Figure NC-4427-1
Fillet and Socket Weld Details and Dimensions

(a) Equal Leg Fillet Weld [Note (1)]

(b) Unequal Leg Fillet Weld [Note (2)]

(c-1) Slip-On Flange [Note (3)]

(c-2) Socket Welding Flange [Note (3)]

(c-3) Socket Welding Fittings [Note (4)]

NOTES:
(1) The size of an equal leg fillet weld is the leg length of the largest inscribed right isosceles triangle. Theoretical throat = 0.7 × size of weld.
(2) The size of an unequal leg fillet weld is the shorter leg length of the largest right triangle that can be inscribed within the fillet weld cross section.
(3) x, min. = 1.4t_n or the thickness of the hub, whichever is smaller, but not less than 1/8 in. (3 mm), where t_n = nominal pipe wall thickness.
(4) C_x, min. = 1.09t_n, where t_n = nominal pipe wall thickness.
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(4) $C_x_{\text{min.}} = 1.09t_n$, where $t_n$ = nominal pipe wall thickness
(a) Nonstructural attachments (NB-1132.1) welded to the pressure-retaining portion of the component need not comply with Article NB-2000 and may be welded with continuous or intermittent fillet or partial penetration welds, provided the requirements of (1) through (4) below are met.

1. The welding procedure and the welders have been qualified in accordance with NB-4321.

2. The material is identified and is compatible with the material to which it is attached.

3. The welding material is identified and compatible with the materials joined.

4. The welds are postweld heat treated when required by NB-4620.

(b) Removal of nonstructural temporary attachments shall be accomplished as follows.

1. The immediate area around the temporary attachment is marked in a suitable manner so that after removal the area can be identified until after it has been examined in accordance with (3) below.

2. The temporary attachment is completely removed in accordance with the procedures of NB-4211.
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Fillet and Socket Weld Details and Dimensions

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