



AMERICAN NATIONAL STANDARDS INSTITUTE/ STEEL DECK INSTITUTE

QA/QC - 2017 Standard for

Quality Control and Quality Assurance for Installation of Steel Deck



Documents

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1. General

1.1 Scope:

- A. This Standard for Quality Control and Quality Assurance for Installation of Steel Deck, hereafter referred to as the Standard, shall govern the minimum requirements for quality control and quality assurance for material control and installation of cold formed steel deck and deck accessories used for floor and roof applications in buildings and other structures, where other structures are defined as structures designed, fabricated, and erected in a manner similar to buildings, with building-like vertical and lateral load resisting-elements.

User Note: This Standard does not apply to the manufacture of steel deck or accessories by the deck manufacturer, other than material control, nor to manufacture of mechanical fasteners or welding consumables. This Standard does not address quality control or quality assurance for concrete, concrete reinforcing steel, welded wire reinforcing, discontinuous fiber reinforcement for concrete, steel anchors, or placement of concrete.

User Note: Quality Control/Quality Assurance provisions for structural steel and steel anchors are found in Section N of AISC 360 and Section J of AISC 341.

- B. The Appendices shall be part of the Standard.
C. The User Notes and Commentary shall not be part of the Standard.

User Note: User Notes and Commentary are intended to provide practical guidance in the use and application of this Standard.

- D. Quality Control (QC) as specified in this Standard shall be provided by the installer. Quality Assurance (QA) as specified in this Standard shall be provided by others when required by the Authority Having Jurisdiction, the applicable building code, Owner, or Designer.

1.2 Definitions

- A. Authority Having Jurisdiction (AHJ): Organization, political subdivision, office or individual charged with the responsibility of administering and enforcing the provisions of the applicable building code.
B. Designer: The licensed professional responsible for the content of the drawings and specifications from which the steel deck is to be constructed.

User Note: The Designer is usually the structural engineer-of-record, however it may be the architect or other licensed professional acting within the scope of their license.

- C. Construction Documents: Written, graphic and pictorial documents prepared or assembled for describing the design, location and physical characteristics of the elements of a project necessary for obtaining a building permit, which

have been approved in accordance with the requirements of the applicable building code.

- D. Design Documents: The design drawings and the specifications.
- E. Design Drawings. Graphic and pictorial documents prepared by the Designer, showing the design, location and dimensions of the steel deck and accessories. These documents generally include plans, sections, details, schedules, diagrams and notes.
- F. Installation Drawings: Field drawings that are prepared to show the deck finish, size and type, location and attachment of the deck and accessories.
- G. Inspect: When used in conjunction with quality control and quality assurance, it shall mean the systematic examination and review of the work for compliance with the appropriate documents, with appropriate subsequent documentation.
- H. Owner's Designated Representative for Construction: The owner or the entity that is responsible to the owner for the overall construction of the project, including its planning, quality, and completion.

User Note: The Owner's Designated Representative for Construction is usually the general contractor, the construction manager or similar authority at the job site.

- I. Quality Assurance (QA): Inspection as herein required of the materials, installation, fabrication, erection or placement of components and connections, performed by an agency, individual or firm other than the installer, requiring special expertise to confirm compliance with construction documents and referenced standards.
- J. Quality Assurance Inspector (QAI): Individual or agency designated to provide quality assurance inspection for the work being performed.
- K. Quality Control (QC): Controls and inspections implemented by the installer to confirm that the material provided and work performed meet the requirements of the construction documents, installation drawings, shop drawings, design documents and referenced standards.
- L. Quality Control Inspector (QCI). Individual or agency designated to perform quality control inspection tasks for the work being performed.
- M. Quality Control Program (QCP). A written practice describing the material controls and inspection procedures used by the installer to confirm conformance with the construction documents and referenced standards.
- N. Shop Drawings: Drawings, diagrams, or schedules depicting the steel deck and accessories produced for the specific project.
- O. Specifications: Written documents prepared by the Designer, containing the requirements for materials, standards and workmanship from which the steel deck is to be constructed.
- P. Terms not defined in this Standard, AISI S100 or AISI/AISC shall have the ordinary accepted meaning for the context for which they are intended.

1.3 Reference Codes, Standards, and Documents:

- A. Codes and Standards: The following documents or portions thereof are referenced in this standard.
1. American Iron and Steel Institute (AISI)
 - a. AISI S100-16, North American Specification for the Design of Cold-Formed Steel Structural Members
 - b. AISI/AISC, Standard Definitions for Use in the Design of Steel Structures, 2007 edition.
 2. American Welding Society (AWS)
 - a. AWS B5.1:2013, Specification for the Qualification of Welding Inspectors
 - b. AWS D1.1:2015, Structural Welding Code-Steel
 - c. AWS D1.3:2008, Structural Welding Code-Sheet Steel
 3. Steel Deck Institute (SDI)
 - a. SDI C-2017, Standard for Composite Steel Floor Deck-Slabs
 - b. SDI NC-2017, Standard for Noncomposite Steel Floor Deck
 - c. SDI RD-2017, Standard for Steel Roof Deck

User Note: The following standards and documents are referenced within the user notes:

1. American Institute of Steel Construction (AISC)
 - a. AISC 341-16, Seismic Provisions for Structural Steel Buildings
 - b. AISC 360-16, Specification for Structural Steel Buildings
2. American Iron and Steel Institute (AISI)
 - a. AISI S100-16, North American Specification for the Design of Cold-Formed Steel Structural Members.
3. American Welding Society (AWS)
 - a. AWS D1.1:2015, Structural Welding Code-Steel
4. Steel Deck Institute (SDI)
 - a. SDI-MOC, Manual of Construction with Steel Deck, 3rd Edition

2. Required Submittals

- 2.1** The following documents shall be submitted to the Designer and Owner's Designated Representative for Construction for approval prior to the installation of the steel deck:
- A. Installation drawings showing deck layout and all accessories, including installation details.
 - B. Catalog data or independent evaluation reports on deck(s), including profile, thickness, physical properties and finish.

User Note: Deck profile, thickness, physical properties, and finish may be shown on the installation drawings instead of on submitted catalog sheets.