



Compliance Guide

Topic: **Fixed Ladder Safety Requirements**

Applicable Legislation: **Part 8, Entrances, Walkways, Stairways and Ladders
Section 130(1) – 130(6) of OHS Code**

Applicable unique farming and ranching requirements within the Alberta OHS Code: **130(7) In the case of a farming and ranching operation, subsections (1) through (6) must be complied with unless a person who is competent or a service provider who is competent provides safe work procedures for workers using fixed ladders.**

Background

Fixed ladders are a common fixture on many structures on farms and ranches in Alberta. There are areas of the provincial Occupational Health and Safety Legislation that apply to fixed ladders. The legislation pertains to both the construction of the fixed ladder, as well as the fall protection provisions that are in place.

Legislation

Section 130(1) – 130(6) of the Occupational Health and Safety Code in Alberta applies to fixed ladders on farms and ranches in the province. It states that PIP Standards (summarized in table 8.1) would apply to any installations after April 30, 2004. The PIP Standards summarize cage requirements and fall arrest systems (combination of construction and required Personal Protective Equipment). Farms and ranches are given an unique requirement where if the structure would not support that configuration outlined in the PIP Standards, a competent person or a service provider who is competent must provide safe work procedures for workers who are using the fixed ladders.

AgSafe Alberta Recommendations

Consider if the fixed ladders on your operation meet the PIP Standards referenced in table 8.1 If they do, a safe work procedure will not be necessary. If they do not, consider whether it would be practicable or affordable to bring them up to standards. If it will not be practicable, have a competent person or service provider create a safe work procedure.

Sources:

<http://www.qp.alberta.ca/documents/OHS/OHSCode.pdf>



PIP Standards

Occupational Health and Safety Code 2009
Explanation Guide

Part 8

Table 8.1 Comparison of selected fixed ladder design requirements

Requirement	Requirements Prior to April 30, 2004	PIP Standard
Rung spacing	250 millimetres min, 305 millimetres max	300 millimetres
Clearance between ladder rungs and structure to which ladder is affixed (hand and toe clearance)	150 millimetres min	178 millimetres; when distance to any unavoidable object, including insulation, is less than 178 millimetres, the minimum clearance is 39 millimetres
Platform spacing intervals and dimensions	6.5 metres (21.5 feet); 760 millimetres x 760 millimetres (platforms not required if the ladder incorporates a fall arrest system)	9.1 metres (30 feet); 762 millimetres x 762 millimetres (platforms not required if the ladder incorporates a fall arrest system)
Ladder cage	Required if the ladder is more than 6.5 metres (21.5 feet) long (cage not required if the ladder incorporates a fall arrest system)	Required on ladder having a minimum unbroken length of 6.1 metres (20 feet); (cage not required if the ladder incorporates a fall arrest system)
Ladder length	Not specified	Max unbroken length of 9.1 metres (30 feet) unless ladder incorporates a fall arrest system
Lowest point of ladder cage	No more than 3 metres (10 feet) above landing or ground	Within 2.1 metres (7 feet) to 2.4 metres (8 feet) of the walking surface
Ladderway opening	Not specified	Requires safety gate or equivalent means
Width of rungs between rails	Not specified	450 millimetres



Excerpts of Alberta OHS Explanation Document

Part 8 – Entrances, Walkways, Stairways and Ladders

Section 130 – Fixed Ladders, Design criteria

<p>A person who is competent or a service provider who is competent can provide safe work procedures for workers using fixed ladders in place of replacing or constructing a ladder that complies with the requirements in place for other industries. Access to and from work areas needs to be strong enough for workers and their equipment.</p>	<p>An employer needs to ensure that a fixed ladder installed on or after April 30, 2004 meets the requirements of PIP Standard STF05501 (February 2002), Fixed Ladders and Cages, published by the Construction Industry Institute. http://www.pip.org/downloads/Sample-STF05501.pdf Despite the standards referenced, an employer may:</p> <ul style="list-style-type: none"> • use applicable Canadian material and process standards if the employer ensures that the fixed ladder is designed and installed in accordance with established engineering principles, and • allow the inside diameter of a cage hoop to be as great as 760 millimetres. 	<p>Provides an alternative to having to follow manufacturer’s specifications or specifications certified by a professional engineer, in keeping with the spirit of the recommendation provided by the technical working groups.</p>
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Part 9 – Fall Protection

Section 159 – Procedures in place of fall protection equipment

<p>Procedures can be used in place of fall protection equipment to keep workers safe where they are exposed to a fall hazard.</p>	<p>An employer may develop and use procedures in place of fall protection equipment, if:</p> <ul style="list-style-type: none"> • it is not reasonably practicable to use one of the fall protection systems described in this Part, and • use of procedures in place of fall protection equipment is restricted to the following situations: 	<p>Storage bins used on farms and ranches vary in structure, while some may not be substantial enough to withstand fall protection requirements, safe work procedures can be used.</p>
	<ul style="list-style-type: none"> ○ the installation or removal of fall protection equipment; ○ roof inspection; ○ emergency repairs; ○ at-height transfers between equipment and structures if allowed by the manufacturer’s specifications. 	