
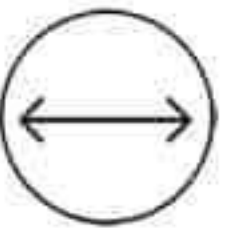


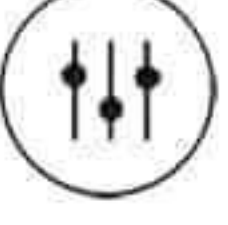


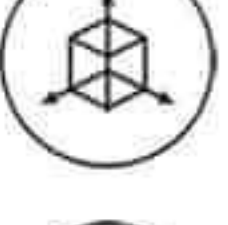





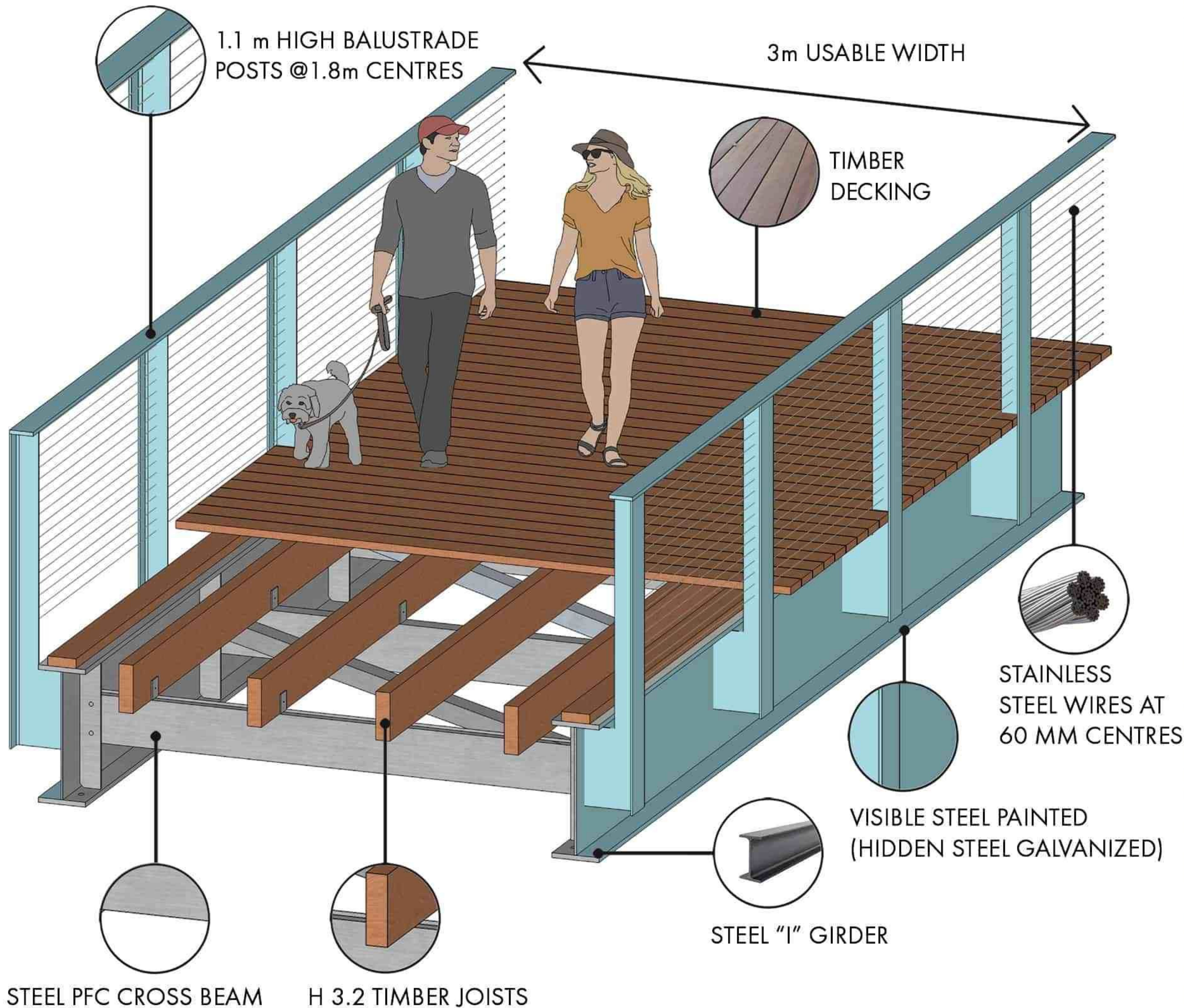


# NZ PEDESTRIAN FOOTBRIDGE WITH HORIZONTAL WIRE BALUSTRADE

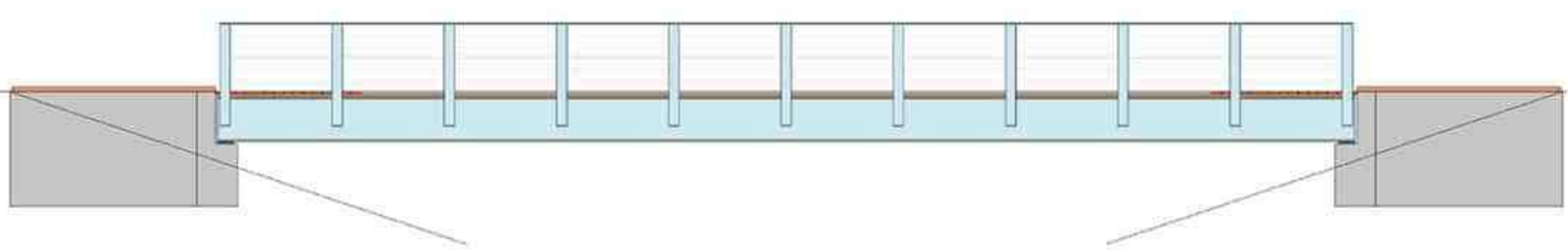
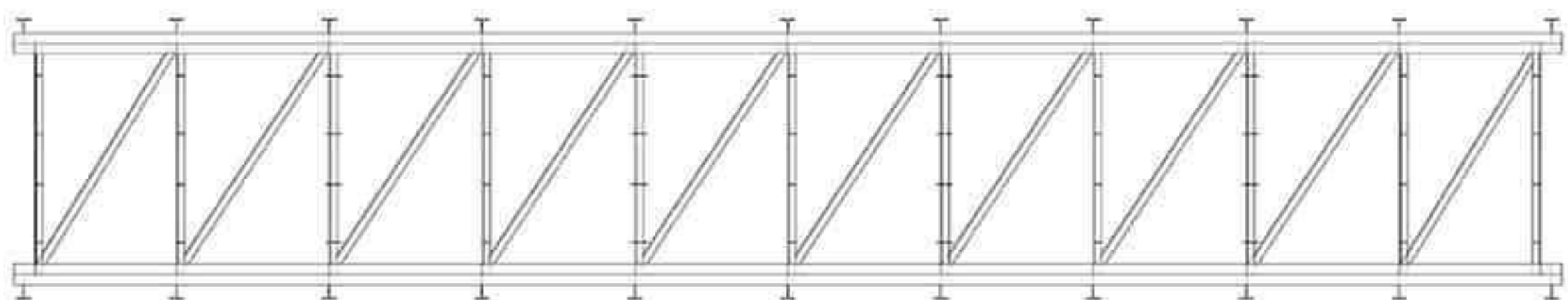
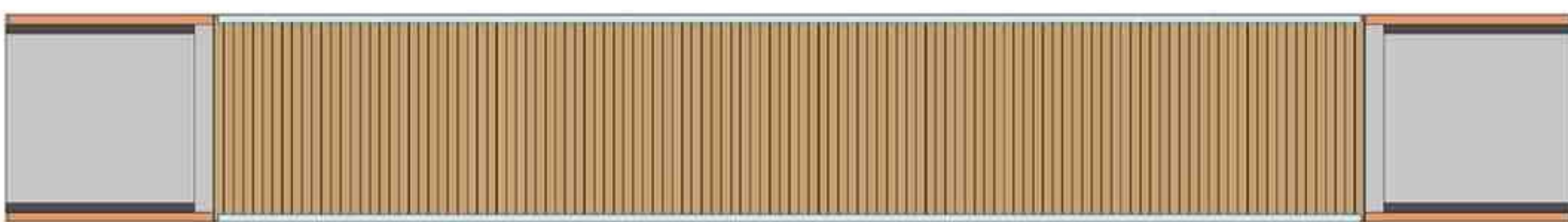
This balustrade option features horizontal balustrade wires. Horizontal wires are a cost effective and low maintenance option for NZ bridges. The horizontal wire infill system is common place on New Zealand cycle bridges as they allow a lightweight aesthetic whilst proving a safe restraint to users\*.

Because the infill wires are made from stainless steel they provide optimal long-term durability compared to contemporary painted steel rod or steel plate infill systems. Using this system reduces overall fabrication and whole of life maintenance costs for the bridge.

-  Fully code compliant.  
Designed for New Zealand conditions in accordance with New Zealand Design Standards.
-  Spans up to 18m.  
Reduce by multiples of 1.8m for smaller spans e.g. can also work for 16.2m, 14.4m, etc.
-  Designed for 3.0m wide footways.  
Can be easily reduced to other widths without further design
-  Balustrade heights of 1.1m.  
Posts are fabricated by cutting universal beams to reduce welding and fabrication costs.
-  Architectural flexibility.  
Alternative balustrade designs can be incorporated to enable the implementation of customised – but cost effective – project specific architectural merit.
-  Full colour versatility.  
The steelwork can be finished to a vast array of different colours including most of the Resene and/or Dulux colour palettes.
-  Includes full superstructure design drawings.  
Enables fast and simple detailed design and fabrication stages.
-  3D models available.  
SKP files can be provided so that the design can be quickly added to landscape architect or urban developer masterplans.
-  Thoughtful economic Vs. aesthetic balance.  
Only the visible elements of the steelwork are painted. All of the internal steelwork is galvanized or zinc sprayed. This provides an excellent balance of aesthetics to cost.
-  Environmentally friendly.  
Acrylic elastomeric paint systems can be used directly over the existing paint system during bridge maintenance and touch-ups which prevents the need for sand blasting over waterways.
-  Good “whole of life” cost.  
The 100 year overall design life exceeds the NZ Building Code (NZBC) requirement of 50 years. Achieved with minimal additional cost thus providing good whole of life cost for clients. Time to first maintenance for steelwork paint systems is 40 years and timber replacement after 50 years.
-  Cost effective solution.  
The estimate for this bridge is approximately \$3,500 per metre square. Our estimates are provided by True-Cost NZ and they include allowance for a concrete abutment with piled foundations, wingwalls to tie into existing ground levels, structural design, geotechnical design, and fabrication/erection costs (this is a full “no surprises” estimate). Examples:
  - 14.4m x 2m wide bridge ≈ NZ\$100,000
  - 18m x 3m wide footbridge ≈ NZ\$190,000Contact us for more details relating to the estimate assumptions.
-  Safe and quick construction.  
Time on site can be significantly reduced by fabricating the entire superstructure (including balustrades) off-site. Bridge is designed to be transportable in single piece (depending upon site access). It can be lifted into place once the abutments are complete.



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\*Please note that this system incorporates a horizontal infill system that is not strictly in accordance with NZBC F4. We strongly recommend that this system is pre-agreed with your consenting authority at the earliest opportunity. Since bridges are not strictly speaking buildings (as intended by the NZBC) and the presence of unaccompanied children under 6 years of age is less likely, councils often agree to the use of horizontal wires because of the improved durability and lower capital costs incurred. We have numerous examples where this has been accepted by Council.