Summary Report

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Summary Report 53355/2 **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	25 August to 17 September 2009
Date of issue	9 October 2018
Test engineer	A Freeth

Quality approved Mark Roper
Principal Test Engineer

This summary report supersedes certificate 53355/2. This up-date was carried out under BSRIA contract reference 61223.

TEST INFORMATION

Contract	53355A	
Date	25/08/2009	
Manufacturer	Renson	
Louvre Model	L.066V	
Material	Aluminium	
Painted	No	
Blade Height	1010	mm
Blade Width	1000	mm
Blade Depth	65	mm
Frame Depth	85	mm
No.of Blades	15	
Blade Pitch	66	mm
Blade Angle	45	Degrees
No.of Banks	1	
Guard Type	Bird	
Guard Spacing	8	
Side Channels	No	
Water Drip Tray	Yes (13 mm Deep)	
Blade Orientation	Horizontal	

Front view of louvre

RAINWATER PENETRATION

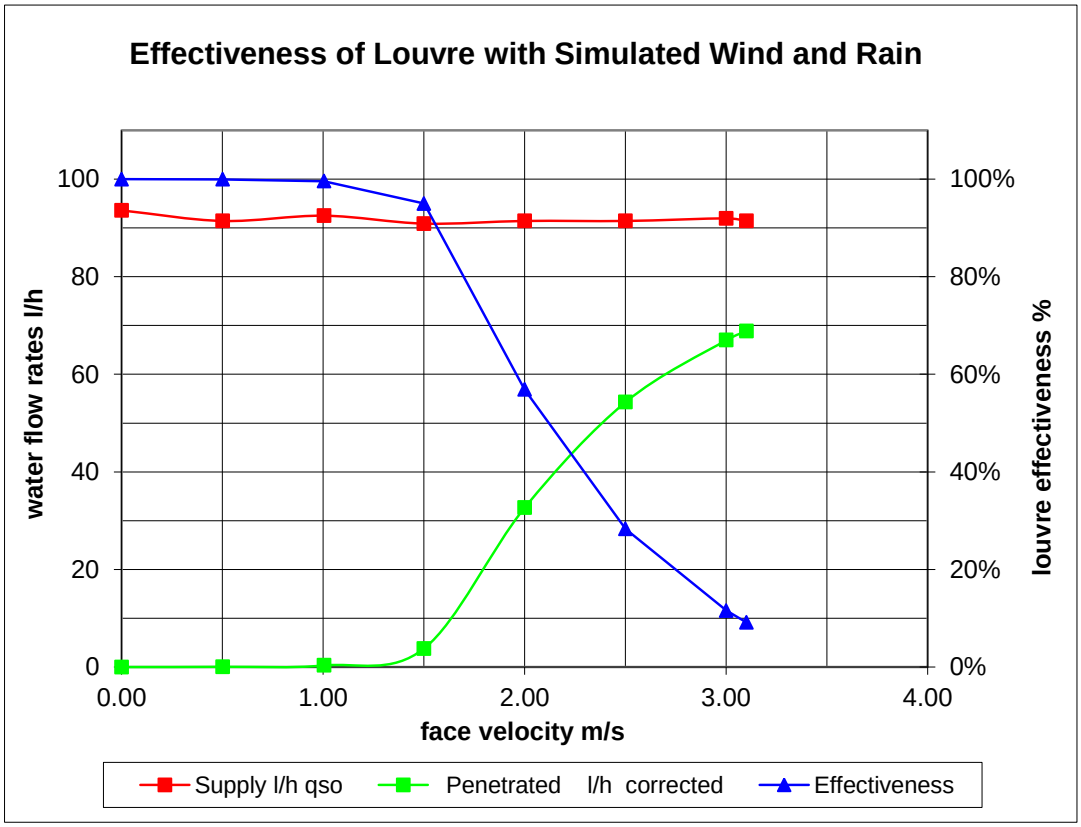
MANUFACTURER Renson
MODEL L.066V

Date 14/08/2009
Contract 53355A

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

louvre height 1010 mm
louvre width 1000 mm
louvre area 1.010 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	93.6	0.0	100.0%	A
0.51	0.50	91.4	0.0	99.9%	A
1.01	1.00	92.5	0.3	99.6%	A
1.52	1.50	90.9	3.8	95.0%	B
2.02	2.00	91.4	32.7	56.9%	D
2.53	2.50	91.4	54.3	28.3%	D
3.03	3.00	92.0	67.0	11.6%	D
3.13	3.10	91.4	68.8	9.1%	D



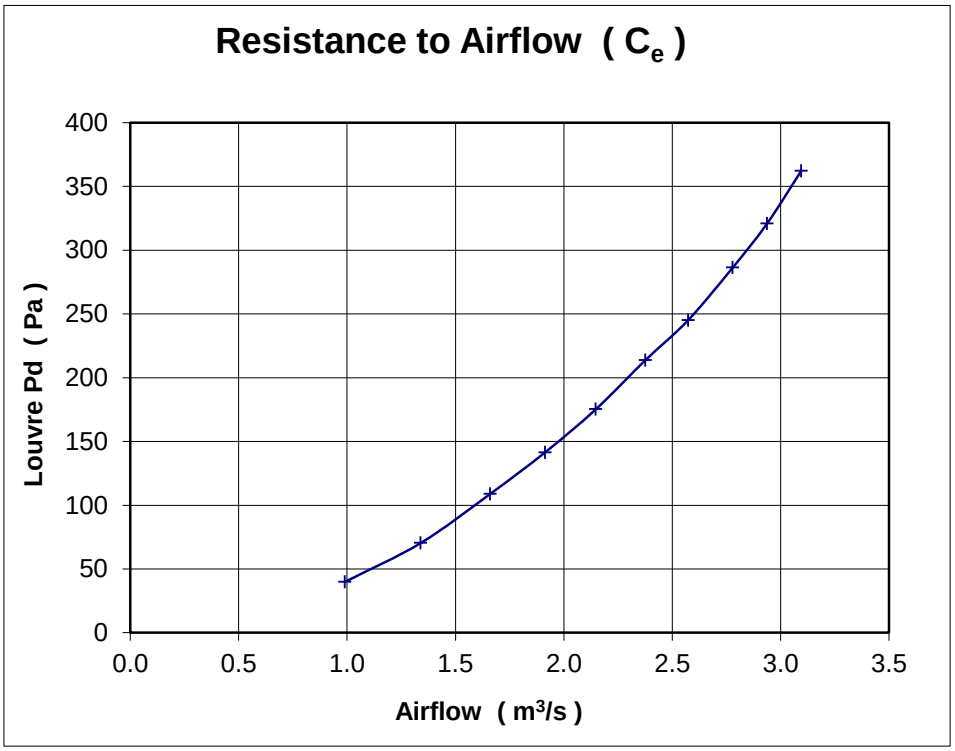
COEFFICIENT OF ENTRY

MANUFACTURER Renson
MODEL L.066V

Date 26/08/2009
Contract 53355A

air temperature	19.8	°C	louvre height	1010	mm
barometer	1002	mbar	louvre width	1000	mm
air density	1.187	kg/m^3	louvre area	1.010	m^2

	louvre face velocity	air flow rate		
louvre pd Pascals	m/s	test m^3/s	theoretical m^3/s	coefficient C_e
39.9	0.98	0.990	8.282	0.120
70.3	1.33	1.339	10.993	0.122
108.8	1.64	1.660	13.676	0.121
141.4	1.89	1.913	15.591	0.123
175.2	2.13	2.148	17.355	0.124
213.7	2.35	2.376	19.167	0.124
245.1	2.55	2.574	20.527	0.125
286.3	2.75	2.779	22.185	0.125
320.8	2.91	2.938	23.484	0.125
362.1	3.06	3.095	24.950	0.124
			mean C_e	0.123
			Class	4



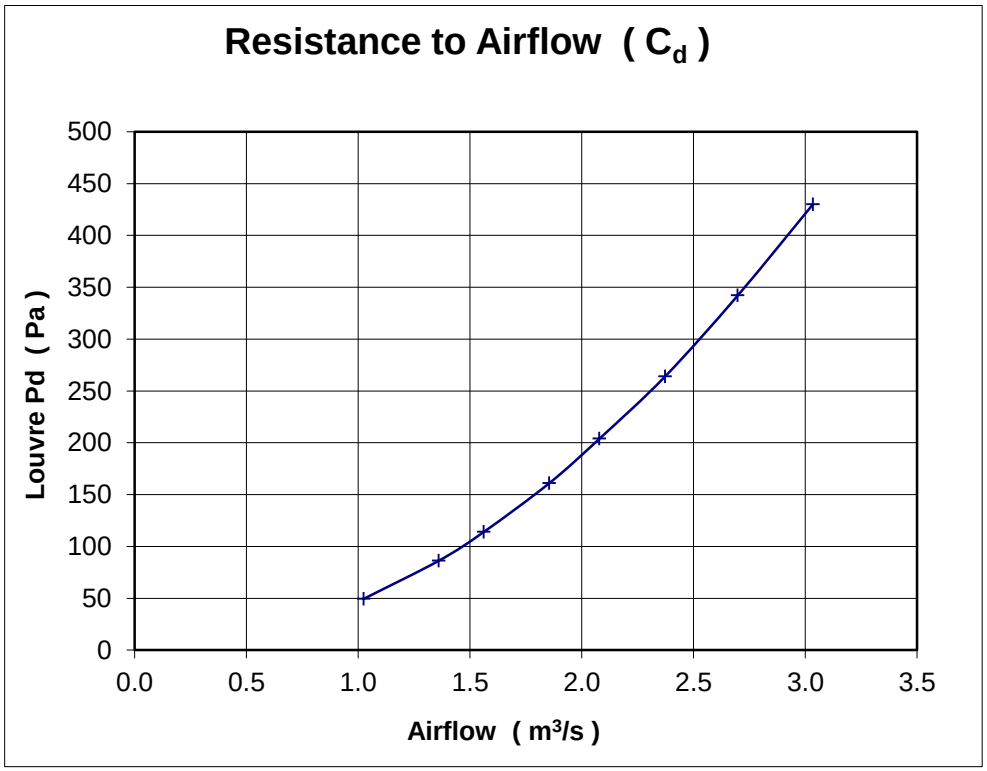
COEFFICIENT OF DISCHARGE

MANUFACTURER Renson
MODEL L.066V

Date 14/08/2009
Contract 53355A

air temperature	18.9	°C	louvre height	1010	mm
barometer	1014	mbar	louvre width	1000	mm
air density	1.205	kg/m^3	louvre area	1.010	m^2

	louvre face velocity	air flow rate		
louvre pd Pascals	m/s	test m^3/s	theoretical m^3/s	coefficient C_d
49.5	1.01	1.025	9.156	0.112
86.3	1.35	1.361	12.089	0.113
114.0	1.55	1.561	13.895	0.112
161.0	1.84	1.854	16.512	0.112
204.0	2.06	2.079	18.587	0.112
264.0	2.35	2.373	21.144	0.112
342.0	2.67	2.697	24.066	0.112
430.0	3.00	3.034	26.985	0.112
			mean C_d	0.112
			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