



Shade Design for Public Places

Selecting appropriate, innovative and cost effective shade measures

Preamble

The provision of functional shade in public places holds great importance as Australians increasingly embrace broader uses of the public realm. The evolving uses of public settings demands more flexible approaches to designing and selecting shade measures, while at the same time being accountable for the 'whole of life' cost implications of projects. While any project has the provision of shade at its core, the broader physical and social context should be considered before making a decision on the type of shade for each case.

Shade Design for Public Places highlights many of these considerations and offers a range of shade examples across various price brackets. The examples are presented in the Shade Selection Decision Tree, a visual reference aiding the selection process.

Aims

- Provide comparative approaches to shade provision within fixed price brackets.
- Highlight the importance of context in siting shade measures.
- Present imaginative, best practice examples of public shade provision.
- Assist councils with their shade selection process through graphic examples.

Shade Types



Trees and other vertical planting.



Shade sails, umbrellas and framed canopies.



Shelters and other roofed structures.

Terms used

- Incidental shade* - shade experienced when passing by
- Destination shade* - where the shaded area is the focal point
- WSUD* - Water Sensitive Urban Design
- Hypar* - Shade sail with two high points and two low points, rectangular in shape



How to use this resource

The Shade Selection Decision Tree allows users to negotiate their shade options from either an outcome (outer ring) or a budget (inner ring) starting point. While the examples presented are site specific, the 12 more detailed graphic depictions show only that included in the price bracket, allowing a like-for-like comparison. The examples have been selected for their considered approach to shade, where sensitive siting and complimentary landscaping measures have greatly enhanced the longer term shade outcomes. The projects illustrate how this complimentary approach can lead to outcomes that are greater than the sum of their parts.

Steps to follow

Review the examples presented and determine either:
a) your budget (inner ring)
b) your preferred shade outcome (outer ring)



Skip to the focus pages for examples of interest and learn more about some likely features of each shade type.



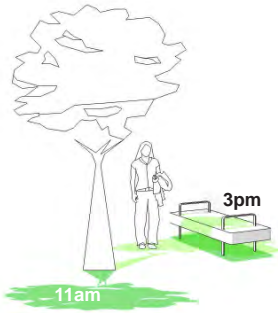
Finally, review the 'Considerations' and 'Functionality' checklists at the end of this resource and apply them to your project.

Pricing information

Projects have been grouped by price and include the whole design depicted unless noted otherwise. Costs include: Design, supply and installation and general landscaping. Site conditions and furniture have generally been excluded from these examples. Projects may fall slightly above or below the listed bracket.



North direction indicated is for all examples as depicted at Summer solstice (22 December, 2015).



Incidental shade in the street for passers-by and those using the seat. Siting considers existing shade from shop canopies and maintains sight-lines for vehicles in nearby street.



Economical umbrella shade with set down footing to allow a sandpit. Shade is focused immediately around the activity. Coupled with new tree planting for a long term shade outcome.



Shelters are grouped with picnic facilities allowing various gathering formats. Trees are scattered between and will enhance the long term shade outcomes.

Images are approximate representations of projects only. Use people as a guide to scale.



- Medium-long term setting
- Integrated with landscape and play
- Coupled with new tree planting
- Centre column most economical
- Immediate shade from shade sail



- Good sight-lines maintained
- Vertical weather protection from wall
- Immediately adjacent play area
- Economical, galvanized steel finish



- Good sight-lines maintained
- Coupled with new tree planting
- Destination shelter
- Good passive surveillance by neighbouring houses



- Integrated with play & seating
- Column is offset from center allowing clear span under
- Clustered shade



- Single tree focal point
- Medium-long term impact
- Sculptural tree form
- Urban setting
- Incidental shade
- Thoughtful siting with furniture



- New use for existing shade
- Site is used for a new activity - funds redirected

- Small umbrella type
- Medium Hypar or square format sail
- Certain shapes and supports are more economical
- Basic finishes

- Small catalogue item
- Rectilinear forms are most economical
- Minimal hardstand and furniture
- Siting critical for best value
- Basic finishes

- Medium area of juvenile tube stock
- Small area of mature tube stock
- Include maintenance for establishment



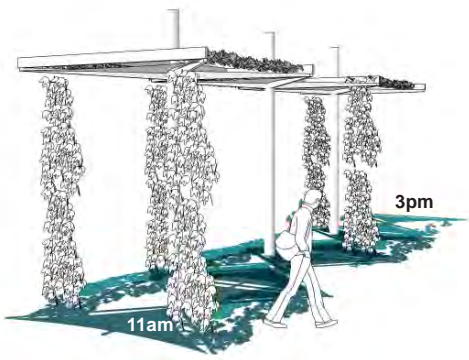
\$20,000

EXAMPLES

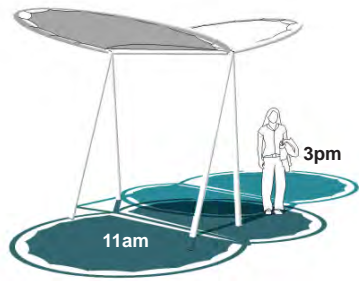
GENERAL FEATURES

SHADE TYPE

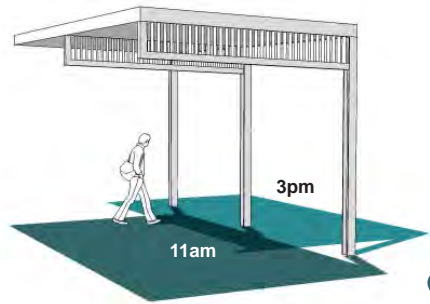
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Good shade provision throughout the day due to vertical planting coupled with shade sail. Adequate root area and drainage are important in this urban setting.



Eye catching and playful, shade is focused immediately over the play area. A raised footing forms part of the design to the wider setting.



Shelter is well sited to provide good shade and weather protection in peak UV times. Roof drains passively to garden bed behind.

North direction indicated is for all examples as depicted at Summer solstice (22 December, 2015).



- Planted arbour with vertical shading
- Integrated shade structure provides immediate impact while plants establish
- Incidental shade
 - Small tree cluster
 - Destination gathering space
 - Dense shade
 - Integrated with deck
 - Sight-lines maintained

- Playful, thematic form
- Integrated as part of play
- UV screening
- Destination shade
- Design intensive

- UV screening
- Integrated around play elements
- Shade sail coupled with existing trees and new tree planting
- Sight-lines maintained

- Various shape options
- Small custom item
- Medium-large catalogue item
- Hypar shape most economical

- Some landscape integration
- Small custom design
- Medium catalogue item
- Higher quality finishes possible

- Destination shade
- Some vertical shade
- Located to optimise existing tree shade
- Colour used as navigation aid

- Integrated seating/steps
- Destination shade
- Located to optimise existing tree shade
- Potential rainwater collection

\$50,000

SHADE TYPE

GENERAL FEATURES

EXAMPLES

Image: Fleetwood

Image: Asco

Image: Fleetwood

EXAMPLES

GENERAL FEATURES

SHADE TYPE



- Vertical weather protection
- Destination shade
- Coupled with furniture
- Sight-lines to complementary activities



- Solar integration for site lighting
- Incidental, linear shade
- Good WSUD - Shelter sheds rainwater to landscape raingarden
- Showcases sustainability

Image: Aecom



- Integrated with tiered seating
- Large, clear spans
- UV protection
- Waterproof roof structure

Image: Shadeliving

Pricing for this example based on single pavilion



- Integrated shade with landscape
- Destination shade forming event space
- Coupled with new and existing trees



- Incidental shade
- Showcases storm-water management
- Reduced maintenance possible due to WSUD & species selection

- Large destination landscape
- Edge defined by tree planting
- Integrated furniture and play
- Mixed species selection
- Clustered tree planting



Pricing for this example based on 20 linear meters of project depicted

\$75,000



- Large catalogue item
- Medium custom design
- High level of landscape integration
- Lighting and services integration

- Large catalogue item
- High level of landscape integration
- Cluster of small sail structures
- Specialty finishes

- Landscape and civil integration
- Large tree stock possible
- Good maintenance provision possible

Shelter is provided along an otherwise exposed expanse between landmarks, offering shade and weather protection. Multiple functions are incorporated into the structure including site power generation.

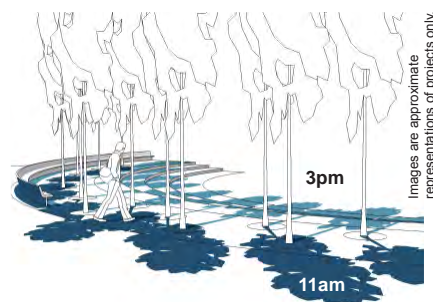
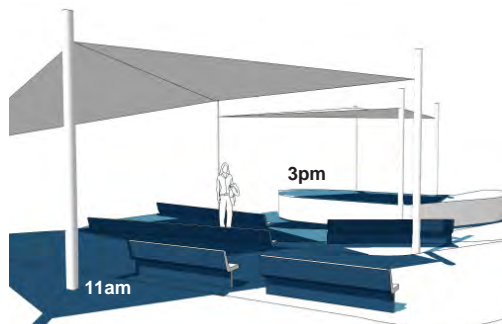
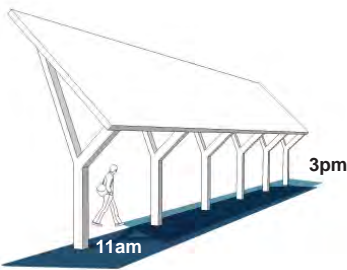
The dynamic form of the shade sails focuses attention on this central gathering space. Coupled with generous seating, the space also utilises existing mature trees and growing frames for cumulative shade outcomes.

Established with tree surrounds in easily trafficable hard paving surfaces. Trees are sited to provide shade to picnic, seating and play amenities throughout the day while maintaining sight-lines.

North direction indicated is for all examples as depicted at Summer solstice (22 December, 2015).



North



Images are approximate representations of projects only. Use people as a guide to scale.

Pricing for this example based on 20 linear meters of streetscape between kerb and road

\$100,000 plus

SHADE TYPE

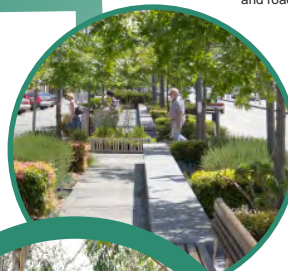
GENERAL FEATURES

EXAMPLES



- High level of landscape and civil integration
- Opportunity to couple with shelter and/or shade sails
- Correct root protection and maintenance

- Integration of trees in trafficable, urban setting
- Adequate root area and drainage provided via root cells under hard paving



- Large custom design
- Multiple catalogue item(s)
- High level of landscape integration
- Lighting and services integration

- Sculptural elements add to vertical shade
- Variety of species and resulting shade profiles
- Year-round shade
- Integration of play and water elements



- Medium-large custom design
- Specialty finishes
- High level of landscape and civil integration

- Defining form
- Large, clear span structure
- Translucent fabric allows light penetration



- Playful colour scheme
- Open sided structure
- Retractable shade sail for all season use
- Considered siting for use with adjacent buildings



Image: Sonia Mangiapane

- Destination shade
- Urban context
- Transport shelter
- Integrated seating & lighting
- Artistic focus in detailing
- Vertical weather protection

- Large, clear span structure
- Open sides allow ventilation and natural light



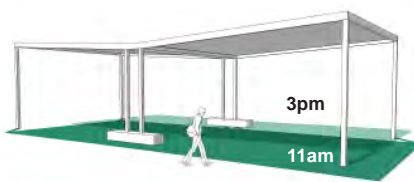
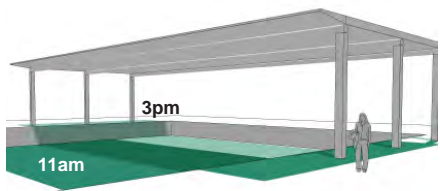
Image: Herald Sun

Spanning over part of the pool, activities requiring dedicated UV protection are clustered around this shaded area.

A historical school setting, the shade retracts when not required. A gathering space is formed and used for play and assemblies. The colour palette references local football team colours.

Combining planting and water play through misting sprays at the base of the sculpture, this playful space encourages activity in and around shade.

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North direction indicated is for all examples as depicted at Summer solstice (22 December, 2015).



North

Considerations for all site & project contexts

- Local climatic conditions (eg. coastal or alpine environments).
>Factor protection measures against elemental damage into the design
- Existing planting and/or structures.
>How they may be of use or detriment in siting the proposed shade measure
- Soil type implications such as structural bearing capacity, drainage capacity.
>Resulting structural and civil design and associated costs
- Adjacent site uses/user groups.
>How they may be incorporated for mutual benefit
- Services available/unavailable on site, such as the provision of power, water, site drainage.
- Minimum offsets from existing infrastructure or site boundaries.
>Clearance zones and their siting implications
- Level of civil integration required.
>Whether drainage is required and to what extent
- Degree of design documentation or permits required.
>Specialist services to realise the shade measure proposed including structural design
- Level and frequency of maintenance available.
>Impact on selection of materials and species to reflect likely maintenance regime
- Procurement arrangements specific to project.

More information

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Additional functionality that may affect cost

Complementary features that may add to the complexity and price of a shade project;

- Level of lighting and other services, eg. mains/solar power
- High durability surface finishes
- Degree of operability, eg. retractable shade
- Level of maintenance required
- Water shedding capacity, eg. stormwater connection/rainwater harvesting
- Side walls/wind breaks
- Hard stand (ground) surfaces
- Furniture and other user amenities
- Sound absorption/insulation
- Anti-vandalism measures

Project listing

