Pedestrian Bridges

With a great selection of designs and materials there are a multitude of ways to create safe accessibility for all the community.

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Landmark
open space structures & solutions

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 & Safety Management certification is proof of our commitment to best practice.

SITE-SPECIFIC SOLUTIONS

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.

KIT FORM ENGINEERED

LESS ON-SITE DISTURBANCE

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

LIMITED STRUCTURAL 10 YEAR WARRANTY

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

STAINLESS STEEL ANTI-VANDAL FASTENING SYSTEM

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

CROSS FLOOD LOADING

CROSS FLOOD LOADING ENGINEERED

We engineer to on-site specific requirements for cross flood loading and debris contact within flood re occurrence intervals.

Landmark LMK 0350

TRACEABILITY PLAQUE

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

Info
Pedestrian Bridges

Landmark designs, constructs and installs pedestrian bridges to suit site-specific applications and environments. We have four main bridge ranges that are based on the main materials and construction methods required for different applications. Our ranges include Timber Truss (Torrens), Steel I Beam (Condamine), Aluminium (PML) and Steel Truss (Murray). We also use a variety of decking materials including steel, timber, aluminium, wood plastic composite (WPC) and fibre reinforced plastic (FRP) to give great flexibility when considering the structure type, application, location and environment.

All Landmark pedestrian bridges are designed, drafted and engineered to meet or exceed the requirements of the National Construction Code (NCC) and use relevant Australian Standards, including 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, pedestrian loading (3kPa to 5kPa) and vehicle loading requirements along with many other relevant compliances or requests. Our in-house design and engineering teams have many years of experience, which you can draw upon to ensure you get the desired results you expect.

We source our materials from quality suppliers who provide attention to detail, repeatability and high scrutinisation of their products. We then manufacture according to our ISO 9001 certification, which ensures the industry's highest quality is achieved. To provide the utmost level of traceability, each and every pedestrian bridge we supply carries a Landmark plaque with a unique identification, offering our customers valued information when upgrading, maintaining or ever replacing an individual item.

We choose to give the highest level of concern to every part of our products, right down to the fittings we use. We provide a choice of galvanised or stainless steel depending on the application. We also 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 also been found to actually reduce the theft and destruction of the products we supply.

We have offices with local staff all over Australia and New Zealand who understand that each pedestrian bridge has different needs depending on location, community values, heritage, terrain and required use. It is an important step in achieving the best results for community outcomes, which is always paramount at Landmark.

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

STANDARD SINGLE SPAN LIMITS

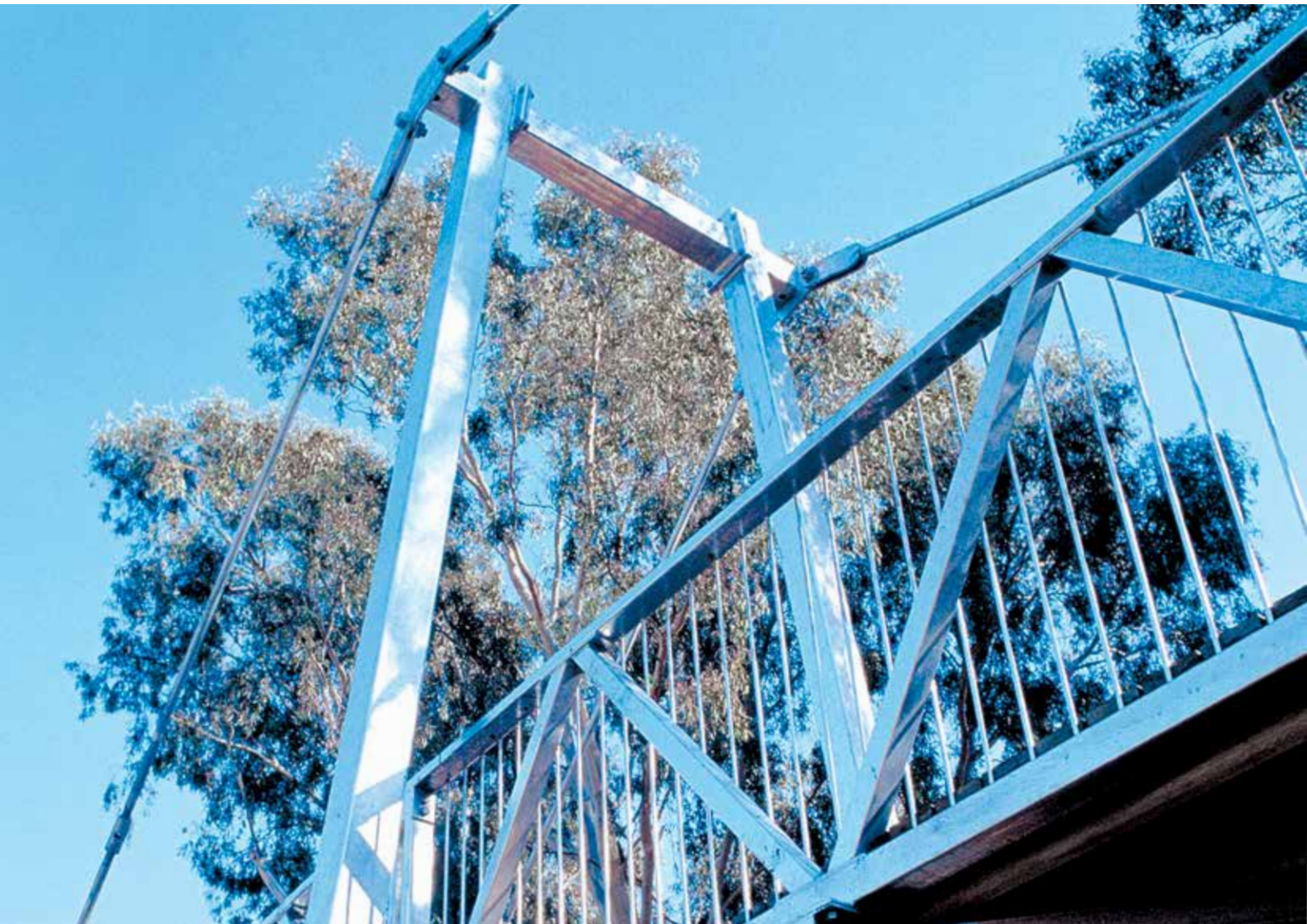
STANDARD WIDTH (mm)	BRIDGE SERIES	CLEAR SPAN (m) 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 40 60
2000	K1101 SERIES TORRENS	
	K1103 SERIES CONDAMINE	
	K1104 SERIES PML	
	K1105 SERIES MURRAY	
2500	K1101 SERIES TORRENS	
	K1103 SERIES CONDAMINE	
	K1104 SERIES PML	
	K1105 SERIES MURRAY	
3000	K1101 SERIES TORRENS	
	K1103 SERIES CONDAMINE	
	K1104 SERIES PML	
	K1105 SERIES MURRAY	

BRIDGE COMPARISON GUIDE

PEDESTRIAN BRIDGE SERIES	K1101 SERIES TORRENS	K1103 SERIES CONDAMINE	K1104 SERIES PML	K1105 SERIES MURRAY
OPTIONS LOADINGS				
Pedestrian or Cycleway	✓	✓	✓	✓
Light Vehicle (maintenance)		✓	✓	✓
Custom Loads		✓	✓	✓
Flood Loads		✓	✓	✓
DECKING				
Timber Hardwood Decking	✓	✓	✓	✓
Concrete: Insitu Pour or Precast Panels		✓		✓
Fibre Reinforced Plastic (FRP) Grate Decking	✓	✓	✓	✓
Wood Plastic Composite (WPC)	✓	✓	✓	✓
Aluminium			✓	
Other: FC and Bitumen, Plywood	✓	✓		✓
SAFETY BARRIERS				
Chain Mesh: Galvanised and Plastic Coated	✓	✓	✓	✓
Bicycle and Disabled Access Rails	✓	✓	✓	✓
Light Barrier Panels	✓			✓
Heavy Duty Barrier Panels	✓	✓		✓
Timber or Aluminium Baluster Panels	✓	✓	✓	✓
CUSTOM SOLUTIONS				
Customisation according to the project and site	✓	✓	✓	✓

* Above information is a guide only for comprehensive loading information please contact your local Project Consultant.

Contents



Timber Truss
Pedestrian Bridges

K1101 Series - Torrens

Timber truss pedestrian bridges are a practical, safe and economical solution for short single spans or where multiple spans are an option.

SITE-SPECIFIC SOLUTIONS

KIT FORM ENGINEERED

Timber Truss
Pedestrian Bridges

STANDARD K1101 SERIES -TORRENS TIMBER TRUSS PEDESTRIAN BRIDGES

Timber truss designed pedestrian bridges are perfect for short single spans in flat or cranked configuration and also for the longer requirements of multi spans. The natural beauty and resilience of timber makes it the perfect choice to blend into any existing landscape.

Each timber pedestrian bridge is designed and manufactured according to individual requirements covering standards, codes and compliances. Engineering is vital when designing and manufacturing pedestrian bridges, which is why we comply with the National Construction Code and apply all necessary standards where applicable. We also consider pedestrian loading requirements. Our standard design of timber truss pedestrian bridges complies to a maximum 3kPa pedestrian loading. We can also manufacture using many different materials giving you unlimited design choices.

All Landmark pedestrian bridges are prefabricated, 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 parts and sections
- Professional building application drawings
- Independent engineering certification
- Comprehensive installations instructions
- All pine is quality plantation and LOSP treated
- All hardwood is select grade, sustainably-harvested and ACQ treated
- Hot dipped galvanised steel to AS/NZS 4680:2006
- Stainless steel anti-vandal fastening system (where applicable)
- High grade penetrating timber treatment stain with colour tones

STANDARD OPTIONS

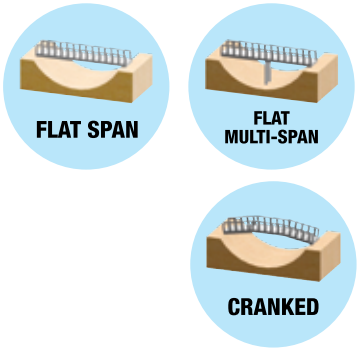
- Pine structure with galvanised saddles
- A selection of hand rail, kick rail and barrier panels
- Bicycle and disabled access rails
- Specialised piers for sensitive or remote sites
- Decking options include: hardwood, wood plastic composite (WPC) decking, steel or fibre reinforced plastic (FRP) grate decking
- Galvanised or stainless steel fixings
- Upgrade to hardwood structure

CUSTOM SOLUTIONS

SINGLE SPAN LIMITS

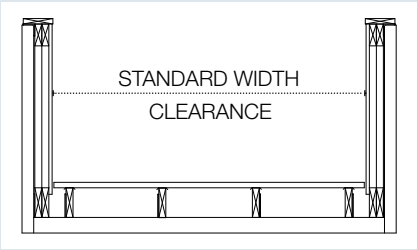
STANDARD WIDTH (mm)	CLEAR SPAN (m)																	
	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	40	60
1500																		
2000																		
2500																		
3000																		

DESIGN OPTIONS



RENDER

SECTIONAL VIEW



I Beam
Pedestrian Bridges

K1103 Series - Condamine

Steel I Beam pedestrian bridges are versatile with a short to medium single span range. They can be engineered and manufactured as per AS5100, vehicle or cross-flood loading, making them the ideal selection for many situations.

SITE-SPECIFIC SOLUTIONS

KIT FORM ENGINEERED

I Beam
Pedestrian Bridges

STANDARD K1103 SERIES - CONDAMINE I BEAM PEDESTRIAN BRIDGES

I Beam pedestrian bridges are chosen for their versatility and load-bearing capabilities. They have a useful single span length and can be designed as flat, multi span, cranked or curved. High load capabilities allow the I Beam to accommodate vehicular access and also to be used for AS 5100 (5kPa requirements) if desired.

They can also be engineered according to cross-flood loading requirements, making them the perfect choice for creeks and floodway areas.

Each I Beam pedestrian bridge is designed and manufactured to individual requirements covering standards, codes and compliances. Engineering is vital when designing and manufacturing pedestrian bridges, which is why we comply with the National Construction Code and apply all necessary standards where applicable. We consider flood, pedestrian and vehicular loading requirements. Our standard design of I Beam pedestrian bridges complies to a maximum 5kPa pedestrian loading. We can also manufacture using many different materials, giving you unlimited design choices.

All Landmark pedestrian bridges are prefabricated, 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 parts and sections
- Professional building application drawings
- Independent engineering certification
- Comprehensive installations instructions
- All pine is quality plantation and LOSP treated
- All hardwood is select grade, sustainably-harvested and ACQ treated
- Hot dipped galvanised steel to AS/NZS 4680:2006
- Stainless steel anti-vandal fastening system (where applicable)
- High grade penetrating timber treatment stain with colour tones

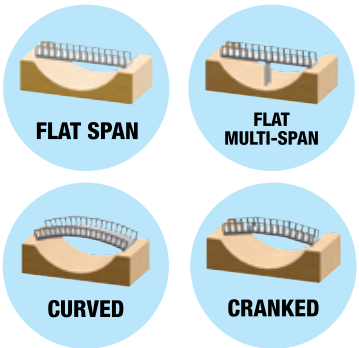
STANDARD OPTIONS

- Steel I Beam, barrier panels and hand rails
- A selection of hand rail, kick rail and barrier panels
- Bicycle and disabled access rails
- Specialised piers for sensitive or remote sites
- Decking options include: hardwood, wood plastic composite (WPC) decking, steel or fibre reinforced plastic (FRP) grate decking
- Galvanised or stainless steel fixings
- AS 5100 compliance
- High cross flood loading
- Vehicle loading
- CUSTOM SOLUTIONS

SINGLE SPAN LIMITS

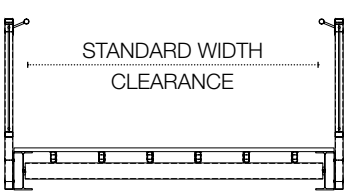
STANDARD WIDTH (mm)	CLEAR SPAN (m)																	
	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	40	60
1500																		
2000																		
2500																		
3000																		

DESIGN OPTIONS



RENDER

SECTIONAL VIEW



Aluminium
Pedestrian Bridges

Modern low maintenance construction.

K1104 Series - PML

Aluminium pedestrian bridges are chosen for their modern light-weight designs, corrosion resistance, low maintenance and minimal whole of life cost. They are well-suited for harsh, corrosive coastlines with an impressive ability to use single spans up to sixty metres.

SITE-SPECIFIC SOLUTIONS

KIT FORM ENGINEERED

Aluminium
Pedestrian Bridges

STANDARD K1104 SERIES - PML ALUMINIUM PEDESTRIAN BRIDGES

Aluminium pedestrian bridges are a modern alternative that have huge benefits over traditionally used materials. Chosen for their minimal whole of life cost, low maintenance and high corrosion resistance. They are also suited for sensitive or difficult to access sites, being lightweight and quick and easy to install.

PML is a world leading company in the design and construction of aluminium bridges, overpasses and observation towers. The material and design excellence of PML bridges make high-strength aluminium pedestrian bridges possible.

Each PML aluminium pedestrian bridge is designed and manufactured according to individual requirements covering standards, codes and compliances. Engineering is vital when designing and manufacturing pedestrian bridges, which is why we comply with the National Construction Code and apply all necessary standards where applicable. We consider flood, pedestrian and vehicular loading requirements.

All Landmark pedestrian bridges are prefabricated, supplied in kit form with instructions and engineering certificates to meet all relevant building codes and Australian Standard requirements.

STANDARD FEATURES

- Designed in Germany
- Precision manufactured components and hardware
- Manufactured and delivered in sections
- Professional building application drawings
- Independent engineering certification
- Comprehensive installation instructions
- High-strength aluminium alloy

STANDARD OPTIONS

- Four different system options (see below)
- Up to 5KN/m2 working loads
- A selection of decking types (see below)
- Anodised or RAL powder coat colours
- Low-medium cross flood loading
- A selection of hand barrier panels types (see below)
- AS 5100 compliance

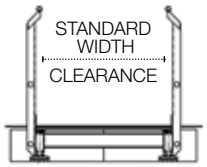
CUSTOM SOLUTIONS

pml

LIMITED STRUCTURAL 10 YEAR WARRANTY

CROSS FLOOD LOADING

R SYSTEM



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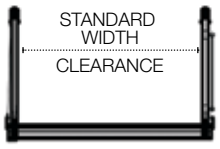

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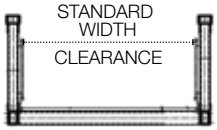

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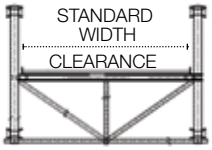


SINGLE SPAN LIMITS

STANDARD WIDTH (mm)	SYSTEM	CLEAR SPAN (m) 4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	40	50	55	60
1500	R																				
	L																				
	SL																				
	B																				
2000	R																				
	L																				
	SL																				
	B																				
2500	R																				
	L																				
	SL																				
	B																				
3000	R																				
	L																				
	SL																				
	B																				
3500	B																				
4000	B																				

STANDARD OPTIONS BY SYSTEM

CATEGORY	OPTIONS	SYSTEMS R	L	SL	B
LOADINGS	Pedestrian or Cycle Ways				
	Light Vehicles				
	Tractors and Mowers				
	Horses and Livestock				
	Flood Loads				
DECKING	Timber				
	Fluted Aluminium Platforms				
	Qualigrip Anti Slip System				
	Recycled Plastic				
	PU Coating				
BARRIERS	Perforated Metal Sheet				
	Stainless Steel Ropes				
	Vertical Aluminium Bars				
	Vertical Timber Bars				
	Meshed Metal Baffle				

Steel Truss
Pedestrian Bridges

K1105 Series - Murray

Steel truss pedestrian bridges are used for their economical long-spanning abilities and effective load-bearing capabilities.

SITE-SPECIFIC SOLUTIONS

KIT FORM ENGINEERED

Steel Truss
Pedestrian Bridges

STANDARD K1105 SERIES - MURRAY STEEL TRUSS PEDESTRIAN BRIDGES

Steel truss pedestrian bridges are used for their economical long-spanning abilities and effective load-bearing capabilities. They have a lengthy single-span reach and can be designed as flat, multi-span, cranked or curved. Each steel truss pedestrian bridge is designed and manufactured to individual requirements covering standards, codes and compliances.

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

All Landmark pedestrian bridges are prefabricated, 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 parts and sections
- Professional building application drawings
- Independent engineering certification
- Comprehensive installations instructions
- All pine is quality plantation and LOSP treated
- All hardwood is select grade, sustainably-harvested and ACQ treated
- Hot dipped galvanised steel to AS/NZS 4680:2006
- Stainless steel anti-vandal fastening system (where applicable)
- High grade penetrating timber treatment stain with colour tones

STANDARD OPTIONS

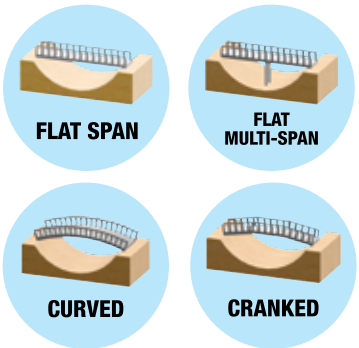
- A selection of hand rail, kick rail and barrier panels
- Bicycle and disabled access rails
- Specialised piers for sensitive or remote sites
- Decking options include: hardwood, wood plastic composite (WPC) decking, steel or fibre reinforced plastic (FRP) grate decking
- Galvanised or stainless steel fixings
- AS 5100 compliance
- Low-medium cross flood loading

CUSTOM SOLUTIONS

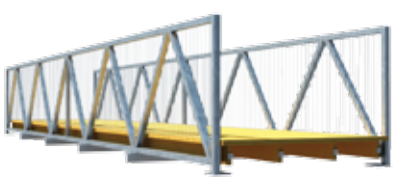
SINGLE SPAN LIMITS

STANDARD WIDTH (mm)	CLEAR SPAN (m)																	
	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	40	60
1500																		
2000																		
2500																		
3000																		

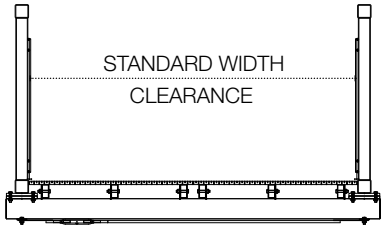
DESIGN OPTIONS



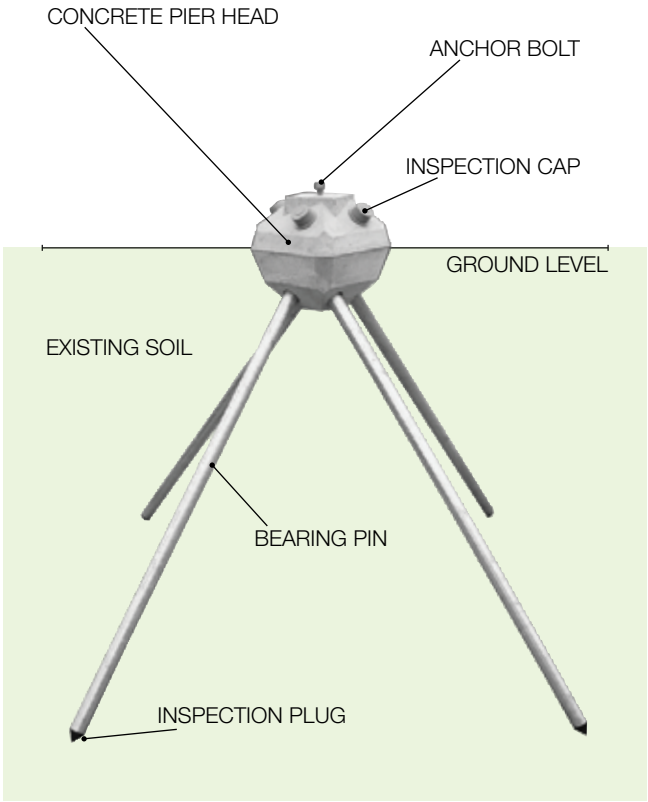
RENDER



SECTIONAL VIEW



Diamond Piers



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.)	½	⅝	⅝	¾
Bolt Height (mm)	19	22	22	22

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 type
- Structure load
- Soil report / information

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 it's 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 pedestrian bridges 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

RAL / EPOXY / TWO PACK

HARDWOOD STAIN

POWDER COAT OPTIONS

WPC COLOUR SELECTION

ALUMINIUM
ANODISED COLOURS (PML)

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

Landmark

Web landmarkpro.com.au **Email** sales@landmarkpro.com.au **Call** 1300 768 230