



TIN 030

Tower Crane Erection Team Composition

The safe erection, alteration, climbing and dismantling (installation) of tower cranes relies to a large extent on the competence of the team of people carrying out these tasks on site. It is therefore essential that each erection team is made up of the correct minimum number of personnel with the right mix of skills, experience and training to enable them to work effectively as a team. The following table shows the minimum requirements agreed by the members of the CPA Tower Crane Interest Group and the Health and Safety Executive.

Title	Responsibilities - BS 7121-5	Qualifications
Erection Supervisor	<ul style="list-style-type: none"> Control of all senior erectors, erectors and trainee erectors; Control of any additional craneage and lifting equipment which could be used in the installation operation, thereby fulfilling the role of the crane supervisor. Ensuring that the operation is carried out in accordance with the method statement. Ensuring that any additional craneage and equipment is in accordance with that specified and properly certified. Ensuring that all erection personnel are equipped with the necessary tools and personal protective equipment. 	<p><i>Essential</i></p> <ul style="list-style-type: none"> NVQ Level 3 Plant Installation (Tower Cranes) with relevant endorsement CPCS Crane Supervisor CPCS Slinger Signaller - All Types - static duties (A40B) Managing & Co-Ordinating Plant (MCP) or equivalent such as SMSTS <p><i>Desirable</i></p> <ul style="list-style-type: none"> NVQ Level 2 - Controlling Lifting Operations NVQ Level 4 - Lifting Operations
Senior Erector	<ul style="list-style-type: none"> Supervision of erectors as directed by the erection supervisor. Responsibility for, and close monitoring of, any trainee erectors involved with the installation of the crane. 	<p><i>Essential</i></p> <ul style="list-style-type: none"> NVQ Level 3 Plant Installation (Tower Cranes) with relevant endorsement CPCS Crane Supervisor CPCS Slinger Signaller - All Types - static duties (A40B) Managing & Co-ordinating Plant (MCP) or equivalent such as SMSTS <p><i>Desirable</i></p> <ul style="list-style-type: none"> NVQ Level 2 Controlling Lifting Operations NVQ Level 4 Lifting Operations
Erector	<ul style="list-style-type: none"> Working on the installation of the crane in accordance with the manufacturer's instructions and a job specific method statement. Working under the guidance of the senior erector or erection supervisor. 	<p><i>Essential</i></p> <ul style="list-style-type: none"> Hold or be working towards NVQ Level 2 Plant Installation (Tower Cranes) with relevant endorsement CPCS Slinger Signaller - All Types - static duties (A40B) <p><i>Desirable</i></p> <ul style="list-style-type: none"> NVQ Level 2 Controlling Lifting Operations
Electrician	<ul style="list-style-type: none"> Working to the direction of the erection supervisor Providing electrical expertise and support to the operation being undertaken Carrying out faultfinding, adjustments and repairs as required 	<ul style="list-style-type: none"> City and Guilds 2391 (Inspection, Testing and Certification) NVQ Level 3. Electrotechnical Certification Scheme Approved Electrician NVQ Level 2 Plant Installation (Tower Cranes) with relevant endorsement
Trainee Erector	<ul style="list-style-type: none"> Working on the installation of the crane under the direct supervision of a senior erector. 	<ul style="list-style-type: none"> Working towards NVQ Level 2 Plant Installation (Tower Cranes) with relevant endorsement



A tower crane erection team will have a minimum of four members and should consist of a Supervisor, Senior Erector, Electrician and an erector. Additional erectors may be required, depending on the type and model of crane, and the circumstances of the operation being undertaken.

NOTE: Only **one** Trainee Erector should be permitted within each team and the trainee will not count as one of the team, i.e. if the process requires five team members and a trainee is to be included in that team, the team should be increased to a team of six, as the trainee is excluded from the number of competent erectors required.

It is essential that all tower crane erection personnel are familiar with the type and model of crane on which they are working. They may need additional training from time to time, for example before they work on new systems or equipment with which they are not familiar. The nature and extent of this training depends on the complexity of the new equipment and the degree of difference from the equipment with which they are familiar. All training and familiarisation should be recorded.

Product specific training of erection personnel for climbing operations should always be carried out by the equipment manufacturer or their approved agent.

It is important that all personnel in the erection team are regularly assessed to ensure that they can carry out their duties safely and effectively. Assessment should form part of any training.

NOTE: Training assessment tools are given in the Tower Crane Installation Training Programme, TWR 01.