

MAGNUM TECHNICAL BULLETIN

ISO 9001 TB 008.0



MH536B - CJP BUTT WELD SPLICE SPECIFICATION AND DETAIL

This weld procedure is for Magnum helical pile MH536B only. All welds must be performed by a certified welder. For galvanized piles, remove galvanizing prior to welding per AWS/ANSI Z49:1 "Safety and Cutting in Welding". After welding, replace any galvanizing in accordance with ASTM A780.

This detail is not valid for splices that are subjected to cyclic loading.

Weld Notes:

- The welds shall be Complete-Joint-Penetration and shall have continuous backing, since the weld will be from one side only.
- 2. Per AWS D1.1 Section 5.10.2, the backing is permitted to be made from one or two pieces.
- 3. Per AWS D1.1 Section 5.10.3 *Backing Thickness*, the backing shall have a minimum thickness of 1/4" for GMAW weld process.
- 4. The backing material shall be in contact with the materials being butt welded.
- Backing should extend beyond the width of the root (no specification for overlap found).
- 6. The filler metal strength shall be 100ksi or greater ($F_{EXX} = 100 \text{ ksi}$).
- The root width shall be equal to the wall thickness of the pipe (0.36 inches). Tolerances for this weld can be found in AISC Table 8-2 or AWS D1.1 Figure 3.4, shown in Figure 2.

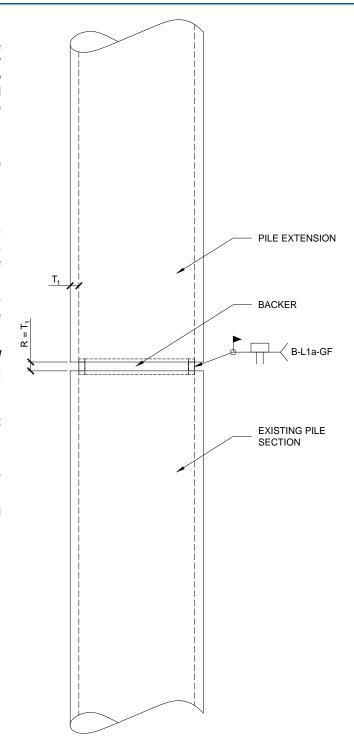


Figure 1. Butt Weld Splice Detail



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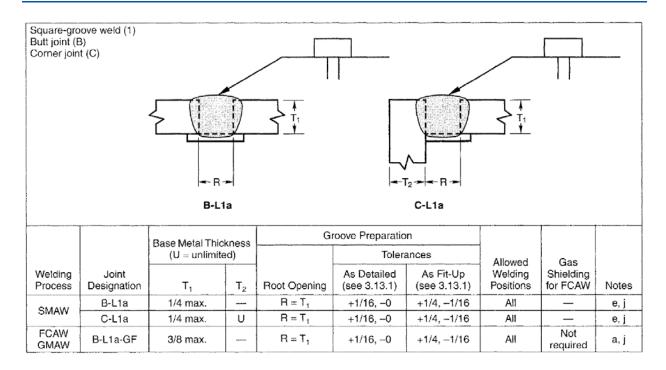


Figure 2. AWS D1.1 Figure 3.4 – Prequalified CJP Groove Welded Joint Details