

## JEOPARDY!

### STEEL QUIZ QUESTIONS:

1. What is finished?
2. What is a slender-element cross-section?
3. What is  $0.9F_y Z$  (but not greater than 1.5 times  $0.9F_y S$ )?
4. What is the effective net area?
5. What is a leaning column?
6. What is weld shrinkage?
7. What is pretensioned, pre-loaded, or fully tensioned? A number of other terms are also used to connote a joint with bolts that have been installed in such a way as to induce a tension in the bolt that is equal to 70 percent of the minimum specified tensile strength. However, take no credit if you said slip critical. A slip-critical joint has pretensioned bolts, but also requires that the faying surfaces be prepared to achieve a minimum frictional coefficient.
8. What is an electric-arc furnace?
9. What is SENRAC (the Steel Erection Negotiated Rule-making Advisory Committee)?
10. What is <http://www.aisc.org>?

### BONUS CHALLENGE:

*Learn something new about steel design or construction at work today?*

*Put it in the form of a question and submit it to:*

***Steel Quiz  
c/o Charlie Carter  
Modern Steel  
Construction  
One East Wacker Dr.  
Suite 3100  
Chicago, IL 60601-2001***

*Submitted questions used in future issues will be credited to their sources.*

**S**TEEL QUIZ, A MONTHLY FEATURE IN *MODERN STEEL CONSTRUCTION*, allows you to test your knowledge of steel design and construction. Unless otherwise noted, all answers can be found in the *LRFD Manual of Steel Construction*.

**Send Steel Quiz Questions & Answers to Charlie Carter, AISC, One East Wacker Dr., Suite 3100, Chicago, IL 60601-2001; fax: 312/670-5403.**

**To receive a copy of the 1997 AISC Publications List, please call 800/644-2400 or fax 312/670-5403.**

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### STEEL QUIZ ANSWERS:

*As a slight change of pace, this month's Steel Quiz is given in Jeopardy! style; remember to phrase your answers as questions.*

1. This term denotes a sawn, milled or ground surface with an ANSI roughness height value not exceeding 500.
2. A cross-section that has compression elements that are subject to local buckling in the elastic range is called this.
3. A beam bent about its weak axis or a compact braced beam bent about its strong axis has this design flexural strength in LRFD.
4. Fracture is checked for a tension member on this area.
5. A column that is pinned at its top and bottom and does not contribute to the strength nor the stability of the frame is known as this.
6. In a welded joint, this is a source of residual stress.
7. This term describes a bolted joint with bolts that have been installed using the turn-of-nut, calibrated wrench, alternative-design-fastener or direct-tension-indicator method.
8. In current U.S. steel-making practice, a heat of steel is most commonly melted from scrap in this.
9. This acronym identifies the OSHA-sponsored group that has proposed a revision to OSHA regulations that cover steel erection.
10. AISC's web page can be found at this address.