



SOLID ACOUSTIC PANEL FENICNG

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 20-30dB 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.

volume of loud neighbours and traffic noise today.

ACOUSTIC FENCING

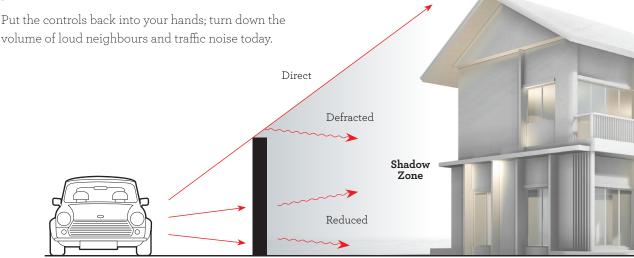
BelAire solid wall systems are acoustically tested and rated, keeping all unwanted surrounding noises at bay and providing peace and quiet for your home.

ECO FRIENDLY

Our innovative products are made of recyclable materials, with our manufacturing processes reducing emitted and embodied CO2 by up to 80%.

NZ MADE

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





...make it your own!

SOLID PANEL FENCING

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 0800 235 2473 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

314m x 1.8m high

Exposed Capping, Solid/Slat Bays

900mm high with 900mm high of vertical 85mm slats with 33mm gaps

Colour

Painted double concrete, slats powder coated grey friars

Client: Karaka Pines Group Limited

Architect: Boffa Miskell

Landscaper: Evergreen Landcare LTD









Solid panel fencing / commercial projects

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.

Project Specifications:

Client: One88 On Commerce

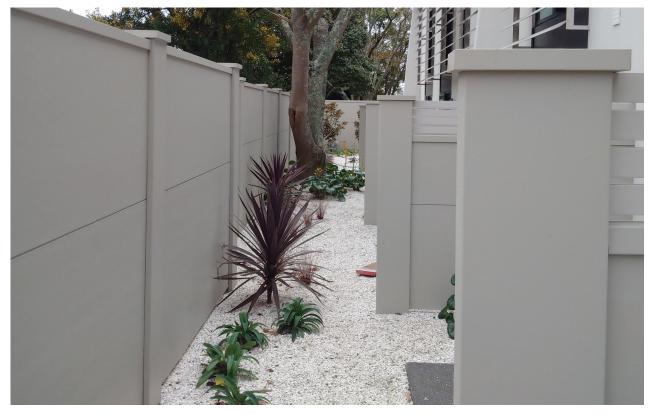
Signature Wall/ Slat Infill for small wings 2100mm and 1800mm high

Exposed Capping, Solid/Slat Bays 230m

Colour Clay

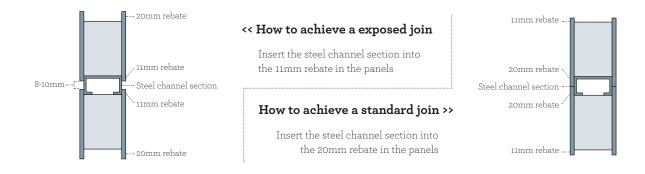






EXPOSED JOIN OR CLOSED JOIN?

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.

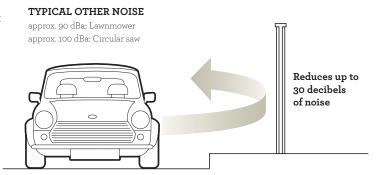


NOISE BARRIER

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.

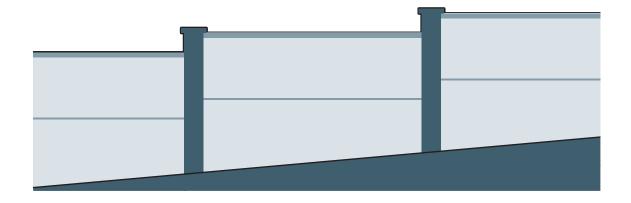
TYPICAL TRAFFIC NOISE - 12m from road edge

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



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: 120mm (deep) x 180mm (face) 0.95 mm BMT

Panel thickness: 50mm

Density of composite panel materials: 15.49kg/m^2

Suitable for fence heights: 900mm - 2400mm

Post centres: 2530mm, 2830mm, 3130mm

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 – 1200mm and 1500mm high.



SIGNATURE

Post dimensions: 140mm (deep) x 280mm (face) 0.95 mm BMT

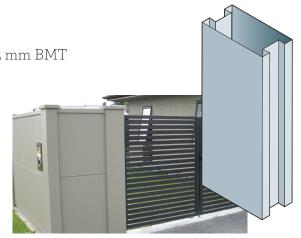
Panel thickness: 70mm

Density of composite panel materials: 15.49kg/m^2

Suitable for fence heights: 900mm - 3000mm

Post centres: 2630mm, 2930mm, 3230mm

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).



ESTATE

Post dimensions: 210mm (deep) x 320mm (face) 0.95 mm BMT

Panel thickness: 70mm

Density of composite panel materials: 15.49kg/m²

Suitable for fence heights: 900mm - 3000mm

Post centres: 2670mm, 2970mm, 3270mm

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).



CLASSIC SPECIFICATIONS

Centre to centre guide

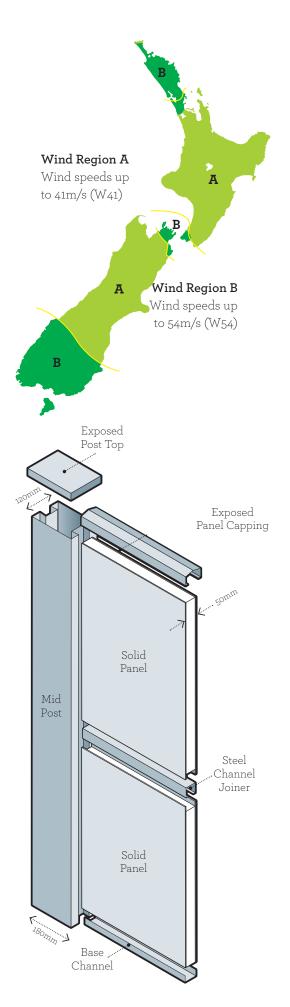
Panel length Post hole centres

2400mm > 2530mm 2700mm > 2830mm 3000mm > 3130mm

Post hole depth guide Wind Regions A&B

Hole depth into firm earth or clay		Fence height		Hole depth into sand, soft clay or loose earth
450mm	>	900mm	>	550mm
550mm	>	1200mm		00
600mm		1500mm		-
650mm	>	1800mm	>	800mm
700mm	>	2100mm	>	900mm

Post hole width: 280mm min (all wind regions) Soil (including garden fill) should not be placed in contact with the steel post Top of concrete should be sloped away from post for water drainage Grade of concrete N20 with maximum size of aggregate 20mm. Concrete shall be compacted after placement inside footing hole.



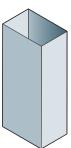


SOLID PANEL FENCING / CLASSIC

PRE-PRIMED STEEL COMPONENTS

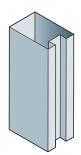
Pillar

120mm (deep) × 180mm (face) × length subject to fence height plus post hole depth



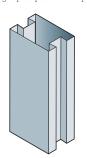
End Post

120mm (deep) × 180mm (face) X length subject to fence height plus post hole depth



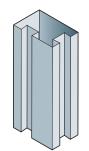
Mid Post

120mm (deep) ×180mm (face) × length subject to fence height plus post hole depth



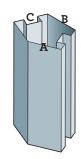
90° Post

120mm (deep) ×180mm (face) × length subject to fence height plus post hole depth



45°/Custom Angle Post

115mm (A) × 117mm (B) × 120mm (C) × length subject to fence height plus post hole depth



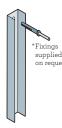
Post Infill

30mm (deep) ×50mm (face) × length subject to fence height



Wall Mount Channel & Masonry Anchor*

30mm (deep) × 52mm (back face) × length subject to fence height



Flush Post Top

120mm (deep) × 180mm (face) ×20mm (leg height)

Exposed Post Top

170mm (deep) ×240mm (face) ×40mm (height)

Flush 45° Post Top

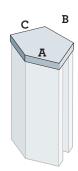
110mm (A) × 115mm (B) ×118mm (C) ×20mm (leg height)

Exposed 45° Post Top

145mm (A) × 145mm (B) ×155mm (C) ×40mm (height)







Flush Panel Capping

20mm (leg height) ×51mm (top face) × length subject to panel length



Exposed Panel Capping

45mm (leg height) ×80mm (top face) × length subject to panel length



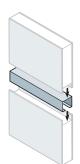
Base Channel

20mm (leg height) × 51mm (face) × length subject to panel length



Steel Channel Joiner

30mm (deep) × 40mm (face) × length subject to panel length



Tek Screw

10/16 galvanised tek screw 16mm (length)



Support Bracket

35mm (deep) × 40mm (face with holes) × 48mm (wide)



CLASSIC INFILL PANELS

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

SIGNATURE

SPECIFICATIONS

Centre to centre guide

900mm

1000mm >

Panel length Post hole centres

2400mm > 2630mm 2700mm > 2930mm 3000mm > 3230mm

Post hole depth guide Wind Regions A&B

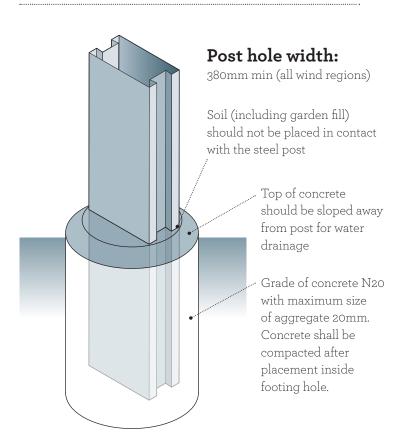
Hole depth into Fence Hole depth into sand, firm earth or clay height soft clay or loose earth 900mm 550mm 450mm 550mm 1200mm > 650mm 600mm > 1500mm > 700mm 650mm 1800mm > 800mm 700mm > 2100mm > 900mm 1000mm 800mm > 2400mm >

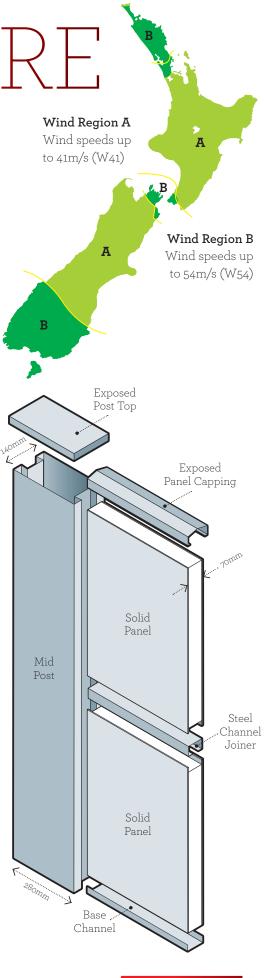
1100mm

1200mm

2700mm >

3000mm >





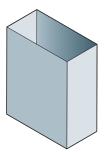


SOLID PANEL FENCING / SIGNATURE

PRE-PRIMED STEEL COMPONENTS

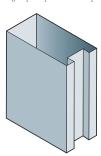
Pillar

140mm (deep) ×280mm (face) × length subject to fence height plus post hole depth



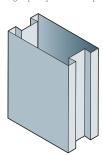
End Post

140mm (deep) ×280mm (face) × length subject to fence height plus post hole depth



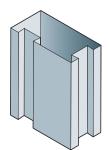
Mid Post

140mm (deep) ×280mm (face) × length subject to fence height plus post hole depth



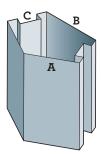
90° Post

140mm (deep) × 280mm (face) × length subject to fence height plus post hole depth



45°/Custom Angle Post

170mm (A) x 205mm (B) ×137mm (C) × length subject to fence height plus post hole depth



Post Infill

30mm (deep) ×70mm (face) × length subject to fence height



Wall Mount Channel & Masonry Anchor*

30mm (deep) × 72mm (back face) imes length subject to fence height



Flush Post Top

140mm (deep) ×280mm (face) ×20mm (leg height)



Exposed Post Top

190mm (deep) ×330mm (face) ×40mm (height)

Flush 45° Post Top

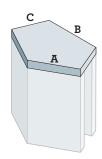
165mm (A) × 199mm (B) ×139mm (C) × 20mm (leg height)

Exposed 45° Post Top

200mm (A) × 230mm (B) ×180mm (C) × 40mm (height)

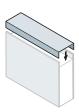


С



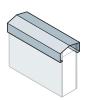
Flush Panel Capping

20mm (leg height) ×71mm (top face) × length subject to panel length



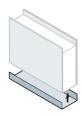
Exposed Panel Capping

55mm (leg height) × 100mm (top face) × length subject to panel length



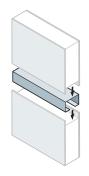
Base Channel

20mm (leg height) ×71mm (face) × length subject to panel length



Steel Channel Joiner

30mm (deep) × 60mm (face) × length subject to panel length



Tek Screw

10/16 galvanised tek screw 16mm (length)



Support Bracket

40mm (deep) × 60mm (face with holes) × 78mm (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.

ESTATE SPECIFICATIONS

Centre to centre guide

Panel length Post hole centres

2400mm > 2670mm 2700mm > 2970mm 3000mm > 3270mm

Post hole depth guide Wind Regions A&B

-	_			O .
Hole depth into firm earth or clay		Fence height		Hole depth into sand, soft clay or loose earth
450mm	>	900mm	>	550mm
550mm	>	1200mm	>	650mm
600mm	>	1500mm	>	700mm
650mm	>	1800mm	>	800mm
700mm	>	2100mm	>	900mm
800mm	>	2400mm	>	1000mm
900mm	>	2700mm	>	1100mm
1000mm	>	3000mm	>	1200mm

Post hole width:
420mm min (all wind regions)

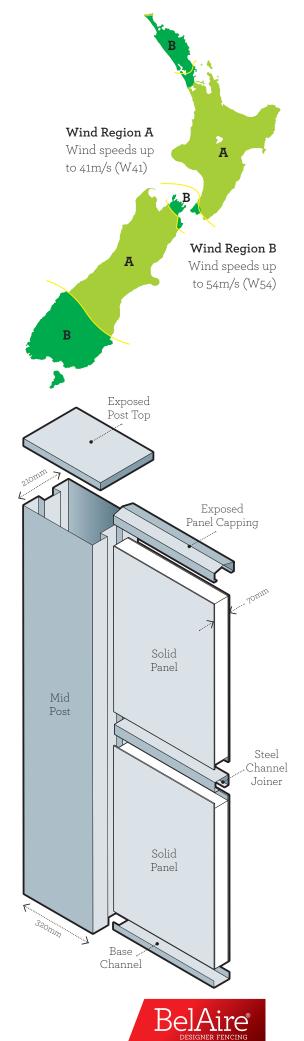
Soil (including garden fill)
should not be placed in contact
with the steel post

Top of concrete
should be sloped away
from post for water
drainage

Grade of concrete N20
with maximum size
of aggregate 20mm.
Concrete shall be
compacted after

placement inside

footing hole.



SOLID PANEL FENCING / ESTATE

ESTATE

PRE-PRIMED STEEL COMPONENTS

Pillar

210mm (deep)

× 320mm (face)

× length subject to fence
height plus post hole depth

End Post

210mm (deep)

× 320mm (face)

× length subject to fence
height plus post hole depth

Mid Post

210mm (deep)

× 320mm (face)

× length subject to fence
height plus post hole depth

90° Post

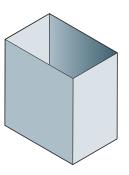
210mm (deep)

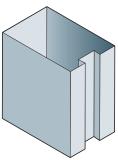
× 320mm (face)

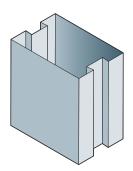
× length subject to fence
height plus post hole depth

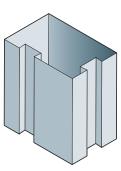
45°/Custom Angle Post

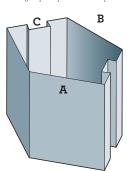
207mm (A) x 220mm (B) × 210mm (C) × length subject to fence height plus post hole depth











Post Infill

30mm (deep) ×70mm (face) ×length subject to fence height

Wall Mount Channel & Masonry Anchor*

30mm (deep) ×72mm (back face) ×length subject to fence height

Flush Post Top

210mm (deep) × 320mm (face) × 20mm (leg height)

Exposed Post Top

260mm (deep) ×370mm (face) ×40mm (height)

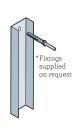
Flush 45° Post Top

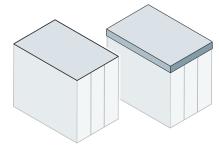
202mm (A) × 215mm (B) × 208mm (C) × 20mm (leg height)

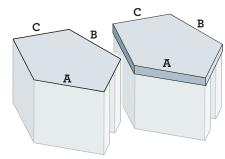
Exposed 45° Post Top

237mm (A) × 250mm (B) × 260mm (C) × 40mm (height)



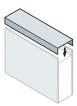






Flush Panel Capping

20mm (leg height) ×71mm (top face) ×length subject to panel length



Exposed Panel Capping

55mm (leg height) X 100mm (top face) X length subject to panel length



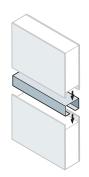
Base Channel

20mm (leg height) ×71mm (face) × length subject to panel length



Steel Channel Joiner

30mm (deep) × 60mm (face) × length subject to panel length



Tek Screw

10/16 galvanised tek screw 16mm (length)



Support Bracket

40mm (deep) × 60mm (face with holes) × 78mm (wide)

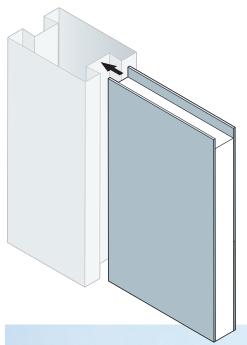


ESTATE INFILL PANELS

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

CLASSIC PANELS

SOLID PANELS



Construction:

5mm fibre cement outer skins 40mm expanded polystyrene core

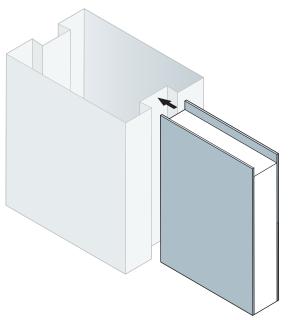
2400mm (length) x 600mm (height) x 50mm (width)
2400mm (length) x 900mm (height) x 50mm (width)
2400mm (length) x 1200mm (height) x 50mm (width)
2700mm (length) x 900mm (height) x 50mm (width)
2700mm (length) x 1200mm (height) x 50mm (width)
3000mm (length) x 900mm (height) x 50mm (width)
3000mm (length) x 1200mm (height) x 50mm (width)





SIGNATURE/ESTATE PANELS

SOLID PANELS



Construction:

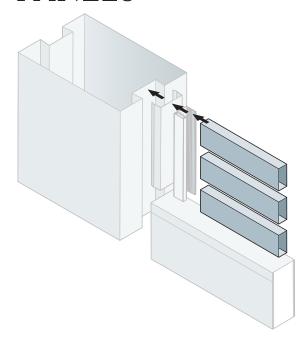
5mm fibre cement outer skins 60mm expanded polystyrene core

2400mm (length) x 600mm (height) x 70mm (width)
2400mm (length) x 900mm (height) x 70mm (width)
2400mm (length) x 1200mm (height) x 70mm (width)
2700mm (length) x 900mm (height) x 70mm (width)
2700mm (length) x 1200mm (height) x 70mm (width)
3000mm (length) x 900mm (height) x 70mm (width)
3000mm (length) x 1200mm (height) x 70mm (width)



CLASSIC/SIGNATURE/ ESTATE INFILL PANELS

SLAT INFILL PANELS



Slat infill panel height options:

300mm 900mm 1500mm 600mm 1200mm 1800mm

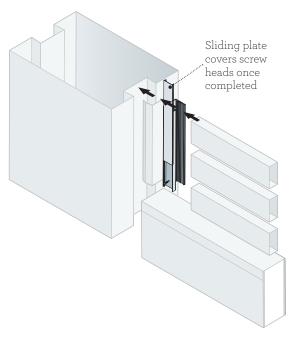
Slat construction:

Powdercoated aluminium

Slat sizes:

2330mm (length) x 60mm (height) x 25mm (width)
2330mm (length) x 85mm (height) x 25mm (width)
2630mm (length) x 60mm (height) x 25mm (width)
2630mm (length) x 85mm (height) x 25mm (width)
2930mm (length) x 60mm (height) x 25mm (width)
2930mm (length) x 85mm (height) x 25mm (width)

SLAT INFILL CHANNEL





Construction:

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

Slat Channel: 39mm x 32mm (includes screw cover plate)

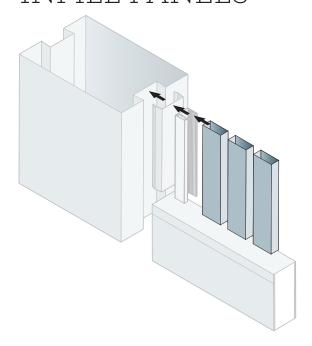
Slat channel length will be cut to length required – total height of all slats plus gaps between slats, and gaps top and bottom.



SOLID PANEL FENCING / INFILL PANELS

CLASSIC/SIGNATURE/ ESTATE INFILL PANELS

VERTICAL SLAT INFILL PANELS



Slat infill panel height options:

300mm 900mm 1500mm 600mm 1200mm 1800mm

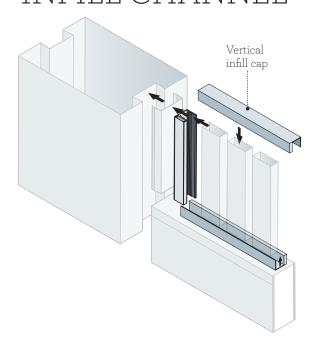
Slat construction:

Powdercoated aluminium

Slat sizes:

2330mm (length) x 60mm (height) x 25mm (width)
2330mm (length) x 85mm (height) x 25mm (width)
2630mm (length) x 60mm (height) x 25mm (width)
2630mm (length) x 85mm (height) x 25mm (width)
2930mm (length) x 60mm (height) x 25mm (width)
2930mm (length) x 85mm (height) x 25mm (width)

VERTICAL SLAT INFILL CHANNEL





Construction:

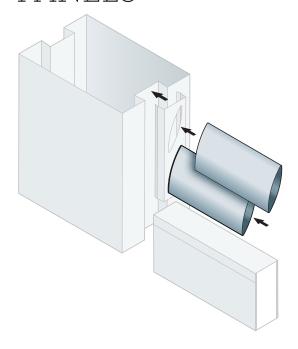
Aluminium slat channel with cover, powdercoated to same colour as the slats.

Slat Channel: 39mm x 32mm (includes screw cover plate)

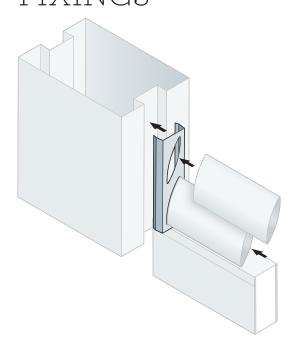
Slat channel length will be cut to length required – total height of all slats plus gaps between slats, and gaps top and bottom.

SIGNATURE/ESTATE INFILL PANELS

LOUVRE INFILL PANELS



LOUVRE INFILL FIXINGS



Louvre infill panel height options:

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

Construction:

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

Louvre sizes:

2400mm (length) x 136mm (height) x 32mm (width) to suit 2400mm panels

2700mm (length) x 136mm (height) x 32mm (width) to suit 2700mm panels

3000mm (length) x 136mm (height) x 32mm (width) to suit 3000mm panels



Construction:

Aluminium Louvre 135mm x 30mm inserted into a prepunched steel Channel that accepts the louvre infil.

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



SOLID PANEL FENCING / TUBULAR INFILL PANELS

CLASSIC/SIGNATURE/ ESTATE INFILL PANELS

TUBULAR INFILL PANELS

Construction:

Aluminium, powder-coated black. Constructed from 40mm x 40mm rails and 19mm x 19mm 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

2400mm Max. (length) x 950mm (height) x 40mm (width) 2400mm Max. (length) x 1200mm (height) x 40mm (width)







Double Top Rail

2400mm Max. (length) x 1200mm (height) x 40mm (width)
2400mm Max. (length) x 1500mm (height) x 40mm (width)
2400mm Max. (length) x 1800mm (height) x 40mm (width)





SOLID PANEL FENCING

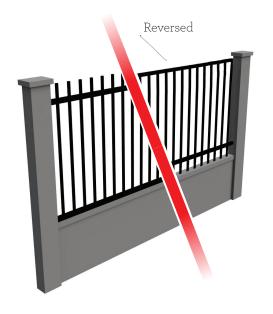
Vecta

Reversible panel that can be used for a flat-top or rod-top look

2250mm Max. (length) x 1200mm (height) x 40mm (width) 2250mm Max. (length) x 1500mm (height) x 40mm (width)



Custom curved-top panel shown - available on request.



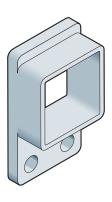
Axis

2250mm Max. (length) x 1200mm (height) x 40mm (width)





TUBULAR INFILL FIXINGS



Construction:

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

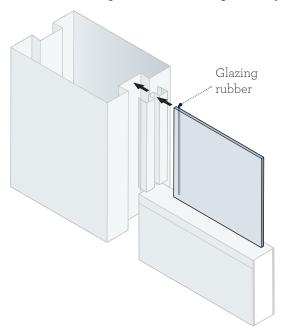


SOLID PANEL FENCING / GLASS INFILL PANELS

SIGNATURE/ESTATE INFILL PANELS

GLASS INFILL PANELS

For the 70mm Signature and Estate posts only



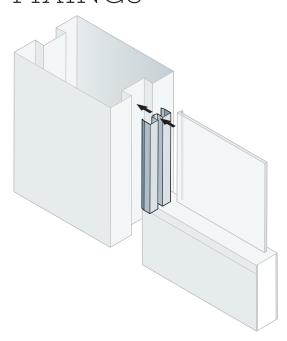
Construction:

12mm toughened safety glass

2380mm (length) x 1200mm Max. (height) x 12mm (width)



GLASS INFILL FIXINGS



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



