Hudson Series® Acoustic Louvre

Louvreclad Hudson Series® offers acoustic louvres with varying depths for optimal noise reduction and rain defence. Options range from 100mm to 600mm deep, ideal for projects requiring effective noise control and ventilation.

Features

PERFORMANCE

Superior Noise Reduction

Acoustic louvres insulated with glass wool for effective noise control. Available in depths from 100mm to 600mm, tested to AS 1191:2002 and AS 4740:2000 standards.

AESTHETICS

Custom Solutions

Ideal for air-conditioning intakes, generators, and plant rooms. Engineered for incidental live load, offering optimal ventilation and weather protection while reducing noise transmission.

DESIGN

Versatile Design

Provides free open area from 17% to 47%. Class B to Class C rain defence with aerodynamics ranging from Class 1 to Class 3. Available in multiple configurations for varied acoustic requirements.

Specifications

AUSTRALIAN STANDARDS

AS 1191:2002 & AS 4740:2000

ORIENTATION

Horizontal
or
Vertical

MATERIAL

Colorbond® Steel, Aluminium

FINISH

Powder Coated, Anodised, Colorbond®

ACCESSORIES

Bird/vermin mesh Insect mesh

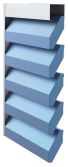
INSTALLATION

Installation and mounting details will be designed in accordance with proprietary systems and recommendations as designed and manufactured by Louvreclad.

Explore the profile options

Hudson Series® 100

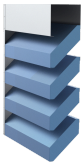
100mm deep single-stage acoustic louvres



12 RW ACOUSTIC RATING	Class 3 AERODYNAMICS	Class C RAIN RESISTANCE
17 % FREE OPEN AREA	100 mm DEPTH	180 PITCH
2000 mm MAX SPAN	19kg/m2 WEIGHT	Horizontal, Vertical ORIENTATION

Hudson Series® 200

200mm deep single-stage acoustic louvres



13 RW ACOUSTIC RATING	33 % FREE OPEN AREA	200 mm DEPTH
200 PITCH	2000 mm MAX SPAN	40kg/m2 WEIGHT
Horizontal, Vertical ORIENTATION		

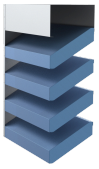
Hudson Series® 200 Chevron

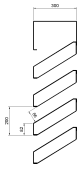
200mm deep two-stage chevron acoustic louvres

18 RW ACOUSTIC RATING	Class 2 AERODYNAMICS	0.51 CD DISCHARGE COEFFICIENT
0.16 m2 EFFECTIVE AERODYNAMIC AREA	Class C RAIN RESISTANCE	22 % FREE OPEN AREA
200 mm DEPTH	180 PITCH	2500 mm MAX SPAN
28kg/m2 WEIGHT	Horizontal, Vertical ORIENTATION	

Hudson Series® 300

300mm deep single-stage acoustic louvres

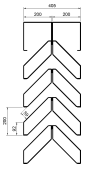




18 RW ACOUSTIC RATING	Class 1 AERODYNAMICS	0.736 CD DISCHARGE COEFFICIENT
0.31 m2 EFFECTIVE AERODYNAMIC AREA	Class C RAIN RESISTANCE	91 % EFFECTIVE RAIN RESISTANCE
47 % FREE OPEN AREA	300 mm DEPTH	200 PITCH
2500 mm MAX SPAN	57kg/m2 WEIGHT	Horizontal, Vertical ORIENTATION

Hudson Series® 400 Chevron

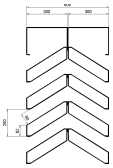
400mm deep two-stage chevron acoustic louvres



21 RW ACOUSTIC RATING	Class 1 AERODYNAMICS	Class B RAIN RESISTANCE
96 % EFFECTIVE RAIN RESISTANCE	33 % FREE OPEN AREA	400 mm DEPTH
200 PITCH	2000 mm MAX SPAN	34kg/m2 WEIGHT
Horizontal, Vertical ORIENTATION		

Hudson Series® 600 Chevron

600mm deep two-stage chevron acoustic louvres



21 RW ACOUSTIC RATING	47 % FREE OPEN AREA	600 mm DEPTH
200 PITCH	2500 mm MAX SPAN	71kg/m2 WEIGHT
Horizontal, Vertical ORIENTATION		

AS 4740 Rain Resistance

Hudson Series® 100

Rain penetration classification at each core velocity.

Ventilator core velocity (m/s)	0	0.5	1	1.5	2	2.5	3	3.5
Effectiveness E (%)	100%	100%	100%	98%	95%	92%	87%	84%
Classification	Class A	Class A	Class A	Class B	Class B	Class C	Class C	Class C

The results concluded the ventilator has fair rain resistance performance at the core velocities from 0-3.5m/s as summarised in the table above. The average rain penetration effectiveness for this model was 95% in Class C rating.

Hudson Series® 200 Chevron

Rain penetration classification at each core velocity.

Ventilator core velocity (m/s)	0	0.5	1	1.5	2	2.5	3	3.5
Effectiveness E (%)	100%	100%	100%	97%	94%	90%	89%	87%
Classification	Class A	Class A	Class A	Class B	Class C	Class C	Class C	Class C

The results concluded the ventilator has fair rain resistance performance at the core velocities from 0-3.5m/s as summarised in the table above. The average rain penetration effectiveness for this model was 95% in Class C rating.

Hudson Series® 300

Rain penetration classification at each core velocity.

Ventilator core velocity (m/s)	0	0.5	1	1.5	2	2.5	3	3.5
Effectiveness E (%)	99%	97%	96%	94%	89%	86%	84%	82%
Classification	Class A	Class B	Class B	Class C	Class C	Class C	Class C	Class C

The results concluded the ventilator has fair rain resistance performance at the core velocities from 0-3.5m/s as summarised in the table above. The average rain penetration effectiveness for this model was 91% in Class C rating.

Hudson Series® 400 Chevron

Rain penetration classification at each core velocity.

Ventilator core velocity (m/s)	0	0.5	1	1.5	2	2.5	3	3.5
Effectiveness E (%)	100%	100%	100%	100%	98%	96%	90%	83%
Classification	Class A	Class A	Class A	Class A	Class B	Class B	Class C	Class C

The results concluded the ventilator has fair rain resistance performance at the core velocities from 0-3.5m/s as summarised in the table above. The average rain penetration effectiveness for this model was 96% in Class B rating.

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:

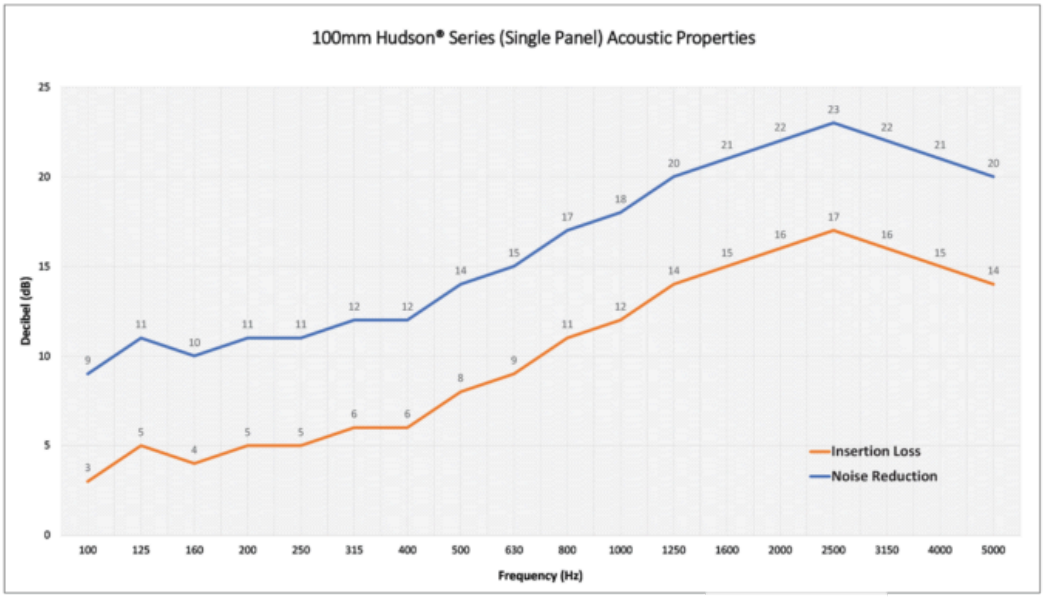
Hudson 100 Series Acoustic Louvre

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**
For and on behalf of Day Design Pty Ltd

DAY DESIGN	ACOUSTIC LOUVRE INSERTION LOSS TEST CERTIFICATE	Test 4203B

Insertion Loss			
Frequency - Hz	1/3 Octave	1/1 Octave	Noise Reduction
100	2	4	8
125	5		11
160	4		10
200	5	6	11
250	5		11
315	7		13
400	8	10	14
500	9		15
630	12		18
800	13	14	19
1000	14		20
1250	14		20
1600	15	15	21
2000	16		22
2500	15		21
3150	14	13	20
4000	13		19
5000	12		18

Test Specimen:

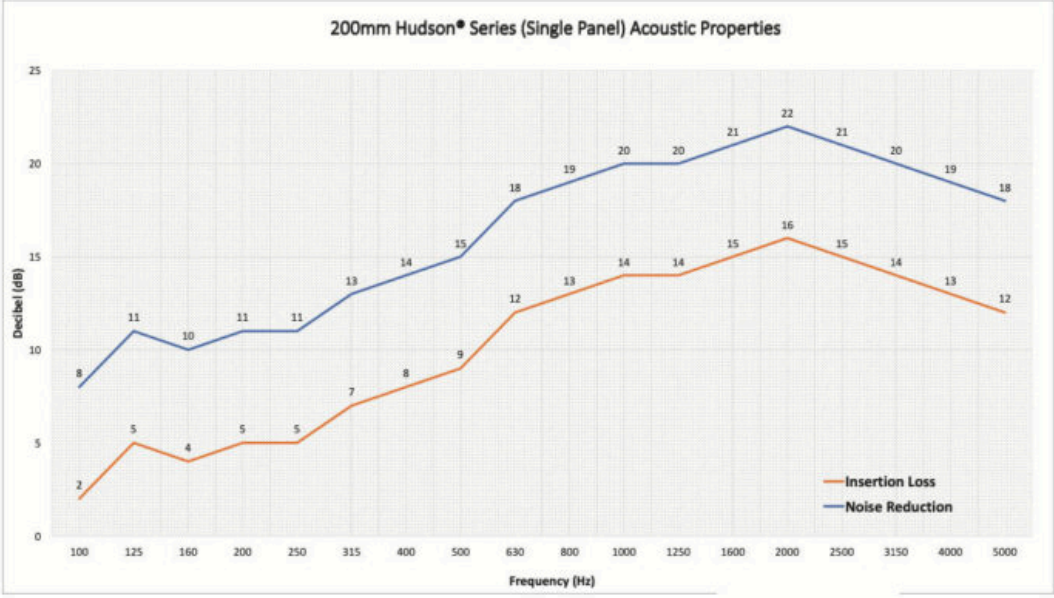
Hudson 200 Series Acoustic Louvre

Australian Standards:
Measured according to AS 1191-2002

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:
- 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: 4203B

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:

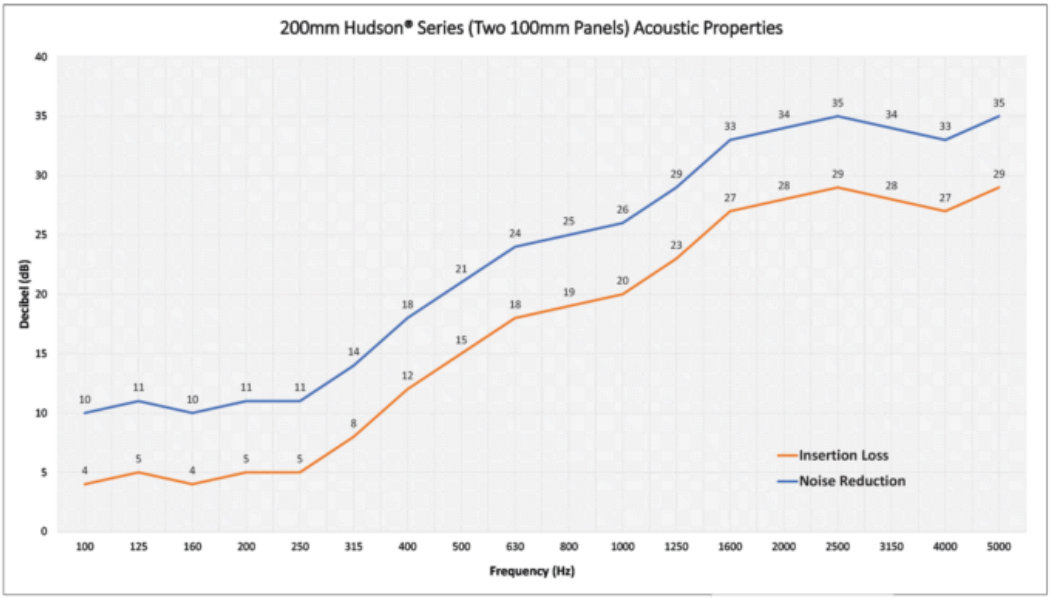
1800 mm (H) x 1200 mm (W) x 200 mm (D)

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: Friday, 21 August 2009
Project Number: 4203E

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 4203F

Insertion Loss			
Frequency - Hz	1/3 Octave	1/1 Octave	Noise Reduction
100	3	4	9
125	5		11
160	4		10
200	5	6	11
250	5		11
315	8		14
400	12	14	18
500	15		21
630	17		23
800	18	20	24
1000	20		26
1250	23		29
1600	27	27	33
2000	28		34
2500	28		34
3150	28	28	34
4000	27		33
5000	29		35

Test Specimen:

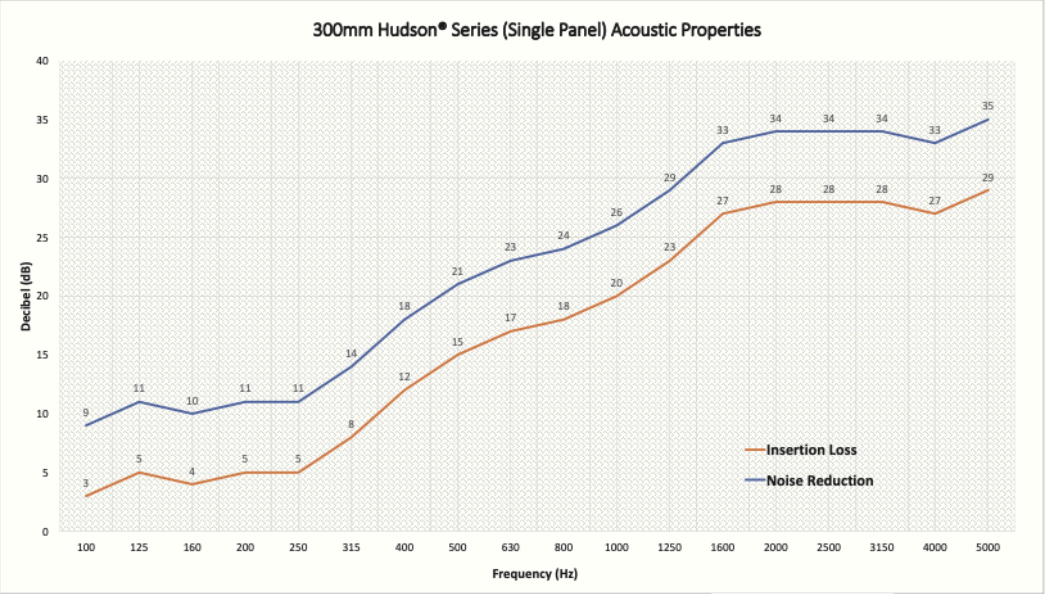
Hudson 300 Series Acoustic Louvre

Australian Standards:
Measured according to AS 1191-2002

Test Specimen Dimensions:
1800 mm (H) x 1200 mm (W) x 300 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: Friday, 21 August 2009
Project Number: 4203F

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 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	18	22
500	19		25
630	22		28
800	23	23	29
1000	23		29
1250	24		30
1600	26	27	32
2000	27		33
2500	27		33
3150	25	25	31
4000	24		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:

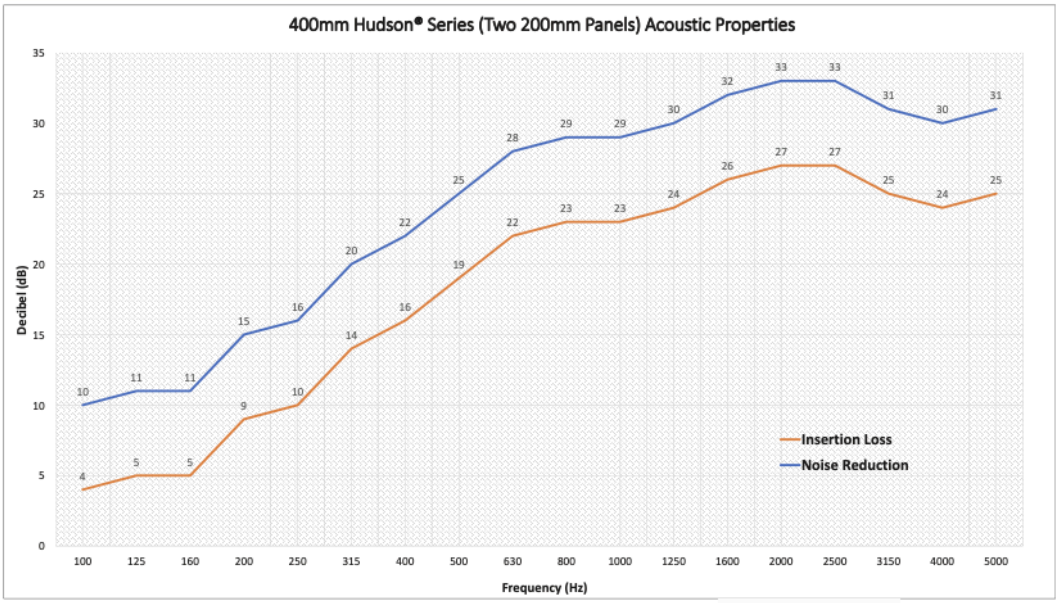
1800 mm (H) x 1200 mm (W) x 400 mm (D)

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



Date of Test: Thursday, 20 August 2009
Project Number: 4203C

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 4203G

Insertion Loss			
Frequency - Hz	1/3 Octave	1/1 Octave	Noise Reduction
100	2	4	8
125	4		10
160	5		11
200	8	9	14
250	9		15
315	12		18
400	15	18	21
500	19		25
630	23		29
800	26	26	32
1000	26		32
1250	27		33
1600	27	25	33
2000	25		31
2500	23		29
3150	22	23	28
4000	24		30
5000	25		31

Test Specimen:

Hudson 600 Chevron Series Acoustic Louvre

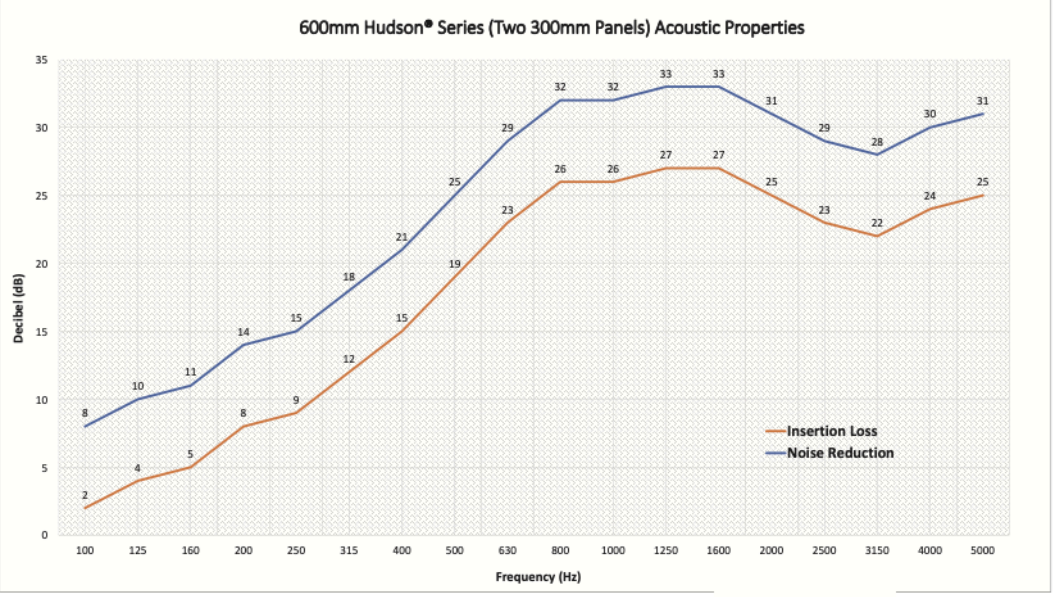
(2 x Hudson 300 Series Louvres back-to-back)

Australian Standards:
Measured according to AS 1191-2002

Test Specimen Dimensions:
1800 mm (H) x 1200 mm (W) x 600 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: Friday, 21 August 2009
Project Number: 4203G

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

Technical Data Disclaimer

- Indicative maximum span provided are based on generic permissible design wind pressure of 2kPa.
- Span values and product technical information provided are subjected to variance by project specific requirements & influence factors such building location, terrain category & local pressure effects.
- Span values provided are based on typical scenario where product specified are fixed at one end; simply supported at the other end and in either horizontal or vertical orientation.
- If the product specified is required to function as barrier for fall protection or as trafficable element, maximum span and pitch nominated may be reduced.
- Spans values provided could be influenced and reduced when used in dynamically sensitive wind environment.
- For project specific product selection or preliminary design & engineering consultation, please contact 1300 165 678 or sales@louvreclad.com to arrange or book a meeting.

Inspire with Quality

As leaders in the building envelope market, we are known for exceptional quality and lasting value. Our credibility, wealth of knowledge, and unmatched competence enable us to inspire exterior solutions that look good and perform better.

The MadeRight Guarantee

Following our proven process enables us to develop solutions we're proud to put our mark of quality to. We guarantee that all projects will be delivered in a timely manner, be on specification, engineered to Australian standards and finished to the highest quality.

Made to Perform

Louvreclad solutions are made to last and manufactured on-site using high-quality Australian aluminium and steel. As an organisation we are driven to get a thousand things right everyday to achieve our vision to be the face of Australian Building.
Our facades are not here to be average, they are here to perform – and so are we.

Speak to an expert

Reach out today to discuss your facade solution requirements; we would love to hear from you.