


In today's world, noise reduction is one of the leading concerns across New Zealand home owners. The BelAire range of acoustic fences and noise barriers have been specifically engineered to meet the acoustic demands of our modern world.

We handle a variety of noise reduction concerns; from general neighbourhood noise, to road noise, to highperformance noise absorption enclosures for pool pumps and HVAC units. On average, our acoustic fences and road noise barriers typically achieve a 2030 dB reduction (depending on noise source and noise type), which equates to a quartering of loudness.

Understanding 'loudness', or the human perception of sound, can be tricky; but you can test just how much different this makes with the simple help of a video and its volume controls. First, watch the video at 100\% volume. Then, reduce the volume to $25 \%$; this is the potential noise reduction that our acoustic fences offer.

Put the controls back into your hands; turn down the volume of loud neighbours and traffic noise today.

## ACOUSTIC FENCING

BelAire solid wall systems are acoustically tested and rated, keeping all unwanted surrounding noises at bay and providing peace and quiet for your home.

## ECO FRIENDLY

Our innovative products are made of recyclable materials, with our manufacturing processes reducing emitted and embodied $\mathrm{CO}_{2}$ by up to $80 \%$.

## NZ MADE

All BelAire Walls products are NZ designed and manufactured to strict international quality standards.



## MODULAR SYSTEM

BelAire solid panel fencing is the most advanced modular fencing system available in New Zealand today.

## DESIGNED BY YOU

With the Classic, Signature and Estate styles to choose from, you can design your fence to suit your lifestyle. Our fences and posts are all fully paintable so that you can complement or match the colour of your property.

You can also add stylish slat, louvre, tubular or glass infills, plus there is a choice of post and capping the options for your fence are only limited by your imagination.

## COST-EFFECTIVE

BelAire solid panel fencing has all the properties of a block wall at a fraction of the cost and mess! Once coated, BelAire fencing will look just as good as a block wall.

## BUILT TO LAST

Our pre-primed, galvanized, high-tensile support posts are very light yet structurally very strong. Our EPS/fibre cement panels are designed to withstand the typical demands placed on a fence in any environment.

## EASY (DIY) INSTALLATION

Our fences are designed to be assembled with ease. There is no need for heavy construction and digging equipment, or cranes - BelAire panels can be easily handled by two people. They are easy to install in difficult-to-access areas such as back yards or annexed ground.

We provide step by step self-install instructions that any competent DIY person should be able to follow, but if you'd rather get someone else to install it, we have a list of preferred installers throughout NZ. Call us on 08002352473 and we will put you in touch with an installer in your area.

## WARRANTY

New Zealand-made and 10 year warranty information. Be assured that with very little maintenance your fence will give you great privacy and security for many years to come. Only the finest raw materials have been used in the construction of your fence. The suppliers of these raw materials state that they have a design life well in excess of 20 years. With this assurance we offer you a replacement warranty for any component of your new fencing if it fails within 10 years* from date of purchase.

## Karaka Pines Retirement Village

Karaka Pines Retirement Village in Rototuna, Hamilton, asked for an aesthetically pleasing boundary fence with noise reduction and privacy benefits.

Project Specifications:
Estate Wall
$314 \mathrm{~m} \times 1.8 \mathrm{~m}$ high
Exposed Capping, Solid/Slat Bays
900 mm high with 900 mm high of
vertical 85 mm slats with 33 mm gaps

Client: Karaka Pines Group Limited
Architect: Boffa Miskell
Landscaper: Evergreen Landcare LTD

## Colour

Painted double concrete, slats powder coated grey friars


## One88 On Commerce

One88 on Commerce motel needed a noise barrier wall that looked great, as it is on a corner of a busy street. BelAire outfitted the motel with an acoustic barrier to separated them from the street and small wing units between the motel rooms to create privacy and provide shade.

Signature Wall/ Slat Infill for small wings
2100 mm and 1800 mm high
Exposed Capping, Solid/Slat Bays
230m
Colour
Clay


## EXPOSED JOIN OR CLOSED JOIN?

An exposed join is recommended - it is more forgiving if you haven't quite got the panels $100 \%$ level, and also gives a much more attractive result.


## NOISE BARRIER

Our patented solid Poly-Fibre
Cement composite sandwich panels are designed to reflect noise. The acoustic performance of this product was evaluated by the Acoustics Research Group at the University of Canterbury and a comprehensive report is available on request.

## TYPICAL TRAFFIC NOISE - 12 m from road edge

approx. 60 dBa : 2-lane urban road, 6,000 vehicles per day @ 50 kph approx. 68 dBa : 4-lane motorway, 25,000 vehicles per day @ 100kph

## TYPICAL OTHER NOISE

approx. 90 dBa: Lawnmower approx. 100 dBa : Circular saw


Reduces up to 30 decibels of noise

## THE ALL-TERRAIN FENCE

BelAire solid panels can be easily cut using a circular saw with a timber blade. This will allow you to easily and neatly follow the terrain of your property.


## CLASSIC

Post dimensions: 120 mm (deep) x 180 mm (face) 0.95 mm BMT
Panel thickness: 50 mm
Density of composite panel materials: $15.49 \mathrm{~kg} / \mathrm{m}^{2}$
Suitable for fence heights: $900 \mathrm{~mm}-2400 \mathrm{~mm}$
Post centres: $2530 \mathrm{~mm}, 2830 \mathrm{~mm}$, 3130 mm
The classic fence is the most cost effective of the styles and most commonly used in residential boundary/ screening fence applications. Suitable for less
 challenging terrain, this style of fence will provide great sound reduction qualities. Also suited to lower fence designs -1200 mm and 1500 mm high.

## SIGNATURE

Post dimensions: 140 mm (deep) x 280 mm (face) 0.95 mm BMT
Panel thickness: 70 mm
Density of composite panel materials: $15.49 \mathrm{~kg} / \mathrm{m}^{2}$ Suitable for fence heights: $900 \mathrm{~mm}-3000 \mathrm{~mm}$ Post centres: $2630 \mathrm{~mm}, 2930 \mathrm{~mm}, 3230 \mathrm{~mm}$

The Signature fence, our most popular line, is most commonly used where a true masonry wall look is desired, or in a commercial and residential security/
 sound fence application. The fence has superb sound reduction qualities (National Acoustic Laboratory tested).


Post dimensions: 210 mm (deep) x 320 mm (face) 0.95 mm BMT
Panel thickness: 70mm
Density of composite panel materials: $15.49 \mathrm{~kg} / \mathrm{m}^{2}$ Suitable for fence heights: $900 \mathrm{~mm}-3000 \mathrm{~mm}$

Post centres: 2670 mm , 2970 mm , 3270 mm
The Estate fence is most commonly used where a 'Grand' masonry wall look is desired. The post face is equivalent to a brick and a half in width, and the fence
 has superb sound reduction qualities
(National Acoustic Laboratory tested).


SPECIFICATIONS

## Centre to centre guide

Panel length

| 2400 mm | $>2530 \mathrm{~mm}$ |
| ---: | :--- |
| 2700 mm | $>2830 \mathrm{~mm}$ |
| 3000 mm | $>3130 \mathrm{~mm}$ |

Post hole depth guide Wind Regions $A \& B$

| Hole depth into <br> firm earth or clay | Fence <br> height |
| ---: | :--- |
| 450 mm | $>900 \mathrm{~mm}$ |$>$| Hole depth into sand, |
| :--- |
| soft clay or loose earth |



Wind Region A
Wind speeds up
to $41 \mathrm{~m} / \mathrm{s}$ (W41)
B

Exposed Panel Capping

Steel
Channel
Joiner


## PRE-PRIMED STEEL COMPONENTS

Pillar
$120 \mathrm{~mm}($ deep $)$
$\times 180 \mathrm{~mm}($ face $)$
$\times$ length subject to fence
height plus post hole depth


## End Post

120 mm (deep)
$\times 180 \mathrm{~mm}$ (face)
$\times$ length subject to fence
height plus post hole depth


Mid Post
120 mm (deep)
$\times 180 \mathrm{~mm}$ (face)
$\times$ length subject to fence
height plus post hole depth

$90^{\circ}$ Post
120 mm (deep)
$\times 180 \mathrm{~mm}$ (face) $\times$ length subject to fence height plus post hole depth
$45^{\circ}$ /Custom Angle Post
$115 \mathrm{~mm}(\mathrm{~A}) \times 117 \mathrm{~mm}(\mathrm{~B})$ $\times 120 \mathrm{~mm}(\mathrm{C})$
$\times$ length subject to fence
height plus post hole depth


Post Infill
30 mm (deep) $\times 50 \mathrm{~mm}$ (face)
$\times$ length subject to
fence height
Wall Mount
Channel \&
Masonry Anchor*
3omm (deep)
$\times 52 \mathrm{~mm}$ (back face)
$\times \times$ length subject to
fence height
Flush Post Top
120mm (deep)
$\times 180 \mathrm{~mm}$ (face)
$\times 20 \mathrm{~mm}$ (leg height)

Exposed Post T
170mm (deep)
$\times 240 \mathrm{~mm}$ (face) $\times 40 \mathrm{~mm}$ (height)
Flush $45^{\circ}$
Post Top
$110 \mathrm{~mm}(\mathrm{~A}) \times 115 \mathrm{~mm}(\mathrm{~B})$
$\times 118 \mathrm{~mm}(\mathrm{C})$
$\times 20 \mathrm{~mm}($ leg height $)$

Exposed $45^{\circ}$ Post Top
145 mm (A) $\times 145 \mathrm{~mm}$ (B)
$\times 155 \mathrm{~mm}$ (C)
$\times 40 \mathrm{~mm}$ (height)


Tek Screw
10/16 galvanised
tek screw 16 mm (length)


## Support Bracket

35 mm (deep)
$\times 40 \mathrm{~mm}$ (face with holes) $\times$ 48mm (wide)



## Centre to centre guide

Panel length

| 2400 mm | $>2630 \mathrm{~mm}$ |
| ---: | :--- |
| 2700 mm | $>2930 \mathrm{~mm}$ |
| 3000 mm | $>3230 \mathrm{~mm}$ |

Post hole depth guide Wind Regions A\&B

Hole depth into firm earth or clay 450 mm 550 mm 600 mm 650 mm 700 mm 800 mm 900 mm 1000 mm

Fence height > 900 mm > 1200 mm > 1500 mm > 1800 mm > 2100 mm > 2400 mm > 2700 mm > 3000 mm

Hole depth into sand, soft clay or loose earth
550 mm
650 mm
> 700 mm
, 800 mm
> 900 mm
> 1000 mm
1100 mm
1200 mm


Wind Region A
Wind speeds up
to $41 \mathrm{~m} / \mathrm{s}$ (W41)

Wind Region B
Wind speeds up to $54 \mathrm{~m} / \mathrm{s}(\mathrm{W} 54)$


BelAire

## SIGNATURE <br> PRE-PRIMED STEEL COMPONENTS

Pillar
140 mm (deep)
$\times 280 \mathrm{~mm}$ (face)
$\times$ length subject to fence height plus post hole depth

End Post
140 mm (deep)
$\times 280 \mathrm{~mm}$ (face)
$\times$ length subject to fence height plus post hole depth

Mid Post<br>140 mm (deep)<br>$\times 280 \mathrm{~mm}$ (face)<br>$\times$ length subject to fence height plus post hole depth

$90^{\circ}$ Post
140 mm (deep)
$\times 280 \mathrm{~mm}$ (face)
$\times$ length subject to fence height plus post hole depth

$45^{\circ}$ /Custom Angle Post
170 mm (A) $\times 205 \mathrm{~mm}$ (B) $\times 137 \mathrm{~mm}$ (C)
$\times$ length subject to fence height plus post hole depth



Flush Panel Capping
20 mm (leg height)
$\times 71 \mathrm{~mm}$ (top face)
$\times$ length subject to panel length


Exposed Panel Capping
55 mm (leg height) $\times 100 \mathrm{~mm}$ (top face)
$\times$ length subject to panel length

## Base Channel

20 mm (leg height) $\times 71 \mathrm{~mm}$ (face)
$\times$ length subject to

panel length


Steel Channel Joiner
30 mm (deep) $\times 60 \mathrm{~mm}$ (face)
$\times$ length subject to panel length


Tek Screw
10/16 galvanised tek screw 16 mm (length)


## Support Bracket

40 mm (deep)
$\times 60 \mathrm{~mm}$ (face with holes) $\times$ 78 mm (wide)


## SIGNATURE INFILL PANELS

Slat, louvre, tubular and glass infills are also available to enhance your fencing. Please refer to the individual infill pages later in this section.


## Centre to centre guide

## Panel length

## Post hole centres

| 2400 mm | $>2670 \mathrm{~mm}$ |
| ---: | :--- |
| 2700 mm | $>2970 \mathrm{~mm}$ |
| 3000 mm | $>3270 \mathrm{~mm}$ |

Post hole depth guide Wind Regions A\&B
$\left.\begin{array}{rl}\begin{array}{rl}\text { Hole depth into } \\ \text { firm earth or clay }\end{array} & \begin{array}{c}\text { Fence } \\ \text { height }\end{array} \\ 450 \mathrm{~mm} & >900 \mathrm{~mm}\end{array}>\begin{array}{l}\text { Hole depth into sand, } \\ \text { soft clay or loose earth }\end{array}\right] 550 \mathrm{~mm}$,
$\qquad$



## ESTATE

## PRE-PRIMED STEEL COMPONENTS

## Pillar

210 mm (deep) $\times 320 \mathrm{~mm}$ (face)
$\times$ length subject to fence height plus post hole depth

## End Post

210mm (deep)
$\times 320 \mathrm{~mm}$ (face)
$\times$ length subject to fence height plus post hole depth

Mid Post
210 mm (deep)
$\times 320 \mathrm{~mm}$ (face)
$\times$ length subject to fence height plus post hole depth
$90^{\circ}$ Post
210 mm (deep)
$\times 320 \mathrm{~mm}$ (face)
$\times$ length subject to fence
height plus post hole depth
$45^{\circ}$ /Custom Angle Post
$207 \mathrm{~mm}(A) \times 220 \mathrm{~mm}(B)$ $\times 210 \mathrm{~mm}(\mathrm{C})$
$\times$ length subject to fence height plus post hole depth


## Flush Panel

 Capping20mm (leg height)
$\times 71 \mathrm{~mm}$ (top face)
$\times$ length subject to panel length

Exposed Panel Capping
55 mm (leg height)
$\times 100 \mathrm{~mm}$ (top face)
$\times$ length subject to
panel length

## Base Channel

20 mm (leg height)
$\times 71 \mathrm{~mm}$ (face)
$\times$ length subject to panel length

## Steel Channel Joiner

30 mm (deep) $\times 60 \mathrm{~mm}$ (face)
$\times$ length subject to panel length


## ESTATE INFILL PANELS

Slat, louvre, tubular and glass infills are also available to enhance your fencing. Please refer to the individual infill pages later in this section.

## Tek Screw

10/16 galvanised
tek screw
16 mm (length)


## Support Bracket

40 mm (deep)
$\times 60 \mathrm{~mm}$ (face with holes) $\times$ 78 mm (wide)


CLASSIC


## SOLID PANELS



## SOLID PANELS



## Construction:

5 mm fibre cement outer skins
60 mm expanded polystyrene core

2400 mm (length) $\times 600 \mathrm{~mm}$ (height) $\times 70 \mathrm{~mm}$ (width) 2400 mm (length) $\times 900 \mathrm{~mm}$ (height) $\times 70 \mathrm{~mm}$ (width) 2400 mm (length) $\times 1200 \mathrm{~mm}$ (height) $\times 70 \mathrm{~mm}$ (width) 2700 mm (length) $\times 900 \mathrm{~mm}$ (height) $\times 70 \mathrm{~mm}$ (width) 2700 mm (length) $\times 1200 \mathrm{~mm}$ (height) $\times 70 \mathrm{~mm}$ (width) 3000 mm (length) $\times 900 \mathrm{~mm}$ (height) $\times 70 \mathrm{~mm}$ (width) 3000 mm (length) $\times 1200 \mathrm{~mm}$ (height) $\times 70 \mathrm{~mm}$ (width)




SLAT INFILL CHANNEL


Slat infill panel height options:

| 300 mm | 900 mm | 1500 mm |
| :--- | :--- | :--- |
| 600 mm | 1200 mm | 1800 mm |

Slat construction:
Powdercoated aluminium

Slat sizes:
2330 mm (length) $\times 60 \mathrm{~mm}$ (height) $\times 25 \mathrm{~mm}$ (width)
2330 mm (length) $\times 85 \mathrm{~mm}$ (height) $\times 25 \mathrm{~mm}$ (width)
2630 mm (length) $\times 60 \mathrm{~mm}$ (height) $\times 25 \mathrm{~mm}$ (width)
2630 mm (length) $\times 85 \mathrm{~mm}$ (height) $\times 25 \mathrm{~mm}$ (width)
2930 mm (length) $\times 60 \mathrm{~mm}$ (height) $\times 25 \mathrm{~mm}$ (width)
2930 mm (length) $\times 85 \mathrm{~mm}$ (height) $\times 25 \mathrm{~mm}$ (width)


Construction:
Aluminium slat channel with cover, powdercoated to same colour as the slats.

Slat Channel: $39 \mathrm{~mm} \times 32 \mathrm{~mm}$ (includes screw cover plate)
Slat channel length will be cut to length required - total height of all slats plus gaps between slats, and gaps top and bottom.



Slat infill panel height options:

| 300 mm | 900 mm | 1500 mm |
| :--- | :--- | :--- |
| 600 mm | 1200 mm | 1800 mm |

Slat construction:

## Powdercoated aluminium

Slat sizes:
2330 mm (length) $\times 60 \mathrm{~mm}$ (height) $\times 25 \mathrm{~mm}$ (width)
2330 mm (length) $\times 85 \mathrm{~mm}$ (height) $\times 25 \mathrm{~mm}$ (width)
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2630 mm (length) $\times 85 \mathrm{~mm}$ (height) $\times 25 \mathrm{~mm}$ (width) 2930 mm (length) $\times 60 \mathrm{~mm}$ (height) $\times 25 \mathrm{~mm}$ (width) 2930 mm (length) $\times 85 \mathrm{~mm}$ (height) $\times 25 \mathrm{~mm}$ (width)


Construction:
Aluminium slat channel with cover, powdercoated to same colour as the slats.

Slat Channel: $39 \mathrm{~mm} \times 32 \mathrm{~mm}$ (includes screw cover plate)
Slat channel length will be cut to length required - total height of all slats plus gaps between slats, and gaps top and bottom.


## LOUVRE INFILL PANELS



## LOUVRE INFILL FIXINGS



Louvre infll panel height options:

| 350 mm (3 louvres) | 1200 mm (10 louvres) |
| :--- | :--- |
| 600 mm (5 louvres) | 1500 mm (13 louvres) |
| 900 mm ( 8 louvres) | 1800 mm ( 15 louvres) |

Construction:
135 mm high aluminium aerofoil louvre infill powdercoated to your colour choice.

Louvre sizes:
2400 mm (length) $\times 136 \mathrm{~mm}$ (height) $\times 32 \mathrm{~mm}$ (width)
to suit 2400 mm panels
2700 mm (length) $\times 136 \mathrm{~mm}$ (height) $\times 32 \mathrm{~mm}$ (width)
to suit 2700 mm panels
3000 mm (length) $\times 136 \mathrm{~mm}$ (height) $\times 32 \mathrm{~mm}$ (width) to suit 3000 mm panels


## Construction:

Aluminium Louvre $135 \mathrm{~mm} \times 30 \mathrm{~mm}$ inserted into a prepunched steel Channel that accepts the louvre infil.

Louvres may need to be cut 5 mm shorter than your solid panel and then inserted onto the fixing bar. The finished assembly can then be inserted between the posts.


## TUBULAR INFILL PANELS

## Construction:

Aluminium, powder-coated black. Constructed from $40 \mathrm{~mm} \times 40 \mathrm{~mm}$ rails and $19 \mathrm{~mm} \times 19 \mathrm{~mm}$ pickets. It is important to note that our 'square cross section' tubular panels are superior in strength to some inferior, 'round cross section' panels.

## Single Top Rail

2400 mm Max. (length) $\times 950 \mathrm{~mm}$ (height) $\times 40 \mathrm{~mm}$ (width)
2400 mm Max. (length) $\times 1200 \mathrm{~mm}$ (height) $\times 40 \mathrm{~mm}$ (width)


Custom 600 mm panel shown.

## Double Top Rail

2400 mm Max. (length) $\times 1200 \mathrm{~mm}$ (height) $\times 40 \mathrm{~mm}$ (width) 2400 mm Max. (length) $\times 1500 \mathrm{~mm}$ (height) $\times 40 \mathrm{~mm}$ (width) 2400 mm Max. (length) $\times 1800 \mathrm{~mm}$ (height) $\times 40 \mathrm{~mm}$ (width)


## Vecta

Reversible panel that can be used for a flat-top or rod-top look
2250 mm Max. (length) $\times 1200 \mathrm{~mm}$ (height) $\times 40 \mathrm{~mm}$ (width)
2250 mm Max. (length) $\times 1500 \mathrm{~mm}$ (height) $\times 40 \mathrm{~mm}$ (width)


Custom curved-top panel shown - available on request.

## Axis

2250 mm Max. (length) $\times 1200 \mathrm{~mm}$ (height) $\times 40 \mathrm{~mm}$ (width)


## TUBULAR INFILL FIXINGS



## Construction:

3 mm aluminium, powder-coated black
Bracket shape dependant on the tubular panel chosen.


## GLASS INFILL PANELS

For the 70 mm Signature and Estate posts only


## Construction:

12 mm toughened safety glass
2380 mm (length) $\times 1200 \mathrm{~mm}$ Max. (height)
x 12 mm (width)


## GLASS INFILL FIXINGS



Max glass pannel size
2400 Max (length) x 1200 mm . (height)
x 12 mm (width)



