

**Table 4.2.9**  
**Some Acceptable Weld Joints for Flange Attachments (Cont'd)**

Detail	Joint Type	Joint Category	Design Notes	Figure
10	7	C	<ul style="list-style-type: none"> <li>• Integral Type Flange</li> <li>• <math>a + b \geq 3t_n</math></li> <li>• <math>t_p \geq \min[t_n, 6 \text{ mm (0.25 in.)}]</math></li> <li>• <math>c \geq \min[t_n, 6 \text{ mm (0.25 in.)}]</math></li> </ul>	<p>The figure shows a cross-sectional view of a flange attachment. A vertical pipe section is shown with a horizontal flange attached to its side. The flange has a thickness <math>t_n</math>. The attachment is made with a fillet weld. The distance from the pipe centerline to the start of the weld is <math>T</math>. The weld has a throat thickness <math>t_p</math>. The distance from the pipe outer surface to the weld toe is <math>a</math>. The distance from the weld toe to the flange outer edge is <math>b</math>. The distance from the weld toe to the flange centerline is <math>c</math>. A red box highlights the weld toe area. A dashed line indicates the pipe centerline.</p>