




Appendix D – Copy of Certificate of Test

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<h2>Certificate of Test</h2>																																
		No. 3227																														
This is to certify that the element of construction described below was tested by the CSIRO Infrastructure Technology in accordance with Australian Standard 1530, Methods for fire tests on building materials, components and structures, Part 8.1-2007 (Clause 18, Skylights and Roof Windows), Tests on elements of construction for buildings exposed to simulated bushfire attack – radiant heat and small flaming sources, on behalf of:																																
Keylite Roof Windows Ltd Derryloran Industrial Estate County Tyrone BT80 9LU Ireland																																
A full description of the test specimen and the complete test results are detailed in the Division's report numbered FSZ 1959.																																
System Name: Keylite RWE 08 Electric Skylight roof window assembly																																
Description: The specimen comprised an electrically operated Keylite RWE 08 Electric Skylight (1000-mm x 1000-mm) roof window assembly (including a removable stainless steel flyscreen) mounted into a 2000-mm wide x 1500-mm high x 1500-mm deep timber framed roof system with a 45 degree pitch. The roof assembly was mounted into a 2400-mm wide x 2400-mm high opening in a masonry lined frame with a steel beam used to support the front of the roof specimen during the test. The window incorporates double glazed 4-mm thick toughened outer Sun Guard pane, 18-mm cavity filled with Argon gas, 6-mm thick laminated inner pane. The size of the glass panes was 1050-mm x 1077-mm. Framing is described as Aluminium framing, incorporating a zinalume head cap along the top of the skylight. Flashing is comprised of 1185-mm wide x 1145 high flat zinalume skylight base flashing, along the bottom with the gaps between the corrugation and the flat base flashing have been sealed with Promat Promaseal sealant. The roof framing was comprised of pine timber 90-mm x 45-mm frame rafters at nominal 1200-mm centres. The system included Truecore 75-mm wide x 40-mm high top hat steel roofing battens. The rafters were lined with Lysaght Custom Orb 0.42 BMT corrugated profile steel roofing material and the roof cladding included capping and edging. Insulation/sarking was comprised of 80-mm thick Bradford Anticon faced glasswool blanket. The ceiling comprised a gutter and fascia and the ceiling lining 16-mm thick CSR Fyrchek plasterboard. Eaves lining was comprised of 15-mm thick plywood lined with 16-mm thick CSR Fyrchek plasterboard and 4.5-mm thick fibre-cement. Roof space enclosure detail included 4.5-mm thick fibre cement sheeting for sides and underside of roof enclosure and 4.5-mm thick fibre cement sheeting with 100-mm x 100-mm vent at base for rear wall of roof enclosure.																																
<table border="1"> <thead> <tr> <th>Performance Criteria observed in respect of Clause 14.4 of AS 1530.8.1-2007</th> <th>Time to failure (min)</th> <th>Position of failure</th> </tr> </thead> <tbody> <tr> <td>Formation of through gaps greater than 3-mm</td> <td>No failure</td> <td>-</td> </tr> <tr> <td>Sustained flaming for 10 seconds on the non-fire side</td> <td>No failure</td> <td>-</td> </tr> <tr> <td>Flaming on the fire-exposed side at the end of the 60 minutes test period</td> <td>No failure</td> <td>-</td> </tr> <tr> <td>Radiant heat flux 365-mm from the non-fire side exceeding 15-kW/m²</td> <td>No failure</td> <td>-</td> </tr> <tr> <td>Mean and maximum temperature rises greater than 140 K and 180 K</td> <td>No failure</td> <td>-</td> </tr> <tr> <td>Radiant heat flux 250-mm from the specimen, greater than 3-kW/m² between 20 minutes and 60 minutes</td> <td>No failure</td> <td>-</td> </tr> <tr> <td>Mean and maximum temperature of internal faces exceeding 250°C and 300°C respectively between 20 minutes and 60 minutes after commencement of test</td> <td>Not applicable</td> <td>-</td> </tr> <tr> <td>Crib class</td> <td>n/a</td> <td>Peak heat flux</td> </tr> <tr> <td></td> <td></td> <td>40 kW/m²</td> </tr> </tbody> </table>	Performance Criteria observed in respect of Clause 14.4 of AS 1530.8.1-2007	Time to failure (min)	Position of failure	Formation of through gaps greater than 3-mm	No failure	-	Sustained flaming for 10 seconds on the non-fire side	No failure	-	Flaming on the fire-exposed side at the end of the 60 minutes test period	No failure	-	Radiant heat flux 365-mm from the non-fire side exceeding 15-kW/m ²	No failure	-	Mean and maximum temperature rises greater than 140 K and 180 K	No failure	-	Radiant heat flux 250-mm from the specimen, greater than 3-kW/m ² between 20 minutes and 60 minutes	No failure	-	Mean and maximum temperature of internal faces exceeding 250°C and 300°C respectively between 20 minutes and 60 minutes after commencement of test	Not applicable	-	Crib class	n/a	Peak heat flux			40 kW/m ²		
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For the purpose of building regulations in Australia, Keylite RWE 08 Electric Skylight roof window assembly achieved a Bushfire Attack Level (BAL) of 40.																																
This report details methods of construction, the test conditions and the results obtained when the specific element of construction described herein was tested in accordance with test method of AS 1530.8.1-2007. This certificate is provided for general information only and does not comply with regulatory requirements for evidence of compliance.																																
Testing Officer: Chris Wojcik	Date of Test: 15 November 2018																															
Issued on the 29 th day of March 2019 without alterations or additions.																																
																																
Brett Roddy Team Leader, Fire Testing and Assessments																																
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