



AWS D1.1 Interpretation

Subject: Corner Radii
Code Edition: D1.1-85
Code Provision: Subsections 3.2.4, 3.12.1
AWS Log: D1-85-020

Inquiry:

- (1) Is it the intent of 3.2.4 that the intersections of built-up plate girders shall have filleted corners of no less than $\frac{3}{4}$ -in. radius in bridge construction and in building construction?
- (2) Is it the fabricator's obligation to build-up such radii in weld metal in which such transitions have not been created in the base metal?
- (3) Is it the intent of 3.12.1 that the ends of welds not create a sharp cornered "stress riser" condition?

Response:

- (1) No.
- (2) No.
- (3) Yes. 3.12.1 covers termination of welds to ensure sound welds.

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.