

Test Report No. 7191241094-MEC20-LXR
dated 01 SEPT 2020

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PERFORMANCE TEST
OF
SLIDING DOOR SYSTEM
FOR
PROJECT: Patio 130 LS

TESTED FOR:


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LA-2007-0380-A LA-2007-0385-E LA-2007-0381-F LA-2007-0386-C LA-2007-0382-B LA-2010-0464-D LA-2007-0383-G LA-2018-0702-B LA-

The results reported herein have been performed in accordance with the terms of accreditation under the Singapore Accreditation Council. Inspections/Calibrations/Tests marked "Not SAC- SINGLAS Accredited" in this Report are not included in the SAC-

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SUMMARY OF TEST AND TEST RESULTS
PROJECT: PATIO 130 LS

Items	Project Test Parameters	Project Requirements	Results												
Air Leakage Test	<ul style="list-style-type: none"> a. Preload 50% design load (750Pa) b. Operate sliding door 5 cycles. c. Apply positive pressure of 300Pa and record the air infiltration rate with polyethylene sheet pasted to test for extraneous leakage, Q_e. d. Remove the polyethylene sheet. e. Apply positive pressure of 300Pa and record the specimen air leakage, Q_{ts}. 	<p>Reference to ASTM E283-04 (2012)</p> <p>Nil</p> <p>Area = 5.3m² Perimeter = 7m</p>	Passed												
Static Water Penetration Test	<ul style="list-style-type: none"> a. Operate sliding door 5 cycles. b. Positive pressure of 500Pa is applied for duration of 15 minutes on surface area. c. Record all points of water leakages. 	<p>Reference to ASTM E331-00 (2016)</p> <p>No leakage is permitted onto the internal face of the sliding door system at a water spray of 3.4 L/m²/min.</p>	Passed												
Cyclic Water Penetration Test	<ul style="list-style-type: none"> a. Operate sliding door 5 cycles b. Positive pressure of 300Pa is applied for duration of 5 minutes on surface area. c. Reduce pressure to 0Pa and maintain for 1 minute. d. Repeat b – c for pressure of 500, 750, 1000Pa. e. Record all points of water leakages. 	<p>Reference to ASTM E547-00 (2016)</p> <p>No leakage is permitted onto the internal face of the sliding door system at a water spray of 3.4 L/m²/min.</p>	Passed												
Structural Performance Test	<ul style="list-style-type: none"> a. Preload 50% design pressure 750Pa and maintain for 10 seconds. b. Between 1 to 5 minutes, take residual reading and zero transducers. c. Apply up to 100% design pressure of 1500Pa in 4 equal steps (750, 1000, 1250 and 1500Pa) each 10 seconds and record the maximum deflection readings. e. Between 1 to 5 minutes, take residual deflection after load is removed. f. To be repeated for negative pressure (-1500Pa). 	<p>Reference to AAMA TIR-11</p> <p>Mullion/ Transom: maximum deflection shall not exceed Span/175 mm or 20mm whichever is lesser for spans less than 13 feet 6 inches</p> <table border="1" data-bbox="943 1581 1347 1724"> <tr> <td>1-2-3</td> <td>2650/175</td> <td>15.14 mm</td> </tr> <tr> <td>4-5-6</td> <td>2000/175</td> <td>11.43 mm</td> </tr> </table> <p>Glass panels:</p> <table border="1" data-bbox="943 1783 1347 1865"> <tr> <td>7-8-9</td> <td>-</td> <td>For info</td> </tr> <tr> <td>10-11-12</td> <td>-</td> <td>For info</td> </tr> </table>	1-2-3	2650/175	15.14 mm	4-5-6	2000/175	11.43 mm	7-8-9	-	For info	10-11-12	-	For info	Passed
1-2-3	2650/175	15.14 mm													
4-5-6	2000/175	11.43 mm													
7-8-9	-	For info													
10-11-12	-	For info													
Proof Load Test	<ul style="list-style-type: none"> a. Apply 150% design pressure i.e. 2250Pa and maintain for 10 seconds. b. Between 1 to 5 minutes, take residual reading and zero transducers. c. To be repeated for negative pressure (-2250Pa). 	<p>Reference to ASTM E330/330M (2014)</p> <p>No permanent distortion or glass breakage shall occur. Hardware shall remain operable.</p>	Passed												