

Fall prevention for tower crane operators

Falls from heights (from a higher level to a lower level) occur frequently on construction sites. Everyone on the worksite has a role to play in preventing falls.

Tower crane operators are at risk of falls from heights as they climb the mast or walk along the jib and crown.

About fall protection systems

In B.C., employers must ensure a fall protection system is used when work is being carried out from a height of 3 m (10 ft.) or more. Types of fall protection systems include:

- Guardrails
- Fall-restraint systems (which prevent a fall)
- Fall-arrest systems (which stop a fall before a worker hits the surface below)
- Work procedures that are acceptable to WorkSafeBC

Employers must ensure workers receive training on using and maintaining fall-restraint or fall-arrest systems (also known as personal fall protection equipment). And workers must use their personal fall protection equipment as required.

When climbing to the crane cab, tower crane operators must have access to a fixed ladder installed, in or on the mast, that meets the requirements of section 14.88 of the OHS Regulation.

Fall-restraint and fall-arrest systems

When tower crane operators walk along the jib, they must use a fall-restraint system or a fall-arrest system.

A typical fall-restraint system includes the following parts:

- A full-body harness or a fall-restraint belt
- A fixed-length lanyard
- An adequate anchor point

A typical fall-arrest system includes the following parts:

- A full-body harness
- A lanyard with shock-absorbing elements
- An adequate anchor point

Equipment used in a personal fall protection system must be:

- Inspected by a qualified person before use
- Kept free from substances and conditions that could contribute to its deterioration
- Maintained in good working order

Personal fall protection systems must:

- Consist of compatible and suitable components.
- Be sufficient to support the fall-restraint or fall-arrest forces.

Any fall-arrest system that has arrested the fall of a worker must:

- Be removed from service
- Not be returned to service until it has been inspected and recertified as safe for use by the manufacturer or its authorized agent, or by a professional engineer.

OHS Regulation references: sections 11.1–11.10

Project:

Address:

Employer:

Supervisor:

Date:

Time:

Shift:

Number in crew:

Number attending:

Other safety concerns or suggestions:

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Record of those attending:

Name: (please print)	Signature:	Company:
1.		
2.		
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12.		
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14.		
15.		

Manager's remarks:

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Manager:

(Signature)

Supervisor:

(Signature)

For more information on health and safety requirements for crane operations in B.C., refer to the *Workers Compensation Act* and the OHS Regulation on worksafebc.com.