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| **Scope** |
| This procedure applies to all Company projects, offices, facilities, asset and concession companies and Joint Venture (JV) projects where the Company Management System has been adopted by the JV Board. Where the Company is required to operate another party’s Management System then the requirements of the Joint Venture/Alliance Business Management System (BMS) Assessment (MSC-PR-0002) must be followed in relation to assessing the validity of third party management systems. |

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| **Purpose** |
| The purpose of this procedure is to define, plan, manage and monitor Lifting Operations. This document excludes specific arrangements for lifting with helicopters as this is covered in the Helicopter Code of Practice Procedure [OPS-PR-5677-OHL](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-7452)., On-Track Plant (Road Rail Vehicles) ([OPS-PR-6603](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-5876)) or Kirow Cranes ([OPS-MA-6050](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-7161)) as these are dealt with in separate procedures.  The requirements in this procedure are considered to be our current standards and must be adopted as part of a safe system of work. However, Projects and Contracts are also encouraged to identify new methods of working as long as these are: developed through rigorous risk assessment, demonstrably improve on current standards, deliver legal compliance and are approved in accordance with the Control of HSES Derogation procedure ([HSES-PR-0004](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-6992)). |

**Procedural Requirements**

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|  | **APPOINTMENTS** |
|  | For the purposes of this procedure the Construction Industry terms shown below have been used. |
|  | |  |  |  |  | | --- | --- | --- | --- | | Activity | Equivalent competence / terminology used in; | | | | LOLER | Construction Industry | Rail infrastructure | | Produces and authorises lift plan | Competent Person | Appointed Person | Lift Planner | | Amends and authorises lift plan on site | Competent Person | Appointed Person | Lift Planner | | Safe control of lifting operations | ‘Appropriately Supervised’ | Crane/Lift Supervisor | Crane Controller | | Attaches/removes an accessory for lifting | Load Handler | Slinger | Crane Controller or Slinger | | Directs crane controller commands | No equivalent term specified | Signaller | Slinger | | Provides guidance for the movement of vehicles off track when manoeuvring | No equivalent term specified | Plant & Vehicle Marshal  *Does not include lifting*  *operations* | Banksman  *Does not include lifting*  *operations* | |
|  | In certain circumstances an individual can undertake more than one of the above duties where they have the required competency and can undertake these roles without having any of their decisions affected/biased due to other responsibilities.  This must be authorised by the Appointed Person and recorded in the Lift Plan. However for Intermediate and Complex lifts the Crane/Lift Supervisor cannot also act as Slinger/Signaller. |

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|  | The Site Lead must appoint a Lifting Operations Appointed Person to ensure lifting operations are properly planned. The Appointed Person must have previous experience of similar lifts and have authority over any other Lifting Operations Appointed Persons associated with the work. The Appointed Person must be sufficiently familiar with the work to enable him/her to effectively fulfil their duties in regards to the lifting operation.  This appointment must be recorded in the Construction Phase Plan. | |
|  | An Appointed Person must be identified for every lifting operation, and the following roles in accordance with the Summary of Lift Plan, Documentation and Competency Requirements: | |
|  | * A Crane/Lift Supervisor | |
|  | * A Slinger and Signaller for lifting operations where lifting accessories are being used | |
|  | * A Crane Coordinator where there are two or more lifting operations which have the potential to impact on each other | |
|  | Where the scope of the project is restricted to Static Lifts, the Appointed Personand Crane/Lift Supervisor appointments can be held by a Static Lift Supervisor. | |
|  | A Slinger/Signaller is required for all lifting operations where lifting accessories are being used; the only exception to this is non-crane lifts using attachments such as hydraulically operated material handlers and proprietary mechanical and vacuum grab systems. | |
|  | **COMPETENCIES** | |
|  | **Appointed Person** | Competent and holds a valid CPCS or NPORS\*\* Appointed Person qualification, except for lorry loaders where an ALLMI Appointed Person qualification is acceptable.  **WHILST WORKING ON NETWORK RAIL AND LONDON UNDERGROUND RAIL INFRASTRUCTURES**  **Sentinel Lift Planners** will be competent and hold a valid Sentinel Lift Planners competency **Note:** Contact the Balfour Beatty Sentinel Coordinator for latest OTP/OTM Sentinel CMS Framework. |
|  | **Crane/Lift Supervisor** | Competent and holds a valid CPCS or NPORS\*\* Crane/Lift Supervisor qualification except for lorry loaders where an ALLMI Crane Supervisor qualification is acceptable.  **WHILST WORKING ON NETWORK RAIL AND LONDON UNDERGROUND RAIL INFRASTRUCTURES**  **Sentinel Crane Controllers (CC)** will be competent and hold a valid Sentinel competency (including Tandem Lifting) for plant type and CC relevant attachments. **Note:** Contact the Balfour Beatty Sentinel Coordinator for latest OTP/OTM Sentinel CMS Framework. |
|  | **Winch Lift Supervisor** | Where winches are used to undertake a lifting operation a valid CPCS or NPORS\*\* Crane/Lift Supervisor qualification. Also see [HSF-PR-0033](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-6982) Hauling and Winching. |
|  | **Slinger/Signaller** | Competent and holds a valid CPCS or NPORS\*\* Slinger/Signaller qualification except for Lorry Loaders where an ALLMI Slinger/Signaller qualification is acceptable.  NOTE CPCS category A40A is required when conducting pick and carry duties  **WHILST WORKING ON NETWORK RAIL AND LONDON UNDERGROUND RAIL INFRASTRUCTURES**  Competent and hold a valid Sentinel Slinger / Signaller endorsement or recognised industry qualification. |
|  | **Crane Coordinator** | Holds a valid CPCS or NPORS\*\* Crane/Lift Supervisor qualification with previous experience of the role in similar circumstances. |
|  | **Static Lift Supervisor** | Competent and holds a current SMSTS or Company accepted equivalent qualification. They must also have passed the internal Static Lift competency course. |
|  | **Crane Operator** | Competent and holds a valid CPCS or NPORS\*\* qualification for the type of equipment except for Lorry Loaders where an ALLMI card is acceptable.  **WHILST WORKING ON NETWORK RAIL AND LONDON UNDERGROUND RAIL INFRASTRUCTURES**  For OTP Excavator Crane (including Tandem Lift), Lorry Loader and relevant lifting attachments a valid Sentinel competence together with employer Authority to Work card specifying specific plant type.  For Railborne Cranes a valid certificate of competence in accordance with OPS-PR-6015 RAIL Plant Competence Management. |
|  | **Overhead Travelling Crane Operator** | Competent and holds a valid CPCS or NPORS\*\* (All Types) qualification, or for overhead travelling cranes in factories and depots RTITB is also accepted. |
|  | **Excavator Operators** | Competent and holds a valid CPCS or NPORS\*\* card for the category of excavator they are operating. This card must include CPCS lifting operations training (A58C/A59C or A10/12).  **WHILST WORKING ON NETWORK RAIL AND LONDON UNDERGROUND RAIL INFRASTRUCTURES**  For OTP Excavators a valid Sentinel competence together with employer Authority to Work card specifying specific plant type. |
|  | **Piling Rig Operators** | Competent and holds a valid CPCS or NPORS\*\* card for the category of piling rig being operated. |
|  | **Telehandler Operator** | Competent and holds a valid CPCS Telescopic Handler or NPORS\*\* card for the category of Telehandler being operated.  For suspended loads additional training is required from CPCS or NPORS\*\*. |
|  | **Lift Truck Operator** | Competent and holds a valid CPCS or NPORS\*\* card for the category of lift truck they are operating. RTITB cards are acceptable only during factory operations.  For suspended loads additional training is required from CPCS, NPORS\*\* or RTITB. |
|  | **Static Equipment Operator** | Has undertaken familiarisation training for the static lifting equipment. |
|  | **Winch Operator** | Competencies are detailed in [HSF-PR-0033](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-6982) Hauling and Winching |
|  | **\*\*** For NPORS qualifications refer to the Plant Competency Card reference material [HSF-RM-0046b](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-7665). | |
|  | **ZERO TOLERANCE RULE** | |
|  | Any plant overturning will be classified as a High Potential Incident (HiPo) and following investigation, anybody found to have violated a safe system of work or safety management procedure, which has or could have compromised an lifting equipment’s stability, will be removed from site.  Anyone removed from site will not be permitted to return. In the case of Balfour Beatty employees, a violation will be deemed as gross misconduct and disciplinary action may result in dismissal. | |
|  | Examples of violation: | |
|  | * Undertaking, supervising, permitting or instructing a lifting operation without a fully authorised or briefed Lift Plan. | |
|  | * Knowingly violating a safe system of work (Lift Plan, RAMS, permit, etc.) | |
|  | * Knowingly operating or permitting the operation of a piling rig on a piling platform without an approved Working Platform Certificate. | |
|  | * Operating an excavator or other tracked plant without authorisation or the correct and valid competency. | |
|  | * Recklessly operating lifting equipment’s which could affect its stability. | |
|  | * Disabling, removing or tampering with load or stability indicators. | |
|  | See the [Health & Safety Communications Page](https://home360.balfourbeatty.com/UKHealthandSafety/Communications/Pages/Default.aspx) for specific details on Zero Tolerances relating to Lifting Operations. | |
|  | **GENERAL** | |
|  | All lifting operations must be carried out in accordance with ‘Lifting Operations: Our Expectations’ document ([HSF-RM-0039a](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-8042)). | |
|  | For Tower Cranes the [Balfour Beatty Group Standard 003 - Safe Operation of Tower Cranes](https://home360.balfourbeatty.com/ghoreferencecentre/GHO%20BMS%20Library/Standard%20003%20-%20Safe%20Operation%20of%20Tower%20Cranes.pdf) must be followed. In addition, when using remote controlled Tower Cranes, the Operator must maintain visual contact with the load at all times. | |
|  | Forks fitted to or suspended from 360 excavators and the backhoe of 180 excavators must not be used for lifting operations. | |
|  | Using excavators, telehandlers, lift trucks or lorry loaders for the lifting of personnel may only be undertaken providing they conform to the requirements of EN280 Mobile Elevated Work Platforms including having integrated man riding basket controls. | |
|  | Gin wheels must be inspected and used in accordance with all statutory regulations, guidance notes and the Manufacturer’s Operating Instructions. Gin wheels used on scaffolding or as part of a permanent system must only be used with an automatic brake fitted. | |
|  | **Basic lifts:** A Crane/Lift Supervisor: Attendance is not required on site at all times, but must ensure all plans and competencies are in place and be immediately available. | |
|  | **Intermediate and Complex lifts:** A Crane/Lift Supervisormust be present for the duration of the lifting operation. | |
|  | **WHILST WORKING ON NETWORK RAIL AND LONDON UNDERGROUND RAIL INFRASTRUCTURES**  The Sentinel Crane Controller must be present for the duration of all lifting operations on the rail infrastructure. | |
|  | In accordance with 4.6 and 4.7 the Crane/Lift Supervisor must monitor the effectiveness of the safe system of work, identify any changes in circumstances and if necessary, stop the lift and seek further direction from the Appointed Person. | |
|  | Cranes must not be supplied with a free fall facility unless required for the specific circumstances. Cranes supplied with a free fall facility must be fitted with interlocks that operate in a positive and fail-safe manner. | |
|  | The use of swivel arm hoists are prohibited. | |
|  | Glass lifting accessories must not be controlled by radio operation. | |
|  | Refer to [HSF-RM-0039a](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-8042) Lifting Operations – Our Expectations for examples of lifting hooks which are acceptable and prohibited for use within the Company. | |
|  | **FITNESS FOR TASK HEALTH SURVEILLANCE** | |
|  | Fitness for task and health surveillance is covered in Occupational Health Surveillance Assessment Procedure ([HSF-PR-0035](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-1734)). Client contractual health surveillance / assessment requirements may differ and where this is the case this must be agreed in writing within the terms and conditions of the contract and agreed with the employees involved. | |
|  | External crane suppliers must ensure that their employed Operators are subject to medical surveillance and are fit for the task. | |
|  | **PLANNING THE LIFT** | |
|  | All lifting operations should be planned to ensure that they are carried out safely and that all foreseeable risks have been taken into account. An Appointed Person who has the appropriate competence, knowledge and experience for the lift being undertaken must sign off/approve the lift plan. | |
|  | **WHILST WORKING ON NETWORK RAIL AND LONDON UNDERGROUND RAIL INFRASTRUCTURES**  **Note:** All lifting operations on rail infrastructure must be planned in compliance with the following;   * Network Rail infrastructure – NR/L2/RMVP/0200 Infrastructure Plant Manual * All other Rail infrastructures – M&EE Codes of Practice (COPs) | |
|  | Lifting operations involving the demolition of a structure must be in accordance with the Demolition procedure [HSF-PR-0022](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-1113). | |
|  | A site visit must be undertaken by the Appointed Person commensurate with the risks involved in the lift however for complex lifts visiting the site is mandatory. It is also recommended that a site visit is undertaken for intermediate lifts. | |
|  | Selecting the Equipment | |
|  | When planning lifting operations the Appointed Person must first consider the suitability of the equipment for the task. | |
|  | The Appointed Person must be responsible for specifying the selection of lifting equipment. The following must be considered to ensure the most suitable equipment is selected: | |
|  | * Weights, dimensions and characteristics of the load(s) and accessories | |
|  | * Operational speeds, radii, height of lifts and areas of movement | |
|  | * Number, frequency and types of lifting operations | |
|  | * Length of time the lifting equipment is required | |
|  | * Site, ground and environmental conditions, or restrictions arising from use of existing structures | |
|  | * Space available for delivery, access, erection, travelling, operation and dismantling | |
|  | * Lifting on Structures e.g. Bridges | |
|  | * Any special operational requirements or limitations imposed | |
|  | * Type of lifting equipment i.e. telehandler, excavator, mobile crane etc. | |
|  | **WHILST WORKING ON NETWORK RAIL AND LONDON UNDERGROUND RAIL INFRASTRUCTURES**  Any Line Open (ALO) working must be in compliance with M&EE COP0032 | |
|  | Minimum plant specifications and associated checklists are detailed in reference material for the Plant procedure [HSF-PR-0046](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-7786). | |
|  | The Appointed Person must ascertain whether the lifting equipment is being operated within its rated capacity and must also de-rate for: | |
|  | * The manner by which the lifting accessory is attached to a load (e.g. the angle of sling legs) | |
|  | * Using a multi leg sling with one or more legs not used | |
|  | * Lifting of people | |
|  | * Where the load being lifted is affected by adverse weather conditions | |
|  | * Lifting from or onto a floating vessel | |
|  | * Tandem lifting | |
|  | Assessment of Ground Conditions | |
|  | An assessment of ground conditions must be carried out to determine whether it will support the imposed loads. Where load reduction or ground improvement measures are required the Appointed Person must ensure a design has been carried out by a competent Temporary Works Design Engineer. | |
|  | All platforms from which lifting operations are to be undertaken must have sufficient capacity for the maximum loads applied. This includes suspended floors, walls, scaffolding, piling mats and all delivery and storage areas. | |
|  | All lifting platforms designed and installed for lifting operations must be maintained to the required bearing capacity at all times. | |
|  | For tower, mobile and crawler cranes, the Appointed Person must consult with a Temporary Works Coordinator (TWC). The TWC is responsible for ensuring that there is an engineering assessment of the ground bearing capacity and a design of the outrigger pads/piling mats. | |
|  | For crawler cranes, the pressures imposed on the ground should be calculated or obtained from the crane manufacturer. This should take account of all routes the crawler crane may traverse. | |
|  | Work At or Adjacent To Railway Property | |
|  | When undertaking lifting operations near railways the relevant Railway Infrastructure Managers Asset Protection Team must be informed who will assess the works and advise anyone who is planning activities on or near the railway. These operations may not materially change the rail infrastructure but may have engineering and safety implications. It is worth noting that requirements and notice periods for approvals may vary between operators. | |
|  | The Railway Infrastructure Managers Asset Protection team will assess the work being undertaken with respect to a number of items, including: | |
|  | * Proximity of the work to the railway | |
|  | * Nature of the work being undertaken, the imposed risk and how these can be mitigated | |
|  | * The programme of works and specifically tasks that interface with the railway | |
|  | * Requirement for any track closures or isolations for the work | |
|  | * Agreeing deliverables that are required for the work to take place in accordance with Railway Infrastructure Managers policy and Group or Line Standards | |
|  | * Review and comment on proposed methodology before work commences for the activities being undertaken. | |
|  | * Providing site staff to ensure that the risks to the railway and the Outside Party are reduced. | |
|  | * Liaison with the other Railway Infrastructure Managers departments as necessary to provide a clear focus and customer service for the Outside Party | |
|  | Lift Complexity | |
|  | The Appointed Person must establish the category which best reflects the complexity of the lift following reference to the relevant part of BS7121. The category of the lift determines the documentation required. | |
|  | BS7121 Series has been accepted as representing the consensus of practical experience for safety on cranes. Access to the standards is available from the [IHS website](https://home360.balfourbeatty.com/kc/EngTech/Pages/IHS.aspx). The following parts of BS7121 details complexity indexes and considerations with the specific crane types: | |
|  | * BS7121-3 Code of Practice for Safe Use of Cranes. Mobile Cranes | |
|  | * BS7121-4 Code of Practice for Safe Use of Cranes. Lorry Loaders | |
|  | * BS7121-5 Code of Practice for Safe Use of Cranes. Tower Cranes | |
|  | * BS7121-11 Code of Practice for Safe Use of Cranes. Offshore Cranes | |
|  | * BS7121-12 Code of Practice for Safe Use of Cranes. Recovery Vehicles and Equipment | |
|  | * BS7121-13 Code of Practice for Safe Use of Cranes. Hydraulic Gantry Lifting Systems | |
|  | * BS7121-14 Code of Practice for Safe Use of Cranes. Side Boom Pipelayers | |
|  | All other types of lifting equipment not featured above, must use BS7121-1: 2016 | |
|  | Multiple Lifting (Tandem) (Complex) | |
|  | All tandem lifts must be reviewed by a Temporary Works Designer. | |
|  | Lifting Equipment of compatible lifting characteristics must be used with sufficient margins within the rated capacity of each crane to allow for any additional dynamic loading that could be transferred from one crane to another during movement of the load.  **WHILST WORKING ON NETWORK RAIL AND LONDON UNDERGROUND RAIL INFRASTRUCTURES**  Note: Multiple Lifting (Tandem) on rail infrastructure with On-Track Plant must meet the requirements of the following;   * Network Rail – NR\_L2\_RMVP\_0200 Module P503 - Lifting operations * All other – M&EE COP 0008 – Multiple Lifting (Tandem) with Two or more Excavator Cranes   Balfour Beatty Rail excavator crane requirements;   * Similar basic characteristics, e. g same size & weight * Have the same load/radius capacity * Have the same RCI type * RCI with the tandem lift (TL) facility which must be used. | |
|  | Topping and tailing during lattice tower and pile cage erection must be planned by an Appointed Person but does not require AP supervision unless the environmental hazards warrant their attendance. | |
|  | Prohibited Zones | |
|  | To prevent plant movement over or near hazardous areas prohibited zones must be established and defined in the risk assessment e.g. over a live highway, railway line or near to live overhead cables.  The crane must be fitted with a Movement Limiting Device (MLD). The MLD must limit both slewing and derricking if required.  **WHILST WORKING ON NETWORK RAIL AND LONDON UNDERGROUND RAIL INFRASTRUCTURES**  Any Line Open (ALO) working must be in compliance with M&EE COP0032. | |
|  | The use of a limiting device must be applied as part of an overall safe system of work, and not relied upon as the only control. Where a limiting device is utilised the level of functional safety achieved must be declared. Further guidance can be sought from BS EN 13849, BS EN 61511 or BS EN 61508. | |
|  | Where slew or height restrictions are required, these must be specified in the Lift Plan. The Crane /Lift Supervisor must check with the Operator that the limits have been set as specified prior to signing the Lift Plan. | |
|  | BS7121 – 1 (Annex E) provides details of additional recommendations for operation of cranes on or adjacent to sites of exceptional hazards (i.e. if the crane or its load falls onto high-hazard areas, within or adjacent to the site, a catastrophic incident might result). Access to the standard is available from the [IHS website](https://home360.balfourbeatty.com/kc/EngTech/Pages/IHS.aspx). | |
|  | Plant Interface Zones | |
|  | To keep authorised (those directly involved in the operation) personnel safe, Plant Interface Zones ([HSF-RM-0047a](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-7804)) must be established around operational mobile plant and vehicles.  Refer to the People, Vehicle and Plant Interface procedure ([HSF-PR-0047](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-7815)). | |
|  | All lifting and lay down areas must be adequately controlled to prevent unauthorised access during lifting operations. Access must be controlled in accordance with the safe system of work. | |
|  | Exclusion Zones | |
|  | To keep non authorised personnel safe Exclusion Zones must be determined by a risk assessment and established for all lifting operations including static lifts. | |
|  | The risk assessment must determine who will monitor and control the exclusion zone(s) to keep non authorised personnel safe. | |
|  | The zone between the lifting and lay down area for a lifting operation must be segregated where reasonably practicable. Where it is not reasonably practicable sufficient control measures must be implemented in accordance with the safe system of work. | |
|  | **LIFT PLAN** | |
|  | A Lift Plan is required for all lifting operations. | |
|  | The following standard forms must be used for Lift plans: | |
|  | * [HSF-TF-0039a](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-8056) Lift Plan – Static Lift | |
|  | * [HSF-TF-0039b](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-8057) Lift Plan – Driven Piling Rig (Junttan) | |
|  | * [HSF-TF-0039d](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-8058) Lift Plan - Crane | |
|  | * [HSF-TF-0039e](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-8059) Lift Plan – Mobile Lifting Operations (Non Crane) (e.g. for lifting with an Excavator, Telehandler or Lorry Loader etc.) | |
|  | * [HSF-TF-0039f](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-8078) Lift Plan – Tower Crane | |
|  | * [HSF-TF-0039g](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-8060) Lift Plan – Overhead Travelling Crane | |
|  | * [OPS-SF-6050a](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-7156) Kirow Crane. | |
|  | * Lifting via winching operations must be planned using a method statement/WPP | |
|  | For static lifts and lifts using a winch, a method statement or work instruction, approved and signed by the Lift Supervisor, may be used instead of Lift plan as long as it is developed in accordance with the Setting People to Work Safely procedure ([HSES-PR-0011](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-8591)). | |
|  | Lift Plans must be in place prior to commencing the lifting operation, and must be reviewed at least every 3 months for construction sites and 12 months for factories and depots or whenever the scope of work, equipment or environment changes. | |
|  | The Lift Plan Appraisal Form ([HSF-TF-0039i](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-8062)) must be used to record internal Lift Plan reviews. | |
|  | Where a number of lifts are planned simultaneously and there is a potential for adjacent lifting operations to meet, a Crane Coordinator must be appointed to coordinate the lifts. | |
|  | A Lift Plan Register ([HSF-TF-0039h](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-8061)) has been provided for use by Projects if required. | |

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|  | Details of tagging or colour marking systems to give a visual indication that the lifting accessory has been thoroughly examined within the last 6 months must be readily available on site. |
|  | The Crane/Lift Supervisor must brief those involved on the contents of the Lift Plan. The briefing must be recorded to confirm that it has been received and understood. |
|  | Supply Chain Lift Plans |
|  | With the exception of the following all Supply Chain Lift Plans must be appraised by an Appointed Person |
|  | * Static Lifting Equipment Lift Plans may be appraised by a Static Lift Supervisor |
|  | * Lorry Loader delivery Lift Plans may be appraised by a competent Crane/Lift Supervisor |
|  | The Lift Plan Appraisal Form ([HSF-TF-0039i](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-8062)) must be used for this appraisal. |
|  | For Basic and Intermediate Lift Plans the Site Lead must determine if the Appointed Person should physically visit site. For Complex Lift Plans the Appointed Person must visit site. |
|  | **Thorough examinations and inspections** |
|  | All thorough examinations, both for equipment and accessories, must be carried out and certified by a competent person independent of the operational team (HSF-PR-0039b). |
|  | Maximum intervals for periodic Thorough Examinations are: |
|  | * 12 months for lifting equipment |
|  | * 6 months for lifting equipment used to lift people |
|  | * 6 months for lifting accessories |
|  | * 6 months for rope access equipment |
|  | The Site Lead must ensure that the above periods are reviewed and reduced if necessary for works which include more than one shift each day, such as double shifting on tidal works or in regularly wet, abrasive or corrosive environments. |
|  | Where externally hired lifting equipment is used a written plan of maintenance for that equipment and any accessories must be agreed with the supplier, taking account of the environment in which the equipment is used. |
|  | All lifting equipment and accessories must be inspected by a competent person weekly whilst in use and recorded on the Lifting Equipment and Accessories Register ([HSF-TF-0039j](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-8063)). Any deterioration detected must be reported, recorded and remedied or the item quarantined. |
|  | The Plant Operator must undertake inspections in accordance with the plant procedure [HSF-PR-0046](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-7786). |
|  | The Slinger/Signaller must visually check all lifting accessories before use on every shift. |
|  | Pre-use visual checks must be undertaken per shift on all man-riding equipment and records must be kept in accordance with [HSF-PR-0063](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-8232) Working at Height. |
|  | Tyre condition is critical to lifting operations where the equipment relies on tyre pressure for part or all of its weight bearing and stabilisation capacity. Condition checks are part of the Daily/Pre-use Checklist. See Plant Procedure [HSF-PR-0046](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-7786). |
|  | Lifting Accessories |
|  | A system must be in place to uniquely identify all lifting accessories. This will include as a minimum the identification mark and safe working load/working load limit. |
|  | A tagging/colour marking system to give a visual indication that the lifting accessory has been thoroughly examined within the last 6 months must be applied. The colour code for the colour marking system must indicate the current inspection period as per the table below. This is also detailed in Statutory Inspection of Lifting Accessories ([HSF-RM-0039o](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-8052)). |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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|  | |  |  |  |  |  | | --- | --- | --- | --- | --- | | **Lifting Accessories and Load Bearing Equipment Colour Coding Examination Cycle** | | | | | | Blue |  | 15 June 2017 to  14 December 2017 | 15 December 2018 to 14 June 2019 | 15 June 2020 to  14 December 2020 | | Yellow |  | 15 December 2017 to 14 June 2018 | 15 June 2019 to  14 December 2019 | 15 December 2020 to 15 June 2021 | | Green | 15 December 2016 to 14 June 2017 | 15 June 2018 to  14 December 2018 | 15December 2019 to 14 June 2020 | 15 June 2021 to 15 December 2021 | | |
|  | New colour code cycles can commence from the 1st of the month and be completed by the end of the month. A change of colour before the 1st of the month would need to be approved by the Site Lead. | |
|  | Sites which will be open for less than six months but will span a colour code change can use a unique colour code if agreed by the Site Lead in conjunction with the Competent Person. | |
|  | Supply chain lifting accessories must have a unique tagging/colour marking system of identification or comply with the above requirements. | |
|  | Lifting accessories must not be used until a current thorough examination certificate (or current CE certificate for new equipment) is available and the item is tagged/colour coded. A Lifting Equipment and Accessories Register [(HSF-TF-0039j](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-8063)) is available for use by Projects if desired. | |
|  | Lifting accessories used to offload deliveries and which are immediately removed by the supplier do not require tagging or colour coding under this system. | |
|  | All lifting accessories must be properly stored. Suitable storage must be provided, along with clear indication of the current examination colour, working load limit charts, and a colour coding chart where relevant for webbing slings. Damaged accessories or accessories with lapsed examination periods must be placed in a designated quarantine area and not used until repaired and re-certified. | |
|  | **TOWER CRANES** | |
|  | The Site Lead must decide that a tower crane is the most appropriate lifting equipment for the lifting operation by undertaking an analysis of the tower cranes utilisation in conjunction with the materials and activity anticipated on site. | |
|  | Balfour Beatty Tower Crane Team are responsible for ensuring [HSF-SF-0039h](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-14607) Permit to Proceed with Change in Tower Crane Configuration is complete and authorised before the erection, change or dismantling of a tower crane. | |
|  | A copy of the authorised permit must be available at all times by the BBPFS Supervisor overseeing the task for the duration of the work operation. | |
|  | Key personnel must be notified at least 7 days prior to works: | |
| **Project Notification 7 days prior to works:**   * BU Managing Director * Project Director * Project Manager * Project HSES Advisor * BU HSES Director | | **PFS Internal Notification 7 days prior to works:**   * Managing Director * Strategic Asset Director * Tower Crane Business Manager * Director of Engineering, Safety & Assurance * HSES Manager |
|  | This is a requirement of [2019-UK-SU-004 Tower Crane Supply](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-14654) | |
|  | The Site Lead must ensure that the use of Tower Cranes on site is sufficiently controlled such that lifting operations are performed in a safe manner. The Appointed Person must ensure that the correct equipment and accessories are used and that all parties are aware of their responsibilities and the lifting restrictions when working on site. Tower Crane Procurement reference material ([HSF-RM-0039g](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-8047)) is available for reference to assist with the procurement/planning requirements. | |
|  | The Site Lead must ensure that tower cranes and their foundations are designed, constructed and checked in accordance with the Temporary Works design and procedures. A formal check of the foundation must be undertaken and recorded prior to erection of the Tower Crane. The Tower Crane Pre-Erection Inspection Approval Certificate [(HSF-SF-0039b](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-8053)) or an equivalent form must be completed prior to erection of the tower crane. | |
|  | The Tower Crane Erection reference material ([HSF-RM-0039h](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-8066)) contains information which will assist when reviewing the Safe System of Work for Tower Crane erection. | |
|  | The Site Lead must ensure that a Safe System of Work for the erection, climbing, operation and dismantling of tower cranes is established, implemented and monitored by the Appointed Person. | |
|  | As a contingency a safe system of work ([HSF-TF-0039k](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-8070)) or equivalent is completed prior to first use of the tower crane, following each climb of the mast or following a collision or damage to the tower crane. | |
|  | The Appointed Person must ensure that a physical survey of mast heights is completed prior to first use and after each climb of the mast. | |
|  | Anti-collision / zoning systems must be fitted to all cranes on multi crane sites or where there is potential to over sail live and third party areas. The Appointed Person must ensure that an Anti-Collision Device Set Up, Test and Acceptance Certificate ([HSF-SF-0039d](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-8054)) or equivalent is completed prior to first use of the tower crane. | |
|  | The anti-collision system must be tested before use. The Crane Operator must undertake a weekly check of the anti-collision / zoning system to ensure it is working correctly. | |
|  | An anti-tamper device must be fitted to the anti-collision system which can only be overridden in an emergency or with the prior permission of the Crane Coordinator. The anti-collision / zoning system ‘key’ must never be left on the crane and must be controlled by the Appointed Person. | |
|  | As a contingency a safe system of work must be developed in case of anti-collision failure. | |
|  | Emergency arrangements for the rescue of operators or maintenance worker must be established, tested and regularly reviewed. | |
|  | Emergency arrangements must include the provision of a trained and competent rescue team. An emergency rescue drill must be undertaken within the first week following hand over of the crane and at pre-determined regular intervals thereafter not exceeding six months. | |
|  | The Appointed Person must ensure that a planned maintenance programme is established and undertaken for all lifting equipment and associated lifting accessories. | |
|  | The Appointed Person must ensure that all applicable crane records and certification are retained on site for the duration of the operations. Reference materials on Examination Schedules ([HSF-RM-0039e](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-8045)), Proof Load Testing ([HSF-RM-0039i](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-8048)) for use where applicable and Climbing Frame Thorough Examinations and Checks ([HSF-RM-0039f](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-8046)) are available as aids to assist the Appointed Person to ensure the correct checks are being undertaken. | |
|  | The Crane Supervisor/Lift Supervisormust undertake a monthly tower crane safety check. | |
|  | An internal tower crane appreciation course is available for Appointed Persons who require further training and guidance in the use of tower cranes. This course is available by contacting HRSS. | |
|  | **MOBILE AND CRAWLER CRANES** | |
|  | Due to the long term effects on the telescopic rams, derricking cylinders and slew ring, and the potential for jib whip, mobile cranes must not be used for installation and extraction of sheet piles. Sheet piling work is restricted to the vibro-installation or extraction only, where this has been specifically agreed with the crane supplier/owner. | |
|  | Mobile cranes must only be used to suspend personnel in a man basket where a specific Method Statement/Work Package Plan is in place and the hierarchy of risk control deems this to be the safest manner having considered all other access options, or for emergency rescue. | |
|  | Crawler cranes must only be used with hydraulic hoist mechanisms. | |
|  | **LIFTING WITH 180 & 360 EXCAVATORS** | |
|  | When an excavator is being used to lift loads whilst travelling from one location to another i.e. “pick and carry duties”, its rated capacity must be reduced by 50% of that stated on the duty chart when it is in ‘cross-carriage’ orientation. | |
|  | Excavator operators, when travelling with suspended loads, must be instructed to travel slowly and keep the load as close to the ground with as short a load radius as possible. | |
|  | The Lifting Supervisor must check that the lifting charts used to plan lifting operations match the excavator’s boom, track/wheel and counterbalance configurations. | |
|  | Ensure that loading calculations for wheeled excavators (180’ and 360’) use the correct WLL information for the configuration of the machine i.e. whether the machine’s stabilizers’ and front loader / dozing blade will be used or not. | |
|  | In all circumstances where lifting is being undertaken using an excavator, the bucket and non-lifting attachments must be removed. The shackle will be attached to the approved lifting point, be free hanging and a swivel shackle used between the load and the lifting point. | |
|  | Ensure that the distance between the load hooking device (the point on the machine designed for connection of the load) and the load is kept as short as possible to reduce load swing. This will require careful selection of lifting accessories. | |
|  |  | |
|  | Where a quick hitch is permanently mounted on an excavator the thorough examination for the excavator must also cover the quick hitch. If the quick hitch is removed it is classed as an accessory and must be thoroughly examined every 6 months. | |
|  | Where a quick hitch is fitted, the weight of this accessory must be considered in the lift plan. | |
|  | Quick hitch devices used on behalf of the Company must comply with [HSF-RM-0046c](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-7666) Safe Use of Quick Hitches. | |
|  | The requirement to have a Crane/Lift Supervisor on site during the lift is dependent on the category of lift (see below). | |
|  | |  |  |  |  | | --- | --- | --- | --- | | ***Role*** | ***Lift Category*** | | | | ***Basic*** | ***Intermediate*** | ***Complex*** | | Crane/Lift Supervisor | Attendance is not required on site at all times, but must ensure all plans and competencies are in place and be immediately available. | Must be in the location. Only directly supervises when more than one lift is taking place | Required | | |
|  | See [HSF-RM-0039p](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-9714) Use of Excavator Lifting Points (Construction) for guidance when lifting with excavators on a construction site. | |
|  | **LIFTING WITH TELEHANDLERS** | |
|  | Loads carried on the forks of a telehandler can be covered by a routine Lift Plan. | |
|  | Telehandlers must only be used to carry suspended loads if designed to do so and if the method is included in the Manufacturers Operating Instructions. This method must be included in the Lift Plan and only proprietary attachments designed for use with the telehandler for this purpose must be used. | |
|  | Supervision of basic lifts using a telehandler requires a minimum competency of SSSTS. | |
|  | Supervision of intermediate (including carrying suspended loads) or complex lifts using a telehandler requires a crane/lift supervisor competency. | |
|  | The Telehandler Operator is not permitted to act as the Crane/Lift Supervisor whilst undertaking intermediate (including carrying suspended loads) or complex lifts. | |
|  | See Construction Plant-hire Association (CPA) guidance on the [Safe Use of Telehandlers](https://www.cpa.uk.net/sfpsgpublications/) | |
|  | Longitudinal Load Moment Indicators | |
|  | Longitudinal Load Moment Indicators (LLMI) must not be relied upon for establishing the weight of the load. | |
|  | **LIFTING WITH LORRY LOADERS** | |
|  | The use of a lorry loader must be via one of two contractual arrangements; hire of a lorry loader or a contract lift. The supply and delivery of goods by lorry loader is a contract lift (see below). Also see a ‘A Suppliers Guide to Lifting Procedures for Lorry Loaders’ ([HSF-RM-0039d](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-8044)) for further guidance. | |
|  | |  |  |  | | --- | --- | --- | | **The Business Unit requiring the load to be moved** | | | |  | | | | **HIRED LORRY LOADER**  (Hired or Managed) |  | **CONTRACT LIFT**  (Formally Contracted or Included with the delivery of goods) | | The Site Lead must:   * carry out all work in accordance with BS 7121 * supply the Appointed Person * The AP must plan the lift and operate a safe system of work * ensure that the lorry loader hired is of a suitable type and capacity * check the credentials of the lorry loader hire company and certification supplied * Consult the AP to ensure that the ground conditions are assessed and that stabilizer loads are adequately spread to ensure the ground bearing capacity is not exceeded |  | The Site Lead must:   * specify that all work is to be undertaken in accordance with BS 7121 * specify that the contractor is to supply an Appointed Person * provide information on the ground bearing capacity of the lifting area * confirm what other information and/or services will be provided to the Contractor | | The lorry loader owner has a duty to:   * provide a lorry loader that is properly maintained, tested and certified * provide a competent operator (if specified) * confirm to the Site Lead the size of standard spreader pads supplied with the lorry loader |  | The Lifting Contractor is responsible for:   * supplying the Appointed Person; * planning the lift, and operation of a safe system of work * organisation and control of the lifting operation * providing a lorry loader that is properly maintained, tested and certified * providing a competent operator * Ensuring stabilizer loads are adequately spread to ensure the ground bearing capacity is not exceeded | | |
|  | The Lorry Loader Operator can only assume combined roles (detailed below) for certain categories of lift, provided they meet the required competencies. Where the Operator does not hold the competency requirements, the Appointed Person must ensure that the competencies required are met by a separate individual. | |
|  | |  |  |  |  | | --- | --- | --- | --- | | ***Role*** | ***Lift Category*** | | | | ***Basic*** | ***Intermediate*** | ***Complex*** | | Appointed Person | Not required on site | Maybe required on site | Required | | Crane/Lift Supervisor | Roles may be combined | Roles may be combined | Required | | Operator | Required | | Slinger/Signaller | Required | Required | | |
|  | The category of the lift determines the documentation required. | |
|  | |  |  | | --- | --- | | **Basic** | **Intermediate & Complex** | | * A Lift Plan * Risk assessment * Evidence of Operator Competence * Thorough examination certificates for all lifting equipment & accessories * The operator must assess the ground to ensure that the supporting ground is firm and can take the weight of the vehicle for the lifting operation. | * In addition to the Basic requirements * The Safe System of Work and Lift Plan are specific to the task * The Lift Plan includes a detailed dimensioned drawing of the lifting operation, the lorry loader and the load, the load path, pick-up and lay-down areas and slinging arrangements * The ground conditions and outrigger pad requirements have been assessed by a Competent Person | | |
|  | All deliveries must be accompanied by a Lift Plan (which may form part of a method statement/WPP) produced by an Appointed Person on behalf of the supplier. This Plan may be generic but must cover the requirements for the material being offloaded. | |
|  | Prior to carrying out lorry loader lifting operations defined as complex, consideration must be given to other items of lifting equipment that may be more appropriate, such as a mobile crane. | |
|  | Lifts within the vicinity of an overhead power line are not necessarily deemed to be complex when the operations are directly related to work on or for that power line. Robust procedures must be in place to ensure safety from the electrical system and the Safety Clearance Check Sheet ([HSF-SF-0015a](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-8581)) must be completed as part of the safe system of work. | |
|  | [HSF-TB-0046j](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-14946) provides information on the Safe Use of Remote Controls with Lorry Loaders. | |
|  | **LIFTING WITH LIFT TRUCKS** | |
|  | General | |
|  | Loads carried on the forks of a Lift truck can be covered by a routine Lift Plan . | |
|  | Truck mounted forklifts and other small forklifts used by delivery companies must not be used on unmade ground. Deliveries must be restricted to a suitable hard standing. | |

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|  | Planning the Lift |
|  | When planning lifting operations the Appointed Person must first consider whether a lift truck is the most suitable equipment for the task in accordance with 6.5. |
|  | Supervision of basic lifts using a fork lift truck requires a minimum competency of SSSTS. |
|  | Supervision of intermediate (including carrying suspended loads) or complex lifts using a fork lift truck requires a crane/lift supervisor competency. |
|  | The Fork Lift Operator is not permitted to act as the Crane/Lift Supervisor whilst undertaking intermediate (including carrying suspended loads) or complex lifts. |
|  | Suspending loads from lift trucks is only permitted if the equipment is designed for this purpose and details are included in the Manufacturers Operating Instructions. This must be included within the Lift Plan and only proprietary attachments designed for this purpose must be used. The Operator must have undertaken familiarisation specific to the lifting attachment. |
|  | Longitudinal Load Moment Indicators |
|  | Longitudinal Load Moment Indicators (LLMI) must not be relied upon for establishing the weight of the load. |

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|  | **Lifting with Drum Winches and Capstans** |
|  | All lifting with drum winches and capstans must be covered by a lift plan/method statement/WPP. |
|  | The equipment Operator is responsible for setting up the winch in accordance with the manufacturer’s and relevant work instructions ensuring that the winch’s anchorage is sufficient for the loads to be lifted. It must be located in a position giving clear lines of sight to all personnel involved in the lift. If this is not possible the method of communication will be established and agreed by the affected parties. |
|  | The Slinger attaching the load is responsible for ensuring that the rigging and rating of the rope and accessories are suitable for the loads to be lifted. |
|  | The role of the Winch Lift Supervisor can be undertaken by one of the Slinger/Signallers provided they have the correct competencies. |
|  | All personnel associated with the lifting operation must vacate the prohibited zone during lifting and lowering operations. |
|  | **Tower erection using a derrick** |
|  | A specific lift plan/method statement/WPP must be created in conjunction with the Design Engineer.  This must take into account: |
|  | * equipment to be used |
|  | * rigidity of panels to be lifted (if single panels are to be installed) |
|  | * weight and position of each lift, and |
|  | * stability of the structure during erection |
|  | The final erection method must be approved by the Temporary Works Designer prior to starting work and the erection method adhered to by the Lift Supervisor during the lift(s). |
|  | **LIFTING OPERATIONS BY STATIC LIFTING EQUIPMENT** |
|  | Where lifting or unloading operations are carried out by use of static lifting equipment it must have a current examination certificate and be subject to a weekly inspection recorded on the Lifting Equipment and Accessories Register ([HSF-TF-0039j](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-8063)) |
|  | The equipment Operator must be briefed on the Lift Plan, the Safe System of Work and receive familiarisation training. |
|  | **OVERHEAD TRAVELLING CRANES** |
|  | All Crane Operators must be briefed and issued with a copy of the Operator’s guide card which will authorise them to operate the crane and undertake the daily/pre-use checks in accordance with the Plant procedure [HSF-PR-0046](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-7786). |
|  | **PASSENGER LIFTS AND ESCALATORS** |
|  | Lifts provided for use by workers in workplaces are subject to the Lifting Operations and Lifting Equipment Regulations (LOLER). |
|  | If you are a lift owner or someone responsible for the safe operation of a lift used at work, such as a Facilities Manager or Supervisor, you are a 'duty holder' under LOLER. This means that you have a legal responsibility to ensure that the lift is thoroughly examined and that it is safe to use. |
|  | Regulation 9 of the Lifting Operations and Lifting Equipment Regulations 1998 ([LOLER](http://www.legislation.gov.uk/uksi/1998/2307/made)) requires that all lifts provided for use in work activities are thoroughly examined by a competent person at 6 monthly intervals where lifts are used to carry people and 12 monthly intervals where lifts are used to carry materials only. |

| **HSF-PR-0039 Lifting Operations: Summary of Lift Plan, Documentation and Competency Requirements** | | | | | | | | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| CRANE | | Pre – Lifting Operation | | | | | | | | | Fit for Task | Safe Lifting | | | | |
| Non BB Lift | | | BB Lift Plans | | | | TW Check | Daily/Pre-use Checklist | Lift Plan Briefed | Crane/Lift Supervisor | Crane Coordinator | Slinger / Signaller | Operator |
| Lift Plan by Supply chain AP | BB AP Review | | Lift Plan by BB AP | | | Independent AP Review |
|  | | ✔ | | ✔ | ✔ | | | ✔ Complex Only | ✔ | ✔ | ✔ | ✔ | ✔ | *\** | ✔ | ✔ |
| *Mobile Crane* | |
|  | | ✔ | | ✔ | ✔ | | | N/A | ✔ | ✔ | ✔ | ✔ | ✔ | *\** | ✔ | ✔ |
| *Piling Rig* | |
|  | | ✔ | ✔ | | ✔ | |  | |  | ✔ | ✔ | ✔ | ✔ | \* | ✔ | ✔ |
| *360 Excavator, tracked and wheeled* | |
|  | | ✔ | ✔ | | ✔ | |  | |  | ✔ | ✔ | ✔ | ✔  Intermediate, suspended load, complex | *\** | ✔  Suspended Load | ✔ |
| *Telehandler (Excl 360)* | |
|  | | ✔ | ✔ | | ✔ | ✔ Complex Only | | | As lift plan | ✔ | ✔ | ✔ | ✔  Intermediate, suspended load, complex | *\** | ✔  Suspended Load | ✔ |
| *Telehandler 360* | |
|  | | ✔ | ✔ | | ✔ | ✔ Complex Only | | | As lift plan | ✔ | ✔ | ✔ | ✔ | \* | ✔ | ✔ |
| *Lorry Loader* | |
| *Forklift* | | ✔ | ✔ | | ✔ |  | | |  | ✔ | ✔ | ✔ | ✔  Intermediate, suspended load, complex | N/A | ✔  Suspended Loads | ✔ |
| *Fork Lift Truck* | |
|  | | ✔ | ✔ | | ✔ | ✔ | | | ✔ | ✔ | ✔ | ✔ | ✔ | \* | ✔ | ✔ |
| *Tower Crane* | |
|  | | N/A | N/A | | ✔ | ✔ Complex Only | | | N/A | ✔ | ✔ | ✔ | ✔ | \* | ✔ | ✔ |
| *Overhead Travelling Crane* | |
|  | | ✔ | ✔ | | ✔ | ✔  Complex Only | | | ✔ | ✔ | ✔ | ✔ | ✔ | *\** | ✔ | ✔ |
| *Crawler Crane* | |
| Description: jcb 2 | *Backhoe* | ✔ | ✔ | | ✔ |  | | |  | ✔ | ✔ | ✔ | ✔ | \* | ✔ | ✔ |
| *Front Forks* | ✔ | ✔ | | ✔ |  | | |  | ✔ | ✔ | ✔ | ✔ | N/A | N/A | ✔ |
| *180 excavator* | |

| **HSF-PR-0039 Lifting Operations: Summary of Lift Plan, Documentation and Competency Requirements** | | | | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| CRANE | Pre – Lifting Operation | | | | | | Fit for Task | Safe Lifting | | | | |
| Non BB Lift | | BB Lift Plans | | TW Check | Daily/Pre-use Checklist | Lift Plan Briefed | Crane/Lift Supervisor | Crane Coordinator | Slinger (where appropriate) | CPCS Operator |
| Lift Plan by Supply chain Static Lift Supervisor/AP | BB Static Lift Supervisor/AP (Review) | Lift Plan by BB Static Lift Supervisor/AP | Independent Static Lift Supervisor Review |
|  | ✔ \*\*\* | ✔ | ✔ | N/A | ✔ | ✔ | N/A | ✔ | ✔ | N/A | ✔ | N/A |
| *Static Operating Lifting Equipment* |

| **HSF-PR-0039 Lifting Operations: Summary of Lift Plan, Documentation and Competency Requirements** | | | | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| CRANE | Pre – Lifting Operation | | | | | | Fit for Task | Safe Lifting | | | | |
| Non BB Lift | | BB Lift Plans | | TW Check | Daily/Pre-use Checklist | Lift Plan Briefed | Crane/Lift Supervisor2 | Crane Coordinator | Slinger / Signaller | Sentinel Operator |
| Lift Plan by Supply chain Sentinel Lift Planner | BB Sentinel Lift Planner Review | Lift Plan by BB Sentinel Lift Planner | Independent AP Review |
| ***C:\Work Stuff\0-01 Compliance Manager\0-01-14 Photos\Camera dump141114\141114 102.jpg*** | ✔ | ✔ | ✔ |  | As lift plan | ✔ | ✔ | ✔ | ✔  CC – OTP  \*\*\*\* | As lift plan | ✔ | ✔  \*\*\*\* |
| *On Track Plant (*[*OPS-PR-6603*](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/BMS%20Documents/BB%20Rail/Procedures/OPS-PR-6603-RAIL%20Control%20of%20OTP.docx) */* [*OPS-MA-6050*](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/BMS%20Documents/BB%20Rail/Manuals/OPS-MA-6050-RAIL%20Kirow%20Crane%20Operations.docx)*)* |

| **HSF-PR-0039 Lifting Operations: Summary of Lift Plan, Documentation and Competency Requirements** | | | | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| CRANE | Pre – Lifting Operation | | | | | | Fit for Task | Safe Lifting | | | | |
| Non BB Lift | | BB Lift Plans | | TW Check | Daily/Pre-use Checklist | Lift Plan Briefed | Crane/Lift Supervisor | Crane Coordinator | Slinger / Signaller | Crane Operator |
| Lift Plan by Supply chain Sentinel Lift Planner | BB Sentinel Lift Planner Review | Lift Plan by BB Sentinel Lift Planner | Independent AP Review |
| ***I:\01-SS CRANE SERVICES\Kirow Crane Pictures\1200 Images\DSC_0107.JPG*** | ✔ | ✔ | ✔ |  | As lift plan | ✔ | ✔ | ✔ | ✔  CC-OTM\*\*\*\* | As lift plan | ✔ | ✔  \*\*\*\* |
| *On Track Machine On Track Plant (*[*OPS-PR-6603*](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/BMS%20Documents/BB%20Rail/Procedures/OPS-PR-6603-RAIL%20Control%20of%20OTP.docx) */* [*OPS-MA-6050*](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/BMS%20Documents/BB%20Rail/Manuals/OPS-MA-6050-RAIL%20Kirow%20Crane%20Operations.docx)*)* |

**\*** Where there are a number of lifting operations carried out on site/factory/depot simultaneously and there is a potential for adjacent lifting operations to clash.

**\*\*\*** Supply Chain Static Lift Supervisor must also have attended the static lift training if they are to complete the lift plan.

**\*\*\*\*** Operators & Crane Controllers must have the correct Sentinel core and attachment modules competency for activity

| **Abbreviations/Definitions** | |
| --- | --- |
| **SITE LEAD** | The person directly responsible for the Health and Safety of all employees, subcontractors and third parties, and for the care of the environment, affected by our works. |
| **APPOINTED PERSON (AP)** | The person responsible for a lifting operation. Each site undertaking lifting operations shall have a nominated AP responsible for overall control of all the lifting operations. |
| **CRANE/LIFT SUPERVISOR (LS)** | Supervises the lifting operation to ensure that it is carried out in accordance with the Lift Plan and the Safe System of Work. |
| **SLINGER** | Appointed within the Lift Plan with the responsibility for the correct identification and use of lifting accessories, attaching and detaching the load. |
| **SIGNALLER** | Appointed within the Lift Plan with the responsibility for directing the Operator to ensure safe movement of the lifting equipment and load. |
| **CRANE COORDINATOR** | Coordinates multiple lifting operations where they may impact upon each other and to liaise with individual Appointed Personsand Crane/Lift Supervisors. |
| **OPERATOR** | A person who operates lifting equipment. |
| **VEHICLE MARSHAL** | See section 5 of [HSF-PR-0047](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-7815) People, Vehicle and Plant Interface for competencies, training, definitions and requirements. |
| **BANKSMAN** | See section 17 of [HSF-PR-0047](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-7815) People, Vehicle and Plant Interface for competencies, training, definitions and requirements. |
| **LIFTING EQUIPMENT** | The equipment used for lifting and lowering loads. This includes attachments used to anchor, fix or support the equipment (e.g. the runway of an overhead travelling crane). |
| **LIFTING ACCESSORY** | The accessories such as chains, slings, shackles, web slings, which are used to attach loads to lifting equipment. |
| **THOROUGH EXAMINATION** | A systematic and detailed examination of lifting equipment by a competent person to detect any defects that is, or may become dangerous. |
| **STATIC LIFT SUPERVISOR** | Only manages and supervises Static Lifting Operations. |
| **STATIC LIFTING EQUIPMENT** | Non-powered equipment used for lifting operations using vertical elevating/lowering lifting equipment (including but not restricted to winch fork lift, chain blocks, gin wheels fitted with an automatic clutch and SkyRak system for use in MEWPs). |
| **STATIC LIFTING OPERATION** | Lifting operations that are conducted by using static lifting equipment. |
| **TOPPING AND TAILING** | This is a process in which one machine lifts one end of a horizontal load just clear of the ground whilst the main crane lifts the other end, repositioning the jib as necessary, until it has the entire load in a vertical position and the tailing machine can be released. |
| **MLD** | Motion Limiting Device (e.g. slew or height restrictor). |
| **CONTRACT LIFT** | A specialist crane company or external supplier taking on the responsibility for planning, organising and controlling the lift, including providing the relevant competent duty holders to plan and execute the lift. |
| **MULTIPLE LIFTING (TANDEM)** | Lifting operation using two or more items of lifting equipment. |
| **RISK ASSESSMENT** | A systematic process of evaluating and mitigating the potential risks that may be involved in a projected activity or undertaking. |
| **METHOD STATEMENT/**  **WORK INSTRUCTION** | A Method Statement/Work Instruction is a document detailing how a particular task or activity will be carried out. It should detail the possible dangers/risks associated with the particular part of the project and the methods of control to be established, to show how the work will be managed safely. |
| **WPP** | Work Package Plan |
| **CPA** | Construction Plant-hire Association |
| **REASONABLY PRACTICABLE** | Balancing the level of risk against the measures needed to control the real risk in terms of money, time or trouble. However, you do not need to take action if it would be grossly disproportionate to the level of risk. |
|  | This highlights a requirement from a significant incident investigation and contains a link to the source material where available. |
| **RED TEXT** | Not yet available, use current BMS for relevant document |
| \*\* For NPORS qualifications refer to the Plant Competency Card reference material [HSF-RM-0046b](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-7665). | |

| **INPUTS** | | |
| --- | --- | --- |
| **Reference** | **Type** | **Title** |
| MSC-PR-0002 | Procedure | Joint Venture/Alliance Business Management System (BMS) Assessment |
| [HSES-PR-0004](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-6992) | Procedure | Control of HSES Derogation |
| [IHS Link](https://home360.balfourbeatty.com/kc/EngTech/Pages/IHS.aspx) |  | British and Network Rail Standards |
| [L113](http://www.hse.gov.uk/pubns/priced/l113.pdf) | Legislation | Lifting Operations and Lifting Equipment Regulations 1998 ACOP & Guidance |
| [L22](http://www.hse.gov.uk/pubns/priced/l22.pdf) | Legislation | Provision and Use of Work Equipment Regulations 1998 ACOP & Guidance |
| [BS7121](https://home360.balfourbeatty.com/kc/EngTech/Pages/IHS.aspx) | External | British Standard – Code of practice for safe use of cranes |
| [BS EN ISO 13849](https://home360.balfourbeatty.com/kc/EngTech/Pages/IHS.aspx) | External | Safety of machinery. Safety-related parts of control systems. General principles for design |
| [BS EN 61511](https://home360.balfourbeatty.com/kc/EngTech/Pages/IHS.aspx) | External | Functional safety. Safety instrumented systems for the process industry sector. Framework, definitions, system, hardware and software requirements |
| [BS EN ISO 61508](https://home360.balfourbeatty.com/kc/EngTech/Pages/IHS.aspx) | External | Functional safety of electrical/electronic/ programmable electronic safety-related systems. Requirements for electrical/electronic/ programmable electronic safety-related systems |
| [INDG339](http://www.hse.gov.uk/pubns/indg339.pdf) | External | Thorough examination and testing of lifts (Simple guidance for lift owners) |
|  | External | The Management of Lifting Operations with Lorry Loaders CPA - ALLMI Best Practice Guide |
|  | External | [Construction Plant-hire Association (CPA) - Safe Use Of Telehandlers in Construction](https://www.cpa.uk.net/sfpsgpublications/) |
| [OPS-PR-6603](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-5876) | Manual | Control of On Track Plant |
| [OPS-MA-6050](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-7161) | Manual | Kirow Crane Operations Manual |
| [HSF-RM-0039a](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-8042) | Reference Material | Lifting Operations: Our Expectations |
| [HSF-RM-0039b](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-8043) | Reference Material | Worked Example of Lift Plan – Mobile Lifting Operations (Non Crane) |
| [HSF-RM-0039d](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-8044) | Reference Material | A Suppliers Guide to Lifting Procedures For Lorry Loaders |
| [HSF-RM-0039e](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-8045) | Reference Material | Examination Schedule-Preparation for Examination or Test of Powered Tower Crane |
| [HSF-RM-0039f](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-8046) | Reference Material | Tower Crane Climbing Frame Thorough Examination and Checks |
| [HSF-RM-0039g](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-8047) | Reference Material | Tower Crane Procurement |
| [HSF-RM-0039h](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-8066) | Reference Material | Tower Crane Erection |
| [HSF-RM-0039i](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-8048) | Reference Material | Proof Load Testing of Tower Crane |
| [HSF-RM-0039j](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-8049) | Reference Material | Tower Crane Operating Procedure |
| [HSF-RM-0039k](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-8050) | Reference Material | Tower Crane Operators Log Book |
| [HSF-RM-0039l](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-8077) | Reference Material | Tower Crane Safe Operating Guide |
| [HSF-RM-0039m](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-8051) | Reference Material | Weekly Tower Crane Supervisor Meeting |
| [GHO/HSEN/SF/05-A01](https://home360.balfourbeatty.com/ghoreferencecentre/GHO%20BMS%20Library/Standard%20003%20-%20Safe%20Operation%20of%20Tower%20Cranes.pdf) | Balfour Beatty Group Standard | Safe Operation of Tower Cranes |
| [HSF-RM-0039o](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-8052) | Reference Material | Statutory Inspections of Lifting Accessories |
| [HSF-RM-0039p](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-9714) | Reference Material | Use of Excavator Lifting Points (Construction) |
| HSF-PR-0039b | Procedure | Management of Thorough Examinations |
| [HSF-PR-0047](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-7815) | Procedure | People, Vehicle and Plant Interface |
| [HSES-PR-0011](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-8082) | Procedure | Setting People to Work Safely |
| [HSF-PR-0063](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-8232) | Procedure | Work at Height |
| [HSF-PR-0046](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-7786) | Procedure | Plant |
| [HSF-PR-0033](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-6982) | Procedure | Hauling and Winching |
| [HSF-PR-0035](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-1734) | Procedure | Occupational Health Surveillance Assessment |
| [HSF-PR-0048](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-8083) | Procedure | Personal Protective Equipment |
| [HSF-PR-0022](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-1113) | Procedure | Demolition |
| [HSF-RM-0046b](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-7665) | Reference Material | Plant Competency Cards |
| [HSF-RM-0047a](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-7804) | Reference Material | People Vehicle Plant Interface Zones |
| [HSF-SF-0015a](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-8581) | Standard Form | Safety Clearance Check Sheet |
| [HSF-PM-0039a](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-14608) | Process Map | Permit to Change Tower Crane Configuration Application |

| **OuTPUTS** | | | |
| --- | --- | --- | --- |
| **Reference No.** | **Document Title** | **Retention Period** | **Responsibility** |
| [HSF-SF-0039b](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-8053) | Tower Crane Pre-Erection Inspection Approval Certificate | Project Duration | Site Lead |
| [HSF-SF-0039c](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-8067) | Tower Crane Acceptance Certificate | Project Duration | Site Lead |
| [HSF-SF-0039d](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-8054) | Anti-Collision Device Set Up, Test and Acceptance Certificate | Project Duration | Site Lead |
| [HSF-SF-0039e](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-8055) | Tower Crane Operator Pre-Start Competency Check | Project Duration | Site Lead |
| [HSF-SF-0039f](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-8065) | Tower Crane Erection Only – Mobile Crane Ground Bearing Capacity | Project Duration | Site Lead |
| [HSF-TF-0039a](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-8056) | Lift Plan – Static Lift | Project Duration | Site Lead |
| [HSF-TF-0039b](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-8057) | Lift Plan – Driven Piling Rig (Junttan) | Project Duration | Site Lead |
| [HSF-TF-0039d](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-8058) | Lift Plan - Crane | Project Duration | Site Lead |
| [HSF-TF-0039e](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-8059) | Lift Plan – Mobile Lifting Operations (Non Crane) | Project Duration | Site Lead |
| [HSF-TF-0039f](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-8078) | Lift Plan – Tower Crane | Project Duration | Site Lead |
| [HSF-TF-0039g](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-8060) | Lift Plan – Overhead Travelling Crane | Project Duration | Site Lead |
| [HSF-TF-0039h](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-8061) | Lift Plan Register | Project Duration | Site Lead |
| [HSF-TF-0039i](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-8062) | Lift Plan Appraisal | Project Duration | Site Lead |
| [HSF-TF-0039j](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-8063) | Lifting Equipment Accessories Register | Project Duration | Site Lead |
| [HSF-TF-0039k](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-8070) | Tower Crane Maintenance – Safe System of Work | Project Duration | Site Lead |
| [HSF-TF-0039l](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-8064) | Post Commissioning Foundation Checklist | Project Duration | Site Lead |
| [HSF-TB-0039a](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-11255) | Slingers and Signallers | Project Duration | Site Lead |
| [HSF-TB-0039b](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-11256) | Lifting and Slinging Operations | Project Duration | Site Lead |
| [HSF-TB-0046j](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-14946) | Safe Use of Remote Controls with Lorry Loaders | Project Duration | Site Lead |
| [OPS-SF-6050a-RAIL](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-7156) | Kirow Crane Work Plan | Project Duration | Site Lead |
| [HSF-SF-0039h](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-14607) | Permit to Proceed with Change of Tower Crane Configuration | Project Duration | BB Tower Crane Team |