STOP if not clear how to do the work

Equipment Lifting | Critical Checklist

When to use

Important: Attach to completed JSA

For lifting / hoisting of heavy equipment / materials and Critical Lifts:

- Using lifting devices: mobile crane, truck mounted crane
- Using straps or chains to lift with excavator, backhoe, skid steer or forklift

Only 1 checklist is required per day for repeat lifts of similar loads

Site location:		Date:
Lifting contractor:		License expiry:
Description of work:		
Load weight (max load weight and radius for group of lifts:	Lift radius:	Crane's rated capacity at lift radius:
Name of critical lift plan approver:		Forecasted local wind speed:
What could go wrong?		

72 hours BEFORE work begins | Determine if this is a Critical Lift

Use the **Critical Lifting Critical Checklist** if any of the following apply:

- ☐ Safety factor less than 25% (exceeds 75% of crane/excavator capacity)
- ☐ Safety factor less than 50% when lifting over critical lines/equipment
- ☐ Swing arc of boom does not meet minimum clearance for high voltage lines or conductors (refer to chart)
- ☐ Lift weight is greater than 5 tonnes (5,000 kg)
- ☐ Lift requires an engineering study with specifications & drawings per local regulations
- ☐ Lift requires two cranes

Voltage (V)	Minimum Clearance (m)
750–150k	3.0
150k–250k	4.5
>250k	6.0

If any of the above apply, create a **Critical Lift Plan** to include the following:

Done ☑

- ☐ Elevation view drawing
- ☐ Boom length _____m and lifting radius _____m
- ☐ Maximum load during lifting procedure _____ tonnes
- ☐ Minimum boom clearances (load, obstructions, or power lines) _____m
- ☐ Plan view layout of lift zone
- ☐ Initial/final lifting position and radius
- ☐ Location of the crane(s), including tail-swing limits, nearby structure
- ☐ Lift analysis including calculation of crane capacity at lift radius _____%
- ☐ Abort plan for emergency situations to bring the load back down to the ground in a safe manner

BEFORE work begins | Complete all steps on page 2

STOP if not clear how to do the work

Equipment Lifting | Critical Checklist

BEFORE work begins | Complete all steps

Done ☑

- ☐ 1. Operator is trained, competent, with valid license, in safe operation of crane or lifting device
- ☐ 2. Confirm adequate space for lift layout and swing radius, considering the load, crane capacity/ configuration and any hazards
- ☐ 3. Crane(s) located at correct position, work area is free from overhead and sideways obstructions
- ☐ 4. Exclusion zones are established and clearly marked, lift area and swing radius established and barricaded, traffic controls are in place
- ☐ 5. Lift equipment is supported on a firm, stable base or foundation, outriggers fully extended and blocked, and positioned an appropriate distance from open excavation or potential underground hazard (sewers, utilities)
- ☐ 6. Lift equipment / apparatus (slings/ straps/ hooks/ jibs etc.) / all riggings appropriate for the lift, in good condition, meet manufacturer's specifications, with valid certification(s) and do not exceed rated capacity
- ☐ 7. Equipment or material to be lifted is stable, wrapped and tied; lifting apparatus is securely fixed and balanced, pallets used are fit for purpose
- ☐ 8. Review minimum required clearance between live electrical lines and any part of the crane, load, or load line. If voltage of electrical lines cannot be confirmed, swing radius of boom is >6 meters from high voltage lines or conductors
- ☐ 9. Equipment operators have a clear view of the work area
- ☐ 10. Dedicated signaller(s)/ spotter(s) are used and communication method with each signaller/ spotter is defined and understood
- ☐ 11. Use of proper tag line(s) / guiding rope(s) for suspended loads, taking local wind speed measurements into consideration
- ☐ 12. Good access and egress in case of emergency, abort lift plan available plan for emergency situations to bring the load back down to the ground in a safe manner
- ☐ 13. All persons including those receiving the load and inside buildings to keep a safe distance from lifting activity (no persons under suspended load)
- ☐ 14. JSA reviewed and LMRA completed immediately prior to lift

Name of equipment operator:	Signature:	Date:
Name of spotter:	Signature:	Date: