

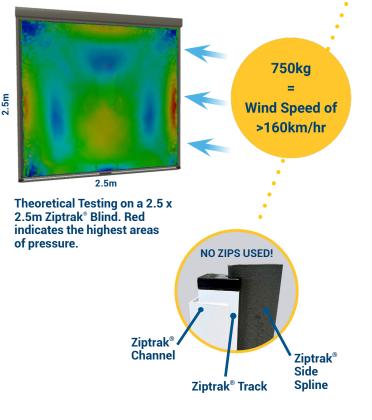
# **Blind Strength Testing**

# ZIPTRAK<sup>®</sup> OUTDOOR TRACK-GUIDED BLIND SYSTEM

The ability for an outdoor blind to resist wind is crucial, especially in windy areas.

When wind hits a blind, it creates forces on the blind like those from a heavy weight.





# TESTING THE ZIPTRAK® SIDE SPLINE

- To test the force required to pull the spline out of the tracks, we tested using a horizontal pulltest. We achieved the result equivalent to 1200kg for one side of a 2.5m high blind. This is more than three times the force exerted on the tracks during wind speeds of 160km/hr.
- The tests showed that the standard Ziptrak<sup>®</sup> side spline, when installed correctly, stays in the track even under extreme side forces.

# TESTING THE COMPLETE BLIND SYSTEM

- To test the strength of Ziptrak<sup>®</sup> Outdoor Blinds in windy conditions, we used a 2.5m x 2.5m blind. We tested it both theoretically and physically in the Ziptrak<sup>®</sup> Engineering Lab, using the recommended Ziptrak<sup>®</sup> fixings for windy areas.
- To test the force on a blind from strong winds, we applied a static load exceeding 750kg, equating to a wind speed of more than 160 km/hr.
- Using Ziptrak<sup>®</sup> fixings for windy areas, our tests showed that a Ziptrak<sup>®</sup> Outdoor Blind can handle wind speeds over 160 km/hr and still properly function afterwards.

## **RECOMMENDATIONS FOR ZIPTRAK® FIXINGS**

We recommend the following fixings for all Ziptrak<sup>®</sup> Outdoor Blind installations:

Blinds <4m wide	Blinds >4m wide or in windy areas
Use 4mm aluminium rivets	Use 4mm stainless steel rivets
Follow the recommended Ziptrak <sup>®</sup> procedures of attaching the side channels and track. These will be specific to the blind size and anticipated wind conditions.	

Work with your Ziptrak<sup>®</sup> Retailer to achieve the best results for your home or business location.

### VITAL FACTORS FOR A STRONG ZIPTRAK<sup>®</sup> BLIND INSTALLATION

(Its ability to withstand strong winds)

- Components: Only use Ziptrak<sup>®</sup> components.
- Fabrication: Authorised Ziptrak<sup>®</sup> Fabricators only use Ziptrak<sup>®</sup>-approved processes to fabricate strong blinds.
- Installation Fixings & Process Trusted Ziptrak<sup>®</sup> Retailers only use Ziptrak<sup>®</sup>-recommended fixings, spacings, and procedures specific to the structure type and location.
- **Maintenance** Regularly clean and maintain your blinds, including the side tracks.
- Location Optimisation Every installation is unique. Consider your local wind conditions. Your local Ziptrak<sup>®</sup> Retailer can recommend the optimal installation for your location.

# WHY CHOOSE ZIPTRAK<sup>®</sup>?

#### We're the original track-guided blind system!

- Australian Made, Owned, and Invented.
- No zip used! Only Ziptrak<sup>®</sup> blinds use Ziptrak<sup>®</sup> extrastrong, purpose-made spline.
- Engineered for Clear PVC or Mesh.
- Manual Spring Balanced and Motorised. - Leave your blind at any height.
- Only quality fixings and Ziptrak<sup>®</sup> components are used.
  - Designed to work perfectly together.
- **Proven to last** Decades of satisfied customer and commercial installations in some of the world's windiest locations.
- Over one million installations and counting!
- The class champions in wind resistance.

# **TIPS FOR REAL-WORLD INSTALLATIONS**

- Install a blind into a strong and secure structure.
- In real-world conditions, wind hits blinds differently.
  While lab tests can show how strong blinds are, they can't perfectly predict how blinds will perform in storms or how they'll affect the structure they're attached to.
- Blind skins may deform or stretch in strong winds, but usually return to their original state once the windy conditions have passed.
- To maintain your blinds, their operation, and your outdoor structure, raise your Ziptrak<sup>®</sup> Outdoor Blinds

fully during strong winds, storms, or severe weather.\*

- Blinds may not move up or down in strong winds, as the wind pressure on the blind effectively locks the skin in the tracks. Wait for the windy conditions to pass before using your blinds. Alternatively, press on the blind skin with your hand to relieve pressure, before moving up or down.
- When not being used, keep blinds fully open or fully closed. These are the strongest positions.
- Use Trusted Ziptrak<sup>®</sup> Retailers and Installers, because once the blinds are installed, they last!

#### Please Note:

- The size of the blind, and the fabric used, affect wind performance. Small blinds handle high winds better than large blinds. The blind skin material and airflow across or on the skin also impacts wind resistance.
- † The wind rating results in this document apply to a standard-size blind, 2.5m wide x 2.5m high. Ziptrak®-recommended fixings for windy areas were used and the blind was installed into a solid structure for testing.
- \* Visit the Australian Bureau of Meteorology's Severe Weather Knowledge Centre at www.bom.gov.au for more information on these weather conditions.



Visit **www.ziptrak.com.au** *Innovation* to learn more about our Wind Testing and read our Wind Test Project Report.

