Index 521-825 42" Concrete Pedestrian/Bicycle Railing

Design Criteria

AASHTO LRFD Bridge Design Specifications; ***Structures Design Guidelines (SDG)***

Design Assumptions and Limitations

Index 825 cannot be used as a traffic railing. A crashworthy traffic railing is required between this railing and adjacent traffic lane.

Use this standard in conjunction with Indexes 521-427 or 521-428.

To preserve the structural integrity, no more than two 2" diameter conduits and associated Embedded Junction Boxes, as shown on ***Standard Plans*** Index 630-010, may be installed within this railing.

This railing is intended for locations where theft of the aluminum components on Index 521-820 is a warranted concern as determined by the District Maintenance Office.

Plan Content Requirements

In the Structures and/or Roadway Plans:

In the Materials Note on the General Notes Sheet, specify the concrete class in accordance with the superstructure or retaining wall environment classification. See ***SDG*** 1.4.

In the Concrete Surface Finish Coating Note on the General Notes, specify any special textured surface requirements and/or colors for the Class 5 Finish Coating (if used). See ***Standard Plans*** Index 534-200 for examples of textured surface options. Use only those with depth or amplitude less than or equal to ½” to maintain 2” cover for reinforcement.

Show and label the 42" Concrete Pedestrian/Bicycle Railing on the Plan and Elevation, Typical Section, Superstructure, Approach Slab and Finish Grade Elevations Cross Section sheets, Retaining Wall Control Drawings, and other sheets as required.

All concrete required to construct the railing and Bars 3R and 4S are included in the Estimated Concrete Railing Quantities. Do not include railing concrete in the estimated concrete quantities, or Bars 3R and 4S in the reinforcing bar lists and estimated reinforcing steel quantities for supporting bridge decks, approach slabs or retaining walls.

Payment

Note: Conduit and EJB are no longer included in the cost of the parapet.

Item number	Item Description	Unit Measure
521-6-12	Concrete Parapet, Pedestrian/Bicycle, 42" Height	LF
521-6-32	Concrete Parapet, Retaining Wall System Mounted with Sidewalk,	LF
630-2-16	Conduit, Furnish & Install, Embedded	LF
635-3-13	Junction Box, Furnish & Install, Embedded	EA