

## PRESIDING REGULATORY AUTHORITY REFERENCE



Society of Professional Rope Access Technicians

**Society of Professional Rope Access Technicians**

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**Notes for Usage:**

For the most recent [standards versions](https://sprat.org), [supporting documentation](https://sprat.org), and [news](https://sprat.org), visit <https://sprat.org>.

Any errors, omissions, or potential updates should be reported to SPRAT at [info@sprat.org](mailto:info@sprat.org).

Terminology and conversion values of this document reflect those of the presiding regulatory authority and may differ from other SPRAT documentation.

## 1. Purpose, Scope, and Exceptions

### 1.1. Purpose

1.1.1. The purpose of this document is to provide a resource to assist conducting work involving rope access and other forms of fall protection in accordance with the presiding regulatory authority.

1.1.2. This document is intended for use by:

1.1.2.1. **Employers** managing a fall protection program that may include the use of rope access.

1.1.2.2. **Rope access technicians** that use **rope access systems** and other fall protection systems.

### 1.2. Scope

1.2.1. This document provides an overview of the presiding regulatory authority structure and regulations as they pertain to rope access and other forms of fall protection.

1.2.2. System and component requirement values and references for rope access and other fall protection systems are provided when referenced within regulations.

### 1.3. Exceptions

1.3.1. This document is not a substitute for consulting a presiding regulatory authority regarding the regulations that may be applicable where work is conducted using rope access or other fall protection systems.

1.3.2. This document does not provide interpretations of values or other regulatory information.

## 2. Australia

### 2.1. General Information

#### 2.1.1. Regulatory Structure

2.1.1.1. Safe Work Australia develops model regulations and codes of practice for adoption by the various Australian presiding regulatory authorities.

2.1.1.1.1. [Model WHS regulations](#)

2.1.1.1.2. [Model codes of practice](#)

2.1.1.1.2.1. [Managing the Risk of Falls at Workplaces \(MRFW\)](#)

2.1.1.2. These model WHS regulations and codes of practice must be adopted by a presiding regulatory authority to become enforceable.

#### 2.1.2. Relevant Standards Development Organization

2.1.2.1. Standards Australia/Standards New Zealand (AS/NZ) develops standards related to work at height.

2.1.2.2. Model codes of practice reference these standards for compliance.

#### 2.1.3. [General Regulatory References](#)

2.1.3.1. [Commonwealth – Legislation](#)

2.1.3.2. [New South Wales – Legislation](#)

2.1.3.3. [Northern Territory – Legislation](#)

2.1.3.4. [Queensland – Legislation](#)

2.1.3.5. [South Australia – Legislation](#)

2.1.3.6. [Tasmania – Legislation](#)

2.1.3.7. [Victoria – Legislation](#)

2.1.3.8. [Western Australia – Legislation](#)

## 2.2. Australia – (Safe Work Australia)

### 2.2.1. General References

Category	Reference	Notes
<b>Overview</b>	<a href="#">Model WHS, MRFW</a>	Section 4.4 of Model WHS - Falls
<b>General Duty</b>	<a href="#">MRFW 1.1</a>	
<b>Rope Access</b>	<a href="#">MRFW, AS4488 (ISO 22846)</a>	AS4488 superseded by ISO 22846
<b>Fall Protection</b>	<a href="#">MRFW</a>	
<b>Platforms</b>	<a href="#">MRFW</a>	
<b>Rope descent systems</b>	<i>Not referenced</i>	
<b>Training</b>	<a href="#">MRFW</a>	

### 2.2.2. System Requirements

Category	Value	Reference	Notes
<b>Trigger height for fall protection</b>	<i>None</i>	<a href="#">MRFW</a>	“reasonably likely to cause injury”
<b>Allowable free fall distance</b>	2 m (6.5 ft)	<a href="#">MRFW 6.3</a>	
<b>Distance from unprotected edge</b>	3 m	<a href="#">MRFW 6.2, 2.2</a>	If using rope access. None for risk assessment
<b>Maximum arrest force (MAF)</b>	6 kN	AS1891.4(2.1.2)	
<b>Maximum deceleration distance</b>	1.7 m	<a href="#">MRFW Figure 21</a>	Energy absorber deployment
<b>Rescue</b>	Procedures	<a href="#">MRFW 9</a>	

### 2.2.3. Component Requirements

Category	Value(s)	Reference	Notes
<b>Anchorage</b>			
<b>Rope access</b>	12kN	AS1891.4, AS4488(ISO 22846)	AS4488 superseded by ISO 22846 Recommended 15 kN
<b>Fall arrest</b>	12 kN – limited 15 kN – free-fall 21 kN – 2-person	AS1891.4	Limited free-fall-arrest is less than 600 mm. Free-fall-arrest is greater than 600 mm
<b>Positioning</b>	<i>Not referenced</i>		AS1891.4 refers to rope access
<b>Travel restraint</b>	12 kN or 15 kN	AS1891.4(3)	
<b>Rope descent systems</b>	<i>Not referenced</i>		
<b>Harness</b>	Full body	<a href="#">MRFW 5.1</a>	
<b>Dorsal</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	AS1891.1(3.2)	Free-fall-arrest only
<b>Sternal</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	AS1891.1(3.2)	Free-fall-arrest and limited free-fall-arrest
<b>Ventral</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	AS1891.1(3.2)	Free-fall-arrest and limited free-fall-arrest
<b>Connectors</b>	20 kN	AS1891.1 (ISO 10333-5)	Carabiners self-closing, with lock. (15kN acceptable in some assemblies)
<b>Energy absorbing lanyards</b>	Ref standards	AS1891.4	
<b>Self-retracting devices</b>	Ref standards	AS1891.3	
<b>Vertical lifelines</b>	Ref standards	AS1891.3, AS 4142	
<b>Horizontal lifelines</b>	12kN or 15kN	AS1891.2	‘equivalent strength’
<b>Personal protective equipment</b>			
<b>Inspection requirements</b>	Pre-use Detailed – 6 months	AS1891.4(9)	<i>MRFW</i> refers to ‘detailed’ inspections. See Table 9.1 in AS1891.4

### 3. Canada

#### 3.1. General Information

##### 3.1.1. Regulatory Structure

3.1.1.1. National worksite safety laws apply only to activities that could be carried out in several provinces during the same work day.

3.1.1.2. Regulations for worksite safety is of provincial jurisdiction.

3.1.1.3. The following provinces have regulations specific to rope access:

3.1.1.3.1. Alberta

3.1.1.3.2. British Columbia

##### 3.1.2. Relevant Standards Development Organization

3.1.2.1. The Canadian Standard Association (CSA) publishes standards relative to worksite safety for application in Canada.

3.1.2.2. When incorporated into regulation, these standards are publicly available at <https://community.csagroup.org/login.jspa?>

##### 3.1.3. General References

3.1.3.1. [Alberta](#)

3.1.3.2. [British Columbia](#)

3.1.3.3. [Manitoba](#)

3.1.3.4. [New Brunswick](#)

3.1.3.5. [Newfoundland and Labrador](#)

3.1.3.6. [Nova Scotia](#)

3.1.3.7. [Ontario](#)

3.1.3.8. [Prince Edward Island](#)

3.1.3.9. [Quebec](#)

3.1.3.10. [Saskatchewan](#)

3.1.3.11. [Northwest Territories and Nunavut,](#)

3.1.3.12. [Yukon](#)

### 3.2. Alberta – (Occupational Health and Safety - OHS)

#### 3.2.1. General References

Category	Reference	Notes
<b>Overview</b>	<a href="#">OHS Code</a>	<a href="#">Explanation guide</a>
<b>Rope Access</b>	<a href="#">Part 41</a>	
<b>Fall Protection</b>	<a href="#">Part 9</a>	
<b>Platforms</b>	<a href="#">Part 23</a>	
<b>Rope descent systems</b>	<a href="#">Part 9</a>	
<b>Training</b>	Part 9 Section 141 Part 41 Section 812, 826	

#### 3.2.2. System Requirements

Category	Value	Reference	Notes
<b>Trigger height for fall protection</b>	3m	Part 9 Section 139 Part 41 Section 808	See sub-clauses for details
<b>Allowable free fall distance</b>	No maximum, 1.2 m – no energy absorber	Part 9 Section 151	See sub-clauses for details
<b>Distance from unprotected edge</b>	2 m	Part 9 Section 161	See sub-clauses for control zone details
<b>Maximum arrest force (MAF)</b>	6 kN, 8kN if E6 used	Part 9 Section 151 Part 41 Section 828	8kN allowance only in Part 9
<b>Maximum deceleration distance</b>	<i>Not referenced</i>		See Part 9 Section 151
<b>Rescue</b>	Plan and procedures	Part 7 Part 9 Section 140 Part 41 Section 811, 821, 822	Part of emergency response and fall protection plan

#### 3.2.3. Component Requirements

Category	Value(s)	Reference	Notes
<b>Anchorage</b>			
<b>Rope access</b>	16 kN or 2x MAF	Part 41 Section 829	Per worker attached.
<b>Fall arrest</b>	16 kN or 2x MAF	Part 9 Section 152	See sub-clauses for temporary and permanent anchorage details
<b>Positioning</b>	<i>Not referenced</i>		
<b>Travel restraint</b>	3.5 kN	Part 9 Section 152.1	Temporary only
<b>Rope descent systems</b>	16 kN or 2x MAF	Part 41 Section 829	Per worker attached.
<b>Harness</b>	Full body	Part 9 Section 142 Part 41 Section 834	Body belt allowed for travel restraint
<b>Dorsal</b>	<i>Not referenced</i>		
<b>Sternal</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Part 41 Section 830(4)	
<b>Ventral</b>	<i>Not referenced</i>		
<b>Connectors</b>	Ref standards	Part 9 Section 143 Part 41 Section 835	
<b>Energy absorbing lanyards</b>	Ref standards	Part 9 Section 142.2, 142.3	
<b>Self-retracting devices</b>	Ref standards	Part 9 Section 145	
<b>Vertical lifelines</b>	Ref standards	Part 9 Section 144, 147 Part 41 Section 838	
<b>Horizontal lifelines</b>	Ref standards	Part 9 Section 153	
<b>Personal protective equipment</b>		Part 18	
<b>Inspection requirements</b>	Before use	Part 9 150.1	

### 3.3. British Columbia – (WorkSafe BC)

Category	Reference	Notes
Overview	<a href="#">OHS Code</a>	<a href="#">OHS Guidelines</a>
General Duty	<a href="#">Part 2.2</a>	
Rope Access	<a href="#">Part 34</a>	
Fall Protection	<a href="#">Part 4</a> <a href="#">Part 11</a>	
Platforms	<a href="#">Part 13</a>	
Rope descent systems	None	<a href="#">See Part 13</a>
Training	<a href="#">Part 34.4</a>	See also <a href="#">G11.2(6)-1</a>

#### 3.3.1. System Requirements

Category	Value	Reference	Notes
Trigger height for fall protection	3m (10')	<a href="#">Part 11.2 (1) (a)</a>	<a href="#">Part 34.2</a> refers to <a href="#">Part 11.2</a>
Allowable free fall distance	2 m (6.5 ft) - energy absorber 1.2 m (4 ft) - no energy absorber	<a href="#">G11.5-3</a>	Guidelines only See also <a href="#">G11.2-3</a>
Distance from unprotected edge	2m (6.5')	<a href="#">G11.2(5)-1</a>	Guidelines only: Safety monitor system
Maximum arrest force (MAF)	<a href="#">Part 34</a> - 6kN	<a href="#">Part 34.15(2)(a)</a>	No MAF in <a href="#">Part 11</a>
Maximum deceleration distance	Not referenced		
Rescue	Prompt	<a href="#">Part 34.8</a>	See also <a href="#">Part 32</a>

#### 3.3.2. Component Requirements

Category	Value(s)	Reference	Notes
<b>Anchorage</b>			
Rope access	22kN (5000 lbf) permanent 12kN (2700lbf) temporary	<a href="#">Parts 34.12, 34.13</a>	See sub-clauses
Fall arrest	22kN (5000 lbf) or 2x MAF	<a href="#">Part 11.6</a>	See sub-clauses. 2x MAF for temporary only
Positioning	<i>Not referenced</i>		
Travel restraint	3.5kN (800lbf) or 4x worker weight	<a href="#">Part 11.6(1)(a)(b)</a>	Temporary only
Rope descent systems	<i>Not referenced</i>		<a href="#">Part 13</a> references <a href="#">Part 11</a> for fall protection
Harness	Full body	<a href="#">Parts 11.4, 11.5(c)</a> <a href="#">Schedule 34-A</a>	See subclauses
Dorsal	<i>Not referenced</i>		
Sternal	<i>Not referenced</i>		
Ventral	<i>Not referenced</i>		
Connectors	Ref standards	<a href="#">Part 11.5(c)</a> <a href="#">Schedule 34-A</a>	
Energy absorbing lanyards	Ref standards	<a href="#">Part 11.5(c)</a> <a href="#">Schedule 34-A</a>	
Self-retracting devices	Ref standards	<a href="#">11.5(c)</a>	None
Vertical lifelines	Ref standards	<a href="#">Part 11.5(c)</a>	<a href="#">See G11.5.2</a>
Horizontal lifelines	Ref manufacturer or engineer	<a href="#">Parts 11.7, 11.8</a>	
Personal protective equipment		<a href="#">Part 8</a>	
Inspection requirements	Before use	<a href="#">Part 11.9</a> <a href="#">Part 34.10</a>	See also <a href="#">Part 32.4, 32.5</a> , and <a href="#">guidelines</a>

### 3.4. Newfoundland & Labrador – ([Service NL](#))

#### 3.4.1. General References

Category	Reference	Notes
<b>Overview</b>	<a href="#">Regulation 5/12</a>	
<b>General Duty</b>	<a href="#">Section 14</a>	
<b>Rope Access</b>	<i>Not referenced</i>	<a href="#">See Section 141(h)</a>
<b>Fall Protection</b>	<a href="#">Part X</a>	
<b>Platforms</b>	<a href="#">Part XI</a>	
<b>Rope descent systems</b>	<i>Not referenced</i>	
<b>Training</b>	<a href="#">Part X Section 139</a>	

#### 3.4.2. System Requirements

Category	Value	Reference	Notes
<b>Trigger height for fall protection</b>	3m (10')	<a href="#">Section 141(a)</a>	
<b>Allowable free fall distance</b>	1.44 m (4 ft) - no 'shock absorption system'	<a href="#">Section 142(c)</a>	See sub-clauses
<b>Distance from unprotected edge</b>	2 m (6.6 ft)	<a href="#">Section 29(1)</a>	See sub-clauses. Roof less than 3/12 grade.
<b>Maximum arrest force (MAF)</b>	<i>Not referenced</i>		
<b>Maximum deceleration distance</b>	<i>Not referenced</i>		
<b>Rescue</b>	Plan and procedures	<a href="#">Section 38</a> <a href="#">Section 142(10)(b)</a>	

#### 3.4.3. Component Requirements

Category	Value(s)	Reference	Notes
<b>Anchorage</b>			
<b>Rope access</b>	<i>Not referenced</i>		
<b>Fall arrest</b>	22.2 kN (5000 lbf)	<a href="#">Section 142</a>	Horizontal lifelines only
<b>Positioning</b>	<i>Not referenced</i>		
<b>Travel restraint</b>	<i>Not referenced</i>		
<b>Rope descent systems</b>	<i>Not referenced</i>		
<b>Harness</b>	Full body, Z259.10	<a href="#">Section 142(d)(iii)</a>	
<b>Dorsal</b>	<i>Not referenced</i>		
<b>Sternal</b>	<i>Not referenced</i>		
<b>Ventral</b>	<i>Not referenced</i>		
<b>Connectors</b>	<i>Not referenced</i>		
<b>Energy absorbing lanyards</b>	CSA Z259.11		
<b>Self-retracting devices</b>	<i>Not referenced</i>		
<b>Vertical lifelines</b>	CSA Z259.2.1	<a href="#">Section 142 (2)&amp;(4)</a>	
<b>Horizontal lifelines</b>			Static line
<b>Personal protective equipment</b>		<a href="#">Part VII</a>	
<b>Inspection requirements</b>	Before use	<a href="#">Section 142(5)</a>	



### 3.5. Ontario – (Ministry of Labor – Health and Safety)

#### 3.5.1. General References

Category	Reference	Notes
<b>Overview</b>	<a href="#">OHS Act RSO</a>	
<b>General Duty</b>		
<b>Rope Access</b>	<a href="#">MOL Guidance</a>	Not in regulation See <a href="#">859/90 3</a> _(Window Cleaning)
<b>Fall Protection</b>	<a href="#">213 91 – Construction</a> <a href="#">851 90 - Industrial</a>	
<b>Platforms</b>	<a href="#">213/91 126-136.0.1</a>	
<b>Rope descent systems</b>	<a href="#">213/91 125,136.1-142.06</a> <a href="#">859/90 (Window Cleaning)</a>	
<b>Training</b>	<a href="#">213/91 26.2</a> <a href="#">297/13</a>	

#### 3.5.2. System Requirements

Category	Value	Reference	Notes
<b>Trigger height for fall protection</b>	3 m	<a href="#">213/91 26, 26.3</a> <a href="#">851/90 85</a>	See clauses for details. 2.4 m for 26.3
<b>Allowable free fall distance</b>	1.5 m	<a href="#">851/90 85(a)</a> <a href="#">859/90 10 (Window Cleaning)</a>	
<b>Distance from unprotected edge</b>	<i>Not referenced</i>		
<b>Maximum arrest force (MAF)</b>	8 kN	<a href="#">213/91 26.6(5)</a> <a href="#">851/90 85(b)(ii)</a>	
<b>Maximum deceleration distance</b>	<i>Not referenced</i>		Ref standards
<b>Rescue</b>	Procedures	<a href="#">213/91 26.1(4)</a>	

#### 3.5.3. Component Requirements

Category	Value(s)	Reference	Notes
<b>Anchorage</b>			
<b>Rope access</b>	<i>Not referenced</i>		
<b>Fall arrest</b>	213 - 8 kN – static 851 - 2x load	<a href="#">213/91/26.7</a> <a href="#">851/90 85(b)</a>	213 - Permanent only. See subclause. 851 – ‘fall arrest system.’ See subclauses.
<b>Positioning</b>			
<b>Travel restraint</b>	2kN - static	<a href="#">213/91/26.7(2)5</a>	Permanent only. See subclause.
<b>Rope descent systems</b>	2x support lines	<a href="#">859/90 29(2)</a>	Window Cleaning
<b>Harness</b>	CSA Z259.10	<a href="#">213/91 26.1(3)5</a>	
<b>Dorsal</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<a href="#">213/91 1</a>	Full body harness definition
<b>Sternal</b>	<i>Not referenced</i>		
<b>Ventral</b>	<i>Not referenced</i>		
<b>Connectors</b>	CSA Z259.12	<a href="#">213/91 26.1(3)7</a>	
<b>Energy absorbing lanyards</b>	CSA Z259.11	<a href="#">213/91 26.1(3)6</a>	See also <a href="#">859/90 10(5)</a>
<b>Self-retracting devices</b>	CSA Z259.2.2	<a href="#">213/91 26.1(3)3</a>	
<b>Vertical lifelines</b>	CSAZ259.2.5	<a href="#">213/91 26.1(3)2</a>	See also <a href="#">859/90 10(6)</a>
<b>Horizontal lifelines</b>	Engineered	<a href="#">213/91 26.9(8)</a>	
<b>Personal protective equipment</b>		<a href="#">213/91 21-27</a> <a href="#">851/90 79-86</a>	
<b>Inspection requirements</b>	Before use	<a href="#">213/926.6(6)</a>	

### 3.6. Quebec - CNESST (Commission des Normes, de l'Équité et de la Santé et Sécurité au Travail)

#### 3.6.1. General References

Category	Reference	Notes
Overview	<a href="#">RSST c.s-2.1, r.13 (ENG)</a>	
General Duty	<a href="#">LSST c.s-2.1 (ENG)</a>	
Rope Access	<i>Not referenced</i>	
Fall Protection	<a href="#">RSST c.s-2.1, r.13 art. 346-354.1 (ENG)</a>	
Platforms	<a href="#">RSST c.s-2.1, r.13 art. 31.-33 (ENG)</a>	
Rope descent systems	<i>Not referenced</i>	
Training	<a href="#">RSST c.s-2.1, r.13 art. 338 (ENG)</a>	

#### 3.6.2. System Requirements

Category	Value	Reference	Notes
Trigger height for fall protection	3 m (10 ft)	<a href="#">RSST c.s-2.1, r.13 art. 33.1 (ENG)</a>	
Allowable free fall distance	1.8 m (6 ft)	<a href="#">RSST c.s-2.1, r.13 art. 347 (ENG)</a>	
Distance from unprotected edge	2 m (6.6 ft)	<a href="#">RSST c.s-2.1, r.13 art. 354.1 (ENG)</a>	Warning line
Maximum arrest force (MAF)	6 kN	<a href="#">RSST c.s-2.1, r.13 art. 347 (ENG)</a>	
Maximum deceleration distance	Ref standard		Refers to CSA Z259.11
Rescue	<i>Not referenced</i>		

#### 3.6.3. Component Requirements

Category	Value(s)	Reference	Notes
<b>Anchorage</b>			
Rope access	<i>Not referenced</i>		
Fall arrest	18 kN	<a href="#">RSST c.s-2.1, r.13 art. 349 (ENG)</a>	Refers to CSA Z259.16
Positioning	<i>Not referenced</i>		
Travel restraint	<i>Not referenced</i>		
Rope descent systems	<i>Not referenced</i>		
<b>Harness</b>	Full body	<a href="#">RSST c.s-2.1, r.13 art. 347 (ENG)</a>	Refers to CSA Z259.10
Dorsal	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<a href="#">RSST c.s-2.1, r.13 art. 348 (ENG)</a>	
Sternal	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<a href="#">RSST c.s-2.1, r.13 art. 348 (ENG)</a>	Limited use, refers to CSA Z259.2.5, Z259.2.4
Ventral	<i>Not referenced</i>		
<b>Connectors</b>	5000 lbf (22.2kN) (tensile) 3600 lbf (16 kN) (proof, gate)	<a href="#">RSST c.s-2.1, r.13 art. 348 (ENG)</a>	Refers to CSA Z259.12
<b>Energy absorbing lanyards</b>	Max length 2 m	<a href="#">RSST c.s-2.1, r.13 art. 348 (ENG)</a>	Refers to CSA Z259.11
<b>Self-retracting devices</b>		<a href="#">RSST c.s-2.1, r.13 art. 348 (ENG)</a>	Refers to CSA Z259.2.2
<b>Vertical lifelines</b>	Max length 90 m	<a href="#">RSST c.s-2.1, r.13 art. 348 (ENG)</a>	Refers to CSA Z259.2.5, Z259.2.4
<b>Horizontal lifelines</b>	90 kN, 12 m max span	<a href="#">RSST c.s-2.1, r.13 art. 349 (ENG)</a>	Refers to CSA Z259.13
<b>Personal protective equipment</b>			
<b>Inspection requirements</b>	Anchorage	<a href="#">RSST c.s-2.1, r.13 art. 349 (ENG)</a>	Prior to initial use - Refers to CSA Z259.16

## 4. United States

### 4.1. General Information

#### 4.1.1. Regulatory Structure

- 4.1.1.1. Worksite safety is managed federally by the Occupational Safety and Health Administration (OSHA).
- 4.1.1.2. Federal 29 U.S.C. § 654, 5 (a) (1)
- 4.1.1.3. Federal regulations are applicable in any US state or territory that does not have an OSHA-approved State Plan.
- 4.1.1.4. Federal regulations are divided mainly into General Industry (29 CFR Part 1910) and Construction (29 CFR Part 1926).
  - 4.1.1.4.1. Additional regulations exist for specific industries.
- 4.1.1.5. State Plans may cover private and state/local government workplaces, or only state/local government workers.

#### 4.1.2. Relevant Standards Development Organization

- 4.1.2.1. The American National Standards Institute (ANSI) publishes standards relative to worksite safety for application in United States.
- 4.1.2.2. These voluntary standards may be used to assist in ensuring regulatory compliance, but are not regulations unless specifically referenced within OSHA regulations.

#### 4.1.3. General References

##### 4.1.3.1. [Federal OSHA resources](#)

##### 4.1.3.2. [State OSHA resources](#)

- 4.1.3.2.1. [Arizona](#)
- 4.1.3.2.2. [California](#)
- 4.1.3.2.3. [Hawaii](#)
- 4.1.3.2.4. [Indiana](#)
- 4.1.3.2.5. [Iowa](#)
- 4.1.3.2.6. [Kentucky](#)
- 4.1.3.2.7. [Maryland](#)
- 4.1.3.2.8. [Michigan](#)
- 4.1.3.2.9. [Minnesota](#)
- 4.1.3.2.10. [Nevada](#)
- 4.1.3.2.11. [New Mexico](#)
- 4.1.3.2.12. [North Carolina](#)
- 4.1.3.2.13. [Oregon](#)
- 4.1.3.2.14. [Puerto Rico](#)
- 4.1.3.2.15. [South Carolina](#)
- 4.1.3.2.16. [Tennessee](#)
- 4.1.3.2.17. [Utah](#)
- 4.1.3.2.18. [Vermont](#)
- 4.1.3.2.19. [Virginia](#)
- 4.1.3.2.20. [Washington](#)
- 4.1.3.2.21. [Wyoming](#)

## 4.2. OSHA 1910 (29 CFR Part 1910 Occupational Safety and Health Standards)

### 4.2.1. General References

Category	Reference	Notes
<b>Overview</b>	29 CFR 1910 Subpart D 29 CFR 1910 Subpart I	Subpart D – Walking Working Surfaces Subpart I – Personal Protective Equipment
<b>General Duty</b>	29 U.S.C. § 654, 5 (a) (1)	
<b>Rope Access</b>	<i>Not referenced</i>	Must meet 1910.28 (page 82569)
<b>Fall Protection</b>	1910.28, 1910.29, 1910.140	1910 Sub part I App C - guidelines
<b>Platforms</b>	1910.66	
<b>Rope descent systems</b>	1910.27	RDS and rope access - LOI
<b>Training</b>	1910.9, 1910.30	

### 4.2.2. System Requirements

Category	Value	Reference	Notes
<b>Trigger height for fall protection</b>	4 ft (1.2 m)	1910.28(b)(1)(i)	
<b>Allowable free fall distance</b>	6 ft (1.8 m)	1910.140(d)(2)(ii)	Higher value permissible if certain conditions are met.
<b>Distance from unprotected edge</b>	<i>Not referenced</i>		See 1926 Construction for letters of interpretation
<b>Maximum arrest force (MAF)</b>	1800 lbf (8 kN)	1910.140(d)(1)(i)	
<b>Maximum deceleration distance</b>	3.5 ft (1.1 m)	1910.140(d)(1)(ii)	
<b>Rescue</b>	“prompt”	1910.140(c)(21)	Letter of interpretation

### 4.2.3. Component Requirements

Category	Value(s)	Reference	Notes
<b>Anchorage</b>			
<b>Rope access</b>	5000 lbf (22.2kN), or Safety factor of 2	1910.140(c)(13)	Safety factor of 2 requires design, install, and use under direction of qualified person. See 1910.140(c)(12) – anchorage independence
<b>Fall arrest</b>			
<b>Positioning</b>			
<b>Travel restraint</b>			
<b>Rope descent systems</b>	5000 lbf (22.2kN)	1910.27(b)(1)(i)	Anchorage enforcement guidance - LOI Anchorage testing - LOI
<b>Harness</b>	Full body	1910.140(c)(19) 1910.140(c)(20)	
<b>Dorsal</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	1910.140(c)(22)	
<b>Sternal</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	1910.140(c)(22)	If free fall distance less than 2 ft (0.6 m)
<b>Ventral</b>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<i>Not referenced</i>	
<b>Connectors</b>	5000 lbf (22.2kN) (tensile)	1910.140(c)(7)	See also: 1910.140(c)(1) 1910.140(c)(2) 1910.140(c)(10)
	3600 lbf (16 kN) (proof, gate)	1910.140(c)(8)	
	Auto-lock, (min 2-stage)	1910.140(c)(9)	
<b>Energy absorbing lanyards</b>	5000 lbf (22.2kN)	1910.140(c)(6)	
<b>Self-retracting devices</b>	Max free fall of 2 ft (0.6 m)	1910.140(c)(5)	Minimum tensile load of 3,000 lbf (13.3 kN)
<b>Vertical lifelines</b>	5000 lbf (22.2kN)	1910.140(c)(4)	1910.140(c)(3) – one worker per lifeline 1910.140(c)(15) – synthetic requirement
<b>Horizontal lifelines</b>	Safety factor of 2	1910.140(c)(11)	1910.140(c)(15) – synthetic requirement
<b>Personal protective equipment</b>		1910.132	1910 Subpart I App B – Selection guidance
<b>Inspection requirements</b>	Before use	1910.140(c)(18)	“before initial use during each workshift”

### 4.3. OSHA 1926 (29 CFR Part 1926 Safety and Health Regulations for Construction)

#### 4.3.1. General References

Category	Reference	Notes
Overview	1926 Subpart M – Fall Protection	
General Duty	1926.20	
Rope Access	Not referenced	
Fall Protection	1926.501, 1926.502	1926 Sub M App C - guidelines
Platforms	1926 Subpart L	
Rope descent systems	Not referenced	
Training	1926.21, 1926.503	

#### 4.3.2. System Requirements

Category	Value	Reference	Notes
Trigger height for fall protection	6 ft	1926.501(b)(1)	
Allowable free fall distance	6 ft	1926.502(d)(16)(iii)	Higher free fall potential –LOI-1, LOI-2
Distance from unprotected edge	15 ft	LOI	Requires warning lines and other policies
Maximum arrest force (MAF)	1800 lbf	1926.502(d)(16)(ii)	
Maximum deceleration distance	3.5 ft (1.07 m)	1926.502(d)(16)(iv)	
Rescue		1926.35(b)(4) 1926.502(d)(20)	

#### 4.3.3. Component Requirements

Category	Value(s)	Reference	Notes
<b>Anchorage</b>			
Rope access	Not referenced		
Fall arrest	5000 lbf, or Safety factor of 2	1926.502(d)(15)	Per person See sub-clauses
Positioning	3000 lbf or 2x impact of fall	1926.502(e)(2)	“whichever is greater” 1926.502(e)(1) - free fall ≤ 2 ft (0.6 m)
Travel restraint	Not referenced		
Rope descent systems	Not referenced		
<b>Harness</b>			
Dorsal	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	1926.502(d)(17)	
Sternal	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Not referenced	
Ventral	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Not referenced	
Connectors	5000 lbf MBS 3600 lbf proof	1926.502(d)(3) 1926.502(d)(4)	
Energy absorbing lanyards	5000 lbf MBS	1926.502(d)(9)	
Self-retracting devices	5000 lbf MBS	1926.502(d)(13)	
Vertical lifelines	5000 lbf MBS	1926.502(d)(9)	
Horizontal lifelines	Safety factor of 2	1926.502(d)(8)	
Personal protective equipment		1926.28 1926.95	1926 Sub E
Inspection requirements	Before use	1926.502(d)(21)	“Prior to each use”

#### 4.4. California – (Cal-OSHA)

##### 4.4.1. General References

Category	Reference	Notes
<b>Overview</b>	<a href="#">Title 8 Regulations</a>	<a href="#">Title 8 Searchable Index</a> Construction (CSO) and General Industry (GISO) primarily referenced here. See other subchapters for industry-specific regulation
<b>General Duty</b>	<a href="#">GISO 3203 - IIPP</a>	Injury and Illness Prevention Program
<b>Rope Access</b>	<a href="#">GISO 3270.1</a>	
<b>Fall Protection</b>	<a href="#">CSO, Article 24</a>	<a href="#">CSO §1670.</a>
<b>Platforms</b>	<a href="#">GISO, Article 24</a> <a href="#">GISO, Article 6 App C</a>	
<b>Rope descent systems</b>	<a href="#">GISO §3286</a>	
<b>Training</b>	<a href="#">GISO 3270.1(c,h)</a> <a href="#">GISO §3203(a)(7)</a> <a href="#">CSO §1510</a>	

##### 4.4.2. System Requirements

Category	Value	Reference	Notes
<b>Trigger height for fall protection</b>	7.5 ft	<a href="#">CSO §1670(a)</a>	See clause for details and references
<b>Allowable free fall distance</b>	6 ft	<a href="#">CSO §1670(b)(11)(B)</a>	
<b>Distance from unprotected edge</b>	6 ft	<a href="#">GISO 3212(d-e)</a>	
<b>Maximum arrest force (MAF)</b>	1800 lb	<a href="#">CSO §1670(b)(11)(A)</a>	
<b>Maximum deceleration distance</b>	3.5 ft	<a href="#">CSO §1670(b)(11)(C)</a>	
<b>Rescue</b>	Prompt, self-rescue	<a href="#">CSO §1670(b)(14)</a> <a href="#">GISO 3270.1(i)</a>	

##### 4.4.3. Component Requirements

Category	Value(s)	Reference	Notes
<b>Anchorage</b>			
<b>Rope access</b>	2x dynamic load	<a href="#">GISO 3270.1(e)</a>	
<b>Fall arrest</b>	5000 lb or safety factor of 2	<a href="#">CSO §1670(b)(10)</a>	
<b>Positioning</b>	3000 lb or 2x load	<a href="#">CSO §1670(c)(4)</a>	Whichever is greater
<b>Travel restraint</b>	4x load	<a href="#">CSO §1670(d)(3)</a>	
<b>Rope descent systems</b>	5000 lb or safety factor of 2	<a href="#">GISO, Article 6 App C (I)(c)(5)</a>	
<b>Harness</b>	Full body Body belt ANSI Z359.1	<a href="#">CSO §1670(b)(12, 13)</a> <a href="#">CSO §1670(d)</a> <a href="#">CSO §1670(k)</a>	
<b>Dorsal</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<a href="#">CSO §1670(b)(12)</a>	
<b>Sternal</b>	<i>Not referenced</i>	See <a href="#">GISO 3270.1(c)(1)</a>	
<b>Ventral</b>	<i>Not referenced</i>		
<b>Connectors</b>	ANSI Z359.1	<a href="#">CSO §1670(l)</a> <a href="#">GISO, Article 6 App C (I)(c)(1-2)</a>	
<b>Energy absorbing lanyards</b>	5000 lb ANSI Z359.1	<a href="#">CSO §1670(b)(3)</a> <a href="#">CSO §1670(l)</a>	
<b>Self-retracting devices</b>	3-5000lb ANSI Z359.1	<a href="#">CSO §1670(b)(7, 8)</a> <a href="#">CSO §1670(l)</a>	3000 lb for <2 ft free fall distance 5000 lb for >2 ft free fall distance
<b>Vertical lifelines</b>	5000 lb ANSI Z359.1	<a href="#">CSO §1670(b)(3)</a> <a href="#">CSO §1670(l)</a>	
<b>Horizontal lifelines</b>	Safety factor of 2	<a href="#">CSO §1670(b)(2)</a>	Qualified person. <a href="#">GISO, Article 6 App C</a> requires CA engineer
<b>Personal protective equipment</b>		<a href="#">GISO §3380</a>	
<b>Inspection requirements</b>	Before use Twice annually	<a href="#">CSO §1670(b)(15)</a> <a href="#">CSO §1670(b)(19)</a>	Twice annually by competent person

#### 4.5. Oregon (Oregon OSHA)

#### 4.5.1. General References

Category	Reference	Notes
Overview	<a href="#">Chapter 437</a>	
General Duty	<a href="#">437-001-0760(1)</a>	
Rope Access	<a href="#">437-002-2027</a>	"Rope Descent & Rope Access Systems"
Fall Protection	<a href="#">437 Sub D, 437 Sub I</a>	Adopted
Platforms	<a href="#">437 Sub F</a>	Adopted
Rope descent systems	<a href="#">437-002-2027</a>	"Rope Descent & Rope Access Systems"
Training	<a href="#">1910.30</a>	Adopted

#### 4.5.2. System Requirements

Category	Value	Reference	Notes
Trigger height for fall protection	4 ft (1.2 m)	<a href="#">1910.28(b)(1)(i)</a>	Adopted
Allowable free fall distance	6 ft (1.8 m)	<a href="#">1910.140(d)(2)(ii)</a>	Adopted
Distance from unprotected edge	<i>Not referenced</i>		
Maximum arrest force (MAF)	1800 lbf (8 kN)	<a href="#">1910.140(d)(1)(i)</a>	Adopted
Maximum deceleration distance	3.5 ft (1.1 m)	<a href="#">1910.140(d)(1)(ii)</a>	
Rescue	"rompt"	<a href="#">1910.140(c)(21)</a>	

#### 4.5.3. Component Requirements

Category	Value(s)	Reference	Notes
<b>Anchorage</b>			
Rope access	5000 lbf or safety factor of 2*	<a href="#">437-002-2027</a>	Safety factor of 2 requires design, install, and use under direction of qualified person. See <a href="#">437-002-2027(4)(b)</a>
Fall arrest	5000 lbf or safety factor of 2*	<a href="#">1910.140(c)(13)</a>	Adopted. Safety factor of 2 requires design, install, and use under direction of qualified person
Positioning	5000 lbf or safety factor of 2*	<a href="#">1910.140(c)(13)</a>	Adopted. Safety factor of 2 requires design, install, and use under direction of qualified person
Travel restraint	3000 lbf (13.34 kN) or safety factor of 2*	<a href="#">437-002-0134(5)(b)</a>	Safety factor of 2 requires design, install, and use under direction of qualified person.
Rope descent systems	5000 lbf or safety factor of 2*	<a href="#">437-002-2027</a>	Safety factor of 2 requires design, install, and use under direction of qualified person. See <a href="#">437-002-2027(4)(b)</a>
<b>Harness</b>	Full body	<a href="#">1910.140(c)(19)</a> <a href="#">1910.140(c)(20)</a>	Adopted
Dorsal	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<a href="#">1910.140(c)(22)</a>	
Sternal	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<a href="#">1910.140(c)(22)</a>	If free fall distance less than 2 ft (0.6 m)
Ventral	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<i>Not referenced</i>	
<b>Connectors</b>	5000 lbf (22.2kN) (tensile) 3600 lbf (16 kN) (proof, gate) Auto-lock	<a href="#">1910.140(c)(7)</a> <a href="#">1910.140(c)(8)</a> <a href="#">1910.140(c)(9)</a>	Adopted. See also: <a href="#">1910.140(c)(1)</a> <a href="#">1910.140(c)(2)</a> <a href="#">1910.140(c)(10)</a>
Energy absorbing lanyards	<i>Not referenced</i>		
Self-retracting devices	Limit free to 2ft.	<a href="#">1910.140(c)(5)</a>	Adopted. Minimum tensile load of 3000 lbf (13.3 kN)
Vertical lifelines	5000 lbf (22.2kN)	<a href="#">1910.140(c)(4)</a>	Adopted. <a href="#">1910.140(c)(3)</a> – one worker per lifeline <a href="#">1910.140(c)(15)</a> – synthetic requirement
Horizontal lifelines	Safety factor of 2	<a href="#">1910.140(c)(11)</a>	Adopted. <a href="#">1910.140(c)(15)</a> – synthetic requirement
Personal protective equipment		<a href="#">1910.132</a>	Adopted. <a href="#">1910 Subpart I App B</a> – Selection guidance
Inspection requirements	Before use	<a href="#">1910.140(c)(18)</a>	"before initial use during each workshift"

#### 4.6. Washington ([Department of Labor & Industries](#))

##### 4.6.1. General References

Category	Reference	Notes
Overview	<a href="#">296-880</a>	
General Duty	<a href="#">296-800-110</a>	
Rope Access	<i>Not referenced</i>	
Fall Protection	<a href="#">296-880</a>	Effective October 1 <sup>st</sup> , 2020
Platforms	<a href="#">296-880-(30015-30030)</a>	
Rope descent systems	<a href="#">296-880-30025</a>	Window Cleaning
Training	<a href="#">296-880-10015</a>	

#### 4.6.2. System Requirements

Category	Value	Reference	Notes
Trigger height for fall protection	0-10 ft	<a href="#">296-880-090</a>	Industry and location dependent
Allowable free fall distance	6 ft	<a href="#">296-880-40020(3)(a)</a>	Higher value permissible if certain conditions are met
Distance from unprotected edge	15 ft	<a href="#">296-880-40040</a>	Warning lines
Maximum arrest force (MAF)	1800 lbf	<a href="#">296-880-40020(3)(b)</a>	
Maximum deceleration distance	3.5 ft (1.07 m)	<a href="#">296-880-40020(3)(c)</a>	
Rescue	"prompt"	<a href="#">296-880-10005</a>	

#### 4.6.3. Component Requirements

Category	Value(s)	Reference	Notes
<b>Anchorage</b>			
Rope access	<i>Not referenced</i>		
Fall arrest	3000 lbf 5000 lbf (22.2 kN), or safety factor of 2	<a href="#">296-880-40020(2)</a>	3000 lbf requires self-retracting lifeline or energy absorbing lanyard with MAF <900lbf Safety factor of 2 requires supervision of qualified person.
Positioning	2x impact from fall or 3000 lbf	<a href="#">296-880-40030(3)</a>	whichever is greater
Travel restraint	4x intended load	<a href="#">296-880-40025(5)</a>	See <a href="#">296-880-40025(6)</a> regarding rope grabs
Rope descent systems	<i>Not referenced</i>		
<b>Harness</b>	Full body	<a href="#">296-880-40020(1)(a)</a>	
Dorsal	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<a href="#">296-880-40020(1)(b)</a>	
Sternal	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<a href="#">296-880-40020(1)(b)</a>	
Ventral	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<a href="#">296-880-40020(1)(b)</a>	
Connectors	5000 lbf MBS 3600 lbf proof	<a href="#">296-880-40020</a>	
Energy absorbing lanyards	5000 lbf MBS	<a href="#">296-880-40020(c)</a>	
Self-retracting devices	3000 lbf (13.3 kN)	<a href="#">296-880-40020(1)(k)</a>	Free fall limited to less than 2 ft (0.6 m)
Vertical lifelines	5000 lbf (22.2kN)	<a href="#">296-880-40020(1)(k)</a>	one worker per line
Horizontal lifelines	Safety factor of 2	<a href="#">296-880-40020(1)(k)</a>	Designed, installed, and used, under supervision of a qualified person
Personal protective equipment		<a href="#">206-800-160</a>	
Inspection requirements	Regularly	<a href="#">296-880-510(11)</a>	References 296-880-40020