



UNEX

ARCHITECTURAL BARRIERS

BALUSTRADES

HANDRAILS

SCREENS

POOL FENCES

www.unex.co.nz

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About UNEX

Since the early-'80s, UNEX has delivered uniquely specific and engineered architectural balustrade solutions for balconies, decks, and pools. We supply our authorised network of fabricators and on-site install teams with fully customisable options to meet every design request, whether it be from an architect or homeowner.

After thousands of projects, from residential homes to high-rise commercial developments, our priority always centres around providing safe and trustworthy views. UNEX styles are backed by strong engineering expertise and testing to meet or exceed the stringent legal requirements of a load being applied.

This expertise is present in every standard installation but also available when a job is outside the normal and needs a custom solution. Added to this, our EziSpec systems gives architects and fabricators Producer Statements with Assembly, Style, and Fixing Specifications for each of our styles. Another system of UNEX's is EziRail, which is a quick and efficient way to obtain full cut lists of materials, lengths, and 3D renders for fabricators.

Support

Our engineering is the bedrock of what formed UNEX. Our reputation of painstaking thoroughness ensures that every component of a UNEX balustrade is tested to meet or exceed the requirements of the NZ Building Code. This is the case for every new product we introduce.

While this is common practise for UNEX, it is also the methodology for site specific designs of homes or 50-storey buildings. Our engineering team regularly provide unique, one-off solutions for any architect or specifier who is looking to push the boundaries of “normal” design.

This ethos of service and support runs throughout the company. Whether it is the pride of routinely delivering in full and on time from month-to-month or the quick turnaround of quoting and estimation. These are services which UNEX operates by helping build relationships which can be relied on from yesterday's ground-breaking, to today's installation, and to tomorrow's conceptual designs.



Building Foundations

With commercial sites, let our installation teams give you one less worry. These teams operate throughout the country and have completed multi-unit apartment blocks and high-rise commercial developments. From the moment of site measurement, which includes cutting-edge stair scanning equipment to provide “made-to-order” handrails, ‘til the last Arena-Point is tightened, our teams are onsite.

UNEX designs and manufactures balustrade systems. In residential instances, UNEX balustrades are only supplied and installed by UNEX’s nationwide network of Authorised Fabricators who have extensive experience with our balustrade systems. It is important to UNEX that the balustrades are installed as per the specifications and are fully compliant with the New Zealand Building Code, so all the fabricators who work with us will be able to quote, supply and safely install our systems.

You can purchase UNEX balustrade systems from an Authorised Fabricator in your area who can be found on www.unex.co.nz.

Framed Baluster Balustrades

UNEX's Framed Baluster category is the most economic choice and one of the core styles for the company. This is the line of products which UNEX was founded upon and where the company's expertise was honed. Fully-framed aluminium balustrades provide strong, reliable and durable options at affordable prices to protect areas at height while preserving the view.

Timeless in its simplicity, all the styles in this category offer clean joins, concealed assembly and rounded edges to suit a multitude of architectural themes.

Ascot



The Ascot style of framed balustrade is a timeless design. A simplistic Framed Baluster design which incorporates vertical balusters from its lower to upper rails as infill and are an economical and aesthetically attractive option.

Windsor



The Windsor style of balustrade has a double-top rail so you have some place to put your feet up as the sun goes down while also having the security of multiple vertical balusters in between each post keeping the lower section safe and secure for little ones.

Wilton



The Wilton style is unique in that this it is the ONLY ONE which allows for corner motifs in either a criss-cross, ring, or diamond shape. This optional feature creates a sense of classic elegance. Double-posts and double top rails give this balustrade a presence from the amount of aluminium used emulating styles typical of the Mediterranean.

Safa-slat



Safa-slat is much more than just a protective balustrade. This style doubles as a balustrade that offers protection at lower heights, but can also act as a screen to provide privacy from neighbours by extending its height or concealing unsightly aspects of a house such as an AC unit.



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Framed Glass Balustrades

The Framed Glass category of balustrades are similar to framed but replace the aluminium baluster infills with toughened glass panels. The structural integrity of aluminium frames still support the widest spans possible to reduce any obstruction even further. For the outlookers this means even clearer views through clear panes of glass or by leaning on the various top rails available. For onlookers, this category lets a home's unique features be seen.

Avon



The Avon style of framed glass balustrade is comprised of the most structurally supportive aluminium framing while also incorporating the greatest amount of glass panel infill. Rectangular top rails give this type of balustrade a minimalist sense often associated with mono-pitch roofs and metallic finishes.

Camden



Camden still has a robustness thanks to the full aluminium frame surrounding each pane of glass. The gap at the top, lets airflow through but also provides the perfect place to put your feet up at the end of the day while watching the sun set.

Siena



Although part of the Framed Glass category, Siena does away with the bottom rail so is 3-sided framing. This style's glass infill spans from post to post in recessed channels and effectively blocks out wind with a full pane of glass infill.

Spectra



Similar to Camden without the bottom rail, Spectra style does it best to do away with a frame while still having a robustness thanks to the top rail linking all the posts together. This style's glass infill spans from post to post but has a gap at the top, to let airflow through in order to deflect most of the harsh elements.



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Semi-frameless Glass Balustrades

Semi-frameless balustrades provide a sleek, stylish style with crisp and slim lines whereby the glass infill panels are recessed into each intermediate post. This allows semi-frameless balustrades to lose the bottom rail causing them to seem suspended off the ground. Unlike many of the other products lines UNEX offers, these styles can have a top rail to lean on or do away with it to offer the clearer vertical sections for each pane.

**These styles require an interlinking side rail whose height shall not be less than the minimum barrier height, as required in F4/AS1.

Vetro



Recessed channels down each post support this style's crisp, clean lines while being significantly more economical than frameless options. A very popular architects' choice, the combination of no top rail with support of aluminium posts is a reliable combination of minimal aluminium use with glass.

Surreal



By reducing the height of each intermediate post, this style obscures even less of the view. This style makes rails optional, allowing it to have a continuous span of viewing at seated height since the top of each panel has no aluminium post to the full height of the glass.



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Frameless Glass Balustrades

The three product styles in this category maximise exposure to the expanse past them. They require only the minimum amount of aluminium to keep them structurally sound. Each style is highly engineered to ensure each span of glass is securely clamped and counter weighted at the base well below the eye line to allow for almost transparent views.

When the sea can be seen or the mountain peaks are just too majestic to not be missed, this product category's minimal visual impact barely detracts from those vistas. The premium feature of all glass balustrades is they keep everything in while letting you look out.

**These styles require an interlinking top rail unless using Sentry Glass.

Metropolis



The Metropolis style is nearly invisible with just a top rail being fitted across the span of the reinforced glass panels set into a channel at its base. True to its name, this style of balustrade is ideal for urban and architectural forward designs of a metropolitan setting.

Panorama



Panorama is simply superb for taking in 360 degree views. This style is one of the most modern styles being nearly invisible and almost non-existent thanks to its channel being side-mounted. Still, the cantilevered aluminium base holds the toughened glass in place providing a balustrade that is as safe and secure as any other on the market.

Arena-Points



Arena-Points is a frameless glass style like no other! The fixing method is also its channel or frame with "points" which are fastened to a substrate with a side-mount making them invisible from a deck or balcony. So there truly is no frame. An added benefit is the points can be polished or brushed stainless steel, powdercoated, or anodised to match a theme.



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Extreme Barrier Balustrades

X1500 Series



The X1500 Series is twice as robust as the typical residential standard balustrade. These balustrades can handle 1.5 kN/m load on the top edge making them ideal for areas and spaces where crowds gather or bulkier residential applications when desired. This series can also handle larger post spacings being based on a 70mm wide suite.

UNEX Extreme Barriers are specifically engineered to comply with the extremely heavy live load classes "C1/C2", "D" or "C5". These codes are the legal requirement of the New Zealand Building Code for public spaces and crowded areas. Both of these styles are available in Framed, and Framed Glass options. Examples of the perfect use for this style of balustrade are:

Bars

- Restaurants, & Cafes
- Sports and Surf Clubs
- Grandstands
- Theatres & Lounges
- School Halls & Gymnasiums
- Shopping & Retail Centres
- Public Pavilions

X3000 Series



The X3000 series strength is twice that of the X1500 series. This style is designed to meet the most stringent compliance and therefore can handle up to 3.0 kN/m load making them ideal for the most extreme need to protect crowds.





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Postless Balustrades

The newest style in UNEX's portfolio of products, also makes it one of the most modern. Finline's continuous row of thin "fins" gives this balustrade system a very slim profile when head-on but has the look of a grill or comb when viewed from the side.

Thin, but strong when in numbers, these fins replace the need for solid posts at set span distances and the variety of colours and finishes available, create a striking feature to any home or building.

Finline





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Rail Types

Rails do more than give someone a place to lean. They also help provide greater rigidity to the overall balustrade system by transferring a load to the posts.

The majority of UNEX styles can be fitted with a number of standard top or side mounted rail types. Each style is interchangeable with the rails shown here.

Whether it is a sleek, low-profile look or a substantial heft and dominance you are wanting, UNEX has rail types to suit any desire. These are the most popular options.

ART



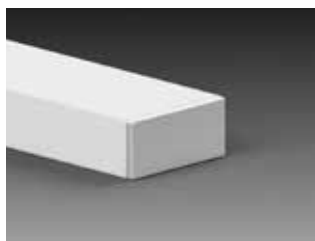
PRR



VRE



VRR



VRT



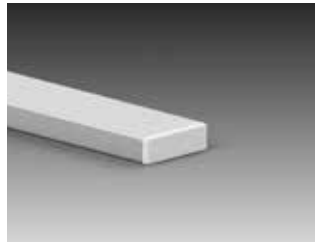
These rail types are much more specific to the pairing of style for both aesthetic and functional reasons.

The CRT is a very thin rail to match perfectly with the very thin fins of Finline.

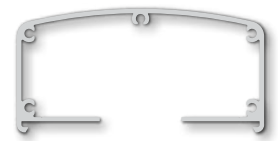
ERT and HRT rail types are specific to the Extreme Barriers as they are heavier and more robust than the other type of rails available. Their wider channels also are engineered to fit the larger posts required to meet NZ standards.

LRR/LRS profiles are round rails which can be universally applied to all the styles and are ideal for handrails (see more about this on the Handrails page, p23).

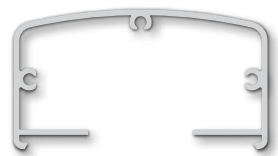
CRT



ERT



HRT



LRR/LRS



Fixing Methods

UNEX's Balustrade systems can be mounted to virtually any substrate for every style. To add to this versatility, nearly each style can be mounted on top of, or to the side of these substrates as well. These features allow for endless solutions to meet any desire or requirement of a renovation or new build.

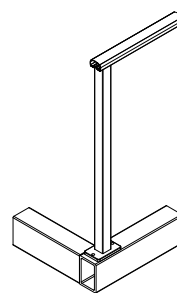
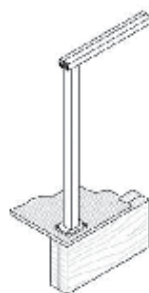
These are just a small sample of the most common examples of various combinations of fixing methods with balustrade type. To see a more comprehensive list of visit unex.co.nz.

Timber

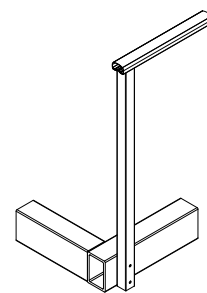
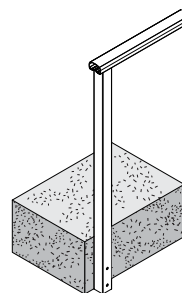
Concrete

Steel

Top



Side

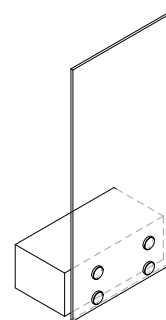
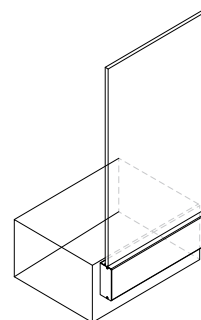
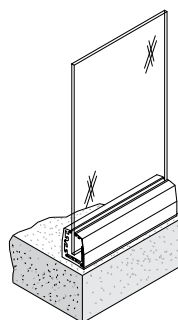


AZM

AZS

Points

Channels



Proprietary Methods

UNEX's ability to engineer solutions for its customers has led them to develop some proprietary solutions for side-fixing balustrades. These brackets were requested so often they are now off-the-shelf solutions.

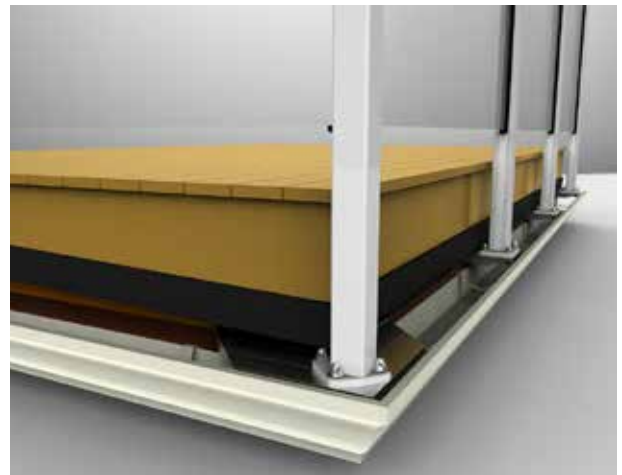
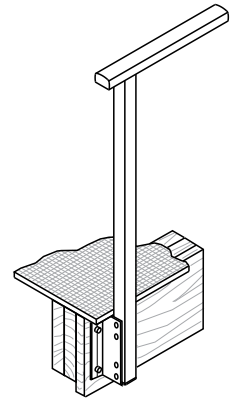
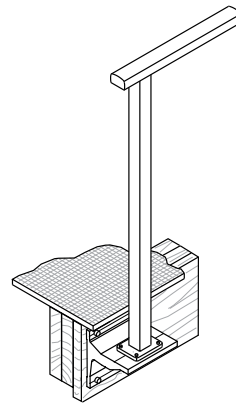
The DKG bracket allows installation of side-mounted posts to fit with external gutters.

The DKF bracket is used when there is an over-hanging drip edge to lift the post far enough out to accommodate water-proofing of decks while keeping them aligned.

Side

DKG

DKF



Exclusive Supplier of:

CLEAR EDGE

glass systems

These screen systems are manufactured and exclusively distributed throughout New Zealand by UNEX. This retractable glass screen is set in aluminium channels which are suspended and supported by tracks allowing these screens to be removed out of the way on the nice days and closed to keep out the inclement weather on the not-so-nice ones.

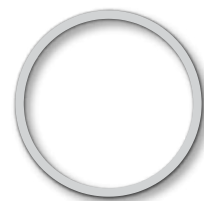


UNEX Hand and Interlinking Rails

UNEX handrails are understated but provide the helping hand(rail) people need. Whether it be the elderly, injured or little ones, they are easy to hold and engineered to be robust whilst still stylish. Handrails alongside stairwells give extra assurance by acting as an assisting or braking to aid when going up or down.

They are non-welded for smooth, continuous, and customised lengths which are faster and easier to install with Stainless Steel fixtures. All to meet the highest standards.

LRR



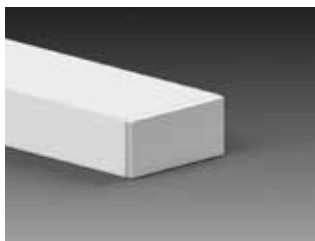
LRS



VRT



VRR



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