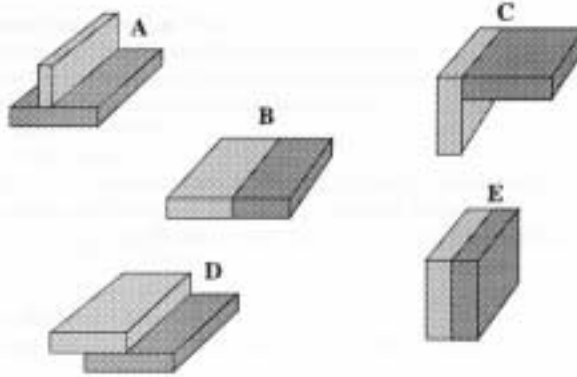


STEEL QUIZ

STEEL QUIZ, A MONTHLY FEATURE IN *MODERN STEEL CONSTRUCTION*, allows you to test your knowledge of steel design and construction. To receive a copy of the 1997 AISC Publications List, please call 800/644-2400 or fax 312/670-5403.

This month's questions come from: *Structural Steel Inspection and Field Practices Workbook*, published by the International Conference of Building Officials. It provides an independent study program based on the 1997 UBC and industry codes and standards governing steel building construction. It is available for \$29 (\$24 for ICBO members) by calling 800/284-4406.

4. Match the type of weld joint with the sketch at right:
- butt joint
 - tee joint
 - edge joint
 - lap joint
 - corner joint



QUESTIONS

1. For $\frac{13}{16}$ " holes, for $\frac{3}{4}$ " diameter bolts, to made in A572, Gr. 50 steel by punching, the thickness of the steel must not exceed:
 - a. $\frac{1}{2}$ "
 - b. $\frac{13}{16}$ "
 - c. $\frac{7}{8}$ "
 - d. $\frac{15}{16}$ "
2. The steel fabricator must have a written steel identification procedure in place that is capable of identifying main structural steel elements, through the fit-up operation.
 - a. for steel grade only
 - b. heat numbers for the steel being used, if such a system is required by the project specification
 - c. either a and b
 - d. both a and b
3. Run-off tabs are:
 - a. removed by any means
 - b. removed by flame-cutting
 - c. removed by flame-cutting and the surfaces are ground flush.
 - d. not removed unless required in the contract documents.
4. Match the type of weld joint with the sketch at right:
 - a. the column plumbness is within 1:500
 - b. the column plumbness is within 1:1000
 - c. the column is within $\frac{1}{2}$ " of plumb
 - d. the column is within 1" of plumb.
5. For buildings up to 40' in height, a column is considered plumb provided:
 - a. verify the quality of the fastener assembly
 - b. calibrate wrenches if this method is used
 - c. educate the crew in the installation method to be used
 - d. all of the above
6. The purpose of the bolt calibration device is to:
 - a. the snugging operation must not damage the tension control device
 - b. a three-bolt set of fasteners must be tested in the bolt calibration device
 - c. the manufacturer's instructions must be followed
 - d. all of the above
7. For alternative design fasteners such as twist-off bolts:
 - a. the minimum length of an intermittent fillet weld?
 - b. should the shear connectors be Type A, Type B or Type C?
 - c. the manufacturer's instructions must be followed
 - d. all of the above
8. What is the minimum length of an intermittent fillet weld?
9. For composite construction, should the shear connectors be Type A, Type B or Type C?
10. For studs used in composite construction, what is the minimum distance from edge of beam flange edge to stud base?

S T E E L Q U I Z

ANSWERS

1. c
2. d
3. d
4. butt joint: B
tee joint: A
edge joint: E
lap joint: D
corner joint: C
5. a.
6. d
7. d
8. 1½"
9. Type B
10. The stud diameter plus 1/8