Summary Report

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Summary Report 54763/1 **Issue No: 1** **Date of issue: 31 August 2018**

This Summary Report confirms that BSRIA Ltd has tested a sample of the product described below in accordance with the test methods contained within EN 13030 : 2001 and have determined the item met the detailed classification shown on pages 3 to 5. For further details of the test item see Page 2 of this Summary Report.

Manufacturer/Agent	N.V. Renson Projects IZ 2 Vijverdam Maalbeekstraat 6 B-8790 Waregem
Product	L.050W
Test location	BSRIA Old Bracknell West Bracknell Berkshire RG12 7AH
Date of test	14 – 28 April 2011
Date of issue	31 August 2018
Test engineer	A Freeth
Quality approved	Mark Roper Principal Test Engineer

This summary report supersedes certificate 54763/1 Ed 2. This up-date was carried out under BSRIA contract reference 61223.

TEST INFORMATION

Contract	54763A	
Date	April 2011	
Manufacturer	N.V. Renson Projects	
Louvre Model	L.050W	
Material	Aluminium	
Painted	No	
Blade Height	965	mm
Blade Width	960	mm
Blade Depth	129	mm
Frame Depth	160	mm
No.of Blades	19	
Blade Pitch	50	mm
No.of Banks	1	
Guard Type	Insect	
Guard Spacing	0	mm
Side Channels	None	
Drip Tray	Yes	
Blade Orientation	Horizontal	

Front view of louvre

Note: Certificate 54763/1 Edition 1 described the louvre as having 2 banks of blades. The louvre has a single bank of blades, with a profile which extends almost the full depth of the unit. The test item information above has been amended. No other changes have been made.

RAINWATER PENETRATION

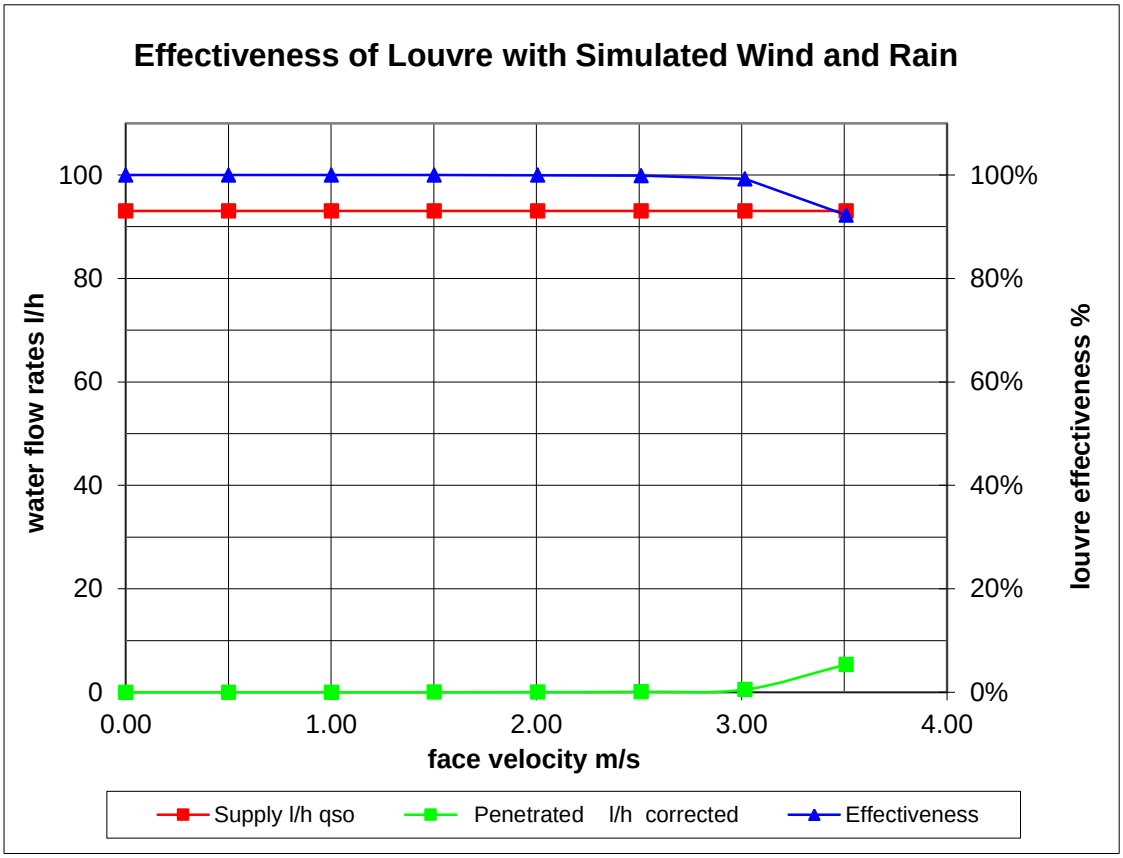
MANUFACTURER Renson
MODEL L.050W

Date 14-28/04/2011
Contract 54763

Simulated rainfall 75 mm/hr
Wind speed 13.0 m/s

louvre height 965 mm
louvre width 960 mm
louvre area 0.926 m^2

VENTILATION RATE		WATER FLOW RATES		Effectiveness	Class
Volume m^3/s	Velocity m/s	Supply l/h	Penetrated l/h		
0.00	0.00	93.0	0.0	100.0%	A
0.46	0.50	93.0	0.0	100.0%	A
0.93	1.00	93.0	0.0	100.0%	A
1.39	1.50	93.0	0.0	100.0%	A
1.86	2.01	93.0	0.0	99.9%	A
2.33	2.51	93.0	0.1	99.9%	A
2.79	3.02	93.0	0.5	99.2%	A
3.25	3.51	93.0	5.4	92.2%	C



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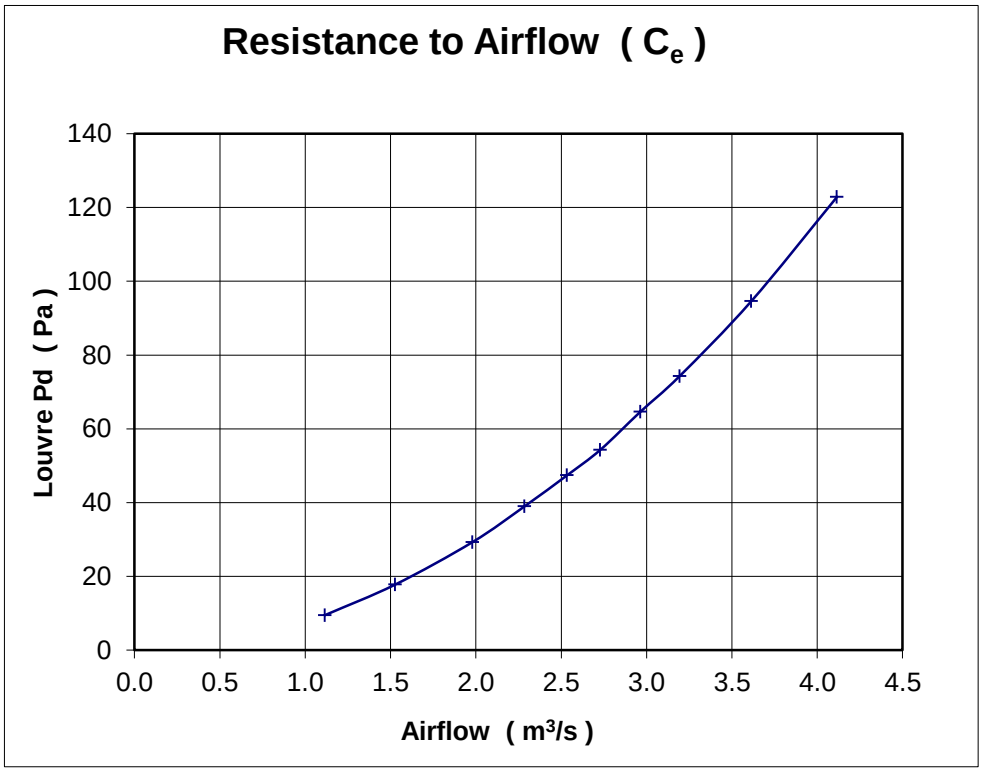
COEFFICIENT OF ENTRY

MANUFACTURER Renson Date 26/04/2011
MODEL L.050W Contract 54763

air temperature	17	°C	louvre height	965	mm
barometer	1016	mbar	louvre width	960	mm
air density	1.215	kg/m^3	louvre area	0.926	m^2

	louvre face velocity	air flow rate		
louvre pd Pascals	m/s	test m^3/s	theoretical m^3/s	coefficient C_e
9.5	1.20	1.12	3.66	0.304
17.8	1.65	1.53	5.01	0.305
29.3	2.14	1.98	6.43	0.308
39.0	2.47	2.29	7.42	0.308
47.4	2.74	2.53	8.18	0.310
54.3	2.95	2.73	8.76	0.312
64.6	3.20	2.96	9.55	0.310
74.3	3.45	3.19	10.25	0.312
94.6	3.90	3.61	11.56	0.313
122.8	4.44	4.11	13.17	0.312
			mean C_e	0.309
			Class	2

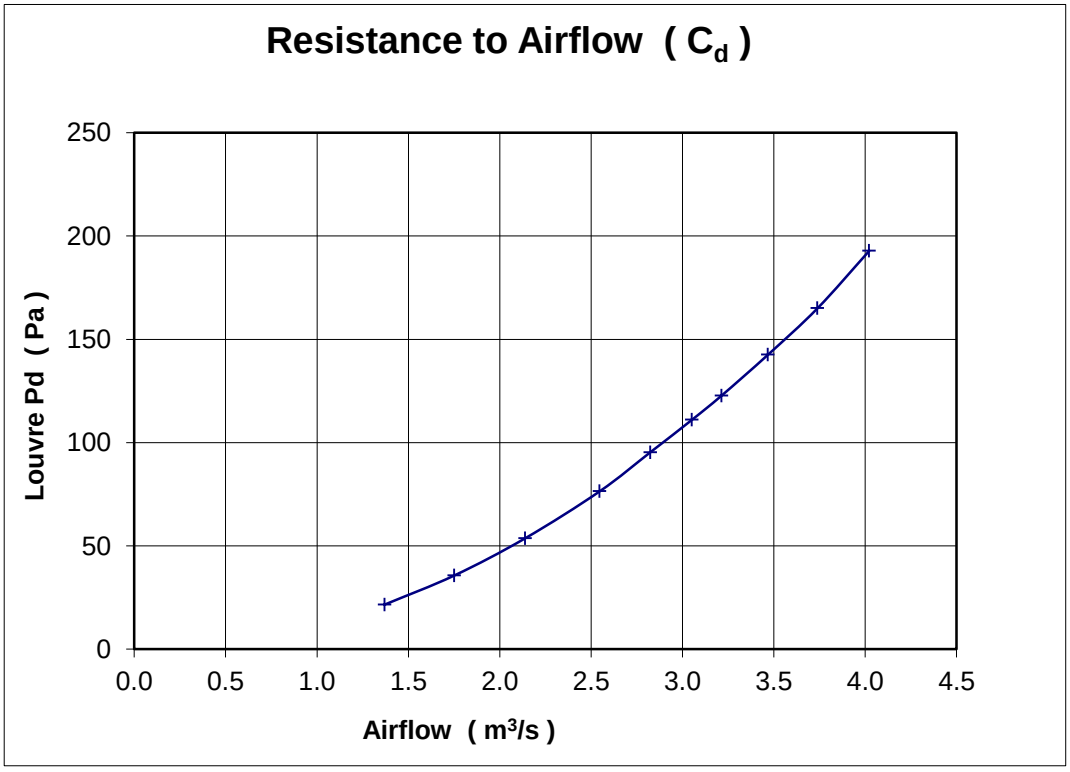


COEFFICIENT OF DISCHARGE

MANUFACTURER Renson Date 27/04/2011
MODEL L.050W Contract 54763

air temperature	16.8	°C	louvre height	965	mm
barometer	1021	mbar	louvre width	960	mm
air density	1.222	kg/m^3	louvre area	0.926	m^2

	louvre face velocity	air flow rate		
louvre pd Pascals	m/s	test m^3/s	theoretical m^3/s	coefficient Cd
21.6	1.48	1.370	5.509	0.249
35.7	1.89	1.752	7.082	0.247
53.7	2.31	2.139	8.686	0.246
76.4	2.75	2.547	10.360	0.246
95.3	3.05	2.824	11.571	0.244
111.0	3.29	3.051	12.487	0.244
122.7	3.47	3.213	13.129	0.245
142.5	3.74	3.467	14.149	0.245
165.0	4.04	3.739	15.225	0.246
192.8	4.34	4.022	16.457	0.244
			mean Cd	0.246
			Class	3



CLASSIFICATION OF WEATHER LOUVRES

Weather louvres shall be classified by their ability to reject simulated rain.

Penetration Classification

Table 1 shows the different classifications based on the maximum simulated rain penetration per square metre of louvre. The classification is determined in accordance with section 8.2 of EN 13030:2001.

Water penetration rating at a given louvre face velocity is determined by the water penetration while the louvre is subjected to a 13 ms^{-1} simulated wind velocity and a simulated rain fall at the nominal rate.

Table 1 - Penetration classification

Class	Effectiveness	Maximum allowed penetration of simulated rain $l.h^{-1}.m^{-2}$
A	1,00 TO 0,99	0,75
B	0,989 TO 0,95	3,75
C	0,949 TO 0,80	15,0
D	Below 0,8	Greater than 15,0

These classifications apply to various core velocities.

Discharge and Entry Loss Coefficient

The discharge and entry loss coefficient given in Table 2, shall be determined in accordance with section 8.3 of test standard EN13030:2001.

Table 2 - Discharge and Entry loss coefficient classification

Class	Discharge and Entry Loss Coefficient
1	0,4 and above
2	0,3 to 0,399
3	0,2 to 0,299
4	0,199 and below