

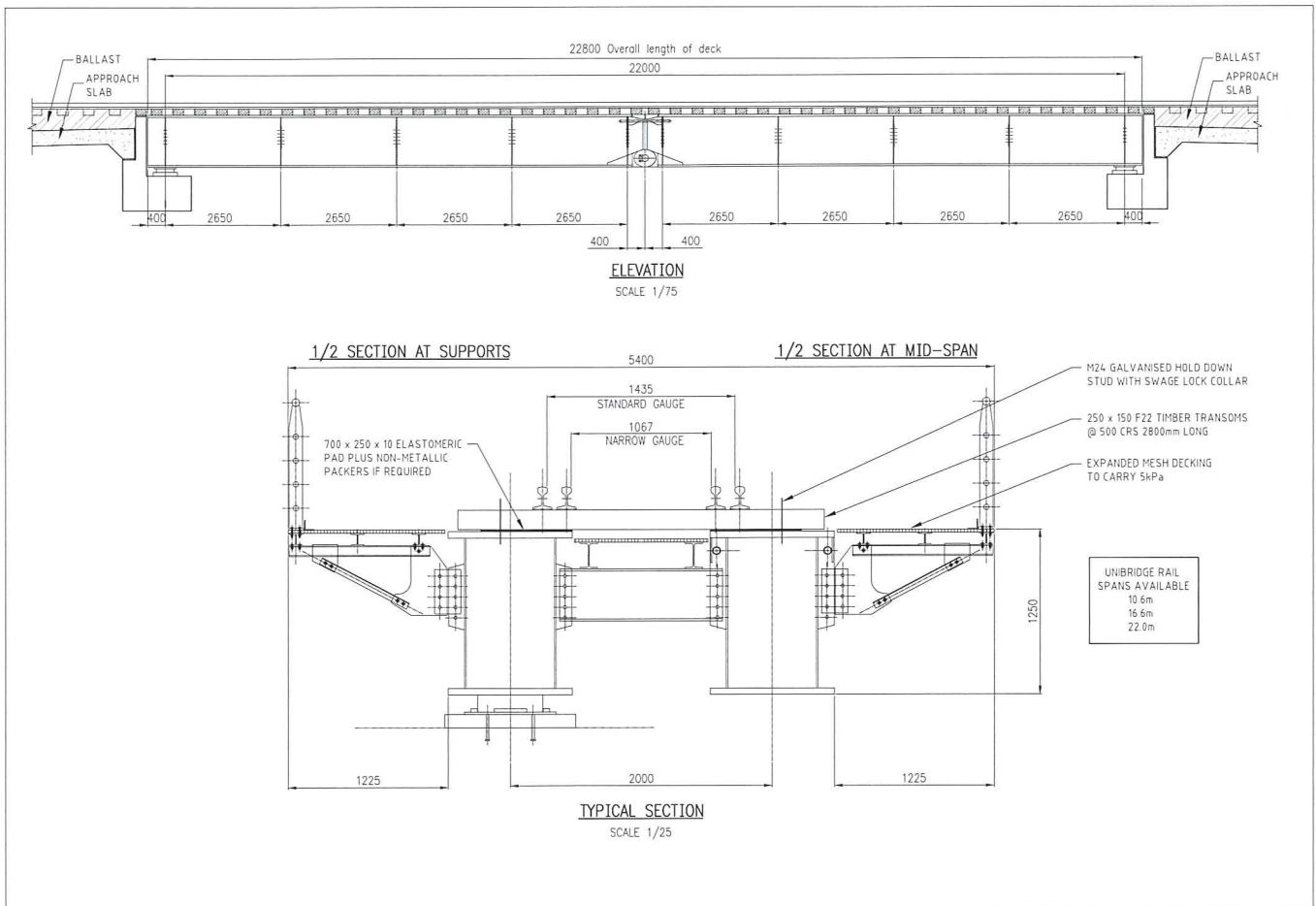


A patented modular steel bridge construction system

The UNIBRIDGE[®] system is a new and innovative pre-engineered steel bridge concept. It eliminates most individual design costs and allows for the rapid construction of bridges for a wide variety of applications using a number of modular standardised elements.

UNIBRIDGE[®] Rail Solution Advantages:

- Savings on design costs, transport costs, downtime, installation time.
- Each UNIBRIDGE[®] module can be transported with standard trucks or semi trailers without any restrictions, either for overload or oversize.
- Very quick installation on pre-built abutments or piers.



UNIBRIDGE® Rail Solutions have been conceived for temporary railway applications, where a railway bridge needs to be installed very rapidly to replace either a damaged bridge (accident or earth tremor) or an existing bridge under repair or heavy maintenance.

- A UNIBRIDGE® Rail bridge can reach up to 22m clear span with two 1.25m deep girders side by side to accommodate one set of rail per bridge, while meeting most current rail load specifications in Australia and New Zealand.
- Each UNIBRIDGE® Rail module consists of two fabricated box girders of 11.4m length with one single connection, fully painted and ready for assembly with spacers, nuts and bolts, connecting pins and anchorage pads. The standard kit also includes two lateral pedestrian side walks recommended for safety reasons.
- No additional welding or machining is required on site during the assembly of a UNIBRIDGE® Rail bridge.
- The installation of UNIBRIDGE® Rail on pre-built abutments adapted to the geo-physical requirements of the site will only take a few days or sometimes hours, if access to the site allows the use of a heavy mobile crane.
- UNIBRIDGE® Rail Solutions can be moved easily to another location. They are a permanent asset to the company and can be used time and time again – they are never obsolete.

Basic Module (either 11.4m or 6m)

Two fabricated box girders of same length and type (Single Connection or Zero Connection) either 11.4m or 6.0m, fully painted and ready for assembly with spacers, nuts and bolts, plus connecting pins and anchorage pads.

Pedestrian Side Walk including guardrails (either 11.4m or 6m)

At least one Pedestrian Side Walk is to be purchased as part of the Basic Module, and two are recommended.

Code

RL = Rail Application (rail application girders are always 1.25m high)

BM = Basic Module (see definition above)

ZC = Zero Connection

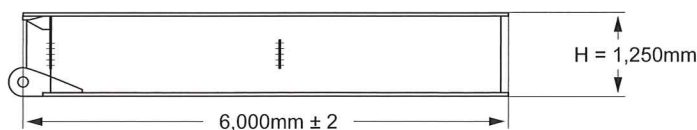
SC = Single Connection

PD SW = Pedestrian Side Walk

Box Girder

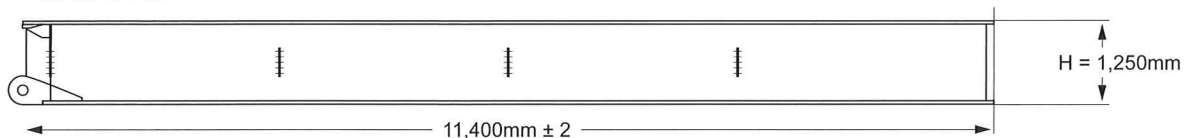
Single connection box girder

RL BM 600 SC



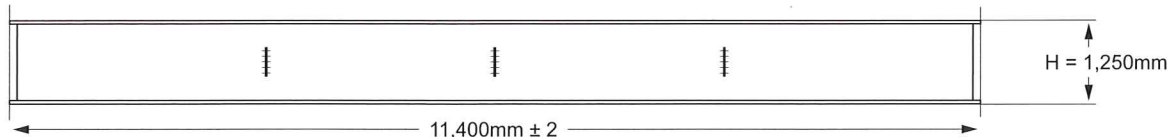
Single connection box girder

RL BM 114 SC



Zero connection box girder

RL BM 114 ZC



Definitions

There are two lengths of box girders, 6.0m and 11.4m. The length of the girders is measured from the center line of the axle to the end of the girder as shown on the diagrams.

The 6.0m girder is only available with a single connection.

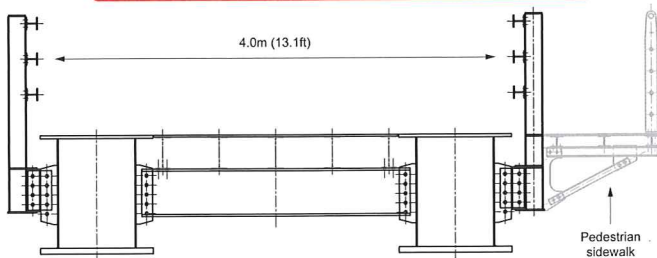
There are 2 types of 11.4m box girders:

- Single Connection girder (code RL BM 114 SC)
- Zero Connection girder no connection (code RL BM 114 ZC)

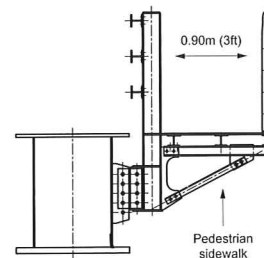
The height of all Unibridge Rail Solution box girders is 1.25m.

Configuration

Single module & pedestrian sidewalk



Pedestrian Sidewalk



Double module

A double module is twice the length of a single module. ie 22.8m

Weights

Some examples of component weights for single connection 11.4m and 6.0m girders and modules

- Standard Box Girder H 1.25m L 11.4m*: 10,925kg (24,086lbs)
- Standard Box Girder H 1.25m L 6.0m: 5,800kg (12,775lbs)
- Complete Module Single Lane H 1.25m L 11.4m*: 29,850kg (65,808 lbs)
- Complete Module Single Lane H 1.25m L 6.0m: 16,025kg (35,439 lbs)
- Pedestrian Sidewalk: 800kg per linear meter (147lbs/ft)

NOTE: Two fabricated box girders of same length and type (Single Connection or Zero Connection) either 11.4m or 6.0m, fully painted and ready for assembly with spacers, nuts and bolts, plus connecting pins and anchorage pads. Transoms and rails are not included.

For more information about Unibridge®, visit
www.unibridge.net.au or email info@unibridge.net.au