

# High Impact Windscreens

## Seriously Strong Windscreens for:

- Ultimate Driver Protection
- Safer working environment
- Less Downtime
- Excellent solar protection

Arbour  Shield<sup>®</sup>

HIGH IMPACT WINDSCREENS - BY GLASSHAPE LTD



# Amazing Impact Resistance

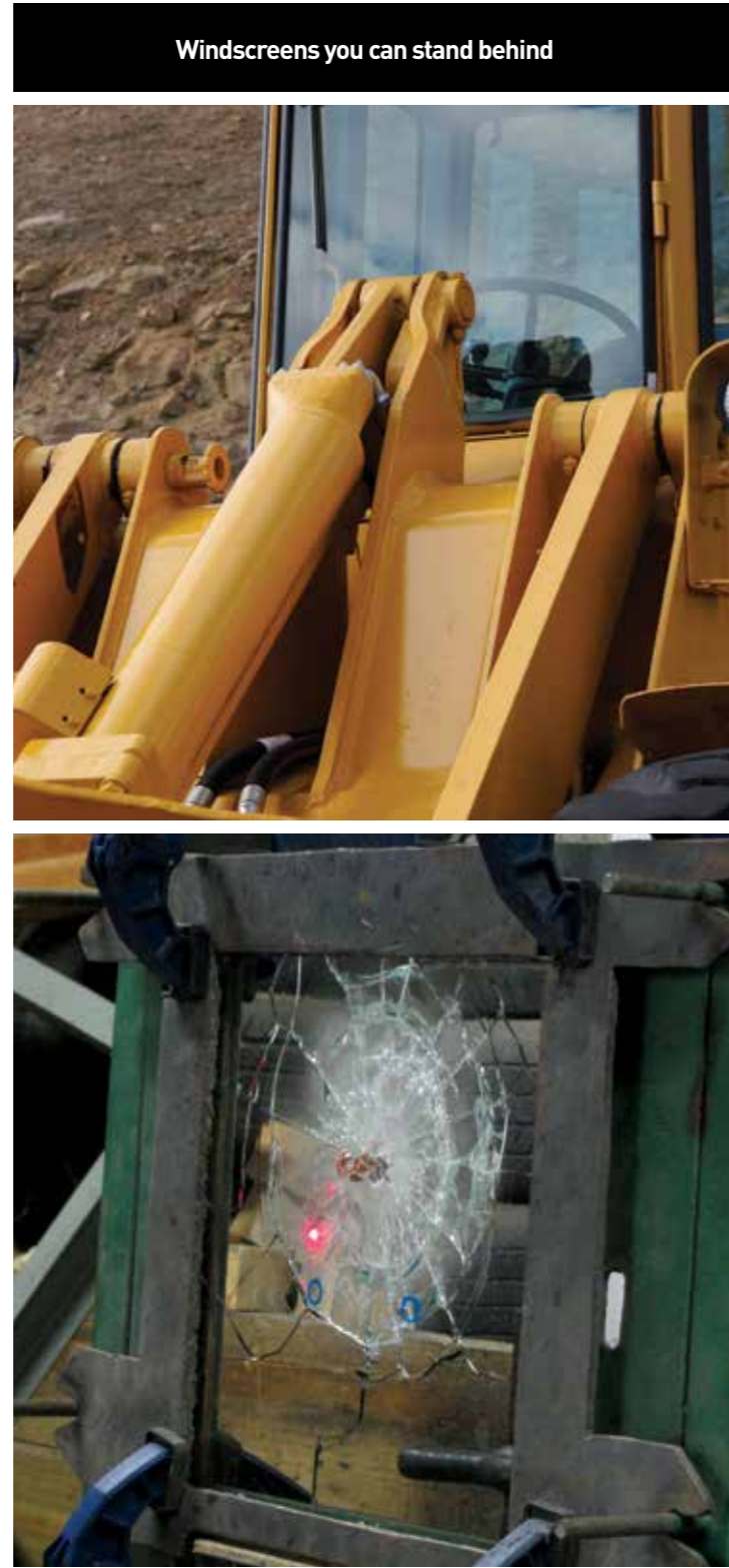
ArbourShield® Windscreens have been extensively impact tested and proven to be over 10x stronger and more impact resistant than standard laminated windscreens of the same thickness.

The 7.8mm thick ArbourShield® ARBCL08 resists a hardened steel ball weighing 2.72kg, 90mm diameter travelling at over 100km/h without breaking through.

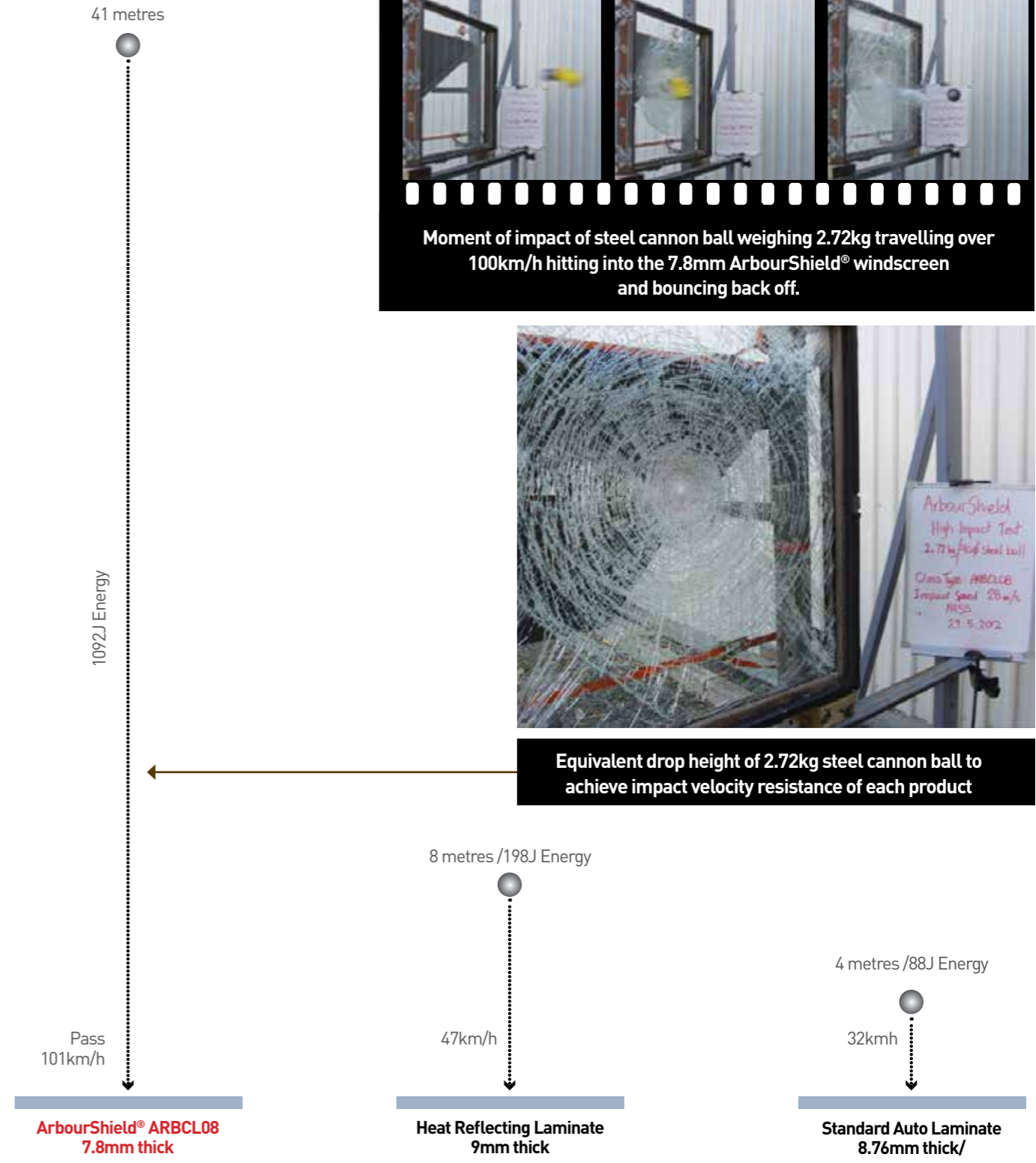
Compare that with 8.76mm laminated glass used in many vehicle windscreens today. It will only resist the same impact at under 21km/h, and also the commonly used 9mm Heat Reflecting Laminated windscreens which will also only resist this impact at under 35km/h. ArbourShield® is by far the safest and most resilient windscreen to put your drivers behind.

The amazing new ArbourShield® laminate uses the latest technology to allow maximum stretch and bounce without perforation, thus offering an unmatched performance that even the inventors are staggered by.

ArbourShield® comes in many different thicknesses and makeups, specifically designed to withstand particular impact criteria, whether it's a steel cannon ball weighing 2.72kg, a 227kg solid steel weight or even a bullet from a 9mm handgun to replicate high velocity lighter weight objects.



Windscreens you can stand behind



## ON ROAD USE

Certified to AS/NZS 2080: 2006

ArbourShield® High Impact Windscreens have been tested and certified for on road use throughout Australia and New Zealand, certified to AS/NZS 2080:2006 Safety Glazing for Land Vehicles.

Subjected to a series of rigorous tests, ArbourShield® has withstood clarity, distortion, luminous transmittance, ageing, impact, fracture and adhesion, boil and quality control tests to show its real value to users.

### Quality assurance

ArbourShield® High Impact Windscreens by Glasshape® Ltd are manufactured in a fully accredited ISO9001 facility so that users are guaranteed continuous quality and performance.



ArbourShield® Windscreens - Makes all the difference.



ArbourShield®  
HIGH IMPACT WINDSCREENS - BY GLASSHAPE LTD

## Solar Resistance

Low Emissivity Glass – Less glare, less heat, more comfort

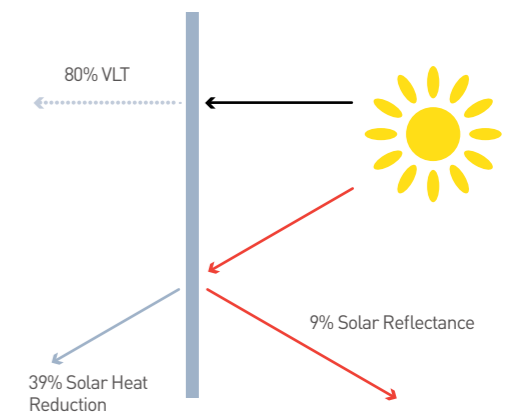


## ArbourShield® E – Solar Controlled

ArbourShield® High Impact Windscreens also come in a solar controlled version called ArbourShield® E.

The special Low Emissivity coating on the glass greatly reduces the solar energy from transmitting through the windscreen (39% reduction), reducing glare and heat, making the entire cabin a more enjoyable space to work in during those hot summer months.

Cooler and more comfortable working environments = increased efficiency from staff, less down time and driver fatigue, therefore increased productivity.



Performance figures based on ArbourShield® ARB-E10

### ArbourShield® E – Solar Controlled

- Visible Light Transmission 80%
- Solar Transmission 61%
- Noise Reduction 54%

**ArbourShield® E**  
Bringing Safety and Comfort together

# FOPS Testing

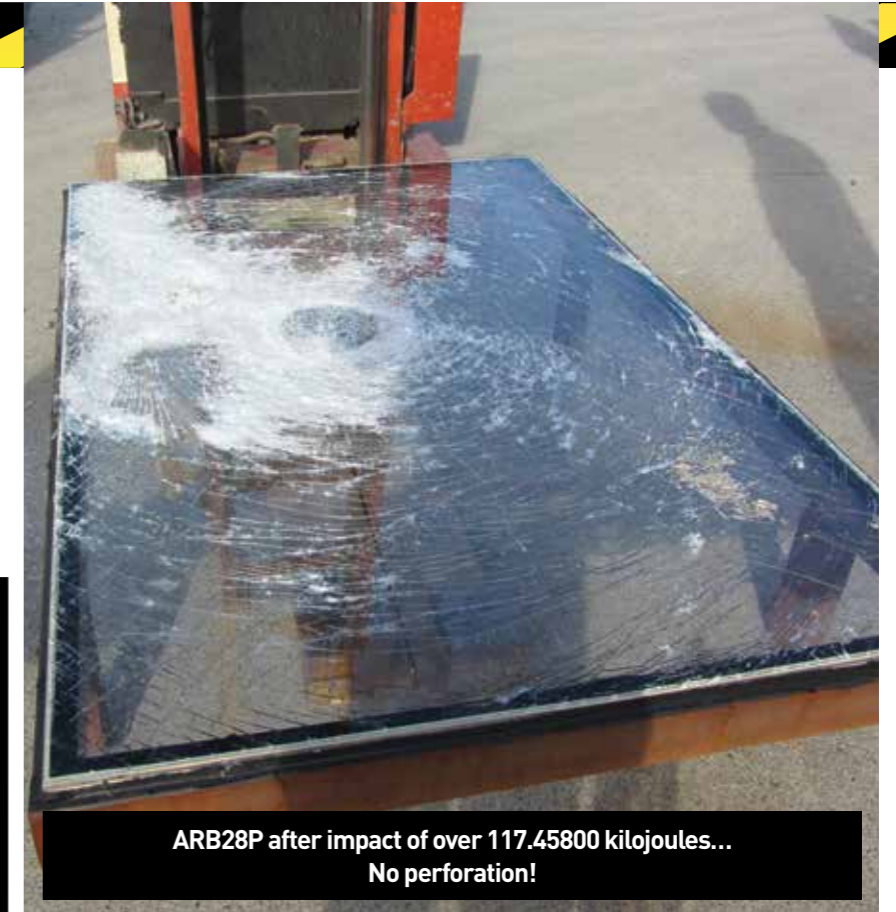
## Falling Objects Protective Structures

**ArbourShield® PG - Glass Clad Polycarbonate Panels by Glasshape® Ltd have been tested to ISO8083, Level 1&2, ISO3449 and SAE J2267.**

Steel weights up to 227kg have been dropped from over 2.8mtrs onto specially designed ArbourShield® PG panels for use in cabins where the risk of falling objects is high. The incredible performance of these specifically engineered panels results in the massive weights simply bouncing off, as shown below.



Total Operator Protection from Falling Objects



ARB28P after impact of over 117.45800 kilojoules...  
No perforation!



ArbourShield®-PG ARB28P under test where a 227kg solid steel weight is dropped from 2.8 metres...

...the result is stunning...it simply bounced off, proving superb safety for crane and other heavy vehicle operators.

# OPS Testing

## Operator Protective Structures

Certified to ISO 8084:2003

Pressure test: over 2200KG applied through a 90mm sphere and held for one minute at five different locations on the panel. This test simulates rocks and other penetrating objects trying to enter the cabin. ArbourShield®-PG passed this test with at least 75% above the standard's requirement!



# ArbourShield® Product Specifications

Name	Code	Thickness	2.72kg Impact	VLT Visible Light Transmission	SHGC Solar Heat Gain Co-Efficient	SHR Solar Heat Reduction	NR Noise Reduction
ArbourShield	ARBCL08	7.8mm	101km/h	88%	0.77	30%	45%
ArbourShield	ARBCL10	9.8mm	96km/h	87%	0.74	35%	54%
ArbourShield	ARBCL12	11.8mm	93km/h	85%	0.71	39%	55%
ArbourShield	ARBCL14	13.8mm	91km/h	84%	0.69	42%	56%
ArbourShield-E	ARB E08	7.8mm	101km/h	81%	0.52	37%	45%
ArbourShield-E	ARB E10	9.8mm	96km/h	81%	0.51	39%	54%
ArbourShield-E	ARB E12	11.8mm	93km/h	80%	0.47	41%	55%
ArbourShield-E	ARB E14	13.8mm	91km/h	80%	0.44	43%	56%
				<b>227kg Impact</b>	<b>OPS</b>	<b>FOPS</b>	
ArbourShield-PG	ARB13P	13.3mm	> 200km/h	Nil	Pass	Nil	
ArbourShield-PG	ARB20P	19.5mm	> 200km/h	Nil	Pass	Nil	
ArbourShield-PG	ARB28P	27.8mm	> 200km/h	Pass	Pass	Pass	

# Dedicated to:

## Protecting lives, property and income

Arbour  Shield®

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Your local dealer is: