Key features
- Modular flexibility
- No-weld assembly
- Flat pack delivery
- Reduced corrosion
- Colour options
- BIM & CAD Support

Applications suited to
- Cycle paths and bikeways
- Shared pedestrian paths
- Protection over culverts
- Footbridges
- Refer to applicable Aust Standards and Building Codes.

Specification Summary
Supply and install the proprietary Bridgerail™ BR10 barrier system to substrate according to Moddex specifications, or by a Moddex accredited installer.

Technical Data

<table>
<thead>
<tr>
<th>Material</th>
<th>Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stanchions, rails &amp; balustrades</td>
<td>Steel/grade 250 &amp; C350</td>
</tr>
<tr>
<td>Clamp fittings</td>
<td>Ductile iron</td>
</tr>
<tr>
<td>Clamp locking screws</td>
<td>Stainless steel (304)</td>
</tr>
<tr>
<td>Protective coating</td>
<td></td>
</tr>
<tr>
<td>Stanchions, rails and balustrades</td>
<td>G390 Hot-dip Galvanized (min 390g/m²)</td>
</tr>
<tr>
<td>Clamp fittings</td>
<td>Hot-dip Galvanized with patented protective coating on threads</td>
</tr>
<tr>
<td>Optional</td>
<td>Powder coating and paint specs</td>
</tr>
</tbody>
</table>

Dimensions
- Variable depending on building/application/code

Stanchions
- Dimensions: 370mm high
- Nominal Thickness: 16.0 mm plate

Rails
- Diameter: 60.3mm OD
- Nominal Thickness: 4.5mm

Base Plate
- Nominal Thickness: 16.0mm

Clamp fittings
- Thickness: 5.0mm (approx)
- Locking screws: M12 x 1.75 x 11mm - DEXX® Drive

Expansion Joint
- Diameter: 48mm
- Length: 300.0mm
- Material: Steel Hollow Bar

Fixings
- Stanchion attachment to:
  - Concrete: M16 mechanical concrete anchors or cast in studs/ferules as specified.
  - Structural steel: M16 galvanized high tensile bolt set

*Other fixing options are available on request

Compliance
Moddex balustrades and handrails are designed and manufactured in accordance with Austroads Guide to Road Design and relevant statutory WHS Codes of Practice/Guidelines, including AS5100.2.2017 CL12.5. Galvanized to AS 4792 and AS/NZS 4680:2006 (where applicable).

The manufacture of Bridgerail proprietary systems is in accordance with Moddex specifications and manufacturing processes, and this may differ to some jurisdictional specifications for steelwork fabrication, bridges and related structures.

Testing
Stringent vibration endurance tests have been performed and independent testing has been carried out to confirm the suitability of the Moddex system in maritime conditions.

Warranty
5 years from date of purchase subject to correct installation, use and maintenance in accordance with manufacturer’s specifications and recommendations, unless otherwise negotiated at the time of purchase.

Inspection & Maintenance
Visual inspection for any damage or loose fixings must be done periodically and prior to use. No certified maintenance required. Basic wear and tear preventative maintenance is recommended, as per manufacturer’s specifications and recommendations.

Design Life
Standard design life of barrier is 100 years in C2 corrosivity zones.
5.5.3 The installation of a fence at the side of a path used by cyclists is desirable where:
- there is a steep batter or large vertical drop located in close proximity to the path,
- the path is adjacent to an arterial road and it is necessary to restrict cyclist access to the road,
- a bridge or culvert exists on a path,
- a hazard exists adjacent to a particular bicycle facility,
- cyclists are likely to be "blazing a separate trail" at an intersection between paths or around a path terminal.

**Mount Dimensions**

**T4 - Top Mount (4 Fixings)**

**Expansion Detail**

**Standard References**

**Austroads Guide To Road Design; Part 6A**

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**Australian Standard Bridge Design; Part 2**

This Standard was prepared by the Standards Australia Committee BD-090, Bridge Design, to supersede AS 5100.2—2004. The objectives of the AS(AS/NZS) 5100 series are to provide nationally acceptable requirements for—
- (a) the design of road, rail, pedestrian and cyclist path bridges;
- (b) the specific application of concrete, steel, timber and composite construction, which embody principles that may be applied to other materials in association with relevant standards;
- (c) the assessment of the load capacity of existing bridges; and
- (d) the strengthening and rehabilitation of existing bridges.

The objective of this Part (AS 5100.2) is to specify minimum design loads and load effects for road, rail, pedestrian and cyclist path bridges, and other associated structures.

The requirements of the AS(AS/NZS) 5100 series are based on the principles of structural mechanics and knowledge of material properties, for both the conceptual and detailed design, to achieve acceptable probabilities that the bridge or associated structure being designed will not become unfit for use during its design life.