

## Australian Product Performance Warranty

Altair® Louvres are designed to exceed the requirements of AS2047-1999 "Windows in Buildings".

The following table outlines the maximum variations that Breezway® will warrant per Serviceability Limit State Wind Pressure (SLS). Exceeding these constraints will void this Warranty. The limitations have been generated through NATA test results and over 60 years of experience manufacturing louvre windows. The design constraints below apply to product sold as a fully assembled Louvre Window System, or as a Louvre Component System.

For commercial and cyclonic applications, please consult Breezway with your specific project requirements, so we can correctly apply the relevant performance warranty constraints. A window manufacturer will be able to label it's Louvre Window products to comply with AS2047 when assembling Louvre windows to Breezway procedures and operating within the following performance warranty constraints.

	N1, N2, N3		N4		N5		N6	
	Up to 1000 Pa SLS Up to 1500 Pa ULS 200 Pa Water Pass		1500 Pa SLS 2300 Pa ULS 200 Pa Water Pass		2200 Pa SLS 3300 Pa ULS 300 Pa Water Pass		3000 Pa SLS 4500 Pa ULS 450 Pa <sup>2</sup> Water Pass	
	Max Blade Length	Max Height	Max Blade Length	Max Height	Max Blade Length	Max Height	Max Blade Length	Max Height
<b>152mm Altair® Louvre</b>								
152mm float glass	900	21 blade	750	21 blade	627	17 blade	499	8/15 blade <sup>3</sup>
152mm toughened glass <sup>1</sup> or aluminium blade	900	21 blade	900	21 blade	707	17 blade	499	8/15 blade <sup>3</sup>
152mm Western Red Cedar blade to suit 6mm clip or 14mm clip	900	21 blade	900	21 blade	583	17 blade	499	8/12 blade <sup>3</sup>
<b>102mm Altair® Louvre</b>								
102mm float glass	750	33 blade	750	33 blade	627	27 blade	See Note 4	
102mm toughened glass <sup>1</sup> or aluminium blade	750	33 blade	750	33 blade	707	27 blade		
102mm Western Red Cedar blade to suit 6mm clip or 14mm clip	750	33 blade	750	33 blade	583	27 blade		
<b>Breezway Mullions (1:150 Deflection ratio. Suitable for Housing)<sup>5</sup></b>								
Strip Mullion	-	1180	-	900	-	800	See Note 2	
Medium Duty (38 x 25 mm) Mullion	-	1500	-	1300	-	1300		
Heavy Duty (109 x 25 mm) Mullion <sup>6</sup>	-	3000	-	3000	-	2800		

### Note:

**SLS** = Serviceability Limit State Wind Pressure / Design Wind Pressure / Permissible Stress. The ability of the window to perform the intended function under normal service conditions avoiding excessive deflection or the appearance of buckling.

**ULS** = Ultimate Limit State Wind Pressure / Ultimate Strength Pressure. The maximum load carrying resistance of the window. Subjecting the window to wind pressures in excess of the ULS is likely to result in the window collapsing.

1. Glass must be straight and flat within 0.35mm/m.
2. Easyscreen® Window System High Profile Sill required. Breezway SL2® Window Systems and Altair Louvre Component Systems are not suitable for 450Pa water ratings.
3. Handle Locking Bars or Keylocks are required for 9-12 or 9-15 blade windows.
4. 102mm louvres are not suitable for use with the Easyscreen Window System High Profile Sill as they are prevented from opening beyond 28°.
5. Heavy Duty Mullions can only be used within Breezway Surround Frames. Contact Breezway for maximum mullion heights at 1:180 and 1:250 deflection ratios suitable for Class 2-9 buildings.

## New Zealand Product Performance Warranty

Altair® Louvres are designed to exceed the requirements of NZS 4211-1985 "Windows in Buildings".

The following table outlines the maximum variations that Breezway® Louvre Windows will warrant per Rating Category. Exceeding these constraints will void this Warranty. The limitations have been generated through NATA test results. The design constraints below apply to product sold as a fully assembled Louvre Window System, or as a Louvre Component System.

For commercial applications, please consult Breezway Louvre Windows with your specific project requirements, so we can correctly apply the relevant performance warranty constraints.

A window manufacturer will be able to label its Louvre Window products to comply with NZS 4211 when assembling Louvre windows to Breezway procedures and operating within the following performance warranty constraints.

	Low & Medium Wind Zones Up to 850 Pa ULS		High & Very High Wind Zones Up to 1550 Pa ULS	
	Max Span (mm)	225 Pa Water Pass	Max Span (mm)	330 Pa Water Pass
<b>152mm Altair® Louvre</b>				
152mm glass <sup>1</sup> or aluminium blade	900	Max 21 blade	600	Max 17 blade
152mm Western Red Cedar blade to suit 6mm clip	900	Max 21 blade	300	Max 17 blade
<b>152mm Altair® Louvre with Handle Locking Bar</b>				
152mm glass <sup>1</sup> or aluminium blade	900	Max 21 blade	700	Max 17 blade
152mm Western Red Cedar blade to suit 6mm clip	900	Max 21 blade	583	Max 17 blade
<b>102mm Altair® Louvre</b>				
102mm glass <sup>1</sup> or aluminium blade	750	Max 33 blade	600	Max 27 blade
102mm Western Red Cedar blade to suit 6mm clip	750	Max 33 blade	300	Max 27 blade
<b>Mullions</b>				
Mullionstrip	1180		900	
Medium Duty (38 x 25 mm) Mullion	1800		1500	
Heavy Duty (109 x 25 mm) Mullion	3000		3000	

### Note:

Allowable length of blades have been calculated using AS1288.

1. Toughened glass must be straight and flat within +/- 0.35 mm/m.