

Hudson Series® 100 Acoustic Louvre



Louvreclad's Hudson Series® acoustic louvre 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 rating of 12





Thinking outside for inside performance



DAY DESIGN

PRESSURE DROP TEST CERTIFICATE

Test 4203D-P



Face Velocity (m/s)	Pressure Drop (Pa)	
0.5	3.0	
1.0	11.7	
1.5	26.1	
2.0	46.1	
2.5	71.7	
3.0	102.9	
3.5	139.7	
4.0	182.0	
4.5	229.8	
5.0	283.1	

Test Specimen:

Hudson 100 Louvre

Test Specimen Dimensions:

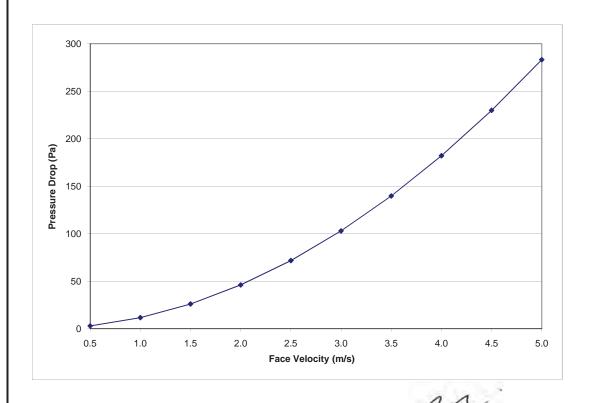
1800 mm (H) x 1200 mm (W) x 100 mm (D)

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: Thursday, 20 August 2009 Project Number: 4203D-P Rev A 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 4203D

Insertion Loss			
Frequency - Hz	1/3 Octave	1/1 Octave	Noise Reduction
100	3	4	9
125	5		11
160	4		10
200	5	5	11
250	5		11
315	6		12
400	6	8	12
500	8		14
630	9		15
800	11	12	17
1000	12		18
1250	14		20
1600	15	16	21
2000	16		22
2500	17		23
3150	16	15	22
4000	15		21
5000	14		20

Test Specimen:

Hudson 100 Series Acoustic Louvre

Australian Standards:

Measured according to AS 1191-2002

Test Specimen Dimensions:

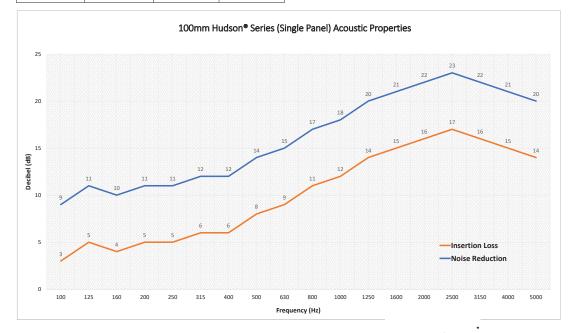
1800 mm (H) x 1200 mm (W) x 100 mm (D)

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



Date of Test: Thursday, 20 August 2009

Project Number: 4203D

Test Enginer: Alex Li, BE(Mech) Hons

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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 $^{\circ}$ 100mm with an R $_{\rm w}$ rating of 12, 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 & Finishes Options

Zincalume®

Colorbond®

Galvabond®

 $\label{eq:millimin} \mbox{Mill finish Aluminium, Powdercoated Aluminium, Anodised Aluminium}$

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

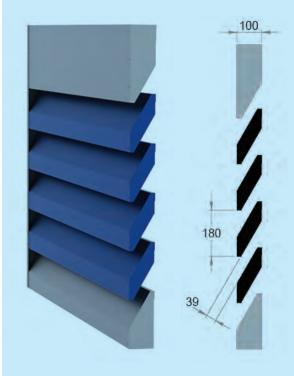
Insect Mesh

Select from the following:

- aluminium
- fibreglass
- stainless steel
- perforated metal

PROFILES

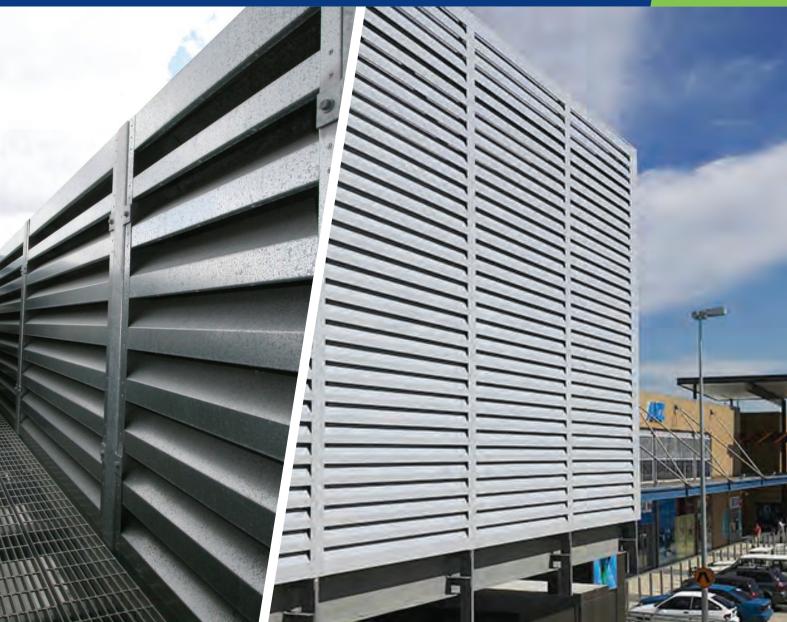
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(i) WOULD YOU LIKE TO KNOW MORE?

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