

Earthquake Preparedness for Cranes

About 400 earthquakes occur each year in southwestern British Columbia. On average, about a dozen of these earthquakes are strong enough for people to feel them.

Cranes are vulnerable to damage from the shaking caused by earthquakes. Employers and jobsites must have emergency procedures in place for natural disasters such as earthquakes, and crane operators must follow them.

Operator Responsibilities During an Earthquake

Once an earthquake is felt, if possible, operators should:

- Move the load and/or boom away from people and unstable objects.
- Lower the load close to the ground or to a safe place.
- Tower crane operators should hold themselves in position with your hands and feet until shaking stops. Secure the door if it opens.

When the Shaking Stops

- Safely store the equipment as if leaving for the day.
- Report to the muster station and remain until accounted for.

After an Earthquake

- The crane's structure must be fully inspected for damage, and all findings must be documented.
- If safe to do so, evaluate areas surrounding the crane such as concrete bases and soils for cracks, shifting, or instability and report findings to site emergency crews.
- Assess other surrounding hazards such as power lines and unstable structures. Leave only if safe.

- If a crane has been subject to a misadventure, it must be removed from service until a professional engineer has supervised an inspection, supervised necessary repairs, and deemed it safe for use.
- It is not recommended to use a dedicated evacuation/emergency platform (DEP) following an earthquake until the crane has been thoroughly inspected and verified as safe for use.
- If you are unsure what to do following an earthquake, communicate with your supervisor and the crane owner for further direction.

Safety Notes

- Always treat cranes as "out of service" until a full inspection is complete and the crane is certified as safe for use.
- Record and communicate inspection results for due diligence.
- Personal safety is the priority—no one should attempt repairs or adjustments until the crane is confirmed safe.

References: OHSR Part 4, Section [4.13–4.16.1](#)

Project: Address:

Employer: Supervisor:

Date: Time: Shift:

Number in crew: Number attending:

Other safety concerns or suggestions:

.....

.....

Record of those attending:

Name: (please print)	Signature:	Company:
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		

Manager's remarks:

.....

Manager: Supervisor:

(Signature)

(Signature)

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