Summary Report

Summary Report 54763/4   **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 and 4. 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.120.01
Test location	BSRIA Old Bracknell West Bracknell Berkshire RG12 7AH
Date of test	29 December 2010
Date of issue	9 October 2018
Test engineer	A Freeth

Quality approved   Mark Roper
                                       Principal Test Engineer

This summary report supersedes certificate 54763/4. This up-date was carried out under BSRIA contract reference 61223.

TEST INFORMATION

Contract	54763
Date	December 2010
Manufacturer	N.V. Renson Projects
Louvre Model	L.120.01
Material	Aluminium
Painted	No
Blade Height	1005 mm
Blade Width	1005 mm
Blade Depth	89 mm
Frame Depth	100 mm
No. of Blades	8
Blade Pitch	120 mm
Blade Angle	30 degrees
No. of Banks	1
Guard Type	None
Guard Spacing	N/A mm
Side Channels	None
Water Drip Tray	Yes
Blade Orientation	Horizontal

Front view of louvre

COEFFICIENT OF ENTRY

MANUFACTURER   Renson   Date 29/12/2010
      MODEL   L.120.01 (no mesh)   Contract 54763

air temperature	15 °C	louvre height	1005 mm
barometer	1015 mbar	louvre width	1005 mm
air density	1.222 kg/m^3	louvre area	1.010 m^2

| louvre pd | louvre face velocity | air flow rate | | coefficient |
Pascals	m/s	test m^3/s	theoretical m^3/s	C_e
130.0	3.88	3.916	14.731	0.266
121.0	3.75	3.792	14.212	0.267
106.0	3.54	3.571	13.302	0.268
93.0	3.29	3.322	12.460	0.267
78.5	3.03	3.056	11.447	0.267
64.0	2.75	2.773	10.336	0.268
52.0	2.49	2.511	9.317	0.269
38.0	2.12	2.140	7.965	0.269
25.0	1.75	1.766	6.460	0.273
16.0	1.40	1.412	5.168	0.273
			mean C_e	0.269
			Class	3

Resistance to Airflow (C_e)

COEFFICIENT OF DISCHARGE

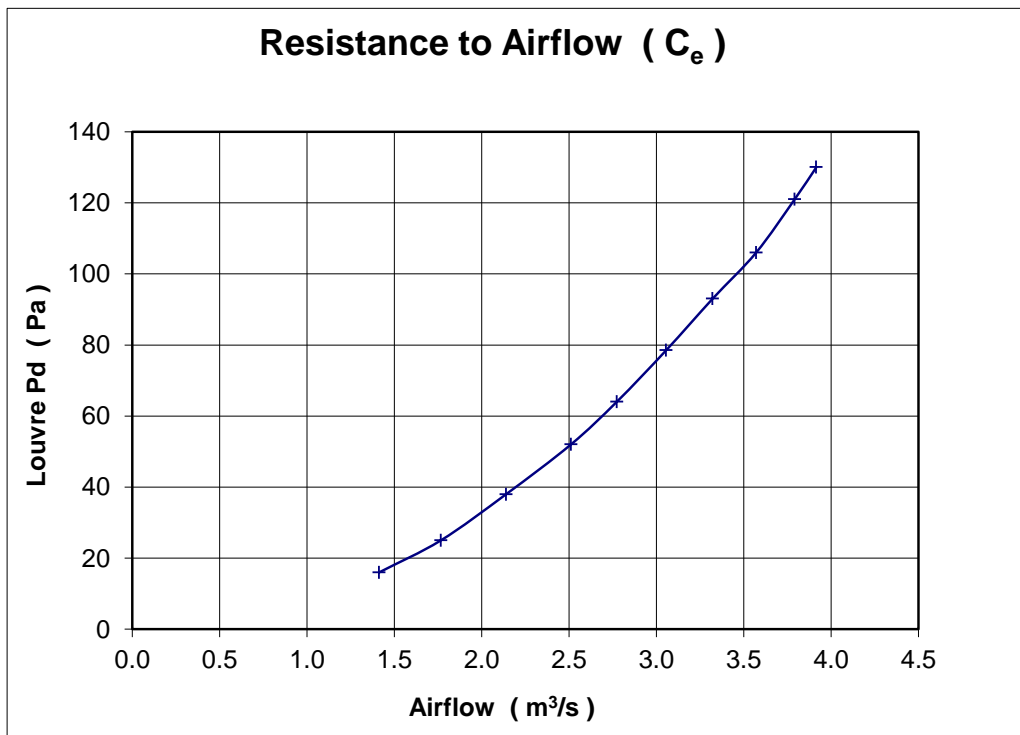MANUFACTURER   Renson   Date 29/12/2010
            MODEL   L.120.01 Reversed   Contract 54763

air temperature   16   °C   louvre height   1005 mm
        barometer 1015 mbar   louvre width   1005 mm
       air density 1.218 kg/m^3 louvre area   1.010 m^2

louvre pd Pascals	louvre face velocity m/s	air flow rate test m^3/s	theoretical m^3/s	coefficient C_d
136.0	3.85	3.886	15.094	0.257
127.0	3.75	3.786	14.586	0.260
116.0	3.54	3.577	13.940	0.257
99.5	3.31	3.342	12.910	0.259
85.0	3.05	3.077	11.933	0.258
68.0	2.75	2.778	10.673	0.260
54.0	2.45	2.472	9.511	0.260
41.0	2.14	2.160	8.287	0.261
27.0	1.76	1.782	6.725	0.265
14.5	1.31	1.328	4.928	0.269

mean C_d	0.261
Class	3

Resistance to Airflow (C_d)
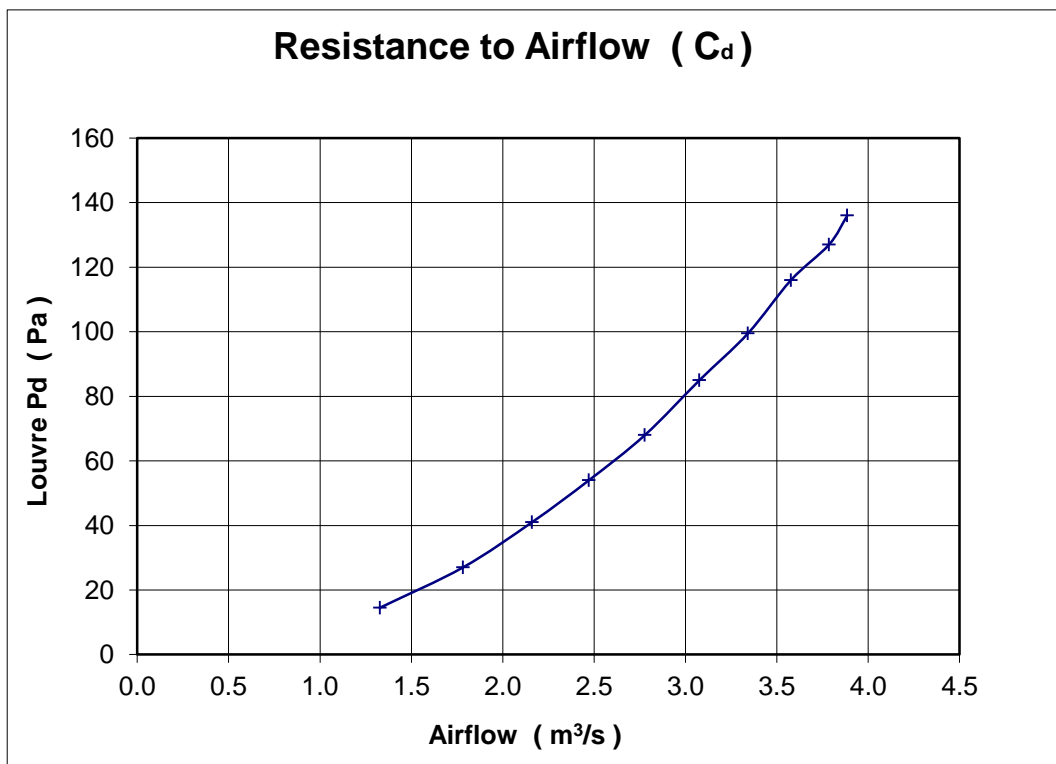
CLASSIFICATION OF WEATHER LOUVRES

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