

“Non-exposed” and “exposed” water penetration resistance test pressures for housing in AS2047-2014

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Table 2.4 of AS2047 specifies water penetration resistance test pressures for housing sites with progressively higher test pressures required for progressively higher N or C ratings¹. The location, the nature of the surrounding terrain and topography, and the shielding offered by surrounding buildings, determine the N or C rating. Housing sites likely to be exposed to higher wind pressures are assigned higher Water Penetration Resistance Test Pressures.

AS2047-2014 retains the same water penetration resistance test pressures, but also introduces the option for specifiers to choose higher water penetration resistance test pressures for housing². The “Non-exposed” test pressures (the naming of which may cause some confusion) are identical to the test pressures in Table 2.4 of AS2047-1999. The higher water penetration resistance test pressures are named “Exposed” and are optional, as indicated by the use of the auxiliary verb “should” (in Note 1 of Clause 2.3.1.6) which denotes a guideline or recommendation (mandatory requirements are denoted by the use of the auxiliary verb ‘shall’).

The “Exposed” test pressures were included in AS2047-2014 to provide an option to specify higher water penetration resistance test pressures due to a few specific cases where the particular local combination of wind and rain exceeds the expectations of AS2047.

Choosing to specify the “Exposed” water penetration resistance test pressures may result in additional cost and could impede the ability of specifiers to achieve their desired design outcomes.

The Altair Product Performance Warranty offered by Breezway Australia Pty Ltd has always been based on the “Non-exposed” water penetration resistance test pressures and is based on extensive testing to AS2047. Altair Louvre Windows around Australia are therefore at sizes and configurations which have passed testing to the “Non-exposed” water penetration resistance test pressures per category. Testimonials gathered from homeowners after Cyclone Yasi give a good insight into the real-life performance of Altair Louvre Windows in conditions approaching the maximum conditions for which they were designed. The testimonials unfailingly praised the performance of Altair Louvre Windows:

- “...they didn’t leak at all during cyclone Yasi.” Lorraine Durham, Cardwell
- “The louvres performed well during Cyclone Yasi...” Neville Brow, Mission Beach
- “...experienced no leaks anywhere from the louvres...” Damien Ferguson, Townsville

Visit: www.breezway.com.au/testimonials/ for more.

Please contact Breezway to discuss this issue further.

Notes:

1. N and C ratings for housing are determined using AS4055.
2. Water penetration resistance test pressures for residential and commercial buildings remain at 30% of the positive Serviceability Design Wind Pressure.