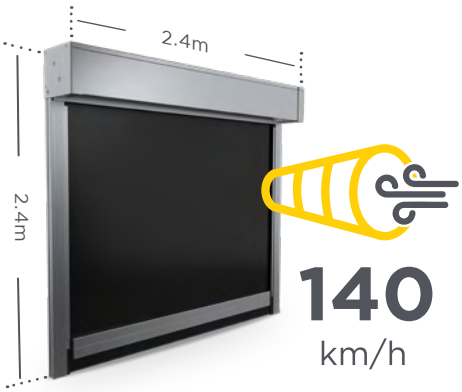
ZIPSCREEN®

Wind Tunnel Test Results

Zipscreen outdoor shades offer the best in open air living by combining innovation with a sleek, functional, and modern design.

To highlight the benefits of our signature side fastening solution, our team of engineers utilised the largest wind tunnel in the southern hemisphere to perform testing on our Zipscreen system.

The Monash University Wind Tunnel is Australia's leading automotive aerodynamic test facility, providing the perfect location to push our shades to their limits.



The result?

A 2.4m x 2.4m Zipscreen shade **withstood** the maximum achievable wind speed of **140km/h***.

* Even with these impressive results, it is always recommended to raise your Zipscreen shades when the wind may exceed 50km/h. Performance may vary depending on your application and structural fixing.

Beaufort Wind Rating Scale

Beaufort Scale	1	2	3	4	5	6
Wind Speed (km/h)	1-5	6-11	12-19	20-28	29-38	39-49
Description	Smoke drift shows wind direction	Wind can be felt on face, flat ripples	Flag waves	Paper and leaves are scattered	Small trees sway, whitecaps form on waves	Umbrellas are hard to use, large branches on trees move

Beaufort Scale	7	8	9	10	11	12
Wind Speed (km/h)	50-61	62-74	75-88	89-102	103-118	118+
Description	Trees sway, walking in the wind is difficult	Twigs and branches break off trees	Roof tiles blow off buildings	Trees are uprooted	Widespread damage to vegetation and buildings, nearly no visibility at sea	Hurricane, cyclone, Widespread destruction

But what does this really mean?

WATCH VIDEO

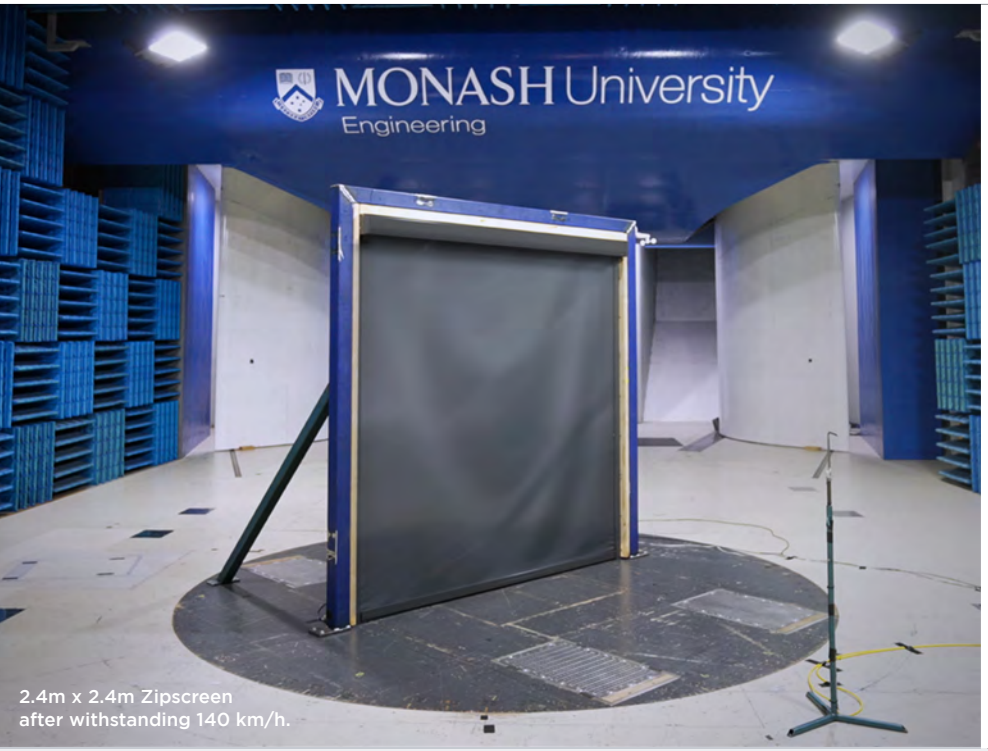
Wind speeds above 118 km/h are equivalent to Beaufort scale of 12, which causes widespread devastation to buildings and complete destruction of vegetation. Given this, it is unreasonable to assume any type of outdoor shading system would withstand the immense power of these weather conditions.

We are in an industry where products are claiming to withstand winds in excess of 200 km/h. It is imperative to be aware of the test methods used to generate these claims and the associated fine print.

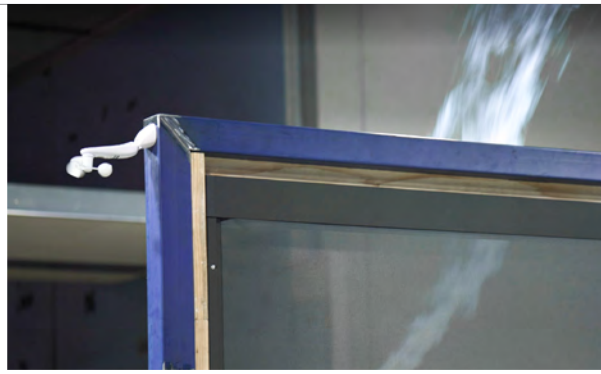
One example of a common testing device is an 'airbox'. An airbox is an open top pressure chamber where a shade is exposed to an air pressure to simulate the effect of wind forces. Calculations are performed to equate this result to an 'equivalent wind load', which is then published in marketing material.

Testing outdoor shades in controlled laboratory environments can clearly depict impressive results, but these artificial conditions do not account for the unpredictable nature of real-world factors such as wind gusts, or loose debris acting as projectiles which could damage the fabric, resulting in a a costly replacement.

Although our Zipscreen shades withstood an impressive wind speed, we strongly recommend shades are retracted in strong winds (above 50 km/h) to ensure your investment will be perfect for many years to come.



2.4m x 2.4m Zipscreen after withstanding 140 km/h.



*The Zipscreen shade was side fixed to a timber substrate and secured to a steel frame with 12G fasteners. Inner rails were secured with 8G fasteners as per the Zipscreen Installation Manual guidelines. Each wind speed test was held for a minimum of 60 seconds. 'Maximum achievable wind speed' refers to the limitations of the testing facility, and not the Zipscreen system.

The representations made by Rollease Acmeda Pty Ltd in relation to Zipscreen are based on the testing conducted and the report prepared by Monash Wind Tunnel dated 01 March 2022 (Report ID W0002-20). You acknowledge that the findings as to the strength and durability of the Zipscreen system set out in the report are based on testing conducted within a controlled laboratory environment. As a result the findings set out above may not accurately reflect the extremes in weather conditions or your use of the Zipscreen system.

Rollease Acmeda does not accept any liability or responsibility for any costs, expenses, loss or damage suffered by you in connection with your reliance on the above and or use of the Zipscreen system including for but not limited to any incorrect installation methods, failure to adhere to our User Guide and care manual, exposure to corrosive environments or extreme weather conditions, deterioration or general fair wear and tear or any other natural disaster such as floods, fires, cyclones, hurricanes, earthquakes, explosions and other events outside of Rollease Acmeda's control.