



## Levelling a crane

Proper levelling plays a key role in preventing a crane from tipping over during operation. Mobile cranes and boom trucks use outriggers or other stabilizing equipment for levelling.

When levelling a crane, do the following:

- Consider ground conditions. Never place outriggers on unstable ground.
- Place pads under the outriggers.
- Fully extend the outrigger beams onto the pads.

### Key factors for successful levelling

The stability of mobile cranes relies on the following:

- The ground beneath the crane should be suitably compacted and levelled.
- The outrigger beams on the crane should be extended to the length or position set out in the crane manufacturer's recommendations.
- The outrigger jacks should be extended to raise the crane's wheels off the ground and free them of weight.
- The pads positioned under the outrigger jacks should be big enough to prevent the jacks from sinking into the ground while the crane is lifting loads.



### Adequate ground conditions are essential

Adequate ground conditions are essential for safe crane operations. The crane's stability and rated capacity depend on these conditions.

Do not assemble or use a crane unless the following apply:

- The ground is firm, drained, and graded enough so that, together with the use of supporting materials (e.g., gravel or concrete), the crane will be stable.
- The crane manufacturer's specifications for adequate support and degree of level of the equipment are met.

For more information, see the [Levelling a Crane](#) Safe Work Practice document at [bccranesafety.ca](http://bccranesafety.ca).

**OHS Regulation reference: section 14.67, 14.69**

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: .....  
(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](http://worksafebc.com).