

Engineering references in the *Occupational Safety General Regulations* under the Nova Scotia *Occupational Health and Safety Act*

The *Occupational Safety General Regulations* make specific reference to engineers or engineering in the sections listed in the table below. Readers should consult the full regulations to determine the precise requirements.

Under the regulations, “engineer“ means a person who is registered as a member or licensed to practise under the *Engineering Profession Act* and is competent to do the work being performed (definition provided in section 2(1)).

Section	Description
Part 2 - General	Engineering Principles can be used to provide an exception
6 (1) (b)	An exception to the requirement that an object conforms to the regulated standard includes provision for conformance to generally accepted engineering principles for an object, that prevailed at the object’s date of manufacture
6 (2) (b)	An exception to the requirement that an activity in relation to an object conforms to the regulated standard includes provision for compliance with generally accepted engineering principles for an object, which prevailed at the object’s date of manufacture
Part 5 - Handling and Storage of Material	Requirements for an Engineer to certify
34 (2) (c)	Certify written specifications and safe work procedures to stockpile and remove unconsolidated material with powered mobile equipment
34 (3) (c)	Certify written specifications and safe work procedures for undermining or undercutting the face of unconsolidated material with powered mobile equipment
Part 7 - Hoists and Mobile Equipment	Requirements for an Engineer to certify and provide statements
55	Certify specifications to erect, install, assemble, start, operate, use, handle, store, stop, inspect, service, test, clean, adjust, maintain, repair, modify, dismantle a hoist, lift truck, or powered mobile equipment
60	Certify alterations to a safety device or control on a hoist, industrial lift truck or powered mobile equipment which provide equivalent or better protection than original
62 (1)	Certify overhead protective structure on powered mobile equipment, ensuring equivalent or better protection than the standard

62 (2)	Certify alterations, modifications, or repairs to powered mobile equipment's falling object's protective structure ensuring equivalent or better protection than the standard
63 (1)	Certify a rollover protective structure for powered mobile equipment and lift trucks (forklifts) to provide equivalent or better protection than the standard
63 (2)	Certify a rollover protective structure for powered mobile equipment or an industrial lift truck (forklift) meets the design requirements set in the regulations
63 (3)	Certify alterations/modifications/repairs, to a rollover protective structure, meet design requirements of the regulations
73 (3)	Provide a statement of rated load for a hoist
73 (4) (b)	Certify mobile and overhead cranes with capacities over 5 tonnes, annually
73 (4) (c) (i) and(ii)	Certify tower cranes, prior to service, when erected and annually
73 (6)	Perform appropriate tests when certifying a mobile, overhead or tower cranes
73 (9)	Provide a revised statement of rated load when part of a hoist is modified, extended, altered, or repaired
73 (10) (a)	Inform if a reduction in the rated load is required for a hoist. Provide a statement of revised rated load for hoist
73 (10) (b)	Certify reduced rated load of hoist
74 (2) (b)	Certify specifications for safety factor of hoist for load tests
80 (4)	Certify rigging hardware design as adequate when standards do not apply
Part 8 - Mechanical Safety	Requirements for an Engineer to certify and specify limits
84 (1)	Certify specifications for a machine where no manufacturer's specifications exist
84 (2)	Set limitation specifications for the operation of a machine, tool, or equipment
101 (2) (b)	Certify adequacy of compressed air device for cleaning a surface or person
Part 10 – Welding, Cutting, Burning and Soldering	Requirements for an Engineer to certify
113 (1A)	Certify written work procedures for welding or hot tapping pipelines
Part 11 - Electrical Safety	Requirements for an Engineer to certify and provide recommendations
126 (6) (c) (iii)	Certify approach distances that are lower than the distances specified in the regulations, regarding energized electrical lines

126 (6) (c) (iv)	Provide recommendations for manner to work when there are reduced approach distances
Part 13 - Premises and Building Safety Construction and Demolition	Requirements for an Engineer to certify, provide assessments and authorize work
141 (2) (b)	Certify the design and construction of permanent stairs where NS Building Code does not apply
141 (3) (b)	Provide a written assessment of permanent stairs
141 (4) (b)	Certify the modifications of permanent stairs according to a certified design
144 (2) (b)	Certify construction and design of permanent ramps where NS Building Code does not apply
144 (3)	Provide written assessment for permanent ramps where NS building Code did not apply
144 (4) (b)	Certify modifications for permanent ramp in accordance with a certified design
146 (2)(b)	Certify construction of catwalk in accordance with certified design
146 (3) (a)	Provide a written assessment for permanent catwalk adequacy
146 (3) (b) (ii)	Certify modifications for permanent catwalk in accordance with a certified design
154 (3) (a)	Design bracing and shoring and certify specifications for erecting, maintaining, and dismantling of bracing and shoring
154 (3) (b)	Authorize removal of shoring and bracing
165 (1) (a)	Designate Demolition Zone in writing before demolition begins
165 (7)	Certify adequate written procedures for undercutting structural supports for the demolition
Part 14 - Excavation and Trenches	Requirements for an Engineer to certify, provide specifications and information
166 (5)	Certify trench or excavation wall slope will be stable with slope steeper than 1:1
168 (a)	Certify distance shorter than 1 m from excavation trench where excavated material may be kept
170 (1)	Certify design of trench cage
170 (2)	Provide information on depth limits for use of certified trench cage and the way it must be installed, erected, used, maintained, and dismantled
170 (3)	Re-Certify a trench cage after alteration, modification, or repair if the structural integrity has been affected
171 (1)	Affix permanent nameplate with Name of engineer that certified trench cage design and the depth at which it may be used

172	Certify design and use of trench cage in specific circumstances
173 (1) (a)	Certify design for Shoring and bracing
173 (2)	Provide specifications for installing, erecting, maintaining, or dismantling shoring or bracing of an excavation or trench
Part 15 - Surface Mine Workings	Requirements for an Engineer to certify and approve
181 (b)	Approve unconsolidated overburden at a surface mine may be kept less than 7 metres away from a surface mine that is more than 1.2 m deep
184 (3) (a)	Certify wall or working face height at a surface mine
185	Certify written specifications and safe work procedures for working or removing unconsolidated material
186 (2)(b)	Certify written specifications and safe work procedures for working with powered mobile equipment at a surface mine
188 (c)	Certify written specifications and safe work procedures for working with unconsolidated material at a surface mine
189 (c)	Certifying written specifications and safe work procedures for the working with unconsolidated material at a working face at a distance that is less than distance set in the regulations
Part 16 - Equipment for Firefighters	Requirements for an Engineer to certify
201 (2) (b)	Certify an aerial device for structural fire fighting

Note:

- (1) The term “adequate” is defined in the regulations as “sufficient to protect a person from injury or damage to health.”
- (2) The term “competent person” is defined in the regulations as “a person who is
 - (i) qualified because of their knowledge, training and experience to do the assigned work in a manner that ensures the health and safety of every person in the workplace, and
 - (ii) knowledgeable about the provisions of the Act and regulations that apply to the assigned work, and about potential or actual danger to health or safety associated with the assigned work”
- (3) In some cases, engineered work is an alternative to other regulatory options; for example, 6(1) (b) where no version of the standard existed at the object’s date of manufacture, but the object conforms to generally accepted engineering principles prevailing at the object’s date of manufacture.
- (4) Note that the regulations incorporate many standards by reference. Where incorporated, the standard, or parts of it, become a regulatory requirement. Some incorporated standards prescribe that work be done by an engineer. Where this is the case, the engineering requirements within the standard are also incorporated, regardless of whether *an engineer* or *engineering* is explicitly noted in the text of the regulation.