



Tower Crane – PRE-ERECTION Requirements Checklist

Site: _____ Erection Date: _____

Prime Contractor: _____ Crane ID: _____

Why is planning important?

Planning is the first step in ensuring that work is done safely. Planning for tower crane erection and operations should start as early as possible and involve consultation with everyone engaged in the work including the prime contractor, crane owner, crane supplier, crane user, crane erection supervisor, electricity entity, mobile crane firm and project supervisor(s). Good planning involves:

- selecting the right crane(s)
- locating, erecting and commissioning the crane
- planning, scheduling and coordinating the work
- operating, inspecting and maintaining the crane on a daily basis
- planning for and completing crane preventive maintenance, inspection and repair.

How to use this checklist

This checklist can be used to assist with the set up and operation of tower cranes at the workplace. This assessment should be led by the prime contractor who assembles the group of relevant people involved in the tower crane erection and operation. The intent is to review and discuss each item on the checklist and coordinate any required action.

Responsible Role(s):

Role:	Description:	Person Responsible:	Confirmation:
Owner	Owner / Supplier of the Tower Crane	Company: Phone #	Signed: Print Name:
Erector	Company that erects and installs the Tower Crane	Company: Phone #	Signed: Print Name:
Prime Contractor	Developer or General / Prime Construction Company responsible for the site	Company: Phone #	Signed: Print Name:
Primary Operator	Sub-contractor / Employer leasing the Tower Crane	Company: Phone #	Signed: Print Name:
Mobile Crane	Owner / Lessee of the Mobile Crane contracted to assist in the erection and installation of the Tower Crane	Company: Phone #	Signed: Print Name:

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REQUIREMENTS:	RESPONSIBLE ROLE(S):				
	Owner / Supplier	Erector	General Contractor	Primary Operator	Mobile Crane
1. Site layout review, including: equipment layout areas, assembly area, mobile crane position, flagged-off work areas and worksite activity planning for day of erection					
2. Crane erection crew site orientation (site specific)					
3. First aid attendant on site for crane erection					
4. Technical High Angle Rope Rescue Agreement, phone call to fire department for short term and written agreement for long term. DEP box for erection crew (as required)					
5. Fall protection plan for crane erection, maintenance, inspection and repair					
6. Lock out procedure for crane erection, maintenance, inspection and repair					
7. Crane operator has valid certification from BC Crane Safety and: <ul style="list-style-type: none"> • Has demonstrated competency on the particular crane type • Level B – Provisional operator has a designated supervisor 					
8. Crane manufacturer’s operating manuals on site, including erection procedures and log book					
9. Traffic control plan, drawing and permit (if required)					
10. Crane component delivery trucks road travel route evaluated and staging (holding) location confirmed (if required)					
11. Crane installation and base drawing specific to the project and certified by a P. Eng.					
12. Geotechnical engineer’s soils report (bearing capacity) for crane base certified by a P. Eng.					
13. Prior to pour inspection of crane base imbed and reinforcing steel certified by a P. Eng.					
14. Electrical grounding equipment installed in base as per crane manufacturer and or electrical code					
15. Concrete compressive strength report required (MPA testing results as per crane installation drawing specifications)					
16. Crane structural components, including imbeds (anchor stools) are non-destructive tested and certified by a P. Eng.					

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17. Specialty engineering documents readily available for crane modifications, cab location, flood lighting, signage, etc. (if required)					
18. Non-standard signage and or lighting certified by a P. Eng.					
19. Noise variance permit (if required)					
20. Neighboring properties aware of crane erection, air rights, etc.					
21. Flight path - Transport Canada Aeronautical Assessment for Obstruction Marking and Lighting (if required)					
22. High voltage – overhead hazards evaluated <ul style="list-style-type: none"> • Crane slew-limiting device installed on crane • WorkSafeBC 30m33 document obtained and specified safeguards in place and safe work procedures developed 					
23. Crane – crane overlap or site collision hazards evaluated <ul style="list-style-type: none"> • Crane anti-collision device installed on crane • Specified safeguards in place and safe work procedures developed 					
24. Crane power supply, hard wired or generator installed by qualified person and inspected by power authority					
25. Air compressor, torque wrench and hose					
26. Mobile crane critical lift plan, including machine location, radii, heights and obstructions					
27. Geotechnical engineer’s soils report (bearing capacity) for mobile crane set-up location certified by a P. Eng.					
28. Air rights – Skytrain / Translink assets agreements in place where applicable					