

solid walls and fences

residential & commercial

BelAire®
DESIGNER FENCING



Design Versatility | Built to Last | Noise Barrier | Easy Construction

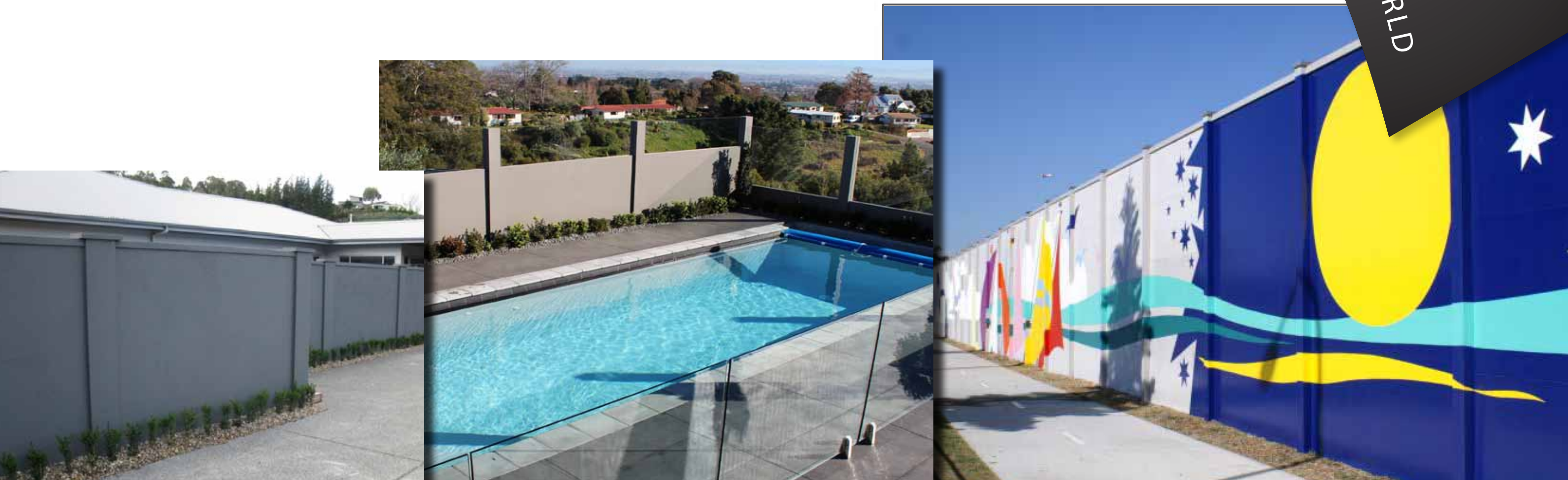
About BelAire

BelAire Designer Fencing – the most advanced modular wall system available in New Zealand today.

From the manufacturing plant in Hastings, BelAire have supplied hundreds of modular wall fences to commercial and residential projects throughout New Zealand. The system is based on an Australian design which has been proven in many varying applications all over Australia, including harsh environments and high wind regions.

CREATING YOUR CORNER OF THE WORLD

BelAire
DESIGNER FENCING



Residential Fences

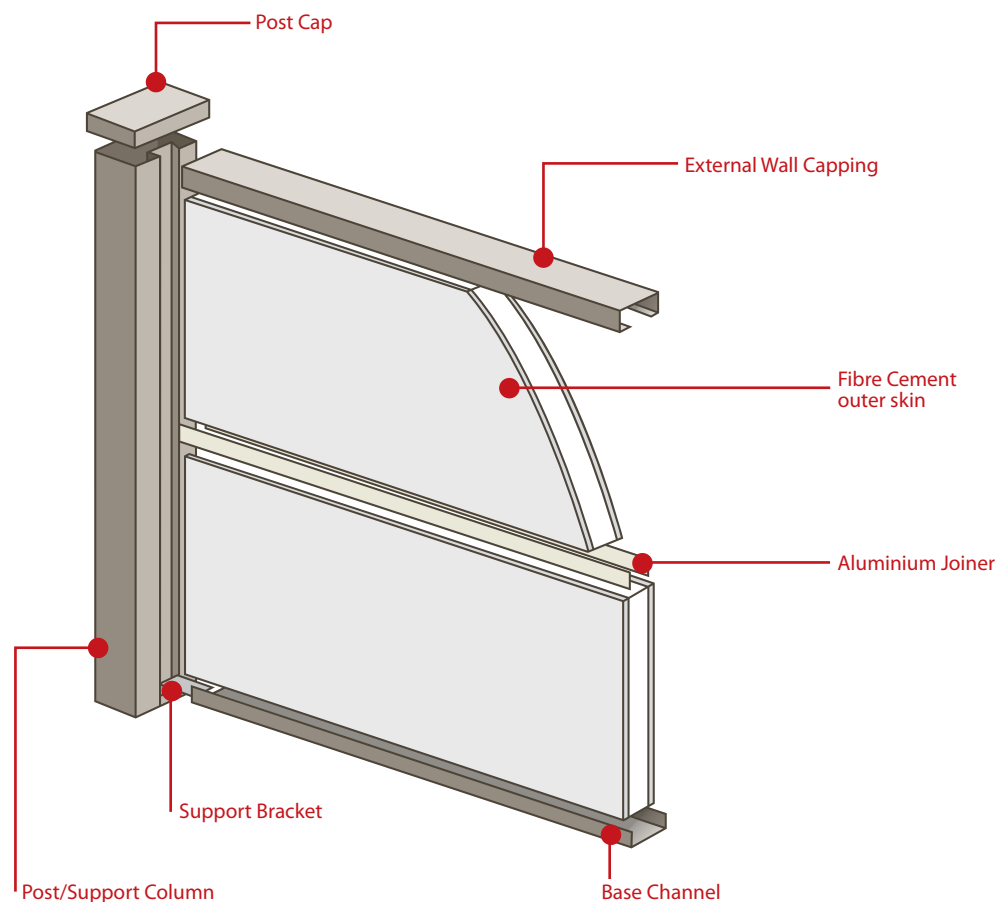
Swimming Pool Surrounds

Commercial Noise Barrier Walls

Construction

- **BelAire** Designer Fences are made from materials that are lightweight, yet structurally strong.
- The **BelAire** system utilizes steel, fibre-cement board and polystyrene in a patented system to achieve a solid boundary wall with unique characteristics:
- **Strong & Stable Construction**
- **Quick installation**
- **Sound Insulating**
- **High Impact Resistance**

TYPICAL WALL CONSTRUCTION



Strong & Stable Construction

- strong steel posts in concrete footings
- wall panels interlock with the posts
- will not collapse in an earthquake
- no cement or masonry to crack

With strong steel posts in concrete footings, and light-weight interlocking panels, this wall system will not collapse in an earthquake, and there is no cement or masonry to fracture or crack. Any expansion and movement can take place within the unique post system meaning the wall will forever carry it's original tidy and straight appearance.

Fast

Strong

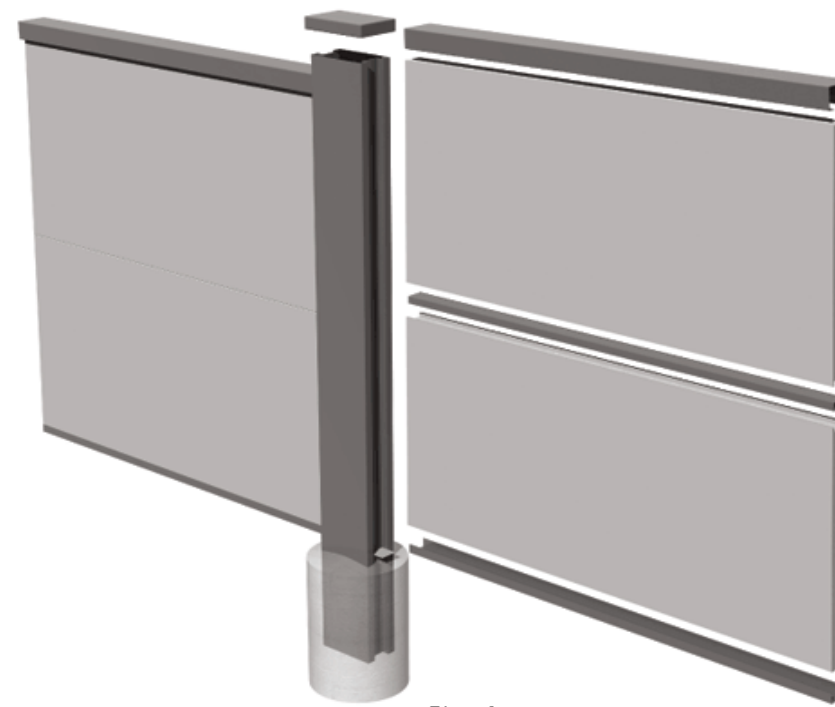
Secure

CREATING YOUR CORNER OF THE WORLD

BelAire
DESIGNER FENCING

Quick Installation

- modular construction
- light-weight materials
- minimal site disturbance
- no heavy foundations required



Step 1
Concrete your hollow steel posts into the ground as specified.

Step 4
Attach post and wall cappings using construction adhesive. Your wall is now ready to coat

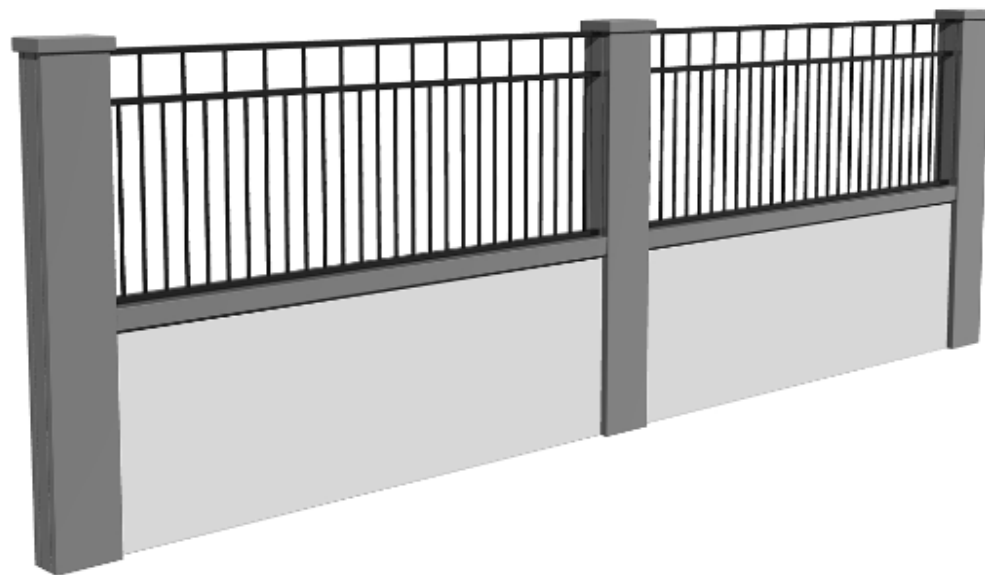
Step 3
Insert panel joiner and upper wall panel.

Step 2
Attach base channel and insert lower wall panel.

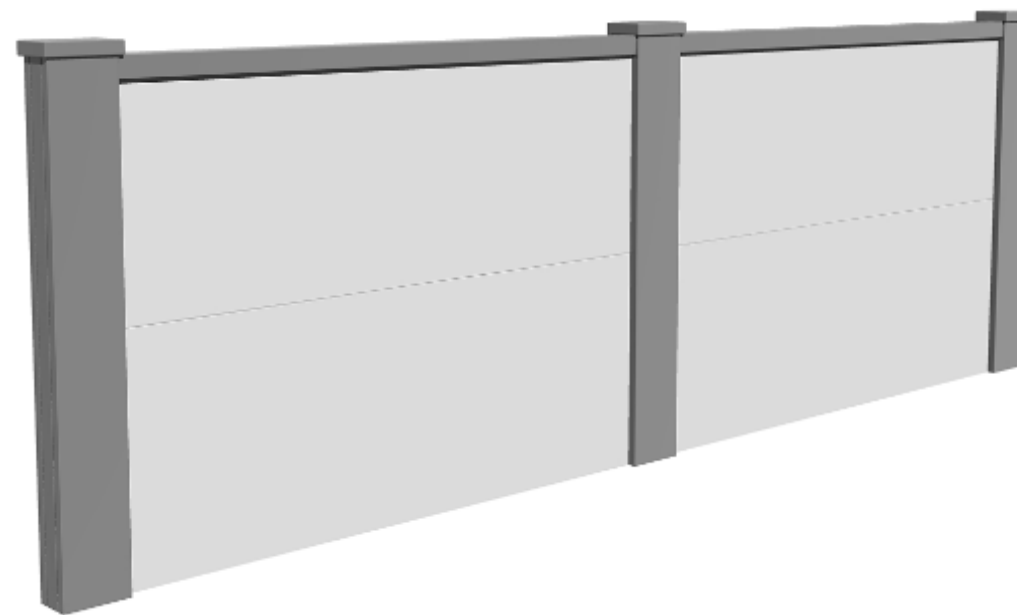
CREATING YOUR CORNER OF THE WORLD

BelAire
DESIGNER FENCING

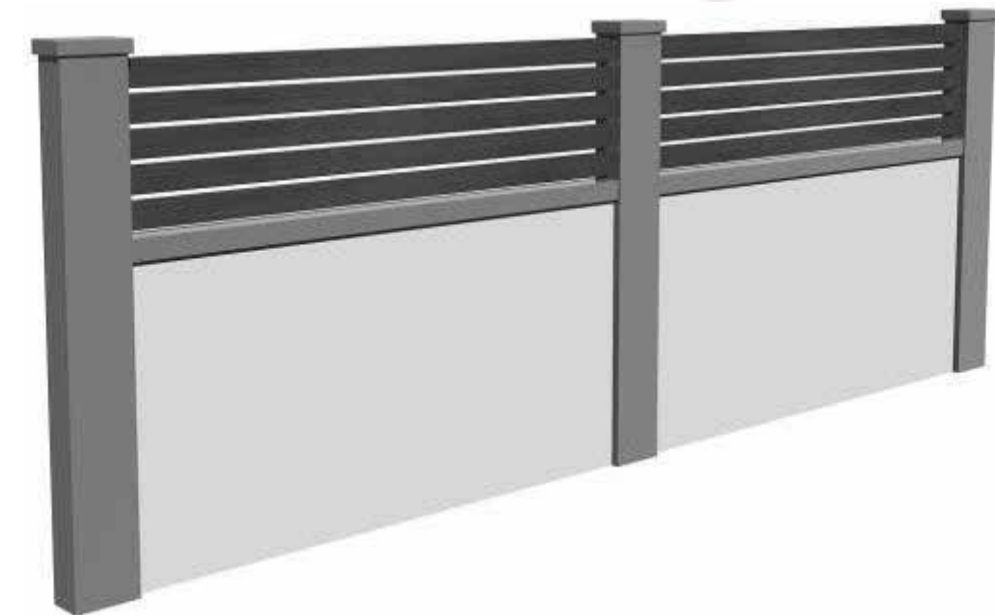
BelAire Standard Designs:



Pool Panel Insert



Solid Wall Style

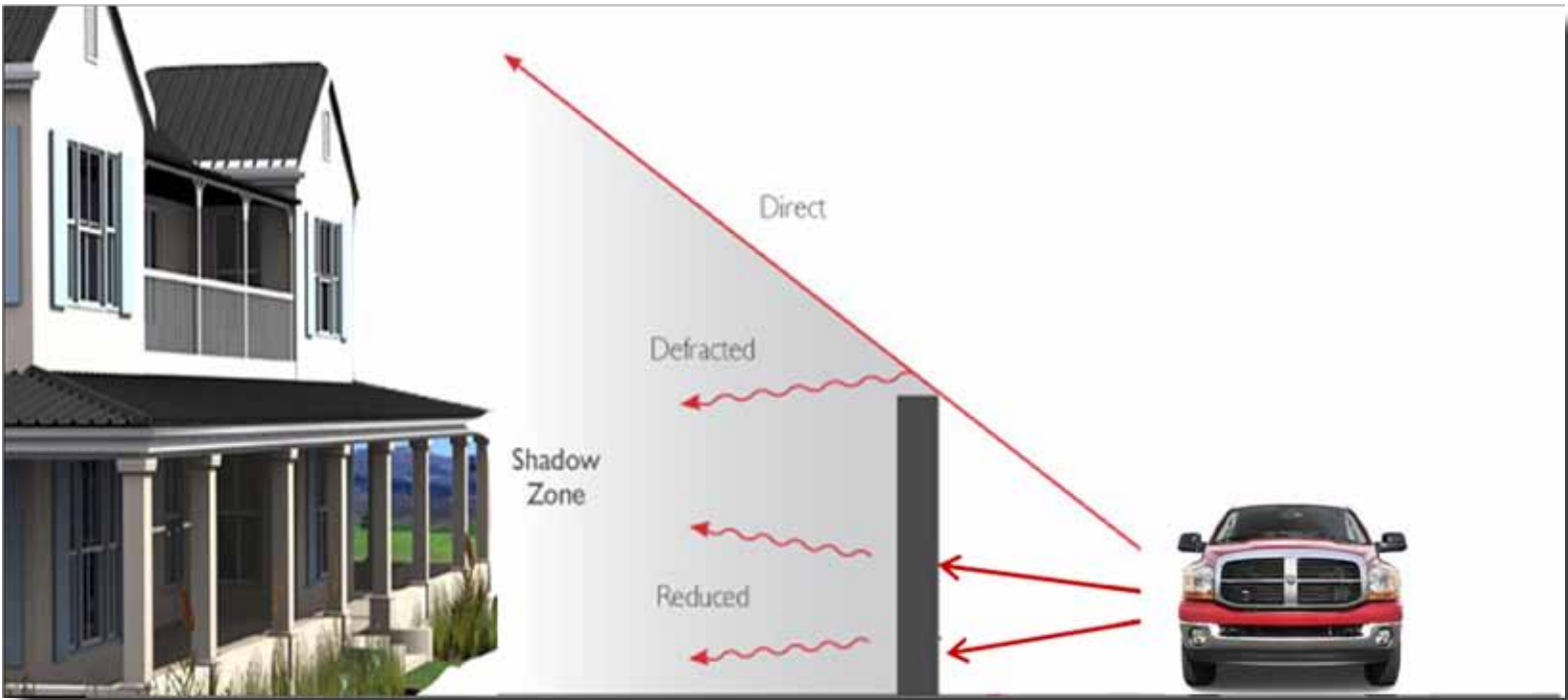


Slats and Louvre Inserts

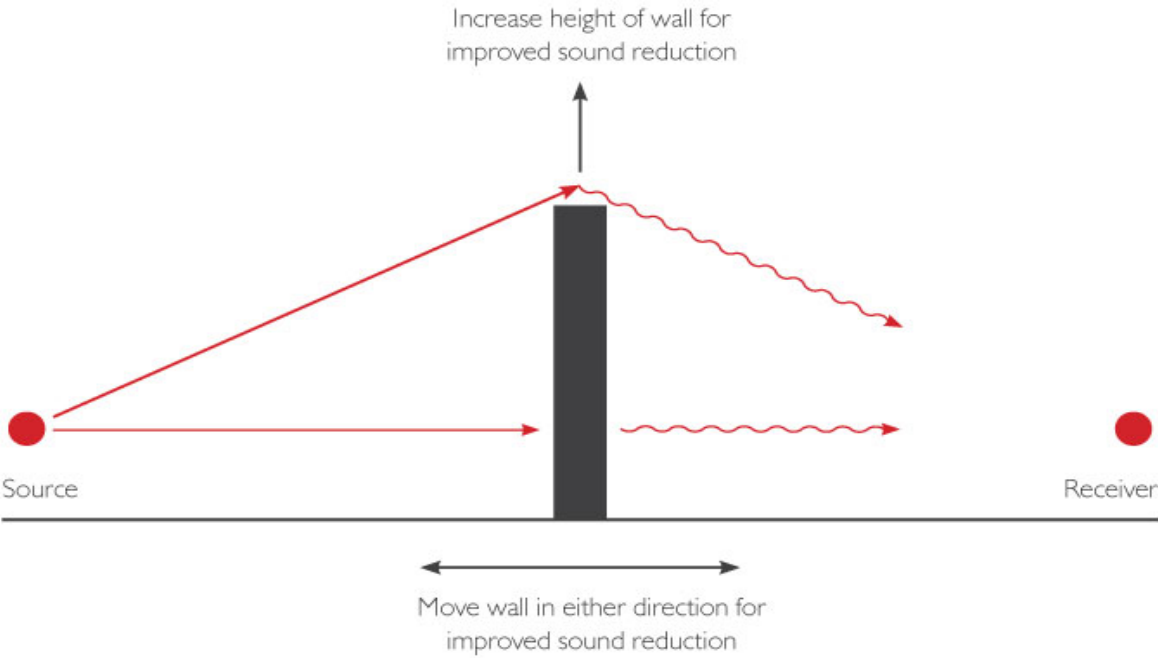
Modular construction and light-weight materials mean heavy equipment is not required for installation and the complete wall is be constructed alot quicker than traditional masonry with minimum site disturbance.

Sound Insulation

The BelAire wall panel is designed with a polystyrene core which has the added benefit of an effective sound barrier. This has been tested by the Australian National Acoustic Laboratories to block up to 28 decibels of noise.



Noise Report Available on Request



ATF Report 1825
Client Name: Garden Wall Systems

Testing Office: G. Cole-Thorne

FILLER WALL + SAMPLE

Test Conditions: Total Area Under Test (m²): 9.93, Temperature (°C): 23.9, Relative Humidity (RH (%)): 65.3, Receiver Room Volume (m³): 300, Speed of Sound (m/s): 345.34

Calculated STC: 35, Calculated R_w: 31

Acoustic Average of Transmission Loss from 125Hz to 2000Hz: 35

1/3 Octave Results: Frequency (Hz), Sound Energy (dB), Transmission Loss (dB), R_w Rating: 33

DID YOU KNOW: WHEN SOUND A INCREASES BY 10 DECIBELS, THE SUBJECTIVE RESPONSE IS A DOUBLING OF LOUDNESS
Example: 60 decibels to 70 decibels = twice as loud

High Impact Resistance

BelAire
DESIGNER FENCING

CREATING YOUR CORNER OF THE WORLD



Stone Impact Test - A steel striker in a pendulum action was used to replicate a 30Nm concentrated blow. The impact is observed and Reported
NSW RTA R271 Specification



Load Test - Bricks are progressively and evenly loaded onto a panel and the deflection measured upto failure

Shot Put Test:

Over View:

A 4kg shotput is dropped onto a supported panel and the deflection and impact damaged measured and assesed.

Test:

Height: 3.0m Drop onto a 70mm BelAire Panel supported as per installation method.

Location of test: BelAire Fencing Factory

Wall Type: Signature wall

Deflection Rate: 8mm Maximum deflection Depth

Panel Servicibility after impact: Still Servicible

Panel Structual Integrity: Unafected

Panel Repairable: Yes

Conclusion

The panel was both stuctually and visually servicable after impact. No immediate repair was necessary & non-repair of the panel would not be detrimental to the performance of the panel's intended function



Shotput Test with a 4kg Shotput Dropped from 3mtrs high

The materials of the BelAire fence offer high impact resistance. In the case of extreme damage such as vehicle impact, complete panels can be replaced easily.

Product Specs

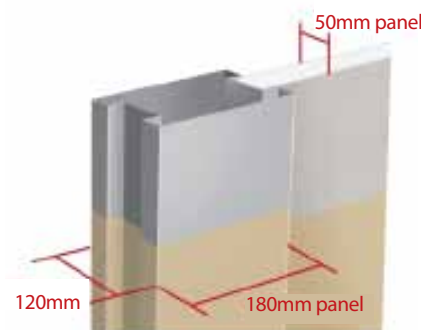
BelAire
DESIGNER FENCING

BelAire Designer Fencing offer 3 different wall types:

- Wall Types: Classic, Signature & Estate
- Wall Heights: 900mm – 3000mm

Classic: Available heights from 900mm – 2100mm

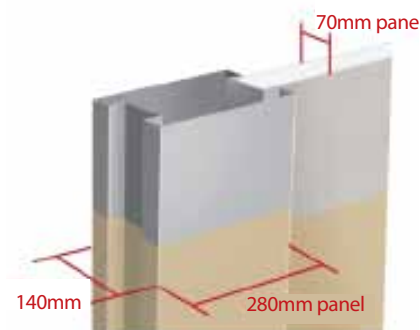
Classic walls have an overall panel thickness of 50mm and a 80mm top wall capping. Posts measure 180 (face) x 120mm (depth). Each standard section has an effective coverage of 2.53 or 2.83 meters, post centre to post centre. The classic wall is the most cost effective of the 3 styles and most commonly used in domestic boundary/screening wall applications. This style of wall will also supply great sound reduction qualities.



Wall Panel: 50mm thickness - Density of composite panel materials: 15.49kg m²
Posts: 180 (width) x 120 (depth) x 0.95 mm BMT
Post centres: 2530mm & 2830mm

Signature: Available heights from 900mm – 3000mm

Signature walls have an overall panel thickness of 70mm and a 100mm top wall capping. Posts measure 280mm (face) x 140 mm (depth) and designed around a single brick in width. Each standard section has an effective coverage of 2.63, 2.93 or 3.23 meters, post centre to post centre. The Signature wall is most commonly used where a true masonry wall look is desired or in a commercial security/sound wall application. The wall has superb sound reduction qualities (National Acoustic Laboratory tested)

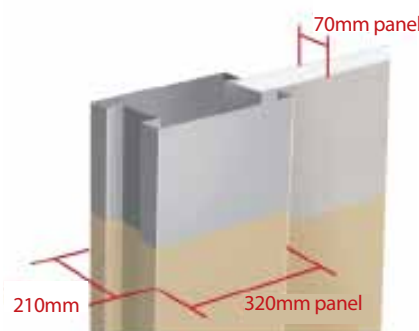


Wall Panel: 70mm thickness - Density of composite panel materials: 15.49kg m²
Posts: 280 (width) x 140 (depth) x 0.95 mm BMT
Post centres: 2630mm, 2930mm & 3230mm

Estate: Available heights from 900mm – 3000mm

Estate walls have an overall panel thickness of 70mm and a 100mm top wall capping. Posts measure 320 (face) x 210 mm (depth). Each standard section has an effective coverage of 2.68, 2.98 or 3.28 meters, post centre to post centre. The Estate wall is most commonly used where a true 'Grand' masonry wall look is desired. The post face is equivalent to a brick & a half in width. The wall has superb sound reduction qualities (National Acoustic Laboratory tested)

Wall Panel: 70mm thickness - Density of composite panel materials: 15.49kg m²
Posts: 320 (width) x 210 (depth) x 0.95 mm BMT
Post centres: 2680mm, 2980mm & 3280mm



CREATING YOUR CORNER OF THE WORLD

For more pics and product specs see: www.belairefencing.co.nz

BelAire Solid Panel Wall

CREATING YOUR CORNER OF THE WORLD

BelAire
DESIGNER FENCING



For more pics and product specs see: [WWW.belairefencing.co.nz](http://www.belairefencing.co.nz)

BelAire Solid Panel / Louvre Infill

CREATING YOUR CORNER OF THE WORLD

BelAire
DESIGNER FENCING



For more pics and product specs see: WWW.belairefencing.co.nz

BelAire Solid Panel / Slat Infill

BelAire
DESIGNER FENCING

CREATING YOUR CORNER OF THE WORLD

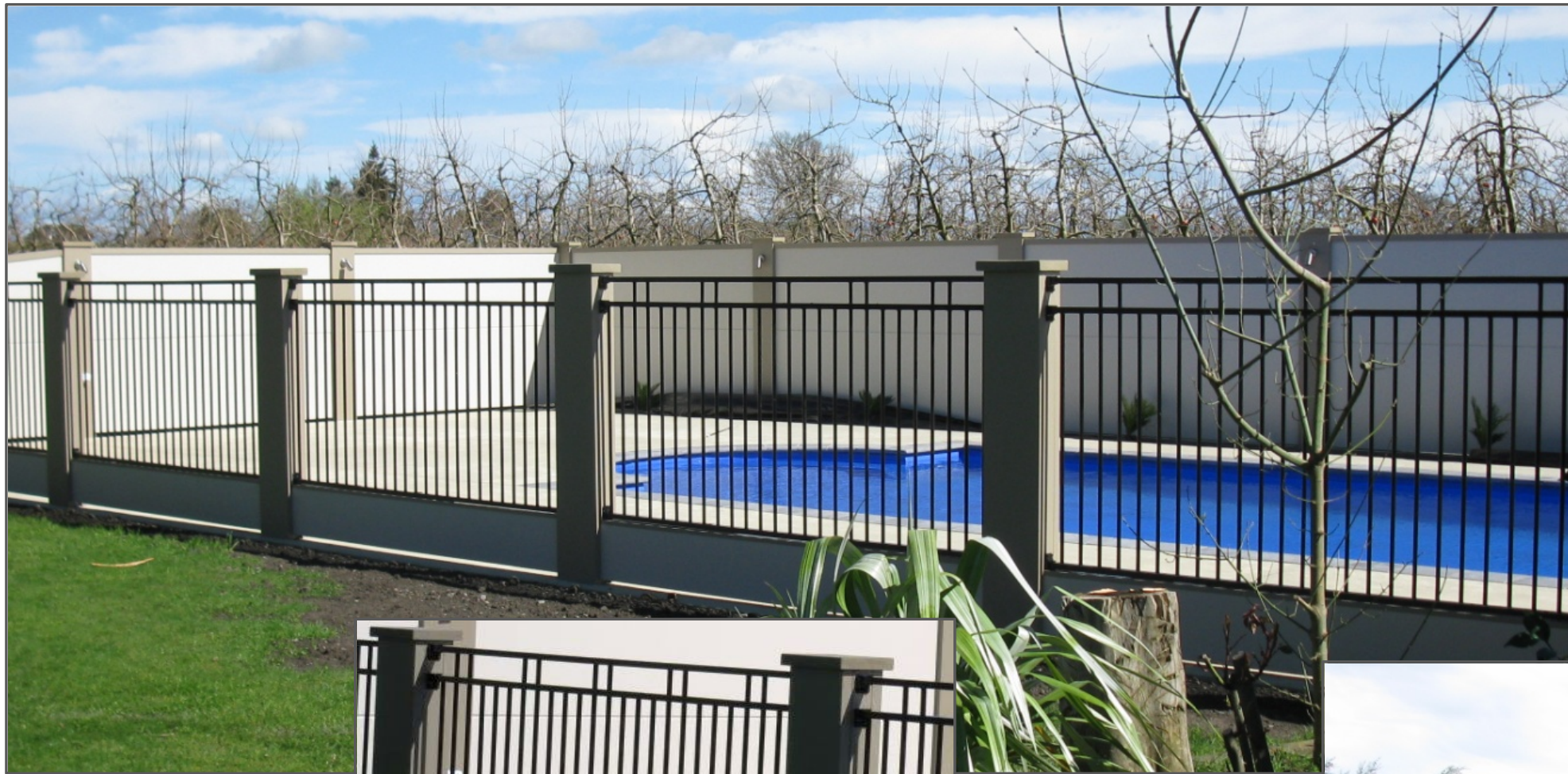


For more pics and product specs see: WWW.belairefencing.co.nz

BelAire Solid Panel / Pool Panel Infill

BelAire
DESIGNER FENCING

CREATING YOUR CORNER OF THE WORLD



For more pics and product specs see: [WWW.belairefencing.co.nz](http://www.belairefencing.co.nz)

BelAire Solid Panel / Noise Walls

CREATING YOUR CORNER OF THE WORLD

BelAire
DESIGNER FENCING



solid walls and fences residential & commercial

Belaire Designer Fencing, PO Box 14175, Mayfair, Hastings, New Zealand
Tel: 0800 belaire (0800 235 2473) ·
Fax: 06 878 5758 ·
Email: sales@belairefencing.co.nz
www.belairefencing.co.nz