



Channel flange is not of adequate width to allow for a 3/16" weld all around.

- Outside diameter of a 1-1/4" pipe = 1.66"
- Minimum shelf of 3/16" weld = 7/16"
- $1.66" + 7/16" * 2 = 2.54"$  required for fillet weld all-around as indicated
- flange width of MC12x14.3 = 2.12".

Per spec 055100 Section 2.5.A.1.b: "Where railing posts are attached to top flange of stringer, the stringer flange width shall not be less than the outside dimension of the post plus the welds required on each side for strength".

A PJP weld is required at "sides" where shelf is not available, or revise weld design such that an all-around weld is not required (see MSC article "Holding On" by Benjamin Baer from Feb 2009, which may be found here: [https://www.aisc.org/globalassets/modern-steel/archives/2009/02/2009v02\\_holding\\_on.pdf](https://www.aisc.org/globalassets/modern-steel/archives/2009/02/2009v02_holding_on.pdf)).