# **Top Rail / Mid Rail**Bikeway barrier with offset top rail and midrail for level and rake





#### **Key features**

- Modular flexibility
- > No-weld assembly
- > Flat pack delivery
- Reduced corrosionColour options
- > Available ex-stock
- > BIM & CAD Support

#### Applications suited to

- > Cycle paths and bikeways
- Shared pedestrian pathsProtection over culverts
- > Footbridges
- > Refer to applicable Aust Standards and Building Codes.

## **Specification Summary**

Supply and install the proprietary BS20 barrier system to substrate according to Moddex specifications, or by a Moddex accredited installer.

# Technical Data

Material

Stanchions, rails & balustrades	Steel/grade C250 & 350
Clamp fittings	Malleable Cast iron
Clamp locking screws	Stainless steel (304)

#### Protective coating

Stanchions, rails and balustrades	G390 Hot-dip Galvanized (min 390g/m²)
Clamp fittings	Hot-dip Galvanized with patented protective coating on threads
Optional	Powder coating and paint specs*

\*The standard process for Powder Coated and Painted handrail products is as follows: black steel is used for fabrication. The steel is sand blasted and a zinc primer coating is applied. The powder coat / paint coat is then applied over the zinc primer creating a dual shield coating with a decorative finish.

# Dimensions

Variable depending on building/application/

48.3mm OD

## Stanchions Diameter

	41.9mm ID
Nominal Thickness	3.2mm – 4.0mm (loading dependent)
Rails	
Diameter	48.3mm OD 41.9mm ID
Nominal Thickness	3.2mm

## Clamp fittings

Thickness	5.0mm (approx)
Locking screws	M12 x 1.75 x 11mm - DEXX <sup>®</sup> Drive

## Weight

Variable depending on building/application/code

Stanchion with clamps	7.2 to 8.0kg
Rail @ 6.0m	21.6kg
Balustrade Panel @ 2.0m	29kg

#### Fixing

Stanchion attachment to

Concrete	M12 galvanized mechanical concrete anchor
Structural steel	M16 galvanized high tensile bolt set
*Other Fixing options	are availble 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.

Galvanized to AS 4792 and AS/NZS 4680:2006 (where applicable).

## **Testing**

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

Tested and certified to AS/NZS 1170 C3 loadings.

# 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.

— Refer maintenance manual

#### **Inspection & Maintenance**

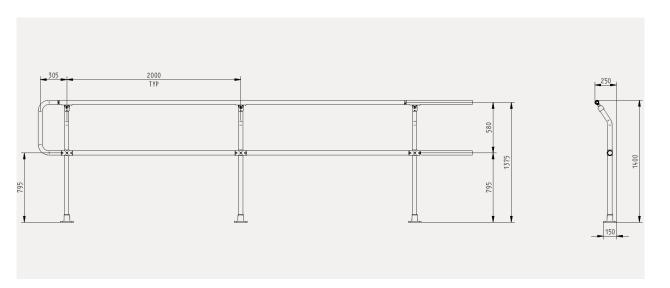
Visual inspection for any damage or loose fixings must be done periodically and prior to use. No certified maintenance required. Basic wear and tear preventative maintenance is recommended, as per manufacturer's specifications and recommendations.

— Refer maintenance manual

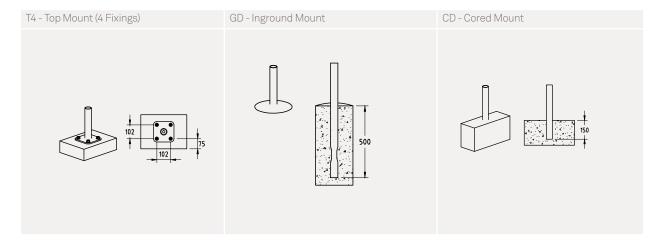
## **Design Life**

Standard design life of barrier is 75 years in C2 corrosivity zones.

# **Technical Information**



## **Mount Dimensions**



# **Standard References**

# Austroads Guide To Road Design; Part 6A

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.

Important Note: Failure to supply and/or install proprietary product in accordance with above Standards and codes, specification and instructions, voids complete system certification and/or warranty.