

Index 700-091 Catwalk Details (for DMS Signs)

Design Criteria

LRFD Specifications for Structural Supports for Highways Signs, Luminaires, and Traffic Signals; Structures Manual (SM), Volume 3

Design Assumptions and Limitations

For use with overhead DMS signs ***Index 700-090***. Assumed loading is an unfactored Live Load on the walkway of 60 psf with a maximum five-foot span. All walkways must have a 3" minimum height toe kick on the longitudinal edges that will support a 50-pound horizontal load.

Guiderails are designed to support a 200-pound point load and a 50 plf load simultaneously applied in a horizontal and vertical directions.

Base spacing of the supports and the elevation of the walkway/bottom on the DMS sign support.

Plan Content Requirements

In the Structures and/or Roadway Plans:

Include the truss chord spacing, distance from the bottom chord to the support beams the catwalk length, and number of supports required.

Length of catwalk is dependent on accessibility by a bucket truck at the site. As a minimum, extend the catwalk over inside edge of shoulder. Coordinate with the District Traffic Operations and District Maintenance to confirm proper access is available.

Consideration for Approval of Alternative Technical Proposals

Alternate catwalk systems may be considered for approval with concurrence from the District Structures Design Engineer. Fabricators must be listed in the ***Material Acceptance and Certification System (MAC)*** as an approved Metals Production Facility.

Design calculations meeting the wind load and live load requirements for the project site in accordance with the ***Structures Design Guidelines (SDG)***, and minimum ***OSHA*** requirements must be submitted for review and approval by the EOR. Technical Specifications with material and testing requirements should be submitted by the Contractor for approval prior to acceptance of any alternative technical proposal (*Contractor Savings Initiative* for Design-Bid-Build projects, or *Alternative Technical Concept* for Design Build/P3 projects).

Payment

There is no separate payment for the DMS Catwalk. See Specification Section 700 for additional information on payment, pay item use, and compensation.