

SHADE SMART GUIDE

For Well-informed Shade Investments



Versatile Structures

with passion we deliver

DREAMWOLD TIGER ISLAND SPECIALISED TEXTILES
ASSOCIATION EXCELLENCE AWARD WINNER

DIRECTOR'S NOTE

The Versatile Structures team is passionate about what we do. We are challenging the status quo and raising the bar on industry standards.

We come across so many disappointed clients who wish they had the know-how upfront to make better shade solution decisions. For this reason, we decided to create a Shade Smart Guide that informs of everything you need to know about shade structures. With the right substrate selection, expert install team and a sensible maintenance plan, shade structures' lifespan can be extended by over 15 years.

We trust you find this guide helpful and our team look forward to helping you with any specific questions or requests you may have.

Stay Versatile,

Jamie Howard

**JAMIE HOWARD, DIRECTOR
VERSATILE STRUCTURES**

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ABOUT VERSATILE STRUCTURES

As an industry leader in quality and durable custom shade designs, our versatility, agility, and ability to deliver a great customer experience gives us our competitive edge.

10 DESIGN EXCELLENCE AWARDS

Specialised Textile Association Excellence Award
Winners since 2017.

2000+
SUCCESSFUL INSTALLATIONS
DELIVERED

We continue to be the supplier of choice across the following industries: residential, outdoor advertising, childcare, construction, hotels and resorts, restaurants, shopping centres, parks, landscaping, schools, and sports clubs.



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ESKGROVE APARTMENTS, BRISBANE

ALL SHADE SOLUTIONS UNDER THE SUN

Expert shade suppliers offer a complete end to end design, construct, management, and installation service that cover all areas of the project, from functionality consideration, initial design concepts, site specific requirements and shading efficiencies, wind regions, engineering, building approvals, structurally sound installations, as well as the commissioning of electrical aspects.

Equally important is our understanding of how to deliver aesthetic results that ensure a visually bold and appealing structure, ensuring that you are noticed for the right reasons. We use the latest computerized cutting technology that results in 100% high frequency welded seams, edges, and reinforcements. And finally, all our structural designs meet AS/NZS1170.0, AS/NZ1170.1, AS/NZ1170.2, AS4100, AS3600 and AS1170.4 standards.

| SOLUTION | APPLICATION | LIFESPAN | SUBSTRATE |
|--------------------------------------|---|--------------|---|
| SHADE SAILS | Premium Residential, Playgrounds, Council Parks, Schools, Childcare Centres Sporting Clubs | 10-15+ years | High strength knitted shade fabric Waterproof PVC Membrane |
| COMMERCIAL SHADE STRUCTURES | Construction, Council Parks, Schools, Child Care Centres, Landscaping | 10-15+ years | High strength knitted shade fabric Waterproof PVC Membrane Protective Coated Steel |
| CAR PARK SHADE STRUCTURES | Premium Residential, Construction, Corporate, Parking, Shopping Centres, Sports Clubs Grandstands | 10-30 years | Skillion options Barrel Vault Structures High strength knitted shade fabric Waterproof PVC Membrane Protective Coated Steel |
| WATERPROOF SHADE STRUCTURES | Premium Residential, Construction Cafés & Restaurants Retail, Parks, Schools, Childcare Centres | 10-30 years | Waterproof PVC Membrane Protective Coated Steel |
| UMBRELLAS | Premium Residential, Cafés & Restaurants Pubs, Hotels Resorts Sportsfields, Commercial Buildings | 10-15 years | Waterproof PVC Membrane Acrylic canvas Protective Coated Steel |
| EXTERNAL AWNINGS & BLINDS | Premium Residential, Cafés & Restaurants Retail, Swimming Centres, Commercial Construction | 5-10+ years | Highest quality European design ranges Typical wind ratings at or above 40km/h. |
| POLYCARBONATE ROOFING | Premium Residential, Cafés & Restaurants, Retail, External Architectural Structures | 5-10+ years | Polycarbonate (PC) heat resistant engineering substrate ideal for roofing, cladding, skylights, façade, and shading |
| INSULATED PANEL ROOFING | Premium Residential, Cafés & Restaurants Retail, Schools | 20+ years | Protective Coatings up to 30 years |

SUBSTRATES

Fabrics now come with longer lifespans, often around 10-15years minimum, thanks to advancements in fabric manufacturing, materials available and R & D progression.

Threads to stitch the shade cloth panels together are more robust with some manufacturers offering lifetime warranties to match the life of the shade cloth. A regular maintenance program including visual inspections, annual re-tensioning and repairs caught early will ensure the lifespan of your investment is maximised.

| CHARACTERISTIC | WATERPROOF PVC | RATING | SHADE SAIL | RATING |
|------------------------|---|--------|--|--------|
| MATERIAL | PVC coated with PVDF specialty plastic resistant to solvents, acids, and hydrocarbons | | Knitted high-density polyethylene | |
| UV PROTECTION | Blocks up to 100% UV light | ★★★★★ | Blocks up to 99% UV light | ★★★★★ |
| COLOURS | 20 + colours | ★★★★☆ | 50 + colours | ★★★★★ |
| CLEANABILITY | Self-cleans in rainfall Can be wiped clean as per maintenance manual | ★★★★★ | Cleaned with a pressure washer as per maintenance manual | ★★★☆☆ |
| HEAT REFLECTIVE | 70%-99%* White fabric reflects up to 85% of heat* | ★★★★☆ | 10% - 50%* | ★★★☆☆ |
| TRANSLUCENCY | High Translucency options available. 0% - 50%. | ★★★★☆ | Max 50%* | ★★★★☆ |
| FIRE | Rated to Australian standard AS1530 part 2 & 3 | ★★★★☆ | Rated to Australian Standard AS1530 part 2&3 | ★★★☆☆ |
| UV RESISTANCE | Nanoparticle and heat reflective coating can achieve up to 20-year UV life | ★★★★★ | Advancements in HDPE technology mean no UV breakdown for the first 10-15years* | ★★★☆☆ |
| STRENGTH | 0.05%-1.5% stretch 10 -20-year warranty depending on the fabric | ★★★★☆ | 100% Monofilament structural yarn available for maximum durability | ★★★★☆ |
| LIFE EXPECTANCY | Working life 15+ years with reasonable maintenance | ★★★★★ | Working life 15+ years with reasonable maintenance | ★★★★★ |

*substrates vary based on supplier

FOUNDATIONS

Strong, deep foundations, with lots of steel reinforcement in the concrete and structural steel columns.

Well-engineered footings will generally require specific minimum levels of reinforcement, larger diameter for bored piers, or a larger footprint for pad footings, they will be designed to accommodate the imposed loads and transfer effectively into the ground.

They should be different sizes for every post as the loads are different unless the structure is perfectly symmetrical. Where a post is directly embedded into the footing, minimum coverage should be achieved to ensure corrosion resistance to the steel, the top of the footing should be domed to prevent water build up, or subsurface steel, treated with a bitumen waterproof layer for protection.

With Versatile Structures you can be sure the above will be completed and your poles will be there for the long run.



POSTS AND COATING

In our opinion there are only three types of coating that should be considered:

1. **HOT DIP GALVANISING** - by far the most durable and hard-wearing coating, with expected lifespans from 10 to 25+ years. Hot Dip Galvanising has a matt to low shine grey-silver appearance, inconsistent appearance at times but reliable always.
2. **POWDER COAT** - available in many variance products and methods available, this type of coating is where the most caution should be exercised. Warranty of between 0-10 years can typically be expected for powder coating options over steelwork, be sure your supplier is supplying a Dulux approved warranty when you purchase a warrantable option, otherwise at minimum ensure a zinc rich epoxy primer is used prior to powder coating.
3. **2 PAC PAINTING** - an exceptionally durable coloured finish available but also the costliest option. This system can be tailored to specific requirements be applied over hot dip galvanised steelwork, negating the warranties, though providing the most durable coloured coating. Warranty options exceeding 15 years are available for application directly over steel.



STITCHING

All stitching is Gore Tenara UV protected, performed using a double locking stitch. GORE® TENARA® Sewing Thread is a long-lasting thread which enhances outdoor and marine products in which it is used. Conventional seam threads on shade sails and other outdoor fabric products suffer from exposure to UV, wind, and weather. After a few years they become brittle and break. In contrast, GORE® TENARA® Sewing Thread is a thread you can really rely on. It does not deteriorate from exposure to elements – not even when exposed to UV radiation!

FITTINGS

We use Forged AISI 316 marine grade stainless steel fittings. Our ultra-high quality 4, 5 or 6mm (7×19 / 1×19 Strand) AISI 316 marine grade stainless steel wire rope is encased in a double folded pocket. Each corner is reinforced with double layers of fabric and heavy-duty seatbelt webbing. All Turnbuckle threads are treated with Anti Seize allowing easy removal & installation.

INSTALLATION

The perimeter of each sail has a curve (catenary) designed to control the fabric tension. Therefore, they do not sag or flap in the wind. This gives you two benefits. It will not work loose, and it will not fatigue prematurely, these are generally set at 8% distance in / length of edge, as this is the best efficiency balance of tension vs coverage, if you require this to be set at a lower percentage, please feel free to discuss further with us, as there are options to reduce.

PRICE AND VALUE

Of course, you want a good deal, but not all shades are equal and making misinformed decisions can be costly in the long term.

**Price is what you are asked to pay.
Value is what you are willing to pay -
and everyone's assessment of value is
different.**

When decisions are made purely on price, there will always be cheaper options. But you also ask yourself at what cost? Buying on price alone could mean substandard services levels, lack of shade sail quality and stitching, durability, workmanship and guarantees and the precious excuse of 'unforeseen additional charges due to technical problems'. Make sure you are not working with an inexperienced supplier who lacks the skill to anticipate installation challenges and learn at your expense, it will save you money.

Typically, we either buy an item or we invest our money. A shade structure must be viewed as a property investment and a real asset in transforming your outdoor area into a source of pride, functionality, and enjoyment. So, ask yourself if the shade solution you are after is merely an item you buy or a return on your investment? When value is greater than price and the return on investment can be justified, price is not an issue.

**If your answer is value, keep reading...
we can help.**



THE VALUE OF A SHADE SAIL

A quality shade sail is a stylish and valuable addition to any property. It improves and boosts street appeal and ensures you get noticed for the right reasons, and a few more...

1. You care about your people and want to ensure you've taken all reasonable steps to **provide protection** and a safe and comfortable space for users.
2. Australia has the highest cases of melanoma in the world and is still on the rise. Good quality safe overhead cover can make a big difference in **reducing the chance of sunburn, heat fatigue and skin cancer**. A shade fabric blocks up to 99% of UV light while waterproof PVC blocks 100% of harmful UV light, letting only diffused filtered light through.
3. Unlock the hidden **value in a property** and improve the ease of use by providing comfortable outdoor areas to socialise.
4. Quality outdoor furnishings can wear out quickly in the sun. Good shade cover can double the lifespan of outdoor equipment and provide a great **return on investment**.
5. Reduce the temperature inside your property and cut down on air conditioning costs. This means the shade structure will pay for itself in the long run by **saving money on electricity** bills.



WATCH VIDEO



WATCH VIDEO

CANTERBURY COLLEGE

INDUSTRY KNOW-HOW

Every industry has its inside story and here is ours.

The fabric structure industry is unregulated, with no formal qualifications or official industry training required. Training and standards come down to the individual businesses and their internal systems.

Inexperienced operators don't know what they don't know and with many simply having a go, it means they could learn on your job and at your expense.

Not to mention how severe the consequences can be if loads are calculated incorrectly and causing the structure to collapse.

Australian weather conditions are very tough on fabric. Material quality differs hugely across suppliers and not all fabric can handle the searing heat and high wind loads. A quote using a cheap fabric cannot be compared to one with high spec European or Australian made fabric and fittings, so make sure you are comparing apples with apples. In our experience cheaper fabrics work out far more expensive in the long run and your smartest investment is to only use materials that are proven in our extreme conditions.

Fabric structures are complex to build and it takes years of observation and trial and error to master

fundamentals such as live loading, fabric knowledge, wind uplift and down forces, and material limitations. Tolerance levels are small, and there are many ways to get it wrong. Flat spots or big wrinkles that appear once the sail is pulled tight are indicative of the three-dimensional curves in a sail not being designed, cut, joined and fabricated accurately. Inferior design can also create excessive vibration causing fatigue and early failure in a structure.

A sail that is built with the incorrect shape and orientation will fail to cast shade in the correct place or provide sufficient rain cover. Experienced operators have an excellent understanding of design, the final sail shape, and the positioning of the poles to provide adequate coverage throughout the day and seasons.

HOW TO IDENTIFY A QUALITY SHADE STRUCTURE

Like so many things, the real value is in the details.

CRAFTSMANSHIP - Quality buys a beautiful sail system for your situation with real care and craftsmanship that will transform any outdoor area into a tranquil and relaxing space to enjoy all year round. Like so many things, real beauty lies in the details.

DESIGN AND EXPERTISE - You will notice the difference in the design quality and expertise. Done well, a sail system is like a dynamic 3D sculpture - a piece of modern design to enjoy right there in your outdoor area.

DURABILITY - The initial investment in quality fabric and workmanship means higher durability and huge cost savings in the long run. Quality PVC sails combined with some sensible maintenance can last over 15 years. The sail will work well for a long time. It won't, sag, droop, flap about or wear out quickly and it will provide shade or rain protection to the right area (yep, the lack of that happens).

FINISHES - Smart features like powder coated poles in the colour of your choice, strong corner detailing for added strength, sails designed with 3D software and cut with accurate computerised equipment have a distinctive streamlined appearance, hidden stainless-steel cables around the edge of the sail for tensioning and ongoing adjustment and Marine grade stainless steel chain and fittings will never rust or wear out, corrode or work lose all add to the design quality and workmanship expertise.

INSTALL - Strong deep foundations, with lots of steel reinforcement in the concrete and engineered poles, you can be sure the poles will be there for the long run. Because the sail has been carefully designed and installed, it will not vibrate excessively under wind load. This gives you two benefits. It will not work lose and it will not fatigue prematurely.



WHAT TO LOOK FOR IN A REPUTABLE OPERATOR

Selecting the right supplier is vital to ensure that your installation is delivered on time, at the agreed price, and in compliance with your quality standards.

1. How many years' experience do they have?

It takes years to understand the technical properties of fabric materials and master design challenges. Avoid paying someone to learn on your job, so no less than 10 years' commercial experience will do. Also, look for a proven track record on larger scale projects, and testimonies from happy customers.

2. Do they own and control the entire process?

Direct accountability from the design, fabric, steel work fabrication, through to the installation is key, should anything go wrong down the line. Dealing with a one-stop solution also cuts out middleman margins.

3. Do they offer custom builds?

When considering your area, it is important to think about the future life of the structure like day-to-day wind conditions, pollutants, contaminants, and airborne debris. Custom builds meet individual requirements and ensure adequate shade or rain protection.

4. What fabrics do they use?

Cheaper second tier fabrics are not proven to work in Australian conditions. High spec European and Australian materials are more expensive upfront but give a far better finish and much better long-term performance.

5. Do they have access to specialist manufacturing equipment and their own factory facilities?

Sophisticated tools like computerised fabric plotter cutters, high- power radio frequency welders and high productivity installation equipment make all the difference in the finished product and factory facilities also mean installation time is minimised as most of the pre-assembly and preparation work takes place in the factory, not at your property.

6. What warranties do they offer?

Many warranties only cover replacement of the fabric and not the labour and repair costs. Do not be caught out with nasty surprises. Look for an iron clad warranty package over the entire system, not just the fabric skin and ask what product and back-up servicing are included?





ROVERA DOMESTIC

THINGS TO AVOID

Avoid making these 5 mistakes when choosing a provider

SELECTION BASED PURELY ON PRICE - Yes, you want a good deal, but be aware that a cheaper price can also mean cheaper unproven materials, rushed install, underwhelming design, poor finishing details, and a vague warranty. Think of the real cost in terms of maximising the working life of your sail system.

CHOOSING A PROVIDER WITH A LACK OF SCALE AND PROVEN COMMERCIAL EXPERIENCE - This includes Workcover compliance, the development of safe and efficient installation systems, and investment in hi-tech equipment such as

computerised plotter cutters and powerful radio frequency radio welders. You need a company with the skills and resources to tackle your job on time and within the budget.

USING A PROVIDER WHO DID NOT MAKE THE SAIL OR BUILD THE STEEL WORK - This is risky. If something goes wrong, it is easy for the installer to “pass the buck” to the business who built the sail or the steel work and avoid sorting the problem out. The installer does not actually have much control over how an outsourced sail or steel work is built, or the ability to keep an eye on the materials used and quality of the workmanship. Not good if they have been cutting corners or failing to take care of the intricate details! A company who takes care of everything – design, fabric, steel work, manufacturing, install and support can do a much

better job with overall quality control and provide a better price due to production efficiencies and the elimination of “middlemen”

NOT COMPARING APPLES WITH APPLES - As you are beginning to see, not all sails are created equal. You want a beautiful sail that makes your property a joy to use. Remember you must look at it every day! As we mentioned earlier, be careful with how you compare quotes. A quote using cheap Import fabric compared to another with high spec European or Australian fabric and fittings will be different.

NO TESTIMONIES, AND NO WEBSITE - This is a red flag! If you only have their word and a cell phone contact, you could be setting yourself up for trouble. Look for at least a website and be wary of anyone who cannot provide written evidence of happy customers.

WHAT CAN POSSIBLY GO WRONG?

A large part of Versatile Structures' work is refurbishments and replacements due to bad workmanship by previous suppliers. Here is what we have seen can go wrong...



1. Waterproof PVC sails can leak, pool water or sag if poorly designed or installed.
2. Low-quality shade cloth can fade excessively, and stitching can begin to work loose and pull out.
3. Low-quality stitch thread can degrade with UV light damage begin to fail after 3 -4 years.
4. Poorly installed foundations fail, and steelwork can collapse under wind load due to lack of steel size or reinforcing in the concrete, skimping on concrete, and poor understanding of the foundation basics. We are often called out to fix foundation problems for people let down by dodgy operators and poor workmanship.
5. Rough installers can damage your property – we know of clients with roof leaks caused by faulty installation of roof penetrations or mounting points or damaged paving caused by construction machinery. A great installation job involves a lot of planning, care, and skill. If any of these are missing your job starts to suffer.
6. The structure does not function as expected. As simple as that.
7. Failure to provide the correct rain or shade cover with water falling or shading casted in the wrong spot.
8. Substandard final product with unsightly galvanised steel turnbuckles, dangling pieces of chain, flat and underwhelming sail design, or a design that clashes with your property or company building.
9. Not adequate cover. Failing to get a custom-built system to suit your unique situation could result in missing out on coverage of 20% of your available space.
10. Expensive installation overruns. Extra installation time can cause big problems for business customers. Installers working hard on site can scare off potential customers, who would rather go somewhere else while the work is going on. Lost business costs can be substantial and need to be avoided by accurate project management and scheduling.
11. No ongoing service or product support. Problems with the sail after a year or two and the installer is nowhere to be found. You want a business to stand by their product and be there assist if something comes up and you need help

WHY VERSATILE STRUCTURES?

Our points of difference are critical to our success and makes us stand out from any competitor as we challenge the status quo on quality, standard and reliability.



INDUSTRY-LEADING EXPERTISE



AWARD WINNING COMPANY



PROFESSIONAL SERVICE



QUICK TURNAROUNDS



HIGH QUALITY FABRIC



VALUE FOR MONEY

1. Dealing directly with us means the buck stops with us. We own every step of the process including design, fabrication, and installation, have total control and full ownership of product quality and 100% accountability for the results.
2. We use the highest quality of textiles available in Australia. Our meticulous design and craftsmanship ensure sails are designed with the latest 3D software, cut and pattern matched using a computerised plotter cutter and joined using double stitched long life PVDF stitch thread, to ensure they perform well for years. Waterproof sails are joined together with a high frequency radio welder. Our sails work, do not sag, pool water, or flap about in the wind!
3. We provide top-quality engineering. All steel work is designed by a tension membrane engineer, built safe and tough using heavy duty steel coatings, and engineered ground connections. An engineering certification options are available for any project we deliver.
4. We will only use quality fabrics, built from long-term performance and proven to work for 10+ years in our tough Australian climate.
5. We make sure that the correct area receives shade protection as the sun moves throughout the day.
6. We are committed to doing what we say we will do, when we say we will do it and pride ourselves on our excellent service and product support, so you will never be left stranded. Our team is reliable, personable, honest, and easy to work with.
7. We earned a reputation and awards for excellence across major commercial as well as residential projects, so you're tapping into reputable, specialist design and construction knowledge across our team.
8. Our ironclad warranties are available over the entire system – not just the fabric.

LET US HELP YOU TRANSFORM YOUR SPACE

Outdoor areas do not have to be all about soaking in the sun, as it is equally enjoyable to relax in a shady spot. There are many ways to transform an outdoor space.

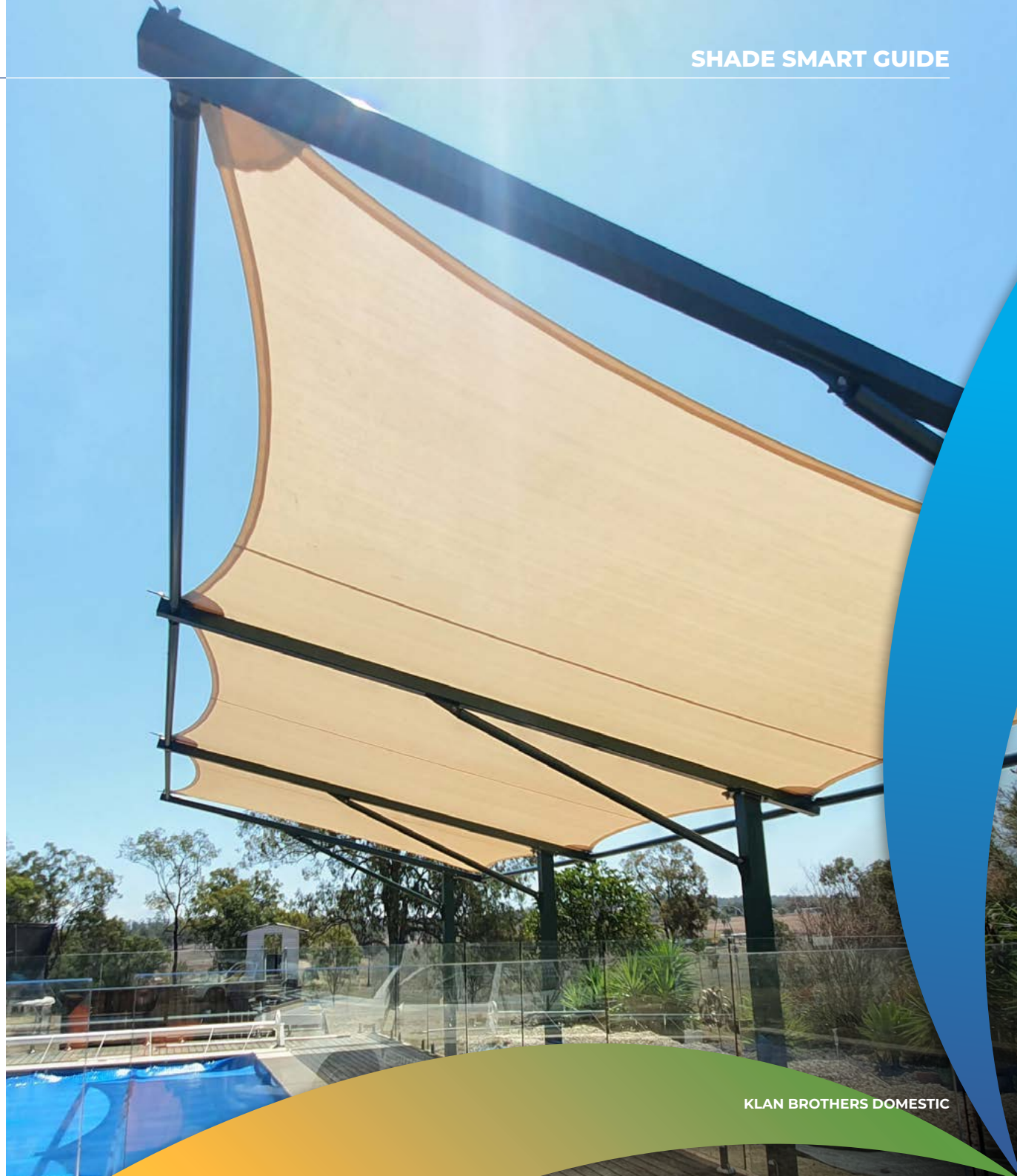
Contact us for a free design consultation. One of our consultants will spend time to understand your needs and talk you through various design options to help you get the most from your outdoor area. No obligation and no high-pressure selling.

Within 48 hours you will receive a detailed and accurate preliminary proposal including the information you need to know about materials and design recommendations to make an informed decision. During every stage of the build process, you will be dealing with the same customer manager.

Once the order is confirmed a deposit paid, the project goes to our production system to be custom built. Expect a 4-10 week build time depending on the scale of your job. This is where design and fabrication work take place in our factory and fittings and finishing details are coordinated.

Usually, two weeks after placing the order. The install team will dig the foundations and place your poles, which is usually completed within one day. The site is secured and left safe in preparation for the final install visit.

During the second visit, the sail system is installed and tested. This includes tensioning and edge cable adjustments. Your property is left clean and tidy, and you get to enjoy your transformed outdoor area.





BOOK A FREE DESIGN CONSULTATION

Inclusive of fabric selection, sail shape and configuration, orientation to the sun and design recommendations.



07 3271 4519



info@versatilestructures.com



Our shade sails are well maintained and are lasting longer than ever before, the prompt delivery and professional service is why we prefer Versatile.

PETER GARDNER,
DREAMWORLD



5 stars and 2 thumbs up for sure. I have dealt with the team for years across several projects and they have always done great work. Versatile are always helpful, knowledgeable, provide value and are genuinely good to deal with.

KANE PETERS, TLCC
GOOGLE REVIEW



Our school finally found a good shade company. They are really worth talking to as it has been the easiest company to deal with.

PETER KERRINS,
PRINCIPAL, MOTHER
TERESA CATHOLIC
PRIMARY SCHOOL,
COOMERA



Versatile Structures are very professional and provide a top quality product. We have been exceptionally happy with all the shade sail works they have done for us on our sites.

KERI DUNCAN,
VENTIA



Thank you for your attention to our shade needs, your Vypar structures have done the trick. We are impressed with the whole experience with Versatile Structures - from your timely and constructive initial attention to the seamless installation. I will most certainly contact Versatile Structures first for any future shade requirements.

WARRAN MORTON