Summary Report

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Summary Report 53928/2 **Issue No: 1** **Date of issue: 10 October 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.066V
Test location	BSRIA Old Bracknell West Bracknell Berkshire RG12 7AH
Date of test	18 January to 4 February 2010
Date of issue	9 October 2018
Test engineer	A Freeth

Quality approved Mark Roper
Principal Test Engineer

This summary report supersedes certificate 53928/2. This up-date was carried out under BSRIA contract reference 61223.

TEST INFORMATION

Contract	53928A	
Date	18/01/2010	
Manufacturer	Renson	
Louvre Model	L.066V vertical	
Material	Aluminium	
Painted	No	
Blade Height	1000	mm
Blade Width	998	mm
Blade Depth	80	mm
Frame Depth	85	mm
No.of Blades	15	
Blade Pitch	66	mm
Blade Angle	45	Degrees
No.of Banks	1	
Guard Type	Insect	
Guard Spacing	5	
Side Channels	No	
Water Drip Tray	Yes	
Blade Orientation	Vertical	

Front view of louvre

RAINWATER PENETRATION

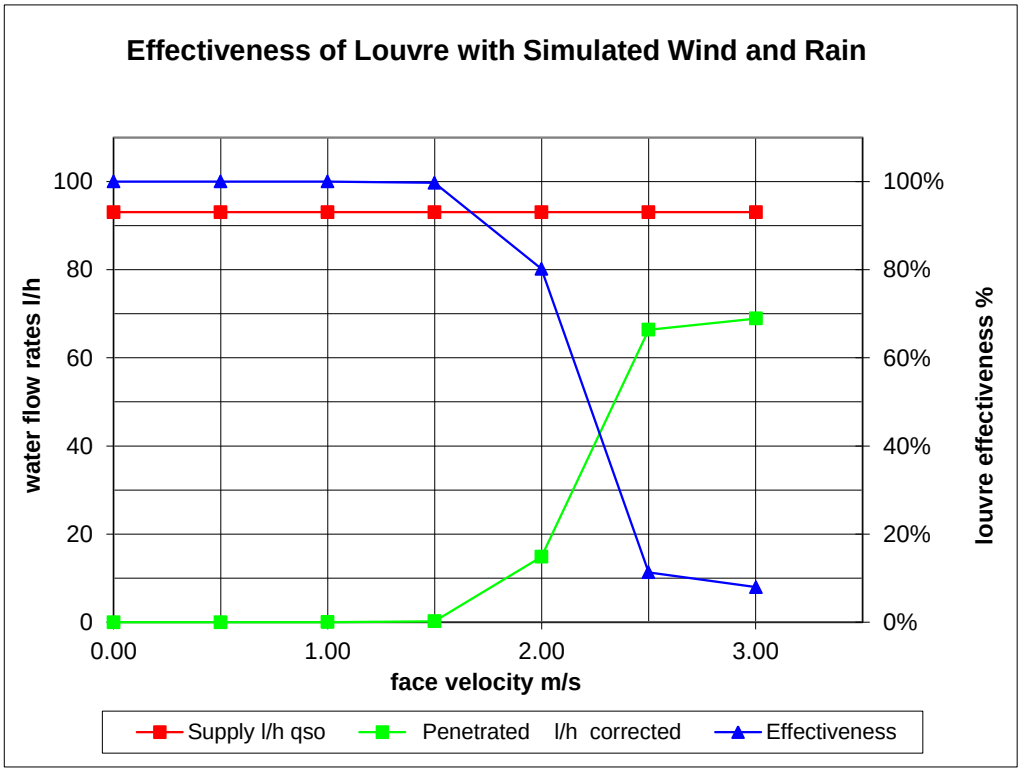
MANUFACTURER Renson
MODEL L.066V vertical

Date 18/01/2010
Contract 53928A

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

louvre height 1000 mm
louvre width 998 mm
louvre area 0.998 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
0.50	0.50	93.0	0.0	100.0%	A
1.00	1.00	93.0	0.0	100.0%	A
1.50	1.50	93.0	0.2	99.7%	A
2.00	2.00	93.0	14.8	80.2%	C
2.50	2.50	93.0	66.4	11.3%	D
3.00	3.00	93.0	68.9	7.9%	D

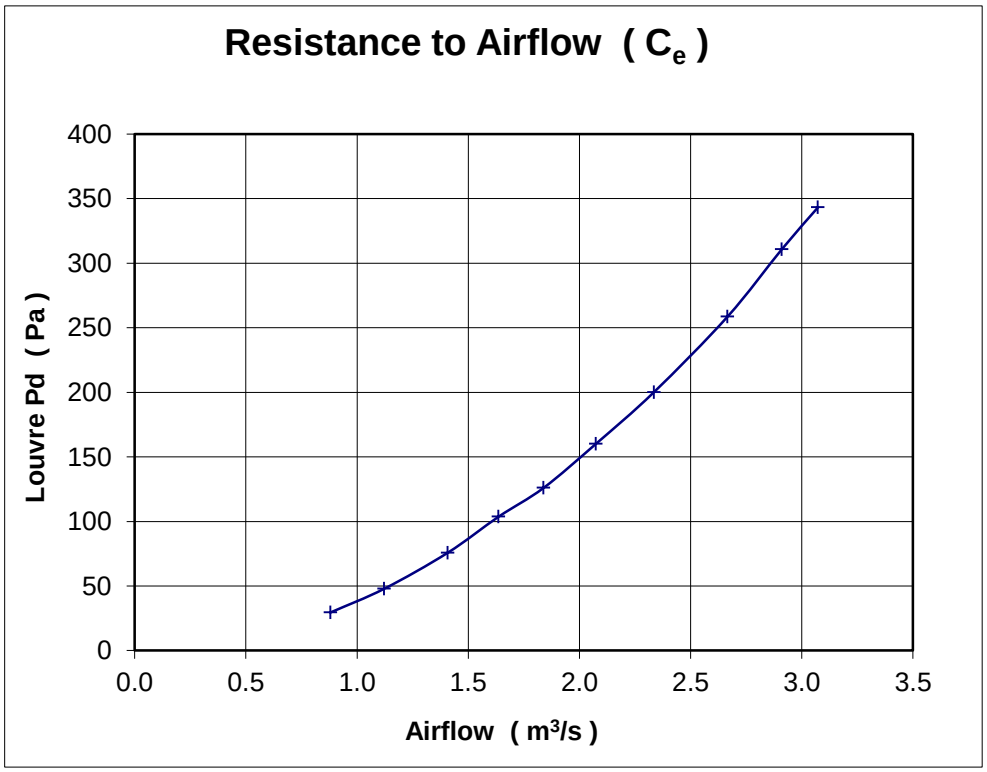


COEFFICIENT OF ENTRY

MANUFACTURER Renson Date 18/01/2010
MODEL L.066V vertical Contract 53928A

air temperature	14.9	°C	louvre height	1000	mm
barometer	1026	mbar	louvre width	998	mm
air density	1.236	kg/m^3	louvre area	0.998	m^2

	louvre face velocity	air flow rate		
louvre pd Pascals	m/s	test m^3/s	theoretical m^3/s	coefficient C_e
29.5	0.88	0.880	6.895	0.128
47.9	1.12	1.122	8.787	0.128
75.8	1.41	1.408	11.053	0.127
103.7	1.64	1.637	12.928	0.127
126.0	1.84	1.839	14.251	0.129
160.2	2.08	2.075	16.069	0.129
200.1	2.34	2.335	17.959	0.130
258.7	2.67	2.667	20.420	0.131
310.8	2.92	2.910	22.382	0.130
343.2	3.08	3.073	23.519	0.131
			mean C_e	0.129
			Class	4

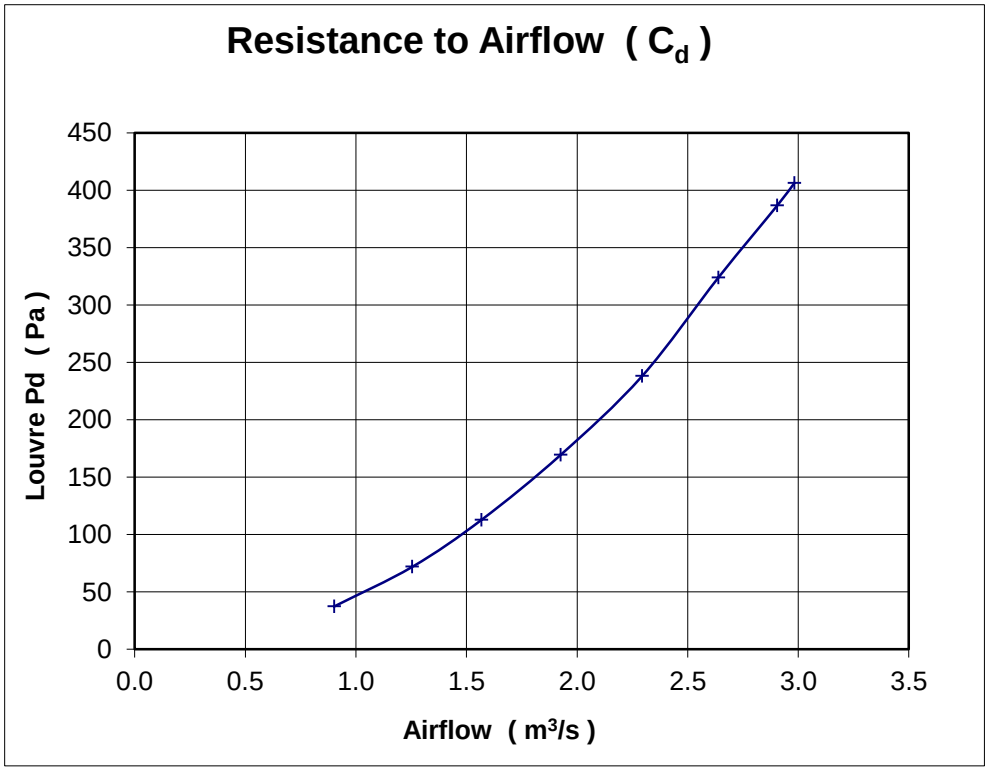


COEFFICIENT OF DISCHARGE

MANUFACTURER Renson Date 04/02/2010
MODEL L.066V vertical Contract 53928A

air temperature	18	°C	louvre height	1000	mm
barometer	999.4	mbar	louvre width	998	mm
air density	1.191	kg/m^3	louvre area	0.998	m^2

	louvre face velocity	air flow rate		
louvre pd Pascals	m/s	test m^3/s	theoretical m^3/s	coefficient C_d
37.4	0.90	0.902	7.909	0.114
71.9	1.26	1.255	10.966	0.114
112.9	1.57	1.568	13.741	0.114
169.4	1.93	1.926	16.832	0.114
238.1	2.30	2.294	19.955	0.115
324.0	2.64	2.639	23.279	0.113
386.6	2.91	2.905	25.428	0.114
406.3	2.99	2.983	26.068	0.114
			mean C_d	0.114
			Class	4



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