

Structural  
Welding  
Quality  
Handbook  
2016



# Structural Welding Quality Handbook 2016

**Based upon AWS D1.1-2015  
Structural Welding Code - Steel, and  
AISC 360-16, the Specification for  
Structural Steel Buildings**



STEEL STRUCTURES TECHNOLOGY CENTER, INC.

**4" by 8" pocket-sized convenience, 128 pages**

a must for:

- ironworkers, fitters and welders
- inspectors
- fabricators and erectors
- engineers and detailers

The **Structural Welding Quality Handbook 2016** has been prepared to assist welders, supervisors, inspectors, engineers, and others involved in the design, fabrication, erection and inspection of steel-framed buildings and structures in achieving quality workmanship and inspection in their welding operations.

Included in the Handbook are topics such as:

- welding inspection tasks, before during and after welding, assigned by AISC 360-16
- welding inspection tasks, before during and after welding, referenced to AWS D1.1:2015
- discontinuities and defects - definitions, measurement, acceptance criteria, and repair requirements; with causes and recommendations
- prequalified groove weld joint details, measurement and tolerances for common joints
- fillet weld measurement and fit-up tolerances
- preheat and interpass temperature tables and measurement
- minimum weld sizes
- reentrant corner, beam cope and weld access hole details
- welding procedure guidelines and troubleshooting
- welder qualification tables based upon plate tests
- electrode classification and selection tables for SMAW, FCAW, and GMAW
- SMAW electrode exposure limits
- guidelines for minimizing distortion
- thermal cutting quality and guidelines
- air carbon arc gouging guidelines
- metric conversion tables
- welding position figures and tables
- welding symbols
- and much more.

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# Structural Welding Quality Handbook 2016

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