



PRODUCT GUIDE

Performance *Louvres*



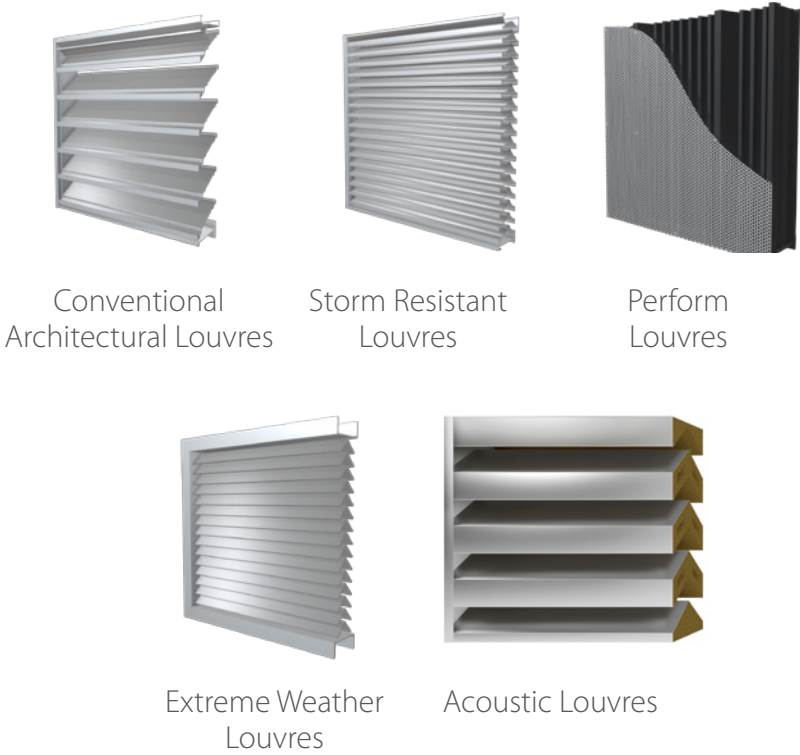
Construction Specialties®

Stylish and functional

Discover the perfect solution for your building's needs with Construction Specialties' range of high-performance louvres.

Acting as the first line of defence, louvres not only provide effective ventilation, but can safeguard against rain ingress. Louvres can also enhance the building's energy efficiency, by offering shading and screening for the building exterior, and plant and machinery.

Trust Construction Specialties to provide innovative, reliable, and effective louvre solutions for your projects.



**ARKON ENERGY DATA CENTRE
GLOMFJORD, NORWAY**
RSH-5700 STORM RESISTANT LOUVRE

**CENTRAL STATION UPGRADE,
SYDNEY, AUSTRALIA**
STORM RESISTANT LOUVRES



HUTCHINGS PSYCHIATRIC CENTER
NEW YORK, USA
BB-7505 BOLD LINE LOUVRES



150 NORTH RIVERSIDE,
CHICAGO, USA
RSH-5700
STORM RESISTANT LOUVRES



88 WALKER ST,
NORTH SYDNEY AUSTRALIA
PL-5700 STORM RESISTANT LOUVRES
WITH PERFORATED MESH SCREEN



UCONN SCIENCE 1 RESEARCH CENTER
MANSFIELD, USA
PL-5700 PERFORM LOUVRES

Performance and range

Most Construction Specialties products are made in our factory in Australia.

We have been manufacturing and selling louvres globally for over 75 years. When you specify our systems, you get the support of a dedicated team with a wealth of experience and design capability.

With coating warranties of up to 35 years you can trust Construction Specialties to provide innovative, reliable, sustainable and effective louvre solutions.

Design Choices

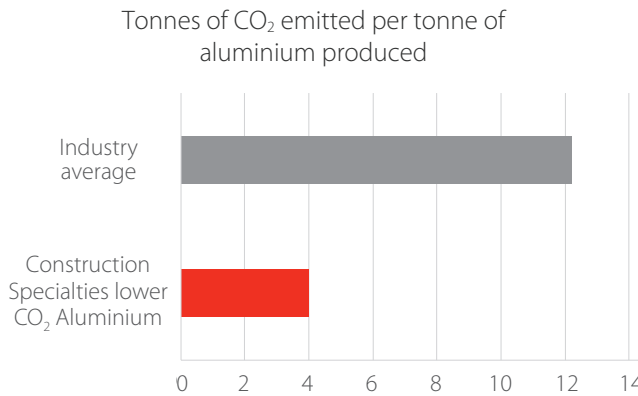
- Incorporate louvres as a design feature in your project.
- Choose from various powder-coating and anodised colours.
- Ventilation becomes an opportunity with flexible options like:
 - Vertical or horizontal blades
 - Hidden or visible mullions
 - Solid or perforated louvres
- Achieve aesthetic flexibility without compromising performance.
- Add a perforated façade for modern style, security, and subtle screening



To assist in selection, a louvre calculator and product diagrams are available on our website.

Certified Low CO₂ Aluminium

Available as an option for a selected range of products, the production of this sustainable material emits 3 times less CO₂ per tonne than the industry average.



Winner AIRAH Product of The Year Award

RS-5605 Storm Resistant Louvre



Conventional Architectural Louvres

Providing ventilation and visual screening of plant or other equipment where rain penetration is not a concern.



Storm Resistant Louvres

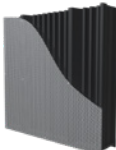
Engineered to provide excellent protection from rain penetration and good airflow.



Acoustic Louvres

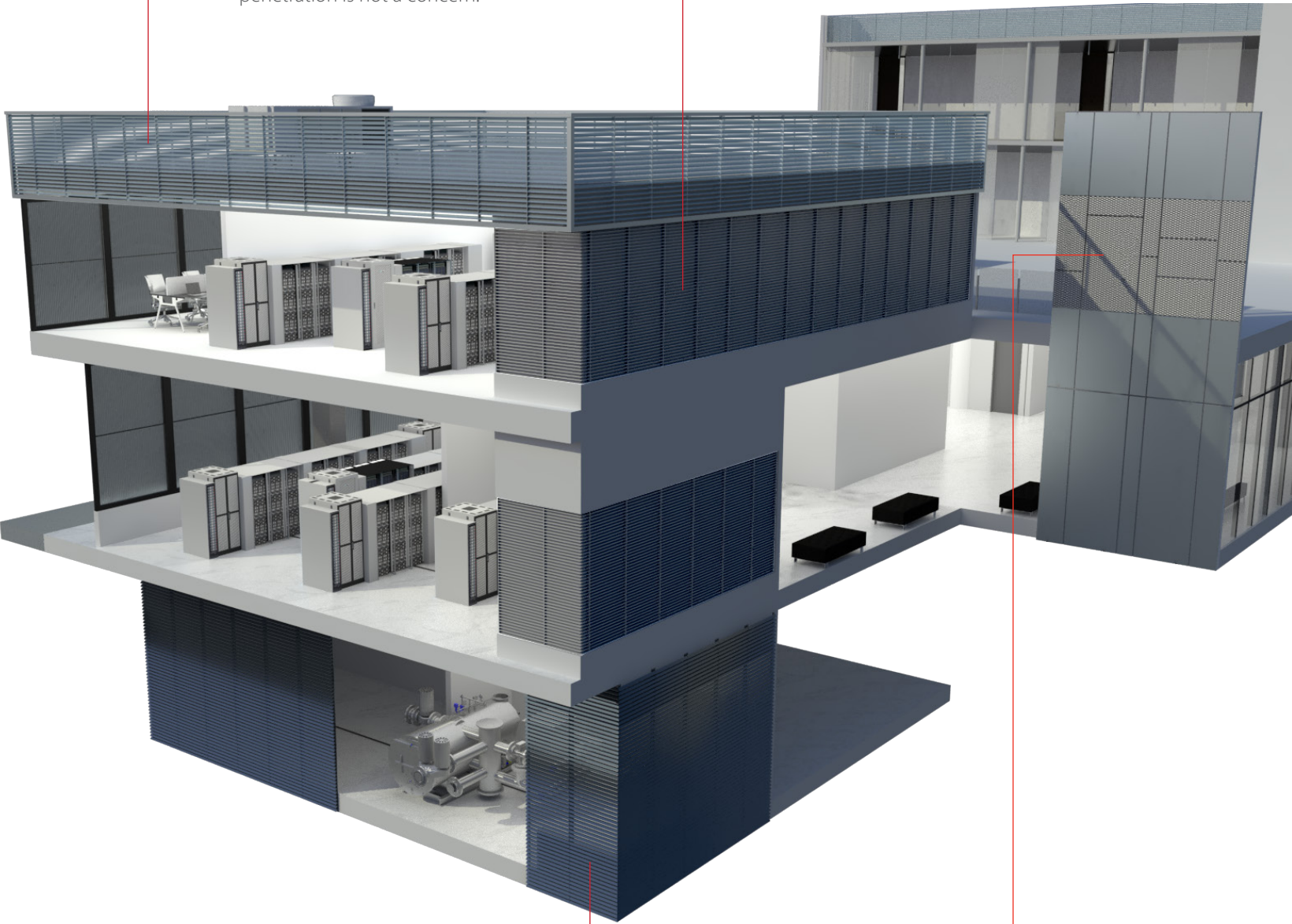
Where both noise control and airflow are required, Acoustic Louvres can be installed as standalone screens, or integrated into building façades.

They can also be used in combination with any of our rain defence or ventilation models, if required.



Perform Louvres

Where airflow and weather protection are needed, but the louvred look is not desired. An elegant way to hide louvres.



Storm Resistant Louvres

Engineered to provide excellent protection from rain penetration and good airflow, our Storm Resistant models are available in a choice of blade configurations, can be hidden behind attractive perforated screens or can feature different blade depths to integrate beautifully with your building.

They are ideal when:

- Reliable resistance to wind-driven rain is a priority
- Using a large plenum behind louvres is impractical due to cost or space considerations
- Sensitive equipment will be housed close to the louvre system
- Integrating louvres into the building design is a priority. They can be housed behind architectural features or installed as continuous line louvres

Typical applications:

- Plant rooms
- Data centres (Models RS-5605, RS-5900, RSV-5700)
- Substations



HORIZONTAL LOUVRE



VERTICAL LOUVRE



BOLD LINE LOUVRE

TECHNICAL DATA

STORM RESISTANT LOUVRES									
Model Number	RS-3700	RS-4700	RSH-5700	RS-5800	RS-5900	RS-7705	RS-5605	RSV-5700	RS-7315
Orientation	Vertical	Horizontal	Horizontal	Vertical	Vertical	Horizontal	Vertical	Vertical	Horizontal
Depth (mm)	76	102	127	127	127	178	127	127	178
Drainable		•	•			•			
Hidden Mullion						•			•
Sight Proof	•	•	•	•	•	•	•	•	•
Rain Resistance Class AS/NZS47402000(R2016)^1	A up to 3.5m³/s	B up to 3.5m³/s	A up to 3.5m³/s	A up to 3.5m³/s	A up to 3.5m³/s	B up to 3.5m³/s	A up to 3.5m³/s	A up to 3.5m³/s	B up to 2.0m³/s
Extended Rain Resistance#	A up to 5.0m³/s	B up to 3.0m³/s	B up to 4.0m³/s	A up to 5.0m³/s	A up to 4.5m³/s	NA	A up to 4.9m³/s	A up to 5.0m³/s	NA
Airflow Performance Class	2	3	2	2	2	3	1	2	3
Intake Cd	0.36	0.25	0.32	0.36	0.33	0.26	0.53	0.33	0.24
Intake Pressure Drop at 2.0m/s face velocity (1219 x 1219mm louvre size)	27 Pa	49 Pa	30 Pa	26 Pa	26 Pa	44 Pa	11 Pa	29 Pa	61 Pa
Free Area (1219 x 1219mm louvre size)	51%	52%	46%	54%	54%	50%	59%	46%	51%
Material	Aluminium					Aluminium			
Finish	Powdercoated or Anodised					Powdercoated or Anodised			
Green Aluminium (Option)	•	•	•	•	•	•	•	•	•
Bird Mesh (Optional)	Galvanised or Stainless Steel 12x12mm aperture 1mm thick					Galvanised or Stainless Steel 12x12mm aperture 1mm thick			
Insect Mesh/Bushfire Mesh (Optional)	Stainless Steel or Bi-Component Monofilament (VOC free)					Stainless Steel or Bi-Component Monofilament (VOC free)			
Security Mesh (Optional)	Galvanised or Powercoated					Galvanised or Powercoated			
AMCA Certified	 Water Penetration Air Performance Wind Driven Rain					 Air Performance Wind Driven Rain			

¹AS/NZS 4740:2000 RAIN RESISTANCE

RAIN RESISTANCE PERFORMANCE CLASS	RAIN RESISTANCE EFFECTIVENESS
A	100 to 99% effective (≤ 0.75 L/hr.m²)
B	98.9 to 95% effective (≤ 3.75 L/hr.m²)
C	94.9 to 80% effective (≤ 15.0 L/hr. m²)
D	Below 80% effective (> 15.0 L/hr.m²)

Louvre performance is dependent on the core velocity, i.e. a Louvre may be class A with an core velocity of 0m/s but at 3.5m/s it might be a D.

TABLE G.1
DISCHARGE LOSS COEFFICIENT CLASSES

AIRFLOW PERFORMANCE CLASS	DISCHARGE LOSS COEFFICIENT (CD)
1	0.4 and above
2	0.3 to 0.399
3	0.2 to 0.299
4	0.199 and below

STORM RESISTANT LOUVRES

Model Number	RS-5300	B-7505
Orientation	Horizontal	Horizontal
Depth (mm)	127	187
Drainable	•	
Hidden Mullion		Optional
Sight Proof	•	•
Rain Resistance Class AS/NZS47402000(R2016)^1	B up to 2.4m³/s	A up to 3.5m³/s
Extended Rain Resistance#	NA	B up to 3.5m³/s
Airflow Performance Class	3	2
Intake Cd	0.22	0.34
Intake Pressure Drop at 2.0m/s face velocity (1219 x 1219mm louvre size)	70 Pa	28 Pa
Free Area (1219 x 1219mm louvre size)	48%	46%
Material	Aluminium	
Finish	Powdercoated or Anodised	
Green Aluminium (Option)	•	
Bird Mesh (Optional)	Galvanised or Stainless Steel 12x12mm aperture 1mm thick	
Insect Mesh/Bushfire Mesh (Optional)	Stainless Steel or Bi-Component Monofilament (VOC free)	
Security Mesh (Optional)	Galvanised or Powercoated	

¹13m/s wind and 75mm/hr rain
#22m/s wind and 203mm/hr rain (AMCA-500L)

Extreme Weather Louvres

Construction Specialties Extreme Weather Louvres are built to withstand cyclones and tropical storm conditions.

Tested to FEMA 361 and ICC 500 standards for the design and construction of storm shelters, they can withstand an impact of a 6.8 kg 100x50mm timber block at 44.7m/s (160km/h).

When your building or assets need protection from high winds and flying debris but airflow is also a priority our Extreme Weather Louvres are the product to specify.

Typical applications:

- Storm shelters

TECHNICAL DATA

EXTREME WEATHER LOUVRES	
Model Number	EW-5210
Orientation	Horizontal
Depth (mm)	152
Drainable	No
Continuous Line	No
Sight Proof	•
Airflow Performance Class	3
Intake Cd	0.23
Intake Pressure Drop at 2.0m/s face velocity (1219 x 1219mm louvre size)	69 Pa
Free Area (1219 x 1219mm louvre size)	45%
Cyclone Testing Standards	FEMA 361 & ICC 500
Media & Travel speed	6.8 kgs 100x50mm timber block at 44.7m/s
Material	Aluminium
Finish	Powdercoated or anodised
Green Aluminium (Option)	No
Bird Mesh (Optional)	Galvanised or Stainless Steel 12x12mm aperture 1mm thick
Insect Mesh/Bushfire Mesh (Optional)	Stainless Steel or Bi-Component Monofilament (VOC free)
Security Mesh (Optional)	Galvanised or Powercoated

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Perform Louvres

With Construction Specialties Perform Louvres, you get the air movement, security and sight screening performance of our standard louvres, under the cover of a modern perforated aluminium skin.

Unlike decorative mesh, which can harm mechanical equipment, Perform’s perforated skin is engineered to work in harmony with the interior louvre blades.

The first and only manufacturer to offer fully concealed louvre system that’s been tested in accordance with BSRIA standards for air performance and water penetration, Construction Specialties turns louvres into a covert operation that’s proven to perform.

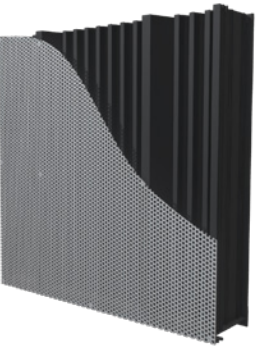
We even offer a Storm Resistant model (PL-5700).

Perform Louvres are available to integrate into any curtain wall system.

TECHNICAL DATA

PERFORM: LOUVRES + PERFORATED SCREEN			
Model Number	PL-3600	PL-4080	PL-5700
Orientation	Vertical + Perforated	Horizontal + Perforated	Vertical + Perforated
Depth (mm)	133	189	189
Hidden Mullion	•	•	•
Sight Proof	•		•
Rain Resistance Class AS/NZS4740:2000(R2016)^1	A up to 3.5m³/s	C up to 3.5m³/s	A up to 3.5m³/s
Extended Rain Resistance#	A up to 5.0m³/s	NA	A up to 5.0m³/s
Airflow Performance Class	2	3	3
Intake Cd	0.31	0.27	0.26
Intake Pressure Drop at 2.0m/s face velocity (1219 x 1219mm louvre size)	28 Pa	35 Pa	32 Pa
Free Area (1219 x 1219mm louvre size)	47%	47%	45%
Material	Aluminium		
Finish	Powdercoated or Anodised		
Green Aluminium (Option)	•	•	•
Bird Mesh (Optional)	Galvanised or Stainless Steel 12x12mm aperture 1mm thick		
Insect Mesh/Bushfire Mesh (Optional)	Stainless Steel or Bi-Component Monofilament (VOC free)		
Security Mesh (Optional)	Galvanised or Powercoated		

- ^13m/s wind and 75mm/hr rain
- #22m/s wind and 203mm/hr rain



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Conventional Architectural Louvres

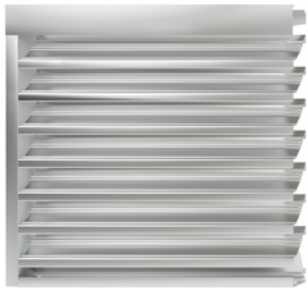
Where maximum airflow is the primary consideration our Conventional Architectural range is a perfect solution. Our louvres offer high levels of airflow with low pressure drop, whilst delivering some weather protection. Continuous look or modular mullion options can be specified to fit the desired façade design.

They are the right choice when:

- High free area / high airflow solution is required
- Economy is the primary consideration
- Occasional rainwater penetration is not an issue
- Continuous line appearance on the façade is preferred

Typical applications:

- Plant rooms
- Open decks
- Car parks



DRAINABLE LOUVRE



NON-DRAINABLE LOUVRE



177 PACIFIC HWY
SYDNEY, AUSTRALIA
A4080 LOUVRE

TECHNICAL DATA

CONVENTIONAL ARCHITECTURAL LOUVRES				
Model Number	A-4080	A-4085	A-4177	A-6177
Orientation	Horizontal	Horizontal or Vertical	Horizontal	Horizontal
Depth (mm)	102	102	102	152
Drainable			•	•
Hidden Mullion		•	Optional	Optional
Rain Resistance Class AS/NZS4740:2000(R2016)^1	C *1m³/s	C *1m³/s	NA	NA
Airflow Performance Class	2	2	2	2
Intake Cd	0.38	0.38	0.39	0.38
Intake Pressure Drop at 2.0m/s face velocity (1219 x 1219mm louvre size)	25 Pa	25 Pa	20 Pa	20 Pa
Free Area (1219 x 1219mm louvre size)	54%	54%	55%	58%
Material	Aluminium			
Finish	Powder coated or Anodised			
Green Aluminium (Option)	•	•	•	
Bird Mesh (Optional)	Galvanised or Stainless Steel 12x12mm aperture 1mm thick			
Insect Mesh/Bushfire Mesh Mesh (Optional)	Stainless Steel or Bi-Component Monofilament (VOC free)			
Security Mesh (Optional)	Galvanised or Powercoated			
AMCA Certified	 Water Penetration, Air Performance			

^13m/s wind and 75mm/hr rain

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Acoustic Louvres

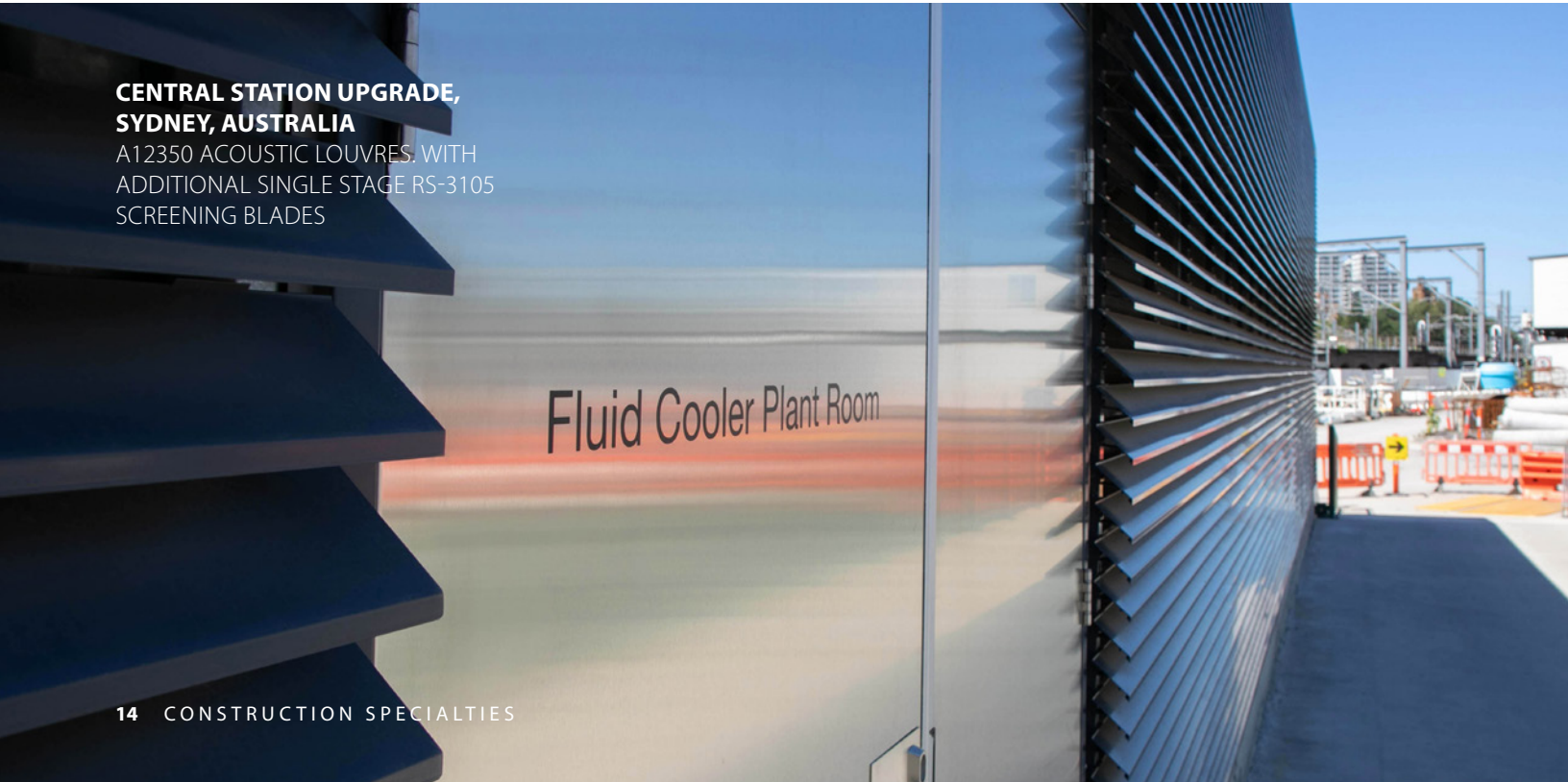
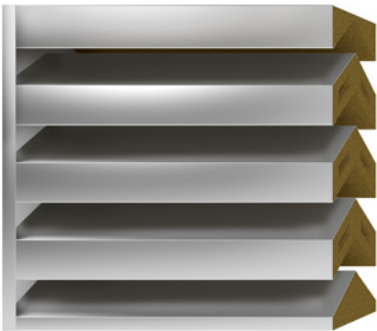
Where both noise control and airflow are required, our Acoustic Louvres can be installed as standalone screens or integrated into building façades. They can be combined with any of our rain defence or ventilation models if required.

Choose acoustic louvres for:

- Applications that require both sound attenuation and ventilation
- Areas where sound levels emanating from exterior or interior walls must be minimised

Typical applications:

- Car parks
- Plant rooms
- Substations
- Cooling towers



**CENTRAL STATION UPGRADE,
SYDNEY, AUSTRALIA**
A12350 ACOUSTIC LOUVRES WITH
ADDITIONAL SINGLE STAGE RS-3105
SCREENING BLADES

TECHNICAL DATA

ACOUSTIC LOUVRES					
Model Number	A-6370	A-8370	A-8890	A-12350	A-12360
Orientation	Horizontal	Horizontal	Horizontal	Horizontal	Horizontal
Depth (mm)	152	203	222	305	305
Sight Proof				•	
Weight	~25kg/m ²	~32kg/m ²	~34kg/m ²	~45kg/m ²	~45kg/m ²
Transmission Loss (as below) dB ¹					
63 Hz	8	9	6	9	10
125 Hz	7	7	4	7	9
250 Hz	7	7	6	10	9
500 Hz	10	11	7	14	12
1000 Hz	14	18	12	22	15
2000 Hz	17	19	12	24	14
4000 Hz	13	14	11	32	12
8000 Hz	13	13	13	22	12
Sound Transmission Class	13	15	10	19	13
Intake Pressure Drop at 1.1m/s face velocity (1219x1219mm louvre size)	27 Pa	20 Pa	12 Pa	46 Pa	21 Pa
Free Area (1219m x 1219mm louvre size)	22%	23%	29%	23%	24%
Material	Aluminium + Fiberglass Insulation protected by woven (self-extinguishing) 100% Polyester sheeting				
Finish	Powdercoated or Anodised				
Bird Mesh (Optional)	Galvanised or Stainless Steel 12x12mm aperture 1mm thick				
Insect Mesh/Bushfire Mesh (Optional)	Stainless Steel or Bi-Component Monofilament (VOC free)				
Security Mesh (Optional)	Galvanised or Powercoated				

¹ Noise Reduction = Transmission Loss + 6dB

LEADING WITH EXCELLENCE

Established over 75 years ago, Construction Specialties has evolved into a global leader in the manufacturing and supply of specialty building products. With a presence in 25 offices worldwide and employing over 2,000 professionals, we serve diverse markets across continents.

In Australia, Construction Specialties has operated for over three decades with manufacturing facilities in Enfield and Condell Park, NSW.



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AUSTRALIA

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Solutions for Data Centres

