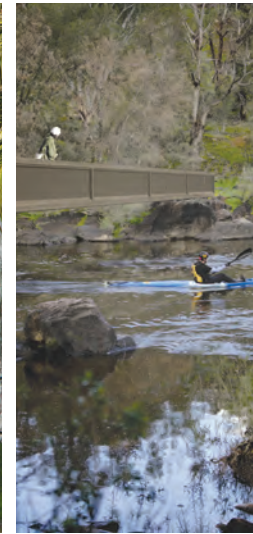


capital**bridges** *universal FLAT PACK solution*



- *A world first: All FRP (Fibre reinforced polymer - composite) pre-engineered 'kit' construction.*
- *Maintenance free: Durable quality finished moulded materials.*
- *100 year Design Life: With infused colouration - and no painted surfaces.*
- *Standard configurations:*
 - Spans: to 30+ metres*
 - Widths: 1.5m, 2.0m, 2.5m, 3.0m (enquire for custom dimensions)*
- *Balustrades: Generous 1.2 metre height, open or infilled.*
- *Prefabricated Components: Lightweight construction.*
- *Convenient procurement: Immediate pricing, documentation and certification.*
- *Packaged delivery: via 6m (20') container.*
- *Easy assembly comprising three (3) standard components and details.*
- *Fully compliant engineering: See data sheet.*



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Engineering

Engineering design is in accordance current international standards for FRP, including;

- EN 1990:2002 Basis of Structural Design (Design load and capacity reduction factors)
- Eurocomp, Structural Design of Polymer Composites (Code & Handbook)
- Prospect for New Guidance in the Design of FRP Report EUR 27666 EN 2016
- Australian Standard AS 5100 Bridge Design

Design Load Criteria

Design loads comply with the following:

1.0 Deck Imposed Loads

- To BS EN1990:2002 Basis of Structural Design, for defined bridges, general walkways, gangways and other building structure.
- Basic imposed load 5kPa, adjusted for tributary length, as appropriate. i.e. Minimum of 5kPa or $2 + [120/(\text{Span}+30)]$
- Park Tractor loads to Australian Standard AS 5100.2 Bridge Standard 20kN point load

2.0 Imposed Lateral Balustrade Load

- To Australian Standard AS1170.1 Permanent, Imposed and other Actions 0.75 kN/m

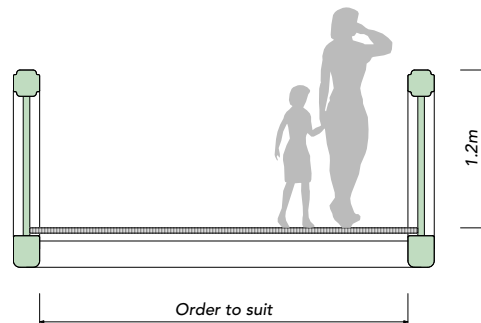
3.0 Wind and River Flow: Drag, Buoyancy, Debris and Log Impact Loads

- To Australian Standard AS1170.2 Wind Actions, and
- Australian Standard AS 5100.2 Bridge Design.
- Assessed on a case by case basis.

Foundations

Load reactions and requirement for foundations are provided for each application.

Footings require four (4) simple holding down attachments necessary to secure the superstructure.



Quality Assured

Manufactured in compliance with ISO 9000 QA procedures, all materials are endorsed by product manufacturers and recorded to ensure traceability. Pre-fabricated components, such as the moulded e-glass flooring and pultruded sections are independently tested and certified to confirm compliance with required standards.

Engineering properties and geometric tolerances of manufactured standard components are load tested for compliance with European FRP guidelines via EN and /or ASTM specifications.

All components are fully quality endorsed prior to packing and delivery; including labelled parts with individual test certificates.

Assembled using standard rigging practices. Documentation provided includes detailed assembly and lifting instructions and QC checking procedures.

Test Loading

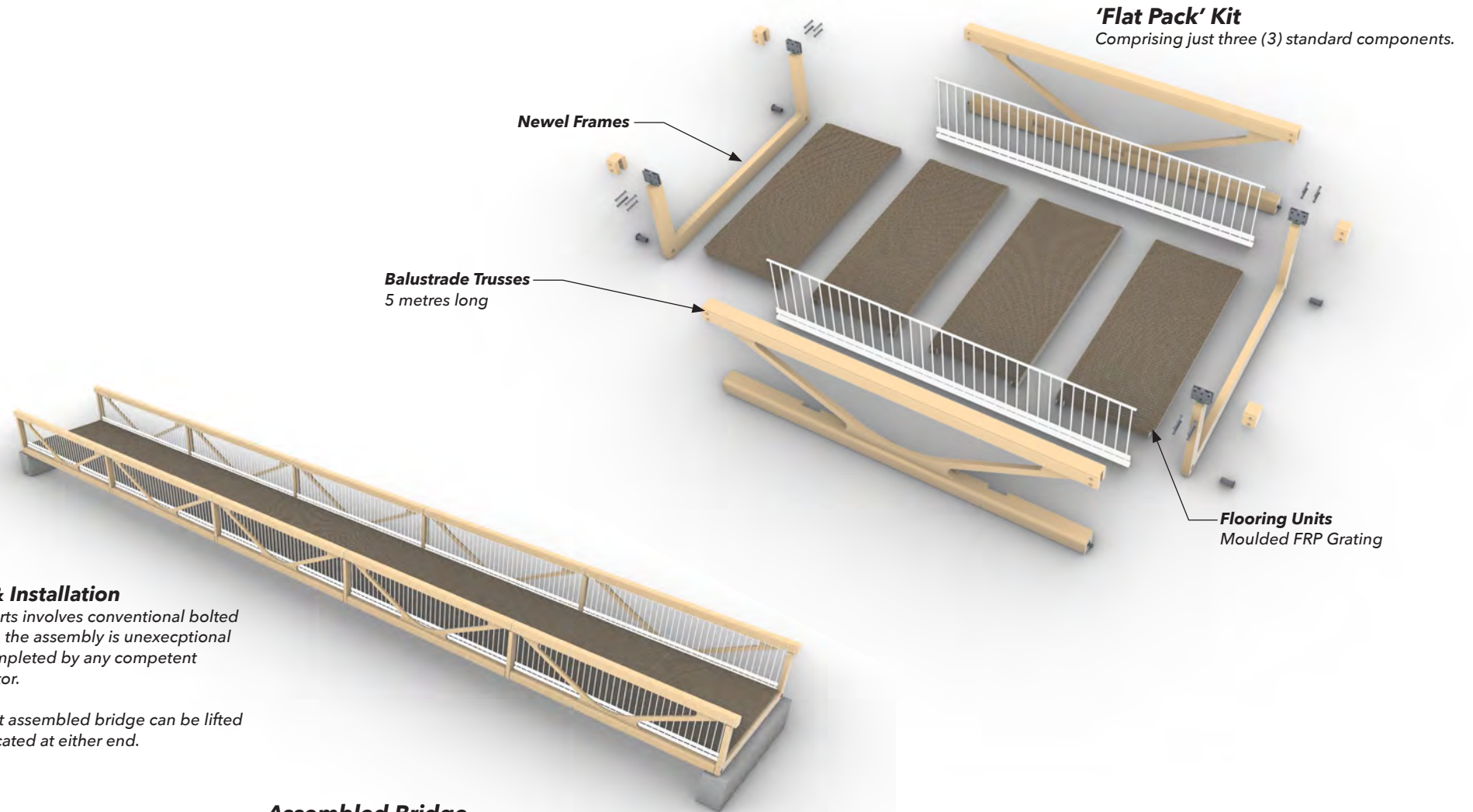
All primary members - trusses and beams - are factory proof loaded using a custom test rig to confirm design strength and stiffness have been achieved.

Certification

Design documentation, certification and QA documentation is provided for each bridge to satisfy local statutory requirements, and to confirm adherence to international standards.



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'Flat Pack' Kit
Comprising just three (3) standard components.

Newel Frames

Balustrade Trusses
5 metres long

Flooring Units
Moulded FRP Grating

Assembly & Installation

Coupling of parts involves conventional bolted joints. As such, the assembly is unexceptional and can be completed by any competent steelwork erector.

The lightweight assembled bridge can be lifted using slings located at either end.

Assembled Bridge

Illustrated: A 25 metre span option.