

Abstract

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Usability Test

– water tightness under heavy rain and storm –






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Sponsor: Lamilux Heinrich Strunz GmbH
Product: Continuous rooflight B
System: LAMILUX-Ci System continuous rooflight B with single flap
Outer dimensions: (W x L): 2000 mm x 3000 mm
Project manager: Dipl.-Ing. Jorge Gomez

	Rain fall rate for the complete continuous rooflight	150 l/(h m ²)
	Rain fall rate over the edge of the flap (per m length)	450 l/(h m ²)
	Maximum wind speed	32 m/s
	Beaufort-Scale	Bft 11: violent storm
	Tested rain index of the complete continuous rooflight	DRI 3.0 m ² /s
	Tested rain index over the edge of the flap	DRI 14.4 m ² /s (DRI: Driving Rain Index)

Test setup	Parts tested
	<ul style="list-style-type: none"> Complete continuous rooflight system Single flap over the edge Base profile Joints Gable wall

Test results at 900 l/h total amount of water			
oncoming flow	wind speed u [m/s]	leakage rate \dot{m} [l/(h m ²)]	DRI [m ² /s]
perpendicular to the axis of the continuous rooflight	20 (Bft 8: gale)	0	3.0
parallel to the axis of the continuous rooflight	20 (Bft 8: gale)	0	3.0
perpendicular to the axis of the continuous rooflight (over the edge of the single flap over a length of 1.5 m)	25 (Bft 10: storm)	0	7.5
perpendicular to the axis of the continuous rooflight (over the edge of the single flap over a length of 1.0 m)	32 (Bft 11: violent storm)	0	14.4

Aachen, February 2, 2015

Head of test laboratory



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Test engineer



Bernd Poick