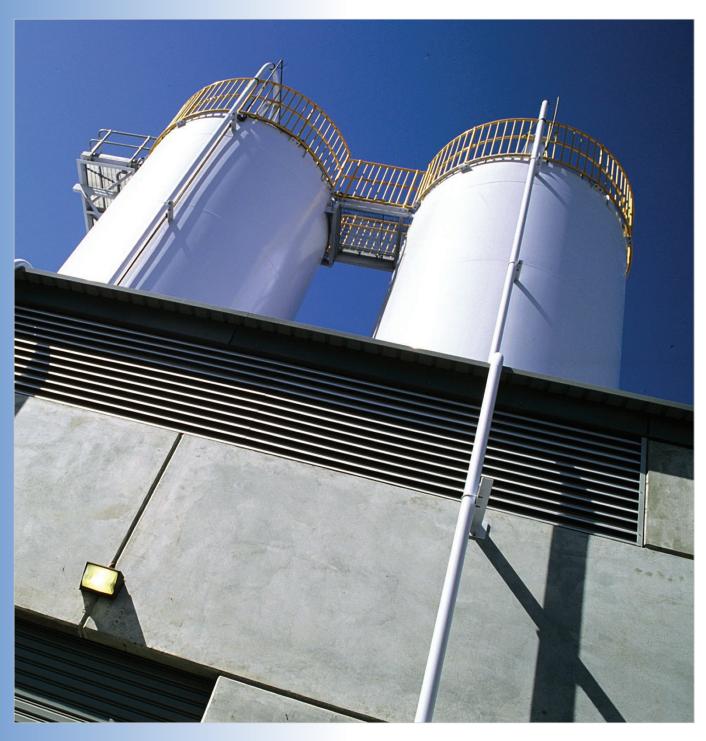


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# **ARCADIA®**

Arcadia<sup>®</sup> is one of Australia's leading manufacturers and suppliers of natural ventilation, louvre and sun shading systems. Arcadia<sup>®</sup> products control the natural elements of the sun, wind and light to create energy effective and comfortable conditions in industrial and commercial buildings.

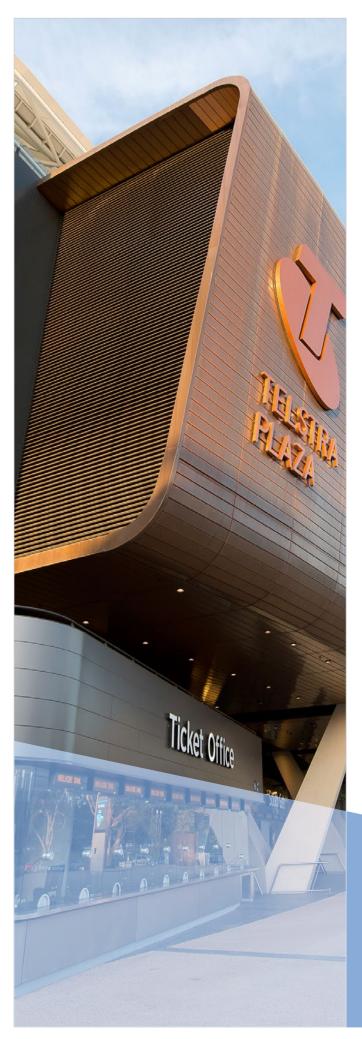
The successful integration of Arcadia<sup>®</sup> products by architects and designers is supported by the experienced management and engineering team at Arcadia.

If you would like to find out more about the range of products at Arcadia, please visit www.grouparcadia.com.au

Arcadia<sup>®</sup> maintains an ongoing research and testing program in the quest for product improvement and in consequence the information provided in this brochure may be subject to change without notice.

# SPUR<sup>®</sup> FIXED LOUVRE SYSTEM





# SPUR® FIXED LOUVRE SYSTEM

### OVERVIEW

The Arcadia Spur<sup>®</sup> Fixed Louvre System is easily integrated by engineers and building designers into commercial and industrial projects. A successful application of Spur<sup>®</sup> Fixed Louvres can provide a building with natural ventilation, air intake, air exhaust, privacy screening and façade aesthetics whilst offering a high level of rain defence. A suitable design solution is to incorporate a louvre system that balances a level of ventilation, pressure drop and rain defence.

Arcadia offers a comprehensive range of base materials and finishes to enable the integration of the Spur<sup>®</sup> Fixed Louvre system in any application. All louvre types can be manufactured to specific designs to meet wind load requirements in all regions. Spur<sup>®</sup> Fixed Louvre profiles are arranged in three categorised louvre types: Single Stage, Two Stage and Three Stage with various sizing across each category.

With Arcadia's diverse selection of louvre profiles and fixings, the possibilities are infinite with the Spur® Fixed Louvre System.

### IN THIS BROCHURE YOU WILL FIND

- Applications & uses
- Single, Two and Three stage Louvres
- Louvre comparison table
- Fixing methods
- Spur<sup>®</sup> Fixed Louvre Specification

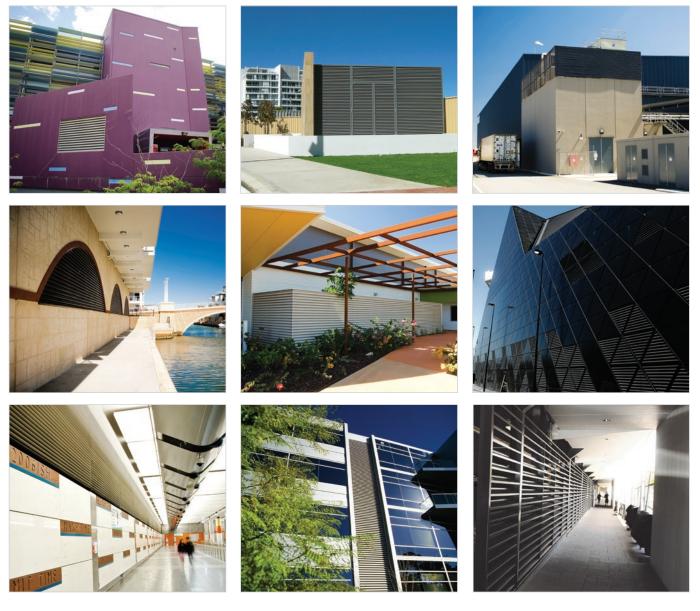
We are available to answer your questions. Call our experts who will talk through your design requirements and will be more than happy to assist you.

> There are infinite possibilities with the Spur® Fixed Louvre System

# VERSATILE DESIGN SOLUTIONS

### SPUR<sup>®</sup> FIXED LOUVRE SYSTEM

The Arcadia Spur<sup>®</sup> Fixed Louvre System is a versatile ventilation or screening solution for industrial and commercial buildings. When a building has correctly incorporated the Arcadia Spur<sup>®</sup> Fixed Louvre System, optimal cooling, ventilation, screening and aesthetic architectural impact is achieved. Such buildings include Industrial warehouses, manufacturing facilities, substations, cooling towers, carparks, hotel and apartment buildings, office blocks, hospitals, mining plant and processing buildings.



Pre-assembled panels are commonly used where louvres are required for small openings, where removable panels are required or where a modular appearance is desired. When the Spur® knockdown system is integrated into a building for a continuous clean sharp

line is achieved with hidden structural support brackets set behind the Louvre system. In addition to the standard horizontal mounting method, the flexible system also allows louvre profiles to be inverted or mounted vertically to meet the aesthetic appeal of your building. Arcadia recommends that consideration is given to the ventilation, structural support and façade integration requirements of the project at an early stage. Arcadia's technical team are available to assist with clarification of the product and to provide information to support the development of your next project.



# **SPUR®** FIXED LOUVRE CONTROL



### **FUNCTION**

Spur<sup>®</sup> Fixed Louvre Systems are compatible for integration within almost any façade design with a vast range of frame designs and connection and flashing details being available from Arcadia.

Depending on the region, the system is generally supported by horizontal structural members. It can be manufactured in long length form to achieve a continuous uninterrupted look or can be supplied as modular panels to align with precast panels, composite cladding or window mullions. When connected with mechanical services, inactive sections of the Spur<sup>®</sup> Fixed Louvre system can be blanked off while others can remain active for air intake and exhaust with bird wire or mesh being added to the rear. Where an increased level of rain defence is required Two and Three Stage Louvre Systems can be selected to ensure driven rain penetration is caught and drained.

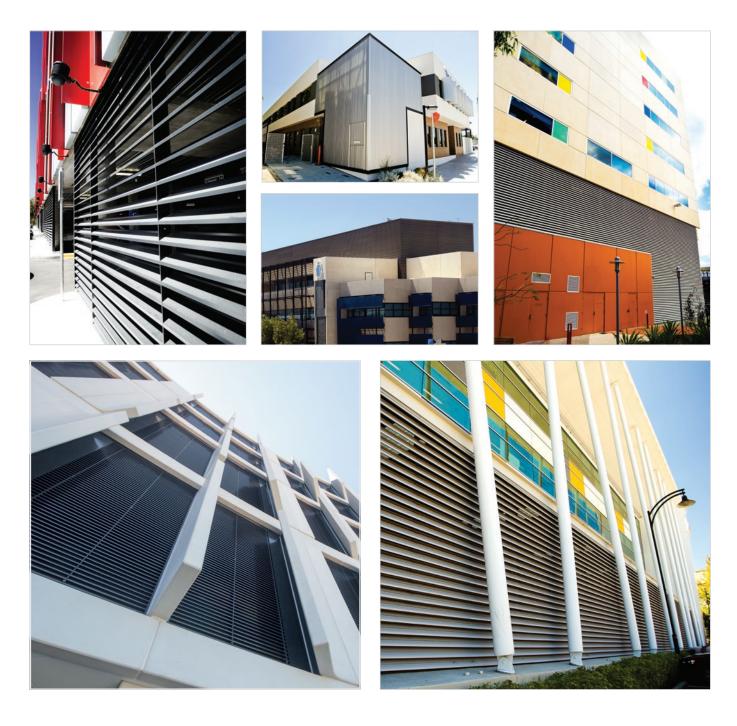
When using the Spur<sup>®</sup> Fixed Louvre system as a louvre screen, the option of inverted single stage louvre or the two stage louvre system removes line of sight. The experienced team at Arcadia are available to assist with calculations and detail design drawings to establish the most efficient design scheme for architects, building designers and engineers.

### BENEFITS

- Single, two and three stage profiles
- Designed & engineered to suit all wind regions
- Prefabricated panels or knockdown form
- Commercial or industrial building projects
- Wide range of optional accessories
- Reduce carbon footprint and energy costs
- Australian designed and manufactured by Arcadia.



# SPUR® COMMERCIAL PROJECTS



### **BASE METAL**

The base material is defined as the material used for the fabrication of the Spur<sup>®</sup> Louvre. These include, Zincalume<sup>®</sup>, Colorbond<sup>®</sup>, Galvanised, Aluminium, Stainless Steel and Copper.

### FINISHES

Finish is the coating applied to the base metal. Pre-coated, Powdercoat and Anodised finishes are all available. Within each finish option, there are a range of colours available.

#### PANEL FORM

Modular panel form is where the Spur<sup>®</sup> Louvre system is manufactured in pre-made panels. This system allows the Louvres to be delivered, ready for immediate installation reducing on-site time and associated costs.

# **SPUR®** INDUSTRIAL PROJECTS







### **KNOCK DOWN FORM**

The knock down form consists of components which are fitted on site for a continuous uninterrupted linear appearance. The cleverly designed knock down form Spur® Louvre system has a hidden support system located to the rear of the louvre profiles.

#### **RAIN DEFENCE**

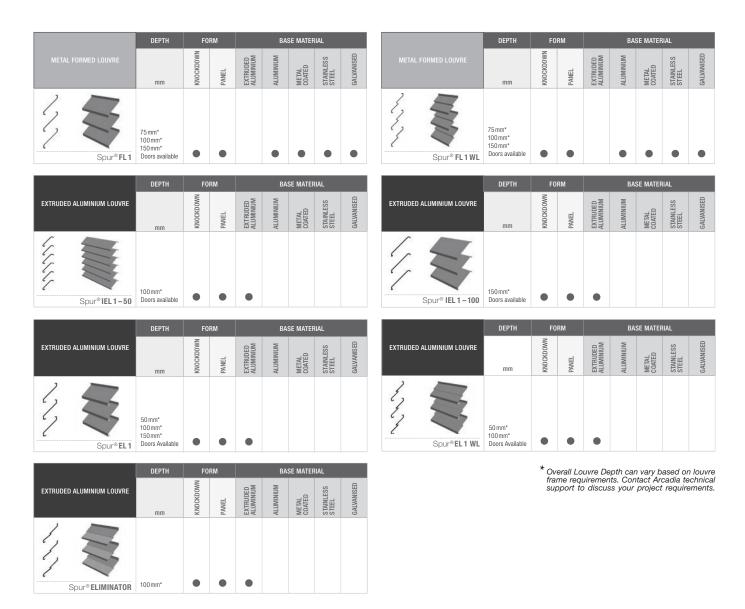
Rain defence is the ability of the louvre system to provide protection against the entry of wind driven rain. This is achieved by the ability of the louvre to self-drain and the combination and quantity of blade stages which the Louvre is made up of. Arcadia has the full range from the economy Single stage to the ultimate Three Stage.

### SECURITY

It is of all importance that where Louvres are being fitted, security must be maintained. Unlike other louvre types, the Arcadia Spur<sup>®</sup> Louvre system can be mechanically screw fixed and security screw type fasteners integrated within the system. Contact Arcadia for Spur<sup>®</sup> detailed fixing drawings and technical information.

# **SPUR®** SINGLE STAGE FIXED LOUVRES

# Spur<sup>®</sup> Single Stage Louvres offer an economical solution with high airflow properties



Where a project requires a reasonable level of rain defence this system remains suitable and offers an additional weather-lip system (WL) to reduce water penetration. This system is the most commonly used and specified system incorporated in Commercial and Industrial applications including hospitals, apartment buildings, carparks, high rise buildings, water processing plants, mining workshops and industrial warehouses.

Within the Spur® Fixed Louvre range there are Panel Form or Knockdown Form available. Panel (P) formed prefabricated modular

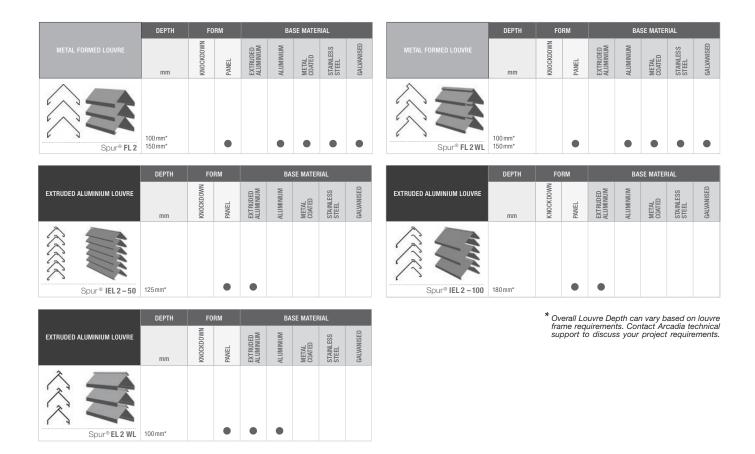
panels are sized to match the projects specification. A continuous uninterrupted linear appearance is achieved by Knockdown form (K). Concealed support vertical fixing rails associated with the component knockdown (K) system allow limitless height and width spans.

A range of louvre depths are available and can also be fabricated with in a framed door system. Additional Spur® Single Stage Profiles to the standard profiles outlined are available from Arcadia. The additional Single Stage Profiles support project specific requirements which may not be achieved from one of the standard profiles.



# **SPUR®** TWO STAGE FIXED LOUVRES

# Spur® Two Stage Louvres is a cost effective screening solution with an increased level of rain defence



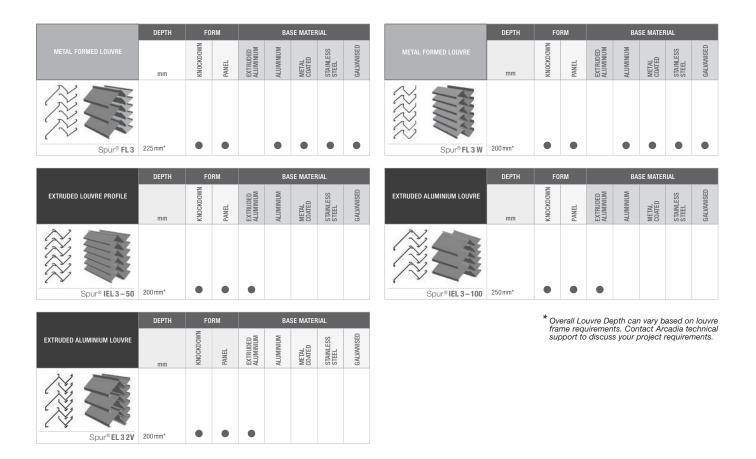
Spur<sup>®</sup> Two Stage Fixed Louvre system is a cost effective privacy screening solution with increased rain defence properties as compared to the Single Stage Louvre Profiles. The V shape Louvre profile eliminates line of sight from both sides of theLouvre bank. This is ideal for plant screens to hide unsightly plant and mechanical equipment and can be used in vertical or horizontal applications.

The combination of external air pressure and the airflow between the louvre blades enables wind driven rain to be collected in the second stage of the louvre and drained at the vertical mullions.

It is recommended that if rain defence is paramount that a profile from the Spur<sup>®</sup> three stage louvres be selected.

# **SPUR®** THREE STAGE FIXED LOUVRES

# Spur<sup>®</sup> Three Stage Louvres are engineered to offer ultimate performance with natural airflow and water ingress control

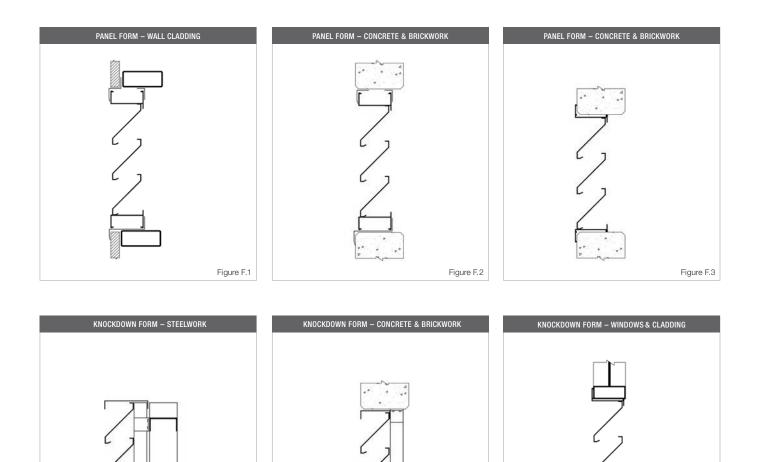


Arcadia has established a comprehensive Spur<sup>®</sup> Three stage louvre range to specifically meet the demand for natural ventilation with the capacity of a high level of rain defence. This means in situations where electrical plant, transformers or water sensitive equipment is located beyond an area of Louvre, wind driven rain will be collected and removed via internal drains, gutters and sills.

Engineered for premium performance, the Spur<sup>®</sup> Three Stage louvre systems suit a full spectrum of natural ventilation needs and meet the requirements for economic ventilation solutions. The additional louvre stages are applicable to areas requiring rain defence, while noncritical areas can integrate a Single Stage Profile. Unlike other systems, this allows designers and engineers to achieve the best performance whilst achieving a cost-effective outcome.

# **SPUR®** FIXING METHODS

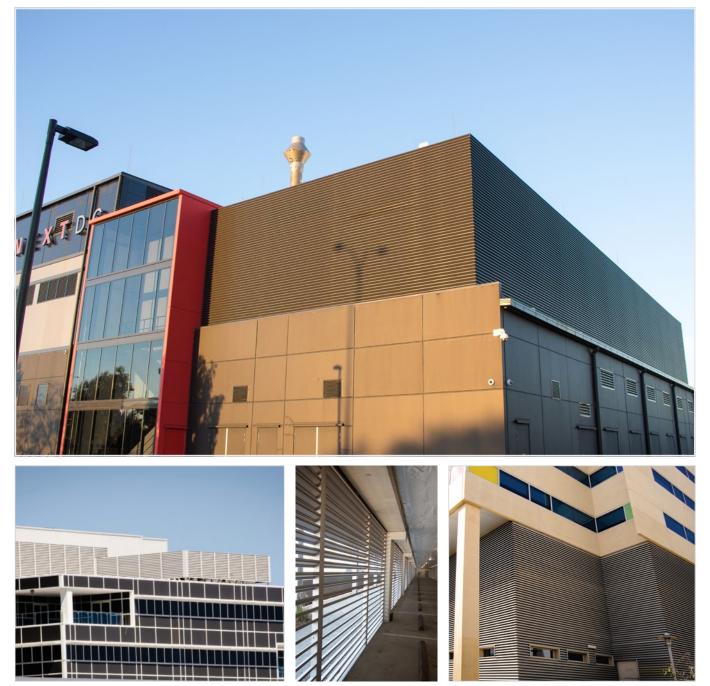
Spur<sup>®</sup> Fixed Louvres fixing methods compliment a building allowing it to breath using properties of natural airflow





# SPUR® PROJECTS





# SPUR® PROJECTS





# **SPUR® | FIXED LOUVRE SPECIFICATION**

### SPUR<sup>®</sup> FIXED LOUVRES

Louvres shall be Arcadia Spur<sup>®</sup> (Select from A below) stage, (select from B below) (select from C below) louvre depth in (select from D below) base material and finished using (select from E below).

#### **ORIENTATION & ACCESSORIES**

The Spur® Fixed Louvre System will be supplied in (select from F below) with (select from G below) blade orientation, incorporating necessary heads, sills, and joint flashings as standard with the manufacturer.

Accessories to be fitted to the Spur® Fixed Louvre System shall be (select from H below).

#### INSTALLATION AND MOUNTING

Installation and mounting details will be designed to satisfy wind actions for Region (select from I below) and Terrain Category (select from J below) in accordance with AS 1170.2 structural design actions to suit Arcadia proprietary systems and manufacture's recommendations.

#### A STAGE

- Single
- Two
- Three

#### LOUVRE MODEL B.

- Single stage | Refer to Pg 8
- Two Stage | Refer to Pg 9
- Three Stage | Refer to Pg 10

#### С DEPTH

- 50 mm 180 mm
- 75 mm 200 mm
- 100 mm 225 mm
- 125 mm 250 mm

\* Colorbond® and Zincalume® is a registered trademark of Bluescope Steel. Arcadia reserves

the right to use alternative similar products to

Zincalume® and Colorbond® materials.

150 mm

- D. **BASE MATERIAL** 
  - Zincalume® \*
  - Colorbond® \*
  - Stainless steel
  - Extruded aluminium
  - Aluminium
  - Galvanised Steel

#### LOUVRE FINISH F.

- Powdercoat
- Anodised
- As base material

#### F. LOUVRE FORM

- . Knockdown with uninterrupted continuous appearance
- . Panel with mullion joint lines as detailed

#### **BLADE ORIENTATION** G

- Horizontal
- Inverted

#### ACCESSORIES Η.

- Not required
- Bird mesh
- Insect mesh
- Perforated mesh
- Security screen
- **Blanking Plates**
- Mitred Corners

#### Ι. REGION

- Region A
- Region B
- Region C
- Region D

.1 **TERRAIN CATEGORY** 

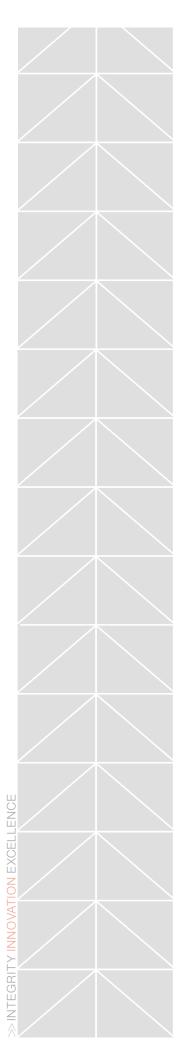
- 1
- 2 •
- 2.5
- 3
- 4

- Vertical

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PROVIDING A FULL SPECTRUM OF SERVICES FROM CONCEPT TO COMPLETION FOR EVERY ASPECT OF YOUR PROJECT.



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