

RESIDENTIAL Acoustic and Feature Fencing

COMMERCIAL Noise Barriers

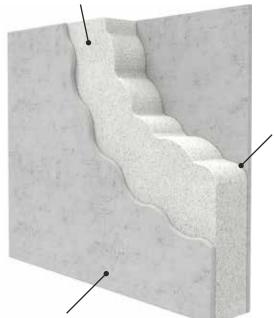


Wallmark specialises in modular acoustic panel fencing and noise barrier solutions for residential, commercial and industrial applications. We produce a range of innovative, economical and stylish wall systems that are designed for Australian conditions, manufactured from quality materials, and fast to install.

Choose between our steel Techniko, Dunewall, Urbanwall and aluminium Evowall product ranges, to satisfy your current requirements and can be enhanced to suit any application from residential to heavy industry. Our sound reducing wall panels are finished with a weather resistant, hard wearing, smooth surface with no gaps. Spray, roll or brush the wall to your own pleasing colour and texture. The walls have been pre-engineered to suit a variety of wind regions including height, footing sizes and post spacings. Installation is easy - drill or dig a row of holes, concrete the posts in and assemble your wall with minimal site disruption to achieve a solid prestige result!

The Panel Core

- Termite resistant
- Superb compressive strength to weight ratio
- Absorbs minimal water no mould or rotting
- Treated with Fire Retardant



The Panel Bond

Full surface contact adhesionHigh grade Polyurethane glue

The Quiet Advantage

Our wall panels are constructed from a very strong composite combination of Fibre Cement sheeting surrounding an Expanded Polystyrene core, creating excellent sound deadening properties. Wallmark has had a complete wall section tested correctly and certified to AS 1191-2002. Testing data sheets and our RMIT Transmission Loss Sound Report are available on request. The panels can be easily cut or shaped on site using a circular or hand saw.

The Panel Outer

- Fire resistant & non-combustible
- Strong, impact resistant surface
- Smooth finish easy to apply paint or render
- Maintenance Free

Mass: 15kg/m2 Thickness: 75mm Panel Height: 900 or 1200mm Length: up to 3000mm Acoustic Rating: Rw 28 Wind Region Rating: to C3 Warranty: up to 10 years



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Product Range

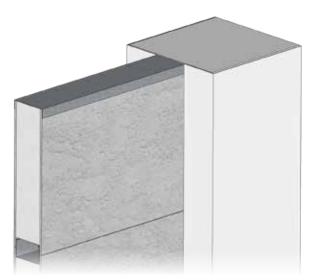
Wallmark Selection Guide	Evowall	Urbanwall	Techniko	Dunewall
Residential	✓	1	1	-
Commercial	5	1	1	1
Alloy Posts - Pre Primed	<i>✓</i>	-	-	-
Steel Posts - Galvanised Steel	-	1	1	1
Slat Compatable	<i>✓</i>	1	1	1
Maximum Panel Width	3m	3m	2.4m	3m
Pre-engineered to Height	2.4m	3m	3m	12m



Evo**Wall**

SLEEK MODERN PRIVACY WALL 100mm Alloy Post, 75mm Panels

- Cost effective alternative to block wallsPre-engineered to 2.4m high
- Quick, hassle free installation
- Superior sound reduction
- No rust modular alloy design





MASONRY STYLE FEATURE WALL 240mm Steel Post, 75mm Panels

- Cost effective alternative to block walls
- Pre-engineered to 2.7m high
- Quick, hassle free installation
- Real masonry wall style
- Post and wall capping choices

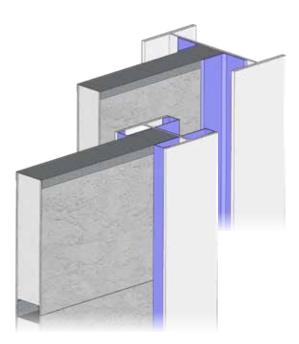
Product Range





MODULAR PANEL FENCE 100mm Galvanised Post | 50mm Panel

- Cost effective alternative to block walls
- Pre-engineered to 3m high
- Durable & Weatherproof
- Superior Acoustic Performance
- Fast & Easy DIY Installation





CUSTOM HEIGHT ACOUSTIC WALL Pre-engineered Custom Post | 75mm Panel

- Cost Effective Alternative To Block & Tilt Wall Systems
- HDG Structural Steel Posts
- Pre-Engineered to 12m high
- Fast Install with Minimal Site Disruption
- Excellent Sound Reduction
- Light Weight Panels
- Looks The Same From Both Sides
- NATA Acoustically Tested and Certified to AS 1191-2002





100mm Aluminum Post, 75mm Panels



Capping Styles



Box Wall Capping Horizon Post Cap



Flush Wall Capping Horizon Post Cap



Flush Wall Capping Plateau Post Cap



Flush Wall Capping Tableland Post Cap



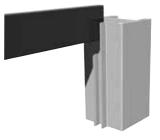
Modular Slat System

Simple Installation Fits 16mm Slats or Panelling Easy To Change Spacing No Spider Traps

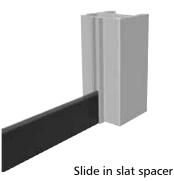




Slide in slat infill



Slide in slat





Repeat to desired height





Modular Panel Fencing 100mm Aluminum Post, 75mm Panels



Modular Panel Fencing 100mm Aluminum Post, 75mm Panels



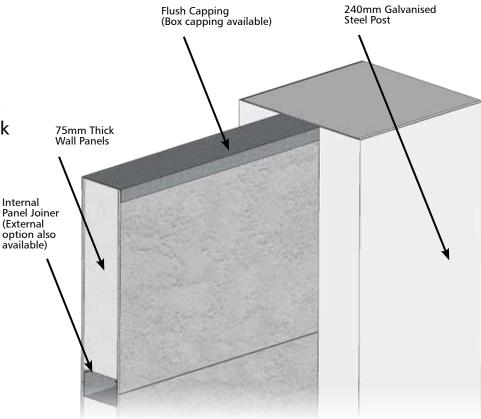




Modular Panel Fencing 240mm Steel Post, 75mm Panel

Features

Fast, Easy Installation Large Pillar Style Posts **Custom Design System Real Masonry Wall Look**



Capping Styles



Box Wall Capping Horizon Post Cap



Flush Wall Capping Horizon Post Cap



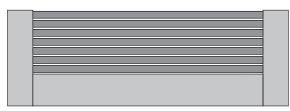
Flush Wall Capping Plateau Post Cap



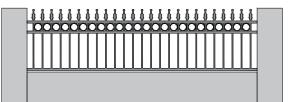
Flush Wall Capping Tableland Post Cap



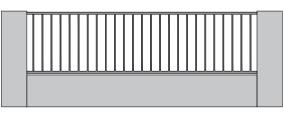
Adaptions



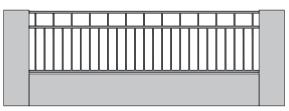
Slat Infill



Classic Infill



Flat Top Infill



Oxley Plain Infill





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Modular Panel Fencing 240mm Steel Post, 75mm Panel

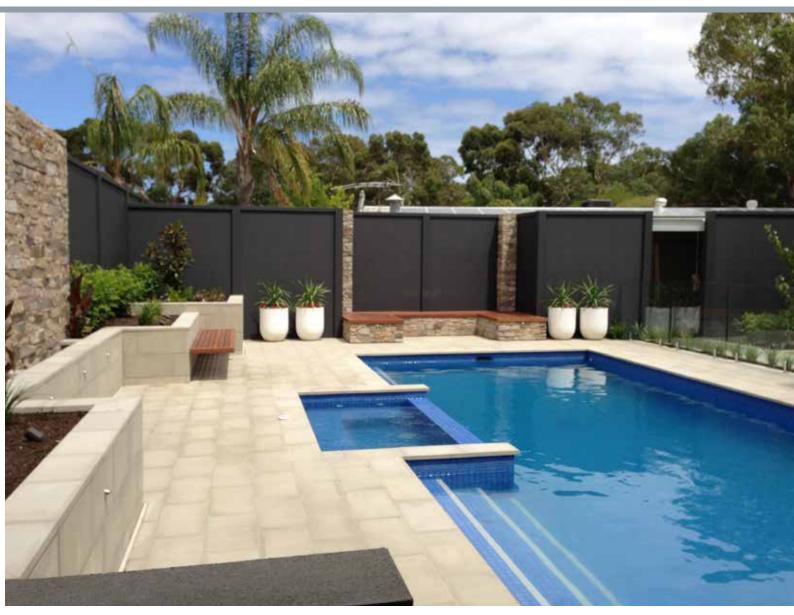






Modular Panel Fencing 240mm Steel Post, 75mm Panel







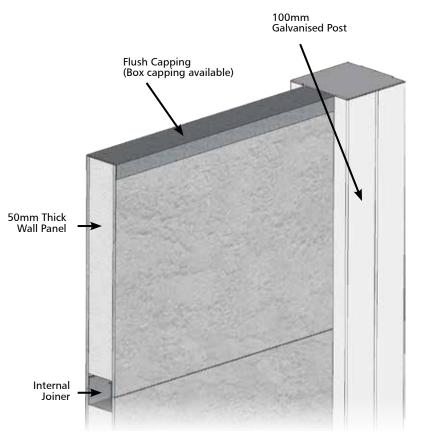




Features

Cost effective Durable & Weatherproof Superior Acoustic Performance Fast & Easy DIY Installation

Assembled View



Capping Styles



Box Wall Capping Horizon Post Cap



Flush Wall Capping Horizon Post Cap



Flush Wall Capping Plateau Post Cap



Flush Wall Capping Tableland Post Cap

Modular Panel Fencing 100mm Galvanised Post



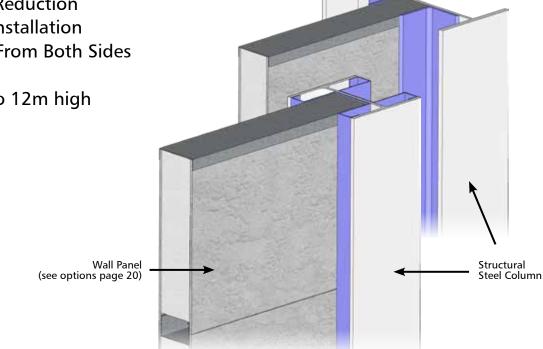




Features

Fast, Boltless Install Excellent Sound Reduction Craneless Panel Installation Looks The Same From Both Sides Rated to Rw28 Pre-engineered to 12m high





Options

Cranked Wall



Double Wall



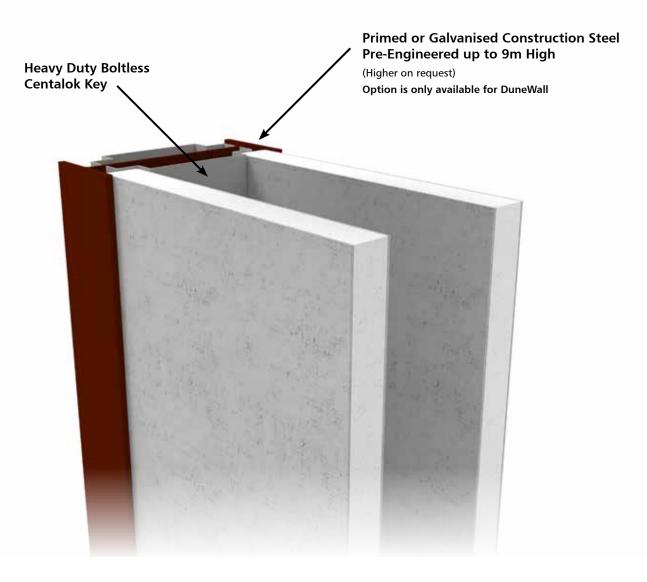
Plexiglass Wall





Double Panel System

Flush Finish Both Sides Safe, Cost Effective Installation Rated to Rw39





Noise Barrier Pre-Engineered Custom Post

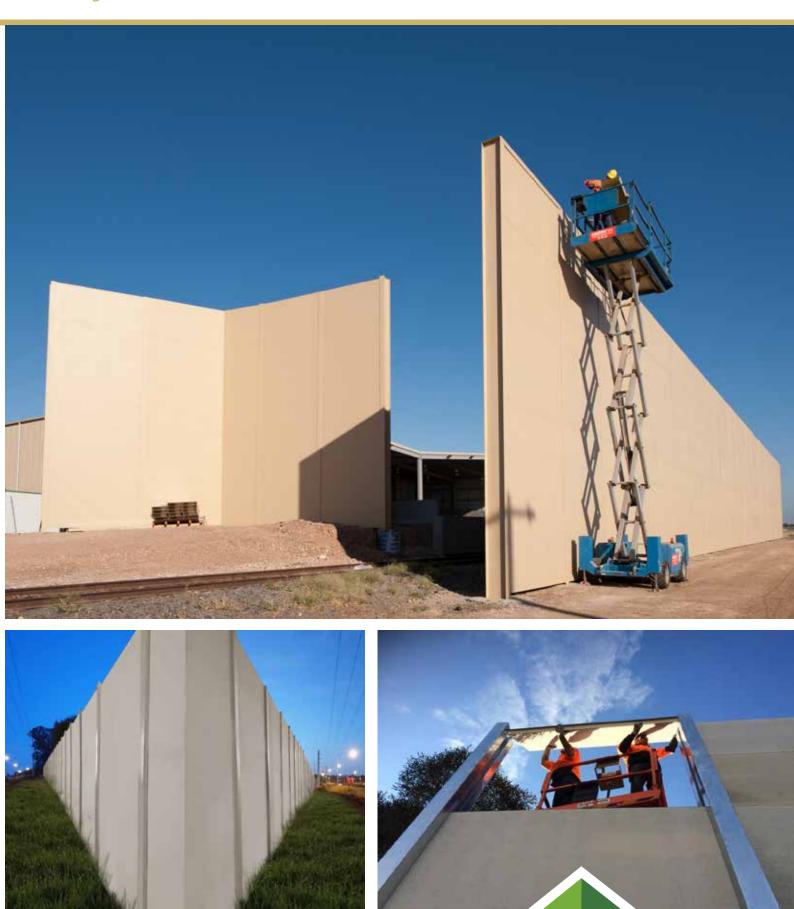






Noise Barrier Pre-Engineered Custom Post





Panel Options









STANDARD PANELLING

- Quiet
- Certified to AS 1191-2002
- Can be easily cut or shaped on site
- Rw28

RetainX

REINFORCED PANELLING

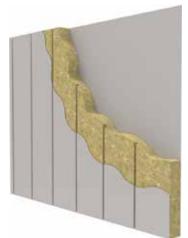
- Retain soil up to 900mm high
- Can be integrated with all wall systems
- Custom made to retain to
- required height



ZorbX

ABSORPTIVE PANELLING

- Premium noise absorption
- Weather Resistant
- · Ready to paint or coat once installed
- Pre-painted option
- NRC rating 0.95 (Absorptive side)
- 1 side absorptive & 1 side reflective





FIRE RATED PANELLING

- Fire rated acoustic wall panel
- Multiple sizes available
- Multiple colour options
- Can be integrated with all of our wall systems
- Rw28



Strux

HIGH IMPACT PANELLING

- Extreme Strength
- Extreme Vandal Protection
- Extreme Impact Resistance
- Acoustic Barrier Rw28

Wallmark Panel Selection Guide

	AcoustX	RetainX	ZorbX	BlazeX	StruX
Residential	1	1	-	1	-
Commercial	1	1	1	1	1
Noise Reduction	1	1	1	1	1
Weather Resistant	1	1	1	1	1
Pre-Painted Option	1	1	1	1	1
Fire Retardant	1	1	1	1	1
Panel Width (m)	2.4/3	2.4/3	2.4/3	2.4	2.4/3
Panel Height (m)	0.9/1.2	0.9/1.2	0.9/1.2	1.2	0.9/1.2
Panel Thickness (mm)	50 / 75	75	130	50/75/100	75
Compatible with Evowall	1	1	-	-	1
Compatible with Urbanwall	1	1	-	-	1
Compatible with Techniko	1	-	-	1	1
Compatible with Dune	1	1	1	1	1





The quiet advantage

Our wall panels are constructed from a very strong composite combination of Fibre Cement sheeting surrounding an Expanded Polystyrene core, creating excellent sound deadening properties.

Wallmark has had a complete wall section tested correctly and certified to AS 1191-2002. Testing data sheets and RMIT Transmission Loss Sound Report available on request. The panels can be easily cut or shaped on site using a circular or hand saw.

Technical Details

- Mass: 15kg/m2
- Thickness: 75mm
- Height: 900 or 1200mm
- Length: up to 3000mm
- Acoustic Rating: Rw 28
- Wind Region Rating: 2.4m Panel - C2 3m Panel - N3

1 The Panel Core (EPS)

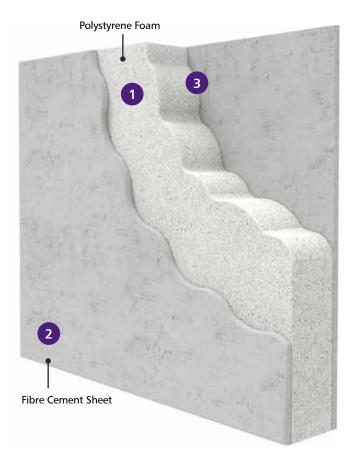
- Superb compressive strength to weight ratio
- · Absorbs minimal water no mould or rotting
- · Environmentally friendly, safe and fully recyclable

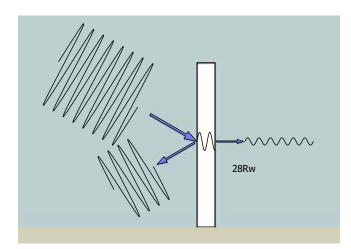
2 The Panel Outer (FC)

- Fire resistant and non-combustible
- Very strong, impact resistant surface
- Maintenance free will not breakdown
- High durability exterior grade composition
- Smooth finish easy to apply paint or render

3 The Panel Bond (PU)

- Full surface contact adhesion
- High grade Polyurethane glue
- 10 year guarantee against failure
- Formulated for the Australian climate







Acoustically Rated Reinforced Panel

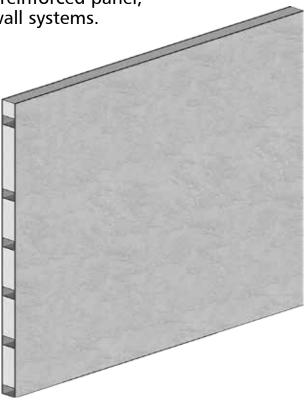
The RetainX panel is an acoustically rated, reinforced panel, that will fit in seamlessly with any of our wall systems.

We custom make these panels, to reinforce them to retain to your specific needs. Whether it be a standalone retaining wall, or integrated into a boundary fence, this panel will allow you to create a landscaping feature, and allow our wall systems to be used over a diverse range of environments.

Advantages

- Can retain soil up to 800mm high
- Panels come in multiple sizes
- Acoustically rated Rw28
- Looks the same as our other panels, so can be incorporated with any other system
- Lightweight
- Easy to install

Engineering and backfilling instructions available.







Commercial Noise Absorption Technology

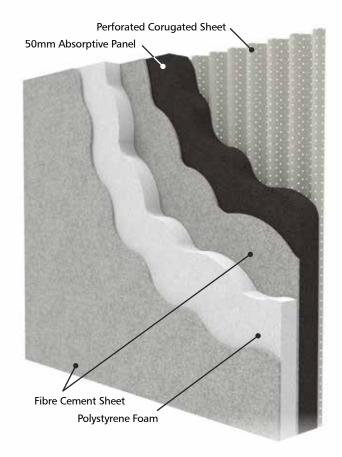
Upgrade your Commercial Wallmark wall, to ensure effective results in reducing noise levels.

The panel is made of complex layers to ensure maximum sound absorption, whilst remaining lightweight and easy to install. The ZorbX panel is suitable for commercial applications such as railways, roadways, commercial sites, mines, car parks, and many more, and can be integrated into any of our Wallmark Smart Wall Solutions.

Advantages

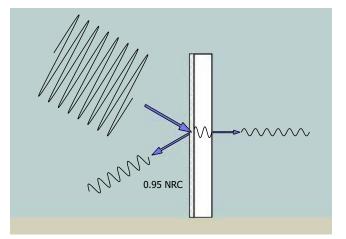
- Noise absorption

 allowing maximum noise reduction. NRC 0.95
- Weather resistance and longevity
- Available in a range of colours
- Lightweight
- Easy to install
- Suitable for most commercial applications
- Seamless aesthetic finish



If you need superior noise reduction for your commercial project, this is the panel to use.

Whilst all of our panels have some noise reduction benefits, we have taken the next step in designing a panel that integrates exceptional noise reduction with many other benefits.





Ultimate Fire Resistance

The BlazeX wall panels are designed to provide ultimate fire resistance, and sound reduction.

Fire rating is an important feature, and can sometimes be required as part of Australian regulations. Coming in multiple different sizes, and colours, this panel is very adaptable to your specific needs. It can be integrated into any of our wall systems and would be an excellent addition to your property.

Advantages

- 1200mm high, and up to 4200mm long panels
- Thickness 50mm, 75mm and 100mm
- Fire rating up to 120 min (FRL /120 / 90)
- Up to Rw 25 acoustically rated.
- 100% recyclable and sustainable building product
- Product compliance with the NCC and AS-NZ Standards
- Lightweight
- Easy to install





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Ultimate Protection Acoustic Barriers

Give your acoustic barrier the ultimate protection from impact, vandals, vehicles or machinery with Wallmark's ultimate Strux upgrade.

Engineered with high impact composite technology, Strux upgrades your barrier wall investment to withstand the hardest knocks, minimising damage and maximising the lifespan of your wall. With primary applications on busy roadways, railway perimeters, car parks, commercial centres, building sites and walls subject to vandalism, Strux panels can be integrated into the full range of Wallmark Smart Wall Solutions.

Advantages

- Cost effective high impact acoustic barriers
- Extreme vandalism protection from physical impacts
- Extend the life of your barrier system
- High fire retardance
- Minimise maintenance and upkeep
- Clean skin aesthetic barrier solution
- Custom height to your specifications
- Single or double panel for extra noise reduction
- Tropical wind rating for storm protection

Polystyrene Foar Fibre Cement Sheet



Superior impact resistance. Superior noise reduction

Protect your property from brutal impacts, vandals, noisy neighbours, busy roadways and commercial noise with Wallmark's smart structural acoustic barrier panelling – Strux.

NOT all acoustic barriers are the same!

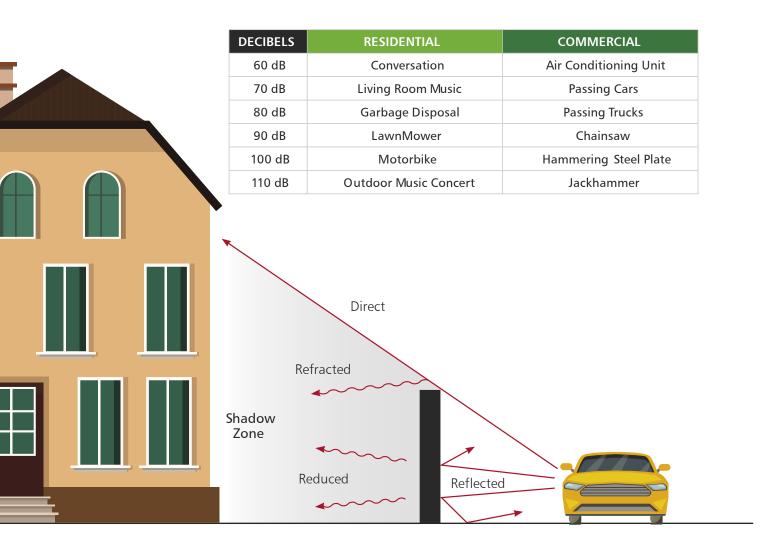
If you are serious about protecting your property with the STRUX high impact acoustic barrier solution – tailored and engineered to your individual application, contact the team at Wallmark.



How does noise affect me?

Sound is emitted from thousands of everyday items and people all around us. Consistently loud or intermittent sounds can destroy your quality of life.

Frequency is also a factor with low frequency sounds being difficult to attenuate and high frequencies very effectively blocked. This is measured in Hertz - common noises are such as a stereo bass (40-80Hz), the human voice (300Hz), rock music (600-3000Hz) and a chainsaw (4kHz)



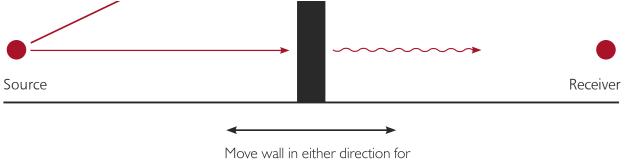
Common Sound Levels

How does a barrier work?

A noise barrier is a solid structure that intercepts and reduces sound within the shadow that it casts. Barrier attenuation in the open field is generally around 10 to 15 decibels due to height and width constraints, sound reflection and flanking around the edges.

The closer a barrier can be to the source or receiver and the higher it is, the more effective it will be. The line of sight between the source and receiver must be blocked completely by the barrier

If a certain decibel level is to be achieved, a qualified acoustician should be used to investigate the site and measure the existing sound to be able to determine what is required and what the actual results might be.



improved sound reduction

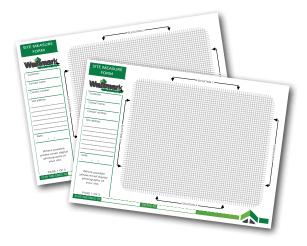
WallMark average noise reduction

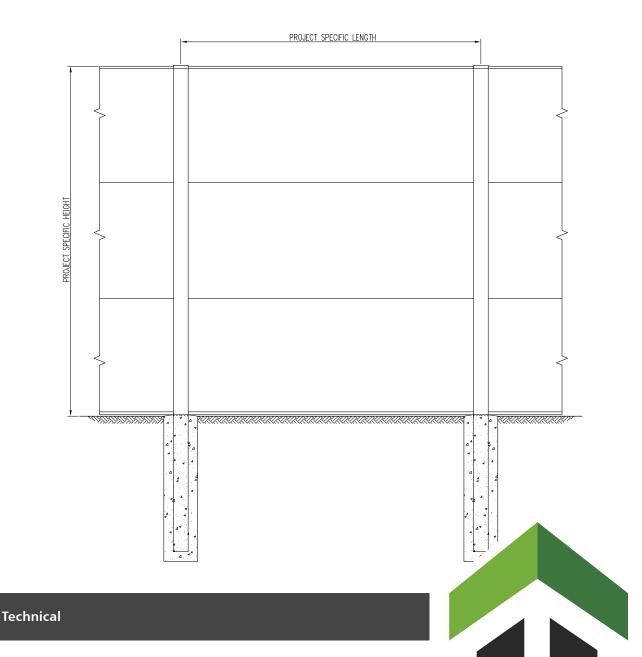
Standard Panel System - 28 Decibels Double Panel System - 39 Decibels

Testing data sheets, Acousticians Reports available on request.

Pre-engineered to the highest standards

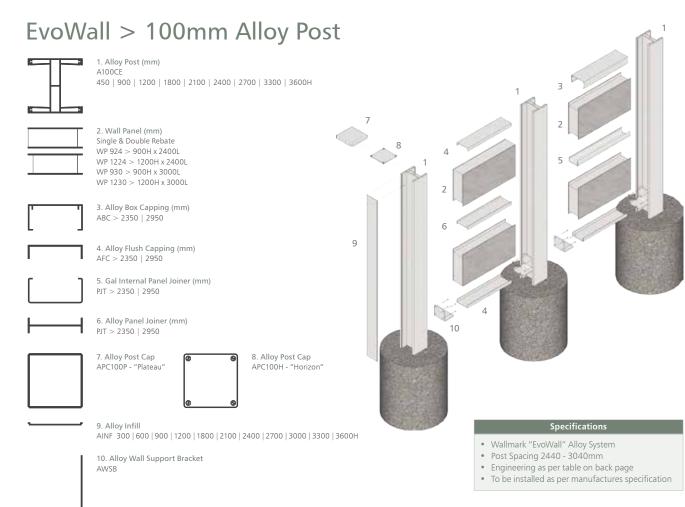
Our range has been engineered to suit a variety of wind regions. This includes wall height, footing sizes and post spacings. Due to the light weight construction of the wall, the footings become narrow piers - easier to dig and using less concrete. No strip footings required. Pre-engineering has been completed on the Dunewall and Evowall posts to retain up to 900mm of soil in various wind regions. Each project can be supplied with a set of detailed drawings to assist in the layout and correct installation with engineering sign-off, if required.







Engineering



Maximum Post Height & Wind Regions

Panel Length	Wall Height mm							
mm 1200	1800	2100	2400					
2400	C1	N3	N2	N2				
3000	N3	N2	N2	-				

Footing Depths for 300mm Diameter Footing for various Wind Regions

Panel Length mm	Wall Height mm								
	1200	1800	2100	2400					
	N2 - 600	N2 - 600	N2 - 700	N2 - 700					
2400	N3 - 600	N3 - 700	-	-					
	C1 - 700	-	-	-					
2000	N2 - 600	N2 - 600	N2 - 700	-					
3000	N3 - 600	-	-	-					

NOTE > N2 - 600 Denotes 300 Diameter x 600 Deep Footing for Wind Region N2

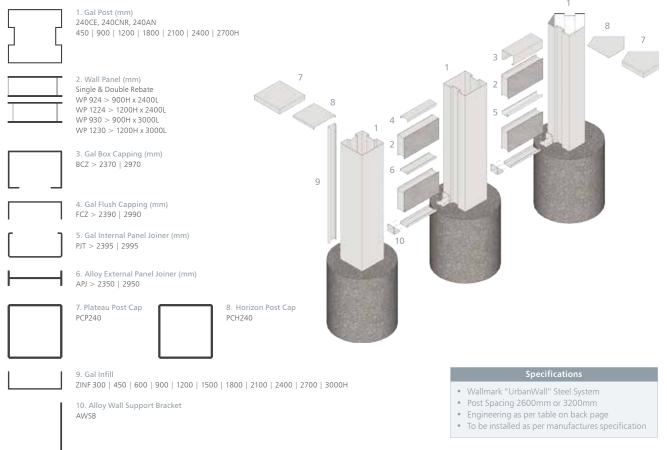
> Refer to Footing Detail and Corner Footing pages

> Corner and Angle Post Footing Diameter must be a minimum of 400mm

Engineering



UrbanWall > 240mm Steel Post



Maximum Post Height & Wind Regions

Panel	Wall Height mm								
Length mm		1800			2700				
2400	C2	C2	C2	C1	C1				
3000	N3	N3	N3	N3	N3				

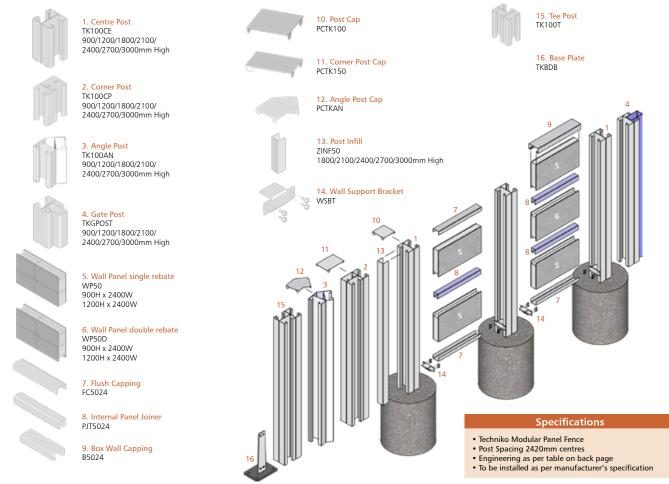
Footing Depths for 450mm Diameter Footing for various Wind Regions

Panel	Wall Height mm									
Length mm										
	N2 - 700	N2 - 800	N2 - 850	N2 - 950	N2 - 950					
2400	N3 - 800	N3 - 900	N3 - 1000	N3 - 1000	N3 - 1100					
	C1 - 900	C1 - 1000	C1 - 1000	C1 - 1100	C1 - 1200					
	C2 - 900	C2 - 1050	C2 - 1150	-	-					
2000	N2 - 750	N2 - 850	N2 - 950	N2 - 950	N2 - 1050					
	N3 - 850	N3 - 1000	N3 - 1000	N3 - 1100	N3 - 1200					

NOTE > N2 - 700 Denotes 450 Diameter x 700 Deep Footing for Wind Region N2



Techniko > Modular Panel Fence



Maximum Post Height & Wind Regions

Panel	Wall Height (mm)						
Length (mm)	1800	2100	2400	3000			
2400	50m/s	40m/s	34m/s	29m/s			

Minimum Footing Depths for 2400mm Panels

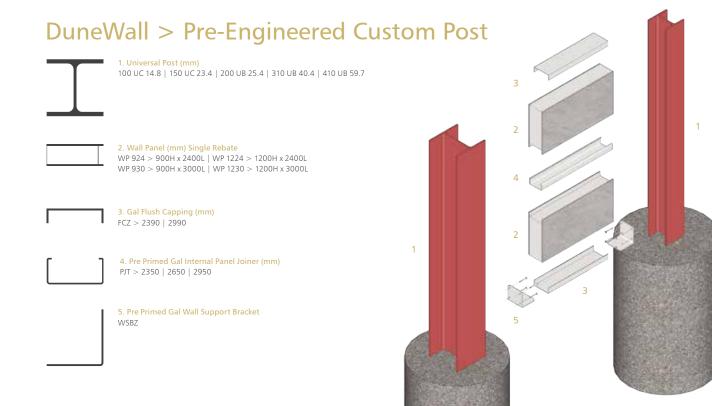
Wind	Wall Height (mm)								
Speed	1200	1500	1800	2100	2400	3000			
20m/s	600	600	600	600	600	700			
34m/s (N1)	600	600	600	600	700	-			
40m/s (N2)	600	600	600	700	-	-			
50m/s (N3/C1)	600	600	700	-	-	-			

Note: Design assumes there is firmly compacted soil at surface around footings.

Corner and Angle Post Footing Diameter must be a minimum of 400mm. Standard footings 300mm diameter.

Engineering





Specifications

- Wallmark "DuneWall" Structural Steel System
- Post Spacing 2430 3030mm
- Engineering as per table on back page
- To be installed as per manufactures specification

Maximum Post Height & Wind Regions

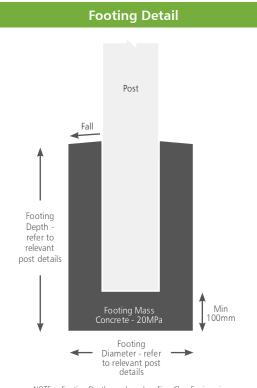
Panel	Wall Height (mm)								
Length (mm)									
2400	C2	C2	C2	C2	N3	N3	N2	C1	C1
3000	C2	C2	C1	N3	N3	N2	-	N3	N3

Footing Depths for 350mm Diameter Footing for various Wind Regions

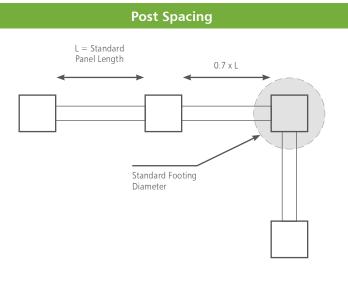
Panel	Wall Height (mm)								
Length (mm)									
	N2 - 600	N2 - 700	N2 -750	N2 - 850	N2 - 950	N2 - 1050	N2 - 1150	N2 - 1200	N2 - 1300
	N3 - 750	N3 - 850	N3 - 950	N3 - 1050	N3 - 1150	N3 - 1300	-	N3 - 1500	N3 - 1600
	C1 - 850	C1 - 950	C1 - 1100	C1 - 1250	-	-	-	C1 - 1800	C1 - 1900
	C2 - 1000	C2 - 1150	C2 - 1300	-	-	-	-	-	-
	N2 - 650	N2 - 750	N2 - 850	N2 - 950	N2 - 1050	N2 - 1150	-	-	N2 - 1500
	N3 - 800	N3 - 950	N3 - 1100	N3 - 1200	N3 - 1300	-	-	-	N3 - 1800
	C1 - 950	C1 - 1100	C1 - 1200	-	-	-	-	-	-

N2 - 1000 Denotes 350 Diameter x 1000 Deep Footing for Wind Region N2 P1/1.5 Denotes 350ø bore pier, 1500mm deep into firm clay Recommended footing depths are for terrain categories 2, 2.5 & 3 Further engineering available for heights up to 12m

Engineering



 $[\]label{eq:NOTE} {\sf NOTE} > {\sf Footing Depths are based on Firm Clay. Engineering advice must be sought on Footing Depths for all other soil types. }$



When wall is over 5 x longer than it is high: 0.7 x L for 2 x height on corners and 0.5 x L for 2 x height on ends.

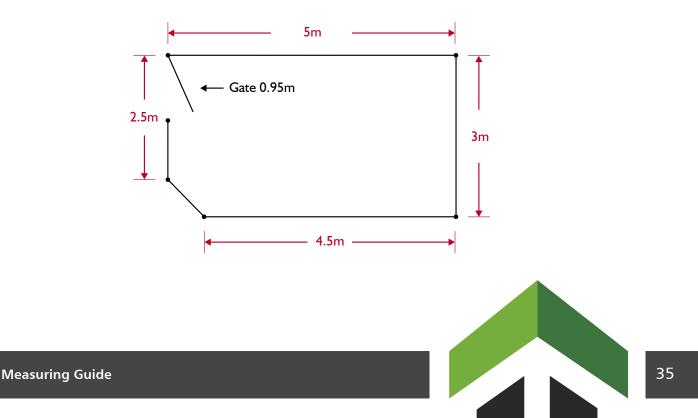
Open and print off our "Site Measure Form" from the website. (https://www.wallmark.com.au/basemedia/content/documents/Wallmark_Site_Measure_Form.pdf) Fill out all details including the customer name and contact number. (IMPORTANT - check your local council requirements as to their approved wall heights).

Plan / Top View

Sketch on the above form the plan (or top) view of your site, showing the intended wall line (90 and 45 degree corners only) and any gate positions (state the gate width on your drawing in metres – we only offer 0.95 and 1.5m gate widths - 2 gates may be used to create a double width). Use our below suggestion as a guide.



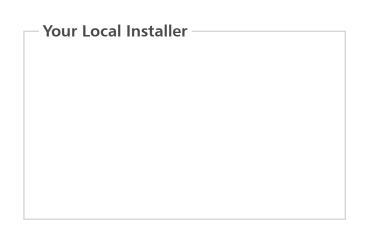
Measure your maximum overall dimensions and mark these on your plan in metres as shown below. (Please ensure your dimensions are within your legal boundary lines).





At Wallmark, we recognise that when it comes to architectural wall solutions, one design does not fit all. We look forward to working hand in hand with you to solve your acoustic privacy wall challenges.

To find out more about our Smart Acoustic Wall Solutions visit **www.wallmark.com.au** or call 02 6057 7600.



Disclaimer

The material within this booklet is made available for general use and information purposes only. Users should use their own skill and care with respect to the use of material. It is not provided as professional advice. Users should obtain appropriate professional advice relevant to their particular circumstances to evaluate its accuracy, currency, completeness and relevance for their purposes and specific site restraints and topography. No person should place reliance on information from the information booklet. It is the user's sole responsibility to comply with all statutory requirements and make appropriate decisions in relation to such compliance. Whilst every effort has been taken to ensure the accuracy and currency of all information within the information booklet, it is not verified information and the accuracy and currency of the information cannot be guaranteed. The provider of this booklet does not warrant that the information within this information booklet can be relied on and expressly disclaims all warranties, express or implied, and does not warrant or make any representations regarding the use of any information within the information booklet. In some cases the material may incorporate or summarise views, guidelines or recommendations of third parties. The information being general in nature is unable to take into account specific site conditions or additional controls that may apply to a particular site. Note that laws and regulations may vary depending on states and territories and it is your responsibility to check and comply with such law and regulations.



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