



Florida Department of Transportation

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ANANTH PRASAD
SECRETARY

STRUCTURES DESIGN BULLETIN 13-09

(FHWA Approved: June 13, 2013)

DATE: June 17, 2013

TO: District Directors of Production, District Design Engineers, District Structures Design Engineers, District Geotechnical Engineers

FROM: Robert V. Robertson, P. E., State Structures Design Engineer 

COPIES: Tom Byron, Brian Blanchard, Duane Brautigam, Charles Boyd, Jeffrey Ger (FHWA)

SUBJECT: Adoption of 2013 Interim ***LRFD Bridge Design Specifications***

This Structures Design Bulletin (SDB) adopts the 2013 Interim ***LRFD Bridge Design Specifications***, with one exception.

REQUIREMENTS

1. Replace ***Structures Manual*** Introduction Section I.6.B.5 with the following:
 5. ***LRFD Bridge Design Specifications***, Sixth Edition with 2013 Interims
2. Add the following new section and commentary to ***Structures Design Guidelines***, Section 1.1:

1.1.8 Welding of Aluminum Pedestrian/Bicycle Railings

In ***LRFD*** 7.4.1, the maximum tension limit for welded aluminum alloy 6061-T6 ($F_{tyw6061}$) in pedestrian/bicycle railings shall be taken as 20 ksi.

Commentary: The welded aluminum tensile yield strength of 20 ksi for design using alloy 6061-T6 has been in use since at least 1994. The 2013 LRFD Interims reduced the welded tensile yield strength to match the 2010 Aluminum Design Manual (The Aluminum Association). Successful in-service performance and anecdotal evidence from testing in the FDOT Structures Research Center indicate that 20 ksi is an acceptable limit for pedestrian/bicycle railing structures and shall remain in effect until further research is completed.

IMPLEMENTATION

These requirements are effective on design-bid-build projects not yet executed. These requirements should be implemented on all design-bid-build projects already underway at the discretion of the District where minimal revision to the existing design is necessary.

These requirements are effective immediately on all design build projects for which the final RFP has not been released. Design build projects that have had the final RFP released are exempt from these requirements unless otherwise directed by the District.

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