Steel Interchange

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Steel Interchange
Modern Steel Construction
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design of structures is within the scope and expertise of a competent licensed structural engineer, architect or other licensed professional for the application of principles to a particular structure.
Information on ordering AISC publications mentioned in this ar-

responses to questions from previous Steel Interchange columns have been received:

a smooth contour for the transition between the outside face of the tube and the base plate.

Fourth, a non-destructive inspection of the butt/fillet weld must be conducted. The

cations at my disposal, I would feel safe to utilize and

In my opinion, the above

ds is expected to cause a smaller stress con-
ration than a butt weld with a concave fil-
and definitely with a convex fillet. Therefore, a
nose of ultra and carefully contoured
ons are considered necessary for safety
though they may be costly.
if the fatigue stresses in the subject con-
are relatively low by comparison with the

weld details and welding procedures must clearly be specified by the designer and carefully be followed by the fabricator.

First, to obtain a full penetration butt (or groove) weld, a continuous backup bar (say, 1 x 1/4") that tightly fits to the inside of the chosen column tube needs to be formed and tack welded to the base plate. The tack welds should be placed on the outs

concave fillet

These conditi
reasons eve
But wh
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let

WELD DETAIL

AISC STEEL DESIGN MANUAL AND AWS WELDING REQUIREMENTS

enough respect. I see plans where the engi

Code. Although this paragraph refers specifically to flat bars, it would be prudent to satisfy those provisions for angle shapes as well.

A Code requirement which can easily be misplaced in this situation is paragraph 5.5.1.1(b)