



AWS D1.1 Interpretation

Subject: Shelf Bars for Horizontal Column Splice Welds
Code Edition: D1.1-84
Code Provision: Subsection 3.6.2
AWS Log: D1-85-018

Inquiry: During the welding of column splices in the horizontal position, it appears to be standard practice in building construction to provide a shelf to facilitate completely filling the joint. The shelf, attached to the lower member (similar to a weld tab), supports the excess weld metal the joint.

(1) Is the use of a shelf for welding column splices in the horizontal position permitted by the Code?
(2) Does the use of a shelf in column splices welded in the horizontal position violate the 1/8 in. maximum reinforcement permitted by 3.12.2?

Response: (1) Yes. The use of a shelf or weld tab is acceptable when welding compression members. For removal, see 3.12.2.
(2) No. The 1/8 in. reinforcement refers to face of unsupported weld metal only; when a shelf or welded tab is used this requirement does not apply.

AWS D1.1, Structural Welding Code—Steel, is prepared by the AWS Structural Welding Committee. Because the Code is written in the form of a specification, it cannot present background material or discuss the committee's intent.

Since the publication of the first edition of the Code, the nature of inquiries directed to the American Welding Society and the Structural Welding Committee has indicated that there are some requirements in the Code that are either difficult to understand or not sufficiently specific, and other that appear to be overly conservative.

It should be recognized that the fundamental premise of the Code is to provide general stipulations applicable to any situation and to leave sufficient latitude for the exercise of engineering judgment. Another point to be recognized is that the Code represents the collective experience of the committee; and, while some provisions may seem overly conservative, they have been based on sound engineering practice.