



AWS D1.1 Interpretation

Subject: Excessive Root Opening
Code Edition: D1.1-90
Code Provision: Subsection 3.3.1
AWS Log: ID1-90-042-04

Inquiry: In accordance with 3.3.1 of the AWS D1.1-90 Code, the root opening of parts joined by fillet welds shall not exceed 3/16 in. in plates or shapes under 3 in. in thickness and 5/16-in. root opening for plates or shapes 3 in. in thickness or greater.

What needs to be done, other than qualifying a procedure, if the root opening exceeds the above dimensions in each case?

Response: For root openings in excess of 3.3.1, qualification testing is not an option, but the Engineer's approval is required for acceptance of any remedial measures or the *in situ* condition.

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.