



## Hudson Series<sup>®</sup> 400 Chevron Louvre



Louvreclad's Hudson Series<sup>®</sup> 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
- 33% free open area
- 200mm Blade Pitch
- $R_w$  rating of 21



**ACOUSTIC LOUVRE**



*Thinking outside for inside performance*

## DAY DESIGN

## PRESSURE DROP TEST CERTIFICATE

Test 4203C-P



Test Specimen:

**Hudson 400 Chevron Louvre**

Test Specimen Dimensions:

1800 mm (H) x 1200 mm (W) x 400 mm (D)

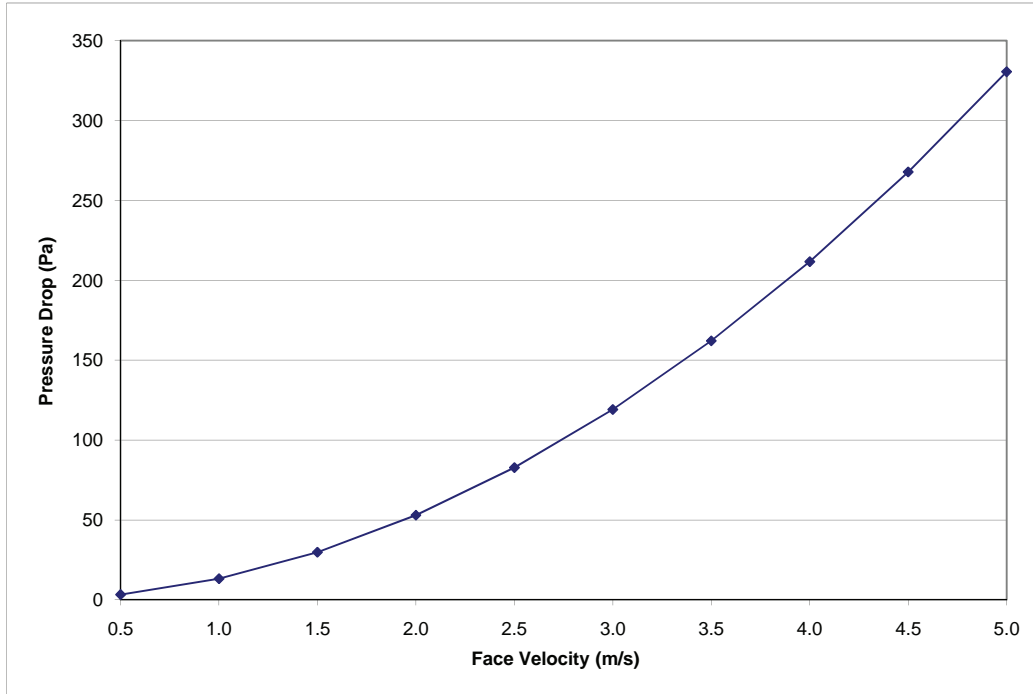
Face Velocity (m/s)	Pressure Drop (Pa)
0.5	3.3
1.0	13.3
1.5	29.9
2.0	53.0
2.5	82.8
3.0	119.2
3.5	162.1
4.0	211.7
4.5	267.8
5.0	330.5

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: Thursday, 20 August 2009  
Project Number: 4203C-P

Test Engineer:   
Alex Li, BE(Mech) Hons  
For and on behalf of Day Design Pty Ltd

## DAY DESIGN

## ACOUSTIC LOUVRE INSERTION LOSS TEST CERTIFICATE

Test 4203C

Insertion Loss			
Frequency - Hz	1/3 Octave	1/1 Octave	Noise Reduction
100	4	4	10
125	5		11
160	5		11
200	9	11	15
250	10		16
315	14		20
400	16		22
500	19	18	25
630	22		28
800	23		29
1000	23	23	29
1250	24		30
1600	26		32
2000	27	27	33
2500	27		33
3150	25		31
4000	24	25	30
5000	25		31

Test Specimen:

**Hudson 400 Chevron Series  
Acoustic Louvre**

(2 x Hudson 200 Series Louvres back-to-back)

Australian Standards:

Measured according to AS 1191-2002



Test Specimen Dimensions:

1800 mm (H) x 1200 mm (W) x 400 mm (D)

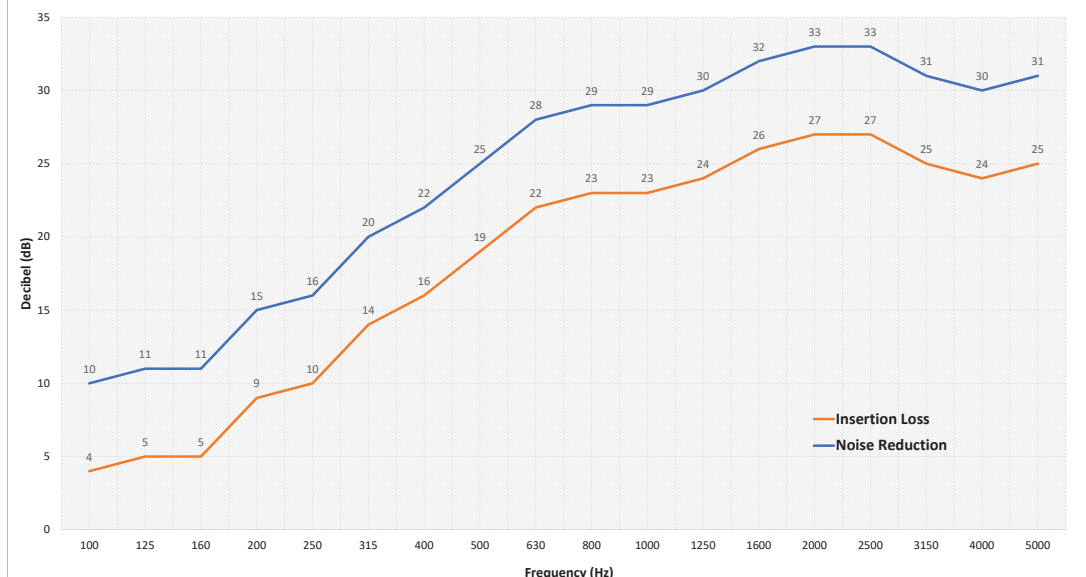
Test Location:

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

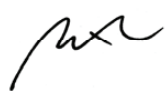
Instrumentation:

- 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

400mm Hudson® Series (Two 200mm Panels) Acoustic Properties



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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<sup>®</sup> 400mm with an  $R_w$  rating of 21, 33% 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<sup>®</sup> | Colorbond<sup>®</sup> | Galvabond<sup>®</sup>

Mill finish Aluminium, Powdercoated Aluminium, Anodised Aluminium, Stainless Steel

*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

#### Insect Mesh

Select from the following:

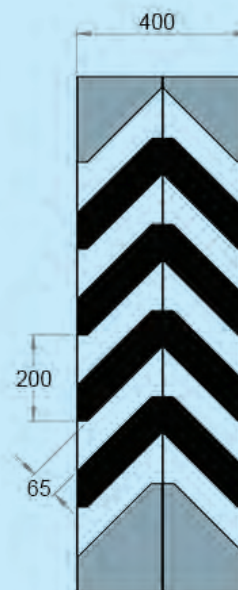
- aluminium
- fibreglass
- stainless steel
- perforated metal

### Other Louvre Accessories

- Security screens and bars
- Fire and smoke dampers
- Volume control dampers
- Dust filters

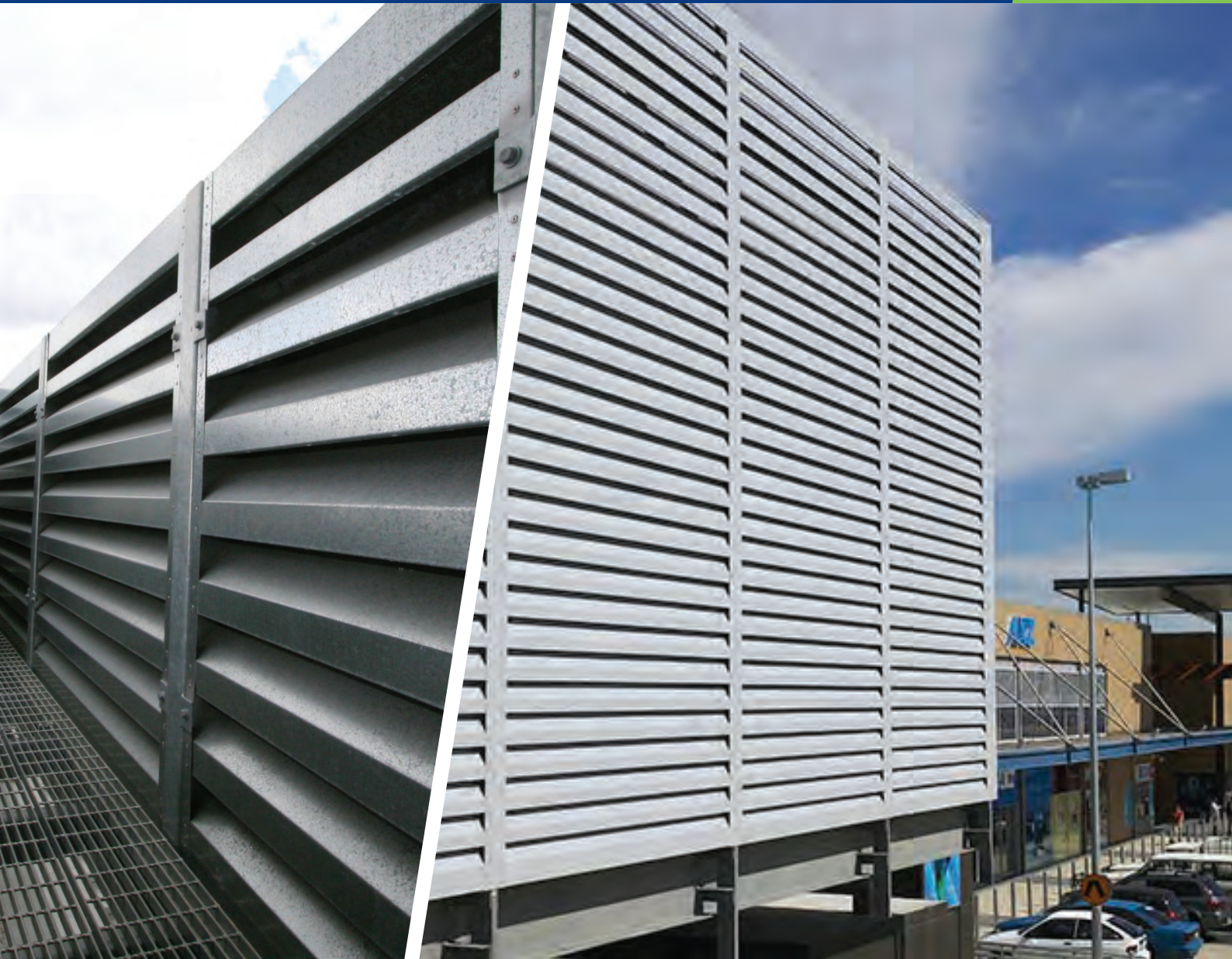
## PROFILES

Hudson Series<sup>®</sup> 400 Louvre



F.O.A -> Free Open Area





**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](http://louvreclad.com)