



Access Structures

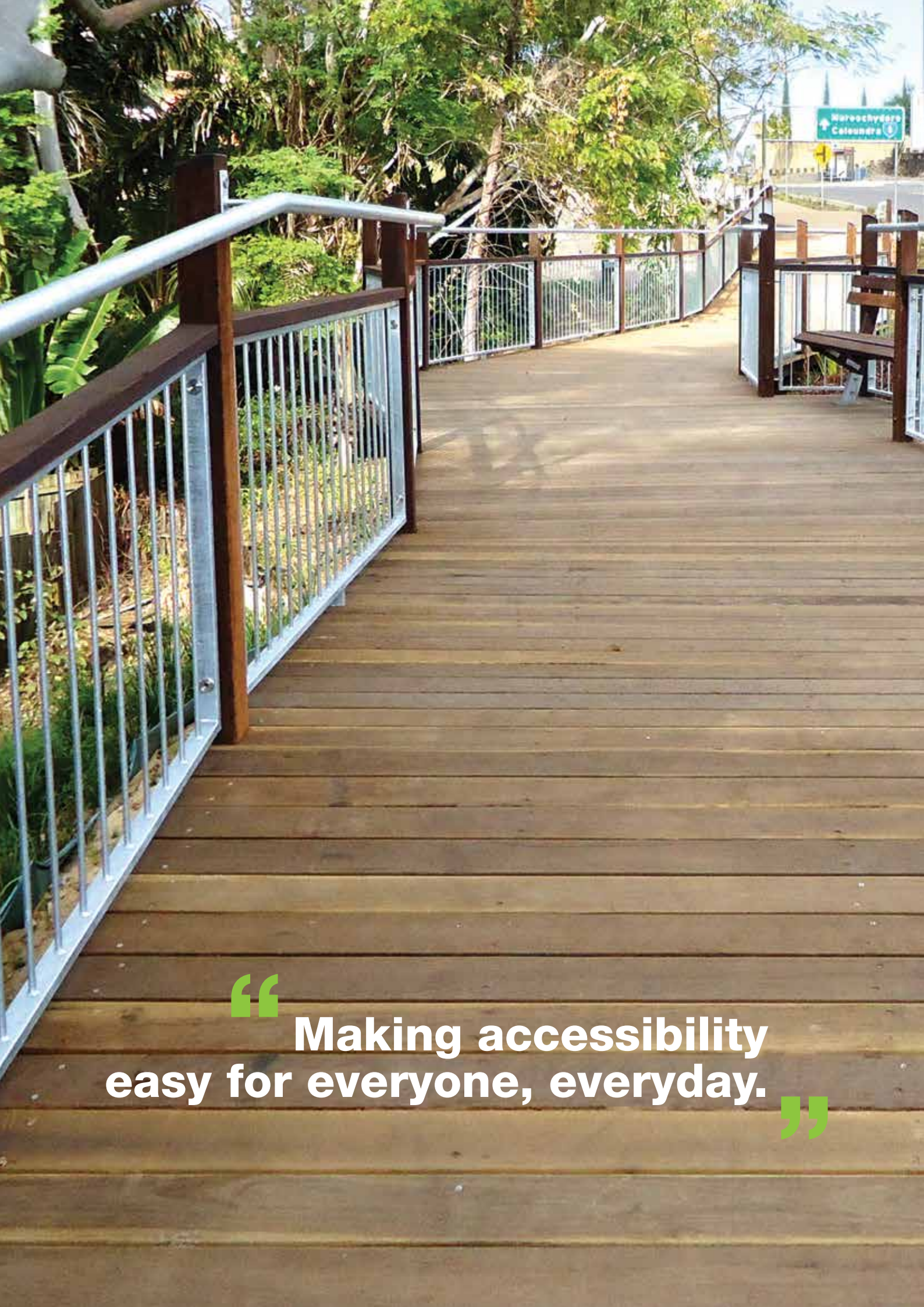


Our range of boardwalks and stairs allow easy and safe access through difficult or sensitive sites, while our viewing platforms offer a secure and enjoyable destination.



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 **Landmark**
open space structures & solutions



**“ Making accessibility
easy for everyone, everyday. ”**

Info

Access Structures

Landmark designs, constructs and installs, boardwalks, viewing platforms, stairs and other pedestrian access structures to suit specific site applications and environments. Our two main ranges are based on the primary materials used: steel (Stromlo) and timber (Timaru). We also use a variety of other materials including aluminium, Wood Plastic Composite (WPC) and Fibre Reinforced Plastic (FRP) depending on what is required for each structure type, application, location and environment.

All Landmark access structures are designed, drafted and engineered to meet or exceed the National Construction Code (NCC) and use relevant Australian Standards, such as AS 1170 Structural Design Actions, AS 1720 Timber Structures, AS 4100 Steel Structures, AS 5100 Bridge Design and AS 1428.1 Design for Access and Mobility.

We also understand and apply (if relevant) flood loading, crowd loading (3kPa to 5kPa) and vehicle loading requirements, along with many other relevant compliance requirements or requests. Our in-house design and engineering teams have many years of experience that you can rely on to achieve your desired result.

We source our materials from quality suppliers who apply the highest level of attention to detail, repeatability and scrutiny to their products. We then manufacture according to our ISO 9001 certification, which is the highest quality standard within the industry. To provide the utmost level of traceability, each and every access structure we supply carries a Landmark Traceability Plaque with a unique identification number. This allows our customers to trace and access product information easily should they ever need to maintain, upgrade or replicate an item.

We place great importance on every individual component used in our products, right down to the fittings. We provide you with a choice of galvanised or stainless steel fittings, depending on the application. We also use, where possible, our proprietary stainless steel anti-vandal fastening system in locations that are susceptible to tampering. This fastening system not only deter vandals but has been shown to reduce theft and destruction of the products we supply.

Landmark access structures are prefabricated and supplied in flat pack kit form. The community benefits from shorter construction times and reduced noise pollution and increased on-site safety.

Ultimately the outcome is a low impact environmental solution. Our access structures are supplied with instructions and engineering certificates that meet all relevant building codes and Australian Standard requirements.

We have local staff in offices throughout Australia and New Zealand who understand that each access structure has different requirements depending on location, community values, heritage, terrain and intended use. Ensuring a successful outcome for the community is an important step in each project and is of paramount importance to us.

YOU CAN TRUST A LANDMARK PRODUCT



LANDMARK IS ISO 9001 CERTIFIED

This international accreditation assures the highest quality standard of manufacture which ensures every Landmark product is consistently of the highest quality.



LANDMARK IS BS OHSAS 18001:2007 CERTIFIED

This international Occupational Health and Safety Management certification is proof of our commitment to best practice.



SOLUTIONS FOR YOUR ENVIRONMENT

We design, engineer and manufacture to suit individual site specifications. We work with you to select the most appropriate materials for the application, location, environment and budget for the best possible outcomes.



LESS ON-SITE DISTURBANCE

Our access structures are prefabricated and supplied in kit form guaranteeing less on-site disturbance, less noise and increased site safety.



ROBUST ENGINEERING

We design, engineer and manufacture often above industry standards, to suit environmental conditions and with consideration for high level public use.

We are proud of our products and offer a 10 year limited structural warranty.



STAINLESS STEEL ANTI-VANDAL FASTENING SYSTEM

Our fastening system deters vandalism and can reduce the incidence of theft and destruction.



TRACEABILITY PLAQUE

Every structure we supply carries an individual serial number to ensure all product specification history is easily available for any maintenance requirements.

Contents

ACCESS STRUCTURES INFORMATION	1
ACCESS STRUCTURES DESIGN	
Timber K1160 Series - Timaru	3
Steel K1170 Series - Stromlo	5
ACCESS STRUCTURES ELEMENTS	
Diamond Piers	7
Composite Materials	8
Materials and Finishes	9



Timber Access Structures



Enduring natural beauty.



K1160 Series - Timaru

Timber access structures are naturally enduring and resistant to corrosion, making them ideal for coastal locations and harsh environments. As well as its obvious natural beauty, timber can be used to complement a range of landscape designs, from traditional and heritage sites through to cosmopolitan or contemporary spaces.

**SITE-SPECIFIC
SOLUTIONS**

**KIT FORM
ENGINEERED**

Timber Access Structures

STANDARD TIMBER ACCESS STRUCTURES

The natural beauty and resilience of timber makes it the perfect choice for harsh, corrosive coastal environments. Timber can also easily blend into any existing landscape. Each Landmark timber access structure is designed and manufactured according to individual requirements.

Engineering is vital when designing and manufacturing access structures, which is why we comply with the National Construction Code and apply all necessary standards where applicable. We consider flood, crowd and vehicular loading either together or as separate requirements. While we have a large selection of standard features and options to cover the most common requirements, we are also able to adapt a project by using many different materials to give you unlimited flexibility.

All Landmark timber access structures are prefabricated and supplied in flat pack kit form with instructions and engineering certificates to meet all relevant building codes and Australian Standard requirements.

STANDARD FEATURES

- ✓ Precision manufactured components and hardware
- ✓ Preprocessed manufacturing
- ✓ Professional building application drawings
- ✓ Independent engineering certification
- ✓ Comprehensive installation instructions
- ✓ Galvanised steel as per AS/NZS 4680:2006
- ✓ Pine is quality plantation and LOSP treated
- ✓ Hardwood is select grade and ACQ treated
- ✓ Stainless steel anti-vandal fastening system where applicable
- ✓ High-grade penetrating timber treatment stain with colour tones

STANDARD OPTIONS

- ✓ A selection of hand rail, kick rail and barrier panels
- ✓ Bicycle and disabled access rails
- ✓ Specialised piers for sensitive or remote sites
- ✓ Fibre Reinforced Plastic (FRP) structural sections
- ✓ Wood Plastic Composite (WPC) decking
- ✓ Fibre Reinforced Plastic (FRP) grate decking
- ✓ Galvanised or stainless steel fixings

K1161 BOARDWALKS



K1162 VIEWING PLATFORMS



K1163 STAIRS & OTHER



Steel Access Structures



Fortifying strength with design flexibility.



K1170 Series - Stromlo

Steel-based access structures offer great design flexibility due to their inherent strength and modern fabrication techniques. Steel can be easily designed to suit a new or modern site and can also be crafted to match an existing space, all while still being cost-effective. These features make it the preferred choice for many access structures.

**SITE-SPECIFIC
SOLUTIONS**

**KIT FORM
ENGINEERED**

Steel Access Structures

STANDARD STEEL ACCESS STRUCTURES

The strength and flexibility of steel enables designers to have great choice in producing either low-cost structures based on standard steel profiles or creating a unique design based on the many different manufacturing techniques available. We hot-dip galvanise all of our steel according to Australian Standards 4680/2006 using only suppliers with recognised quality management systems to ensure we provide only the best structures. Each Landmark steel access structure is designed and manufactured according to individual requirements.

Engineering is vital when designing and manufacturing access structures, which is why we comply with the National Construction Code and apply all necessary standards where applicable. We consider flood, crowd and vehicular loading, together or as separate requirements. While we have a large selection of standard features and options to cover most common requirements, we can also manufacture using many different materials, giving you unlimited flexibility.

STANDARD FEATURES

- ✓ Precision manufactured components and hardware
- ✓ Preprocessed manufacturing
- ✓ Professional building application drawings
- ✓ Independent engineering certification
- ✓ Comprehensive installation instructions
- ✓ Galvanised steel as per AS/NZS 4680:2006
- ✓ Stainless steel anti-vandal fastening system where applicable

STANDARD OPTIONS

- ✓ Powder coated, two-pack epoxy paint or thermoplastic coatings
- ✓ A selection of hand rail, kick rail and barrier panels
- ✓ Bicycle and disabled access rails
- ✓ Specialised piers for sensitive or remote sites
- ✓ Fibre Reinforced Plastic (FRP) structural sections
- ✓ Wood Plastic Composite (WPC) decking
- ✓ Fibre Reinforced Plastic (FRP) grate decking
- ✓ Galvanised or stainless steel fixings

All Landmark steel access structures are prefabricated, supplied in flat pack kit form with instructions and engineering certificates to meet all relevant building codes and Australian Standard requirements.

K1171 BOARDWALKS



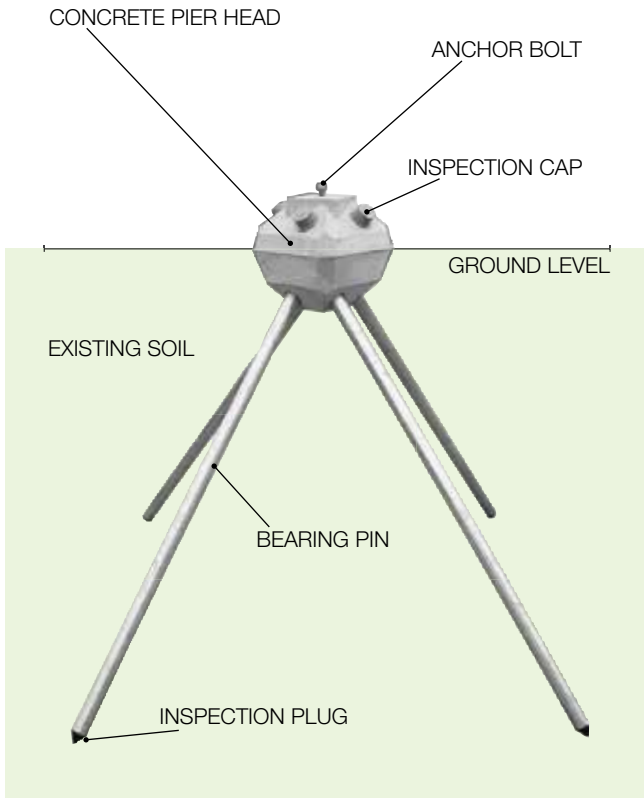
K1172 VIEWING PLATFORMS



K1173 STAIRS & OTHER



Diamond Piers



Construction without excavation is now easier with our Diamond Pier foundations. Diamond Piers are commonly used on installations at sensitive, problematic or hard-to-reach sites. Diamond Piers can also be used for standard site installations to reduce noise (heavy machinery is not required) and they allow the structure above to be easily removed or relocated if required. These piers are also ideal for a site with difficult access as all items can be carried in and manually fixed into position without the need for machinery. Diamond Piers have been engineered for a range of construction types (loads) and soil conditions.

Diamond Piers are engineered with two main components: the pier and the pins. The concrete pier comes in a range of sizes, from the smallest 25kg (DP-50) to the largest 95kg (DP-200E) depending on load. They have a single bolt fixing on top for easy use with standard stirrups. The pins are the main variable and are available in steel, galvanized steel, stainless steel and FRP which all vary in length to match the load and soil condition.

To determine the right combination of pins and piers for your project we need to consider:

- Structure location
- Structure load
- Structure type
- Soil report / information

SIZE	DP-50	DP-75E	DP-100E	DP-200E
Weight (kg)	25.4	33.6	43.6	95.3
Concrete Limit (kg)	1815	2722	4083	5444
Pin Outside Diameter (mm)	33.4	42.4	48.3	60.3
Bolt Diameter (in.)	1/2	5/8	5/8	3/4
Bolt Height (mm)	19	22	22	22



Composite Materials

Most composite materials in outdoor access structures are generally either Wood Plastic Composite (WPC) or Fibre Reinforced Plastic (FRP). They come in many different varieties for different applications and offer solutions to some problems that natural or single component materials can not meet.

Wood Plastic Composites in access structures can be used as an alternative to timber decking and can adhere to pedestrian loads of up to 5kPa. Typically it is made from recycled wood compounds and polypropylene (engineered plastic) and is an environmentally friendly choice as it can contain as much as 100% recycled content. WPC requires no staining, oil, lacquer or painting, it has a high UV resistance, doesn't splinter and is extremely resistant to insect attack, fungi, rot and is corrosion free. Delivering a cost effective solution over the product's life cycle for a low maintenance pedestrian decking material.

Fibre Reinforced Plastic is commonly used as open grate decking or for structural sections for access applications. FRP decking is moulded into large size sheets with an open grate pattern allowing for debris to pass through the grate. It has a hard wearing non-slip surface and comes in many thicknesses, sizes and colours. Open grate decking is the perfect solution for beachside access structures and sandy locations, in addition to providing a water-repellent non-slip surface for bikeways. Fibre Reinforced Plastic structural members are manufactured in a number of different ways, the fibre element provides the structural integrity. These fibres can comprise of different materials from glass strands to Kevlar. FRP structural sections don't have the same strength as steel and require larger / thicker sections to provide the same strength. Both the FRP decking and structural sections provide high levels of protection from UV degradation, insect attack, fungi, rot and corrosion.

Composite materials are the perfect solution where environmental conditions are harsh or corrosive, where insect attack could occur and they are low maintenance. While these composite materials are flame retardant other material options may be better suited for areas prone to bushfires. Composite materials are also generally manufactured in standard shapes and sizes which can limit their applications.

WHY USE COMPOSITE MATERIALS?

- ✓ Minimal maintenance
- ✓ Quick and easy installation
- ✓ Hard wearing and durable
- ✓ Resistant to insects
- ✓ Will not split, warp or rot
- ✓ No splinters
- ✓ No treatments or stain required
- ✓ Resistant to water
- ✓ Environmentally friendly, uses recycled plastic



WPC DECKING BOARD



FRP STRUCTURAL SECTIONS



FRP OPEN GRATE DECKING

Materials & Finishes

We source our materials from quality suppliers who provide attention to detail, repeatability and high scrutinisation of their products. We then manufacture accordingly to achieve the industry's highest quality time after time as ensured by our ISO 9001 certification.

Our pine is environmentally friendly plantation sourced and is stabilised and treated with Light Organic Solvent Preservatives (LOSP) to provide protection from insects and decay. It can be stained or painted to further enhance its life, durability and appeal.

Our hardwood is select-grade and sustainably-harvested western Queensland hardwood or similar stress grade F17 or better. It is treated with Ammoniacal Copper Quaternary (ACQ) for protection from insects and decay, which can be stained. We don't recommend painting on hardwood because it releases natural tannins from the timber and diminishes the look of the finished paintwork. We can also use other types of timber species and finishes according to your requirements.

Our steel is structural-grade and hot-dip galvanised as per AS/NZ 4680 for superior performance. It can be powder coated to provide a hard wearing protective coating, which is attractive and comes in many colour options. For a higher level of corrosive protection from the elements, we recommend using two-pack epoxy paint or thermoplastic coatings over galvanised steel structures.

Aluminium is also a structural grade and usually chosen for its excellent anti-corrosive properties for those locations that are harshly affected, but due to the relatively lower strength (approximately 30% that of steel) there are some design issues that limit its use. Aluminium can be powder coated or anodised providing an attractive finish that comes in many colours, both two-pack paint and thermoplastic coatings can also be used to further enhance its natural anti-corrosive abilities.

We use many other materials such as composites, plastics, glass, stainless steel, concrete and other timber species for varying applications. With access structures we can use a range of structural materials, foundation and piers, decking types and balustrade options to cover a wide range of solutions for individual requirements.

We give the highest level of attention to our fittings and provide a choice of galvanised or stainless steel depending on the application. We use, where possible, our proprietary stainless steel anti-vandal fastening system in locations that are susceptible to tampering as they not only deter vandals but have been found to reduce the theft and destruction of the access structures we supply.



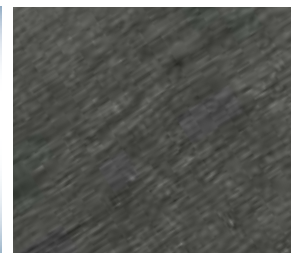
TIMBER PAINT COLOURS



PINE STAINS



EPOXY / TWO PACK COLOURS



HARDWOOD STAIN



POWDER COAT OPTIONS



WPC COLOUR SELECTION



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“ Providing you with successful pathways. ”



WITH OFFICES ACROSS AUSTRALIA AND NEW ZEALAND WE'VE GOT YOU COVERED



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