

Curved balustrades and staircases are also ideal uses for TemperShield[®] Toughened Curved Glass. The range of shapes and curves is endless enabling both new and renovated homes to benefit from the feeling of added light and space that TemperShield[®] Toughened Curved Glass delivers.

Curved glass bay windows can add flair to the facade of contemporary dwellings. Bending the glass allows projects to break the mould and use long, swooping curves for distinctive designs and panoramic views. The generous expanse of glass in a curved glass bay window enhances the feeling of openness and freedom while also letting in plenty of light.





Architectural Glass:



SwitchShield® Switchable Glass by Glasshape® is the latest and one of the most innovative developments in glass technology. 'Normal' windows allow people to see both in and out of buildings. They let people see merchandise in shops, exhibits in museums and from one end of an office to the other. They have been with us for hundreds of years but their functions and abilities have stayed much the same... until now.

SwitchShield[®] Switchable Glass offers both the ability for people to see clearly through a window; however when there is a need for privacy or security, the window can be made opaque or any degree of translucence in between by simply flicking a switch.

SwitchShield® features two panes of tempered glass with two sheets of polycarbonate film, plus an additional PD-LCD (Polymer-Dispersed Liquid Crystal Display) film sandwiched between them. This ground-breaking laminated structure not only makes SwitchShield® an aesthetically pleasing glass to look through; it also makes it a full Grade A Safety Glass.









PowerGlass® by Glasshape® introduces a whole new dimension to glass and lighting technology. At long last architects and designers can specify architectural glass embedded with bright and colourful LED lighting.

When you consider PowerGlass®, the possibilities for its use become almost endless. In both interior and exterior applications, PowerGlass® lighting delivers lighting that is both practical and visually stunning. Whether used internally in windows and walls, glass balustrades and walkways, or externally on building facades, skylights and advertising signs, PowerGlass® will do much more than just 'brighten up your project'; it will bring it to life in stunning fashion.

The technology behind PowerGlass $^{\footnotesize @}$ is as striking as the product itself. Chip LEDs are embedded into





laminated glass using a completely transparent conductive layer. This layer allows the glass to remain completely transparent whilst the low voltage power and LED operation signals pass through it. Nearly any number and spacing of LEDs is possible. Utilising a connecting cable, power is inducted via contacting strips.

High Security Glass:



AmmoShield[®] Bullet Resistant Glass, is used in areas of Very High Security, where the threat of fire arms is prevalent. AmmoShield[®] Bullet Resistant Glass is specially designed to encapsulate

exceedingly high velocity projectiles without allowing penetration through the panel. AmmoShield® is designed for use in areas where large amounts of cash, valuables or IP are stored or handled on a daily basis.







ArmourShield[®] is a poly-glass composite high security panel, specially designed for hostility restraint applications where prisoner monitoring and observation is carried out within a secure area such as medium and maximum security jails, youth detention facilities, remand centres, police stations and court houses.



BlastShield[®] is a poly-glass composite panel, which is specifically designed to absorb huge amounts energy from a blast to protect occupants in highly volatile areas where terrorist activity is prevalent or where the risk of bombs have been identified. Embassy's and Courthouses are a common areas for the product to be installed, however specialized mining equipment also use BlastShield[®] in windscreens and viewing areas.



CareShield[®] is a poly-glass composite panel of which is specially designed and tested for use in windows and vision panels in mental health wards where anti ligature is priority. CareShield[®] is designed to significantly reduce the likelihood of self-harm incidents to patients, whilst still offering full protection to staff.





Cyclone Resistant Glass – StormShield®



StormShield[®] is the Ultimate High Wind Zone, Storm, Cyclone and Hurricane Resistant Window and Door Glass. Fully tested and certified to resist impact against storm debris travelling at over 140km/h, and wind speeds over 400km/h, StormShield[®] protects life, property and investments. The ultra-high grade laminate used in its manufacture is designed to allow the glass to expand and contract up to five times its normal rate before breaking. Even if it is damaged by flying storm debris it remains weather-tight without tearing or breach of the window envelope, thus maintaining a water-tight environment during a storm.

StormShield[®] is fully tested and certified to the current cyclone standard AS/NZS 1170.2: 2011, and has been approved by major insurance companies. Large stocks of this product are held in various locations globally including New Zealand, Pacific Islands, Western Australia, Queensland and Singapore to allow for quick delivery times of cut to size and bulk product.



Marine & Superyacht Glass: DuraShield Marine®



DuraShield® Superyacht Glass is a superior glass designed specifically to meet the rigorous demands of marine applications. Its manufacturing process incorporates a high performance Marine Grade interlayer developed by Glasshape® Ltd. Because of this unique interlayer, DuraShield® delivers the ultimate in strength, clarity, noise reduction, thermal performance, and safety.

DuraShield[®] Superyacht Glass is targeted at the high performance Superyacht and Luxury Launch market where quality, performance, durability and safety are paramount. Designers, builders and owners of these vessels will find uses for DuraShield[®] Superyacht Glass both in exterior applications such as windows, windscreens, portholes, deadlites, and interior applications that include internal doors, balustrading, glass floors, spiral stair balustrades, lift shafts, shower screens, doors, cabinets, decorative screens and fascias etc.

All DuraShield® Superyacht Glass is manufactured to ISO 21005:2004 and is tested to ISO614:1989 standards. The product also meets and complies with MCA LY2, and BSMA25:1973. DuraShield® Superyacht Glass is endorsed on builds classed to Lloyds Register, Germanischer Lloyds, ABS, RINA, DNV, BV, and many world-renowned Flag States. The team at Glasshape® will liaise with the appropriate societies throughout your build process, from the design stage to the vessel's final acceptance and sign-off, to help ensure a faultless result.





Marine Thermal Resistant Glass – EzoneMarine®



E-ZoneTM Marine is a special laminated coated glass type, which when incorporated in our DuraShield[®] Superyacht glass, not only offers thermal performance that is almost identical to the performance of a double glazed unit, but also the ultimate in strength, clarity and noise reduction.

The pyrolitic process used in the manufacture of EzoneTM Marine embeds invisible heat-reflective materials to the glass. This allows light to enter, but reflects much of the inbound heat, increasing comfort.

EzoneTM Marine is a premium alternative to double glazed glass. It offers durability and high thermal performance in the marine environment.

EzoneTM Marine is available in all clear or tinted glasses. It will reduce the overall glass thickness while still maintaining fantastic thermal resistance.



Marine Security Glass - PirateShield®



DuraShield® Marine Pirate-Resistant Glass is specially designed and constructed from exceedingly robust laminated glass. It easily resists extreme levels of physical violence. It incorporates a sophisticated interlayer that causes attack weapons to simply bounce off; making penetration all but impossible. DuraShield Marine Pirate Resistant Glass® will also withstand bullets fired from most automatic and semi-automatic firearms.

DuraShield Marine Pirate-Resistant Glass® has been tested and approved to AS/NZS2343:1997 Bullet Resistant Panels and Elements and also NIJ0108.01 Level 3.



Rail & Carriage Glass – RailShield®



RailShield® Train and Carriage glass is specially developed to withstand the harsh rigors and requirements of the rail industry. Whether it's curved front windscreens or flat side windows, Glasshape® has the technology and accreditation to supply glass for these applications, compliant to BRB 566, FRA 1&2 and GM/RT2456.

Glasshape[®] has a certified in-house test laboratory where RailShield[®] is tested against missiles fired from a high speed air cannon, hydrostatically pressurized to test for wind and water resistance and other application specific tests that may be required.



Automotive Glass – DuraShield®



DuraShield® Automotive windscreens are manufactured to provide protection to your vehicle, its occupants and your investment. Custom built DuraShield® windscreens can be produced to fit almost any vehicle, including passenger buses and coaches, heavy transport vehicles, classic cars, limousines, hearses, tractors, and even vintage aircraft! Completely compliant with the highest American automotive windscreen standard (ANSI Z26.1), and AS/NZS 2080: 2006, DuraShield® Windscreens are highly cost effective and provide excellent value.



Machinery High Impact Resistant Glass - ArbourShield®





ArbourShield® Forestry and Mining protection glass is the ultimate high impact windscreen for use in forestry harvester equipment, where safety, protection, strength and clarity are all combined eliminating the need for unsightly grills and bars that only further obscure the operators view.

ArbourShield® uses a combination of glass and high grade abrasion resistant polycarbonate to offer superior protection to operators of forestry harvesting and mining equipment, whilst offering very clear vision from the cabins, increasing safety and productivity all round. ArbourShield® has a laminated glass exterior, which allows the use of wipers without scratching! Unlike traditional polycarbonate products ArbourShield® can be cleaned with standard cleaning agents and rags on the exterior without becoming discoloured or damaged.







Our Services

Digital Onsite Measures

Measuring curved glass projects has just become a whole lot easier now with Glasshape's new onsite digital measuring service. No longer do you have to spend countless hour's onsite cutting and fitting templates, still unsure whether you have it right! Now our specialist technicians can come to your site and use the latest digital, scanning software to produce electronic templates of exactly what is required.

No more making assumptions off plans, hoping for the best! Our scanning equipment produces templates within 0.1mm of accuracy. Our technicians are then able to process the data collected into finished projected glass drawings showing detail that the client can then sign off before production of the curved glass commences. Discrepancies within a project are often picked up at this stage and remedied before it is too late and the glass is made.

All project electronic template files are stored away for future use. In the event that at a later stage another piece of glass is required, we have an exact record of what was produced, so reproduction of the exact same shape is assured!

Full Delivery Services

Glasshape[®] offer fully insured freight options right to your doorstep or onsite, regardless of where you are located globally. When you invest with Glasshape[®], you invest in our culture of customer care, customer satisfaction and customer peace of mind with our quality assurance. Glasshape[®] are fully certified to ISO 9001 and ISO 17025.



Flag Ship Projects

Architectural

•	Tiffany & Co. – Collins Street Melbourne, AU		Curved Staircase Balustrade
•	Supreme Court – Wellington, NZ	Curved	Staircase, Balustrades and Curved Partitions
•	Eliza Apartments - Sydney, AU	Curved Grey I	_ow E Heat Strengthened Laminated Windows
•	Sealevel Restaurant – Cronulla Be	each, AU	Curved Sliding Doors
•	Rundle Place Shopping Mall - Ade	laide, AU	Curved Balustrade
•	ANZ Bank - Various Branches in N	١Z	Curved Partitions
•	Pulman Reef Hotel Casino - Cairn	s, AU	Curved Balustrading and PowerGlass Panels
•	Novatel Hotel - Auckland Airport,	NZ	Frameless Glass Revolving Doors

Superyacht & Marine

•	M/Y Invictus – Delta Marine – USA	65.50m Motor Yacht
•	M/Y Lady M – Palmer Johnson – USA	65.00m Motor Yacht
•	M/Y DB9 – Palmer Johnson – USA	52.20m Motor Yacht
•	M/Y Big Fish – McMullen & Wing – NZ	45.00m Motor Yacht
•	S/Y Ohana – Fitzroy Yachts – NZ	49.69m Sailing Yacht
•	M/Y Lady Linda – Trinity Yachts – USA	56.69m Motor Yacht
•	M/Y Tsumat – Trinity Yachts – USA	49.90m Motor Yacht
•	M/Y Unbridled – Trinity Yachts – USA	58.20m Motor Yacht
•	S/Y Athena – Royal Huisman / Orams Marine – NZ	90.00m Sailing Yacht
•	S/Y Bristolian – Yachting Developments – NZ	36.70m Sailing Yacht
•	S/Y Bliss – Yachting Developments – NZ	36.80m Sailing Yacht
•	S/Y Antares III – Yachting Developments – NZ	30.00m Sailing Yacht

High Security Glass

•	Australian Embassy - Jakarta	3100m2 of	Bullet, Blast & Intrud	er Resistant glass
•	High Security Prison – Wiri New Zealand		1000m2 of Intrud	er Resistant Glass
•	Medium Security Prison – Mt Eden New Ze	aland	600m2 of Intrud	er Resistant Glass
•	Special Intelligence Building – Wellington	New Zealand	d 700m2 of Intrud	er Resistant Glass
•	USA Embassy – Fiji Islands		Bull	et Resistant Glass
•	Japanese Embassy – Samoa, Pacific Island	ls	Bull	et Resistant Glass
•	German Embassy – Wellington New Zealar	nd	Bull	et Resistant Glass
•	Australian High Commission – Tonga, Paci	fic Islands	Intrud	er Resistant Glass
•	Sir Charles Gardiner Hospital – Perth, Aus	tralia	400m2 CareShield Mo	ental Health Glass

Cyclonic Glass

•	MHCC Shopping Mall – Suva Fiji Islands	650m2 StormShield Glass
•	ANZ Tower – Suva Fiji Islands	600m2 StormShield Glass
•	ICON apartments – Port Hedland, Western Australia	1200m2 StormShield Glass
•	Baynton Apartments – Karratha, Western Australia	1000m2 StormShield Glass
•	Shreedah Motors Building – Suva, Fiji Islands	200m2 StormShield Glass
•	Westpac Bank – Suva, Fiji Islands	200m2 StormShield Glass
•	Continental Hotel – Denarau, Fiji Islands	200m2 StormShield Glass
•	Townsville Apartments - Townsville Queensland	800m2 StormShield Glass
•	Darwin Medical Centre - Darwin, Northern Territory	200m2 StormShield Glass IGU



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