

CAN/CSA-B354.1-04 – Portable Elevating Work Platforms Welding Requirements

This document provides an overview of the requirements of *CAN/CSA-B354.1-04 –Portable elevating work platforms* with respect to welding. It is designed to provide guidance for individuals and organizations involved in the design, manufacture, remanufacture, rebuild/recondition, testing, performance, inspection, training, maintenance, and safe operation of aerial platforms.

This document is only for general guidance purposes; reference to the full text of CSA B354.1 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 elevating work platforms. To ensure welds of the highest quality and the safety of both the users of aerial platforms and the general public, CSA Standard B354.1 provides specific requirements around the design, testing, and manufacture of aerial platforms, with awareness that the unit will be carrying personnel.

Welded Fabrication

CSA B354.1 provides the following requirements:

4.14 Welding Standards

All welding shall be performed by a qualified person, and all welding shall meet the applicable requirements of CSA W59 and CSA W59.2 or AWS D1.1 and AWS D1.2 or equivalent Standards.

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

CSA Standard W59 requires 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 W59.2 requires that contractors performing work to be certified under the requirements of CSA Standard W47.2.

CSA Standard W47.1 and / or CSA Standard W47.2 provide requirements for the qualification of welders and welding operators, welding procedures and welding supervisory and engineering personnel.

An organization meeting the requirements of CSA Standard W47.1 and / or 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.

Please note that there are no domestic or international equivalents to CSA Standard W47.1 and / or CSA Standard W47.2. 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. Although CSA Standards B354.1 recommends alternative standards for welding, 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 / or CSA Standard W47.2 and please see www.cwbgroup.org.

Welding Inspection

CSA Standard W59 and / or 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 W59 and / or CSA Standard W59.2 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 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.

