

Jacob Cosentino

BinQ Windows and Doors

2-4 Asley Park Dr,

Chelsea Heights, Vic, 3196

**RE: Window Case Study and Tests**

EcoResults has been engaged by BINQ Windows & Doors to test and provide results pertaining to the thermal performance of the Archetto timber window frame series compared to that of standard aluminium. The tests are limited to providing information on the relative NatHERS Energy Rating performance of 2 dwellings using the specific glazing types listed below, with no other elements in the house design being changed.

The following information and assumptions were used in the tests:

- Standard aluminium double glazing was based on values of U3.5 and SHGC 0.50
- BINQ glazing was based on the values supplied by BINQ and the closest available WERS glazing units were selected to simulate these, as shown in the following table

Series	Name	WERS Code (U/SHGC Used in tests)	U & SHGC Supplied by BINQ	
Archetto	IV68-R Hinged Door	MBC-004-01 (1.16 / 0.3)	1.1	0.300
Archetto Special	Tilt & Turn Window	CTD-004-59 (1.41 / 0.30)	1.4	0.308
Archetto Special	Lift & Slide Door	CTD-007-55 (1.6 / 0.40)	1.6	0.385

- Standard aluminium double glazing was based on values of U3.5 and SHGC 0.50
- The tests were based on a previously certified project at Dwellings 1 & 2 of 34 Lyall Rd, Berwick

The following table shows the energy rating results of the supplied U and SHGC values for the Archetto Special double-glazed range compared to standard aluminium double glazing:

Series	Unit 1	Unit 2
Aluminium	6.2	6.4
Archetto Special	7.4	7.7

Conclusions:

- All BINQ windows tested showed significant improvements compared with standard aluminium double glazing
- Using BINQ Archetto Special glazing achieved a 1.2-star improvement for Dwelling 1 and a 1.3-star improvement for Dwelling 2, compared with standard aluminium double glazing
- These units perform better in the test than Archetto units which have even lower U values, as they balance a low U-value with a higher SHGC, which is fundamentally required in cool/cold climate zones including Melbourne

Please contact me or my Director Samuel Thomson with any queries.



Marius Andrasciuc | ESD Consultant