steel quiz

LOOKING FOR A CHALLENGE? *Modern Steel Construction*'s monthly Steel Quiz tests your knowledge of steel design and construction. This month's questions refer to a number of different documents, many of which are available as free downloads at **www.aisc.org/freepubs**. Other sources are noted in the questions and answers below.

- 1 Which section in the AISC Code of Standard Practice provides the requirements for shop painting steel?
 - a) Section 3.1.6
- b) Section 4.4.1
- c) Section 6.5
- d) Both A and C
- e) Both B and C
- 2 True/False: Protective coatings can be applied to Direct Tension Indicators (DTIs) if specified.
- Which chapter in the 2010 AISC Specification provides the requirements for coatings?
 - a) Chapter B
- b) Chapter F
- c) Chapter J
- d) Chapter M
- 4 True/False: There is a newly published certification standard for shop application of coatings that is a collaborative publication by AISC and SSPC.
- What is the acronym for the organization that provides standards on corrosion protection?
 - a) COSP
- b) NACE
- c) DSC
- d) COS

- 6 True/False: American Galvanizers Association provides information on inspecting and specifying galvanized steel for corrosion protection.
- 7 What was the original name of SSPC: The Society for Protective Coatings?
 - a) Steel Structures Painting Council
 - b) Steel Surfaces Protection Council
 - c) Steel Society for Prevention of Corrosion
 - d) Steel Society for Protective Coverings
- A summary of the SSPC surface preparation specifications is provided in which part of the 13th Edition AISC Steel Construction Manual?
 - a) Part 1
- b) Part 2
- c) Part 15
- d) Part 17
- 9 True/False: Corrosion does not need to be considered when connecting steel to dissimilar metals.
- True/False: The 2010 AISC Specification includes typical stainless steels in the list of referenced material specifications.

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steel quiz answers

- 1 (e) Both Section 3.1.6 and Section 6.5 of the Code of Standard Practice provide the requirements for shop painting steel. Section 3.1.6 addresses items that must be included in the contract documents, while Section 6.5 is specific to shop painting requirements.
- True. The Research Council on Structural Connections (RCSC) Specification Section 2.6 permits the use of DTIs that meet ASTM
- F959. Section 5.4 of ASTM F959 covers protective coatings for DTls, but unless otherwise specified they are furnished "plain." The RCSC Specification is available as a free download at www.boltcouncil.org.
- 3 (d) Section M3 of Chapter M in the 2010 AISC Specification provides the requirements for shop painting and surface preparation. Section M4.6 discusses field painting requirements.
- 4 True. AISC and SSPC have developed a joint certification standard for shop application of protective coatings. The Certification Standard for Shop Application of Complex Protective Coating Systems (AISC 420-10/SSPC-QP 3) describes requirements for certification of firms that apply complex painting systems. The standard is available as a free download at www.aisc. org/JointPaintStandard.
- (b) NACE. The National Association of Corrosion Engineers (www.nace. org) is an international organization that publishes standards for corrosion prevention and control.
- True. American Galvanizers Association or AGA (www.galvanizeit.org) has resources and information to address questions on galvanizing. The website also is a resource to ask technical questions on galvanizing.
- 7 (a) Steel Structures Painting Council (www.sspc.org) was the original name of the Society of Protective Coatings when it was first founded in 1950—hence the acronym SSPC.
- 8 (b) Table 2-7 in Part 2 of the 13th Edition AISC Steel Construction Manual indicates the SSPC Specification number and description of the surface preparation designations. The discussion is on page 2-31 and the table is on page 2-43.
- 9 False. Corrosion needs to be considered when two or more different metals are in contact. Guidance on steel compatibility with metal fasteners is provided in Table 2-6 of the 13th Edition *Manual*.
- 10 False. Sections A2 and A3 in Chapter A of the 2010 AISC Specification indicate which materials are specifically considered by the AISC Committee on Specifications. Stainless steel materials are addressed by the Specialty Steel Industry of North America (www.ssina.com).



Anyone 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.