**WORKING AT HEIGHT – SPECIFICATION AND SAFETY REQUIREMENTS ASSESSMENT TUBE AND FITTING TIMBER FRAME BUILD**

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| --- | --- |
| **Operating business** |  |
| **Development name** |  |

**Part 1. Specify Property Type**

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| --- | --- | --- | --- |
| **Name of property type** |  | **Number of storeys** |  |

**Part 2. Types of Work and Access Requirements – Please Consult Ground Levels and Property Designs**

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| **Work Activity** | **Working at height arrangements**  **(to be read in conjunction with the working at height standards)** | **Specific control measures** | **Remarks/ additional site specific control measures** |
| **Raised Foundations** | Foot Scaffold if required | Risk Assessment **1** – Independent Tube & Fitting Scaffold |  |
| **Erection of Scaffold** | Persimmon Operating Businesses must ensure that:  1. All scaffold arrangements are set out in Terms & Conditions and Scaffold Specifications;  2. Scaffold is erected in line with the HBF Scaffold Guidance Template, TG20:21 & Space4 Standard Operations or when required bespoke scaffold design drawings (which must be provided by the Scaffold Contractor). | Risk Assessment **1** – Independent Tube & Fitting Scaffold.  Risk Assessment **3** – Scaffold tube and fitting loading towers.  Risk Assessments **48** – Use of un-extended bandstand trestles.  Refer to use of NASC guidance SG4:15 Preventing Falls in Scaffolding Operations. |  |
| **Erection of Timber Frame Panels** | The default setting is that the scaffold should be erected on three sides to allow loading of timber kit panels by the telehandler.  After erection of ground floor panels, scaffold front elevation can then be erected, to include guard rails, brick guards etc to allow floor joists and flooring to be installed.  Internal Fall Protection/Prevention may be provided by the following options:  **Decking system or scaffold birdcage**  Crash Deck System/Birdcage Scaffold (Fall Prevention) installed to specification prior to any work commencing, checked and signed off by installer and site manager. Fall Prevention must cover complete area of floor. Trestles removed. Ensure the decking system is complete and stable prior to work commencing:  NOTE:  Decking system must **NOT** be loaded with materials.  Maximum fall distance from external platform to inner platform must not exceed 900mm.  Suitable assessment must be undertaken regarding propping of joists where Safety Decking or Scaffold Birdcages are utilised on upper floors.  Care should be taken during scaffold design and erection to provide a removable area at the doorways to allow for access and loading of internal materials during construction (eg plasterboard etc).  First floor wall panels can be loaded onto the first floor after this by temporarily removing front handrails. this  This is subject to separate assessment utilising recognised methodology ( see attached guidance)  Scaffold can then be completed to roof height.  Timber wall panels can then be erected.  Internal double guard rails must remain in place at all times unless removed for access to immediate work area. After use, they must be replaced.  After external wall panels erected, scaffold remains in place for roof truss fitting.  Scaffold may be erected around the floor slab after the timber frame panels have been placed on the slab and joists, trusses & spandrel panels lifted in by crane. | Current Space4 Standard Operations  Crash Deck/Birdcage Scaffold as per manufacturers fitting instructions.  Soft Landing System as per manufacturers fitting Instructions. |  |
|  |
|  | To prevent a fall in stairwell area, Space4 sacrificial floor design / sacrificial joist system to be installed at time of floor installation and covered over using flooring - in accordance with manufacturer’s designs. If this is not suitable, other methods may be used following plot specific risk assessment |  |  |
| Non-standard Joists/Flooring (Ceiling heights greater than 2.7m) | Where higher ceiling heights and bespoke property designs influence potential fall heights assessment is to be carried out to identify additional suitable controls such as Crash Deck/Birdcage Scaffold. | Risk Assessment **1** – Independent Tube & Fitting Scaffold.  Risk Assessment **18** – Installing timber joists  Crash Deck/Birdcage Scaffold as per manufacturers fitting instructions. |  |
| Detached garage walls (traditional build) | Working Platform (Independent Scaffold)  Crash Decking or birdcage fitted | Risk Assessment **1** – Independent Tube & Fitting Scaffold.  Crash Deck/Birdcage Scaffold as per manufacturers fitting instructions. |  |
| Porch Roof | Independent Scaffold, Low level working platform or Birdcage | Risk Assessment **1** – Independent Tube & Fitting Scaffold. |  |
| Dormer Roof (2.5/ 3 Stories) | Working Platform (Independent Tube & Fitting Scaffold)  See Internal Fall Prevention/Protection measures above, installed to specification prior to any work commencing, checked and signed off by installer and site manager.  Suitable edge protection to be in place. | Risk Assessment **1** – Independent Tube & Fitting Scaffold.  Crash Deck/Birdcage Scaffold as per manufacturers fitting instructions.  .  Risk Assessment **6** – Installation of roof trusses.  Risk Assessment **46** – Working on roofs.  When installing roof cassettes the guidance for horizontal or vertical cassettes must be followed. |  |
| Garage Roof | Working Platform (Independent Scaffold)  See Internal Fall Prevention/Protection measures above, installed to specification prior to any work commencing, checked and signed off by installer and site manager.  Suitable edge protection to be in place on gable ends, for roofers whilst working on roofs, where required. | Risk Assessment **1** – Independent Tube & Fitting Scaffold.  Risk Assessment **6** – Installation of roof trusses.  Risk Assessment **46** – Working on roofs.  Crash Deck/Birdcage Scaffold as per manufacturers fitting instructions.  . |  |
| Low Level Roof | Working Platform (Independent Tube & Fitting Scaffold)  See Internal Fall Prevention/Protection measures above, installed to specification prior to any work commencing, checked and signed off by installer and site manager.  Suitable edge protection may be required, dependent upon roof size. | Risk Assessment **1** – Independent Tube & Fitting Scaffold.  Risk Assessment **6** – Installation of roof trusses;  Risk Assessment **46** – Working on roofs:  Crash Deck/Birdcage Scaffold as per manufacturers fitting instructions. |  |
| Main Roof | Working Platform (Independent Tube & Fitting Scaffold)  See Internal Fall Prevention/Protection measures above, installed to specification prior to any work commencing, checked and signed off by installer and site manager.  Suitable edge protection to be in place, on gable ends and pediment projections, for roofers whilst working on roofs. Dependent upon the size and pitch of the roof, on assessment, this may be achieved by leaving table lifts in place, installation of handrails parallel to the roof pitch, or a combination of both.  Certain roof configurations with pediment roofs require installation of girder and/or diminishing trusses. This may require the installation of a lightweight working platform approximately 450mm below the wall plate for access only. | Risk Assessment **1** – Independent Tube & Fitting Scaffold.  Risk Assessment **6** – Installation of roof trusses.  Risk Assessment **46** – Working on roofs.  Risk Assessment **47** – Work around and in Stairwells. As per specific method statement.  Crash Deck/Birdcage Scaffold as per manufacturers fitting instructions. |  |
| Removal of Decking systems | Removal of Decking Systems may require the use of a trap door for access to the upper floors. | Risk Assessment 1 – Independent Tube & Fitting Scaffold. |  |
| Chimney | Independent Scaffold | Risk Assessment **1** – Independent Tube & Fitting Scaffold. |  |
| External Walls (Including Retaining Walls) | Independent Tube & Fitting Scaffold will be provided for bricklayers to work from and will wrap around the full plot.  Scaffold is to be erected in line with the HBF Scaffold Guidance Template, TG20:21 & Space4 Standard Operations or when required bespoke scaffold design drawings (which must be provided by the Scaffold Contractor).  Scaffold is also to be erected in accordance with guidance given in Group Policy.  The first lift of scaffold will be set at no lower than 900mm from the top of joists allowing bricklayers to construct from floor level.  Additional work at height controls i.e. additional scaffold lift may be required when, for example, ground levels are such that the above options are not reasonably practicable.  Where bricklayers are unable to build the required courses from floor level, usually screen walls then un-extended bandstand trestles may be used by the Operating Business. | Risk Assessment **1** – Independent Tube & Fitting Scaffold.  Risk Assessment **4** – Use of abrasive wheels and cutting disks;  Risk assessment **5** – Bricklayers and bricklaying operations;  Risk assessment **6** – Installation of roof trusses.  Risk assessment **48** – Use of un-extended bandstand trestles. For use on screen walls |  |
| Scaffold Access | An external pole ladder is sufficient for standard ceiling height of 2.5 storey properties. The top lift access must include the provision of additional guiderails to provide fall protection at the step off point (see pictures).  Where the working platform access exceeds 4.8m, further assessment of the ladder must be undertaken with suitable controls provided e.g.   1. A suitable brace fitted to the ladder to prevent flexing (usually at the mid point) and a handrail running parallel to the stiles. 2. The use of single or multiple lift ladder bays   All ladder access points must have a self closing ladder access gate or a protected trap.  There must be provision for lifting tools & materials onto the loading bays. This will usually consist of the tools being placed in a muck bin and lifted to the loading bay by telehandler.  Staircases may be used for house types depending on the storey height & length of terrace. All flats & apartments should utilise staircases | Risk Assessment No 1 – Independent scaffolding  When ladder boards/locks are used, they must fully cover the runs on the ladders.  It is imperative that the site management check that all ladder or staircase access is lock off prior to the site closing each day. |  |
| Securing of Access | Suitable means of securing access must be utilised for when scaffolds are not in use or the site is closed. This may include the removal of ladders, or the use of ladder boards. Staircases must be fenced off to prevent access |  |  |
| Waste Removal | On assessment, suitable means to remove waste from scaffolds must be utilised. This may include waste chutes or skip bay.  **Materials must not be thrown from scaffolds!** | Risk Assessment 1 – Independent Tube & Fitting Scaffold. |  |
| Rainwater and Plumbing Goods | Independent Scaffold (were possible will be the preferred option), MEWP or Aluminium scaffold tower to be erected by a trained and qualified operative. Gutters etc. over external projections (Lean-to roofs etc.) to be completed from scaffold prior to roof covering. Scaffold tower to be checked and signed off by site manager. | Risk Assessment **1** – Independent Tube & Fitting Scaffold.  Risk Assessment **39** – Use of mobile towers:  Risk Assessment **44** – Working with MEWPs. |  |
| Rendering | Independent scaffold erected against surface to be rendered with opportunity to up-turn scaffold board closest to external wall to provide void not exceeding 300mm for working space as per renderer’s method statement (specialist scaffold). Pre-render inspection to be signed off by render contractor as well as standard inspection by scaffolder and site manager. | Risk Assessment **1** – Independent Tube & Fitting Scaffold.  Risk Assessment **10** – Working with wet concrete, wet cement and mortar products. |  |
| Timber Features/Hanging tiles | Independent Tube & Fitting Scaffold or MEWP | Risk Assessment No **1** – Independent Tube & Fitting Scaffold.  Risk Assessment **44** – Working with MEWPs. |  |
| Pointing Up | Independent Tube & Fitting Scaffold or MEWP | Risk Assessment No **1** – Independent Tube & Fitting Scaffold.  Risk Assessment **44** – Working with MEWPs. |  |
| Lead-work / Flashing | Independent Tube & Fitting Scaffold | Risk Assessment No **1** – Independent Tube & Fitting Scaffold  Risk Assessment **46** – Working on roofs: |  |
| Windows | Windows fitted internally – temporary handrail fitted to all stairs. | Risk Assessment **25** – Installation of windows and glazing; See window fitters risk assessment & method statement. |  |
| Sealants / Mastic | Use existing independent tube & fitting scaffold, MEWP, Aluminium scaffold tower or ladders fitted with stabilisation device and harness. Windows above low-level roofs to be completed from scaffold prior to roof covering. | Risk Assessment No **1** – Independent Tube & Fitting Scaffold.  Risk Assessment **34** – Use of ladders;  Risk Assessment **39** – Use of mobile towers:  Risk Assessment **44** – Working with MEWPs:  Risk Assessment **46** – Working on roofs:,  See sub contractor risk assessment & method statement. |  |
| Alarm Systems | Use existing independent scaffold, MEWP, Aluminium scaffold tower or ladders fitted with stabilisation device and harness. | Risk Assessment No **1** – Independent Tube & Fitting Scaffold.  Risk Assessment **34** – Use of ladders;  Risk Assessment **39** – Use of mobile towers:  Risk Assessment **44** – Working with MEWPs:  Risk Assessment **46** – Working on roofs:,  See sub contractor risk assessment and method statement. |  |
| Stairwell Working | Ensure temporary guardrails are in place before removing the stairwell sacrificial flooring. These guardrails are kept in place until permanent balustrades are fitted.  Where unsupported joists become apparent on fitting of stairs, a suitable propping system must be employed, until bulkhead/supporting stud wall can be constructed.  When fitting 2nd/3rd flights of stairs the stairwell below must be clover to prevent a fall  Alternatively, balustrades, banisters and bulkheads can be installed at installation of staircases.  Suitable stairwell working platform system to be installed during dry lining, plastering and painting operations. This may include:   1. The use of proprietary access platforms 2. Refitting of sacrificial joists and flooring 3. Use of secured “Youngman” boards to provide a suitable working platform and remove fall hazard.   On assessment, some property types may require a bespoke decking system or Independent Tube & Fitting Scaffold (Birdcage). | Risk Assessment **47** – Work around and in stairwells;  See internal trades risk assessment and method statements or LOSC pack |  |
| Cleaning | Where practicable, all windows to be fitted with easy-clean hinges for internal cleaning. Remove film from PVC facia and clean soffits, gutters and down-comers from independent scaffold, MEWP, aluminium tower or ladders fitted with stabilisation device and harness. Brickwork Cleaning by use of extended easy-reach wash system. | Risk Assessment No **1** – Independent Tube & Fitting Scaffold.  Risk Assessment **34** – Use of ladders;  Risk Assessment **39** – Use of mobile towers:  Risk Assessment **44** – Working with MEWPs:  Risk Assessment **46** – Working on roofs:,  See contractor Risk assessment |  |

**Part 3. Type of External Scaffold Required (see also property design drawings)**

|  |  |  |  |
| --- | --- | --- | --- |
|  | Independent | Putlog | System |
| General Purpose (2 kN/m2) | **✓** |  |  |
| Heavy Duty (3 kN/m2) | For Loading Bays |  |  |

**Part 4. Scaffold Design & Access/Egress**

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| --- | --- | --- | --- | --- |
|  | | | (✓or X) | If X date expected |
| Scaffold designs/TG20:21 compliant sheets available | | |  |  |
| Safe system of work received from Scaffold Contractor | | |  |  |
| Ground Composition details | | |  |  |
| Waste removal arrangements waste chutes or skip bays | | |  |  |
| Dismantling arrangements | | |  |  |
| **Type of Access/Egress to be used** | **Tick** | **Recommended Guidance Scaffold Access/Egress** | | |
| 1. Staircases |  | For apartment blocks, runs of 4 or more and 3 storey properties | | |
| 1. Ladder Access Bays with single lift ladders |  | For 2 storey detached/semi-detached properties | | |
| 1. Ladder Access Bays with multiple lift ladders |  |
| 1. Internal ladder access with protected trap |  |
| 1. Pole ladder external access using safety gate |  | Only to be used for access from ground to base/first lift and only if other method of access is not suitable | | |

Pole ladders and self-closing gates should also be included on table lifts.

Ladders must be secured to the scaffolding by a square lashing using suitable rope, proprietary ladder clamps or cable ties of sufficient strength. Putlog clamps must not be used as they can damage the ladder stiles.

**✓\* -** Delete where applicable

**Note:** See also diagram attached depicting examples of good practice and Persimmon Scaffolding Trade Specification.

**Part 5. Loading Requirements of External Scaffold (see also property design specification)**

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| --- | --- | --- | --- |
| **Indicate Loading Requirements for Scaffold ✓ or X** | | | |
| Max. weight to be placed on Loading Bay |  | Total Number of Loading Bays Required |  |

**Part 6. Type of Scaffold Contract**

|  |  |  |
| --- | --- | --- |
| **Indicate Type of Scaffold Contract (✓ or X)** | | |
| Supply and Fit Sub-Contractor | Labour Only Sub-Contractor | Directly Employed |
| **✓** |  |  |

**Note:** For the purpose of scaffold contracts a one-man self-employed/labour only person should be regarded as subcontract.

**Part 7. Inspection Regime Requirements (✓)**

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| --- | --- | --- | --- |
| **Hand-over/Inspection Required** | **Direct Employee** | **Sub-contractor** | **Site Manager** |
| Hand-over procedure |  | Scaffold Supervisor | Site Manager |
| Component Inspection prior to erection |  | Scaffold Supervisor | Site Manager |
| Before first use |  | Scaffold Supervisor | Site Manager |
| Substantial Alteration Inspection |  | Scaffold Supervisor | Site Manager |
| Adverse weather condition / situations |  | Scaffold Supervisor | Site Manager |
| 7 Day Inspection |  | Scaffold Supervisor | Site Manager |

**Part 8. Competency and Training Requirements – Site Manager to complete details on Site Induction Forms**

**Part 9. Additional Comments/Notes**

This assessment should be read in conjunction with the requirements detailed in TG20:21, SG4:10 and the HBF Scaffold Specification Template together with associated trade specifications and site specific information i.e. traffic management plans, lifting plans etc.

**Directors Responsible For Completing the Assessment**

|  |  |
| --- | --- |
| **Name(s)** |  |
| **Signature** |  |
| **Date** |  |