



OH&S Alert!

August 2010

Tower crane Operational Safety Zones (OSZ)

APPROVED BY THE VICTORIAN TOWER CRANE CONSULTATIVE COMMITTEE (VTCCC)

OSZs are individually specific to each operation and application – what is suitable for one area may not necessarily be adequate for another.

For this reason each operation must be planned thoroughly with the involvement of and consultation between management, safety committee, employee representatives, crane companies/operatives involved, and where required, clients/neighbours (referred to as the relevant parties). WorkSafe may be consulted as required.

Common industry practices used for defining an OSZ include:

- Barricading – e.g. handrailing, parawebbing and screening
- Barring – e.g. securing doors, stairwells, entrances etc.
- Signage
- Spotters
- Permit systems/exclusion zones

NB: Operations restricted or confined within project/site boundaries as much as possible

Combinations of the above are to be considered depending on interface/s affected, including:

- operational area
- building levels
- extent of site
- layout and geometry of building/structure
- site access and egress
- public paths/roads

This document is written as a guideline only, and is not exhaustive.

All operational aspects must be risk-managed at all times.

Please read in conjunction with OSZ proposal (overleaf).



SAFETY IS UNION BUSINESS



OH&S Alert!

Operational Safety Zone (OSZ)

- Operational Risk Assessment (RA) and site/task-specific Safe Work Method Statement (SWMS) to be in place with all personnel inducted prior to commencement of operation; this includes any auxiliary units (mobile cranes, EWPs, etc...)
- Adequate OSZ to be in place to ensure protection of personnel. Where achievable and practicable, a radius measured 20m from the base of the crane when erecting or dismantling, and 12m when climbing or rigging ties, is to be in place.
- In any case, the extent and nature of the OSZ will be determined by risk analysis in consultation with the relevant parties.
- The OSZ must physically restrict unauthorised personnel from entering. Signage to be displayed, and total area monitored as required.
- Where necessary, traffic management and public protection to be in place with appropriate authorities notified, e.g. appropriate Council and/or VicRoads for road closures.

Considerations

- Preparation and coordination – initial and ongoing
- Type of tower crane – e.g. diesel/ electric luffer, hammerhead, etc...
- Internal or external climber
- Erection
- Climbing (i.e. up or down)
- Dismantling e.g. continuity of operation, structure bound, etc.
- Height of installation – e.g. number of tower sections

Coordination and hours of operation

No-one shall be in the OSZ during tower crane rigging operations, with the exception of personnel authorised and essential to the operation, supervision and auxiliary workers.

With regard to the above considerations and dependent on agreed RA/SWMS/OZS requirements, tower crane rigging operations may take place during normal working hours.

It is acknowledged that critical aspects of some activities (e.g. erection/dismantling of boom) may necessitate stricter controls and timing restrictions. These will be determined by the relevant parties and communicated to all affected personnel.

NB: Except in an emergency situation, erection/climbing/dismantling is not to be carried out at night and/or under artificial lighting.

Further considerations

- Task-specific training
- Geography of site/interface of areas and buildings
- Layout/number of cranes
- Environment, e.g. light, wind, rain etc.
- Council/adjoining owners/ public protection requirements
- Ancillary equipment (mobile cranes, etc...): placement and control
- Servicing requirements
- Traffic management

Controls

- Engineering for specific type of crane:
 - Diesel Luffer
 - Electric Luffer
 - Hammerhead
 - Other
- Training/competency:
 - Licence/s for High Risk Work
 - Gold Card
 - Training for specific model of crane
 - Trainee status
 - Height safety
 - Other