

Construction Plant-hire Association

Tower Crane Interest Group



Tower Crane Technical Information Note

TIN 032

Exclusion Zones

This Technical Information Note specifies arrangements for the protection of persons from falling objects in the area below a tower crane on which work such as erection, climbing, maintenance or dismantling is being carried out.

The Principal Contractor should ensure that the primary method of control is the establishment and enforcement of appropriate exclusion zones around the base of the tower crane. A drawing (**See Figure 1**) should be prepared showing the position and extent of the zone, which has been determined in consultation with the tower crane supplier. Different exclusions zones may be required for maintenance work, which is normally carried out during normal working hours, and erection/alteration and dismantling, which is often carried out at weekends.

Arrangements should be put in place to ensure that:-

- The extent of the exclusion zone is clearly marked with effective personnel barriers;
- All personnel on site are made aware of the exclusion zone and the times during which it will be in force;
- Marshals are in place to prevent unauthorised entry and monitor the effectiveness of the exclusion zone.

The exclusion zone must be based on a risk assessment and include where practicable:-

- A radius of at least 20 metres from the base of the tower crane:
- A footprint relative to the length of the jib, the jibs of luffing jib cranes need to be horizontal for erection and maintenance.

Additional control measures should include:-

- The use of a protection fan around the tower (See Figure 2);
- Good housekeeping on the crane structure (See TIN 005);
- The use of lanyards for small hand tools as appropriate;
- Toe boards and mesh panels on working platforms of climbing frames.

NOTE: Additional or extended exclusion zones may be required where mobile cranes are being used to assist with tower crane installation.

