

Open Box Beam Barrier

Open Box Beam



Open box beam barrier is a high-strength road safety barrier designed for long-term durability and impact resistance. Constructed from high-quality steel and hot-dip galvanized to 550 g/m², it is commonly used in highway and bridge applications across EU countries. The section is manufactured to meet design standards and can be customized for specific project requirements. Production has been ongoing since 2007, with approximately 100 containers shipped annually to the EU since 2010.

Specifications

Standard Size	200 x 150 x 149 x 4800 mm
Thickness	5.00 mm or customized
Steel Grade	Q235B (equivalent to S235JR) / Q345 (S355JR / ASTM A529M 1994)
Surface Treatment	Hot dip galvanized
Zinc Coating	550 g/m ² (80 microns)
Application	Highway, Bridge

TBC: the published specification does not state Standard for this product. Confirm before relying on it.

Key Benefits

- Higher durability and impact resistance compared to standard metal guardrails
- Hot-dip galvanized finish with 550 g/m² zinc coating for long-term corrosion protection
- Lower maintenance cost over the service life compared to other barrier types

- Structural rigidity supports continuous runs on bridges and high-speed roadways
- Customizable section dimensions and steel grades to match project specifications
- Consistent performance across batches due to steel sourced from Tang Steel

Technical Features

- Open box section with 200 x 150 x 149 mm cross-section and 4800 mm length
- 5.00 mm standard wall thickness, with customization available
- Q235B (equivalent to S235JR) or Q345 (S355JR / ASTM A529M 1994) hot rolled steel
- Hot-dip galvanized finish with zinc coating of 550 g/m² (80 microns)
- Designed for highway and bridge applications with high impact resistance
- Splice compatibility ensured through consistent roll forming and hole punching

Materials

- Q235B hot rolled carbon steel, equivalent to S235JR, for standard applications
- Q345 higher strength steel, equivalent to S355JR and ASTM A529M 1994, where higher strength is required
- Steel coil supplied by Tang Steel, ensuring consistent grade and thickness across batches
- Zinc for hot-dip galvanizing applied at 550 g/m², matching the coating weight specified in EU tender documents

Application Scenarios

- Highway and expressway installations where long-term durability and low maintenance are required
- Bridge approaches and deck edges needing robust impact protection
- Urban roadways and park access zones where aesthetic and structural performance are both important
- High-traffic corridors with frequent vehicle run-off-road incidents
- Locations where barrier repair must be done without full system replacement

Installation Notes

- Install posts at the spacing and embedment depth specified in the project drawing
- Attach the beam to the post using bolts and spacers, ensuring alignment and secure fit
- Lap splices in the direction of traffic flow to avoid snagging an impacting vehicle
- Fit terminal ends at both ends of each run and at every opening in the barrier line
- Inspect galvanized coating at cut or drilled points and treat any exposed steel before handover
- Replace damaged sections individually rather than re-running the entire barrier system