RENSON LINIUS® L.170ACL
SPECIFICATION SHEET

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

- **Acoustic Performance**
  According to :
  - EN ISO 140-1:1997 + A1:2004
  - EN 20140-3:1995 + A1:2004
  - EN ISO 717-1:1996 + A1:2006

  Tested with dimensions width x height = 1.23m x 1.48m
  - Sound reduction index Rw ($C;C_{tr}$) = 13 (-1;-3)
  - 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	8,5	10,1	5,8	3,9	4,6	5,1	5,7	7,8	10,2	13,0	15,4	17,6	18,8	17,8	16,0	14,8

  - To be submitted: independent test report (IFT-Rosenheim nr.164 43337e)

- **airflow**
  - physical free area: 37%
  - visual free area: 59%
  - aerodynamic properties according to EN 13030:2001
    CFD on louvre dimensions width x height = 1m x 1m.
    - resistance factor entry $K = 1/c_e^2 = 28.58$; $c_e = 0.187$
    - resistance factor discharge $K = 1/c_d^2 = 30.88$; $c_d = 0.180$

- **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: 328 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