

Preventing Unauthorised Access to Tower Cranes

The climbing of tower cranes by unauthorised people, often at night time when the site is closed, is a serious problem. This can occur for many reasons including for sport, as a protest or as a means to commit suicide.

The Principal Contractor has the overall responsibility to ensure that the necessary steps are taken to prevent access by unauthorised persons to the construction site. General site security measures are usually in place to prevent or discourage access to the tower crane but these measures alone are not usually effective for a determined intruder. Additional measures to prevent and discourage the climbing of the crane itself should also be considered depending upon the site's perceived risk.

The tower crane provider should always be consulted in the provision of any solutions so as not to restrict erection/dismantling and normal use and maintenance activities.

The solution to the right shows a base enclosure which still allows good visibility and access for inspections

A better solution (as shown below) is to include a horizontal barrier and trapdoor in the interior of the tower combined with an external anti-climbing fan or anti-climb mesh panels









Internal lockable trapdoor

Anti-Climb Fan

Anti-climb mesh panels

Key benefits:

- Significantly reduces the risk of unauthorised persons climbing the tower crane.
- Reduces the risk of damaged company reputation and adverse publicity.
- Unauthorised climbing of the tower crane can cause damage to the tower crane which may not always be immediately apparent.

Other considerations:

- Consider the lock that is placed on the base enclosure and trap door. A keyless combination lock is a better solution.
- Review the emergency escape procedure for the tower crane driver
- Plan ahead will the measures put in place be sufficient throughout the project's lifecycle e.g. as the building structure surrounds the tower crane?