Figure QB-461.1
Flow Positions

GENERAL NOTES:
(a) \( C \) = joint clearance
(b) \( L \) = length of lap or thickness
Figure QB-461.2
Test Flow Positions

GENERAL NOTES:
(a) $C =$ joint clearance
(b) $L =$ length of lap or thickness
Figure QB-462.1(a)
Tension — Reduced Section for Butt and Scarf Joints — Plate

NOTES:
(1) Length may vary to fit testing machine.
(2) $A = \text{greater of } \frac{1}{4} \text{ in. (6 mm) or } 2T$
Figure QB-462.1(b)
Tension — Reduced Section for Butt, Lap, and Scarf Joints — Pipe

NOTES:
(1) Length may vary to fit testing machine.
(2) \( A \) = greater of \( \frac{1}{4} \) in. (6 mm) or \( 2T \)
(3) \( X \) = test specimen overlap
Figure QB-462.1(c)

**Tension — Reduced Section for Lap and Rabbet Joints — Plate**

For Lap Joints

Alternate Pin-Loaded Specimen

NOTES:
(1) Length may vary to fit testing machine.
(2) \( A = \text{greater of } \frac{1}{4} \text{ in. (6 mm)} \text{ or } 2T \)
(3) \( X = \text{test specimen overlap} \)
Figure QB-462.1(e)
Tension — Full Section for Lap, Scarf, and Butt Joints — Small Diameter Pipe

For Lap Joints

V-jaws of testing machine

Alternate for Butt or Scarf Joints
Figure QB-462.1(f)
Support Fixture for Reduced-Section Tension Specimens

GENERAL NOTE: The restraining fixture is intended to provide a snug fit between the fixture and the contour of the tension specimen. The fixture shall be tightened, but only to the point where a minimum of 0.001 in. (0.03 mm) clearance exists between the sides of the fixture and the tension specimen.
Figure QB-462.2(a)
Transverse First and Second Surface Bends — Plate and Pipe

GENERAL NOTE: For the first surface bend specimens, machine from the second surface as necessary until the required thickness is obtained. For second surface bend specimens, machine from the first surface as necessary until the required thickness is obtained.

Figure QB-462.2(b)
Longitudinal First and Second Surface Bends — Plate

GENERAL NOTE: For the first surface bend specimens, machine from the second surface as necessary until the required thickness is obtained. For second surface bend specimens, machine from the first surface as necessary until the required thickness is obtained.
Figure QB-462.3
Lap Joint Peel Specimen

10 in. (250 mm) approx.

[Note (1)]

Section A

Approximately, or sufficient for peeling purposes

Fulcrum point

X = 4T min. or as required by design

GENERAL NOTES:
(a) Flange Y may be omitted from Section B when "peeling" is to be accomplished in a suitable tension machine.
(b) Specimen shall be brazed from side marked Z.

NOTE:
(1) Length may vary to fit testing machine.

Figure QB-462.4
Lap Joint Section Specimen (See QB-181)

\[ W = \frac{1}{3} W \]

Discard

Section specimen

Discard

this piece

\[ \frac{1}{3} W \]

\[ \frac{1}{3} W \]

\[ \frac{1}{3} W \]

\[ \frac{1}{3} W \]

Section B

Section A

X = 4T min. or as required by design

GENERAL NOTE: Lap or socket joint specimens in the pipe and tube shall be sectioned by cutting the pipe or tube specimen in half lengthwise, and the cut edges of at least one-half prepared and examined.
NOTES:
(1) Workmanship coupons shall be 10 in. (250 mm) in length or represent one-half the typical joint, whichever is less.
(2) Circular coupons shall be sectioned in half, and one-half shall be used as the test specimen.