Technical Submittal - UCLH P5 33695

Package Number:	3200
Package Name:	Windows / Doors / Cladding
Company Name:	Fleetwood Architectural Aluminium
Sub-Contractor manager:	Sath Vellanki
File Name:	P5-FAA-001-ZZ-TS-X-0033
Document Title:	Ground Floor Levolux louvres
Purpose of Issue:	See Conject for current purpose of issue.

Status by Lead Reviewer:	***See Conject for current status***

Version History			
Revision No.	Date Issued	Prepared By	Status
P01	07-12-18	Salam Al-Mochtar	

Design Information and Technical Data used to prepare submittal	
Equipment Data Sheets / Schedules **:**	• Louvre Data Sheets • •
Particular Specification**:**	• • •
Materials & Workmanship**:**	• • •
Drawings:	• •
Schematics/Diagrammatic:	• • •
Supplementary Specs:	• • •

Attachments *(Tick as appropriate)*

- ☐ Catalogue Details
- ☐ Design Check Calculations
- ☐ Manufacturing Drawings
- ☐ Wiring/Control Diagrams
- ☐ Sample List
- ☐ BWIC requirements
- ☐ Assembly / installation details
- ☐ O&M instructions
- ☐ List of recommended spares
- ☐ Interface and coordination with other packages
- ☐ FAT / SAT Test Requirements
- ☐ Description of Operation
- ☐ Louvre Details / Calculation
- ☐
- ☐

Specification Compliance Statement

Technical Submission fully compliant

Y	N

If no then proposed deviations are:

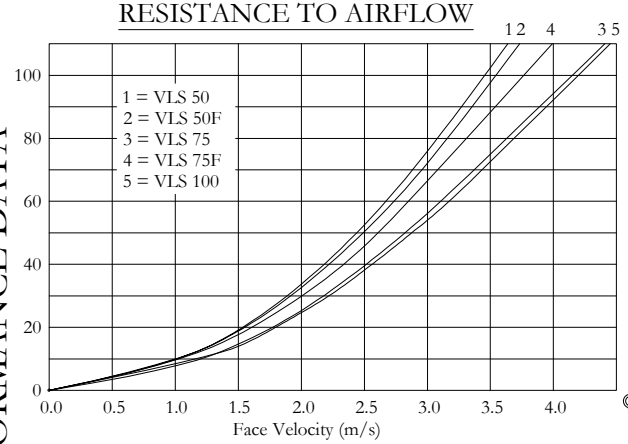
Specification Requirement	Proposed Deviation
Specification calls for Levolux Louvres	FAA propose: Please see attached levolux louvers VLS 50 pitched blade data sheet.

LEVOLUX

Drawing No.
G.A. 950/C/01

VENTILATION LOUVRE PERFORMANCE DATA

RESISTANCE TO AIRFLOW



Test performed by BSRIA to EN 13030.
All results shown include insectmesh/birdmesh.

Classification Nonmenclature

The internationally recognised HEVAC test is conducted by BSRIA to the standard EN13030: 2001. This measures water penetration at a given face velocity (specifically not core velocity) whilst subjected to a 13m/s simulated wind velocity and a simulated rain fall of 75mm/hr.

Penetration Classification

Class	Effectiveness
A	99 - 100%
B	95 - 98.9%
C	80 - 94.9%
D	0 -79.9%

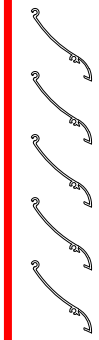
Maximum allowed penetration of simulated rain. Litre/hour/m²

Discharge Loss Coefficient Classification

Class	Discharge loss coefficient
1	>0.4
2	0.30 - 0.399
3	0.20 - 0.299
4	<0.199

A higher cd figure represents a lower resistance to air flow

CONTOUR DESIGN PARAMETERS

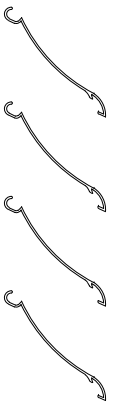


VLS 50mm Pitch Blade

Louvre Coefficient 0.342
Louvre Coefficient with mesh 0.269
Nominal Free Area: 54.2%

Application: Used where good airflow and weatherability are both required. Aesthetically positioned at lower level where the smaller pitch can be more visually appreciated. Small overall depth allows more application freedom.

Vent windspeed (m/s)	0	0.5	1.0	1.5	2.0	2.5
Class rating	A3	B3	B3	C3	C3	D3

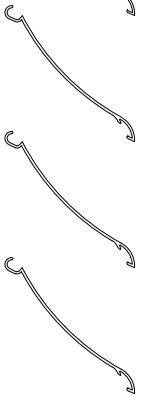


VLS 75mm Pitch Blade

Louvre Coefficient 0.44
Louvre Coefficient with mesh 0.31
Nominal Free Area: 58.3%

Application: Used where especially good airflow required and weatherability allows for a little water ingress under storm conditions. Aesthetically positioned at either high or low level. A good 'all-round' blade suitable for most applications.

Vent windspeed (m/s)	0	0.5	1.0	1.5	2.0	2.5
Class rating	A2	B2	B2	C2	C2	D2



VLS 100mm Pitch Blade

Louvre Coefficient 0.449
Louvre Coefficient with mesh 0.315
Nominal Free Area: 60.1%

Application: Used where especially good airflow required and weatherability allows for water ingress under storm conditions. Aesthetically positioned at higher level.

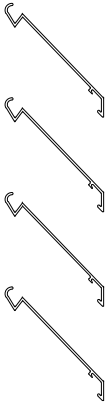
Vent windspeed (m/s)	0	0.5	1.0	1.5	2.0	2.5
Class rating	A2	B2	C2	C2	C2	D2

VLS 50mm Pitch Flat Blade

Louvre Coefficient 0.314
Louvre Coefficient with mesh 0.274
Nominal Free Area: 58.4%

Application: Used where good airflow and weatherability are both required. Aesthetically positioned at lower level where the smaller pitch can be more visually appreciated. Small overall depth allows more application freedom.

Vent windspeed (m/s)	0	0.5	1.0	1.5	2.0	2.5
Class rating	A3	B3	B3	C3	C3	D3



VLS 75mm Pitch Flat Blade

Louvre Coefficient 0.44
Louvre Coefficient with mesh 0.286
Nominal Free Area: 54.3%

Application: Used where especially good airflow required and weatherability allows for a little water ingress under storm conditions. Aesthetically positioned at either high or low level. A good 'all-round' blade suitable for most applications.

Vent windspeed (m/s)	0	0.5	1.0	1.5	2.0	2.5
Class rating	A3	B3	B3	C3	C3	D3

Specification:
Material: Aluminium extrusion grade 6063 T6
Finish: Polyester powder coated to RAL.... , average 60 microns / anodised AA25 / mill finish / PVDF.

Notes:
See Drawing No. G.A.950/HP/01 for High Performance Louvres.

LEVOLUX
DESIGNED TO CONTROL
LEVOLUX LTD.
Forward Drive, Harrow, Middlesex, HA3 8NT. UK
Tel (+44) 020 8863 9111
email:info@levolux.com
24 Eastville Close, Gloucester, GL4 3SJ. UK
Tel (+44) 01452 500007
web:www.levolux.com