CQA - FAQ

FAQ 10.003

PREQUALIFIED COLUMN SPLICE

Q Does anyone have an opinion on whether Figure 1 below would be a pre-qualified joint per AWS (American Welding Society) D1.1? Note there is only a weld access hole in the top tier column, and thus the backing bar does not actually lap past the joint. D1.1 is silent on the actual width of backing. All of the pre-qualified joints with backing shown in the Figures 3.3 and 3.4 show the backing lapping past the joint in butt joints (see prequalified joint B-U4a from Figure 3.4 shown below), but no minimum dimension is ever shown or discussed. In a Tee joint the backing of course stops right at the edge of the joint, but there is continuous base metal along that edge in that case. In the configuration shown below, except at the column web there is nothing behind the intersection of the corners of the backing and the bottom tier column flange.

Submitted by Art Dell, P.E. in San Francisco, California

A Informal Response Submitted by Andrew Davis

“This does not constitute an official position of the American Welding Society or the D1 Committee on Structural Welding”

The code is silent on minimum edge overlap of backing. However, no overlap is not permitted. The overlap should be at least the thickness of the backing bar.

I am told that accepted practice would be to put a weld access hole in the lower shaft web and center the backing. One could also cut a tight notch in the backing to “swallow” the web and center the rest of backing bar at the root opening (see Figure 2 below). However, the EOR (Engineer of Record) should review and approve this approach.

The joint as shown in Figure 1 is not prequalified.

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Prequalified Joint B-U4a from Figure 3.4

Figure 2

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