

**IAN BENNIE AND ASSOCIATES**

**TEST REPORT NO. 2017-022-S3**

**RWE04**

**SKYLIGHT TESTS TO AS 4285-2007**

**for**

**Keylite Roof Windows**

**November 2017**



Accredited Laboratory No. 2371  
Accredited for compliance with ISO/IEC 17025.



**TEST REPORT NUMBER 2017-022-S3**

**Client:** Keylite Roof Windows  
Derryloran Industrial Estate, County Tyrone, Northern Ireland

**Sample:** RWE04 .

The sample was mounted on a timber base of 90 x 45 mm pine in accordance with the fitting instructions included in Appendix B. Appendix B provided y theClient details modifications required in order to pass the water penetration test.

Overall size: 780 x 980 mm

Shaft opening size: 730 x 940 mm

Glazing: Type 2004 laminated IGU

(4 mm toughened outer/20 mm argon space/6.38 laminated inner glass)

**Test Location:** Ian Bennie & Associates Laboratory      **Test Date:** 26 June 2017  
Dandenong, Victoria

**Test Results:** The sample was subjected to Watertightness, Resistance to Concentrated Loads, and Resistance to Wind Pressures for Non-cyclone Regions tests for Skylight assemblies nominated in Clause 3.2.2 of Australian Standard AS4285-2007, Skylights, with test methods and results as summarised below.

**Watertightness ..... PASS at 5°, 15°, 27° (default) 45° and 60°**

**Method:** AS2050 Appendix C modified as required in AS4285

**Test pitch angle(s):** 5°, 15°, 27° (default) 45° and 60° roof pitch

**Sample orientations:** Square and at 45°

**Sample detailing:** Prior to the test the flashing was crimped and the base sealed.

**Observations:** No water penetration was observed during the tests.

**Resistance to Concentrated Loads ..... PASS**

**Method:** AS4040.1 modified as required in AS4285

**Load applied:** 1.1kN at the centre of the glazing and at one corner.

**Observations:** Each load was sustained for the test duration of 1 minute.

## Resistance to Wind Pressures for Non-cyclone Regions

**Method:** AS4040.2 modified as required in AS4285.

**Loads applied and sustained for 1 minute (kPa):**

Positive	4.22	<b>PASS</b>
Negative	6.39	<b>PASS</b>

**Observations:** No sign of failure was observed at the test pressures above.

### **Conclusion:**

The test sample passed the test requirements of Australian Standard AS4285-2007 for Watertightness, Resistance to Concentrated Loads, and Resistance to Wind Pressures for Non-cyclone Regions at the test loads.

The test of Resistance to Wind Pressures for Non-cyclone Regions determined the maximum Strength Limit State pressures sustained by the skylights during testing.

<b>Maximum Strength Limit State Pressures Sustained</b>	
<b>+ 4.22 kPa</b>	<b>- 6.39 kPa</b>

These loads correspond with the static loads nominated in AS4055-2012 for Wind Classes up to C4 for the General roof zone (away from edges) defined in that Standard



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Ian Bennie 30 November 2017  
Authorised Signatory