

# Hudson Series® 200 Chevron Louvre



Louvreclad's Hudson Series® is an acoustic louvre. It is the ideal solution when aesthetics are as important as noise reduction, ventilation, and weather protection.

## Distinctive Features + Diverse Applications

- + Multitude of Benefits:
- Enclosures for air-conditioning intakes and generators, pump rooms, and complete stand-alone plant rooms.
- Insulated with glass wool to reduce noise transmission
- Multiple options available for selection to counteract specific acoustic frequency bandwidths
- Range from 100mm, 200mm, 300mm, 400mm and 600mm

### Attention to Detail:

- Tested to Australian Standards AS1191-2002
- · 22% free open area
- 180mm Blade Pitch
- R<sub>w</sub> rating of 18







### DAY DESIGN

### PRESSURE DROP TEST CERTIFICATE

**Test 4203E-P** 



Face Velocity (m/s)	Pressure Drop (Pa)	
0.5	3.7	
1.0	17.8	
1.5	44.4	
2.0	84.8	
2.5	140.1	
3.0	211.3	
3.5	299.0	
4.0	403.9	
4.5	526.6	
5.0	667.6	

### **Test Specimen:**

### **Hudson 200 Chevron Louvre**

### **Test Specimen Dimensions:**

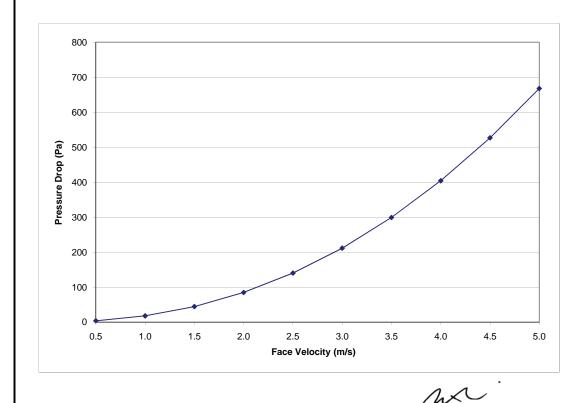
1800 mm (H) x 1200 mm (W) x 200 mm (D)

### **Test Location:**

Twin Reverberation Rooms National Acoustic Laboratories 126 Greville Street, Chatswood NSW

#### Instrumentation:

- Vaisala Digital Barometer (Type PTB201AD)
- Kestrel Anemometer (Model K2000)



Date of Test: Friday, 21 August 2009

Project Number: 4203E-P

Test Enginer: Alex Li, BE(Mech) Hons

For and on behalf of Day Design Pty Ltd



## DAY DESIGN

# ACOUSTIC LOUVRE INSERTION LOSS TEST CERTIFICATE

**Test 4203E** 

Insertion Loss			
Frequency - Hz	1/3 Octave	1/1 Octave	Noise Reduction
100	4	5	10
125	5		11
160	4		10
200	5	6	11
250	5		11
315	8		14
400	12	15	18
500	15		21
630	18		24
800	19	20	25
1000	20		26
1250	23		29
1600	27	28	33
2000	28		34
2500	29		35
3150	28	28	34
4000	27		33
5000	29		35

### **Test Specimen:**

# Hudson 200 Chevron Series Acoustic Louvre

(2 x Hudson 100 Series Louvres back-to-back)

#### Australian Standards:

Measured according to AS 1191-2002

### **Test Specimen Dimensions:**

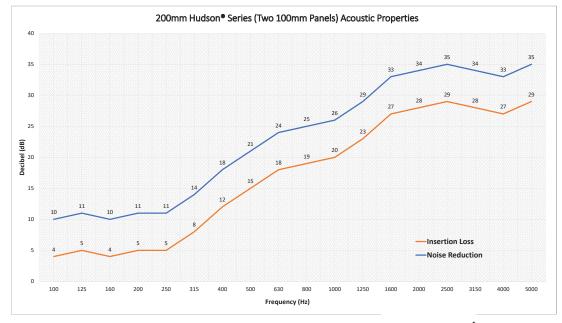
1800 mm (H) x 1200 mm (W) x 200 mm (D)



Twin Reverberation Rooms National Acoustic Laboratories 126 Greville Street, Chatswood NSW

### Instrumentation:

- Brüel and Kjær Two Channel Pulse Analyser (assembly 2825, 7521, 2 x 3015)
- Brüel and Kjær Cathode Follower type 2639
- Brüel and Kjær Cathode Follower type 2669
- Brüel and Kjær Microphone type 4144
- Brüel and Kjær Microphone type 4179
- Brüel and Kjær Sound Level Calibrator type 4231
- Yamaha Professional Sound Sources type S50



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### **GENERAL NOTES**

NR (Noise Reduction) A value that represents the difference in sound pressure level between any two points along the path of sound propagation. The unit of measurement is decibels (dB)

Transmission Loss (TL) is a reduction of sound levels as a result of passage through an obstruction such as a wall, partition, or ductwork. These values are expressed with a unit of decibels (dB).

Insertion Loss (IL) - The reduction of noise level at a given location due to placement of a noise control device in the sound path between the sound source and that location. Usually rated in octave bands or 1/3-octave bands

Far field - (1) Part of the sound field where the sound wave is spreading spherically. (2) Sound decays at 6 dB for a doubling of the distance from the sound source.

### **DRAFT SPECIFICATION**

Acoustic Louvres will be Louvreclad Hudson Series® 200mm Chevron with an R., rating of 18, 22% free open area (F.O.A) and tested to Australian Standard AS1191-2002.

### Base Material & Finish

Louvres will be manufactured in (select base material) finish in (select colour).

### Accessories

Louvres will be fitted with (nominate options/accessories from the selection).

### Installation and Mounting

Installation and mounting details will be designed in accordance with proprietary systems and recommendations as designed and manufactured by Louvreclad Pty. Ltd. Phone: 1300 165 678 Email: sales@louvreclad.com

### **Base Material Options**

Zincalume® | Colorbond® | Galvabond®

Mill finish Aluminium, Powdercoated Aluminium, Anodised Aluminium, Stainless

Specialised coatings are also available on request.

### Accessories

### **Bird/Vermin Mesh**

Select from the following:

- galvanised
- galvanised powder coated
- · stainless steel
- plastic
- · perforated metal
- · expanded metal

### Other Louvre Accessories

- Security screens and bars
- Volume control dampers

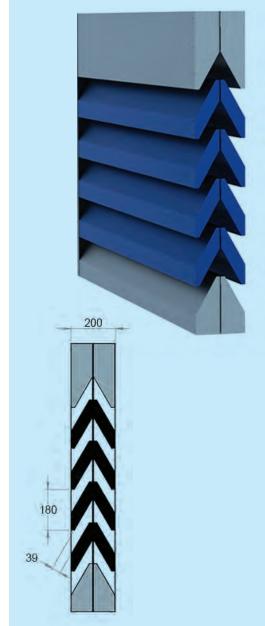
### **Insect Mesh**

Select from the following:

- aluminium
- fibreglass
- · stainless steel
- · perforated metal
- Dust filters

### **PROFILES**

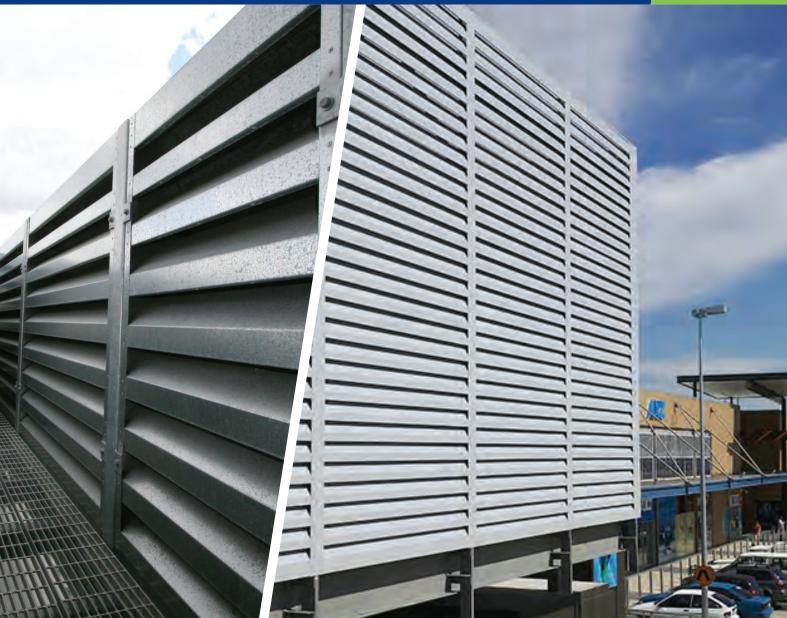
Hudson Series® 200 Louvre



F.O.A -> Free Open Area

# Hudson Series®







### (i) WOULD YOU LIKE TO KNOW MORE?

If you have any questions about this product, or if you would like to speak to a member of our expert team about how we can tailor a solution for you, call: 1300 165 678 or visit: louvreclad.com