CAN/CSA-Z259.15 – Anchorage connectors

This document provides an overview of the requirements of *Welding Requirements CSA-Z259.15 – Anchorage connectors* with respect to welding. It is designed to specify performance, design, testing, marking, classification, and other requirements related to anchorage connectors in travel restraint, fall arrest, work positioning, and suspended component/tie-back line systems.

This document is only for general guidance purposes; reference to the full text of CSA Z259.15 should be made. For further information, please contact the CWB at 1-800-844-6790 or info@cwbgroup.org.

Introduction

Welding is a key joining method used in the fabrication of anchorage connectors. To ensure welds of the highest quality and the safety of both the users of anchorage connectors and the general public, CSA Standard Z259.1 provides specific requirements around the design and fabrication of anchorage connectors.

Welded Fabrication

CSA Z259.1 provides the following requirements:

6.3.1.5 Welded assembly
When steel components are welded, the welding shall be performed by companies complying with CSA W47.1 and meet or exceed the requirements of CSA W59. When aluminum components are welded, the welding shall be performed by companies complying with CSA W47.2 and meet or exceed the requirements of CSA W59.2.

C.3.2 Test fixture and adaptor plate
Welding shall be performed in accordance with CSA W59.

D.4.2 Test fixture
Welding shall be performed in accordance with CSA W59.

An organization meeting the requirements of CSA Standard W47.1 and CSA Standard W47.2 will have qualified welders, accepted welding procedures and accepted supervisory / engineering personnel. All elements of the welding operation will be independently verified by the Canadian Welding Bureau on an on-going basis.

CSA Standard W59 require that contractors performing work under this standard be certified under the requirements of CSA Standard W47.1 unless the Engineer of record approves the contractor for the work to be undertaken. CSA Standard W47.1 provides requirements for the qualification of welders and welding operators, welding procedures and welding supervisory and engineering personnel.

CSA Standard W59.2 require that contractors performing work under this standard be certified under the requirements of CSA Standard W47.1. CSA Standard W47.1 provides requirements for the qualification of welders and welding operators, welding procedures and welding supervisory and engineering personnel.

CSA Standard W59 and CSA Standard W59.2 provide guidance on weld design, fabrication techniques, inspection and other key considerations around welding for steel.

Please note that there are no domestic or international equivalents to CSA Standard W47.1 or CSA Standards 47.2. Other national systems, such as that of the American Welding Society (AWS) do not include key concepts such as independent and on-going verification and welding supervisors/engineers. The CWB strongly cautions the reader around accepting substitutions; doing so may place public safety at risk.

For a listing of all organizations that currently meet the requirements of CSA Standard W47.1 and CSA Standard W47.2 please see *www.cwbgroup.org*.

Welding Inspection

CSA Standard W59 and CSA Standard W59.2 require that all welds be visually inspected. In addition, when required by contract weld inspection must be completed by certified welding inspectors or a welding inspection organization following the requirements of CSA Standard W178.2 or CSA Standard W178.1 respectively. It also requires that CSA Standard W186 and CSA Standard W59 be followed for the acceptance criteria for all welds. It should be noted that CSA Standard W178.2 has individual "product categories" that inspectors may qualify to, including one for CSA Standard W59 and one for CSA Standard W59.2.

For a listing of all organizations and individuals who currently meet the requirements of CSA Standard W178.1 and CSA Standard W178.2, please see *www.cwbgroup.org* .