

# steel quiz

This month's Steel Quiz takes a look at quality control, quality assurance and AISC 360 Chapter N.

- 1 Chapter N in AISC 360 defines a comprehensive system of "Quality Control" requirements on the part of the \_\_\_\_\_.  
a) steel fabricator  
b) erector  
c) project owner's representative  
d) a and b  
e) all of the above
- 2 True or False: The fabricator and erector must implement a QC system as part of their normal operations.
- 3 Chapter N defines two levels of frequency for required inspection tasks and labels them as \_\_\_\_\_ and \_\_\_\_\_. (Choose 2)  
a) periodic  
b) random  
c) perform  
d) continuous  
e) observe
- 4 Chapter N does not address QC for \_\_\_\_\_.  
a) concrete reinforcing bars  
b) placement of concrete for composite members  
c) control and handling of welding consumables  
d) a and b  
e) All of the above
- 5 The inspection of \_\_\_\_\_ is addressed in Chapter N.  
a) steel open-web joists  
b) cables  
c) tanks  
d) pressure vessels  
e) none of the above
- 6 True or False: In all cases, nondestructive testing (NDT) must only be performed by the agency or firm responsible for quality assurance.
- 7 True or False: Per Chapter N, quality assurance is always required.
- 8 When requested, which of the following documents must the fabricator provide for review by the engineer of record?  
a) Material test reports for main structural steel elements  
b) Welding procedure specifications  
c) Copies of manufacturer's certification for fasteners  
d) a and b  
e) All of the above

TURN PAGE FOR ANSWERS

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## ANSWERS

- 1 d) In Chapter N of AISC 360, the term “quality control” relates to what the fabricator or erector must do; the term “quality assurance” relates to what third-party inspection does.
- 2 True. Section N2 of the AISC *Specification* and Section 8 of the AISC *Code of Standard Practice* require that a fabricator and erector both maintain a quality control program to ensure that the work is performed in accordance with the requirements in the AISC *Code of Standard Practice*, the AISC *Specification* and the contract documents.
- 3 c) Perform and e) Observe. The first means the task is done for each piece each time. The second means the task is done randomly on a frequency appropriate for the task.
- 4 d) a and b
- 5 e) None of the above. AISC 360 Chapter N covers structural steel and these steel items are not included in that definition; they are covered by requirements written by others.
- 6 False. Section N7 states that NDT of welds completed in an approved fabricator’s shop may be performed by that fabricator when approved by the authority having jurisdiction (AHJ).
- 7 False. Quality assurance requirements are applicable when required by the authority having jurisdiction, applicable building code, purchaser, owner or engineer of record (EOR).
- 8 e) All of the above. Note though that these are not automatically required to be submitted. Section N3.2 of the AISC *Specification* requires that these items must be available in electronic or printed form for review by the EOR or the EOR’s designee prior to fabrication or erection but need not be submitted unless this is required in the contract.



Everyone is welcome to submit questions and answers for Steel Quiz. If you are interested in submitting one question or an entire quiz, contact AISC’s Steel Solutions Center at 866.ASK.AISC or at [solutions@aisc.org](mailto:solutions@aisc.org).