

RENSON LINIUS® L.170ACS

SPECIFICATION SHEET

LINIUS® L.170ACS is a ventilation system composed of continuous louvres with the following essential characteristics:

- Acoustic Performance

According to :

- EN ISO 10140-1:2010
- EN ISO 10140-2:2010
- EN ISO 717-1:1996 + A1:2006

Tested with dimensions width x height = 1.23m x 1.48m

- Sound reduction index $R_w (C;C_{tr}) = 9 (0;-1)$
- Sound reduction related to frequency :

F (Hz)	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150
R in dB	5,3	4,2	3,5	2,8	2,9	3,6	4,3	5,4	7,0	9,4	11,5	12,3	12,4	11,2	10,2	9,9

- To be submitted: independent test report (IFT-Rosenheim no. 10-001892-PR02-PB02-E02-04-en-03)

- airflow

- physical free area: 37%
- visual free area: 59%
- aerodynamic properties according to EN 13030:2001
CFD on louvre with dimensions width x height = 1m x 1m.
 - resistance factor entry $K = 1/c_e^2 = 25,46$; $C_e = 0,198$
 - resistance factor discharge $K = 1/c_d^2 = 25,15$; $C_d = 0,200$

- aesthetically appealing

- visual protection
 - horizontally visually closed by applying a blade pitch which does not exceed the blade height
 - blade pitch: 170 mm
 - blade height: 239 mm
- invisible assembly with aluminium blade clips

- stability

- impact of wind forces :
 - C_{fx} : 1,36 (drag - horizontal)
 - C_{fy} : 1,09 (lift - vertical)
- max. unsupported blade span at a peak velocity pressure $q_p(z)$ of 800 Pa: 2.800 mm
- supporting structure
 - type of mullion and number of mullions are to be provided according to the designed span and the local wind load
 - preferably in aluminium, as part of the continuous louvre system

- materials:

- extruded aluminium profiles (AlMgSi0.5, EN AW 6063 T66)
- surface treatment:
 - anodised in natural colour EV6/EV1 (20 micron): pretreated and anodised
 - OR**
 - polyester powder coating in RAL colour according to the Qualicoat standard

- options

- wire mesh 2.3 x 2.3 ; 6 x 6 of 20 x 20 mm, fitted to the rear of the supporting structure
- threshold profile LZ.4140